COMMITTENTE:

RFI RETE FERROVIARIA ITALIANA
GRUPPO FERROVIE DELLO STATO ITALIANE

ALTA SORVEGLIANZA:

ITALFERR
GRUPPO FERROVIE DELLO STATO ITALIANE

GENERAL CONTRACTOR:

Cepav due

INFRASTRUTTURE FERROVIARIE STRATEGICHE DEFINITE DALLA LEGGE OBIETTIVO N. 443/01

LINEA A.V. /A.C. TORINO – VENEZIA Tratta MILANO – VERONA
Lotto funzionale Brescia-Verona

PROGETTO ESECUTIVO

IV40 – CVF BRESCIA EST SU LINEA STORICA pk 106+100,000
OPERE DI SOSTEGNO DEGLI SCAVI – TABULATI DI CALCOLO

GENERAL CONTRACTOR	DIRETTORE LAVORI
Consorzio Cepav due Data: _____	Data: _____

COMMESSA	LOTTO	FASE	ENTE	TIPO DOC	OPERA/DISCIPLINA	PROGR	REV
I N 0 R	1 2	E	E 2	C L	I V 4 0 A 1	0 0 2	A

PROGETTAZIONE								IL PROGETTISTA
Rev.	Descrizione	Redatto	Data	Verificato	Data	Progettista Integratore	Data	
A	Emissione	R. Mariani	19/07/19	C.Beltrami	19/07/19	Liani	19/07/19	Dott. Ing. Carlo M.A. BELTRAMI Ordine Ingegneri Milano n. A21004
B								
C								Data:_19/07/19___

CIG. 751447334A File: IN0R12EE2CLIV40A1002A_10.docx

Progetto cofinanziato dalla Unione Europea

CUP: F81H91000000008

INDICE

1. SEZIONE 1 – PARATIA DI PALI

1.1. Design Assumption : Nominal - File di Paratie - File di input (.d)

```
* PARATIE ANALYSIS FOR DESIGN SECTION:Base Design Section USING ASSUMPTION: Nominal
 * Time:mercoledì 24 luglio 2019 10:49:24
 * 1: Defining general settings
 UNIT  m kN
 TITLE New Project
 DELTA 0.2
 option param itemax 100
 option control hinges 0 0.0001 0.001

 * 2: Defining wall(s)
 WALL LeftWall_32 0 -16 0 1

 * 3: Defining surfaces for wall(s)
 SOIL 0_L LeftWall_32 -16 0 1 0
 SOIL 0_R LeftWall_32 -16 0 2 180

 * 4: Defining soil layers
 *
 * Soil Profile (Strato1_2_8_L_0)
 *
 LDATA Strato1_2_8_L_0 5.84 LeftWall_32
 ATREST 0.53 1 1
 WEIGHT 19 9 10
 PERMEABILITY 1E-06
 RESISTANCE 0 29
 YOUNG 2E+04 6E+04
 ENDL
 *
 * Soil Profile (Strato2_3095_82743_L_0)
 *
 LDATA Strato2_3095_82743_L_0 -9.5 LeftWall_32
 ATREST 0.5 0.5 1
 WEIGHT 20 10 10
 PERMEABILITY 0.0001
 RESISTANCE 20 35
 YOUNG 5E+04 1.5E+05
 ENDL

 * 5: Defining structural materials
 * Steel material: 108 Name=Fe360 E=206000200 kPa
 MATERIAL Fe360_108 2.06E+08
 * Concrete material: 104 Name=C25/30 E=31475800 kPa
 MATERIAL C2530_104 3.148E+07
 * Rebar material: 124 Name=acciaio armonico E=200100000 kPa
 MATERIAL acciaioarmonico_124 2.001E+08
 * Concrete material: 103 Name=C20/25 E=29962000 kPa
 MATERIAL C2025_103 2.996E+07

 * 6: Defining structural elements
 * 6.1: Beams and combined Wall Elements
 BEAM WallElement_33 LeftWall_32 -16 0 C2530_104 0.6848 00 00 0


 * 6.2: Supports
 WIRE Tieback_768111 LeftWall_32 -2.5 acciaioarmonico_124 2.211E-05 163.6 15 0 0


 * 6.3: Strips
 STRIP LeftWall_32 2 5 0 13 0 15 45
 STRIP LeftWall_32 2 5 0 40 0 10 30

 * 7: Defining Steps
 STEP Stage1_31
 CHANGE Strato1_2_8_L_0 U-FRICT=29 LeftWall_32
 CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
 CHANGE Strato1_2_8_L_0 U-KA=0.478 LeftWall_32
 CHANGE Strato1_2_8_L_0 U-KP=5.914 LeftWall_32
 CHANGE Strato1_2_8_L_0 D-KA=0.304 LeftWall_32
 CHANGE Strato1_2_8_L_0 D-KP=4.041 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 U-FRICT=35 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 U-KA=0.333 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 U-KP=8.331 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 D-KA=0.235 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 D-KP=5.879 LeftWall_32
 CHANGE Strato1_2_8_L_0 U-COHE=0 LeftWall_32
```

```
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-COHE=20 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -26 0 -16 0 0
ADD WallElement_33
ENDSTEP

STEP Stage2_759103
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -26 0 -16 0 0
ENDSTEP

STEP Stage3_158
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -3
WATER -26 0 -16 0 0
ENDSTEP

STEP Stage4_617
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -3
WATER -26 0 -16 0 0
ADD Tieback_768111
ENDSTEP

STEP Stage5_714
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -6.73
WATER -26 0 -16 0 0
ENDSTEP
```

1.2. Design Assumption : Nominal - File di Paratie - File di output (.out)

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                       NewProject.BaseDesignSection_28.Nominal_63                                        |
|                                  Exe Time :24 July 2019      10:49:24                                                   |
+-------------------------------------------------------------------------------------------------------------------------+

                  ***********************************************************
                  *                                                         *
                  *  PARATIE PLUS Non-Linear Spring Engine                  *
                  *                                                         *
                  *          AN ELASTOPLASTIC FINITE ELEMENT PROGRAM        *
                  *          FOR FLEXIBLE EARTH-RETAINING STRUCTURES        *
                  *                                                         *
                  *          Written by Ce.A.S. s.r.l. (ITALY)              *
                  *          with the scientific supervision of             *
                  *          Roberto Nova - full professor SOIL MECHANICS   *
                  *          at Politecnico di Milano (ITALY)               *
                  *                                                         *
                  ***********************************************************
                  *                                                         *
                  *  RELEASE   2017.1     *Build date:Jul 11, 2017*    *    *
                  *                                                         *
                  *                                                         *
                  *  Ce.A.S.     S.R.L   CENTRO DI ANALISI STRUTTURALE      *
                  *              VIALE   GIUSTINIANO 10                     *
                  *              20129   M I L A N O  (ITALIA)              *
                  *  TEL.        +39 02 2020221   (+39 035 23 67 19)        *
                  *  FAX         +39 02 29512533  (+39 035 42285 49)        *
```

```
                *  email       bruno.becci@ceas.it                      *
                *  Web Page    www.ceas.it                              *
                ***********************************************************



 JOB : NewProject.BaseDesignSection_28.Nominal_63
 STARTING
ACCEPTED   <FILE,GENW                                                    >
ACCEPTED   <FILE,PLOTTER,BINARY                                          >
ACCEPTED   <SOLVE TOTAL_STRESS                                           >
ACCEPTED   <PARAM ITEMAX 100                                             >
ACCEPTED   <CONTROL HINGES 0 0.0001 0.001                                >



                ***********************************************************
                *                                                         *
                *  WARNING : PORE PRESSURES ARE AUTOMATICALLY COMPUTED    *
                *    BY THE PROGRAM.                                      *
                ***********************************************************

PRELIMINARY OPERATIONS CPU TIME     0.00 [sec]



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      10:49:24                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


INPUT FILE HAS BEEN GENERATED BY WALGEN PROGRAM


New Project


NO. OF NODAL POINTS (NUMNP) ...................    82
NO. OF COORDINATES  (NCOORD)...................     2
NO. OF NODE DOFS    (NDOF).....................     2
NO. OF EQUATIONS    (NEQ)...................... .  164
NO. OF CONSTRAINTS CARDS (NVINC)...............     0
NO. OF ELEMENT GROUPS (NEG)....................     4
NO. OF SOLUTION STEPS (NSTE)...................     5
NO. OF ELEMENT SETS ATTACHED TO SLAVE NODES ...     0
NO. OF RECORD FROM WALGEN .....................    89
NO. OF LONG NAMES (LASTNAME) ..................    21
LENGTH UNIT CHOICE ............................     3 (M   )
FORCE  UNIT CHOICE ............................     3 (KN  )
MAX PORE PRESSURE TABLE LENGTH.................     1
NO. OF ELEMENT GROUPS REQUIRING ADD. SLIP DOF .     0


IDOFA (01) =  2  Y-DISPL.F
IDOFA (02) =  4   X-ROT. F

 RELEVANT ITEMS UNITS

 STRESSES                  kPa
 Y-DISPLACEMENTS           m
 ROTATIONS                 RADIANS
 BEAM AND SLAB MOMENTS     kN*m/m
 BEAM SHEAR FORCES         kN/m
 ANCHOR FORCES             kN/m
 AXIAL FORCES IN TRUSSES   kN/m
 AXIAL FORCES SPRINGS      kN/m
 Y-REACTIONS               kN/m
 X-MOMENT REACTIONS        kN*m/m
 ETC.



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      10:49:24                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
                P R E P R O C E S S O R     D A T A
```

N O. O F C O M M A N D S 89

```
 1 : UNIT  m kN
 2 : TITLE New Project
 3 : DELTA 0.2
 4 : option param itemax 100
 5 : option control hinges 0 0.0001 0.001
 6 : WALL LeftWall_32 0 -16 0 1
 7 : SOIL 0_L LeftWall_32 -16 0 1 0
 8 : SOIL 0_R LeftWall_32 -16 0 2 180
 9 : LDATA Strato1_2_8_L_0 5.84 LeftWall_32
10 : ATREST 0.53 1 1
11 : WEIGHT 19 9 10
12 : PERMEABILITY 1E-06
13 : RESISTANCE 0 29
14 : YOUNG 2E+04 6E+04
15 : ENDL
16 : LDATA Strato2_3095_82743_L_0 -9.5 LeftWall_32
17 : ATREST 0.5 0.5 1
18 : WEIGHT 20 10 10
19 : PERMEABILITY 0.0001
20 : RESISTANCE 20 35
21 : YOUNG 5E+04 1.5E+05
22 : ENDL
23 : MATERIAL Fe360_108 2.06E+08
24 : MATERIAL C2530_104 3.148E+07
25 : MATERIAL acciaioarmonico_124 2.001E+08
26 : MATERIAL C2025_103 2.996E+07
27 : BEAM WallElement_33 LeftWall_32 -16 0 C2530_104 0.6848 00 00 0
28 : WIRE Tieback_768111 LeftWall_32 -2.5 acciaioarmonico_124 2.211E-05 163.6 15 0 0
29 : STRIP LeftWall_32 2 5 0 13 0 15 45
30 : STRIP LeftWall_32 2 5 0 40 0 10 30
31 : STEP Stage1_31
32 : CHANGE Strato1_2_8_L_0 U-FRICT=29 LeftWall_32
33 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
34 : CHANGE Strato1_2_8_L_0 U-KA=0.478 LeftWall_32
35 : CHANGE Strato1_2_8_L_0 U-KP=5.914 LeftWall_32
36 : CHANGE Strato1_2_8_L_0 D-KA=0.304 LeftWall_32
37 : CHANGE Strato1_2_8_L_0 D-KP=4.041 LeftWall_32
38 : CHANGE Strato2_3095_82743_L_0 U-FRICT=35 LeftWall_32
39 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
40 : CHANGE Strato2_3095_82743_L_0 U-KA=0.333 LeftWall_32
41 : CHANGE Strato2_3095_82743_L_0 U-KP=8.331 LeftWall_32
42 : CHANGE Strato2_3095_82743_L_0 D-KA=0.235 LeftWall_32
43 : CHANGE Strato2_3095_82743_L_0 D-KP=5.879 LeftWall_32
44 : CHANGE Strato1_2_8_L_0 U-COHE=0 LeftWall_32
45 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
46 : CHANGE Strato2_3095_82743_L_0 U-COHE=20 LeftWall_32
47 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
48 : SETWALL LeftWall_32
49 : GEOM 0 0
50 : WATER -26 0 -16 0 0
51 : ADD WallElement_33
52 : ENDSTEP
53 : STEP Stage2_759103
54 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
55 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
56 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
57 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
58 : SETWALL LeftWall_32
59 : GEOM 0 0
60 : WATER -26 0 -16 0 0
61 : ENDSTEP
62 : STEP Stage3_158
63 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
64 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
65 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
66 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
67 : SETWALL LeftWall_32
68 : GEOM 0 -3
69 : WATER -26 0 -16 0 0
70 : ENDSTEP
71 : STEP Stage4_617
72 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
73 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
74 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
75 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
76 : SETWALL LeftWall_32
77 : GEOM 0 -3
78 : WATER -26 0 -16 0 0
79 : ADD Tieback_768111
80 : ENDSTEP
81 : STEP Stage5_714
82 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
83 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
```

```
   84 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
   85 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
   86 : SETWALL LeftWall_32
   87 : GEOM 0 -6.73
   88 : WATER -26 0 -16 0 0
   89 : ENDSTEP



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      10:49:24                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
N O D A L    P O I N T    D A T A
--------------------------------

NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD /

   1  0.0000      0.0000     /    2  0.0000    -0.20000     /    3  0.0000    -0.40000     /    4  0.0000    -0.60000     /
   5  0.0000    -0.80000     /    6  0.0000     -1.0000     /    7  0.0000     -1.2000     /    8  0.0000     -1.4000     /
   9  0.0000     -1.6000     /   10  0.0000     -1.8000     /   11  0.0000     -2.0000     /   12  0.0000     -2.2000     /
  13  0.0000     -2.4000     /   14  0.0000     -2.5000     /   15  0.0000     -2.7000     /   16  0.0000     -2.9000     /
  17  0.0000     -3.1000     /   18  0.0000     -3.3000     /   19  0.0000     -3.5000     /   20  0.0000     -3.7000     /
  21  0.0000     -3.9000     /   22  0.0000     -4.1000     /   23  0.0000     -4.3000     /   24  0.0000     -4.5000     /
  25  0.0000     -4.7000     /   26  0.0000     -4.9000     /   27  0.0000     -5.1000     /   28  0.0000     -5.3000     /
  29  0.0000     -5.5000     /   30  0.0000     -5.7000     /   31  0.0000     -5.9000     /   32  0.0000     -6.1000     /
  33  0.0000     -6.3000     /   34  0.0000     -6.5000     /   35  0.0000     -6.7000     /   36  0.0000     -6.9000     /
  37  0.0000     -7.1000     /   38  0.0000     -7.3000     /   39  0.0000     -7.5000     /   40  0.0000     -7.7000     /
  41  0.0000     -7.9000     /   42  0.0000     -8.1000     /   43  0.0000     -8.3000     /   44  0.0000     -8.5000     /
  45  0.0000     -8.7000     /   46  0.0000     -8.9000     /   47  0.0000     -9.1000     /   48  0.0000     -9.3000     /
  49  0.0000     -9.5000     /   50  0.0000     -9.7000     /   51  0.0000     -9.9000     /   52  0.0000     -10.100     /
  53  0.0000     -10.300     /   54  0.0000     -10.500     /   55  0.0000     -10.700     /   56  0.0000     -10.900     /
  57  0.0000     -11.100     /   58  0.0000     -11.300     /   59  0.0000     -11.500     /   60  0.0000     -11.700     /
  61  0.0000     -11.900     /   62  0.0000     -12.100     /   63  0.0000     -12.300     /   64  0.0000     -12.500     /
  65  0.0000     -12.700     /   66  0.0000     -12.900     /   67  0.0000     -13.100     /   68  0.0000     -13.300     /
  69  0.0000     -13.500     /   70  0.0000     -13.700     /   71  0.0000     -13.900     /   72  0.0000     -14.100     /
  73  0.0000     -14.300     /   74  0.0000     -14.500     /   75  0.0000     -14.700     /   76  0.0000     -14.900     /
  77  0.0000     -15.100     /   78  0.0000     -15.300     /   79  0.0000     -15.500     /   80  0.0000     -15.700     /
  81  0.0000     -15.900     /   82  0.0000     -16.000     /



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      10:49:24                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  1

0_L                              :
   5  82   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
..........2D PLASTIC SOIL ..........
.....................................

element group behaviour throughout stage analysis

stage   status
------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area      .....      .....      .....      flag
-----------------------------------------------------------------
```

1	1	1	0.1000	0.000	0.000	0.000	1.000
2	2	1	0.2000	0.000	0.000	0.000	1.000
3	3	1	0.2000	0.000	0.000	0.000	1.000
4	4	1	0.2000	0.000	0.000	0.000	1.000
5	5	1	0.2000	0.000	0.000	0.000	1.000
6	6	1	0.2000	0.000	0.000	0.000	1.000
7	7	1	0.2000	0.000	0.000	0.000	1.000
8	8	1	0.2000	0.000	0.000	0.000	1.000
9	9	1	0.2000	0.000	0.000	0.000	1.000
10	10	1	0.2000	0.000	0.000	0.000	1.000
11	11	1	0.2000	0.000	0.000	0.000	1.000
12	12	1	0.2000	0.000	0.000	0.000	1.000
13	13	1	0.1500	0.000	0.000	0.000	1.000
14	14	1	0.1500	0.000	0.000	0.000	1.000
15	15	1	0.2000	0.000	0.000	0.000	1.000
16	16	1	0.2000	0.000	0.000	0.000	1.000
17	17	1	0.2000	0.000	0.000	0.000	1.000
18	18	1	0.2000	0.000	0.000	0.000	1.000
19	19	1	0.2000	0.000	0.000	0.000	1.000
20	20	1	0.2000	0.000	0.000	0.000	1.000
21	21	1	0.2000	0.000	0.000	0.000	1.000
22	22	1	0.2000	0.000	0.000	0.000	1.000
23	23	1	0.2000	0.000	0.000	0.000	1.000
24	24	1	0.2000	0.000	0.000	0.000	1.000
25	25	1	0.2000	0.000	0.000	0.000	1.000
26	26	1	0.2000	0.000	0.000	0.000	1.000
27	27	1	0.2000	0.000	0.000	0.000	1.000
28	28	1	0.2000	0.000	0.000	0.000	1.000
29	29	1	0.2000	0.000	0.000	0.000	1.000
30	30	1	0.2000	0.000	0.000	0.000	1.000
31	31	1	0.2000	0.000	0.000	0.000	1.000
32	32	1	0.2000	0.000	0.000	0.000	1.000
33	33	1	0.2000	0.000	0.000	0.000	1.000
34	34	1	0.2000	0.000	0.000	0.000	1.000
35	35	1	0.2000	0.000	0.000	0.000	1.000
36	36	1	0.2000	0.000	0.000	0.000	1.000
37	37	1	0.2000	0.000	0.000	0.000	1.000
38	38	1	0.2000	0.000	0.000	0.000	1.000
39	39	1	0.2000	0.000	0.000	0.000	1.000
40	40	1	0.2000	0.000	0.000	0.000	1.000
41	41	1	0.2000	0.000	0.000	0.000	1.000
42	42	1	0.2000	0.000	0.000	0.000	1.000
43	43	1	0.2000	0.000	0.000	0.000	1.000
44	44	1	0.2000	0.000	0.000	0.000	1.000
45	45	1	0.2000	0.000	0.000	0.000	1.000
46	46	1	0.2000	0.000	0.000	0.000	1.000
47	47	1	0.2000	0.000	0.000	0.000	1.000
48	48	1	0.2000	0.000	0.000	0.000	1.000
49	49	1	0.2000	0.000	0.000	0.000	1.000
50	50	2	0.2000	0.000	0.000	0.000	1.000
51	51	2	0.2000	0.000	0.000	0.000	1.000
52	52	2	0.2000	0.000	0.000	0.000	1.000
53	53	2	0.2000	0.000	0.000	0.000	1.000
54	54	2	0.2000	0.000	0.000	0.000	1.000
55	55	2	0.2000	0.000	0.000	0.000	1.000
56	56	2	0.2000	0.000	0.000	0.000	1.000
57	57	2	0.2000	0.000	0.000	0.000	1.000
58	58	2	0.2000	0.000	0.000	0.000	1.000
59	59	2	0.2000	0.000	0.000	0.000	1.000
60	60	2	0.2000	0.000	0.000	0.000	1.000
61	61	2	0.2000	0.000	0.000	0.000	1.000
62	62	2	0.2000	0.000	0.000	0.000	1.000
63	63	2	0.2000	0.000	0.000	0.000	1.000
64	64	2	0.2000	0.000	0.000	0.000	1.000
65	65	2	0.2000	0.000	0.000	0.000	1.000
66	66	2	0.2000	0.000	0.000	0.000	1.000
67	67	2	0.2000	0.000	0.000	0.000	1.000
68	68	2	0.2000	0.000	0.000	0.000	1.000
69	69	2	0.2000	0.000	0.000	0.000	1.000
70	70	2	0.2000	0.000	0.000	0.000	1.000
71	71	2	0.2000	0.000	0.000	0.000	1.000
72	72	2	0.2000	0.000	0.000	0.000	1.000
73	73	2	0.2000	0.000	0.000	0.000	1.000
74	74	2	0.2000	0.000	0.000	0.000	1.000
75	75	2	0.2000	0.000	0.000	0.000	1.000
76	76	2	0.2000	0.000	0.000	0.000	1.000
77	77	2	0.2000	0.000	0.000	0.000	1.000
78	78	2	0.2000	0.000	0.000	0.000	1.000
79	79	2	0.2000	0.000	0.000	0.000	1.000
80	80	2	0.2000	0.000	0.000	0.000	1.000
81	81	2	0.1500	0.000	0.000	0.000	1.000
82	82	2	0.5000E-01	0.000	0.000	0.000	1.000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      10:49:24                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  2

0_R                              :
   5  82   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
.....2D PLASTIC SOIL .....
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area      .....     .....     .....      flag
-------------------------------------------------------------------

    1    1    1   0.1000      0.000     0.000     0.000     2.000
    2    2    1   0.2000      0.000     0.000     0.000     2.000
    3    3    1   0.2000      0.000     0.000     0.000     2.000
    4    4    1   0.2000      0.000     0.000     0.000     2.000
    5    5    1   0.2000      0.000     0.000     0.000     2.000
    6    6    1   0.2000      0.000     0.000     0.000     2.000
    7    7    1   0.2000      0.000     0.000     0.000     2.000
    8    8    1   0.2000      0.000     0.000     0.000     2.000
    9    9    1   0.2000      0.000     0.000     0.000     2.000
   10   10    1   0.2000      0.000     0.000     0.000     2.000
   11   11    1   0.2000      0.000     0.000     0.000     2.000
   12   12    1   0.2000      0.000     0.000     0.000     2.000
   13   13    1   0.1500      0.000     0.000     0.000     2.000
   14   14    1   0.1500      0.000     0.000     0.000     2.000
   15   15    1   0.2000      0.000     0.000     0.000     2.000
   16   16    1   0.2000      0.000     0.000     0.000     2.000
   17   17    1   0.2000      0.000     0.000     0.000     2.000
   18   18    1   0.2000      0.000     0.000     0.000     2.000
   19   19    1   0.2000      0.000     0.000     0.000     2.000
   20   20    1   0.2000      0.000     0.000     0.000     2.000
   21   21    1   0.2000      0.000     0.000     0.000     2.000
   22   22    1   0.2000      0.000     0.000     0.000     2.000
   23   23    1   0.2000      0.000     0.000     0.000     2.000
   24   24    1   0.2000      0.000     0.000     0.000     2.000
   25   25    1   0.2000      0.000     0.000     0.000     2.000
   26   26    1   0.2000      0.000     0.000     0.000     2.000
   27   27    1   0.2000      0.000     0.000     0.000     2.000
   28   28    1   0.2000      0.000     0.000     0.000     2.000
   29   29    1   0.2000      0.000     0.000     0.000     2.000
   30   30    1   0.2000      0.000     0.000     0.000     2.000
   31   31    1   0.2000      0.000     0.000     0.000     2.000
   32   32    1   0.2000      0.000     0.000     0.000     2.000
   33   33    1   0.2000      0.000     0.000     0.000     2.000
   34   34    1   0.2000      0.000     0.000     0.000     2.000
   35   35    1   0.2000      0.000     0.000     0.000     2.000
   36   36    1   0.2000      0.000     0.000     0.000     2.000
   37   37    1   0.2000      0.000     0.000     0.000     2.000
   38   38    1   0.2000      0.000     0.000     0.000     2.000
   39   39    1   0.2000      0.000     0.000     0.000     2.000
   40   40    1   0.2000      0.000     0.000     0.000     2.000
   41   41    1   0.2000      0.000     0.000     0.000     2.000
   42   42    1   0.2000      0.000     0.000     0.000     2.000
   43   43    1   0.2000      0.000     0.000     0.000     2.000
```

44	44	1	0.2000	0.000	0.000	0.000	2.000
45	45	1	0.2000	0.000	0.000	0.000	2.000
46	46	1	0.2000	0.000	0.000	0.000	2.000
47	47	1	0.2000	0.000	0.000	0.000	2.000
48	48	1	0.2000	0.000	0.000	0.000	2.000
49	49	1	0.2000	0.000	0.000	0.000	2.000
50	50	2	0.2000	0.000	0.000	0.000	2.000
51	51	2	0.2000	0.000	0.000	0.000	2.000
52	52	2	0.2000	0.000	0.000	0.000	2.000
53	53	2	0.2000	0.000	0.000	0.000	2.000
54	54	2	0.2000	0.000	0.000	0.000	2.000
55	55	2	0.2000	0.000	0.000	0.000	2.000
56	56	2	0.2000	0.000	0.000	0.000	2.000
57	57	2	0.2000	0.000	0.000	0.000	2.000
58	58	2	0.2000	0.000	0.000	0.000	2.000
59	59	2	0.2000	0.000	0.000	0.000	2.000
60	60	2	0.2000	0.000	0.000	0.000	2.000
61	61	2	0.2000	0.000	0.000	0.000	2.000
62	62	2	0.2000	0.000	0.000	0.000	2.000
63	63	2	0.2000	0.000	0.000	0.000	2.000
64	64	2	0.2000	0.000	0.000	0.000	2.000
65	65	2	0.2000	0.000	0.000	0.000	2.000
66	66	2	0.2000	0.000	0.000	0.000	2.000
67	67	2	0.2000	0.000	0.000	0.000	2.000
68	68	2	0.2000	0.000	0.000	0.000	2.000
69	69	2	0.2000	0.000	0.000	0.000	2.000
70	70	2	0.2000	0.000	0.000	0.000	2.000
71	71	2	0.2000	0.000	0.000	0.000	2.000
72	72	2	0.2000	0.000	0.000	0.000	2.000
73	73	2	0.2000	0.000	0.000	0.000	2.000
74	74	2	0.2000	0.000	0.000	0.000	2.000
75	75	2	0.2000	0.000	0.000	0.000	2.000
76	76	2	0.2000	0.000	0.000	0.000	2.000
77	77	2	0.2000	0.000	0.000	0.000	2.000
78	78	2	0.2000	0.000	0.000	0.000	2.000
79	79	2	0.2000	0.000	0.000	0.000	2.000
80	80	2	0.2000	0.000	0.000	0.000	2.000
81	81	2	0.1500	0.000	0.000	0.000	2.000
82	82	2	0.5000E-01	0.000	0.000	0.000	2.000

```
+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                        NewProject.BaseDesignSection_28.Nominal_63                                             |
|                                  Exe Time :24 July 2019      10:49:24                                                         |
+-------------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  3

WallElement_33                   :
   2  81   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   1   0
.....................................
..........2D WALL ELEMENT...........
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) young modulus       0.314800E+08
 prop( 2) modification  time  0.00000
 prop( 3) new young modulus   0.00000
 prop( 4) poisson ratio       0.00000
 prop( 5) future .............0.252200E-43

 no. of step variable items:     1
 step  inertia multipier
--------------------------
    1   1.000
    2   1.000
    3   1.000
    4   1.000
    5   1.000

 element data

   el   na   nb  mat      erc1      erc2     thick      by-i      by-j
-------------------------------------------------------------

    1    1    2    1     0.000     0.000    0.6848     0.000     0.000
    2    2    3    1     0.000     0.000    0.6848     0.000     0.000
    3    3    4    1     0.000     0.000    0.6848     0.000     0.000
    4    4    5    1     0.000     0.000    0.6848     0.000     0.000
    5    5    6    1     0.000     0.000    0.6848     0.000     0.000
    6    6    7    1     0.000     0.000    0.6848     0.000     0.000
    7    7    8    1     0.000     0.000    0.6848     0.000     0.000
    8    8    9    1     0.000     0.000    0.6848     0.000     0.000
    9    9   10    1     0.000     0.000    0.6848     0.000     0.000
   10   10   11    1     0.000     0.000    0.6848     0.000     0.000
   11   11   12    1     0.000     0.000    0.6848     0.000     0.000
   12   12   13    1     0.000     0.000    0.6848     0.000     0.000
   13   13   14    1     0.000     0.000    0.6848     0.000     0.000
   14   14   15    1     0.000     0.000    0.6848     0.000     0.000
   15   15   16    1     0.000     0.000    0.6848     0.000     0.000
   16   16   17    1     0.000     0.000    0.6848     0.000     0.000
   17   17   18    1     0.000     0.000    0.6848     0.000     0.000
   18   18   19    1     0.000     0.000    0.6848     0.000     0.000
   19   19   20    1     0.000     0.000    0.6848     0.000     0.000
   20   20   21    1     0.000     0.000    0.6848     0.000     0.000
   21   21   22    1     0.000     0.000    0.6848     0.000     0.000
   22   22   23    1     0.000     0.000    0.6848     0.000     0.000
   23   23   24    1     0.000     0.000    0.6848     0.000     0.000
   24   24   25    1     0.000     0.000    0.6848     0.000     0.000
   25   25   26    1     0.000     0.000    0.6848     0.000     0.000
   26   26   27    1     0.000     0.000    0.6848     0.000     0.000
   27   27   28    1     0.000     0.000    0.6848     0.000     0.000
   28   28   29    1     0.000     0.000    0.6848     0.000     0.000
   29   29   30    1     0.000     0.000    0.6848     0.000     0.000
   30   30   31    1     0.000     0.000    0.6848     0.000     0.000
   31   31   32    1     0.000     0.000    0.6848     0.000     0.000
   32   32   33    1     0.000     0.000    0.6848     0.000     0.000
   33   33   34    1     0.000     0.000    0.6848     0.000     0.000
   34   34   35    1     0.000     0.000    0.6848     0.000     0.000
   35   35   36    1     0.000     0.000    0.6848     0.000     0.000
   36   36   37    1     0.000     0.000    0.6848     0.000     0.000
```

37	37	38	1	0.000	0.000	0.6848	0.000	0.000
38	38	39	1	0.000	0.000	0.6848	0.000	0.000
39	39	40	1	0.000	0.000	0.6848	0.000	0.000
40	40	41	1	0.000	0.000	0.6848	0.000	0.000
41	41	42	1	0.000	0.000	0.6848	0.000	0.000
42	42	43	1	0.000	0.000	0.6848	0.000	0.000
43	43	44	1	0.000	0.000	0.6848	0.000	0.000
44	44	45	1	0.000	0.000	0.6848	0.000	0.000
45	45	46	1	0.000	0.000	0.6848	0.000	0.000
46	46	47	1	0.000	0.000	0.6848	0.000	0.000
47	47	48	1	0.000	0.000	0.6848	0.000	0.000
48	48	49	1	0.000	0.000	0.6848	0.000	0.000
49	49	50	1	0.000	0.000	0.6848	0.000	0.000
50	50	51	1	0.000	0.000	0.6848	0.000	0.000
51	51	52	1	0.000	0.000	0.6848	0.000	0.000
52	52	53	1	0.000	0.000	0.6848	0.000	0.000
53	53	54	1	0.000	0.000	0.6848	0.000	0.000
54	54	55	1	0.000	0.000	0.6848	0.000	0.000
55	55	56	1	0.000	0.000	0.6848	0.000	0.000
56	56	57	1	0.000	0.000	0.6848	0.000	0.000
57	57	58	1	0.000	0.000	0.6848	0.000	0.000
58	58	59	1	0.000	0.000	0.6848	0.000	0.000
59	59	60	1	0.000	0.000	0.6848	0.000	0.000
60	60	61	1	0.000	0.000	0.6848	0.000	0.000
61	61	62	1	0.000	0.000	0.6848	0.000	0.000
62	62	63	1	0.000	0.000	0.6848	0.000	0.000
63	63	64	1	0.000	0.000	0.6848	0.000	0.000
64	64	65	1	0.000	0.000	0.6848	0.000	0.000
65	65	66	1	0.000	0.000	0.6848	0.000	0.000
66	66	67	1	0.000	0.000	0.6848	0.000	0.000
67	67	68	1	0.000	0.000	0.6848	0.000	0.000
68	68	69	1	0.000	0.000	0.6848	0.000	0.000
69	69	70	1	0.000	0.000	0.6848	0.000	0.000
70	70	71	1	0.000	0.000	0.6848	0.000	0.000
71	71	72	1	0.000	0.000	0.6848	0.000	0.000
72	72	73	1	0.000	0.000	0.6848	0.000	0.000
73	73	74	1	0.000	0.000	0.6848	0.000	0.000
74	74	75	1	0.000	0.000	0.6848	0.000	0.000
75	75	76	1	0.000	0.000	0.6848	0.000	0.000
76	76	77	1	0.000	0.000	0.6848	0.000	0.000
77	77	78	1	0.000	0.000	0.6848	0.000	0.000
78	78	79	1	0.000	0.000	0.6848	0.000	0.000
79	79	80	1	0.000	0.000	0.6848	0.000	0.000
80	80	81	1	0.000	0.000	0.6848	0.000	0.000
81	81	82	1	0.000	0.000	0.6848	0.000	0.000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      10:49:24                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  4

Tieback_768111                  :
   6   1   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   2   0
.....................................
..........2D POST-TENSION ANCHOR....
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1  inactive
    2  inactive
    3  inactive
    4   active
    5   active

 material set no.    1

 prop( 1) angle          15.0000
 prop( 2) young modulus 0.200100E+09
 prop( 3) modification  time  0.00000
 prop( 4) new young modulus   0.00000

 no. of step variable items:     2
 step   -ve lim     +ve lim
----------------------------
    1   0.000       0.000
    2   0.000       0.000
```

```
     3    0.000        0.000
     4    0.000        0.000
     5    0.000        0.000

 element data

   el     n  mat       a/l     pinit     yieldc     yieldt
-------------------------------------------------------------

     1    14    1   0.2211E-04 163.6     0.000      0.000
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      10:49:24                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


NO. OF NODAL LOADS  (NLOAD) ...................    0
NO. OF LOAD CURVES  (NLCUR) ...................   10
MAXIMUM POINTS/LCURVE (NPTM)...................    5



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      10:49:24                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
L O A D     D A T A


    LOAD FUNCTION NUMBER   =    1
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       1.20000    0.0000E+00
       6.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    2
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       2.20000    0.0000E+00
       6.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    3
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       3.20000    0.0000E+00
       6.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    4
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       3.80000    0.0000E+00
       4.00000    0.1000E+01
       4.20000    0.0000E+00
       6.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    5
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION
```

```
       0.00000    0.0000E+00
       4.80000    0.0000E+00
       5.00000    0.1000E+01
       5.20000    0.0000E+00
       6.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    6
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =    7
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =    8
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =    9
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       3.80000    0.0000E+00
       4.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =   10
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       4.80000    0.0000E+00
       5.00000    0.1000E+01
       6.00000    0.1000E+01


NO. OF DISTRIBUTED LOAD CARDS     0




+-----------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                 Exe Time :24 July 2019      10:49:24                                                  |
+-----------------------------------------------------------------------------------------------------------------------+
L O A D     B A L A N C E

STEP     1 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     1 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000
```

```
STEP     2 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     2 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     3 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     3 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     4 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     4 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     5 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     5 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000


                     LOAD INPUT SECTION COMPLETED



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      10:49:24                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


NO. OF LAYERS ..............................    2
NO. OF DATA PER LAYER.......................  100



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      10:49:24                                                   |
+-------------------------------------------------------------------------------------------------------------------------+

LAYER DESCRIPTORS FOR STEP NO.    1


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.47800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.9140     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.33300     WALL NO.        1
ITEM NO.  11<U-KP    >=  8.3310     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
```

```
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    2


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.47800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.9140     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.33300     WALL NO.        1
ITEM NO.  11<U-KP    >=  8.3310     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    3


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.47800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.9140     WALL NO.        1
```

```
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.33300     WALL NO.        1
ITEM NO.  11<U-KP    >=  8.3310     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    4


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    4

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.47800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.9140     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    4

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.33300     WALL NO.        1
ITEM NO.  11<U-KP    >=  8.3310     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
```

```
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    5


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    5

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.47800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.9140     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    5

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.33300     WALL NO.        1
ITEM NO.  11<U-KP    >=  8.3310     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)


DEFAULT WATER UNIT WEIGHT =  10.000
AVERAGED ON    10 VALUES




+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      10:49:24                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
```

PHASE DESCRIPTORS

STEP NO. 1

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	0.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-16.00	-16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 1

STEP NO. 2

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	0.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-16.00	-16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 2

STEP NO. 3

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-3.000	0.000

Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-16.00	-16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 3

STEP NO. 4

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-3.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-16.00	-16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 4

STEP NO. 5

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-6.730	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-16.00	-16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000

```
PORE_UPDATE_FLAG                          0.000         0.000
PORE_TAB. _FLAG (gt.0= use tabs)          0.000         0.000
lateral thrusts reduction elevatio        0.000         0.000
Downhill reduction factor for effe        0.000         0.000
Downhill reduction factor for pore        0.000         0.000
Uphill reduction factor for effect        0.000         0.000
Uphill reduction factor for pore p        0.000         0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]          0.000         0.000
UPHILL VERTICAL ACCEL.  Kv_uh [g]         0.000         0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]         0.000         0.000
UPHILL BETA ANGLE (SLOPE) [deg]           0.000         0.000
UPHILL DELTA/PHI RATIO                    0.000         0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]         0.000         0.000
DOWNHILL DELTA/PHI RATIO                  0.000         0.000
DYN.WATER BEHAVIOUR                       0.000         0.000
Excess pore pressure RATIO Ru             0.000         0.000
SEISMIC PRESSURE LOWER VALUE              0.000         0.000
SEISMIC PRESSURE UPPER VALUE              0.000         0.000
SEISMIC PRESSURE LOWER LEVEL              0.000         0.000
SEISMIC PRESSURE UPPER LEVEL              0.000         0.000

================================================================================================================end of step    5


 LEFT-HAND WALL

 LOWER  LEVEL         -16.00000
 UPPER  LEVEL           0.00000

 RIGHT-HAND WALL

 LOWER  LEVEL         -16.00000
 UPPER  LEVEL           0.00000




+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.Nominal_63                                          |
|                                Exe Time :24 July 2019      10:49:24                                                     |
+-------------------------------------------------------------------------------------------------------------------------+
 I N I T I A L    S T R E S S    T A B L E S

            S E C T I O N

 NUMBER OF DEFINED TABLES             2


INPUT DATA FOR INITIAL STRESS SET NO.    1
PERTAINING SOIL ELEMENTS AT Y-COORD    0.0000

ACTIVATION TIME                              2.0000
END TIME (TIME BEYOND WHICH IT IS REMOVED)   5.0000

TYPE BOUSSINESQ

 HORIZONTAL DISTANCE (DY)          0.000000000000000E+000
 FOUNDATION WIDTH    (B)            13.0000000000000
 ZETA-F.....                       0.000000000000000E+000
 Q-F .....                          15.0000000000000
 BETA .....                         45.0000000000000
 BEHAVIOUR (0=FREE, 1=REFLECTING)  0.000000000000000E+000


INPUT DATA FOR INITIAL STRESS SET NO.    2
PERTAINING SOIL ELEMENTS AT Y-COORD    0.0000

ACTIVATION TIME                              2.0000
END TIME (TIME BEYOND WHICH IT IS REMOVED)   5.0000

TYPE BOUSSINESQ

 HORIZONTAL DISTANCE (DY)          0.000000000000000E+000
 FOUNDATION WIDTH    (B)            40.0000000000000
 ZETA-F.....                       0.000000000000000E+000
 Q-F .....                          10.0000000000000
 BETA .....                         30.0000000000000
 BEHAVIOUR (0=FREE, 1=REFLECTING)  0.000000000000000E+000
```

```
 ELEMENT GROUPS BACKUP AREA CAN STAY IN CORE AT
 POSITION        3803

 NO. OF D.P.W  FOR THIS AREA       9726
 MAX NO. OF D.P.W. AVAILABLE      81920
 ** MAX NO OF ITERATIONS SET TO         100

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5099E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 30.45     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5099E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   164 NODE     82 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     1 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5099E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 30.45     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5099E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   164 NODE     82 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5099E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 30.45     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5099E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   164 NODE     82 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                     NewProject.BaseDesignSection_28.Nominal_63                                        |
|                                  Exe Time :24 July 2019      10:49:24                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     2 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    1     ( AT TIME   1.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (


ALL NODAL POINTS HAVE ZERO DISPLACEMENT COMPONENTS
```

```
+--------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*       |
|                                                                                                              |
|                                     NewProject.BaseDesignSection_28.Nominal_63                               |
|                                 Exe Time :24 July 2019      10:49:24                                         |
+--------------------------------------------------------------------------------------------------------------+
New Project
```

S T R E S S   R E S U L T S   F O R   G R O U P   N O.   1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 82
C U R R E N T   T I M E   I S   1.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.000	0.000	0.000	0.000	0.000	0.000	V-C	1.5916E+04	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_2_8_L_0
2 D	0.4028	0.000	3.800	2.014	3.800	2.014	V-C	1.5916E+04	-0.2000	0.000	1.000	1.000	2.014	0.000	0.000	Strato1_2_8_L_0
3 D	0.8056	0.000	7.600	4.028	7.600	4.028	V-C	1.5916E+04	-0.4000	0.000	1.000	1.000	4.028	0.000	0.000	Strato1_2_8_L_0
4 D	1.208	0.000	11.40	6.042	11.40	6.042	V-C	1.5916E+04	-0.6000	0.000	1.000	1.000	6.042	0.000	0.000	Strato1_2_8_L_0
5 D	1.611	0.000	15.20	8.056	15.20	8.056	V-C	1.5916E+04	-0.8000	0.000	1.000	1.000	8.056	0.000	0.000	Strato1_2_8_L_0
6 D	2.014	0.000	19.00	10.07	19.00	10.07	V-C	1.5916E+04	-1.000	0.000	1.000	1.000	10.07	0.000	0.000	Strato1_2_8_L_0
7 D	2.417	0.000	22.80	12.08	22.80	12.08	V-C	1.5916E+04	-1.200	0.000	1.000	1.000	12.08	0.000	0.000	Strato1_2_8_L_0
8 D	2.820	0.000	26.60	14.10	26.60	14.10	V-C	1.5916E+04	-1.400	0.000	1.000	1.000	14.10	0.000	0.000	Strato1_2_8_L_0
9 D	3.222	0.000	30.40	16.11	30.40	16.11	V-C	1.5916E+04	-1.600	0.000	1.000	1.000	16.11	0.000	0.000	Strato1_2_8_L_0
10 D	3.625	0.000	34.20	18.13	34.20	18.13	V-C	1.5916E+04	-1.800	0.000	1.000	1.000	18.13	0.000	0.000	Strato1_2_8_L_0
11 D	4.028	0.000	38.00	20.14	38.00	20.14	V-C	1.5916E+04	-2.000	0.000	1.000	1.000	20.14	0.000	0.000	Strato1_2_8_L_0
12 D	4.431	0.000	41.80	22.15	41.80	22.15	V-C	1.5916E+04	-2.200	0.000	1.000	1.000	22.15	0.000	0.000	Strato1_2_8_L_0
13 D	3.625	0.000	45.60	24.17	45.60	24.17	V-C	1.5916E+04	-2.400	0.000	1.000	1.000	24.17	0.000	0.000	Strato1_2_8_L_0
14 D	3.776	0.000	47.50	25.18	47.50	25.18	V-C	1.5916E+04	-2.500	0.000	1.000	1.000	25.18	0.000	0.000	Strato1_2_8_L_0
15 D	5.438	0.000	51.30	27.19	51.30	27.19	V-C	1.5916E+04	-2.700	0.000	1.000	1.000	27.19	0.000	0.000	Strato1_2_8_L_0
16 D	5.841	0.000	55.10	29.20	55.10	29.20	V-C	1.5916E+04	-2.900	0.000	1.000	1.000	29.20	0.000	0.000	Strato1_2_8_L_0
17 D	6.243	0.000	58.90	31.22	58.90	31.22	V-C	1.5916E+04	-3.100	0.000	1.000	1.000	31.22	0.000	0.000	Strato1_2_8_L_0
18 D	6.646	0.000	62.70	33.23	62.70	33.23	V-C	1.5916E+04	-3.300	0.000	1.000	1.000	33.23	0.000	0.000	Strato1_2_8_L_0
19 D	7.049	0.000	66.50	35.25	66.50	35.25	V-C	1.5916E+04	-3.500	0.000	1.000	1.000	35.25	0.000	0.000	Strato1_2_8_L_0
20 D	7.452	0.000	70.30	37.26	70.30	37.26	V-C	1.5916E+04	-3.700	0.000	1.000	1.000	37.26	0.000	0.000	Strato1_2_8_L_0
21 D	7.855	0.000	74.10	39.27	74.10	39.27	V-C	1.5916E+04	-3.900	0.000	1.000	1.000	39.27	0.000	0.000	Strato1_2_8_L_0
22 D	8.257	0.000	77.90	41.29	77.90	41.29	V-C	1.5916E+04	-4.100	0.000	1.000	1.000	41.29	0.000	0.000	Strato1_2_8_L_0
23 D	8.660	0.000	81.70	43.30	81.70	43.30	V-C	1.5916E+04	-4.300	0.000	1.000	1.000	43.30	0.000	0.000	Strato1_2_8_L_0
24 D	9.063	0.000	85.50	45.32	85.50	45.32	V-C	1.5916E+04	-4.500	0.000	1.000	1.000	45.31	0.000	0.000	Strato1_2_8_L_0
25 D	9.466	0.000	89.30	47.33	89.30	47.33	V-C	1.5916E+04	-4.700	0.000	1.000	1.000	47.33	0.000	0.000	Strato1_2_8_L_0
26 D	9.869	0.000	93.10	49.34	93.10	49.34	V-C	1.5916E+04	-4.900	0.000	1.000	1.000	49.34	0.000	0.000	Strato1_2_8_L_0
27 D	10.27	0.000	96.90	51.36	96.90	51.36	V-C	1.5916E+04	-5.100	0.000	1.000	1.000	51.36	0.000	0.000	Strato1_2_8_L_0
28 D	10.67	0.000	100.7	53.37	100.7	53.37	V-C	1.5916E+04	-5.300	0.000	1.000	1.000	53.37	0.000	0.000	Strato1_2_8_L_0
29 D	11.08	0.000	104.5	55.38	104.5	55.38	V-C	1.5916E+04	-5.500	0.000	1.000	1.000	55.38	0.000	0.000	Strato1_2_8_L_0
30 D	11.48	0.000	108.3	57.40	108.3	57.40	V-C	1.5916E+04	-5.700	0.000	1.000	1.000				

57.40	0.000	0.000	Strato1_2_8_L_0									
31 D	11.88	0.000	112.1	59.41	112.1	59.41	V-C	1.5916E+04	-5.900	0.000	1.000	1.000
59.41	0.000	0.000	Strato1_2_8_L_0									
32 D	12.29	0.000	115.9	61.43	115.9	61.43	V-C	1.5916E+04	-6.100	0.000	1.000	1.000
61.43	0.000	0.000	Strato1_2_8_L_0									
33 D	12.69	0.000	119.7	63.44	119.7	63.44	V-C	1.5916E+04	-6.300	0.000	1.000	1.000
63.44	0.000	0.000	Strato1_2_8_L_0									
34 D	13.09	0.000	123.5	65.45	123.5	65.45	V-C	1.5916E+04	-6.500	0.000	1.000	1.000
65.45	0.000	0.000	Strato1_2_8_L_0									
35 D	13.49	0.000	127.3	67.47	127.3	67.47	V-C	1.5916E+04	-6.700	0.000	1.000	1.000
67.47	0.000	0.000	Strato1_2_8_L_0									
36 D	13.90	0.000	131.1	69.48	131.1	69.48	V-C	1.5916E+04	-6.900	0.000	1.000	1.000
69.48	0.000	0.000	Strato1_2_8_L_0									
37 D	14.30	0.000	134.9	71.50	134.9	71.50	V-C	1.5916E+04	-7.100	0.000	1.000	1.000
71.50	0.000	0.000	Strato1_2_8_L_0									
38 D	14.70	0.000	138.7	73.51	138.7	73.51	V-C	1.5916E+04	-7.300	0.000	1.000	1.000
73.51	0.000	0.000	Strato1_2_8_L_0									
39 D	15.10	0.000	142.5	75.52	142.5	75.52	V-C	1.5916E+04	-7.500	0.000	1.000	1.000
75.52	0.000	0.000	Strato1_2_8_L_0									
40 D	15.51	0.000	146.3	77.54	146.3	77.54	V-C	1.5916E+04	-7.700	0.000	1.000	1.000
77.54	0.000	0.000	Strato1_2_8_L_0									
41 D	15.91	0.000	150.1	79.55	150.1	79.55	V-C	1.5916E+04	-7.900	0.000	1.000	1.000
79.55	0.000	0.000	Strato1_2_8_L_0									
42 D	16.31	0.000	153.9	81.57	153.9	81.57	V-C	1.5916E+04	-8.100	0.000	1.000	1.000
81.57	0.000	0.000	Strato1_2_8_L_0									
43 D	16.72	0.000	157.7	83.58	157.7	83.58	V-C	1.5916E+04	-8.300	0.000	1.000	1.000
83.58	0.000	0.000	Strato1_2_8_L_0									
44 D	17.12	0.000	161.5	85.59	161.5	85.59	V-C	1.5916E+04	-8.500	0.000	1.000	1.000
85.59	0.000	0.000	Strato1_2_8_L_0									
45 D	17.52	0.000	165.3	87.61	165.3	87.61	V-C	1.5916E+04	-8.700	0.000	1.000	1.000
87.61	0.000	0.000	Strato1_2_8_L_0									
46 D	17.92	0.000	169.1	89.62	169.1	89.62	V-C	1.5916E+04	-8.900	0.000	1.000	1.000
89.62	0.000	0.000	Strato1_2_8_L_0									
47 D	18.33	0.000	172.9	91.64	172.9	91.64	V-C	1.5916E+04	-9.100	0.000	1.000	1.000
91.64	0.000	0.000	Strato1_2_8_L_0									
48 D	18.73	0.000	176.7	93.65	176.7	93.65	V-C	1.5916E+04	-9.300	0.000	1.000	1.000
93.65	0.000	0.000	Strato1_2_8_L_0									
49 D	19.13	0.000	180.5	95.66	180.5	95.66	V-C	1.5916E+04	-9.500	0.000	1.000	1.000
95.66	0.000	0.000	Strato1_2_8_L_0									
50 D	18.45	0.000	184.5	92.25	184.5	92.25	V-C	4.5023E+04	-9.700	0.000	1.000	1.000
92.25	0.000	0.000	Strato2_3095_82743_L_0									
51 D	18.85	0.000	188.5	94.25	188.5	94.25	V-C	4.5023E+04	-9.900	0.000	1.000	1.000
94.25	0.000	0.000	Strato2_3095_82743_L_0									
52 D	19.25	0.000	192.5	96.25	192.5	96.25	V-C	4.5023E+04	-10.10	0.000	1.000	1.000
96.25	0.000	0.000	Strato2_3095_82743_L_0									
53 D	19.65	0.000	196.5	98.25	196.5	98.25	V-C	4.5023E+04	-10.30	0.000	1.000	1.000
98.25	0.000	0.000	Strato2_3095_82743_L_0									
54 D	20.05	0.000	200.5	100.2	200.5	100.2	V-C	4.5023E+04	-10.50	0.000	1.000	1.000
100.2	0.000	0.000	Strato2_3095_82743_L_0									
55 D	20.45	0.000	204.5	102.2	204.5	102.2	V-C	4.5023E+04	-10.70	0.000	1.000	1.000
102.2	0.000	0.000	Strato2_3095_82743_L_0									
56 D	20.85	0.000	208.5	104.2	208.5	104.2	V-C	4.5023E+04	-10.90	0.000	1.000	1.000
104.2	0.000	0.000	Strato2_3095_82743_L_0									
57 D	21.25	0.000	212.5	106.2	212.5	106.2	V-C	4.5023E+04	-11.10	0.000	1.000	1.000
106.2	0.000	0.000	Strato2_3095_82743_L_0									
58 D	21.65	0.000	216.5	108.2	216.5	108.2	V-C	4.5023E+04	-11.30	0.000	1.000	1.000
108.2	0.000	0.000	Strato2_3095_82743_L_0									
59 D	22.05	0.000	220.5	110.2	220.5	110.2	V-C	4.5023E+04	-11.50	0.000	1.000	1.000
110.2	0.000	0.000	Strato2_3095_82743_L_0									
60 D	22.45	0.000	224.5	112.2	224.5	112.2	V-C	4.5023E+04	-11.70	0.000	1.000	1.000
112.2	0.000	0.000	Strato2_3095_82743_L_0									
61 D	22.85	0.000	228.5	114.2	228.5	114.2	V-C	4.5023E+04	-11.90	0.000	1.000	1.000
114.2	0.000	0.000	Strato2_3095_82743_L_0									
62 D	23.25	0.000	232.5	116.2	232.5	116.2	V-C	4.5023E+04	-12.10	0.000	1.000	1.000
116.2	0.000	0.000	Strato2_3095_82743_L_0									
63 D	23.65	0.000	236.5	118.2	236.5	118.2	V-C	4.5023E+04	-12.30	0.000	1.000	1.000
118.2	0.000	0.000	Strato2_3095_82743_L_0									
64 D	24.05	0.000	240.5	120.2	240.5	120.2	V-C	4.5023E+04	-12.50	0.000	1.000	1.000
120.2	0.000	0.000	Strato2_3095_82743_L_0									
65 D	24.45	0.000	244.5	122.2	244.5	122.2	V-C	4.5023E+04	-12.70	0.000	1.000	1.000
122.2	0.000	0.000	Strato2_3095_82743_L_0									
66 D	24.85	0.000	248.5	124.2	248.5	124.2	V-C	4.5023E+04	-12.90	0.000	1.000	1.000
124.2	0.000	0.000	Strato2_3095_82743_L_0									
67 D	25.25	0.000	252.5	126.2	252.5	126.2	V-C	4.5023E+04	-13.10	0.000	1.000	1.000
126.2	0.000	0.000	Strato2_3095_82743_L_0									
68 D	25.65	0.000	256.5	128.2	256.5	128.2	V-C	4.5023E+04	-13.30	0.000	1.000	1.000
128.2	0.000	0.000	Strato2_3095_82743_L_0									
69 D	26.05	0.000	260.5	130.2	260.5	130.2	V-C	4.5023E+04	-13.50	0.000	1.000	1.000
130.2	0.000	0.000	Strato2_3095_82743_L_0									
70 D	26.45	0.000	264.5	132.2	264.5	132.2	V-C	4.5023E+04	-13.70	0.000	1.000	1.000
132.2	0.000	0.000	Strato2_3095_82743_L_0									
71 D	26.85	0.000	268.5	134.2	268.5	134.2	V-C	4.5023E+04	-13.90	0.000	1.000	1.000
134.2	0.000	0.000	Strato2_3095_82743_L_0									
72 D	27.25	0.000	272.5	136.2	272.5	136.2	V-C	4.5023E+04	-14.10	0.000	1.000	1.000
136.2	0.000	0.000	Strato2_3095_82743_L_0									

```
  73 D   27.65       0.000       276.5        138.2        276.5        138.2             V-C  4.5023E+04  -14.30        0.000          1.000         1.000
138.2         0.000       0.000      Strato2_3095_82743_L_0
  74 D   28.05       0.000       280.5        140.2        280.5        140.2             V-C  4.5023E+04  -14.50        0.000          1.000         1.000
140.2         0.000       0.000      Strato2_3095_82743_L_0
  75 D   28.45       0.000       284.5        142.2        284.5        142.2             V-C  4.5023E+04  -14.70        0.000          1.000         1.000
142.2         0.000       0.000      Strato2_3095_82743_L_0
  76 D   28.85       0.000       288.5        144.2        288.5        144.2             V-C  4.5023E+04  -14.90        0.000          1.000         1.000
144.2         0.000       0.000      Strato2_3095_82743_L_0
  77 D   29.25       0.000       292.5        146.2        292.5        146.2             V-C  4.5023E+04  -15.10        0.000          1.000         1.000
146.2         0.000       0.000      Strato2_3095_82743_L_0
  78 D   29.65       0.000       296.5        148.2        296.5        148.2             V-C  4.5023E+04  -15.30        0.000          1.000         1.000
148.2         0.000       0.000      Strato2_3095_82743_L_0
  79 D   30.05       0.000       300.5        150.2        300.5        150.2             V-C  4.5023E+04  -15.50        0.000          1.000         1.000
150.2         0.000       0.000      Strato2_3095_82743_L_0
  80 D   30.45       0.000       304.5        152.2        304.5        152.2             V-C  4.5023E+04  -15.70        0.000          1.000         1.000
152.2         0.000       0.000      Strato2_3095_82743_L_0
  81 D   23.14       0.000       308.5        154.2        308.5        154.2             V-C  4.5023E+04  -15.90        0.000          1.000         1.000
154.2         0.000       0.000      Strato2_3095_82743_L_0
  82 D   7.763       0.000       310.5        155.2        310.5        155.2             V-C  4.5023E+04  -16.00        0.000          1.000         1.000
155.2         0.000       0.000      Strato2_3095_82743_L_0



 +----------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*   |
 |                                                                                                          |
 |                                   NewProject.BaseDesignSection_28.Nominal_63                             |
 |                               Exe Time :24 July 2019      10:49:24                                       |
 +----------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S    R E S U L T S    F O R    G R O U P   N O.    2

 0_R                                  :
 ELEMENT TYPE     5 NO.OF ELEMENTS. IN THIS GROUP   82
 C U R R E N T    T I M E    I S      1.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P           STATE  STIFFNESS Z-LEVEL       PORE         E FACTOR     UFACTOR
Peq            Su_a         Su_p       LAYER
 -------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1 D   0.000       0.000       0.000        0.000        0.000        0.000             V-C  1.1045E+04   0.000        0.000          1.000         1.000
0.000         0.000       0.000      Strato1_2_8_L_0
   2 D  0.4028       0.000       3.800        2.014        3.800        2.014             V-C  1.1045E+04 -0.2000        0.000          1.000         1.000
2.014         0.000       0.000      Strato1_2_8_L_0
   3 D  0.8056       0.000       7.600        4.028        7.600        4.028             V-C  1.1045E+04 -0.4000        0.000          1.000         1.000
4.028         0.000       0.000      Strato1_2_8_L_0
   4 D   1.208       0.000       11.40        6.042        11.40        6.042             V-C  1.1045E+04 -0.6000        0.000          1.000         1.000
6.042         0.000       0.000      Strato1_2_8_L_0
   5 D   1.611       0.000       15.20        8.056        15.20        8.056             V-C  1.1045E+04 -0.8000        0.000          1.000         1.000
8.056         0.000       0.000      Strato1_2_8_L_0
   6 D   2.014       0.000       19.00        10.07        19.00        10.07             V-C  1.1045E+04  -1.000        0.000          1.000         1.000
10.07         0.000       0.000      Strato1_2_8_L_0
   7 D   2.417       0.000       22.80        12.08        22.80        12.08             V-C  1.1045E+04  -1.200        0.000          1.000         1.000
12.08         0.000       0.000      Strato1_2_8_L_0
   8 D   2.820       0.000       26.60        14.10        26.60        14.10             V-C  1.1045E+04  -1.400        0.000          1.000         1.000
14.10         0.000       0.000      Strato1_2_8_L_0
   9 D   3.222       0.000       30.40        16.11        30.40        16.11             V-C  1.1045E+04  -1.600        0.000          1.000         1.000
16.11         0.000       0.000      Strato1_2_8_L_0
  10 D   3.625       0.000       34.20        18.13        34.20        18.13             V-C  1.1045E+04  -1.800        0.000          1.000         1.000
18.13         0.000       0.000      Strato1_2_8_L_0
  11 D   4.028       0.000       38.00        20.14        38.00        20.14             V-C  1.1045E+04  -2.000        0.000          1.000         1.000
20.14         0.000       0.000      Strato1_2_8_L_0
  12 D   4.431       0.000       41.80        22.15        41.80        22.15             V-C  1.1045E+04  -2.200        0.000          1.000         1.000
22.15         0.000       0.000      Strato1_2_8_L_0
  13 D   3.625       0.000       45.60        24.17        45.60        24.17             V-C  1.1045E+04  -2.400        0.000          1.000         1.000
24.17         0.000       0.000      Strato1_2_8_L_0
  14 D   3.776       0.000       47.50        25.18        47.50        25.18             V-C  1.1045E+04  -2.500        0.000          1.000         1.000
25.18         0.000       0.000      Strato1_2_8_L_0
  15 D   5.438       0.000       51.30        27.19        51.30        27.19             V-C  1.1045E+04  -2.700        0.000          1.000         1.000
27.19         0.000       0.000      Strato1_2_8_L_0
  16 D   5.841       0.000       55.10        29.20        55.10        29.20             V-C  1.1045E+04  -2.900        0.000          1.000         1.000
29.20         0.000       0.000      Strato1_2_8_L_0
  17 D   6.243       0.000       58.90        31.22        58.90        31.22             V-C  1.1045E+04  -3.100        0.000          1.000         1.000
31.22         0.000       0.000      Strato1_2_8_L_0
  18 D   6.646       0.000       62.70        33.23        62.70        33.23             V-C  1.1045E+04  -3.300        0.000          1.000         1.000
33.23         0.000       0.000      Strato1_2_8_L_0
  19 D   7.049       0.000       66.50        35.25        66.50        35.25             V-C  1.1045E+04  -3.500        0.000          1.000         1.000
35.25         0.000       0.000      Strato1_2_8_L_0
```

20 D	7.452	0.000	70.30	37.26	70.30	37.26	V-C	1.1045E+04	-3.700	0.000	1.000	1.000
37.26	0.000	0.000	Strato1_2_8_L_0									
21 D	7.855	0.000	74.10	39.27	74.10	39.27	V-C	1.1045E+04	-3.900	0.000	1.000	1.000
39.27	0.000	0.000	Strato1_2_8_L_0									
22 D	8.257	0.000	77.90	41.29	77.90	41.29	V-C	1.1045E+04	-4.100	0.000	1.000	1.000
41.29	0.000	0.000	Strato1_2_8_L_0									
23 D	8.660	0.000	81.70	43.30	81.70	43.30	V-C	1.1045E+04	-4.300	0.000	1.000	1.000
43.30	0.000	0.000	Strato1_2_8_L_0									
24 D	9.063	0.000	85.50	45.32	85.50	45.32	V-C	1.1045E+04	-4.500	0.000	1.000	1.000
45.31	0.000	0.000	Strato1_2_8_L_0									
25 D	9.466	0.000	89.30	47.33	89.30	47.33	V-C	1.1045E+04	-4.700	0.000	1.000	1.000
47.33	0.000	0.000	Strato1_2_8_L_0									
26 D	9.869	0.000	93.10	49.34	93.10	49.34	V-C	1.1045E+04	-4.900	0.000	1.000	1.000
49.34	0.000	0.000	Strato1_2_8_L_0									
27 D	10.27	0.000	96.90	51.36	96.90	51.36	V-C	1.1045E+04	-5.100	0.000	1.000	1.000
51.36	0.000	0.000	Strato1_2_8_L_0									
28 D	10.67	0.000	100.7	53.37	100.7	53.37	V-C	1.1045E+04	-5.300	0.000	1.000	1.000
53.37	0.000	0.000	Strato1_2_8_L_0									
29 D	11.08	0.000	104.5	55.38	104.5	55.38	V-C	1.1045E+04	-5.500	0.000	1.000	1.000
55.38	0.000	0.000	Strato1_2_8_L_0									
30 D	11.48	0.000	108.3	57.40	108.3	57.40	V-C	1.1045E+04	-5.700	0.000	1.000	1.000
57.40	0.000	0.000	Strato1_2_8_L_0									
31 D	11.88	0.000	112.1	59.41	112.1	59.41	V-C	1.1045E+04	-5.900	0.000	1.000	1.000
59.41	0.000	0.000	Strato1_2_8_L_0									
32 D	12.29	0.000	115.9	61.43	115.9	61.43	V-C	1.1045E+04	-6.100	0.000	1.000	1.000
61.43	0.000	0.000	Strato1_2_8_L_0									
33 D	12.69	0.000	119.7	63.44	119.7	63.44	V-C	1.1045E+04	-6.300	0.000	1.000	1.000
63.44	0.000	0.000	Strato1_2_8_L_0									
34 D	13.09	0.000	123.5	65.45	123.5	65.45	V-C	1.1045E+04	-6.500	0.000	1.000	1.000
65.45	0.000	0.000	Strato1_2_8_L_0									
35 D	13.49	0.000	127.3	67.47	127.3	67.47	V-C	1.1045E+04	-6.700	0.000	1.000	1.000
67.47	0.000	0.000	Strato1_2_8_L_0									
36 D	13.90	0.000	131.1	69.48	131.1	69.48	V-C	1.1045E+04	-6.900	0.000	1.000	1.000
69.48	0.000	0.000	Strato1_2_8_L_0									
37 D	14.30	0.000	134.9	71.50	134.9	71.50	V-C	1.1045E+04	-7.100	0.000	1.000	1.000
71.50	0.000	0.000	Strato1_2_8_L_0									
38 D	14.70	0.000	138.7	73.51	138.7	73.51	V-C	1.1045E+04	-7.300	0.000	1.000	1.000
73.51	0.000	0.000	Strato1_2_8_L_0									
39 D	15.10	0.000	142.5	75.52	142.5	75.52	V-C	1.1045E+04	-7.500	0.000	1.000	1.000
75.52	0.000	0.000	Strato1_2_8_L_0									
40 D	15.51	0.000	146.3	77.54	146.3	77.54	V-C	1.1045E+04	-7.700	0.000	1.000	1.000
77.54	0.000	0.000	Strato1_2_8_L_0									
41 D	15.91	0.000	150.1	79.55	150.1	79.55	V-C	1.1045E+04	-7.900	0.000	1.000	1.000
79.55	0.000	0.000	Strato1_2_8_L_0									
42 D	16.31	0.000	153.9	81.57	153.9	81.57	V-C	1.1045E+04	-8.100	0.000	1.000	1.000
81.57	0.000	0.000	Strato1_2_8_L_0									
43 D	16.72	0.000	157.7	83.58	157.7	83.58	V-C	1.1045E+04	-8.300	0.000	1.000	1.000
83.58	0.000	0.000	Strato1_2_8_L_0									
44 D	17.12	0.000	161.5	85.59	161.5	85.59	V-C	1.1045E+04	-8.500	0.000	1.000	1.000
85.59	0.000	0.000	Strato1_2_8_L_0									
45 D	17.52	0.000	165.3	87.61	165.3	87.61	V-C	1.1045E+04	-8.700	0.000	1.000	1.000
87.61	0.000	0.000	Strato1_2_8_L_0									
46 D	17.92	0.000	169.1	89.62	169.1	89.62	V-C	1.1045E+04	-8.900	0.000	1.000	1.000
89.62	0.000	0.000	Strato1_2_8_L_0									
47 D	18.33	0.000	172.9	91.64	172.9	91.64	V-C	1.1045E+04	-9.100	0.000	1.000	1.000
91.64	0.000	0.000	Strato1_2_8_L_0									
48 D	18.73	0.000	176.7	93.65	176.7	93.65	V-C	1.1045E+04	-9.300	0.000	1.000	1.000
93.65	0.000	0.000	Strato1_2_8_L_0									
49 D	19.13	0.000	180.5	95.66	180.5	95.66	V-C	1.1045E+04	-9.500	0.000	1.000	1.000
95.66	0.000	0.000	Strato1_2_8_L_0									
50 D	18.45	0.000	184.5	92.25	184.5	92.25	V-C	2.4402E+04	-9.700	0.000	1.000	1.000
92.25	0.000	0.000	Strato2_3095_82743_L_0									
51 D	18.85	0.000	188.5	94.25	188.5	94.25	V-C	2.4402E+04	-9.900	0.000	1.000	1.000
94.25	0.000	0.000	Strato2_3095_82743_L_0									
52 D	19.25	0.000	192.5	96.25	192.5	96.25	V-C	2.4402E+04	-10.10	0.000	1.000	1.000
96.25	0.000	0.000	Strato2_3095_82743_L_0									
53 D	19.65	0.000	196.5	98.25	196.5	98.25	V-C	2.4402E+04	-10.30	0.000	1.000	1.000
98.25	0.000	0.000	Strato2_3095_82743_L_0									
54 D	20.05	0.000	200.5	100.2	200.5	100.2	V-C	2.4402E+04	-10.50	0.000	1.000	1.000
100.2	0.000	0.000	Strato2_3095_82743_L_0									
55 D	20.45	0.000	204.5	102.2	204.5	102.2	V-C	2.4402E+04	-10.70	0.000	1.000	1.000
102.2	0.000	0.000	Strato2_3095_82743_L_0									
56 D	20.85	0.000	208.5	104.2	208.5	104.2	V-C	2.4402E+04	-10.90	0.000	1.000	1.000
104.2	0.000	0.000	Strato2_3095_82743_L_0									
57 D	21.25	0.000	212.5	106.2	212.5	106.2	V-C	2.4402E+04	-11.10	0.000	1.000	1.000
106.2	0.000	0.000	Strato2_3095_82743_L_0									
58 D	21.65	0.000	216.5	108.2	216.5	108.2	V-C	2.4402E+04	-11.30	0.000	1.000	1.000
108.2	0.000	0.000	Strato2_3095_82743_L_0									
59 D	22.05	0.000	220.5	110.2	220.5	110.2	V-C	2.4402E+04	-11.50	0.000	1.000	1.000
110.2	0.000	0.000	Strato2_3095_82743_L_0									
60 D	22.45	0.000	224.5	112.2	224.5	112.2	V-C	2.4402E+04	-11.70	0.000	1.000	1.000
112.2	0.000	0.000	Strato2_3095_82743_L_0									
61 D	22.85	0.000	228.5	114.2	228.5	114.2	V-C	2.4402E+04	-11.90	0.000	1.000	1.000
114.2	0.000	0.000	Strato2_3095_82743_L_0									
62 D	23.25	0.000	232.5	116.2	232.5	116.2	V-C	2.4402E+04	-12.10	0.000	1.000	1.000

```
116.2       0.000       0.000     Strato2_3095_82743_L_0
  63 D   23.65       0.000       236.5       118.2       236.5       118.2       V-C  2.4402E+04  -12.30       0.000       1.000       1.000
118.2       0.000       0.000     Strato2_3095_82743_L_0
  64 D   24.05       0.000       240.5       120.2       240.5       120.2       V-C  2.4402E+04  -12.50       0.000       1.000       1.000
120.2       0.000       0.000     Strato2_3095_82743_L_0
  65 D   24.45       0.000       244.5       122.2       244.5       122.2       V-C  2.4402E+04  -12.70       0.000       1.000       1.000
122.2       0.000       0.000     Strato2_3095_82743_L_0
  66 D   24.85       0.000       248.5       124.2       248.5       124.2       V-C  2.4402E+04  -12.90       0.000       1.000       1.000
124.2       0.000       0.000     Strato2_3095_82743_L_0
  67 D   25.25       0.000       252.5       126.2       252.5       126.2       V-C  2.4402E+04  -13.10       0.000       1.000       1.000
126.2       0.000       0.000     Strato2_3095_82743_L_0
  68 D   25.65       0.000       256.5       128.2       256.5       128.2       V-C  2.4402E+04  -13.30       0.000       1.000       1.000
128.2       0.000       0.000     Strato2_3095_82743_L_0
  69 D   26.05       0.000       260.5       130.2       260.5       130.2       V-C  2.4402E+04  -13.50       0.000       1.000       1.000
130.2       0.000       0.000     Strato2_3095_82743_L_0
  70 D   26.45       0.000       264.5       132.2       264.5       132.2       V-C  2.4402E+04  -13.70       0.000       1.000       1.000
132.2       0.000       0.000     Strato2_3095_82743_L_0
  71 D   26.85       0.000       268.5       134.2       268.5       134.2       V-C  2.4402E+04  -13.90       0.000       1.000       1.000
134.2       0.000       0.000     Strato2_3095_82743_L_0
  72 D   27.25       0.000       272.5       136.2       272.5       136.2       V-C  2.4402E+04  -14.10       0.000       1.000       1.000
136.2       0.000       0.000     Strato2_3095_82743_L_0
  73 D   27.65       0.000       276.5       138.2       276.5       138.2       V-C  2.4402E+04  -14.30       0.000       1.000       1.000
138.2       0.000       0.000     Strato2_3095_82743_L_0
  74 D   28.05       0.000       280.5       140.2       280.5       140.2       V-C  2.4402E+04  -14.50       0.000       1.000       1.000
140.2       0.000       0.000     Strato2_3095_82743_L_0
  75 D   28.45       0.000       284.5       142.2       284.5       142.2       V-C  2.4402E+04  -14.70       0.000       1.000       1.000
142.2       0.000       0.000     Strato2_3095_82743_L_0
  76 D   28.85       0.000       288.5       144.2       288.5       144.2       V-C  2.4402E+04  -14.90       0.000       1.000       1.000
144.2       0.000       0.000     Strato2_3095_82743_L_0
  77 D   29.25       0.000       292.5       146.2       292.5       146.2       V-C  2.4402E+04  -15.10       0.000       1.000       1.000
146.2       0.000       0.000     Strato2_3095_82743_L_0
  78 D   29.65       0.000       296.5       148.2       296.5       148.2       V-C  2.4402E+04  -15.30       0.000       1.000       1.000
148.2       0.000       0.000     Strato2_3095_82743_L_0
  79 D   30.05       0.000       300.5       150.2       300.5       150.2       V-C  2.4402E+04  -15.50       0.000       1.000       1.000
150.2       0.000       0.000     Strato2_3095_82743_L_0
  80 D   30.45       0.000       304.5       152.2       304.5       152.2       V-C  2.4402E+04  -15.70       0.000       1.000       1.000
152.2       0.000       0.000     Strato2_3095_82743_L_0
  81 D   23.14       0.000       308.5       154.2       308.5       154.2       V-C  2.4402E+04  -15.90       0.000       1.000       1.000
154.2       0.000       0.000     Strato2_3095_82743_L_0
  82 D    7.763      0.000       310.5       155.2       310.5       155.2       V-C  2.4402E+04  -16.00       0.000       1.000       1.000
155.2       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
 |                                                                                                                               |
 |                                        NewProject.BaseDesignSection_28.Nominal_63                                             |
 |                                   Exe Time :24 July 2019      10:49:24                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

 WallElement_33                :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   81
 C U R R E N T   T I M E   I S     1.0000

  WALL2D ELEMENT

    EL      TA          TB          MA          MB
 ------------------------------------------------------
     1  0.0000      0.0000      0.0000      0.0000
     2  0.0000      0.0000      0.0000      0.0000
     3  0.0000      0.0000      0.0000      0.0000
     4  0.0000      0.0000      0.0000      0.0000
     5  0.0000      0.0000      0.0000      0.0000
     6  0.0000      0.0000      0.0000      0.0000
     7  0.0000      0.0000      0.0000      0.0000
     8  0.0000      0.0000      0.0000      0.0000
     9  0.0000      0.0000      0.0000      0.0000
    10  0.0000      0.0000      0.0000      0.0000
    11  0.0000      0.0000      0.0000      0.0000
    12  0.0000      0.0000      0.0000      0.0000
    13  0.0000      0.0000      0.0000      0.0000
    14  0.0000      0.0000      0.0000      0.0000
    15  0.0000      0.0000      0.0000      0.0000
    16  0.0000      0.0000      0.0000      0.0000
    17  0.0000      0.0000      0.0000      0.0000
    18  0.0000      0.0000      0.0000      0.0000
    19  0.0000      0.0000      0.0000      0.0000
    20  0.0000      0.0000      0.0000      0.0000
    21  0.0000      0.0000      0.0000      0.0000
```

22	0.0000	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0000
24	0.0000	0.0000	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000
26	0.0000	0.0000	0.0000	0.0000
27	0.0000	0.0000	0.0000	0.0000
28	0.0000	0.0000	0.0000	0.0000
29	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000
31	0.0000	0.0000	0.0000	0.0000
32	0.0000	0.0000	0.0000	0.0000
33	0.0000	0.0000	0.0000	0.0000
34	0.0000	0.0000	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000
36	0.0000	0.0000	0.0000	0.0000
37	0.0000	0.0000	0.0000	0.0000
38	0.0000	0.0000	0.0000	0.0000
39	0.0000	0.0000	0.0000	0.0000
40	0.0000	0.0000	0.0000	0.0000
41	0.0000	0.0000	0.0000	0.0000
42	0.0000	0.0000	0.0000	0.0000
43	0.0000	0.0000	0.0000	0.0000
44	0.0000	0.0000	0.0000	0.0000
45	0.0000	0.0000	0.0000	0.0000
46	0.0000	0.0000	0.0000	0.0000
47	0.0000	0.0000	0.0000	0.0000
48	0.0000	0.0000	0.0000	0.0000
49	0.0000	0.0000	0.0000	0.0000
50	0.0000	0.0000	0.0000	0.0000
51	0.0000	0.0000	0.0000	0.0000
52	0.0000	0.0000	0.0000	0.0000
53	0.0000	0.0000	0.0000	0.0000
54	0.0000	0.0000	0.0000	0.0000
55	0.0000	0.0000	0.0000	0.0000
56	0.0000	0.0000	0.0000	0.0000
57	0.0000	0.0000	0.0000	0.0000
58	0.0000	0.0000	0.0000	0.0000
59	0.0000	0.0000	0.0000	0.0000
60	0.0000	0.0000	0.0000	0.0000
61	0.0000	0.0000	0.0000	0.0000
62	0.0000	0.0000	0.0000	0.0000
63	0.0000	0.0000	0.0000	0.0000
64	0.0000	0.0000	0.0000	0.0000
65	0.0000	0.0000	0.0000	0.0000
66	0.0000	0.0000	0.0000	0.0000
67	0.0000	0.0000	0.0000	0.0000
68	0.0000	0.0000	0.0000	0.0000
69	0.0000	0.0000	0.0000	0.0000
70	0.0000	0.0000	0.0000	0.0000
71	0.0000	0.0000	0.0000	0.0000
72	0.0000	0.0000	0.0000	0.0000
73	0.0000	0.0000	0.0000	0.0000
74	0.0000	0.0000	0.0000	0.0000
75	0.0000	0.0000	0.0000	0.0000
76	0.0000	0.0000	0.0000	0.0000
77	0.0000	0.0000	0.0000	0.0000
78	0.0000	0.0000	0.0000	0.0000
79	0.0000	0.0000	0.0000	0.0000
80	0.0000	0.0000	0.0000	0.0000
81	0.0000	0.0000	0.0000	0.0000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      10:49:24                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P    N O.    4

Tieback_768111                   :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      1.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****
```

```
ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5557E+05 RIMNOR= 0.000
           RENORM= 251.1     REMNOR= 0.000     RATIO =0.6722E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 32.04     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5557E+05 RDR   = 0.000
           RATIOT=0.6722E-01 RATIOR= 0.000
           MAX UN= 1.885     IEQ=    13 NODE      7 DOF   1  Y-DISPL.F
           MIN UN= 0.000     IEQ=     2 NODE      1 DOF   2   X-ROT. F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5557E+05 RIMNOR= 0.000
           RENORM= 20.45     REMNOR=0.8025E-21 RATIO =0.1918E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 32.04     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5557E+05 RDR   = 0.000
           RATIOT=0.1918E-01 RATIOR= 0.000
           MAX UN= 1.366     IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           MIN UN=-.7417E-10 IEQ=    65 NODE     33 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5557E+05 RIMNOR= 0.000
           RENORM= 1.241     REMNOR=0.8160E-20 RATIO =0.4725E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 32.04     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5557E+05 RDR   = 0.000
           RATIOT=0.4725E-02 RATIOR= 0.000
           MAX UN=0.7313     IEQ=    65 NODE     33 DOF   1  Y-DISPL.F
           MIN UN=-.6996E-09 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5557E+05 RIMNOR= 0.000
           RENORM=0.9188E-03 REMNOR=0.9286E-21 RATIO =0.1286E-03 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 32.04     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5557E+05 RDR   = 0.000
           RATIOT=0.1286E-03 RATIOR= 0.000
           MAX UN=0.2064E-01 IEQ=    95 NODE     48 DOF   1  Y-DISPL.F
           MIN UN=-.1821E-09 IEQ=    23 NODE     12 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     5 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5557E+05 RIMNOR= 0.000
           RENORM=0.4066E-07 REMNOR=0.1315E-20 RATIO =0.8554E-06 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 32.04     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5557E+05 RDR   = 0.000
           RATIOT=0.8554E-06 RATIOR= 0.000
           MAX UN=0.1656E-03 IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           MIN UN=-.5826E-09 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0




+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                 Exe Time :24 July 2019      10:49:24                                                  |
+-----------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     5 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    2     ( AT TIME   2.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)            (
    1   7.3632134E-04  -8.8298491E-05
    2   7.1866353E-04  -8.8270122E-05
    3   7.0101684E-04  -8.8188444E-05
    4   6.8339156E-04  -8.8055668E-05
    5   6.6579805E-04  -8.7870759E-05
    6   6.4824682E-04  -8.7632332E-05
```

7	6.3074883E-04	-8.7338225E-05
8	6.1331540E-04	-8.6986195E-05
9	5.9595839E-04	-8.6573677E-05
10	5.7869003E-04	-8.6099620E-05
11	5.6152263E-04	-8.5564178E-05
12	5.4446846E-04	-8.4967235E-05
13	5.2753986E-04	-8.4308381E-05
14	5.1912653E-04	-8.3955635E-05
15	5.0240963E-04	-8.3202894E-05
16	4.8584958E-04	-8.2387103E-05
17	4.6945901E-04	-8.1508015E-05
18	4.5325061E-04	-8.0565314E-05
19	4.3723714E-04	-7.9558708E-05
20	4.2143141E-04	-7.8487922E-05
21	4.0584626E-04	-7.7352780E-05
22	3.9049455E-04	-7.6153851E-05
23	3.7538888E-04	-7.4892488E-05
24	3.6054165E-04	-7.3569642E-05
25	3.4596505E-04	-7.2186441E-05
26	3.3167101E-04	-7.0744248E-05
27	3.1767125E-04	-6.9244684E-05
28	3.0397690E-04	-6.7689659E-05
29	2.9059890E-04	-6.6081921E-05
30	2.7754741E-04	-6.4425061E-05
31	2.6483188E-04	-6.2723044E-05
32	2.5246097E-04	-6.0980279E-05
33	2.4044223E-04	-5.9201607E-05
34	2.2878236E-04	-5.7392413E-05
35	2.1748690E-04	-5.5558619E-05
36	2.0656012E-04	-5.3706750E-05
37	1.9600493E-04	-5.1844021E-05
38	1.8582273E-04	-4.9978703E-05
39	1.7601307E-04	-4.8119756E-05
40	1.6657376E-04	-4.6276920E-05
41	1.5750070E-04	-4.4458077E-05
42	1.4878872E-04	-4.2666313E-05
43	1.4043254E-04	-4.0899691E-05
44	1.3242764E-04	-3.9151764E-05
45	1.2477131E-04	-3.7411818E-05
46	1.1746339E-04	-3.5664684E-05
47	1.1050721E-04	-3.3890943E-05
48	1.0391039E-04	-3.2067137E-05
49	9.7685545E-05	-3.0165928E-05
50	9.1851255E-05	-2.8156111E-05
51	8.6429558E-05	-2.6049426E-05
52	8.1434564E-05	-2.3898396E-05
53	7.6870333E-05	-2.1747271E-05
54	7.2733221E-05	-1.9632663E-05
55	6.9012865E-05	-1.7584087E-05
56	6.5693636E-05	-1.5624755E-05
57	6.2755840E-05	-1.3772282E-05
58	6.0176754E-05	-1.2039355E-05
59	5.7931553E-05	-1.0434599E-05
60	5.5994027E-05	-8.9631507E-06
61	5.4337276E-05	-7.6269433E-06
62	5.2934286E-05	-6.4251957E-06
63	5.1758451E-05	-5.3546532E-06
64	5.0784021E-05	-4.4101689E-06
65	4.9986426E-05	-3.5850510E-06
66	4.9342558E-05	-2.8715733E-06
67	4.8830920E-05	-2.2612356E-06
68	4.8431794E-05	-1.7449424E-06
69	4.8127284E-05	-1.3135424E-06
70	4.7901321E-05	-9.5797518E-07
71	4.7739628E-05	-6.6939190E-07
72	4.7629668E-05	-4.3925186E-07
73	4.7560575E-05	-2.5939847E-07
74	4.7523058E-05	-1.2230752E-07
75	4.7509258E-05	-2.1127569E-08
76	4.7512636E-05	5.0482285E-08
77	4.7527867E-05	9.8331964E-08
78	4.7550740E-05	1.2775957E-07
79	4.7578072E-05	1.4370021E-07
80	4.7607624E-05	1.5068785E-07
81	4.7638014E-05	1.5268393E-07
82	4.7653291E-05	1.5278336E-07

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 82
C U R R E N T T I M E I S 2.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	1.195	-7.3632E-04	25.00	11.95	25.00	13.25	UL-RL	4.7747E+04	0.000	0.000	1.000	1.000	11.95	0.000	0.000	Strato1_2_8_L_0
2 D	1.846	-7.1866E-04	19.31	9.229	19.31	10.23	UL-RL	4.7747E+04	-0.2000	0.000	1.000	1.000	9.229	0.000	0.000	Strato1_2_8_L_0
3 D	2.405	-7.0102E-04	25.16	12.03	25.16	13.34	UL-RL	4.7747E+04	-0.4000	0.000	1.000	1.000	12.03	0.000	0.000	Strato1_2_8_L_0
4 D	2.710	-6.8339E-04	28.35	13.55	28.35	15.03	ACTIVE	0.000	-0.6000	0.000	1.000	1.000	13.55	0.000	0.000	Strato1_2_8_L_0
5 D	3.148	-6.6580E-04	32.93	15.74	32.93	17.45	ACTIVE	0.000	-0.8000	0.000	1.000	1.000	15.74	0.000	0.000	Strato1_2_8_L_0
6 D	3.471	-6.4825E-04	36.31	17.35	36.31	19.24	ACTIVE	0.000	-1.000	0.000	1.000	1.000	17.35	0.000	0.000	Strato1_2_8_L_0
7 D	3.880	-6.3075E-04	40.58	19.40	40.58	21.51	ACTIVE	0.000	-1.200	0.000	1.000	1.000	19.40	0.000	0.000	Strato1_2_8_L_0
8 D	4.213	-6.1332E-04	44.07	21.06	44.07	23.35	ACTIVE	0.000	-1.400	0.000	1.000	1.000	21.06	0.000	0.000	Strato1_2_8_L_0
9 D	4.545	-5.9596E-04	47.54	22.72	47.54	25.20	ACTIVE	0.000	-1.600	0.000	1.000	1.000	22.72	0.000	0.000	Strato1_2_8_L_0
10 D	4.891	-5.7869E-04	51.16	24.45	51.16	27.12	ACTIVE	0.000	-1.800	0.000	1.000	1.000	24.45	0.000	0.000	Strato1_2_8_L_0
11 D	5.286	-5.6152E-04	55.29	26.43	55.29	29.30	ACTIVE	0.000	-2.000	0.000	1.000	1.000	26.43	0.000	0.000	Strato1_2_8_L_0
12 D	5.633	-5.4447E-04	58.93	28.17	58.93	31.23	ACTIVE	0.000	-2.200	0.000	1.000	1.000	28.17	0.000	0.000	Strato1_2_8_L_0
13 D	4.516	-5.2754E-04	62.99	30.11	62.99	33.38	ACTIVE	0.000	-2.400	0.000	1.000	1.000	30.11	0.000	0.000	Strato1_2_8_L_0
14 D	4.645	-5.1913E-04	64.78	30.97	64.78	34.33	ACTIVE	0.000	-2.500	0.000	1.000	1.000	30.97	0.000	0.000	Strato1_2_8_L_0
15 D	6.544	-5.0241E-04	68.45	32.72	68.45	36.28	ACTIVE	0.000	-2.700	0.000	1.000	1.000	32.72	0.000	0.000	Strato1_2_8_L_0
16 D	6.928	-4.8585E-04	72.47	34.64	72.47	38.41	ACTIVE	0.000	-2.900	0.000	1.000	1.000	34.64	0.000	0.000	Strato1_2_8_L_0
17 D	7.280	-4.6946E-04	76.15	36.40	76.15	40.36	ACTIVE	0.000	-3.100	0.000	1.000	1.000	36.40	0.000	0.000	Strato1_2_8_L_0
18 D	7.661	-4.5325E-04	80.13	38.30	80.13	42.47	ACTIVE	0.000	-3.300	0.000	1.000	1.000	38.30	0.000	0.000	Strato1_2_8_L_0
19 D	8.013	-4.3724E-04	83.82	40.07	83.82	44.42	ACTIVE	0.000	-3.500	0.000	1.000	1.000	40.07	0.000	0.000	Strato1_2_8_L_0
20 D	8.392	-4.2143E-04	87.78	41.96	87.78	46.52	ACTIVE	0.000	-3.700	0.000	1.000	1.000	41.96	0.000	0.000	Strato1_2_8_L_0
21 D	8.718	-4.0585E-04	91.19	43.59	91.19	48.33	ACTIVE	0.000	-3.900	0.000	1.000	1.000	43.59	0.000	0.000	Strato1_2_8_L_0
22 D	9.096	-3.9049E-04	95.15	45.48	95.15	50.43	ACTIVE	0.000	-4.100	0.000	1.000	1.000	45.48	0.000	0.000	Strato1_2_8_L_0
23 D	9.473	-3.7539E-04	99.09	47.37	99.09	52.52	ACTIVE	0.000	-4.300	0.000	1.000	1.000	47.37	0.000	0.000	Strato1_2_8_L_0
24 D	9.828	-3.6054E-04	102.8	49.14	102.8	54.49	ACTIVE	0.000	-4.500	0.000	1.000	1.000	49.14	0.000	0.000	Strato1_2_8_L_0
25 D	10.20	-3.4597E-04	106.7	51.02	106.7	56.57	ACTIVE	0.000	-4.700	0.000	1.000	1.000	51.02	0.000	0.000	Strato1_2_8_L_0
26 D	10.56	-3.3167E-04	110.5	52.80	110.5	58.54	ACTIVE	0.000	-4.900	0.000	1.000	1.000	52.80	0.000	0.000	Strato1_2_8_L_0
27 D	10.93	-3.1767E-04	114.4	54.67	114.4	60.62	ACTIVE	0.000	-5.100	0.000	1.000	1.000	54.67	0.000	0.000	Strato1_2_8_L_0
28 D	11.27	-3.0398E-04	117.9	56.35	117.9	62.48	ACTIVE	0.000	-5.300	0.000	1.000	1.000	56.35	0.000	0.000	Strato1_2_8_L_0
29 D	11.64	-2.9060E-04	121.8	58.22	121.8	64.55	ACTIVE	0.000	-5.500	0.000	1.000	1.000	58.22	0.000	0.000	Strato1_2_8_L_0
30 D	12.00	-2.7755E-04	125.5	60.00	125.5	66.53	ACTIVE	0.000	-5.700	0.000	1.000	1.000	60.00	0.000	0.000	Strato1_2_8_L_0
31 D	12.37	-2.6483E-04	129.4	61.87	129.4	68.60	ACTIVE	0.000	-5.900	0.000	1.000	1.000	61.87	0.000	0.000	Strato1_2_8_L_0
32 D	12.73	-2.5246E-04	133.2	63.66	133.2	70.58	ACTIVE	0.000	-6.100	0.000	1.000	1.000	63.66	0.000	0.000	Strato1_2_8_L_0
33 D	13.10	-2.4044E-04	137.1	65.52	137.1	72.65	ACTIVE	0.000	-6.300	0.000	1.000	1.000	65.52	0.000	0.000	Strato1_2_8_L_0
34 D	13.46	-2.2878E-04	140.8	67.31	140.8	74.63	ACTIVE	0.000	-6.500	0.000	1.000	1.000				

67.31	0.000	0.000	Strato1_2_8_L_0									
35 D	13.83	-2.1749E-04	144.7	69.17	144.7	76.69	ACTIVE	0.000	-6.700	0.000	1.000	1.000
69.17	0.000	0.000	Strato1_2_8_L_0									
36 D	14.19	-2.0656E-04	148.4	70.95	148.4	78.67	ACTIVE	0.000	-6.900	0.000	1.000	1.000
70.95	0.000	0.000	Strato1_2_8_L_0									
37 D	14.55	-1.9600E-04	152.2	72.74	152.2	80.65	ACTIVE	0.000	-7.100	0.000	1.000	1.000
72.74	0.000	0.000	Strato1_2_8_L_0									
38 D	14.92	-1.8582E-04	156.1	74.60	156.1	82.71	ACTIVE	0.000	-7.300	0.000	1.000	1.000
74.60	0.000	0.000	Strato1_2_8_L_0									
39 D	15.28	-1.7601E-04	159.8	76.39	159.8	84.70	ACTIVE	0.000	-7.500	0.000	1.000	1.000
76.39	0.000	0.000	Strato1_2_8_L_0									
40 D	15.76	-1.6657E-04	163.7	78.80	163.7	86.75	UL-RL	4.7747E+04	-7.700	0.000	1.000	1.000
78.80	0.000	0.000	Strato1_2_8_L_0									
41 D	16.24	-1.5750E-04	167.4	81.22	167.4	88.74	UL-RL	4.7747E+04	-7.900	0.000	1.000	1.000
81.22	0.000	0.000	Strato1_2_8_L_0									
42 D	16.74	-1.4879E-04	171.3	83.69	171.3	90.79	UL-RL	4.7747E+04	-8.100	0.000	1.000	1.000
83.69	0.000	0.000	Strato1_2_8_L_0									
43 D	17.20	-1.4043E-04	174.9	86.01	174.9	92.71	UL-RL	4.7747E+04	-8.300	0.000	1.000	1.000
86.01	0.000	0.000	Strato1_2_8_L_0									
44 D	17.69	-1.3243E-04	178.8	88.44	178.8	94.76	UL-RL	4.7747E+04	-8.500	0.000	1.000	1.000
88.44	0.000	0.000	Strato1_2_8_L_0									
45 D	18.16	-1.2477E-04	182.6	90.80	182.6	96.76	UL-RL	4.7747E+04	-8.700	0.000	1.000	1.000
90.80	0.000	0.000	Strato1_2_8_L_0									
46 D	18.64	-1.1746E-04	186.4	93.20	186.4	98.81	UL-RL	4.7747E+04	-8.900	0.000	1.000	1.000
93.20	0.000	0.000	Strato1_2_8_L_0									
47 D	19.10	-1.1051E-04	190.2	95.52	190.2	100.8	UL-RL	4.7747E+04	-9.100	0.000	1.000	1.000
95.52	0.000	0.000	Strato1_2_8_L_0									
48 D	19.58	-1.0391E-04	194.1	97.89	194.1	102.8	UL-RL	4.7747E+04	-9.300	0.000	1.000	1.000
97.89	0.000	0.000	Strato1_2_8_L_0									
49 D	20.05	-9.7686E-05	197.9	100.2	197.9	104.9	UL-RL	4.7747E+04	-9.500	0.000	1.000	1.000
100.2	0.000	0.000	Strato1_2_8_L_0									
50 D	17.71	-9.1851E-05	201.9	88.53	201.9	100.9	UL-RL	1.3507E+05	-9.700	0.000	1.000	1.000
88.53	0.000	0.000	Strato2_3095_82743_L_0									
51 D	18.25	-8.6430E-05	205.8	91.24	205.8	102.9	UL-RL	1.3507E+05	-9.900	0.000	1.000	1.000
91.24	0.000	0.000	Strato2_3095_82743_L_0									
52 D	18.78	-8.1435E-05	209.8	93.89	209.8	104.9	UL-RL	1.3507E+05	-10.10	0.000	1.000	1.000
93.89	0.000	0.000	Strato2_3095_82743_L_0									
53 D	19.31	-7.6870E-05	213.8	96.54	213.8	106.9	UL-RL	1.3507E+05	-10.30	0.000	1.000	1.000
96.54	0.000	0.000	Strato2_3095_82743_L_0									
54 D	19.82	-7.2733E-05	217.8	99.08	217.8	108.9	UL-RL	1.3507E+05	-10.50	0.000	1.000	1.000
99.08	0.000	0.000	Strato2_3095_82743_L_0									
55 D	20.32	-6.9013E-05	221.9	101.6	221.9	110.9	UL-RL	1.3507E+05	-10.70	0.000	1.000	1.000
101.6	0.000	0.000	Strato2_3095_82743_L_0									
56 D	20.81	-6.5694E-05	225.8	104.0	225.8	112.9	UL-RL	1.3507E+05	-10.90	0.000	1.000	1.000
104.0	0.000	0.000	Strato2_3095_82743_L_0									
57 D	21.29	-6.2756E-05	229.9	106.5	229.9	114.9	UL-RL	1.3507E+05	-11.10	0.000	1.000	1.000
106.5	0.000	0.000	Strato2_3095_82743_L_0									
58 D	21.75	-6.0177E-05	233.7	108.7	233.7	116.9	UL-RL	1.3507E+05	-11.30	0.000	1.000	1.000
108.7	0.000	0.000	Strato2_3095_82743_L_0									
59 D	22.22	-5.7932E-05	237.8	111.1	237.8	118.9	UL-RL	1.3507E+05	-11.50	0.000	1.000	1.000
111.1	0.000	0.000	Strato2_3095_82743_L_0									
60 D	22.66	-5.5994E-05	241.8	113.3	241.8	120.9	UL-RL	1.3507E+05	-11.70	0.000	1.000	1.000
113.3	0.000	0.000	Strato2_3095_82743_L_0									
61 D	23.11	-5.4337E-05	245.8	115.6	245.8	122.9	UL-RL	1.3507E+05	-11.90	0.000	1.000	1.000
115.6	0.000	0.000	Strato2_3095_82743_L_0									
62 D	23.56	-5.2934E-05	249.9	117.8	249.9	124.9	UL-RL	1.3507E+05	-12.10	0.000	1.000	1.000
117.8	0.000	0.000	Strato2_3095_82743_L_0									
63 D	23.99	-5.1758E-05	253.8	119.9	253.8	126.9	UL-RL	1.3507E+05	-12.30	0.000	1.000	1.000
119.9	0.000	0.000	Strato2_3095_82743_L_0									
64 D	24.42	-5.0784E-05	257.9	122.1	257.9	128.9	UL-RL	1.3507E+05	-12.50	0.000	1.000	1.000
122.1	0.000	0.000	Strato2_3095_82743_L_0									
65 D	24.83	-4.9986E-05	261.8	124.1	261.8	130.9	UL-RL	1.3507E+05	-12.70	0.000	1.000	1.000
124.1	0.000	0.000	Strato2_3095_82743_L_0									
66 D	25.25	-4.9343E-05	265.8	126.2	265.8	132.9	UL-RL	1.3507E+05	-12.90	0.000	1.000	1.000
126.2	0.000	0.000	Strato2_3095_82743_L_0									
67 D	25.65	-4.8831E-05	269.7	128.3	269.7	134.9	UL-RL	1.3507E+05	-13.10	0.000	1.000	1.000
128.3	0.000	0.000	Strato2_3095_82743_L_0									
68 D	26.05	-4.8432E-05	273.6	130.3	273.6	136.8	UL-RL	1.3507E+05	-13.30	0.000	1.000	1.000
130.3	0.000	0.000	Strato2_3095_82743_L_0									
69 D	26.45	-4.8127E-05	277.5	132.3	277.5	138.8	UL-RL	1.3507E+05	-13.50	0.000	1.000	1.000
132.3	0.000	0.000	Strato2_3095_82743_L_0									
70 D	26.85	-4.7901E-05	281.4	134.2	281.4	140.7	UL-RL	1.3507E+05	-13.70	0.000	1.000	1.000
134.2	0.000	0.000	Strato2_3095_82743_L_0									
71 D	27.24	-4.7740E-05	285.3	136.2	285.3	142.7	UL-RL	1.3507E+05	-13.90	0.000	1.000	1.000
136.2	0.000	0.000	Strato2_3095_82743_L_0									
72 D	27.64	-4.7630E-05	289.2	138.2	289.2	144.6	UL-RL	1.3507E+05	-14.10	0.000	1.000	1.000
138.2	0.000	0.000	Strato2_3095_82743_L_0									
73 D	28.02	-4.7561E-05	293.1	140.1	293.1	146.5	UL-RL	1.3507E+05	-14.30	0.000	1.000	1.000
140.1	0.000	0.000	Strato2_3095_82743_L_0									
74 D	28.41	-4.7523E-05	297.0	142.1	297.0	148.5	UL-RL	1.3507E+05	-14.50	0.000	1.000	1.000
142.1	0.000	0.000	Strato2_3095_82743_L_0									
75 D	28.81	-4.7509E-05	300.9	144.0	300.9	150.4	UL-RL	1.3507E+05	-14.70	0.000	1.000	1.000
144.0	0.000	0.000	Strato2_3095_82743_L_0									
76 D	29.20	-4.7513E-05	304.8	146.0	304.8	152.4	UL-RL	1.3507E+05	-14.90	0.000	1.000	1.000
146.0	0.000	0.000	Strato2_3095_82743_L_0									

```
  77 D   29.59     -4.7528E-05   308.7       147.9       308.7       154.4          UL-RL  1.3507E+05  -15.10       0.000        1.000        1.000
147.9       0.000       0.000     Strato2_3095_82743_L_0
  78 D   29.98     -4.7551E-05   312.6       149.9       312.6       156.3          UL-RL  1.3507E+05  -15.30       0.000        1.000        1.000
149.9       0.000       0.000     Strato2_3095_82743_L_0
  79 D   30.37     -4.7578E-05   316.6       151.9       316.6       158.3          UL-RL  1.3507E+05  -15.50       0.000        1.000        1.000
151.9       0.000       0.000     Strato2_3095_82743_L_0
  80 D   30.76     -4.7608E-05   320.4       153.8       320.4       160.2          UL-RL  1.3507E+05  -15.70       0.000        1.000        1.000
153.8       0.000       0.000     Strato2_3095_82743_L_0
  81 D   23.36     -4.7638E-05   324.3       155.7       324.3       162.2          UL-RL  1.3507E+05  -15.90       0.000        1.000        1.000
155.7       0.000       0.000     Strato2_3095_82743_L_0
  82 D   7.837     -4.7653E-05   326.3       156.7       326.3       163.2          UL-RL  1.3507E+05  -16.00       0.000        1.000        1.000
156.7       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                              |
 |                                                                                                                                           |
 |                                      NewProject.BaseDesignSection_28.Nominal_63                                                           |
 |                                  Exe Time :24 July 2019      10:49:24                                                                     |
 +-------------------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                            :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
 C U R R E N T   T I M E   I S      2.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P          STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1 D   0.000      7.3632E-04   0.000       0.000       0.000       0.000          ACTIVE   0.000       0.000       0.000        1.000        1.000
0.000       0.000       0.000     Strato1_2_8_L_0
   2 D   1.990      7.1866E-04   3.800       9.951       3.800       9.951          UL-RL  3.3134E+04 -0.2000       0.000        1.000        1.000
9.951       0.000       0.000     Strato1_2_8_L_0
   3 D   2.354      7.0102E-04   7.600       11.77       7.600       11.77          UL-RL  3.3134E+04 -0.4000       0.000        1.000        1.000
11.77       0.000       0.000     Strato1_2_8_L_0
   4 D   2.718      6.8339E-04   11.40       13.59       11.40       13.59            V-C  1.1045E+04 -0.6000       0.000        1.000        1.000
13.59       0.000       0.000     Strato1_2_8_L_0
   5 D   3.082      6.6580E-04   15.20       15.41       15.20       15.41            V-C  1.1045E+04 -0.8000       0.000        1.000        1.000
15.41       0.000       0.000     Strato1_2_8_L_0
   6 D   3.446      6.4825E-04   19.00       17.23       19.00       17.23            V-C  1.1045E+04  -1.000       0.000        1.000        1.000
17.23       0.000       0.000     Strato1_2_8_L_0
   7 D   3.810      6.3075E-04   22.80       19.05       22.80       19.05            V-C  1.1045E+04  -1.200       0.000        1.000        1.000
19.05       0.000       0.000     Strato1_2_8_L_0
   8 D   4.174      6.1332E-04   26.60       20.87       26.60       20.87            V-C  1.1045E+04  -1.400       0.000        1.000        1.000
20.87       0.000       0.000     Strato1_2_8_L_0
   9 D   4.539      5.9596E-04   30.40       22.69       30.40       22.69            V-C  1.1045E+04  -1.600       0.000        1.000        1.000
22.69       0.000       0.000     Strato1_2_8_L_0
  10 D   4.903      5.7869E-04   34.20       24.52       34.20       24.52            V-C  1.1045E+04  -1.800       0.000        1.000        1.000
24.52       0.000       0.000     Strato1_2_8_L_0
  11 D   5.268      5.6152E-04   38.00       26.34       38.00       26.34            V-C  1.1045E+04  -2.000       0.000        1.000        1.000
26.34       0.000       0.000     Strato1_2_8_L_0
  12 D   5.633      5.4447E-04   41.80       28.17       41.80       28.17            V-C  1.1045E+04  -2.200       0.000        1.000        1.000
28.17       0.000       0.000     Strato1_2_8_L_0
  13 D   4.499      5.2754E-04   45.60       29.99       45.60       29.99            V-C  1.1045E+04  -2.400       0.000        1.000        1.000
29.99       0.000       0.000     Strato1_2_8_L_0
  14 D   4.636      5.1913E-04   47.50       30.91       47.50       30.91            V-C  1.1045E+04  -2.500       0.000        1.000        1.000
30.91       0.000       0.000     Strato1_2_8_L_0
  15 D   6.548      5.0241E-04   51.30       32.74       51.30       32.74            V-C  1.1045E+04  -2.700       0.000        1.000        1.000
32.74       0.000       0.000     Strato1_2_8_L_0
  16 D   6.914      4.8585E-04   55.10       34.57       55.10       34.57            V-C  1.1045E+04  -2.900       0.000        1.000        1.000
34.57       0.000       0.000     Strato1_2_8_L_0
  17 D   7.280      4.6946E-04   58.90       36.40       58.90       36.40            V-C  1.1045E+04  -3.100       0.000        1.000        1.000
36.40       0.000       0.000     Strato1_2_8_L_0
  18 D   7.647      4.5325E-04   62.70       38.24       62.70       38.24            V-C  1.1045E+04  -3.300       0.000        1.000        1.000
38.24       0.000       0.000     Strato1_2_8_L_0
  19 D   8.015      4.3724E-04   66.50       40.07       66.50       40.07            V-C  1.1045E+04  -3.500       0.000        1.000        1.000
40.07       0.000       0.000     Strato1_2_8_L_0
  20 D   8.383      4.2143E-04   70.30       41.91       70.30       41.91            V-C  1.1045E+04  -3.700       0.000        1.000        1.000
41.91       0.000       0.000     Strato1_2_8_L_0
  21 D   8.751      4.0585E-04   74.10       43.76       74.10       43.76            V-C  1.1045E+04  -3.900       0.000        1.000        1.000
43.76       0.000       0.000     Strato1_2_8_L_0
  22 D   9.120      3.9049E-04   77.90       45.60       77.90       45.60            V-C  1.1045E+04  -4.100       0.000        1.000        1.000
45.60       0.000       0.000     Strato1_2_8_L_0
  23 D   9.489      3.7539E-04   81.70       47.45       81.70       47.45            V-C  1.1045E+04  -4.300       0.000        1.000        1.000
47.45       0.000       0.000     Strato1_2_8_L_0
```

24 D	9.859	3.6054E-04	85.50	49.30	85.50	49.30	V-C	1.1045E+04	-4.500	0.000	1.000	1.000	
49.30	0.000	0.000	Strato1_2_8_L_0										
25 D	10.23	3.4597E-04	89.30	51.15	89.30	51.15	V-C	1.1045E+04	-4.700	0.000	1.000	1.000	
51.15	0.000	0.000	Strato1_2_8_L_0										
26 D	10.60	3.3167E-04	93.10	53.01	93.10	53.01	V-C	1.1045E+04	-4.900	0.000	1.000	1.000	
53.01	0.000	0.000	Strato1_2_8_L_0										
27 D	10.97	3.1767E-04	96.90	54.87	96.90	54.87	V-C	1.1045E+04	-5.100	0.000	1.000	1.000	
54.87	0.000	0.000	Strato1_2_8_L_0										
28 D	11.35	3.0398E-04	100.7	56.73	100.7	56.73	V-C	1.1045E+04	-5.300	0.000	1.000	1.000	
56.73	0.000	0.000	Strato1_2_8_L_0										
29 D	11.72	2.9060E-04	104.5	58.59	104.5	58.59	V-C	1.1045E+04	-5.500	0.000	1.000	1.000	
58.59	0.000	0.000	Strato1_2_8_L_0										
30 D	12.09	2.7755E-04	108.3	60.46	108.3	60.46	V-C	1.1045E+04	-5.700	0.000	1.000	1.000	
60.46	0.000	0.000	Strato1_2_8_L_0										
31 D	12.47	2.6483E-04	112.1	62.34	112.1	62.34	V-C	1.1045E+04	-5.900	0.000	1.000	1.000	
62.34	0.000	0.000	Strato1_2_8_L_0										
32 D	12.84	2.5246E-04	115.9	64.22	115.9	64.22	V-C	1.1045E+04	-6.100	0.000	1.000	1.000	
64.22	0.000	0.000	Strato1_2_8_L_0										
33 D	13.22	2.4044E-04	119.7	66.10	119.7	66.10	V-C	1.1045E+04	-6.300	0.000	1.000	1.000	
66.10	0.000	0.000	Strato1_2_8_L_0										
34 D	13.60	2.2878E-04	123.5	67.98	123.5	67.98	V-C	1.1045E+04	-6.500	0.000	1.000	1.000	
67.98	0.000	0.000	Strato1_2_8_L_0										
35 D	13.97	2.1749E-04	127.3	69.87	127.3	69.87	V-C	1.1045E+04	-6.700	0.000	1.000	1.000	
69.87	0.000	0.000	Strato1_2_8_L_0										
36 D	14.35	2.0656E-04	131.1	71.76	131.1	71.76	V-C	1.1045E+04	-6.900	0.000	1.000	1.000	
71.76	0.000	0.000	Strato1_2_8_L_0										
37 D	14.73	1.9600E-04	134.9	73.66	134.9	73.66	V-C	1.1045E+04	-7.100	0.000	1.000	1.000	
73.66	0.000	0.000	Strato1_2_8_L_0										
38 D	15.11	1.8582E-04	138.7	75.56	138.7	75.56	V-C	1.1045E+04	-7.300	0.000	1.000	1.000	
75.56	0.000	0.000	Strato1_2_8_L_0										
39 D	15.49	1.7601E-04	142.5	77.47	142.5	77.47	V-C	1.1045E+04	-7.500	0.000	1.000	1.000	
77.47	0.000	0.000	Strato1_2_8_L_0										
40 D	15.88	1.6657E-04	146.3	79.38	146.3	79.38	V-C	1.1045E+04	-7.700	0.000	1.000	1.000	
79.38	0.000	0.000	Strato1_2_8_L_0										
41 D	16.26	1.5750E-04	150.1	81.29	150.1	81.29	V-C	1.1045E+04	-7.900	0.000	1.000	1.000	
81.29	0.000	0.000	Strato1_2_8_L_0										
42 D	16.64	1.4879E-04	153.9	83.21	153.9	83.21	V-C	1.1045E+04	-8.100	0.000	1.000	1.000	
83.21	0.000	0.000	Strato1_2_8_L_0										
43 D	17.03	1.4043E-04	157.7	85.13	157.7	85.13	V-C	1.1045E+04	-8.300	0.000	1.000	1.000	
85.13	0.000	0.000	Strato1_2_8_L_0										
44 D	17.41	1.3243E-04	161.5	87.06	161.5	87.06	V-C	1.1045E+04	-8.500	0.000	1.000	1.000	
87.06	0.000	0.000	Strato1_2_8_L_0										
45 D	17.80	1.2477E-04	165.3	88.99	165.3	88.99	V-C	1.1045E+04	-8.700	0.000	1.000	1.000	
88.99	0.000	0.000	Strato1_2_8_L_0										
46 D	18.18	1.1746E-04	169.1	90.92	169.1	90.92	V-C	1.1045E+04	-8.900	0.000	1.000	1.000	
90.92	0.000	0.000	Strato1_2_8_L_0										
47 D	18.57	1.1051E-04	172.9	92.86	172.9	92.86	V-C	1.1045E+04	-9.100	0.000	1.000	1.000	
92.86	0.000	0.000	Strato1_2_8_L_0										
48 D	18.96	1.0391E-04	176.7	94.80	176.7	94.80	V-C	1.1045E+04	-9.300	0.000	1.000	1.000	
94.80	0.000	0.000	Strato1_2_8_L_0										
49 D	19.35	9.7686E-05	180.5	96.74	180.5	96.74	V-C	1.1045E+04	-9.500	0.000	1.000	1.000	
96.74	0.000	0.000	Strato1_2_8_L_0										
50 D	18.90	9.1851E-05	184.5	94.49	184.5	94.49	V-C	2.4402E+04	-9.700	0.000	1.000	1.000	
94.49	0.000	0.000	Strato2_3095_82743_L_0										
51 D	19.27	8.6430E-05	188.5	96.33	188.5	96.38	UL-RL	7.3205E+04	-9.900	0.000	1.000	1.000	
96.33	0.000	0.000	Strato2_3095_82743_L_0										
52 D	19.63	8.1435E-05	192.5	98.14	192.5	98.28	UL-RL	7.3205E+04	-10.10	0.000	1.000	1.000	
98.14	0.000	0.000	Strato2_3095_82743_L_0										
53 D	20.00	7.6870E-05	196.5	99.99	196.5	100.2	UL-RL	7.3205E+04	-10.30	0.000	1.000	1.000	
99.99	0.000	0.000	Strato2_3095_82743_L_0										
54 D	20.37	7.2733E-05	200.5	101.8	200.5	102.1	UL-RL	7.3205E+04	-10.50	0.000	1.000	1.000	
101.8	0.000	0.000	Strato2_3095_82743_L_0										
55 D	20.75	6.9013E-05	204.5	103.7	204.5	104.0	UL-RL	7.3205E+04	-10.70	0.000	1.000	1.000	
103.7	0.000	0.000	Strato2_3095_82743_L_0										
56 D	21.13	6.5694E-05	208.5	105.6	208.5	106.0	UL-RL	7.3205E+04	-10.90	0.000	1.000	1.000	
105.6	0.000	0.000	Strato2_3095_82743_L_0										
57 D	21.51	6.2756E-05	212.5	107.5	212.5	107.9	UL-RL	7.3205E+04	-11.10	0.000	1.000	1.000	
107.5	0.000	0.000	Strato2_3095_82743_L_0										
58 D	21.90	6.0177E-05	216.5	109.5	216.5	109.8	UL-RL	7.3205E+04	-11.30	0.000	1.000	1.000	
109.5	0.000	0.000	Strato2_3095_82743_L_0										
59 D	22.28	5.7932E-05	220.5	111.4	220.5	111.8	UL-RL	7.3205E+04	-11.50	0.000	1.000	1.000	
111.4	0.000	0.000	Strato2_3095_82743_L_0										
60 D	22.68	5.5994E-05	224.5	113.4	224.5	113.7	UL-RL	7.3205E+04	-11.70	0.000	1.000	1.000	
113.4	0.000	0.000	Strato2_3095_82743_L_0										
61 D	23.07	5.4337E-05	228.5	115.3	228.5	115.7	UL-RL	7.3205E+04	-11.90	0.000	1.000	1.000	
115.3	0.000	0.000	Strato2_3095_82743_L_0										
62 D	23.46	5.2934E-05	232.5	117.3	232.5	117.7	UL-RL	7.3205E+04	-12.10	0.000	1.000	1.000	
117.3	0.000	0.000	Strato2_3095_82743_L_0										
63 D	23.86	5.1758E-05	236.5	119.3	236.5	119.6	UL-RL	7.3205E+04	-12.30	0.000	1.000	1.000	
119.3	0.000	0.000	Strato2_3095_82743_L_0										
64 D	24.26	5.0784E-05	240.5	121.3	240.5	121.6	UL-RL	7.3205E+04	-12.50	0.000	1.000	1.000	
121.3	0.000	0.000	Strato2_3095_82743_L_0										
65 D	24.66	4.9986E-05	244.5	123.3	244.5	123.6	UL-RL	7.3205E+04	-12.70	0.000	1.000	1.000	
123.3	0.000	0.000	Strato2_3095_82743_L_0										
66 D	25.06	4.9343E-05	248.5	125.3	248.5	125.5	UL-RL	7.3205E+04	-12.90	0.000	1.000	1.000	

```
125.3       0.000       0.000     Strato2_3095_82743_L_0
  67 D   25.46      4.8831E-05  252.5       127.3       252.5       127.5       UL-RL  7.3205E+04  -13.10      0.000       1.000       1.000
127.3       0.000       0.000     Strato2_3095_82743_L_0
  68 D   25.86      4.8432E-05  256.5       129.3       256.5       129.5       UL-RL  7.3205E+04  -13.30      0.000       1.000       1.000
129.3       0.000       0.000     Strato2_3095_82743_L_0
  69 D   26.26      4.8127E-05  260.5       131.3       260.5       131.5       UL-RL  7.3205E+04  -13.50      0.000       1.000       1.000
131.3       0.000       0.000     Strato2_3095_82743_L_0
  70 D   26.66      4.7901E-05  264.5       133.3       264.5       133.5       UL-RL  7.3205E+04  -13.70      0.000       1.000       1.000
133.3       0.000       0.000     Strato2_3095_82743_L_0
  71 D   27.07      4.7740E-05  268.5       135.3       268.5       135.5       UL-RL  7.3205E+04  -13.90      0.000       1.000       1.000
135.3       0.000       0.000     Strato2_3095_82743_L_0
  72 D   27.47      4.7630E-05  272.5       137.3       272.5       137.4       UL-RL  7.3205E+04  -14.10      0.000       1.000       1.000
137.3       0.000       0.000     Strato2_3095_82743_L_0
  73 D   27.87      4.7561E-05  276.5       139.4       276.5       139.4       UL-RL  7.3205E+04  -14.30      0.000       1.000       1.000
139.4       0.000       0.000     Strato2_3095_82743_L_0
  74 D   28.27      4.7523E-05  280.5       141.4       280.5       141.4       UL-RL  7.3205E+04  -14.50      0.000       1.000       1.000
141.4       0.000       0.000     Strato2_3095_82743_L_0
  75 D   28.68      4.7509E-05  284.5       143.4       284.5       143.4       UL-RL  7.3205E+04  -14.70      0.000       1.000       1.000
143.4       0.000       0.000     Strato2_3095_82743_L_0
  76 D   29.08      4.7513E-05  288.5       145.4       288.5       145.4       UL-RL  7.3205E+04  -14.90      0.000       1.000       1.000
145.4       0.000       0.000     Strato2_3095_82743_L_0
  77 D   29.48      4.7528E-05  292.5       147.4       292.5       147.4       UL-RL  7.3205E+04  -15.10      0.000       1.000       1.000
147.4       0.000       0.000     Strato2_3095_82743_L_0
  78 D   29.88      4.7551E-05  296.5       149.4       296.5       149.4       UL-RL  7.3205E+04  -15.30      0.000       1.000       1.000
149.4       0.000       0.000     Strato2_3095_82743_L_0
  79 D   30.28      4.7578E-05  300.5       151.4       300.5       151.4       UL-RL  7.3205E+04  -15.50      0.000       1.000       1.000
151.4       0.000       0.000     Strato2_3095_82743_L_0
  80 D   30.68      4.7608E-05  304.5       153.4       304.5       153.4       UL-RL  7.3205E+04  -15.70      0.000       1.000       1.000
153.4       0.000       0.000     Strato2_3095_82743_L_0
  81 D   23.31      4.7638E-05  308.5       155.4       308.5       155.4       UL-RL  7.3205E+04  -15.90      0.000       1.000       1.000
155.4       0.000       0.000     Strato2_3095_82743_L_0
  82 D   7.820      4.7653E-05  310.5       156.4       310.5       156.4       UL-RL  7.3205E+04  -16.00      0.000       1.000       1.000
156.4       0.000       0.000     Strato2_3095_82743_L_0
```

```
 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
 |                                                                                                                               |
 |                                       NewProject.BaseDesignSection_28.Nominal_63                                              |
 |                                   Exe Time :24 July 2019      10:49:24                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

 WallElement_33                 :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   81
 C U R R E N T   T I M E   I S     2.0000

  WALL2D ELEMENT

    EL      TA          TB          MA          MB
 ------------------------------------------------------
     1  1.1950     -1.1950     4.15307E-12 0.23900
     2  1.0505     -1.0505     -0.23900    0.44910
     3  1.1018     -1.1018     -0.44910    0.66947
     4  1.0941     -1.0941     -0.66947    0.88830
     5  1.1602     -1.1602     -0.88830     1.1203
     6  1.1851     -1.1851      -1.1203     1.3574
     7  1.2548     -1.2548      -1.3574     1.6083
     8  1.2931     -1.2931      -1.6083     1.8669
     9  1.2991     -1.2991      -1.8669     2.1268
    10  1.2866     -1.2866      -2.1268     2.3841
    11  1.3039     -1.3039      -2.3841     2.6449
    12  1.3039     -1.3039      -2.6449     2.9057
    13  1.3211     -1.3211      -2.9057     3.0378
    14  1.3297     -1.3297      -3.0378     3.3037
    15  1.3261     -1.3261      -3.3037     3.5689
    16  1.3401     -1.3401      -3.5689     3.8370
    17  1.3394     -1.3394      -3.8370     4.1048
    18  1.3525     -1.3525      -4.1048     4.3753
    19  1.3509     -1.3509      -4.3753     4.6455
    20  1.3600     -1.3600      -4.6455     4.9175
    21  1.3268     -1.3268      -4.9175     5.1829
    22  1.3031     -1.3031      -5.1829     5.4435
    23  1.2867     -1.2867      -5.4435     5.7008
    24  1.2556     -1.2556      -5.7008     5.9520
    25  1.2293     -1.2293      -5.9520     6.1978
    26  1.1876     -1.1876      -6.1978     6.4353
    27  1.1483     -1.1483      -6.4353     6.6650
    28  1.0722     -1.0722      -6.6650     6.8794
    29 0.99699    -0.99699     -6.8794     7.0788
```

```
   30 0.90508    -0.90508     -7.0788      7.2598
   31 0.81173    -0.81173     -7.2598      7.4222
   32 0.70039    -0.70039     -7.4222      7.5623
   33 0.58530    -0.58530     -7.5623      7.6793
   34 0.45088    -0.45088     -7.6793      7.7695
   35 0.31047    -0.31047     -7.7695      7.8316
   36 0.14701    -0.14701     -7.8316      7.8610
   37-3.75682E-02 3.75682E-02 -7.8610      7.8535
   38-0.23120     0.23120     -7.8535      7.8072
   39-0.44744     0.44744     -7.8072      7.7178
   40-0.56321     0.56321     -7.7178      7.6051
   41-0.57739     0.57739     -7.6051      7.4896
   42-0.48133     0.48133     -7.4896      7.3934
   43-0.30647     0.30647     -7.3934      7.3321
   44-2.97546E-02 2.97546E-02 -7.3321      7.3261
   45 0.33257    -0.33257     -7.3261      7.3926
   46 0.78814    -0.78814     -7.3926      7.5503
   47  1.3212     -1.3212     -7.5503      7.8145
   48  1.9388     -1.9388     -7.8145      8.2023
   49  2.6361     -2.6361     -8.2023      8.7295
   50  1.4442     -1.4442     -8.7295      9.0183
   51 0.42608    -0.42608     -9.0183      9.1035
   52-0.42436     0.42436     -9.1035      9.0187
   53 -1.1138      1.1138     -9.0187      8.7959
   54 -1.6676      1.6676     -8.7959      8.4624
   55 -2.0916      2.0916     -8.4624      8.0440
   56 -2.4095      2.4095     -8.0440      7.5621
   57 -2.6261      2.6261     -7.5621      7.0369
   58 -2.7728      2.7728     -7.0369      6.4824
   59 -2.8425      2.8425     -6.4824      5.9139
   60 -2.8543      2.8543     -5.9139      5.3430
   61 -2.8095      2.8095     -5.3430      4.7811
   62 -2.7171      2.7171     -4.7811      4.2377
   63 -2.5928      2.5928     -4.2377      3.7191
   64 -2.4353      2.4353     -3.7191      3.2321
   65 -2.2673      2.2673     -3.2321      2.7786
   66 -2.0772      2.0772     -2.7786      2.3632
   67 -1.8842      1.8842     -2.3632      1.9863
   68 -1.6917      1.6917     -1.9863      1.6480
   69 -1.5026      1.5026     -1.6480      1.3475
   70 -1.3190      1.3190     -1.3475      1.0837
   71 -1.1428      1.1428     -1.0837     0.85513
   72-0.97540     0.97540    -0.85513     0.66005
   73-0.82586     0.82586    -0.66005     0.49488
   74-0.68680     0.68680    -0.49488     0.35752
   75-0.55876     0.55876    -0.35752     0.24576
   76-0.44207     0.44207    -0.24576     0.15735
   77-0.33391     0.33391    -0.15735     9.05656E-02
   78-0.23420     0.23420    -9.05656E-02 4.37264E-02
   79-0.14293     0.14293    -4.37264E-02 1.51410E-02
   80-6.73297E-02 6.73297E-02-1.51410E-02 1.67504E-03
   81-1.67488E-02 1.67488E-02-1.67504E-03-1.60583E-12



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                       |
|                                  Exe Time :24 July 2019      10:49:24                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P    N O.    4

Tieback_768111                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      2.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.4833E+05 RIMNOR= 4910.
           RENORM= 642.1     REMNOR=0.1315E-20 RATIO =0.1153     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 30.76     RMMAX = 9.104
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.4833E+05 RDR   = 4910.
           RATIOT=0.1153     RATIOR= 0.000
```

```
           MAX UN= 6.914      IEQ=    31 NODE     16 DOF   1  Y-DISPL.F
           MIN UN=-.8776E-10 IEQ=    53 NODE     27 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000      RMNORM= 0.000
           RINORM=0.4833E+05 RIMNOR= 4910.
           RENORM= 132.8      REMNOR=0.2099E-17 RATIO =0.5242E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 30.76      RMMAX = 9.104
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.4833E+05 RDR   = 4910.
           RATIOT=0.5242E-01 RATIOR= 0.000
           MAX UN= 5.824      IEQ=    79 NODE     40 DOF   1  Y-DISPL.F
           MIN UN=-.1132E-03 IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000      RMNORM= 0.000
           RINORM=0.4833E+05 RIMNOR= 4910.
           RENORM=0.1631E-01 REMNOR=0.2299E-18 RATIO =0.5809E-03 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 30.76      RMMAX = 9.104
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.4833E+05 RDR   = 4910.
           RATIOT=0.5809E-03 RATIOR= 0.000
           MAX UN=0.1277      IEQ=    99 NODE     50 DOF   1  Y-DISPL.F
           MIN UN=-.8303E-08 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000      RMNORM= 0.000
           RINORM=0.4833E+05 RIMNOR= 4910.
           RENORM=0.2720E-15 REMNOR=0.2827E-18 RATIO =0.7502E-10 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 30.76      RMMAX = 9.104
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.4833E+05 RDR   = 4910.
           RATIOT=0.7502E-10 RATIOR= 0.000
           MAX UN=0.1044E-07 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           MIN UN=-.1096E-07 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                       |
|                                 Exe Time :24 July 2019      10:49:24                                                  |
+-----------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     4 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    3     ( AT TIME   3.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (
    1   1.4493888E-02  -1.9975505E-03
    2   1.4094380E-02  -1.9975222E-03
    3   1.3694886E-02  -1.9973932E-03
    4   1.3295436E-02  -1.9970628E-03
    5   1.2896082E-02  -1.9964095E-03
    6   1.2496903E-02  -1.9952941E-03
    7   1.2098006E-02  -1.9935596E-03
    8   1.1699532E-02  -1.9910315E-03
    9   1.1301659E-02  -1.9875176E-03
   10   1.0904604E-02  -1.9828101E-03
   11   1.0508629E-02  -1.9766849E-03
   12   1.0114041E-02  -1.9689004E-03
   13   9.7211971E-03  -1.9591974E-03
   14   9.5255551E-03  -1.9535495E-03
   15   9.1361143E-03  -1.9404435E-03
   16   8.7495538E-03  -1.9246948E-03
   17   8.3664339E-03  -1.9059838E-03
   18   7.9873779E-03  -1.8840096E-03
   19   7.6130615E-03  -1.8585633E-03
   20   7.2441894E-03  -1.8295644E-03
   21   6.8814693E-03  -1.7970610E-03
   22   6.5255868E-03  -1.7612302E-03
   23   6.1771796E-03  -1.7223651E-03
   24   5.8368207E-03  -1.6808007E-03
   25   5.5050181E-03  -1.6368535E-03
   26   5.1822182E-03  -1.5908223E-03
```

27	4.8688109E-03	-1.5429889E-03
28	4.5651268E-03	-1.4936177E-03
29	4.2714498E-03	-1.4429581E-03
30	3.9880138E-03	-1.3912442E-03
31	3.7150077E-03	-1.3386952E-03
32	3.4525791E-03	-1.2855160E-03
33	3.2008320E-03	-1.2318968E-03
34	2.9598378E-03	-1.1780157E-03
35	2.7296322E-03	-1.1240377E-03
36	2.5102190E-03	-1.0701159E-03
37	2.3015726E-03	-1.0163924E-03
38	2.1036410E-03	-9.6299887E-04
39	1.9163440E-03	-9.1005638E-04
40	1.7395809E-03	-8.5767721E-04
41	1.5732287E-03	-8.0596456E-04
42	1.4171443E-03	-7.5501339E-04
43	1.2711674E-03	-7.0491128E-04
44	1.1351186E-03	-6.5573830E-04
45	1.0088052E-03	-6.0756913E-04
46	8.9201945E-04	-5.6047229E-04
47	7.8454056E-04	-5.1451092E-04
48	6.8613596E-04	-4.6974361E-04
49	5.9656043E-04	-4.2622397E-04
50	5.1555984E-04	-3.8400233E-04
51	4.4285971E-04	-3.4327757E-04
52	3.7812966E-04	-3.0436384E-04
53	3.2097912E-04	-2.6750069E-04
54	2.7098096E-04	-2.3286389E-04
55	2.2767740E-04	-2.0056950E-04
56	1.9059267E-04	-1.7068251E-04
57	1.5924251E-04	-1.4322384E-04
58	1.3314235E-04	-1.1817698E-04
59	1.1181412E-04	-9.5494160E-05
60	9.4791977E-05	-7.5101898E-05
61	8.1626955E-05	-5.6905694E-05
62	7.1890699E-05	-4.0794509E-05
63	6.5178402E-05	-2.6644567E-05
64	6.1110976E-05	-1.4323069E-05
65	5.9336525E-05	-3.6913018E-06
66	5.9531254E-05	5.3924530E-06
67	6.1399799E-05	1.3070595E-05
68	6.4675194E-05	1.9484259E-05
69	6.9118394E-05	2.4771288E-05
70	7.4517477E-05	2.9064840E-05
71	8.0686587E-05	3.2492246E-05
72	8.7464671E-05	3.5174086E-05
73	9.4714056E-05	3.7223445E-05
74	1.0231887E-04	3.8745155E-05
75	1.1018335E-04	3.9835355E-05
76	1.1823007E-04	4.0581367E-05
77	1.2639817E-04	4.1061467E-05
78	1.3464154E-04	4.1344800E-05
79	1.4292697E-04	4.1491362E-05
80	1.5123235E-04	4.1551947E-05
81	1.5954478E-04	4.1567953E-05
82	1.6370204E-04	4.1568670E-05

```
 +-----------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
 |                                                                                                                       |
 |                                      NewProject.BaseDesignSection_28.Nominal_63                                       |
 |                                  Exe Time :24 July 2019      10:49:24                                                 |
 +-----------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   1

 0_L                              :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
 C U R R E N T   T I M E   I S     3.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P          STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1 D   1.195     -1.4494E-02   25.00       11.95       25.00       13.25          ACTIVE   0.000       0.000       0.000        1.000       1.000
11.95       0.000       0.000     Strato1_2_8_L_0
```

2 D	1.846	-1.4094E-02	19.31	9.229	19.31	10.23	ACTIVE	0.000	-0.2000	0.000	1.000	1.000
9.229	0.000	0.000	Strato1_2_8_L_0									
3 D	2.405	-1.3695E-02	25.16	12.03	25.16	13.34	ACTIVE	0.000	-0.4000	0.000	1.000	1.000
12.03	0.000	0.000	Strato1_2_8_L_0									
4 D	2.710	-1.3295E-02	28.35	13.55	28.35	15.03	ACTIVE	0.000	-0.6000	0.000	1.000	1.000
13.55	0.000	0.000	Strato1_2_8_L_0									
5 D	3.148	-1.2896E-02	32.93	15.74	32.93	17.45	ACTIVE	0.000	-0.8000	0.000	1.000	1.000
15.74	0.000	0.000	Strato1_2_8_L_0									
6 D	3.471	-1.2497E-02	36.31	17.35	36.31	19.24	ACTIVE	0.000	-1.000	0.000	1.000	1.000
17.35	0.000	0.000	Strato1_2_8_L_0									
7 D	3.880	-1.2098E-02	40.58	19.40	40.58	21.51	ACTIVE	0.000	-1.200	0.000	1.000	1.000
19.40	0.000	0.000	Strato1_2_8_L_0									
8 D	4.213	-1.1700E-02	44.07	21.06	44.07	23.35	ACTIVE	0.000	-1.400	0.000	1.000	1.000
21.06	0.000	0.000	Strato1_2_8_L_0									
9 D	4.545	-1.1302E-02	47.54	22.72	47.54	25.20	ACTIVE	0.000	-1.600	0.000	1.000	1.000
22.72	0.000	0.000	Strato1_2_8_L_0									
10 D	4.891	-1.0905E-02	51.16	24.45	51.16	27.12	ACTIVE	0.000	-1.800	0.000	1.000	1.000
24.45	0.000	0.000	Strato1_2_8_L_0									
11 D	5.286	-1.0509E-02	55.29	26.43	55.29	29.30	ACTIVE	0.000	-2.000	0.000	1.000	1.000
26.43	0.000	0.000	Strato1_2_8_L_0									
12 D	5.633	-1.0114E-02	58.93	28.17	58.93	31.23	ACTIVE	0.000	-2.200	0.000	1.000	1.000
28.17	0.000	0.000	Strato1_2_8_L_0									
13 D	4.516	-9.7212E-03	62.99	30.11	62.99	33.38	ACTIVE	0.000	-2.400	0.000	1.000	1.000
30.11	0.000	0.000	Strato1_2_8_L_0									
14 D	4.645	-9.5256E-03	64.78	30.97	64.78	34.33	ACTIVE	0.000	-2.500	0.000	1.000	1.000
30.97	0.000	0.000	Strato1_2_8_L_0									
15 D	6.544	-9.1361E-03	68.45	32.72	68.45	36.28	ACTIVE	0.000	-2.700	0.000	1.000	1.000
32.72	0.000	0.000	Strato1_2_8_L_0									
16 D	6.928	-8.7496E-03	72.47	34.64	72.47	38.41	ACTIVE	0.000	-2.900	0.000	1.000	1.000
34.64	0.000	0.000	Strato1_2_8_L_0									
17 D	7.280	-8.3664E-03	76.15	36.40	76.15	40.36	ACTIVE	0.000	-3.100	0.000	1.000	1.000
36.40	0.000	0.000	Strato1_2_8_L_0									
18 D	7.661	-7.9874E-03	80.13	38.30	80.13	42.47	ACTIVE	0.000	-3.300	0.000	1.000	1.000
38.30	0.000	0.000	Strato1_2_8_L_0									
19 D	8.013	-7.6131E-03	83.82	40.07	83.82	44.42	ACTIVE	0.000	-3.500	0.000	1.000	1.000
40.07	0.000	0.000	Strato1_2_8_L_0									
20 D	8.392	-7.2442E-03	87.78	41.96	87.78	46.52	ACTIVE	0.000	-3.700	0.000	1.000	1.000
41.96	0.000	0.000	Strato1_2_8_L_0									
21 D	8.718	-6.8815E-03	91.19	43.59	91.19	48.33	ACTIVE	0.000	-3.900	0.000	1.000	1.000
43.59	0.000	0.000	Strato1_2_8_L_0									
22 D	9.096	-6.5256E-03	95.15	45.48	95.15	50.43	ACTIVE	0.000	-4.100	0.000	1.000	1.000
45.48	0.000	0.000	Strato1_2_8_L_0									
23 D	9.473	-6.1772E-03	99.09	47.37	99.09	52.52	ACTIVE	0.000	-4.300	0.000	1.000	1.000
47.37	0.000	0.000	Strato1_2_8_L_0									
24 D	9.828	-5.8368E-03	102.8	49.14	102.8	54.49	ACTIVE	0.000	-4.500	0.000	1.000	1.000
49.14	0.000	0.000	Strato1_2_8_L_0									
25 D	10.20	-5.5050E-03	106.7	51.02	106.7	56.57	ACTIVE	0.000	-4.700	0.000	1.000	1.000
51.02	0.000	0.000	Strato1_2_8_L_0									
26 D	10.56	-5.1822E-03	110.5	52.80	110.5	58.54	ACTIVE	0.000	-4.900	0.000	1.000	1.000
52.80	0.000	0.000	Strato1_2_8_L_0									
27 D	10.93	-4.8688E-03	114.4	54.67	114.4	60.62	ACTIVE	0.000	-5.100	0.000	1.000	1.000
54.67	0.000	0.000	Strato1_2_8_L_0									
28 D	11.27	-4.5651E-03	117.9	56.35	117.9	62.48	ACTIVE	0.000	-5.300	0.000	1.000	1.000
56.35	0.000	0.000	Strato1_2_8_L_0									
29 D	11.64	-4.2714E-03	121.8	58.22	121.8	64.55	ACTIVE	0.000	-5.500	0.000	1.000	1.000
58.22	0.000	0.000	Strato1_2_8_L_0									
30 D	12.00	-3.9880E-03	125.5	60.00	125.5	66.53	ACTIVE	0.000	-5.700	0.000	1.000	1.000
60.00	0.000	0.000	Strato1_2_8_L_0									
31 D	12.37	-3.7150E-03	129.4	61.87	129.4	68.60	ACTIVE	0.000	-5.900	0.000	1.000	1.000
61.87	0.000	0.000	Strato1_2_8_L_0									
32 D	12.73	-3.4526E-03	133.2	63.66	133.2	70.58	ACTIVE	0.000	-6.100	0.000	1.000	1.000
63.66	0.000	0.000	Strato1_2_8_L_0									
33 D	13.10	-3.2008E-03	137.1	65.52	137.1	72.65	ACTIVE	0.000	-6.300	0.000	1.000	1.000
65.52	0.000	0.000	Strato1_2_8_L_0									
34 D	13.46	-2.9598E-03	140.8	67.31	140.8	74.63	ACTIVE	0.000	-6.500	0.000	1.000	1.000
67.31	0.000	0.000	Strato1_2_8_L_0									
35 D	13.83	-2.7296E-03	144.7	69.17	144.7	76.69	ACTIVE	0.000	-6.700	0.000	1.000	1.000
69.17	0.000	0.000	Strato1_2_8_L_0									
36 D	14.19	-2.5102E-03	148.4	70.95	148.4	78.67	ACTIVE	0.000	-6.900	0.000	1.000	1.000
70.95	0.000	0.000	Strato1_2_8_L_0									
37 D	14.55	-2.3016E-03	152.2	72.74	152.2	80.65	ACTIVE	0.000	-7.100	0.000	1.000	1.000
72.74	0.000	0.000	Strato1_2_8_L_0									
38 D	14.92	-2.1036E-03	156.1	74.60	156.1	82.71	ACTIVE	0.000	-7.300	0.000	1.000	1.000
74.60	0.000	0.000	Strato1_2_8_L_0									
39 D	15.28	-1.9163E-03	159.8	76.39	159.8	84.70	ACTIVE	0.000	-7.500	0.000	1.000	1.000
76.39	0.000	0.000	Strato1_2_8_L_0									
40 D	15.65	-1.7396E-03	163.7	78.24	163.7	86.75	ACTIVE	0.000	-7.700	0.000	1.000	1.000
78.24	0.000	0.000	Strato1_2_8_L_0									
41 D	16.01	-1.5732E-03	167.4	80.03	167.4	88.74	ACTIVE	0.000	-7.900	0.000	1.000	1.000
80.03	0.000	0.000	Strato1_2_8_L_0									
42 D	16.38	-1.4171E-03	171.3	81.89	171.3	90.79	ACTIVE	0.000	-8.100	0.000	1.000	1.000
81.89	0.000	0.000	Strato1_2_8_L_0									
43 D	16.72	-1.2712E-03	174.9	83.62	174.9	92.71	ACTIVE	0.000	-8.300	0.000	1.000	1.000
83.62	0.000	0.000	Strato1_2_8_L_0									
44 D	17.09	-1.1351E-03	178.8	85.47	178.8	94.76	ACTIVE	0.000	-8.500	0.000	1.000	1.000

85.47	0.000	0.000	Strato1_2_8_L_0										
45 D	17.45	-1.0088E-03	182.6	87.26	182.6	96.76	ACTIVE	0.000	-8.700	0.000	1.000	1.000	
87.26	0.000	0.000	Strato1_2_8_L_0										
46 D	17.82	-8.9202E-04	186.4	89.11	186.4	98.81	ACTIVE	0.000	-8.900	0.000	1.000	1.000	
89.11	0.000	0.000	Strato1_2_8_L_0										
47 D	18.18	-7.8454E-04	190.2	90.91	190.2	100.8	ACTIVE	0.000	-9.100	0.000	1.000	1.000	
90.91	0.000	0.000	Strato1_2_8_L_0										
48 D	18.55	-6.8614E-04	194.1	92.76	194.1	102.8	ACTIVE	0.000	-9.300	0.000	1.000	1.000	
92.76	0.000	0.000	Strato1_2_8_L_0										
49 D	18.92	-5.9656E-04	197.9	94.60	197.9	104.9	ACTIVE	0.000	-9.500	0.000	1.000	1.000	
94.60	0.000	0.000	Strato1_2_8_L_0										
50 D	11.60	-5.1556E-04	201.9	58.01	201.9	100.9	UL-RL	7.2037E+04	-9.700	0.000	1.000	1.000	
58.01	0.000	0.000	Strato2_3095_82743_L_0										
51 D	13.11	-4.4286E-04	205.8	65.56	205.8	102.9	UL-RL	7.2037E+04	-9.900	0.000	1.000	1.000	
65.56	0.000	0.000	Strato2_3095_82743_L_0										
52 D	14.50	-3.7813E-04	209.8	72.52	209.8	104.9	UL-RL	7.2037E+04	-10.10	0.000	1.000	1.000	
72.52	0.000	0.000	Strato2_3095_82743_L_0										
53 D	15.79	-3.2098E-04	213.8	78.95	213.8	106.9	UL-RL	7.2037E+04	-10.30	0.000	1.000	1.000	
78.95	0.000	0.000	Strato2_3095_82743_L_0										
54 D	16.96	-2.7098E-04	217.8	84.80	217.8	108.9	UL-RL	7.2037E+04	-10.50	0.000	1.000	1.000	
84.80	0.000	0.000	Strato2_3095_82743_L_0										
55 D	18.04	-2.2768E-04	221.9	90.18	221.9	110.9	UL-RL	7.2037E+04	-10.70	0.000	1.000	1.000	
90.18	0.000	0.000	Strato2_3095_82743_L_0										
56 D	19.01	-1.9059E-04	225.8	95.04	225.8	112.9	UL-RL	7.2037E+04	-10.90	0.000	1.000	1.000	
95.04	0.000	0.000	Strato2_3095_82743_L_0										
57 D	19.90	-1.5924E-04	229.9	99.51	229.9	114.9	UL-RL	7.2037E+04	-11.10	0.000	1.000	1.000	
99.51	0.000	0.000	Strato2_3095_82743_L_0										
58 D	20.70	-1.3314E-04	233.7	103.5	233.7	116.9	UL-RL	7.2037E+04	-11.30	0.000	1.000	1.000	
103.5	0.000	0.000	Strato2_3095_82743_L_0										
59 D	21.44	-1.1181E-04	237.8	107.2	237.8	118.9	UL-RL	7.2037E+04	-11.50	0.000	1.000	1.000	
107.2	0.000	0.000	Strato2_3095_82743_L_0										
60 D	22.11	-9.4792E-05	241.8	110.5	241.8	120.9	UL-RL	7.2037E+04	-11.70	0.000	1.000	1.000	
110.5	0.000	0.000	Strato2_3095_82743_L_0										
61 D	22.72	-8.1627E-05	245.8	113.6	245.8	122.9	UL-RL	7.2037E+04	-11.90	0.000	1.000	1.000	
113.6	0.000	0.000	Strato2_3095_82743_L_0										
62 D	23.28	-7.1891E-05	249.9	116.4	249.9	124.9	UL-RL	7.2037E+04	-12.10	0.000	1.000	1.000	
116.4	0.000	0.000	Strato2_3095_82743_L_0										
63 D	23.79	-6.5178E-05	253.8	119.0	253.8	126.9	UL-RL	7.2037E+04	-12.30	0.000	1.000	1.000	
119.0	0.000	0.000	Strato2_3095_82743_L_0										
64 D	24.27	-6.1111E-05	257.9	121.3	257.9	128.9	UL-RL	7.2037E+04	-12.50	0.000	1.000	1.000	
121.3	0.000	0.000	Strato2_3095_82743_L_0										
65 D	24.69	-5.9337E-05	261.8	123.5	261.8	130.9	UL-RL	7.2037E+04	-12.70	0.000	1.000	1.000	
123.5	0.000	0.000	Strato2_3095_82743_L_0										
66 D	25.10	-5.9531E-05	265.8	125.5	265.8	132.9	UL-RL	7.2037E+04	-12.90	0.000	1.000	1.000	
125.5	0.000	0.000	Strato2_3095_82743_L_0										
67 D	25.47	-6.1400E-05	269.7	127.4	269.7	134.9	UL-RL	7.2037E+04	-13.10	0.000	1.000	1.000	
127.4	0.000	0.000	Strato2_3095_82743_L_0										
68 D	25.82	-6.4675E-05	273.6	129.1	273.6	136.8	UL-RL	7.2037E+04	-13.30	0.000	1.000	1.000	
129.1	0.000	0.000	Strato2_3095_82743_L_0										
69 D	26.15	-6.9118E-05	277.5	130.7	277.5	138.8	UL-RL	7.2037E+04	-13.50	0.000	1.000	1.000	
130.7	0.000	0.000	Strato2_3095_82743_L_0										
70 D	26.46	-7.4517E-05	281.4	132.3	281.4	140.7	UL-RL	7.2037E+04	-13.70	0.000	1.000	1.000	
132.3	0.000	0.000	Strato2_3095_82743_L_0										
71 D	26.77	-8.0687E-05	285.3	133.8	285.3	142.7	UL-RL	7.2037E+04	-13.90	0.000	1.000	1.000	
133.8	0.000	0.000	Strato2_3095_82743_L_0										
72 D	27.06	-8.7465E-05	289.2	135.3	289.2	144.6	UL-RL	7.2037E+04	-14.10	0.000	1.000	1.000	
135.3	0.000	0.000	Strato2_3095_82743_L_0										
73 D	27.34	-9.4714E-05	293.1	136.7	293.1	146.5	UL-RL	7.2037E+04	-14.30	0.000	1.000	1.000	
136.7	0.000	0.000	Strato2_3095_82743_L_0										
74 D	27.62	-1.0232E-04	297.0	138.1	297.0	148.5	UL-RL	7.2037E+04	-14.50	0.000	1.000	1.000	
138.1	0.000	0.000	Strato2_3095_82743_L_0										
75 D	27.90	-1.1018E-04	300.9	139.5	300.9	150.4	UL-RL	7.2037E+04	-14.70	0.000	1.000	1.000	
139.5	0.000	0.000	Strato2_3095_82743_L_0										
76 D	28.18	-1.1823E-04	304.8	140.9	304.8	152.4	UL-RL	7.2037E+04	-14.90	0.000	1.000	1.000	
140.9	0.000	0.000	Strato2_3095_82743_L_0										
77 D	28.45	-1.2640E-04	308.7	142.3	308.7	154.4	UL-RL	7.2037E+04	-15.10	0.000	1.000	1.000	
142.3	0.000	0.000	Strato2_3095_82743_L_0										
78 D	28.73	-1.3464E-04	312.6	143.6	312.6	156.3	UL-RL	7.2037E+04	-15.30	0.000	1.000	1.000	
143.6	0.000	0.000	Strato2_3095_82743_L_0										
79 D	29.00	-1.4293E-04	316.6	145.0	316.6	158.3	UL-RL	7.2037E+04	-15.50	0.000	1.000	1.000	
145.0	0.000	0.000	Strato2_3095_82743_L_0										
80 D	29.26	-1.5123E-04	320.4	146.3	320.4	160.2	UL-RL	7.2037E+04	-15.70	0.000	1.000	1.000	
146.3	0.000	0.000	Strato2_3095_82743_L_0										
81 D	22.15	-1.5954E-04	324.3	147.7	324.3	162.2	UL-RL	7.2037E+04	-15.90	0.000	1.000	1.000	
147.7	0.000	0.000	Strato2_3095_82743_L_0										
82 D	7.419	-1.6370E-04	326.3	148.4	326.3	163.2	UL-RL	7.2037E+04	-16.00	0.000	1.000	1.000	
148.4	0.000	0.000	Strato2_3095_82743_L_0										

| Exe Time :24 July 2019 10:49:24 |

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 2

0_R :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 82
C U R R E N T T I M E I S 3.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000	0.000	0.000	0.000	not available
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000	0.000	0.000	0.000	not available
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000	0.000	0.000	0.000	not available
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000	0.000	0.000	0.000	not available
6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000	0.000	0.000	0.000	not available
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000	0.000	0.000	0.000	not available
9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000	0.000	0.000	0.000	not available
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000	0.000	0.000	0.000	not available
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000	0.000	0.000	0.000	not available
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000	0.000	0.000	0.000	not available
14	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000	0.000	0.000	0.000	not available
15	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000	0.000	0.000	0.000	not available
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000	0.000	0.000	0.000	not available
17 D	1.536	8.3664E-03	1.900	7.678	58.90	36.40	PASSIVE	0.000	-3.100	0.000	1.000	1.000	7.678	0.000	0.000	Strato1_2_8_L_0
18 D	4.607	7.9874E-03	5.700	23.03	62.70	38.24	PASSIVE	0.000	-3.300	0.000	1.000	1.000	23.03	0.000	0.000	Strato1_2_8_L_0
19 D	7.678	7.6131E-03	9.500	38.39	66.50	40.07	PASSIVE	0.000	-3.500	0.000	1.000	1.000	38.39	0.000	0.000	Strato1_2_8_L_0
20 D	10.75	7.2442E-03	13.30	53.75	70.30	53.75	PASSIVE	0.000	-3.700	0.000	1.000	1.000	53.75	0.000	0.000	Strato1_2_8_L_0
21 D	13.82	6.8815E-03	17.10	69.10	74.10	69.10	PASSIVE	0.000	-3.900	0.000	1.000	1.000	69.10	0.000	0.000	Strato1_2_8_L_0
22 D	16.35	6.5256E-03	20.90	81.74	77.90	81.74	V-C	5890.	-4.100	0.000	1.000	1.000	81.74	0.000	0.000	Strato1_2_8_L_0
23 D	16.32	6.1772E-03	24.70	81.62	81.70	81.62	V-C	5890.	-4.300	0.000	1.000	1.000	81.62	0.000	0.000	Strato1_2_8_L_0
24 D	16.31	5.8368E-03	28.50	81.55	85.50	81.55	V-C	5890.	-4.500	0.000	1.000	1.000	81.55	0.000	0.000	Strato1_2_8_L_0
25 D	16.31	5.5050E-03	32.30	81.54	89.30	81.54	V-C	5890.	-4.700	0.000	1.000	1.000	81.54	0.000	0.000	Strato1_2_8_L_0
26 D	16.32	5.1822E-03	36.10	81.58	93.10	81.58	V-C	5890.	-4.900	0.000	1.000	1.000	81.58	0.000	0.000	Strato1_2_8_L_0
27 D	16.33	4.8688E-03	39.90	81.67	96.90	81.67	V-C	5890.	-5.100	0.000	1.000	1.000	81.67	0.000	0.000	Strato1_2_8_L_0
28 D	16.37	4.5651E-03	43.70	81.83	100.7	81.83	V-C	5890.	-5.300	0.000	1.000	1.000	81.83	0.000	0.000	Strato1_2_8_L_0
29 D	16.41	4.2714E-03	47.50	82.04	104.5	82.04	V-C	5890.	-5.500	0.000	1.000	1.000	82.04	0.000	0.000	Strato1_2_8_L_0
30 D	16.46	3.9880E-03	51.30	82.32	108.3	82.32	V-C	5890.	-5.700	0.000	1.000	1.000	82.32	0.000	0.000	Strato1_2_8_L_0
31 D	16.53	3.7150E-03	55.10	82.66	112.1	82.66	V-C	5890.	-5.900	0.000	1.000	1.000	82.66	0.000	0.000	Strato1_2_8_L_0
32 D	16.61	3.4526E-03	58.90	83.07	115.9	83.07	V-C	5890.	-6.100	0.000	1.000	1.000	83.07	0.000	0.000	Strato1_2_8_L_0
33 D	16.71	3.2008E-03	62.70	83.53	119.7	83.53	V-C	5890.	-6.300	0.000	1.000	1.000	83.53	0.000	0.000	Strato1_2_8_L_0

34 D	16.81	2.9598E-03	66.50	84.07	123.5	84.07	V-C	5890.	-6.500	0.000	1.000	1.000	84.07
0.000	0.000	Strato1_2_8_L_0											
35 D	16.93	2.7296E-03	70.30	84.67	127.3	84.67	V-C	5890.	-6.700	0.000	1.000	1.000	84.67
0.000	0.000	Strato1_2_8_L_0											
36 D	17.07	2.5102E-03	74.10	85.33	131.1	85.33	V-C	5890.	-6.900	0.000	1.000	1.000	85.33
0.000	0.000	Strato1_2_8_L_0											
37 D	17.21	2.3016E-03	77.90	86.06	134.9	86.06	V-C	5890.	-7.100	0.000	1.000	1.000	86.06
0.000	0.000	Strato1_2_8_L_0											
38 D	17.37	2.1036E-03	81.70	86.86	138.7	86.86	V-C	5890.	-7.300	0.000	1.000	1.000	86.86
0.000	0.000	Strato1_2_8_L_0											
39 D	17.54	1.9163E-03	85.50	87.72	142.5	87.72	V-C	5890.	-7.500	0.000	1.000	1.000	87.72
0.000	0.000	Strato1_2_8_L_0											
40 D	17.73	1.7396E-03	89.30	88.64	146.3	88.64	V-C	5890.	-7.700	0.000	1.000	1.000	88.64
0.000	0.000	Strato1_2_8_L_0											
41 D	17.93	1.5732E-03	93.10	89.63	150.1	89.63	V-C	5890.	-7.900	0.000	1.000	1.000	89.63
0.000	0.000	Strato1_2_8_L_0											
42 D	18.14	1.4171E-03	96.90	90.68	153.9	90.68	V-C	5890.	-8.100	0.000	1.000	1.000	90.68
0.000	0.000	Strato1_2_8_L_0											
43 D	18.36	1.2712E-03	100.7	91.79	157.7	91.79	V-C	5890.	-8.300	0.000	1.000	1.000	91.79
0.000	0.000	Strato1_2_8_L_0											
44 D	18.59	1.1351E-03	104.5	92.96	161.5	92.96	V-C	5890.	-8.500	0.000	1.000	1.000	92.96
0.000	0.000	Strato1_2_8_L_0											
45 D	18.84	1.0088E-03	108.3	94.19	165.3	94.19	V-C	5890.	-8.700	0.000	1.000	1.000	94.19
0.000	0.000	Strato1_2_8_L_0											
46 D	19.10	8.9202E-04	112.1	95.48	169.1	95.48	V-C	5890.	-8.900	0.000	1.000	1.000	95.48
0.000	0.000	Strato1_2_8_L_0											
47 D	19.37	7.8454E-04	115.9	96.83	172.9	96.83	V-C	5890.	-9.100	0.000	1.000	1.000	96.83
0.000	0.000	Strato1_2_8_L_0											
48 D	19.65	6.8614E-04	119.7	98.23	176.7	98.23	V-C	5890.	-9.300	0.000	1.000	1.000	98.23
0.000	0.000	Strato1_2_8_L_0											
49 D	19.94	5.9656E-04	123.5	99.68	180.5	99.68	V-C	5890.	-9.500	0.000	1.000	1.000	99.68
0.000	0.000	Strato1_2_8_L_0											
50 D	18.96	5.1556E-04	127.5	94.82	184.5	94.82	V-C	1.3014E+04	-9.700	0.000	1.000	1.000	94.82
0.000	0.000	Strato2_3095_82743_L_0											
51 D	18.94	4.4286E-04	131.5	94.71	188.5	96.38	UL-RL	3.9043E+04	-9.900	0.000	1.000	1.000	94.71
0.000	0.000	Strato2_3095_82743_L_0											
52 D	18.85	3.7813E-04	135.5	94.23	192.5	98.28	UL-RL	3.9043E+04	-10.10	0.000	1.000	1.000	94.23
0.000	0.000	Strato2_3095_82743_L_0											
53 D	18.81	3.2098E-04	139.5	94.05	196.5	100.2	UL-RL	3.9043E+04	-10.30	0.000	1.000	1.000	94.05
0.000	0.000	Strato2_3095_82743_L_0											
54 D	18.83	2.7098E-04	143.5	94.15	200.5	102.1	UL-RL	3.9043E+04	-10.50	0.000	1.000	1.000	94.15
0.000	0.000	Strato2_3095_82743_L_0											
55 D	18.90	2.2768E-04	147.5	94.51	204.5	104.0	UL-RL	3.9043E+04	-10.70	0.000	1.000	1.000	94.51
0.000	0.000	Strato2_3095_82743_L_0											
56 D	19.02	1.9059E-04	151.5	95.12	208.5	106.0	UL-RL	3.9043E+04	-10.90	0.000	1.000	1.000	95.12
0.000	0.000	Strato2_3095_82743_L_0											
57 D	19.19	1.5924E-04	155.5	95.95	212.5	107.9	UL-RL	3.9043E+04	-11.10	0.000	1.000	1.000	95.95
0.000	0.000	Strato2_3095_82743_L_0											
58 D	19.40	1.3314E-04	159.5	96.99	216.5	109.8	UL-RL	3.9043E+04	-11.30	0.000	1.000	1.000	96.99
0.000	0.000	Strato2_3095_82743_L_0											
59 D	19.64	1.1181E-04	163.5	98.21	220.5	111.8	UL-RL	3.9043E+04	-11.50	0.000	1.000	1.000	98.21
0.000	0.000	Strato2_3095_82743_L_0											
60 D	19.92	9.4792E-05	167.5	99.60	224.5	113.7	UL-RL	3.9043E+04	-11.70	0.000	1.000	1.000	99.60
0.000	0.000	Strato2_3095_82743_L_0											
61 D	20.23	8.1627E-05	171.5	101.1	228.5	115.7	UL-RL	3.9043E+04	-11.90	0.000	1.000	1.000	101.1
0.000	0.000	Strato2_3095_82743_L_0											
62 D	20.56	7.1891E-05	175.5	102.8	232.5	117.7	UL-RL	3.9043E+04	-12.10	0.000	1.000	1.000	102.8
0.000	0.000	Strato2_3095_82743_L_0											
63 D	20.92	6.5178E-05	179.5	104.6	236.5	119.6	UL-RL	3.9043E+04	-12.30	0.000	1.000	1.000	104.6
0.000	0.000	Strato2_3095_82743_L_0											
64 D	21.30	6.1111E-05	183.5	106.5	240.5	121.6	UL-RL	3.9043E+04	-12.50	0.000	1.000	1.000	106.5
0.000	0.000	Strato2_3095_82743_L_0											
65 D	21.69	5.9337E-05	187.5	108.5	244.5	123.6	UL-RL	3.9043E+04	-12.70	0.000	1.000	1.000	108.5
0.000	0.000	Strato2_3095_82743_L_0											
66 D	22.10	5.9531E-05	191.5	110.5	248.5	125.5	UL-RL	3.9043E+04	-12.90	0.000	1.000	1.000	110.5
0.000	0.000	Strato2_3095_82743_L_0											
67 D	22.53	6.1400E-05	195.5	112.6	252.5	127.5	UL-RL	3.9043E+04	-13.10	0.000	1.000	1.000	112.6
0.000	0.000	Strato2_3095_82743_L_0											
68 D	22.96	6.4675E-05	199.5	114.8	256.5	129.5	UL-RL	3.9043E+04	-13.30	0.000	1.000	1.000	114.8
0.000	0.000	Strato2_3095_82743_L_0											
69 D	23.40	6.9118E-05	203.5	117.0	260.5	131.5	UL-RL	3.9043E+04	-13.50	0.000	1.000	1.000	117.0
0.000	0.000	Strato2_3095_82743_L_0											
70 D	23.85	7.4517E-05	207.5	119.2	264.5	133.5	UL-RL	3.9043E+04	-13.70	0.000	1.000	1.000	119.2
0.000	0.000	Strato2_3095_82743_L_0											
71 D	24.30	8.0687E-05	211.5	121.5	268.5	135.5	UL-RL	3.9043E+04	-13.90	0.000	1.000	1.000	121.5
0.000	0.000	Strato2_3095_82743_L_0											
72 D	24.76	8.7465E-05	215.5	123.8	272.5	137.4	UL-RL	3.9043E+04	-14.10	0.000	1.000	1.000	123.8
0.000	0.000	Strato2_3095_82743_L_0											
73 D	25.23	9.4714E-05	219.5	126.1	276.5	139.4	UL-RL	3.9043E+04	-14.30	0.000	1.000	1.000	126.1
0.000	0.000	Strato2_3095_82743_L_0											
74 D	25.69	1.0232E-04	223.5	128.5	280.5	141.4	UL-RL	3.9043E+04	-14.50	0.000	1.000	1.000	128.5
0.000	0.000	Strato2_3095_82743_L_0											
75 D	26.16	1.1018E-04	227.5	130.8	284.5	143.4	UL-RL	3.9043E+04	-14.70	0.000	1.000	1.000	130.8
0.000	0.000	Strato2_3095_82743_L_0											
76 D	26.63	1.1823E-04	231.5	133.1	288.5	145.4	UL-RL	3.9043E+04	-14.90	0.000	1.000	1.000	

```
133.1       0.000       0.000     Strato2_3095_82743_L_0
  77 D   27.09      1.2640E-04   235.5       135.5       292.5       147.4          UL-RL  3.9043E+04  -15.10       0.000       1.000       1.000
135.5       0.000       0.000     Strato2_3095_82743_L_0
  78 D   27.56      1.3464E-04   239.5       137.8       296.5       149.4          UL-RL  3.9043E+04  -15.30       0.000       1.000       1.000
137.8       0.000       0.000     Strato2_3095_82743_L_0
  79 D   28.02      1.4293E-04   243.5       140.1       300.5       151.4          UL-RL  3.9043E+04  -15.50       0.000       1.000       1.000
140.1       0.000       0.000     Strato2_3095_82743_L_0
  80 D   28.49      1.5123E-04   247.5       142.5       304.5       153.4          UL-RL  3.9043E+04  -15.70       0.000       1.000       1.000
142.5       0.000       0.000     Strato2_3095_82743_L_0
  81 D   21.72      1.5954E-04   251.5       144.8       308.5       155.4          UL-RL  3.9043E+04  -15.90       0.000       1.000       1.000
144.8       0.000       0.000     Strato2_3095_82743_L_0
  82 D   7.298      1.6370E-04   253.5       146.0       310.5       156.4          UL-RL  3.9043E+04  -16.00       0.000       1.000       1.000
146.0       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                              |
 |                                                                                                                                           |
 |                                        NewProject.BaseDesignSection_28.Nominal_63                                                         |
 |                                    Exe Time :24 July 2019      10:49:24                                                                   |
 +-------------------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

 WallElement_33                  :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   81
 C U R R E N T   T I M E   I S     3.0000

  WALL2D ELEMENT

    EL      TA          TB          MA          MB
 ------------------------------------------------------
     1  1.1950     -1.1950     4.57415E-12 0.23900
     2  3.0408     -3.0408    -0.23900     0.84715
     3  5.4462     -5.4462    -0.84715     1.9364
     4  8.1565     -8.1565     -1.9364     3.5677
     5  11.304     -11.304     -3.5677     5.8286
     6  14.775     -14.775     -5.8286     8.7836
     7  18.655     -18.655     -8.7836     12.515
     8  22.868     -22.868     -12.515     17.088
     9  27.412     -27.412     -17.088     22.571
    10  32.303     -32.303     -22.571     29.031
    11  37.589     -37.589     -29.031     36.549
    12  43.223     -43.223     -36.549     45.194
    13  47.739     -47.739     -45.194     49.968
    14  52.384     -52.384     -49.968     60.444
    15  58.928     -58.928     -60.444     72.230
    16  65.856     -65.856     -72.230     85.401
    17  71.600     -71.600     -85.401     99.721
    18  74.654     -74.654     -99.721     114.65
    19  74.989     -74.989     -114.65     129.65
    20  72.632     -72.632     -129.65     144.18
    21  67.529     -67.529     -144.18     157.68
    22  60.278     -60.278     -157.68     169.74
    23  53.426     -53.426     -169.74     180.42
    24  46.944     -46.944     -180.42     189.81
    25  40.840     -40.840     -189.81     197.98
    26  35.084     -35.084     -197.98     205.00
    27  29.683     -29.683     -205.00     210.93
    28  24.586     -24.586     -210.93     215.85
    29  19.821     -19.821     -215.85     219.81
    30  15.358     -15.358     -219.81     222.89
    31  11.200     -11.200     -222.89     225.13
    32  7.3190     -7.3190     -225.13     226.59
    33  3.7163     -3.7163     -226.59     227.33
    34 0.36444    -0.36444     -227.33     227.41
    35 -2.7355     2.7355      -227.41     226.86
    36 -5.6129     5.6129      -226.86     225.74
    37 -8.2780     8.2780      -225.74     224.08
    38 -10.731     10.731      -224.08     221.93
    39 -12.998     12.998      -221.93     219.33
    40 -15.078     15.078      -219.33     216.32
    41 -16.997     16.997      -216.32     212.92
    42 -18.756     18.756      -212.92     209.17
    43 -20.392     20.392      -209.17     205.09
    44 -21.891     21.891      -205.09     200.71
    45 -23.278     23.278      -200.71     196.06
    46 -24.552     24.552      -196.06     191.15
    47 -25.735     25.735      -191.15     186.00
    48 -26.830     26.830      -186.00     180.63
    49 -27.845     27.845      -180.63     175.06
```

```
   50 -35.207      35.207     -175.06      168.02
   51 -41.038      41.038     -168.02      159.82
   52 -45.380      45.380     -159.82      150.74
   53 -48.399      48.399     -150.74      141.06
   54 -50.269      50.269     -141.06      131.01
   55 -51.136      51.136     -131.01      120.78
   56 -51.152      51.152     -120.78      110.55
   57 -50.440      50.440     -110.55      100.46
   58 -49.140      49.140     -100.46      90.632
   59 -47.344      47.344     -90.632      81.163
   60 -45.159      45.159     -81.163      72.131
   61 -42.667      42.667     -72.131      63.598
   62 -39.946      39.946     -63.598      55.609
   63 -37.073      37.073     -55.609      48.194
   64 -34.103      34.103     -48.194      41.373
   65 -31.104      31.104     -41.373      35.153
   66 -28.104      28.104     -35.153      29.532
   67 -25.159      25.159     -29.532      24.500
   68 -22.298      22.298     -24.500      20.041
   69 -19.550      19.550     -20.041      16.131
   70 -16.935      16.935     -16.131      12.744
   71 -14.471      14.471     -12.744      9.8495
   72 -12.171      12.171     -9.8495      7.4153
   73 -10.055      10.055     -7.4153      5.4043
   74 -8.1214      8.1214     -5.4043      3.7801
   75 -6.3766      6.3766     -3.7801      2.5047
   76 -4.8243      4.8243     -2.5047      1.5399
   77 -3.4640      3.4640     -1.5399     0.84707
   78 -2.2971      2.2971    -0.84707     0.38764
   79 -1.3244      1.3244    -0.38764     0.12276
   80-0.55338     0.55338    -0.12276     1.20826E-02
   81-0.12081     0.12081    -1.20826E-02-3.83560E-12



+-------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                       NewProject.BaseDesignSection_28.Nominal_63                                        |
|                                  Exe Time :24 July 2019      10:49:24                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P    N O.    4

Tieback_768111                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      3.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2731E+06 RIMNOR=0.3018E+07
           RENORM=0.2497E+05 REMNOR=0.2827E-18 RATIO =0.3024     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 158.0     RMMAX = 227.4
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.2731E+06 RDR   =0.3018E+07
           RATIOT=0.3024     RATIOR= 0.000
           MAX UN=0.1044E-07 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           MIN UN=-158.0     IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2731E+06 RIMNOR=0.3018E+07
           RENORM= 207.3     REMNOR=0.8132E-18 RATIO =0.2755E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 158.0     RMMAX = 227.4
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.2731E+06 RDR   =0.3018E+07
           RATIOT=0.2755E-01 RATIOR= 0.000
           MAX UN=0.6393E-09 IEQ=    67 NODE     34 DOF   1  Y-DISPL.F
           MIN UN=-4.070     IEQ=    33 NODE     17 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2731E+06 RIMNOR=0.3018E+07
           RENORM= 2.795     REMNOR=0.1112E-18 RATIO =0.3199E-02 TOLER =0.1000E-03  NOT CONVERGED
```

```
           RFMAX = 158.0     RMMAX = 227.4
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.2731E+06 RDR   =0.3018E+07
           RATIOT=0.3199E-02 RATIOR= 0.000
           MAX UN=0.7255E-01 IEQ=   101 NODE     51 DOF   1  Y-DISPL.F
           MIN UN=-1.521     IEQ=    35 NODE     18 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2731E+06 RIMNOR=0.3018E+07
           RENORM=0.2277E-02 REMNOR=0.2248E-18 RATIO =0.9132E-04 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 158.0     RMMAX = 227.4
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.2731E+06 RDR   =0.3018E+07
           RATIOT=0.9132E-04 RATIOR= 0.000
           MAX UN=0.2680E-01 IEQ=    89 NODE     45 DOF   1  Y-DISPL.F
           MIN UN=-.4379E-08 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                      |
|                                                                                                                               |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                               |
|                                  Exe Time :24 July 2019      10:49:24                                                         |
+-------------------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     4 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    4     ( AT TIME   4.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)            (
    1   1.1406680E-02  -1.6036829E-03
    2   1.1085950E-02  -1.6035902E-03
    3   1.0765268E-02  -1.6031441E-03
    4   1.0444739E-02  -1.6019968E-03
    5   1.0124540E-02  -1.5997853E-03
    6   9.8049209E-03  -1.5961336E-03
    7   9.4862084E-03  -1.5906532E-03
    8   9.1688082E-03  -1.5829431E-03
    9   8.8532074E-03  -1.5725900E-03
   10   8.5399767E-03  -1.5591702E-03
   11   8.2297727E-03  -1.5422495E-03
   12   7.9233400E-03  -1.5213816E-03
   13   7.6215137E-03  -1.4961084E-03
   14   7.4726135E-03  -1.4816883E-03
   15   7.1792131E-03  -1.4526738E-03
   16   6.8914171E-03  -1.4255623E-03
   17   6.6088944E-03  -1.3998571E-03
   18   6.3314142E-03  -1.3750533E-03
   19   6.0588468E-03  -1.3506441E-03
   20   5.7911615E-03  -1.3261609E-03
   21   5.5284109E-03  -1.3012501E-03
   22   5.2707033E-03  -1.2757107E-03
   23   5.0181726E-03  -1.2494815E-03
   24   4.7709565E-03  -1.2225654E-03
   25   4.5291918E-03  -1.1949695E-03
   26   4.2930133E-03  -1.1667044E-03
   27   4.0625548E-03  -1.1377844E-03
   28   3.8379433E-03  -1.1082266E-03
   29   3.6193053E-03  -1.0780516E-03
   30   3.4067622E-03  -1.0472827E-03
   31   3.2004302E-03  -1.0159452E-03
   32   3.0004213E-03  -9.8406566E-04
   33   2.8068392E-03  -9.5167144E-04
   34   2.6197851E-03  -9.1879076E-04
   35   2.4393535E-03  -8.8545181E-04
   36   2.2656331E-03  -8.5168289E-04
   37   2.0987068E-03  -8.1751635E-04
   38   1.9386512E-03  -7.8299230E-04
   39   1.7855315E-03  -7.4815657E-04
   40   1.6394059E-03  -7.1306078E-04
   41   1.5003208E-03  -6.7776083E-04
   42   1.3683112E-03  -6.4231621E-04
   43   1.2434004E-03  -6.0678951E-04
   44   1.1255972E-03  -5.7124526E-04
   45   1.0148990E-03  -5.3575042E-04
   46   9.1128926E-04  -5.0037173E-04
```

47	8.1473829E-04	-4.6517305E-04
48	7.2520449E-04	-4.3021428E-04
49	6.4263333E-04	-3.9555110E-04
50	5.6696083E-04	-3.6123615E-04
51	4.9810093E-04	-3.2749036E-04
52	4.3590412E-04	-2.9467606E-04
53	3.8015012E-04	-2.6309117E-04
54	3.3056987E-04	-2.3297293E-04
55	2.8685126E-04	-2.0450008E-04
56	2.4865164E-04	-1.7780021E-04
57	2.1560745E-04	-1.5295611E-04
58	1.8734256E-04	-1.3001158E-04
59	1.6347548E-04	-1.0897719E-04
60	1.4362552E-04	-8.9835277E-05
61	1.2741797E-04	-7.2544345E-05
62	1.1448845E-04	-5.7043263E-05
63	1.0448648E-04	-4.3254870E-05
64	9.7078300E-05	-3.1089566E-05
65	9.1949052E-05	-2.0448340E-05
66	8.8804396E-05	-1.1225643E-05
67	8.7371544E-05	-3.3117127E-06
68	8.7399926E-05	3.4054476E-06
69	8.8661415E-05	9.0379973E-06
70	9.0950209E-05	1.3696803E-05
71	9.4082444E-05	1.7490222E-05
72	9.7895595E-05	2.0523101E-05
73	1.0224768E-04	2.2895960E-05
74	1.0701633E-04	2.4704155E-05
75	1.1209768E-04	2.6037375E-05
76	1.1740521E-04	2.6979456E-05
77	1.2286857E-04	2.7608097E-05
78	1.2843231E-04	2.7994740E-05
79	1.3405467E-04	2.8204518E-05
80	1.3970625E-04	2.8296180E-05
81	1.4536875E-04	2.8321881E-05
82	1.4820130E-04	2.8323109E-05

PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017*

NewProject.BaseDesignSection_28.Nominal_63

Exe Time :24 July 2019 10:49:24

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 82
C U R R E N T T I M E I S 4.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR
Peq	Su_a	Su_p	LAYER									
1 D	3.902	-1.1407E-02	25.00	39.02	25.00	39.02	V-C	8488.	0.000	0.000	1.000	1.000
39.02	0.000	0.000	Strato1_2_8_L_0									
2 D	7.087	-1.1086E-02	19.31	35.43	19.31	35.43	V-C	8488.	-0.2000	0.000	1.000	1.000
35.43	0.000	0.000	Strato1_2_8_L_0									
3 D	7.553	-1.0765E-02	25.16	37.77	25.16	37.77	V-C	8488.	-0.4000	0.000	1.000	1.000
37.77	0.000	0.000	Strato1_2_8_L_0									
4 D	7.746	-1.0445E-02	28.35	38.73	28.35	38.73	V-C	8488.	-0.6000	0.000	1.000	1.000
38.73	0.000	0.000	Strato1_2_8_L_0									
5 D	8.081	-1.0125E-02	32.93	40.41	32.93	40.41	V-C	8488.	-0.8000	0.000	1.000	1.000
40.41	0.000	0.000	Strato1_2_8_L_0									
6 D	8.293	-9.8049E-03	36.31	41.46	36.31	41.46	V-C	8488.	-1.000	0.000	1.000	1.000
41.46	0.000	0.000	Strato1_2_8_L_0									
7 D	8.595	-9.4862E-03	40.58	42.98	40.58	42.98	V-C	8488.	-1.200	0.000	1.000	1.000
42.98	0.000	0.000	Strato1_2_8_L_0									
8 D	8.815	-9.1688E-03	44.07	44.07	44.07	44.07	V-C	8488.	-1.400	0.000	1.000	1.000
44.07	0.000	0.000	Strato1_2_8_L_0									
9 D	9.031	-8.8532E-03	47.54	45.16	47.54	45.16	V-C	8488.	-1.600	0.000	1.000	1.000
45.16	0.000	0.000	Strato1_2_8_L_0									
10 D	9.260	-8.5400E-03	51.16	46.30	51.16	46.30	V-C	8488.	-1.800	0.000	1.000	1.000
46.30	0.000	0.000	Strato1_2_8_L_0									
11 D	9.538	-8.2298E-03	55.29	47.69	55.29	47.69	V-C	8488.	-2.000	0.000	1.000	1.000
47.69	0.000	0.000	Strato1_2_8_L_0									

12 D	9.761	-7.9233E-03	58.93	48.81	58.93	48.81	V-C	8488.	-2.200	0.000	1.000	1.000	
48.81	0.000	0.000	Strato1_2_8_L_0										
13 D	7.517	-7.6215E-03	62.99	50.12	62.99	50.12	V-C	8488.	-2.400	0.000	1.000	1.000	
50.12	0.000	0.000	Strato1_2_8_L_0										
14 D	7.596	-7.4726E-03	64.78	50.64	64.78	50.64	V-C	8488.	-2.500	0.000	1.000	1.000	
50.64	0.000	0.000	Strato1_2_8_L_0										
15 D	10.34	-7.1792E-03	68.45	51.70	68.45	51.70	V-C	8488.	-2.700	0.000	1.000	1.000	
51.70	0.000	0.000	Strato1_2_8_L_0										
16 D	10.58	-6.8914E-03	72.47	52.92	72.47	52.92	V-C	8488.	-2.900	0.000	1.000	1.000	
52.92	0.000	0.000	Strato1_2_8_L_0										
17 D	10.79	-6.6089E-03	76.15	53.96	76.15	53.96	V-C	8488.	-3.100	0.000	1.000	1.000	
53.96	0.000	0.000	Strato1_2_8_L_0										
18 D	11.03	-6.3314E-03	80.13	55.14	80.13	55.14	V-C	8488.	-3.300	0.000	1.000	1.000	
55.14	0.000	0.000	Strato1_2_8_L_0										
19 D	11.23	-6.0588E-03	83.82	56.16	83.82	56.16	V-C	8488.	-3.500	0.000	1.000	1.000	
56.16	0.000	0.000	Strato1_2_8_L_0										
20 D	11.47	-5.7912E-03	87.78	57.34	87.78	57.34	V-C	8488.	-3.700	0.000	1.000	1.000	
57.34	0.000	0.000	Strato1_2_8_L_0										
21 D	11.65	-5.5284E-03	91.19	58.24	91.19	58.24	V-C	8488.	-3.900	0.000	1.000	1.000	
58.24	0.000	0.000	Strato1_2_8_L_0										
22 D	11.89	-5.2707E-03	95.15	59.43	95.15	59.43	V-C	8488.	-4.100	0.000	1.000	1.000	
59.43	0.000	0.000	Strato1_2_8_L_0										
23 D	12.13	-5.0182E-03	99.09	60.64	99.09	60.64	V-C	8488.	-4.300	0.000	1.000	1.000	
60.64	0.000	0.000	Strato1_2_8_L_0										
24 D	12.35	-4.7710E-03	102.8	61.75	102.8	61.75	V-C	8488.	-4.500	0.000	1.000	1.000	
61.75	0.000	0.000	Strato1_2_8_L_0										
25 D	12.60	-4.5292E-03	106.7	63.00	106.7	63.00	V-C	8488.	-4.700	0.000	1.000	1.000	
63.00	0.000	0.000	Strato1_2_8_L_0										
26 D	12.83	-4.2930E-03	110.5	64.17	110.5	64.17	V-C	8488.	-4.900	0.000	1.000	1.000	
64.17	0.000	0.000	Strato1_2_8_L_0										
27 D	13.10	-4.0626E-03	114.4	65.48	114.4	65.48	V-C	8488.	-5.100	0.000	1.000	1.000	
65.48	0.000	0.000	Strato1_2_8_L_0										
28 D	13.32	-3.8379E-03	117.9	66.61	117.9	66.61	V-C	8488.	-5.300	0.000	1.000	1.000	
66.61	0.000	0.000	Strato1_2_8_L_0										
29 D	13.60	-3.6193E-03	121.8	67.98	121.8	67.98	V-C	8488.	-5.500	0.000	1.000	1.000	
67.98	0.000	0.000	Strato1_2_8_L_0										
30 D	13.86	-3.4068E-03	125.5	69.29	125.5	69.29	V-C	8488.	-5.700	0.000	1.000	1.000	
69.29	0.000	0.000	Strato1_2_8_L_0										
31 D	14.15	-3.2004E-03	129.4	70.73	129.4	70.73	V-C	8488.	-5.900	0.000	1.000	1.000	
70.73	0.000	0.000	Strato1_2_8_L_0										
32 D	14.42	-3.0004E-03	133.2	72.11	133.2	72.11	V-C	8488.	-6.100	0.000	1.000	1.000	
72.11	0.000	0.000	Strato1_2_8_L_0										
33 D	14.72	-2.8068E-03	137.1	73.62	137.1	73.62	V-C	8488.	-6.300	0.000	1.000	1.000	
73.62	0.000	0.000	Strato1_2_8_L_0										
34 D	15.02	-2.6198E-03	140.8	75.08	140.8	75.08	V-C	8488.	-6.500	0.000	1.000	1.000	
75.08	0.000	0.000	Strato1_2_8_L_0										
35 D	15.31	-2.4394E-03	144.7	76.56	144.7	76.69	UL-RL	2.5465E+04	-6.700	0.000	1.000	1.000	
76.56	0.000	0.000	Strato1_2_8_L_0										
36 D	15.44	-2.2656E-03	148.4	77.18	148.4	78.67	UL-RL	2.5465E+04	-6.900	0.000	1.000	1.000	
77.18	0.000	0.000	Strato1_2_8_L_0										
37 D	15.58	-2.0987E-03	152.2	77.90	152.2	80.65	UL-RL	2.5465E+04	-7.100	0.000	1.000	1.000	
77.90	0.000	0.000	Strato1_2_8_L_0										
38 D	15.76	-1.9387E-03	156.1	78.80	156.1	82.71	UL-RL	2.5465E+04	-7.300	0.000	1.000	1.000	
78.80	0.000	0.000	Strato1_2_8_L_0										
39 D	15.94	-1.7855E-03	159.8	79.72	159.8	84.70	UL-RL	2.5465E+04	-7.500	0.000	1.000	1.000	
79.72	0.000	0.000	Strato1_2_8_L_0										
40 D	16.16	-1.6394E-03	163.7	80.79	163.7	86.75	UL-RL	2.5465E+04	-7.700	0.000	1.000	1.000	
80.79	0.000	0.000	Strato1_2_8_L_0										
41 D	16.38	-1.5003E-03	167.4	81.89	167.4	88.74	UL-RL	2.5465E+04	-7.900	0.000	1.000	1.000	
81.89	0.000	0.000	Strato1_2_8_L_0										
42 D	16.63	-1.3683E-03	171.3	83.13	171.3	90.79	UL-RL	2.5465E+04	-8.100	0.000	1.000	1.000	
83.13	0.000	0.000	Strato1_2_8_L_0										
43 D	16.86	-1.2434E-03	174.9	84.32	174.9	92.71	UL-RL	2.5465E+04	-8.300	0.000	1.000	1.000	
84.32	0.000	0.000	Strato1_2_8_L_0										
44 D	17.14	-1.1256E-03	178.8	85.71	178.8	94.76	UL-RL	2.5465E+04	-8.500	0.000	1.000	1.000	
85.71	0.000	0.000	Strato1_2_8_L_0										
45 D	17.47	-1.0149E-03	182.6	87.35	182.6	96.76	UL-RL	2.5465E+04	-8.700	0.000	1.000	1.000	
87.35	0.000	0.000	Strato1_2_8_L_0										
46 D	17.84	-9.1129E-04	186.4	89.19	186.4	98.81	UL-RL	2.5465E+04	-8.900	0.000	1.000	1.000	
89.19	0.000	0.000	Strato1_2_8_L_0										
47 D	18.20	-8.1474E-04	190.2	90.98	190.2	100.8	UL-RL	2.5465E+04	-9.100	0.000	1.000	1.000	
90.98	0.000	0.000	Strato1_2_8_L_0										
48 D	18.56	-7.2520E-04	194.1	92.82	194.1	102.8	UL-RL	2.5465E+04	-9.300	0.000	1.000	1.000	
92.82	0.000	0.000	Strato1_2_8_L_0										
49 D	18.93	-6.4263E-04	197.9	94.65	197.9	104.9	UL-RL	2.5465E+04	-9.500	0.000	1.000	1.000	
94.65	0.000	0.000	Strato1_2_8_L_0										
50 D	10.86	-5.6696E-04	201.9	54.31	201.9	100.9	UL-RL	7.2037E+04	-9.700	0.000	1.000	1.000	
54.31	0.000	0.000	Strato2_3095_82743_L_0										
51 D	12.32	-4.9810E-04	205.8	61.58	205.8	102.9	UL-RL	7.2037E+04	-9.900	0.000	1.000	1.000	
61.58	0.000	0.000	Strato2_3095_82743_L_0										
52 D	13.67	-4.3590E-04	209.8	68.36	209.8	104.9	UL-RL	7.2037E+04	-10.10	0.000	1.000	1.000	
68.36	0.000	0.000	Strato2_3095_82743_L_0										
53 D	14.94	-3.8015E-04	213.8	74.69	213.8	106.9	UL-RL	7.2037E+04	-10.30	0.000	1.000	1.000	
74.69	0.000	0.000	Strato2_3095_82743_L_0										
54 D	16.10	-3.3057E-04	217.8	80.51	217.8	108.9	UL-RL	7.2037E+04	-10.50	0.000	1.000	1.000	

```
80.51       0.000       0.000     Strato2_3095_82743_L_0
  55 D   17.18      -2.8685E-04   221.9       85.92       221.9       110.9          UL-RL  7.2037E+04  -10.70       0.000       1.000       1.000
85.92       0.000       0.000     Strato2_3095_82743_L_0
  56 D   18.17      -2.4865E-04   225.8       90.86       225.8       112.9          UL-RL  7.2037E+04  -10.90       0.000       1.000       1.000
90.86       0.000       0.000     Strato2_3095_82743_L_0
  57 D   19.09      -2.1561E-04   229.9       95.45       229.9       114.9          UL-RL  7.2037E+04  -11.10       0.000       1.000       1.000
95.45       0.000       0.000     Strato2_3095_82743_L_0
  58 D   19.92      -1.8734E-04   233.7       99.59       233.7       116.9          UL-RL  7.2037E+04  -11.30       0.000       1.000       1.000
99.59       0.000       0.000     Strato2_3095_82743_L_0
  59 D   20.69      -1.6348E-04   237.8       103.5       237.8       118.9          UL-RL  7.2037E+04  -11.50       0.000       1.000       1.000
103.5       0.000       0.000     Strato2_3095_82743_L_0
  60 D   21.40      -1.4363E-04   241.8       107.0       241.8       120.9          UL-RL  7.2037E+04  -11.70       0.000       1.000       1.000
107.0       0.000       0.000     Strato2_3095_82743_L_0
  61 D   22.06      -1.2742E-04   245.8       110.3       245.8       122.9          UL-RL  7.2037E+04  -11.90       0.000       1.000       1.000
110.3       0.000       0.000     Strato2_3095_82743_L_0
  62 D   22.67      -1.1449E-04   249.9       113.4       249.9       124.9          UL-RL  7.2037E+04  -12.10       0.000       1.000       1.000
113.4       0.000       0.000     Strato2_3095_82743_L_0
  63 D   23.23      -1.0449E-04   253.8       116.1       253.8       126.9          UL-RL  7.2037E+04  -12.30       0.000       1.000       1.000
116.1       0.000       0.000     Strato2_3095_82743_L_0
  64 D   23.75      -9.7078E-05   257.9       118.8       257.9       128.9          UL-RL  7.2037E+04  -12.50       0.000       1.000       1.000
118.8       0.000       0.000     Strato2_3095_82743_L_0
  65 D   24.22      -9.1949E-05   261.8       121.1       261.8       130.9          UL-RL  7.2037E+04  -12.70       0.000       1.000       1.000
121.1       0.000       0.000     Strato2_3095_82743_L_0
  66 D   24.68      -8.8804E-05   265.8       123.4       265.8       132.9          UL-RL  7.2037E+04  -12.90       0.000       1.000       1.000
123.4       0.000       0.000     Strato2_3095_82743_L_0
  67 D   25.10      -8.7372E-05   269.7       125.5       269.7       134.9          UL-RL  7.2037E+04  -13.10       0.000       1.000       1.000
125.5       0.000       0.000     Strato2_3095_82743_L_0
  68 D   25.49      -8.7400E-05   273.6       127.5       273.6       136.8          UL-RL  7.2037E+04  -13.30       0.000       1.000       1.000
127.5       0.000       0.000     Strato2_3095_82743_L_0
  69 D   25.87      -8.8661E-05   277.5       129.3       277.5       138.8          UL-RL  7.2037E+04  -13.50       0.000       1.000       1.000
129.3       0.000       0.000     Strato2_3095_82743_L_0
  70 D   26.23      -9.0950E-05   281.4       131.1       281.4       140.7          UL-RL  7.2037E+04  -13.70       0.000       1.000       1.000
131.1       0.000       0.000     Strato2_3095_82743_L_0
  71 D   26.58      -9.4082E-05   285.3       132.9       285.3       142.7          UL-RL  7.2037E+04  -13.90       0.000       1.000       1.000
132.9       0.000       0.000     Strato2_3095_82743_L_0
  72 D   26.91      -9.7896E-05   289.2       134.6       289.2       144.6          UL-RL  7.2037E+04  -14.10       0.000       1.000       1.000
134.6       0.000       0.000     Strato2_3095_82743_L_0
  73 D   27.23      -1.0225E-04   293.1       136.2       293.1       146.5          UL-RL  7.2037E+04  -14.30       0.000       1.000       1.000
136.2       0.000       0.000     Strato2_3095_82743_L_0
  74 D   27.56      -1.0702E-04   297.0       137.8       297.0       148.5          UL-RL  7.2037E+04  -14.50       0.000       1.000       1.000
137.8       0.000       0.000     Strato2_3095_82743_L_0
  75 D   27.88      -1.1210E-04   300.9       139.4       300.9       150.4          UL-RL  7.2037E+04  -14.70       0.000       1.000       1.000
139.4       0.000       0.000     Strato2_3095_82743_L_0
  76 D   28.19      -1.1741E-04   304.8       141.0       304.8       152.4          UL-RL  7.2037E+04  -14.90       0.000       1.000       1.000
141.0       0.000       0.000     Strato2_3095_82743_L_0
  77 D   28.50      -1.2287E-04   308.7       142.5       308.7       154.4          UL-RL  7.2037E+04  -15.10       0.000       1.000       1.000
142.5       0.000       0.000     Strato2_3095_82743_L_0
  78 D   28.81      -1.2843E-04   312.6       144.1       312.6       156.3          UL-RL  7.2037E+04  -15.30       0.000       1.000       1.000
144.1       0.000       0.000     Strato2_3095_82743_L_0
  79 D   29.13      -1.3405E-04   316.6       145.6       316.6       158.3          UL-RL  7.2037E+04  -15.50       0.000       1.000       1.000
145.6       0.000       0.000     Strato2_3095_82743_L_0
  80 D   29.43      -1.3971E-04   320.4       147.1       320.4       160.2          UL-RL  7.2037E+04  -15.70       0.000       1.000       1.000
147.1       0.000       0.000     Strato2_3095_82743_L_0
  81 D   22.30      -1.4537E-04   324.3       148.7       324.3       162.2          UL-RL  7.2037E+04  -15.90       0.000       1.000       1.000
148.7       0.000       0.000     Strato2_3095_82743_L_0
  82 D   7.475      -1.4820E-04   326.3       149.5       326.3       163.2          UL-RL  7.2037E+04  -16.00       0.000       1.000       1.000
149.5       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                  |
 |                                                                                                                               |
 |                                        NewProject.BaseDesignSection_28.Nominal_63                                             |
 |                                    Exe Time :24 July 2019      10:49:24                                                       |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                           :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
 C U R R E N T   T I M E   I S      4.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE      DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P          STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p      LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
------------------------------------------------------------------
   1     0.000         --          --          --          --          --          REMOVED     --        0.000       0.000       1.000       1.000
```

0.000 0.000 0.000 not available
2 0.000 -- -- -- -- -- REMOVED -- -0.2000 0.000 1.000 1.000
0.000 0.000 0.000 not available
3 0.000 -- -- -- -- -- REMOVED -- -0.4000 0.000 1.000 1.000
0.000 0.000 0.000 not available
4 0.000 -- -- -- -- -- REMOVED -- -0.6000 0.000 1.000 1.000
0.000 0.000 0.000 not available
5 0.000 -- -- -- -- -- REMOVED -- -0.8000 0.000 1.000 1.000
0.000 0.000 0.000 not available
6 0.000 -- -- -- -- -- REMOVED -- -1.000 0.000 1.000 1.000
0.000 0.000 0.000 not available
7 0.000 -- -- -- -- -- REMOVED -- -1.200 0.000 1.000 1.000
0.000 0.000 0.000 not available
8 0.000 -- -- -- -- -- REMOVED -- -1.400 0.000 1.000 1.000
0.000 0.000 0.000 not available
9 0.000 -- -- -- -- -- REMOVED -- -1.600 0.000 1.000 1.000
0.000 0.000 0.000 not available
10 0.000 -- -- -- -- -- REMOVED -- -1.800 0.000 1.000 1.000
0.000 0.000 0.000 not available
11 0.000 -- -- -- -- -- REMOVED -- -2.000 0.000 1.000 1.000
0.000 0.000 0.000 not available
12 0.000 -- -- -- -- -- REMOVED -- -2.200 0.000 1.000 1.000
0.000 0.000 0.000 not available
13 0.000 -- -- -- -- -- REMOVED -- -2.400 0.000 1.000 1.000
0.000 0.000 0.000 not available
14 0.000 -- -- -- -- -- REMOVED -- -2.500 0.000 1.000 1.000
0.000 0.000 0.000 not available
15 0.000 -- -- -- -- -- REMOVED -- -2.700 0.000 1.000 1.000
0.000 0.000 0.000 not available
16 0.000 -- -- -- -- -- REMOVED -- -2.900 0.000 1.000 1.000
0.000 0.000 0.000 not available
17 D 0.1155 6.6089E-03 1.900 0.5776 58.90 36.40 ACTIVE 0.000 -3.100 0.000 1.000 1.000
0.5776 0.000 0.000 Strato1_2_8_L_0
18 D 0.3466 6.3314E-03 5.700 1.733 62.70 38.24 ACTIVE 0.000 -3.300 0.000 1.000 1.000
1.733 0.000 0.000 Strato1_2_8_L_0
19 D 2.185 6.0588E-03 9.500 10.92 66.50 40.07 UL-RL 1.7671E+04 -3.500 0.000 1.000 1.000
10.92 0.000 0.000 Strato1_2_8_L_0
20 D 5.614 5.7912E-03 13.30 28.07 70.30 53.75 UL-RL 1.7671E+04 -3.700 0.000 1.000 1.000
28.07 0.000 0.000 Strato1_2_8_L_0
21 D 9.038 5.5284E-03 17.10 45.19 74.10 69.10 UL-RL 1.7671E+04 -3.900 0.000 1.000 1.000
45.19 0.000 0.000 Strato1_2_8_L_0
22 D 11.91 5.2707E-03 20.90 59.56 77.90 81.74 UL-RL 1.7671E+04 -4.100 0.000 1.000 1.000
59.56 0.000 0.000 Strato1_2_8_L_0
23 D 12.23 5.0182E-03 24.70 61.14 81.70 81.62 UL-RL 1.7671E+04 -4.300 0.000 1.000 1.000
61.14 0.000 0.000 Strato1_2_8_L_0
24 D 12.54 4.7710E-03 28.50 62.72 85.50 81.55 UL-RL 1.7671E+04 -4.500 0.000 1.000 1.000
62.72 0.000 0.000 Strato1_2_8_L_0
25 D 12.86 4.5292E-03 32.30 64.30 89.30 81.54 UL-RL 1.7671E+04 -4.700 0.000 1.000 1.000
64.30 0.000 0.000 Strato1_2_8_L_0
26 D 13.17 4.2930E-03 36.10 65.86 93.10 81.58 UL-RL 1.7671E+04 -4.900 0.000 1.000 1.000
65.86 0.000 0.000 Strato1_2_8_L_0
27 D 13.49 4.0626E-03 39.90 67.43 96.90 81.67 UL-RL 1.7671E+04 -5.100 0.000 1.000 1.000
67.43 0.000 0.000 Strato1_2_8_L_0
28 D 13.80 3.8379E-03 43.70 68.98 100.7 81.83 UL-RL 1.7671E+04 -5.300 0.000 1.000 1.000
68.98 0.000 0.000 Strato1_2_8_L_0
29 D 14.10 3.6193E-03 47.50 70.52 104.5 82.04 UL-RL 1.7671E+04 -5.500 0.000 1.000 1.000
70.52 0.000 0.000 Strato1_2_8_L_0
30 D 14.41 3.4068E-03 51.30 72.05 108.3 82.32 UL-RL 1.7671E+04 -5.700 0.000 1.000 1.000
72.05 0.000 0.000 Strato1_2_8_L_0
31 D 14.71 3.2004E-03 55.10 73.57 112.1 82.66 UL-RL 1.7671E+04 -5.900 0.000 1.000 1.000
73.57 0.000 0.000 Strato1_2_8_L_0
32 D 15.02 3.0004E-03 58.90 75.08 115.9 83.07 UL-RL 1.7671E+04 -6.100 0.000 1.000 1.000
75.08 0.000 0.000 Strato1_2_8_L_0
33 D 15.31 2.8068E-03 62.70 76.57 119.7 83.53 UL-RL 1.7671E+04 -6.300 0.000 1.000 1.000
76.57 0.000 0.000 Strato1_2_8_L_0
34 D 15.61 2.6198E-03 66.50 78.06 123.5 84.07 UL-RL 1.7671E+04 -6.500 0.000 1.000 1.000
78.06 0.000 0.000 Strato1_2_8_L_0
35 D 15.91 2.4394E-03 70.30 79.54 127.3 84.67 UL-RL 1.7671E+04 -6.700 0.000 1.000 1.000
79.54 0.000 0.000 Strato1_2_8_L_0
36 D 16.20 2.2656E-03 74.10 81.01 131.1 85.33 UL-RL 1.7671E+04 -6.900 0.000 1.000 1.000
81.01 0.000 0.000 Strato1_2_8_L_0
37 D 16.50 2.0987E-03 77.90 82.48 134.9 86.06 UL-RL 1.7671E+04 -7.100 0.000 1.000 1.000
82.48 0.000 0.000 Strato1_2_8_L_0
38 D 16.79 1.9387E-03 81.70 83.94 138.7 86.86 UL-RL 1.7671E+04 -7.300 0.000 1.000 1.000
83.94 0.000 0.000 Strato1_2_8_L_0
39 D 17.08 1.7855E-03 85.50 85.41 142.5 87.72 UL-RL 1.7671E+04 -7.500 0.000 1.000 1.000
85.41 0.000 0.000 Strato1_2_8_L_0
40 D 17.37 1.6394E-03 89.30 86.87 146.3 88.64 UL-RL 1.7671E+04 -7.700 0.000 1.000 1.000
86.87 0.000 0.000 Strato1_2_8_L_0
41 D 17.67 1.5003E-03 93.10 88.34 150.1 89.63 UL-RL 1.7671E+04 -7.900 0.000 1.000 1.000
88.34 0.000 0.000 Strato1_2_8_L_0
42 D 17.96 1.3683E-03 96.90 89.82 153.9 90.68 UL-RL 1.7671E+04 -8.100 0.000 1.000 1.000
89.82 0.000 0.000 Strato1_2_8_L_0
43 D 18.26 1.2434E-03 100.7 91.30 157.7 91.79 UL-RL 1.7671E+04 -8.300 0.000 1.000 1.000
91.30 0.000 0.000 Strato1_2_8_L_0

44	D	18.56	1.1256E-03	104.5	92.80	161.5	92.96	UL-RL	1.7671E+04	-8.500	0.000	1.000	1.000	92.80	0.000	0.000	Strato1_2_8_L_0
45	D	18.84	1.0149E-03	108.3	94.19	165.3	94.25	UL-RL	1.7671E+04	-8.700	0.000	1.000	1.000	94.19	0.000	0.000	Strato1_2_8_L_0
46	D	19.11	9.1129E-04	112.1	95.56	169.1	95.61	UL-RL	1.7671E+04	-8.900	0.000	1.000	1.000	95.56	0.000	0.000	Strato1_2_8_L_0
47	D	19.39	8.1474E-04	115.9	96.97	172.9	97.02	UL-RL	1.7671E+04	-9.100	0.000	1.000	1.000	96.97	0.000	0.000	Strato1_2_8_L_0
48	D	19.69	7.2520E-04	119.7	98.43	176.7	98.47	UL-RL	1.7671E+04	-9.300	0.000	1.000	1.000	98.43	0.000	0.000	Strato1_2_8_L_0
49	D	19.99	6.4263E-04	123.5	99.93	180.5	99.97	UL-RL	1.7671E+04	-9.500	0.000	1.000	1.000	99.93	0.000	0.000	Strato1_2_8_L_0
50	D	19.09	5.6696E-04	127.5	95.45	184.5	95.51	UL-RL	3.9043E+04	-9.700	0.000	1.000	1.000	95.45	0.000	0.000	Strato2_3095_82743_L_0
51	D	19.30	4.9810E-04	131.5	96.51	188.5	96.56	UL-RL	3.9043E+04	-9.900	0.000	1.000	1.000	96.51	0.000	0.000	Strato2_3095_82743_L_0
52	D	19.30	4.3590E-04	135.5	96.49	192.5	98.28	UL-RL	3.9043E+04	-10.10	0.000	1.000	1.000	96.49	0.000	0.000	Strato2_3095_82743_L_0
53	D	19.27	3.8015E-04	139.5	96.36	196.5	100.2	UL-RL	3.9043E+04	-10.30	0.000	1.000	1.000	96.36	0.000	0.000	Strato2_3095_82743_L_0
54	D	19.30	3.3057E-04	143.5	96.48	200.5	102.1	UL-RL	3.9043E+04	-10.50	0.000	1.000	1.000	96.48	0.000	0.000	Strato2_3095_82743_L_0
55	D	19.36	2.8685E-04	147.5	96.82	204.5	104.0	UL-RL	3.9043E+04	-10.70	0.000	1.000	1.000	96.82	0.000	0.000	Strato2_3095_82743_L_0
56	D	19.48	2.4865E-04	151.5	97.39	208.5	106.0	UL-RL	3.9043E+04	-10.90	0.000	1.000	1.000	97.39	0.000	0.000	Strato2_3095_82743_L_0
57	D	19.63	2.1561E-04	155.5	98.16	212.5	107.9	UL-RL	3.9043E+04	-11.10	0.000	1.000	1.000	98.16	0.000	0.000	Strato2_3095_82743_L_0
58	D	19.82	1.8734E-04	159.5	99.11	216.5	109.8	UL-RL	3.9043E+04	-11.30	0.000	1.000	1.000	99.11	0.000	0.000	Strato2_3095_82743_L_0
59	D	20.05	1.6348E-04	163.5	100.2	220.5	111.8	UL-RL	3.9043E+04	-11.50	0.000	1.000	1.000	100.2	0.000	0.000	Strato2_3095_82743_L_0
60	D	20.30	1.4363E-04	167.5	101.5	224.5	113.7	UL-RL	3.9043E+04	-11.70	0.000	1.000	1.000	101.5	0.000	0.000	Strato2_3095_82743_L_0
61	D	20.59	1.2742E-04	171.5	102.9	228.5	115.7	UL-RL	3.9043E+04	-11.90	0.000	1.000	1.000	102.9	0.000	0.000	Strato2_3095_82743_L_0
62	D	20.90	1.1449E-04	175.5	104.5	232.5	117.7	UL-RL	3.9043E+04	-12.10	0.000	1.000	1.000	104.5	0.000	0.000	Strato2_3095_82743_L_0
63	D	21.23	1.0449E-04	179.5	106.1	236.5	119.6	UL-RL	3.9043E+04	-12.30	0.000	1.000	1.000	106.1	0.000	0.000	Strato2_3095_82743_L_0
64	D	21.58	9.7078E-05	183.5	107.9	240.5	121.6	UL-RL	3.9043E+04	-12.50	0.000	1.000	1.000	107.9	0.000	0.000	Strato2_3095_82743_L_0
65	D	21.95	9.1949E-05	187.5	109.7	244.5	123.6	UL-RL	3.9043E+04	-12.70	0.000	1.000	1.000	109.7	0.000	0.000	Strato2_3095_82743_L_0
66	D	22.33	8.8804E-05	191.5	111.7	248.5	125.5	UL-RL	3.9043E+04	-12.90	0.000	1.000	1.000	111.7	0.000	0.000	Strato2_3095_82743_L_0
67	D	22.73	8.7372E-05	195.5	113.6	252.5	127.5	UL-RL	3.9043E+04	-13.10	0.000	1.000	1.000	113.6	0.000	0.000	Strato2_3095_82743_L_0
68	D	23.14	8.7400E-05	199.5	115.7	256.5	129.5	UL-RL	3.9043E+04	-13.30	0.000	1.000	1.000	115.7	0.000	0.000	Strato2_3095_82743_L_0
69	D	23.55	8.8661E-05	203.5	117.8	260.5	131.5	UL-RL	3.9043E+04	-13.50	0.000	1.000	1.000	117.8	0.000	0.000	Strato2_3095_82743_L_0
70	D	23.98	9.0950E-05	207.5	119.9	264.5	133.5	UL-RL	3.9043E+04	-13.70	0.000	1.000	1.000	119.9	0.000	0.000	Strato2_3095_82743_L_0
71	D	24.41	9.4082E-05	211.5	122.0	268.5	135.5	UL-RL	3.9043E+04	-13.90	0.000	1.000	1.000	122.0	0.000	0.000	Strato2_3095_82743_L_0
72	D	24.84	9.7896E-05	215.5	124.2	272.5	137.4	UL-RL	3.9043E+04	-14.10	0.000	1.000	1.000	124.2	0.000	0.000	Strato2_3095_82743_L_0
73	D	25.28	1.0225E-04	219.5	126.4	276.5	139.4	UL-RL	3.9043E+04	-14.30	0.000	1.000	1.000	126.4	0.000	0.000	Strato2_3095_82743_L_0
74	D	25.73	1.0702E-04	223.5	128.6	280.5	141.4	UL-RL	3.9043E+04	-14.50	0.000	1.000	1.000	128.6	0.000	0.000	Strato2_3095_82743_L_0
75	D	26.17	1.1210E-04	227.5	130.9	284.5	143.4	UL-RL	3.9043E+04	-14.70	0.000	1.000	1.000	130.9	0.000	0.000	Strato2_3095_82743_L_0
76	D	26.62	1.1741E-04	231.5	133.1	288.5	145.4	UL-RL	3.9043E+04	-14.90	0.000	1.000	1.000	133.1	0.000	0.000	Strato2_3095_82743_L_0
77	D	27.06	1.2287E-04	235.5	135.3	292.5	147.4	UL-RL	3.9043E+04	-15.10	0.000	1.000	1.000	135.3	0.000	0.000	Strato2_3095_82743_L_0
78	D	27.51	1.2843E-04	239.5	137.5	296.5	149.4	UL-RL	3.9043E+04	-15.30	0.000	1.000	1.000	137.5	0.000	0.000	Strato2_3095_82743_L_0
79	D	27.96	1.3405E-04	243.5	139.8	300.5	151.4	UL-RL	3.9043E+04	-15.50	0.000	1.000	1.000	139.8	0.000	0.000	Strato2_3095_82743_L_0
80	D	28.40	1.3971E-04	247.5	142.0	304.5	153.4	UL-RL	3.9043E+04	-15.70	0.000	1.000	1.000	142.0	0.000	0.000	Strato2_3095_82743_L_0
81	D	21.64	1.4537E-04	251.5	144.2	308.5	155.4	UL-RL	3.9043E+04	-15.90	0.000	1.000	1.000	144.2	0.000	0.000	Strato2_3095_82743_L_0
82	D	7.268	1.4820E-04	253.5	145.4	310.5	156.4	UL-RL	3.9043E+04	-16.00	0.000	1.000	1.000	145.4	0.000	0.000	Strato2_3095_82743_L_0

NewProject.BaseDesignSection_28.Nominal_63
Exe Time :24 July 2019 10:49:24

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 3

WallElement_33 :
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 81
C U R R E N T T I M E I S 4.0000

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	3.9022	-3.9022	1.06243E-10	0.78044
2	10.989	-10.989	-0.78044	2.9783
3	18.543	-18.543	-2.9783	6.6868
4	26.289	-26.289	-6.6868	11.945
5	34.370	-34.370	-11.945	18.819
6	42.663	-42.663	-18.819	27.351
7	51.258	-51.258	-27.351	37.603
8	60.072	-60.072	-37.603	49.617
9	69.104	-69.104	-49.617	63.438
10	78.364	-78.364	-63.438	79.111
11	87.901	-87.901	-79.111	96.691
12	97.662	-97.662	-96.691	116.22
13	105.18	-105.18	-116.22	126.74
14	-45.250	45.250	-126.74	117.69
15	-34.909	34.909	-117.69	110.71
16	-24.325	24.325	-110.71	105.84
17	-13.649	13.649	-105.84	103.11
18	-2.9680	2.9680	-103.11	102.52
19	6.0800	-6.0800	-102.52	103.74
20	11.934	-11.934	-103.74	106.12
21	14.543	-14.543	-106.12	109.03
22	14.516	-14.516	-109.03	111.94
23	14.416	-14.416	-111.94	114.82
24	14.222	-14.222	-114.82	117.66
25	13.964	-13.964	-117.66	120.46
26	13.626	-13.626	-120.46	123.18
27	13.236	-13.236	-123.18	125.83
28	12.762	-12.762	-125.83	128.38
29	12.253	-12.253	-128.38	130.83
30	11.702	-11.702	-130.83	133.17
31	11.133	-11.133	-133.17	135.40
32	10.541	-10.541	-135.40	137.51
33	9.9500	-9.9500	-137.51	139.50
34	9.3536	-9.3536	-139.50	141.37
35	8.7579	-8.7579	-141.37	143.12
36	7.9907	-7.9907	-143.12	144.72
37	7.0757	-7.0757	-144.72	146.13
38	6.0461	-6.0461	-146.13	147.34
39	4.9082	-4.9082	-147.34	148.32
40	3.6918	-3.6918	-148.32	149.06
41	2.4015	-2.4015	-149.06	149.54
42	1.0638	-1.0638	-149.54	149.75
43	-0.33209	0.33209	-149.75	149.69
44	-1.7494	1.7494	-149.69	149.34
45	-3.1429	3.1429	-149.34	148.71
46	-4.4396	4.4396	-148.71	147.82
47	-5.6589	5.6589	-147.82	146.69
48	-6.7992	6.7992	-146.69	145.33
49	-7.8692	7.8692	-145.33	143.76
50	-16.105	16.105	-143.76	140.54
51	-23.097	23.097	-140.54	135.92
52	-28.723	28.723	-135.92	130.17
53	-33.057	33.057	-130.17	123.56
54	-36.251	36.251	-123.56	116.31
55	-38.432	38.432	-116.31	108.62
56	-39.737	39.737	-108.62	100.68
57	-40.278	40.278	-100.68	92.620
58	-40.182	40.182	-92.620	84.584
59	-39.534	39.534	-84.584	76.677
60	-38.434	38.434	-76.677	68.990
61	-36.959	36.959	-68.990	61.599
62	-35.184	35.184	-61.599	54.562
63	-33.185	33.185	-54.562	47.925
64	-31.013	31.013	-47.925	41.722
65	-28.739	28.739	-41.722	35.974
66	-26.390	26.390	-35.974	30.697
67	-24.021	24.021	-30.697	25.892
68	-21.665	21.665	-25.892	21.559
69	-19.351	19.351	-21.559	17.689

```
   70 -17.101      17.101     -17.689      14.269
   71 -14.935      14.935     -14.269      11.282
   72 -12.867      12.867     -11.282      8.7084
   73 -10.918      10.918     -8.7084      6.5248
   74 -9.0890      9.0890     -6.5248      4.7070
   75 -7.3868      7.3868     -4.7070      3.2296
   76 -5.8161      5.8161     -3.2296      2.0664
   77 -4.3774      4.3774     -2.0664      1.1909
   78 -3.0726      3.0726     -1.1909     0.57638
   79 -1.9028      1.9028    -0.57638     0.19583
   80-0.87567     0.87567    -0.19583     2.06925E-02
   81-0.20690     0.20690    -2.06925E-02-7.83418E-12



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                       |
|                                  Exe Time :24 July 2019      10:49:24                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P    N O.    4

Tieback_768111                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      4.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------
ANCHOR    1   163.60     -1.98299E-03 -1.98299E-03   0.0000       0.0000       0.0000       0.0000     BORN NOW JUST ACTIVATED

ITER      0 RNORM = 0.000      RMNORM= 0.000
            RINORM=0.2225E+06 RIMNOR=0.1665E+07
            RENORM= 3921.      REMNOR=0.2248E-18 RATIO =0.1328     TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 158.0      RMMAX = 149.8
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
            RDT   =0.2225E+06 RDR   =0.1665E+07
            RATIOT=0.1328      RATIOR= 0.000
            MAX UN= 15.91      IEQ=     69 NODE     35 DOF   1  Y-DISPL.F
            MIN UN=-.4379E-08 IEQ=     25 NODE     13 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER      2 RNORM = 0.000      RMNORM= 0.000
            RINORM=0.2225E+06 RIMNOR=0.1665E+07
            RENORM= 506.3      REMNOR=0.3565E-18 RATIO =0.4770E-01 TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 158.0      RMMAX = 149.8
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
            RDT   =0.2225E+06 RDR   =0.1665E+07
            RATIOT=0.4770E-01 RATIOR= 0.000
            MAX UN= 6.341      IEQ=     81 NODE     41 DOF   1  Y-DISPL.F
            MIN UN=-.1922E-08 IEQ=      3 NODE      2 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER      3 RNORM = 0.000      RMNORM= 0.000
            RINORM=0.2225E+06 RIMNOR=0.1665E+07
            RENORM= 154.6      REMNOR=0.4985E-18 RATIO =0.2636E-01 TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 158.0      RMMAX = 149.8
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
            RDT   =0.2225E+06 RDR   =0.1665E+07
            RATIOT=0.2636E-01 RATIOR= 0.000
            MAX UN= 7.418      IEQ=    107 NODE     54 DOF   1  Y-DISPL.F
            MIN UN=-.3485E-08 IEQ=     39 NODE     20 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER      4 RNORM = 0.000      RMNORM= 0.000
            RINORM=0.2225E+06 RIMNOR=0.1665E+07
            RENORM= 11.76      REMNOR=0.4655E-18 RATIO =0.7270E-02 TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 158.0      RMMAX = 149.8
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
            RDT   =0.2225E+06 RDR   =0.1665E+07
            RATIOT=0.7270E-02 RATIOR= 0.000
            MAX UN= 2.151      IEQ=      9 NODE      5 DOF   1  Y-DISPL.F
            MIN UN=-.4019E-08 IEQ=     25 NODE     13 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0
```

```
ITER      5 RNORM = 0.000      RMNORM= 0.000
            RINORM=0.2225E+06 RIMNOR=0.1665E+07
            RENORM=0.6646E-03 REMNOR=0.1143E-17 RATIO =0.5465E-04 TOLER =0.1000E-03      CONVERGED !
            RFMAX = 158.0      RMMAX = 149.8
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
            RDT   =0.2225E+06 RDR   =0.1665E+07
            RATIOT=0.5465E-04 RATIOR= 0.000
            MAX UN=0.1315E-07 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
            MIN UN=-.2578E-01 IEQ=   163 NODE     82 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                       |
|                                  Exe Time :24 July 2019      10:49:24                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     5 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    5     ( AT TIME   5.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (
    1   1.5617324E-02  -9.7228586E-04
    2   1.5422869E-02  -9.7225749E-04
    3   1.5228428E-02  -9.7212856E-04
    4   1.5034031E-02  -9.7179815E-04
    5   1.4839730E-02  -9.7114481E-04
    6   1.4645603E-02  -9.7002946E-04
    7   1.4451759E-02  -9.6829497E-04
    8   1.4258338E-02  -9.6576685E-04
    9   1.4065518E-02  -9.6225296E-04
   10   1.3873517E-02  -9.5754541E-04
   11   1.3682595E-02  -9.5142019E-04
   12   1.3493059E-02  -9.4363570E-04
   13   1.3305268E-02  -9.3393272E-04
   14   1.3212153E-02  -9.2828483E-04
   15   1.3027477E-02  -9.1949281E-04
   16   1.2843956E-02  -9.1668625E-04
   17   1.2660425E-02  -9.1954532E-04
   18   1.2475783E-02  -9.2773275E-04
   19   1.2289000E-02  -9.4089385E-04
   20   1.2099119E-02  -9.5865652E-04
   21   1.1905257E-02  -9.8063129E-04
   22   1.1706613E-02  -1.0064120E-03
   23   1.1502467E-02  -1.0355757E-03
   24   1.1292186E-02  -1.0676816E-03
   25   1.1075228E-02  -1.1022714E-03
   26   1.0851144E-02  -1.1388696E-03
   27   1.0619581E-02  -1.1769831E-03
   28   1.0380285E-02  -1.2161020E-03
   29   1.0133108E-02  -1.2556990E-03
   30   9.8780094E-03  -1.2952301E-03
   31   9.6150578E-03  -1.3341340E-03
   32   9.3444376E-03  -1.3718318E-03
   33   9.0664465E-03  -1.4077279E-03
   34   8.7815074E-03  -1.4412088E-03
   35   8.4901661E-03  -1.4716437E-03
   36   8.1930962E-03  -1.4983847E-03
   37   7.8910987E-03  -1.5208284E-03
   38   7.5850852E-03  -1.5384895E-03
   39   7.2760471E-03  -1.5510111E-03
   40   6.9650386E-03  -1.5581649E-03
   41   6.6531456E-03  -1.5598509E-03
   42   6.3414609E-03  -1.5560978E-03
   43   6.0310607E-03  -1.5470545E-03
   44   5.7229800E-03  -1.5329211E-03
   45   5.4182189E-03  -1.5138881E-03
   46   5.1177393E-03  -1.4901360E-03
   47   4.8224677E-03  -1.4618360E-03
   48   4.5332988E-03  -1.4291505E-03
   49   4.2510912E-03  -1.3922325E-03
   50   3.9766782E-03  -1.3512272E-03
   51   3.7108483E-03  -1.3065023E-03
   52   3.4542924E-03  -1.2586471E-03
   53   3.2075663E-03  -1.2082357E-03
   54   2.9711308E-03  -1.1558345E-03
   55   2.7453282E-03  -1.1019985E-03
```

56	2.5303906E-03	-1.0472736E-03
57	2.3264421E-03	-9.9219730E-04
58	2.1334998E-03	-9.3730003E-04
59	1.9514754E-03	-8.8310429E-04
60	1.7801776E-03	-8.3011495E-04
61	1.6193170E-03	-7.7881166E-04
62	1.4685113E-03	-7.2963402E-04
63	1.3272968E-03	-6.8295470E-04
64	1.1951430E-03	-6.3907201E-04
65	1.0714662E-03	-5.9821598E-04
66	9.5564362E-04	-5.6055407E-04
67	8.4702433E-04	-5.2619634E-04
68	7.4494099E-04	-4.9520002E-04
69	6.4871964E-04	-4.6757399E-04
70	5.5768909E-04	-4.4328252E-04
71	4.7118948E-04	-4.2224845E-04
72	3.8858027E-04	-4.0435605E-04
73	3.0924774E-04	-3.8945337E-04
74	2.3261200E-04	-3.7735449E-04
75	1.5813358E-04	-3.6784110E-04
76	8.5319825E-05	-3.6066371E-04
77	1.3731011E-05	-3.5554259E-04
78	-5.7013682E-05	-3.5216852E-04
79	-1.2723031E-04	-3.5020318E-04
80	-1.9716440E-04	-3.4927956E-04
81	-2.6698522E-04	-3.4900223E-04
82	-3.0188799E-04	-3.4898809E-04

PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017*

NewProject.BaseDesignSection_28.Nominal_63
Exe Time :24 July 2019 10:49:24

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 82
C U R R E N T T I M E I S 5.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	1.195	-1.5617E-02	25.00	11.95	25.00	39.02	ACTIVE	0.000	0.000	0.000	1.000	1.000	11.95	0.000	0.000	Strato1_2_8_L_0
2 D	1.846	-1.5423E-02	19.31	9.229	19.31	35.43	ACTIVE	0.000	-0.2000	0.000	1.000	1.000	9.229	0.000	0.000	Strato1_2_8_L_0
3 D	2.405	-1.5228E-02	25.16	12.03	25.16	37.77	ACTIVE	0.000	-0.4000	0.000	1.000	1.000	12.03	0.000	0.000	Strato1_2_8_L_0
4 D	2.710	-1.5034E-02	28.35	13.55	28.35	38.73	ACTIVE	0.000	-0.6000	0.000	1.000	1.000	13.55	0.000	0.000	Strato1_2_8_L_0
5 D	3.148	-1.4840E-02	32.93	15.74	32.93	40.41	ACTIVE	0.000	-0.8000	0.000	1.000	1.000	15.74	0.000	0.000	Strato1_2_8_L_0
6 D	3.471	-1.4646E-02	36.31	17.35	36.31	41.46	ACTIVE	0.000	-1.000	0.000	1.000	1.000	17.35	0.000	0.000	Strato1_2_8_L_0
7 D	3.880	-1.4452E-02	40.58	19.40	40.58	42.98	ACTIVE	0.000	-1.200	0.000	1.000	1.000	19.40	0.000	0.000	Strato1_2_8_L_0
8 D	4.213	-1.4258E-02	44.07	21.06	44.07	44.07	ACTIVE	0.000	-1.400	0.000	1.000	1.000	21.06	0.000	0.000	Strato1_2_8_L_0
9 D	4.545	-1.4066E-02	47.54	22.72	47.54	45.16	ACTIVE	0.000	-1.600	0.000	1.000	1.000	22.72	0.000	0.000	Strato1_2_8_L_0
10 D	4.891	-1.3874E-02	51.16	24.45	51.16	46.30	ACTIVE	0.000	-1.800	0.000	1.000	1.000	24.45	0.000	0.000	Strato1_2_8_L_0
11 D	5.286	-1.3683E-02	55.29	26.43	55.29	47.69	ACTIVE	0.000	-2.000	0.000	1.000	1.000	26.43	0.000	0.000	Strato1_2_8_L_0
12 D	5.633	-1.3493E-02	58.93	28.17	58.93	48.81	ACTIVE	0.000	-2.200	0.000	1.000	1.000	28.17	0.000	0.000	Strato1_2_8_L_0
13 D	4.516	-1.3305E-02	62.99	30.11	62.99	50.12	ACTIVE	0.000	-2.400	0.000	1.000	1.000	30.11	0.000	0.000	Strato1_2_8_L_0
14 D	4.645	-1.3212E-02	64.78	30.97	64.78	50.64	ACTIVE	0.000	-2.500	0.000	1.000	1.000	30.97	0.000	0.000	Strato1_2_8_L_0
15 D	6.544	-1.3027E-02	68.45	32.72	68.45	51.70	ACTIVE	0.000	-2.700	0.000	1.000	1.000	32.72	0.000	0.000	Strato1_2_8_L_0
16 D	6.928	-1.2844E-02	72.47	34.64	72.47	52.92	ACTIVE	0.000	-2.900	0.000	1.000	1.000				

34.64	0.000	0.000	Strato1_2_8_L_0									
17 D	7.280	-1.2660E-02	76.15	36.40	76.15	53.96	ACTIVE	0.000	-3.100	0.000	1.000	1.000
36.40	0.000	0.000	Strato1_2_8_L_0									
18 D	7.661	-1.2476E-02	80.13	38.30	80.13	55.14	ACTIVE	0.000	-3.300	0.000	1.000	1.000
38.30	0.000	0.000	Strato1_2_8_L_0									
19 D	8.013	-1.2289E-02	83.82	40.07	83.82	56.16	ACTIVE	0.000	-3.500	0.000	1.000	1.000
40.07	0.000	0.000	Strato1_2_8_L_0									
20 D	8.392	-1.2099E-02	87.78	41.96	87.78	57.34	ACTIVE	0.000	-3.700	0.000	1.000	1.000
41.96	0.000	0.000	Strato1_2_8_L_0									
21 D	8.718	-1.1905E-02	91.19	43.59	91.19	58.24	ACTIVE	0.000	-3.900	0.000	1.000	1.000
43.59	0.000	0.000	Strato1_2_8_L_0									
22 D	9.096	-1.1707E-02	95.15	45.48	95.15	59.43	ACTIVE	0.000	-4.100	0.000	1.000	1.000
45.48	0.000	0.000	Strato1_2_8_L_0									
23 D	9.473	-1.1502E-02	99.09	47.37	99.09	60.64	ACTIVE	0.000	-4.300	0.000	1.000	1.000
47.37	0.000	0.000	Strato1_2_8_L_0									
24 D	9.828	-1.1292E-02	102.8	49.14	102.8	61.75	ACTIVE	0.000	-4.500	0.000	1.000	1.000
49.14	0.000	0.000	Strato1_2_8_L_0									
25 D	10.20	-1.1075E-02	106.7	51.02	106.7	63.00	ACTIVE	0.000	-4.700	0.000	1.000	1.000
51.02	0.000	0.000	Strato1_2_8_L_0									
26 D	10.56	-1.0851E-02	110.5	52.80	110.5	64.17	ACTIVE	0.000	-4.900	0.000	1.000	1.000
52.80	0.000	0.000	Strato1_2_8_L_0									
27 D	10.93	-1.0620E-02	114.4	54.67	114.4	65.48	ACTIVE	0.000	-5.100	0.000	1.000	1.000
54.67	0.000	0.000	Strato1_2_8_L_0									
28 D	11.27	-1.0380E-02	117.9	56.35	117.9	66.61	ACTIVE	0.000	-5.300	0.000	1.000	1.000
56.35	0.000	0.000	Strato1_2_8_L_0									
29 D	11.64	-1.0133E-02	121.8	58.22	121.8	67.98	ACTIVE	0.000	-5.500	0.000	1.000	1.000
58.22	0.000	0.000	Strato1_2_8_L_0									
30 D	12.00	-9.8780E-03	125.5	60.00	125.5	69.29	ACTIVE	0.000	-5.700	0.000	1.000	1.000
60.00	0.000	0.000	Strato1_2_8_L_0									
31 D	12.37	-9.6151E-03	129.4	61.87	129.4	70.73	ACTIVE	0.000	-5.900	0.000	1.000	1.000
61.87	0.000	0.000	Strato1_2_8_L_0									
32 D	12.73	-9.3444E-03	133.2	63.66	133.2	72.11	ACTIVE	0.000	-6.100	0.000	1.000	1.000
63.66	0.000	0.000	Strato1_2_8_L_0									
33 D	13.10	-9.0664E-03	137.1	65.52	137.1	73.62	ACTIVE	0.000	-6.300	0.000	1.000	1.000
65.52	0.000	0.000	Strato1_2_8_L_0									
34 D	13.46	-8.7815E-03	140.8	67.31	140.8	75.08	ACTIVE	0.000	-6.500	0.000	1.000	1.000
67.31	0.000	0.000	Strato1_2_8_L_0									
35 D	13.83	-8.4902E-03	144.7	69.17	144.7	76.69	ACTIVE	0.000	-6.700	0.000	1.000	1.000
69.17	0.000	0.000	Strato1_2_8_L_0									
36 D	14.19	-8.1931E-03	148.4	70.95	148.4	78.67	ACTIVE	0.000	-6.900	0.000	1.000	1.000
70.95	0.000	0.000	Strato1_2_8_L_0									
37 D	14.55	-7.8911E-03	152.2	72.74	152.2	80.65	ACTIVE	0.000	-7.100	0.000	1.000	1.000
72.74	0.000	0.000	Strato1_2_8_L_0									
38 D	14.92	-7.5851E-03	156.1	74.60	156.1	82.71	ACTIVE	0.000	-7.300	0.000	1.000	1.000
74.60	0.000	0.000	Strato1_2_8_L_0									
39 D	15.28	-7.2760E-03	159.8	76.39	159.8	84.70	ACTIVE	0.000	-7.500	0.000	1.000	1.000
76.39	0.000	0.000	Strato1_2_8_L_0									
40 D	15.65	-6.9650E-03	163.7	78.24	163.7	86.75	ACTIVE	0.000	-7.700	0.000	1.000	1.000
78.24	0.000	0.000	Strato1_2_8_L_0									
41 D	16.01	-6.6531E-03	167.4	80.03	167.4	88.74	ACTIVE	0.000	-7.900	0.000	1.000	1.000
80.03	0.000	0.000	Strato1_2_8_L_0									
42 D	16.38	-6.3415E-03	171.3	81.89	171.3	90.79	ACTIVE	0.000	-8.100	0.000	1.000	1.000
81.89	0.000	0.000	Strato1_2_8_L_0									
43 D	16.72	-6.0311E-03	174.9	83.62	174.9	92.71	ACTIVE	0.000	-8.300	0.000	1.000	1.000
83.62	0.000	0.000	Strato1_2_8_L_0									
44 D	17.09	-5.7230E-03	178.8	85.47	178.8	94.76	ACTIVE	0.000	-8.500	0.000	1.000	1.000
85.47	0.000	0.000	Strato1_2_8_L_0									
45 D	17.45	-5.4182E-03	182.6	87.26	182.6	96.76	ACTIVE	0.000	-8.700	0.000	1.000	1.000
87.26	0.000	0.000	Strato1_2_8_L_0									
46 D	17.82	-5.1177E-03	186.4	89.11	186.4	98.81	ACTIVE	0.000	-8.900	0.000	1.000	1.000
89.11	0.000	0.000	Strato1_2_8_L_0									
47 D	18.18	-4.8225E-03	190.2	90.91	190.2	100.8	ACTIVE	0.000	-9.100	0.000	1.000	1.000
90.91	0.000	0.000	Strato1_2_8_L_0									
48 D	18.55	-4.5333E-03	194.1	92.76	194.1	102.8	ACTIVE	0.000	-9.300	0.000	1.000	1.000
92.76	0.000	0.000	Strato1_2_8_L_0									
49 D	18.92	-4.2511E-03	197.9	94.60	197.9	104.9	ACTIVE	0.000	-9.500	0.000	1.000	1.000
94.60	0.000	0.000	Strato1_2_8_L_0									
50 D	8.828	-3.9767E-03	201.9	44.14	201.9	100.9	ACTIVE	0.000	-9.700	0.000	1.000	1.000
44.14	0.000	0.000	Strato2_3095_82743_L_0									
51 D	9.091	-3.7108E-03	205.8	45.46	205.8	102.9	ACTIVE	0.000	-9.900	0.000	1.000	1.000
45.46	0.000	0.000	Strato2_3095_82743_L_0									
52 D	9.355	-3.4543E-03	209.8	46.78	209.8	104.9	ACTIVE	0.000	-10.10	0.000	1.000	1.000
46.78	0.000	0.000	Strato2_3095_82743_L_0									
53 D	9.625	-3.2076E-03	213.8	48.13	213.8	106.9	ACTIVE	0.000	-10.30	0.000	1.000	1.000
48.13	0.000	0.000	Strato2_3095_82743_L_0									
54 D	9.889	-2.9711E-03	217.8	49.45	217.8	108.9	ACTIVE	0.000	-10.50	0.000	1.000	1.000
49.45	0.000	0.000	Strato2_3095_82743_L_0									
55 D	10.16	-2.7453E-03	221.9	50.80	221.9	110.9	ACTIVE	0.000	-10.70	0.000	1.000	1.000
50.80	0.000	0.000	Strato2_3095_82743_L_0									
56 D	10.42	-2.5304E-03	225.8	52.12	225.8	112.9	ACTIVE	0.000	-10.90	0.000	1.000	1.000
52.12	0.000	0.000	Strato2_3095_82743_L_0									
57 D	10.69	-2.3264E-03	229.9	53.47	229.9	114.9	ACTIVE	0.000	-11.10	0.000	1.000	1.000
53.47	0.000	0.000	Strato2_3095_82743_L_0									
58 D	10.95	-2.1335E-03	233.7	54.76	233.7	116.9	ACTIVE	0.000	-11.30	0.000	1.000	1.000
54.76	0.000	0.000	Strato2_3095_82743_L_0									

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
59 D	11.22	-1.9515E-03	237.8	56.11	237.8	118.9	ACTIVE	0.000	-11.50	0.000	1.000	1.000	56.11	0.000	0.000	Strato2_3095_82743_L_0
60 D	11.49	-1.7802E-03	241.8	57.43	241.8	120.9	ACTIVE	0.000	-11.70	0.000	1.000	1.000	57.43	0.000	0.000	Strato2_3095_82743_L_0
61 D	12.48	-1.6193E-03	245.8	62.40	245.8	122.9	UL-RL	3.2112E+04	-11.90	0.000	1.000	1.000	62.40	0.000	0.000	Strato2_3095_82743_L_0
62 D	13.97	-1.4685E-03	249.9	69.87	249.9	124.9	UL-RL	3.2112E+04	-12.10	0.000	1.000	1.000	69.87	0.000	0.000	Strato2_3095_82743_L_0
63 D	15.37	-1.3273E-03	253.8	76.87	253.8	126.9	UL-RL	3.2112E+04	-12.30	0.000	1.000	1.000	76.87	0.000	0.000	Strato2_3095_82743_L_0
64 D	16.70	-1.1951E-03	257.9	83.49	257.9	128.9	UL-RL	3.2112E+04	-12.50	0.000	1.000	1.000	83.49	0.000	0.000	Strato2_3095_82743_L_0
65 D	17.93	-1.0715E-03	261.8	89.66	261.8	130.9	UL-RL	3.2112E+04	-12.70	0.000	1.000	1.000	89.66	0.000	0.000	Strato2_3095_82743_L_0
66 D	19.11	-9.5564E-04	265.8	95.57	265.8	132.9	UL-RL	3.2112E+04	-12.90	0.000	1.000	1.000	95.57	0.000	0.000	Strato2_3095_82743_L_0
67 D	20.22	-8.4702E-04	269.7	101.1	269.7	134.9	UL-RL	3.2112E+04	-13.10	0.000	1.000	1.000	101.1	0.000	0.000	Strato2_3095_82743_L_0
68 D	21.27	-7.4494E-04	273.6	106.3	273.6	136.8	UL-RL	3.2112E+04	-13.30	0.000	1.000	1.000	106.3	0.000	0.000	Strato2_3095_82743_L_0
69 D	22.27	-6.4872E-04	277.5	111.4	277.5	138.8	UL-RL	3.2112E+04	-13.50	0.000	1.000	1.000	111.4	0.000	0.000	Strato2_3095_82743_L_0
70 D	23.23	-5.5769E-04	281.4	116.2	281.4	140.7	UL-RL	3.2112E+04	-13.70	0.000	1.000	1.000	116.2	0.000	0.000	Strato2_3095_82743_L_0
71 D	24.15	-4.7119E-04	285.3	120.8	285.3	142.7	UL-RL	3.2112E+04	-13.90	0.000	1.000	1.000	120.8	0.000	0.000	Strato2_3095_82743_L_0
72 D	25.05	-3.8858E-04	289.2	125.2	289.2	144.6	UL-RL	3.2112E+04	-14.10	0.000	1.000	1.000	125.2	0.000	0.000	Strato2_3095_82743_L_0
73 D	25.90	-3.0925E-04	293.1	129.5	293.1	146.5	UL-RL	3.2112E+04	-14.30	0.000	1.000	1.000	129.5	0.000	0.000	Strato2_3095_82743_L_0
74 D	26.75	-2.3261E-04	297.0	133.8	297.0	148.5	UL-RL	3.2112E+04	-14.50	0.000	1.000	1.000	133.8	0.000	0.000	Strato2_3095_82743_L_0
75 D	27.58	-1.5813E-04	300.9	137.9	300.9	150.4	UL-RL	3.2112E+04	-14.70	0.000	1.000	1.000	137.9	0.000	0.000	Strato2_3095_82743_L_0
76 D	28.40	-8.5320E-05	304.8	142.0	304.8	152.4	UL-RL	3.2112E+04	-14.90	0.000	1.000	1.000	142.0	0.000	0.000	Strato2_3095_82743_L_0
77 D	29.20	-1.3731E-05	308.7	146.0	308.7	154.4	UL-RL	3.2112E+04	-15.10	0.000	1.000	1.000	146.0	0.000	0.000	Strato2_3095_82743_L_0
78 D	30.01	5.7014E-05	312.6	150.0	312.6	156.3	UL-RL	3.2112E+04	-15.30	0.000	1.000	1.000	150.0	0.000	0.000	Strato2_3095_82743_L_0
79 D	30.80	1.2723E-04	316.6	154.0	316.6	158.3	UL-RL	3.2112E+04	-15.50	0.000	1.000	1.000	154.0	0.000	0.000	Strato2_3095_82743_L_0
80 D	31.59	1.9716E-04	320.4	158.0	320.4	160.2	UL-RL	3.2112E+04	-15.70	0.000	1.000	1.000	158.0	0.000	0.000	Strato2_3095_82743_L_0
81 D	24.29	2.6699E-04	324.3	161.9	324.3	162.2	UL-RL	3.2112E+04	-15.90	0.000	1.000	1.000	161.9	0.000	0.000	Strato2_3095_82743_L_0
82 D	8.171	3.0189E-04	326.3	163.4	326.3	163.4	V-C	1.0704E+04	-16.00	0.000	1.000	1.000	163.4	0.000	0.000	Strato2_3095_82743_L_0

```
+-----------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017* |
|                                                                                                           |
|                                       NewProject.BaseDesignSection_28.Nominal_63                          |
|                                   Exe Time :24 July 2019      10:49:24                                    |
+-----------------------------------------------------------------------------------------------------------+
```

New Project

S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

0_R :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 82
C U R R E N T   T I M E   I S   5.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000	0.000	0.000	0.000	not available
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000	0.000	0.000	0.000	not available
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000	0.000	0.000	0.000	not available
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000	0.000	0.000	0.000	not available

6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000	0.000	0.000	not available
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000	0.000	0.000	not available
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000	0.000	0.000	not available
9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000	0.000	0.000	not available
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000	0.000	0.000	not available
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000	0.000	0.000	not available
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000	0.000	0.000	not available
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000	0.000	0.000	not available
14	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000	0.000	0.000	not available
15	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000	0.000	0.000	not available
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000	0.000	0.000	not available
17	0.000	--	--	--	--	--	REMOVED	--	-3.100	0.000	1.000	1.000	0.000	0.000	not available
18	0.000	--	--	--	--	--	REMOVED	--	-3.300	0.000	1.000	1.000	0.000	0.000	not available
19	0.000	--	--	--	--	--	REMOVED	--	-3.500	0.000	1.000	1.000	0.000	0.000	not available
20	0.000	--	--	--	--	--	REMOVED	--	-3.700	0.000	1.000	1.000	0.000	0.000	not available
21	0.000	--	--	--	--	--	REMOVED	--	-3.900	0.000	1.000	1.000	0.000	0.000	not available
22	0.000	--	--	--	--	--	REMOVED	--	-4.100	0.000	1.000	1.000	0.000	0.000	not available
23	0.000	--	--	--	--	--	REMOVED	--	-4.300	0.000	1.000	1.000	0.000	0.000	not available
24	0.000	--	--	--	--	--	REMOVED	--	-4.500	0.000	1.000	1.000	0.000	0.000	not available
25	0.000	--	--	--	--	--	REMOVED	--	-4.700	0.000	1.000	1.000	0.000	0.000	not available
26	0.000	--	--	--	--	--	REMOVED	--	-4.900	0.000	1.000	1.000	0.000	0.000	not available
27	0.000	--	--	--	--	--	REMOVED	--	-5.100	0.000	1.000	1.000	0.000	0.000	not available
28	0.000	--	--	--	--	--	REMOVED	--	-5.300	0.000	1.000	1.000	0.000	0.000	not available
29	0.000	--	--	--	--	--	REMOVED	--	-5.500	0.000	1.000	1.000	0.000	0.000	not available
30	0.000	--	--	--	--	--	REMOVED	--	-5.700	0.000	1.000	1.000	0.000	0.000	not available
31	0.000	--	--	--	--	--	REMOVED	--	-5.900	0.000	1.000	1.000	0.000	0.000	not available
32	0.000	--	--	--	--	--	REMOVED	--	-6.100	0.000	1.000	1.000	0.000	0.000	not available
33	0.000	--	--	--	--	--	REMOVED	--	-6.300	0.000	1.000	1.000	0.000	0.000	not available
34	0.000	--	--	--	--	--	REMOVED	--	-6.500	0.000	1.000	1.000	0.000	0.000	not available
35	0.000	--	--	--	--	--	REMOVED	--	-6.700	0.000	1.000	1.000	0.000	0.000	not available
36 D	2.610	8.1931E-03	3.230	13.05	131.1	85.33	PASSIVE	0.000	-6.900	0.000	1.000	1.000	13.05	0.000	Strato1_2_8_L_0
37 D	5.682	7.8911E-03	7.030	28.41	134.9	86.06	PASSIVE	0.000	-7.100	0.000	1.000	1.000	28.41	0.000	Strato1_2_8_L_0
38 D	8.753	7.5851E-03	10.83	43.76	138.7	86.86	PASSIVE	0.000	-7.300	0.000	1.000	1.000	43.76	0.000	Strato1_2_8_L_0
39 D	11.82	7.2760E-03	14.63	59.12	142.5	87.72	PASSIVE	0.000	-7.500	0.000	1.000	1.000	59.12	0.000	Strato1_2_8_L_0
40 D	14.90	6.9650E-03	18.43	74.48	146.3	88.64	PASSIVE	0.000	-7.700	0.000	1.000	1.000	74.48	0.000	Strato1_2_8_L_0
41 D	17.97	6.6531E-03	22.23	89.83	150.1	89.83	PASSIVE	0.000	-7.900	0.000	1.000	1.000	89.83	0.000	Strato1_2_8_L_0
42 D	20.69	6.3415E-03	26.03	103.5	153.9	103.5	V-C	2626.	-8.100	0.000	1.000	1.000	103.5	0.000	Strato1_2_8_L_0
43 D	20.84	6.0311E-03	29.83	104.2	157.7	104.2	V-C	2626.	-8.300	0.000	1.000	1.000	104.2	0.000	Strato1_2_8_L_0
44 D	21.00	5.7230E-03	33.63	105.0	161.5	105.0	V-C	2626.	-8.500	0.000	1.000	1.000	105.0	0.000	Strato1_2_8_L_0
45 D	21.16	5.4182E-03	37.43	105.8	165.3	105.8	V-C	2626.	-8.700	0.000	1.000	1.000	105.8	0.000	Strato1_2_8_L_0
46 D	21.33	5.1177E-03	41.23	106.6	169.1	106.6	V-C	2626.	-8.900	0.000	1.000	1.000	106.6	0.000	Strato1_2_8_L_0
47 D	21.51	4.8225E-03	45.03	107.5	172.9	107.5	V-C	2626.	-9.100	0.000	1.000	1.000	107.5	0.000	Strato1_2_8_L_0
48 D	21.69	4.5333E-03	48.83	108.5	176.7	108.5	V-C	2626.	-9.300	0.000	1.000	1.000			

108.5	0.000	0.000	Strato1_2_8_L_0									
49 D	21.89	4.2511E-03	52.63	109.4	180.5	109.4	V-C	2626.	-9.500	0.000	1.000	1.000
109.4	0.000	0.000	Strato1_2_8_L_0									
50 D	21.35	3.9767E-03	56.63	106.7	184.5	106.7	V-C	5801.	-9.700	0.000	1.000	1.000
106.7	0.000	0.000	Strato2_3095_82743_L_0									
51 D	21.35	3.7108E-03	60.63	106.8	188.5	106.8	V-C	5801.	-9.900	0.000	1.000	1.000
106.8	0.000	0.000	Strato2_3095_82743_L_0									
52 D	21.37	3.4543E-03	64.63	106.9	192.5	106.9	V-C	5801.	-10.10	0.000	1.000	1.000
106.9	0.000	0.000	Strato2_3095_82743_L_0									
53 D	21.42	3.2076E-03	68.63	107.1	196.5	107.1	V-C	5801.	-10.30	0.000	1.000	1.000
107.1	0.000	0.000	Strato2_3095_82743_L_0									
54 D	21.48	2.9711E-03	72.63	107.4	200.5	107.4	V-C	5801.	-10.50	0.000	1.000	1.000
107.4	0.000	0.000	Strato2_3095_82743_L_0									
55 D	21.56	2.7453E-03	76.63	107.8	204.5	107.8	V-C	5801.	-10.70	0.000	1.000	1.000
107.8	0.000	0.000	Strato2_3095_82743_L_0									
56 D	21.67	2.5304E-03	80.63	108.3	208.5	108.3	V-C	5801.	-10.90	0.000	1.000	1.000
108.3	0.000	0.000	Strato2_3095_82743_L_0									
57 D	21.79	2.3264E-03	84.63	108.9	212.5	108.9	V-C	5801.	-11.10	0.000	1.000	1.000
108.9	0.000	0.000	Strato2_3095_82743_L_0									
58 D	21.87	2.1335E-03	88.63	109.3	216.5	109.8	UL-RL	1.7404E+04	-11.30	0.000	1.000	1.000
109.3	0.000	0.000	Strato2_3095_82743_L_0									
59 D	21.57	1.9515E-03	92.63	107.9	220.5	111.8	UL-RL	1.7404E+04	-11.50	0.000	1.000	1.000
107.9	0.000	0.000	Strato2_3095_82743_L_0									
60 D	21.34	1.7802E-03	96.63	106.7	224.5	113.7	UL-RL	1.7404E+04	-11.70	0.000	1.000	1.000
106.7	0.000	0.000	Strato2_3095_82743_L_0									
61 D	21.15	1.6193E-03	100.6	105.7	228.5	115.7	UL-RL	1.7404E+04	-11.90	0.000	1.000	1.000
105.7	0.000	0.000	Strato2_3095_82743_L_0									
62 D	21.01	1.4685E-03	104.6	105.0	232.5	117.7	UL-RL	1.7404E+04	-12.10	0.000	1.000	1.000
105.0	0.000	0.000	Strato2_3095_82743_L_0									
63 D	20.91	1.3273E-03	108.6	104.5	236.5	119.6	UL-RL	1.7404E+04	-12.30	0.000	1.000	1.000
104.5	0.000	0.000	Strato2_3095_82743_L_0									
64 D	20.85	1.1951E-03	112.6	104.3	240.5	121.6	UL-RL	1.7404E+04	-12.50	0.000	1.000	1.000
104.3	0.000	0.000	Strato2_3095_82743_L_0									
65 D	20.83	1.0715E-03	116.6	104.2	244.5	123.6	UL-RL	1.7404E+04	-12.70	0.000	1.000	1.000
104.2	0.000	0.000	Strato2_3095_82743_L_0									
66 D	20.85	9.5564E-04	120.6	104.2	248.5	125.5	UL-RL	1.7404E+04	-12.90	0.000	1.000	1.000
104.2	0.000	0.000	Strato2_3095_82743_L_0									
67 D	20.89	8.4702E-04	124.6	104.5	252.5	127.5	UL-RL	1.7404E+04	-13.10	0.000	1.000	1.000
104.5	0.000	0.000	Strato2_3095_82743_L_0									
68 D	20.97	7.4494E-04	128.6	104.8	256.5	129.5	UL-RL	1.7404E+04	-13.30	0.000	1.000	1.000
104.8	0.000	0.000	Strato2_3095_82743_L_0									
69 D	21.07	6.4872E-04	132.6	105.3	260.5	131.5	UL-RL	1.7404E+04	-13.50	0.000	1.000	1.000
105.3	0.000	0.000	Strato2_3095_82743_L_0									
70 D	21.19	5.5769E-04	136.6	105.9	264.5	133.5	UL-RL	1.7404E+04	-13.70	0.000	1.000	1.000
105.9	0.000	0.000	Strato2_3095_82743_L_0									
71 D	21.32	4.7119E-04	140.6	106.6	268.5	135.5	UL-RL	1.7404E+04	-13.90	0.000	1.000	1.000
106.6	0.000	0.000	Strato2_3095_82743_L_0									
72 D	21.48	3.8858E-04	144.6	107.4	272.5	137.4	UL-RL	1.7404E+04	-14.10	0.000	1.000	1.000
107.4	0.000	0.000	Strato2_3095_82743_L_0									
73 D	21.64	3.0925E-04	148.6	108.2	276.5	139.4	UL-RL	1.7404E+04	-14.30	0.000	1.000	1.000
108.2	0.000	0.000	Strato2_3095_82743_L_0									
74 D	21.82	2.3261E-04	152.6	109.1	280.5	141.4	UL-RL	1.7404E+04	-14.50	0.000	1.000	1.000
109.1	0.000	0.000	Strato2_3095_82743_L_0									
75 D	22.00	1.5813E-04	156.6	110.0	284.5	143.4	UL-RL	1.7404E+04	-14.70	0.000	1.000	1.000
110.0	0.000	0.000	Strato2_3095_82743_L_0									
76 D	22.19	8.5320E-05	160.6	111.0	288.5	145.4	UL-RL	1.7404E+04	-14.90	0.000	1.000	1.000
111.0	0.000	0.000	Strato2_3095_82743_L_0									
77 D	22.38	1.3731E-05	164.6	111.9	292.5	147.4	UL-RL	1.7404E+04	-15.10	0.000	1.000	1.000
111.9	0.000	0.000	Strato2_3095_82743_L_0									
78 D	22.58	-5.7014E-05	168.6	112.9	296.5	149.4	UL-RL	1.7404E+04	-15.30	0.000	1.000	1.000
112.9	0.000	0.000	Strato2_3095_82743_L_0									
79 D	22.77	-1.2723E-04	172.6	113.9	300.5	151.4	UL-RL	1.7404E+04	-15.50	0.000	1.000	1.000
113.9	0.000	0.000	Strato2_3095_82743_L_0									
80 D	22.97	-1.9716E-04	176.6	114.8	304.5	153.4	UL-RL	1.7404E+04	-15.70	0.000	1.000	1.000
114.8	0.000	0.000	Strato2_3095_82743_L_0									
81 D	17.37	-2.6699E-04	180.6	115.8	308.5	155.4	UL-RL	1.7404E+04	-15.90	0.000	1.000	1.000
115.8	0.000	0.000	Strato2_3095_82743_L_0									
82 D	5.815	-3.0189E-04	182.6	116.3	310.5	156.4	UL-RL	1.7404E+04	-16.00	0.000	1.000	1.000
116.3	0.000	0.000	Strato2_3095_82743_L_0									

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                        NewProject.BaseDesignSection_28.Nominal_63                                       |
|                                  Exe Time :24 July 2019      10:49:24                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P    N O.    3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   81
C U R R E N T    T I M E    I S      5.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-----------------------------------------------------
    1  1.1950     -1.1950     1.84786E-10 0.23900
    2  3.0408     -3.0408    -0.23900     0.84715
    3  5.4462     -5.4462    -0.84715     1.9364
    4  8.1565     -8.1565     -1.9364     3.5677
    5  11.304     -11.304     -3.5677     5.8286
    6  14.775     -14.775     -5.8286     8.7836
    7  18.655     -18.655     -8.7836     12.515
    8  22.868     -22.868     -12.515     17.088
    9  27.412     -27.412     -17.088     22.571
   10  32.303     -32.303     -22.571     29.031
   11  37.589     -37.589     -29.031     36.549
   12  43.223     -43.223     -36.549     45.194
   13  47.739     -47.739     -45.194     49.968
   14 -129.33      129.33     -49.968     24.101
   15 -122.79      122.79     -24.101    -0.45700
   16 -115.86      115.86     0.45700     -23.629
   17 -108.58      108.58      23.629     -45.346
   18 -100.92      100.92      45.346     -65.530
   19 -92.908      92.908      65.530     -84.112
   20 -84.517      84.517      84.112     -101.02
   21 -75.799      75.799      101.02     -116.17
   22 -66.702      66.702      116.17     -129.52
   23 -57.229      57.229      129.52     -140.96
   24 -47.401      47.401      140.96     -150.44
   25 -37.197      37.197      150.44     -157.88
   26 -26.638      26.638      157.88     -163.21
   27 -15.704      15.704      163.21     -166.35
   28 -4.4345      4.4345      166.35     -167.24
   29  7.2093     -7.2093      167.24     -165.79
   30  19.210     -19.210      165.79     -161.95
   31  31.584     -31.584      161.95     -155.64
   32  44.316     -44.316      155.64     -146.77
   33  57.420     -57.420      146.77     -135.29
   34  70.882     -70.882      135.29     -121.11
   35  84.716     -84.716      121.11     -104.17
   36  96.295     -96.295      104.17     -84.909
   37  105.16     -105.16      84.909     -63.877
   38  111.33     -111.33      63.877     -41.612
   39  114.78     -114.78      41.612     -18.655
   40  115.53     -115.53      18.655      4.4515
   41  113.58     -113.58     -4.4515      27.167
   42  109.26     -109.26     -27.167      49.019
   43  105.15     -105.15     -49.019      70.048
   44  101.24     -101.24     -70.048      90.296
   45  97.537     -97.537     -90.296      109.80
   46  94.031     -94.031     -109.80      128.61
   47  90.707     -90.707     -128.61      146.75
   48  87.567     -87.567     -146.75      164.26
   49  84.602     -84.602     -164.26      181.18
   50  72.082     -72.082     -181.18      195.60
   51  59.822     -59.822     -195.60      207.57
   52  47.804     -47.804     -207.57      217.13
   53  36.013     -36.013     -217.13      224.33
   54  24.423     -24.423     -224.33      229.21
   55  13.021     -13.021     -229.21      231.82
   56  1.7783     -1.7783     -231.82      232.17
   57 -9.3179      9.3179     -232.17      230.31
   58 -20.232      20.232     -230.31      226.26
   59 -30.585      30.585     -226.26      220.15
   60 -40.435      40.435     -220.15      212.06
   61 -49.102      49.102     -212.06      202.24
   62 -56.133      56.133     -202.24      191.01
   63 -61.668      61.668     -191.01      178.68
```

```
   64 -65.822      65.822     -178.68      165.51
   65 -68.723      68.723     -165.51      151.77
   66 -70.458      70.458     -151.77      137.68
   67 -71.133      71.133     -137.68      123.45
   68 -70.832      70.832     -123.45      109.28
   69 -69.628      69.628     -109.28      95.359
   70 -67.583      67.583     -95.359      81.843
   71 -64.752      64.752     -81.843      68.892
   72 -61.183      61.183     -68.892      56.656
   73 -56.920      56.920     -56.656      45.272
   74 -51.988      51.988     -45.272      34.874
   75 -46.410      46.410     -34.874      25.592
   76 -40.206      40.206     -25.592      17.551
   77 -33.384      33.384     -17.551      10.874
   78 -25.955      25.955     -10.874      5.6829
   79 -17.924      17.924     -5.6829      2.0981
   80 -9.2997      9.2997     -2.0981     0.23821
   81 -2.3818      2.3818    -0.23821    -7.49312E-12


+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                   |
|                                  Exe Time :24 July 2019      10:49:24                                             |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P    N O.    4

Tieback_768111                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      5.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------
ANCHOR    1   188.13     -1.98299E-03  3.56098E-03   0.0000       4424.2       0.0000       0.0000     ELASTIC  ORIGINAL YOUNG MODULUS



+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                   |
|                                  Exe Time :24 July 2019      10:49:24                                             |
+-------------------------------------------------------------------------------------------------------------------+


     F I N A L    I N C R E M E N T A L    A N A L Y S I S

                    S U M M A R Y

     STEP                                  NO. OF ITERATIONS

        1           CONVERGENCE :YES                       2
        2           CONVERGENCE :YES                       5
        3           CONVERGENCE :YES                       4
        4           CONVERGENCE :YES                       4
        5           CONVERGENCE :YES                       5



 END OF PROCESS FOR PROBLEM
New Project
NONLINEAR SOLUTION CPU TIME ....    0.07 [sec]
DATABASE  CREATION CPU TIME.....    0.27 [sec]
```

1.3. Design Assumption : SLE (Rara) - File di Paratie - File di input (.d)

```
* PARATIE ANALYSIS FOR DESIGN SECTION:Base Design Section USING ASSUMPTION: SLE (Rara)
 * Time:mercoledì 24 luglio 2019 10:49:25
 * 1: Defining general settings
 UNIT  m kN
 TITLE New Project
 DELTA 0.2
 option param itemax 100
 option control hinges 0 0.0001 0.001
```

```
* 2: Defining wall(s)
WALL LeftWall_32 0 -16 0 1

* 3: Defining surfaces for wall(s)
SOIL 0_L LeftWall_32 -16 0 1 0
SOIL 0_R LeftWall_32 -16 0 2 180

* 4: Defining soil layers
*
* Soil Profile (Strato1_2_8_L_0)
*
LDATA Strato1_2_8_L_0 5.84 LeftWall_32
ATREST 0.53 1 1
WEIGHT 19 9 10
PERMEABILITY 1E-06
RESISTANCE 0 29
YOUNG 2E+04 6E+04
ENDL
*
* Soil Profile (Strato2_3095_82743_L_0)
*
LDATA Strato2_3095_82743_L_0 -9.5 LeftWall_32
ATREST 0.5 0.5 1
WEIGHT 20 10 10
PERMEABILITY 0.0001
RESISTANCE 20 35
YOUNG 5E+04 1.5E+05
ENDL

* 5: Defining structural materials
* Steel material: 108 Name=Fe360 E=206000200 kPa
MATERIAL Fe360_108 2.06E+08
* Concrete material: 104 Name=C25/30 E=31475800 kPa
MATERIAL C2530_104 3.148E+07
* Rebar material: 124 Name=acciaio armonico E=200100000 kPa
MATERIAL acciaioarmonico_124 2.001E+08
* Concrete material: 103 Name=C20/25 E=29962000 kPa
MATERIAL C2025_103 2.996E+07

* 6: Defining structural elements
* 6.1: Beams and combined Wall Elements
BEAM WallElement_33 LeftWall_32 -16 0 C2530_104 0.6848 00 00 0


* 6.2: Supports
WIRE Tieback_768111 LeftWall_32 -2.5 acciaioarmonico_124 2.211E-05 163.6 15 0 0




* 6.3: Strips
STRIP LeftWall_32 2 5 0 13 0 15 45
STRIP LeftWall_32 2 5 0 40 0 10 30

* 7: Defining Steps
STEP Stage1_31
CHANGE Strato1_2_8_L_0 U-FRICT=29 LeftWall_32
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato1_2_8_L_0 U-KA=0.478 LeftWall_32
CHANGE Strato1_2_8_L_0 U-KP=5.914 LeftWall_32
CHANGE Strato1_2_8_L_0 D-KA=0.304 LeftWall_32
CHANGE Strato1_2_8_L_0 D-KP=4.041 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-FRICT=35 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-KA=0.333 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-KP=8.331 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-KA=0.235 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-KP=5.879 LeftWall_32
CHANGE Strato1_2_8_L_0 U-COHE=0 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-COHE=20 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -26 0 -16 0 0
ADD WallElement_33
ENDSTEP

STEP Stage2_759103
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
```

```
SETWALL LeftWall_32
GEOM 0 0
WATER -26 0 -16 0 0
ENDSTEP

STEP Stage3_158
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -3
WATER -26 0 -16 0 0
ENDSTEP

STEP Stage4_617
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -3
WATER -26 0 -16 0 0
ADD Tieback_768111
ENDSTEP

STEP Stage5_714
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -6.73
WATER -26 0 -16 0 0
ENDSTEP
```

1.4. Design Assumption : SLE (Rara) - File di Paratie - File di output (.out)

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                         |
|                                 Exe Time :24 July 2019      10:49:25                                                    |
+-------------------------------------------------------------------------------------------------------------------------+

                  ************************************************************
                  *                                                          *
                  *  PARATIE PLUS Non-Linear Spring Engine                   *
                  *                                                          *
                  *          AN ELASTOPLASTIC FINITE ELEMENT PROGRAM         *
                  *          FOR FLEXIBLE EARTH-RETAINING STRUCTURES         *
                  *                                                          *
                  *          Written by Ce.A.S. s.r.l. (ITALY)               *
                  *          with the scientific supervision of              *
                  *          Roberto Nova - full professor SOIL MECHANICS    *
                  *          at Politecnico di Milano (ITALY)                *
                  *                                                          *
                  ************************************************************
                  *                                                          *
                  *  RELEASE   2017.1     *Build date:Jul 11, 2017*    *     
                  *                                                          *
                  *                                                          *
                  *  Ce.A.S.     S.R.L   CENTRO DI ANALISI STRUTTURALE       *
                  *              VIALE   GIUSTINIANO 10                      *
                  *              20129   M I L A N O  (ITALIA)               *
                  *  TEL.        +39 02 2020221   (+39 035 23 67 19)         *
                  *  FAX         +39 02 29512533  (+39 035 42285 49)         *
                  *  email       bruno.becci@ceas.it                         *
                  *  Web Page    www.ceas.it                                 *
                  ************************************************************



 JOB : NewProject.BaseDesignSection_28.SLERara_3454
 STARTING
ACCEPTED   <FILE,GENW                                                       >
ACCEPTED   <FILE,PLOTTER,BINARY                                             >
ACCEPTED   <SOLVE TOTAL_STRESS                                              >
ACCEPTED   <PARAM ITEMAX 100                                                >
ACCEPTED   <CONTROL HINGES 0 0.0001 0.001                                   >
```

```
                  ************************************************************
                  *                                                          *
                  *  WARNING : PORE PRESSURES ARE AUTOMATICALLY COMPUTED     *
                  *    BY THE PROGRAM.                                       *
                  ************************************************************

PRELIMINARY OPERATIONS CPU TIME     0.00 [sec]



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.SLERara_3454                                        |
|                                  Exe Time :24 July 2019      10:49:25                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


INPUT FILE HAS BEEN GENERATED BY WALGEN PROGRAM


New Project


NO. OF NODAL POINTS (NUMNP) ...................   82
NO. OF COORDINATES  (NCOORD)...................    2
NO. OF NODE DOFS    (NDOF).....................    2
NO. OF EQUATIONS    (NEQ)...................... 164
NO. OF CONSTRAINTS CARDS (NVINC)...............    0
NO. OF ELEMENT GROUPS (NEG)....................    4
NO. OF SOLUTION STEPS (NSTE)...................    5
NO. OF ELEMENT SETS ATTACHED TO SLAVE NODES ...    0
NO. OF RECORD FROM WALGEN .....................   89
NO. OF LONG NAMES (LASTNAME) ..................   21
LENGTH UNIT CHOICE ............................    3 (M   )
FORCE  UNIT CHOICE ............................    3 (KN  )
MAX PORE PRESSURE TABLE LENGTH.................    1
NO. OF ELEMENT GROUPS REQUIRING ADD. SLIP DOF .    0


IDOFA (01) =  2  Y-DISPL.F
IDOFA (02) =  4   X-ROT. F

 RELEVANT ITEMS UNITS

 STRESSES                  kPa
 Y-DISPLACEMENTS           m
 ROTATIONS                 RADIANS
 BEAM AND SLAB MOMENTS     kN*m/m
 BEAM SHEAR FORCES         kN/m
 ANCHOR FORCES             kN/m
 AXIAL FORCES IN TRUSSES   kN/m
 AXIAL FORCES SPRINGS      kN/m
 Y-REACTIONS               kN/m
 X-MOMENT REACTIONS        kN*m/m
 ETC.



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.SLERara_3454                                        |
|                                  Exe Time :24 July 2019      10:49:25                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
                  P R E P R O C E S S O R     D A T A

                  N O.  O F   C O M M A N D S     89

    1 : UNIT  m kN
    2 : TITLE New Project
    3 : DELTA 0.2
    4 : option param itemax 100
    5 : option control hinges 0 0.0001 0.001
    6 : WALL LeftWall_32 0 -16 0 1
    7 : SOIL 0_L LeftWall_32 -16 0 1 0
    8 : SOIL 0_R LeftWall_32 -16 0 2 180
    9 : LDATA Strato1_2_8_L_0 5.84 LeftWall_32
   10 : ATREST 0.53 1 1
   11 : WEIGHT 19 9 10
   12 : PERMEABILITY 1E-06
```

```
  13 : RESISTANCE 0 29
  14 : YOUNG 2E+04 6E+04
  15 : ENDL
  16 : LDATA Strato2_3095_82743_L_0 -9.5 LeftWall_32
  17 : ATREST 0.5 0.5 1
  18 : WEIGHT 20 10 10
  19 : PERMEABILITY 0.0001
  20 : RESISTANCE 20 35
  21 : YOUNG 5E+04 1.5E+05
  22 : ENDL
  23 : MATERIAL Fe360_108 2.06E+08
  24 : MATERIAL C2530_104 3.148E+07
  25 : MATERIAL acciaioarmonico_124 2.001E+08
  26 : MATERIAL C2025_103 2.996E+07
  27 : BEAM WallElement_33 LeftWall_32 -16 0 C2530_104 0.6848 00 00 0
  28 : WIRE Tieback_768111 LeftWall_32 -2.5 acciaioarmonico_124 2.211E-05 163.6 15 0 0
  29 : STRIP LeftWall_32 2 5 0 13 0 15 45
  30 : STRIP LeftWall_32 2 5 0 40 0 10 30
  31 : STEP Stage1_31
  32 : CHANGE Strato1_2_8_L_0 U-FRICT=29 LeftWall_32
  33 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
  34 : CHANGE Strato1_2_8_L_0 U-KA=0.478 LeftWall_32
  35 : CHANGE Strato1_2_8_L_0 U-KP=5.914 LeftWall_32
  36 : CHANGE Strato1_2_8_L_0 D-KA=0.304 LeftWall_32
  37 : CHANGE Strato1_2_8_L_0 D-KP=4.041 LeftWall_32
  38 : CHANGE Strato2_3095_82743_L_0 U-FRICT=35 LeftWall_32
  39 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
  40 : CHANGE Strato2_3095_82743_L_0 U-KA=0.333 LeftWall_32
  41 : CHANGE Strato2_3095_82743_L_0 U-KP=8.331 LeftWall_32
  42 : CHANGE Strato2_3095_82743_L_0 D-KA=0.235 LeftWall_32
  43 : CHANGE Strato2_3095_82743_L_0 D-KP=5.879 LeftWall_32
  44 : CHANGE Strato1_2_8_L_0 U-COHE=0 LeftWall_32
  45 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
  46 : CHANGE Strato2_3095_82743_L_0 U-COHE=20 LeftWall_32
  47 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
  48 : SETWALL LeftWall_32
  49 : GEOM 0 0
  50 : WATER -26 0 -16 0 0
  51 : ADD WallElement_33
  52 : ENDSTEP
  53 : STEP Stage2_759103
  54 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
  55 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
  56 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
  57 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
  58 : SETWALL LeftWall_32
  59 : GEOM 0 0
  60 : WATER -26 0 -16 0 0
  61 : ENDSTEP
  62 : STEP Stage3_158
  63 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
  64 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
  65 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
  66 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
  67 : SETWALL LeftWall_32
  68 : GEOM 0 -3
  69 : WATER -26 0 -16 0 0
  70 : ENDSTEP
  71 : STEP Stage4_617
  72 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
  73 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
  74 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
  75 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
  76 : SETWALL LeftWall_32
  77 : GEOM 0 -3
  78 : WATER -26 0 -16 0 0
  79 : ADD Tieback_768111
  80 : ENDSTEP
  81 : STEP Stage5_714
  82 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
  83 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
  84 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
  85 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
  86 : SETWALL LeftWall_32
  87 : GEOM 0 -6.73
  88 : WATER -26 0 -16 0 0
  89 : ENDSTEP



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                       |
|                                      NewProject.BaseDesignSection_28.SLERara_3454                                     |
```

| Exe Time :24 July 2019 10:49:25 |

N O D A L P O I N T D A T A

NODE	Y-COORD	Z-COORD	/ NODE	Y-COORD	Z-COORD	/ NODE	Y-COORD	Z-COORD	/ NODE	Y-COORD	Z-COORD	/
1	0.0000	0.0000	/ 2	0.0000	-0.20000	/ 3	0.0000	-0.40000	/ 4	0.0000	-0.60000	/
5	0.0000	-0.80000	/ 6	0.0000	-1.0000	/ 7	0.0000	-1.2000	/ 8	0.0000	-1.4000	/
9	0.0000	-1.6000	/ 10	0.0000	-1.8000	/ 11	0.0000	-2.0000	/ 12	0.0000	-2.2000	/
13	0.0000	-2.4000	/ 14	0.0000	-2.5000	/ 15	0.0000	-2.7000	/ 16	0.0000	-2.9000	/
17	0.0000	-3.1000	/ 18	0.0000	-3.3000	/ 19	0.0000	-3.5000	/ 20	0.0000	-3.7000	/
21	0.0000	-3.9000	/ 22	0.0000	-4.1000	/ 23	0.0000	-4.3000	/ 24	0.0000	-4.5000	/
25	0.0000	-4.7000	/ 26	0.0000	-4.9000	/ 27	0.0000	-5.1000	/ 28	0.0000	-5.3000	/
29	0.0000	-5.5000	/ 30	0.0000	-5.7000	/ 31	0.0000	-5.9000	/ 32	0.0000	-6.1000	/
33	0.0000	-6.3000	/ 34	0.0000	-6.5000	/ 35	0.0000	-6.7000	/ 36	0.0000	-6.9000	/
37	0.0000	-7.1000	/ 38	0.0000	-7.3000	/ 39	0.0000	-7.5000	/ 40	0.0000	-7.7000	/
41	0.0000	-7.9000	/ 42	0.0000	-8.1000	/ 43	0.0000	-8.3000	/ 44	0.0000	-8.5000	/
45	0.0000	-8.7000	/ 46	0.0000	-8.9000	/ 47	0.0000	-9.1000	/ 48	0.0000	-9.3000	/
49	0.0000	-9.5000	/ 50	0.0000	-9.7000	/ 51	0.0000	-9.9000	/ 52	0.0000	-10.100	/
53	0.0000	-10.300	/ 54	0.0000	-10.500	/ 55	0.0000	-10.700	/ 56	0.0000	-10.900	/
57	0.0000	-11.100	/ 58	0.0000	-11.300	/ 59	0.0000	-11.500	/ 60	0.0000	-11.700	/
61	0.0000	-11.900	/ 62	0.0000	-12.100	/ 63	0.0000	-12.300	/ 64	0.0000	-12.500	/
65	0.0000	-12.700	/ 66	0.0000	-12.900	/ 67	0.0000	-13.100	/ 68	0.0000	-13.300	/
69	0.0000	-13.500	/ 70	0.0000	-13.700	/ 71	0.0000	-13.900	/ 72	0.0000	-14.100	/
73	0.0000	-14.300	/ 74	0.0000	-14.500	/ 75	0.0000	-14.700	/ 76	0.0000	-14.900	/
77	0.0000	-15.100	/ 78	0.0000	-15.300	/ 79	0.0000	-15.500	/ 80	0.0000	-15.700	/
81	0.0000	-15.900	/ 82	0.0000	-16.000	/						

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                  Exe Time :24 July 2019      10:49:25                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  1

0_L                              :
   5  82   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
.........2D PLASTIC SOIL ..........
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area      .....     .....     .....      flag
-------------------------------------------------------------------

    1    1    1   0.1000      0.000     0.000     0.000     1.000
    2    2    1   0.2000      0.000     0.000     0.000     1.000
    3    3    1   0.2000      0.000     0.000     0.000     1.000
    4    4    1   0.2000      0.000     0.000     0.000     1.000
    5    5    1   0.2000      0.000     0.000     0.000     1.000
    6    6    1   0.2000      0.000     0.000     0.000     1.000
    7    7    1   0.2000      0.000     0.000     0.000     1.000
    8    8    1   0.2000      0.000     0.000     0.000     1.000
    9    9    1   0.2000      0.000     0.000     0.000     1.000
   10   10    1   0.2000      0.000     0.000     0.000     1.000
   11   11    1   0.2000      0.000     0.000     0.000     1.000
   12   12    1   0.2000      0.000     0.000     0.000     1.000
   13   13    1   0.1500      0.000     0.000     0.000     1.000
   14   14    1   0.1500      0.000     0.000     0.000     1.000
   15   15    1   0.2000      0.000     0.000     0.000     1.000
   16   16    1   0.2000      0.000     0.000     0.000     1.000
   17   17    1   0.2000      0.000     0.000     0.000     1.000
   18   18    1   0.2000      0.000     0.000     0.000     1.000
   19   19    1   0.2000      0.000     0.000     0.000     1.000
   20   20    1   0.2000      0.000     0.000     0.000     1.000
   21   21    1   0.2000      0.000     0.000     0.000     1.000
   22   22    1   0.2000      0.000     0.000     0.000     1.000
   23   23    1   0.2000      0.000     0.000     0.000     1.000
   24   24    1   0.2000      0.000     0.000     0.000     1.000
   25   25    1   0.2000      0.000     0.000     0.000     1.000
   26   26    1   0.2000      0.000     0.000     0.000     1.000
   27   27    1   0.2000      0.000     0.000     0.000     1.000
   28   28    1   0.2000      0.000     0.000     0.000     1.000
   29   29    1   0.2000      0.000     0.000     0.000     1.000
   30   30    1   0.2000      0.000     0.000     0.000     1.000
   31   31    1   0.2000      0.000     0.000     0.000     1.000
   32   32    1   0.2000      0.000     0.000     0.000     1.000
   33   33    1   0.2000      0.000     0.000     0.000     1.000
   34   34    1   0.2000      0.000     0.000     0.000     1.000
   35   35    1   0.2000      0.000     0.000     0.000     1.000
   36   36    1   0.2000      0.000     0.000     0.000     1.000
   37   37    1   0.2000      0.000     0.000     0.000     1.000
   38   38    1   0.2000      0.000     0.000     0.000     1.000
   39   39    1   0.2000      0.000     0.000     0.000     1.000
   40   40    1   0.2000      0.000     0.000     0.000     1.000
   41   41    1   0.2000      0.000     0.000     0.000     1.000
```

42	42	1	0.2000	0.000	0.000	0.000	1.000
43	43	1	0.2000	0.000	0.000	0.000	1.000
44	44	1	0.2000	0.000	0.000	0.000	1.000
45	45	1	0.2000	0.000	0.000	0.000	1.000
46	46	1	0.2000	0.000	0.000	0.000	1.000
47	47	1	0.2000	0.000	0.000	0.000	1.000
48	48	1	0.2000	0.000	0.000	0.000	1.000
49	49	1	0.2000	0.000	0.000	0.000	1.000
50	50	2	0.2000	0.000	0.000	0.000	1.000
51	51	2	0.2000	0.000	0.000	0.000	1.000
52	52	2	0.2000	0.000	0.000	0.000	1.000
53	53	2	0.2000	0.000	0.000	0.000	1.000
54	54	2	0.2000	0.000	0.000	0.000	1.000
55	55	2	0.2000	0.000	0.000	0.000	1.000
56	56	2	0.2000	0.000	0.000	0.000	1.000
57	57	2	0.2000	0.000	0.000	0.000	1.000
58	58	2	0.2000	0.000	0.000	0.000	1.000
59	59	2	0.2000	0.000	0.000	0.000	1.000
60	60	2	0.2000	0.000	0.000	0.000	1.000
61	61	2	0.2000	0.000	0.000	0.000	1.000
62	62	2	0.2000	0.000	0.000	0.000	1.000
63	63	2	0.2000	0.000	0.000	0.000	1.000
64	64	2	0.2000	0.000	0.000	0.000	1.000
65	65	2	0.2000	0.000	0.000	0.000	1.000
66	66	2	0.2000	0.000	0.000	0.000	1.000
67	67	2	0.2000	0.000	0.000	0.000	1.000
68	68	2	0.2000	0.000	0.000	0.000	1.000
69	69	2	0.2000	0.000	0.000	0.000	1.000
70	70	2	0.2000	0.000	0.000	0.000	1.000
71	71	2	0.2000	0.000	0.000	0.000	1.000
72	72	2	0.2000	0.000	0.000	0.000	1.000
73	73	2	0.2000	0.000	0.000	0.000	1.000
74	74	2	0.2000	0.000	0.000	0.000	1.000
75	75	2	0.2000	0.000	0.000	0.000	1.000
76	76	2	0.2000	0.000	0.000	0.000	1.000
77	77	2	0.2000	0.000	0.000	0.000	1.000
78	78	2	0.2000	0.000	0.000	0.000	1.000
79	79	2	0.2000	0.000	0.000	0.000	1.000
80	80	2	0.2000	0.000	0.000	0.000	1.000
81	81	2	0.1500	0.000	0.000	0.000	1.000
82	82	2	0.5000E-01	0.000	0.000	0.000	1.000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                         |
|                                 Exe Time :24 July 2019      10:49:25                                                    |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  2

0_R                           :
   5  82   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
..........2D PLASTIC SOIL ..........
.....................................

element group behaviour throughout stage analysis

stage   status
------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area     .....     .....     .....      flag
-----------------------------------------------------------------
```

1	1	1	0.1000	0.000	0.000	0.000	2.000
2	2	1	0.2000	0.000	0.000	0.000	2.000
3	3	1	0.2000	0.000	0.000	0.000	2.000
4	4	1	0.2000	0.000	0.000	0.000	2.000
5	5	1	0.2000	0.000	0.000	0.000	2.000
6	6	1	0.2000	0.000	0.000	0.000	2.000
7	7	1	0.2000	0.000	0.000	0.000	2.000
8	8	1	0.2000	0.000	0.000	0.000	2.000
9	9	1	0.2000	0.000	0.000	0.000	2.000
10	10	1	0.2000	0.000	0.000	0.000	2.000
11	11	1	0.2000	0.000	0.000	0.000	2.000
12	12	1	0.2000	0.000	0.000	0.000	2.000
13	13	1	0.1500	0.000	0.000	0.000	2.000
14	14	1	0.1500	0.000	0.000	0.000	2.000
15	15	1	0.2000	0.000	0.000	0.000	2.000
16	16	1	0.2000	0.000	0.000	0.000	2.000
17	17	1	0.2000	0.000	0.000	0.000	2.000
18	18	1	0.2000	0.000	0.000	0.000	2.000
19	19	1	0.2000	0.000	0.000	0.000	2.000
20	20	1	0.2000	0.000	0.000	0.000	2.000
21	21	1	0.2000	0.000	0.000	0.000	2.000
22	22	1	0.2000	0.000	0.000	0.000	2.000
23	23	1	0.2000	0.000	0.000	0.000	2.000
24	24	1	0.2000	0.000	0.000	0.000	2.000
25	25	1	0.2000	0.000	0.000	0.000	2.000
26	26	1	0.2000	0.000	0.000	0.000	2.000
27	27	1	0.2000	0.000	0.000	0.000	2.000
28	28	1	0.2000	0.000	0.000	0.000	2.000
29	29	1	0.2000	0.000	0.000	0.000	2.000
30	30	1	0.2000	0.000	0.000	0.000	2.000
31	31	1	0.2000	0.000	0.000	0.000	2.000
32	32	1	0.2000	0.000	0.000	0.000	2.000
33	33	1	0.2000	0.000	0.000	0.000	2.000
34	34	1	0.2000	0.000	0.000	0.000	2.000
35	35	1	0.2000	0.000	0.000	0.000	2.000
36	36	1	0.2000	0.000	0.000	0.000	2.000
37	37	1	0.2000	0.000	0.000	0.000	2.000
38	38	1	0.2000	0.000	0.000	0.000	2.000
39	39	1	0.2000	0.000	0.000	0.000	2.000
40	40	1	0.2000	0.000	0.000	0.000	2.000
41	41	1	0.2000	0.000	0.000	0.000	2.000
42	42	1	0.2000	0.000	0.000	0.000	2.000
43	43	1	0.2000	0.000	0.000	0.000	2.000
44	44	1	0.2000	0.000	0.000	0.000	2.000
45	45	1	0.2000	0.000	0.000	0.000	2.000
46	46	1	0.2000	0.000	0.000	0.000	2.000
47	47	1	0.2000	0.000	0.000	0.000	2.000
48	48	1	0.2000	0.000	0.000	0.000	2.000
49	49	1	0.2000	0.000	0.000	0.000	2.000
50	50	2	0.2000	0.000	0.000	0.000	2.000
51	51	2	0.2000	0.000	0.000	0.000	2.000
52	52	2	0.2000	0.000	0.000	0.000	2.000
53	53	2	0.2000	0.000	0.000	0.000	2.000
54	54	2	0.2000	0.000	0.000	0.000	2.000
55	55	2	0.2000	0.000	0.000	0.000	2.000
56	56	2	0.2000	0.000	0.000	0.000	2.000
57	57	2	0.2000	0.000	0.000	0.000	2.000
58	58	2	0.2000	0.000	0.000	0.000	2.000
59	59	2	0.2000	0.000	0.000	0.000	2.000
60	60	2	0.2000	0.000	0.000	0.000	2.000
61	61	2	0.2000	0.000	0.000	0.000	2.000
62	62	2	0.2000	0.000	0.000	0.000	2.000
63	63	2	0.2000	0.000	0.000	0.000	2.000
64	64	2	0.2000	0.000	0.000	0.000	2.000
65	65	2	0.2000	0.000	0.000	0.000	2.000
66	66	2	0.2000	0.000	0.000	0.000	2.000
67	67	2	0.2000	0.000	0.000	0.000	2.000
68	68	2	0.2000	0.000	0.000	0.000	2.000
69	69	2	0.2000	0.000	0.000	0.000	2.000
70	70	2	0.2000	0.000	0.000	0.000	2.000
71	71	2	0.2000	0.000	0.000	0.000	2.000
72	72	2	0.2000	0.000	0.000	0.000	2.000
73	73	2	0.2000	0.000	0.000	0.000	2.000
74	74	2	0.2000	0.000	0.000	0.000	2.000
75	75	2	0.2000	0.000	0.000	0.000	2.000
76	76	2	0.2000	0.000	0.000	0.000	2.000
77	77	2	0.2000	0.000	0.000	0.000	2.000
78	78	2	0.2000	0.000	0.000	0.000	2.000
79	79	2	0.2000	0.000	0.000	0.000	2.000
80	80	2	0.2000	0.000	0.000	0.000	2.000
81	81	2	0.1500	0.000	0.000	0.000	2.000
82	82	2	0.5000E-01	0.000	0.000	0.000	2.000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                         |
|                                 Exe Time :24 July 2019      10:49:25                                                    |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  3

WallElement_33                  :
   2  81   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   1   0
.....................................
..........2D WALL ELEMENT...........
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) young modulus      0.314800E+08
 prop( 2) modification  time  0.00000
 prop( 3) new young modulus   0.00000
 prop( 4) poisson ratio       0.00000
 prop( 5) future ............0.252200E-43

 no. of step variable items:     1
 step  inertia multipier
--------------------------
    1   1.000
    2   1.000
    3   1.000
    4   1.000
    5   1.000

 element data

   el   na   nb  mat      erc1      erc2     thick      by-i      by-j
-------------------------------------------------------------------

    1    1    2    1     0.000     0.000    0.6848     0.000     0.000
    2    2    3    1     0.000     0.000    0.6848     0.000     0.000
    3    3    4    1     0.000     0.000    0.6848     0.000     0.000
    4    4    5    1     0.000     0.000    0.6848     0.000     0.000
    5    5    6    1     0.000     0.000    0.6848     0.000     0.000
    6    6    7    1     0.000     0.000    0.6848     0.000     0.000
    7    7    8    1     0.000     0.000    0.6848     0.000     0.000
    8    8    9    1     0.000     0.000    0.6848     0.000     0.000
    9    9   10    1     0.000     0.000    0.6848     0.000     0.000
   10   10   11    1     0.000     0.000    0.6848     0.000     0.000
   11   11   12    1     0.000     0.000    0.6848     0.000     0.000
   12   12   13    1     0.000     0.000    0.6848     0.000     0.000
   13   13   14    1     0.000     0.000    0.6848     0.000     0.000
   14   14   15    1     0.000     0.000    0.6848     0.000     0.000
   15   15   16    1     0.000     0.000    0.6848     0.000     0.000
   16   16   17    1     0.000     0.000    0.6848     0.000     0.000
   17   17   18    1     0.000     0.000    0.6848     0.000     0.000
   18   18   19    1     0.000     0.000    0.6848     0.000     0.000
   19   19   20    1     0.000     0.000    0.6848     0.000     0.000
   20   20   21    1     0.000     0.000    0.6848     0.000     0.000
   21   21   22    1     0.000     0.000    0.6848     0.000     0.000
   22   22   23    1     0.000     0.000    0.6848     0.000     0.000
   23   23   24    1     0.000     0.000    0.6848     0.000     0.000
   24   24   25    1     0.000     0.000    0.6848     0.000     0.000
   25   25   26    1     0.000     0.000    0.6848     0.000     0.000
   26   26   27    1     0.000     0.000    0.6848     0.000     0.000
   27   27   28    1     0.000     0.000    0.6848     0.000     0.000
   28   28   29    1     0.000     0.000    0.6848     0.000     0.000
   29   29   30    1     0.000     0.000    0.6848     0.000     0.000
   30   30   31    1     0.000     0.000    0.6848     0.000     0.000
   31   31   32    1     0.000     0.000    0.6848     0.000     0.000
   32   32   33    1     0.000     0.000    0.6848     0.000     0.000
   33   33   34    1     0.000     0.000    0.6848     0.000     0.000
   34   34   35    1     0.000     0.000    0.6848     0.000     0.000
   35   35   36    1     0.000     0.000    0.6848     0.000     0.000
   36   36   37    1     0.000     0.000    0.6848     0.000     0.000
   37   37   38    1     0.000     0.000    0.6848     0.000     0.000
   38   38   39    1     0.000     0.000    0.6848     0.000     0.000
```

39	39	40	1	0.000	0.000	0.6848	0.000	0.000
40	40	41	1	0.000	0.000	0.6848	0.000	0.000
41	41	42	1	0.000	0.000	0.6848	0.000	0.000
42	42	43	1	0.000	0.000	0.6848	0.000	0.000
43	43	44	1	0.000	0.000	0.6848	0.000	0.000
44	44	45	1	0.000	0.000	0.6848	0.000	0.000
45	45	46	1	0.000	0.000	0.6848	0.000	0.000
46	46	47	1	0.000	0.000	0.6848	0.000	0.000
47	47	48	1	0.000	0.000	0.6848	0.000	0.000
48	48	49	1	0.000	0.000	0.6848	0.000	0.000
49	49	50	1	0.000	0.000	0.6848	0.000	0.000
50	50	51	1	0.000	0.000	0.6848	0.000	0.000
51	51	52	1	0.000	0.000	0.6848	0.000	0.000
52	52	53	1	0.000	0.000	0.6848	0.000	0.000
53	53	54	1	0.000	0.000	0.6848	0.000	0.000
54	54	55	1	0.000	0.000	0.6848	0.000	0.000
55	55	56	1	0.000	0.000	0.6848	0.000	0.000
56	56	57	1	0.000	0.000	0.6848	0.000	0.000
57	57	58	1	0.000	0.000	0.6848	0.000	0.000
58	58	59	1	0.000	0.000	0.6848	0.000	0.000
59	59	60	1	0.000	0.000	0.6848	0.000	0.000
60	60	61	1	0.000	0.000	0.6848	0.000	0.000
61	61	62	1	0.000	0.000	0.6848	0.000	0.000
62	62	63	1	0.000	0.000	0.6848	0.000	0.000
63	63	64	1	0.000	0.000	0.6848	0.000	0.000
64	64	65	1	0.000	0.000	0.6848	0.000	0.000
65	65	66	1	0.000	0.000	0.6848	0.000	0.000
66	66	67	1	0.000	0.000	0.6848	0.000	0.000
67	67	68	1	0.000	0.000	0.6848	0.000	0.000
68	68	69	1	0.000	0.000	0.6848	0.000	0.000
69	69	70	1	0.000	0.000	0.6848	0.000	0.000
70	70	71	1	0.000	0.000	0.6848	0.000	0.000
71	71	72	1	0.000	0.000	0.6848	0.000	0.000
72	72	73	1	0.000	0.000	0.6848	0.000	0.000
73	73	74	1	0.000	0.000	0.6848	0.000	0.000
74	74	75	1	0.000	0.000	0.6848	0.000	0.000
75	75	76	1	0.000	0.000	0.6848	0.000	0.000
76	76	77	1	0.000	0.000	0.6848	0.000	0.000
77	77	78	1	0.000	0.000	0.6848	0.000	0.000
78	78	79	1	0.000	0.000	0.6848	0.000	0.000
79	79	80	1	0.000	0.000	0.6848	0.000	0.000
80	80	81	1	0.000	0.000	0.6848	0.000	0.000
81	81	82	1	0.000	0.000	0.6848	0.000	0.000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                       NewProject.BaseDesignSection_28.SLERara_3454                                      |
|                                    Exe Time :24 July 2019      10:49:25                                                 |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  4

Tieback_768111                 :
   6   1   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   2   0
.....................................
.........2D POST-TENSION ANCHOR....
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1  inactive
    2  inactive
    3  inactive
    4   active
    5   active

 material set no.    1

 prop( 1) angle          15.0000
 prop( 2) young modulus 0.200100E+09
 prop( 3) modification  time  0.00000
 prop( 4) new young modulus   0.00000

 no. of step variable items:     2
 step   -ve lim     +ve lim
-----------------------------
    1   0.000       0.000
    2   0.000       0.000
    3   0.000       0.000
    4   0.000       0.000
```

```
    5   0.000       0.000

 element data

   el     n  mat       a/l     pinit    yieldc    yieldt
-------------------------------------------------------

    1   14    1   0.2211E-04 163.6     0.000     0.000



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                   Exe Time :24 July 2019      10:49:25                                                  |
+-------------------------------------------------------------------------------------------------------------------------+


NO. OF NODAL LOADS  (NLOAD) ...................    0
NO. OF LOAD CURVES  (NLCUR) ...................   10
MAXIMUM POINTS/LCURVE (NPTM)...................    5
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.SLERara_3454                                        |
|                                 Exe Time :24 July 2019      10:49:25                                                    |
+-------------------------------------------------------------------------------------------------------------------------+
L O A D     D A T A


    LOAD FUNCTION NUMBER   =    1
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       1.20000    0.0000E+00
       6.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    2
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       2.20000    0.0000E+00
       6.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    3
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       3.20000    0.0000E+00
       6.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    4
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       3.80000    0.0000E+00
       4.00000    0.1000E+01
       4.20000    0.0000E+00
       6.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    5
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       4.80000    0.0000E+00
       5.00000    0.1000E+01
       5.20000    0.0000E+00
       6.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    6
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
```

```
       1.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =    7
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =    8
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =    9
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       3.80000    0.0000E+00
       4.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =   10
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       4.80000    0.0000E+00
       5.00000    0.1000E+01
       6.00000    0.1000E+01


NO. OF DISTRIBUTED LOAD CARDS     0



+-----------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                 Exe Time :24 July 2019      10:49:25                                                  |
+-----------------------------------------------------------------------------------------------------------------------+
L O A D     B A L A N C E

STEP     1 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     1 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     2 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     2 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     3 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     3 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     4 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     4 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     5 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     5 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000


                     LOAD INPUT SECTION COMPLETED
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                  Exe Time :24 July 2019      10:49:25                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


NO. OF LAYERS .................................    2
NO. OF DATA PER LAYER.........................  100



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                  Exe Time :24 July 2019      10:49:25                                                   |
+-------------------------------------------------------------------------------------------------------------------------+

LAYER DESCRIPTORS FOR STEP NO.    1


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.47800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.9140     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.33300     WALL NO.        1
ITEM NO.  11<U-KP    >=  8.3310     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    2


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    2
```

```
ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.47800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.9140     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.33300     WALL NO.        1
ITEM NO.  11<U-KP    >=  8.3310     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    3


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.47800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.9140     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
```

```
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.33300     WALL NO.        1
ITEM NO.  11<U-KP    >=  8.3310     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    4


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    4

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.47800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.9140     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    4

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.33300     WALL NO.        1
ITEM NO.  11<U-KP    >=  8.3310     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    5
```

```
 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    5

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.47800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.9140     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    5

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.33300     WALL NO.        1
ITEM NO.  11<U-KP    >=  8.3310     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)


DEFAULT WATER UNIT WEIGHT =  10.000
AVERAGED ON    10 VALUES




+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                   |
|                                  Exe Time :24 July 2019      10:49:25                                             |
+-------------------------------------------------------------------------------------------------------------------+

PHASE DESCRIPTORS


STEP  NO.     1
                                      LEFT WALL    RIGHT WALL
Y                                      0.000       -0.9990E+30
Z-PC                                   0.000         0.000
Z-EXCAVATION                           0.000         0.000
Z-WATER_TABLE                        -26.00        -0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL              0.000         0.000
ZQ                                     0.000         0.000
DZW_OF_THE_WATER_TABLE                 0.000         0.000
QS_ON_THE_EXCAVATION_SIDE              0.000         0.000
ZQS                                  -0.9990E+30   -0.9990E+30
ZCUT                                   0.000         0.000
BALANCE LEVEL FOR PORE PRESSURES     -16.00        -16.00
```

WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 1

STEP NO. 2

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	0.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-16.00	-16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 2

STEP NO. 3

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-3.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-16.00	-16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000

UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 3

STEP NO. 4

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-3.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-16.00	-16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 4

STEP NO. 5

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-6.730	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-16.00	-16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000

```
SEISMIC PRESSURE UPPER VALUE            0.000         0.000
SEISMIC PRESSURE LOWER LEVEL            0.000         0.000
SEISMIC PRESSURE UPPER LEVEL            0.000         0.000

==========================================================================================================end of step    5


 LEFT-HAND WALL

 LOWER  LEVEL         -16.00000
 UPPER  LEVEL           0.00000

 RIGHT-HAND WALL

 LOWER  LEVEL         -16.00000
 UPPER  LEVEL           0.00000




+------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                        |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                        |
|                                  Exe Time :24 July 2019      10:49:25                                                  |
+------------------------------------------------------------------------------------------------------------------------+
 I N I T I A L    S T R E S S    T A B L E S

            S E C T I O N

 NUMBER OF DEFINED TABLES             2


INPUT DATA FOR INITIAL STRESS SET NO.    1
PERTAINING SOIL ELEMENTS AT Y-COORD    0.0000

ACTIVATION TIME                                2.0000
END TIME (TIME BEYOND WHICH IT IS REMOVED)   5.0000

TYPE BOUSSINESQ

 HORIZONTAL DISTANCE (DY)          0.000000000000000E+000
 FOUNDATION WIDTH    (B)            13.0000000000000
 ZETA-F.....                       0.000000000000000E+000
 Q-F .....                          15.0000000000000
 BETA ....                          45.0000000000000
 BEHAVIOUR (0=FREE, 1=REFLECTING)  0.000000000000000E+000


INPUT DATA FOR INITIAL STRESS SET NO.    2
PERTAINING SOIL ELEMENTS AT Y-COORD    0.0000

ACTIVATION TIME                                2.0000
END TIME (TIME BEYOND WHICH IT IS REMOVED)   5.0000

TYPE BOUSSINESQ

 HORIZONTAL DISTANCE (DY)          0.000000000000000E+000
 FOUNDATION WIDTH    (B)            40.0000000000000
 ZETA-F.....                       0.000000000000000E+000
 Q-F .....                          10.0000000000000
 BETA ....                          30.0000000000000
 BEHAVIOUR (0=FREE, 1=REFLECTING)  0.000000000000000E+000


 ELEMENT GROUPS BACKUP AREA CAN STAY IN CORE AT
 POSITION        3803

 NO. OF D.P.W  FOR THIS AREA       9726
 MAX NO. OF D.P.W. AVAILABLE      81920
 ** MAX NO OF ITERATIONS SET TO         100

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5099E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 30.45     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5099E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   164 NODE     82 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0
```

```
 ITER     1 RNORM = 0.000     RMNORM= 0.000
             RINORM=0.5099E+05 RIMNOR= 0.000
             RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
             RFMAX = 30.45     RMMAX = 0.000
             RTSMAL=0.1000E-03 RMSMAL= 0.000
             RDT   =0.5099E+05 RDR   = 0.000
             RATIOT= 0.000     RATIOR= 0.000
             MAX UN= 0.000     IEQ=   164 NODE     82 DOF   2   X-ROT. F
             MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
             NO. OF CONTACT CONSTRAINT VIOLATIONS     0


 ITER     2 RNORM = 0.000     RMNORM= 0.000
             RINORM=0.5099E+05 RIMNOR= 0.000
             RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
             RFMAX = 30.45     RMMAX = 0.000
             RTSMAL=0.1000E-03 RMSMAL= 0.000
             RDT   =0.5099E+05 RDR   = 0.000
             RATIOT= 0.000     RATIOR= 0.000
             MAX UN= 0.000     IEQ=   164 NODE     82 DOF   2   X-ROT. F
             MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
             NO. OF CONTACT CONSTRAINT VIOLATIONS     0



 +-------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
 |                                                                                                                         |
 |                                    NewProject.BaseDesignSection_28.SLERara_3454                                         |
 |                                  Exe Time :24 July 2019      10:49:25                                                   |
 +-------------------------------------------------------------------------------------------------------------------------+
 New Project
 SOLUTION REACHED USING     2 ITERATIONS ON  100

 P R I N T   O U T   F O R   T I M E   S T E P    1     ( AT TIME   1.000     )

 PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

           Y-DISPL.F        X-ROT. F
            (02)             (04)            (


 ALL NODAL POINTS HAVE ZERO DISPLACEMENT COMPONENTS




 +-------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
 |                                                                                                                         |
 |                                    NewProject.BaseDesignSection_28.SLERara_3454                                         |
 |                                  Exe Time :24 July 2019      10:49:25                                                   |
 +-------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.    1

 0_L                             :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
 C U R R E N T   T I M E   I S      1.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE      DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P           STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1 D   0.000       0.000       0.000       0.000       0.000       0.000            V-C  1.5916E+04   0.000       0.000       1.000       1.000
0.000       0.000       0.000     Strato1_2_8_L_0
   2 D  0.4028       0.000       3.800       2.014       3.800       2.014            V-C  1.5916E+04 -0.2000       0.000       1.000       1.000
2.014       0.000       0.000     Strato1_2_8_L_0
   3 D  0.8056       0.000       7.600       4.028       7.600       4.028            V-C  1.5916E+04 -0.4000       0.000       1.000       1.000
4.028       0.000       0.000     Strato1_2_8_L_0
   4 D   1.208       0.000       11.40       6.042       11.40       6.042            V-C  1.5916E+04 -0.6000       0.000       1.000       1.000
6.042       0.000       0.000     Strato1_2_8_L_0
   5 D   1.611       0.000       15.20       8.056       15.20       8.056            V-C  1.5916E+04 -0.8000       0.000       1.000       1.000
8.056       0.000       0.000     Strato1_2_8_L_0
```

6 D	2.014	0.000	19.00	10.07	19.00	10.07	V-C	1.5916E+04	-1.000	0.000	1.000	1.000	
10.07	0.000	0.000	Strato1_2_8_L_0										
7 D	2.417	0.000	22.80	12.08	22.80	12.08	V-C	1.5916E+04	-1.200	0.000	1.000	1.000	
12.08	0.000	0.000	Strato1_2_8_L_0										
8 D	2.820	0.000	26.60	14.10	26.60	14.10	V-C	1.5916E+04	-1.400	0.000	1.000	1.000	
14.10	0.000	0.000	Strato1_2_8_L_0										
9 D	3.222	0.000	30.40	16.11	30.40	16.11	V-C	1.5916E+04	-1.600	0.000	1.000	1.000	
16.11	0.000	0.000	Strato1_2_8_L_0										
10 D	3.625	0.000	34.20	18.13	34.20	18.13	V-C	1.5916E+04	-1.800	0.000	1.000	1.000	
18.13	0.000	0.000	Strato1_2_8_L_0										
11 D	4.028	0.000	38.00	20.14	38.00	20.14	V-C	1.5916E+04	-2.000	0.000	1.000	1.000	
20.14	0.000	0.000	Strato1_2_8_L_0										
12 D	4.431	0.000	41.80	22.15	41.80	22.15	V-C	1.5916E+04	-2.200	0.000	1.000	1.000	
22.15	0.000	0.000	Strato1_2_8_L_0										
13 D	3.625	0.000	45.60	24.17	45.60	24.17	V-C	1.5916E+04	-2.400	0.000	1.000	1.000	
24.17	0.000	0.000	Strato1_2_8_L_0										
14 D	3.776	0.000	47.50	25.18	47.50	25.18	V-C	1.5916E+04	-2.500	0.000	1.000	1.000	
25.18	0.000	0.000	Strato1_2_8_L_0										
15 D	5.438	0.000	51.30	27.19	51.30	27.19	V-C	1.5916E+04	-2.700	0.000	1.000	1.000	
27.19	0.000	0.000	Strato1_2_8_L_0										
16 D	5.841	0.000	55.10	29.20	55.10	29.20	V-C	1.5916E+04	-2.900	0.000	1.000	1.000	
29.20	0.000	0.000	Strato1_2_8_L_0										
17 D	6.243	0.000	58.90	31.22	58.90	31.22	V-C	1.5916E+04	-3.100	0.000	1.000	1.000	
31.22	0.000	0.000	Strato1_2_8_L_0										
18 D	6.646	0.000	62.70	33.23	62.70	33.23	V-C	1.5916E+04	-3.300	0.000	1.000	1.000	
33.23	0.000	0.000	Strato1_2_8_L_0										
19 D	7.049	0.000	66.50	35.25	66.50	35.25	V-C	1.5916E+04	-3.500	0.000	1.000	1.000	
35.25	0.000	0.000	Strato1_2_8_L_0										
20 D	7.452	0.000	70.30	37.26	70.30	37.26	V-C	1.5916E+04	-3.700	0.000	1.000	1.000	
37.26	0.000	0.000	Strato1_2_8_L_0										
21 D	7.855	0.000	74.10	39.27	74.10	39.27	V-C	1.5916E+04	-3.900	0.000	1.000	1.000	
39.27	0.000	0.000	Strato1_2_8_L_0										
22 D	8.257	0.000	77.90	41.29	77.90	41.29	V-C	1.5916E+04	-4.100	0.000	1.000	1.000	
41.29	0.000	0.000	Strato1_2_8_L_0										
23 D	8.660	0.000	81.70	43.30	81.70	43.30	V-C	1.5916E+04	-4.300	0.000	1.000	1.000	
43.30	0.000	0.000	Strato1_2_8_L_0										
24 D	9.063	0.000	85.50	45.32	85.50	45.32	V-C	1.5916E+04	-4.500	0.000	1.000	1.000	
45.31	0.000	0.000	Strato1_2_8_L_0										
25 D	9.466	0.000	89.30	47.33	89.30	47.33	V-C	1.5916E+04	-4.700	0.000	1.000	1.000	
47.33	0.000	0.000	Strato1_2_8_L_0										
26 D	9.869	0.000	93.10	49.34	93.10	49.34	V-C	1.5916E+04	-4.900	0.000	1.000	1.000	
49.34	0.000	0.000	Strato1_2_8_L_0										
27 D	10.27	0.000	96.90	51.36	96.90	51.36	V-C	1.5916E+04	-5.100	0.000	1.000	1.000	
51.36	0.000	0.000	Strato1_2_8_L_0										
28 D	10.67	0.000	100.7	53.37	100.7	53.37	V-C	1.5916E+04	-5.300	0.000	1.000	1.000	
53.37	0.000	0.000	Strato1_2_8_L_0										
29 D	11.08	0.000	104.5	55.38	104.5	55.38	V-C	1.5916E+04	-5.500	0.000	1.000	1.000	
55.38	0.000	0.000	Strato1_2_8_L_0										
30 D	11.48	0.000	108.3	57.40	108.3	57.40	V-C	1.5916E+04	-5.700	0.000	1.000	1.000	
57.40	0.000	0.000	Strato1_2_8_L_0										
31 D	11.88	0.000	112.1	59.41	112.1	59.41	V-C	1.5916E+04	-5.900	0.000	1.000	1.000	
59.41	0.000	0.000	Strato1_2_8_L_0										
32 D	12.29	0.000	115.9	61.43	115.9	61.43	V-C	1.5916E+04	-6.100	0.000	1.000	1.000	
61.43	0.000	0.000	Strato1_2_8_L_0										
33 D	12.69	0.000	119.7	63.44	119.7	63.44	V-C	1.5916E+04	-6.300	0.000	1.000	1.000	
63.44	0.000	0.000	Strato1_2_8_L_0										
34 D	13.09	0.000	123.5	65.45	123.5	65.45	V-C	1.5916E+04	-6.500	0.000	1.000	1.000	
65.45	0.000	0.000	Strato1_2_8_L_0										
35 D	13.49	0.000	127.3	67.47	127.3	67.47	V-C	1.5916E+04	-6.700	0.000	1.000	1.000	
67.47	0.000	0.000	Strato1_2_8_L_0										
36 D	13.90	0.000	131.1	69.48	131.1	69.48	V-C	1.5916E+04	-6.900	0.000	1.000	1.000	
69.48	0.000	0.000	Strato1_2_8_L_0										
37 D	14.30	0.000	134.9	71.50	134.9	71.50	V-C	1.5916E+04	-7.100	0.000	1.000	1.000	
71.50	0.000	0.000	Strato1_2_8_L_0										
38 D	14.70	0.000	138.7	73.51	138.7	73.51	V-C	1.5916E+04	-7.300	0.000	1.000	1.000	
73.51	0.000	0.000	Strato1_2_8_L_0										
39 D	15.10	0.000	142.5	75.52	142.5	75.52	V-C	1.5916E+04	-7.500	0.000	1.000	1.000	
75.52	0.000	0.000	Strato1_2_8_L_0										
40 D	15.51	0.000	146.3	77.54	146.3	77.54	V-C	1.5916E+04	-7.700	0.000	1.000	1.000	
77.54	0.000	0.000	Strato1_2_8_L_0										
41 D	15.91	0.000	150.1	79.55	150.1	79.55	V-C	1.5916E+04	-7.900	0.000	1.000	1.000	
79.55	0.000	0.000	Strato1_2_8_L_0										
42 D	16.31	0.000	153.9	81.57	153.9	81.57	V-C	1.5916E+04	-8.100	0.000	1.000	1.000	
81.57	0.000	0.000	Strato1_2_8_L_0										
43 D	16.72	0.000	157.7	83.58	157.7	83.58	V-C	1.5916E+04	-8.300	0.000	1.000	1.000	
83.58	0.000	0.000	Strato1_2_8_L_0										
44 D	17.12	0.000	161.5	85.59	161.5	85.59	V-C	1.5916E+04	-8.500	0.000	1.000	1.000	
85.59	0.000	0.000	Strato1_2_8_L_0										
45 D	17.52	0.000	165.3	87.61	165.3	87.61	V-C	1.5916E+04	-8.700	0.000	1.000	1.000	
87.61	0.000	0.000	Strato1_2_8_L_0										
46 D	17.92	0.000	169.1	89.62	169.1	89.62	V-C	1.5916E+04	-8.900	0.000	1.000	1.000	
89.62	0.000	0.000	Strato1_2_8_L_0										
47 D	18.33	0.000	172.9	91.64	172.9	91.64	V-C	1.5916E+04	-9.100	0.000	1.000	1.000	
91.64	0.000	0.000	Strato1_2_8_L_0										
48 D	18.73	0.000	176.7	93.65	176.7	93.65	V-C	1.5916E+04	-9.300	0.000	1.000	1.000	

```
93.65       0.000       0.000     Strato1_2_8_L_0
  49 D   19.13       0.000       180.5       95.66       180.5       95.66             V-C  1.5916E+04  -9.500       0.000       1.000       1.000
95.66       0.000       0.000     Strato1_2_8_L_0
  50 D   18.45       0.000       184.5       92.25       184.5       92.25             V-C  4.5023E+04  -9.700       0.000       1.000       1.000
92.25       0.000       0.000     Strato2_3095_82743_L_0
  51 D   18.85       0.000       188.5       94.25       188.5       94.25             V-C  4.5023E+04  -9.900       0.000       1.000       1.000
94.25       0.000       0.000     Strato2_3095_82743_L_0
  52 D   19.25       0.000       192.5       96.25       192.5       96.25             V-C  4.5023E+04  -10.10       0.000       1.000       1.000
96.25       0.000       0.000     Strato2_3095_82743_L_0
  53 D   19.65       0.000       196.5       98.25       196.5       98.25             V-C  4.5023E+04  -10.30       0.000       1.000       1.000
98.25       0.000       0.000     Strato2_3095_82743_L_0
  54 D   20.05       0.000       200.5       100.2       200.5       100.2             V-C  4.5023E+04  -10.50       0.000       1.000       1.000
100.2       0.000       0.000     Strato2_3095_82743_L_0
  55 D   20.45       0.000       204.5       102.2       204.5       102.2             V-C  4.5023E+04  -10.70       0.000       1.000       1.000
102.2       0.000       0.000     Strato2_3095_82743_L_0
  56 D   20.85       0.000       208.5       104.2       208.5       104.2             V-C  4.5023E+04  -10.90       0.000       1.000       1.000
104.2       0.000       0.000     Strato2_3095_82743_L_0
  57 D   21.25       0.000       212.5       106.2       212.5       106.2             V-C  4.5023E+04  -11.10       0.000       1.000       1.000
106.2       0.000       0.000     Strato2_3095_82743_L_0
  58 D   21.65       0.000       216.5       108.2       216.5       108.2             V-C  4.5023E+04  -11.30       0.000       1.000       1.000
108.2       0.000       0.000     Strato2_3095_82743_L_0
  59 D   22.05       0.000       220.5       110.2       220.5       110.2             V-C  4.5023E+04  -11.50       0.000       1.000       1.000
110.2       0.000       0.000     Strato2_3095_82743_L_0
  60 D   22.45       0.000       224.5       112.2       224.5       112.2             V-C  4.5023E+04  -11.70       0.000       1.000       1.000
112.2       0.000       0.000     Strato2_3095_82743_L_0
  61 D   22.85       0.000       228.5       114.2       228.5       114.2             V-C  4.5023E+04  -11.90       0.000       1.000       1.000
114.2       0.000       0.000     Strato2_3095_82743_L_0
  62 D   23.25       0.000       232.5       116.2       232.5       116.2             V-C  4.5023E+04  -12.10       0.000       1.000       1.000
116.2       0.000       0.000     Strato2_3095_82743_L_0
  63 D   23.65       0.000       236.5       118.2       236.5       118.2             V-C  4.5023E+04  -12.30       0.000       1.000       1.000
118.2       0.000       0.000     Strato2_3095_82743_L_0
  64 D   24.05       0.000       240.5       120.2       240.5       120.2             V-C  4.5023E+04  -12.50       0.000       1.000       1.000
120.2       0.000       0.000     Strato2_3095_82743_L_0
  65 D   24.45       0.000       244.5       122.2       244.5       122.2             V-C  4.5023E+04  -12.70       0.000       1.000       1.000
122.2       0.000       0.000     Strato2_3095_82743_L_0
  66 D   24.85       0.000       248.5       124.2       248.5       124.2             V-C  4.5023E+04  -12.90       0.000       1.000       1.000
124.2       0.000       0.000     Strato2_3095_82743_L_0
  67 D   25.25       0.000       252.5       126.2       252.5       126.2             V-C  4.5023E+04  -13.10       0.000       1.000       1.000
126.2       0.000       0.000     Strato2_3095_82743_L_0
  68 D   25.65       0.000       256.5       128.2       256.5       128.2             V-C  4.5023E+04  -13.30       0.000       1.000       1.000
128.2       0.000       0.000     Strato2_3095_82743_L_0
  69 D   26.05       0.000       260.5       130.2       260.5       130.2             V-C  4.5023E+04  -13.50       0.000       1.000       1.000
130.2       0.000       0.000     Strato2_3095_82743_L_0
  70 D   26.45       0.000       264.5       132.2       264.5       132.2             V-C  4.5023E+04  -13.70       0.000       1.000       1.000
132.2       0.000       0.000     Strato2_3095_82743_L_0
  71 D   26.85       0.000       268.5       134.2       268.5       134.2             V-C  4.5023E+04  -13.90       0.000       1.000       1.000
134.2       0.000       0.000     Strato2_3095_82743_L_0
  72 D   27.25       0.000       272.5       136.2       272.5       136.2             V-C  4.5023E+04  -14.10       0.000       1.000       1.000
136.2       0.000       0.000     Strato2_3095_82743_L_0
  73 D   27.65       0.000       276.5       138.2       276.5       138.2             V-C  4.5023E+04  -14.30       0.000       1.000       1.000
138.2       0.000       0.000     Strato2_3095_82743_L_0
  74 D   28.05       0.000       280.5       140.2       280.5       140.2             V-C  4.5023E+04  -14.50       0.000       1.000       1.000
140.2       0.000       0.000     Strato2_3095_82743_L_0
  75 D   28.45       0.000       284.5       142.2       284.5       142.2             V-C  4.5023E+04  -14.70       0.000       1.000       1.000
142.2       0.000       0.000     Strato2_3095_82743_L_0
  76 D   28.85       0.000       288.5       144.2       288.5       144.2             V-C  4.5023E+04  -14.90       0.000       1.000       1.000
144.2       0.000       0.000     Strato2_3095_82743_L_0
  77 D   29.25       0.000       292.5       146.2       292.5       146.2             V-C  4.5023E+04  -15.10       0.000       1.000       1.000
146.2       0.000       0.000     Strato2_3095_82743_L_0
  78 D   29.65       0.000       296.5       148.2       296.5       148.2             V-C  4.5023E+04  -15.30       0.000       1.000       1.000
148.2       0.000       0.000     Strato2_3095_82743_L_0
  79 D   30.05       0.000       300.5       150.2       300.5       150.2             V-C  4.5023E+04  -15.50       0.000       1.000       1.000
150.2       0.000       0.000     Strato2_3095_82743_L_0
  80 D   30.45       0.000       304.5       152.2       304.5       152.2             V-C  4.5023E+04  -15.70       0.000       1.000       1.000
152.2       0.000       0.000     Strato2_3095_82743_L_0
  81 D   23.14       0.000       308.5       154.2       308.5       154.2             V-C  4.5023E+04  -15.90       0.000       1.000       1.000
154.2       0.000       0.000     Strato2_3095_82743_L_0
  82 D   7.763       0.000       310.5       155.2       310.5       155.2             V-C  4.5023E+04  -16.00       0.000       1.000       1.000
155.2       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
 |                                                                                                                         |
 |                                      NewProject.BaseDesignSection_28.SLERara_3454                                       |
 |                                  Exe Time :24 July 2019      10:49:25                                                   |
 +-------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                          :
```

ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 82
C U R R E N T T I M E I S 1.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.000	0.000	0.000	0.000	0.000	0.000	V-C	1.1045E+04	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_2_8_L_0
2 D	0.4028	0.000	3.800	2.014	3.800	2.014	V-C	1.1045E+04	-0.2000	0.000	1.000	1.000	2.014	0.000	0.000	Strato1_2_8_L_0
3 D	0.8056	0.000	7.600	4.028	7.600	4.028	V-C	1.1045E+04	-0.4000	0.000	1.000	1.000	4.028	0.000	0.000	Strato1_2_8_L_0
4 D	1.208	0.000	11.40	6.042	11.40	6.042	V-C	1.1045E+04	-0.6000	0.000	1.000	1.000	6.042	0.000	0.000	Strato1_2_8_L_0
5 D	1.611	0.000	15.20	8.056	15.20	8.056	V-C	1.1045E+04	-0.8000	0.000	1.000	1.000	8.056	0.000	0.000	Strato1_2_8_L_0
6 D	2.014	0.000	19.00	10.07	19.00	10.07	V-C	1.1045E+04	-1.000	0.000	1.000	1.000	10.07	0.000	0.000	Strato1_2_8_L_0
7 D	2.417	0.000	22.80	12.08	22.80	12.08	V-C	1.1045E+04	-1.200	0.000	1.000	1.000	12.08	0.000	0.000	Strato1_2_8_L_0
8 D	2.820	0.000	26.60	14.10	26.60	14.10	V-C	1.1045E+04	-1.400	0.000	1.000	1.000	14.10	0.000	0.000	Strato1_2_8_L_0
9 D	3.222	0.000	30.40	16.11	30.40	16.11	V-C	1.1045E+04	-1.600	0.000	1.000	1.000	16.11	0.000	0.000	Strato1_2_8_L_0
10 D	3.625	0.000	34.20	18.13	34.20	18.13	V-C	1.1045E+04	-1.800	0.000	1.000	1.000	18.13	0.000	0.000	Strato1_2_8_L_0
11 D	4.028	0.000	38.00	20.14	38.00	20.14	V-C	1.1045E+04	-2.000	0.000	1.000	1.000	20.14	0.000	0.000	Strato1_2_8_L_0
12 D	4.431	0.000	41.80	22.15	41.80	22.15	V-C	1.1045E+04	-2.200	0.000	1.000	1.000	22.15	0.000	0.000	Strato1_2_8_L_0
13 D	3.625	0.000	45.60	24.17	45.60	24.17	V-C	1.1045E+04	-2.400	0.000	1.000	1.000	24.17	0.000	0.000	Strato1_2_8_L_0
14 D	3.776	0.000	47.50	25.18	47.50	25.18	V-C	1.1045E+04	-2.500	0.000	1.000	1.000	25.18	0.000	0.000	Strato1_2_8_L_0
15 D	5.438	0.000	51.30	27.19	51.30	27.19	V-C	1.1045E+04	-2.700	0.000	1.000	1.000	27.19	0.000	0.000	Strato1_2_8_L_0
16 D	5.841	0.000	55.10	29.20	55.10	29.20	V-C	1.1045E+04	-2.900	0.000	1.000	1.000	29.20	0.000	0.000	Strato1_2_8_L_0
17 D	6.243	0.000	58.90	31.22	58.90	31.22	V-C	1.1045E+04	-3.100	0.000	1.000	1.000	31.22	0.000	0.000	Strato1_2_8_L_0
18 D	6.646	0.000	62.70	33.23	62.70	33.23	V-C	1.1045E+04	-3.300	0.000	1.000	1.000	33.23	0.000	0.000	Strato1_2_8_L_0
19 D	7.049	0.000	66.50	35.25	66.50	35.25	V-C	1.1045E+04	-3.500	0.000	1.000	1.000	35.25	0.000	0.000	Strato1_2_8_L_0
20 D	7.452	0.000	70.30	37.26	70.30	37.26	V-C	1.1045E+04	-3.700	0.000	1.000	1.000	37.26	0.000	0.000	Strato1_2_8_L_0
21 D	7.855	0.000	74.10	39.27	74.10	39.27	V-C	1.1045E+04	-3.900	0.000	1.000	1.000	39.27	0.000	0.000	Strato1_2_8_L_0
22 D	8.257	0.000	77.90	41.29	77.90	41.29	V-C	1.1045E+04	-4.100	0.000	1.000	1.000	41.29	0.000	0.000	Strato1_2_8_L_0
23 D	8.660	0.000	81.70	43.30	81.70	43.30	V-C	1.1045E+04	-4.300	0.000	1.000	1.000	43.30	0.000	0.000	Strato1_2_8_L_0
24 D	9.063	0.000	85.50	45.32	85.50	45.32	V-C	1.1045E+04	-4.500	0.000	1.000	1.000	45.31	0.000	0.000	Strato1_2_8_L_0
25 D	9.466	0.000	89.30	47.33	89.30	47.33	V-C	1.1045E+04	-4.700	0.000	1.000	1.000	47.33	0.000	0.000	Strato1_2_8_L_0
26 D	9.869	0.000	93.10	49.34	93.10	49.34	V-C	1.1045E+04	-4.900	0.000	1.000	1.000	49.34	0.000	0.000	Strato1_2_8_L_0
27 D	10.27	0.000	96.90	51.36	96.90	51.36	V-C	1.1045E+04	-5.100	0.000	1.000	1.000	51.36	0.000	0.000	Strato1_2_8_L_0
28 D	10.67	0.000	100.7	53.37	100.7	53.37	V-C	1.1045E+04	-5.300	0.000	1.000	1.000	53.37	0.000	0.000	Strato1_2_8_L_0
29 D	11.08	0.000	104.5	55.38	104.5	55.38	V-C	1.1045E+04	-5.500	0.000	1.000	1.000	55.38	0.000	0.000	Strato1_2_8_L_0
30 D	11.48	0.000	108.3	57.40	108.3	57.40	V-C	1.1045E+04	-5.700	0.000	1.000	1.000	57.40	0.000	0.000	Strato1_2_8_L_0
31 D	11.88	0.000	112.1	59.41	112.1	59.41	V-C	1.1045E+04	-5.900	0.000	1.000	1.000	59.41	0.000	0.000	Strato1_2_8_L_0
32 D	12.29	0.000	115.9	61.43	115.9	61.43	V-C	1.1045E+04	-6.100	0.000	1.000	1.000	61.43	0.000	0.000	Strato1_2_8_L_0
33 D	12.69	0.000	119.7	63.44	119.7	63.44	V-C	1.1045E+04	-6.300	0.000	1.000	1.000	63.44	0.000	0.000	Strato1_2_8_L_0
34 D	13.09	0.000	123.5	65.45	123.5	65.45	V-C	1.1045E+04	-6.500	0.000	1.000	1.000	65.45	0.000	0.000	Strato1_2_8_L_0
35 D	13.49	0.000	127.3	67.47	127.3	67.47	V-C	1.1045E+04	-6.700	0.000	1.000	1.000	67.47	0.000	0.000	Strato1_2_8_L_0
36 D	13.90	0.000	131.1	69.48	131.1	69.48	V-C	1.1045E+04	-6.900	0.000	1.000	1.000	69.48	0.000	0.000	Strato1_2_8_L_0
37 D	14.30	0.000	134.9	71.50	134.9	71.50	V-C	1.1045E+04	-7.100	0.000	1.000	1.000	71.50	0.000	0.000	Strato1_2_8_L_0

38 D	14.70	0.000	138.7	73.51	138.7	73.51	V-C	1.1045E+04	-7.300	0.000	1.000	1.000	
73.51	0.000	0.000	Strato1_2_8_L_0										
39 D	15.10	0.000	142.5	75.52	142.5	75.52	V-C	1.1045E+04	-7.500	0.000	1.000	1.000	
75.52	0.000	0.000	Strato1_2_8_L_0										
40 D	15.51	0.000	146.3	77.54	146.3	77.54	V-C	1.1045E+04	-7.700	0.000	1.000	1.000	
77.54	0.000	0.000	Strato1_2_8_L_0										
41 D	15.91	0.000	150.1	79.55	150.1	79.55	V-C	1.1045E+04	-7.900	0.000	1.000	1.000	
79.55	0.000	0.000	Strato1_2_8_L_0										
42 D	16.31	0.000	153.9	81.57	153.9	81.57	V-C	1.1045E+04	-8.100	0.000	1.000	1.000	
81.57	0.000	0.000	Strato1_2_8_L_0										
43 D	16.72	0.000	157.7	83.58	157.7	83.58	V-C	1.1045E+04	-8.300	0.000	1.000	1.000	
83.58	0.000	0.000	Strato1_2_8_L_0										
44 D	17.12	0.000	161.5	85.59	161.5	85.59	V-C	1.1045E+04	-8.500	0.000	1.000	1.000	
85.59	0.000	0.000	Strato1_2_8_L_0										
45 D	17.52	0.000	165.3	87.61	165.3	87.61	V-C	1.1045E+04	-8.700	0.000	1.000	1.000	
87.61	0.000	0.000	Strato1_2_8_L_0										
46 D	17.92	0.000	169.1	89.62	169.1	89.62	V-C	1.1045E+04	-8.900	0.000	1.000	1.000	
89.62	0.000	0.000	Strato1_2_8_L_0										
47 D	18.33	0.000	172.9	91.64	172.9	91.64	V-C	1.1045E+04	-9.100	0.000	1.000	1.000	
91.64	0.000	0.000	Strato1_2_8_L_0										
48 D	18.73	0.000	176.7	93.65	176.7	93.65	V-C	1.1045E+04	-9.300	0.000	1.000	1.000	
93.65	0.000	0.000	Strato1_2_8_L_0										
49 D	19.13	0.000	180.5	95.66	180.5	95.66	V-C	1.1045E+04	-9.500	0.000	1.000	1.000	
95.66	0.000	0.000	Strato1_2_8_L_0										
50 D	18.45	0.000	184.5	92.25	184.5	92.25	V-C	2.4402E+04	-9.700	0.000	1.000	1.000	
92.25	0.000	0.000	Strato2_3095_82743_L_0										
51 D	18.85	0.000	188.5	94.25	188.5	94.25	V-C	2.4402E+04	-9.900	0.000	1.000	1.000	
94.25	0.000	0.000	Strato2_3095_82743_L_0										
52 D	19.25	0.000	192.5	96.25	192.5	96.25	V-C	2.4402E+04	-10.10	0.000	1.000	1.000	
96.25	0.000	0.000	Strato2_3095_82743_L_0										
53 D	19.65	0.000	196.5	98.25	196.5	98.25	V-C	2.4402E+04	-10.30	0.000	1.000	1.000	
98.25	0.000	0.000	Strato2_3095_82743_L_0										
54 D	20.05	0.000	200.5	100.2	200.5	100.2	V-C	2.4402E+04	-10.50	0.000	1.000	1.000	
100.2	0.000	0.000	Strato2_3095_82743_L_0										
55 D	20.45	0.000	204.5	102.2	204.5	102.2	V-C	2.4402E+04	-10.70	0.000	1.000	1.000	
102.2	0.000	0.000	Strato2_3095_82743_L_0										
56 D	20.85	0.000	208.5	104.2	208.5	104.2	V-C	2.4402E+04	-10.90	0.000	1.000	1.000	
104.2	0.000	0.000	Strato2_3095_82743_L_0										
57 D	21.25	0.000	212.5	106.2	212.5	106.2	V-C	2.4402E+04	-11.10	0.000	1.000	1.000	
106.2	0.000	0.000	Strato2_3095_82743_L_0										
58 D	21.65	0.000	216.5	108.2	216.5	108.2	V-C	2.4402E+04	-11.30	0.000	1.000	1.000	
108.2	0.000	0.000	Strato2_3095_82743_L_0										
59 D	22.05	0.000	220.5	110.2	220.5	110.2	V-C	2.4402E+04	-11.50	0.000	1.000	1.000	
110.2	0.000	0.000	Strato2_3095_82743_L_0										
60 D	22.45	0.000	224.5	112.2	224.5	112.2	V-C	2.4402E+04	-11.70	0.000	1.000	1.000	
112.2	0.000	0.000	Strato2_3095_82743_L_0										
61 D	22.85	0.000	228.5	114.2	228.5	114.2	V-C	2.4402E+04	-11.90	0.000	1.000	1.000	
114.2	0.000	0.000	Strato2_3095_82743_L_0										
62 D	23.25	0.000	232.5	116.2	232.5	116.2	V-C	2.4402E+04	-12.10	0.000	1.000	1.000	
116.2	0.000	0.000	Strato2_3095_82743_L_0										
63 D	23.65	0.000	236.5	118.2	236.5	118.2	V-C	2.4402E+04	-12.30	0.000	1.000	1.000	
118.2	0.000	0.000	Strato2_3095_82743_L_0										
64 D	24.05	0.000	240.5	120.2	240.5	120.2	V-C	2.4402E+04	-12.50	0.000	1.000	1.000	
120.2	0.000	0.000	Strato2_3095_82743_L_0										
65 D	24.45	0.000	244.5	122.2	244.5	122.2	V-C	2.4402E+04	-12.70	0.000	1.000	1.000	
122.2	0.000	0.000	Strato2_3095_82743_L_0										
66 D	24.85	0.000	248.5	124.2	248.5	124.2	V-C	2.4402E+04	-12.90	0.000	1.000	1.000	
124.2	0.000	0.000	Strato2_3095_82743_L_0										
67 D	25.25	0.000	252.5	126.2	252.5	126.2	V-C	2.4402E+04	-13.10	0.000	1.000	1.000	
126.2	0.000	0.000	Strato2_3095_82743_L_0										
68 D	25.65	0.000	256.5	128.2	256.5	128.2	V-C	2.4402E+04	-13.30	0.000	1.000	1.000	
128.2	0.000	0.000	Strato2_3095_82743_L_0										
69 D	26.05	0.000	260.5	130.2	260.5	130.2	V-C	2.4402E+04	-13.50	0.000	1.000	1.000	
130.2	0.000	0.000	Strato2_3095_82743_L_0										
70 D	26.45	0.000	264.5	132.2	264.5	132.2	V-C	2.4402E+04	-13.70	0.000	1.000	1.000	
132.2	0.000	0.000	Strato2_3095_82743_L_0										
71 D	26.85	0.000	268.5	134.2	268.5	134.2	V-C	2.4402E+04	-13.90	0.000	1.000	1.000	
134.2	0.000	0.000	Strato2_3095_82743_L_0										
72 D	27.25	0.000	272.5	136.2	272.5	136.2	V-C	2.4402E+04	-14.10	0.000	1.000	1.000	
136.2	0.000	0.000	Strato2_3095_82743_L_0										
73 D	27.65	0.000	276.5	138.2	276.5	138.2	V-C	2.4402E+04	-14.30	0.000	1.000	1.000	
138.2	0.000	0.000	Strato2_3095_82743_L_0										
74 D	28.05	0.000	280.5	140.2	280.5	140.2	V-C	2.4402E+04	-14.50	0.000	1.000	1.000	
140.2	0.000	0.000	Strato2_3095_82743_L_0										
75 D	28.45	0.000	284.5	142.2	284.5	142.2	V-C	2.4402E+04	-14.70	0.000	1.000	1.000	
142.2	0.000	0.000	Strato2_3095_82743_L_0										
76 D	28.85	0.000	288.5	144.2	288.5	144.2	V-C	2.4402E+04	-14.90	0.000	1.000	1.000	
144.2	0.000	0.000	Strato2_3095_82743_L_0										
77 D	29.25	0.000	292.5	146.2	292.5	146.2	V-C	2.4402E+04	-15.10	0.000	1.000	1.000	
146.2	0.000	0.000	Strato2_3095_82743_L_0										
78 D	29.65	0.000	296.5	148.2	296.5	148.2	V-C	2.4402E+04	-15.30	0.000	1.000	1.000	
148.2	0.000	0.000	Strato2_3095_82743_L_0										
79 D	30.05	0.000	300.5	150.2	300.5	150.2	V-C	2.4402E+04	-15.50	0.000	1.000	1.000	
150.2	0.000	0.000	Strato2_3095_82743_L_0										
80 D	30.45	0.000	304.5	152.2	304.5	152.2	V-C	2.4402E+04	-15.70	0.000	1.000	1.000	

```
152.2       0.000       0.000     Strato2_3095_82743_L_0
  81 D   23.14       0.000       308.5       154.2       308.5       154.2            V-C  2.4402E+04  -15.90       0.000       1.000       1.000
154.2       0.000       0.000     Strato2_3095_82743_L_0
  82 D   7.763       0.000       310.5       155.2       310.5       155.2            V-C  2.4402E+04  -16.00       0.000       1.000       1.000
155.2       0.000       0.000     Strato2_3095_82743_L_0
```

```
 +-------------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                     |
 |                                                                                                                               |
 |                                       NewProject.BaseDesignSection_28.SLERara_3454                                            |
 |                                   Exe Time :24 July 2019      10:49:25                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S    R E S U L T S    F O R    G R O U P    N O.    3

 WallElement_33                  :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   81
 C U R R E N T    T I M E    I S      1.0000

  WALL2D ELEMENT

    EL      TA          TB          MA          MB
 ---------------------------------------------------
     1  0.0000      0.0000      0.0000      0.0000
     2  0.0000      0.0000      0.0000      0.0000
     3  0.0000      0.0000      0.0000      0.0000
     4  0.0000      0.0000      0.0000      0.0000
     5  0.0000      0.0000      0.0000      0.0000
     6  0.0000      0.0000      0.0000      0.0000
     7  0.0000      0.0000      0.0000      0.0000
     8  0.0000      0.0000      0.0000      0.0000
     9  0.0000      0.0000      0.0000      0.0000
    10  0.0000      0.0000      0.0000      0.0000
    11  0.0000      0.0000      0.0000      0.0000
    12  0.0000      0.0000      0.0000      0.0000
    13  0.0000      0.0000      0.0000      0.0000
    14  0.0000      0.0000      0.0000      0.0000
    15  0.0000      0.0000      0.0000      0.0000
    16  0.0000      0.0000      0.0000      0.0000
    17  0.0000      0.0000      0.0000      0.0000
    18  0.0000      0.0000      0.0000      0.0000
    19  0.0000      0.0000      0.0000      0.0000
    20  0.0000      0.0000      0.0000      0.0000
    21  0.0000      0.0000      0.0000      0.0000
    22  0.0000      0.0000      0.0000      0.0000
    23  0.0000      0.0000      0.0000      0.0000
    24  0.0000      0.0000      0.0000      0.0000
    25  0.0000      0.0000      0.0000      0.0000
    26  0.0000      0.0000      0.0000      0.0000
    27  0.0000      0.0000      0.0000      0.0000
    28  0.0000      0.0000      0.0000      0.0000
    29  0.0000      0.0000      0.0000      0.0000
    30  0.0000      0.0000      0.0000      0.0000
    31  0.0000      0.0000      0.0000      0.0000
    32  0.0000      0.0000      0.0000      0.0000
    33  0.0000      0.0000      0.0000      0.0000
    34  0.0000      0.0000      0.0000      0.0000
    35  0.0000      0.0000      0.0000      0.0000
    36  0.0000      0.0000      0.0000      0.0000
    37  0.0000      0.0000      0.0000      0.0000
    38  0.0000      0.0000      0.0000      0.0000
    39  0.0000      0.0000      0.0000      0.0000
    40  0.0000      0.0000      0.0000      0.0000
    41  0.0000      0.0000      0.0000      0.0000
    42  0.0000      0.0000      0.0000      0.0000
    43  0.0000      0.0000      0.0000      0.0000
    44  0.0000      0.0000      0.0000      0.0000
    45  0.0000      0.0000      0.0000      0.0000
    46  0.0000      0.0000      0.0000      0.0000
    47  0.0000      0.0000      0.0000      0.0000
    48  0.0000      0.0000      0.0000      0.0000
    49  0.0000      0.0000      0.0000      0.0000
    50  0.0000      0.0000      0.0000      0.0000
    51  0.0000      0.0000      0.0000      0.0000
    52  0.0000      0.0000      0.0000      0.0000
    53  0.0000      0.0000      0.0000      0.0000
    54  0.0000      0.0000      0.0000      0.0000
    55  0.0000      0.0000      0.0000      0.0000
    56  0.0000      0.0000      0.0000      0.0000
    57  0.0000      0.0000      0.0000      0.0000
```

58	0.0000	0.0000	0.0000	0.0000
59	0.0000	0.0000	0.0000	0.0000
60	0.0000	0.0000	0.0000	0.0000
61	0.0000	0.0000	0.0000	0.0000
62	0.0000	0.0000	0.0000	0.0000
63	0.0000	0.0000	0.0000	0.0000
64	0.0000	0.0000	0.0000	0.0000
65	0.0000	0.0000	0.0000	0.0000
66	0.0000	0.0000	0.0000	0.0000
67	0.0000	0.0000	0.0000	0.0000
68	0.0000	0.0000	0.0000	0.0000
69	0.0000	0.0000	0.0000	0.0000
70	0.0000	0.0000	0.0000	0.0000
71	0.0000	0.0000	0.0000	0.0000
72	0.0000	0.0000	0.0000	0.0000
73	0.0000	0.0000	0.0000	0.0000
74	0.0000	0.0000	0.0000	0.0000
75	0.0000	0.0000	0.0000	0.0000
76	0.0000	0.0000	0.0000	0.0000
77	0.0000	0.0000	0.0000	0.0000
78	0.0000	0.0000	0.0000	0.0000
79	0.0000	0.0000	0.0000	0.0000
80	0.0000	0.0000	0.0000	0.0000
81	0.0000	0.0000	0.0000	0.0000

```
+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                      NewProject.BaseDesignSection_28.SLERara_3454                                             |
|                                  Exe Time :24 July 2019      10:49:25                                                         |
+-------------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_768111                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S      1.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5557E+05 RIMNOR= 0.000
           RENORM= 251.1     REMNOR= 0.000     RATIO =0.6722E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 32.04     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5557E+05 RDR   = 0.000
           RATIOT=0.6722E-01 RATIOR= 0.000
           MAX UN= 1.885     IEQ=    13 NODE      7 DOF   1  Y-DISPL.F
           MIN UN= 0.000     IEQ=     2 NODE      1 DOF   2   X-ROT. F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5557E+05 RIMNOR= 0.000
           RENORM= 20.45     REMNOR=0.8025E-21 RATIO =0.1918E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 32.04     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5557E+05 RDR   = 0.000
           RATIOT=0.1918E-01 RATIOR= 0.000
           MAX UN= 1.366     IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           MIN UN=-.7417E-10 IEQ=    65 NODE     33 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5557E+05 RIMNOR= 0.000
           RENORM= 1.241     REMNOR=0.8160E-20 RATIO =0.4725E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 32.04     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5557E+05 RDR   = 0.000
           RATIOT=0.4725E-02 RATIOR= 0.000
           MAX UN=0.7313     IEQ=    65 NODE     33 DOF   1  Y-DISPL.F
           MIN UN=-.6996E-09 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0
```

```
ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5557E+05 RIMNOR= 0.000
           RENORM=0.9188E-03 REMNOR=0.9286E-21 RATIO =0.1286E-03 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 32.04     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5557E+05 RDR   = 0.000
           RATIOT=0.1286E-03 RATIOR= 0.000
           MAX UN=0.2064E-01 IEQ=    95 NODE     48 DOF   1  Y-DISPL.F
           MIN UN=-.1821E-09 IEQ=    23 NODE     12 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     5 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5557E+05 RIMNOR= 0.000
           RENORM=0.4066E-07 REMNOR=0.1315E-20 RATIO =0.8554E-06 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 32.04     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5557E+05 RDR   = 0.000
           RATIOT=0.8554E-06 RATIOR= 0.000
           MAX UN=0.1656E-03 IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           MIN UN=-.5826E-09 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                             |
|                                     NewProject.BaseDesignSection_28.SLERara_3454                                            |
|                                Exe Time :24 July 2019      10:49:25                                                         |
+-----------------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     5 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    2     ( AT TIME   2.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)            (
    1   7.3632134E-04  -8.8298491E-05
    2   7.1866353E-04  -8.8270122E-05
    3   7.0101684E-04  -8.8188444E-05
    4   6.8339156E-04  -8.8055668E-05
    5   6.6579805E-04  -8.7870759E-05
    6   6.4824682E-04  -8.7632332E-05
    7   6.3074883E-04  -8.7338225E-05
    8   6.1331540E-04  -8.6986195E-05
    9   5.9595839E-04  -8.6573677E-05
   10   5.7869003E-04  -8.6099620E-05
   11   5.6152263E-04  -8.5564178E-05
   12   5.4446846E-04  -8.4967235E-05
   13   5.2753986E-04  -8.4308381E-05
   14   5.1912653E-04  -8.3955635E-05
   15   5.0240963E-04  -8.3202894E-05
   16   4.8584958E-04  -8.2387103E-05
   17   4.6945901E-04  -8.1508015E-05
   18   4.5325061E-04  -8.0565314E-05
   19   4.3723714E-04  -7.9558708E-05
   20   4.2143141E-04  -7.8487922E-05
   21   4.0584626E-04  -7.7352780E-05
   22   3.9049455E-04  -7.6153851E-05
   23   3.7538888E-04  -7.4892488E-05
   24   3.6054165E-04  -7.3569642E-05
   25   3.4596505E-04  -7.2186441E-05
   26   3.3167101E-04  -7.0744248E-05
   27   3.1767125E-04  -6.9244684E-05
   28   3.0397690E-04  -6.7689659E-05
   29   2.9059890E-04  -6.6081921E-05
   30   2.7754741E-04  -6.4425061E-05
   31   2.6483188E-04  -6.2723044E-05
   32   2.5246097E-04  -6.0980279E-05
   33   2.4044223E-04  -5.9201607E-05
   34   2.2878236E-04  -5.7392413E-05
   35   2.1748690E-04  -5.5558619E-05
   36   2.0656012E-04  -5.3706750E-05
   37   1.9600493E-04  -5.1844021E-05
   38   1.8582273E-04  -4.9978703E-05
   39   1.7601307E-04  -4.8119756E-05
   40   1.6657376E-04  -4.6276920E-05
   41   1.5750070E-04  -4.4458077E-05
   42   1.4878872E-04  -4.2666313E-05
```

43	1.4043254E-04	-4.0899691E-05
44	1.3242764E-04	-3.9151764E-05
45	1.2477131E-04	-3.7411818E-05
46	1.1746339E-04	-3.5664684E-05
47	1.1050721E-04	-3.3890943E-05
48	1.0391039E-04	-3.2067137E-05
49	9.7685545E-05	-3.0165928E-05
50	9.1851255E-05	-2.8156111E-05
51	8.6429558E-05	-2.6049426E-05
52	8.1434564E-05	-2.3898396E-05
53	7.6870333E-05	-2.1747271E-05
54	7.2733221E-05	-1.9632663E-05
55	6.9012865E-05	-1.7584087E-05
56	6.5693636E-05	-1.5624755E-05
57	6.2755840E-05	-1.3772282E-05
58	6.0176754E-05	-1.2039355E-05
59	5.7931553E-05	-1.0434599E-05
60	5.5994027E-05	-8.9631507E-06
61	5.4337276E-05	-7.6269433E-06
62	5.2934286E-05	-6.4251957E-06
63	5.1758451E-05	-5.3546532E-06
64	5.0784021E-05	-4.4101689E-06
65	4.9986426E-05	-3.5850510E-06
66	4.9342558E-05	-2.8715733E-06
67	4.8830920E-05	-2.2612356E-06
68	4.8431794E-05	-1.7449424E-06
69	4.8127284E-05	-1.3135424E-06
70	4.7901321E-05	-9.5797518E-07
71	4.7739628E-05	-6.6939190E-07
72	4.7629668E-05	-4.3925186E-07
73	4.7560575E-05	-2.5939847E-07
74	4.7523058E-05	-1.2230752E-07
75	4.7509258E-05	-2.1127569E-08
76	4.7512636E-05	5.0482285E-08
77	4.7527867E-05	9.8331964E-08
78	4.7550740E-05	1.2775957E-07
79	4.7578072E-05	1.4370021E-07
80	4.7607624E-05	1.5068785E-07
81	4.7638014E-05	1.5268393E-07
82	4.7653291E-05	1.5278336E-07

```
+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                 Exe Time :24 July 2019      10:49:25                                                  |
+-----------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P  N O.   1

0_L                                 :
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
C U R R E N T    T I M E    I S      2.0000

 HARDENING 2D SOIL ELEMENT

 ****** TOTAL STRESS FORMULATION *****
```

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	1.195	-7.3632E-04	25.00	11.95	25.00	13.25	UL-RL	4.7747E+04	0.000	0.000	1.000	1.000	11.95	0.000	0.000	Strato1_2_8_L_0
2 D	1.846	-7.1866E-04	19.31	9.229	19.31	10.23	UL-RL	4.7747E+04	-0.2000	0.000	1.000	1.000	9.229	0.000	0.000	Strato1_2_8_L_0
3 D	2.405	-7.0102E-04	25.16	12.03	25.16	13.34	UL-RL	4.7747E+04	-0.4000	0.000	1.000	1.000	12.03	0.000	0.000	Strato1_2_8_L_0
4 D	2.710	-6.8339E-04	28.35	13.55	28.35	15.03	ACTIVE	0.000	-0.6000	0.000	1.000	1.000	13.55	0.000	0.000	Strato1_2_8_L_0
5 D	3.148	-6.6580E-04	32.93	15.74	32.93	17.45	ACTIVE	0.000	-0.8000	0.000	1.000	1.000	15.74	0.000	0.000	Strato1_2_8_L_0
6 D	3.471	-6.4825E-04	36.31	17.35	36.31	19.24	ACTIVE	0.000	-1.000	0.000	1.000	1.000	17.35	0.000	0.000	Strato1_2_8_L_0
7 D	3.880	-6.3075E-04	40.58	19.40	40.58	21.51	ACTIVE	0.000	-1.200	0.000	1.000	1.000	19.40	0.000	0.000	Strato1_2_8_L_0
8 D	4.213	-6.1332E-04	44.07	21.06	44.07	23.35	ACTIVE	0.000	-1.400	0.000	1.000	1.000	21.06	0.000	0.000	Strato1_2_8_L_0
9 D	4.545	-5.9596E-04	47.54	22.72	47.54	25.20	ACTIVE	0.000	-1.600	0.000	1.000	1.000	22.72	0.000	0.000	Strato1_2_8_L_0

10 D	4.891	-5.7869E-04	51.16	24.45	51.16	27.12	ACTIVE	0.000	-1.800	0.000	1.000	1.000	
24.45	0.000	0.000	Strato1_2_8_L_0										
11 D	5.286	-5.6152E-04	55.29	26.43	55.29	29.30	ACTIVE	0.000	-2.000	0.000	1.000	1.000	
26.43	0.000	0.000	Strato1_2_8_L_0										
12 D	5.633	-5.4447E-04	58.93	28.17	58.93	31.23	ACTIVE	0.000	-2.200	0.000	1.000	1.000	
28.17	0.000	0.000	Strato1_2_8_L_0										
13 D	4.516	-5.2754E-04	62.99	30.11	62.99	33.38	ACTIVE	0.000	-2.400	0.000	1.000	1.000	
30.11	0.000	0.000	Strato1_2_8_L_0										
14 D	4.645	-5.1913E-04	64.78	30.97	64.78	34.33	ACTIVE	0.000	-2.500	0.000	1.000	1.000	
30.97	0.000	0.000	Strato1_2_8_L_0										
15 D	6.544	-5.0241E-04	68.45	32.72	68.45	36.28	ACTIVE	0.000	-2.700	0.000	1.000	1.000	
32.72	0.000	0.000	Strato1_2_8_L_0										
16 D	6.928	-4.8585E-04	72.47	34.64	72.47	38.41	ACTIVE	0.000	-2.900	0.000	1.000	1.000	
34.64	0.000	0.000	Strato1_2_8_L_0										
17 D	7.280	-4.6946E-04	76.15	36.40	76.15	40.36	ACTIVE	0.000	-3.100	0.000	1.000	1.000	
36.40	0.000	0.000	Strato1_2_8_L_0										
18 D	7.661	-4.5325E-04	80.13	38.30	80.13	42.47	ACTIVE	0.000	-3.300	0.000	1.000	1.000	
38.30	0.000	0.000	Strato1_2_8_L_0										
19 D	8.013	-4.3724E-04	83.82	40.07	83.82	44.42	ACTIVE	0.000	-3.500	0.000	1.000	1.000	
40.07	0.000	0.000	Strato1_2_8_L_0										
20 D	8.392	-4.2143E-04	87.78	41.96	87.78	46.52	ACTIVE	0.000	-3.700	0.000	1.000	1.000	
41.96	0.000	0.000	Strato1_2_8_L_0										
21 D	8.718	-4.0585E-04	91.19	43.59	91.19	48.33	ACTIVE	0.000	-3.900	0.000	1.000	1.000	
43.59	0.000	0.000	Strato1_2_8_L_0										
22 D	9.096	-3.9049E-04	95.15	45.48	95.15	50.43	ACTIVE	0.000	-4.100	0.000	1.000	1.000	
45.48	0.000	0.000	Strato1_2_8_L_0										
23 D	9.473	-3.7539E-04	99.09	47.37	99.09	52.52	ACTIVE	0.000	-4.300	0.000	1.000	1.000	
47.37	0.000	0.000	Strato1_2_8_L_0										
24 D	9.828	-3.6054E-04	102.8	49.14	102.8	54.49	ACTIVE	0.000	-4.500	0.000	1.000	1.000	
49.14	0.000	0.000	Strato1_2_8_L_0										
25 D	10.20	-3.4597E-04	106.7	51.02	106.7	56.57	ACTIVE	0.000	-4.700	0.000	1.000	1.000	
51.02	0.000	0.000	Strato1_2_8_L_0										
26 D	10.56	-3.3167E-04	110.5	52.80	110.5	58.54	ACTIVE	0.000	-4.900	0.000	1.000	1.000	
52.80	0.000	0.000	Strato1_2_8_L_0										
27 D	10.93	-3.1767E-04	114.4	54.67	114.4	60.62	ACTIVE	0.000	-5.100	0.000	1.000	1.000	
54.67	0.000	0.000	Strato1_2_8_L_0										
28 D	11.27	-3.0398E-04	117.9	56.35	117.9	62.48	ACTIVE	0.000	-5.300	0.000	1.000	1.000	
56.35	0.000	0.000	Strato1_2_8_L_0										
29 D	11.64	-2.9060E-04	121.8	58.22	121.8	64.55	ACTIVE	0.000	-5.500	0.000	1.000	1.000	
58.22	0.000	0.000	Strato1_2_8_L_0										
30 D	12.00	-2.7755E-04	125.5	60.00	125.5	66.53	ACTIVE	0.000	-5.700	0.000	1.000	1.000	
60.00	0.000	0.000	Strato1_2_8_L_0										
31 D	12.37	-2.6483E-04	129.4	61.87	129.4	68.60	ACTIVE	0.000	-5.900	0.000	1.000	1.000	
61.87	0.000	0.000	Strato1_2_8_L_0										
32 D	12.73	-2.5246E-04	133.2	63.66	133.2	70.58	ACTIVE	0.000	-6.100	0.000	1.000	1.000	
63.66	0.000	0.000	Strato1_2_8_L_0										
33 D	13.10	-2.4044E-04	137.1	65.52	137.1	72.65	ACTIVE	0.000	-6.300	0.000	1.000	1.000	
65.52	0.000	0.000	Strato1_2_8_L_0										
34 D	13.46	-2.2878E-04	140.8	67.31	140.8	74.63	ACTIVE	0.000	-6.500	0.000	1.000	1.000	
67.31	0.000	0.000	Strato1_2_8_L_0										
35 D	13.83	-2.1749E-04	144.7	69.17	144.7	76.69	ACTIVE	0.000	-6.700	0.000	1.000	1.000	
69.17	0.000	0.000	Strato1_2_8_L_0										
36 D	14.19	-2.0656E-04	148.4	70.95	148.4	78.67	ACTIVE	0.000	-6.900	0.000	1.000	1.000	
70.95	0.000	0.000	Strato1_2_8_L_0										
37 D	14.55	-1.9600E-04	152.2	72.74	152.2	80.65	ACTIVE	0.000	-7.100	0.000	1.000	1.000	
72.74	0.000	0.000	Strato1_2_8_L_0										
38 D	14.92	-1.8582E-04	156.1	74.60	156.1	82.71	ACTIVE	0.000	-7.300	0.000	1.000	1.000	
74.60	0.000	0.000	Strato1_2_8_L_0										
39 D	15.28	-1.7601E-04	159.8	76.39	159.8	84.70	ACTIVE	0.000	-7.500	0.000	1.000	1.000	
76.39	0.000	0.000	Strato1_2_8_L_0										
40 D	15.76	-1.6657E-04	163.7	78.80	163.7	86.75	UL-RL	4.7747E+04	-7.700	0.000	1.000	1.000	
78.80	0.000	0.000	Strato1_2_8_L_0										
41 D	16.24	-1.5750E-04	167.4	81.22	167.4	88.74	UL-RL	4.7747E+04	-7.900	0.000	1.000	1.000	
81.22	0.000	0.000	Strato1_2_8_L_0										
42 D	16.74	-1.4879E-04	171.3	83.69	171.3	90.79	UL-RL	4.7747E+04	-8.100	0.000	1.000	1.000	
83.69	0.000	0.000	Strato1_2_8_L_0										
43 D	17.20	-1.4043E-04	174.9	86.01	174.9	92.71	UL-RL	4.7747E+04	-8.300	0.000	1.000	1.000	
86.01	0.000	0.000	Strato1_2_8_L_0										
44 D	17.69	-1.3243E-04	178.8	88.44	178.8	94.76	UL-RL	4.7747E+04	-8.500	0.000	1.000	1.000	
88.44	0.000	0.000	Strato1_2_8_L_0										
45 D	18.16	-1.2477E-04	182.6	90.80	182.6	96.76	UL-RL	4.7747E+04	-8.700	0.000	1.000	1.000	
90.80	0.000	0.000	Strato1_2_8_L_0										
46 D	18.64	-1.1746E-04	186.4	93.20	186.4	98.81	UL-RL	4.7747E+04	-8.900	0.000	1.000	1.000	
93.20	0.000	0.000	Strato1_2_8_L_0										
47 D	19.10	-1.1051E-04	190.2	95.52	190.2	100.8	UL-RL	4.7747E+04	-9.100	0.000	1.000	1.000	
95.52	0.000	0.000	Strato1_2_8_L_0										
48 D	19.58	-1.0391E-04	194.1	97.89	194.1	102.8	UL-RL	4.7747E+04	-9.300	0.000	1.000	1.000	
97.89	0.000	0.000	Strato1_2_8_L_0										
49 D	20.05	-9.7686E-05	197.9	100.2	197.9	104.9	UL-RL	4.7747E+04	-9.500	0.000	1.000	1.000	
100.2	0.000	0.000	Strato1_2_8_L_0										
50 D	17.71	-9.1851E-05	201.9	88.53	201.9	100.9	UL-RL	1.3507E+05	-9.700	0.000	1.000	1.000	
88.53	0.000	0.000	Strato2_3095_82743_L_0										
51 D	18.25	-8.6430E-05	205.8	91.24	205.8	102.9	UL-RL	1.3507E+05	-9.900	0.000	1.000	1.000	
91.24	0.000	0.000	Strato2_3095_82743_L_0										
52 D	18.78	-8.1435E-05	209.8	93.89	209.8	104.9	UL-RL	1.3507E+05	-10.10	0.000	1.000	1.000	

93.89	0.000	0.000	Strato2_3095_82743_L_0										
53 D	19.31	-7.6870E-05	213.8	96.54	213.8	106.9	UL-RL	1.3507E+05	-10.30	0.000	1.000	1.000	
96.54	0.000	0.000	Strato2_3095_82743_L_0										
54 D	19.82	-7.2733E-05	217.8	99.08	217.8	108.9	UL-RL	1.3507E+05	-10.50	0.000	1.000	1.000	
99.08	0.000	0.000	Strato2_3095_82743_L_0										
55 D	20.32	-6.9013E-05	221.9	101.6	221.9	110.9	UL-RL	1.3507E+05	-10.70	0.000	1.000	1.000	
101.6	0.000	0.000	Strato2_3095_82743_L_0										
56 D	20.81	-6.5694E-05	225.8	104.0	225.8	112.9	UL-RL	1.3507E+05	-10.90	0.000	1.000	1.000	
104.0	0.000	0.000	Strato2_3095_82743_L_0										
57 D	21.29	-6.2756E-05	229.9	106.5	229.9	114.9	UL-RL	1.3507E+05	-11.10	0.000	1.000	1.000	
106.5	0.000	0.000	Strato2_3095_82743_L_0										
58 D	21.75	-6.0177E-05	233.7	108.7	233.7	116.9	UL-RL	1.3507E+05	-11.30	0.000	1.000	1.000	
108.7	0.000	0.000	Strato2_3095_82743_L_0										
59 D	22.22	-5.7932E-05	237.8	111.1	237.8	118.9	UL-RL	1.3507E+05	-11.50	0.000	1.000	1.000	
111.1	0.000	0.000	Strato2_3095_82743_L_0										
60 D	22.66	-5.5994E-05	241.8	113.3	241.8	120.9	UL-RL	1.3507E+05	-11.70	0.000	1.000	1.000	
113.3	0.000	0.000	Strato2_3095_82743_L_0										
61 D	23.11	-5.4337E-05	245.8	115.6	245.8	122.9	UL-RL	1.3507E+05	-11.90	0.000	1.000	1.000	
115.6	0.000	0.000	Strato2_3095_82743_L_0										
62 D	23.56	-5.2934E-05	249.9	117.8	249.9	124.9	UL-RL	1.3507E+05	-12.10	0.000	1.000	1.000	
117.8	0.000	0.000	Strato2_3095_82743_L_0										
63 D	23.99	-5.1758E-05	253.8	119.9	253.8	126.9	UL-RL	1.3507E+05	-12.30	0.000	1.000	1.000	
119.9	0.000	0.000	Strato2_3095_82743_L_0										
64 D	24.42	-5.0784E-05	257.9	122.1	257.9	128.9	UL-RL	1.3507E+05	-12.50	0.000	1.000	1.000	
122.1	0.000	0.000	Strato2_3095_82743_L_0										
65 D	24.83	-4.9986E-05	261.8	124.1	261.8	130.9	UL-RL	1.3507E+05	-12.70	0.000	1.000	1.000	
124.1	0.000	0.000	Strato2_3095_82743_L_0										
66 D	25.25	-4.9343E-05	265.8	126.2	265.8	132.9	UL-RL	1.3507E+05	-12.90	0.000	1.000	1.000	
126.2	0.000	0.000	Strato2_3095_82743_L_0										
67 D	25.65	-4.8831E-05	269.7	128.3	269.7	134.9	UL-RL	1.3507E+05	-13.10	0.000	1.000	1.000	
128.3	0.000	0.000	Strato2_3095_82743_L_0										
68 D	26.05	-4.8432E-05	273.6	130.3	273.6	136.8	UL-RL	1.3507E+05	-13.30	0.000	1.000	1.000	
130.3	0.000	0.000	Strato2_3095_82743_L_0										
69 D	26.45	-4.8127E-05	277.5	132.3	277.5	138.8	UL-RL	1.3507E+05	-13.50	0.000	1.000	1.000	
132.3	0.000	0.000	Strato2_3095_82743_L_0										
70 D	26.85	-4.7901E-05	281.4	134.2	281.4	140.7	UL-RL	1.3507E+05	-13.70	0.000	1.000	1.000	
134.2	0.000	0.000	Strato2_3095_82743_L_0										
71 D	27.24	-4.7740E-05	285.3	136.2	285.3	142.7	UL-RL	1.3507E+05	-13.90	0.000	1.000	1.000	
136.2	0.000	0.000	Strato2_3095_82743_L_0										
72 D	27.64	-4.7630E-05	289.2	138.2	289.2	144.6	UL-RL	1.3507E+05	-14.10	0.000	1.000	1.000	
138.2	0.000	0.000	Strato2_3095_82743_L_0										
73 D	28.02	-4.7561E-05	293.1	140.1	293.1	146.5	UL-RL	1.3507E+05	-14.30	0.000	1.000	1.000	
140.1	0.000	0.000	Strato2_3095_82743_L_0										
74 D	28.41	-4.7523E-05	297.0	142.1	297.0	148.5	UL-RL	1.3507E+05	-14.50	0.000	1.000	1.000	
142.1	0.000	0.000	Strato2_3095_82743_L_0										
75 D	28.81	-4.7509E-05	300.9	144.0	300.9	150.4	UL-RL	1.3507E+05	-14.70	0.000	1.000	1.000	
144.0	0.000	0.000	Strato2_3095_82743_L_0										
76 D	29.20	-4.7513E-05	304.8	146.0	304.8	152.4	UL-RL	1.3507E+05	-14.90	0.000	1.000	1.000	
146.0	0.000	0.000	Strato2_3095_82743_L_0										
77 D	29.59	-4.7528E-05	308.7	147.9	308.7	154.4	UL-RL	1.3507E+05	-15.10	0.000	1.000	1.000	
147.9	0.000	0.000	Strato2_3095_82743_L_0										
78 D	29.98	-4.7551E-05	312.6	149.9	312.6	156.3	UL-RL	1.3507E+05	-15.30	0.000	1.000	1.000	
149.9	0.000	0.000	Strato2_3095_82743_L_0										
79 D	30.37	-4.7578E-05	316.6	151.9	316.6	158.3	UL-RL	1.3507E+05	-15.50	0.000	1.000	1.000	
151.9	0.000	0.000	Strato2_3095_82743_L_0										
80 D	30.76	-4.7608E-05	320.4	153.8	320.4	160.2	UL-RL	1.3507E+05	-15.70	0.000	1.000	1.000	
153.8	0.000	0.000	Strato2_3095_82743_L_0										
81 D	23.36	-4.7638E-05	324.3	155.7	324.3	162.2	UL-RL	1.3507E+05	-15.90	0.000	1.000	1.000	
155.7	0.000	0.000	Strato2_3095_82743_L_0										
82 D	7.837	-4.7653E-05	326.3	156.7	326.3	163.2	UL-RL	1.3507E+05	-16.00	0.000	1.000	1.000	
156.7	0.000	0.000	Strato2_3095_82743_L_0										

```
+-------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                   Exe Time :24 July 2019      10:49:25                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

0_R                          :
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
C U R R E N T   T I M E   I S      2.0000

 HARDENING 2D SOIL ELEMENT

 ****** TOTAL STRESS FORMULATION *****

 EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P          STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
```

Peq		Su_a	Su_p	LAYER									
1	D	0.000	7.3632E-04	0.000	0.000	0.000	0.000	ACTIVE	0.000	0.000	0.000	1.000	1.000
0.000		0.000	0.000	Strato1_2_8_L_0									
2	D	1.990	7.1866E-04	3.800	9.951	3.800	9.951	UL-RL	3.3134E+04	-0.2000	0.000	1.000	1.000
9.951		0.000	0.000	Strato1_2_8_L_0									
3	D	2.354	7.0102E-04	7.600	11.77	7.600	11.77	UL-RL	3.3134E+04	-0.4000	0.000	1.000	1.000
11.77		0.000	0.000	Strato1_2_8_L_0									
4	D	2.718	6.8339E-04	11.40	13.59	11.40	13.59	V-C	1.1045E+04	-0.6000	0.000	1.000	1.000
13.59		0.000	0.000	Strato1_2_8_L_0									
5	D	3.082	6.6580E-04	15.20	15.41	15.20	15.41	V-C	1.1045E+04	-0.8000	0.000	1.000	1.000
15.41		0.000	0.000	Strato1_2_8_L_0									
6	D	3.446	6.4825E-04	19.00	17.23	19.00	17.23	V-C	1.1045E+04	-1.000	0.000	1.000	1.000
17.23		0.000	0.000	Strato1_2_8_L_0									
7	D	3.810	6.3075E-04	22.80	19.05	22.80	19.05	V-C	1.1045E+04	-1.200	0.000	1.000	1.000
19.05		0.000	0.000	Strato1_2_8_L_0									
8	D	4.174	6.1332E-04	26.60	20.87	26.60	20.87	V-C	1.1045E+04	-1.400	0.000	1.000	1.000
20.87		0.000	0.000	Strato1_2_8_L_0									
9	D	4.539	5.9596E-04	30.40	22.69	30.40	22.69	V-C	1.1045E+04	-1.600	0.000	1.000	1.000
22.69		0.000	0.000	Strato1_2_8_L_0									
10	D	4.903	5.7869E-04	34.20	24.52	34.20	24.52	V-C	1.1045E+04	-1.800	0.000	1.000	1.000
24.52		0.000	0.000	Strato1_2_8_L_0									
11	D	5.268	5.6152E-04	38.00	26.34	38.00	26.34	V-C	1.1045E+04	-2.000	0.000	1.000	1.000
26.34		0.000	0.000	Strato1_2_8_L_0									
12	D	5.633	5.4447E-04	41.80	28.17	41.80	28.17	V-C	1.1045E+04	-2.200	0.000	1.000	1.000
28.17		0.000	0.000	Strato1_2_8_L_0									
13	D	4.499	5.2754E-04	45.60	29.99	45.60	29.99	V-C	1.1045E+04	-2.400	0.000	1.000	1.000
29.99		0.000	0.000	Strato1_2_8_L_0									
14	D	4.636	5.1913E-04	47.50	30.91	47.50	30.91	V-C	1.1045E+04	-2.500	0.000	1.000	1.000
30.91		0.000	0.000	Strato1_2_8_L_0									
15	D	6.548	5.0241E-04	51.30	32.74	51.30	32.74	V-C	1.1045E+04	-2.700	0.000	1.000	1.000
32.74		0.000	0.000	Strato1_2_8_L_0									
16	D	6.914	4.8585E-04	55.10	34.57	55.10	34.57	V-C	1.1045E+04	-2.900	0.000	1.000	1.000
34.57		0.000	0.000	Strato1_2_8_L_0									
17	D	7.280	4.6946E-04	58.90	36.40	58.90	36.40	V-C	1.1045E+04	-3.100	0.000	1.000	1.000
36.40		0.000	0.000	Strato1_2_8_L_0									
18	D	7.647	4.5325E-04	62.70	38.24	62.70	38.24	V-C	1.1045E+04	-3.300	0.000	1.000	1.000
38.24		0.000	0.000	Strato1_2_8_L_0									
19	D	8.015	4.3724E-04	66.50	40.07	66.50	40.07	V-C	1.1045E+04	-3.500	0.000	1.000	1.000
40.07		0.000	0.000	Strato1_2_8_L_0									
20	D	8.383	4.2143E-04	70.30	41.91	70.30	41.91	V-C	1.1045E+04	-3.700	0.000	1.000	1.000
41.91		0.000	0.000	Strato1_2_8_L_0									
21	D	8.751	4.0585E-04	74.10	43.76	74.10	43.76	V-C	1.1045E+04	-3.900	0.000	1.000	1.000
43.76		0.000	0.000	Strato1_2_8_L_0									
22	D	9.120	3.9049E-04	77.90	45.60	77.90	45.60	V-C	1.1045E+04	-4.100	0.000	1.000	1.000
45.60		0.000	0.000	Strato1_2_8_L_0									
23	D	9.489	3.7539E-04	81.70	47.45	81.70	47.45	V-C	1.1045E+04	-4.300	0.000	1.000	1.000
47.45		0.000	0.000	Strato1_2_8_L_0									
24	D	9.859	3.6054E-04	85.50	49.30	85.50	49.30	V-C	1.1045E+04	-4.500	0.000	1.000	1.000
49.30		0.000	0.000	Strato1_2_8_L_0									
25	D	10.23	3.4597E-04	89.30	51.15	89.30	51.15	V-C	1.1045E+04	-4.700	0.000	1.000	1.000
51.15		0.000	0.000	Strato1_2_8_L_0									
26	D	10.60	3.3167E-04	93.10	53.01	93.10	53.01	V-C	1.1045E+04	-4.900	0.000	1.000	1.000
53.01		0.000	0.000	Strato1_2_8_L_0									
27	D	10.97	3.1767E-04	96.90	54.87	96.90	54.87	V-C	1.1045E+04	-5.100	0.000	1.000	1.000
54.87		0.000	0.000	Strato1_2_8_L_0									
28	D	11.35	3.0398E-04	100.7	56.73	100.7	56.73	V-C	1.1045E+04	-5.300	0.000	1.000	1.000
56.73		0.000	0.000	Strato1_2_8_L_0									
29	D	11.72	2.9060E-04	104.5	58.59	104.5	58.59	V-C	1.1045E+04	-5.500	0.000	1.000	1.000
58.59		0.000	0.000	Strato1_2_8_L_0									
30	D	12.09	2.7755E-04	108.3	60.46	108.3	60.46	V-C	1.1045E+04	-5.700	0.000	1.000	1.000
60.46		0.000	0.000	Strato1_2_8_L_0									
31	D	12.47	2.6483E-04	112.1	62.34	112.1	62.34	V-C	1.1045E+04	-5.900	0.000	1.000	1.000
62.34		0.000	0.000	Strato1_2_8_L_0									
32	D	12.84	2.5246E-04	115.9	64.22	115.9	64.22	V-C	1.1045E+04	-6.100	0.000	1.000	1.000
64.22		0.000	0.000	Strato1_2_8_L_0									
33	D	13.22	2.4044E-04	119.7	66.10	119.7	66.10	V-C	1.1045E+04	-6.300	0.000	1.000	1.000
66.10		0.000	0.000	Strato1_2_8_L_0									
34	D	13.60	2.2878E-04	123.5	67.98	123.5	67.98	V-C	1.1045E+04	-6.500	0.000	1.000	1.000
67.98		0.000	0.000	Strato1_2_8_L_0									
35	D	13.97	2.1749E-04	127.3	69.87	127.3	69.87	V-C	1.1045E+04	-6.700	0.000	1.000	1.000
69.87		0.000	0.000	Strato1_2_8_L_0									
36	D	14.35	2.0656E-04	131.1	71.76	131.1	71.76	V-C	1.1045E+04	-6.900	0.000	1.000	1.000
71.76		0.000	0.000	Strato1_2_8_L_0									
37	D	14.73	1.9600E-04	134.9	73.66	134.9	73.66	V-C	1.1045E+04	-7.100	0.000	1.000	1.000
73.66		0.000	0.000	Strato1_2_8_L_0									
38	D	15.11	1.8582E-04	138.7	75.56	138.7	75.56	V-C	1.1045E+04	-7.300	0.000	1.000	1.000
75.56		0.000	0.000	Strato1_2_8_L_0									
39	D	15.49	1.7601E-04	142.5	77.47	142.5	77.47	V-C	1.1045E+04	-7.500	0.000	1.000	1.000
77.47		0.000	0.000	Strato1_2_8_L_0									
40	D	15.88	1.6657E-04	146.3	79.38	146.3	79.38	V-C	1.1045E+04	-7.700	0.000	1.000	1.000
79.38		0.000	0.000	Strato1_2_8_L_0									
41	D	16.26	1.5750E-04	150.1	81.29	150.1	81.29	V-C	1.1045E+04	-7.900	0.000	1.000	1.000
81.29		0.000	0.000	Strato1_2_8_L_0									

42 D	16.64	1.4879E-04	153.9	83.21	153.9	83.21	V-C	1.1045E+04	-8.100	0.000	1.000	1.000
83.21	0.000	0.000	Strato1_2_8_L_0									
43 D	17.03	1.4043E-04	157.7	85.13	157.7	85.13	V-C	1.1045E+04	-8.300	0.000	1.000	1.000
85.13	0.000	0.000	Strato1_2_8_L_0									
44 D	17.41	1.3243E-04	161.5	87.06	161.5	87.06	V-C	1.1045E+04	-8.500	0.000	1.000	1.000
87.06	0.000	0.000	Strato1_2_8_L_0									
45 D	17.80	1.2477E-04	165.3	88.99	165.3	88.99	V-C	1.1045E+04	-8.700	0.000	1.000	1.000
88.99	0.000	0.000	Strato1_2_8_L_0									
46 D	18.18	1.1746E-04	169.1	90.92	169.1	90.92	V-C	1.1045E+04	-8.900	0.000	1.000	1.000
90.92	0.000	0.000	Strato1_2_8_L_0									
47 D	18.57	1.1051E-04	172.9	92.86	172.9	92.86	V-C	1.1045E+04	-9.100	0.000	1.000	1.000
92.86	0.000	0.000	Strato1_2_8_L_0									
48 D	18.96	1.0391E-04	176.7	94.80	176.7	94.80	V-C	1.1045E+04	-9.300	0.000	1.000	1.000
94.80	0.000	0.000	Strato1_2_8_L_0									
49 D	19.35	9.7686E-05	180.5	96.74	180.5	96.74	V-C	1.1045E+04	-9.500	0.000	1.000	1.000
96.74	0.000	0.000	Strato1_2_8_L_0									
50 D	18.90	9.1851E-05	184.5	94.49	184.5	94.49	V-C	2.4402E+04	-9.700	0.000	1.000	1.000
94.49	0.000	0.000	Strato2_3095_82743_L_0									
51 D	19.27	8.6430E-05	188.5	96.33	188.5	96.38	UL-RL	7.3205E+04	-9.900	0.000	1.000	1.000
96.33	0.000	0.000	Strato2_3095_82743_L_0									
52 D	19.63	8.1435E-05	192.5	98.14	192.5	98.28	UL-RL	7.3205E+04	-10.10	0.000	1.000	1.000
98.14	0.000	0.000	Strato2_3095_82743_L_0									
53 D	20.00	7.6870E-05	196.5	99.99	196.5	100.2	UL-RL	7.3205E+04	-10.30	0.000	1.000	1.000
99.99	0.000	0.000	Strato2_3095_82743_L_0									
54 D	20.37	7.2733E-05	200.5	101.8	200.5	102.1	UL-RL	7.3205E+04	-10.50	0.000	1.000	1.000
101.8	0.000	0.000	Strato2_3095_82743_L_0									
55 D	20.75	6.9013E-05	204.5	103.7	204.5	104.0	UL-RL	7.3205E+04	-10.70	0.000	1.000	1.000
103.7	0.000	0.000	Strato2_3095_82743_L_0									
56 D	21.13	6.5694E-05	208.5	105.6	208.5	106.0	UL-RL	7.3205E+04	-10.90	0.000	1.000	1.000
105.6	0.000	0.000	Strato2_3095_82743_L_0									
57 D	21.51	6.2756E-05	212.5	107.5	212.5	107.9	UL-RL	7.3205E+04	-11.10	0.000	1.000	1.000
107.5	0.000	0.000	Strato2_3095_82743_L_0									
58 D	21.90	6.0177E-05	216.5	109.5	216.5	109.8	UL-RL	7.3205E+04	-11.30	0.000	1.000	1.000
109.5	0.000	0.000	Strato2_3095_82743_L_0									
59 D	22.28	5.7932E-05	220.5	111.4	220.5	111.8	UL-RL	7.3205E+04	-11.50	0.000	1.000	1.000
111.4	0.000	0.000	Strato2_3095_82743_L_0									
60 D	22.68	5.5994E-05	224.5	113.4	224.5	113.7	UL-RL	7.3205E+04	-11.70	0.000	1.000	1.000
113.4	0.000	0.000	Strato2_3095_82743_L_0									
61 D	23.07	5.4337E-05	228.5	115.3	228.5	115.7	UL-RL	7.3205E+04	-11.90	0.000	1.000	1.000
115.3	0.000	0.000	Strato2_3095_82743_L_0									
62 D	23.46	5.2934E-05	232.5	117.3	232.5	117.7	UL-RL	7.3205E+04	-12.10	0.000	1.000	1.000
117.3	0.000	0.000	Strato2_3095_82743_L_0									
63 D	23.86	5.1758E-05	236.5	119.3	236.5	119.6	UL-RL	7.3205E+04	-12.30	0.000	1.000	1.000
119.3	0.000	0.000	Strato2_3095_82743_L_0									
64 D	24.26	5.0784E-05	240.5	121.3	240.5	121.6	UL-RL	7.3205E+04	-12.50	0.000	1.000	1.000
121.3	0.000	0.000	Strato2_3095_82743_L_0									
65 D	24.66	4.9986E-05	244.5	123.3	244.5	123.6	UL-RL	7.3205E+04	-12.70	0.000	1.000	1.000
123.3	0.000	0.000	Strato2_3095_82743_L_0									
66 D	25.06	4.9343E-05	248.5	125.3	248.5	125.5	UL-RL	7.3205E+04	-12.90	0.000	1.000	1.000
125.3	0.000	0.000	Strato2_3095_82743_L_0									
67 D	25.46	4.8831E-05	252.5	127.3	252.5	127.5	UL-RL	7.3205E+04	-13.10	0.000	1.000	1.000
127.3	0.000	0.000	Strato2_3095_82743_L_0									
68 D	25.86	4.8432E-05	256.5	129.3	256.5	129.5	UL-RL	7.3205E+04	-13.30	0.000	1.000	1.000
129.3	0.000	0.000	Strato2_3095_82743_L_0									
69 D	26.26	4.8127E-05	260.5	131.3	260.5	131.5	UL-RL	7.3205E+04	-13.50	0.000	1.000	1.000
131.3	0.000	0.000	Strato2_3095_82743_L_0									
70 D	26.66	4.7901E-05	264.5	133.3	264.5	133.5	UL-RL	7.3205E+04	-13.70	0.000	1.000	1.000
133.3	0.000	0.000	Strato2_3095_82743_L_0									
71 D	27.07	4.7740E-05	268.5	135.3	268.5	135.5	UL-RL	7.3205E+04	-13.90	0.000	1.000	1.000
135.3	0.000	0.000	Strato2_3095_82743_L_0									
72 D	27.47	4.7630E-05	272.5	137.3	272.5	137.4	UL-RL	7.3205E+04	-14.10	0.000	1.000	1.000
137.3	0.000	0.000	Strato2_3095_82743_L_0									
73 D	27.87	4.7561E-05	276.5	139.4	276.5	139.4	UL-RL	7.3205E+04	-14.30	0.000	1.000	1.000
139.4	0.000	0.000	Strato2_3095_82743_L_0									
74 D	28.27	4.7523E-05	280.5	141.4	280.5	141.4	UL-RL	7.3205E+04	-14.50	0.000	1.000	1.000
141.4	0.000	0.000	Strato2_3095_82743_L_0									
75 D	28.68	4.7509E-05	284.5	143.4	284.5	143.4	UL-RL	7.3205E+04	-14.70	0.000	1.000	1.000
143.4	0.000	0.000	Strato2_3095_82743_L_0									
76 D	29.08	4.7513E-05	288.5	145.4	288.5	145.4	UL-RL	7.3205E+04	-14.90	0.000	1.000	1.000
145.4	0.000	0.000	Strato2_3095_82743_L_0									
77 D	29.48	4.7528E-05	292.5	147.4	292.5	147.4	UL-RL	7.3205E+04	-15.10	0.000	1.000	1.000
147.4	0.000	0.000	Strato2_3095_82743_L_0									
78 D	29.88	4.7551E-05	296.5	149.4	296.5	149.4	UL-RL	7.3205E+04	-15.30	0.000	1.000	1.000
149.4	0.000	0.000	Strato2_3095_82743_L_0									
79 D	30.28	4.7578E-05	300.5	151.4	300.5	151.4	UL-RL	7.3205E+04	-15.50	0.000	1.000	1.000
151.4	0.000	0.000	Strato2_3095_82743_L_0									
80 D	30.68	4.7608E-05	304.5	153.4	304.5	153.4	UL-RL	7.3205E+04	-15.70	0.000	1.000	1.000
153.4	0.000	0.000	Strato2_3095_82743_L_0									
81 D	23.31	4.7638E-05	308.5	155.4	308.5	155.4	UL-RL	7.3205E+04	-15.90	0.000	1.000	1.000
155.4	0.000	0.000	Strato2_3095_82743_L_0									
82 D	7.820	4.7653E-05	310.5	156.4	310.5	156.4	UL-RL	7.3205E+04	-16.00	0.000	1.000	1.000
156.4	0.000	0.000	Strato2_3095_82743_L_0									

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                   Exe Time :24 July 2019      10:49:25                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   81
C U R R E N T   T I M E   I S      2.0000

 WALL2D ELEMENT

   EL      TA           TB           MA           MB
-----------------------------------------------------------
    1  1.1950      -1.1950      4.15307E-12 0.23900
    2  1.0505      -1.0505     -0.23900     0.44910
    3  1.1018      -1.1018     -0.44910     0.66947
    4  1.0941      -1.0941     -0.66947     0.88830
    5  1.1602      -1.1602     -0.88830      1.1203
    6  1.1851      -1.1851      -1.1203      1.3574
    7  1.2548      -1.2548      -1.3574      1.6083
    8  1.2931      -1.2931      -1.6083      1.8669
    9  1.2991      -1.2991      -1.8669      2.1268
   10  1.2866      -1.2866      -2.1268      2.3841
   11  1.3039      -1.3039      -2.3841      2.6449
   12  1.3039      -1.3039      -2.6449      2.9057
   13  1.3211      -1.3211      -2.9057      3.0378
   14  1.3297      -1.3297      -3.0378      3.3037
   15  1.3261      -1.3261      -3.3037      3.5689
   16  1.3401      -1.3401      -3.5689      3.8370
   17  1.3394      -1.3394      -3.8370      4.1048
   18  1.3525      -1.3525      -4.1048      4.3753
   19  1.3509      -1.3509      -4.3753      4.6455
   20  1.3600      -1.3600      -4.6455      4.9175
   21  1.3268      -1.3268      -4.9175      5.1829
   22  1.3031      -1.3031      -5.1829      5.4435
   23  1.2867      -1.2867      -5.4435      5.7008
   24  1.2556      -1.2556      -5.7008      5.9520
   25  1.2293      -1.2293      -5.9520      6.1978
   26  1.1876      -1.1876      -6.1978      6.4353
   27  1.1483      -1.1483      -6.4353      6.6650
   28  1.0722      -1.0722      -6.6650      6.8794
   29 0.99699     -0.99699      -6.8794      7.0788
   30 0.90508     -0.90508      -7.0788      7.2598
   31 0.81173     -0.81173      -7.2598      7.4222
   32 0.70039     -0.70039      -7.4222      7.5623
   33 0.58530     -0.58530      -7.5623      7.6793
   34 0.45088     -0.45088      -7.6793      7.7695
   35 0.31047     -0.31047      -7.7695      7.8316
   36 0.14701     -0.14701      -7.8316      7.8610
   37-3.75682E-02 3.75682E-02 -7.8610      7.8535
   38-0.23120      0.23120      -7.8535      7.8072
   39-0.44744      0.44744      -7.8072      7.7178
   40-0.56321      0.56321      -7.7178      7.6051
   41-0.57739      0.57739      -7.6051      7.4896
   42-0.48133      0.48133      -7.4896      7.3934
   43-0.30647      0.30647      -7.3934      7.3321
   44-2.97546E-02 2.97546E-02 -7.3321      7.3261
   45 0.33257     -0.33257      -7.3261      7.3926
   46 0.78814     -0.78814      -7.3926      7.5503
   47  1.3212      -1.3212      -7.5503      7.8145
   48  1.9388      -1.9388      -7.8145      8.2023
   49  2.6361      -2.6361      -8.2023      8.7295
   50  1.4442      -1.4442      -8.7295      9.0183
   51 0.42608     -0.42608      -9.0183      9.1035
   52-0.42436      0.42436      -9.1035      9.0187
   53 -1.1138       1.1138      -9.0187      8.7959
   54 -1.6676       1.6676      -8.7959      8.4624
   55 -2.0916       2.0916      -8.4624      8.0440
   56 -2.4095       2.4095      -8.0440      7.5621
   57 -2.6261       2.6261      -7.5621      7.0369
   58 -2.7728       2.7728      -7.0369      6.4824
   59 -2.8425       2.8425      -6.4824      5.9139
   60 -2.8543       2.8543      -5.9139      5.3430
   61 -2.8095       2.8095      -5.3430      4.7811
   62 -2.7171       2.7171      -4.7811      4.2377
   63 -2.5928       2.5928      -4.2377      3.7191
   64 -2.4353       2.4353      -3.7191      3.2321
   65 -2.2673       2.2673      -3.2321      2.7786
```

```
   66 -2.0772      2.0772     -2.7786      2.3632
   67 -1.8842      1.8842     -2.3632      1.9863
   68 -1.6917      1.6917     -1.9863      1.6480
   69 -1.5026      1.5026     -1.6480      1.3475
   70 -1.3190      1.3190     -1.3475      1.0837
   71 -1.1428      1.1428     -1.0837     0.85513
   72-0.97540     0.97540    -0.85513     0.66005
   73-0.82586     0.82586    -0.66005     0.49488
   74-0.68680     0.68680    -0.49488     0.35752
   75-0.55876     0.55876    -0.35752     0.24576
   76-0.44207     0.44207    -0.24576     0.15735
   77-0.33391     0.33391    -0.15735     9.05656E-02
   78-0.23420     0.23420    -9.05656E-02 4.37264E-02
   79-0.14293     0.14293    -4.37264E-02 1.51410E-02
   80-6.73297E-02 6.73297E-02-1.51410E-02 1.67504E-03
   81-1.67488E-02 1.67488E-02-1.67504E-03-1.60583E-12



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.SLERara_3454                                        |
|                                  Exe Time :24 July 2019      10:49:25                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P    N O.    4

Tieback_768111                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      2.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-----------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.4833E+05 RIMNOR= 4910.
           RENORM= 642.1     REMNOR=0.1315E-20 RATIO =0.1153     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 30.76     RMMAX = 9.104
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.4833E+05 RDR   = 4910.
           RATIOT=0.1153     RATIOR= 0.000
           MAX UN= 6.914     IEQ=    31 NODE     16 DOF   1  Y-DISPL.F
           MIN UN=-.8776E-10 IEQ=    53 NODE     27 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.4833E+05 RIMNOR= 4910.
           RENORM= 132.8     REMNOR=0.2099E-17 RATIO =0.5242E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 30.76     RMMAX = 9.104
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.4833E+05 RDR   = 4910.
           RATIOT=0.5242E-01 RATIOR= 0.000
           MAX UN= 5.824     IEQ=    79 NODE     40 DOF   1  Y-DISPL.F
           MIN UN=-.1132E-03 IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.4833E+05 RIMNOR= 4910.
           RENORM=0.1631E-01 REMNOR=0.2299E-18 RATIO =0.5809E-03 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 30.76     RMMAX = 9.104
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.4833E+05 RDR   = 4910.
           RATIOT=0.5809E-03 RATIOR= 0.000
           MAX UN=0.1277     IEQ=    99 NODE     50 DOF   1  Y-DISPL.F
           MIN UN=-.8303E-08 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.4833E+05 RIMNOR= 4910.
           RENORM=0.2720E-15 REMNOR=0.2827E-18 RATIO =0.7502E-10 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 30.76     RMMAX = 9.104
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.4833E+05 RDR   = 4910.
           RATIOT=0.7502E-10 RATIOR= 0.000
```

```
          MAX UN=0.1044E-07 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
          MIN UN=-.1096E-07 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
          NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                   |
|                                                                                                                             |
|                                      NewProject.BaseDesignSection_28.SLERara_3454                                           |
|                                   Exe Time :24 July 2019      10:49:25                                                      |
+-----------------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     4 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    3     ( AT TIME   3.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)           (
    1   1.4493888E-02  -1.9975505E-03
    2   1.4094380E-02  -1.9975222E-03
    3   1.3694886E-02  -1.9973932E-03
    4   1.3295436E-02  -1.9970628E-03
    5   1.2896082E-02  -1.9964095E-03
    6   1.2496903E-02  -1.9952941E-03
    7   1.2098006E-02  -1.9935596E-03
    8   1.1699532E-02  -1.9910315E-03
    9   1.1301659E-02  -1.9875176E-03
   10   1.0904604E-02  -1.9828101E-03
   11   1.0508629E-02  -1.9766849E-03
   12   1.0114041E-02  -1.9689004E-03
   13   9.7211971E-03  -1.9591974E-03
   14   9.5255551E-03  -1.9535495E-03
   15   9.1361143E-03  -1.9404435E-03
   16   8.7495538E-03  -1.9246948E-03
   17   8.3664339E-03  -1.9059838E-03
   18   7.9873779E-03  -1.8840096E-03
   19   7.6130615E-03  -1.8585633E-03
   20   7.2441894E-03  -1.8295644E-03
   21   6.8814693E-03  -1.7970610E-03
   22   6.5255868E-03  -1.7612302E-03
   23   6.1771796E-03  -1.7223651E-03
   24   5.8368207E-03  -1.6808007E-03
   25   5.5050181E-03  -1.6368535E-03
   26   5.1822182E-03  -1.5908223E-03
   27   4.8688109E-03  -1.5429889E-03
   28   4.5651268E-03  -1.4936177E-03
   29   4.2714498E-03  -1.4429581E-03
   30   3.9880138E-03  -1.3912442E-03
   31   3.7150077E-03  -1.3386952E-03
   32   3.4525791E-03  -1.2855160E-03
   33   3.2008320E-03  -1.2318968E-03
   34   2.9598378E-03  -1.1780157E-03
   35   2.7296322E-03  -1.1240377E-03
   36   2.5102190E-03  -1.0701159E-03
   37   2.3015726E-03  -1.0163924E-03
   38   2.1036410E-03  -9.6299887E-04
   39   1.9163440E-03  -9.1005638E-04
   40   1.7395809E-03  -8.5767721E-04
   41   1.5732287E-03  -8.0596456E-04
   42   1.4171443E-03  -7.5501339E-04
   43   1.2711674E-03  -7.0491128E-04
   44   1.1351186E-03  -6.5573830E-04
   45   1.0088052E-03  -6.0756913E-04
   46   8.9201945E-04  -5.6047229E-04
   47   7.8454056E-04  -5.1451092E-04
   48   6.8613596E-04  -4.6974361E-04
   49   5.9656043E-04  -4.2622397E-04
   50   5.1555984E-04  -3.8400233E-04
   51   4.4285971E-04  -3.4327757E-04
   52   3.7812966E-04  -3.0436384E-04
   53   3.2097912E-04  -2.6750069E-04
   54   2.7098096E-04  -2.3286389E-04
   55   2.2767740E-04  -2.0056950E-04
   56   1.9059267E-04  -1.7068251E-04
   57   1.5924251E-04  -1.4322384E-04
   58   1.3314235E-04  -1.1817698E-04
   59   1.1181412E-04  -9.5494160E-05
   60   9.4791977E-05  -7.5101898E-05
   61   8.1626955E-05  -5.6905694E-05
   62   7.1890699E-05  -4.0794509E-05
```

63	6.5178402E-05	-2.6644567E-05
64	6.1110976E-05	-1.4323069E-05
65	5.9336525E-05	-3.6913018E-06
66	5.9531254E-05	5.3924530E-06
67	6.1399799E-05	1.3070595E-05
68	6.4675194E-05	1.9484259E-05
69	6.9118394E-05	2.4771288E-05
70	7.4517477E-05	2.9064840E-05
71	8.0686587E-05	3.2492246E-05
72	8.7464671E-05	3.5174086E-05
73	9.4714056E-05	3.7223445E-05
74	1.0231887E-04	3.8745155E-05
75	1.1018335E-04	3.9835355E-05
76	1.1823007E-04	4.0581367E-05
77	1.2639817E-04	4.1061467E-05
78	1.3464154E-04	4.1344800E-05
79	1.4292697E-04	4.1491362E-05
80	1.5123235E-04	4.1551947E-05
81	1.5954478E-04	4.1567953E-05
82	1.6370204E-04	4.1568670E-05

```
+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                      NewProject.BaseDesignSection_28.SLERara_3454                                             |
|                                  Exe Time :24 July 2019      10:49:25                                                         |
+-------------------------------------------------------------------------------------------------------------------------------+
New Project


 S T R E S S    R E S U L T S    F O R    G R O U P    N O.    1

 0_L                              :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
 C U R R E N T    T I M E    I S      3.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P           STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
-------------------------------------------------------------------------
   1 D   1.195     -1.4494E-02   25.00       11.95       25.00       13.25          ACTIVE   0.000       0.000       0.000       1.000       1.000
11.95       0.000       0.000     Strato1_2_8_L_0
   2 D   1.846     -1.4094E-02   19.31       9.229       19.31       10.23          ACTIVE   0.000     -0.2000       0.000       1.000       1.000
9.229       0.000       0.000     Strato1_2_8_L_0
   3 D   2.405     -1.3695E-02   25.16       12.03       25.16       13.34          ACTIVE   0.000     -0.4000       0.000       1.000       1.000
12.03       0.000       0.000     Strato1_2_8_L_0
   4 D   2.710     -1.3295E-02   28.35       13.55       28.35       15.03          ACTIVE   0.000     -0.6000       0.000       1.000       1.000
13.55       0.000       0.000     Strato1_2_8_L_0
   5 D   3.148     -1.2896E-02   32.93       15.74       32.93       17.45          ACTIVE   0.000     -0.8000       0.000       1.000       1.000
15.74       0.000       0.000     Strato1_2_8_L_0
   6 D   3.471     -1.2497E-02   36.31       17.35       36.31       19.24          ACTIVE   0.000      -1.000       0.000       1.000       1.000
17.35       0.000       0.000     Strato1_2_8_L_0
   7 D   3.880     -1.2098E-02   40.58       19.40       40.58       21.51          ACTIVE   0.000      -1.200       0.000       1.000       1.000
19.40       0.000       0.000     Strato1_2_8_L_0
   8 D   4.213     -1.1700E-02   44.07       21.06       44.07       23.35          ACTIVE   0.000      -1.400       0.000       1.000       1.000
21.06       0.000       0.000     Strato1_2_8_L_0
   9 D   4.545     -1.1302E-02   47.54       22.72       47.54       25.20          ACTIVE   0.000      -1.600       0.000       1.000       1.000
22.72       0.000       0.000     Strato1_2_8_L_0
  10 D   4.891     -1.0905E-02   51.16       24.45       51.16       27.12          ACTIVE   0.000      -1.800       0.000       1.000       1.000
24.45       0.000       0.000     Strato1_2_8_L_0
  11 D   5.286     -1.0509E-02   55.29       26.43       55.29       29.30          ACTIVE   0.000      -2.000       0.000       1.000       1.000
26.43       0.000       0.000     Strato1_2_8_L_0
  12 D   5.633     -1.0114E-02   58.93       28.17       58.93       31.23          ACTIVE   0.000      -2.200       0.000       1.000       1.000
28.17       0.000       0.000     Strato1_2_8_L_0
  13 D   4.516     -9.7212E-03   62.99       30.11       62.99       33.38          ACTIVE   0.000      -2.400       0.000       1.000       1.000
30.11       0.000       0.000     Strato1_2_8_L_0
  14 D   4.645     -9.5256E-03   64.78       30.97       64.78       34.33          ACTIVE   0.000      -2.500       0.000       1.000       1.000
30.97       0.000       0.000     Strato1_2_8_L_0
  15 D   6.544     -9.1361E-03   68.45       32.72       68.45       36.28          ACTIVE   0.000      -2.700       0.000       1.000       1.000
32.72       0.000       0.000     Strato1_2_8_L_0
  16 D   6.928     -8.7496E-03   72.47       34.64       72.47       38.41          ACTIVE   0.000      -2.900       0.000       1.000       1.000
34.64       0.000       0.000     Strato1_2_8_L_0
  17 D   7.280     -8.3664E-03   76.15       36.40       76.15       40.36          ACTIVE   0.000      -3.100       0.000       1.000       1.000
36.40       0.000       0.000     Strato1_2_8_L_0
  18 D   7.661     -7.9874E-03   80.13       38.30       80.13       42.47          ACTIVE   0.000      -3.300       0.000       1.000       1.000
38.30       0.000       0.000     Strato1_2_8_L_0
  19 D   8.013     -7.6131E-03   83.82       40.07       83.82       44.42          ACTIVE   0.000      -3.500       0.000       1.000       1.000
40.07       0.000       0.000     Strato1_2_8_L_0
```

20 D	8.392	-7.2442E-03	87.78	41.96	87.78	46.52	ACTIVE	0.000	-3.700	0.000	1.000	1.000	
41.96	0.000	0.000	Strato1_2_8_L_0										
21 D	8.718	-6.8815E-03	91.19	43.59	91.19	48.33	ACTIVE	0.000	-3.900	0.000	1.000	1.000	
43.59	0.000	0.000	Strato1_2_8_L_0										
22 D	9.096	-6.5256E-03	95.15	45.48	95.15	50.43	ACTIVE	0.000	-4.100	0.000	1.000	1.000	
45.48	0.000	0.000	Strato1_2_8_L_0										
23 D	9.473	-6.1772E-03	99.09	47.37	99.09	52.52	ACTIVE	0.000	-4.300	0.000	1.000	1.000	
47.37	0.000	0.000	Strato1_2_8_L_0										
24 D	9.828	-5.8368E-03	102.8	49.14	102.8	54.49	ACTIVE	0.000	-4.500	0.000	1.000	1.000	
49.14	0.000	0.000	Strato1_2_8_L_0										
25 D	10.20	-5.5050E-03	106.7	51.02	106.7	56.57	ACTIVE	0.000	-4.700	0.000	1.000	1.000	
51.02	0.000	0.000	Strato1_2_8_L_0										
26 D	10.56	-5.1822E-03	110.5	52.80	110.5	58.54	ACTIVE	0.000	-4.900	0.000	1.000	1.000	
52.80	0.000	0.000	Strato1_2_8_L_0										
27 D	10.93	-4.8688E-03	114.4	54.67	114.4	60.62	ACTIVE	0.000	-5.100	0.000	1.000	1.000	
54.67	0.000	0.000	Strato1_2_8_L_0										
28 D	11.27	-4.5651E-03	117.9	56.35	117.9	62.48	ACTIVE	0.000	-5.300	0.000	1.000	1.000	
56.35	0.000	0.000	Strato1_2_8_L_0										
29 D	11.64	-4.2714E-03	121.8	58.22	121.8	64.55	ACTIVE	0.000	-5.500	0.000	1.000	1.000	
58.22	0.000	0.000	Strato1_2_8_L_0										
30 D	12.00	-3.9880E-03	125.5	60.00	125.5	66.53	ACTIVE	0.000	-5.700	0.000	1.000	1.000	
60.00	0.000	0.000	Strato1_2_8_L_0										
31 D	12.37	-3.7150E-03	129.4	61.87	129.4	68.60	ACTIVE	0.000	-5.900	0.000	1.000	1.000	
61.87	0.000	0.000	Strato1_2_8_L_0										
32 D	12.73	-3.4526E-03	133.2	63.66	133.2	70.58	ACTIVE	0.000	-6.100	0.000	1.000	1.000	
63.66	0.000	0.000	Strato1_2_8_L_0										
33 D	13.10	-3.2008E-03	137.1	65.52	137.1	72.65	ACTIVE	0.000	-6.300	0.000	1.000	1.000	
65.52	0.000	0.000	Strato1_2_8_L_0										
34 D	13.46	-2.9598E-03	140.8	67.31	140.8	74.63	ACTIVE	0.000	-6.500	0.000	1.000	1.000	
67.31	0.000	0.000	Strato1_2_8_L_0										
35 D	13.83	-2.7296E-03	144.7	69.17	144.7	76.69	ACTIVE	0.000	-6.700	0.000	1.000	1.000	
69.17	0.000	0.000	Strato1_2_8_L_0										
36 D	14.19	-2.5102E-03	148.4	70.95	148.4	78.67	ACTIVE	0.000	-6.900	0.000	1.000	1.000	
70.95	0.000	0.000	Strato1_2_8_L_0										
37 D	14.55	-2.3016E-03	152.2	72.74	152.2	80.65	ACTIVE	0.000	-7.100	0.000	1.000	1.000	
72.74	0.000	0.000	Strato1_2_8_L_0										
38 D	14.92	-2.1036E-03	156.1	74.60	156.1	82.71	ACTIVE	0.000	-7.300	0.000	1.000	1.000	
74.60	0.000	0.000	Strato1_2_8_L_0										
39 D	15.28	-1.9163E-03	159.8	76.39	159.8	84.70	ACTIVE	0.000	-7.500	0.000	1.000	1.000	
76.39	0.000	0.000	Strato1_2_8_L_0										
40 D	15.65	-1.7396E-03	163.7	78.24	163.7	86.75	ACTIVE	0.000	-7.700	0.000	1.000	1.000	
78.24	0.000	0.000	Strato1_2_8_L_0										
41 D	16.01	-1.5732E-03	167.4	80.03	167.4	88.74	ACTIVE	0.000	-7.900	0.000	1.000	1.000	
80.03	0.000	0.000	Strato1_2_8_L_0										
42 D	16.38	-1.4171E-03	171.3	81.89	171.3	90.79	ACTIVE	0.000	-8.100	0.000	1.000	1.000	
81.89	0.000	0.000	Strato1_2_8_L_0										
43 D	16.72	-1.2712E-03	174.9	83.62	174.9	92.71	ACTIVE	0.000	-8.300	0.000	1.000	1.000	
83.62	0.000	0.000	Strato1_2_8_L_0										
44 D	17.09	-1.1351E-03	178.8	85.47	178.8	94.76	ACTIVE	0.000	-8.500	0.000	1.000	1.000	
85.47	0.000	0.000	Strato1_2_8_L_0										
45 D	17.45	-1.0088E-03	182.6	87.26	182.6	96.76	ACTIVE	0.000	-8.700	0.000	1.000	1.000	
87.26	0.000	0.000	Strato1_2_8_L_0										
46 D	17.82	-8.9202E-04	186.4	89.11	186.4	98.81	ACTIVE	0.000	-8.900	0.000	1.000	1.000	
89.11	0.000	0.000	Strato1_2_8_L_0										
47 D	18.18	-7.8454E-04	190.2	90.91	190.2	100.8	ACTIVE	0.000	-9.100	0.000	1.000	1.000	
90.91	0.000	0.000	Strato1_2_8_L_0										
48 D	18.55	-6.8614E-04	194.1	92.76	194.1	102.8	ACTIVE	0.000	-9.300	0.000	1.000	1.000	
92.76	0.000	0.000	Strato1_2_8_L_0										
49 D	18.92	-5.9656E-04	197.9	94.60	197.9	104.9	ACTIVE	0.000	-9.500	0.000	1.000	1.000	
94.60	0.000	0.000	Strato1_2_8_L_0										
50 D	11.60	-5.1556E-04	201.9	58.01	201.9	100.9	UL-RL	7.2037E+04	-9.700	0.000	1.000	1.000	
58.01	0.000	0.000	Strato2_3095_82743_L_0										
51 D	13.11	-4.4286E-04	205.8	65.56	205.8	102.9	UL-RL	7.2037E+04	-9.900	0.000	1.000	1.000	
65.56	0.000	0.000	Strato2_3095_82743_L_0										
52 D	14.50	-3.7813E-04	209.8	72.52	209.8	104.9	UL-RL	7.2037E+04	-10.10	0.000	1.000	1.000	
72.52	0.000	0.000	Strato2_3095_82743_L_0										
53 D	15.79	-3.2098E-04	213.8	78.95	213.8	106.9	UL-RL	7.2037E+04	-10.30	0.000	1.000	1.000	
78.95	0.000	0.000	Strato2_3095_82743_L_0										
54 D	16.96	-2.7098E-04	217.8	84.80	217.8	108.9	UL-RL	7.2037E+04	-10.50	0.000	1.000	1.000	
84.80	0.000	0.000	Strato2_3095_82743_L_0										
55 D	18.04	-2.2768E-04	221.9	90.18	221.9	110.9	UL-RL	7.2037E+04	-10.70	0.000	1.000	1.000	
90.18	0.000	0.000	Strato2_3095_82743_L_0										
56 D	19.01	-1.9059E-04	225.8	95.04	225.8	112.9	UL-RL	7.2037E+04	-10.90	0.000	1.000	1.000	
95.04	0.000	0.000	Strato2_3095_82743_L_0										
57 D	19.90	-1.5924E-04	229.9	99.51	229.9	114.9	UL-RL	7.2037E+04	-11.10	0.000	1.000	1.000	
99.51	0.000	0.000	Strato2_3095_82743_L_0										
58 D	20.70	-1.3314E-04	233.7	103.5	233.7	116.9	UL-RL	7.2037E+04	-11.30	0.000	1.000	1.000	
103.5	0.000	0.000	Strato2_3095_82743_L_0										
59 D	21.44	-1.1181E-04	237.8	107.2	237.8	118.9	UL-RL	7.2037E+04	-11.50	0.000	1.000	1.000	
107.2	0.000	0.000	Strato2_3095_82743_L_0										
60 D	22.11	-9.4792E-05	241.8	110.5	241.8	120.9	UL-RL	7.2037E+04	-11.70	0.000	1.000	1.000	
110.5	0.000	0.000	Strato2_3095_82743_L_0										
61 D	22.72	-8.1627E-05	245.8	113.6	245.8	122.9	UL-RL	7.2037E+04	-11.90	0.000	1.000	1.000	
113.6	0.000	0.000	Strato2_3095_82743_L_0										
62 D	23.28	-7.1891E-05	249.9	116.4	249.9	124.9	UL-RL	7.2037E+04	-12.10	0.000	1.000	1.000	

```
116.4       0.000       0.000     Strato2_3095_82743_L_0
  63 D   23.79     -6.5178E-05  253.8       119.0       253.8       126.9          UL-RL  7.2037E+04  -12.30       0.000       1.000       1.000
119.0       0.000       0.000     Strato2_3095_82743_L_0
  64 D   24.27     -6.1111E-05  257.9       121.3       257.9       128.9          UL-RL  7.2037E+04  -12.50       0.000       1.000       1.000
121.3       0.000       0.000     Strato2_3095_82743_L_0
  65 D   24.69     -5.9337E-05  261.8       123.5       261.8       130.9          UL-RL  7.2037E+04  -12.70       0.000       1.000       1.000
123.5       0.000       0.000     Strato2_3095_82743_L_0
  66 D   25.10     -5.9531E-05  265.8       125.5       265.8       132.9          UL-RL  7.2037E+04  -12.90       0.000       1.000       1.000
125.5       0.000       0.000     Strato2_3095_82743_L_0
  67 D   25.47     -6.1400E-05  269.7       127.4       269.7       134.9          UL-RL  7.2037E+04  -13.10       0.000       1.000       1.000
127.4       0.000       0.000     Strato2_3095_82743_L_0
  68 D   25.82     -6.4675E-05  273.6       129.1       273.6       136.8          UL-RL  7.2037E+04  -13.30       0.000       1.000       1.000
129.1       0.000       0.000     Strato2_3095_82743_L_0
  69 D   26.15     -6.9118E-05  277.5       130.7       277.5       138.8          UL-RL  7.2037E+04  -13.50       0.000       1.000       1.000
130.7       0.000       0.000     Strato2_3095_82743_L_0
  70 D   26.46     -7.4517E-05  281.4       132.3       281.4       140.7          UL-RL  7.2037E+04  -13.70       0.000       1.000       1.000
132.3       0.000       0.000     Strato2_3095_82743_L_0
  71 D   26.77     -8.0687E-05  285.3       133.8       285.3       142.7          UL-RL  7.2037E+04  -13.90       0.000       1.000       1.000
133.8       0.000       0.000     Strato2_3095_82743_L_0
  72 D   27.06     -8.7465E-05  289.2       135.3       289.2       144.6          UL-RL  7.2037E+04  -14.10       0.000       1.000       1.000
135.3       0.000       0.000     Strato2_3095_82743_L_0
  73 D   27.34     -9.4714E-05  293.1       136.7       293.1       146.5          UL-RL  7.2037E+04  -14.30       0.000       1.000       1.000
136.7       0.000       0.000     Strato2_3095_82743_L_0
  74 D   27.62     -1.0232E-04  297.0       138.1       297.0       148.5          UL-RL  7.2037E+04  -14.50       0.000       1.000       1.000
138.1       0.000       0.000     Strato2_3095_82743_L_0
  75 D   27.90     -1.1018E-04  300.9       139.5       300.9       150.4          UL-RL  7.2037E+04  -14.70       0.000       1.000       1.000
139.5       0.000       0.000     Strato2_3095_82743_L_0
  76 D   28.18     -1.1823E-04  304.8       140.9       304.8       152.4          UL-RL  7.2037E+04  -14.90       0.000       1.000       1.000
140.9       0.000       0.000     Strato2_3095_82743_L_0
  77 D   28.45     -1.2640E-04  308.7       142.3       308.7       154.4          UL-RL  7.2037E+04  -15.10       0.000       1.000       1.000
142.3       0.000       0.000     Strato2_3095_82743_L_0
  78 D   28.73     -1.3464E-04  312.6       143.6       312.6       156.3          UL-RL  7.2037E+04  -15.30       0.000       1.000       1.000
143.6       0.000       0.000     Strato2_3095_82743_L_0
  79 D   29.00     -1.4293E-04  316.6       145.0       316.6       158.3          UL-RL  7.2037E+04  -15.50       0.000       1.000       1.000
145.0       0.000       0.000     Strato2_3095_82743_L_0
  80 D   29.26     -1.5123E-04  320.4       146.3       320.4       160.2          UL-RL  7.2037E+04  -15.70       0.000       1.000       1.000
146.3       0.000       0.000     Strato2_3095_82743_L_0
  81 D   22.15     -1.5954E-04  324.3       147.7       324.3       162.2          UL-RL  7.2037E+04  -15.90       0.000       1.000       1.000
147.7       0.000       0.000     Strato2_3095_82743_L_0
  82 D   7.419     -1.6370E-04  326.3       148.4       326.3       163.2          UL-RL  7.2037E+04  -16.00       0.000       1.000       1.000
148.4       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                  |
 |                                                                                                                               |
 |                                      NewProject.BaseDesignSection_28.SLERara_3454                                             |
 |                                   Exe Time :24 July 2019      10:49:25                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                          :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
 C U R R E N T   T I M E   I S      3.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P          STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1     0.000         --          --          --          --          --          REMOVED     --        0.000       0.000       1.000       1.000
0.000       0.000       0.000     not available
   2     0.000         --          --          --          --          --          REMOVED     --       -0.2000      0.000       1.000       1.000
0.000       0.000       0.000     not available
   3     0.000         --          --          --          --          --          REMOVED     --       -0.4000      0.000       1.000       1.000
0.000       0.000       0.000     not available
   4     0.000         --          --          --          --          --          REMOVED     --       -0.6000      0.000       1.000       1.000
0.000       0.000       0.000     not available
   5     0.000         --          --          --          --          --          REMOVED     --       -0.8000      0.000       1.000       1.000
0.000       0.000       0.000     not available
   6     0.000         --          --          --          --          --          REMOVED     --       -1.000       0.000       1.000       1.000
0.000       0.000       0.000     not available
   7     0.000         --          --          --          --          --          REMOVED     --       -1.200       0.000       1.000       1.000
0.000       0.000       0.000     not available
   8     0.000         --          --          --          --          --          REMOVED     --       -1.400       0.000       1.000       1.000
0.000       0.000       0.000     not available
   9     0.000         --          --          --          --          --          REMOVED     --       -1.600       0.000       1.000       1.000
```

0.000	0.000	0.000	not available										
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000	
0.000	0.000	0.000	not available										
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000	
0.000	0.000	0.000	not available										
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000	
0.000	0.000	0.000	not available										
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000	
0.000	0.000	0.000	not available										
14	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000	
0.000	0.000	0.000	not available										
15	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000	
0.000	0.000	0.000	not available										
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000	
0.000	0.000	0.000	not available										
17 D	1.536	8.3664E-03	1.900	7.678	58.90	36.40	PASSIVE	0.000	-3.100	0.000	1.000	1.000	
7.678	0.000	0.000	Strato1_2_8_L_0										
18 D	4.607	7.9874E-03	5.700	23.03	62.70	38.24	PASSIVE	0.000	-3.300	0.000	1.000	1.000	
23.03	0.000	0.000	Strato1_2_8_L_0										
19 D	7.678	7.6131E-03	9.500	38.39	66.50	40.07	PASSIVE	0.000	-3.500	0.000	1.000	1.000	
38.39	0.000	0.000	Strato1_2_8_L_0										
20 D	10.75	7.2442E-03	13.30	53.75	70.30	53.75	PASSIVE	0.000	-3.700	0.000	1.000	1.000	
53.75	0.000	0.000	Strato1_2_8_L_0										
21 D	13.82	6.8815E-03	17.10	69.10	74.10	69.10	PASSIVE	0.000	-3.900	0.000	1.000	1.000	
69.10	0.000	0.000	Strato1_2_8_L_0										
22 D	16.35	6.5256E-03	20.90	81.74	77.90	81.74	V-C	5890.	-4.100	0.000	1.000	1.000	
81.74	0.000	0.000	Strato1_2_8_L_0										
23 D	16.32	6.1772E-03	24.70	81.62	81.70	81.62	V-C	5890.	-4.300	0.000	1.000	1.000	
81.62	0.000	0.000	Strato1_2_8_L_0										
24 D	16.31	5.8368E-03	28.50	81.55	85.50	81.55	V-C	5890.	-4.500	0.000	1.000	1.000	
81.55	0.000	0.000	Strato1_2_8_L_0										
25 D	16.31	5.5050E-03	32.30	81.54	89.30	81.54	V-C	5890.	-4.700	0.000	1.000	1.000	
81.54	0.000	0.000	Strato1_2_8_L_0										
26 D	16.32	5.1822E-03	36.10	81.58	93.10	81.58	V-C	5890.	-4.900	0.000	1.000	1.000	
81.58	0.000	0.000	Strato1_2_8_L_0										
27 D	16.33	4.8688E-03	39.90	81.67	96.90	81.67	V-C	5890.	-5.100	0.000	1.000	1.000	
81.67	0.000	0.000	Strato1_2_8_L_0										
28 D	16.37	4.5651E-03	43.70	81.83	100.7	81.83	V-C	5890.	-5.300	0.000	1.000	1.000	
81.83	0.000	0.000	Strato1_2_8_L_0										
29 D	16.41	4.2714E-03	47.50	82.04	104.5	82.04	V-C	5890.	-5.500	0.000	1.000	1.000	
82.04	0.000	0.000	Strato1_2_8_L_0										
30 D	16.46	3.9880E-03	51.30	82.32	108.3	82.32	V-C	5890.	-5.700	0.000	1.000	1.000	
82.32	0.000	0.000	Strato1_2_8_L_0										
31 D	16.53	3.7150E-03	55.10	82.66	112.1	82.66	V-C	5890.	-5.900	0.000	1.000	1.000	
82.66	0.000	0.000	Strato1_2_8_L_0										
32 D	16.61	3.4526E-03	58.90	83.07	115.9	83.07	V-C	5890.	-6.100	0.000	1.000	1.000	
83.07	0.000	0.000	Strato1_2_8_L_0										
33 D	16.71	3.2008E-03	62.70	83.53	119.7	83.53	V-C	5890.	-6.300	0.000	1.000	1.000	
83.53	0.000	0.000	Strato1_2_8_L_0										
34 D	16.81	2.9598E-03	66.50	84.07	123.5	84.07	V-C	5890.	-6.500	0.000	1.000	1.000	
84.07	0.000	0.000	Strato1_2_8_L_0										
35 D	16.93	2.7296E-03	70.30	84.67	127.3	84.67	V-C	5890.	-6.700	0.000	1.000	1.000	
84.67	0.000	0.000	Strato1_2_8_L_0										
36 D	17.07	2.5102E-03	74.10	85.33	131.1	85.33	V-C	5890.	-6.900	0.000	1.000	1.000	
85.33	0.000	0.000	Strato1_2_8_L_0										
37 D	17.21	2.3016E-03	77.90	86.06	134.9	86.06	V-C	5890.	-7.100	0.000	1.000	1.000	
86.06	0.000	0.000	Strato1_2_8_L_0										
38 D	17.37	2.1036E-03	81.70	86.86	138.7	86.86	V-C	5890.	-7.300	0.000	1.000	1.000	
86.86	0.000	0.000	Strato1_2_8_L_0										
39 D	17.54	1.9163E-03	85.50	87.72	142.5	87.72	V-C	5890.	-7.500	0.000	1.000	1.000	
87.72	0.000	0.000	Strato1_2_8_L_0										
40 D	17.73	1.7396E-03	89.30	88.64	146.3	88.64	V-C	5890.	-7.700	0.000	1.000	1.000	
88.64	0.000	0.000	Strato1_2_8_L_0										
41 D	17.93	1.5732E-03	93.10	89.63	150.1	89.63	V-C	5890.	-7.900	0.000	1.000	1.000	
89.63	0.000	0.000	Strato1_2_8_L_0										
42 D	18.14	1.4171E-03	96.90	90.68	153.9	90.68	V-C	5890.	-8.100	0.000	1.000	1.000	
90.68	0.000	0.000	Strato1_2_8_L_0										
43 D	18.36	1.2712E-03	100.7	91.79	157.7	91.79	V-C	5890.	-8.300	0.000	1.000	1.000	
91.79	0.000	0.000	Strato1_2_8_L_0										
44 D	18.59	1.1351E-03	104.5	92.96	161.5	92.96	V-C	5890.	-8.500	0.000	1.000	1.000	
92.96	0.000	0.000	Strato1_2_8_L_0										
45 D	18.84	1.0088E-03	108.3	94.19	165.3	94.19	V-C	5890.	-8.700	0.000	1.000	1.000	
94.19	0.000	0.000	Strato1_2_8_L_0										
46 D	19.10	8.9202E-04	112.1	95.48	169.1	95.48	V-C	5890.	-8.900	0.000	1.000	1.000	
95.48	0.000	0.000	Strato1_2_8_L_0										
47 D	19.37	7.8454E-04	115.9	96.83	172.9	96.83	V-C	5890.	-9.100	0.000	1.000	1.000	
96.83	0.000	0.000	Strato1_2_8_L_0										
48 D	19.65	6.8614E-04	119.7	98.23	176.7	98.23	V-C	5890.	-9.300	0.000	1.000	1.000	
98.23	0.000	0.000	Strato1_2_8_L_0										
49 D	19.94	5.9656E-04	123.5	99.68	180.5	99.68	V-C	5890.	-9.500	0.000	1.000	1.000	
99.68	0.000	0.000	Strato1_2_8_L_0										
50 D	18.96	5.1556E-04	127.5	94.82	184.5	94.82	V-C	1.3014E+04	-9.700	0.000	1.000	1.000	
94.82	0.000	0.000	Strato2_3095_82743_L_0										
51 D	18.94	4.4286E-04	131.5	94.71	188.5	96.38	UL-RL	3.9043E+04	-9.900	0.000	1.000	1.000	
94.71	0.000	0.000	Strato2_3095_82743_L_0										

52 D	18.85	3.7813E-04	135.5	94.23	192.5	98.28	UL-RL	3.9043E+04	-10.10	0.000	1.000	1.000	
94.23	0.000	0.000	Strato2_3095_82743_L_0										
53 D	18.81	3.2098E-04	139.5	94.05	196.5	100.2	UL-RL	3.9043E+04	-10.30	0.000	1.000	1.000	
94.05	0.000	0.000	Strato2_3095_82743_L_0										
54 D	18.83	2.7098E-04	143.5	94.15	200.5	102.1	UL-RL	3.9043E+04	-10.50	0.000	1.000	1.000	
94.15	0.000	0.000	Strato2_3095_82743_L_0										
55 D	18.90	2.2768E-04	147.5	94.51	204.5	104.0	UL-RL	3.9043E+04	-10.70	0.000	1.000	1.000	
94.51	0.000	0.000	Strato2_3095_82743_L_0										
56 D	19.02	1.9059E-04	151.5	95.12	208.5	106.0	UL-RL	3.9043E+04	-10.90	0.000	1.000	1.000	
95.12	0.000	0.000	Strato2_3095_82743_L_0										
57 D	19.19	1.5924E-04	155.5	95.95	212.5	107.9	UL-RL	3.9043E+04	-11.10	0.000	1.000	1.000	
95.95	0.000	0.000	Strato2_3095_82743_L_0										
58 D	19.40	1.3314E-04	159.5	96.99	216.5	109.8	UL-RL	3.9043E+04	-11.30	0.000	1.000	1.000	
96.99	0.000	0.000	Strato2_3095_82743_L_0										
59 D	19.64	1.1181E-04	163.5	98.21	220.5	111.8	UL-RL	3.9043E+04	-11.50	0.000	1.000	1.000	
98.21	0.000	0.000	Strato2_3095_82743_L_0										
60 D	19.92	9.4792E-05	167.5	99.60	224.5	113.7	UL-RL	3.9043E+04	-11.70	0.000	1.000	1.000	
99.60	0.000	0.000	Strato2_3095_82743_L_0										
61 D	20.23	8.1627E-05	171.5	101.1	228.5	115.7	UL-RL	3.9043E+04	-11.90	0.000	1.000	1.000	
101.1	0.000	0.000	Strato2_3095_82743_L_0										
62 D	20.56	7.1891E-05	175.5	102.8	232.5	117.7	UL-RL	3.9043E+04	-12.10	0.000	1.000	1.000	
102.8	0.000	0.000	Strato2_3095_82743_L_0										
63 D	20.92	6.5178E-05	179.5	104.6	236.5	119.6	UL-RL	3.9043E+04	-12.30	0.000	1.000	1.000	
104.6	0.000	0.000	Strato2_3095_82743_L_0										
64 D	21.30	6.1111E-05	183.5	106.5	240.5	121.6	UL-RL	3.9043E+04	-12.50	0.000	1.000	1.000	
106.5	0.000	0.000	Strato2_3095_82743_L_0										
65 D	21.69	5.9337E-05	187.5	108.5	244.5	123.6	UL-RL	3.9043E+04	-12.70	0.000	1.000	1.000	
108.5	0.000	0.000	Strato2_3095_82743_L_0										
66 D	22.10	5.9531E-05	191.5	110.5	248.5	125.5	UL-RL	3.9043E+04	-12.90	0.000	1.000	1.000	
110.5	0.000	0.000	Strato2_3095_82743_L_0										
67 D	22.53	6.1400E-05	195.5	112.6	252.5	127.5	UL-RL	3.9043E+04	-13.10	0.000	1.000	1.000	
112.6	0.000	0.000	Strato2_3095_82743_L_0										
68 D	22.96	6.4675E-05	199.5	114.8	256.5	129.5	UL-RL	3.9043E+04	-13.30	0.000	1.000	1.000	
114.8	0.000	0.000	Strato2_3095_82743_L_0										
69 D	23.40	6.9118E-05	203.5	117.0	260.5	131.5	UL-RL	3.9043E+04	-13.50	0.000	1.000	1.000	
117.0	0.000	0.000	Strato2_3095_82743_L_0										
70 D	23.85	7.4517E-05	207.5	119.2	264.5	133.5	UL-RL	3.9043E+04	-13.70	0.000	1.000	1.000	
119.2	0.000	0.000	Strato2_3095_82743_L_0										
71 D	24.30	8.0687E-05	211.5	121.5	268.5	135.5	UL-RL	3.9043E+04	-13.90	0.000	1.000	1.000	
121.5	0.000	0.000	Strato2_3095_82743_L_0										
72 D	24.76	8.7465E-05	215.5	123.8	272.5	137.4	UL-RL	3.9043E+04	-14.10	0.000	1.000	1.000	
123.8	0.000	0.000	Strato2_3095_82743_L_0										
73 D	25.23	9.4714E-05	219.5	126.1	276.5	139.4	UL-RL	3.9043E+04	-14.30	0.000	1.000	1.000	
126.1	0.000	0.000	Strato2_3095_82743_L_0										
74 D	25.69	1.0232E-04	223.5	128.5	280.5	141.4	UL-RL	3.9043E+04	-14.50	0.000	1.000	1.000	
128.5	0.000	0.000	Strato2_3095_82743_L_0										
75 D	26.16	1.1018E-04	227.5	130.8	284.5	143.4	UL-RL	3.9043E+04	-14.70	0.000	1.000	1.000	
130.8	0.000	0.000	Strato2_3095_82743_L_0										
76 D	26.63	1.1823E-04	231.5	133.1	288.5	145.4	UL-RL	3.9043E+04	-14.90	0.000	1.000	1.000	
133.1	0.000	0.000	Strato2_3095_82743_L_0										
77 D	27.09	1.2640E-04	235.5	135.5	292.5	147.4	UL-RL	3.9043E+04	-15.10	0.000	1.000	1.000	
135.5	0.000	0.000	Strato2_3095_82743_L_0										
78 D	27.56	1.3464E-04	239.5	137.8	296.5	149.4	UL-RL	3.9043E+04	-15.30	0.000	1.000	1.000	
137.8	0.000	0.000	Strato2_3095_82743_L_0										
79 D	28.02	1.4293E-04	243.5	140.1	300.5	151.4	UL-RL	3.9043E+04	-15.50	0.000	1.000	1.000	
140.1	0.000	0.000	Strato2_3095_82743_L_0										
80 D	28.49	1.5123E-04	247.5	142.5	304.5	153.4	UL-RL	3.9043E+04	-15.70	0.000	1.000	1.000	
142.5	0.000	0.000	Strato2_3095_82743_L_0										
81 D	21.72	1.5954E-04	251.5	144.8	308.5	155.4	UL-RL	3.9043E+04	-15.90	0.000	1.000	1.000	
144.8	0.000	0.000	Strato2_3095_82743_L_0										
82 D	7.298	1.6370E-04	253.5	146.0	310.5	156.4	UL-RL	3.9043E+04	-16.00	0.000	1.000	1.000	
146.0	0.000	0.000	Strato2_3095_82743_L_0										

```
 +-------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
 |                                                                                                                         |
 |                                    NewProject.BaseDesignSection_28.SLERara_3454                                         |
 |                                 Exe Time :24 July 2019      10:49:25                                                    |
 +-------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

 WallElement_33                 :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   81
 C U R R E N T   T I M E   I S     3.0000

  WALL2D ELEMENT

    EL      TA          TB          MA          MB
 ---------------------------------------------------------
```

1	1.1950	-1.1950	4.57415E-12	0.23900
2	3.0408	-3.0408	-0.23900	0.84715
3	5.4462	-5.4462	-0.84715	1.9364
4	8.1565	-8.1565	-1.9364	3.5677
5	11.304	-11.304	-3.5677	5.8286
6	14.775	-14.775	-5.8286	8.7836
7	18.655	-18.655	-8.7836	12.515
8	22.868	-22.868	-12.515	17.088
9	27.412	-27.412	-17.088	22.571
10	32.303	-32.303	-22.571	29.031
11	37.589	-37.589	-29.031	36.549
12	43.223	-43.223	-36.549	45.194
13	47.739	-47.739	-45.194	49.968
14	52.384	-52.384	-49.968	60.444
15	58.928	-58.928	-60.444	72.230
16	65.856	-65.856	-72.230	85.401
17	71.600	-71.600	-85.401	99.721
18	74.654	-74.654	-99.721	114.65
19	74.989	-74.989	-114.65	129.65
20	72.632	-72.632	-129.65	144.18
21	67.529	-67.529	-144.18	157.68
22	60.278	-60.278	-157.68	169.74
23	53.426	-53.426	-169.74	180.42
24	46.944	-46.944	-180.42	189.81
25	40.840	-40.840	-189.81	197.98
26	35.084	-35.084	-197.98	205.00
27	29.683	-29.683	-205.00	210.93
28	24.586	-24.586	-210.93	215.85
29	19.821	-19.821	-215.85	219.81
30	15.358	-15.358	-219.81	222.89
31	11.200	-11.200	-222.89	225.13
32	7.3190	-7.3190	-225.13	226.59
33	3.7163	-3.7163	-226.59	227.33
34	0.36444	-0.36444	-227.33	227.41
35	-2.7355	2.7355	-227.41	226.86
36	-5.6129	5.6129	-226.86	225.74
37	-8.2780	8.2780	-225.74	224.08
38	-10.731	10.731	-224.08	221.93
39	-12.998	12.998	-221.93	219.33
40	-15.078	15.078	-219.33	216.32
41	-16.997	16.997	-216.32	212.92
42	-18.756	18.756	-212.92	209.17
43	-20.392	20.392	-209.17	205.09
44	-21.891	21.891	-205.09	200.71
45	-23.278	23.278	-200.71	196.06
46	-24.552	24.552	-196.06	191.15
47	-25.735	25.735	-191.15	186.00
48	-26.830	26.830	-186.00	180.63
49	-27.845	27.845	-180.63	175.06
50	-35.207	35.207	-175.06	168.02
51	-41.038	41.038	-168.02	159.82
52	-45.380	45.380	-159.82	150.74
53	-48.399	48.399	-150.74	141.06
54	-50.269	50.269	-141.06	131.01
55	-51.136	51.136	-131.01	120.78
56	-51.152	51.152	-120.78	110.55
57	-50.440	50.440	-110.55	100.46
58	-49.140	49.140	-100.46	90.632
59	-47.344	47.344	-90.632	81.163
60	-45.159	45.159	-81.163	72.131
61	-42.667	42.667	-72.131	63.598
62	-39.946	39.946	-63.598	55.609
63	-37.073	37.073	-55.609	48.194
64	-34.103	34.103	-48.194	41.373
65	-31.104	31.104	-41.373	35.153
66	-28.104	28.104	-35.153	29.532
67	-25.159	25.159	-29.532	24.500
68	-22.298	22.298	-24.500	20.041
69	-19.550	19.550	-20.041	16.131
70	-16.935	16.935	-16.131	12.744
71	-14.471	14.471	-12.744	9.8495
72	-12.171	12.171	-9.8495	7.4153
73	-10.055	10.055	-7.4153	5.4043
74	-8.1214	8.1214	-5.4043	3.7801
75	-6.3766	6.3766	-3.7801	2.5047
76	-4.8243	4.8243	-2.5047	1.5399
77	-3.4640	3.4640	-1.5399	0.84707
78	-2.2971	2.2971	-0.84707	0.38764
79	-1.3244	1.3244	-0.38764	0.12276
80	-0.55338	0.55338	-0.12276	1.20826E-02
81	-0.12081	0.12081	-1.20826E-02	-3.83560E-12

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                         |
|                                  Exe Time :24 July 2019      10:49:25                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    4

Tieback_768111                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      3.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-----------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2731E+06 RIMNOR=0.3018E+07
           RENORM=0.2497E+05 REMNOR=0.2827E-18 RATIO =0.3024     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 158.0     RMMAX = 227.4
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.2731E+06 RDR   =0.3018E+07
           RATIOT=0.3024     RATIOR= 0.000
           MAX UN=0.1044E-07 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           MIN UN=-158.0     IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2731E+06 RIMNOR=0.3018E+07
           RENORM= 207.3     REMNOR=0.8132E-18 RATIO =0.2755E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 158.0     RMMAX = 227.4
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.2731E+06 RDR   =0.3018E+07
           RATIOT=0.2755E-01 RATIOR= 0.000
           MAX UN=0.6393E-09 IEQ=    67 NODE     34 DOF   1  Y-DISPL.F
           MIN UN=-4.070     IEQ=    33 NODE     17 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2731E+06 RIMNOR=0.3018E+07
           RENORM= 2.795     REMNOR=0.1112E-18 RATIO =0.3199E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 158.0     RMMAX = 227.4
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.2731E+06 RDR   =0.3018E+07
           RATIOT=0.3199E-02 RATIOR= 0.000
           MAX UN=0.7255E-01 IEQ=   101 NODE     51 DOF   1  Y-DISPL.F
           MIN UN=-1.521     IEQ=    35 NODE     18 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2731E+06 RIMNOR=0.3018E+07
           RENORM=0.2277E-02 REMNOR=0.2248E-18 RATIO =0.9132E-04 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 158.0     RMMAX = 227.4
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.2731E+06 RDR   =0.3018E+07
           RATIOT=0.9132E-04 RATIOR= 0.000
           MAX UN=0.2680E-01 IEQ=    89 NODE     45 DOF   1  Y-DISPL.F
           MIN UN=-.4379E-08 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0




+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                         |
|                                  Exe Time :24 July 2019      10:49:25                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     4 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    4     ( AT TIME   4.000     )
```

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

	Y-DISPL.F (02)	X-ROT. F (04)	(
1	1.1406680E-02	-1.6036829E-03	
2	1.1085950E-02	-1.6035902E-03	
3	1.0765268E-02	-1.6031441E-03	
4	1.0444739E-02	-1.6019968E-03	
5	1.0124540E-02	-1.5997853E-03	
6	9.8049209E-03	-1.5961336E-03	
7	9.4862084E-03	-1.5906532E-03	
8	9.1688082E-03	-1.5829431E-03	
9	8.8532074E-03	-1.5725900E-03	
10	8.5399767E-03	-1.5591702E-03	
11	8.2297727E-03	-1.5422495E-03	
12	7.9233400E-03	-1.5213816E-03	
13	7.6215137E-03	-1.4961084E-03	
14	7.4726135E-03	-1.4816883E-03	
15	7.1792131E-03	-1.4526738E-03	
16	6.8914171E-03	-1.4255623E-03	
17	6.6088944E-03	-1.3998571E-03	
18	6.3314142E-03	-1.3750533E-03	
19	6.0588468E-03	-1.3506441E-03	
20	5.7911615E-03	-1.3261609E-03	
21	5.5284109E-03	-1.3012501E-03	
22	5.2707033E-03	-1.2757107E-03	
23	5.0181726E-03	-1.2494815E-03	
24	4.7709565E-03	-1.2225654E-03	
25	4.5291918E-03	-1.1949695E-03	
26	4.2930133E-03	-1.1667044E-03	
27	4.0625548E-03	-1.1377844E-03	
28	3.8379433E-03	-1.1082266E-03	
29	3.6193053E-03	-1.0780516E-03	
30	3.4067622E-03	-1.0472827E-03	
31	3.2004302E-03	-1.0159452E-03	
32	3.0004213E-03	-9.8406566E-04	
33	2.8068392E-03	-9.5167144E-04	
34	2.6197851E-03	-9.1879076E-04	
35	2.4393535E-03	-8.8545181E-04	
36	2.2656331E-03	-8.5168289E-04	
37	2.0987068E-03	-8.1751635E-04	
38	1.9386512E-03	-7.8299230E-04	
39	1.7855315E-03	-7.4815657E-04	
40	1.6394059E-03	-7.1306078E-04	
41	1.5003208E-03	-6.7776083E-04	
42	1.3683112E-03	-6.4231621E-04	
43	1.2434004E-03	-6.0678951E-04	
44	1.1255972E-03	-5.7124526E-04	
45	1.0148990E-03	-5.3575042E-04	
46	9.1128926E-04	-5.0037173E-04	
47	8.1473829E-04	-4.6517305E-04	
48	7.2520449E-04	-4.3021428E-04	
49	6.4263333E-04	-3.9555110E-04	
50	5.6696083E-04	-3.6123615E-04	
51	4.9810093E-04	-3.2749036E-04	
52	4.3590412E-04	-2.9467606E-04	
53	3.8015012E-04	-2.6309117E-04	
54	3.3056987E-04	-2.3297293E-04	
55	2.8685126E-04	-2.0450008E-04	
56	2.4865164E-04	-1.7780021E-04	
57	2.1560745E-04	-1.5295611E-04	
58	1.8734256E-04	-1.3001158E-04	
59	1.6347548E-04	-1.0897719E-04	
60	1.4362552E-04	-8.9835277E-05	
61	1.2741797E-04	-7.2544345E-05	
62	1.1448845E-04	-5.7043263E-05	
63	1.0448648E-04	-4.3254870E-05	
64	9.7078300E-05	-3.1089566E-05	
65	9.1949052E-05	-2.0448340E-05	
66	8.8804396E-05	-1.1225643E-05	
67	8.7371544E-05	-3.3117127E-06	
68	8.7399926E-05	3.4054476E-06	
69	8.8661415E-05	9.0379973E-06	
70	9.0950209E-05	1.3696803E-05	
71	9.4082444E-05	1.7490222E-05	
72	9.7895595E-05	2.0523101E-05	
73	1.0224768E-04	2.2895960E-05	
74	1.0701633E-04	2.4704155E-05	
75	1.1209768E-04	2.6037375E-05	
76	1.1740521E-04	2.6979456E-05	
77	1.2286857E-04	2.7608097E-05	
78	1.2843231E-04	2.7994740E-05	
79	1.3405467E-04	2.8204518E-05	
80	1.3970625E-04	2.8296180E-05	
81	1.4536875E-04	2.8321881E-05	

82 1.4820130E-04 2.8323109E-05

PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017*

NewProject.BaseDesignSection_28.SLERara_3454
Exe Time :24 July 2019 10:49:25

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 82
C U R R E N T T I M E I S 4.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	3.902	-1.1407E-02	25.00	39.02	25.00	39.02	V-C	8488.	0.000	0.000	1.000	1.000	39.02	0.000	0.000	Strato1_2_8_L_0
2 D	7.087	-1.1086E-02	19.31	35.43	19.31	35.43	V-C	8488.	-0.2000	0.000	1.000	1.000	35.43	0.000	0.000	Strato1_2_8_L_0
3 D	7.553	-1.0765E-02	25.16	37.77	25.16	37.77	V-C	8488.	-0.4000	0.000	1.000	1.000	37.77	0.000	0.000	Strato1_2_8_L_0
4 D	7.746	-1.0445E-02	28.35	38.73	28.35	38.73	V-C	8488.	-0.6000	0.000	1.000	1.000	38.73	0.000	0.000	Strato1_2_8_L_0
5 D	8.081	-1.0125E-02	32.93	40.41	32.93	40.41	V-C	8488.	-0.8000	0.000	1.000	1.000	40.41	0.000	0.000	Strato1_2_8_L_0
6 D	8.293	-9.8049E-03	36.31	41.46	36.31	41.46	V-C	8488.	-1.000	0.000	1.000	1.000	41.46	0.000	0.000	Strato1_2_8_L_0
7 D	8.595	-9.4862E-03	40.58	42.98	40.58	42.98	V-C	8488.	-1.200	0.000	1.000	1.000	42.98	0.000	0.000	Strato1_2_8_L_0
8 D	8.815	-9.1688E-03	44.07	44.07	44.07	44.07	V-C	8488.	-1.400	0.000	1.000	1.000	44.07	0.000	0.000	Strato1_2_8_L_0
9 D	9.031	-8.8532E-03	47.54	45.16	47.54	45.16	V-C	8488.	-1.600	0.000	1.000	1.000	45.16	0.000	0.000	Strato1_2_8_L_0
10 D	9.260	-8.5400E-03	51.16	46.30	51.16	46.30	V-C	8488.	-1.800	0.000	1.000	1.000	46.30	0.000	0.000	Strato1_2_8_L_0
11 D	9.538	-8.2298E-03	55.29	47.69	55.29	47.69	V-C	8488.	-2.000	0.000	1.000	1.000	47.69	0.000	0.000	Strato1_2_8_L_0
12 D	9.761	-7.9233E-03	58.93	48.81	58.93	48.81	V-C	8488.	-2.200	0.000	1.000	1.000	48.81	0.000	0.000	Strato1_2_8_L_0
13 D	7.517	-7.6215E-03	62.99	50.12	62.99	50.12	V-C	8488.	-2.400	0.000	1.000	1.000	50.12	0.000	0.000	Strato1_2_8_L_0
14 D	7.596	-7.4726E-03	64.78	50.64	64.78	50.64	V-C	8488.	-2.500	0.000	1.000	1.000	50.64	0.000	0.000	Strato1_2_8_L_0
15 D	10.34	-7.1792E-03	68.45	51.70	68.45	51.70	V-C	8488.	-2.700	0.000	1.000	1.000	51.70	0.000	0.000	Strato1_2_8_L_0
16 D	10.58	-6.8914E-03	72.47	52.92	72.47	52.92	V-C	8488.	-2.900	0.000	1.000	1.000	52.92	0.000	0.000	Strato1_2_8_L_0
17 D	10.79	-6.6089E-03	76.15	53.96	76.15	53.96	V-C	8488.	-3.100	0.000	1.000	1.000	53.96	0.000	0.000	Strato1_2_8_L_0
18 D	11.03	-6.3314E-03	80.13	55.14	80.13	55.14	V-C	8488.	-3.300	0.000	1.000	1.000	55.14	0.000	0.000	Strato1_2_8_L_0
19 D	11.23	-6.0588E-03	83.82	56.16	83.82	56.16	V-C	8488.	-3.500	0.000	1.000	1.000	56.16	0.000	0.000	Strato1_2_8_L_0
20 D	11.47	-5.7912E-03	87.78	57.34	87.78	57.34	V-C	8488.	-3.700	0.000	1.000	1.000	57.34	0.000	0.000	Strato1_2_8_L_0
21 D	11.65	-5.5284E-03	91.19	58.24	91.19	58.24	V-C	8488.	-3.900	0.000	1.000	1.000	58.24	0.000	0.000	Strato1_2_8_L_0
22 D	11.89	-5.2707E-03	95.15	59.43	95.15	59.43	V-C	8488.	-4.100	0.000	1.000	1.000	59.43	0.000	0.000	Strato1_2_8_L_0
23 D	12.13	-5.0182E-03	99.09	60.64	99.09	60.64	V-C	8488.	-4.300	0.000	1.000	1.000	60.64	0.000	0.000	Strato1_2_8_L_0
24 D	12.35	-4.7710E-03	102.8	61.75	102.8	61.75	V-C	8488.	-4.500	0.000	1.000	1.000	61.75	0.000	0.000	Strato1_2_8_L_0
25 D	12.60	-4.5292E-03	106.7	63.00	106.7	63.00	V-C	8488.	-4.700	0.000	1.000	1.000	63.00	0.000	0.000	Strato1_2_8_L_0
26 D	12.83	-4.2930E-03	110.5	64.17	110.5	64.17	V-C	8488.	-4.900	0.000	1.000	1.000	64.17	0.000	0.000	Strato1_2_8_L_0
27 D	13.10	-4.0626E-03	114.4	65.48	114.4	65.48	V-C	8488.	-5.100	0.000	1.000	1.000	65.48	0.000	0.000	Strato1_2_8_L_0
28 D	13.32	-3.8379E-03	117.9	66.61	117.9	66.61	V-C	8488.	-5.300	0.000	1.000	1.000	66.61	0.000	0.000	Strato1_2_8_L_0
29 D	13.60	-3.6193E-03	121.8	67.98	121.8	67.98	V-C	8488.	-5.500	0.000	1.000	1.000				

67.98	0.000	0.000	Strato1_2_8_L_0									
30 D	13.86	-3.4068E-03	125.5	69.29	125.5	69.29	V-C	8488.	-5.700	0.000	1.000	1.000
69.29	0.000	0.000	Strato1_2_8_L_0									
31 D	14.15	-3.2004E-03	129.4	70.73	129.4	70.73	V-C	8488.	-5.900	0.000	1.000	1.000
70.73	0.000	0.000	Strato1_2_8_L_0									
32 D	14.42	-3.0004E-03	133.2	72.11	133.2	72.11	V-C	8488.	-6.100	0.000	1.000	1.000
72.11	0.000	0.000	Strato1_2_8_L_0									
33 D	14.72	-2.8068E-03	137.1	73.62	137.1	73.62	V-C	8488.	-6.300	0.000	1.000	1.000
73.62	0.000	0.000	Strato1_2_8_L_0									
34 D	15.02	-2.6198E-03	140.8	75.08	140.8	75.08	V-C	8488.	-6.500	0.000	1.000	1.000
75.08	0.000	0.000	Strato1_2_8_L_0									
35 D	15.31	-2.4394E-03	144.7	76.56	144.7	76.69	UL-RL	2.5465E+04	-6.700	0.000	1.000	1.000
76.56	0.000	0.000	Strato1_2_8_L_0									
36 D	15.44	-2.2656E-03	148.4	77.18	148.4	78.67	UL-RL	2.5465E+04	-6.900	0.000	1.000	1.000
77.18	0.000	0.000	Strato1_2_8_L_0									
37 D	15.58	-2.0987E-03	152.2	77.90	152.2	80.65	UL-RL	2.5465E+04	-7.100	0.000	1.000	1.000
77.90	0.000	0.000	Strato1_2_8_L_0									
38 D	15.76	-1.9387E-03	156.1	78.80	156.1	82.71	UL-RL	2.5465E+04	-7.300	0.000	1.000	1.000
78.80	0.000	0.000	Strato1_2_8_L_0									
39 D	15.94	-1.7855E-03	159.8	79.72	159.8	84.70	UL-RL	2.5465E+04	-7.500	0.000	1.000	1.000
79.72	0.000	0.000	Strato1_2_8_L_0									
40 D	16.16	-1.6394E-03	163.7	80.79	163.7	86.75	UL-RL	2.5465E+04	-7.700	0.000	1.000	1.000
80.79	0.000	0.000	Strato1_2_8_L_0									
41 D	16.38	-1.5003E-03	167.4	81.89	167.4	88.74	UL-RL	2.5465E+04	-7.900	0.000	1.000	1.000
81.89	0.000	0.000	Strato1_2_8_L_0									
42 D	16.63	-1.3683E-03	171.3	83.13	171.3	90.79	UL-RL	2.5465E+04	-8.100	0.000	1.000	1.000
83.13	0.000	0.000	Strato1_2_8_L_0									
43 D	16.86	-1.2434E-03	174.9	84.32	174.9	92.71	UL-RL	2.5465E+04	-8.300	0.000	1.000	1.000
84.32	0.000	0.000	Strato1_2_8_L_0									
44 D	17.14	-1.1256E-03	178.8	85.71	178.8	94.76	UL-RL	2.5465E+04	-8.500	0.000	1.000	1.000
85.71	0.000	0.000	Strato1_2_8_L_0									
45 D	17.47	-1.0149E-03	182.6	87.35	182.6	96.76	UL-RL	2.5465E+04	-8.700	0.000	1.000	1.000
87.35	0.000	0.000	Strato1_2_8_L_0									
46 D	17.84	-9.1129E-04	186.4	89.19	186.4	98.81	UL-RL	2.5465E+04	-8.900	0.000	1.000	1.000
89.19	0.000	0.000	Strato1_2_8_L_0									
47 D	18.20	-8.1474E-04	190.2	90.98	190.2	100.8	UL-RL	2.5465E+04	-9.100	0.000	1.000	1.000
90.98	0.000	0.000	Strato1_2_8_L_0									
48 D	18.56	-7.2520E-04	194.1	92.82	194.1	102.8	UL-RL	2.5465E+04	-9.300	0.000	1.000	1.000
92.82	0.000	0.000	Strato1_2_8_L_0									
49 D	18.93	-6.4263E-04	197.9	94.65	197.9	104.9	UL-RL	2.5465E+04	-9.500	0.000	1.000	1.000
94.65	0.000	0.000	Strato1_2_8_L_0									
50 D	10.86	-5.6696E-04	201.9	54.31	201.9	100.9	UL-RL	7.2037E+04	-9.700	0.000	1.000	1.000
54.31	0.000	0.000	Strato2_3095_82743_L_0									
51 D	12.32	-4.9810E-04	205.8	61.58	205.8	102.9	UL-RL	7.2037E+04	-9.900	0.000	1.000	1.000
61.58	0.000	0.000	Strato2_3095_82743_L_0									
52 D	13.67	-4.3590E-04	209.8	68.36	209.8	104.9	UL-RL	7.2037E+04	-10.10	0.000	1.000	1.000
68.36	0.000	0.000	Strato2_3095_82743_L_0									
53 D	14.94	-3.8015E-04	213.8	74.69	213.8	106.9	UL-RL	7.2037E+04	-10.30	0.000	1.000	1.000
74.69	0.000	0.000	Strato2_3095_82743_L_0									
54 D	16.10	-3.3057E-04	217.8	80.51	217.8	108.9	UL-RL	7.2037E+04	-10.50	0.000	1.000	1.000
80.51	0.000	0.000	Strato2_3095_82743_L_0									
55 D	17.18	-2.8685E-04	221.9	85.92	221.9	110.9	UL-RL	7.2037E+04	-10.70	0.000	1.000	1.000
85.92	0.000	0.000	Strato2_3095_82743_L_0									
56 D	18.17	-2.4865E-04	225.8	90.86	225.8	112.9	UL-RL	7.2037E+04	-10.90	0.000	1.000	1.000
90.86	0.000	0.000	Strato2_3095_82743_L_0									
57 D	19.09	-2.1561E-04	229.9	95.45	229.9	114.9	UL-RL	7.2037E+04	-11.10	0.000	1.000	1.000
95.45	0.000	0.000	Strato2_3095_82743_L_0									
58 D	19.92	-1.8734E-04	233.7	99.59	233.7	116.9	UL-RL	7.2037E+04	-11.30	0.000	1.000	1.000
99.59	0.000	0.000	Strato2_3095_82743_L_0									
59 D	20.69	-1.6348E-04	237.8	103.5	237.8	118.9	UL-RL	7.2037E+04	-11.50	0.000	1.000	1.000
103.5	0.000	0.000	Strato2_3095_82743_L_0									
60 D	21.40	-1.4363E-04	241.8	107.0	241.8	120.9	UL-RL	7.2037E+04	-11.70	0.000	1.000	1.000
107.0	0.000	0.000	Strato2_3095_82743_L_0									
61 D	22.06	-1.2742E-04	245.8	110.3	245.8	122.9	UL-RL	7.2037E+04	-11.90	0.000	1.000	1.000
110.3	0.000	0.000	Strato2_3095_82743_L_0									
62 D	22.67	-1.1449E-04	249.9	113.4	249.9	124.9	UL-RL	7.2037E+04	-12.10	0.000	1.000	1.000
113.4	0.000	0.000	Strato2_3095_82743_L_0									
63 D	23.23	-1.0449E-04	253.8	116.1	253.8	126.9	UL-RL	7.2037E+04	-12.30	0.000	1.000	1.000
116.1	0.000	0.000	Strato2_3095_82743_L_0									
64 D	23.75	-9.7078E-05	257.9	118.8	257.9	128.9	UL-RL	7.2037E+04	-12.50	0.000	1.000	1.000
118.8	0.000	0.000	Strato2_3095_82743_L_0									
65 D	24.22	-9.1949E-05	261.8	121.1	261.8	130.9	UL-RL	7.2037E+04	-12.70	0.000	1.000	1.000
121.1	0.000	0.000	Strato2_3095_82743_L_0									
66 D	24.68	-8.8804E-05	265.8	123.4	265.8	132.9	UL-RL	7.2037E+04	-12.90	0.000	1.000	1.000
123.4	0.000	0.000	Strato2_3095_82743_L_0									
67 D	25.10	-8.7372E-05	269.7	125.5	269.7	134.9	UL-RL	7.2037E+04	-13.10	0.000	1.000	1.000
125.5	0.000	0.000	Strato2_3095_82743_L_0									
68 D	25.49	-8.7400E-05	273.6	127.5	273.6	136.8	UL-RL	7.2037E+04	-13.30	0.000	1.000	1.000
127.5	0.000	0.000	Strato2_3095_82743_L_0									
69 D	25.87	-8.8661E-05	277.5	129.3	277.5	138.8	UL-RL	7.2037E+04	-13.50	0.000	1.000	1.000
129.3	0.000	0.000	Strato2_3095_82743_L_0									
70 D	26.23	-9.0950E-05	281.4	131.1	281.4	140.7	UL-RL	7.2037E+04	-13.70	0.000	1.000	1.000
131.1	0.000	0.000	Strato2_3095_82743_L_0									
71 D	26.58	-9.4082E-05	285.3	132.9	285.3	142.7	UL-RL	7.2037E+04	-13.90	0.000	1.000	1.000
132.9	0.000	0.000	Strato2_3095_82743_L_0									

72	D	26.91	-9.7896E-05	289.2	134.6	289.2	144.6	UL-RL	7.2037E+04	-14.10	0.000	1.000	1.000
134.6		0.000	0.000	Strato2_3095_82743_L_0									
73	D	27.23	-1.0225E-04	293.1	136.2	293.1	146.5	UL-RL	7.2037E+04	-14.30	0.000	1.000	1.000
136.2		0.000	0.000	Strato2_3095_82743_L_0									
74	D	27.56	-1.0702E-04	297.0	137.8	297.0	148.5	UL-RL	7.2037E+04	-14.50	0.000	1.000	1.000
137.8		0.000	0.000	Strato2_3095_82743_L_0									
75	D	27.88	-1.1210E-04	300.9	139.4	300.9	150.4	UL-RL	7.2037E+04	-14.70	0.000	1.000	1.000
139.4		0.000	0.000	Strato2_3095_82743_L_0									
76	D	28.19	-1.1741E-04	304.8	141.0	304.8	152.4	UL-RL	7.2037E+04	-14.90	0.000	1.000	1.000
141.0		0.000	0.000	Strato2_3095_82743_L_0									
77	D	28.50	-1.2287E-04	308.7	142.5	308.7	154.4	UL-RL	7.2037E+04	-15.10	0.000	1.000	1.000
142.5		0.000	0.000	Strato2_3095_82743_L_0									
78	D	28.81	-1.2843E-04	312.6	144.1	312.6	156.3	UL-RL	7.2037E+04	-15.30	0.000	1.000	1.000
144.1		0.000	0.000	Strato2_3095_82743_L_0									
79	D	29.13	-1.3405E-04	316.6	145.6	316.6	158.3	UL-RL	7.2037E+04	-15.50	0.000	1.000	1.000
145.6		0.000	0.000	Strato2_3095_82743_L_0									
80	D	29.43	-1.3971E-04	320.4	147.1	320.4	160.2	UL-RL	7.2037E+04	-15.70	0.000	1.000	1.000
147.1		0.000	0.000	Strato2_3095_82743_L_0									
81	D	22.30	-1.4537E-04	324.3	148.7	324.3	162.2	UL-RL	7.2037E+04	-15.90	0.000	1.000	1.000
148.7		0.000	0.000	Strato2_3095_82743_L_0									
82	D	7.475	-1.4820E-04	326.3	149.5	326.3	163.2	UL-RL	7.2037E+04	-16.00	0.000	1.000	1.000
149.5		0.000	0.000	Strato2_3095_82743_L_0									

```
 +-------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
 |                                                                                                                         |
 |                                      NewProject.BaseDesignSection_28.SLERara_3454                                       |
 |                                   Exe Time :24 July 2019      10:49:25                                                  |
 +-------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S    R E S U L T S    F O R    G R O U P    N O.    2

 0_R                              :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
 C U R R E N T    T I M E    I S      4.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****
```

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR
Peq	Su_a	Su_p	LAYER									
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000
0.000	0.000	0.000	not available									
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000
0.000	0.000	0.000	not available									
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
14	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									
15	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000
0.000	0.000	0.000	not available									
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000
0.000	0.000	0.000	not available									
17	D	0.1155	6.6089E-03	1.900	0.5776	58.90	36.40	ACTIVE	0.000	-3.100	0.000	1.000	1.000
0.5776		0.000	0.000	Strato1_2_8_L_0									
18	D	0.3466	6.3314E-03	5.700	1.733	62.70	38.24	ACTIVE	0.000	-3.300	0.000	1.000	1.000
1.733		0.000	0.000	Strato1_2_8_L_0									

19 D	2.185	6.0588E-03	9.500	10.92	66.50	40.07	UL-RL	1.7671E+04	-3.500	0.000	1.000	1.000
10.92	0.000	0.000	Strato1_2_8_L_0									
20 D	5.614	5.7912E-03	13.30	28.07	70.30	53.75	UL-RL	1.7671E+04	-3.700	0.000	1.000	1.000
28.07	0.000	0.000	Strato1_2_8_L_0									
21 D	9.038	5.5284E-03	17.10	45.19	74.10	69.10	UL-RL	1.7671E+04	-3.900	0.000	1.000	1.000
45.19	0.000	0.000	Strato1_2_8_L_0									
22 D	11.91	5.2707E-03	20.90	59.56	77.90	81.74	UL-RL	1.7671E+04	-4.100	0.000	1.000	1.000
59.56	0.000	0.000	Strato1_2_8_L_0									
23 D	12.23	5.0182E-03	24.70	61.14	81.70	81.62	UL-RL	1.7671E+04	-4.300	0.000	1.000	1.000
61.14	0.000	0.000	Strato1_2_8_L_0									
24 D	12.54	4.7710E-03	28.50	62.72	85.50	81.55	UL-RL	1.7671E+04	-4.500	0.000	1.000	1.000
62.72	0.000	0.000	Strato1_2_8_L_0									
25 D	12.86	4.5292E-03	32.30	64.30	89.30	81.54	UL-RL	1.7671E+04	-4.700	0.000	1.000	1.000
64.30	0.000	0.000	Strato1_2_8_L_0									
26 D	13.17	4.2930E-03	36.10	65.86	93.10	81.58	UL-RL	1.7671E+04	-4.900	0.000	1.000	1.000
65.86	0.000	0.000	Strato1_2_8_L_0									
27 D	13.49	4.0626E-03	39.90	67.43	96.90	81.67	UL-RL	1.7671E+04	-5.100	0.000	1.000	1.000
67.43	0.000	0.000	Strato1_2_8_L_0									
28 D	13.80	3.8379E-03	43.70	68.98	100.7	81.83	UL-RL	1.7671E+04	-5.300	0.000	1.000	1.000
68.98	0.000	0.000	Strato1_2_8_L_0									
29 D	14.10	3.6193E-03	47.50	70.52	104.5	82.04	UL-RL	1.7671E+04	-5.500	0.000	1.000	1.000
70.52	0.000	0.000	Strato1_2_8_L_0									
30 D	14.41	3.4068E-03	51.30	72.05	108.3	82.32	UL-RL	1.7671E+04	-5.700	0.000	1.000	1.000
72.05	0.000	0.000	Strato1_2_8_L_0									
31 D	14.71	3.2004E-03	55.10	73.57	112.1	82.66	UL-RL	1.7671E+04	-5.900	0.000	1.000	1.000
73.57	0.000	0.000	Strato1_2_8_L_0									
32 D	15.02	3.0004E-03	58.90	75.08	115.9	83.07	UL-RL	1.7671E+04	-6.100	0.000	1.000	1.000
75.08	0.000	0.000	Strato1_2_8_L_0									
33 D	15.31	2.8068E-03	62.70	76.57	119.7	83.53	UL-RL	1.7671E+04	-6.300	0.000	1.000	1.000
76.57	0.000	0.000	Strato1_2_8_L_0									
34 D	15.61	2.6198E-03	66.50	78.06	123.5	84.07	UL-RL	1.7671E+04	-6.500	0.000	1.000	1.000
78.06	0.000	0.000	Strato1_2_8_L_0									
35 D	15.91	2.4394E-03	70.30	79.54	127.3	84.67	UL-RL	1.7671E+04	-6.700	0.000	1.000	1.000
79.54	0.000	0.000	Strato1_2_8_L_0									
36 D	16.20	2.2656E-03	74.10	81.01	131.1	85.33	UL-RL	1.7671E+04	-6.900	0.000	1.000	1.000
81.01	0.000	0.000	Strato1_2_8_L_0									
37 D	16.50	2.0987E-03	77.90	82.48	134.9	86.06	UL-RL	1.7671E+04	-7.100	0.000	1.000	1.000
82.48	0.000	0.000	Strato1_2_8_L_0									
38 D	16.79	1.9387E-03	81.70	83.94	138.7	86.86	UL-RL	1.7671E+04	-7.300	0.000	1.000	1.000
83.94	0.000	0.000	Strato1_2_8_L_0									
39 D	17.08	1.7855E-03	85.50	85.41	142.5	87.72	UL-RL	1.7671E+04	-7.500	0.000	1.000	1.000
85.41	0.000	0.000	Strato1_2_8_L_0									
40 D	17.37	1.6394E-03	89.30	86.87	146.3	88.64	UL-RL	1.7671E+04	-7.700	0.000	1.000	1.000
86.87	0.000	0.000	Strato1_2_8_L_0									
41 D	17.67	1.5003E-03	93.10	88.34	150.1	89.63	UL-RL	1.7671E+04	-7.900	0.000	1.000	1.000
88.34	0.000	0.000	Strato1_2_8_L_0									
42 D	17.96	1.3683E-03	96.90	89.82	153.9	90.68	UL-RL	1.7671E+04	-8.100	0.000	1.000	1.000
89.82	0.000	0.000	Strato1_2_8_L_0									
43 D	18.26	1.2434E-03	100.7	91.30	157.7	91.79	UL-RL	1.7671E+04	-8.300	0.000	1.000	1.000
91.30	0.000	0.000	Strato1_2_8_L_0									
44 D	18.56	1.1256E-03	104.5	92.80	161.5	92.96	UL-RL	1.7671E+04	-8.500	0.000	1.000	1.000
92.80	0.000	0.000	Strato1_2_8_L_0									
45 D	18.84	1.0149E-03	108.3	94.19	165.3	94.25	UL-RL	1.7671E+04	-8.700	0.000	1.000	1.000
94.19	0.000	0.000	Strato1_2_8_L_0									
46 D	19.11	9.1129E-04	112.1	95.56	169.1	95.61	UL-RL	1.7671E+04	-8.900	0.000	1.000	1.000
95.56	0.000	0.000	Strato1_2_8_L_0									
47 D	19.39	8.1474E-04	115.9	96.97	172.9	97.02	UL-RL	1.7671E+04	-9.100	0.000	1.000	1.000
96.97	0.000	0.000	Strato1_2_8_L_0									
48 D	19.69	7.2520E-04	119.7	98.43	176.7	98.47	UL-RL	1.7671E+04	-9.300	0.000	1.000	1.000
98.43	0.000	0.000	Strato1_2_8_L_0									
49 D	19.99	6.4263E-04	123.5	99.93	180.5	99.97	UL-RL	1.7671E+04	-9.500	0.000	1.000	1.000
99.93	0.000	0.000	Strato1_2_8_L_0									
50 D	19.09	5.6696E-04	127.5	95.45	184.5	95.51	UL-RL	3.9043E+04	-9.700	0.000	1.000	1.000
95.45	0.000	0.000	Strato2_3095_82743_L_0									
51 D	19.30	4.9810E-04	131.5	96.51	188.5	96.56	UL-RL	3.9043E+04	-9.900	0.000	1.000	1.000
96.51	0.000	0.000	Strato2_3095_82743_L_0									
52 D	19.30	4.3590E-04	135.5	96.49	192.5	98.28	UL-RL	3.9043E+04	-10.10	0.000	1.000	1.000
96.49	0.000	0.000	Strato2_3095_82743_L_0									
53 D	19.27	3.8015E-04	139.5	96.36	196.5	100.2	UL-RL	3.9043E+04	-10.30	0.000	1.000	1.000
96.36	0.000	0.000	Strato2_3095_82743_L_0									
54 D	19.30	3.3057E-04	143.5	96.48	200.5	102.1	UL-RL	3.9043E+04	-10.50	0.000	1.000	1.000
96.48	0.000	0.000	Strato2_3095_82743_L_0									
55 D	19.36	2.8685E-04	147.5	96.82	204.5	104.0	UL-RL	3.9043E+04	-10.70	0.000	1.000	1.000
96.82	0.000	0.000	Strato2_3095_82743_L_0									
56 D	19.48	2.4865E-04	151.5	97.39	208.5	106.0	UL-RL	3.9043E+04	-10.90	0.000	1.000	1.000
97.39	0.000	0.000	Strato2_3095_82743_L_0									
57 D	19.63	2.1561E-04	155.5	98.16	212.5	107.9	UL-RL	3.9043E+04	-11.10	0.000	1.000	1.000
98.16	0.000	0.000	Strato2_3095_82743_L_0									
58 D	19.82	1.8734E-04	159.5	99.11	216.5	109.8	UL-RL	3.9043E+04	-11.30	0.000	1.000	1.000
99.11	0.000	0.000	Strato2_3095_82743_L_0									
59 D	20.05	1.6348E-04	163.5	100.2	220.5	111.8	UL-RL	3.9043E+04	-11.50	0.000	1.000	1.000
100.2	0.000	0.000	Strato2_3095_82743_L_0									
60 D	20.30	1.4363E-04	167.5	101.5	224.5	113.7	UL-RL	3.9043E+04	-11.70	0.000	1.000	1.000
101.5	0.000	0.000	Strato2_3095_82743_L_0									
61 D	20.59	1.2742E-04	171.5	102.9	228.5	115.7	UL-RL	3.9043E+04	-11.90	0.000	1.000	1.000

```
102.9       0.000       0.000      Strato2_3095_82743_L_0
  62 D   20.90     1.1449E-04   175.5       104.5       232.5       117.7         UL-RL  3.9043E+04  -12.10       0.000       1.000       1.000
104.5       0.000       0.000      Strato2_3095_82743_L_0
  63 D   21.23     1.0449E-04   179.5       106.1       236.5       119.6         UL-RL  3.9043E+04  -12.30       0.000       1.000       1.000
106.1       0.000       0.000      Strato2_3095_82743_L_0
  64 D   21.58     9.7078E-05   183.5       107.9       240.5       121.6         UL-RL  3.9043E+04  -12.50       0.000       1.000       1.000
107.9       0.000       0.000      Strato2_3095_82743_L_0
  65 D   21.95     9.1949E-05   187.5       109.7       244.5       123.6         UL-RL  3.9043E+04  -12.70       0.000       1.000       1.000
109.7       0.000       0.000      Strato2_3095_82743_L_0
  66 D   22.33     8.8804E-05   191.5       111.7       248.5       125.5         UL-RL  3.9043E+04  -12.90       0.000       1.000       1.000
111.7       0.000       0.000      Strato2_3095_82743_L_0
  67 D   22.73     8.7372E-05   195.5       113.6       252.5       127.5         UL-RL  3.9043E+04  -13.10       0.000       1.000       1.000
113.6       0.000       0.000      Strato2_3095_82743_L_0
  68 D   23.14     8.7400E-05   199.5       115.7       256.5       129.5         UL-RL  3.9043E+04  -13.30       0.000       1.000       1.000
115.7       0.000       0.000      Strato2_3095_82743_L_0
  69 D   23.55     8.8661E-05   203.5       117.8       260.5       131.5         UL-RL  3.9043E+04  -13.50       0.000       1.000       1.000
117.8       0.000       0.000      Strato2_3095_82743_L_0
  70 D   23.98     9.0950E-05   207.5       119.9       264.5       133.5         UL-RL  3.9043E+04  -13.70       0.000       1.000       1.000
119.9       0.000       0.000      Strato2_3095_82743_L_0
  71 D   24.41     9.4082E-05   211.5       122.0       268.5       135.5         UL-RL  3.9043E+04  -13.90       0.000       1.000       1.000
122.0       0.000       0.000      Strato2_3095_82743_L_0
  72 D   24.84     9.7896E-05   215.5       124.2       272.5       137.4         UL-RL  3.9043E+04  -14.10       0.000       1.000       1.000
124.2       0.000       0.000      Strato2_3095_82743_L_0
  73 D   25.28     1.0225E-04   219.5       126.4       276.5       139.4         UL-RL  3.9043E+04  -14.30       0.000       1.000       1.000
126.4       0.000       0.000      Strato2_3095_82743_L_0
  74 D   25.73     1.0702E-04   223.5       128.6       280.5       141.4         UL-RL  3.9043E+04  -14.50       0.000       1.000       1.000
128.6       0.000       0.000      Strato2_3095_82743_L_0
  75 D   26.17     1.1210E-04   227.5       130.9       284.5       143.4         UL-RL  3.9043E+04  -14.70       0.000       1.000       1.000
130.9       0.000       0.000      Strato2_3095_82743_L_0
  76 D   26.62     1.1741E-04   231.5       133.1       288.5       145.4         UL-RL  3.9043E+04  -14.90       0.000       1.000       1.000
133.1       0.000       0.000      Strato2_3095_82743_L_0
  77 D   27.06     1.2287E-04   235.5       135.3       292.5       147.4         UL-RL  3.9043E+04  -15.10       0.000       1.000       1.000
135.3       0.000       0.000      Strato2_3095_82743_L_0
  78 D   27.51     1.2843E-04   239.5       137.5       296.5       149.4         UL-RL  3.9043E+04  -15.30       0.000       1.000       1.000
137.5       0.000       0.000      Strato2_3095_82743_L_0
  79 D   27.96     1.3405E-04   243.5       139.8       300.5       151.4         UL-RL  3.9043E+04  -15.50       0.000       1.000       1.000
139.8       0.000       0.000      Strato2_3095_82743_L_0
  80 D   28.40     1.3971E-04   247.5       142.0       304.5       153.4         UL-RL  3.9043E+04  -15.70       0.000       1.000       1.000
142.0       0.000       0.000      Strato2_3095_82743_L_0
  81 D   21.64     1.4537E-04   251.5       144.2       308.5       155.4         UL-RL  3.9043E+04  -15.90       0.000       1.000       1.000
144.2       0.000       0.000      Strato2_3095_82743_L_0
  82 D   7.268     1.4820E-04   253.5       145.4       310.5       156.4         UL-RL  3.9043E+04  -16.00       0.000       1.000       1.000
145.4       0.000       0.000      Strato2_3095_82743_L_0
```

```
+----------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*  |
|                                                                                                          |
|                                     NewProject.BaseDesignSection_28.SLERara_3454                         |
|                                  Exe Time :24 July 2019      10:49:25                                    |
+----------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P  N O.   3

WallElement_33                       :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   81
C U R R E N T    T I M E    I S      4.0000

 WALL2D ELEMENT

   EL      TA          TB           MA          MB
-----------------------------------------------------
    1  3.9022     -3.9022     1.06243E-10 0.78044
    2  10.989     -10.989    -0.78044      2.9783
    3  18.543     -18.543     -2.9783      6.6868
    4  26.289     -26.289     -6.6868      11.945
    5  34.370     -34.370     -11.945      18.819
    6  42.663     -42.663     -18.819      27.351
    7  51.258     -51.258     -27.351      37.603
    8  60.072     -60.072     -37.603      49.617
    9  69.104     -69.104     -49.617      63.438
   10  78.364     -78.364     -63.438      79.111
   11  87.901     -87.901     -79.111      96.691
   12  97.662     -97.662     -96.691      116.22
   13  105.18     -105.18     -116.22      126.74
   14 -45.250      45.250     -126.74      117.69
   15 -34.909      34.909     -117.69      110.71
   16 -24.325      24.325     -110.71      105.84
   17 -13.649      13.649     -105.84      103.11
   18 -2.9680      2.9680     -103.11      102.52
   19  6.0800     -6.0800     -102.52      103.74
```

20	11.934	-11.934	-103.74	106.12
21	14.543	-14.543	-106.12	109.03
22	14.516	-14.516	-109.03	111.94
23	14.416	-14.416	-111.94	114.82
24	14.222	-14.222	-114.82	117.66
25	13.964	-13.964	-117.66	120.46
26	13.626	-13.626	-120.46	123.18
27	13.236	-13.236	-123.18	125.83
28	12.762	-12.762	-125.83	128.38
29	12.253	-12.253	-128.38	130.83
30	11.702	-11.702	-130.83	133.17
31	11.133	-11.133	-133.17	135.40
32	10.541	-10.541	-135.40	137.51
33	9.9500	-9.9500	-137.51	139.50
34	9.3536	-9.3536	-139.50	141.37
35	8.7579	-8.7579	-141.37	143.12
36	7.9907	-7.9907	-143.12	144.72
37	7.0757	-7.0757	-144.72	146.13
38	6.0461	-6.0461	-146.13	147.34
39	4.9082	-4.9082	-147.34	148.32
40	3.6918	-3.6918	-148.32	149.06
41	2.4015	-2.4015	-149.06	149.54
42	1.0638	-1.0638	-149.54	149.75
43	-0.33209	0.33209	-149.75	149.69
44	-1.7494	1.7494	-149.69	149.34
45	-3.1429	3.1429	-149.34	148.71
46	-4.4396	4.4396	-148.71	147.82
47	-5.6589	5.6589	-147.82	146.69
48	-6.7992	6.7992	-146.69	145.33
49	-7.8692	7.8692	-145.33	143.76
50	-16.105	16.105	-143.76	140.54
51	-23.097	23.097	-140.54	135.92
52	-28.723	28.723	-135.92	130.17
53	-33.057	33.057	-130.17	123.56
54	-36.251	36.251	-123.56	116.31
55	-38.432	38.432	-116.31	108.62
56	-39.737	39.737	-108.62	100.68
57	-40.278	40.278	-100.68	92.620
58	-40.182	40.182	-92.620	84.584
59	-39.534	39.534	-84.584	76.677
60	-38.434	38.434	-76.677	68.990
61	-36.959	36.959	-68.990	61.599
62	-35.184	35.184	-61.599	54.562
63	-33.185	33.185	-54.562	47.925
64	-31.013	31.013	-47.925	41.722
65	-28.739	28.739	-41.722	35.974
66	-26.390	26.390	-35.974	30.697
67	-24.021	24.021	-30.697	25.892
68	-21.665	21.665	-25.892	21.559
69	-19.351	19.351	-21.559	17.689
70	-17.101	17.101	-17.689	14.269
71	-14.935	14.935	-14.269	11.282
72	-12.867	12.867	-11.282	8.7084
73	-10.918	10.918	-8.7084	6.5248
74	-9.0890	9.0890	-6.5248	4.7070
75	-7.3868	7.3868	-4.7070	3.2296
76	-5.8161	5.8161	-3.2296	2.0664
77	-4.3774	4.3774	-2.0664	1.1909
78	-3.0726	3.0726	-1.1909	0.57638
79	-1.9028	1.9028	-0.57638	0.19583
80	-0.87567	0.87567	-0.19583	2.06925E-02
81	-0.20690	0.20690	-2.06925E-02	-7.83418E-12

```
+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                   |
|                                  Exe Time :24 July 2019      10:49:25                                             |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_768111                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S     4.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------
```

```
ANCHOR    1   163.60     -1.98299E-03 -1.98299E-03   0.0000       0.0000       0.0000       0.0000     BORN NOW JUST ACTIVATED

ITER      0 RNORM = 0.000     RMNORM= 0.000
            RINORM=0.2225E+06 RIMNOR=0.1665E+07
            RENORM= 3921.     REMNOR=0.2248E-18 RATIO =0.1328     TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 158.0     RMMAX = 149.8
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
            RDT   =0.2225E+06 RDR   =0.1665E+07
            RATIOT=0.1328     RATIOR= 0.000
            MAX UN= 15.91     IEQ=    69 NODE     35 DOF   1  Y-DISPL.F
            MIN UN=-.4379E-08 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER      2 RNORM = 0.000     RMNORM= 0.000
            RINORM=0.2225E+06 RIMNOR=0.1665E+07
            RENORM= 506.3     REMNOR=0.3565E-18 RATIO =0.4770E-01 TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 158.0     RMMAX = 149.8
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
            RDT   =0.2225E+06 RDR   =0.1665E+07
            RATIOT=0.4770E-01 RATIOR= 0.000
            MAX UN= 6.341     IEQ=    81 NODE     41 DOF   1  Y-DISPL.F
            MIN UN=-.1922E-08 IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER      3 RNORM = 0.000     RMNORM= 0.000
            RINORM=0.2225E+06 RIMNOR=0.1665E+07
            RENORM= 154.6     REMNOR=0.4985E-18 RATIO =0.2636E-01 TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 158.0     RMMAX = 149.8
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
            RDT   =0.2225E+06 RDR   =0.1665E+07
            RATIOT=0.2636E-01 RATIOR= 0.000
            MAX UN= 7.418     IEQ=   107 NODE     54 DOF   1  Y-DISPL.F
            MIN UN=-.3485E-08 IEQ=    39 NODE     20 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER      4 RNORM = 0.000     RMNORM= 0.000
            RINORM=0.2225E+06 RIMNOR=0.1665E+07
            RENORM= 11.76     REMNOR=0.4655E-18 RATIO =0.7270E-02 TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 158.0     RMMAX = 149.8
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
            RDT   =0.2225E+06 RDR   =0.1665E+07
            RATIOT=0.7270E-02 RATIOR= 0.000
            MAX UN= 2.151     IEQ=     9 NODE      5 DOF   1  Y-DISPL.F
            MIN UN=-.4019E-08 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER      5 RNORM = 0.000     RMNORM= 0.000
            RINORM=0.2225E+06 RIMNOR=0.1665E+07
            RENORM=0.6646E-03 REMNOR=0.1143E-17 RATIO =0.5465E-04 TOLER =0.1000E-03      CONVERGED !
            RFMAX = 158.0     RMMAX = 149.8
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
            RDT   =0.2225E+06 RDR   =0.1665E+07
            RATIOT=0.5465E-04 RATIOR= 0.000
            MAX UN=0.1315E-07 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
            MIN UN=-.2578E-01 IEQ=   163 NODE     82 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0




+-----------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                 Exe Time :24 July 2019      10:49:25                                                  |
+-----------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     5 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    5     ( AT TIME   5.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)           (
    1   1.5617324E-02  -9.7228586E-04
    2   1.5422869E-02  -9.7225749E-04
    3   1.5228428E-02  -9.7212856E-04
    4   1.5034031E-02  -9.7179815E-04
    5   1.4839730E-02  -9.7114481E-04
```

6	1.4645603E-02	-9.7002946E-04
7	1.4451759E-02	-9.6829497E-04
8	1.4258338E-02	-9.6576685E-04
9	1.4065518E-02	-9.6225296E-04
10	1.3873517E-02	-9.5754541E-04
11	1.3682595E-02	-9.5142019E-04
12	1.3493059E-02	-9.4363570E-04
13	1.3305268E-02	-9.3393272E-04
14	1.3212153E-02	-9.2828483E-04
15	1.3027477E-02	-9.1949281E-04
16	1.2843956E-02	-9.1668625E-04
17	1.2660425E-02	-9.1954532E-04
18	1.2475783E-02	-9.2773275E-04
19	1.2289000E-02	-9.4089385E-04
20	1.2099119E-02	-9.5865652E-04
21	1.1905257E-02	-9.8063129E-04
22	1.1706613E-02	-1.0064120E-03
23	1.1502467E-02	-1.0355757E-03
24	1.1292186E-02	-1.0676816E-03
25	1.1075228E-02	-1.1022714E-03
26	1.0851144E-02	-1.1388696E-03
27	1.0619581E-02	-1.1769831E-03
28	1.0380285E-02	-1.2161020E-03
29	1.0133108E-02	-1.2556990E-03
30	9.8780094E-03	-1.2952301E-03
31	9.6150578E-03	-1.3341340E-03
32	9.3444376E-03	-1.3718318E-03
33	9.0664465E-03	-1.4077279E-03
34	8.7815074E-03	-1.4412088E-03
35	8.4901661E-03	-1.4716437E-03
36	8.1930962E-03	-1.4983847E-03
37	7.8910987E-03	-1.5208284E-03
38	7.5850852E-03	-1.5384895E-03
39	7.2760471E-03	-1.5510111E-03
40	6.9650386E-03	-1.5581649E-03
41	6.6531456E-03	-1.5598509E-03
42	6.3414609E-03	-1.5560978E-03
43	6.0310607E-03	-1.5470545E-03
44	5.7229800E-03	-1.5329211E-03
45	5.4182189E-03	-1.5138881E-03
46	5.1177393E-03	-1.4901360E-03
47	4.8224677E-03	-1.4618360E-03
48	4.5332988E-03	-1.4291505E-03
49	4.2510912E-03	-1.3922325E-03
50	3.9766782E-03	-1.3512272E-03
51	3.7108483E-03	-1.3065023E-03
52	3.4542924E-03	-1.2586471E-03
53	3.2075663E-03	-1.2082357E-03
54	2.9711308E-03	-1.1558345E-03
55	2.7453282E-03	-1.1019985E-03
56	2.5303906E-03	-1.0472736E-03
57	2.3264421E-03	-9.9219730E-04
58	2.1334998E-03	-9.3730003E-04
59	1.9514754E-03	-8.8310429E-04
60	1.7801776E-03	-8.3011495E-04
61	1.6193170E-03	-7.7881166E-04
62	1.4685113E-03	-7.2963402E-04
63	1.3272968E-03	-6.8295470E-04
64	1.1951430E-03	-6.3907201E-04
65	1.0714662E-03	-5.9821598E-04
66	9.5564362E-04	-5.6055407E-04
67	8.4702433E-04	-5.2619634E-04
68	7.4494099E-04	-4.9520002E-04
69	6.4871964E-04	-4.6757399E-04
70	5.5768909E-04	-4.4328252E-04
71	4.7118948E-04	-4.2224845E-04
72	3.8858027E-04	-4.0435605E-04
73	3.0924774E-04	-3.8945337E-04
74	2.3261200E-04	-3.7735449E-04
75	1.5813358E-04	-3.6784110E-04
76	8.5319825E-05	-3.6066371E-04
77	1.3731011E-05	-3.5554259E-04
78	-5.7013682E-05	-3.5216852E-04
79	-1.2723031E-04	-3.5020318E-04
80	-1.9716440E-04	-3.4927956E-04
81	-2.6698522E-04	-3.4900223E-04
82	-3.0188799E-04	-3.4898809E-04

| Exe Time :24 July 2019 10:49:25 |

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 82
C U R R E N T T I M E I S 5.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	1.195	-1.5617E-02	25.00	11.95	25.00	39.02	ACTIVE	0.000	0.000	0.000	1.000	1.000	11.95	0.000	0.000	Strato1_2_8_L_0
2 D	1.846	-1.5423E-02	19.31	9.229	19.31	35.43	ACTIVE	0.000	-0.2000	0.000	1.000	1.000	9.229	0.000	0.000	Strato1_2_8_L_0
3 D	2.405	-1.5228E-02	25.16	12.03	25.16	37.77	ACTIVE	0.000	-0.4000	0.000	1.000	1.000	12.03	0.000	0.000	Strato1_2_8_L_0
4 D	2.710	-1.5034E-02	28.35	13.55	28.35	38.73	ACTIVE	0.000	-0.6000	0.000	1.000	1.000	13.55	0.000	0.000	Strato1_2_8_L_0
5 D	3.148	-1.4840E-02	32.93	15.74	32.93	40.41	ACTIVE	0.000	-0.8000	0.000	1.000	1.000	15.74	0.000	0.000	Strato1_2_8_L_0
6 D	3.471	-1.4646E-02	36.31	17.35	36.31	41.46	ACTIVE	0.000	-1.000	0.000	1.000	1.000	17.35	0.000	0.000	Strato1_2_8_L_0
7 D	3.880	-1.4452E-02	40.58	19.40	40.58	42.98	ACTIVE	0.000	-1.200	0.000	1.000	1.000	19.40	0.000	0.000	Strato1_2_8_L_0
8 D	4.213	-1.4258E-02	44.07	21.06	44.07	44.07	ACTIVE	0.000	-1.400	0.000	1.000	1.000	21.06	0.000	0.000	Strato1_2_8_L_0
9 D	4.545	-1.4066E-02	47.54	22.72	47.54	45.16	ACTIVE	0.000	-1.600	0.000	1.000	1.000	22.72	0.000	0.000	Strato1_2_8_L_0
10 D	4.891	-1.3874E-02	51.16	24.45	51.16	46.30	ACTIVE	0.000	-1.800	0.000	1.000	1.000	24.45	0.000	0.000	Strato1_2_8_L_0
11 D	5.286	-1.3683E-02	55.29	26.43	55.29	47.69	ACTIVE	0.000	-2.000	0.000	1.000	1.000	26.43	0.000	0.000	Strato1_2_8_L_0
12 D	5.633	-1.3493E-02	58.93	28.17	58.93	48.81	ACTIVE	0.000	-2.200	0.000	1.000	1.000	28.17	0.000	0.000	Strato1_2_8_L_0
13 D	4.516	-1.3305E-02	62.99	30.11	62.99	50.12	ACTIVE	0.000	-2.400	0.000	1.000	1.000	30.11	0.000	0.000	Strato1_2_8_L_0
14 D	4.645	-1.3212E-02	64.78	30.97	64.78	50.64	ACTIVE	0.000	-2.500	0.000	1.000	1.000	30.97	0.000	0.000	Strato1_2_8_L_0
15 D	6.544	-1.3027E-02	68.45	32.72	68.45	51.70	ACTIVE	0.000	-2.700	0.000	1.000	1.000	32.72	0.000	0.000	Strato1_2_8_L_0
16 D	6.928	-1.2844E-02	72.47	34.64	72.47	52.92	ACTIVE	0.000	-2.900	0.000	1.000	1.000	34.64	0.000	0.000	Strato1_2_8_L_0
17 D	7.280	-1.2660E-02	76.15	36.40	76.15	53.96	ACTIVE	0.000	-3.100	0.000	1.000	1.000	36.40	0.000	0.000	Strato1_2_8_L_0
18 D	7.661	-1.2476E-02	80.13	38.30	80.13	55.14	ACTIVE	0.000	-3.300	0.000	1.000	1.000	38.30	0.000	0.000	Strato1_2_8_L_0
19 D	8.013	-1.2289E-02	83.82	40.07	83.82	56.16	ACTIVE	0.000	-3.500	0.000	1.000	1.000	40.07	0.000	0.000	Strato1_2_8_L_0
20 D	8.392	-1.2099E-02	87.78	41.96	87.78	57.34	ACTIVE	0.000	-3.700	0.000	1.000	1.000	41.96	0.000	0.000	Strato1_2_8_L_0
21 D	8.718	-1.1905E-02	91.19	43.59	91.19	58.24	ACTIVE	0.000	-3.900	0.000	1.000	1.000	43.59	0.000	0.000	Strato1_2_8_L_0
22 D	9.096	-1.1707E-02	95.15	45.48	95.15	59.43	ACTIVE	0.000	-4.100	0.000	1.000	1.000	45.48	0.000	0.000	Strato1_2_8_L_0
23 D	9.473	-1.1502E-02	99.09	47.37	99.09	60.64	ACTIVE	0.000	-4.300	0.000	1.000	1.000	47.37	0.000	0.000	Strato1_2_8_L_0
24 D	9.828	-1.1292E-02	102.8	49.14	102.8	61.75	ACTIVE	0.000	-4.500	0.000	1.000	1.000	49.14	0.000	0.000	Strato1_2_8_L_0
25 D	10.20	-1.1075E-02	106.7	51.02	106.7	63.00	ACTIVE	0.000	-4.700	0.000	1.000	1.000	51.02	0.000	0.000	Strato1_2_8_L_0
26 D	10.56	-1.0851E-02	110.5	52.80	110.5	64.17	ACTIVE	0.000	-4.900	0.000	1.000	1.000	52.80	0.000	0.000	Strato1_2_8_L_0
27 D	10.93	-1.0620E-02	114.4	54.67	114.4	65.48	ACTIVE	0.000	-5.100	0.000	1.000	1.000	54.67	0.000	0.000	Strato1_2_8_L_0
28 D	11.27	-1.0380E-02	117.9	56.35	117.9	66.61	ACTIVE	0.000	-5.300	0.000	1.000	1.000	56.35	0.000	0.000	Strato1_2_8_L_0
29 D	11.64	-1.0133E-02	121.8	58.22	121.8	67.98	ACTIVE	0.000	-5.500	0.000	1.000	1.000	58.22	0.000	0.000	Strato1_2_8_L_0
30 D	12.00	-9.8780E-03	125.5	60.00	125.5	69.29	ACTIVE	0.000	-5.700	0.000	1.000	1.000	60.00	0.000	0.000	Strato1_2_8_L_0
31 D	12.37	-9.6151E-03	129.4	61.87	129.4	70.73	ACTIVE	0.000	-5.900	0.000	1.000	1.000	61.87	0.000	0.000	Strato1_2_8_L_0
32 D	12.73	-9.3444E-03	133.2	63.66	133.2	72.11	ACTIVE	0.000	-6.100	0.000	1.000	1.000	63.66	0.000	0.000	Strato1_2_8_L_0
33 D	13.10	-9.0664E-03	137.1	65.52	137.1	73.62	ACTIVE	0.000	-6.300	0.000	1.000	1.000	65.52	0.000	0.000	Strato1_2_8_L_0

34 D	13.46	-8.7815E-03	140.8	67.31	140.8	75.08	ACTIVE	0.000	-6.500	0.000	1.000	1.000	67.31	0.000	0.000	Strato1_2_8_L_0
35 D	13.83	-8.4902E-03	144.7	69.17	144.7	76.69	ACTIVE	0.000	-6.700	0.000	1.000	1.000	69.17	0.000	0.000	Strato1_2_8_L_0
36 D	14.19	-8.1931E-03	148.4	70.95	148.4	78.67	ACTIVE	0.000	-6.900	0.000	1.000	1.000	70.95	0.000	0.000	Strato1_2_8_L_0
37 D	14.55	-7.8911E-03	152.2	72.74	152.2	80.65	ACTIVE	0.000	-7.100	0.000	1.000	1.000	72.74	0.000	0.000	Strato1_2_8_L_0
38 D	14.92	-7.5851E-03	156.1	74.60	156.1	82.71	ACTIVE	0.000	-7.300	0.000	1.000	1.000	74.60	0.000	0.000	Strato1_2_8_L_0
39 D	15.28	-7.2760E-03	159.8	76.39	159.8	84.70	ACTIVE	0.000	-7.500	0.000	1.000	1.000	76.39	0.000	0.000	Strato1_2_8_L_0
40 D	15.65	-6.9650E-03	163.7	78.24	163.7	86.75	ACTIVE	0.000	-7.700	0.000	1.000	1.000	78.24	0.000	0.000	Strato1_2_8_L_0
41 D	16.01	-6.6531E-03	167.4	80.03	167.4	88.74	ACTIVE	0.000	-7.900	0.000	1.000	1.000	80.03	0.000	0.000	Strato1_2_8_L_0
42 D	16.38	-6.3415E-03	171.3	81.89	171.3	90.79	ACTIVE	0.000	-8.100	0.000	1.000	1.000	81.89	0.000	0.000	Strato1_2_8_L_0
43 D	16.72	-6.0311E-03	174.9	83.62	174.9	92.71	ACTIVE	0.000	-8.300	0.000	1.000	1.000	83.62	0.000	0.000	Strato1_2_8_L_0
44 D	17.09	-5.7230E-03	178.8	85.47	178.8	94.76	ACTIVE	0.000	-8.500	0.000	1.000	1.000	85.47	0.000	0.000	Strato1_2_8_L_0
45 D	17.45	-5.4182E-03	182.6	87.26	182.6	96.76	ACTIVE	0.000	-8.700	0.000	1.000	1.000	87.26	0.000	0.000	Strato1_2_8_L_0
46 D	17.82	-5.1177E-03	186.4	89.11	186.4	98.81	ACTIVE	0.000	-8.900	0.000	1.000	1.000	89.11	0.000	0.000	Strato1_2_8_L_0
47 D	18.18	-4.8225E-03	190.2	90.91	190.2	100.8	ACTIVE	0.000	-9.100	0.000	1.000	1.000	90.91	0.000	0.000	Strato1_2_8_L_0
48 D	18.55	-4.5333E-03	194.1	92.76	194.1	102.8	ACTIVE	0.000	-9.300	0.000	1.000	1.000	92.76	0.000	0.000	Strato1_2_8_L_0
49 D	18.92	-4.2511E-03	197.9	94.60	197.9	104.9	ACTIVE	0.000	-9.500	0.000	1.000	1.000	94.60	0.000	0.000	Strato1_2_8_L_0
50 D	8.828	-3.9767E-03	201.9	44.14	201.9	100.9	ACTIVE	0.000	-9.700	0.000	1.000	1.000	44.14	0.000	0.000	Strato2_3095_82743_L_0
51 D	9.091	-3.7108E-03	205.8	45.46	205.8	102.9	ACTIVE	0.000	-9.900	0.000	1.000	1.000	45.46	0.000	0.000	Strato2_3095_82743_L_0
52 D	9.355	-3.4543E-03	209.8	46.78	209.8	104.9	ACTIVE	0.000	-10.10	0.000	1.000	1.000	46.78	0.000	0.000	Strato2_3095_82743_L_0
53 D	9.625	-3.2076E-03	213.8	48.13	213.8	106.9	ACTIVE	0.000	-10.30	0.000	1.000	1.000	48.13	0.000	0.000	Strato2_3095_82743_L_0
54 D	9.889	-2.9711E-03	217.8	49.45	217.8	108.9	ACTIVE	0.000	-10.50	0.000	1.000	1.000	49.45	0.000	0.000	Strato2_3095_82743_L_0
55 D	10.16	-2.7453E-03	221.9	50.80	221.9	110.9	ACTIVE	0.000	-10.70	0.000	1.000	1.000	50.80	0.000	0.000	Strato2_3095_82743_L_0
56 D	10.42	-2.5304E-03	225.8	52.12	225.8	112.9	ACTIVE	0.000	-10.90	0.000	1.000	1.000	52.12	0.000	0.000	Strato2_3095_82743_L_0
57 D	10.69	-2.3264E-03	229.9	53.47	229.9	114.9	ACTIVE	0.000	-11.10	0.000	1.000	1.000	53.47	0.000	0.000	Strato2_3095_82743_L_0
58 D	10.95	-2.1335E-03	233.7	54.76	233.7	116.9	ACTIVE	0.000	-11.30	0.000	1.000	1.000	54.76	0.000	0.000	Strato2_3095_82743_L_0
59 D	11.22	-1.9515E-03	237.8	56.11	237.8	118.9	ACTIVE	0.000	-11.50	0.000	1.000	1.000	56.11	0.000	0.000	Strato2_3095_82743_L_0
60 D	11.49	-1.7802E-03	241.8	57.43	241.8	120.9	ACTIVE	0.000	-11.70	0.000	1.000	1.000	57.43	0.000	0.000	Strato2_3095_82743_L_0
61 D	12.48	-1.6193E-03	245.8	62.40	245.8	122.9	UL-RL	3.2112E+04	-11.90	0.000	1.000	1.000	62.40	0.000	0.000	Strato2_3095_82743_L_0
62 D	13.97	-1.4685E-03	249.9	69.87	249.9	124.9	UL-RL	3.2112E+04	-12.10	0.000	1.000	1.000	69.87	0.000	0.000	Strato2_3095_82743_L_0
63 D	15.37	-1.3273E-03	253.8	76.87	253.8	126.9	UL-RL	3.2112E+04	-12.30	0.000	1.000	1.000	76.87	0.000	0.000	Strato2_3095_82743_L_0
64 D	16.70	-1.1951E-03	257.9	83.49	257.9	128.9	UL-RL	3.2112E+04	-12.50	0.000	1.000	1.000	83.49	0.000	0.000	Strato2_3095_82743_L_0
65 D	17.93	-1.0715E-03	261.8	89.66	261.8	130.9	UL-RL	3.2112E+04	-12.70	0.000	1.000	1.000	89.66	0.000	0.000	Strato2_3095_82743_L_0
66 D	19.11	-9.5564E-04	265.8	95.57	265.8	132.9	UL-RL	3.2112E+04	-12.90	0.000	1.000	1.000	95.57	0.000	0.000	Strato2_3095_82743_L_0
67 D	20.22	-8.4702E-04	269.7	101.1	269.7	134.9	UL-RL	3.2112E+04	-13.10	0.000	1.000	1.000	101.1	0.000	0.000	Strato2_3095_82743_L_0
68 D	21.27	-7.4494E-04	273.6	106.3	273.6	136.8	UL-RL	3.2112E+04	-13.30	0.000	1.000	1.000	106.3	0.000	0.000	Strato2_3095_82743_L_0
69 D	22.27	-6.4872E-04	277.5	111.4	277.5	138.8	UL-RL	3.2112E+04	-13.50	0.000	1.000	1.000	111.4	0.000	0.000	Strato2_3095_82743_L_0
70 D	23.23	-5.5769E-04	281.4	116.2	281.4	140.7	UL-RL	3.2112E+04	-13.70	0.000	1.000	1.000	116.2	0.000	0.000	Strato2_3095_82743_L_0
71 D	24.15	-4.7119E-04	285.3	120.8	285.3	142.7	UL-RL	3.2112E+04	-13.90	0.000	1.000	1.000	120.8	0.000	0.000	Strato2_3095_82743_L_0
72 D	25.05	-3.8858E-04	289.2	125.2	289.2	144.6	UL-RL	3.2112E+04	-14.10	0.000	1.000	1.000	125.2	0.000	0.000	Strato2_3095_82743_L_0
73 D	25.90	-3.0925E-04	293.1	129.5	293.1	146.5	UL-RL	3.2112E+04	-14.30	0.000	1.000	1.000	129.5	0.000	0.000	Strato2_3095_82743_L_0
74 D	26.75	-2.3261E-04	297.0	133.8	297.0	148.5	UL-RL	3.2112E+04	-14.50	0.000	1.000	1.000	133.8	0.000	0.000	Strato2_3095_82743_L_0
75 D	27.58	-1.5813E-04	300.9	137.9	300.9	150.4	UL-RL	3.2112E+04	-14.70	0.000	1.000	1.000	137.9	0.000	0.000	Strato2_3095_82743_L_0
76 D	28.40	-8.5320E-05	304.8	142.0	304.8	152.4	UL-RL	3.2112E+04	-14.90	0.000	1.000	1.000				

```
142.0       0.000       0.000     Strato2_3095_82743_L_0
  77 D   29.20     -1.3731E-05   308.7       146.0       308.7       154.4          UL-RL  3.2112E+04  -15.10       0.000       1.000       1.000
146.0       0.000       0.000     Strato2_3095_82743_L_0
  78 D   30.01      5.7014E-05   312.6       150.0       312.6       156.3          UL-RL  3.2112E+04  -15.30       0.000       1.000       1.000
150.0       0.000       0.000     Strato2_3095_82743_L_0
  79 D   30.80      1.2723E-04   316.6       154.0       316.6       158.3          UL-RL  3.2112E+04  -15.50       0.000       1.000       1.000
154.0       0.000       0.000     Strato2_3095_82743_L_0
  80 D   31.59      1.9716E-04   320.4       158.0       320.4       160.2          UL-RL  3.2112E+04  -15.70       0.000       1.000       1.000
158.0       0.000       0.000     Strato2_3095_82743_L_0
  81 D   24.29      2.6699E-04   324.3       161.9       324.3       162.2          UL-RL  3.2112E+04  -15.90       0.000       1.000       1.000
161.9       0.000       0.000     Strato2_3095_82743_L_0
  82 D   8.171      3.0189E-04   326.3       163.4       326.3       163.4            V-C  1.0704E+04  -16.00       0.000       1.000       1.000
163.4       0.000       0.000     Strato2_3095_82743_L_0
```

```
+------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*    |
|                                                                                                            |
|                                   NewProject.BaseDesignSection_28.SLERara_3454                             |
|                              Exe Time :24 July 2019      10:49:25                                          |
+------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    2

0_R                             :
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
C U R R E N T    T I M E    I S      5.0000

 HARDENING 2D SOIL ELEMENT

 ****** TOTAL STRESS FORMULATION *****
```

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000	0.000	0.000	0.000	not available
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000	0.000	0.000	0.000	not available
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000	0.000	0.000	0.000	not available
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000	0.000	0.000	0.000	not available
6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000	0.000	0.000	0.000	not available
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000	0.000	0.000	0.000	not available
9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000	0.000	0.000	0.000	not available
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000	0.000	0.000	0.000	not available
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000	0.000	0.000	0.000	not available
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000	0.000	0.000	0.000	not available
14	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000	0.000	0.000	0.000	not available
15	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000	0.000	0.000	0.000	not available
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000	0.000	0.000	0.000	not available
17	0.000	--	--	--	--	--	REMOVED	--	-3.100	0.000	1.000	1.000	0.000	0.000	0.000	not available
18	0.000	--	--	--	--	--	REMOVED	--	-3.300	0.000	1.000	1.000	0.000	0.000	0.000	not available
19	0.000	--	--	--	--	--	REMOVED	--	-3.500	0.000	1.000	1.000	0.000	0.000	0.000	not available
20	0.000	--	--	--	--	--	REMOVED	--	-3.700	0.000	1.000	1.000	0.000	0.000	0.000	not available
21	0.000	--	--	--	--	--	REMOVED	--	-3.900	0.000	1.000	1.000	0.000	0.000	0.000	not available
22	0.000	--	--	--	--	--	REMOVED	--	-4.100	0.000	1.000	1.000	0.000	0.000	0.000	not available
23	0.000	--	--	--	--	--	REMOVED	--	-4.300	0.000	1.000	1.000	0.000	0.000	0.000	not available
24	0.000	--	--	--	--	--	REMOVED	--	-4.500	0.000	1.000	1.000	0.000	0.000	0.000	not available
25	0.000	--	--	--	--	--	REMOVED	--	-4.700	0.000	1.000	1.000	0.000	0.000	0.000	not available
26	0.000	--	--	--	--	--	REMOVED	--	-4.900	0.000	1.000	1.000	0.000	0.000	0.000	not available
27	0.000	--	--	--	--	--	REMOVED	--	-5.100	0.000	1.000	1.000	0.000	0.000	0.000	not available
28	0.000	--	--	--	--	--	REMOVED	--	-5.300	0.000	1.000	1.000	0.000	0.000	0.000	not available
29	0.000	--	--	--	--	--	REMOVED	--	-5.500	0.000	1.000	1.000	0.000	0.000	0.000	not available
30	0.000	--	--	--	--	--	REMOVED	--	-5.700	0.000	1.000	1.000				

0.000	0.000	0.000	not available										
31	0.000	--	--	--	--	--	REMOVED	--	-5.900	0.000	1.000	1.000	
0.000	0.000	0.000	not available										
32	0.000	--	--	--	--	--	REMOVED	--	-6.100	0.000	1.000	1.000	
0.000	0.000	0.000	not available										
33	0.000	--	--	--	--	--	REMOVED	--	-6.300	0.000	1.000	1.000	
0.000	0.000	0.000	not available										
34	0.000	--	--	--	--	--	REMOVED	--	-6.500	0.000	1.000	1.000	
0.000	0.000	0.000	not available										
35	0.000	--	--	--	--	--	REMOVED	--	-6.700	0.000	1.000	1.000	
0.000	0.000	0.000	not available										
36 D	2.610	8.1931E-03	3.230	13.05	131.1	85.33	PASSIVE	0.000	-6.900	0.000	1.000	1.000	
13.05	0.000	0.000	Strato1_2_8_L_0										
37 D	5.682	7.8911E-03	7.030	28.41	134.9	86.06	PASSIVE	0.000	-7.100	0.000	1.000	1.000	
28.41	0.000	0.000	Strato1_2_8_L_0										
38 D	8.753	7.5851E-03	10.83	43.76	138.7	86.86	PASSIVE	0.000	-7.300	0.000	1.000	1.000	
43.76	0.000	0.000	Strato1_2_8_L_0										
39 D	11.82	7.2760E-03	14.63	59.12	142.5	87.72	PASSIVE	0.000	-7.500	0.000	1.000	1.000	
59.12	0.000	0.000	Strato1_2_8_L_0										
40 D	14.90	6.9650E-03	18.43	74.48	146.3	88.64	PASSIVE	0.000	-7.700	0.000	1.000	1.000	
74.48	0.000	0.000	Strato1_2_8_L_0										
41 D	17.97	6.6531E-03	22.23	89.83	150.1	89.83	PASSIVE	0.000	-7.900	0.000	1.000	1.000	
89.83	0.000	0.000	Strato1_2_8_L_0										
42 D	20.69	6.3415E-03	26.03	103.5	153.9	103.5	V-C	2626.	-8.100	0.000	1.000	1.000	
103.5	0.000	0.000	Strato1_2_8_L_0										
43 D	20.84	6.0311E-03	29.83	104.2	157.7	104.2	V-C	2626.	-8.300	0.000	1.000	1.000	
104.2	0.000	0.000	Strato1_2_8_L_0										
44 D	21.00	5.7230E-03	33.63	105.0	161.5	105.0	V-C	2626.	-8.500	0.000	1.000	1.000	
105.0	0.000	0.000	Strato1_2_8_L_0										
45 D	21.16	5.4182E-03	37.43	105.8	165.3	105.8	V-C	2626.	-8.700	0.000	1.000	1.000	
105.8	0.000	0.000	Strato1_2_8_L_0										
46 D	21.33	5.1177E-03	41.23	106.6	169.1	106.6	V-C	2626.	-8.900	0.000	1.000	1.000	
106.6	0.000	0.000	Strato1_2_8_L_0										
47 D	21.51	4.8225E-03	45.03	107.5	172.9	107.5	V-C	2626.	-9.100	0.000	1.000	1.000	
107.5	0.000	0.000	Strato1_2_8_L_0										
48 D	21.69	4.5333E-03	48.83	108.5	176.7	108.5	V-C	2626.	-9.300	0.000	1.000	1.000	
108.5	0.000	0.000	Strato1_2_8_L_0										
49 D	21.89	4.2511E-03	52.63	109.4	180.5	109.4	V-C	2626.	-9.500	0.000	1.000	1.000	
109.4	0.000	0.000	Strato1_2_8_L_0										
50 D	21.35	3.9767E-03	56.63	106.7	184.5	106.7	V-C	5801.	-9.700	0.000	1.000	1.000	
106.7	0.000	0.000	Strato2_3095_82743_L_0										
51 D	21.35	3.7108E-03	60.63	106.8	188.5	106.8	V-C	5801.	-9.900	0.000	1.000	1.000	
106.8	0.000	0.000	Strato2_3095_82743_L_0										
52 D	21.37	3.4543E-03	64.63	106.9	192.5	106.9	V-C	5801.	-10.10	0.000	1.000	1.000	
106.9	0.000	0.000	Strato2_3095_82743_L_0										
53 D	21.42	3.2076E-03	68.63	107.1	196.5	107.1	V-C	5801.	-10.30	0.000	1.000	1.000	
107.1	0.000	0.000	Strato2_3095_82743_L_0										
54 D	21.48	2.9711E-03	72.63	107.4	200.5	107.4	V-C	5801.	-10.50	0.000	1.000	1.000	
107.4	0.000	0.000	Strato2_3095_82743_L_0										
55 D	21.56	2.7453E-03	76.63	107.8	204.5	107.8	V-C	5801.	-10.70	0.000	1.000	1.000	
107.8	0.000	0.000	Strato2_3095_82743_L_0										
56 D	21.67	2.5304E-03	80.63	108.3	208.5	108.3	V-C	5801.	-10.90	0.000	1.000	1.000	
108.3	0.000	0.000	Strato2_3095_82743_L_0										
57 D	21.79	2.3264E-03	84.63	108.9	212.5	108.9	V-C	5801.	-11.10	0.000	1.000	1.000	
108.9	0.000	0.000	Strato2_3095_82743_L_0										
58 D	21.87	2.1335E-03	88.63	109.3	216.5	109.8	UL-RL	1.7404E+04	-11.30	0.000	1.000	1.000	
109.3	0.000	0.000	Strato2_3095_82743_L_0										
59 D	21.57	1.9515E-03	92.63	107.9	220.5	111.8	UL-RL	1.7404E+04	-11.50	0.000	1.000	1.000	
107.9	0.000	0.000	Strato2_3095_82743_L_0										
60 D	21.34	1.7802E-03	96.63	106.7	224.5	113.7	UL-RL	1.7404E+04	-11.70	0.000	1.000	1.000	
106.7	0.000	0.000	Strato2_3095_82743_L_0										
61 D	21.15	1.6193E-03	100.6	105.7	228.5	115.7	UL-RL	1.7404E+04	-11.90	0.000	1.000	1.000	
105.7	0.000	0.000	Strato2_3095_82743_L_0										
62 D	21.01	1.4685E-03	104.6	105.0	232.5	117.7	UL-RL	1.7404E+04	-12.10	0.000	1.000	1.000	
105.0	0.000	0.000	Strato2_3095_82743_L_0										
63 D	20.91	1.3273E-03	108.6	104.5	236.5	119.6	UL-RL	1.7404E+04	-12.30	0.000	1.000	1.000	
104.5	0.000	0.000	Strato2_3095_82743_L_0										
64 D	20.85	1.1951E-03	112.6	104.3	240.5	121.6	UL-RL	1.7404E+04	-12.50	0.000	1.000	1.000	
104.3	0.000	0.000	Strato2_3095_82743_L_0										
65 D	20.83	1.0715E-03	116.6	104.2	244.5	123.6	UL-RL	1.7404E+04	-12.70	0.000	1.000	1.000	
104.2	0.000	0.000	Strato2_3095_82743_L_0										
66 D	20.85	9.5564E-04	120.6	104.2	248.5	125.5	UL-RL	1.7404E+04	-12.90	0.000	1.000	1.000	
104.2	0.000	0.000	Strato2_3095_82743_L_0										
67 D	20.89	8.4702E-04	124.6	104.5	252.5	127.5	UL-RL	1.7404E+04	-13.10	0.000	1.000	1.000	
104.5	0.000	0.000	Strato2_3095_82743_L_0										
68 D	20.97	7.4494E-04	128.6	104.8	256.5	129.5	UL-RL	1.7404E+04	-13.30	0.000	1.000	1.000	
104.8	0.000	0.000	Strato2_3095_82743_L_0										
69 D	21.07	6.4872E-04	132.6	105.3	260.5	131.5	UL-RL	1.7404E+04	-13.50	0.000	1.000	1.000	
105.3	0.000	0.000	Strato2_3095_82743_L_0										
70 D	21.19	5.5769E-04	136.6	105.9	264.5	133.5	UL-RL	1.7404E+04	-13.70	0.000	1.000	1.000	
105.9	0.000	0.000	Strato2_3095_82743_L_0										
71 D	21.32	4.7119E-04	140.6	106.6	268.5	135.5	UL-RL	1.7404E+04	-13.90	0.000	1.000	1.000	
106.6	0.000	0.000	Strato2_3095_82743_L_0										
72 D	21.48	3.8858E-04	144.6	107.4	272.5	137.4	UL-RL	1.7404E+04	-14.10	0.000	1.000	1.000	
107.4	0.000	0.000	Strato2_3095_82743_L_0										

```
  73 D   21.64     3.0925E-04  148.6       108.2       276.5       139.4            UL-RL  1.7404E+04  -14.30        0.000        1.000        1.000
108.2       0.000       0.000    Strato2_3095_82743_L_0
  74 D   21.82     2.3261E-04  152.6       109.1       280.5       141.4            UL-RL  1.7404E+04  -14.50        0.000        1.000        1.000
109.1       0.000       0.000    Strato2_3095_82743_L_0
  75 D   22.00     1.5813E-04  156.6       110.0       284.5       143.4            UL-RL  1.7404E+04  -14.70        0.000        1.000        1.000
110.0       0.000       0.000    Strato2_3095_82743_L_0
  76 D   22.19     8.5320E-05  160.6       111.0       288.5       145.4            UL-RL  1.7404E+04  -14.90        0.000        1.000        1.000
111.0       0.000       0.000    Strato2_3095_82743_L_0
  77 D   22.38     1.3731E-05  164.6       111.9       292.5       147.4            UL-RL  1.7404E+04  -15.10        0.000        1.000        1.000
111.9       0.000       0.000    Strato2_3095_82743_L_0
  78 D   22.58    -5.7014E-05  168.6       112.9       296.5       149.4            UL-RL  1.7404E+04  -15.30        0.000        1.000        1.000
112.9       0.000       0.000    Strato2_3095_82743_L_0
  79 D   22.77    -1.2723E-04  172.6       113.9       300.5       151.4            UL-RL  1.7404E+04  -15.50        0.000        1.000        1.000
113.9       0.000       0.000    Strato2_3095_82743_L_0
  80 D   22.97    -1.9716E-04  176.6       114.8       304.5       153.4            UL-RL  1.7404E+04  -15.70        0.000        1.000        1.000
114.8       0.000       0.000    Strato2_3095_82743_L_0
  81 D   17.37    -2.6699E-04  180.6       115.8       308.5       155.4            UL-RL  1.7404E+04  -15.90        0.000        1.000        1.000
115.8       0.000       0.000    Strato2_3095_82743_L_0
  82 D   5.815    -3.0189E-04  182.6       116.3       310.5       156.4            UL-RL  1.7404E+04  -16.00        0.000        1.000        1.000
116.3       0.000       0.000    Strato2_3095_82743_L_0
```

```
+-----------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*  |
|                                                                                                           |
|                                     NewProject.BaseDesignSection_28.SLERara_3454                          |
|                                  Exe Time :24 July 2019      10:49:25                                     |
+-----------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P  N O.   3

WallElement_33                     :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   81
C U R R E N T   T I M E   I S      5.0000

 WALL2D ELEMENT
```

EL	TA	TB	MA	MB
1	1.1950	-1.1950	1.84786E-10	0.23900
2	3.0408	-3.0408	-0.23900	0.84715
3	5.4462	-5.4462	-0.84715	1.9364
4	8.1565	-8.1565	-1.9364	3.5677
5	11.304	-11.304	-3.5677	5.8286
6	14.775	-14.775	-5.8286	8.7836
7	18.655	-18.655	-8.7836	12.515
8	22.868	-22.868	-12.515	17.088
9	27.412	-27.412	-17.088	22.571
10	32.303	-32.303	-22.571	29.031
11	37.589	-37.589	-29.031	36.549
12	43.223	-43.223	-36.549	45.194
13	47.739	-47.739	-45.194	49.968
14	-129.33	129.33	-49.968	24.101
15	-122.79	122.79	-24.101	-0.45700
16	-115.86	115.86	0.45700	-23.629
17	-108.58	108.58	23.629	-45.346
18	-100.92	100.92	45.346	-65.530
19	-92.908	92.908	65.530	-84.112
20	-84.517	84.517	84.112	-101.02
21	-75.799	75.799	101.02	-116.17
22	-66.702	66.702	116.17	-129.52
23	-57.229	57.229	129.52	-140.96
24	-47.401	47.401	140.96	-150.44
25	-37.197	37.197	150.44	-157.88
26	-26.638	26.638	157.88	-163.21
27	-15.704	15.704	163.21	-166.35
28	-4.4345	4.4345	166.35	-167.24
29	7.2093	-7.2093	167.24	-165.79
30	19.210	-19.210	165.79	-161.95
31	31.584	-31.584	161.95	-155.64
32	44.316	-44.316	155.64	-146.77
33	57.420	-57.420	146.77	-135.29
34	70.882	-70.882	135.29	-121.11
35	84.716	-84.716	121.11	-104.17
36	96.295	-96.295	104.17	-84.909
37	105.16	-105.16	84.909	-63.877
38	111.33	-111.33	63.877	-41.612
39	114.78	-114.78	41.612	-18.655
40	115.53	-115.53	18.655	4.4515
41	113.58	-113.58	-4.4515	27.167
42	109.26	-109.26	-27.167	49.019

43	105.15	-105.15	-49.019	70.048
44	101.24	-101.24	-70.048	90.296
45	97.537	-97.537	-90.296	109.80
46	94.031	-94.031	-109.80	128.61
47	90.707	-90.707	-128.61	146.75
48	87.567	-87.567	-146.75	164.26
49	84.602	-84.602	-164.26	181.18
50	72.082	-72.082	-181.18	195.60
51	59.822	-59.822	-195.60	207.57
52	47.804	-47.804	-207.57	217.13
53	36.013	-36.013	-217.13	224.33
54	24.423	-24.423	-224.33	229.21
55	13.021	-13.021	-229.21	231.82
56	1.7783	-1.7783	-231.82	232.17
57	-9.3179	9.3179	-232.17	230.31
58	-20.232	20.232	-230.31	226.26
59	-30.585	30.585	-226.26	220.15
60	-40.435	40.435	-220.15	212.06
61	-49.102	49.102	-212.06	202.24
62	-56.133	56.133	-202.24	191.01
63	-61.668	61.668	-191.01	178.68
64	-65.822	65.822	-178.68	165.51
65	-68.723	68.723	-165.51	151.77
66	-70.458	70.458	-151.77	137.68
67	-71.133	71.133	-137.68	123.45
68	-70.832	70.832	-123.45	109.28
69	-69.628	69.628	-109.28	95.359
70	-67.583	67.583	-95.359	81.843
71	-64.752	64.752	-81.843	68.892
72	-61.183	61.183	-68.892	56.656
73	-56.920	56.920	-56.656	45.272
74	-51.988	51.988	-45.272	34.874
75	-46.410	46.410	-34.874	25.592
76	-40.206	40.206	-25.592	17.551
77	-33.384	33.384	-17.551	10.874
78	-25.955	25.955	-10.874	5.6829
79	-17.924	17.924	-5.6829	2.0981
80	-9.2997	9.2997	-2.0981	0.23821
81	-2.3818	2.3818	-0.23821	-7.49312E-12

PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017*

NewProject.BaseDesignSection_28.SLERara_3454

Exe Time :24 July 2019 10:49:25

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 4

Tieback_768111 :
ELEMENT TYPE 6 NO.OF ELEMENTS. IN THIS GROUP 1
C U R R E N T T I M E I S 5.0000

POST-TENSION 2D-BOUNDARY ELEMENT

	EL	FORCE	d0	EDISPL	pl. eps	K	-ve limit	+ve limit		
ANCHOR	1	188.13	-1.98299E-03	3.56098E-03	0.0000	4424.2	0.0000	0.0000	ELASTIC	ORIGINAL YOUNG MODULUS

PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017*

NewProject.BaseDesignSection_28.SLERara_3454

Exe Time :24 July 2019 10:49:25

F I N A L I N C R E M E N T A L A N A L Y S I S

S U M M A R Y

STEP		NO. OF ITERATIONS
1	CONVERGENCE :YES	2
2	CONVERGENCE :YES	5
3	CONVERGENCE :YES	4
4	CONVERGENCE :YES	4
5	CONVERGENCE :YES	5

```
 END OF PROCESS FOR PROBLEM
New Project
NONLINEAR SOLUTION CPU TIME ....     0.06 [sec]
DATABASE  CREATION CPU TIME.....     0.27 [sec]
```

1.5. Design Assumption : A1+M1+R1 - File di Paratie - File di input (.d)

```
* PARATIE ANALYSIS FOR DESIGN SECTION:Base Design Section USING ASSUMPTION: A1+M1+R1
 * Time:mercoledì 24 luglio 2019 10:49:26
 * 1: Defining general settings
 UNIT  m kN
 TITLE New Project
 DELTA 0.2
 option param itemax 100
 option control hinges 0 0.0001 0.001

 * 2: Defining wall(s)
 WALL LeftWall_32 0 -16 0 1

 * 3: Defining surfaces for wall(s)
 SOIL 0_L LeftWall_32 -16 0 1 0
 SOIL 0_R LeftWall_32 -16 0 2 180

 * 4: Defining soil layers
 *
 * Soil Profile (Strato1_2_8_L_0)
 *
 LDATA Strato1_2_8_L_0 5.84 LeftWall_32
 ATREST 0.53 1 1
 WEIGHT 19 9 10
 PERMEABILITY 1E-06
 RESISTANCE 0 29
 YOUNG 2E+04 6E+04
 ENDL
 *
 * Soil Profile (Strato2_3095_82743_L_0)
 *
 LDATA Strato2_3095_82743_L_0 -9.5 LeftWall_32
 ATREST 0.5 0.5 1
 WEIGHT 20 10 10
 PERMEABILITY 0.0001
 RESISTANCE 20 35
 YOUNG 5E+04 1.5E+05
 ENDL

 * 5: Defining structural materials
 * Steel material: 108 Name=Fe360 E=206000200 kPa
 MATERIAL Fe360_108 2.06E+08
 * Concrete material: 104 Name=C25/30 E=31475800 kPa
 MATERIAL C2530_104 3.148E+07
 * Rebar material: 124 Name=acciaio armonico E=200100000 kPa
 MATERIAL acciaioarmonico_124 2.001E+08
 * Concrete material: 103 Name=C20/25 E=29962000 kPa
 MATERIAL C2025_103 2.996E+07

 * 6: Defining structural elements
 * 6.1: Beams and combined Wall Elements
 BEAM WallElement_33 LeftWall_32 -16 0 C2530_104 0.6848 00 00 0


 * 6.2: Supports
 WIRE Tieback_768111 LeftWall_32 -2.5 acciaioarmonico_124 2.211E-05 163.6 15 0 0




 * 6.3: Strips
 STRIP LeftWall_32 2 5 0 13 0 15 45
 STRIP LeftWall_32 2 5 0 40 0 11.54 30

 * 7: Defining Steps
 STEP Stage1_31
 CHANGE Strato1_2_8_L_0 U-FRICT=29 LeftWall_32
 CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
 CHANGE Strato1_2_8_L_0 U-KA=0.478 LeftWall_32
 CHANGE Strato1_2_8_L_0 U-KP=5.914 LeftWall_32
 CHANGE Strato1_2_8_L_0 D-KA=0.304 LeftWall_32
 CHANGE Strato1_2_8_L_0 D-KP=4.041 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 U-FRICT=35 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 U-KA=0.333 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 U-KP=8.331 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 D-KA=0.235 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 D-KP=5.879 LeftWall_32
 CHANGE Strato1_2_8_L_0 U-COHE=0 LeftWall_32
```

```
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-COHE=20 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -26 0 -16 0 0
ADD WallElement_33
ENDSTEP

STEP Stage2_759103
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -26 0 -16 0 0
ENDSTEP

STEP Stage3_158
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -3
WATER -26 0 -16 0 0
ENDSTEP

STEP Stage4_617
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -3
WATER -26 0 -16 0 0
ADD Tieback_768111
ENDSTEP

STEP Stage5_714
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -6.73
WATER -26 0 -16 0 0
ENDSTEP
```

1.6. Design Assumption : A1+M1+R1 - File di Paratie - File di output (.out)

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                   Exe Time :24 July 2019      10:49:26                                                  |
+-------------------------------------------------------------------------------------------------------------------------+

                  ***********************************************************
                  *                                                         *
                  *  PARATIE PLUS Non-Linear Spring Engine                  *
                  *                                                         *
                  *          AN ELASTOPLASTIC FINITE ELEMENT PROGRAM        *
                  *          FOR FLEXIBLE EARTH-RETAINING STRUCTURES        *
                  *                                                         *
                  *          Written by Ce.A.S. s.r.l. (ITALY)              *
                  *          with the scientific supervision of             *
                  *          Roberto Nova - full professor SOIL MECHANICS   *
                  *          at Politecnico di Milano (ITALY)               *
                  *                                                         *
                  ***********************************************************
                  *                                                         *
                  *  RELEASE   2017.1     *Build date:Jul 11, 2017*    *    *
                  *                                                         *
                  *                                                         *
                  *  Ce.A.S.     S.R.L   CENTRO DI ANALISI STRUTTURALE      *
                  *              VIALE   GIUSTINIANO 10                     *
                  *              20129   M I L A N O  (ITALIA)              *
                  *  TEL.        +39 02 2020221   (+39 035 23 67 19)        *
                  *  FAX         +39 02 29512533  (+39 035 42285 49)        *
```

```
                  *  email       bruno.becci@ceas.it                      *
                  *  Web Page    www.ceas.it                              *
                  ************************************************************



 JOB : NewProject.BaseDesignSection_28.A1M1R1_3484
 STARTING
ACCEPTED   <FILE,GENW                                                      >
ACCEPTED   <FILE,PLOTTER,BINARY                                            >
ACCEPTED   <SOLVE TOTAL_STRESS                                             >
ACCEPTED   <PARAM ITEMAX 100                                               >
ACCEPTED   <CONTROL HINGES 0 0.0001 0.001                                  >



                  ************************************************************
                  *                                                          *
                  *  WARNING : PORE PRESSURES ARE AUTOMATICALLY COMPUTED     *
                  *    BY THE PROGRAM.                                       *
                  ************************************************************

PRELIMINARY OPERATIONS CPU TIME     0.00 [sec]



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                  Exe Time :24 July 2019      10:49:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


INPUT FILE HAS BEEN GENERATED BY WALGEN PROGRAM


New Project


NO. OF NODAL POINTS (NUMNP) ...................    82
NO. OF COORDINATES  (NCOORD)...................     2
NO. OF NODE DOFS    (NDOF).....................     2
NO. OF EQUATIONS    (NEQ)...................... .  164
NO. OF CONSTRAINTS CARDS (NVINC)...............     0
NO. OF ELEMENT GROUPS (NEG)....................     4
NO. OF SOLUTION STEPS (NSTE)...................     5
NO. OF ELEMENT SETS ATTACHED TO SLAVE NODES ...     0
NO. OF RECORD FROM WALGEN .....................    89
NO. OF LONG NAMES (LASTNAME) ..................    21
LENGTH UNIT CHOICE ............................     3 (M   )
FORCE  UNIT CHOICE ............................     3 (KN  )
MAX PORE PRESSURE TABLE LENGTH.................     1
NO. OF ELEMENT GROUPS REQUIRING ADD. SLIP DOF .     0


IDOFA (01) =  2  Y-DISPL.F
IDOFA (02) =  4   X-ROT. F

 RELEVANT ITEMS UNITS

 STRESSES                  kPa
 Y-DISPLACEMENTS           m
 ROTATIONS                 RADIANS
 BEAM AND SLAB MOMENTS     kN*m/m
 BEAM SHEAR FORCES         kN/m
 ANCHOR FORCES             kN/m
 AXIAL FORCES IN TRUSSES   kN/m
 AXIAL FORCES SPRINGS      kN/m
 Y-REACTIONS               kN/m
 X-MOMENT REACTIONS        kN*m/m
 ETC.



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                  Exe Time :24 July 2019      10:49:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
                  P R E P R O C E S S O R     D A T A
```

N O. O F C O M M A N D S 89

```
 1 : UNIT  m kN
 2 : TITLE New Project
 3 : DELTA 0.2
 4 : option param itemax 100
 5 : option control hinges 0 0.0001 0.001
 6 : WALL LeftWall_32 0 -16 0 1
 7 : SOIL 0_L LeftWall_32 -16 0 1 0
 8 : SOIL 0_R LeftWall_32 -16 0 2 180
 9 : LDATA Strato1_2_8_L_0 5.84 LeftWall_32
10 : ATREST 0.53 1 1
11 : WEIGHT 19 9 10
12 : PERMEABILITY 1E-06
13 : RESISTANCE 0 29
14 : YOUNG 2E+04 6E+04
15 : ENDL
16 : LDATA Strato2_3095_82743_L_0 -9.5 LeftWall_32
17 : ATREST 0.5 0.5 1
18 : WEIGHT 20 10 10
19 : PERMEABILITY 0.0001
20 : RESISTANCE 20 35
21 : YOUNG 5E+04 1.5E+05
22 : ENDL
23 : MATERIAL Fe360_108 2.06E+08
24 : MATERIAL C2530_104 3.148E+07
25 : MATERIAL acciaioarmonico_124 2.001E+08
26 : MATERIAL C2025_103 2.996E+07
27 : BEAM WallElement_33 LeftWall_32 -16 0 C2530_104 0.6848 00 00 0
28 : WIRE Tieback_768111 LeftWall_32 -2.5 acciaioarmonico_124 2.211E-05 163.6 15 0 0
29 : STRIP LeftWall_32 2 5 0 13 0 15 45
30 : STRIP LeftWall_32 2 5 0 40 0 11.54 30
31 : STEP Stage1_31
32 : CHANGE Strato1_2_8_L_0 U-FRICT=29 LeftWall_32
33 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
34 : CHANGE Strato1_2_8_L_0 U-KA=0.478 LeftWall_32
35 : CHANGE Strato1_2_8_L_0 U-KP=5.914 LeftWall_32
36 : CHANGE Strato1_2_8_L_0 D-KA=0.304 LeftWall_32
37 : CHANGE Strato1_2_8_L_0 D-KP=4.041 LeftWall_32
38 : CHANGE Strato2_3095_82743_L_0 U-FRICT=35 LeftWall_32
39 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
40 : CHANGE Strato2_3095_82743_L_0 U-KA=0.333 LeftWall_32
41 : CHANGE Strato2_3095_82743_L_0 U-KP=8.331 LeftWall_32
42 : CHANGE Strato2_3095_82743_L_0 D-KA=0.235 LeftWall_32
43 : CHANGE Strato2_3095_82743_L_0 D-KP=5.879 LeftWall_32
44 : CHANGE Strato1_2_8_L_0 U-COHE=0 LeftWall_32
45 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
46 : CHANGE Strato2_3095_82743_L_0 U-COHE=20 LeftWall_32
47 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
48 : SETWALL LeftWall_32
49 : GEOM 0 0
50 : WATER -26 0 -16 0 0
51 : ADD WallElement_33
52 : ENDSTEP
53 : STEP Stage2_759103
54 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
55 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
56 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
57 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
58 : SETWALL LeftWall_32
59 : GEOM 0 0
60 : WATER -26 0 -16 0 0
61 : ENDSTEP
62 : STEP Stage3_158
63 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
64 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
65 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
66 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
67 : SETWALL LeftWall_32
68 : GEOM 0 -3
69 : WATER -26 0 -16 0 0
70 : ENDSTEP
71 : STEP Stage4_617
72 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
73 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
74 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
75 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
76 : SETWALL LeftWall_32
77 : GEOM 0 -3
78 : WATER -26 0 -16 0 0
79 : ADD Tieback_768111
80 : ENDSTEP
81 : STEP Stage5_714
82 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
83 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
```

```
   84 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
   85 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
   86 : SETWALL LeftWall_32
   87 : GEOM 0 -6.73
   88 : WATER -26 0 -16 0 0
   89 : ENDSTEP



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                  Exe Time :24 July 2019      10:49:26                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
N O D A L    P O I N T    D A T A
--------------------------------

NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD /

   1  0.0000      0.0000     /    2  0.0000    -0.20000     /    3  0.0000    -0.40000     /    4  0.0000    -0.60000     /
   5  0.0000    -0.80000     /    6  0.0000     -1.0000     /    7  0.0000     -1.2000     /    8  0.0000     -1.4000     /
   9  0.0000     -1.6000     /   10  0.0000     -1.8000     /   11  0.0000     -2.0000     /   12  0.0000     -2.2000     /
  13  0.0000     -2.4000     /   14  0.0000     -2.5000     /   15  0.0000     -2.7000     /   16  0.0000     -2.9000     /
  17  0.0000     -3.1000     /   18  0.0000     -3.3000     /   19  0.0000     -3.5000     /   20  0.0000     -3.7000     /
  21  0.0000     -3.9000     /   22  0.0000     -4.1000     /   23  0.0000     -4.3000     /   24  0.0000     -4.5000     /
  25  0.0000     -4.7000     /   26  0.0000     -4.9000     /   27  0.0000     -5.1000     /   28  0.0000     -5.3000     /
  29  0.0000     -5.5000     /   30  0.0000     -5.7000     /   31  0.0000     -5.9000     /   32  0.0000     -6.1000     /
  33  0.0000     -6.3000     /   34  0.0000     -6.5000     /   35  0.0000     -6.7000     /   36  0.0000     -6.9000     /
  37  0.0000     -7.1000     /   38  0.0000     -7.3000     /   39  0.0000     -7.5000     /   40  0.0000     -7.7000     /
  41  0.0000     -7.9000     /   42  0.0000     -8.1000     /   43  0.0000     -8.3000     /   44  0.0000     -8.5000     /
  45  0.0000     -8.7000     /   46  0.0000     -8.9000     /   47  0.0000     -9.1000     /   48  0.0000     -9.3000     /
  49  0.0000     -9.5000     /   50  0.0000     -9.7000     /   51  0.0000     -9.9000     /   52  0.0000     -10.100     /
  53  0.0000     -10.300     /   54  0.0000     -10.500     /   55  0.0000     -10.700     /   56  0.0000     -10.900     /
  57  0.0000     -11.100     /   58  0.0000     -11.300     /   59  0.0000     -11.500     /   60  0.0000     -11.700     /
  61  0.0000     -11.900     /   62  0.0000     -12.100     /   63  0.0000     -12.300     /   64  0.0000     -12.500     /
  65  0.0000     -12.700     /   66  0.0000     -12.900     /   67  0.0000     -13.100     /   68  0.0000     -13.300     /
  69  0.0000     -13.500     /   70  0.0000     -13.700     /   71  0.0000     -13.900     /   72  0.0000     -14.100     /
  73  0.0000     -14.300     /   74  0.0000     -14.500     /   75  0.0000     -14.700     /   76  0.0000     -14.900     /
  77  0.0000     -15.100     /   78  0.0000     -15.300     /   79  0.0000     -15.500     /   80  0.0000     -15.700     /
  81  0.0000     -15.900     /   82  0.0000     -16.000     /



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                  Exe Time :24 July 2019      10:49:26                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  1

0_L                             :
   5  82   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
..........2D PLASTIC SOIL ..........
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area      .....      .....      .....      flag
-----------------------------------------------------------------
```

1	1	1	0.1000	0.000	0.000	0.000	1.000
2	2	1	0.2000	0.000	0.000	0.000	1.000
3	3	1	0.2000	0.000	0.000	0.000	1.000
4	4	1	0.2000	0.000	0.000	0.000	1.000
5	5	1	0.2000	0.000	0.000	0.000	1.000
6	6	1	0.2000	0.000	0.000	0.000	1.000
7	7	1	0.2000	0.000	0.000	0.000	1.000
8	8	1	0.2000	0.000	0.000	0.000	1.000
9	9	1	0.2000	0.000	0.000	0.000	1.000
10	10	1	0.2000	0.000	0.000	0.000	1.000
11	11	1	0.2000	0.000	0.000	0.000	1.000
12	12	1	0.2000	0.000	0.000	0.000	1.000
13	13	1	0.1500	0.000	0.000	0.000	1.000
14	14	1	0.1500	0.000	0.000	0.000	1.000
15	15	1	0.2000	0.000	0.000	0.000	1.000
16	16	1	0.2000	0.000	0.000	0.000	1.000
17	17	1	0.2000	0.000	0.000	0.000	1.000
18	18	1	0.2000	0.000	0.000	0.000	1.000
19	19	1	0.2000	0.000	0.000	0.000	1.000
20	20	1	0.2000	0.000	0.000	0.000	1.000
21	21	1	0.2000	0.000	0.000	0.000	1.000
22	22	1	0.2000	0.000	0.000	0.000	1.000
23	23	1	0.2000	0.000	0.000	0.000	1.000
24	24	1	0.2000	0.000	0.000	0.000	1.000
25	25	1	0.2000	0.000	0.000	0.000	1.000
26	26	1	0.2000	0.000	0.000	0.000	1.000
27	27	1	0.2000	0.000	0.000	0.000	1.000
28	28	1	0.2000	0.000	0.000	0.000	1.000
29	29	1	0.2000	0.000	0.000	0.000	1.000
30	30	1	0.2000	0.000	0.000	0.000	1.000
31	31	1	0.2000	0.000	0.000	0.000	1.000
32	32	1	0.2000	0.000	0.000	0.000	1.000
33	33	1	0.2000	0.000	0.000	0.000	1.000
34	34	1	0.2000	0.000	0.000	0.000	1.000
35	35	1	0.2000	0.000	0.000	0.000	1.000
36	36	1	0.2000	0.000	0.000	0.000	1.000
37	37	1	0.2000	0.000	0.000	0.000	1.000
38	38	1	0.2000	0.000	0.000	0.000	1.000
39	39	1	0.2000	0.000	0.000	0.000	1.000
40	40	1	0.2000	0.000	0.000	0.000	1.000
41	41	1	0.2000	0.000	0.000	0.000	1.000
42	42	1	0.2000	0.000	0.000	0.000	1.000
43	43	1	0.2000	0.000	0.000	0.000	1.000
44	44	1	0.2000	0.000	0.000	0.000	1.000
45	45	1	0.2000	0.000	0.000	0.000	1.000
46	46	1	0.2000	0.000	0.000	0.000	1.000
47	47	1	0.2000	0.000	0.000	0.000	1.000
48	48	1	0.2000	0.000	0.000	0.000	1.000
49	49	1	0.2000	0.000	0.000	0.000	1.000
50	50	2	0.2000	0.000	0.000	0.000	1.000
51	51	2	0.2000	0.000	0.000	0.000	1.000
52	52	2	0.2000	0.000	0.000	0.000	1.000
53	53	2	0.2000	0.000	0.000	0.000	1.000
54	54	2	0.2000	0.000	0.000	0.000	1.000
55	55	2	0.2000	0.000	0.000	0.000	1.000
56	56	2	0.2000	0.000	0.000	0.000	1.000
57	57	2	0.2000	0.000	0.000	0.000	1.000
58	58	2	0.2000	0.000	0.000	0.000	1.000
59	59	2	0.2000	0.000	0.000	0.000	1.000
60	60	2	0.2000	0.000	0.000	0.000	1.000
61	61	2	0.2000	0.000	0.000	0.000	1.000
62	62	2	0.2000	0.000	0.000	0.000	1.000
63	63	2	0.2000	0.000	0.000	0.000	1.000
64	64	2	0.2000	0.000	0.000	0.000	1.000
65	65	2	0.2000	0.000	0.000	0.000	1.000
66	66	2	0.2000	0.000	0.000	0.000	1.000
67	67	2	0.2000	0.000	0.000	0.000	1.000
68	68	2	0.2000	0.000	0.000	0.000	1.000
69	69	2	0.2000	0.000	0.000	0.000	1.000
70	70	2	0.2000	0.000	0.000	0.000	1.000
71	71	2	0.2000	0.000	0.000	0.000	1.000
72	72	2	0.2000	0.000	0.000	0.000	1.000
73	73	2	0.2000	0.000	0.000	0.000	1.000
74	74	2	0.2000	0.000	0.000	0.000	1.000
75	75	2	0.2000	0.000	0.000	0.000	1.000
76	76	2	0.2000	0.000	0.000	0.000	1.000
77	77	2	0.2000	0.000	0.000	0.000	1.000
78	78	2	0.2000	0.000	0.000	0.000	1.000
79	79	2	0.2000	0.000	0.000	0.000	1.000
80	80	2	0.2000	0.000	0.000	0.000	1.000
81	81	2	0.1500	0.000	0.000	0.000	1.000
82	82	2	0.5000E-01	0.000	0.000	0.000	1.000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                          |
|                                 Exe Time :24 July 2019      10:49:26                                                    |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  2

0_R                             :
   5  82   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
.........2D PLASTIC SOIL ..........
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area      .....     .....     .....      flag
-------------------------------------------------------------------

    1    1    1   0.1000      0.000     0.000     0.000     2.000
    2    2    1   0.2000      0.000     0.000     0.000     2.000
    3    3    1   0.2000      0.000     0.000     0.000     2.000
    4    4    1   0.2000      0.000     0.000     0.000     2.000
    5    5    1   0.2000      0.000     0.000     0.000     2.000
    6    6    1   0.2000      0.000     0.000     0.000     2.000
    7    7    1   0.2000      0.000     0.000     0.000     2.000
    8    8    1   0.2000      0.000     0.000     0.000     2.000
    9    9    1   0.2000      0.000     0.000     0.000     2.000
   10   10    1   0.2000      0.000     0.000     0.000     2.000
   11   11    1   0.2000      0.000     0.000     0.000     2.000
   12   12    1   0.2000      0.000     0.000     0.000     2.000
   13   13    1   0.1500      0.000     0.000     0.000     2.000
   14   14    1   0.1500      0.000     0.000     0.000     2.000
   15   15    1   0.2000      0.000     0.000     0.000     2.000
   16   16    1   0.2000      0.000     0.000     0.000     2.000
   17   17    1   0.2000      0.000     0.000     0.000     2.000
   18   18    1   0.2000      0.000     0.000     0.000     2.000
   19   19    1   0.2000      0.000     0.000     0.000     2.000
   20   20    1   0.2000      0.000     0.000     0.000     2.000
   21   21    1   0.2000      0.000     0.000     0.000     2.000
   22   22    1   0.2000      0.000     0.000     0.000     2.000
   23   23    1   0.2000      0.000     0.000     0.000     2.000
   24   24    1   0.2000      0.000     0.000     0.000     2.000
   25   25    1   0.2000      0.000     0.000     0.000     2.000
   26   26    1   0.2000      0.000     0.000     0.000     2.000
   27   27    1   0.2000      0.000     0.000     0.000     2.000
   28   28    1   0.2000      0.000     0.000     0.000     2.000
   29   29    1   0.2000      0.000     0.000     0.000     2.000
   30   30    1   0.2000      0.000     0.000     0.000     2.000
   31   31    1   0.2000      0.000     0.000     0.000     2.000
   32   32    1   0.2000      0.000     0.000     0.000     2.000
   33   33    1   0.2000      0.000     0.000     0.000     2.000
   34   34    1   0.2000      0.000     0.000     0.000     2.000
   35   35    1   0.2000      0.000     0.000     0.000     2.000
   36   36    1   0.2000      0.000     0.000     0.000     2.000
   37   37    1   0.2000      0.000     0.000     0.000     2.000
   38   38    1   0.2000      0.000     0.000     0.000     2.000
   39   39    1   0.2000      0.000     0.000     0.000     2.000
   40   40    1   0.2000      0.000     0.000     0.000     2.000
   41   41    1   0.2000      0.000     0.000     0.000     2.000
   42   42    1   0.2000      0.000     0.000     0.000     2.000
   43   43    1   0.2000      0.000     0.000     0.000     2.000
```

44	44	1	0.2000	0.000	0.000	0.000	2.000
45	45	1	0.2000	0.000	0.000	0.000	2.000
46	46	1	0.2000	0.000	0.000	0.000	2.000
47	47	1	0.2000	0.000	0.000	0.000	2.000
48	48	1	0.2000	0.000	0.000	0.000	2.000
49	49	1	0.2000	0.000	0.000	0.000	2.000
50	50	2	0.2000	0.000	0.000	0.000	2.000
51	51	2	0.2000	0.000	0.000	0.000	2.000
52	52	2	0.2000	0.000	0.000	0.000	2.000
53	53	2	0.2000	0.000	0.000	0.000	2.000
54	54	2	0.2000	0.000	0.000	0.000	2.000
55	55	2	0.2000	0.000	0.000	0.000	2.000
56	56	2	0.2000	0.000	0.000	0.000	2.000
57	57	2	0.2000	0.000	0.000	0.000	2.000
58	58	2	0.2000	0.000	0.000	0.000	2.000
59	59	2	0.2000	0.000	0.000	0.000	2.000
60	60	2	0.2000	0.000	0.000	0.000	2.000
61	61	2	0.2000	0.000	0.000	0.000	2.000
62	62	2	0.2000	0.000	0.000	0.000	2.000
63	63	2	0.2000	0.000	0.000	0.000	2.000
64	64	2	0.2000	0.000	0.000	0.000	2.000
65	65	2	0.2000	0.000	0.000	0.000	2.000
66	66	2	0.2000	0.000	0.000	0.000	2.000
67	67	2	0.2000	0.000	0.000	0.000	2.000
68	68	2	0.2000	0.000	0.000	0.000	2.000
69	69	2	0.2000	0.000	0.000	0.000	2.000
70	70	2	0.2000	0.000	0.000	0.000	2.000
71	71	2	0.2000	0.000	0.000	0.000	2.000
72	72	2	0.2000	0.000	0.000	0.000	2.000
73	73	2	0.2000	0.000	0.000	0.000	2.000
74	74	2	0.2000	0.000	0.000	0.000	2.000
75	75	2	0.2000	0.000	0.000	0.000	2.000
76	76	2	0.2000	0.000	0.000	0.000	2.000
77	77	2	0.2000	0.000	0.000	0.000	2.000
78	78	2	0.2000	0.000	0.000	0.000	2.000
79	79	2	0.2000	0.000	0.000	0.000	2.000
80	80	2	0.2000	0.000	0.000	0.000	2.000
81	81	2	0.1500	0.000	0.000	0.000	2.000
82	82	2	0.5000E-01	0.000	0.000	0.000	2.000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                  Exe Time :24 July 2019      10:49:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  3

WallElement_33                   :
   2  81   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   1   0
.....................................
..........2D WALL ELEMENT...........
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) young modulus       0.314800E+08
 prop( 2) modification  time  0.00000
 prop( 3) new young modulus   0.00000
 prop( 4) poisson ratio       0.00000
 prop( 5) future .............0.252200E-43

 no. of step variable items:     1
 step  inertia multipier
--------------------------
    1   1.000
    2   1.000
    3   1.000
    4   1.000
    5   1.000

 element data

   el   na   nb  mat      erc1      erc2     thick      by-i      by-j
-------------------------------------------------------------

    1    1    2    1     0.000     0.000    0.6848     0.000     0.000
    2    2    3    1     0.000     0.000    0.6848     0.000     0.000
    3    3    4    1     0.000     0.000    0.6848     0.000     0.000
    4    4    5    1     0.000     0.000    0.6848     0.000     0.000
    5    5    6    1     0.000     0.000    0.6848     0.000     0.000
    6    6    7    1     0.000     0.000    0.6848     0.000     0.000
    7    7    8    1     0.000     0.000    0.6848     0.000     0.000
    8    8    9    1     0.000     0.000    0.6848     0.000     0.000
    9    9   10    1     0.000     0.000    0.6848     0.000     0.000
   10   10   11    1     0.000     0.000    0.6848     0.000     0.000
   11   11   12    1     0.000     0.000    0.6848     0.000     0.000
   12   12   13    1     0.000     0.000    0.6848     0.000     0.000
   13   13   14    1     0.000     0.000    0.6848     0.000     0.000
   14   14   15    1     0.000     0.000    0.6848     0.000     0.000
   15   15   16    1     0.000     0.000    0.6848     0.000     0.000
   16   16   17    1     0.000     0.000    0.6848     0.000     0.000
   17   17   18    1     0.000     0.000    0.6848     0.000     0.000
   18   18   19    1     0.000     0.000    0.6848     0.000     0.000
   19   19   20    1     0.000     0.000    0.6848     0.000     0.000
   20   20   21    1     0.000     0.000    0.6848     0.000     0.000
   21   21   22    1     0.000     0.000    0.6848     0.000     0.000
   22   22   23    1     0.000     0.000    0.6848     0.000     0.000
   23   23   24    1     0.000     0.000    0.6848     0.000     0.000
   24   24   25    1     0.000     0.000    0.6848     0.000     0.000
   25   25   26    1     0.000     0.000    0.6848     0.000     0.000
   26   26   27    1     0.000     0.000    0.6848     0.000     0.000
   27   27   28    1     0.000     0.000    0.6848     0.000     0.000
   28   28   29    1     0.000     0.000    0.6848     0.000     0.000
   29   29   30    1     0.000     0.000    0.6848     0.000     0.000
   30   30   31    1     0.000     0.000    0.6848     0.000     0.000
   31   31   32    1     0.000     0.000    0.6848     0.000     0.000
   32   32   33    1     0.000     0.000    0.6848     0.000     0.000
   33   33   34    1     0.000     0.000    0.6848     0.000     0.000
   34   34   35    1     0.000     0.000    0.6848     0.000     0.000
   35   35   36    1     0.000     0.000    0.6848     0.000     0.000
   36   36   37    1     0.000     0.000    0.6848     0.000     0.000
```

37	37	38	1	0.000	0.000	0.6848	0.000	0.000
38	38	39	1	0.000	0.000	0.6848	0.000	0.000
39	39	40	1	0.000	0.000	0.6848	0.000	0.000
40	40	41	1	0.000	0.000	0.6848	0.000	0.000
41	41	42	1	0.000	0.000	0.6848	0.000	0.000
42	42	43	1	0.000	0.000	0.6848	0.000	0.000
43	43	44	1	0.000	0.000	0.6848	0.000	0.000
44	44	45	1	0.000	0.000	0.6848	0.000	0.000
45	45	46	1	0.000	0.000	0.6848	0.000	0.000
46	46	47	1	0.000	0.000	0.6848	0.000	0.000
47	47	48	1	0.000	0.000	0.6848	0.000	0.000
48	48	49	1	0.000	0.000	0.6848	0.000	0.000
49	49	50	1	0.000	0.000	0.6848	0.000	0.000
50	50	51	1	0.000	0.000	0.6848	0.000	0.000
51	51	52	1	0.000	0.000	0.6848	0.000	0.000
52	52	53	1	0.000	0.000	0.6848	0.000	0.000
53	53	54	1	0.000	0.000	0.6848	0.000	0.000
54	54	55	1	0.000	0.000	0.6848	0.000	0.000
55	55	56	1	0.000	0.000	0.6848	0.000	0.000
56	56	57	1	0.000	0.000	0.6848	0.000	0.000
57	57	58	1	0.000	0.000	0.6848	0.000	0.000
58	58	59	1	0.000	0.000	0.6848	0.000	0.000
59	59	60	1	0.000	0.000	0.6848	0.000	0.000
60	60	61	1	0.000	0.000	0.6848	0.000	0.000
61	61	62	1	0.000	0.000	0.6848	0.000	0.000
62	62	63	1	0.000	0.000	0.6848	0.000	0.000
63	63	64	1	0.000	0.000	0.6848	0.000	0.000
64	64	65	1	0.000	0.000	0.6848	0.000	0.000
65	65	66	1	0.000	0.000	0.6848	0.000	0.000
66	66	67	1	0.000	0.000	0.6848	0.000	0.000
67	67	68	1	0.000	0.000	0.6848	0.000	0.000
68	68	69	1	0.000	0.000	0.6848	0.000	0.000
69	69	70	1	0.000	0.000	0.6848	0.000	0.000
70	70	71	1	0.000	0.000	0.6848	0.000	0.000
71	71	72	1	0.000	0.000	0.6848	0.000	0.000
72	72	73	1	0.000	0.000	0.6848	0.000	0.000
73	73	74	1	0.000	0.000	0.6848	0.000	0.000
74	74	75	1	0.000	0.000	0.6848	0.000	0.000
75	75	76	1	0.000	0.000	0.6848	0.000	0.000
76	76	77	1	0.000	0.000	0.6848	0.000	0.000
77	77	78	1	0.000	0.000	0.6848	0.000	0.000
78	78	79	1	0.000	0.000	0.6848	0.000	0.000
79	79	80	1	0.000	0.000	0.6848	0.000	0.000
80	80	81	1	0.000	0.000	0.6848	0.000	0.000
81	81	82	1	0.000	0.000	0.6848	0.000	0.000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                         |
|                                  Exe Time :24 July 2019      10:49:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  4

Tieback_768111                  :
   6   1   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   2   0
.....................................
..........2D POST-TENSION ANCHOR....
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1  inactive
    2  inactive
    3  inactive
    4   active
    5   active

 material set no.    1

 prop( 1) angle          15.0000
 prop( 2) young modulus 0.200100E+09
 prop( 3) modification  time  0.00000
 prop( 4) new young modulus   0.00000

 no. of step variable items:     2
 step   -ve lim     +ve lim
----------------------------
    1   0.000       0.000
    2   0.000       0.000
```

```
     3    0.000        0.000
     4    0.000        0.000
     5    0.000        0.000

 element data

   el     n  mat       a/l     pinit     yieldc     yieldt
-------------------------------------------------------------

     1    14    1   0.2211E-04 163.6     0.000      0.000
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                         |
|                                  Exe Time :24 July 2019      10:49:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


NO. OF NODAL LOADS  (NLOAD) ...................    0
NO. OF LOAD CURVES  (NLCUR) ...................   10
MAXIMUM POINTS/LCURVE (NPTM)...................    5



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                         |
|                                  Exe Time :24 July 2019      10:49:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
L O A D     D A T A


    LOAD FUNCTION NUMBER   =    1
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       1.20000    0.0000E+00
       6.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    2
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       2.20000    0.0000E+00
       6.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    3
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       3.20000    0.0000E+00
       6.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    4
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       3.80000    0.0000E+00
       4.00000    0.1000E+01
       4.20000    0.0000E+00
       6.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    5
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION
```

```
       0.00000    0.0000E+00
       4.80000    0.0000E+00
       5.00000    0.1000E+01
       5.20000    0.0000E+00
       6.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    6
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =    7
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =    8
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =    9
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       3.80000    0.0000E+00
       4.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =   10
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       4.80000    0.0000E+00
       5.00000    0.1000E+01
       6.00000    0.1000E+01


NO. OF DISTRIBUTED LOAD CARDS     0




+-----------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                  Exe Time :24 July 2019      10:49:26                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
L O A D     B A L A N C E

STEP     1 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     1 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000
```

```
STEP     2 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     2 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     3 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     3 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     4 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     4 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     5 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     5 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000


                     LOAD INPUT SECTION COMPLETED



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                       |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                       |
|                                  Exe Time :24 July 2019      10:49:26                                                 |
+-----------------------------------------------------------------------------------------------------------------------+


NO. OF LAYERS ..............................    2
NO. OF DATA PER LAYER.......................  100



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                       |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                       |
|                                  Exe Time :24 July 2019      10:49:26                                                 |
+-----------------------------------------------------------------------------------------------------------------------+

LAYER DESCRIPTORS FOR STEP NO.    1


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.47800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.9140     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.33300     WALL NO.        1
ITEM NO.  11<U-KP    >=  8.3310     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
```

```
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    2


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.47800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.9140     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.33300     WALL NO.        1
ITEM NO.  11<U-KP    >=  8.3310     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    3


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.47800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.9140     WALL NO.        1
```

```
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.33300     WALL NO.        1
ITEM NO.  11<U-KP    >=  8.3310     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    4


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    4

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.47800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.9140     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    4

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.33300     WALL NO.        1
ITEM NO.  11<U-KP    >=  8.3310     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
```

```
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    5


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    5

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.47800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.9140     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    5

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.33300     WALL NO.        1
ITEM NO.  11<U-KP    >=  8.3310     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)


DEFAULT WATER UNIT WEIGHT =  10.000
AVERAGED ON    10 VALUES




+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                  Exe Time :24 July 2019      10:49:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
```

PHASE DESCRIPTORS

STEP NO. 1

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	0.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-16.00	-16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 1

STEP NO. 2

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	0.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-16.00	-16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 2

STEP NO. 3

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-3.000	0.000

Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-16.00	-16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 3

STEP NO. 4

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-3.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-16.00	-16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 4

STEP NO. 5

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-6.730	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-16.00	-16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000

```
PORE_UPDATE_FLAG                          0.000         0.000
PORE_TAB. _FLAG (gt.0= use tabs)          0.000         0.000
lateral thrusts reduction elevatio        0.000         0.000
Downhill reduction factor for effe        0.000         0.000
Downhill reduction factor for pore        0.000         0.000
Uphill reduction factor for effect        0.000         0.000
Uphill reduction factor for pore p        0.000         0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]          0.000         0.000
UPHILL VERTICAL ACCEL.  Kv_uh [g]         0.000         0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]         0.000         0.000
UPHILL BETA ANGLE (SLOPE) [deg]           0.000         0.000
UPHILL DELTA/PHI RATIO                    0.000         0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]         0.000         0.000
DOWNHILL DELTA/PHI RATIO                  0.000         0.000
DYN.WATER BEHAVIOUR                       0.000         0.000
Excess pore pressure RATIO Ru             0.000         0.000
SEISMIC PRESSURE LOWER VALUE              0.000         0.000
SEISMIC PRESSURE UPPER VALUE              0.000         0.000
SEISMIC PRESSURE LOWER LEVEL              0.000         0.000
SEISMIC PRESSURE UPPER LEVEL              0.000         0.000

================================================================================================================end of step    5


 LEFT-HAND WALL

 LOWER  LEVEL         -16.00000
 UPPER  LEVEL           0.00000

 RIGHT-HAND WALL

 LOWER  LEVEL         -16.00000
 UPPER  LEVEL           0.00000




+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                         |
|                                  Exe Time :24 July 2019      10:49:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
 I N I T I A L    S T R E S S    T A B L E S

            S E C T I O N

 NUMBER OF DEFINED TABLES             2


INPUT DATA FOR INITIAL STRESS SET NO.    1
PERTAINING SOIL ELEMENTS AT Y-COORD    0.0000

ACTIVATION TIME                              2.0000
END TIME (TIME BEYOND WHICH IT IS REMOVED)   5.0000

TYPE BOUSSINESQ

 HORIZONTAL DISTANCE (DY)          0.000000000000000E+000
 FOUNDATION WIDTH    (B)            13.0000000000000
 ZETA-F.....                       0.000000000000000E+000
 Q-F .....                          15.0000000000000
 BETA .....                         45.0000000000000
 BEHAVIOUR (0=FREE, 1=REFLECTING)  0.000000000000000E+000


INPUT DATA FOR INITIAL STRESS SET NO.    2
PERTAINING SOIL ELEMENTS AT Y-COORD    0.0000

ACTIVATION TIME                              2.0000
END TIME (TIME BEYOND WHICH IT IS REMOVED)   5.0000

TYPE BOUSSINESQ

 HORIZONTAL DISTANCE (DY)          0.000000000000000E+000
 FOUNDATION WIDTH    (B)            40.0000000000000
 ZETA-F.....                       0.000000000000000E+000
 Q-F .....                          11.5400000000000
 BETA .....                         30.0000000000000
 BEHAVIOUR (0=FREE, 1=REFLECTING)  0.000000000000000E+000
```

```
 ELEMENT GROUPS BACKUP AREA CAN STAY IN CORE AT
 POSITION        3803

 NO. OF D.P.W  FOR THIS AREA       9726
 MAX NO. OF D.P.W. AVAILABLE      81920
 ** MAX NO OF ITERATIONS SET TO         100

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5099E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 30.45     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5099E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   164 NODE     82 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     1 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5099E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 30.45     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5099E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   164 NODE     82 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5099E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 30.45     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5099E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   164 NODE     82 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                  Exe Time :24 July 2019      10:49:26                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     2 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    1     ( AT TIME   1.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (


ALL NODAL POINTS HAVE ZERO DISPLACEMENT COMPONENTS
```

```
+----------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1     FULL VERSION  *Build date:Jul 11, 2017*      |
|                                                                                                          |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                          |
|                                Exe Time :24 July 2019      10:49:26                                      |
+----------------------------------------------------------------------------------------------------------+
```

New Project

S T R E S S   R E S U L T S   F O R   G R O U P   N O.   1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 82
C U R R E N T   T I M E   I S   1.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.000	0.000	0.000	0.000	0.000	0.000	V-C	1.5916E+04	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_2_8_L_0
2 D	0.4028	0.000	3.800	2.014	3.800	2.014	V-C	1.5916E+04	-0.2000	0.000	1.000	1.000	2.014	0.000	0.000	Strato1_2_8_L_0
3 D	0.8056	0.000	7.600	4.028	7.600	4.028	V-C	1.5916E+04	-0.4000	0.000	1.000	1.000	4.028	0.000	0.000	Strato1_2_8_L_0
4 D	1.208	0.000	11.40	6.042	11.40	6.042	V-C	1.5916E+04	-0.6000	0.000	1.000	1.000	6.042	0.000	0.000	Strato1_2_8_L_0
5 D	1.611	0.000	15.20	8.056	15.20	8.056	V-C	1.5916E+04	-0.8000	0.000	1.000	1.000	8.056	0.000	0.000	Strato1_2_8_L_0
6 D	2.014	0.000	19.00	10.07	19.00	10.07	V-C	1.5916E+04	-1.000	0.000	1.000	1.000	10.07	0.000	0.000	Strato1_2_8_L_0
7 D	2.417	0.000	22.80	12.08	22.80	12.08	V-C	1.5916E+04	-1.200	0.000	1.000	1.000	12.08	0.000	0.000	Strato1_2_8_L_0
8 D	2.820	0.000	26.60	14.10	26.60	14.10	V-C	1.5916E+04	-1.400	0.000	1.000	1.000	14.10	0.000	0.000	Strato1_2_8_L_0
9 D	3.222	0.000	30.40	16.11	30.40	16.11	V-C	1.5916E+04	-1.600	0.000	1.000	1.000	16.11	0.000	0.000	Strato1_2_8_L_0
10 D	3.625	0.000	34.20	18.13	34.20	18.13	V-C	1.5916E+04	-1.800	0.000	1.000	1.000	18.13	0.000	0.000	Strato1_2_8_L_0
11 D	4.028	0.000	38.00	20.14	38.00	20.14	V-C	1.5916E+04	-2.000	0.000	1.000	1.000	20.14	0.000	0.000	Strato1_2_8_L_0
12 D	4.431	0.000	41.80	22.15	41.80	22.15	V-C	1.5916E+04	-2.200	0.000	1.000	1.000	22.15	0.000	0.000	Strato1_2_8_L_0
13 D	3.625	0.000	45.60	24.17	45.60	24.17	V-C	1.5916E+04	-2.400	0.000	1.000	1.000	24.17	0.000	0.000	Strato1_2_8_L_0
14 D	3.776	0.000	47.50	25.18	47.50	25.18	V-C	1.5916E+04	-2.500	0.000	1.000	1.000	25.18	0.000	0.000	Strato1_2_8_L_0
15 D	5.438	0.000	51.30	27.19	51.30	27.19	V-C	1.5916E+04	-2.700	0.000	1.000	1.000	27.19	0.000	0.000	Strato1_2_8_L_0
16 D	5.841	0.000	55.10	29.20	55.10	29.20	V-C	1.5916E+04	-2.900	0.000	1.000	1.000	29.20	0.000	0.000	Strato1_2_8_L_0
17 D	6.243	0.000	58.90	31.22	58.90	31.22	V-C	1.5916E+04	-3.100	0.000	1.000	1.000	31.22	0.000	0.000	Strato1_2_8_L_0
18 D	6.646	0.000	62.70	33.23	62.70	33.23	V-C	1.5916E+04	-3.300	0.000	1.000	1.000	33.23	0.000	0.000	Strato1_2_8_L_0
19 D	7.049	0.000	66.50	35.25	66.50	35.25	V-C	1.5916E+04	-3.500	0.000	1.000	1.000	35.25	0.000	0.000	Strato1_2_8_L_0
20 D	7.452	0.000	70.30	37.26	70.30	37.26	V-C	1.5916E+04	-3.700	0.000	1.000	1.000	37.26	0.000	0.000	Strato1_2_8_L_0
21 D	7.855	0.000	74.10	39.27	74.10	39.27	V-C	1.5916E+04	-3.900	0.000	1.000	1.000	39.27	0.000	0.000	Strato1_2_8_L_0
22 D	8.257	0.000	77.90	41.29	77.90	41.29	V-C	1.5916E+04	-4.100	0.000	1.000	1.000	41.29	0.000	0.000	Strato1_2_8_L_0
23 D	8.660	0.000	81.70	43.30	81.70	43.30	V-C	1.5916E+04	-4.300	0.000	1.000	1.000	43.30	0.000	0.000	Strato1_2_8_L_0
24 D	9.063	0.000	85.50	45.32	85.50	45.32	V-C	1.5916E+04	-4.500	0.000	1.000	1.000	45.31	0.000	0.000	Strato1_2_8_L_0
25 D	9.466	0.000	89.30	47.33	89.30	47.33	V-C	1.5916E+04	-4.700	0.000	1.000	1.000	47.33	0.000	0.000	Strato1_2_8_L_0
26 D	9.869	0.000	93.10	49.34	93.10	49.34	V-C	1.5916E+04	-4.900	0.000	1.000	1.000	49.34	0.000	0.000	Strato1_2_8_L_0
27 D	10.27	0.000	96.90	51.36	96.90	51.36	V-C	1.5916E+04	-5.100	0.000	1.000	1.000	51.36	0.000	0.000	Strato1_2_8_L_0
28 D	10.67	0.000	100.7	53.37	100.7	53.37	V-C	1.5916E+04	-5.300	0.000	1.000	1.000	53.37	0.000	0.000	Strato1_2_8_L_0
29 D	11.08	0.000	104.5	55.38	104.5	55.38	V-C	1.5916E+04	-5.500	0.000	1.000	1.000	55.38	0.000	0.000	Strato1_2_8_L_0
30 D	11.48	0.000	108.3	57.40	108.3	57.40	V-C	1.5916E+04	-5.700	0.000	1.000	1.000				

57.40	0.000	0.000	Strato1_2_8_L_0									
31 D	11.88	0.000	112.1	59.41	112.1	59.41	V-C	1.5916E+04	-5.900	0.000	1.000	1.000
59.41	0.000	0.000	Strato1_2_8_L_0									
32 D	12.29	0.000	115.9	61.43	115.9	61.43	V-C	1.5916E+04	-6.100	0.000	1.000	1.000
61.43	0.000	0.000	Strato1_2_8_L_0									
33 D	12.69	0.000	119.7	63.44	119.7	63.44	V-C	1.5916E+04	-6.300	0.000	1.000	1.000
63.44	0.000	0.000	Strato1_2_8_L_0									
34 D	13.09	0.000	123.5	65.45	123.5	65.45	V-C	1.5916E+04	-6.500	0.000	1.000	1.000
65.45	0.000	0.000	Strato1_2_8_L_0									
35 D	13.49	0.000	127.3	67.47	127.3	67.47	V-C	1.5916E+04	-6.700	0.000	1.000	1.000
67.47	0.000	0.000	Strato1_2_8_L_0									
36 D	13.90	0.000	131.1	69.48	131.1	69.48	V-C	1.5916E+04	-6.900	0.000	1.000	1.000
69.48	0.000	0.000	Strato1_2_8_L_0									
37 D	14.30	0.000	134.9	71.50	134.9	71.50	V-C	1.5916E+04	-7.100	0.000	1.000	1.000
71.50	0.000	0.000	Strato1_2_8_L_0									
38 D	14.70	0.000	138.7	73.51	138.7	73.51	V-C	1.5916E+04	-7.300	0.000	1.000	1.000
73.51	0.000	0.000	Strato1_2_8_L_0									
39 D	15.10	0.000	142.5	75.52	142.5	75.52	V-C	1.5916E+04	-7.500	0.000	1.000	1.000
75.52	0.000	0.000	Strato1_2_8_L_0									
40 D	15.51	0.000	146.3	77.54	146.3	77.54	V-C	1.5916E+04	-7.700	0.000	1.000	1.000
77.54	0.000	0.000	Strato1_2_8_L_0									
41 D	15.91	0.000	150.1	79.55	150.1	79.55	V-C	1.5916E+04	-7.900	0.000	1.000	1.000
79.55	0.000	0.000	Strato1_2_8_L_0									
42 D	16.31	0.000	153.9	81.57	153.9	81.57	V-C	1.5916E+04	-8.100	0.000	1.000	1.000
81.57	0.000	0.000	Strato1_2_8_L_0									
43 D	16.72	0.000	157.7	83.58	157.7	83.58	V-C	1.5916E+04	-8.300	0.000	1.000	1.000
83.58	0.000	0.000	Strato1_2_8_L_0									
44 D	17.12	0.000	161.5	85.59	161.5	85.59	V-C	1.5916E+04	-8.500	0.000	1.000	1.000
85.59	0.000	0.000	Strato1_2_8_L_0									
45 D	17.52	0.000	165.3	87.61	165.3	87.61	V-C	1.5916E+04	-8.700	0.000	1.000	1.000
87.61	0.000	0.000	Strato1_2_8_L_0									
46 D	17.92	0.000	169.1	89.62	169.1	89.62	V-C	1.5916E+04	-8.900	0.000	1.000	1.000
89.62	0.000	0.000	Strato1_2_8_L_0									
47 D	18.33	0.000	172.9	91.64	172.9	91.64	V-C	1.5916E+04	-9.100	0.000	1.000	1.000
91.64	0.000	0.000	Strato1_2_8_L_0									
48 D	18.73	0.000	176.7	93.65	176.7	93.65	V-C	1.5916E+04	-9.300	0.000	1.000	1.000
93.65	0.000	0.000	Strato1_2_8_L_0									
49 D	19.13	0.000	180.5	95.66	180.5	95.66	V-C	1.5916E+04	-9.500	0.000	1.000	1.000
95.66	0.000	0.000	Strato1_2_8_L_0									
50 D	18.45	0.000	184.5	92.25	184.5	92.25	V-C	4.5023E+04	-9.700	0.000	1.000	1.000
92.25	0.000	0.000	Strato2_3095_82743_L_0									
51 D	18.85	0.000	188.5	94.25	188.5	94.25	V-C	4.5023E+04	-9.900	0.000	1.000	1.000
94.25	0.000	0.000	Strato2_3095_82743_L_0									
52 D	19.25	0.000	192.5	96.25	192.5	96.25	V-C	4.5023E+04	-10.10	0.000	1.000	1.000
96.25	0.000	0.000	Strato2_3095_82743_L_0									
53 D	19.65	0.000	196.5	98.25	196.5	98.25	V-C	4.5023E+04	-10.30	0.000	1.000	1.000
98.25	0.000	0.000	Strato2_3095_82743_L_0									
54 D	20.05	0.000	200.5	100.2	200.5	100.2	V-C	4.5023E+04	-10.50	0.000	1.000	1.000
100.2	0.000	0.000	Strato2_3095_82743_L_0									
55 D	20.45	0.000	204.5	102.2	204.5	102.2	V-C	4.5023E+04	-10.70	0.000	1.000	1.000
102.2	0.000	0.000	Strato2_3095_82743_L_0									
56 D	20.85	0.000	208.5	104.2	208.5	104.2	V-C	4.5023E+04	-10.90	0.000	1.000	1.000
104.2	0.000	0.000	Strato2_3095_82743_L_0									
57 D	21.25	0.000	212.5	106.2	212.5	106.2	V-C	4.5023E+04	-11.10	0.000	1.000	1.000
106.2	0.000	0.000	Strato2_3095_82743_L_0									
58 D	21.65	0.000	216.5	108.2	216.5	108.2	V-C	4.5023E+04	-11.30	0.000	1.000	1.000
108.2	0.000	0.000	Strato2_3095_82743_L_0									
59 D	22.05	0.000	220.5	110.2	220.5	110.2	V-C	4.5023E+04	-11.50	0.000	1.000	1.000
110.2	0.000	0.000	Strato2_3095_82743_L_0									
60 D	22.45	0.000	224.5	112.2	224.5	112.2	V-C	4.5023E+04	-11.70	0.000	1.000	1.000
112.2	0.000	0.000	Strato2_3095_82743_L_0									
61 D	22.85	0.000	228.5	114.2	228.5	114.2	V-C	4.5023E+04	-11.90	0.000	1.000	1.000
114.2	0.000	0.000	Strato2_3095_82743_L_0									
62 D	23.25	0.000	232.5	116.2	232.5	116.2	V-C	4.5023E+04	-12.10	0.000	1.000	1.000
116.2	0.000	0.000	Strato2_3095_82743_L_0									
63 D	23.65	0.000	236.5	118.2	236.5	118.2	V-C	4.5023E+04	-12.30	0.000	1.000	1.000
118.2	0.000	0.000	Strato2_3095_82743_L_0									
64 D	24.05	0.000	240.5	120.2	240.5	120.2	V-C	4.5023E+04	-12.50	0.000	1.000	1.000
120.2	0.000	0.000	Strato2_3095_82743_L_0									
65 D	24.45	0.000	244.5	122.2	244.5	122.2	V-C	4.5023E+04	-12.70	0.000	1.000	1.000
122.2	0.000	0.000	Strato2_3095_82743_L_0									
66 D	24.85	0.000	248.5	124.2	248.5	124.2	V-C	4.5023E+04	-12.90	0.000	1.000	1.000
124.2	0.000	0.000	Strato2_3095_82743_L_0									
67 D	25.25	0.000	252.5	126.2	252.5	126.2	V-C	4.5023E+04	-13.10	0.000	1.000	1.000
126.2	0.000	0.000	Strato2_3095_82743_L_0									
68 D	25.65	0.000	256.5	128.2	256.5	128.2	V-C	4.5023E+04	-13.30	0.000	1.000	1.000
128.2	0.000	0.000	Strato2_3095_82743_L_0									
69 D	26.05	0.000	260.5	130.2	260.5	130.2	V-C	4.5023E+04	-13.50	0.000	1.000	1.000
130.2	0.000	0.000	Strato2_3095_82743_L_0									
70 D	26.45	0.000	264.5	132.2	264.5	132.2	V-C	4.5023E+04	-13.70	0.000	1.000	1.000
132.2	0.000	0.000	Strato2_3095_82743_L_0									
71 D	26.85	0.000	268.5	134.2	268.5	134.2	V-C	4.5023E+04	-13.90	0.000	1.000	1.000
134.2	0.000	0.000	Strato2_3095_82743_L_0									
72 D	27.25	0.000	272.5	136.2	272.5	136.2	V-C	4.5023E+04	-14.10	0.000	1.000	1.000
136.2	0.000	0.000	Strato2_3095_82743_L_0									

73 D	27.65	0.000	276.5	138.2	276.5	138.2	V-C	4.5023E+04	-14.30	0.000	1.000	1.000	
138.2	0.000	0.000	Strato2_3095_82743_L_0										
74 D	28.05	0.000	280.5	140.2	280.5	140.2	V-C	4.5023E+04	-14.50	0.000	1.000	1.000	
140.2	0.000	0.000	Strato2_3095_82743_L_0										
75 D	28.45	0.000	284.5	142.2	284.5	142.2	V-C	4.5023E+04	-14.70	0.000	1.000	1.000	
142.2	0.000	0.000	Strato2_3095_82743_L_0										
76 D	28.85	0.000	288.5	144.2	288.5	144.2	V-C	4.5023E+04	-14.90	0.000	1.000	1.000	
144.2	0.000	0.000	Strato2_3095_82743_L_0										
77 D	29.25	0.000	292.5	146.2	292.5	146.2	V-C	4.5023E+04	-15.10	0.000	1.000	1.000	
146.2	0.000	0.000	Strato2_3095_82743_L_0										
78 D	29.65	0.000	296.5	148.2	296.5	148.2	V-C	4.5023E+04	-15.30	0.000	1.000	1.000	
148.2	0.000	0.000	Strato2_3095_82743_L_0										
79 D	30.05	0.000	300.5	150.2	300.5	150.2	V-C	4.5023E+04	-15.50	0.000	1.000	1.000	
150.2	0.000	0.000	Strato2_3095_82743_L_0										
80 D	30.45	0.000	304.5	152.2	304.5	152.2	V-C	4.5023E+04	-15.70	0.000	1.000	1.000	
152.2	0.000	0.000	Strato2_3095_82743_L_0										
81 D	23.14	0.000	308.5	154.2	308.5	154.2	V-C	4.5023E+04	-15.90	0.000	1.000	1.000	
154.2	0.000	0.000	Strato2_3095_82743_L_0										
82 D	7.763	0.000	310.5	155.2	310.5	155.2	V-C	4.5023E+04	-16.00	0.000	1.000	1.000	
155.2	0.000	0.000	Strato2_3095_82743_L_0										

```
 +-----------------------------------------------------------------------------------------------------------------------------+
 |                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
 |                                                                                                                             |
 |                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                              |
 |                                Exe Time :24 July 2019      10:49:26                                                         |
 +-----------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                              :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
 C U R R E N T   T I M E   I S      1.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****
```

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR
Peq	Su_a	Su_p	LAYER									
1 D	0.000	0.000	0.000	0.000	0.000	0.000	V-C	1.1045E+04	0.000	0.000	1.000	1.000
0.000	0.000	0.000	Strato1_2_8_L_0									
2 D	0.4028	0.000	3.800	2.014	3.800	2.014	V-C	1.1045E+04	-0.2000	0.000	1.000	1.000
2.014	0.000	0.000	Strato1_2_8_L_0									
3 D	0.8056	0.000	7.600	4.028	7.600	4.028	V-C	1.1045E+04	-0.4000	0.000	1.000	1.000
4.028	0.000	0.000	Strato1_2_8_L_0									
4 D	1.208	0.000	11.40	6.042	11.40	6.042	V-C	1.1045E+04	-0.6000	0.000	1.000	1.000
6.042	0.000	0.000	Strato1_2_8_L_0									
5 D	1.611	0.000	15.20	8.056	15.20	8.056	V-C	1.1045E+04	-0.8000	0.000	1.000	1.000
8.056	0.000	0.000	Strato1_2_8_L_0									
6 D	2.014	0.000	19.00	10.07	19.00	10.07	V-C	1.1045E+04	-1.000	0.000	1.000	1.000
10.07	0.000	0.000	Strato1_2_8_L_0									
7 D	2.417	0.000	22.80	12.08	22.80	12.08	V-C	1.1045E+04	-1.200	0.000	1.000	1.000
12.08	0.000	0.000	Strato1_2_8_L_0									
8 D	2.820	0.000	26.60	14.10	26.60	14.10	V-C	1.1045E+04	-1.400	0.000	1.000	1.000
14.10	0.000	0.000	Strato1_2_8_L_0									
9 D	3.222	0.000	30.40	16.11	30.40	16.11	V-C	1.1045E+04	-1.600	0.000	1.000	1.000
16.11	0.000	0.000	Strato1_2_8_L_0									
10 D	3.625	0.000	34.20	18.13	34.20	18.13	V-C	1.1045E+04	-1.800	0.000	1.000	1.000
18.13	0.000	0.000	Strato1_2_8_L_0									
11 D	4.028	0.000	38.00	20.14	38.00	20.14	V-C	1.1045E+04	-2.000	0.000	1.000	1.000
20.14	0.000	0.000	Strato1_2_8_L_0									
12 D	4.431	0.000	41.80	22.15	41.80	22.15	V-C	1.1045E+04	-2.200	0.000	1.000	1.000
22.15	0.000	0.000	Strato1_2_8_L_0									
13 D	3.625	0.000	45.60	24.17	45.60	24.17	V-C	1.1045E+04	-2.400	0.000	1.000	1.000
24.17	0.000	0.000	Strato1_2_8_L_0									
14 D	3.776	0.000	47.50	25.18	47.50	25.18	V-C	1.1045E+04	-2.500	0.000	1.000	1.000
25.18	0.000	0.000	Strato1_2_8_L_0									
15 D	5.438	0.000	51.30	27.19	51.30	27.19	V-C	1.1045E+04	-2.700	0.000	1.000	1.000
27.19	0.000	0.000	Strato1_2_8_L_0									
16 D	5.841	0.000	55.10	29.20	55.10	29.20	V-C	1.1045E+04	-2.900	0.000	1.000	1.000
29.20	0.000	0.000	Strato1_2_8_L_0									
17 D	6.243	0.000	58.90	31.22	58.90	31.22	V-C	1.1045E+04	-3.100	0.000	1.000	1.000
31.22	0.000	0.000	Strato1_2_8_L_0									
18 D	6.646	0.000	62.70	33.23	62.70	33.23	V-C	1.1045E+04	-3.300	0.000	1.000	1.000
33.23	0.000	0.000	Strato1_2_8_L_0									
19 D	7.049	0.000	66.50	35.25	66.50	35.25	V-C	1.1045E+04	-3.500	0.000	1.000	1.000
35.25	0.000	0.000	Strato1_2_8_L_0									

20 D	7.452	0.000	70.30	37.26	70.30	37.26	V-C	1.1045E+04	-3.700	0.000	1.000	1.000
37.26	0.000	0.000	Strato1_2_8_L_0									
21 D	7.855	0.000	74.10	39.27	74.10	39.27	V-C	1.1045E+04	-3.900	0.000	1.000	1.000
39.27	0.000	0.000	Strato1_2_8_L_0									
22 D	8.257	0.000	77.90	41.29	77.90	41.29	V-C	1.1045E+04	-4.100	0.000	1.000	1.000
41.29	0.000	0.000	Strato1_2_8_L_0									
23 D	8.660	0.000	81.70	43.30	81.70	43.30	V-C	1.1045E+04	-4.300	0.000	1.000	1.000
43.30	0.000	0.000	Strato1_2_8_L_0									
24 D	9.063	0.000	85.50	45.32	85.50	45.32	V-C	1.1045E+04	-4.500	0.000	1.000	1.000
45.31	0.000	0.000	Strato1_2_8_L_0									
25 D	9.466	0.000	89.30	47.33	89.30	47.33	V-C	1.1045E+04	-4.700	0.000	1.000	1.000
47.33	0.000	0.000	Strato1_2_8_L_0									
26 D	9.869	0.000	93.10	49.34	93.10	49.34	V-C	1.1045E+04	-4.900	0.000	1.000	1.000
49.34	0.000	0.000	Strato1_2_8_L_0									
27 D	10.27	0.000	96.90	51.36	96.90	51.36	V-C	1.1045E+04	-5.100	0.000	1.000	1.000
51.36	0.000	0.000	Strato1_2_8_L_0									
28 D	10.67	0.000	100.7	53.37	100.7	53.37	V-C	1.1045E+04	-5.300	0.000	1.000	1.000
53.37	0.000	0.000	Strato1_2_8_L_0									
29 D	11.08	0.000	104.5	55.38	104.5	55.38	V-C	1.1045E+04	-5.500	0.000	1.000	1.000
55.38	0.000	0.000	Strato1_2_8_L_0									
30 D	11.48	0.000	108.3	57.40	108.3	57.40	V-C	1.1045E+04	-5.700	0.000	1.000	1.000
57.40	0.000	0.000	Strato1_2_8_L_0									
31 D	11.88	0.000	112.1	59.41	112.1	59.41	V-C	1.1045E+04	-5.900	0.000	1.000	1.000
59.41	0.000	0.000	Strato1_2_8_L_0									
32 D	12.29	0.000	115.9	61.43	115.9	61.43	V-C	1.1045E+04	-6.100	0.000	1.000	1.000
61.43	0.000	0.000	Strato1_2_8_L_0									
33 D	12.69	0.000	119.7	63.44	119.7	63.44	V-C	1.1045E+04	-6.300	0.000	1.000	1.000
63.44	0.000	0.000	Strato1_2_8_L_0									
34 D	13.09	0.000	123.5	65.45	123.5	65.45	V-C	1.1045E+04	-6.500	0.000	1.000	1.000
65.45	0.000	0.000	Strato1_2_8_L_0									
35 D	13.49	0.000	127.3	67.47	127.3	67.47	V-C	1.1045E+04	-6.700	0.000	1.000	1.000
67.47	0.000	0.000	Strato1_2_8_L_0									
36 D	13.90	0.000	131.1	69.48	131.1	69.48	V-C	1.1045E+04	-6.900	0.000	1.000	1.000
69.48	0.000	0.000	Strato1_2_8_L_0									
37 D	14.30	0.000	134.9	71.50	134.9	71.50	V-C	1.1045E+04	-7.100	0.000	1.000	1.000
71.50	0.000	0.000	Strato1_2_8_L_0									
38 D	14.70	0.000	138.7	73.51	138.7	73.51	V-C	1.1045E+04	-7.300	0.000	1.000	1.000
73.51	0.000	0.000	Strato1_2_8_L_0									
39 D	15.10	0.000	142.5	75.52	142.5	75.52	V-C	1.1045E+04	-7.500	0.000	1.000	1.000
75.52	0.000	0.000	Strato1_2_8_L_0									
40 D	15.51	0.000	146.3	77.54	146.3	77.54	V-C	1.1045E+04	-7.700	0.000	1.000	1.000
77.54	0.000	0.000	Strato1_2_8_L_0									
41 D	15.91	0.000	150.1	79.55	150.1	79.55	V-C	1.1045E+04	-7.900	0.000	1.000	1.000
79.55	0.000	0.000	Strato1_2_8_L_0									
42 D	16.31	0.000	153.9	81.57	153.9	81.57	V-C	1.1045E+04	-8.100	0.000	1.000	1.000
81.57	0.000	0.000	Strato1_2_8_L_0									
43 D	16.72	0.000	157.7	83.58	157.7	83.58	V-C	1.1045E+04	-8.300	0.000	1.000	1.000
83.58	0.000	0.000	Strato1_2_8_L_0									
44 D	17.12	0.000	161.5	85.59	161.5	85.59	V-C	1.1045E+04	-8.500	0.000	1.000	1.000
85.59	0.000	0.000	Strato1_2_8_L_0									
45 D	17.52	0.000	165.3	87.61	165.3	87.61	V-C	1.1045E+04	-8.700	0.000	1.000	1.000
87.61	0.000	0.000	Strato1_2_8_L_0									
46 D	17.92	0.000	169.1	89.62	169.1	89.62	V-C	1.1045E+04	-8.900	0.000	1.000	1.000
89.62	0.000	0.000	Strato1_2_8_L_0									
47 D	18.33	0.000	172.9	91.64	172.9	91.64	V-C	1.1045E+04	-9.100	0.000	1.000	1.000
91.64	0.000	0.000	Strato1_2_8_L_0									
48 D	18.73	0.000	176.7	93.65	176.7	93.65	V-C	1.1045E+04	-9.300	0.000	1.000	1.000
93.65	0.000	0.000	Strato1_2_8_L_0									
49 D	19.13	0.000	180.5	95.66	180.5	95.66	V-C	1.1045E+04	-9.500	0.000	1.000	1.000
95.66	0.000	0.000	Strato1_2_8_L_0									
50 D	18.45	0.000	184.5	92.25	184.5	92.25	V-C	2.4402E+04	-9.700	0.000	1.000	1.000
92.25	0.000	0.000	Strato2_3095_82743_L_0									
51 D	18.85	0.000	188.5	94.25	188.5	94.25	V-C	2.4402E+04	-9.900	0.000	1.000	1.000
94.25	0.000	0.000	Strato2_3095_82743_L_0									
52 D	19.25	0.000	192.5	96.25	192.5	96.25	V-C	2.4402E+04	-10.10	0.000	1.000	1.000
96.25	0.000	0.000	Strato2_3095_82743_L_0									
53 D	19.65	0.000	196.5	98.25	196.5	98.25	V-C	2.4402E+04	-10.30	0.000	1.000	1.000
98.25	0.000	0.000	Strato2_3095_82743_L_0									
54 D	20.05	0.000	200.5	100.2	200.5	100.2	V-C	2.4402E+04	-10.50	0.000	1.000	1.000
100.2	0.000	0.000	Strato2_3095_82743_L_0									
55 D	20.45	0.000	204.5	102.2	204.5	102.2	V-C	2.4402E+04	-10.70	0.000	1.000	1.000
102.2	0.000	0.000	Strato2_3095_82743_L_0									
56 D	20.85	0.000	208.5	104.2	208.5	104.2	V-C	2.4402E+04	-10.90	0.000	1.000	1.000
104.2	0.000	0.000	Strato2_3095_82743_L_0									
57 D	21.25	0.000	212.5	106.2	212.5	106.2	V-C	2.4402E+04	-11.10	0.000	1.000	1.000
106.2	0.000	0.000	Strato2_3095_82743_L_0									
58 D	21.65	0.000	216.5	108.2	216.5	108.2	V-C	2.4402E+04	-11.30	0.000	1.000	1.000
108.2	0.000	0.000	Strato2_3095_82743_L_0									
59 D	22.05	0.000	220.5	110.2	220.5	110.2	V-C	2.4402E+04	-11.50	0.000	1.000	1.000
110.2	0.000	0.000	Strato2_3095_82743_L_0									
60 D	22.45	0.000	224.5	112.2	224.5	112.2	V-C	2.4402E+04	-11.70	0.000	1.000	1.000
112.2	0.000	0.000	Strato2_3095_82743_L_0									
61 D	22.85	0.000	228.5	114.2	228.5	114.2	V-C	2.4402E+04	-11.90	0.000	1.000	1.000
114.2	0.000	0.000	Strato2_3095_82743_L_0									
62 D	23.25	0.000	232.5	116.2	232.5	116.2	V-C	2.4402E+04	-12.10	0.000	1.000	1.000

```
116.2       0.000       0.000     Strato2_3095_82743_L_0
  63 D   23.65       0.000       236.5       118.2       236.5       118.2       V-C  2.4402E+04  -12.30       0.000       1.000       1.000
118.2       0.000       0.000     Strato2_3095_82743_L_0
  64 D   24.05       0.000       240.5       120.2       240.5       120.2       V-C  2.4402E+04  -12.50       0.000       1.000       1.000
120.2       0.000       0.000     Strato2_3095_82743_L_0
  65 D   24.45       0.000       244.5       122.2       244.5       122.2       V-C  2.4402E+04  -12.70       0.000       1.000       1.000
122.2       0.000       0.000     Strato2_3095_82743_L_0
  66 D   24.85       0.000       248.5       124.2       248.5       124.2       V-C  2.4402E+04  -12.90       0.000       1.000       1.000
124.2       0.000       0.000     Strato2_3095_82743_L_0
  67 D   25.25       0.000       252.5       126.2       252.5       126.2       V-C  2.4402E+04  -13.10       0.000       1.000       1.000
126.2       0.000       0.000     Strato2_3095_82743_L_0
  68 D   25.65       0.000       256.5       128.2       256.5       128.2       V-C  2.4402E+04  -13.30       0.000       1.000       1.000
128.2       0.000       0.000     Strato2_3095_82743_L_0
  69 D   26.05       0.000       260.5       130.2       260.5       130.2       V-C  2.4402E+04  -13.50       0.000       1.000       1.000
130.2       0.000       0.000     Strato2_3095_82743_L_0
  70 D   26.45       0.000       264.5       132.2       264.5       132.2       V-C  2.4402E+04  -13.70       0.000       1.000       1.000
132.2       0.000       0.000     Strato2_3095_82743_L_0
  71 D   26.85       0.000       268.5       134.2       268.5       134.2       V-C  2.4402E+04  -13.90       0.000       1.000       1.000
134.2       0.000       0.000     Strato2_3095_82743_L_0
  72 D   27.25       0.000       272.5       136.2       272.5       136.2       V-C  2.4402E+04  -14.10       0.000       1.000       1.000
136.2       0.000       0.000     Strato2_3095_82743_L_0
  73 D   27.65       0.000       276.5       138.2       276.5       138.2       V-C  2.4402E+04  -14.30       0.000       1.000       1.000
138.2       0.000       0.000     Strato2_3095_82743_L_0
  74 D   28.05       0.000       280.5       140.2       280.5       140.2       V-C  2.4402E+04  -14.50       0.000       1.000       1.000
140.2       0.000       0.000     Strato2_3095_82743_L_0
  75 D   28.45       0.000       284.5       142.2       284.5       142.2       V-C  2.4402E+04  -14.70       0.000       1.000       1.000
142.2       0.000       0.000     Strato2_3095_82743_L_0
  76 D   28.85       0.000       288.5       144.2       288.5       144.2       V-C  2.4402E+04  -14.90       0.000       1.000       1.000
144.2       0.000       0.000     Strato2_3095_82743_L_0
  77 D   29.25       0.000       292.5       146.2       292.5       146.2       V-C  2.4402E+04  -15.10       0.000       1.000       1.000
146.2       0.000       0.000     Strato2_3095_82743_L_0
  78 D   29.65       0.000       296.5       148.2       296.5       148.2       V-C  2.4402E+04  -15.30       0.000       1.000       1.000
148.2       0.000       0.000     Strato2_3095_82743_L_0
  79 D   30.05       0.000       300.5       150.2       300.5       150.2       V-C  2.4402E+04  -15.50       0.000       1.000       1.000
150.2       0.000       0.000     Strato2_3095_82743_L_0
  80 D   30.45       0.000       304.5       152.2       304.5       152.2       V-C  2.4402E+04  -15.70       0.000       1.000       1.000
152.2       0.000       0.000     Strato2_3095_82743_L_0
  81 D   23.14       0.000       308.5       154.2       308.5       154.2       V-C  2.4402E+04  -15.90       0.000       1.000       1.000
154.2       0.000       0.000     Strato2_3095_82743_L_0
  82 D   7.763       0.000       310.5       155.2       310.5       155.2       V-C  2.4402E+04  -16.00       0.000       1.000       1.000
155.2       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                  |
 |                                                                                                                               |
 |                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                              |
 |                                   Exe Time :24 July 2019      10:49:26                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

 WallElement_33                :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   81
 C U R R E N T   T I M E   I S     1.0000

  WALL2D ELEMENT

    EL      TA          TB          MA          MB
 ------------------------------------------------------
     1  0.0000      0.0000      0.0000      0.0000
     2  0.0000      0.0000      0.0000      0.0000
     3  0.0000      0.0000      0.0000      0.0000
     4  0.0000      0.0000      0.0000      0.0000
     5  0.0000      0.0000      0.0000      0.0000
     6  0.0000      0.0000      0.0000      0.0000
     7  0.0000      0.0000      0.0000      0.0000
     8  0.0000      0.0000      0.0000      0.0000
     9  0.0000      0.0000      0.0000      0.0000
    10  0.0000      0.0000      0.0000      0.0000
    11  0.0000      0.0000      0.0000      0.0000
    12  0.0000      0.0000      0.0000      0.0000
    13  0.0000      0.0000      0.0000      0.0000
    14  0.0000      0.0000      0.0000      0.0000
    15  0.0000      0.0000      0.0000      0.0000
    16  0.0000      0.0000      0.0000      0.0000
    17  0.0000      0.0000      0.0000      0.0000
    18  0.0000      0.0000      0.0000      0.0000
    19  0.0000      0.0000      0.0000      0.0000
    20  0.0000      0.0000      0.0000      0.0000
    21  0.0000      0.0000      0.0000      0.0000
```

22	0.0000	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0000
24	0.0000	0.0000	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000
26	0.0000	0.0000	0.0000	0.0000
27	0.0000	0.0000	0.0000	0.0000
28	0.0000	0.0000	0.0000	0.0000
29	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000
31	0.0000	0.0000	0.0000	0.0000
32	0.0000	0.0000	0.0000	0.0000
33	0.0000	0.0000	0.0000	0.0000
34	0.0000	0.0000	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000
36	0.0000	0.0000	0.0000	0.0000
37	0.0000	0.0000	0.0000	0.0000
38	0.0000	0.0000	0.0000	0.0000
39	0.0000	0.0000	0.0000	0.0000
40	0.0000	0.0000	0.0000	0.0000
41	0.0000	0.0000	0.0000	0.0000
42	0.0000	0.0000	0.0000	0.0000
43	0.0000	0.0000	0.0000	0.0000
44	0.0000	0.0000	0.0000	0.0000
45	0.0000	0.0000	0.0000	0.0000
46	0.0000	0.0000	0.0000	0.0000
47	0.0000	0.0000	0.0000	0.0000
48	0.0000	0.0000	0.0000	0.0000
49	0.0000	0.0000	0.0000	0.0000
50	0.0000	0.0000	0.0000	0.0000
51	0.0000	0.0000	0.0000	0.0000
52	0.0000	0.0000	0.0000	0.0000
53	0.0000	0.0000	0.0000	0.0000
54	0.0000	0.0000	0.0000	0.0000
55	0.0000	0.0000	0.0000	0.0000
56	0.0000	0.0000	0.0000	0.0000
57	0.0000	0.0000	0.0000	0.0000
58	0.0000	0.0000	0.0000	0.0000
59	0.0000	0.0000	0.0000	0.0000
60	0.0000	0.0000	0.0000	0.0000
61	0.0000	0.0000	0.0000	0.0000
62	0.0000	0.0000	0.0000	0.0000
63	0.0000	0.0000	0.0000	0.0000
64	0.0000	0.0000	0.0000	0.0000
65	0.0000	0.0000	0.0000	0.0000
66	0.0000	0.0000	0.0000	0.0000
67	0.0000	0.0000	0.0000	0.0000
68	0.0000	0.0000	0.0000	0.0000
69	0.0000	0.0000	0.0000	0.0000
70	0.0000	0.0000	0.0000	0.0000
71	0.0000	0.0000	0.0000	0.0000
72	0.0000	0.0000	0.0000	0.0000
73	0.0000	0.0000	0.0000	0.0000
74	0.0000	0.0000	0.0000	0.0000
75	0.0000	0.0000	0.0000	0.0000
76	0.0000	0.0000	0.0000	0.0000
77	0.0000	0.0000	0.0000	0.0000
78	0.0000	0.0000	0.0000	0.0000
79	0.0000	0.0000	0.0000	0.0000
80	0.0000	0.0000	0.0000	0.0000
81	0.0000	0.0000	0.0000	0.0000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                   Exe Time :24 July 2019      10:49:26                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_768111                   :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S      1.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****
```

```
ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5587E+05 RIMNOR= 0.000
           RENORM= 283.1     REMNOR= 0.000     RATIO =0.7119E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 32.15     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5587E+05 RDR   = 0.000
           RATIOT=0.7119E-01 RATIOR= 0.000
           MAX UN= 2.002     IEQ=    13 NODE      7 DOF   1  Y-DISPL.F
           MIN UN= 0.000     IEQ=     2 NODE      1 DOF   2   X-ROT. F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5587E+05 RIMNOR= 0.000
           RENORM= 24.29     REMNOR=0.1278E-20 RATIO =0.2085E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 32.15     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5587E+05 RDR   = 0.000
           RATIOT=0.2085E-01 RATIOR= 0.000
           MAX UN= 1.452     IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           MIN UN=-.1197E-09 IEQ=   163 NODE     82 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5587E+05 RIMNOR= 0.000
           RENORM= 1.481     REMNOR=0.1564E-19 RATIO =0.5148E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 32.15     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5587E+05 RDR   = 0.000
           RATIOT=0.5148E-02 RATIOR= 0.000
           MAX UN=0.7923     IEQ=    67 NODE     34 DOF   1  Y-DISPL.F
           MIN UN=-.6568E-09 IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5587E+05 RIMNOR= 0.000
           RENORM=0.3130E-02 REMNOR=0.9412E-21 RATIO =0.2367E-03 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 32.15     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5587E+05 RDR   = 0.000
           RATIOT=0.2367E-03 RATIOR= 0.000
           MAX UN=0.4167E-01 IEQ=    79 NODE     40 DOF   1  Y-DISPL.F
           MIN UN=-.2908E-09 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     5 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5587E+05 RIMNOR= 0.000
           RENORM=0.1256E-06 REMNOR=0.7544E-21 RATIO =0.1499E-05 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 32.15     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5587E+05 RDR   = 0.000
           RATIOT=0.1499E-05 RATIOR= 0.000
           MAX UN=0.2933E-03 IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           MIN UN=-.1265E-09 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0




+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                 Exe Time :24 July 2019      10:49:26                                                  |
+-----------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     5 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    2     ( AT TIME   2.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)            (
    1   7.9492717E-04  -9.3071189E-05
    2   7.7631494E-04  -9.3041072E-05
    3   7.5771445E-04  -9.2955301E-05
    4   7.3913625E-04  -9.2817995E-05
    5   7.2059067E-04  -9.2629445E-05
    6   7.0208792E-04  -9.2389271E-05
```

7	6.8363849E-04	-9.2096103E-05
8	6.6525312E-04	-9.1748300E-05
9	6.4694296E-04	-9.1343751E-05
10	6.2871944E-04	-9.0881947E-05
11	6.1059394E-04	-9.0363664E-05
12	5.9257771E-04	-8.9789233E-05
13	5.7468200E-04	-8.9158533E-05
14	5.6578285E-04	-8.8822025E-05
15	5.4808908E-04	-8.8106166E-05
16	5.3054420E-04	-8.7333168E-05
17	5.1315964E-04	-8.6502714E-05
18	4.9594698E-04	-8.5614280E-05
19	4.7891784E-04	-8.4667223E-05
20	4.6208405E-04	-8.3660788E-05
21	4.4545754E-04	-8.2594182E-05
22	4.2905039E-04	-8.1467329E-05
23	4.1287458E-04	-8.0280897E-05
24	3.9694199E-04	-7.9035019E-05
25	3.8126452E-04	-7.7729861E-05
26	3.6585398E-04	-7.6365687E-05
27	3.5072223E-04	-7.4942882E-05
28	3.3588078E-04	-7.3461983E-05
29	3.2134122E-04	-7.1924300E-05
30	3.0711471E-04	-7.0331921E-05
31	2.9321195E-04	-6.8687165E-05
32	2.7964323E-04	-6.6992650E-05
33	2.6641808E-04	-6.5251282E-05
34	2.5354562E-04	-6.3466371E-05
35	2.4103419E-04	-6.1641620E-05
36	2.2889135E-04	-5.9781190E-05
37	2.1712377E-04	-5.7889851E-05
38	2.0573714E-04	-5.5973343E-05
39	1.9473575E-04	-5.4037952E-05
40	1.8412276E-04	-5.2090604E-05
41	1.7389980E-04	-5.0138879E-05
42	1.6406709E-04	-4.8188879E-05
43	1.5462408E-04	-4.6242099E-05
44	1.4557032E-04	-4.4294944E-05
45	1.3690669E-04	-4.2338999E-05
46	1.2863621E-04	-4.0360804E-05
47	1.2076507E-04	-3.8342084E-05
48	1.1330363E-04	-3.6259989E-05
49	1.0626715E-04	-3.4087278E-05
50	9.9676870E-05	-3.1792363E-05
51	9.3557367E-05	-2.9390047E-05
52	8.7924221E-05	-2.6939264E-05
53	8.2781704E-05	-2.4489989E-05
54	7.8125359E-05	-2.2083723E-05
55	7.3943121E-05	-1.9753865E-05
56	7.0216971E-05	-1.7526628E-05
57	6.6924306E-05	-1.5421839E-05
58	6.4039124E-05	-1.3453720E-05
59	6.1533067E-05	-1.1631871E-05
60	5.9376248E-05	-9.9619395E-06
61	5.7538029E-05	-8.4459433E-06
62	5.5987678E-05	-7.0828322E-06
63	5.4694958E-05	-5.8687937E-06
64	5.3630618E-05	-4.7978940E-06
65	5.2766768E-05	-3.8624757E-06
66	5.2077182E-05	-3.0537475E-06
67	5.1537465E-05	-2.3620831E-06
68	5.1125230E-05	-1.7772005E-06
69	5.0820157E-05	-1.2887301E-06
70	5.0603996E-05	-8.8638610E-07
71	5.0460532E-05	-5.6010684E-07
72	5.0375530E-05	-3.0016797E-07
73	5.0336662E-05	-9.7271592E-08
74	5.0333391E-05	5.7165844E-08
75	5.0356819E-05	1.7096561E-07
76	5.0399551E-05	2.5137251E-07
77	5.0455585E-05	3.0503009E-07
78	5.0520184E-05	3.3800007E-07
79	5.0589776E-05	3.5584006E-07
80	5.0661852E-05	3.6365171E-07
81	5.0734865E-05	3.6588181E-07
82	5.0771464E-05	3.6599291E-07

```
+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                  |
|                                  Exe Time :24 July 2019      10:49:26                                             |
```

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 82
C U R R E N T T I M E I S 2.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	1.269	-7.9493E-04	26.54	12.69	26.54	14.07	UL-RL	4.7747E+04	0.000	0.000	1.000	1.000	12.69	0.000	0.000	Strato1_2_8_L_0
2 D	1.925	-7.7631E-04	20.13	9.624	20.13	10.67	UL-RL	4.7747E+04	-0.2000	0.000	1.000	1.000	9.624	0.000	0.000	Strato1_2_8_L_0
3 D	2.499	-7.5771E-04	26.14	12.49	26.14	13.85	UL-RL	4.7747E+04	-0.4000	0.000	1.000	1.000	12.49	0.000	0.000	Strato1_2_8_L_0
4 D	2.809	-7.3914E-04	29.39	14.05	29.39	15.58	ACTIVE	0.000	-0.6000	0.000	1.000	1.000	14.05	0.000	0.000	Strato1_2_8_L_0
5 D	3.250	-7.2059E-04	34.00	16.25	34.00	18.02	ACTIVE	0.000	-0.8000	0.000	1.000	1.000	16.25	0.000	0.000	Strato1_2_8_L_0
6 D	3.575	-7.0209E-04	37.40	17.88	37.40	19.82	ACTIVE	0.000	-1.000	0.000	1.000	1.000	17.88	0.000	0.000	Strato1_2_8_L_0
7 D	3.986	-6.8364E-04	41.69	19.93	41.69	22.10	ACTIVE	0.000	-1.200	0.000	1.000	1.000	19.93	0.000	0.000	Strato1_2_8_L_0
8 D	4.319	-6.6525E-04	45.18	21.60	45.18	23.95	ACTIVE	0.000	-1.400	0.000	1.000	1.000	21.60	0.000	0.000	Strato1_2_8_L_0
9 D	4.642	-6.4694E-04	48.56	23.21	48.56	25.74	ACTIVE	0.000	-1.600	0.000	1.000	1.000	23.21	0.000	0.000	Strato1_2_8_L_0
10 D	4.990	-6.2872E-04	52.20	24.95	52.20	27.67	ACTIVE	0.000	-1.800	0.000	1.000	1.000	24.95	0.000	0.000	Strato1_2_8_L_0
11 D	5.386	-6.1059E-04	56.34	26.93	56.34	29.86	ACTIVE	0.000	-2.000	0.000	1.000	1.000	26.93	0.000	0.000	Strato1_2_8_L_0
12 D	5.735	-5.9258E-04	59.99	28.68	59.99	31.80	ACTIVE	0.000	-2.200	0.000	1.000	1.000	28.68	0.000	0.000	Strato1_2_8_L_0
13 D	4.593	-5.7468E-04	64.06	30.62	64.06	33.95	ACTIVE	0.000	-2.400	0.000	1.000	1.000	30.62	0.000	0.000	Strato1_2_8_L_0
14 D	4.720	-5.6578E-04	65.83	31.47	65.83	34.89	ACTIVE	0.000	-2.500	0.000	1.000	1.000	31.47	0.000	0.000	Strato1_2_8_L_0
15 D	6.645	-5.4809E-04	69.51	33.22	69.51	36.84	ACTIVE	0.000	-2.700	0.000	1.000	1.000	33.22	0.000	0.000	Strato1_2_8_L_0
16 D	7.030	-5.3054E-04	73.53	35.15	73.53	38.97	ACTIVE	0.000	-2.900	0.000	1.000	1.000	35.15	0.000	0.000	Strato1_2_8_L_0
17 D	7.382	-5.1316E-04	77.22	36.91	77.22	40.93	ACTIVE	0.000	-3.100	0.000	1.000	1.000	36.91	0.000	0.000	Strato1_2_8_L_0
18 D	7.764	-4.9595E-04	81.21	38.82	81.21	43.04	ACTIVE	0.000	-3.300	0.000	1.000	1.000	38.82	0.000	0.000	Strato1_2_8_L_0
19 D	8.117	-4.7892E-04	84.90	40.58	84.90	45.00	ACTIVE	0.000	-3.500	0.000	1.000	1.000	40.58	0.000	0.000	Strato1_2_8_L_0
20 D	8.496	-4.6208E-04	88.87	42.48	88.87	47.10	ACTIVE	0.000	-3.700	0.000	1.000	1.000	42.48	0.000	0.000	Strato1_2_8_L_0
21 D	8.818	-4.4546E-04	92.24	44.09	92.24	48.89	ACTIVE	0.000	-3.900	0.000	1.000	1.000	44.09	0.000	0.000	Strato1_2_8_L_0
22 D	9.197	-4.2905E-04	96.21	45.99	96.21	50.99	ACTIVE	0.000	-4.100	0.000	1.000	1.000	45.99	0.000	0.000	Strato1_2_8_L_0
23 D	9.575	-4.1287E-04	100.2	47.87	100.2	53.08	ACTIVE	0.000	-4.300	0.000	1.000	1.000	47.87	0.000	0.000	Strato1_2_8_L_0
24 D	9.930	-3.9694E-04	103.9	49.65	103.9	55.05	ACTIVE	0.000	-4.500	0.000	1.000	1.000	49.65	0.000	0.000	Strato1_2_8_L_0
25 D	10.31	-3.8126E-04	107.8	51.53	107.8	57.14	ACTIVE	0.000	-4.700	0.000	1.000	1.000	51.53	0.000	0.000	Strato1_2_8_L_0
26 D	10.66	-3.6585E-04	111.5	53.31	111.5	59.11	ACTIVE	0.000	-4.900	0.000	1.000	1.000	53.31	0.000	0.000	Strato1_2_8_L_0
27 D	11.04	-3.5072E-04	115.5	55.19	115.5	61.19	ACTIVE	0.000	-5.100	0.000	1.000	1.000	55.19	0.000	0.000	Strato1_2_8_L_0
28 D	11.37	-3.3588E-04	118.9	56.85	118.9	63.04	ACTIVE	0.000	-5.300	0.000	1.000	1.000	56.85	0.000	0.000	Strato1_2_8_L_0
29 D	11.74	-3.2134E-04	122.9	58.72	122.9	65.11	ACTIVE	0.000	-5.500	0.000	1.000	1.000	58.72	0.000	0.000	Strato1_2_8_L_0
30 D	12.10	-3.0711E-04	126.6	60.51	126.6	67.10	ACTIVE	0.000	-5.700	0.000	1.000	1.000	60.51	0.000	0.000	Strato1_2_8_L_0
31 D	12.48	-2.9321E-04	130.5	62.38	130.5	69.17	ACTIVE	0.000	-5.900	0.000	1.000	1.000	62.38	0.000	0.000	Strato1_2_8_L_0
32 D	12.83	-2.7964E-04	134.2	64.17	134.2	71.15	ACTIVE	0.000	-6.100	0.000	1.000	1.000	64.17	0.000	0.000	Strato1_2_8_L_0
33 D	13.21	-2.6642E-04	138.1	66.03	138.1	73.22	ACTIVE	0.000	-6.300	0.000	1.000	1.000	66.03	0.000	0.000	Strato1_2_8_L_0
34 D	13.56	-2.5355E-04	141.9	67.82	141.9	75.20	ACTIVE	0.000	-6.500	0.000	1.000	1.000				

67.82	0.000	0.000	Strato1_2_8_L_0									
35 D	13.94	-2.4103E-04	145.8	69.69	145.8	77.27	ACTIVE	0.000	-6.700	0.000	1.000	1.000
69.69	0.000	0.000	Strato1_2_8_L_0									
36 D	14.29	-2.2889E-04	149.5	71.45	149.5	79.23	ACTIVE	0.000	-6.900	0.000	1.000	1.000
71.45	0.000	0.000	Strato1_2_8_L_0									
37 D	14.65	-2.1712E-04	153.2	73.25	153.2	81.21	ACTIVE	0.000	-7.100	0.000	1.000	1.000
73.25	0.000	0.000	Strato1_2_8_L_0									
38 D	15.02	-2.0574E-04	157.1	75.10	157.1	83.27	ACTIVE	0.000	-7.300	0.000	1.000	1.000
75.10	0.000	0.000	Strato1_2_8_L_0									
39 D	15.38	-1.9474E-04	160.9	76.90	160.9	85.26	ACTIVE	0.000	-7.500	0.000	1.000	1.000
76.90	0.000	0.000	Strato1_2_8_L_0									
40 D	15.75	-1.8412E-04	164.8	78.75	164.8	87.32	ACTIVE	0.000	-7.700	0.000	1.000	1.000
78.75	0.000	0.000	Strato1_2_8_L_0									
41 D	16.20	-1.7390E-04	168.5	81.01	168.5	89.31	UL-RL	4.7747E+04	-7.900	0.000	1.000	1.000
81.01	0.000	0.000	Strato1_2_8_L_0									
42 D	16.71	-1.6407E-04	172.4	83.53	172.4	91.37	UL-RL	4.7747E+04	-8.100	0.000	1.000	1.000
83.53	0.000	0.000	Strato1_2_8_L_0									
43 D	17.18	-1.5462E-04	176.0	85.89	176.0	93.27	UL-RL	4.7747E+04	-8.300	0.000	1.000	1.000
85.89	0.000	0.000	Strato1_2_8_L_0									
44 D	17.68	-1.4557E-04	179.9	88.38	179.9	95.33	UL-RL	4.7747E+04	-8.500	0.000	1.000	1.000
88.38	0.000	0.000	Strato1_2_8_L_0									
45 D	18.16	-1.3691E-04	183.6	90.78	183.6	97.32	UL-RL	4.7747E+04	-8.700	0.000	1.000	1.000
90.78	0.000	0.000	Strato1_2_8_L_0									
46 D	18.65	-1.2864E-04	187.5	93.23	187.5	99.37	UL-RL	4.7747E+04	-8.900	0.000	1.000	1.000
93.23	0.000	0.000	Strato1_2_8_L_0									
47 D	19.12	-1.2077E-04	191.3	95.60	191.3	101.4	UL-RL	4.7747E+04	-9.100	0.000	1.000	1.000
95.60	0.000	0.000	Strato1_2_8_L_0									
48 D	19.60	-1.1330E-04	195.1	98.01	195.1	103.4	UL-RL	4.7747E+04	-9.300	0.000	1.000	1.000
98.01	0.000	0.000	Strato1_2_8_L_0									
49 D	20.08	-1.0627E-04	199.0	100.4	199.0	105.5	UL-RL	4.7747E+04	-9.500	0.000	1.000	1.000
100.4	0.000	0.000	Strato1_2_8_L_0									
50 D	17.60	-9.9677E-05	203.0	88.01	203.0	101.5	UL-RL	1.3507E+05	-9.700	0.000	1.000	1.000
88.01	0.000	0.000	Strato2_3095_82743_L_0									
51 D	18.16	-9.3557E-05	206.9	90.80	206.9	103.4	UL-RL	1.3507E+05	-9.900	0.000	1.000	1.000
90.80	0.000	0.000	Strato2_3095_82743_L_0									
52 D	18.71	-8.7924E-05	210.8	93.55	210.8	105.4	UL-RL	1.3507E+05	-10.10	0.000	1.000	1.000
93.55	0.000	0.000	Strato2_3095_82743_L_0									
53 D	19.25	-8.2782E-05	214.9	96.27	214.9	107.5	UL-RL	1.3507E+05	-10.30	0.000	1.000	1.000
96.27	0.000	0.000	Strato2_3095_82743_L_0									
54 D	19.78	-7.8125E-05	218.9	98.89	218.9	109.4	UL-RL	1.3507E+05	-10.50	0.000	1.000	1.000
98.89	0.000	0.000	Strato2_3095_82743_L_0									
55 D	20.30	-7.3943E-05	222.9	101.5	222.9	111.5	UL-RL	1.3507E+05	-10.70	0.000	1.000	1.000
101.5	0.000	0.000	Strato2_3095_82743_L_0									
56 D	20.79	-7.0217E-05	226.9	104.0	226.9	113.5	UL-RL	1.3507E+05	-10.90	0.000	1.000	1.000
104.0	0.000	0.000	Strato2_3095_82743_L_0									
57 D	21.29	-6.6924E-05	231.0	106.4	231.0	115.5	UL-RL	1.3507E+05	-11.10	0.000	1.000	1.000
106.4	0.000	0.000	Strato2_3095_82743_L_0									
58 D	21.75	-6.4039E-05	234.8	108.8	234.8	117.4	UL-RL	1.3507E+05	-11.30	0.000	1.000	1.000
108.8	0.000	0.000	Strato2_3095_82743_L_0									
59 D	22.22	-6.1533E-05	238.9	111.1	238.9	119.4	UL-RL	1.3507E+05	-11.50	0.000	1.000	1.000
111.1	0.000	0.000	Strato2_3095_82743_L_0									
60 D	22.68	-5.9376E-05	242.8	113.4	242.8	121.4	UL-RL	1.3507E+05	-11.70	0.000	1.000	1.000
113.4	0.000	0.000	Strato2_3095_82743_L_0									
61 D	23.13	-5.7538E-05	246.9	115.7	246.9	123.4	UL-RL	1.3507E+05	-11.90	0.000	1.000	1.000
115.7	0.000	0.000	Strato2_3095_82743_L_0									
62 D	23.58	-5.5988E-05	250.9	117.9	250.9	125.5	UL-RL	1.3507E+05	-12.10	0.000	1.000	1.000
117.9	0.000	0.000	Strato2_3095_82743_L_0									
63 D	24.01	-5.4695E-05	254.9	120.1	254.9	127.5	UL-RL	1.3507E+05	-12.30	0.000	1.000	1.000
120.1	0.000	0.000	Strato2_3095_82743_L_0									
64 D	24.45	-5.3631E-05	259.0	122.2	259.0	129.5	UL-RL	1.3507E+05	-12.50	0.000	1.000	1.000
122.2	0.000	0.000	Strato2_3095_82743_L_0									
65 D	24.86	-5.2767E-05	262.8	124.3	262.8	131.4	UL-RL	1.3507E+05	-12.70	0.000	1.000	1.000
124.3	0.000	0.000	Strato2_3095_82743_L_0									
66 D	25.28	-5.2077E-05	266.9	126.4	266.9	133.4	UL-RL	1.3507E+05	-12.90	0.000	1.000	1.000
126.4	0.000	0.000	Strato2_3095_82743_L_0									
67 D	25.69	-5.1537E-05	270.8	128.4	270.8	135.4	UL-RL	1.3507E+05	-13.10	0.000	1.000	1.000
128.4	0.000	0.000	Strato2_3095_82743_L_0									
68 D	26.09	-5.1125E-05	274.7	130.4	274.7	137.3	UL-RL	1.3507E+05	-13.30	0.000	1.000	1.000
130.4	0.000	0.000	Strato2_3095_82743_L_0									
69 D	26.49	-5.0820E-05	278.6	132.4	278.6	139.3	UL-RL	1.3507E+05	-13.50	0.000	1.000	1.000
132.4	0.000	0.000	Strato2_3095_82743_L_0									
70 D	26.88	-5.0604E-05	282.5	134.4	282.5	141.2	UL-RL	1.3507E+05	-13.70	0.000	1.000	1.000
134.4	0.000	0.000	Strato2_3095_82743_L_0									
71 D	27.28	-5.0461E-05	286.4	136.4	286.4	143.2	UL-RL	1.3507E+05	-13.90	0.000	1.000	1.000
136.4	0.000	0.000	Strato2_3095_82743_L_0									
72 D	27.67	-5.0376E-05	290.3	138.3	290.3	145.2	UL-RL	1.3507E+05	-14.10	0.000	1.000	1.000
138.3	0.000	0.000	Strato2_3095_82743_L_0									
73 D	28.05	-5.0337E-05	294.1	140.3	294.1	147.1	UL-RL	1.3507E+05	-14.30	0.000	1.000	1.000
140.3	0.000	0.000	Strato2_3095_82743_L_0									
74 D	28.44	-5.0333E-05	298.0	142.2	298.0	149.0	UL-RL	1.3507E+05	-14.50	0.000	1.000	1.000
142.2	0.000	0.000	Strato2_3095_82743_L_0									
75 D	28.84	-5.0357E-05	302.0	144.2	302.0	151.0	UL-RL	1.3507E+05	-14.70	0.000	1.000	1.000
144.2	0.000	0.000	Strato2_3095_82743_L_0									
76 D	29.23	-5.0400E-05	305.9	146.1	305.9	152.9	UL-RL	1.3507E+05	-14.90	0.000	1.000	1.000
146.1	0.000	0.000	Strato2_3095_82743_L_0									

EL	*	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
77	D	29.62	-5.0456E-05	309.8	148.1	309.8	154.9	UL-RL	1.3507E+05	-15.10	0.000	1.000	1.000	148.1	0.000	0.000	Strato2_3095_82743_L_0
78	D	30.01	-5.0520E-05	313.7	150.0	313.7	156.9	UL-RL	1.3507E+05	-15.30	0.000	1.000	1.000	150.0	0.000	0.000	Strato2_3095_82743_L_0
79	D	30.40	-5.0590E-05	317.6	152.0	317.6	158.8	UL-RL	1.3507E+05	-15.50	0.000	1.000	1.000	152.0	0.000	0.000	Strato2_3095_82743_L_0
80	D	30.78	-5.0662E-05	321.5	153.9	321.5	160.7	UL-RL	1.3507E+05	-15.70	0.000	1.000	1.000	153.9	0.000	0.000	Strato2_3095_82743_L_0
81	D	23.38	-5.0735E-05	325.4	155.8	325.4	162.7	UL-RL	1.3507E+05	-15.90	0.000	1.000	1.000	155.8	0.000	0.000	Strato2_3095_82743_L_0
82	D	7.842	-5.0771E-05	327.4	156.8	327.4	163.7	UL-RL	1.3507E+05	-16.00	0.000	1.000	1.000	156.8	0.000	0.000	Strato2_3095_82743_L_0

```
+-------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*  |
|                                                                                                       |
|                                   NewProject.BaseDesignSection_28.A1M1R1_3484                          |
|                                Exe Time :24 July 2019      10:49:26                                   |
+-------------------------------------------------------------------------------------------------------+
```

New Project

S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

0_R :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 82
C U R R E N T   T I M E   I S   2.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL	*	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1	D	0.000	7.9493E-04	0.000	0.000	0.000	0.000	ACTIVE	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_2_8_L_0
2	D	2.118	7.7631E-04	3.800	10.59	3.800	10.59	UL-RL	3.3134E+04	-0.2000	0.000	1.000	1.000	10.59	0.000	0.000	Strato1_2_8_L_0
3	D	2.479	7.5771E-04	7.600	12.40	7.600	12.40	UL-RL	3.3134E+04	-0.4000	0.000	1.000	1.000	12.40	0.000	0.000	Strato1_2_8_L_0
4	D	2.841	7.3914E-04	11.40	14.21	11.40	14.21	V-C	1.1045E+04	-0.6000	0.000	1.000	1.000	14.21	0.000	0.000	Strato1_2_8_L_0
5	D	3.203	7.2059E-04	15.20	16.01	15.20	16.01	V-C	1.1045E+04	-0.8000	0.000	1.000	1.000	16.01	0.000	0.000	Strato1_2_8_L_0
6	D	3.565	7.0209E-04	19.00	17.82	19.00	17.82	V-C	1.1045E+04	-1.000	0.000	1.000	1.000	17.82	0.000	0.000	Strato1_2_8_L_0
7	D	3.927	6.8364E-04	22.80	19.63	22.80	19.63	V-C	1.1045E+04	-1.200	0.000	1.000	1.000	19.63	0.000	0.000	Strato1_2_8_L_0
8	D	4.289	6.6525E-04	26.60	21.45	26.60	21.45	V-C	1.1045E+04	-1.400	0.000	1.000	1.000	21.45	0.000	0.000	Strato1_2_8_L_0
9	D	4.651	6.4694E-04	30.40	23.26	30.40	23.26	V-C	1.1045E+04	-1.600	0.000	1.000	1.000	23.26	0.000	0.000	Strato1_2_8_L_0
10	D	5.014	6.2872E-04	34.20	25.07	34.20	25.07	V-C	1.1045E+04	-1.800	0.000	1.000	1.000	25.07	0.000	0.000	Strato1_2_8_L_0
11	D	5.377	6.1059E-04	38.00	26.88	38.00	26.88	V-C	1.1045E+04	-2.000	0.000	1.000	1.000	26.88	0.000	0.000	Strato1_2_8_L_0
12	D	5.740	5.9258E-04	41.80	28.70	41.80	28.70	V-C	1.1045E+04	-2.200	0.000	1.000	1.000	28.70	0.000	0.000	Strato1_2_8_L_0
13	D	4.577	5.7468E-04	45.60	30.52	45.60	30.52	V-C	1.1045E+04	-2.400	0.000	1.000	1.000	30.52	0.000	0.000	Strato1_2_8_L_0
14	D	4.714	5.6578E-04	47.50	31.42	47.50	31.42	V-C	1.1045E+04	-2.500	0.000	1.000	1.000	31.42	0.000	0.000	Strato1_2_8_L_0
15	D	6.648	5.4809E-04	51.30	33.24	51.30	33.24	V-C	1.1045E+04	-2.700	0.000	1.000	1.000	33.24	0.000	0.000	Strato1_2_8_L_0
16	D	7.013	5.3054E-04	55.10	35.06	55.10	35.06	V-C	1.1045E+04	-2.900	0.000	1.000	1.000	35.06	0.000	0.000	Strato1_2_8_L_0
17	D	7.377	5.1316E-04	58.90	36.88	58.90	36.88	V-C	1.1045E+04	-3.100	0.000	1.000	1.000	36.88	0.000	0.000	Strato1_2_8_L_0
18	D	7.742	4.9595E-04	62.70	38.71	62.70	38.71	V-C	1.1045E+04	-3.300	0.000	1.000	1.000	38.71	0.000	0.000	Strato1_2_8_L_0
19	D	8.107	4.7892E-04	66.50	40.53	66.50	40.53	V-C	1.1045E+04	-3.500	0.000	1.000	1.000	40.53	0.000	0.000	Strato1_2_8_L_0
20	D	8.473	4.6208E-04	70.30	42.36	70.30	42.36	V-C	1.1045E+04	-3.700	0.000	1.000	1.000	42.36	0.000	0.000	Strato1_2_8_L_0
21	D	8.839	4.4546E-04	74.10	44.19	74.10	44.19	V-C	1.1045E+04	-3.900	0.000	1.000	1.000	44.19	0.000	0.000	Strato1_2_8_L_0
22	D	9.205	4.2905E-04	77.90	46.03	77.90	46.03	V-C	1.1045E+04	-4.100	0.000	1.000	1.000	46.03	0.000	0.000	Strato1_2_8_L_0
23	D	9.572	4.1287E-04	81.70	47.86	81.70	47.86	V-C	1.1045E+04	-4.300	0.000	1.000	1.000	47.86	0.000	0.000	Strato1_2_8_L_0

24 D	9.940	3.9694E-04	85.50	49.70	85.50	49.70	V-C	1.1045E+04	-4.500	0.000	1.000	1.000	
49.70	0.000	0.000	Strato1_2_8_L_0										
25 D	10.31	3.8126E-04	89.30	51.54	89.30	51.54	V-C	1.1045E+04	-4.700	0.000	1.000	1.000	
51.54	0.000	0.000	Strato1_2_8_L_0										
26 D	10.68	3.6585E-04	93.10	53.38	93.10	53.38	V-C	1.1045E+04	-4.900	0.000	1.000	1.000	
53.38	0.000	0.000	Strato1_2_8_L_0										
27 D	11.05	3.5072E-04	96.90	55.23	96.90	55.23	V-C	1.1045E+04	-5.100	0.000	1.000	1.000	
55.23	0.000	0.000	Strato1_2_8_L_0										
28 D	11.42	3.3588E-04	100.7	57.08	100.7	57.08	V-C	1.1045E+04	-5.300	0.000	1.000	1.000	
57.08	0.000	0.000	Strato1_2_8_L_0										
29 D	11.79	3.2134E-04	104.5	58.93	104.5	58.93	V-C	1.1045E+04	-5.500	0.000	1.000	1.000	
58.93	0.000	0.000	Strato1_2_8_L_0										
30 D	12.16	3.0711E-04	108.3	60.79	108.3	60.79	V-C	1.1045E+04	-5.700	0.000	1.000	1.000	
60.79	0.000	0.000	Strato1_2_8_L_0										
31 D	12.53	2.9321E-04	112.1	62.65	112.1	62.65	V-C	1.1045E+04	-5.900	0.000	1.000	1.000	
62.65	0.000	0.000	Strato1_2_8_L_0										
32 D	12.90	2.7964E-04	115.9	64.52	115.9	64.52	V-C	1.1045E+04	-6.100	0.000	1.000	1.000	
64.52	0.000	0.000	Strato1_2_8_L_0										
33 D	13.28	2.6642E-04	119.7	66.38	119.7	66.38	V-C	1.1045E+04	-6.300	0.000	1.000	1.000	
66.38	0.000	0.000	Strato1_2_8_L_0										
34 D	13.65	2.5355E-04	123.5	68.26	123.5	68.26	V-C	1.1045E+04	-6.500	0.000	1.000	1.000	
68.26	0.000	0.000	Strato1_2_8_L_0										
35 D	14.03	2.4103E-04	127.3	70.13	127.3	70.13	V-C	1.1045E+04	-6.700	0.000	1.000	1.000	
70.13	0.000	0.000	Strato1_2_8_L_0										
36 D	14.40	2.2889E-04	131.1	72.01	131.1	72.01	V-C	1.1045E+04	-6.900	0.000	1.000	1.000	
72.01	0.000	0.000	Strato1_2_8_L_0										
37 D	14.78	2.1712E-04	134.9	73.90	134.9	73.90	V-C	1.1045E+04	-7.100	0.000	1.000	1.000	
73.90	0.000	0.000	Strato1_2_8_L_0										
38 D	15.16	2.0574E-04	138.7	75.78	138.7	75.78	V-C	1.1045E+04	-7.300	0.000	1.000	1.000	
75.78	0.000	0.000	Strato1_2_8_L_0										
39 D	15.54	1.9474E-04	142.5	77.68	142.5	77.68	V-C	1.1045E+04	-7.500	0.000	1.000	1.000	
77.68	0.000	0.000	Strato1_2_8_L_0										
40 D	15.91	1.8412E-04	146.3	79.57	146.3	79.57	V-C	1.1045E+04	-7.700	0.000	1.000	1.000	
79.57	0.000	0.000	Strato1_2_8_L_0										
41 D	16.29	1.7390E-04	150.1	81.47	150.1	81.47	V-C	1.1045E+04	-7.900	0.000	1.000	1.000	
81.47	0.000	0.000	Strato1_2_8_L_0										
42 D	16.68	1.6407E-04	153.9	83.38	153.9	83.38	V-C	1.1045E+04	-8.100	0.000	1.000	1.000	
83.38	0.000	0.000	Strato1_2_8_L_0										
43 D	17.06	1.5462E-04	157.7	85.29	157.7	85.29	V-C	1.1045E+04	-8.300	0.000	1.000	1.000	
85.29	0.000	0.000	Strato1_2_8_L_0										
44 D	17.44	1.4557E-04	161.5	87.20	161.5	87.20	V-C	1.1045E+04	-8.500	0.000	1.000	1.000	
87.20	0.000	0.000	Strato1_2_8_L_0										
45 D	17.82	1.3691E-04	165.3	89.12	165.3	89.12	V-C	1.1045E+04	-8.700	0.000	1.000	1.000	
89.12	0.000	0.000	Strato1_2_8_L_0										
46 D	18.21	1.2864E-04	169.1	91.04	169.1	91.04	V-C	1.1045E+04	-8.900	0.000	1.000	1.000	
91.04	0.000	0.000	Strato1_2_8_L_0										
47 D	18.59	1.2077E-04	172.9	92.97	172.9	92.97	V-C	1.1045E+04	-9.100	0.000	1.000	1.000	
92.97	0.000	0.000	Strato1_2_8_L_0										
48 D	18.98	1.1330E-04	176.7	94.90	176.7	94.90	V-C	1.1045E+04	-9.300	0.000	1.000	1.000	
94.90	0.000	0.000	Strato1_2_8_L_0										
49 D	19.37	1.0627E-04	180.5	96.84	180.5	96.84	V-C	1.1045E+04	-9.500	0.000	1.000	1.000	
96.84	0.000	0.000	Strato1_2_8_L_0										
50 D	18.94	9.9677E-05	184.5	94.68	184.5	94.68	V-C	2.4402E+04	-9.700	0.000	1.000	1.000	
94.68	0.000	0.000	Strato2_3095_82743_L_0										
51 D	19.31	9.3557E-05	188.5	96.53	188.5	96.53	V-C	2.4402E+04	-9.900	0.000	1.000	1.000	
96.53	0.000	0.000	Strato2_3095_82743_L_0										
52 D	19.67	8.7924E-05	192.5	98.37	192.5	98.41	UL-RL	7.3205E+04	-10.10	0.000	1.000	1.000	
98.37	0.000	0.000	Strato2_3095_82743_L_0										
53 D	20.04	8.2782E-05	196.5	100.2	196.5	100.3	UL-RL	7.3205E+04	-10.30	0.000	1.000	1.000	
100.2	0.000	0.000	Strato2_3095_82743_L_0										
54 D	20.40	7.8125E-05	200.5	102.0	200.5	102.2	UL-RL	7.3205E+04	-10.50	0.000	1.000	1.000	
102.0	0.000	0.000	Strato2_3095_82743_L_0										
55 D	20.77	7.3943E-05	204.5	103.9	204.5	104.1	UL-RL	7.3205E+04	-10.70	0.000	1.000	1.000	
103.9	0.000	0.000	Strato2_3095_82743_L_0										
56 D	21.15	7.0217E-05	208.5	105.8	208.5	106.1	UL-RL	7.3205E+04	-10.90	0.000	1.000	1.000	
105.8	0.000	0.000	Strato2_3095_82743_L_0										
57 D	21.53	6.6924E-05	212.5	107.6	212.5	108.0	UL-RL	7.3205E+04	-11.10	0.000	1.000	1.000	
107.6	0.000	0.000	Strato2_3095_82743_L_0										
58 D	21.91	6.4039E-05	216.5	109.6	216.5	109.9	UL-RL	7.3205E+04	-11.30	0.000	1.000	1.000	
109.6	0.000	0.000	Strato2_3095_82743_L_0										
59 D	22.30	6.1533E-05	220.5	111.5	220.5	111.9	UL-RL	7.3205E+04	-11.50	0.000	1.000	1.000	
111.5	0.000	0.000	Strato2_3095_82743_L_0										
60 D	22.69	5.9376E-05	224.5	113.4	224.5	113.8	UL-RL	7.3205E+04	-11.70	0.000	1.000	1.000	
113.4	0.000	0.000	Strato2_3095_82743_L_0										
61 D	23.08	5.7538E-05	228.5	115.4	228.5	115.8	UL-RL	7.3205E+04	-11.90	0.000	1.000	1.000	
115.4	0.000	0.000	Strato2_3095_82743_L_0										
62 D	23.47	5.5988E-05	232.5	117.4	232.5	117.7	UL-RL	7.3205E+04	-12.10	0.000	1.000	1.000	
117.4	0.000	0.000	Strato2_3095_82743_L_0										
63 D	23.87	5.4695E-05	236.5	119.4	236.5	119.7	UL-RL	7.3205E+04	-12.30	0.000	1.000	1.000	
119.4	0.000	0.000	Strato2_3095_82743_L_0										
64 D	24.27	5.3631E-05	240.5	121.3	240.5	121.7	UL-RL	7.3205E+04	-12.50	0.000	1.000	1.000	
121.3	0.000	0.000	Strato2_3095_82743_L_0										
65 D	24.67	5.2767E-05	244.5	123.3	244.5	123.6	UL-RL	7.3205E+04	-12.70	0.000	1.000	1.000	
123.3	0.000	0.000	Strato2_3095_82743_L_0										
66 D	25.07	5.2077E-05	248.5	125.3	248.5	125.6	UL-RL	7.3205E+04	-12.90	0.000	1.000	1.000	

125.3	0.000	0.000	Strato2_3095_82743_L_0									
67 D	25.47	5.1537E-05	252.5	127.3	252.5	127.6	UL-RL	7.3205E+04	-13.10	0.000	1.000	1.000
127.3	0.000	0.000	Strato2_3095_82743_L_0									
68 D	25.87	5.1125E-05	256.5	129.3	256.5	129.6	UL-RL	7.3205E+04	-13.30	0.000	1.000	1.000
129.3	0.000	0.000	Strato2_3095_82743_L_0									
69 D	26.27	5.0820E-05	260.5	131.4	260.5	131.6	UL-RL	7.3205E+04	-13.50	0.000	1.000	1.000
131.4	0.000	0.000	Strato2_3095_82743_L_0									
70 D	26.67	5.0604E-05	264.5	133.4	264.5	133.5	UL-RL	7.3205E+04	-13.70	0.000	1.000	1.000
133.4	0.000	0.000	Strato2_3095_82743_L_0									
71 D	27.08	5.0461E-05	268.5	135.4	268.5	135.5	UL-RL	7.3205E+04	-13.90	0.000	1.000	1.000
135.4	0.000	0.000	Strato2_3095_82743_L_0									
72 D	27.48	5.0376E-05	272.5	137.4	272.5	137.5	UL-RL	7.3205E+04	-14.10	0.000	1.000	1.000
137.4	0.000	0.000	Strato2_3095_82743_L_0									
73 D	27.88	5.0337E-05	276.5	139.4	276.5	139.5	UL-RL	7.3205E+04	-14.30	0.000	1.000	1.000
139.4	0.000	0.000	Strato2_3095_82743_L_0									
74 D	28.29	5.0333E-05	280.5	141.4	280.5	141.5	UL-RL	7.3205E+04	-14.50	0.000	1.000	1.000
141.4	0.000	0.000	Strato2_3095_82743_L_0									
75 D	28.69	5.0357E-05	284.5	143.4	284.5	143.5	UL-RL	7.3205E+04	-14.70	0.000	1.000	1.000
143.4	0.000	0.000	Strato2_3095_82743_L_0									
76 D	29.09	5.0400E-05	288.5	145.5	288.5	145.5	UL-RL	7.3205E+04	-14.90	0.000	1.000	1.000
145.5	0.000	0.000	Strato2_3095_82743_L_0									
77 D	29.49	5.0456E-05	292.5	147.5	292.5	147.5	UL-RL	7.3205E+04	-15.10	0.000	1.000	1.000
147.5	0.000	0.000	Strato2_3095_82743_L_0									
78 D	29.89	5.0520E-05	296.5	149.5	296.5	149.5	UL-RL	7.3205E+04	-15.30	0.000	1.000	1.000
149.5	0.000	0.000	Strato2_3095_82743_L_0									
79 D	30.29	5.0590E-05	300.5	151.5	300.5	151.5	UL-RL	7.3205E+04	-15.50	0.000	1.000	1.000
151.5	0.000	0.000	Strato2_3095_82743_L_0									
80 D	30.69	5.0662E-05	304.5	153.5	304.5	153.5	UL-RL	7.3205E+04	-15.70	0.000	1.000	1.000
153.5	0.000	0.000	Strato2_3095_82743_L_0									
81 D	23.32	5.0735E-05	308.5	155.5	308.5	155.5	UL-RL	7.3205E+04	-15.90	0.000	1.000	1.000
155.5	0.000	0.000	Strato2_3095_82743_L_0									
82 D	7.824	5.0771E-05	310.5	156.5	310.5	156.5	UL-RL	7.3205E+04	-16.00	0.000	1.000	1.000
156.5	0.000	0.000	Strato2_3095_82743_L_0									

```
 +-------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
 |                                                                                                                         |
 |                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                          |
 |                                  Exe Time :24 July 2019      10:49:26                                                   |
 +-------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

 WallElement_33                 :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   81
 C U R R E N T   T I M E   I S     2.0000

  WALL2D ELEMENT

    EL      TA          TB          MA          MB
 ------------------------------------------------------
     1  1.2686     -1.2686     1.27509E-12 0.25372
     2  1.0757     -1.0757    -0.25372     0.46885
     3  1.0951     -1.0951    -0.46885     0.68788
     4  1.0635     -1.0635    -0.68788     0.90057
     5  1.1110     -1.1110    -0.90057      1.1228
     6  1.1213     -1.1213     -1.1228      1.3470
     7  1.1800     -1.1800     -1.3470      1.5830
     8  1.2103     -1.2103     -1.5830      1.8251
     9  1.2014     -1.2014     -1.8251      2.0654
    10  1.1777     -1.1777     -2.0654      2.3009
    11  1.1873     -1.1873     -2.3009      2.5384
    12  1.1829     -1.1829     -2.5384      2.7750
    13  1.1990     -1.1990     -2.7750      2.8949
    14  1.2052     -1.2052     -2.8949      3.1359
    15  1.2016     -1.2016     -3.1359      3.3762
    16  1.2186     -1.2186     -3.3762      3.6199
    17  1.2237     -1.2237     -3.6199      3.8647
    18  1.2456     -1.2456     -3.8647      4.1138
    19  1.2555     -1.2555     -4.1138      4.3649
    20  1.2790     -1.2790     -4.3649      4.6207
    21  1.2587     -1.2587     -4.6207      4.8725
    22  1.2508     -1.2508     -4.8725      5.1226
    23  1.2532     -1.2532     -5.1226      5.3733
    24  1.2438     -1.2438     -5.3733      5.6220
    25  1.2421     -1.2421     -5.6220      5.8705
    26  1.2278     -1.2278     -5.8705      6.1160
    27  1.2189     -1.2189     -6.1160      6.3598
    28  1.1730     -1.1730     -6.3598      6.5944
    29  1.1310     -1.1310     -6.5944      6.8206
```

```
   30  1.0753     -1.0753     -6.8206      7.0357
   31  1.0211     -1.0211     -7.0357      7.2399
   32 0.95202    -0.95202     -7.2399      7.4303
   33 0.88217    -0.88217     -7.4303      7.6067
   34 0.79601    -0.79601     -7.6067      7.7659
   35 0.70683    -0.70683     -7.7659      7.9073
   36 0.59517    -0.59517     -7.9073      8.0263
   37 0.46541    -0.46541     -8.0263      8.1194
   38 0.32958    -0.32958     -8.1194      8.1853
   39 0.17408    -0.17408     -8.1853      8.2201
   40 1.02780E-02-1.02780E-02 -8.2201      8.2222
   41-8.29011E-02 8.29011E-02 -8.2222      8.2056
   42-5.23658E-02 5.23658E-02 -8.2056      8.1951
   43 6.77804E-02-6.77804E-02 -8.1951      8.2087
   44 0.30244    -0.30244     -8.2087      8.2692
   45 0.63485    -0.63485     -8.2692      8.3962
   46  1.0721     -1.0721     -8.3962      8.6106
   47  1.5979     -1.5979     -8.6106      8.9302
   48  2.2186     -2.2186     -8.9302      9.3739
   49  2.9290     -2.9290     -9.3739      9.9597
   50  1.5950     -1.5950     -9.9597      10.279
   51 0.44915    -0.44915     -10.279      10.368
   52-0.51522     0.51522     -10.368      10.265
   53 -1.2964      1.2964     -10.265      10.006
   54 -1.9221      1.9221     -10.006      9.6217
   55 -2.4005      2.4005     -9.6217      9.1416
   56 -2.7574      2.7574     -9.1416      8.5902
   57 -2.9995      2.9995     -8.5902      7.9903
   58 -3.1618      3.1618     -7.9903      7.3579
   59 -3.2373      3.2373     -7.3579      6.7104
   60 -3.2468      3.2468     -6.7104      6.0611
   61 -3.1931      3.1931     -6.0611      5.4225
   62 -3.0862      3.0862     -5.4225      4.8052
   63 -2.9431      2.9431     -4.8052      4.2166
   64 -2.7637      2.7637     -4.2166      3.6639
   65 -2.5728      2.5728     -3.6639      3.1493
   66 -2.3582      2.3582     -3.1493      2.6776
   67 -2.1397      2.1397     -2.6776      2.2497
   68 -1.9214      1.9214     -2.2497      1.8654
   69 -1.7065      1.7065     -1.8654      1.5241
   70 -1.4976      1.4976     -1.5241      1.2246
   71 -1.2968      1.2968     -1.2246     0.96524
   72 -1.1059      1.1059    -0.96524     0.74406
   73-0.93529     0.93529    -0.74406     0.55700
   74-0.77647     0.77647    -0.55700     0.40171
   75-0.63012     0.63012    -0.40171     0.27568
   76-0.49663     0.49663    -0.27568     0.17636
   77-0.37478     0.37478    -0.17636     0.10140
   78-0.26253     0.26253    -0.10140     4.88935E-02
   79-0.15989     0.15989    -4.88935E-02 1.69158E-02
   80-7.52207E-02 7.52207E-02-1.69158E-02 1.87168E-03
   81-1.87149E-02 1.87149E-02-1.87168E-03-2.39497E-12



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                       |
|                                  Exe Time :24 July 2019      10:49:26                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P    N O.    4

Tieback_768111                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      2.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER      0 RNORM = 0.000      RMNORM= 0.000
            RINORM=0.4854E+05 RIMNOR= 5595.
            RENORM= 657.8     REMNOR=0.7544E-21 RATIO =0.1164     TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 30.78     RMMAX = 10.37
            RTSMAL=0.1000E-03 RMSMAL=0.1000E-03
            RDT   =0.4854E+05 RDR   = 5595.
            RATIOT=0.1164     RATIOR= 0.000
```

```
           MAX UN= 7.013     IEQ=    31 NODE     16 DOF   1  Y-DISPL.F
           MIN UN=-.3796E-10 IEQ=    57 NODE     29 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.4854E+05 RIMNOR= 5595.
           RENORM= 124.3     REMNOR=0.7309E-18 RATIO =0.5061E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 30.78     RMMAX = 10.37
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-03
           RDT   =0.4854E+05 RDR   = 5595.
           RATIOT=0.5061E-01 RATIOR= 0.000
           MAX UN= 5.543     IEQ=    81 NODE     41 DOF   1  Y-DISPL.F
           MIN UN=-.2005E-03 IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.4854E+05 RIMNOR= 5595.
           RENORM=0.4529E-01 REMNOR=0.7457E-18 RATIO =0.9660E-03 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 30.78     RMMAX = 10.37
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-03
           RDT   =0.4854E+05 RDR   = 5595.
           RATIOT=0.9660E-03 RATIOR= 0.000
           MAX UN=0.2128     IEQ=    99 NODE     50 DOF   1  Y-DISPL.F
           MIN UN=-.1551E-07 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.4854E+05 RIMNOR= 5595.
           RENORM=0.1825E-15 REMNOR=0.5956E-18 RATIO =0.6131E-10 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 30.78     RMMAX = 10.37
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-03
           RDT   =0.4854E+05 RDR   = 5595.
           RATIOT=0.6131E-10 RATIOR= 0.000
           MAX UN=0.8004E-08 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           MIN UN=-.8737E-08 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                Exe Time :24 July 2019      10:49:26                                                   |
+-----------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     4 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    3     ( AT TIME   3.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (
    1   1.5003090E-02  -2.0634878E-03
    2   1.4590394E-02  -2.0634577E-03
    3   1.4177714E-02  -2.0633217E-03
    4   1.3765080E-02  -2.0629747E-03
    5   1.3352546E-02  -2.0622908E-03
    6   1.2940195E-02  -2.0611260E-03
    7   1.2528139E-02  -2.0593184E-03
    8   1.2116523E-02  -2.0566884E-03
    9   1.1705531E-02  -2.0530389E-03
   10   1.1295389E-02  -2.0481571E-03
   11   1.0886366E-02  -2.0418143E-03
   12   1.0478778E-02  -2.0337643E-03
   13   1.0072992E-02  -2.0237428E-03
   14   9.8709040E-03  -2.0179146E-03
   15   9.4686298E-03  -2.0044018E-03
   16   9.0693237E-03  -1.9881815E-03
   17   8.6735594E-03  -1.9689292E-03
   18   8.2819746E-03  -1.9463391E-03
   19   7.8952605E-03  -1.9201975E-03
   20   7.5141380E-03  -1.8904191E-03
   21   7.1393324E-03  -1.8570468E-03
   22   6.7715474E-03  -1.8202530E-03
   23   6.4114396E-03  -1.7803340E-03
   24   6.0595991E-03  -1.7376350E-03
   25   5.7165491E-03  -1.6924824E-03
   26   5.3827492E-03  -1.6451840E-03
```

27	5.0586009E-03	-1.5960299E-03
28	4.7444445E-03	-1.5452923E-03
29	4.4405724E-03	-1.4932276E-03
30	4.1472258E-03	-1.4400765E-03
31	3.8645993E-03	-1.3860638E-03
32	3.5928451E-03	-1.3313997E-03
33	3.3320712E-03	-1.2762792E-03
34	3.0823517E-03	-1.2208842E-03
35	2.8437246E-03	-1.1653833E-03
36	2.6161951E-03	-1.1099325E-03
37	2.3997386E-03	-1.0546763E-03
38	2.1943037E-03	-9.9974832E-04
39	1.9998102E-03	-9.4527110E-04
40	1.8161576E-03	-8.9135788E-04
41	1.6432226E-03	-8.3811239E-04
42	1.4808618E-03	-7.8562965E-04
43	1.3289148E-03	-7.3399687E-04
44	1.1872019E-03	-6.8329340E-04
45	1.0555306E-03	-6.3359284E-04
46	9.3369344E-04	-5.8496227E-04
47	8.2147025E-04	-5.3746304E-04
48	7.1862954E-04	-4.9115162E-04
49	6.2492753E-04	-4.4607918E-04
50	5.4011210E-04	-4.0229332E-04
51	4.6391059E-04	-3.6000162E-04
52	3.9599119E-04	-3.1953875E-04
53	3.3595766E-04	-2.8116329E-04
54	2.8337395E-04	-2.4506668E-04
55	2.3777050E-04	-2.1137736E-04
56	1.9865756E-04	-1.8016972E-04
57	1.6553532E-04	-1.5147150E-04
58	1.3790247E-04	-1.2527071E-04
59	1.1526355E-04	-1.0152214E-04
60	9.7134968E-05	-8.0153218E-05
61	8.3049959E-05	-6.1068898E-05
62	7.2562621E-05	-4.4156390E-05
63	6.5251051E-05	-2.9289162E-05
64	6.0719695E-05	-1.6330864E-05
65	5.8600970E-05	-5.1385990E-06
66	5.8556276E-05	4.4339790E-06
67	6.0276405E-05	1.2534206E-05
68	6.3481555E-05	1.9308381E-05
69	6.7920895E-05	2.4899633E-05
70	7.3371779E-05	2.9446449E-05
71	7.9638688E-05	3.3081455E-05
72	8.6551959E-05	3.5930430E-05
73	9.3966334E-05	3.8111519E-05
74	1.0175935E-04	3.9734400E-05
75	1.0982960E-04	4.0899820E-05
76	1.1809490E-04	4.1699469E-05
77	1.2649049E-04	4.2215739E-05
78	1.3496716E-04	4.2521588E-05
79	1.4348933E-04	4.2680524E-05
80	1.5203318E-04	4.2746595E-05
81	1.6058474E-04	4.2764165E-05
82	1.6486164E-04	4.2764958E-05

```
 +-----------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
 |                                                                                                                       |
 |                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                       |
 |                                  Exe Time :24 July 2019      10:49:26                                                 |
 +-----------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   1

 0_L                              :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
 C U R R E N T   T I M E   I S     3.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P          STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1 D   1.269     -1.5003E-02   26.54       12.69       26.54       14.07          ACTIVE   0.000       0.000       0.000        1.000       1.000
12.69       0.000       0.000     Strato1_2_8_L_0
```

2 D	1.925	-1.4590E-02	20.13	9.623	20.13	10.67	ACTIVE	0.000	-0.2000	0.000	1.000	1.000
9.623	0.000	0.000	Strato1_2_8_L_0									
3 D	2.499	-1.4178E-02	26.14	12.49	26.14	13.85	ACTIVE	0.000	-0.4000	0.000	1.000	1.000
12.49	0.000	0.000	Strato1_2_8_L_0									
4 D	2.809	-1.3765E-02	29.39	14.05	29.39	15.58	ACTIVE	0.000	-0.6000	0.000	1.000	1.000
14.05	0.000	0.000	Strato1_2_8_L_0									
5 D	3.250	-1.3353E-02	34.00	16.25	34.00	18.02	ACTIVE	0.000	-0.8000	0.000	1.000	1.000
16.25	0.000	0.000	Strato1_2_8_L_0									
6 D	3.575	-1.2940E-02	37.40	17.88	37.40	19.82	ACTIVE	0.000	-1.000	0.000	1.000	1.000
17.88	0.000	0.000	Strato1_2_8_L_0									
7 D	3.986	-1.2528E-02	41.69	19.93	41.69	22.10	ACTIVE	0.000	-1.200	0.000	1.000	1.000
19.93	0.000	0.000	Strato1_2_8_L_0									
8 D	4.319	-1.2117E-02	45.18	21.60	45.18	23.95	ACTIVE	0.000	-1.400	0.000	1.000	1.000
21.60	0.000	0.000	Strato1_2_8_L_0									
9 D	4.642	-1.1706E-02	48.56	23.21	48.56	25.74	ACTIVE	0.000	-1.600	0.000	1.000	1.000
23.21	0.000	0.000	Strato1_2_8_L_0									
10 D	4.990	-1.1295E-02	52.20	24.95	52.20	27.67	ACTIVE	0.000	-1.800	0.000	1.000	1.000
24.95	0.000	0.000	Strato1_2_8_L_0									
11 D	5.386	-1.0886E-02	56.34	26.93	56.34	29.86	ACTIVE	0.000	-2.000	0.000	1.000	1.000
26.93	0.000	0.000	Strato1_2_8_L_0									
12 D	5.735	-1.0479E-02	59.99	28.68	59.99	31.80	ACTIVE	0.000	-2.200	0.000	1.000	1.000
28.68	0.000	0.000	Strato1_2_8_L_0									
13 D	4.593	-1.0073E-02	64.06	30.62	64.06	33.95	ACTIVE	0.000	-2.400	0.000	1.000	1.000
30.62	0.000	0.000	Strato1_2_8_L_0									
14 D	4.720	-9.8709E-03	65.83	31.47	65.83	34.89	ACTIVE	0.000	-2.500	0.000	1.000	1.000
31.47	0.000	0.000	Strato1_2_8_L_0									
15 D	6.645	-9.4686E-03	69.51	33.22	69.51	36.84	ACTIVE	0.000	-2.700	0.000	1.000	1.000
33.22	0.000	0.000	Strato1_2_8_L_0									
16 D	7.030	-9.0693E-03	73.53	35.15	73.53	38.97	ACTIVE	0.000	-2.900	0.000	1.000	1.000
35.15	0.000	0.000	Strato1_2_8_L_0									
17 D	7.382	-8.6736E-03	77.22	36.91	77.22	40.93	ACTIVE	0.000	-3.100	0.000	1.000	1.000
36.91	0.000	0.000	Strato1_2_8_L_0									
18 D	7.764	-8.2820E-03	81.21	38.82	81.21	43.04	ACTIVE	0.000	-3.300	0.000	1.000	1.000
38.82	0.000	0.000	Strato1_2_8_L_0									
19 D	8.117	-7.8953E-03	84.90	40.58	84.90	45.00	ACTIVE	0.000	-3.500	0.000	1.000	1.000
40.58	0.000	0.000	Strato1_2_8_L_0									
20 D	8.496	-7.5141E-03	88.87	42.48	88.87	47.10	ACTIVE	0.000	-3.700	0.000	1.000	1.000
42.48	0.000	0.000	Strato1_2_8_L_0									
21 D	8.818	-7.1393E-03	92.24	44.09	92.24	48.89	ACTIVE	0.000	-3.900	0.000	1.000	1.000
44.09	0.000	0.000	Strato1_2_8_L_0									
22 D	9.197	-6.7715E-03	96.21	45.99	96.21	50.99	ACTIVE	0.000	-4.100	0.000	1.000	1.000
45.99	0.000	0.000	Strato1_2_8_L_0									
23 D	9.575	-6.4114E-03	100.2	47.87	100.2	53.08	ACTIVE	0.000	-4.300	0.000	1.000	1.000
47.87	0.000	0.000	Strato1_2_8_L_0									
24 D	9.930	-6.0596E-03	103.9	49.65	103.9	55.05	ACTIVE	0.000	-4.500	0.000	1.000	1.000
49.65	0.000	0.000	Strato1_2_8_L_0									
25 D	10.31	-5.7165E-03	107.8	51.53	107.8	57.14	ACTIVE	0.000	-4.700	0.000	1.000	1.000
51.53	0.000	0.000	Strato1_2_8_L_0									
26 D	10.66	-5.3827E-03	111.5	53.31	111.5	59.11	ACTIVE	0.000	-4.900	0.000	1.000	1.000
53.31	0.000	0.000	Strato1_2_8_L_0									
27 D	11.04	-5.0586E-03	115.5	55.19	115.5	61.19	ACTIVE	0.000	-5.100	0.000	1.000	1.000
55.19	0.000	0.000	Strato1_2_8_L_0									
28 D	11.37	-4.7444E-03	118.9	56.85	118.9	63.04	ACTIVE	0.000	-5.300	0.000	1.000	1.000
56.85	0.000	0.000	Strato1_2_8_L_0									
29 D	11.74	-4.4406E-03	122.9	58.72	122.9	65.11	ACTIVE	0.000	-5.500	0.000	1.000	1.000
58.72	0.000	0.000	Strato1_2_8_L_0									
30 D	12.10	-4.1472E-03	126.6	60.51	126.6	67.10	ACTIVE	0.000	-5.700	0.000	1.000	1.000
60.51	0.000	0.000	Strato1_2_8_L_0									
31 D	12.48	-3.8646E-03	130.5	62.38	130.5	69.17	ACTIVE	0.000	-5.900	0.000	1.000	1.000
62.38	0.000	0.000	Strato1_2_8_L_0									
32 D	12.83	-3.5928E-03	134.2	64.17	134.2	71.15	ACTIVE	0.000	-6.100	0.000	1.000	1.000
64.17	0.000	0.000	Strato1_2_8_L_0									
33 D	13.21	-3.3321E-03	138.1	66.03	138.1	73.22	ACTIVE	0.000	-6.300	0.000	1.000	1.000
66.03	0.000	0.000	Strato1_2_8_L_0									
34 D	13.56	-3.0824E-03	141.9	67.82	141.9	75.20	ACTIVE	0.000	-6.500	0.000	1.000	1.000
67.82	0.000	0.000	Strato1_2_8_L_0									
35 D	13.94	-2.8437E-03	145.8	69.69	145.8	77.27	ACTIVE	0.000	-6.700	0.000	1.000	1.000
69.69	0.000	0.000	Strato1_2_8_L_0									
36 D	14.29	-2.6162E-03	149.5	71.45	149.5	79.23	ACTIVE	0.000	-6.900	0.000	1.000	1.000
71.45	0.000	0.000	Strato1_2_8_L_0									
37 D	14.65	-2.3997E-03	153.2	73.25	153.2	81.21	ACTIVE	0.000	-7.100	0.000	1.000	1.000
73.25	0.000	0.000	Strato1_2_8_L_0									
38 D	15.02	-2.1943E-03	157.1	75.10	157.1	83.27	ACTIVE	0.000	-7.300	0.000	1.000	1.000
75.10	0.000	0.000	Strato1_2_8_L_0									
39 D	15.38	-1.9998E-03	160.9	76.90	160.9	85.26	ACTIVE	0.000	-7.500	0.000	1.000	1.000
76.90	0.000	0.000	Strato1_2_8_L_0									
40 D	15.75	-1.8162E-03	164.8	78.75	164.8	87.32	ACTIVE	0.000	-7.700	0.000	1.000	1.000
78.75	0.000	0.000	Strato1_2_8_L_0									
41 D	16.11	-1.6432E-03	168.5	80.55	168.5	89.31	ACTIVE	0.000	-7.900	0.000	1.000	1.000
80.55	0.000	0.000	Strato1_2_8_L_0									
42 D	16.48	-1.4809E-03	172.4	82.40	172.4	91.37	ACTIVE	0.000	-8.100	0.000	1.000	1.000
82.40	0.000	0.000	Strato1_2_8_L_0									
43 D	16.82	-1.3289E-03	176.0	84.12	176.0	93.27	ACTIVE	0.000	-8.300	0.000	1.000	1.000
84.12	0.000	0.000	Strato1_2_8_L_0									
44 D	17.19	-1.1872E-03	179.9	85.97	179.9	95.33	ACTIVE	0.000	-8.500	0.000	1.000	1.000

85.97	0.000	0.000	Strato1_2_8_L_0									
45 D	17.55	-1.0555E-03	183.6	87.77	183.6	97.32	ACTIVE	0.000	-8.700	0.000	1.000	1.000
87.77	0.000	0.000	Strato1_2_8_L_0									
46 D	17.92	-9.3369E-04	187.5	89.62	187.5	99.37	ACTIVE	0.000	-8.900	0.000	1.000	1.000
89.62	0.000	0.000	Strato1_2_8_L_0									
47 D	18.28	-8.2147E-04	191.3	91.42	191.3	101.4	ACTIVE	0.000	-9.100	0.000	1.000	1.000
91.42	0.000	0.000	Strato1_2_8_L_0									
48 D	18.65	-7.1863E-04	195.1	93.27	195.1	103.4	ACTIVE	0.000	-9.300	0.000	1.000	1.000
93.27	0.000	0.000	Strato1_2_8_L_0									
49 D	19.02	-6.2493E-04	199.0	95.12	199.0	105.5	ACTIVE	0.000	-9.500	0.000	1.000	1.000
95.12	0.000	0.000	Strato1_2_8_L_0									
50 D	11.26	-5.4011E-04	203.0	56.28	203.0	101.5	UL-RL	7.2037E+04	-9.700	0.000	1.000	1.000
56.28	0.000	0.000	Strato2_3095_82743_L_0									
51 D	12.82	-4.6391E-04	206.9	64.12	206.9	103.4	UL-RL	7.2037E+04	-9.900	0.000	1.000	1.000
64.12	0.000	0.000	Strato2_3095_82743_L_0									
52 D	14.27	-3.9599E-04	210.8	71.36	210.8	105.4	UL-RL	7.2037E+04	-10.10	0.000	1.000	1.000
71.36	0.000	0.000	Strato2_3095_82743_L_0									
53 D	15.61	-3.3596E-04	214.9	78.03	214.9	107.5	UL-RL	7.2037E+04	-10.30	0.000	1.000	1.000
78.03	0.000	0.000	Strato2_3095_82743_L_0									
54 D	16.82	-2.8337E-04	218.9	84.10	218.9	109.4	UL-RL	7.2037E+04	-10.50	0.000	1.000	1.000
84.10	0.000	0.000	Strato2_3095_82743_L_0									
55 D	17.94	-2.3777E-04	222.9	89.68	222.9	111.5	UL-RL	7.2037E+04	-10.70	0.000	1.000	1.000
89.68	0.000	0.000	Strato2_3095_82743_L_0									
56 D	18.94	-1.9866E-04	226.9	94.71	226.9	113.5	UL-RL	7.2037E+04	-10.90	0.000	1.000	1.000
94.71	0.000	0.000	Strato2_3095_82743_L_0									
57 D	19.87	-1.6554E-04	231.0	99.34	231.0	115.5	UL-RL	7.2037E+04	-11.10	0.000	1.000	1.000
99.34	0.000	0.000	Strato2_3095_82743_L_0									
58 D	20.69	-1.3790E-04	234.8	103.4	234.8	117.4	UL-RL	7.2037E+04	-11.30	0.000	1.000	1.000
103.4	0.000	0.000	Strato2_3095_82743_L_0									
59 D	21.45	-1.1526E-04	238.9	107.3	238.9	119.4	UL-RL	7.2037E+04	-11.50	0.000	1.000	1.000
107.3	0.000	0.000	Strato2_3095_82743_L_0									
60 D	22.14	-9.7135E-05	242.8	110.7	242.8	121.4	UL-RL	7.2037E+04	-11.70	0.000	1.000	1.000
110.7	0.000	0.000	Strato2_3095_82743_L_0									
61 D	22.77	-8.3050E-05	246.9	113.8	246.9	123.4	UL-RL	7.2037E+04	-11.90	0.000	1.000	1.000
113.8	0.000	0.000	Strato2_3095_82743_L_0									
62 D	23.34	-7.2563E-05	250.9	116.7	250.9	125.5	UL-RL	7.2037E+04	-12.10	0.000	1.000	1.000
116.7	0.000	0.000	Strato2_3095_82743_L_0									
63 D	23.86	-6.5251E-05	254.9	119.3	254.9	127.5	UL-RL	7.2037E+04	-12.30	0.000	1.000	1.000
119.3	0.000	0.000	Strato2_3095_82743_L_0									
64 D	24.35	-6.0720E-05	259.0	121.7	259.0	129.5	UL-RL	7.2037E+04	-12.50	0.000	1.000	1.000
121.7	0.000	0.000	Strato2_3095_82743_L_0									
65 D	24.77	-5.8601E-05	262.8	123.9	262.8	131.4	UL-RL	7.2037E+04	-12.70	0.000	1.000	1.000
123.9	0.000	0.000	Strato2_3095_82743_L_0									
66 D	25.19	-5.8556E-05	266.9	125.9	266.9	133.4	UL-RL	7.2037E+04	-12.90	0.000	1.000	1.000
125.9	0.000	0.000	Strato2_3095_82743_L_0									
67 D	25.56	-6.0276E-05	270.8	127.8	270.8	135.4	UL-RL	7.2037E+04	-13.10	0.000	1.000	1.000
127.8	0.000	0.000	Strato2_3095_82743_L_0									
68 D	25.91	-6.3482E-05	274.7	129.5	274.7	137.3	UL-RL	7.2037E+04	-13.30	0.000	1.000	1.000
129.5	0.000	0.000	Strato2_3095_82743_L_0									
69 D	26.24	-6.7921E-05	278.6	131.2	278.6	139.3	UL-RL	7.2037E+04	-13.50	0.000	1.000	1.000
131.2	0.000	0.000	Strato2_3095_82743_L_0									
70 D	26.55	-7.3372E-05	282.5	132.8	282.5	141.2	UL-RL	7.2037E+04	-13.70	0.000	1.000	1.000
132.8	0.000	0.000	Strato2_3095_82743_L_0									
71 D	26.86	-7.9639E-05	286.4	134.3	286.4	143.2	UL-RL	7.2037E+04	-13.90	0.000	1.000	1.000
134.3	0.000	0.000	Strato2_3095_82743_L_0									
72 D	27.15	-8.6552E-05	290.3	135.7	290.3	145.2	UL-RL	7.2037E+04	-14.10	0.000	1.000	1.000
135.7	0.000	0.000	Strato2_3095_82743_L_0									
73 D	27.42	-9.3966E-05	294.1	137.1	294.1	147.1	UL-RL	7.2037E+04	-14.30	0.000	1.000	1.000
137.1	0.000	0.000	Strato2_3095_82743_L_0									
74 D	27.70	-1.0176E-04	298.0	138.5	298.0	149.0	UL-RL	7.2037E+04	-14.50	0.000	1.000	1.000
138.5	0.000	0.000	Strato2_3095_82743_L_0									
75 D	27.98	-1.0983E-04	302.0	139.9	302.0	151.0	UL-RL	7.2037E+04	-14.70	0.000	1.000	1.000
139.9	0.000	0.000	Strato2_3095_82743_L_0									
76 D	28.25	-1.1809E-04	305.9	141.3	305.9	152.9	UL-RL	7.2037E+04	-14.90	0.000	1.000	1.000
141.3	0.000	0.000	Strato2_3095_82743_L_0									
77 D	28.52	-1.2649E-04	309.8	142.6	309.8	154.9	UL-RL	7.2037E+04	-15.10	0.000	1.000	1.000
142.6	0.000	0.000	Strato2_3095_82743_L_0									
78 D	28.79	-1.3497E-04	313.7	144.0	313.7	156.9	UL-RL	7.2037E+04	-15.30	0.000	1.000	1.000
144.0	0.000	0.000	Strato2_3095_82743_L_0									
79 D	29.06	-1.4349E-04	317.6	145.3	317.6	158.8	UL-RL	7.2037E+04	-15.50	0.000	1.000	1.000
145.3	0.000	0.000	Strato2_3095_82743_L_0									
80 D	29.32	-1.5203E-04	321.5	146.6	321.5	160.7	UL-RL	7.2037E+04	-15.70	0.000	1.000	1.000
146.6	0.000	0.000	Strato2_3095_82743_L_0									
81 D	22.19	-1.6058E-04	325.4	147.9	325.4	162.7	UL-RL	7.2037E+04	-15.90	0.000	1.000	1.000
147.9	0.000	0.000	Strato2_3095_82743_L_0									
82 D	7.431	-1.6486E-04	327.4	148.6	327.4	163.7	UL-RL	7.2037E+04	-16.00	0.000	1.000	1.000
148.6	0.000	0.000	Strato2_3095_82743_L_0									

| Exe Time :24 July 2019 10:49:26 |

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 2

0_R :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 82
C U R R E N T T I M E I S 3.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000	0.000	0.000	0.000	not available
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000	0.000	0.000	0.000	not available
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000	0.000	0.000	0.000	not available
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000	0.000	0.000	0.000	not available
6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000	0.000	0.000	0.000	not available
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000	0.000	0.000	0.000	not available
9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000	0.000	0.000	0.000	not available
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000	0.000	0.000	0.000	not available
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000	0.000	0.000	0.000	not available
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000	0.000	0.000	0.000	not available
14	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000	0.000	0.000	0.000	not available
15	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000	0.000	0.000	0.000	not available
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000	0.000	0.000	0.000	not available
17 D	1.536	8.6736E-03	1.900	7.678	58.90	36.88	PASSIVE	0.000	-3.100	0.000	1.000	1.000	7.678	0.000	0.000	Strato1_2_8_L_0
18 D	4.607	8.2820E-03	5.700	23.03	62.70	38.71	PASSIVE	0.000	-3.300	0.000	1.000	1.000	23.03	0.000	0.000	Strato1_2_8_L_0
19 D	7.678	7.8953E-03	9.500	38.39	66.50	40.53	PASSIVE	0.000	-3.500	0.000	1.000	1.000	38.39	0.000	0.000	Strato1_2_8_L_0
20 D	10.75	7.5141E-03	13.30	53.75	70.30	53.75	PASSIVE	0.000	-3.700	0.000	1.000	1.000	53.75	0.000	0.000	Strato1_2_8_L_0
21 D	13.82	7.1393E-03	17.10	69.10	74.10	69.10	PASSIVE	0.000	-3.900	0.000	1.000	1.000	69.10	0.000	0.000	Strato1_2_8_L_0
22 D	16.68	6.7715E-03	20.90	83.39	77.90	83.39	V-C	5890.	-4.100	0.000	1.000	1.000	83.39	0.000	0.000	Strato1_2_8_L_0
23 D	16.64	6.4114E-03	24.70	83.20	81.70	83.20	V-C	5890.	-4.300	0.000	1.000	1.000	83.20	0.000	0.000	Strato1_2_8_L_0
24 D	16.61	6.0596E-03	28.50	83.05	85.50	83.05	V-C	5890.	-4.500	0.000	1.000	1.000	83.05	0.000	0.000	Strato1_2_8_L_0
25 D	16.59	5.7165E-03	32.30	82.97	89.30	82.97	V-C	5890.	-4.700	0.000	1.000	1.000	82.97	0.000	0.000	Strato1_2_8_L_0
26 D	16.59	5.3827E-03	36.10	82.94	93.10	82.94	V-C	5890.	-4.900	0.000	1.000	1.000	82.94	0.000	0.000	Strato1_2_8_L_0
27 D	16.59	5.0586E-03	39.90	82.96	96.90	82.96	V-C	5890.	-5.100	0.000	1.000	1.000	82.96	0.000	0.000	Strato1_2_8_L_0
28 D	16.61	4.7444E-03	43.70	83.05	100.7	83.05	V-C	5890.	-5.300	0.000	1.000	1.000	83.05	0.000	0.000	Strato1_2_8_L_0
29 D	16.64	4.4406E-03	47.50	83.20	104.5	83.20	V-C	5890.	-5.500	0.000	1.000	1.000	83.20	0.000	0.000	Strato1_2_8_L_0
30 D	16.68	4.1472E-03	51.30	83.41	108.3	83.41	V-C	5890.	-5.700	0.000	1.000	1.000	83.41	0.000	0.000	Strato1_2_8_L_0
31 D	16.74	3.8646E-03	55.10	83.69	112.1	83.69	V-C	5890.	-5.900	0.000	1.000	1.000	83.69	0.000	0.000	Strato1_2_8_L_0
32 D	16.81	3.5928E-03	58.90	84.03	115.9	84.03	V-C	5890.	-6.100	0.000	1.000	1.000	84.03	0.000	0.000	Strato1_2_8_L_0
33 D	16.89	3.3321E-03	62.70	84.44	119.7	84.44	V-C	5890.	-6.300	0.000	1.000	1.000	84.44	0.000	0.000	Strato1_2_8_L_0

34 D	16.98	3.0824E-03	66.50	84.92	123.5	84.92	V-C	5890.	-6.500	0.000	1.000	1.000	
84.92	0.000	0.000	Strato1_2_8_L_0										
35 D	17.09	2.8437E-03	70.30	85.46	127.3	85.46	V-C	5890.	-6.700	0.000	1.000	1.000	
85.46	0.000	0.000	Strato1_2_8_L_0										
36 D	17.21	2.6162E-03	74.10	86.07	131.1	86.07	V-C	5890.	-6.900	0.000	1.000	1.000	
86.07	0.000	0.000	Strato1_2_8_L_0										
37 D	17.35	2.3997E-03	77.90	86.75	134.9	86.75	V-C	5890.	-7.100	0.000	1.000	1.000	
86.75	0.000	0.000	Strato1_2_8_L_0										
38 D	17.50	2.1943E-03	81.70	87.50	138.7	87.50	V-C	5890.	-7.300	0.000	1.000	1.000	
87.50	0.000	0.000	Strato1_2_8_L_0										
39 D	17.66	1.9998E-03	85.50	88.31	142.5	88.31	V-C	5890.	-7.500	0.000	1.000	1.000	
88.31	0.000	0.000	Strato1_2_8_L_0										
40 D	17.84	1.8162E-03	89.30	89.19	146.3	89.19	V-C	5890.	-7.700	0.000	1.000	1.000	
89.19	0.000	0.000	Strato1_2_8_L_0										
41 D	18.03	1.6432E-03	93.10	90.13	150.1	90.13	V-C	5890.	-7.900	0.000	1.000	1.000	
90.13	0.000	0.000	Strato1_2_8_L_0										
42 D	18.23	1.4809E-03	96.90	91.14	153.9	91.14	V-C	5890.	-8.100	0.000	1.000	1.000	
91.14	0.000	0.000	Strato1_2_8_L_0										
43 D	18.44	1.3289E-03	100.7	92.21	157.7	92.21	V-C	5890.	-8.300	0.000	1.000	1.000	
92.21	0.000	0.000	Strato1_2_8_L_0										
44 D	18.67	1.1872E-03	104.5	93.34	161.5	93.34	V-C	5890.	-8.500	0.000	1.000	1.000	
93.34	0.000	0.000	Strato1_2_8_L_0										
45 D	18.91	1.0555E-03	108.3	94.53	165.3	94.53	V-C	5890.	-8.700	0.000	1.000	1.000	
94.53	0.000	0.000	Strato1_2_8_L_0										
46 D	19.16	9.3369E-04	112.1	95.79	169.1	95.79	V-C	5890.	-8.900	0.000	1.000	1.000	
95.79	0.000	0.000	Strato1_2_8_L_0										
47 D	19.42	8.2147E-04	115.9	97.10	172.9	97.10	V-C	5890.	-9.100	0.000	1.000	1.000	
97.10	0.000	0.000	Strato1_2_8_L_0										
48 D	19.69	7.1863E-04	119.7	98.47	176.7	98.47	V-C	5890.	-9.300	0.000	1.000	1.000	
98.47	0.000	0.000	Strato1_2_8_L_0										
49 D	19.98	6.2493E-04	123.5	99.89	180.5	99.89	V-C	5890.	-9.500	0.000	1.000	1.000	
99.89	0.000	0.000	Strato1_2_8_L_0										
50 D	19.05	5.4011E-04	127.5	95.23	184.5	95.23	V-C	1.3014E+04	-9.700	0.000	1.000	1.000	
95.23	0.000	0.000	Strato2_3095_82743_L_0										
51 D	19.09	4.6391E-04	131.5	95.46	188.5	96.53	UL-RL	3.9043E+04	-9.900	0.000	1.000	1.000	
95.46	0.000	0.000	Strato2_3095_82743_L_0										
52 D	18.98	3.9599E-04	135.5	94.90	192.5	98.41	UL-RL	3.9043E+04	-10.10	0.000	1.000	1.000	
94.90	0.000	0.000	Strato2_3095_82743_L_0										
53 D	18.92	3.3596E-04	139.5	94.60	196.5	100.3	UL-RL	3.9043E+04	-10.30	0.000	1.000	1.000	
94.60	0.000	0.000	Strato2_3095_82743_L_0										
54 D	18.92	2.8337E-04	143.5	94.59	200.5	102.2	UL-RL	3.9043E+04	-10.50	0.000	1.000	1.000	
94.59	0.000	0.000	Strato2_3095_82743_L_0										
55 D	18.97	2.3777E-04	147.5	94.86	204.5	104.1	UL-RL	3.9043E+04	-10.70	0.000	1.000	1.000	
94.86	0.000	0.000	Strato2_3095_82743_L_0										
56 D	19.08	1.9866E-04	151.5	95.38	208.5	106.1	UL-RL	3.9043E+04	-10.90	0.000	1.000	1.000	
95.38	0.000	0.000	Strato2_3095_82743_L_0										
57 D	19.23	1.6554E-04	155.5	96.14	212.5	108.0	UL-RL	3.9043E+04	-11.10	0.000	1.000	1.000	
96.14	0.000	0.000	Strato2_3095_82743_L_0										
58 D	19.42	1.3790E-04	159.5	97.11	216.5	109.9	UL-RL	3.9043E+04	-11.30	0.000	1.000	1.000	
97.11	0.000	0.000	Strato2_3095_82743_L_0										
59 D	19.66	1.1526E-04	163.5	98.28	220.5	111.9	UL-RL	3.9043E+04	-11.50	0.000	1.000	1.000	
98.28	0.000	0.000	Strato2_3095_82743_L_0										
60 D	19.93	9.7135E-05	167.5	99.63	224.5	113.8	UL-RL	3.9043E+04	-11.70	0.000	1.000	1.000	
99.63	0.000	0.000	Strato2_3095_82743_L_0										
61 D	20.23	8.3050E-05	171.5	101.1	228.5	115.8	UL-RL	3.9043E+04	-11.90	0.000	1.000	1.000	
101.1	0.000	0.000	Strato2_3095_82743_L_0										
62 D	20.55	7.2563E-05	175.5	102.8	232.5	117.7	UL-RL	3.9043E+04	-12.10	0.000	1.000	1.000	
102.8	0.000	0.000	Strato2_3095_82743_L_0										
63 D	20.91	6.5251E-05	179.5	104.5	236.5	119.7	UL-RL	3.9043E+04	-12.30	0.000	1.000	1.000	
104.5	0.000	0.000	Strato2_3095_82743_L_0										
64 D	21.28	6.0720E-05	183.5	106.4	240.5	121.7	UL-RL	3.9043E+04	-12.50	0.000	1.000	1.000	
106.4	0.000	0.000	Strato2_3095_82743_L_0										
65 D	21.67	5.8601E-05	187.5	108.4	244.5	123.6	UL-RL	3.9043E+04	-12.70	0.000	1.000	1.000	
108.4	0.000	0.000	Strato2_3095_82743_L_0										
66 D	22.08	5.8556E-05	191.5	110.4	248.5	125.6	UL-RL	3.9043E+04	-12.90	0.000	1.000	1.000	
110.4	0.000	0.000	Strato2_3095_82743_L_0										
67 D	22.50	6.0276E-05	195.5	112.5	252.5	127.6	UL-RL	3.9043E+04	-13.10	0.000	1.000	1.000	
112.5	0.000	0.000	Strato2_3095_82743_L_0										
68 D	22.94	6.3482E-05	199.5	114.7	256.5	129.6	UL-RL	3.9043E+04	-13.30	0.000	1.000	1.000	
114.7	0.000	0.000	Strato2_3095_82743_L_0										
69 D	23.38	6.7921E-05	203.5	116.9	260.5	131.6	UL-RL	3.9043E+04	-13.50	0.000	1.000	1.000	
116.9	0.000	0.000	Strato2_3095_82743_L_0										
70 D	23.83	7.3372E-05	207.5	119.1	264.5	133.5	UL-RL	3.9043E+04	-13.70	0.000	1.000	1.000	
119.1	0.000	0.000	Strato2_3095_82743_L_0										
71 D	24.28	7.9639E-05	211.5	121.4	268.5	135.5	UL-RL	3.9043E+04	-13.90	0.000	1.000	1.000	
121.4	0.000	0.000	Strato2_3095_82743_L_0										
72 D	24.74	8.6552E-05	215.5	123.7	272.5	137.5	UL-RL	3.9043E+04	-14.10	0.000	1.000	1.000	
123.7	0.000	0.000	Strato2_3095_82743_L_0										
73 D	25.21	9.3966E-05	219.5	126.0	276.5	139.5	UL-RL	3.9043E+04	-14.30	0.000	1.000	1.000	
126.0	0.000	0.000	Strato2_3095_82743_L_0										
74 D	25.68	1.0176E-04	223.5	128.4	280.5	141.5	UL-RL	3.9043E+04	-14.50	0.000	1.000	1.000	
128.4	0.000	0.000	Strato2_3095_82743_L_0										
75 D	26.14	1.0983E-04	227.5	130.7	284.5	143.5	UL-RL	3.9043E+04	-14.70	0.000	1.000	1.000	
130.7	0.000	0.000	Strato2_3095_82743_L_0										
76 D	26.61	1.1809E-04	231.5	133.1	288.5	145.5	UL-RL	3.9043E+04	-14.90	0.000	1.000	1.000	

```
133.1       0.000       0.000     Strato2_3095_82743_L_0
  77 D   27.08      1.2649E-04   235.5       135.4       292.5       147.5          UL-RL  3.9043E+04  -15.10       0.000       1.000       1.000
135.4       0.000       0.000     Strato2_3095_82743_L_0
  78 D   27.55      1.3497E-04   239.5       137.8       296.5       149.5          UL-RL  3.9043E+04  -15.30       0.000       1.000       1.000
137.8       0.000       0.000     Strato2_3095_82743_L_0
  79 D   28.02      1.4349E-04   243.5       140.1       300.5       151.5          UL-RL  3.9043E+04  -15.50       0.000       1.000       1.000
140.1       0.000       0.000     Strato2_3095_82743_L_0
  80 D   28.49      1.5203E-04   247.5       142.4       304.5       153.5          UL-RL  3.9043E+04  -15.70       0.000       1.000       1.000
142.4       0.000       0.000     Strato2_3095_82743_L_0
  81 D   21.72      1.6058E-04   251.5       144.8       308.5       155.5          UL-RL  3.9043E+04  -15.90       0.000       1.000       1.000
144.8       0.000       0.000     Strato2_3095_82743_L_0
  82 D   7.298      1.6486E-04   253.5       146.0       310.5       156.5          UL-RL  3.9043E+04  -16.00       0.000       1.000       1.000
146.0       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                              |
 |                                                                                                                                           |
 |                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                                          |
 |                                   Exe Time :24 July 2019      10:49:26                                                                    |
 +-------------------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

 WallElement_33                 :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   81
 C U R R E N T   T I M E   I S     3.0000

  WALL2D ELEMENT

    EL      TA          TB          MA          MB
 ------------------------------------------------------
     1  1.2686     -1.2686    -1.11991E-11 0.25372
     2  3.1933     -3.1933     -0.25372     0.89238
     3  5.6920     -5.6920     -0.89238      2.0308
     4  8.5015     -8.5015      -2.0308      3.7311
     5  11.752     -11.752      -3.7311      6.0815
     6  15.327     -15.327      -6.0815      9.1469
     7  19.313     -19.313      -9.1469      13.009
     8  23.632     -23.632      -13.009      17.736
     9  28.275     -28.275      -17.736      23.391
    10  33.265     -33.265      -23.391      30.044
    11  38.651     -38.651      -30.044      37.774
    12  44.387     -44.387      -37.774      46.651
    13  48.980     -48.980      -46.651      51.549
    14  53.700     -53.700      -51.549      62.289
    15  60.345     -60.345      -62.289      74.358
    16  67.374     -67.374      -74.358      87.833
    17  73.221     -73.221      -87.833      102.48
    18  76.378     -76.378      -102.48      117.75
    19  76.816     -76.816      -117.75      133.12
    20  74.563     -74.563      -133.12      148.03
    21  69.561     -69.561      -148.03      161.94
    22  62.082     -62.082      -161.94      174.36
    23  55.017     -55.017      -174.36      185.36
    24  48.337     -48.337      -185.36      195.03
    25  42.049     -42.049      -195.03      203.44
    26  36.125     -36.125      -203.44      210.66
    27  30.570     -30.570      -210.66      216.78
    28  25.330     -25.330      -216.78      221.84
    29  20.435     -20.435      -221.84      225.93
    30  15.855     -15.855      -225.93      229.10
    31  11.594     -11.594      -229.10      231.42
    32  7.6215     -7.6215      -231.42      232.94
    33  3.9400     -3.9400      -232.94      233.73
    34 0.52125    -0.52125      -233.73      233.84
    35 -2.6341      2.6341      -233.84      233.31
    36 -5.5582      5.5582      -233.31      232.20
    37 -8.2593      8.2593      -232.20      230.55
    38 -10.738      10.738      -230.55      228.40
    39 -13.020      13.020      -228.40      225.79
    40 -15.106      15.106      -225.79      222.77
    41 -17.022      17.022      -222.77      219.37
    42 -18.769      18.769      -219.37      215.61
    43 -20.386      20.386      -215.61      211.54
    44 -21.859      21.859      -211.54      207.17
    45 -23.211      23.211      -207.17      202.52
    46 -24.444      24.444      -202.52      197.63
    47 -25.580      25.580      -197.63      192.52
    48 -26.619      26.619      -192.52      187.19
    49 -27.575      27.575      -187.19      181.68
```

50	-35.363	35.363	-181.68	174.61
51	-41.631	41.631	-174.61	166.28
52	-46.340	46.340	-166.28	157.01
53	-49.652	49.652	-157.01	147.08
54	-51.749	51.749	-147.08	136.73
55	-52.785	52.785	-136.73	126.18
56	-52.918	52.918	-126.18	115.59
57	-52.279	52.279	-115.59	105.14
58	-51.015	51.015	-105.14	94.934
59	-49.222	49.222	-94.934	85.089
60	-47.012	47.012	-85.089	75.687
61	-44.471	44.471	-75.687	66.793
62	-41.682	41.682	-66.793	58.456
63	-38.727	38.727	-58.456	50.711
64	-35.663	35.663	-50.711	43.578
65	-32.563	32.563	-43.578	37.066
66	-29.457	29.457	-37.066	31.175
67	-26.400	26.400	-31.175	25.895
68	-23.428	23.428	-25.895	21.209
69	-20.567	20.567	-21.209	17.096
70	-17.841	17.841	-17.096	13.527
71	-15.269	15.269	-13.527	10.474
72	-12.864	12.864	-10.474	7.9009
73	-10.649	10.649	-7.9009	5.7711
74	-8.6207	8.6207	-5.7711	4.0470
75	-6.7865	6.7865	-4.0470	2.6897
76	-5.1502	5.1502	-2.6897	1.6596
77	-3.7133	3.7133	-1.6596	0.91699
78	-2.4751	2.4751	-0.91699	0.42197
79	-1.4366	1.4366	-0.42197	0.13465
80	-0.60642	0.60642	-0.13465	1.33671E-02
81	-0.13366	0.13366	-1.33671E-02	-1.95799E-12

```
+-------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                       NewProject.BaseDesignSection_28.A1M1R1_3484                                       |
|                                   Exe Time :24 July 2019      10:49:26                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P    N O.    4

Tieback_768111                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      3.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2847E+06 RIMNOR=0.3210E+07
           RENORM=0.2497E+05 REMNOR=0.5956E-18 RATIO =0.2962     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 158.0     RMMAX = 233.8
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.2847E+06 RDR   =0.3210E+07
           RATIOT=0.2962     RATIOR= 0.000
           MAX UN=0.2181E-08 IEQ=    21 NODE     11 DOF   1  Y-DISPL.F
           MIN UN=-158.0     IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2847E+06 RIMNOR=0.3210E+07
           RENORM= 206.3     REMNOR=0.4892E-18 RATIO =0.2692E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 158.0     RMMAX = 233.8
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.2847E+06 RDR   =0.3210E+07
           RATIOT=0.2692E-01 RATIOR= 0.000
           MAX UN=0.4786E-09 IEQ=    26 NODE     13 DOF   2   X-ROT. F
           MIN UN=-4.063     IEQ=    33 NODE     17 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2847E+06 RIMNOR=0.3210E+07
           RENORM= 2.768     REMNOR=0.2414E-18 RATIO =0.3118E-02 TOLER =0.1000E-03  NOT CONVERGED
```

```
           RFMAX = 158.0     RMMAX = 233.8
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.2847E+06 RDR   =0.3210E+07
           RATIOT=0.3118E-02 RATIOR= 0.000
           MAX UN=0.1515     IEQ=   101 NODE     51 DOF   1  Y-DISPL.F
           MIN UN=-1.514     IEQ=    35 NODE     18 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2847E+06 RIMNOR=0.3210E+07
           RENORM=0.1784E-02 REMNOR=0.4675E-18 RATIO =0.7916E-04 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 158.0     RMMAX = 233.8
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.2847E+06 RDR   =0.3210E+07
           RATIOT=0.7916E-04 RATIOR= 0.000
           MAX UN=0.2438E-01 IEQ=    89 NODE     45 DOF   1  Y-DISPL.F
           MIN UN=-.8269E-08 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                Exe Time :24 July 2019      10:49:26                                                   |
+-----------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     4 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    4     ( AT TIME   4.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)            (
    1   1.1920179E-02  -1.6702038E-03
    2   1.1586145E-02  -1.6701094E-03
    3   1.1252159E-02  -1.6696560E-03
    4   1.0918329E-02  -1.6684921E-03
    5   1.0584834E-02  -1.6662498E-03
    6   1.0251927E-02  -1.6625486E-03
    7   9.9199383E-03  -1.6569948E-03
    8   9.5892795E-03  -1.6491823E-03
    9   9.2604438E-03  -1.6386929E-03
   10   8.9340094E-03  -1.6250978E-03
   11   8.6106410E-03  -1.6079581E-03
   12   8.2910925E-03  -1.5868227E-03
   13   7.9762092E-03  -1.5612286E-03
   14   7.8208059E-03  -1.5466266E-03
   15   7.5144578E-03  -1.5172017E-03
   16   7.2138027E-03  -1.4896141E-03
   17   6.9185231E-03  -1.4633620E-03
   18   6.6284029E-03  -1.4379356E-03
   19   6.3433280E-03  -1.4128231E-03
   20   6.0632843E-03  -1.3875510E-03
   21   5.7883421E-03  -1.3617610E-03
   22   5.5186281E-03  -1.3352474E-03
   23   5.2542952E-03  -1.3079520E-03
   24   4.9954985E-03  -1.2798886E-03
   25   4.7423899E-03  -1.2510740E-03
   26   4.4951177E-03  -1.2215279E-03
   27   4.2538272E-03  -1.1912731E-03
   28   4.0186552E-03  -1.1603343E-03
   29   3.7897372E-03  -1.1287392E-03
   30   3.5672013E-03  -1.0965176E-03
   31   3.3511698E-03  -1.0637005E-03
   32   3.1417597E-03  -1.0303199E-03
   33   2.9390784E-03  -9.9640742E-04
   34   2.7432301E-03  -9.6199534E-04
   35   2.5543115E-03  -9.2711517E-04
   36   2.3724131E-03  -8.9179825E-04
   37   2.1976189E-03  -8.5607968E-04
   38   2.0300060E-03  -8.2000187E-04
   39   1.8696398E-03  -7.8361237E-04
   40   1.7165783E-03  -7.4696407E-04
   41   1.5708677E-03  -7.1011364E-04
   42   1.4325424E-03  -6.7312086E-04
   43   1.3016253E-03  -6.3604817E-04
   44   1.1781248E-03  -5.9895958E-04
   45   1.0620381E-03  -5.6192117E-04
   46   9.5334864E-04  -5.2499833E-04
```

47	8.5202695E-04	-4.8825317E-04
48	7.5803214E-04	-4.5174348E-04
49	6.7131078E-04	-4.1552251E-04
50	5.9180056E-04	-3.7964020E-04
51	5.1941681E-04	-3.4432629E-04
52	4.5400834E-04	-3.0996201E-04
53	3.9534934E-04	-2.7686261E-04
54	3.4316209E-04	-2.4528132E-04
55	2.9712286E-04	-2.1540943E-04
56	2.5687521E-04	-1.8738415E-04
57	2.2204010E-04	-1.6129525E-04
58	1.9222478E-04	-1.3719122E-04
59	1.6703040E-04	-1.1508533E-04
60	1.4605855E-04	-9.4960942E-05
61	1.2891672E-04	-7.6776118E-05
62	1.1522298E-04	-6.0468062E-05
63	1.0460970E-04	-4.5956933E-05
64	9.6726620E-05	-3.3149638E-05
65	9.1243135E-05	-2.1943030E-05
66	8.7850038E-05	-1.2226968E-05
67	8.6260623E-05	-3.8867814E-06
68	8.6211410E-05	3.1946730E-06
69	8.7462406E-05	9.1348336E-06
70	8.9797004E-05	1.4049892E-05
71	9.3021600E-05	1.8053506E-05
72	9.6964980E-05	2.1255732E-05
73	1.0147751E-04	2.3762167E-05
74	1.0643014E-04	2.5673033E-05
75	1.1171330E-04	2.7082653E-05
76	1.1723567E-04	2.8079261E-05
77	1.2292293E-04	2.8744708E-05
78	1.2871649E-04	2.9154287E-05
79	1.3457217E-04	2.9376683E-05
80	1.4045883E-04	2.9473946E-05
81	1.4635708E-04	2.9501246E-05
82	1.4930759E-04	2.9502552E-05

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                |
|                                                                                                                         |
|                                  NewProject.BaseDesignSection_28.A1M1R1_3484                                            |
|                               Exe Time :24 July 2019      10:49:26                                                      |
+-------------------------------------------------------------------------------------------------------------------------+
```

New Project

S T R E S S   R E S U L T S   F O R   G R O U P N O. 1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 82
C U R R E N T T I M E I S 4.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	3.977	-1.1920E-02	26.54	39.77	26.54	39.77	V-C	8488.	0.000	0.000	1.000	1.000	39.77	0.000	0.000	Strato1_2_8_L_0
2 D	7.164	-1.1586E-02	20.13	35.82	20.13	35.82	V-C	8488.	-0.2000	0.000	1.000	1.000	35.82	0.000	0.000	Strato1_2_8_L_0
3 D	7.647	-1.1252E-02	26.14	38.23	26.14	38.23	V-C	8488.	-0.4000	0.000	1.000	1.000	38.23	0.000	0.000	Strato1_2_8_L_0
4 D	7.846	-1.0918E-02	29.39	39.23	29.39	39.23	V-C	8488.	-0.6000	0.000	1.000	1.000	39.23	0.000	0.000	Strato1_2_8_L_0
5 D	8.185	-1.0585E-02	34.00	40.92	34.00	40.92	V-C	8488.	-0.8000	0.000	1.000	1.000	40.92	0.000	0.000	Strato1_2_8_L_0
6 D	8.398	-1.0252E-02	37.40	41.99	37.40	41.99	V-C	8488.	-1.000	0.000	1.000	1.000	41.99	0.000	0.000	Strato1_2_8_L_0
7 D	8.702	-9.9199E-03	41.69	43.51	41.69	43.51	V-C	8488.	-1.200	0.000	1.000	1.000	43.51	0.000	0.000	Strato1_2_8_L_0
8 D	8.923	-9.5893E-03	45.18	44.62	45.18	44.62	V-C	8488.	-1.400	0.000	1.000	1.000	44.62	0.000	0.000	Strato1_2_8_L_0
9 D	9.130	-9.2604E-03	48.56	45.65	48.56	45.65	V-C	8488.	-1.600	0.000	1.000	1.000	45.65	0.000	0.000	Strato1_2_8_L_0
10 D	9.361	-8.9340E-03	52.20	46.81	52.20	46.81	V-C	8488.	-1.800	0.000	1.000	1.000	46.81	0.000	0.000	Strato1_2_8_L_0
11 D	9.640	-8.6106E-03	56.34	48.20	56.34	48.20	V-C	8488.	-2.000	0.000	1.000	1.000	48.20	0.000	0.000	Strato1_2_8_L_0

12 D	9.865	-8.2911E-03	59.99	49.33	59.99	49.33	V-C	8488.	-2.200	0.000	1.000	1.000	49.33	0.000	0.000	Strato1_2_8_L_0
13 D	7.596	-7.9762E-03	64.06	50.64	64.06	50.64	V-C	8488.	-2.400	0.000	1.000	1.000	50.64	0.000	0.000	Strato1_2_8_L_0
14 D	7.672	-7.8208E-03	65.83	51.15	65.83	51.15	V-C	8488.	-2.500	0.000	1.000	1.000	51.15	0.000	0.000	Strato1_2_8_L_0
15 D	10.44	-7.5145E-03	69.51	52.22	69.51	52.22	V-C	8488.	-2.700	0.000	1.000	1.000	52.22	0.000	0.000	Strato1_2_8_L_0
16 D	10.69	-7.2138E-03	73.53	53.45	73.53	53.45	V-C	8488.	-2.900	0.000	1.000	1.000	53.45	0.000	0.000	Strato1_2_8_L_0
17 D	10.90	-6.9185E-03	77.22	54.48	77.22	54.48	V-C	8488.	-3.100	0.000	1.000	1.000	54.48	0.000	0.000	Strato1_2_8_L_0
18 D	11.13	-6.6284E-03	81.21	55.67	81.21	55.67	V-C	8488.	-3.300	0.000	1.000	1.000	55.67	0.000	0.000	Strato1_2_8_L_0
19 D	11.34	-6.3433E-03	84.90	56.70	84.90	56.70	V-C	8488.	-3.500	0.000	1.000	1.000	56.70	0.000	0.000	Strato1_2_8_L_0
20 D	11.58	-6.0633E-03	88.87	57.88	88.87	57.88	V-C	8488.	-3.700	0.000	1.000	1.000	57.88	0.000	0.000	Strato1_2_8_L_0
21 D	11.75	-5.7883E-03	92.24	58.76	92.24	58.76	V-C	8488.	-3.900	0.000	1.000	1.000	58.76	0.000	0.000	Strato1_2_8_L_0
22 D	11.99	-5.5186E-03	96.21	59.96	96.21	59.96	V-C	8488.	-4.100	0.000	1.000	1.000	59.96	0.000	0.000	Strato1_2_8_L_0
23 D	12.23	-5.2543E-03	100.2	61.17	100.2	61.17	V-C	8488.	-4.300	0.000	1.000	1.000	61.17	0.000	0.000	Strato1_2_8_L_0
24 D	12.46	-4.9955E-03	103.9	62.29	103.9	62.29	V-C	8488.	-4.500	0.000	1.000	1.000	62.29	0.000	0.000	Strato1_2_8_L_0
25 D	12.71	-4.7424E-03	107.8	63.54	107.8	63.54	V-C	8488.	-4.700	0.000	1.000	1.000	63.54	0.000	0.000	Strato1_2_8_L_0
26 D	12.94	-4.4951E-03	111.5	64.71	111.5	64.71	V-C	8488.	-4.900	0.000	1.000	1.000	64.71	0.000	0.000	Strato1_2_8_L_0
27 D	13.20	-4.2538E-03	115.5	66.02	115.5	66.02	V-C	8488.	-5.100	0.000	1.000	1.000	66.02	0.000	0.000	Strato1_2_8_L_0
28 D	13.43	-4.0187E-03	118.9	67.13	118.9	67.13	V-C	8488.	-5.300	0.000	1.000	1.000	67.13	0.000	0.000	Strato1_2_8_L_0
29 D	13.70	-3.7897E-03	122.9	68.51	122.9	68.51	V-C	8488.	-5.500	0.000	1.000	1.000	68.51	0.000	0.000	Strato1_2_8_L_0
30 D	13.96	-3.5672E-03	126.6	69.82	126.6	69.82	V-C	8488.	-5.700	0.000	1.000	1.000	69.82	0.000	0.000	Strato1_2_8_L_0
31 D	14.25	-3.3512E-03	130.5	71.26	130.5	71.26	V-C	8488.	-5.900	0.000	1.000	1.000	71.26	0.000	0.000	Strato1_2_8_L_0
32 D	14.53	-3.1418E-03	134.2	72.65	134.2	72.65	V-C	8488.	-6.100	0.000	1.000	1.000	72.65	0.000	0.000	Strato1_2_8_L_0
33 D	14.83	-2.9391E-03	138.1	74.16	138.1	74.16	V-C	8488.	-6.300	0.000	1.000	1.000	74.16	0.000	0.000	Strato1_2_8_L_0
34 D	15.12	-2.7432E-03	141.9	75.62	141.9	75.62	V-C	8488.	-6.500	0.000	1.000	1.000	75.62	0.000	0.000	Strato1_2_8_L_0
35 D	15.41	-2.5543E-03	145.8	77.06	145.8	77.27	UL-RL	2.5465E+04	-6.700	0.000	1.000	1.000	77.06	0.000	0.000	Strato1_2_8_L_0
36 D	15.53	-2.3724E-03	149.5	77.66	149.5	79.23	UL-RL	2.5465E+04	-6.900	0.000	1.000	1.000	77.66	0.000	0.000	Strato1_2_8_L_0
37 D	15.68	-2.1976E-03	153.2	78.39	153.2	81.21	UL-RL	2.5465E+04	-7.100	0.000	1.000	1.000	78.39	0.000	0.000	Strato1_2_8_L_0
38 D	15.86	-2.0300E-03	157.1	79.29	157.1	83.27	UL-RL	2.5465E+04	-7.300	0.000	1.000	1.000	79.29	0.000	0.000	Strato1_2_8_L_0
39 D	16.04	-1.8696E-03	160.9	80.21	160.9	85.26	UL-RL	2.5465E+04	-7.500	0.000	1.000	1.000	80.21	0.000	0.000	Strato1_2_8_L_0
40 D	16.26	-1.7166E-03	164.8	81.29	164.8	87.32	UL-RL	2.5465E+04	-7.700	0.000	1.000	1.000	81.29	0.000	0.000	Strato1_2_8_L_0
41 D	16.48	-1.5709E-03	168.5	82.39	168.5	89.31	UL-RL	2.5465E+04	-7.900	0.000	1.000	1.000	82.39	0.000	0.000	Strato1_2_8_L_0
42 D	16.73	-1.4325E-03	172.4	83.63	172.4	91.37	UL-RL	2.5465E+04	-8.100	0.000	1.000	1.000	83.63	0.000	0.000	Strato1_2_8_L_0
43 D	16.96	-1.3016E-03	176.0	84.82	176.0	93.27	UL-RL	2.5465E+04	-8.300	0.000	1.000	1.000	84.82	0.000	0.000	Strato1_2_8_L_0
44 D	17.24	-1.1781E-03	179.9	86.20	179.9	95.33	UL-RL	2.5465E+04	-8.500	0.000	1.000	1.000	86.20	0.000	0.000	Strato1_2_8_L_0
45 D	17.57	-1.0620E-03	183.6	87.85	183.6	97.32	UL-RL	2.5465E+04	-8.700	0.000	1.000	1.000	87.85	0.000	0.000	Strato1_2_8_L_0
46 D	17.94	-9.5335E-04	187.5	89.69	187.5	99.37	UL-RL	2.5465E+04	-8.900	0.000	1.000	1.000	89.69	0.000	0.000	Strato1_2_8_L_0
47 D	18.30	-8.5203E-04	191.3	91.48	191.3	101.4	UL-RL	2.5465E+04	-9.100	0.000	1.000	1.000	91.48	0.000	0.000	Strato1_2_8_L_0
48 D	18.66	-7.5803E-04	195.1	93.32	195.1	103.4	UL-RL	2.5465E+04	-9.300	0.000	1.000	1.000	93.32	0.000	0.000	Strato1_2_8_L_0
49 D	19.03	-6.7131E-04	199.0	95.16	199.0	105.5	UL-RL	2.5465E+04	-9.500	0.000	1.000	1.000	95.16	0.000	0.000	Strato1_2_8_L_0
50 D	10.51	-5.9180E-04	203.0	52.56	203.0	101.5	UL-RL	7.2037E+04	-9.700	0.000	1.000	1.000	52.56	0.000	0.000	Strato2_3095_82743_L_0
51 D	12.03	-5.1942E-04	206.9	60.13	206.9	103.4	UL-RL	7.2037E+04	-9.900	0.000	1.000	1.000	60.13	0.000	0.000	Strato2_3095_82743_L_0
52 D	13.44	-4.5401E-04	210.8	67.18	210.8	105.4	UL-RL	7.2037E+04	-10.10	0.000	1.000	1.000	67.18	0.000	0.000	Strato2_3095_82743_L_0
53 D	14.75	-3.9535E-04	214.9	73.76	214.9	107.5	UL-RL	7.2037E+04	-10.30	0.000	1.000	1.000	73.76	0.000	0.000	Strato2_3095_82743_L_0
54 D	15.96	-3.4316E-04	218.9	79.79	218.9	109.4	UL-RL	7.2037E+04	-10.50	0.000	1.000	1.000				

79.79	0.000	0.000	Strato2_3095_82743_L_0										
55 D	17.08	-2.9712E-04	222.9	85.40	222.9	111.5	UL-RL	7.2037E+04	-10.70	0.000	1.000	1.000	
85.40	0.000	0.000	Strato2_3095_82743_L_0										
56 D	18.10	-2.5688E-04	226.9	90.52	226.9	113.5	UL-RL	7.2037E+04	-10.90	0.000	1.000	1.000	
90.52	0.000	0.000	Strato2_3095_82743_L_0										
57 D	19.05	-2.2204E-04	231.0	95.27	231.0	115.5	UL-RL	7.2037E+04	-11.10	0.000	1.000	1.000	
95.27	0.000	0.000	Strato2_3095_82743_L_0										
58 D	19.90	-1.9222E-04	234.8	99.52	234.8	117.4	UL-RL	7.2037E+04	-11.30	0.000	1.000	1.000	
99.52	0.000	0.000	Strato2_3095_82743_L_0										
59 D	20.70	-1.6703E-04	238.9	103.5	238.9	119.4	UL-RL	7.2037E+04	-11.50	0.000	1.000	1.000	
103.5	0.000	0.000	Strato2_3095_82743_L_0										
60 D	21.43	-1.4606E-04	242.8	107.2	242.8	121.4	UL-RL	7.2037E+04	-11.70	0.000	1.000	1.000	
107.2	0.000	0.000	Strato2_3095_82743_L_0										
61 D	22.11	-1.2892E-04	246.9	110.5	246.9	123.4	UL-RL	7.2037E+04	-11.90	0.000	1.000	1.000	
110.5	0.000	0.000	Strato2_3095_82743_L_0										
62 D	22.73	-1.1522E-04	250.9	113.6	250.9	125.5	UL-RL	7.2037E+04	-12.10	0.000	1.000	1.000	
113.6	0.000	0.000	Strato2_3095_82743_L_0										
63 D	23.29	-1.0461E-04	254.9	116.5	254.9	127.5	UL-RL	7.2037E+04	-12.30	0.000	1.000	1.000	
116.5	0.000	0.000	Strato2_3095_82743_L_0										
64 D	23.83	-9.6727E-05	259.0	119.1	259.0	129.5	UL-RL	7.2037E+04	-12.50	0.000	1.000	1.000	
119.1	0.000	0.000	Strato2_3095_82743_L_0										
65 D	24.30	-9.1243E-05	262.8	121.5	262.8	131.4	UL-RL	7.2037E+04	-12.70	0.000	1.000	1.000	
121.5	0.000	0.000	Strato2_3095_82743_L_0										
66 D	24.77	-8.7850E-05	266.9	123.8	266.9	133.4	UL-RL	7.2037E+04	-12.90	0.000	1.000	1.000	
123.8	0.000	0.000	Strato2_3095_82743_L_0										
67 D	25.19	-8.6261E-05	270.8	125.9	270.8	135.4	UL-RL	7.2037E+04	-13.10	0.000	1.000	1.000	
125.9	0.000	0.000	Strato2_3095_82743_L_0										
68 D	25.58	-8.6211E-05	274.7	127.9	274.7	137.3	UL-RL	7.2037E+04	-13.30	0.000	1.000	1.000	
127.9	0.000	0.000	Strato2_3095_82743_L_0										
69 D	25.96	-8.7462E-05	278.6	129.8	278.6	139.3	UL-RL	7.2037E+04	-13.50	0.000	1.000	1.000	
129.8	0.000	0.000	Strato2_3095_82743_L_0										
70 D	26.32	-8.9797E-05	282.5	131.6	282.5	141.2	UL-RL	7.2037E+04	-13.70	0.000	1.000	1.000	
131.6	0.000	0.000	Strato2_3095_82743_L_0										
71 D	26.66	-9.3022E-05	286.4	133.3	286.4	143.2	UL-RL	7.2037E+04	-13.90	0.000	1.000	1.000	
133.3	0.000	0.000	Strato2_3095_82743_L_0										
72 D	27.00	-9.6965E-05	290.3	135.0	290.3	145.2	UL-RL	7.2037E+04	-14.10	0.000	1.000	1.000	
135.0	0.000	0.000	Strato2_3095_82743_L_0										
73 D	27.32	-1.0148E-04	294.1	136.6	294.1	147.1	UL-RL	7.2037E+04	-14.30	0.000	1.000	1.000	
136.6	0.000	0.000	Strato2_3095_82743_L_0										
74 D	27.64	-1.0643E-04	298.0	138.2	298.0	149.0	UL-RL	7.2037E+04	-14.50	0.000	1.000	1.000	
138.2	0.000	0.000	Strato2_3095_82743_L_0										
75 D	27.95	-1.1171E-04	302.0	139.8	302.0	151.0	UL-RL	7.2037E+04	-14.70	0.000	1.000	1.000	
139.8	0.000	0.000	Strato2_3095_82743_L_0										
76 D	28.26	-1.1724E-04	305.9	141.3	305.9	152.9	UL-RL	7.2037E+04	-14.90	0.000	1.000	1.000	
141.3	0.000	0.000	Strato2_3095_82743_L_0										
77 D	28.57	-1.2292E-04	309.8	142.9	309.8	154.9	UL-RL	7.2037E+04	-15.10	0.000	1.000	1.000	
142.9	0.000	0.000	Strato2_3095_82743_L_0										
78 D	28.88	-1.2872E-04	313.7	144.4	313.7	156.9	UL-RL	7.2037E+04	-15.30	0.000	1.000	1.000	
144.4	0.000	0.000	Strato2_3095_82743_L_0										
79 D	29.19	-1.3457E-04	317.6	145.9	317.6	158.8	UL-RL	7.2037E+04	-15.50	0.000	1.000	1.000	
145.9	0.000	0.000	Strato2_3095_82743_L_0										
80 D	29.49	-1.4046E-04	321.5	147.4	321.5	160.7	UL-RL	7.2037E+04	-15.70	0.000	1.000	1.000	
147.4	0.000	0.000	Strato2_3095_82743_L_0										
81 D	22.34	-1.4636E-04	325.4	149.0	325.4	162.7	UL-RL	7.2037E+04	-15.90	0.000	1.000	1.000	
149.0	0.000	0.000	Strato2_3095_82743_L_0										
82 D	7.487	-1.4931E-04	327.4	149.7	327.4	163.7	UL-RL	7.2037E+04	-16.00	0.000	1.000	1.000	
149.7	0.000	0.000	Strato2_3095_82743_L_0										

```
 +-------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
 |                                                                                                                         |
 |                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                          |
 |                                  Exe Time :24 July 2019      10:49:26                                                   |
 +-------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                          :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
 C U R R E N T   T I M E   I S      4.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P          STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1     0.000         --          --          --          --          --          REMOVED     --        0.000       0.000       1.000       1.000
```

0.000 0.000 0.000 not available
2 0.000 -- -- -- -- -- REMOVED -- -0.2000 0.000 1.000 1.000
0.000 0.000 0.000 not available
3 0.000 -- -- -- -- -- REMOVED -- -0.4000 0.000 1.000 1.000
0.000 0.000 0.000 not available
4 0.000 -- -- -- -- -- REMOVED -- -0.6000 0.000 1.000 1.000
0.000 0.000 0.000 not available
5 0.000 -- -- -- -- -- REMOVED -- -0.8000 0.000 1.000 1.000
0.000 0.000 0.000 not available
6 0.000 -- -- -- -- -- REMOVED -- -1.000 0.000 1.000 1.000
0.000 0.000 0.000 not available
7 0.000 -- -- -- -- -- REMOVED -- -1.200 0.000 1.000 1.000
0.000 0.000 0.000 not available
8 0.000 -- -- -- -- -- REMOVED -- -1.400 0.000 1.000 1.000
0.000 0.000 0.000 not available
9 0.000 -- -- -- -- -- REMOVED -- -1.600 0.000 1.000 1.000
0.000 0.000 0.000 not available
10 0.000 -- -- -- -- -- REMOVED -- -1.800 0.000 1.000 1.000
0.000 0.000 0.000 not available
11 0.000 -- -- -- -- -- REMOVED -- -2.000 0.000 1.000 1.000
0.000 0.000 0.000 not available
12 0.000 -- -- -- -- -- REMOVED -- -2.200 0.000 1.000 1.000
0.000 0.000 0.000 not available
13 0.000 -- -- -- -- -- REMOVED -- -2.400 0.000 1.000 1.000
0.000 0.000 0.000 not available
14 0.000 -- -- -- -- -- REMOVED -- -2.500 0.000 1.000 1.000
0.000 0.000 0.000 not available
15 0.000 -- -- -- -- -- REMOVED -- -2.700 0.000 1.000 1.000
0.000 0.000 0.000 not available
16 0.000 -- -- -- -- -- REMOVED -- -2.900 0.000 1.000 1.000
0.000 0.000 0.000 not available
17 D 0.1155 6.9185E-03 1.900 0.5776 58.90 36.88 ACTIVE 0.000 -3.100 0.000 1.000 1.000
0.5776 0.000 0.000 Strato1_2_8_L_0
18 D 0.3466 6.6284E-03 5.700 1.733 62.70 38.71 ACTIVE 0.000 -3.300 0.000 1.000 1.000
1.733 0.000 0.000 Strato1_2_8_L_0
19 D 2.193 6.3433E-03 9.500 10.96 66.50 40.53 UL-RL 1.7671E+04 -3.500 0.000 1.000 1.000
10.96 0.000 0.000 Strato1_2_8_L_0
20 D 5.621 6.0633E-03 13.30 28.11 70.30 53.75 UL-RL 1.7671E+04 -3.700 0.000 1.000 1.000
28.11 0.000 0.000 Strato1_2_8_L_0
21 D 9.045 5.7883E-03 17.10 45.23 74.10 69.10 UL-RL 1.7671E+04 -3.900 0.000 1.000 1.000
45.23 0.000 0.000 Strato1_2_8_L_0
22 D 12.25 5.5186E-03 20.90 61.25 77.90 83.39 UL-RL 1.7671E+04 -4.100 0.000 1.000 1.000
61.25 0.000 0.000 Strato1_2_8_L_0
23 D 12.55 5.2543E-03 24.70 62.75 81.70 83.20 UL-RL 1.7671E+04 -4.300 0.000 1.000 1.000
62.75 0.000 0.000 Strato1_2_8_L_0
24 D 12.85 4.9955E-03 28.50 64.25 85.50 83.05 UL-RL 1.7671E+04 -4.500 0.000 1.000 1.000
64.25 0.000 0.000 Strato1_2_8_L_0
25 D 13.15 4.7424E-03 32.30 65.75 89.30 82.97 UL-RL 1.7671E+04 -4.700 0.000 1.000 1.000
65.75 0.000 0.000 Strato1_2_8_L_0
26 D 13.45 4.4951E-03 36.10 67.25 93.10 82.94 UL-RL 1.7671E+04 -4.900 0.000 1.000 1.000
67.25 0.000 0.000 Strato1_2_8_L_0
27 D 13.75 4.2538E-03 39.90 68.74 96.90 82.96 UL-RL 1.7671E+04 -5.100 0.000 1.000 1.000
68.74 0.000 0.000 Strato1_2_8_L_0
28 D 14.04 4.0187E-03 43.70 70.22 100.7 83.05 UL-RL 1.7671E+04 -5.300 0.000 1.000 1.000
70.22 0.000 0.000 Strato1_2_8_L_0
29 D 14.34 3.7897E-03 47.50 71.70 104.5 83.20 UL-RL 1.7671E+04 -5.500 0.000 1.000 1.000
71.70 0.000 0.000 Strato1_2_8_L_0
30 D 14.63 3.5672E-03 51.30 73.16 108.3 83.41 UL-RL 1.7671E+04 -5.700 0.000 1.000 1.000
73.16 0.000 0.000 Strato1_2_8_L_0
31 D 14.92 3.3512E-03 55.10 74.62 112.1 83.69 UL-RL 1.7671E+04 -5.900 0.000 1.000 1.000
74.62 0.000 0.000 Strato1_2_8_L_0
32 D 15.21 3.1418E-03 58.90 76.06 115.9 84.03 UL-RL 1.7671E+04 -6.100 0.000 1.000 1.000
76.06 0.000 0.000 Strato1_2_8_L_0
33 D 15.50 2.9391E-03 62.70 77.50 119.7 84.44 UL-RL 1.7671E+04 -6.300 0.000 1.000 1.000
77.50 0.000 0.000 Strato1_2_8_L_0
34 D 15.79 2.7432E-03 66.50 78.93 123.5 84.92 UL-RL 1.7671E+04 -6.500 0.000 1.000 1.000
78.93 0.000 0.000 Strato1_2_8_L_0
35 D 16.07 2.5543E-03 70.30 80.35 127.3 85.46 UL-RL 1.7671E+04 -6.700 0.000 1.000 1.000
80.35 0.000 0.000 Strato1_2_8_L_0
36 D 16.35 2.3724E-03 74.10 81.77 131.1 86.07 UL-RL 1.7671E+04 -6.900 0.000 1.000 1.000
81.77 0.000 0.000 Strato1_2_8_L_0
37 D 16.64 2.1976E-03 77.90 83.18 134.9 86.75 UL-RL 1.7671E+04 -7.100 0.000 1.000 1.000
83.18 0.000 0.000 Strato1_2_8_L_0
38 D 16.92 2.0300E-03 81.70 84.59 138.7 87.50 UL-RL 1.7671E+04 -7.300 0.000 1.000 1.000
84.59 0.000 0.000 Strato1_2_8_L_0
39 D 17.20 1.8696E-03 85.50 86.01 142.5 88.31 UL-RL 1.7671E+04 -7.500 0.000 1.000 1.000
86.01 0.000 0.000 Strato1_2_8_L_0
40 D 17.49 1.7166E-03 89.30 87.43 146.3 89.19 UL-RL 1.7671E+04 -7.700 0.000 1.000 1.000
87.43 0.000 0.000 Strato1_2_8_L_0
41 D 17.77 1.5709E-03 93.10 88.85 150.1 90.13 UL-RL 1.7671E+04 -7.900 0.000 1.000 1.000
88.85 0.000 0.000 Strato1_2_8_L_0
42 D 18.06 1.4325E-03 96.90 90.28 153.9 91.14 UL-RL 1.7671E+04 -8.100 0.000 1.000 1.000
90.28 0.000 0.000 Strato1_2_8_L_0
43 D 18.34 1.3016E-03 100.7 91.72 157.7 92.21 UL-RL 1.7671E+04 -8.300 0.000 1.000 1.000
91.72 0.000 0.000 Strato1_2_8_L_0

```
  44 D   18.64     1.1781E-03  104.5       93.18        161.5        93.34          UL-RL  1.7671E+04  -8.500        0.000        1.000        1.000
93.18       0.000      0.000     Strato1_2_8_L_0
  45 D   18.91     1.0620E-03  108.3       94.53        165.3        94.59          UL-RL  1.7671E+04  -8.700        0.000        1.000        1.000
94.53       0.000      0.000     Strato1_2_8_L_0
  46 D   19.17     9.5335E-04  112.1       95.87        169.1        95.92          UL-RL  1.7671E+04  -8.900        0.000        1.000        1.000
95.87       0.000      0.000     Strato1_2_8_L_0
  47 D   19.45     8.5203E-04  115.9       97.25        172.9        97.29          UL-RL  1.7671E+04  -9.100        0.000        1.000        1.000
97.25       0.000      0.000     Strato1_2_8_L_0
  48 D   19.74     7.5803E-04  119.7       98.68        176.7        98.71          UL-RL  1.7671E+04  -9.300        0.000        1.000        1.000
98.68       0.000      0.000     Strato1_2_8_L_0
  49 D   20.03     6.7131E-04  123.5       100.1        180.5        100.2          UL-RL  1.7671E+04  -9.500        0.000        1.000        1.000
100.1       0.000      0.000     Strato1_2_8_L_0
  50 D   19.17     5.9180E-04  127.5       95.87        184.5        95.92          UL-RL  3.9043E+04  -9.700        0.000        1.000        1.000
95.87       0.000      0.000     Strato2_3095_82743_L_0
  51 D   19.37     5.1942E-04  131.5       96.87        188.5        96.91          UL-RL  3.9043E+04  -9.900        0.000        1.000        1.000
96.87       0.000      0.000     Strato2_3095_82743_L_0
  52 D   19.43     4.5401E-04  135.5       97.16        192.5        98.41          UL-RL  3.9043E+04  -10.10        0.000        1.000        1.000
97.16       0.000      0.000     Strato2_3095_82743_L_0
  53 D   19.38     3.9535E-04  139.5       96.91        196.5        100.3          UL-RL  3.9043E+04  -10.30        0.000        1.000        1.000
96.91       0.000      0.000     Strato2_3095_82743_L_0
  54 D   19.38     3.4316E-04  143.5       96.92        200.5        102.2          UL-RL  3.9043E+04  -10.50        0.000        1.000        1.000
96.92       0.000      0.000     Strato2_3095_82743_L_0
  55 D   19.43     2.9712E-04  147.5       97.17        204.5        104.1          UL-RL  3.9043E+04  -10.70        0.000        1.000        1.000
97.17       0.000      0.000     Strato2_3095_82743_L_0
  56 D   19.53     2.5688E-04  151.5       97.65        208.5        106.1          UL-RL  3.9043E+04  -10.90        0.000        1.000        1.000
97.65       0.000      0.000     Strato2_3095_82743_L_0
  57 D   19.67     2.2204E-04  155.5       98.35        212.5        108.0          UL-RL  3.9043E+04  -11.10        0.000        1.000        1.000
98.35       0.000      0.000     Strato2_3095_82743_L_0
  58 D   19.85     1.9222E-04  159.5       99.23        216.5        109.9          UL-RL  3.9043E+04  -11.30        0.000        1.000        1.000
99.23       0.000      0.000     Strato2_3095_82743_L_0
  59 D   20.06     1.6703E-04  163.5       100.3        220.5        111.9          UL-RL  3.9043E+04  -11.50        0.000        1.000        1.000
100.3       0.000      0.000     Strato2_3095_82743_L_0
  60 D   20.31     1.4606E-04  167.5       101.5        224.5        113.8          UL-RL  3.9043E+04  -11.70        0.000        1.000        1.000
101.5       0.000      0.000     Strato2_3095_82743_L_0
  61 D   20.58     1.2892E-04  171.5       102.9        228.5        115.8          UL-RL  3.9043E+04  -11.90        0.000        1.000        1.000
102.9       0.000      0.000     Strato2_3095_82743_L_0
  62 D   20.89     1.1522E-04  175.5       104.4        232.5        117.7          UL-RL  3.9043E+04  -12.10        0.000        1.000        1.000
104.4       0.000      0.000     Strato2_3095_82743_L_0
  63 D   21.21     1.0461E-04  179.5       106.1        236.5        119.7          UL-RL  3.9043E+04  -12.30        0.000        1.000        1.000
106.1       0.000      0.000     Strato2_3095_82743_L_0
  64 D   21.56     9.6727E-05  183.5       107.8        240.5        121.7          UL-RL  3.9043E+04  -12.50        0.000        1.000        1.000
107.8       0.000      0.000     Strato2_3095_82743_L_0
  65 D   21.93     9.1243E-05  187.5       109.6        244.5        123.6          UL-RL  3.9043E+04  -12.70        0.000        1.000        1.000
109.6       0.000      0.000     Strato2_3095_82743_L_0
  66 D   22.31     8.7850E-05  191.5       111.6        248.5        125.6          UL-RL  3.9043E+04  -12.90        0.000        1.000        1.000
111.6       0.000      0.000     Strato2_3095_82743_L_0
  67 D   22.71     8.6261E-05  195.5       113.5        252.5        127.6          UL-RL  3.9043E+04  -13.10        0.000        1.000        1.000
113.5       0.000      0.000     Strato2_3095_82743_L_0
  68 D   23.11     8.6211E-05  199.5       115.6        256.5        129.6          UL-RL  3.9043E+04  -13.30        0.000        1.000        1.000
115.6       0.000      0.000     Strato2_3095_82743_L_0
  69 D   23.53     8.7462E-05  203.5       117.7        260.5        131.6          UL-RL  3.9043E+04  -13.50        0.000        1.000        1.000
117.7       0.000      0.000     Strato2_3095_82743_L_0
  70 D   23.96     8.9797E-05  207.5       119.8        264.5        133.5          UL-RL  3.9043E+04  -13.70        0.000        1.000        1.000
119.8       0.000      0.000     Strato2_3095_82743_L_0
  71 D   24.39     9.3022E-05  211.5       121.9        268.5        135.5          UL-RL  3.9043E+04  -13.90        0.000        1.000        1.000
121.9       0.000      0.000     Strato2_3095_82743_L_0
  72 D   24.83     9.6965E-05  215.5       124.1        272.5        137.5          UL-RL  3.9043E+04  -14.10        0.000        1.000        1.000
124.1       0.000      0.000     Strato2_3095_82743_L_0
  73 D   25.27     1.0148E-04  219.5       126.3        276.5        139.5          UL-RL  3.9043E+04  -14.30        0.000        1.000        1.000
126.3       0.000      0.000     Strato2_3095_82743_L_0
  74 D   25.71     1.0643E-04  223.5       128.6        280.5        141.5          UL-RL  3.9043E+04  -14.50        0.000        1.000        1.000
128.6       0.000      0.000     Strato2_3095_82743_L_0
  75 D   26.16     1.1171E-04  227.5       130.8        284.5        143.5          UL-RL  3.9043E+04  -14.70        0.000        1.000        1.000
130.8       0.000      0.000     Strato2_3095_82743_L_0
  76 D   26.61     1.1724E-04  231.5       133.0        288.5        145.5          UL-RL  3.9043E+04  -14.90        0.000        1.000        1.000
133.0       0.000      0.000     Strato2_3095_82743_L_0
  77 D   27.06     1.2292E-04  235.5       135.3        292.5        147.5          UL-RL  3.9043E+04  -15.10        0.000        1.000        1.000
135.3       0.000      0.000     Strato2_3095_82743_L_0
  78 D   27.50     1.2872E-04  239.5       137.5        296.5        149.5          UL-RL  3.9043E+04  -15.30        0.000        1.000        1.000
137.5       0.000      0.000     Strato2_3095_82743_L_0
  79 D   27.95     1.3457E-04  243.5       139.8        300.5        151.5          UL-RL  3.9043E+04  -15.50        0.000        1.000        1.000
139.8       0.000      0.000     Strato2_3095_82743_L_0
  80 D   28.40     1.4046E-04  247.5       142.0        304.5        153.5          UL-RL  3.9043E+04  -15.70        0.000        1.000        1.000
142.0       0.000      0.000     Strato2_3095_82743_L_0
  81 D   21.63     1.4636E-04  251.5       144.2        308.5        155.5          UL-RL  3.9043E+04  -15.90        0.000        1.000        1.000
144.2       0.000      0.000     Strato2_3095_82743_L_0
  82 D   7.267     1.4931E-04  253.5       145.3        310.5        156.5          UL-RL  3.9043E+04  -16.00        0.000        1.000        1.000
145.3       0.000      0.000     Strato2_3095_82743_L_0
```

NewProject.BaseDesignSection_28.A1M1R1_3484
Exe Time :24 July 2019 10:49:26

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 3

WallElement_33 :
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 81
C U R R E N T T I M E I S 4.0000

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	3.9775	-3.9775	-1.55351E-10	0.79550
2	11.142	-11.142	-0.79550	3.0239
3	18.789	-18.789	-3.0239	6.7816
4	26.635	-26.635	-6.7816	12.109
5	34.819	-34.819	-12.109	19.072
6	43.218	-43.218	-19.072	27.716
7	51.920	-51.920	-27.716	38.100
8	60.843	-60.843	-38.100	50.269
9	69.973	-69.973	-50.269	64.263
10	79.334	-79.334	-64.263	80.130
11	88.975	-88.975	-80.130	97.925
12	98.840	-98.840	-97.925	117.69
13	106.44	-106.44	-117.69	128.34
14	-43.917	43.917	-128.34	119.55
15	-33.473	33.473	-119.55	112.86
16	-22.783	22.783	-112.86	108.30
17	-12.002	12.002	-108.30	105.90
18	-1.2144	1.2144	-105.90	105.66
19	7.9328	-7.9328	-105.66	107.25
20	13.887	-13.887	-107.25	110.02
21	16.593	-16.593	-110.02	113.34
22	16.335	-16.335	-113.34	116.61
23	16.019	-16.019	-116.61	119.81
24	15.626	-15.626	-119.81	122.94
25	15.183	-15.183	-122.94	125.97
26	14.676	-14.676	-125.97	128.91
27	14.131	-14.131	-128.91	131.74
28	13.514	-13.514	-131.74	134.44
29	12.876	-12.876	-134.44	137.01
30	12.208	-12.208	-137.01	139.45
31	11.538	-11.538	-139.45	141.76
32	10.856	-10.856	-141.76	143.93
33	10.189	-10.189	-143.93	145.97
34	9.5281	-9.5281	-145.97	147.88
35	8.8695	-8.8695	-147.88	149.65
36	8.0486	-8.0486	-149.65	151.26
37	7.0912	-7.0912	-151.26	152.68
38	6.0301	-6.0301	-152.68	153.88
39	4.8711	-4.8711	-153.88	154.86
40	3.6437	-3.6437	-154.86	155.59
41	2.3519	-2.3519	-155.59	156.06
42	1.0219	-1.0219	-156.06	156.26
43	-0.35963	0.35963	-156.26	156.19
44	-1.7543	1.7543	-156.19	155.84
45	-3.1140	3.1140	-155.84	155.22
46	-4.3699	4.3699	-155.22	154.34
47	-5.5414	5.5414	-154.34	153.23
48	-6.6276	6.6276	-153.23	151.91
49	-7.6376	7.6376	-151.91	150.38
50	-16.305	16.305	-150.38	147.12
51	-23.660	23.660	-147.12	142.39
52	-29.657	29.657	-142.39	136.46
53	-34.289	34.289	-136.46	129.60
54	-37.715	37.715	-129.60	122.06
55	-40.069	40.069	-122.06	114.04
56	-41.496	41.496	-114.04	105.74
57	-42.112	42.112	-105.74	97.321
58	-42.055	42.055	-97.321	88.910
59	-41.411	41.411	-88.910	80.628
60	-40.288	40.288	-80.628	72.570
61	-38.766	38.766	-72.570	64.817
62	-36.925	36.925	-64.817	57.432
63	-34.845	34.845	-57.432	50.463
64	-32.580	32.580	-50.463	43.947
65	-30.205	30.205	-43.947	37.906
66	-27.750	27.750	-37.906	32.356
67	-25.271	25.271	-32.356	27.302
68	-22.803	22.803	-27.302	22.741
69	-20.377	20.377	-22.741	18.666

```
   70 -18.016      18.016     -18.666      15.063
   71 -15.741      15.741     -15.063      11.915
   72 -13.568      13.568     -11.915      9.2010
   73 -11.519      11.519     -9.2010      6.8972
   74 -9.5948      9.5948     -6.8972      4.9782
   75 -7.8024      7.8024     -4.9782      3.4177
   76 -6.1470      6.1470     -3.4177      2.1883
   77 -4.6308      4.6308     -2.1883      1.2622
   78 -3.2538      3.2538     -1.2622     0.61141
   79 -2.0172      2.0172    -0.61141     0.20798
   80-0.92987     0.92987    -0.20798     2.20067E-02
   81-0.22004     0.22004    -2.20067E-02 4.84368E-12



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                       |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                       |
|                                  Exe Time :24 July 2019      10:49:26                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_768111                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S      4.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------
ANCHOR    1   163.60     -1.98024E-03 -1.98024E-03   0.0000       0.0000       0.0000       0.0000     BORN NOW JUST ACTIVATED

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2295E+06 RIMNOR=0.1807E+07
           RENORM= 4027.     REMNOR=0.4675E-18 RATIO =0.1325     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 158.0     RMMAX = 156.3
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.2295E+06 RDR   =0.1807E+07
           RATIOT=0.1325     RATIOR= 0.000
           MAX UN= 16.07     IEQ=     69 NODE     35 DOF   1  Y-DISPL.F
           MIN UN=-.8269E-08 IEQ=     25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2295E+06 RIMNOR=0.1807E+07
           RENORM= 537.3     REMNOR=0.4864E-18 RATIO =0.4839E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 158.0     RMMAX = 156.3
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.2295E+06 RDR   =0.1807E+07
           RATIOT=0.4839E-01 RATIOR= 0.000
           MAX UN= 6.545     IEQ=     81 NODE     41 DOF   1  Y-DISPL.F
           MIN UN=-.2106E-08 IEQ=      9 NODE      5 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2295E+06 RIMNOR=0.1807E+07
           RENORM= 183.2     REMNOR=0.6910E-18 RATIO =0.2826E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 158.0     RMMAX = 156.3
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.2295E+06 RDR   =0.1807E+07
           RATIOT=0.2826E-01 RATIOR= 0.000
           MAX UN= 8.163     IEQ=    107 NODE     54 DOF   1  Y-DISPL.F
           MIN UN=-.2945E-08 IEQ=     43 NODE     22 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2295E+06 RIMNOR=0.1807E+07
           RENORM= 17.74     REMNOR=0.3923E-18 RATIO =0.8793E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 158.0     RMMAX = 156.3
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.2295E+06 RDR   =0.1807E+07
           RATIOT=0.8793E-02 RATIOR= 0.000
           MAX UN= 2.469     IEQ=      9 NODE      5 DOF   1  Y-DISPL.F
           MIN UN=-.3971E-08 IEQ=     25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0
```

```
ITER     5 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2295E+06 RIMNOR=0.1807E+07
           RENORM=0.3933E-01 REMNOR=0.6878E-18 RATIO =0.4140E-03 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 158.0     RMMAX = 156.3
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.2295E+06 RDR   =0.1807E+07
           RATIOT=0.4140E-03 RATIOR= 0.000
           MAX UN=0.1578     IEQ=   115 NODE     58 DOF   1  Y-DISPL.F
           MIN UN=-.9857E-01 IEQ=   161 NODE     81 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     6 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2295E+06 RIMNOR=0.1807E+07
           RENORM=0.1529E-15 REMNOR=0.4569E-18 RATIO =0.2581E-10 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 158.0     RMMAX = 156.3
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.2295E+06 RDR   =0.1807E+07
           RATIOT=0.2581E-10 RATIOR= 0.000
           MAX UN=0.3751E-08 IEQ=    11 NODE      6 DOF   1  Y-DISPL.F
           MIN UN=-.5165E-08 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                         |
|                                  Exe Time :24 July 2019      10:49:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     6 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    5     ( AT TIME   5.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (
    1   1.6692260E-02  -1.0702483E-03
    2   1.6478212E-02  -1.0702181E-03
    3   1.6264180E-02  -1.0700821E-03
    4   1.6050193E-02  -1.0697351E-03
    5   1.5836308E-02  -1.0690512E-03
    6   1.5622605E-02  -1.0678864E-03
    7   1.5409196E-02  -1.0660788E-03
    8   1.5196228E-02  -1.0634488E-03
    9   1.4983885E-02  -1.0597993E-03
   10   1.4772391E-02  -1.0549175E-03
   11   1.4562015E-02  -1.0485747E-03
   12   1.4353075E-02  -1.0405247E-03
   13   1.4145937E-02  -1.0305033E-03
   14   1.4043173E-02  -1.0246750E-03
   15   1.3839256E-02  -1.0155235E-03
   16   1.3636563E-02  -1.0123873E-03
   17   1.3433922E-02  -1.0149416E-03
   18   1.3230229E-02  -1.0228444E-03
   19   1.3024451E-02  -1.0357361E-03
   20   1.2815628E-02  -1.0532396E-03
   21   1.2602874E-02  -1.0749607E-03
   22   1.2385389E-02  -1.1004881E-03
   23   1.2162454E-02  -1.1293944E-03
   24   1.1933436E-02  -1.1612337E-03
   25   1.1697796E-02  -1.1955431E-03
   26   1.1455086E-02  -1.2318422E-03
   27   1.1204961E-02  -1.2696328E-03
   28   1.0947169E-02  -1.3084003E-03
   29   1.0681571E-02  -1.3476126E-03
   30   1.0408131E-02  -1.3867207E-03
   31   1.0126927E-02  -1.4251587E-03
   32   9.8381528E-03  -1.4623429E-03
   33   9.5421152E-03  -1.4976726E-03
   34   9.2392486E-03  -1.5305296E-03
   35   8.9301106E-03  -1.5602783E-03
   36   8.6153880E-03  -1.5862657E-03
   37   8.2958956E-03  -1.6078837E-03
   38   7.9725601E-03  -1.6246420E-03
   39   7.6463885E-03  -1.6361792E-03
   40   7.3184521E-03  -1.6422618E-03
   41   6.9898544E-03  -1.6427853E-03
   42   6.6617070E-03  -1.6377733E-03
   43   6.3351058E-03  -1.6273752E-03
```

44	6.0111039E-03	-1.6117968E-03
45	5.6907194E-03	-1.5912333E-03
46	5.3749306E-03	-1.5658697E-03
47	5.0646799E-03	-1.5358810E-03
48	4.7608771E-03	-1.5014325E-03
49	4.4643953E-03	-1.4626801E-03
50	4.1760822E-03	-1.4197707E-03
51	3.8967393E-03	-1.3730780E-03
52	3.6270699E-03	-1.3232011E-03
53	3.3676391E-03	-1.2707226E-03
54	3.1189161E-03	-1.2162164E-03
55	2.8812502E-03	-1.1602443E-03
56	2.6548793E-03	-1.1033580E-03
57	2.4399318E-03	-1.0460999E-03
58	2.2364285E-03	-9.8900449E-04
59	2.0442840E-03	-9.3259934E-04
60	1.8633085E-03	-8.7739855E-04
61	1.6932116E-03	-8.2389287E-04
62	1.5336076E-03	-7.7254295E-04
63	1.3840239E-03	-7.2375093E-04
64	1.2439152E-03	-6.7784007E-04
65	1.1126790E-03	-6.3506110E-04
66	9.8966964E-04	-5.9559831E-04
67	8.7421042E-04	-5.5957493E-04
68	7.6560591E-04	-5.2705791E-04
69	6.6315247E-04	-4.9806266E-04
70	5.6614821E-04	-4.7255692E-04
71	4.7390217E-04	-4.5046417E-04
72	3.8574286E-04	-4.3166662E-04
73	3.0102628E-04	-4.1600769E-04
74	2.1914342E-04	-4.0329436E-04
75	1.3952734E-04	-3.9329895E-04
76	6.1660056E-05	-3.8576023E-04
77	-1.4920950E-05	-3.8038452E-04
78	-9.0616264E-05	-3.7684648E-04
79	-1.6575828E-04	-3.7478952E-04
80	-2.4060498E-04	-3.7382618E-04
81	-3.1533379E-04	-3.7353845E-04
82	-3.5269040E-04	-3.7352390E-04

```
+----------------------------------------------------------------------------------------------------------+
|                 PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*   |
|                                                                                                          |
|                                 NewProject.BaseDesignSection_28.A1M1R1_3484                              |
|                              Exe Time :24 July 2019      10:49:26                                        |
+----------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    1

0_L                              :
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
C U R R E N T    T I M E    I S      5.0000

 HARDENING 2D SOIL ELEMENT

 ****** TOTAL STRESS FORMULATION *****
```

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	1.269	-1.6692E-02	26.54	12.69	26.54	39.77	ACTIVE	0.000	0.000	0.000	1.000	1.000	12.69	0.000	0.000	Strato1_2_8_L_0
2 D	1.925	-1.6478E-02	20.13	9.623	20.13	35.82	ACTIVE	0.000	-0.2000	0.000	1.000	1.000	9.623	0.000	0.000	Strato1_2_8_L_0
3 D	2.499	-1.6264E-02	26.14	12.49	26.14	38.23	ACTIVE	0.000	-0.4000	0.000	1.000	1.000	12.49	0.000	0.000	Strato1_2_8_L_0
4 D	2.809	-1.6050E-02	29.39	14.05	29.39	39.23	ACTIVE	0.000	-0.6000	0.000	1.000	1.000	14.05	0.000	0.000	Strato1_2_8_L_0
5 D	3.250	-1.5836E-02	34.00	16.25	34.00	40.92	ACTIVE	0.000	-0.8000	0.000	1.000	1.000	16.25	0.000	0.000	Strato1_2_8_L_0
6 D	3.575	-1.5623E-02	37.40	17.88	37.40	41.99	ACTIVE	0.000	-1.000	0.000	1.000	1.000	17.88	0.000	0.000	Strato1_2_8_L_0
7 D	3.986	-1.5409E-02	41.69	19.93	41.69	43.51	ACTIVE	0.000	-1.200	0.000	1.000	1.000	19.93	0.000	0.000	Strato1_2_8_L_0
8 D	4.319	-1.5196E-02	45.18	21.60	45.18	44.62	ACTIVE	0.000	-1.400	0.000	1.000	1.000	21.60	0.000	0.000	Strato1_2_8_L_0
9 D	4.642	-1.4984E-02	48.56	23.21	48.56	45.65	ACTIVE	0.000	-1.600	0.000	1.000	1.000	23.21	0.000	0.000	Strato1_2_8_L_0
10 D	4.990	-1.4772E-02	52.20	24.95	52.20	46.81	ACTIVE	0.000	-1.800	0.000	1.000	1.000	24.95	0.000	0.000	Strato1_2_8_L_0
11 D	5.386	-1.4562E-02	56.34	26.93	56.34	48.20	ACTIVE	0.000	-2.000	0.000	1.000	1.000	26.93	0.000	0.000	Strato1_2_8_L_0
12 D	5.735	-1.4353E-02	59.99	28.68	59.99	49.33	ACTIVE	0.000	-2.200	0.000	1.000	1.000	28.68	0.000	0.000	Strato1_2_8_L_0
13 D	4.593	-1.4146E-02	64.06	30.62	64.06	50.64	ACTIVE	0.000	-2.400	0.000	1.000	1.000	30.62	0.000	0.000	Strato1_2_8_L_0
14 D	4.720	-1.4043E-02	65.83	31.47	65.83	51.15	ACTIVE	0.000	-2.500	0.000	1.000	1.000	31.47	0.000	0.000	Strato1_2_8_L_0
15 D	6.645	-1.3839E-02	69.51	33.22	69.51	52.22	ACTIVE	0.000	-2.700	0.000	1.000	1.000	33.22	0.000	0.000	Strato1_2_8_L_0
16 D	7.030	-1.3637E-02	73.53	35.15	73.53	53.45	ACTIVE	0.000	-2.900	0.000	1.000	1.000	35.15	0.000	0.000	Strato1_2_8_L_0
17 D	7.382	-1.3434E-02	77.22	36.91	77.22	54.48	ACTIVE	0.000	-3.100	0.000	1.000	1.000	36.91	0.000	0.000	Strato1_2_8_L_0
18 D	7.764	-1.3230E-02	81.21	38.82	81.21	55.67	ACTIVE	0.000	-3.300	0.000	1.000	1.000	38.82	0.000	0.000	Strato1_2_8_L_0
19 D	8.117	-1.3024E-02	84.90	40.58	84.90	56.70	ACTIVE	0.000	-3.500	0.000	1.000	1.000	40.58	0.000	0.000	Strato1_2_8_L_0
20 D	8.496	-1.2816E-02	88.87	42.48	88.87	57.88	ACTIVE	0.000	-3.700	0.000	1.000	1.000	42.48	0.000	0.000	Strato1_2_8_L_0
21 D	8.818	-1.2603E-02	92.24	44.09	92.24	58.76	ACTIVE	0.000	-3.900	0.000	1.000	1.000	44.09	0.000	0.000	Strato1_2_8_L_0
22 D	9.197	-1.2385E-02	96.21	45.99	96.21	59.96	ACTIVE	0.000	-4.100	0.000	1.000	1.000	45.99	0.000	0.000	Strato1_2_8_L_0
23 D	9.575	-1.2162E-02	100.2	47.87	100.2	61.17	ACTIVE	0.000	-4.300	0.000	1.000	1.000	47.87	0.000	0.000	Strato1_2_8_L_0
24 D	9.930	-1.1933E-02	103.9	49.65	103.9	62.29	ACTIVE	0.000	-4.500	0.000	1.000	1.000	49.65	0.000	0.000	Strato1_2_8_L_0
25 D	10.31	-1.1698E-02	107.8	51.53	107.8	63.54	ACTIVE	0.000	-4.700	0.000	1.000	1.000	51.53	0.000	0.000	Strato1_2_8_L_0
26 D	10.66	-1.1455E-02	111.5	53.31	111.5	64.71	ACTIVE	0.000	-4.900	0.000	1.000	1.000	53.31	0.000	0.000	Strato1_2_8_L_0
27 D	11.04	-1.1205E-02	115.5	55.19	115.5	66.02	ACTIVE	0.000	-5.100	0.000	1.000	1.000	55.19	0.000	0.000	Strato1_2_8_L_0
28 D	11.37	-1.0947E-02	118.9	56.85	118.9	67.13	ACTIVE	0.000	-5.300	0.000	1.000	1.000	56.85	0.000	0.000	Strato1_2_8_L_0
29 D	11.74	-1.0682E-02	122.9	58.72	122.9	68.51	ACTIVE	0.000	-5.500	0.000	1.000	1.000	58.72	0.000	0.000	Strato1_2_8_L_0
30 D	12.10	-1.0408E-02	126.6	60.51	126.6	69.82	ACTIVE	0.000	-5.700	0.000	1.000	1.000				

60.51	0.000	0.000	Strato1_2_8_L_0									
31 D	12.48	-1.0127E-02	130.5	62.38	130.5	71.26	ACTIVE	0.000	-5.900	0.000	1.000	1.000
62.38	0.000	0.000	Strato1_2_8_L_0									
32 D	12.83	-9.8382E-03	134.2	64.17	134.2	72.65	ACTIVE	0.000	-6.100	0.000	1.000	1.000
64.17	0.000	0.000	Strato1_2_8_L_0									
33 D	13.21	-9.5421E-03	138.1	66.03	138.1	74.16	ACTIVE	0.000	-6.300	0.000	1.000	1.000
66.03	0.000	0.000	Strato1_2_8_L_0									
34 D	13.56	-9.2392E-03	141.9	67.82	141.9	75.62	ACTIVE	0.000	-6.500	0.000	1.000	1.000
67.82	0.000	0.000	Strato1_2_8_L_0									
35 D	13.94	-8.9301E-03	145.8	69.69	145.8	77.27	ACTIVE	0.000	-6.700	0.000	1.000	1.000
69.69	0.000	0.000	Strato1_2_8_L_0									
36 D	14.29	-8.6154E-03	149.5	71.45	149.5	79.23	ACTIVE	0.000	-6.900	0.000	1.000	1.000
71.45	0.000	0.000	Strato1_2_8_L_0									
37 D	14.65	-8.2959E-03	153.2	73.25	153.2	81.21	ACTIVE	0.000	-7.100	0.000	1.000	1.000
73.25	0.000	0.000	Strato1_2_8_L_0									
38 D	15.02	-7.9726E-03	157.1	75.10	157.1	83.27	ACTIVE	0.000	-7.300	0.000	1.000	1.000
75.10	0.000	0.000	Strato1_2_8_L_0									
39 D	15.38	-7.6464E-03	160.9	76.90	160.9	85.26	ACTIVE	0.000	-7.500	0.000	1.000	1.000
76.90	0.000	0.000	Strato1_2_8_L_0									
40 D	15.75	-7.3185E-03	164.8	78.75	164.8	87.32	ACTIVE	0.000	-7.700	0.000	1.000	1.000
78.75	0.000	0.000	Strato1_2_8_L_0									
41 D	16.11	-6.9899E-03	168.5	80.55	168.5	89.31	ACTIVE	0.000	-7.900	0.000	1.000	1.000
80.55	0.000	0.000	Strato1_2_8_L_0									
42 D	16.48	-6.6617E-03	172.4	82.40	172.4	91.37	ACTIVE	0.000	-8.100	0.000	1.000	1.000
82.40	0.000	0.000	Strato1_2_8_L_0									
43 D	16.82	-6.3351E-03	176.0	84.12	176.0	93.27	ACTIVE	0.000	-8.300	0.000	1.000	1.000
84.12	0.000	0.000	Strato1_2_8_L_0									
44 D	17.19	-6.0111E-03	179.9	85.97	179.9	95.33	ACTIVE	0.000	-8.500	0.000	1.000	1.000
85.97	0.000	0.000	Strato1_2_8_L_0									
45 D	17.55	-5.6907E-03	183.6	87.77	183.6	97.32	ACTIVE	0.000	-8.700	0.000	1.000	1.000
87.77	0.000	0.000	Strato1_2_8_L_0									
46 D	17.92	-5.3749E-03	187.5	89.62	187.5	99.37	ACTIVE	0.000	-8.900	0.000	1.000	1.000
89.62	0.000	0.000	Strato1_2_8_L_0									
47 D	18.28	-5.0647E-03	191.3	91.42	191.3	101.4	ACTIVE	0.000	-9.100	0.000	1.000	1.000
91.42	0.000	0.000	Strato1_2_8_L_0									
48 D	18.65	-4.7609E-03	195.1	93.27	195.1	103.4	ACTIVE	0.000	-9.300	0.000	1.000	1.000
93.27	0.000	0.000	Strato1_2_8_L_0									
49 D	19.02	-4.4644E-03	199.0	95.12	199.0	105.5	ACTIVE	0.000	-9.500	0.000	1.000	1.000
95.12	0.000	0.000	Strato1_2_8_L_0									
50 D	8.900	-4.1761E-03	203.0	44.50	203.0	101.5	ACTIVE	0.000	-9.700	0.000	1.000	1.000
44.50	0.000	0.000	Strato2_3095_82743_L_0									
51 D	9.162	-3.8967E-03	206.9	45.81	206.9	103.4	ACTIVE	0.000	-9.900	0.000	1.000	1.000
45.81	0.000	0.000	Strato2_3095_82743_L_0									
52 D	9.426	-3.6271E-03	210.8	47.13	210.8	105.4	ACTIVE	0.000	-10.10	0.000	1.000	1.000
47.13	0.000	0.000	Strato2_3095_82743_L_0									
53 D	9.696	-3.3676E-03	214.9	48.48	214.9	107.5	ACTIVE	0.000	-10.30	0.000	1.000	1.000
48.48	0.000	0.000	Strato2_3095_82743_L_0									
54 D	9.961	-3.1189E-03	218.9	49.80	218.9	109.4	ACTIVE	0.000	-10.50	0.000	1.000	1.000
49.80	0.000	0.000	Strato2_3095_82743_L_0									
55 D	10.23	-2.8813E-03	222.9	51.15	222.9	111.5	ACTIVE	0.000	-10.70	0.000	1.000	1.000
51.15	0.000	0.000	Strato2_3095_82743_L_0									
56 D	10.50	-2.6549E-03	226.9	52.48	226.9	113.5	ACTIVE	0.000	-10.90	0.000	1.000	1.000
52.48	0.000	0.000	Strato2_3095_82743_L_0									
57 D	10.77	-2.4399E-03	231.0	53.83	231.0	115.5	ACTIVE	0.000	-11.10	0.000	1.000	1.000
53.83	0.000	0.000	Strato2_3095_82743_L_0									
58 D	11.02	-2.2364E-03	234.8	55.11	234.8	117.4	ACTIVE	0.000	-11.30	0.000	1.000	1.000
55.11	0.000	0.000	Strato2_3095_82743_L_0									
59 D	11.29	-2.0443E-03	238.9	56.46	238.9	119.4	ACTIVE	0.000	-11.50	0.000	1.000	1.000
56.46	0.000	0.000	Strato2_3095_82743_L_0									
60 D	11.56	-1.8633E-03	242.8	57.78	242.8	121.4	ACTIVE	0.000	-11.70	0.000	1.000	1.000
57.78	0.000	0.000	Strato2_3095_82743_L_0									
61 D	12.06	-1.6932E-03	246.9	60.30	246.9	123.4	UL-RL	3.2112E+04	-11.90	0.000	1.000	1.000
60.30	0.000	0.000	Strato2_3095_82743_L_0									
62 D	13.62	-1.5336E-03	250.9	68.09	250.9	125.5	UL-RL	3.2112E+04	-12.10	0.000	1.000	1.000
68.09	0.000	0.000	Strato2_3095_82743_L_0									
63 D	15.08	-1.3840E-03	254.9	75.39	254.9	127.5	UL-RL	3.2112E+04	-12.30	0.000	1.000	1.000
75.39	0.000	0.000	Strato2_3095_82743_L_0									
64 D	16.46	-1.2439E-03	259.0	82.29	259.0	129.5	UL-RL	3.2112E+04	-12.50	0.000	1.000	1.000
82.29	0.000	0.000	Strato2_3095_82743_L_0									
65 D	17.74	-1.1127E-03	262.8	88.72	262.8	131.4	UL-RL	3.2112E+04	-12.70	0.000	1.000	1.000
88.72	0.000	0.000	Strato2_3095_82743_L_0									
66 D	18.97	-9.8967E-04	266.9	94.87	266.9	133.4	UL-RL	3.2112E+04	-12.90	0.000	1.000	1.000
94.87	0.000	0.000	Strato2_3095_82743_L_0									
67 D	20.12	-8.7421E-04	270.8	100.6	270.8	135.4	UL-RL	3.2112E+04	-13.10	0.000	1.000	1.000
100.6	0.000	0.000	Strato2_3095_82743_L_0									
68 D	21.22	-7.6561E-04	274.7	106.1	274.7	137.3	UL-RL	3.2112E+04	-13.30	0.000	1.000	1.000
106.1	0.000	0.000	Strato2_3095_82743_L_0									
69 D	22.26	-6.6315E-04	278.6	111.3	278.6	139.3	UL-RL	3.2112E+04	-13.50	0.000	1.000	1.000
111.3	0.000	0.000	Strato2_3095_82743_L_0									
70 D	23.26	-5.6615E-04	282.5	116.3	282.5	141.2	UL-RL	3.2112E+04	-13.70	0.000	1.000	1.000
116.3	0.000	0.000	Strato2_3095_82743_L_0									
71 D	24.22	-4.7390E-04	286.4	121.1	286.4	143.2	UL-RL	3.2112E+04	-13.90	0.000	1.000	1.000
121.1	0.000	0.000	Strato2_3095_82743_L_0									
72 D	25.14	-3.8574E-04	290.3	125.7	290.3	145.2	UL-RL	3.2112E+04	-14.10	0.000	1.000	1.000
125.7	0.000	0.000	Strato2_3095_82743_L_0									

73 D	26.03	-3.0103E-04	294.1	130.2	294.1	147.1	UL-RL	3.2112E+04	-14.30	0.000	1.000	1.000
130.2	0.000	0.000	Strato2_3095_82743_L_0									
74 D	26.91	-2.1914E-04	298.0	134.6	298.0	149.0	UL-RL	3.2112E+04	-14.50	0.000	1.000	1.000
134.6	0.000	0.000	Strato2_3095_82743_L_0									
75 D	27.77	-1.3953E-04	302.0	138.9	302.0	151.0	UL-RL	3.2112E+04	-14.70	0.000	1.000	1.000
138.9	0.000	0.000	Strato2_3095_82743_L_0									
76 D	28.62	-6.1660E-05	305.9	143.1	305.9	152.9	UL-RL	3.2112E+04	-14.90	0.000	1.000	1.000
143.1	0.000	0.000	Strato2_3095_82743_L_0									
77 D	29.46	1.4921E-05	309.8	147.3	309.8	154.9	UL-RL	3.2112E+04	-15.10	0.000	1.000	1.000
147.3	0.000	0.000	Strato2_3095_82743_L_0									
78 D	30.29	9.0616E-05	313.7	151.4	313.7	156.9	UL-RL	3.2112E+04	-15.30	0.000	1.000	1.000
151.4	0.000	0.000	Strato2_3095_82743_L_0									
79 D	31.12	1.6576E-04	317.6	155.6	317.6	158.8	UL-RL	3.2112E+04	-15.50	0.000	1.000	1.000
155.6	0.000	0.000	Strato2_3095_82743_L_0									
80 D	31.93	2.4060E-04	321.5	159.7	321.5	160.7	UL-RL	3.2112E+04	-15.70	0.000	1.000	1.000
159.7	0.000	0.000	Strato2_3095_82743_L_0									
81 D	24.46	3.1533E-04	325.4	163.1	325.4	163.1	V-C	1.0704E+04	-15.90	0.000	1.000	1.000
163.1	0.000	0.000	Strato2_3095_82743_L_0									
82 D	8.221	3.5269E-04	327.4	164.4	327.4	164.4	V-C	1.0704E+04	-16.00	0.000	1.000	1.000
164.4	0.000	0.000	Strato2_3095_82743_L_0									

```
 +-------------------------------------------------------------------------------------------------------------------------------+
 |                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
 |                                                                                                                               |
 |                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                                |
 |                                Exe Time :24 July 2019      10:49:26                                                           |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                              :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
 C U R R E N T   T I M E   I S      5.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****
```

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR
Peq	Su_a	Su_p	LAYER									
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000
0.000	0.000	0.000	not available									
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000
0.000	0.000	0.000	not available									
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
14	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									
15	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000
0.000	0.000	0.000	not available									
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000
0.000	0.000	0.000	not available									
17	0.000	--	--	--	--	--	REMOVED	--	-3.100	0.000	1.000	1.000
0.000	0.000	0.000	not available									
18	0.000	--	--	--	--	--	REMOVED	--	-3.300	0.000	1.000	1.000
0.000	0.000	0.000	not available									
19	0.000	--	--	--	--	--	REMOVED	--	-3.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									

20	0.000	--	--	--	--	--	REMOVED	--	-3.700	0.000	1.000	1.000	0.000	0.000	0.000	not available
21	0.000	--	--	--	--	--	REMOVED	--	-3.900	0.000	1.000	1.000	0.000	0.000	0.000	not available
22	0.000	--	--	--	--	--	REMOVED	--	-4.100	0.000	1.000	1.000	0.000	0.000	0.000	not available
23	0.000	--	--	--	--	--	REMOVED	--	-4.300	0.000	1.000	1.000	0.000	0.000	0.000	not available
24	0.000	--	--	--	--	--	REMOVED	--	-4.500	0.000	1.000	1.000	0.000	0.000	0.000	not available
25	0.000	--	--	--	--	--	REMOVED	--	-4.700	0.000	1.000	1.000	0.000	0.000	0.000	not available
26	0.000	--	--	--	--	--	REMOVED	--	-4.900	0.000	1.000	1.000	0.000	0.000	0.000	not available
27	0.000	--	--	--	--	--	REMOVED	--	-5.100	0.000	1.000	1.000	0.000	0.000	0.000	not available
28	0.000	--	--	--	--	--	REMOVED	--	-5.300	0.000	1.000	1.000	0.000	0.000	0.000	not available
29	0.000	--	--	--	--	--	REMOVED	--	-5.500	0.000	1.000	1.000	0.000	0.000	0.000	not available
30	0.000	--	--	--	--	--	REMOVED	--	-5.700	0.000	1.000	1.000	0.000	0.000	0.000	not available
31	0.000	--	--	--	--	--	REMOVED	--	-5.900	0.000	1.000	1.000	0.000	0.000	0.000	not available
32	0.000	--	--	--	--	--	REMOVED	--	-6.100	0.000	1.000	1.000	0.000	0.000	0.000	not available
33	0.000	--	--	--	--	--	REMOVED	--	-6.300	0.000	1.000	1.000	0.000	0.000	0.000	not available
34	0.000	--	--	--	--	--	REMOVED	--	-6.500	0.000	1.000	1.000	0.000	0.000	0.000	not available
35	0.000	--	--	--	--	--	REMOVED	--	-6.700	0.000	1.000	1.000	0.000	0.000	0.000	not available
36 D	2.610	8.6154E-03	3.230	13.05	131.1	86.07	PASSIVE	0.000	-6.900	0.000	1.000	1.000	13.05	0.000	0.000	Strato1_2_8_L_0
37 D	5.682	8.2959E-03	7.030	28.41	134.9	86.75	PASSIVE	0.000	-7.100	0.000	1.000	1.000	28.41	0.000	0.000	Strato1_2_8_L_0
38 D	8.753	7.9726E-03	10.83	43.76	138.7	87.50	PASSIVE	0.000	-7.300	0.000	1.000	1.000	43.76	0.000	0.000	Strato1_2_8_L_0
39 D	11.82	7.6464E-03	14.63	59.12	142.5	88.31	PASSIVE	0.000	-7.500	0.000	1.000	1.000	59.12	0.000	0.000	Strato1_2_8_L_0
40 D	14.90	7.3185E-03	18.43	74.48	146.3	89.19	PASSIVE	0.000	-7.700	0.000	1.000	1.000	74.48	0.000	0.000	Strato1_2_8_L_0
41 D	17.97	6.9899E-03	22.23	89.83	150.1	90.13	PASSIVE	0.000	-7.900	0.000	1.000	1.000	89.83	0.000	0.000	Strato1_2_8_L_0
42 D	20.92	6.6617E-03	26.03	104.6	153.9	104.6	V-C	2626.	-8.100	0.000	1.000	1.000	104.6	0.000	0.000	Strato1_2_8_L_0
43 D	21.05	6.3351E-03	29.83	105.3	157.7	105.3	V-C	2626.	-8.300	0.000	1.000	1.000	105.3	0.000	0.000	Strato1_2_8_L_0
44 D	21.20	6.0111E-03	33.63	106.0	161.5	106.0	V-C	2626.	-8.500	0.000	1.000	1.000	106.0	0.000	0.000	Strato1_2_8_L_0
45 D	21.34	5.6907E-03	37.43	106.7	165.3	106.7	V-C	2626.	-8.700	0.000	1.000	1.000	106.7	0.000	0.000	Strato1_2_8_L_0
46 D	21.50	5.3749E-03	41.23	107.5	169.1	107.5	V-C	2626.	-8.900	0.000	1.000	1.000	107.5	0.000	0.000	Strato1_2_8_L_0
47 D	21.67	5.0647E-03	45.03	108.3	172.9	108.3	V-C	2626.	-9.100	0.000	1.000	1.000	108.3	0.000	0.000	Strato1_2_8_L_0
48 D	21.84	4.7609E-03	48.83	109.2	176.7	109.2	V-C	2626.	-9.300	0.000	1.000	1.000	109.2	0.000	0.000	Strato1_2_8_L_0
49 D	22.03	4.4644E-03	52.63	110.1	180.5	110.1	V-C	2626.	-9.500	0.000	1.000	1.000	110.1	0.000	0.000	Strato1_2_8_L_0
50 D	21.63	4.1761E-03	56.63	108.2	184.5	108.2	V-C	5801.	-9.700	0.000	1.000	1.000	108.2	0.000	0.000	Strato2_3095_82743_L_0
51 D	21.61	3.8967E-03	60.63	108.1	188.5	108.1	V-C	5801.	-9.900	0.000	1.000	1.000	108.1	0.000	0.000	Strato2_3095_82743_L_0
52 D	21.61	3.6271E-03	64.63	108.1	192.5	108.1	V-C	5801.	-10.10	0.000	1.000	1.000	108.1	0.000	0.000	Strato2_3095_82743_L_0
53 D	21.64	3.3676E-03	68.63	108.2	196.5	108.2	V-C	5801.	-10.30	0.000	1.000	1.000	108.2	0.000	0.000	Strato2_3095_82743_L_0
54 D	21.68	3.1189E-03	72.63	108.4	200.5	108.4	V-C	5801.	-10.50	0.000	1.000	1.000	108.4	0.000	0.000	Strato2_3095_82743_L_0
55 D	21.75	2.8813E-03	76.63	108.7	204.5	108.7	V-C	5801.	-10.70	0.000	1.000	1.000	108.7	0.000	0.000	Strato2_3095_82743_L_0
56 D	21.83	2.6549E-03	80.63	109.2	208.5	109.2	V-C	5801.	-10.90	0.000	1.000	1.000	109.2	0.000	0.000	Strato2_3095_82743_L_0
57 D	21.94	2.4399E-03	84.63	109.7	212.5	109.7	V-C	5801.	-11.10	0.000	1.000	1.000	109.7	0.000	0.000	Strato2_3095_82743_L_0
58 D	22.07	2.2364E-03	88.63	110.3	216.5	110.3	V-C	5801.	-11.30	0.000	1.000	1.000	110.3	0.000	0.000	Strato2_3095_82743_L_0
59 D	21.90	2.0443E-03	92.63	109.5	220.5	111.9	UL-RL	1.7404E+04	-11.50	0.000	1.000	1.000	109.5	0.000	0.000	Strato2_3095_82743_L_0
60 D	21.62	1.8633E-03	96.63	108.1	224.5	113.8	UL-RL	1.7404E+04	-11.70	0.000	1.000	1.000	108.1	0.000	0.000	Strato2_3095_82743_L_0
61 D	21.40	1.6932E-03	100.6	107.0	228.5	115.8	UL-RL	1.7404E+04	-11.90	0.000	1.000	1.000	107.0	0.000	0.000	Strato2_3095_82743_L_0
62 D	21.22	1.5336E-03	104.6	106.1	232.5	117.7	UL-RL	1.7404E+04	-12.10	0.000	1.000	1.000				

```
106.1        0.000        0.000      Strato2_3095_82743_L_0
  63 D   21.09     1.3840E-03   108.6        105.5        236.5        119.7              UL-RL  1.7404E+04  -12.30        0.000        1.000        1.000
105.5        0.000        0.000      Strato2_3095_82743_L_0
  64 D   21.01     1.2439E-03   112.6        105.0        240.5        121.7              UL-RL  1.7404E+04  -12.50        0.000        1.000        1.000
105.0        0.000        0.000      Strato2_3095_82743_L_0
  65 D   20.96     1.1127E-03   116.6        104.8        244.5        123.6              UL-RL  1.7404E+04  -12.70        0.000        1.000        1.000
104.8        0.000        0.000      Strato2_3095_82743_L_0
  66 D   20.95     9.8967E-04   120.6        104.7        248.5        125.6              UL-RL  1.7404E+04  -12.90        0.000        1.000        1.000
104.7        0.000        0.000      Strato2_3095_82743_L_0
  67 D   20.97     8.7421E-04   124.6        104.9        252.5        127.6              UL-RL  1.7404E+04  -13.10        0.000        1.000        1.000
104.9        0.000        0.000      Strato2_3095_82743_L_0
  68 D   21.02     7.6561E-04   128.6        105.1        256.5        129.6              UL-RL  1.7404E+04  -13.30        0.000        1.000        1.000
105.1        0.000        0.000      Strato2_3095_82743_L_0
  69 D   21.10     6.6315E-04   132.6        105.5        260.5        131.6              UL-RL  1.7404E+04  -13.50        0.000        1.000        1.000
105.5        0.000        0.000      Strato2_3095_82743_L_0
  70 D   21.20     5.6615E-04   136.6        106.0        264.5        133.5              UL-RL  1.7404E+04  -13.70        0.000        1.000        1.000
106.0        0.000        0.000      Strato2_3095_82743_L_0
  71 D   21.32     4.7390E-04   140.6        106.6        268.5        135.5              UL-RL  1.7404E+04  -13.90        0.000        1.000        1.000
106.6        0.000        0.000      Strato2_3095_82743_L_0
  72 D   21.45     3.8574E-04   144.6        107.3        272.5        137.5              UL-RL  1.7404E+04  -14.10        0.000        1.000        1.000
107.3        0.000        0.000      Strato2_3095_82743_L_0
  73 D   21.60     3.0103E-04   148.6        108.0        276.5        139.5              UL-RL  1.7404E+04  -14.30        0.000        1.000        1.000
108.0        0.000        0.000      Strato2_3095_82743_L_0
  74 D   21.76     2.1914E-04   152.6        108.8        280.5        141.5              UL-RL  1.7404E+04  -14.50        0.000        1.000        1.000
108.8        0.000        0.000      Strato2_3095_82743_L_0
  75 D   21.92     1.3953E-04   156.6        109.6        284.5        143.5              UL-RL  1.7404E+04  -14.70        0.000        1.000        1.000
109.6        0.000        0.000      Strato2_3095_82743_L_0
  76 D   22.10     6.1660E-05   160.6        110.5        288.5        145.5              UL-RL  1.7404E+04  -14.90        0.000        1.000        1.000
110.5        0.000        0.000      Strato2_3095_82743_L_0
  77 D   22.27    -1.4921E-05   164.6        111.4        292.5        147.5              UL-RL  1.7404E+04  -15.10        0.000        1.000        1.000
111.4        0.000        0.000      Strato2_3095_82743_L_0
  78 D   22.45    -9.0616E-05   168.6        112.3        296.5        149.5              UL-RL  1.7404E+04  -15.30        0.000        1.000        1.000
112.3        0.000        0.000      Strato2_3095_82743_L_0
  79 D   22.63    -1.6576E-04   172.6        113.2        300.5        151.5              UL-RL  1.7404E+04  -15.50        0.000        1.000        1.000
113.2        0.000        0.000      Strato2_3095_82743_L_0
  80 D   22.81    -2.4060E-04   176.6        114.1        304.5        153.5              UL-RL  1.7404E+04  -15.70        0.000        1.000        1.000
114.1        0.000        0.000      Strato2_3095_82743_L_0
  81 D   17.24    -3.1533E-04   180.6        115.0        308.5        155.5              UL-RL  1.7404E+04  -15.90        0.000        1.000        1.000
115.0        0.000        0.000      Strato2_3095_82743_L_0
  82 D   5.770    -3.5269E-04   182.6        115.4        310.5        156.5              UL-RL  1.7404E+04  -16.00        0.000        1.000        1.000
115.4        0.000        0.000      Strato2_3095_82743_L_0
```

```
+------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*     |
|                                                                                                            |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                             |
|                                  Exe Time :24 July 2019       10:49:26                                     |
+------------------------------------------------------------------------------------------------------------+
New Project
```

S T R E S S   R E S U L T S   F O R   G R O U P N O. 3

WallElement_33 :
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 81
C U R R E N T   T I M E   I S   5.0000

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	1.2686	-1.2686	-3.86617E-11	0.25372
2	3.1933	-3.1933	-0.25372	0.89238
3	5.6920	-5.6920	-0.89238	2.0308
4	8.5015	-8.5015	-2.0308	3.7311
5	11.752	-11.752	-3.7311	6.0815
6	15.327	-15.327	-6.0815	9.1469
7	19.313	-19.313	-9.1469	13.009
8	23.632	-23.632	-13.009	17.736
9	28.275	-28.275	-17.736	23.391
10	33.265	-33.265	-23.391	30.044
11	38.651	-38.651	-30.044	37.774
12	44.387	-44.387	-37.774	46.651
13	48.980	-48.980	-46.651	51.549
14	-130.01	130.01	-51.549	25.547
15	-123.37	123.37	-25.547	0.87412
16	-116.34	116.34	-0.87412	-22.393
17	-108.95	108.95	22.393	-44.184
18	-101.19	101.19	44.184	-64.422
19	-93.074	93.074	64.422	-83.037
20	-84.578	84.578	83.037	-99.952
21	-75.759	75.759	99.952	-115.10

22	-66.562	66.562	115.10	-128.42
23	-56.988	56.988	128.42	-139.81
24	-47.057	47.057	139.81	-149.23
25	-36.751	36.751	149.23	-156.58
26	-26.088	26.088	156.58	-161.79
27	-15.051	15.051	161.79	-164.80
28	-3.6811	3.6811	164.80	-165.54
29	8.0637	-8.0637	165.54	-163.93
30	20.166	-20.166	163.93	-159.89
31	32.642	-32.642	159.89	-153.37
32	45.476	-45.476	153.37	-144.27
33	58.683	-58.683	144.27	-132.53
34	72.248	-72.248	132.53	-118.08
35	86.185	-86.185	118.08	-100.85
36	97.865	-97.865	100.85	-81.274
37	106.83	-106.83	81.274	-59.908
38	113.10	-113.10	59.908	-37.287
39	116.66	-116.66	37.287	-13.956
40	117.51	-117.51	13.956	9.5464
41	115.66	-115.66	-9.5464	32.677
42	111.22	-111.22	-32.677	54.921
43	106.99	-106.99	-54.921	76.320
44	102.99	-102.99	-76.320	96.918
45	99.201	-99.201	-96.918	116.76
46	95.623	-95.623	-116.76	135.88
47	92.239	-92.239	-135.88	154.33
48	89.051	-89.051	-154.33	172.14
49	86.049	-86.049	-172.14	189.35
50	73.316	-73.316	-189.35	204.01
51	60.864	-60.864	-204.01	216.19
52	48.675	-48.675	-216.19	225.92
53	36.734	-36.734	-225.92	233.27
54	25.014	-25.014	-233.27	238.27
55	13.498	-13.498	-238.27	240.97
56	2.1608	-2.1608	-240.97	241.40
57	-9.0143	9.0143	-241.40	239.60
58	-20.061	20.061	-239.60	235.59
59	-30.669	30.669	-235.59	229.45
60	-40.734	40.734	-229.45	221.31
61	-50.071	50.071	-221.31	211.29
62	-57.674	57.674	-211.29	199.76
63	-63.688	63.688	-199.76	187.02
64	-68.235	68.235	-187.02	173.37
65	-71.451	71.451	-173.37	159.08
66	-73.426	73.426	-159.08	144.40
67	-74.271	74.271	-144.40	129.54
68	-74.075	74.075	-129.54	114.73
69	-72.912	72.912	-114.73	100.15
70	-70.852	70.852	-100.15	85.975
71	-67.950	67.950	-85.975	72.385
72	-64.256	64.256	-72.385	59.534
73	-59.820	59.820	-59.534	47.570
74	-54.665	54.665	-47.570	36.637
75	-48.817	48.817	-36.637	26.873
76	-42.295	42.295	-26.873	18.414
77	-35.112	35.112	-18.414	11.392
78	-27.275	27.275	-11.392	5.9369
79	-18.790	18.790	-5.9369	2.1788
80	-9.6683	9.6683	-2.1788	0.24516
81	-2.4514	2.4514	-0.24516	8.80851E-12

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                   Exe Time :24 July 2019      10:49:26                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_768111                   :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S      5.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-----------------------------------------------------------------------------------------------------
ANCHOR    1   190.19     -1.98024E-03  4.03010E-03   0.0000       4424.2       0.0000       0.0000     ELASTIC  ORIGINAL YOUNG MODULUS
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                          |
|                                 Exe Time :24 July 2019      10:49:26                                                    |
+-------------------------------------------------------------------------------------------------------------------------+


     F I N A L   I N C R E M E N T A L   A N A L Y S I S

                   S U M M A R Y

     STEP                                  NO. OF ITERATIONS

        1          CONVERGENCE :YES                      2
        2          CONVERGENCE :YES                      5
        3          CONVERGENCE :YES                      4
        4          CONVERGENCE :YES                      4
        5          CONVERGENCE :YES                      6


 END OF PROCESS FOR PROBLEM
New Project
NONLINEAR SOLUTION CPU TIME ....    0.07 [sec]
DATABASE  CREATION CPU TIME.....    0.26 [sec]
```

1.7. Design Assumption : A2+M2+R1 - File di Paratie - File di input (.d)

```
* PARATIE ANALYSIS FOR DESIGN SECTION:Base Design Section USING ASSUMPTION: A2+M2+R1
 * Time:mercoledì 24 luglio 2019 10:49:26
 * 1: Defining general settings
 UNIT  m kN
 TITLE New Project
 DELTA 0.2
 option param itemax 100
 option control hinges 0 0.0001 0.001

 * 2: Defining wall(s)
 WALL LeftWall_32 0 -16 0 1

 * 3: Defining surfaces for wall(s)
 SOIL 0_L LeftWall_32 -16 0 1 0
 SOIL 0_R LeftWall_32 -16 0 2 180

 * 4: Defining soil layers
 *
 * Soil Profile (Strato1_2_8_L_0)
 *
 LDATA Strato1_2_8_L_0 5.84 LeftWall_32
 ATREST 0.53 1 1
 WEIGHT 19 9 10
 PERMEABILITY 1E-06
 RESISTANCE 0 29
 YOUNG 2E+04 6E+04
 ENDL
 *
 * Soil Profile (Strato2_3095_82743_L_0)
 *
 LDATA Strato2_3095_82743_L_0 -9.5 LeftWall_32
 ATREST 0.5 0.5 1
 WEIGHT 20 10 10
 PERMEABILITY 0.0001
 RESISTANCE 20 35
 YOUNG 5E+04 1.5E+05
 ENDL

 * 5: Defining structural materials
 * Steel material: 108 Name=Fe360 E=206000200 kPa
 MATERIAL Fe360_108 2.06E+08
 * Concrete material: 104 Name=C25/30 E=31475800 kPa
 MATERIAL C2530_104 3.148E+07
 * Rebar material: 124 Name=acciaio armonico E=200100000 kPa
 MATERIAL acciaioarmonico_124 2.001E+08
 * Concrete material: 103 Name=C20/25 E=29962000 kPa
 MATERIAL C2025_103 2.996E+07

 * 6: Defining structural elements
 * 6.1: Beams and combined Wall Elements
 BEAM WallElement_33 LeftWall_32 -16 0 C2530_104 0.6848 00 00 0


 * 6.2: Supports
 WIRE Tieback_768111 LeftWall_32 -2.5 acciaioarmonico_124 2.211E-05 163.6 15 0 0




 * 6.3: Strips
 STRIP LeftWall_32 2 5 0 13 0 15 45
 STRIP LeftWall_32 2 5 0 40 0 13 30

 * 7: Defining Steps
 STEP Stage1_31
 CHANGE Strato1_2_8_L_0 U-FRICT=23.91 LeftWall_32
 CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
 CHANGE Strato1_2_8_L_0 U-KA=0.787 LeftWall_32
 CHANGE Strato1_2_8_L_0 U-KP=4.176 LeftWall_32
 CHANGE Strato1_2_8_L_0 D-KA=0.375 LeftWall_32
 CHANGE Strato1_2_8_L_0 D-KP=3.038 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 U-FRICT=29.26 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 U-KA=0.47 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 U-KP=5.524 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 D-KA=0.3 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 D-KP=4.102 LeftWall_32
 CHANGE Strato1_2_8_L_0 U-COHE=0 LeftWall_32
```

```
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-COHE=16 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -26 0 -16 0 0
ADD WallElement_33
ENDSTEP

STEP Stage2_759103
CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -26 0 -16 0 0
ENDSTEP

STEP Stage3_158
CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -3
WATER -26 0 -16 0 0
ENDSTEP

STEP Stage4_617
CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -3
WATER -26 0 -16 0 0
ADD Tieback_768111
ENDSTEP

STEP Stage5_714
CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -6.73
WATER -26 0 -16 0 0
ENDSTEP
```

1.8. Design Assumption : A2+M2+R1 - File di Paratie - File di output (.out)

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                        |
|                                    Exe Time :24 July 2019      10:49:27                                                 |
+-------------------------------------------------------------------------------------------------------------------------+

                  ***********************************************************
                  *                                                         *
                  *  PARATIE PLUS Non-Linear Spring Engine                  *
                  *                                                         *
                  *          AN ELASTOPLASTIC FINITE ELEMENT PROGRAM        *
                  *          FOR FLEXIBLE EARTH-RETAINING STRUCTURES        *
                  *                                                         *
                  *          Written by Ce.A.S. s.r.l. (ITALY)              *
                  *          with the scientific supervision of             *
                  *          Roberto Nova - full professor SOIL MECHANICS   *
                  *          at Politecnico di Milano (ITALY)               *
                  *                                                         *
                  ***********************************************************
                  *                                                         *
                  *  RELEASE   2017.1     *Build date:Jul 11, 2017*    *    *
                  *                                                         *
                  *                                                         *
                  *  Ce.A.S.     S.R.L   CENTRO DI ANALISI STRUTTURALE      *
                  *              VIALE   GIUSTINIANO 10                     *
                  *              20129   M I L A N O  (ITALIA)              *
                  *  TEL.        +39 02 2020221   (+39 035 23 67 19)        *
                  *  FAX         +39 02 29512533  (+39 035 42285 49)        *
```

```
                  *  email       bruno.becci@ceas.it                      *
                  *  Web Page    www.ceas.it                              *
                  ************************************************************



 JOB : NewProject.BaseDesignSection_28.A2M2R1_3514
 STARTING
ACCEPTED   <FILE,GENW                                                      >
ACCEPTED   <FILE,PLOTTER,BINARY                                            >
ACCEPTED   <SOLVE TOTAL_STRESS                                             >
ACCEPTED   <PARAM ITEMAX 100                                               >
ACCEPTED   <CONTROL HINGES 0 0.0001 0.001                                  >



                  ************************************************************
                  *                                                          *
                  *  WARNING : PORE PRESSURES ARE AUTOMATICALLY COMPUTED     *
                  *    BY THE PROGRAM.                                       *
                  ************************************************************

PRELIMINARY OPERATIONS CPU TIME     0.00 [sec]



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                        |
|                                  Exe Time :24 July 2019      10:49:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


INPUT FILE HAS BEEN GENERATED BY WALGEN PROGRAM


New Project


NO. OF NODAL POINTS (NUMNP) ...................   82
NO. OF COORDINATES  (NCOORD)...................    2
NO. OF NODE DOFS    (NDOF).....................    2
NO. OF EQUATIONS    (NEQ)...................... 164
NO. OF CONSTRAINTS CARDS (NVINC)...............    0
NO. OF ELEMENT GROUPS (NEG)....................    4
NO. OF SOLUTION STEPS (NSTE)...................    5
NO. OF ELEMENT SETS ATTACHED TO SLAVE NODES ...    0
NO. OF RECORD FROM WALGEN .....................   89
NO. OF LONG NAMES (LASTNAME) ..................   21
LENGTH UNIT CHOICE ............................    3 (M   )
FORCE  UNIT CHOICE ............................    3 (KN  )
MAX PORE PRESSURE TABLE LENGTH.................    1
NO. OF ELEMENT GROUPS REQUIRING ADD. SLIP DOF .    0


IDOFA (01) =  2  Y-DISPL.F
IDOFA (02) =  4   X-ROT. F

 RELEVANT ITEMS UNITS

 STRESSES                  kPa
 Y-DISPLACEMENTS           m
 ROTATIONS                 RADIANS
 BEAM AND SLAB MOMENTS     kN*m/m
 BEAM SHEAR FORCES         kN/m
 ANCHOR FORCES             kN/m
 AXIAL FORCES IN TRUSSES   kN/m
 AXIAL FORCES SPRINGS      kN/m
 Y-REACTIONS               kN/m
 X-MOMENT REACTIONS        kN*m/m
 ETC.



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                        |
|                                  Exe Time :24 July 2019      10:49:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
                  P R E P R O C E S S O R     D A T A
```

N O. O F C O M M A N D S 89

```
 1 : UNIT  m kN
 2 : TITLE New Project
 3 : DELTA 0.2
 4 : option param itemax 100
 5 : option control hinges 0 0.0001 0.001
 6 : WALL LeftWall_32 0 -16 0 1
 7 : SOIL 0_L LeftWall_32 -16 0 1 0
 8 : SOIL 0_R LeftWall_32 -16 0 2 180
 9 : LDATA Strato1_2_8_L_0 5.84 LeftWall_32
10 : ATREST 0.53 1 1
11 : WEIGHT 19 9 10
12 : PERMEABILITY 1E-06
13 : RESISTANCE 0 29
14 : YOUNG 2E+04 6E+04
15 : ENDL
16 : LDATA Strato2_3095_82743_L_0 -9.5 LeftWall_32
17 : ATREST 0.5 0.5 1
18 : WEIGHT 20 10 10
19 : PERMEABILITY 0.0001
20 : RESISTANCE 20 35
21 : YOUNG 5E+04 1.5E+05
22 : ENDL
23 : MATERIAL Fe360_108 2.06E+08
24 : MATERIAL C2530_104 3.148E+07
25 : MATERIAL acciaioarmonico_124 2.001E+08
26 : MATERIAL C2025_103 2.996E+07
27 : BEAM WallElement_33 LeftWall_32 -16 0 C2530_104 0.6848 00 00 0
28 : WIRE Tieback_768111 LeftWall_32 -2.5 acciaioarmonico_124 2.211E-05 163.6 15 0 0
29 : STRIP LeftWall_32 2 5 0 13 0 15 45
30 : STRIP LeftWall_32 2 5 0 40 0 13 30
31 : STEP Stage1_31
32 : CHANGE Strato1_2_8_L_0 U-FRICT=23.91 LeftWall_32
33 : CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
34 : CHANGE Strato1_2_8_L_0 U-KA=0.787 LeftWall_32
35 : CHANGE Strato1_2_8_L_0 U-KP=4.176 LeftWall_32
36 : CHANGE Strato1_2_8_L_0 D-KA=0.375 LeftWall_32
37 : CHANGE Strato1_2_8_L_0 D-KP=3.038 LeftWall_32
38 : CHANGE Strato2_3095_82743_L_0 U-FRICT=29.26 LeftWall_32
39 : CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
40 : CHANGE Strato2_3095_82743_L_0 U-KA=0.47 LeftWall_32
41 : CHANGE Strato2_3095_82743_L_0 U-KP=5.524 LeftWall_32
42 : CHANGE Strato2_3095_82743_L_0 D-KA=0.3 LeftWall_32
43 : CHANGE Strato2_3095_82743_L_0 D-KP=4.102 LeftWall_32
44 : CHANGE Strato1_2_8_L_0 U-COHE=0 LeftWall_32
45 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
46 : CHANGE Strato2_3095_82743_L_0 U-COHE=16 LeftWall_32
47 : CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
48 : SETWALL LeftWall_32
49 : GEOM 0 0
50 : WATER -26 0 -16 0 0
51 : ADD WallElement_33
52 : ENDSTEP
53 : STEP Stage2_759103
54 : CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
55 : CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
56 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
57 : CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
58 : SETWALL LeftWall_32
59 : GEOM 0 0
60 : WATER -26 0 -16 0 0
61 : ENDSTEP
62 : STEP Stage3_158
63 : CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
64 : CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
65 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
66 : CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
67 : SETWALL LeftWall_32
68 : GEOM 0 -3
69 : WATER -26 0 -16 0 0
70 : ENDSTEP
71 : STEP Stage4_617
72 : CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
73 : CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
74 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
75 : CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
76 : SETWALL LeftWall_32
77 : GEOM 0 -3
78 : WATER -26 0 -16 0 0
79 : ADD Tieback_768111
80 : ENDSTEP
81 : STEP Stage5_714
82 : CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
83 : CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
```

```
84 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
85 : CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
86 : SETWALL LeftWall_32
87 : GEOM 0 -6.73
88 : WATER -26 0 -16 0 0
89 : ENDSTEP
```

```
+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                              |
|                                   Exe Time :24 July 2019      10:49:27                                                        |
+-------------------------------------------------------------------------------------------------------------------------------+
N O D A L    P O I N T    D A T A
--------------------------------

NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD /

   1  0.0000      0.0000     /    2  0.0000    -0.20000     /    3  0.0000    -0.40000     /    4  0.0000    -0.60000     /
   5  0.0000    -0.80000     /    6  0.0000     -1.0000     /    7  0.0000     -1.2000     /    8  0.0000     -1.4000     /
   9  0.0000     -1.6000     /   10  0.0000     -1.8000     /   11  0.0000     -2.0000     /   12  0.0000     -2.2000     /
  13  0.0000     -2.4000     /   14  0.0000     -2.5000     /   15  0.0000     -2.7000     /   16  0.0000     -2.9000     /
  17  0.0000     -3.1000     /   18  0.0000     -3.3000     /   19  0.0000     -3.5000     /   20  0.0000     -3.7000     /
  21  0.0000     -3.9000     /   22  0.0000     -4.1000     /   23  0.0000     -4.3000     /   24  0.0000     -4.5000     /
  25  0.0000     -4.7000     /   26  0.0000     -4.9000     /   27  0.0000     -5.1000     /   28  0.0000     -5.3000     /
  29  0.0000     -5.5000     /   30  0.0000     -5.7000     /   31  0.0000     -5.9000     /   32  0.0000     -6.1000     /
  33  0.0000     -6.3000     /   34  0.0000     -6.5000     /   35  0.0000     -6.7000     /   36  0.0000     -6.9000     /
  37  0.0000     -7.1000     /   38  0.0000     -7.3000     /   39  0.0000     -7.5000     /   40  0.0000     -7.7000     /
  41  0.0000     -7.9000     /   42  0.0000     -8.1000     /   43  0.0000     -8.3000     /   44  0.0000     -8.5000     /
  45  0.0000     -8.7000     /   46  0.0000     -8.9000     /   47  0.0000     -9.1000     /   48  0.0000     -9.3000     /
  49  0.0000     -9.5000     /   50  0.0000     -9.7000     /   51  0.0000     -9.9000     /   52  0.0000     -10.100     /
  53  0.0000     -10.300     /   54  0.0000     -10.500     /   55  0.0000     -10.700     /   56  0.0000     -10.900     /
  57  0.0000     -11.100     /   58  0.0000     -11.300     /   59  0.0000     -11.500     /   60  0.0000     -11.700     /
  61  0.0000     -11.900     /   62  0.0000     -12.100     /   63  0.0000     -12.300     /   64  0.0000     -12.500     /
  65  0.0000     -12.700     /   66  0.0000     -12.900     /   67  0.0000     -13.100     /   68  0.0000     -13.300     /
  69  0.0000     -13.500     /   70  0.0000     -13.700     /   71  0.0000     -13.900     /   72  0.0000     -14.100     /
  73  0.0000     -14.300     /   74  0.0000     -14.500     /   75  0.0000     -14.700     /   76  0.0000     -14.900     /
  77  0.0000     -15.100     /   78  0.0000     -15.300     /   79  0.0000     -15.500     /   80  0.0000     -15.700     /
  81  0.0000     -15.900     /   82  0.0000     -16.000     /



+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                              |
|                                   Exe Time :24 July 2019      10:49:27                                                        |
+-------------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  1

0_L                            :
   5  82   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
.........2D PLASTIC SOIL ..........
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area      .....     .....     .....      flag
-------------------------------------------------------------------

    1    1    1   0.1000      0.000     0.000     0.000     1.000
    2    2    1   0.2000      0.000     0.000     0.000     1.000
    3    3    1   0.2000      0.000     0.000     0.000     1.000
    4    4    1   0.2000      0.000     0.000     0.000     1.000
    5    5    1   0.2000      0.000     0.000     0.000     1.000
```

6	6	1	0.2000	0.000	0.000	0.000	1.000
7	7	1	0.2000	0.000	0.000	0.000	1.000
8	8	1	0.2000	0.000	0.000	0.000	1.000
9	9	1	0.2000	0.000	0.000	0.000	1.000
10	10	1	0.2000	0.000	0.000	0.000	1.000
11	11	1	0.2000	0.000	0.000	0.000	1.000
12	12	1	0.2000	0.000	0.000	0.000	1.000
13	13	1	0.1500	0.000	0.000	0.000	1.000
14	14	1	0.1500	0.000	0.000	0.000	1.000
15	15	1	0.2000	0.000	0.000	0.000	1.000
16	16	1	0.2000	0.000	0.000	0.000	1.000
17	17	1	0.2000	0.000	0.000	0.000	1.000
18	18	1	0.2000	0.000	0.000	0.000	1.000
19	19	1	0.2000	0.000	0.000	0.000	1.000
20	20	1	0.2000	0.000	0.000	0.000	1.000
21	21	1	0.2000	0.000	0.000	0.000	1.000
22	22	1	0.2000	0.000	0.000	0.000	1.000
23	23	1	0.2000	0.000	0.000	0.000	1.000
24	24	1	0.2000	0.000	0.000	0.000	1.000
25	25	1	0.2000	0.000	0.000	0.000	1.000
26	26	1	0.2000	0.000	0.000	0.000	1.000
27	27	1	0.2000	0.000	0.000	0.000	1.000
28	28	1	0.2000	0.000	0.000	0.000	1.000
29	29	1	0.2000	0.000	0.000	0.000	1.000
30	30	1	0.2000	0.000	0.000	0.000	1.000
31	31	1	0.2000	0.000	0.000	0.000	1.000
32	32	1	0.2000	0.000	0.000	0.000	1.000
33	33	1	0.2000	0.000	0.000	0.000	1.000
34	34	1	0.2000	0.000	0.000	0.000	1.000
35	35	1	0.2000	0.000	0.000	0.000	1.000
36	36	1	0.2000	0.000	0.000	0.000	1.000
37	37	1	0.2000	0.000	0.000	0.000	1.000
38	38	1	0.2000	0.000	0.000	0.000	1.000
39	39	1	0.2000	0.000	0.000	0.000	1.000
40	40	1	0.2000	0.000	0.000	0.000	1.000
41	41	1	0.2000	0.000	0.000	0.000	1.000
42	42	1	0.2000	0.000	0.000	0.000	1.000
43	43	1	0.2000	0.000	0.000	0.000	1.000
44	44	1	0.2000	0.000	0.000	0.000	1.000
45	45	1	0.2000	0.000	0.000	0.000	1.000
46	46	1	0.2000	0.000	0.000	0.000	1.000
47	47	1	0.2000	0.000	0.000	0.000	1.000
48	48	1	0.2000	0.000	0.000	0.000	1.000
49	49	1	0.2000	0.000	0.000	0.000	1.000
50	50	2	0.2000	0.000	0.000	0.000	1.000
51	51	2	0.2000	0.000	0.000	0.000	1.000
52	52	2	0.2000	0.000	0.000	0.000	1.000
53	53	2	0.2000	0.000	0.000	0.000	1.000
54	54	2	0.2000	0.000	0.000	0.000	1.000
55	55	2	0.2000	0.000	0.000	0.000	1.000
56	56	2	0.2000	0.000	0.000	0.000	1.000
57	57	2	0.2000	0.000	0.000	0.000	1.000
58	58	2	0.2000	0.000	0.000	0.000	1.000
59	59	2	0.2000	0.000	0.000	0.000	1.000
60	60	2	0.2000	0.000	0.000	0.000	1.000
61	61	2	0.2000	0.000	0.000	0.000	1.000
62	62	2	0.2000	0.000	0.000	0.000	1.000
63	63	2	0.2000	0.000	0.000	0.000	1.000
64	64	2	0.2000	0.000	0.000	0.000	1.000
65	65	2	0.2000	0.000	0.000	0.000	1.000
66	66	2	0.2000	0.000	0.000	0.000	1.000
67	67	2	0.2000	0.000	0.000	0.000	1.000
68	68	2	0.2000	0.000	0.000	0.000	1.000
69	69	2	0.2000	0.000	0.000	0.000	1.000
70	70	2	0.2000	0.000	0.000	0.000	1.000
71	71	2	0.2000	0.000	0.000	0.000	1.000
72	72	2	0.2000	0.000	0.000	0.000	1.000
73	73	2	0.2000	0.000	0.000	0.000	1.000
74	74	2	0.2000	0.000	0.000	0.000	1.000
75	75	2	0.2000	0.000	0.000	0.000	1.000
76	76	2	0.2000	0.000	0.000	0.000	1.000
77	77	2	0.2000	0.000	0.000	0.000	1.000
78	78	2	0.2000	0.000	0.000	0.000	1.000
79	79	2	0.2000	0.000	0.000	0.000	1.000
80	80	2	0.2000	0.000	0.000	0.000	1.000
81	81	2	0.1500	0.000	0.000	0.000	1.000
82	82	2	0.5000E-01	0.000	0.000	0.000	1.000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                        |
|                                  Exe Time :24 July 2019      10:49:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  2

0_R                              :
   5  82   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
.........2D PLASTIC SOIL ..........
.....................................

element group behaviour throughout stage analysis

stage   status
------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area      .....     .....     .....      flag
-------------------------------------------------------------------

    1    1    1   0.1000     0.000     0.000     0.000     2.000
    2    2    1   0.2000     0.000     0.000     0.000     2.000
    3    3    1   0.2000     0.000     0.000     0.000     2.000
    4    4    1   0.2000     0.000     0.000     0.000     2.000
    5    5    1   0.2000     0.000     0.000     0.000     2.000
    6    6    1   0.2000     0.000     0.000     0.000     2.000
    7    7    1   0.2000     0.000     0.000     0.000     2.000
    8    8    1   0.2000     0.000     0.000     0.000     2.000
    9    9    1   0.2000     0.000     0.000     0.000     2.000
   10   10    1   0.2000     0.000     0.000     0.000     2.000
   11   11    1   0.2000     0.000     0.000     0.000     2.000
   12   12    1   0.2000     0.000     0.000     0.000     2.000
   13   13    1   0.1500     0.000     0.000     0.000     2.000
   14   14    1   0.1500     0.000     0.000     0.000     2.000
   15   15    1   0.2000     0.000     0.000     0.000     2.000
   16   16    1   0.2000     0.000     0.000     0.000     2.000
   17   17    1   0.2000     0.000     0.000     0.000     2.000
   18   18    1   0.2000     0.000     0.000     0.000     2.000
   19   19    1   0.2000     0.000     0.000     0.000     2.000
   20   20    1   0.2000     0.000     0.000     0.000     2.000
   21   21    1   0.2000     0.000     0.000     0.000     2.000
   22   22    1   0.2000     0.000     0.000     0.000     2.000
   23   23    1   0.2000     0.000     0.000     0.000     2.000
   24   24    1   0.2000     0.000     0.000     0.000     2.000
   25   25    1   0.2000     0.000     0.000     0.000     2.000
   26   26    1   0.2000     0.000     0.000     0.000     2.000
   27   27    1   0.2000     0.000     0.000     0.000     2.000
   28   28    1   0.2000     0.000     0.000     0.000     2.000
   29   29    1   0.2000     0.000     0.000     0.000     2.000
   30   30    1   0.2000     0.000     0.000     0.000     2.000
   31   31    1   0.2000     0.000     0.000     0.000     2.000
   32   32    1   0.2000     0.000     0.000     0.000     2.000
   33   33    1   0.2000     0.000     0.000     0.000     2.000
   34   34    1   0.2000     0.000     0.000     0.000     2.000
   35   35    1   0.2000     0.000     0.000     0.000     2.000
   36   36    1   0.2000     0.000     0.000     0.000     2.000
   37   37    1   0.2000     0.000     0.000     0.000     2.000
   38   38    1   0.2000     0.000     0.000     0.000     2.000
   39   39    1   0.2000     0.000     0.000     0.000     2.000
   40   40    1   0.2000     0.000     0.000     0.000     2.000
   41   41    1   0.2000     0.000     0.000     0.000     2.000
```

42	42	1	0.2000	0.000	0.000	0.000	2.000
43	43	1	0.2000	0.000	0.000	0.000	2.000
44	44	1	0.2000	0.000	0.000	0.000	2.000
45	45	1	0.2000	0.000	0.000	0.000	2.000
46	46	1	0.2000	0.000	0.000	0.000	2.000
47	47	1	0.2000	0.000	0.000	0.000	2.000
48	48	1	0.2000	0.000	0.000	0.000	2.000
49	49	1	0.2000	0.000	0.000	0.000	2.000
50	50	2	0.2000	0.000	0.000	0.000	2.000
51	51	2	0.2000	0.000	0.000	0.000	2.000
52	52	2	0.2000	0.000	0.000	0.000	2.000
53	53	2	0.2000	0.000	0.000	0.000	2.000
54	54	2	0.2000	0.000	0.000	0.000	2.000
55	55	2	0.2000	0.000	0.000	0.000	2.000
56	56	2	0.2000	0.000	0.000	0.000	2.000
57	57	2	0.2000	0.000	0.000	0.000	2.000
58	58	2	0.2000	0.000	0.000	0.000	2.000
59	59	2	0.2000	0.000	0.000	0.000	2.000
60	60	2	0.2000	0.000	0.000	0.000	2.000
61	61	2	0.2000	0.000	0.000	0.000	2.000
62	62	2	0.2000	0.000	0.000	0.000	2.000
63	63	2	0.2000	0.000	0.000	0.000	2.000
64	64	2	0.2000	0.000	0.000	0.000	2.000
65	65	2	0.2000	0.000	0.000	0.000	2.000
66	66	2	0.2000	0.000	0.000	0.000	2.000
67	67	2	0.2000	0.000	0.000	0.000	2.000
68	68	2	0.2000	0.000	0.000	0.000	2.000
69	69	2	0.2000	0.000	0.000	0.000	2.000
70	70	2	0.2000	0.000	0.000	0.000	2.000
71	71	2	0.2000	0.000	0.000	0.000	2.000
72	72	2	0.2000	0.000	0.000	0.000	2.000
73	73	2	0.2000	0.000	0.000	0.000	2.000
74	74	2	0.2000	0.000	0.000	0.000	2.000
75	75	2	0.2000	0.000	0.000	0.000	2.000
76	76	2	0.2000	0.000	0.000	0.000	2.000
77	77	2	0.2000	0.000	0.000	0.000	2.000
78	78	2	0.2000	0.000	0.000	0.000	2.000
79	79	2	0.2000	0.000	0.000	0.000	2.000
80	80	2	0.2000	0.000	0.000	0.000	2.000
81	81	2	0.1500	0.000	0.000	0.000	2.000
82	82	2	0.5000E-01	0.000	0.000	0.000	2.000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                        |
|                                  Exe Time :24 July 2019      10:49:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  3

WallElement_33                  :
   2  81   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   1   0
.....................................
..........2D WALL ELEMENT...........
.....................................

element group behaviour throughout stage analysis

stage   status
------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) young modulus      0.314800E+08
 prop( 2) modification  time  0.00000
 prop( 3) new young modulus   0.00000
 prop( 4) poisson ratio       0.00000
 prop( 5) future .............0.252200E-43

 no. of step variable items:     1
 step  inertia multipier
-------------------------
    1   1.000
    2   1.000
    3   1.000
    4   1.000
    5   1.000
```

element data

el	na	nb	mat	erc1	erc2	thick	by-i	by-j
1	1	2	1	0.000	0.000	0.6848	0.000	0.000
2	2	3	1	0.000	0.000	0.6848	0.000	0.000
3	3	4	1	0.000	0.000	0.6848	0.000	0.000
4	4	5	1	0.000	0.000	0.6848	0.000	0.000
5	5	6	1	0.000	0.000	0.6848	0.000	0.000
6	6	7	1	0.000	0.000	0.6848	0.000	0.000
7	7	8	1	0.000	0.000	0.6848	0.000	0.000
8	8	9	1	0.000	0.000	0.6848	0.000	0.000
9	9	10	1	0.000	0.000	0.6848	0.000	0.000
10	10	11	1	0.000	0.000	0.6848	0.000	0.000
11	11	12	1	0.000	0.000	0.6848	0.000	0.000
12	12	13	1	0.000	0.000	0.6848	0.000	0.000
13	13	14	1	0.000	0.000	0.6848	0.000	0.000
14	14	15	1	0.000	0.000	0.6848	0.000	0.000
15	15	16	1	0.000	0.000	0.6848	0.000	0.000
16	16	17	1	0.000	0.000	0.6848	0.000	0.000
17	17	18	1	0.000	0.000	0.6848	0.000	0.000
18	18	19	1	0.000	0.000	0.6848	0.000	0.000
19	19	20	1	0.000	0.000	0.6848	0.000	0.000
20	20	21	1	0.000	0.000	0.6848	0.000	0.000
21	21	22	1	0.000	0.000	0.6848	0.000	0.000
22	22	23	1	0.000	0.000	0.6848	0.000	0.000
23	23	24	1	0.000	0.000	0.6848	0.000	0.000
24	24	25	1	0.000	0.000	0.6848	0.000	0.000
25	25	26	1	0.000	0.000	0.6848	0.000	0.000
26	26	27	1	0.000	0.000	0.6848	0.000	0.000
27	27	28	1	0.000	0.000	0.6848	0.000	0.000
28	28	29	1	0.000	0.000	0.6848	0.000	0.000
29	29	30	1	0.000	0.000	0.6848	0.000	0.000
30	30	31	1	0.000	0.000	0.6848	0.000	0.000
31	31	32	1	0.000	0.000	0.6848	0.000	0.000
32	32	33	1	0.000	0.000	0.6848	0.000	0.000
33	33	34	1	0.000	0.000	0.6848	0.000	0.000
34	34	35	1	0.000	0.000	0.6848	0.000	0.000
35	35	36	1	0.000	0.000	0.6848	0.000	0.000
36	36	37	1	0.000	0.000	0.6848	0.000	0.000
37	37	38	1	0.000	0.000	0.6848	0.000	0.000
38	38	39	1	0.000	0.000	0.6848	0.000	0.000
39	39	40	1	0.000	0.000	0.6848	0.000	0.000
40	40	41	1	0.000	0.000	0.6848	0.000	0.000
41	41	42	1	0.000	0.000	0.6848	0.000	0.000
42	42	43	1	0.000	0.000	0.6848	0.000	0.000
43	43	44	1	0.000	0.000	0.6848	0.000	0.000
44	44	45	1	0.000	0.000	0.6848	0.000	0.000
45	45	46	1	0.000	0.000	0.6848	0.000	0.000
46	46	47	1	0.000	0.000	0.6848	0.000	0.000
47	47	48	1	0.000	0.000	0.6848	0.000	0.000
48	48	49	1	0.000	0.000	0.6848	0.000	0.000
49	49	50	1	0.000	0.000	0.6848	0.000	0.000
50	50	51	1	0.000	0.000	0.6848	0.000	0.000
51	51	52	1	0.000	0.000	0.6848	0.000	0.000
52	52	53	1	0.000	0.000	0.6848	0.000	0.000
53	53	54	1	0.000	0.000	0.6848	0.000	0.000
54	54	55	1	0.000	0.000	0.6848	0.000	0.000
55	55	56	1	0.000	0.000	0.6848	0.000	0.000
56	56	57	1	0.000	0.000	0.6848	0.000	0.000
57	57	58	1	0.000	0.000	0.6848	0.000	0.000
58	58	59	1	0.000	0.000	0.6848	0.000	0.000
59	59	60	1	0.000	0.000	0.6848	0.000	0.000
60	60	61	1	0.000	0.000	0.6848	0.000	0.000
61	61	62	1	0.000	0.000	0.6848	0.000	0.000
62	62	63	1	0.000	0.000	0.6848	0.000	0.000
63	63	64	1	0.000	0.000	0.6848	0.000	0.000
64	64	65	1	0.000	0.000	0.6848	0.000	0.000
65	65	66	1	0.000	0.000	0.6848	0.000	0.000
66	66	67	1	0.000	0.000	0.6848	0.000	0.000
67	67	68	1	0.000	0.000	0.6848	0.000	0.000
68	68	69	1	0.000	0.000	0.6848	0.000	0.000
69	69	70	1	0.000	0.000	0.6848	0.000	0.000
70	70	71	1	0.000	0.000	0.6848	0.000	0.000
71	71	72	1	0.000	0.000	0.6848	0.000	0.000
72	72	73	1	0.000	0.000	0.6848	0.000	0.000
73	73	74	1	0.000	0.000	0.6848	0.000	0.000
74	74	75	1	0.000	0.000	0.6848	0.000	0.000
75	75	76	1	0.000	0.000	0.6848	0.000	0.000
76	76	77	1	0.000	0.000	0.6848	0.000	0.000
77	77	78	1	0.000	0.000	0.6848	0.000	0.000
78	78	79	1	0.000	0.000	0.6848	0.000	0.000
79	79	80	1	0.000	0.000	0.6848	0.000	0.000

```
   80   80   81    1    0.000     0.000     0.6848     0.000     0.000
   81   81   82    1    0.000     0.000     0.6848     0.000     0.000



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                         |
|                                  Exe Time :24 July 2019      10:49:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  4

Tieback_768111                  :
   6   1   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   2   0
.....................................
.........2D POST-TENSION ANCHOR....
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1  inactive
    2  inactive
    3  inactive
    4   active
    5   active

 material set no.    1

 prop( 1) angle          15.0000
 prop( 2) young modulus 0.200100E+09
 prop( 3) modification  time  0.00000
 prop( 4) new young modulus   0.00000

 no. of step variable items:     2
 step   -ve lim     +ve lim
-----------------------------
    1   0.000       0.000
    2   0.000       0.000
    3   0.000       0.000
    4   0.000       0.000
    5   0.000       0.000

 element data

   el    n  mat       a/l     pinit    yieldc    yieldt
-----------------------------------------------------------

    1   14    1   0.2211E-04 163.6     0.000     0.000



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                         |
|                                  Exe Time :24 July 2019      10:49:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


NO. OF NODAL LOADS  (NLOAD) ...................    0
NO. OF LOAD CURVES  (NLCUR) ...................   10
MAXIMUM POINTS/LCURVE (NPTM)...................    5



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                         |
|                                  Exe Time :24 July 2019      10:49:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
L O A D     D A T A



    LOAD FUNCTION NUMBER   =    1
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
```

```
    0.80000    0.0000E+00
    1.00000    0.1000E+01
    1.20000    0.0000E+00
    6.00000    0.0000E+00


LOAD FUNCTION NUMBER   =    2
NUMBER OF TIME POINTS  =    5

TIME VALUE      FUNCTION

    0.00000    0.0000E+00
    1.80000    0.0000E+00
    2.00000    0.1000E+01
    2.20000    0.0000E+00
    6.00000    0.0000E+00


LOAD FUNCTION NUMBER   =    3
NUMBER OF TIME POINTS  =    5

TIME VALUE      FUNCTION

    0.00000    0.0000E+00
    2.80000    0.0000E+00
    3.00000    0.1000E+01
    3.20000    0.0000E+00
    6.00000    0.0000E+00


LOAD FUNCTION NUMBER   =    4
NUMBER OF TIME POINTS  =    5

TIME VALUE      FUNCTION

    0.00000    0.0000E+00
    3.80000    0.0000E+00
    4.00000    0.1000E+01
    4.20000    0.0000E+00
    6.00000    0.0000E+00


LOAD FUNCTION NUMBER   =    5
NUMBER OF TIME POINTS  =    5

TIME VALUE      FUNCTION

    0.00000    0.0000E+00
    4.80000    0.0000E+00
    5.00000    0.1000E+01
    5.20000    0.0000E+00
    6.00000    0.0000E+00


LOAD FUNCTION NUMBER   =    6
NUMBER OF TIME POINTS  =    4

TIME VALUE      FUNCTION

    0.00000    0.0000E+00
    0.80000    0.0000E+00
    1.00000    0.1000E+01
    6.00000    0.1000E+01


LOAD FUNCTION NUMBER   =    7
NUMBER OF TIME POINTS  =    4

TIME VALUE      FUNCTION

    0.00000    0.0000E+00
    1.80000    0.0000E+00
    2.00000    0.1000E+01
    6.00000    0.1000E+01


LOAD FUNCTION NUMBER   =    8
NUMBER OF TIME POINTS  =    4
```

```
    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =    9
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       3.80000    0.0000E+00
       4.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =   10
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       4.80000    0.0000E+00
       5.00000    0.1000E+01
       6.00000    0.1000E+01


NO. OF DISTRIBUTED LOAD CARDS     0
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                         |
|                                  Exe Time :24 July 2019      10:49:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
L O A D     B A L A N C E

STEP     1 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     1 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     2 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     2 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     3 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     3 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     4 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     4 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     5 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     5 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000


                    LOAD INPUT SECTION COMPLETED



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                         |
|                                  Exe Time :24 July 2019      10:49:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


NO. OF LAYERS .................................    2
NO. OF DATA PER LAYER.........................  100



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                         |
|                                  Exe Time :24 July 2019      10:49:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+

LAYER DESCRIPTORS FOR STEP NO.    1


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  23.910     WALL NO.        1
ITEM NO.   9<U-FRICT >=  29.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.78700     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.1760     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  23.910     WALL NO.        1
ITEM NO.  59<D-FRICT >=  29.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.37500     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.0380     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)
```

```
 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  16.000     WALL NO.        1
ITEM NO.   8<U-COHE  >=  20.000     WALL NO.        2
ITEM NO.   9<U-FRICT >=  29.260     WALL NO.        1
ITEM NO.   9<U-FRICT >=  35.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.47000     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.5240     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  16.000     WALL NO.        1
ITEM NO.  58<D-COHE  >=  20.000     WALL NO.        2
ITEM NO.  59<D-FRICT >=  29.260     WALL NO.        1
ITEM NO.  59<D-FRICT >=  35.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.30000     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.1020     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    2

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  23.910     WALL NO.        1
ITEM NO.   9<U-FRICT >=  29.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.78700     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.1760     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  23.910     WALL NO.        1
ITEM NO.  59<D-FRICT >=  29.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.37500     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.0380     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  16.000     WALL NO.        1
ITEM NO.   8<U-COHE  >=  20.000     WALL NO.        2
ITEM NO.   9<U-FRICT >=  29.260     WALL NO.        1
ITEM NO.   9<U-FRICT >=  35.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.47000     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.5240     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
```

```
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  16.000     WALL NO.        1
ITEM NO.  58<D-COHE  >=  20.000     WALL NO.        2
ITEM NO.  59<D-FRICT >=  29.260     WALL NO.        1
ITEM NO.  59<D-FRICT >=  35.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.30000     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.1020     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    3


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  23.910     WALL NO.        1
ITEM NO.   9<U-FRICT >=  29.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.78700     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.1760     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  23.910     WALL NO.        1
ITEM NO.  59<D-FRICT >=  29.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.37500     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.0380     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  16.000     WALL NO.        1
ITEM NO.   8<U-COHE  >=  20.000     WALL NO.        2
ITEM NO.   9<U-FRICT >=  29.260     WALL NO.        1
ITEM NO.   9<U-FRICT >=  35.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.47000     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.5240     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  16.000     WALL NO.        1
ITEM NO.  58<D-COHE  >=  20.000     WALL NO.        2
ITEM NO.  59<D-FRICT >=  29.260     WALL NO.        1
ITEM NO.  59<D-FRICT >=  35.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.30000     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.1020     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    4


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    4

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
```

```
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  23.910     WALL NO.        1
ITEM NO.   9<U-FRICT >=  29.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.78700     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.1760     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  23.910     WALL NO.        1
ITEM NO.  59<D-FRICT >=  29.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.37500     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.0380     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    4

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  16.000     WALL NO.        1
ITEM NO.   8<U-COHE  >=  20.000     WALL NO.        2
ITEM NO.   9<U-FRICT >=  29.260     WALL NO.        1
ITEM NO.   9<U-FRICT >=  35.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.47000     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.5240     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  16.000     WALL NO.        1
ITEM NO.  58<D-COHE  >=  20.000     WALL NO.        2
ITEM NO.  59<D-FRICT >=  29.260     WALL NO.        1
ITEM NO.  59<D-FRICT >=  35.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.30000     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.1020     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    5


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    5

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  5.8400     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  23.910     WALL NO.        1
ITEM NO.   9<U-FRICT >=  29.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.78700     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.1760     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  23.910     WALL NO.        1
ITEM NO.  59<D-FRICT >=  29.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.37500     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.0380     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    5
```

```
ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -9.5000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  16.000     WALL NO.        1
ITEM NO.   8<U-COHE  >=  20.000     WALL NO.        2
ITEM NO.   9<U-FRICT >=  29.260     WALL NO.        1
ITEM NO.   9<U-FRICT >=  35.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.47000     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.5240     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  16.000     WALL NO.        1
ITEM NO.  58<D-COHE  >=  20.000     WALL NO.        2
ITEM NO.  59<D-FRICT >=  29.260     WALL NO.        1
ITEM NO.  59<D-FRICT >=  35.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.30000     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.1020     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)


DEFAULT WATER UNIT WEIGHT =  10.000
AVERAGED ON    10 VALUES



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                        |
|                                 Exe Time :24 July 2019      10:49:27                                                  |
+-----------------------------------------------------------------------------------------------------------------------+

PHASE DESCRIPTORS


STEP  NO.     1
                                      LEFT WALL    RIGHT WALL
Y                                      0.000       -0.9990E+30
Z-PC                                   0.000         0.000
Z-EXCAVATION                           0.000         0.000
Z-WATER_TABLE                        -26.00        -0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL              0.000         0.000
ZQ                                     0.000         0.000
DZW_OF_THE_WATER_TABLE                 0.000         0.000
QS_ON_THE_EXCAVATION_SIDE              0.000         0.000
ZQS                                 -0.9990E+30    -0.9990E+30
ZCUT                                   0.000         0.000
BALANCE LEVEL FOR PORE PRESSURES     -16.00        -16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)      0.000         0.000
PORE_UPDATE_FLAG                       0.000         0.000
PORE_TAB. _FLAG (gt.0= use tabs)       0.000         0.000
lateral thrusts reduction elevatio     0.000         0.000
Downhill reduction factor for effe     0.000         0.000
Downhill reduction factor for pore     0.000         0.000
Uphill reduction factor for effect     0.000         0.000
Uphill reduction factor for pore p     0.000         0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]       0.000         0.000
UPHILL VERTICAL ACCEL.  Kv_uh [g]      0.000         0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]      0.000         0.000
UPHILL BETA ANGLE (SLOPE) [deg]        0.000         0.000
UPHILL DELTA/PHI RATIO                 0.000         0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]      0.000         0.000
DOWNHILL DELTA/PHI RATIO               0.000         0.000
DYN.WATER BEHAVIOUR                    0.000         0.000
Excess pore pressure RATIO Ru          0.000         0.000
SEISMIC PRESSURE LOWER VALUE           0.000         0.000
SEISMIC PRESSURE UPPER VALUE           0.000         0.000
SEISMIC PRESSURE LOWER LEVEL           0.000         0.000
SEISMIC PRESSURE UPPER LEVEL           0.000         0.000

=============================================================================================================end of step     1
```

STEP NO. 2

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	0.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-16.00	-16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 2

STEP NO. 3

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-3.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-16.00	-16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 3

STEP NO. 4

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-3.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000

DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-16.00	-16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 4

STEP NO. 5

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-6.730	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-16.00	-16.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 5

LEFT-HAND WALL

LOWER LEVEL -16.00000
UPPER LEVEL 0.00000

RIGHT-HAND WALL

LOWER LEVEL -16.00000
UPPER LEVEL 0.00000

+----------+

```
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                     |
|                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                      |
|                                Exe Time :24 July 2019      10:49:27                                                 |
+---------------------------------------------------------------------------------------------------------------------+
 I N I T I A L   S T R E S S   T A B L E S

            S E C T I O N

 NUMBER OF DEFINED TABLES             2


INPUT DATA FOR INITIAL STRESS SET NO.    1
PERTAINING SOIL ELEMENTS AT Y-COORD    0.0000

ACTIVATION TIME                              2.0000
END TIME (TIME BEYOND WHICH IT IS REMOVED)   5.0000

TYPE BOUSSINESQ

 HORIZONTAL DISTANCE (DY)          0.000000000000000E+000
 FOUNDATION WIDTH    (B)            13.0000000000000
 ZETA-F.....                       0.000000000000000E+000
 Q-F .....                          15.0000000000000
 BETA .....                         45.0000000000000
 BEHAVIOUR (0=FREE, 1=REFLECTING)  0.000000000000000E+000


INPUT DATA FOR INITIAL STRESS SET NO.    2
PERTAINING SOIL ELEMENTS AT Y-COORD    0.0000

ACTIVATION TIME                              2.0000
END TIME (TIME BEYOND WHICH IT IS REMOVED)   5.0000

TYPE BOUSSINESQ

 HORIZONTAL DISTANCE (DY)          0.000000000000000E+000
 FOUNDATION WIDTH    (B)            40.0000000000000
 ZETA-F.....                       0.000000000000000E+000
 Q-F .....                          13.0000000000000
 BETA .....                         30.0000000000000
 BEHAVIOUR (0=FREE, 1=REFLECTING)  0.000000000000000E+000


 ELEMENT GROUPS BACKUP AREA CAN STAY IN CORE AT
 POSITION        3803

 NO. OF D.P.W  FOR THIS AREA       9726
 MAX NO. OF D.P.W. AVAILABLE      81920
 ** MAX NO OF ITERATIONS SET TO         100

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5099E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 30.45     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5099E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   164 NODE     82 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     1 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5099E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 30.45     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5099E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   164 NODE     82 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.5099E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 30.45     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.5099E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   164 NODE     82 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0
```

```
+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                               |
|                                  Exe Time :24 July 2019      10:49:27                                                         |
+-------------------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     2 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    1     ( AT TIME   1.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (


ALL NODAL POINTS HAVE ZERO DISPLACEMENT COMPONENTS




+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                               |
|                                  Exe Time :24 July 2019      10:49:27                                                         |
+-------------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   1

0_L                              :
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
C U R R E N T   T I M E   I S      1.0000

 HARDENING 2D SOIL ELEMENT

 ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P           STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1 D   0.000       0.000       0.000       0.000       0.000       0.000            V-C  1.4411E+04   0.000       0.000       1.000       1.000
0.000       0.000       0.000     Strato1_2_8_L_0
   2 D  0.4028       0.000       3.800       2.014       3.800       2.014            V-C  1.4411E+04 -0.2000       0.000       1.000       1.000
2.014       0.000       0.000     Strato1_2_8_L_0
   3 D  0.8056       0.000       7.600       4.028       7.600       4.028            V-C  1.4411E+04 -0.4000       0.000       1.000       1.000
4.028       0.000       0.000     Strato1_2_8_L_0
   4 D   1.208       0.000       11.40       6.042       11.40       6.042            V-C  1.4411E+04 -0.6000       0.000       1.000       1.000
6.042       0.000       0.000     Strato1_2_8_L_0
   5 D   1.611       0.000       15.20       8.056       15.20       8.056            V-C  1.4411E+04 -0.8000       0.000       1.000       1.000
8.056       0.000       0.000     Strato1_2_8_L_0
   6 D   2.014       0.000       19.00       10.07       19.00       10.07            V-C  1.4411E+04  -1.000       0.000       1.000       1.000
10.07       0.000       0.000     Strato1_2_8_L_0
   7 D   2.417       0.000       22.80       12.08       22.80       12.08            V-C  1.4411E+04  -1.200       0.000       1.000       1.000
12.08       0.000       0.000     Strato1_2_8_L_0
   8 D   2.820       0.000       26.60       14.10       26.60       14.10            V-C  1.4411E+04  -1.400       0.000       1.000       1.000
14.10       0.000       0.000     Strato1_2_8_L_0
   9 D   3.222       0.000       30.40       16.11       30.40       16.11            V-C  1.4411E+04  -1.600       0.000       1.000       1.000
16.11       0.000       0.000     Strato1_2_8_L_0
  10 D   3.625       0.000       34.20       18.13       34.20       18.13            V-C  1.4411E+04  -1.800       0.000       1.000       1.000
18.13       0.000       0.000     Strato1_2_8_L_0
  11 D   4.028       0.000       38.00       20.14       38.00       20.14            V-C  1.4411E+04  -2.000       0.000       1.000       1.000
20.14       0.000       0.000     Strato1_2_8_L_0
  12 D   4.431       0.000       41.80       22.15       41.80       22.15            V-C  1.4411E+04  -2.200       0.000       1.000       1.000
22.15       0.000       0.000     Strato1_2_8_L_0
  13 D   3.625       0.000       45.60       24.17       45.60       24.17            V-C  1.4411E+04  -2.400       0.000       1.000       1.000
24.17       0.000       0.000     Strato1_2_8_L_0
  14 D   3.776       0.000       47.50       25.18       47.50       25.18            V-C  1.4411E+04  -2.500       0.000       1.000       1.000
25.18       0.000       0.000     Strato1_2_8_L_0
  15 D   5.438       0.000       51.30       27.19       51.30       27.19            V-C  1.4411E+04  -2.700       0.000       1.000       1.000
27.19       0.000       0.000     Strato1_2_8_L_0
  16 D   5.841       0.000       55.10       29.20       55.10       29.20            V-C  1.4411E+04  -2.900       0.000       1.000       1.000
29.20       0.000       0.000     Strato1_2_8_L_0
  17 D   6.243       0.000       58.90       31.22       58.90       31.22            V-C  1.4411E+04  -3.100       0.000       1.000       1.000
31.22       0.000       0.000     Strato1_2_8_L_0
```

18 D	6.646	0.000	62.70	33.23	62.70	33.23	V-C	1.4411E+04	-3.300	0.000	1.000	1.000
33.23	0.000	0.000	Strato1_2_8_L_0									
19 D	7.049	0.000	66.50	35.25	66.50	35.25	V-C	1.4411E+04	-3.500	0.000	1.000	1.000
35.25	0.000	0.000	Strato1_2_8_L_0									
20 D	7.452	0.000	70.30	37.26	70.30	37.26	V-C	1.4411E+04	-3.700	0.000	1.000	1.000
37.26	0.000	0.000	Strato1_2_8_L_0									
21 D	7.855	0.000	74.10	39.27	74.10	39.27	V-C	1.4411E+04	-3.900	0.000	1.000	1.000
39.27	0.000	0.000	Strato1_2_8_L_0									
22 D	8.257	0.000	77.90	41.29	77.90	41.29	V-C	1.4411E+04	-4.100	0.000	1.000	1.000
41.29	0.000	0.000	Strato1_2_8_L_0									
23 D	8.660	0.000	81.70	43.30	81.70	43.30	V-C	1.4411E+04	-4.300	0.000	1.000	1.000
43.30	0.000	0.000	Strato1_2_8_L_0									
24 D	9.063	0.000	85.50	45.32	85.50	45.32	V-C	1.4411E+04	-4.500	0.000	1.000	1.000
45.31	0.000	0.000	Strato1_2_8_L_0									
25 D	9.466	0.000	89.30	47.33	89.30	47.33	V-C	1.4411E+04	-4.700	0.000	1.000	1.000
47.33	0.000	0.000	Strato1_2_8_L_0									
26 D	9.869	0.000	93.10	49.34	93.10	49.34	V-C	1.4411E+04	-4.900	0.000	1.000	1.000
49.34	0.000	0.000	Strato1_2_8_L_0									
27 D	10.27	0.000	96.90	51.36	96.90	51.36	V-C	1.4411E+04	-5.100	0.000	1.000	1.000
51.36	0.000	0.000	Strato1_2_8_L_0									
28 D	10.67	0.000	100.7	53.37	100.7	53.37	V-C	1.4411E+04	-5.300	0.000	1.000	1.000
53.37	0.000	0.000	Strato1_2_8_L_0									
29 D	11.08	0.000	104.5	55.38	104.5	55.38	V-C	1.4411E+04	-5.500	0.000	1.000	1.000
55.38	0.000	0.000	Strato1_2_8_L_0									
30 D	11.48	0.000	108.3	57.40	108.3	57.40	V-C	1.4411E+04	-5.700	0.000	1.000	1.000
57.40	0.000	0.000	Strato1_2_8_L_0									
31 D	11.88	0.000	112.1	59.41	112.1	59.41	V-C	1.4411E+04	-5.900	0.000	1.000	1.000
59.41	0.000	0.000	Strato1_2_8_L_0									
32 D	12.29	0.000	115.9	61.43	115.9	61.43	V-C	1.4411E+04	-6.100	0.000	1.000	1.000
61.43	0.000	0.000	Strato1_2_8_L_0									
33 D	12.69	0.000	119.7	63.44	119.7	63.44	V-C	1.4411E+04	-6.300	0.000	1.000	1.000
63.44	0.000	0.000	Strato1_2_8_L_0									
34 D	13.09	0.000	123.5	65.45	123.5	65.45	V-C	1.4411E+04	-6.500	0.000	1.000	1.000
65.45	0.000	0.000	Strato1_2_8_L_0									
35 D	13.49	0.000	127.3	67.47	127.3	67.47	V-C	1.4411E+04	-6.700	0.000	1.000	1.000
67.47	0.000	0.000	Strato1_2_8_L_0									
36 D	13.90	0.000	131.1	69.48	131.1	69.48	V-C	1.4411E+04	-6.900	0.000	1.000	1.000
69.48	0.000	0.000	Strato1_2_8_L_0									
37 D	14.30	0.000	134.9	71.50	134.9	71.50	V-C	1.4411E+04	-7.100	0.000	1.000	1.000
71.50	0.000	0.000	Strato1_2_8_L_0									
38 D	14.70	0.000	138.7	73.51	138.7	73.51	V-C	1.4411E+04	-7.300	0.000	1.000	1.000
73.51	0.000	0.000	Strato1_2_8_L_0									
39 D	15.10	0.000	142.5	75.52	142.5	75.52	V-C	1.4411E+04	-7.500	0.000	1.000	1.000
75.52	0.000	0.000	Strato1_2_8_L_0									
40 D	15.51	0.000	146.3	77.54	146.3	77.54	V-C	1.4411E+04	-7.700	0.000	1.000	1.000
77.54	0.000	0.000	Strato1_2_8_L_0									
41 D	15.91	0.000	150.1	79.55	150.1	79.55	V-C	1.4411E+04	-7.900	0.000	1.000	1.000
79.55	0.000	0.000	Strato1_2_8_L_0									
42 D	16.31	0.000	153.9	81.57	153.9	81.57	V-C	1.4411E+04	-8.100	0.000	1.000	1.000
81.57	0.000	0.000	Strato1_2_8_L_0									
43 D	16.72	0.000	157.7	83.58	157.7	83.58	V-C	1.4411E+04	-8.300	0.000	1.000	1.000
83.58	0.000	0.000	Strato1_2_8_L_0									
44 D	17.12	0.000	161.5	85.59	161.5	85.59	V-C	1.4411E+04	-8.500	0.000	1.000	1.000
85.59	0.000	0.000	Strato1_2_8_L_0									
45 D	17.52	0.000	165.3	87.61	165.3	87.61	V-C	1.4411E+04	-8.700	0.000	1.000	1.000
87.61	0.000	0.000	Strato1_2_8_L_0									
46 D	17.92	0.000	169.1	89.62	169.1	89.62	V-C	1.4411E+04	-8.900	0.000	1.000	1.000
89.62	0.000	0.000	Strato1_2_8_L_0									
47 D	18.33	0.000	172.9	91.64	172.9	91.64	V-C	1.4411E+04	-9.100	0.000	1.000	1.000
91.64	0.000	0.000	Strato1_2_8_L_0									
48 D	18.73	0.000	176.7	93.65	176.7	93.65	V-C	1.4411E+04	-9.300	0.000	1.000	1.000
93.65	0.000	0.000	Strato1_2_8_L_0									
49 D	19.13	0.000	180.5	95.66	180.5	95.66	V-C	1.4411E+04	-9.500	0.000	1.000	1.000
95.66	0.000	0.000	Strato1_2_8_L_0									
50 D	18.45	0.000	184.5	92.25	184.5	92.25	V-C	3.9996E+04	-9.700	0.000	1.000	1.000
92.25	0.000	0.000	Strato2_3095_82743_L_0									
51 D	18.85	0.000	188.5	94.25	188.5	94.25	V-C	3.9996E+04	-9.900	0.000	1.000	1.000
94.25	0.000	0.000	Strato2_3095_82743_L_0									
52 D	19.25	0.000	192.5	96.25	192.5	96.25	V-C	3.9996E+04	-10.10	0.000	1.000	1.000
96.25	0.000	0.000	Strato2_3095_82743_L_0									
53 D	19.65	0.000	196.5	98.25	196.5	98.25	V-C	3.9996E+04	-10.30	0.000	1.000	1.000
98.25	0.000	0.000	Strato2_3095_82743_L_0									
54 D	20.05	0.000	200.5	100.2	200.5	100.2	V-C	3.9996E+04	-10.50	0.000	1.000	1.000
100.2	0.000	0.000	Strato2_3095_82743_L_0									
55 D	20.45	0.000	204.5	102.2	204.5	102.2	V-C	3.9996E+04	-10.70	0.000	1.000	1.000
102.2	0.000	0.000	Strato2_3095_82743_L_0									
56 D	20.85	0.000	208.5	104.2	208.5	104.2	V-C	3.9996E+04	-10.90	0.000	1.000	1.000
104.2	0.000	0.000	Strato2_3095_82743_L_0									
57 D	21.25	0.000	212.5	106.2	212.5	106.2	V-C	3.9996E+04	-11.10	0.000	1.000	1.000
106.2	0.000	0.000	Strato2_3095_82743_L_0									
58 D	21.65	0.000	216.5	108.2	216.5	108.2	V-C	3.9996E+04	-11.30	0.000	1.000	1.000
108.2	0.000	0.000	Strato2_3095_82743_L_0									
59 D	22.05	0.000	220.5	110.2	220.5	110.2	V-C	3.9996E+04	-11.50	0.000	1.000	1.000
110.2	0.000	0.000	Strato2_3095_82743_L_0									
60 D	22.45	0.000	224.5	112.2	224.5	112.2	V-C	3.9996E+04	-11.70	0.000	1.000	1.000

112.2	0.000	0.000	Strato2_3095_82743_L_0										
61 D	22.85	0.000	228.5	114.2	228.5	114.2	V-C	3.9996E+04	-11.90	0.000	1.000	1.000	
114.2	0.000	0.000	Strato2_3095_82743_L_0										
62 D	23.25	0.000	232.5	116.2	232.5	116.2	V-C	3.9996E+04	-12.10	0.000	1.000	1.000	
116.2	0.000	0.000	Strato2_3095_82743_L_0										
63 D	23.65	0.000	236.5	118.2	236.5	118.2	V-C	3.9996E+04	-12.30	0.000	1.000	1.000	
118.2	0.000	0.000	Strato2_3095_82743_L_0										
64 D	24.05	0.000	240.5	120.2	240.5	120.2	V-C	3.9996E+04	-12.50	0.000	1.000	1.000	
120.2	0.000	0.000	Strato2_3095_82743_L_0										
65 D	24.45	0.000	244.5	122.2	244.5	122.2	V-C	3.9996E+04	-12.70	0.000	1.000	1.000	
122.2	0.000	0.000	Strato2_3095_82743_L_0										
66 D	24.85	0.000	248.5	124.2	248.5	124.2	V-C	3.9996E+04	-12.90	0.000	1.000	1.000	
124.2	0.000	0.000	Strato2_3095_82743_L_0										
67 D	25.25	0.000	252.5	126.2	252.5	126.2	V-C	3.9996E+04	-13.10	0.000	1.000	1.000	
126.2	0.000	0.000	Strato2_3095_82743_L_0										
68 D	25.65	0.000	256.5	128.2	256.5	128.2	V-C	3.9996E+04	-13.30	0.000	1.000	1.000	
128.2	0.000	0.000	Strato2_3095_82743_L_0										
69 D	26.05	0.000	260.5	130.2	260.5	130.2	V-C	3.9996E+04	-13.50	0.000	1.000	1.000	
130.2	0.000	0.000	Strato2_3095_82743_L_0										
70 D	26.45	0.000	264.5	132.2	264.5	132.2	V-C	3.9996E+04	-13.70	0.000	1.000	1.000	
132.2	0.000	0.000	Strato2_3095_82743_L_0										
71 D	26.85	0.000	268.5	134.2	268.5	134.2	V-C	3.9996E+04	-13.90	0.000	1.000	1.000	
134.2	0.000	0.000	Strato2_3095_82743_L_0										
72 D	27.25	0.000	272.5	136.2	272.5	136.2	V-C	3.9996E+04	-14.10	0.000	1.000	1.000	
136.2	0.000	0.000	Strato2_3095_82743_L_0										
73 D	27.65	0.000	276.5	138.2	276.5	138.2	V-C	3.9996E+04	-14.30	0.000	1.000	1.000	
138.2	0.000	0.000	Strato2_3095_82743_L_0										
74 D	28.05	0.000	280.5	140.2	280.5	140.2	V-C	3.9996E+04	-14.50	0.000	1.000	1.000	
140.2	0.000	0.000	Strato2_3095_82743_L_0										
75 D	28.45	0.000	284.5	142.2	284.5	142.2	V-C	3.9996E+04	-14.70	0.000	1.000	1.000	
142.2	0.000	0.000	Strato2_3095_82743_L_0										
76 D	28.85	0.000	288.5	144.2	288.5	144.2	V-C	3.9996E+04	-14.90	0.000	1.000	1.000	
144.2	0.000	0.000	Strato2_3095_82743_L_0										
77 D	29.25	0.000	292.5	146.2	292.5	146.2	V-C	3.9996E+04	-15.10	0.000	1.000	1.000	
146.2	0.000	0.000	Strato2_3095_82743_L_0										
78 D	29.65	0.000	296.5	148.2	296.5	148.2	V-C	3.9996E+04	-15.30	0.000	1.000	1.000	
148.2	0.000	0.000	Strato2_3095_82743_L_0										
79 D	30.05	0.000	300.5	150.2	300.5	150.2	V-C	3.9996E+04	-15.50	0.000	1.000	1.000	
150.2	0.000	0.000	Strato2_3095_82743_L_0										
80 D	30.45	0.000	304.5	152.2	304.5	152.2	V-C	3.9996E+04	-15.70	0.000	1.000	1.000	
152.2	0.000	0.000	Strato2_3095_82743_L_0										
81 D	23.14	0.000	308.5	154.2	308.5	154.2	V-C	3.9996E+04	-15.90	0.000	1.000	1.000	
154.2	0.000	0.000	Strato2_3095_82743_L_0										
82 D	7.763	0.000	310.5	155.2	310.5	155.2	V-C	3.9996E+04	-16.00	0.000	1.000	1.000	
155.2	0.000	0.000	Strato2_3095_82743_L_0										

```
 +-------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
 |                                                                                                                         |
 |                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                          |
 |                                 Exe Time :24 July 2019      10:49:27                                                    |
 +-------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                          :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
 C U R R E N T   T I M E   I S      1.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****
```

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.000	0.000	0.000	0.000	0.000	0.000	V-C	1.2197E+04	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_2_8_L_0
2 D	0.4028	0.000	3.800	2.014	3.800	2.014	V-C	1.2197E+04	-0.2000	0.000	1.000	1.000	2.014	0.000	0.000	Strato1_2_8_L_0
3 D	0.8056	0.000	7.600	4.028	7.600	4.028	V-C	1.2197E+04	-0.4000	0.000	1.000	1.000	4.028	0.000	0.000	Strato1_2_8_L_0
4 D	1.208	0.000	11.40	6.042	11.40	6.042	V-C	1.2197E+04	-0.6000	0.000	1.000	1.000	6.042	0.000	0.000	Strato1_2_8_L_0
5 D	1.611	0.000	15.20	8.056	15.20	8.056	V-C	1.2197E+04	-0.8000	0.000	1.000	1.000	8.056	0.000	0.000	Strato1_2_8_L_0
6 D	2.014	0.000	19.00	10.07	19.00	10.07	V-C	1.2197E+04	-1.000	0.000	1.000	1.000	10.07	0.000	0.000	Strato1_2_8_L_0
7 D	2.417	0.000	22.80	12.08	22.80	12.08	V-C	1.2197E+04	-1.200	0.000	1.000	1.000				

12.08	0.000	0.000	Strato1_2_8_L_0									
8 D	2.820	0.000	26.60	14.10	26.60	14.10	V-C	1.2197E+04	-1.400	0.000	1.000	1.000
14.10	0.000	0.000	Strato1_2_8_L_0									
9 D	3.222	0.000	30.40	16.11	30.40	16.11	V-C	1.2197E+04	-1.600	0.000	1.000	1.000
16.11	0.000	0.000	Strato1_2_8_L_0									
10 D	3.625	0.000	34.20	18.13	34.20	18.13	V-C	1.2197E+04	-1.800	0.000	1.000	1.000
18.13	0.000	0.000	Strato1_2_8_L_0									
11 D	4.028	0.000	38.00	20.14	38.00	20.14	V-C	1.2197E+04	-2.000	0.000	1.000	1.000
20.14	0.000	0.000	Strato1_2_8_L_0									
12 D	4.431	0.000	41.80	22.15	41.80	22.15	V-C	1.2197E+04	-2.200	0.000	1.000	1.000
22.15	0.000	0.000	Strato1_2_8_L_0									
13 D	3.625	0.000	45.60	24.17	45.60	24.17	V-C	1.2197E+04	-2.400	0.000	1.000	1.000
24.17	0.000	0.000	Strato1_2_8_L_0									
14 D	3.776	0.000	47.50	25.18	47.50	25.18	V-C	1.2197E+04	-2.500	0.000	1.000	1.000
25.18	0.000	0.000	Strato1_2_8_L_0									
15 D	5.438	0.000	51.30	27.19	51.30	27.19	V-C	1.2197E+04	-2.700	0.000	1.000	1.000
27.19	0.000	0.000	Strato1_2_8_L_0									
16 D	5.841	0.000	55.10	29.20	55.10	29.20	V-C	1.2197E+04	-2.900	0.000	1.000	1.000
29.20	0.000	0.000	Strato1_2_8_L_0									
17 D	6.243	0.000	58.90	31.22	58.90	31.22	V-C	1.2197E+04	-3.100	0.000	1.000	1.000
31.22	0.000	0.000	Strato1_2_8_L_0									
18 D	6.646	0.000	62.70	33.23	62.70	33.23	V-C	1.2197E+04	-3.300	0.000	1.000	1.000
33.23	0.000	0.000	Strato1_2_8_L_0									
19 D	7.049	0.000	66.50	35.25	66.50	35.25	V-C	1.2197E+04	-3.500	0.000	1.000	1.000
35.25	0.000	0.000	Strato1_2_8_L_0									
20 D	7.452	0.000	70.30	37.26	70.30	37.26	V-C	1.2197E+04	-3.700	0.000	1.000	1.000
37.26	0.000	0.000	Strato1_2_8_L_0									
21 D	7.855	0.000	74.10	39.27	74.10	39.27	V-C	1.2197E+04	-3.900	0.000	1.000	1.000
39.27	0.000	0.000	Strato1_2_8_L_0									
22 D	8.257	0.000	77.90	41.29	77.90	41.29	V-C	1.2197E+04	-4.100	0.000	1.000	1.000
41.29	0.000	0.000	Strato1_2_8_L_0									
23 D	8.660	0.000	81.70	43.30	81.70	43.30	V-C	1.2197E+04	-4.300	0.000	1.000	1.000
43.30	0.000	0.000	Strato1_2_8_L_0									
24 D	9.063	0.000	85.50	45.32	85.50	45.32	V-C	1.2197E+04	-4.500	0.000	1.000	1.000
45.31	0.000	0.000	Strato1_2_8_L_0									
25 D	9.466	0.000	89.30	47.33	89.30	47.33	V-C	1.2197E+04	-4.700	0.000	1.000	1.000
47.33	0.000	0.000	Strato1_2_8_L_0									
26 D	9.869	0.000	93.10	49.34	93.10	49.34	V-C	1.2197E+04	-4.900	0.000	1.000	1.000
49.34	0.000	0.000	Strato1_2_8_L_0									
27 D	10.27	0.000	96.90	51.36	96.90	51.36	V-C	1.2197E+04	-5.100	0.000	1.000	1.000
51.36	0.000	0.000	Strato1_2_8_L_0									
28 D	10.67	0.000	100.7	53.37	100.7	53.37	V-C	1.2197E+04	-5.300	0.000	1.000	1.000
53.37	0.000	0.000	Strato1_2_8_L_0									
29 D	11.08	0.000	104.5	55.38	104.5	55.38	V-C	1.2197E+04	-5.500	0.000	1.000	1.000
55.38	0.000	0.000	Strato1_2_8_L_0									
30 D	11.48	0.000	108.3	57.40	108.3	57.40	V-C	1.2197E+04	-5.700	0.000	1.000	1.000
57.40	0.000	0.000	Strato1_2_8_L_0									
31 D	11.88	0.000	112.1	59.41	112.1	59.41	V-C	1.2197E+04	-5.900	0.000	1.000	1.000
59.41	0.000	0.000	Strato1_2_8_L_0									
32 D	12.29	0.000	115.9	61.43	115.9	61.43	V-C	1.2197E+04	-6.100	0.000	1.000	1.000
61.43	0.000	0.000	Strato1_2_8_L_0									
33 D	12.69	0.000	119.7	63.44	119.7	63.44	V-C	1.2197E+04	-6.300	0.000	1.000	1.000
63.44	0.000	0.000	Strato1_2_8_L_0									
34 D	13.09	0.000	123.5	65.45	123.5	65.45	V-C	1.2197E+04	-6.500	0.000	1.000	1.000
65.45	0.000	0.000	Strato1_2_8_L_0									
35 D	13.49	0.000	127.3	67.47	127.3	67.47	V-C	1.2197E+04	-6.700	0.000	1.000	1.000
67.47	0.000	0.000	Strato1_2_8_L_0									
36 D	13.90	0.000	131.1	69.48	131.1	69.48	V-C	1.2197E+04	-6.900	0.000	1.000	1.000
69.48	0.000	0.000	Strato1_2_8_L_0									
37 D	14.30	0.000	134.9	71.50	134.9	71.50	V-C	1.2197E+04	-7.100	0.000	1.000	1.000
71.50	0.000	0.000	Strato1_2_8_L_0									
38 D	14.70	0.000	138.7	73.51	138.7	73.51	V-C	1.2197E+04	-7.300	0.000	1.000	1.000
73.51	0.000	0.000	Strato1_2_8_L_0									
39 D	15.10	0.000	142.5	75.52	142.5	75.52	V-C	1.2197E+04	-7.500	0.000	1.000	1.000
75.52	0.000	0.000	Strato1_2_8_L_0									
40 D	15.51	0.000	146.3	77.54	146.3	77.54	V-C	1.2197E+04	-7.700	0.000	1.000	1.000
77.54	0.000	0.000	Strato1_2_8_L_0									
41 D	15.91	0.000	150.1	79.55	150.1	79.55	V-C	1.2197E+04	-7.900	0.000	1.000	1.000
79.55	0.000	0.000	Strato1_2_8_L_0									
42 D	16.31	0.000	153.9	81.57	153.9	81.57	V-C	1.2197E+04	-8.100	0.000	1.000	1.000
81.57	0.000	0.000	Strato1_2_8_L_0									
43 D	16.72	0.000	157.7	83.58	157.7	83.58	V-C	1.2197E+04	-8.300	0.000	1.000	1.000
83.58	0.000	0.000	Strato1_2_8_L_0									
44 D	17.12	0.000	161.5	85.59	161.5	85.59	V-C	1.2197E+04	-8.500	0.000	1.000	1.000
85.59	0.000	0.000	Strato1_2_8_L_0									
45 D	17.52	0.000	165.3	87.61	165.3	87.61	V-C	1.2197E+04	-8.700	0.000	1.000	1.000
87.61	0.000	0.000	Strato1_2_8_L_0									
46 D	17.92	0.000	169.1	89.62	169.1	89.62	V-C	1.2197E+04	-8.900	0.000	1.000	1.000
89.62	0.000	0.000	Strato1_2_8_L_0									
47 D	18.33	0.000	172.9	91.64	172.9	91.64	V-C	1.2197E+04	-9.100	0.000	1.000	1.000
91.64	0.000	0.000	Strato1_2_8_L_0									
48 D	18.73	0.000	176.7	93.65	176.7	93.65	V-C	1.2197E+04	-9.300	0.000	1.000	1.000
93.65	0.000	0.000	Strato1_2_8_L_0									
49 D	19.13	0.000	180.5	95.66	180.5	95.66	V-C	1.2197E+04	-9.500	0.000	1.000	1.000
95.66	0.000	0.000	Strato1_2_8_L_0									

```
  50 D   18.45       0.000       184.5       92.25       184.5       92.25          V-C  2.7468E+04  -9.700       0.000       1.000       1.000
92.25       0.000       0.000     Strato2_3095_82743_L_0
  51 D   18.85       0.000       188.5       94.25       188.5       94.25          V-C  2.7468E+04  -9.900       0.000       1.000       1.000
94.25       0.000       0.000     Strato2_3095_82743_L_0
  52 D   19.25       0.000       192.5       96.25       192.5       96.25          V-C  2.7468E+04  -10.10       0.000       1.000       1.000
96.25       0.000       0.000     Strato2_3095_82743_L_0
  53 D   19.65       0.000       196.5       98.25       196.5       98.25          V-C  2.7468E+04  -10.30       0.000       1.000       1.000
98.25       0.000       0.000     Strato2_3095_82743_L_0
  54 D   20.05       0.000       200.5       100.2       200.5       100.2          V-C  2.7468E+04  -10.50       0.000       1.000       1.000
100.2       0.000       0.000     Strato2_3095_82743_L_0
  55 D   20.45       0.000       204.5       102.2       204.5       102.2          V-C  2.7468E+04  -10.70       0.000       1.000       1.000
102.2       0.000       0.000     Strato2_3095_82743_L_0
  56 D   20.85       0.000       208.5       104.2       208.5       104.2          V-C  2.7468E+04  -10.90       0.000       1.000       1.000
104.2       0.000       0.000     Strato2_3095_82743_L_0
  57 D   21.25       0.000       212.5       106.2       212.5       106.2          V-C  2.7468E+04  -11.10       0.000       1.000       1.000
106.2       0.000       0.000     Strato2_3095_82743_L_0
  58 D   21.65       0.000       216.5       108.2       216.5       108.2          V-C  2.7468E+04  -11.30       0.000       1.000       1.000
108.2       0.000       0.000     Strato2_3095_82743_L_0
  59 D   22.05       0.000       220.5       110.2       220.5       110.2          V-C  2.7468E+04  -11.50       0.000       1.000       1.000
110.2       0.000       0.000     Strato2_3095_82743_L_0
  60 D   22.45       0.000       224.5       112.2       224.5       112.2          V-C  2.7468E+04  -11.70       0.000       1.000       1.000
112.2       0.000       0.000     Strato2_3095_82743_L_0
  61 D   22.85       0.000       228.5       114.2       228.5       114.2          V-C  2.7468E+04  -11.90       0.000       1.000       1.000
114.2       0.000       0.000     Strato2_3095_82743_L_0
  62 D   23.25       0.000       232.5       116.2       232.5       116.2          V-C  2.7468E+04  -12.10       0.000       1.000       1.000
116.2       0.000       0.000     Strato2_3095_82743_L_0
  63 D   23.65       0.000       236.5       118.2       236.5       118.2          V-C  2.7468E+04  -12.30       0.000       1.000       1.000
118.2       0.000       0.000     Strato2_3095_82743_L_0
  64 D   24.05       0.000       240.5       120.2       240.5       120.2          V-C  2.7468E+04  -12.50       0.000       1.000       1.000
120.2       0.000       0.000     Strato2_3095_82743_L_0
  65 D   24.45       0.000       244.5       122.2       244.5       122.2          V-C  2.7468E+04  -12.70       0.000       1.000       1.000
122.2       0.000       0.000     Strato2_3095_82743_L_0
  66 D   24.85       0.000       248.5       124.2       248.5       124.2          V-C  2.7468E+04  -12.90       0.000       1.000       1.000
124.2       0.000       0.000     Strato2_3095_82743_L_0
  67 D   25.25       0.000       252.5       126.2       252.5       126.2          V-C  2.7468E+04  -13.10       0.000       1.000       1.000
126.2       0.000       0.000     Strato2_3095_82743_L_0
  68 D   25.65       0.000       256.5       128.2       256.5       128.2          V-C  2.7468E+04  -13.30       0.000       1.000       1.000
128.2       0.000       0.000     Strato2_3095_82743_L_0
  69 D   26.05       0.000       260.5       130.2       260.5       130.2          V-C  2.7468E+04  -13.50       0.000       1.000       1.000
130.2       0.000       0.000     Strato2_3095_82743_L_0
  70 D   26.45       0.000       264.5       132.2       264.5       132.2          V-C  2.7468E+04  -13.70       0.000       1.000       1.000
132.2       0.000       0.000     Strato2_3095_82743_L_0
  71 D   26.85       0.000       268.5       134.2       268.5       134.2          V-C  2.7468E+04  -13.90       0.000       1.000       1.000
134.2       0.000       0.000     Strato2_3095_82743_L_0
  72 D   27.25       0.000       272.5       136.2       272.5       136.2          V-C  2.7468E+04  -14.10       0.000       1.000       1.000
136.2       0.000       0.000     Strato2_3095_82743_L_0
  73 D   27.65       0.000       276.5       138.2       276.5       138.2          V-C  2.7468E+04  -14.30       0.000       1.000       1.000
138.2       0.000       0.000     Strato2_3095_82743_L_0
  74 D   28.05       0.000       280.5       140.2       280.5       140.2          V-C  2.7468E+04  -14.50       0.000       1.000       1.000
140.2       0.000       0.000     Strato2_3095_82743_L_0
  75 D   28.45       0.000       284.5       142.2       284.5       142.2          V-C  2.7468E+04  -14.70       0.000       1.000       1.000
142.2       0.000       0.000     Strato2_3095_82743_L_0
  76 D   28.85       0.000       288.5       144.2       288.5       144.2          V-C  2.7468E+04  -14.90       0.000       1.000       1.000
144.2       0.000       0.000     Strato2_3095_82743_L_0
  77 D   29.25       0.000       292.5       146.2       292.5       146.2          V-C  2.7468E+04  -15.10       0.000       1.000       1.000
146.2       0.000       0.000     Strato2_3095_82743_L_0
  78 D   29.65       0.000       296.5       148.2       296.5       148.2          V-C  2.7468E+04  -15.30       0.000       1.000       1.000
148.2       0.000       0.000     Strato2_3095_82743_L_0
  79 D   30.05       0.000       300.5       150.2       300.5       150.2          V-C  2.7468E+04  -15.50       0.000       1.000       1.000
150.2       0.000       0.000     Strato2_3095_82743_L_0
  80 D   30.45       0.000       304.5       152.2       304.5       152.2          V-C  2.7468E+04  -15.70       0.000       1.000       1.000
152.2       0.000       0.000     Strato2_3095_82743_L_0
  81 D   23.14       0.000       308.5       154.2       308.5       154.2          V-C  2.7468E+04  -15.90       0.000       1.000       1.000
154.2       0.000       0.000     Strato2_3095_82743_L_0
  82 D   7.763       0.000       310.5       155.2       310.5       155.2          V-C  2.7468E+04  -16.00       0.000       1.000       1.000
155.2       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
 |                                                                                                                               |
 |                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                              |
 |                                    Exe Time :24 July 2019      10:49:27                                                       |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

 WallElement_33                  :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   81
 C U R R E N T   T I M E   I S     1.0000
```

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000
9	0.0000	0.0000	0.0000	0.0000
10	0.0000	0.0000	0.0000	0.0000
11	0.0000	0.0000	0.0000	0.0000
12	0.0000	0.0000	0.0000	0.0000
13	0.0000	0.0000	0.0000	0.0000
14	0.0000	0.0000	0.0000	0.0000
15	0.0000	0.0000	0.0000	0.0000
16	0.0000	0.0000	0.0000	0.0000
17	0.0000	0.0000	0.0000	0.0000
18	0.0000	0.0000	0.0000	0.0000
19	0.0000	0.0000	0.0000	0.0000
20	0.0000	0.0000	0.0000	0.0000
21	0.0000	0.0000	0.0000	0.0000
22	0.0000	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0000
24	0.0000	0.0000	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000
26	0.0000	0.0000	0.0000	0.0000
27	0.0000	0.0000	0.0000	0.0000
28	0.0000	0.0000	0.0000	0.0000
29	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000
31	0.0000	0.0000	0.0000	0.0000
32	0.0000	0.0000	0.0000	0.0000
33	0.0000	0.0000	0.0000	0.0000
34	0.0000	0.0000	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000
36	0.0000	0.0000	0.0000	0.0000
37	0.0000	0.0000	0.0000	0.0000
38	0.0000	0.0000	0.0000	0.0000
39	0.0000	0.0000	0.0000	0.0000
40	0.0000	0.0000	0.0000	0.0000
41	0.0000	0.0000	0.0000	0.0000
42	0.0000	0.0000	0.0000	0.0000
43	0.0000	0.0000	0.0000	0.0000
44	0.0000	0.0000	0.0000	0.0000
45	0.0000	0.0000	0.0000	0.0000
46	0.0000	0.0000	0.0000	0.0000
47	0.0000	0.0000	0.0000	0.0000
48	0.0000	0.0000	0.0000	0.0000
49	0.0000	0.0000	0.0000	0.0000
50	0.0000	0.0000	0.0000	0.0000
51	0.0000	0.0000	0.0000	0.0000
52	0.0000	0.0000	0.0000	0.0000
53	0.0000	0.0000	0.0000	0.0000
54	0.0000	0.0000	0.0000	0.0000
55	0.0000	0.0000	0.0000	0.0000
56	0.0000	0.0000	0.0000	0.0000
57	0.0000	0.0000	0.0000	0.0000
58	0.0000	0.0000	0.0000	0.0000
59	0.0000	0.0000	0.0000	0.0000
60	0.0000	0.0000	0.0000	0.0000
61	0.0000	0.0000	0.0000	0.0000
62	0.0000	0.0000	0.0000	0.0000
63	0.0000	0.0000	0.0000	0.0000
64	0.0000	0.0000	0.0000	0.0000
65	0.0000	0.0000	0.0000	0.0000
66	0.0000	0.0000	0.0000	0.0000
67	0.0000	0.0000	0.0000	0.0000
68	0.0000	0.0000	0.0000	0.0000
69	0.0000	0.0000	0.0000	0.0000
70	0.0000	0.0000	0.0000	0.0000
71	0.0000	0.0000	0.0000	0.0000
72	0.0000	0.0000	0.0000	0.0000
73	0.0000	0.0000	0.0000	0.0000
74	0.0000	0.0000	0.0000	0.0000
75	0.0000	0.0000	0.0000	0.0000
76	0.0000	0.0000	0.0000	0.0000
77	0.0000	0.0000	0.0000	0.0000
78	0.0000	0.0000	0.0000	0.0000
79	0.0000	0.0000	0.0000	0.0000
80	0.0000	0.0000	0.0000	0.0000

```
   81  0.0000      0.0000      0.0000      0.0000


+-------------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                          |
|                                 Exe Time :24 July 2019      10:49:27                                                    |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    4

Tieback_768111                    :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      1.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-----------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.6588E+05 RIMNOR= 0.000
           RENORM= 3330.     REMNOR= 0.000     RATIO =0.2248     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 32.25     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.6588E+05 RDR   = 0.000
           RATIOT=0.2248     RATIOR= 0.000
           MAX UN= 12.35     IEQ=    97 NODE     49 DOF   1  Y-DISPL.F
           MIN UN= 0.000     IEQ=     2 NODE      1 DOF   2   X-ROT. F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.6588E+05 RIMNOR= 0.000
           RENORM= 761.4     REMNOR=0.2786E-18 RATIO =0.1075     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 32.25     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.6588E+05 RDR   = 0.000
           RATIOT=0.1075     RATIOR= 0.000
           MAX UN= 15.46     IEQ=    99 NODE     50 DOF   1  Y-DISPL.F
           MIN UN=-.1672     IEQ=   159 NODE     80 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.6588E+05 RIMNOR= 0.000
           RENORM= 27.44     REMNOR=0.3076E-19 RATIO =0.2041E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 32.25     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.6588E+05 RDR   = 0.000
           RATIOT=0.2041E-01 RATIOR= 0.000
           MAX UN= 4.169     IEQ=   119 NODE     60 DOF   1  Y-DISPL.F
           MIN UN=-.2911     IEQ=   141 NODE     71 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.6588E+05 RIMNOR= 0.000
           RENORM=0.5507E-01 REMNOR=0.4491E-19 RATIO =0.9142E-03 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 32.25     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.6588E+05 RDR   = 0.000
           RATIOT=0.9142E-03 RATIOR= 0.000
           MAX UN=0.1064     IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           MIN UN=-.6735E-01 IEQ=   147 NODE     74 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     5 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.6588E+05 RIMNOR= 0.000
           RENORM=0.2016E-02 REMNOR=0.5522E-19 RATIO =0.1749E-03 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 32.25     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.6588E+05 RDR   = 0.000
           RATIOT=0.1749E-03 RATIOR= 0.000
           MAX UN=0.1818E-01 IEQ=    31 NODE     16 DOF   1  Y-DISPL.F
           MIN UN=-.1079E-01 IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0
```

```
ITER     6 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.6588E+05 RIMNOR= 0.000
           RENORM=0.1368E-03 REMNOR=0.5546E-19 RATIO =0.4557E-04 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 32.25     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.6588E+05 RDR   = 0.000
           RATIOT=0.4557E-04 RATIOR= 0.000
           MAX UN=0.5196E-02 IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           MIN UN=-.1918E-03 IEQ=    97 NODE     49 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                        |
|                                 Exe Time :24 July 2019      10:49:27                                                  |
+-----------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     6 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    2     ( AT TIME   2.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)            (
    1   2.7070174E-03   4.5246100E-05
    2   2.7160701E-03   4.5298414E-05
    3   2.7251453E-03   4.5479450E-05
    4   2.7342715E-03   4.5805477E-05
    5   2.7434733E-03   4.6218312E-05
    6   2.7527569E-03   4.6601645E-05
    7   2.7621033E-03   4.6826187E-05
    8   2.7714687E-03   4.6771197E-05
    9   2.7807857E-03   4.6324786E-05
   10   2.7899654E-03   4.5380125E-05
   11   2.7988978E-03   4.3836024E-05
   12   2.8074537E-03   4.1600191E-05
   13   2.8154862E-03   3.8589346E-05
   14   2.8192561E-03   3.6771867E-05
   15   2.8261948E-03   3.2461998E-05
   16   2.8321778E-03   2.7206374E-05
   17   2.8370107E-03   2.0951544E-05
   18   2.8404889E-03   1.3653177E-05
   19   2.8424000E-03   5.2760790E-06
   20   2.8425257E-03  -4.2056157E-06
   21   2.8406431E-03  -1.4808350E-05
   22   2.8365271E-03  -2.6540291E-05
   23   2.8299517E-03  -3.9401092E-05
   24   2.8206921E-03  -5.3379306E-05
   25   2.8085269E-03  -6.8452998E-05
   26   2.7932401E-03  -8.4589479E-05
   27   2.7746233E-03  -1.0174486E-04
   28   2.7524780E-03  -1.1986407E-04
   29   2.7266178E-03  -1.3888099E-04
   30   2.6968709E-03  -1.5871833E-04
   31   2.6630818E-03  -1.7928606E-04
   32   2.6251148E-03  -2.0048088E-04
   33   2.5828556E-03  -2.2218616E-04
   34   2.5362151E-03  -2.4427082E-04
   35   2.4851317E-03  -2.6658929E-04
   36   2.4295745E-03  -2.8898095E-04
   37   2.3695462E-03  -3.1126985E-04
   38   2.3050865E-03  -3.3326459E-04
   39   2.2362741E-03  -3.5475742E-04
   40   2.1632320E-03  -3.7552308E-04
   41   2.0861296E-03  -3.9531878E-04
   42   2.0051866E-03  -4.1388358E-04
   43   1.9206772E-03  -4.3093789E-04
   44   1.8329324E-03  -4.4618403E-04
   45   1.7423453E-03  -4.5930534E-04
   46   1.6493743E-03  -4.6996547E-04
   47   1.5545469E-03  -4.7780804E-04
   48   1.4584645E-03  -4.8245634E-04
   49   1.3618043E-03  -4.8351327E-04
   50   1.2653265E-03  -4.8056069E-04
   51   1.1698448E-03  -4.7363627E-04
   52   1.0761063E-03  -4.6323253E-04
   53   9.8475488E-04  -4.4981792E-04
```

54	8.9635011E-04	-4.3383854E-04
55	8.1136222E-04	-4.1571790E-04
56	7.3017890E-04	-3.9585799E-04
57	6.5310955E-04	-3.7464017E-04
58	5.8038924E-04	-3.5242629E-04
59	5.1218252E-04	-3.2956001E-04
60	4.4858695E-04	-3.0636799E-04
61	3.8963634E-04	-2.8316076E-04
62	3.3530395E-04	-2.6023399E-04
63	2.8550527E-04	-2.3786941E-04
64	2.4010075E-04	-2.1633630E-04
65	1.9889841E-04	-1.9588821E-04
66	1.6165879E-04	-1.7674031E-04
67	1.2810491E-04	-1.5905311E-04
68	9.7932763E-05	-1.4293761E-04
69	7.0820623E-05	-1.2846071E-04
70	4.6437424E-05	-1.1564962E-04
71	2.4450097E-05	-1.0449869E-04
72	4.5294346E-06	-9.4975456E-05
73	-1.3644800E-05	-8.7022943E-05
74	-3.0378917E-05	-8.0558044E-05
75	-4.5959935E-05	-7.5471906E-05
76	-6.0650937E-05	-7.1634640E-05
77	-7.4687144E-05	-6.8897664E-05
78	-8.8272309E-05	-6.7095272E-05
79	-1.0157546E-04	-6.6046012E-05
80	-1.1472781E-04	-6.5553170E-05
81	-1.2781972E-04	-6.5405239E-05
82	-1.3436040E-04	-6.5397697E-05

PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017*

NewProject.BaseDesignSection_28.A2M2R1_3514

Exe Time :24 July 2019 10:49:27

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 82
C U R R E N T T I M E I S 2.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	2.206	-2.7070E-03	28.00	22.06	22.06	22.20	UL-RL	4.3234E+04	0.000	0.000	1.000	1.000	22.06	0.000	0.000	Strato1_2_8_L_0
2 D	3.297	-2.7161E-03	20.91	16.49	20.91	16.61	UL-RL	4.3234E+04	-0.2000	0.000	1.000	1.000	16.49	0.000	0.000	Strato1_2_8_L_0
3 D	4.265	-2.7251E-03	27.06	21.32	27.06	21.44	UL-RL	4.3234E+04	-0.4000	0.000	1.000	1.000	21.32	0.000	0.000	Strato1_2_8_L_0
4 D	4.785	-2.7343E-03	30.37	23.92	30.37	24.03	UL-RL	4.3234E+04	-0.6000	0.000	1.000	1.000	23.92	0.000	0.000	Strato1_2_8_L_0
5 D	5.515	-2.7435E-03	35.02	27.58	35.02	27.68	UL-RL	4.3234E+04	-0.8000	0.000	1.000	1.000	27.58	0.000	0.000	Strato1_2_8_L_0
6 D	6.053	-2.7528E-03	38.43	30.26	38.43	30.35	UL-RL	4.3234E+04	-1.000	0.000	1.000	1.000	30.26	0.000	0.000	Strato1_2_8_L_0
7 D	6.730	-2.7621E-03	42.74	33.65	42.74	33.73	UL-RL	4.3234E+04	-1.200	0.000	1.000	1.000	33.65	0.000	0.000	Strato1_2_8_L_0
8 D	7.281	-2.7715E-03	46.24	36.40	46.24	36.48	UL-RL	4.3234E+04	-1.400	0.000	1.000	1.000	36.40	0.000	0.000	Strato1_2_8_L_0
9 D	7.798	-2.7808E-03	49.53	38.99	49.53	39.06	UL-RL	4.3234E+04	-1.600	0.000	1.000	1.000	38.99	0.000	0.000	Strato1_2_8_L_0
10 D	8.373	-2.7900E-03	53.19	41.86	53.19	41.92	UL-RL	4.3234E+04	-1.800	0.000	1.000	1.000	41.86	0.000	0.000	Strato1_2_8_L_0
11 D	9.027	-2.7989E-03	57.34	45.13	57.34	45.18	UL-RL	4.3234E+04	-2.000	0.000	1.000	1.000	45.13	0.000	0.000	Strato1_2_8_L_0
12 D	9.603	-2.8075E-03	61.00	48.01	61.00	48.05	UL-RL	4.3234E+04	-2.200	0.000	1.000	1.000	48.01	0.000	0.000	Strato1_2_8_L_0
13 D	7.683	-2.8155E-03	65.08	51.22	65.08	51.25	UL-RL	4.3234E+04	-2.400	0.000	1.000	1.000	51.22	0.000	0.000	Strato1_2_8_L_0
14 D	7.888	-2.8193E-03	66.82	52.59	66.82	52.61	UL-RL	4.3234E+04	-2.500	0.000	1.000	1.000	52.59	0.000	0.000	Strato1_2_8_L_0
15 D	11.10	-2.8262E-03	70.51	55.49	70.51	55.50	ACTIVE	0.000	-2.700	0.000	1.000	1.000				

55.49	0.000	0.000	Strato1_2_8_L_0									
16 D	11.73	-2.8322E-03	74.54	58.66	74.54	58.67	ACTIVE	0.000	-2.900	0.000	1.000	1.000
58.66	0.000	0.000	Strato1_2_8_L_0									
17 D	12.31	-2.8370E-03	78.23	61.57	78.23	61.57	ACTIVE	0.000	-3.100	0.000	1.000	1.000
61.57	0.000	0.000	Strato1_2_8_L_0									
18 D	12.94	-2.8405E-03	82.23	64.72	82.23	64.72	ACTIVE	0.000	-3.300	0.000	1.000	1.000
64.72	0.000	0.000	Strato1_2_8_L_0									
19 D	13.53	-2.8424E-03	85.93	67.63	85.93	67.63	ACTIVE	0.000	-3.500	0.000	1.000	1.000
67.63	0.000	0.000	Strato1_2_8_L_0									
20 D	14.15	-2.8425E-03	89.90	70.75	89.90	70.75	ACTIVE	0.000	-3.700	0.000	1.000	1.000
70.75	0.000	0.000	Strato1_2_8_L_0									
21 D	14.68	-2.8406E-03	93.24	73.38	93.24	73.38	ACTIVE	0.000	-3.900	0.000	1.000	1.000
73.38	0.000	0.000	Strato1_2_8_L_0									
22 D	15.30	-2.8365E-03	97.21	76.50	97.21	76.50	ACTIVE	0.000	-4.100	0.000	1.000	1.000
76.50	0.000	0.000	Strato1_2_8_L_0									
23 D	15.92	-2.8300E-03	101.2	79.61	101.2	79.61	ACTIVE	0.000	-4.300	0.000	1.000	1.000
79.61	0.000	0.000	Strato1_2_8_L_0									
24 D	16.51	-2.8207E-03	104.9	82.55	104.9	82.55	ACTIVE	0.000	-4.500	0.000	1.000	1.000
82.55	0.000	0.000	Strato1_2_8_L_0									
25 D	17.13	-2.8085E-03	108.8	85.64	108.8	85.64	ACTIVE	0.000	-4.700	0.000	1.000	1.000
85.64	0.000	0.000	Strato1_2_8_L_0									
26 D	17.72	-2.7932E-03	112.6	88.58	112.6	88.58	ACTIVE	0.000	-4.900	0.000	1.000	1.000
88.58	0.000	0.000	Strato1_2_8_L_0									
27 D	18.33	-2.7746E-03	116.5	91.67	116.5	91.67	ACTIVE	0.000	-5.100	0.000	1.000	1.000
91.67	0.000	0.000	Strato1_2_8_L_0									
28 D	18.88	-2.7525E-03	119.9	94.39	119.9	94.39	ACTIVE	0.000	-5.300	0.000	1.000	1.000
94.39	0.000	0.000	Strato1_2_8_L_0									
29 D	19.49	-2.7266E-03	123.9	97.47	123.9	97.47	ACTIVE	0.000	-5.500	0.000	1.000	1.000
97.47	0.000	0.000	Strato1_2_8_L_0									
30 D	20.08	-2.6969E-03	127.6	100.4	127.6	100.4	ACTIVE	0.000	-5.700	0.000	1.000	1.000
100.4	0.000	0.000	Strato1_2_8_L_0									
31 D	20.70	-2.6631E-03	131.5	103.5	131.5	103.5	ACTIVE	0.000	-5.900	0.000	1.000	1.000
103.5	0.000	0.000	Strato1_2_8_L_0									
32 D	21.29	-2.6251E-03	135.3	106.5	135.3	106.5	ACTIVE	0.000	-6.100	0.000	1.000	1.000
106.5	0.000	0.000	Strato1_2_8_L_0									
33 D	21.90	-2.5829E-03	139.2	109.5	139.2	109.5	ACTIVE	0.000	-6.300	0.000	1.000	1.000
109.5	0.000	0.000	Strato1_2_8_L_0									
34 D	22.49	-2.5362E-03	142.9	112.5	142.9	112.5	ACTIVE	0.000	-6.500	0.000	1.000	1.000
112.5	0.000	0.000	Strato1_2_8_L_0									
35 D	23.11	-2.4851E-03	146.8	115.5	146.8	115.5	ACTIVE	0.000	-6.700	0.000	1.000	1.000
115.5	0.000	0.000	Strato1_2_8_L_0									
36 D	23.69	-2.4296E-03	150.5	118.4	150.5	118.4	ACTIVE	0.000	-6.900	0.000	1.000	1.000
118.4	0.000	0.000	Strato1_2_8_L_0									
37 D	24.28	-2.3695E-03	154.2	121.4	154.2	121.4	ACTIVE	0.000	-7.100	0.000	1.000	1.000
121.4	0.000	0.000	Strato1_2_8_L_0									
38 D	24.89	-2.3051E-03	158.1	124.4	158.1	124.5	ACTIVE	0.000	-7.300	0.000	1.000	1.000
124.4	0.000	0.000	Strato1_2_8_L_0									
39 D	25.48	-2.2363E-03	161.9	127.4	161.9	127.4	ACTIVE	0.000	-7.500	0.000	1.000	1.000
127.4	0.000	0.000	Strato1_2_8_L_0									
40 D	26.09	-2.1632E-03	165.8	130.5	165.8	130.5	ACTIVE	0.000	-7.700	0.000	1.000	1.000
130.5	0.000	0.000	Strato1_2_8_L_0									
41 D	26.68	-2.0861E-03	169.5	133.4	169.5	133.4	ACTIVE	0.000	-7.900	0.000	1.000	1.000
133.4	0.000	0.000	Strato1_2_8_L_0									
42 D	27.29	-2.0052E-03	173.4	136.5	173.4	136.5	ACTIVE	0.000	-8.100	0.000	1.000	1.000
136.5	0.000	0.000	Strato1_2_8_L_0									
43 D	27.86	-1.9207E-03	177.0	139.3	177.0	139.3	ACTIVE	0.000	-8.300	0.000	1.000	1.000
139.3	0.000	0.000	Strato1_2_8_L_0									
44 D	28.47	-1.8329E-03	180.9	142.3	180.9	142.3	ACTIVE	0.000	-8.500	0.000	1.000	1.000
142.3	0.000	0.000	Strato1_2_8_L_0									
45 D	29.06	-1.7423E-03	184.6	145.3	184.6	145.3	ACTIVE	0.000	-8.700	0.000	1.000	1.000
145.3	0.000	0.000	Strato1_2_8_L_0									
46 D	29.67	-1.6494E-03	188.5	148.4	188.5	148.4	ACTIVE	0.000	-8.900	0.000	1.000	1.000
148.4	0.000	0.000	Strato1_2_8_L_0									
47 D	30.26	-1.5545E-03	192.3	151.3	192.3	151.3	ACTIVE	0.000	-9.100	0.000	1.000	1.000
151.3	0.000	0.000	Strato1_2_8_L_0									
48 D	30.87	-1.4585E-03	196.1	154.4	196.1	154.4	ACTIVE	0.000	-9.300	0.000	1.000	1.000
154.4	0.000	0.000	Strato1_2_8_L_0									
49 D	31.48	-1.3618E-03	200.0	157.4	200.0	157.4	ACTIVE	0.000	-9.500	0.000	1.000	1.000
157.4	0.000	0.000	Strato1_2_8_L_0									
50 D	14.79	-1.2653E-03	204.0	73.94	204.0	102.0	UL-RL	1.1999E+05	-9.700	0.000	1.000	1.000
73.94	0.000	0.000	Strato2_3095_82743_L_0									
51 D	15.16	-1.1698E-03	207.9	75.78	207.9	103.9	UL-RL	1.1999E+05	-9.900	0.000	1.000	1.000
75.78	0.000	0.000	Strato2_3095_82743_L_0									
52 D	15.53	-1.0761E-03	211.9	77.64	211.9	105.9	UL-RL	1.1999E+05	-10.10	0.000	1.000	1.000
77.64	0.000	0.000	Strato2_3095_82743_L_0									
53 D	15.91	-9.8475E-04	215.9	79.55	215.9	108.0	UL-RL	1.1999E+05	-10.30	0.000	1.000	1.000
79.55	0.000	0.000	Strato2_3095_82743_L_0									
54 D	16.28	-8.9635E-04	219.9	81.42	219.9	109.9	UL-RL	1.1999E+05	-10.50	0.000	1.000	1.000
81.42	0.000	0.000	Strato2_3095_82743_L_0									
55 D	16.66	-8.1136E-04	223.9	83.32	223.9	112.0	UL-RL	1.1999E+05	-10.70	0.000	1.000	1.000
83.32	0.000	0.000	Strato2_3095_82743_L_0									
56 D	17.04	-7.3018E-04	227.9	85.19	227.9	114.0	UL-RL	1.1999E+05	-10.90	0.000	1.000	1.000
85.19	0.000	0.000	Strato2_3095_82743_L_0									
57 D	17.42	-6.5311E-04	232.0	87.10	232.0	116.0	UL-RL	1.1999E+05	-11.10	0.000	1.000	1.000
87.10	0.000	0.000	Strato2_3095_82743_L_0									

58	D	17.78	-5.8039E-04	235.8	88.90	235.8	117.9	UL-RL	1.1999E+05	-11.30	0.000	1.000	1.000	88.90
0.000	0.000	Strato2_3095_82743_L_0												
59	D	18.16	-5.1218E-04	239.9	90.81	239.9	119.9	UL-RL	1.1999E+05	-11.50	0.000	1.000	1.000	90.81
0.000	0.000	Strato2_3095_82743_L_0												
60	D	18.53	-4.4859E-04	243.8	92.67	243.8	121.9	UL-RL	1.1999E+05	-11.70	0.000	1.000	1.000	92.67
0.000	0.000	Strato2_3095_82743_L_0												
61	D	18.92	-3.8964E-04	247.9	94.58	247.9	124.0	UL-RL	1.1999E+05	-11.90	0.000	1.000	1.000	94.58
0.000	0.000	Strato2_3095_82743_L_0												
62	D	19.30	-3.3530E-04	252.0	96.49	252.0	126.0	UL-RL	1.1999E+05	-12.10	0.000	1.000	1.000	96.49
0.000	0.000	Strato2_3095_82743_L_0												
63	D	19.67	-2.8551E-04	255.9	98.35	255.9	128.0	UL-RL	1.1999E+05	-12.30	0.000	1.000	1.000	98.35
0.000	0.000	Strato2_3095_82743_L_0												
64	D	20.24	-2.4010E-04	260.0	101.2	260.0	130.0	UL-RL	1.1999E+05	-12.50	0.000	1.000	1.000	101.2
0.000	0.000	Strato2_3095_82743_L_0												
65	D	21.61	-1.9890E-04	263.8	108.1	263.8	131.9	UL-RL	1.1999E+05	-12.70	0.000	1.000	1.000	108.1
0.000	0.000	Strato2_3095_82743_L_0												
66	D	22.91	-1.6166E-04	267.9	114.5	267.9	133.9	UL-RL	1.1999E+05	-12.90	0.000	1.000	1.000	114.5
0.000	0.000	Strato2_3095_82743_L_0												
67	D	24.10	-1.2810E-04	271.8	120.5	271.8	135.9	UL-RL	1.1999E+05	-13.10	0.000	1.000	1.000	120.5
0.000	0.000	Strato2_3095_82743_L_0												
68	D	25.22	-9.7933E-05	275.7	126.1	275.7	137.8	UL-RL	1.1999E+05	-13.30	0.000	1.000	1.000	126.1
0.000	0.000	Strato2_3095_82743_L_0												
69	D	26.26	-7.0821E-05	279.6	131.3	279.6	139.8	UL-RL	1.1999E+05	-13.50	0.000	1.000	1.000	131.3
0.000	0.000	Strato2_3095_82743_L_0												
70	D	27.12	-4.6437E-05	283.5	135.6	283.5	142.0	UL-RL	1.1999E+05	-13.70	0.000	1.000	1.000	135.6
0.000	0.000	Strato2_3095_82743_L_0												
71	D	27.93	-2.4450E-05	287.4	139.7	287.4	144.3	UL-RL	1.1999E+05	-13.90	0.000	1.000	1.000	139.7
0.000	0.000	Strato2_3095_82743_L_0												
72	D	28.72	-4.5294E-06	291.3	143.6	291.3	146.4	UL-RL	1.1999E+05	-14.10	0.000	1.000	1.000	143.6
0.000	0.000	Strato2_3095_82743_L_0												
73	D	29.48	1.3645E-05	295.1	147.4	295.1	148.5	UL-RL	1.1999E+05	-14.30	0.000	1.000	1.000	147.4
0.000	0.000	Strato2_3095_82743_L_0												
74	D	30.08	3.0379E-05	299.0	150.4	299.0	150.9	UL-RL	1.1999E+05	-14.50	0.000	1.000	1.000	150.4
0.000	0.000	Strato2_3095_82743_L_0												
75	D	30.63	4.5960E-05	303.0	153.2	303.0	153.4	UL-RL	1.1999E+05	-14.70	0.000	1.000	1.000	153.2
0.000	0.000	Strato2_3095_82743_L_0												
76	D	31.17	6.0651E-05	306.9	155.9	306.9	155.9	UL-RL	1.1999E+05	-14.90	0.000	1.000	1.000	155.9
0.000	0.000	Strato2_3095_82743_L_0												
77	D	31.68	7.4687E-05	310.8	158.4	310.8	158.4	V-C	3.9996E+04	-15.10	0.000	1.000	1.000	158.4
0.000	0.000	Strato2_3095_82743_L_0												
78	D	32.18	8.8272E-05	314.7	160.9	314.7	160.9	V-C	3.9996E+04	-15.30	0.000	1.000	1.000	160.9
0.000	0.000	Strato2_3095_82743_L_0												
79	D	32.68	1.0158E-04	318.7	163.4	318.7	163.4	V-C	3.9996E+04	-15.50	0.000	1.000	1.000	163.4
0.000	0.000	Strato2_3095_82743_L_0												
80	D	33.17	1.1473E-04	322.5	165.8	322.5	165.8	V-C	3.9996E+04	-15.70	0.000	1.000	1.000	165.8
0.000	0.000	Strato2_3095_82743_L_0												
81	D	25.25	1.2782E-04	326.4	168.3	326.4	168.3	V-C	3.9996E+04	-15.90	0.000	1.000	1.000	168.3
0.000	0.000	Strato2_3095_82743_L_0												
82	D	8.479	1.3436E-04	328.4	169.6	328.4	169.6	V-C	3.9996E+04	-16.00	0.000	1.000	1.000	169.6
0.000	0.000	Strato2_3095_82743_L_0												

```
 +-------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
 |                                                                                                                         |
 |                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                          |
 |                                  Exe Time :24 July 2019      10:49:27                                                   |
 +-------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                          :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
 C U R R E N T   T I M E   I S     2.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****
```

EL	*	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq
Su_a	Su_p	LAYER												
1	D	0.000	2.7070E-03	0.000	0.000	0.000	0.000	ACTIVE	0.000	0.000	0.000	1.000	1.000	0.000
0.000	0.000	Strato1_2_8_L_0												
2	D	2.277	2.7161E-03	3.800	11.39	3.800	11.54	UL-RL	3.6592E+04	-0.2000	0.000	1.000	1.000	11.39
0.000	0.000	Strato1_2_8_L_0												
3	D	4.589	2.7251E-03	7.600	22.95	7.600	23.09	UL-RL	3.6592E+04	-0.4000	0.000	1.000	1.000	22.95
0.000	0.000	Strato1_2_8_L_0												
4	D	6.902	2.7343E-03	11.40	34.51	11.40	34.63	UL-RL	3.6592E+04	-0.6000	0.000	1.000	1.000	34.51
0.000	0.000	Strato1_2_8_L_0												

5 D	8.290	2.7435E-03	15.20	41.45	15.20	41.55	UL-RL	3.6592E+04	-0.8000	0.000	1.000	1.000
41.45	0.000	0.000	Strato1_2_8_L_0									
6 D	8.717	2.7528E-03	19.00	43.59	19.00	43.68	UL-RL	3.6592E+04	-1.000	0.000	1.000	1.000
43.59	0.000	0.000	Strato1_2_8_L_0									
7 D	9.145	2.7621E-03	22.80	45.73	22.80	45.80	UL-RL	3.6592E+04	-1.200	0.000	1.000	1.000
45.73	0.000	0.000	Strato1_2_8_L_0									
8 D	9.573	2.7715E-03	26.60	47.87	26.60	47.92	UL-RL	3.6592E+04	-1.400	0.000	1.000	1.000
47.87	0.000	0.000	Strato1_2_8_L_0									
9 D	10.00	2.7808E-03	30.40	50.01	30.40	50.04	UL-RL	3.6592E+04	-1.600	0.000	1.000	1.000
50.01	0.000	0.000	Strato1_2_8_L_0									
10 D	10.43	2.7900E-03	34.20	52.14	34.20	52.16	UL-RL	3.6592E+04	-1.800	0.000	1.000	1.000
52.14	0.000	0.000	Strato1_2_8_L_0									
11 D	10.86	2.7989E-03	38.00	54.28	38.00	54.28	UL-RL	3.6592E+04	-2.000	0.000	1.000	1.000
54.28	0.000	0.000	Strato1_2_8_L_0									
12 D	11.28	2.8075E-03	41.80	56.40	41.80	56.40	UL-RL	3.6592E+04	-2.200	0.000	1.000	1.000
56.40	0.000	0.000	Strato1_2_8_L_0									
13 D	8.776	2.8155E-03	45.60	58.51	45.60	58.51	UL-RL	3.6592E+04	-2.400	0.000	1.000	1.000
58.51	0.000	0.000	Strato1_2_8_L_0									
14 D	8.934	2.8193E-03	47.50	59.56	47.50	59.56	UL-RL	3.6592E+04	-2.500	0.000	1.000	1.000
59.56	0.000	0.000	Strato1_2_8_L_0									
15 D	12.33	2.8262E-03	51.30	61.66	51.30	61.66	V-C	1.2197E+04	-2.700	0.000	1.000	1.000
61.66	0.000	0.000	Strato1_2_8_L_0									
16 D	12.75	2.8322E-03	55.10	63.75	55.10	63.75	V-C	1.2197E+04	-2.900	0.000	1.000	1.000
63.75	0.000	0.000	Strato1_2_8_L_0									
17 D	13.16	2.8370E-03	58.90	65.82	58.90	65.82	V-C	1.2197E+04	-3.100	0.000	1.000	1.000
65.82	0.000	0.000	Strato1_2_8_L_0									
18 D	13.58	2.8405E-03	62.70	67.88	62.70	67.88	V-C	1.2197E+04	-3.300	0.000	1.000	1.000
67.88	0.000	0.000	Strato1_2_8_L_0									
19 D	13.98	2.8424E-03	66.50	69.91	66.50	69.91	V-C	1.2197E+04	-3.500	0.000	1.000	1.000
69.91	0.000	0.000	Strato1_2_8_L_0									
20 D	14.39	2.8425E-03	70.30	71.93	70.30	71.93	V-C	1.2197E+04	-3.700	0.000	1.000	1.000
71.93	0.000	0.000	Strato1_2_8_L_0									
21 D	14.78	2.8406E-03	74.10	73.92	74.10	73.92	V-C	1.2197E+04	-3.900	0.000	1.000	1.000
73.92	0.000	0.000	Strato1_2_8_L_0									
22 D	15.18	2.8365E-03	77.90	75.89	77.90	75.89	V-C	1.2197E+04	-4.100	0.000	1.000	1.000
75.89	0.000	0.000	Strato1_2_8_L_0									
23 D	15.56	2.8300E-03	81.70	77.82	81.70	77.82	V-C	1.2197E+04	-4.300	0.000	1.000	1.000
77.82	0.000	0.000	Strato1_2_8_L_0									
24 D	15.94	2.8207E-03	85.50	79.72	85.50	79.72	V-C	1.2197E+04	-4.500	0.000	1.000	1.000
79.72	0.000	0.000	Strato1_2_8_L_0									
25 D	16.32	2.8085E-03	89.30	81.59	89.30	81.59	V-C	1.2197E+04	-4.700	0.000	1.000	1.000
81.59	0.000	0.000	Strato1_2_8_L_0									
26 D	16.68	2.7932E-03	93.10	83.41	93.10	83.41	V-C	1.2197E+04	-4.900	0.000	1.000	1.000
83.41	0.000	0.000	Strato1_2_8_L_0									
27 D	17.04	2.7746E-03	96.90	85.20	96.90	85.20	V-C	1.2197E+04	-5.100	0.000	1.000	1.000
85.20	0.000	0.000	Strato1_2_8_L_0									
28 D	17.39	2.7525E-03	100.7	86.94	100.7	86.94	V-C	1.2197E+04	-5.300	0.000	1.000	1.000
86.94	0.000	0.000	Strato1_2_8_L_0									
29 D	17.73	2.7266E-03	104.5	88.64	104.5	88.64	V-C	1.2197E+04	-5.500	0.000	1.000	1.000
88.64	0.000	0.000	Strato1_2_8_L_0									
30 D	18.06	2.6969E-03	108.3	90.29	108.3	90.29	V-C	1.2197E+04	-5.700	0.000	1.000	1.000
90.29	0.000	0.000	Strato1_2_8_L_0									
31 D	18.38	2.6631E-03	112.1	91.90	112.1	91.90	V-C	1.2197E+04	-5.900	0.000	1.000	1.000
91.90	0.000	0.000	Strato1_2_8_L_0									
32 D	18.69	2.6251E-03	115.9	93.45	115.9	93.45	V-C	1.2197E+04	-6.100	0.000	1.000	1.000
93.45	0.000	0.000	Strato1_2_8_L_0									
33 D	18.99	2.5829E-03	119.7	94.94	119.7	94.94	V-C	1.2197E+04	-6.300	0.000	1.000	1.000
94.94	0.000	0.000	Strato1_2_8_L_0									
34 D	19.28	2.5362E-03	123.5	96.39	123.5	96.39	V-C	1.2197E+04	-6.500	0.000	1.000	1.000
96.39	0.000	0.000	Strato1_2_8_L_0									
35 D	19.56	2.4851E-03	127.3	97.78	127.3	97.78	V-C	1.2197E+04	-6.700	0.000	1.000	1.000
97.78	0.000	0.000	Strato1_2_8_L_0									
36 D	19.82	2.4296E-03	131.1	99.12	131.1	99.12	V-C	1.2197E+04	-6.900	0.000	1.000	1.000
99.12	0.000	0.000	Strato1_2_8_L_0									
37 D	20.08	2.3695E-03	134.9	100.4	134.9	100.4	V-C	1.2197E+04	-7.100	0.000	1.000	1.000
100.4	0.000	0.000	Strato1_2_8_L_0									
38 D	20.33	2.3051E-03	138.7	101.6	138.7	101.6	V-C	1.2197E+04	-7.300	0.000	1.000	1.000
101.6	0.000	0.000	Strato1_2_8_L_0									
39 D	20.56	2.2363E-03	142.5	102.8	142.5	102.8	V-C	1.2197E+04	-7.500	0.000	1.000	1.000
102.8	0.000	0.000	Strato1_2_8_L_0									
40 D	20.78	2.1632E-03	146.3	103.9	146.3	103.9	V-C	1.2197E+04	-7.700	0.000	1.000	1.000
103.9	0.000	0.000	Strato1_2_8_L_0									
41 D	21.00	2.0861E-03	150.1	105.0	150.1	105.0	V-C	1.2197E+04	-7.900	0.000	1.000	1.000
105.0	0.000	0.000	Strato1_2_8_L_0									
42 D	21.20	2.0052E-03	153.9	106.0	153.9	106.0	UL-RL	3.6592E+04	-8.100	0.000	1.000	1.000
106.0	0.000	0.000	Strato1_2_8_L_0									
43 D	21.40	1.9207E-03	157.7	107.0	157.7	107.0	UL-RL	3.6592E+04	-8.300	0.000	1.000	1.000
107.0	0.000	0.000	Strato1_2_8_L_0									
44 D	21.59	1.8329E-03	161.5	108.0	161.5	108.0	UL-RL	3.6592E+04	-8.500	0.000	1.000	1.000
108.0	0.000	0.000	Strato1_2_8_L_0									
45 D	21.77	1.7423E-03	165.3	108.9	165.3	108.9	UL-RL	3.6592E+04	-8.700	0.000	1.000	1.000
108.9	0.000	0.000	Strato1_2_8_L_0									
46 D	21.95	1.6494E-03	169.1	109.7	169.1	109.7	UL-RL	3.6592E+04	-8.900	0.000	1.000	1.000
109.7	0.000	0.000	Strato1_2_8_L_0									
47 D	22.12	1.5545E-03	172.9	110.6	172.9	110.6	UL-RL	3.6592E+04	-9.100	0.000	1.000	1.000

110.6	0.000	0.000	Strato1_2_8_L_0									
48 D	22.29	1.4585E-03	176.7	111.4	176.7	111.4	UL-RL	3.6592E+04	-9.300	0.000	1.000	1.000
111.4	0.000	0.000	Strato1_2_8_L_0									
49 D	22.45	1.3618E-03	180.5	112.3	180.5	112.3	UL-RL	3.6592E+04	-9.500	0.000	1.000	1.000
112.3	0.000	0.000	Strato1_2_8_L_0									
50 D	25.40	1.2653E-03	184.5	127.0	184.5	127.0	UL-RL	8.2405E+04	-9.700	0.000	1.000	1.000
127.0	0.000	0.000	Strato2_3095_82743_L_0									
51 D	25.28	1.1698E-03	188.5	126.4	188.5	126.4	UL-RL	8.2405E+04	-9.900	0.000	1.000	1.000
126.4	0.000	0.000	Strato2_3095_82743_L_0									
52 D	25.16	1.0761E-03	192.5	125.8	192.5	125.8	UL-RL	8.2405E+04	-10.10	0.000	1.000	1.000
125.8	0.000	0.000	Strato2_3095_82743_L_0									
53 D	25.06	9.8475E-04	196.5	125.3	196.5	125.3	UL-RL	8.2405E+04	-10.30	0.000	1.000	1.000
125.3	0.000	0.000	Strato2_3095_82743_L_0									
54 D	24.97	8.9635E-04	200.5	124.9	200.5	124.9	UL-RL	8.2405E+04	-10.50	0.000	1.000	1.000
124.9	0.000	0.000	Strato2_3095_82743_L_0									
55 D	24.91	8.1136E-04	204.5	124.5	204.5	124.5	UL-RL	8.2405E+04	-10.70	0.000	1.000	1.000
124.5	0.000	0.000	Strato2_3095_82743_L_0									
56 D	24.86	7.3018E-04	208.5	124.3	208.5	124.3	UL-RL	8.2405E+04	-10.90	0.000	1.000	1.000
124.3	0.000	0.000	Strato2_3095_82743_L_0									
57 D	24.84	6.5311E-04	212.5	124.2	212.5	124.2	UL-RL	8.2405E+04	-11.10	0.000	1.000	1.000
124.2	0.000	0.000	Strato2_3095_82743_L_0									
58 D	24.84	5.8039E-04	216.5	124.2	216.5	124.2	UL-RL	8.2405E+04	-11.30	0.000	1.000	1.000
124.2	0.000	0.000	Strato2_3095_82743_L_0									
59 D	24.86	5.1218E-04	220.5	124.3	220.5	124.3	UL-RL	8.2405E+04	-11.50	0.000	1.000	1.000
124.3	0.000	0.000	Strato2_3095_82743_L_0									
60 D	24.91	4.4859E-04	224.5	124.6	224.5	124.6	UL-RL	8.2405E+04	-11.70	0.000	1.000	1.000
124.6	0.000	0.000	Strato2_3095_82743_L_0									
61 D	24.99	3.8964E-04	228.5	125.0	228.5	125.0	UL-RL	8.2405E+04	-11.90	0.000	1.000	1.000
125.0	0.000	0.000	Strato2_3095_82743_L_0									
62 D	25.09	3.3530E-04	232.5	125.5	232.5	125.5	UL-RL	8.2405E+04	-12.10	0.000	1.000	1.000
125.5	0.000	0.000	Strato2_3095_82743_L_0									
63 D	25.22	2.8551E-04	236.5	126.1	236.5	126.1	UL-RL	8.2405E+04	-12.30	0.000	1.000	1.000
126.1	0.000	0.000	Strato2_3095_82743_L_0									
64 D	25.37	2.4010E-04	240.5	126.8	240.5	126.8	UL-RL	8.2405E+04	-12.50	0.000	1.000	1.000
126.8	0.000	0.000	Strato2_3095_82743_L_0									
65 D	25.54	1.9890E-04	244.5	127.7	244.5	127.7	UL-RL	8.2405E+04	-12.70	0.000	1.000	1.000
127.7	0.000	0.000	Strato2_3095_82743_L_0									
66 D	25.74	1.6166E-04	248.5	128.7	248.5	128.7	UL-RL	8.2405E+04	-12.90	0.000	1.000	1.000
128.7	0.000	0.000	Strato2_3095_82743_L_0									
67 D	25.95	1.2810E-04	252.5	129.8	252.5	129.8	UL-RL	8.2405E+04	-13.10	0.000	1.000	1.000
129.8	0.000	0.000	Strato2_3095_82743_L_0									
68 D	26.19	9.7933E-05	256.5	130.9	256.5	130.9	UL-RL	8.2405E+04	-13.30	0.000	1.000	1.000
130.9	0.000	0.000	Strato2_3095_82743_L_0									
69 D	26.44	7.0821E-05	260.5	132.2	260.5	132.2	UL-RL	8.2405E+04	-13.50	0.000	1.000	1.000
132.2	0.000	0.000	Strato2_3095_82743_L_0									
70 D	26.70	4.6437E-05	264.5	133.5	264.5	133.5	UL-RL	8.2405E+04	-13.70	0.000	1.000	1.000
133.5	0.000	0.000	Strato2_3095_82743_L_0									
71 D	26.98	2.4450E-05	268.5	134.9	268.5	134.9	UL-RL	8.2405E+04	-13.90	0.000	1.000	1.000
134.9	0.000	0.000	Strato2_3095_82743_L_0									
72 D	27.27	4.5294E-06	272.5	136.4	272.5	136.4	UL-RL	8.2405E+04	-14.10	0.000	1.000	1.000
136.4	0.000	0.000	Strato2_3095_82743_L_0									
73 D	27.43	-1.3645E-05	276.5	137.1	276.5	138.2	UL-RL	8.2405E+04	-14.30	0.000	1.000	1.000
137.1	0.000	0.000	Strato2_3095_82743_L_0									
74 D	27.55	-3.0379E-05	280.5	137.7	280.5	140.2	UL-RL	8.2405E+04	-14.50	0.000	1.000	1.000
137.7	0.000	0.000	Strato2_3095_82743_L_0									
75 D	27.69	-4.5960E-05	284.5	138.5	284.5	142.2	UL-RL	8.2405E+04	-14.70	0.000	1.000	1.000
138.5	0.000	0.000	Strato2_3095_82743_L_0									
76 D	27.85	-6.0651E-05	288.5	139.3	288.5	144.2	UL-RL	8.2405E+04	-14.90	0.000	1.000	1.000
139.3	0.000	0.000	Strato2_3095_82743_L_0									
77 D	28.02	-7.4687E-05	292.5	140.1	292.5	146.2	UL-RL	8.2405E+04	-15.10	0.000	1.000	1.000
140.1	0.000	0.000	Strato2_3095_82743_L_0									
78 D	28.20	-8.8272E-05	296.5	141.0	296.5	148.2	UL-RL	8.2405E+04	-15.30	0.000	1.000	1.000
141.0	0.000	0.000	Strato2_3095_82743_L_0									
79 D	28.38	-1.0158E-04	300.5	141.9	300.5	150.2	UL-RL	8.2405E+04	-15.50	0.000	1.000	1.000
141.9	0.000	0.000	Strato2_3095_82743_L_0									
80 D	28.56	-1.1473E-04	304.5	142.8	304.5	152.2	UL-RL	8.2405E+04	-15.70	0.000	1.000	1.000
142.8	0.000	0.000	Strato2_3095_82743_L_0									
81 D	21.56	-1.2782E-04	308.5	143.7	308.5	154.2	UL-RL	8.2405E+04	-15.90	0.000	1.000	1.000
143.7	0.000	0.000	Strato2_3095_82743_L_0									
82 D	7.209	-1.3436E-04	310.5	144.2	310.5	155.2	UL-RL	8.2405E+04	-16.00	0.000	1.000	1.000
144.2	0.000	0.000	Strato2_3095_82743_L_0									

```
+------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*        |
|                                                                                                                  |
|                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                 |
|                                   Exe Time :24 July 2019      10:49:27                                           |
+------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P  N O.   3
```

WallElement_33 :
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 81
C U R R E N T T I M E I S 2.0000

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	2.2036	-2.2036	2.74505E-11	0.44072
2	3.2185	-3.2185	-0.44072	1.0844
3	2.8889	-2.8889	-1.0844	1.6622
4	0.76767	-0.76767	-1.6622	1.8157
5	-2.0104	2.0104	-1.8157	1.4137
6	-4.6783	4.6783	-1.4137	0.47800
7	-7.0964	7.0964	-0.47800	-0.94127
8	-9.3912	9.3912	0.94127	-2.8195
9	-11.596	11.596	2.8195	-5.1388
10	-13.654	13.654	5.1388	-7.8695
11	-15.484	15.484	7.8695	-10.966
12	-17.162	17.162	10.966	-14.399
13	-18.255	18.255	14.399	-16.224
14	-19.302	19.302	16.224	-20.084
15	-20.536	20.536	20.084	-24.192
16	-21.553	21.553	24.192	-28.502
17	-22.403	22.403	28.502	-32.983
18	-23.036	23.036	32.983	-37.590
19	-23.493	23.493	37.590	-42.289
20	-23.728	23.728	42.289	-47.034
21	-23.837	23.837	47.034	-51.802
22	-23.714	23.714	51.802	-56.544
23	-23.355	23.355	56.544	-61.215
24	-22.790	22.790	61.215	-65.773
25	-21.978	21.978	65.773	-70.169
26	-20.945	20.945	70.169	-74.358
27	-19.651	19.651	74.358	-78.288
28	-18.162	18.162	78.288	-81.920
29	-16.396	16.396	81.920	-85.200
30	-14.370	14.370	85.200	-88.074
31	-12.049	12.049	88.074	-90.483
32	-9.4481	9.4481	90.483	-92.373
33	-6.5326	6.5326	92.373	-93.680
34	-3.3161	3.3161	93.680	-94.343
35	0.23346	-0.23346	94.343	-94.296
36	4.0949	-4.0949	94.296	-93.477
37	8.2914	-8.2914	93.477	-91.819
38	12.855	-12.855	91.819	-89.248
39	17.775	-17.775	89.248	-85.693
40	23.082	-23.082	85.693	-81.076
41	28.766	-28.766	81.076	-75.323
42	34.856	-34.856	75.323	-68.352
43	41.312	-41.312	68.352	-60.089
44	48.191	-48.191	60.089	-50.451
45	55.480	-55.480	50.451	-39.355
46	63.203	-63.203	39.355	-26.715
47	71.347	-71.347	26.715	-12.445
48	79.932	-79.932	12.445	3.5412
49	88.959	-88.959	-3.5412	21.333
50	78.345	-78.345	-21.333	37.002
51	68.225	-68.225	-37.002	50.647
52	58.592	-58.592	-50.647	62.365
53	49.443	-49.443	-62.365	72.254
54	40.752	-40.752	-72.254	80.404
55	32.510	-32.510	-80.404	86.906
56	24.688	-24.688	-86.906	91.844
57	17.269	-17.269	-91.844	95.297
58	10.211	-10.211	-95.297	97.340
59	3.5096	-3.5096	-97.340	98.042
60	-2.8695	2.8695	-98.042	97.468
61	-8.9435	8.9435	-97.468	95.679
62	-14.738	14.738	-95.679	92.732
63	-20.285	20.285	-92.732	88.674
64	-25.418	25.418	-88.674	83.591
65	-29.350	29.350	-83.591	77.721
66	-32.178	32.178	-77.721	71.285
67	-34.027	34.027	-71.285	64.480
68	-34.995	34.995	-64.480	57.481
69	-35.173	35.173	-57.481	50.446
70	-34.757	34.757	-50.446	43.495
71	-33.806	33.806	-43.495	36.734
72	-32.357	32.357	-36.734	30.262
73	-30.305	30.305	-30.262	24.201
74	-27.772	27.772	-24.201	18.647
75	-24.834	24.834	-18.647	13.680
76	-21.513	21.513	-13.680	9.3775

```
   77 -17.854      17.854     -9.3775      5.8067
   78 -13.870      13.870     -5.8067      3.0328
   79 -9.5678      9.5678     -3.0328      1.1192
   80 -4.9607      4.9607     -1.1192     0.12705
   81 -1.2704      1.2704    -0.12705     1.90378E-12


+-----------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                       |
|                                  Exe Time :24 July 2019      10:49:27                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P    N O.    4

Tieback_768111                    :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      2.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2182E+06 RIMNOR=0.5906E+06
           RENORM= 1992.     REMNOR=0.5546E-19 RATIO =0.9555E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 88.96     RMMAX = 98.04
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-03
           RDT   =0.2182E+06 RDR   =0.5906E+06
           RATIOT=0.9555E-01 RATIOR= 0.000
           MAX UN= 12.75     IEQ=    31 NODE     16 DOF   1  Y-DISPL.F
           MIN UN=-.1918E-03 IEQ=    97 NODE     49 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2182E+06 RIMNOR=0.5906E+06
           RENORM= 1646.     REMNOR=0.1562E-16 RATIO =0.8685E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 88.96     RMMAX = 98.04
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-03
           RDT   =0.2182E+06 RDR   =0.5906E+06
           RATIOT=0.8685E-01 RATIOR= 0.000
           MAX UN= 18.58     IEQ=    47 NODE     24 DOF   1  Y-DISPL.F
           MIN UN=-1.043     IEQ=   145 NODE     73 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2182E+06 RIMNOR=0.5906E+06
           RENORM= 276.1     REMNOR=0.1166E-16 RATIO =0.3557E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 88.96     RMMAX = 98.04
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-03
           RDT   =0.2182E+06 RDR   =0.5906E+06
           RATIOT=0.3557E-01 RATIOR= 0.000
           MAX UN= 9.104     IEQ=   115 NODE     58 DOF   1  Y-DISPL.F
           MIN UN=-2.875     IEQ=   157 NODE     79 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2182E+06 RIMNOR=0.5906E+06
           RENORM= 10.83     REMNOR=0.1105E-16 RATIO =0.7044E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 88.96     RMMAX = 98.04
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-03
           RDT   =0.2182E+06 RDR   =0.5906E+06
           RATIOT=0.7044E-02 RATIOR= 0.000
           MAX UN= 2.435     IEQ=   125 NODE     63 DOF   1  Y-DISPL.F
           MIN UN=-.9418     IEQ=   133 NODE     67 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     5 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2182E+06 RIMNOR=0.5906E+06
           RENORM=0.5534E-04 REMNOR=0.3846E-17 RATIO =0.1593E-04 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 88.96     RMMAX = 98.04
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-03
           RDT   =0.2182E+06 RDR   =0.5906E+06
```

```
          RATIOT=0.1593E-04 RATIOR= 0.000
          MAX UN=0.1881E-07 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
          MIN UN=-.7439E-02 IEQ=   145 NODE     73 DOF   1  Y-DISPL.F
          NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                       |
|                                  Exe Time :24 July 2019      10:49:27                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     5 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    3     ( AT TIME   3.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (
    1   5.5431856E-02  -6.5031609E-03
    2   5.4131227E-02  -6.5031086E-03
    3   5.2830625E-02  -6.5028735E-03
    4   5.1530102E-02  -6.5022763E-03
    5   5.0229753E-02  -6.5011025E-03
    6   4.8929716E-02  -6.4991076E-03
    7   4.7630183E-02  -6.4960173E-03
    8   4.6331402E-02  -6.4915282E-03
    9   4.5033687E-02  -6.4853078E-03
   10   4.3737418E-02  -6.4769982E-03
   11   4.2443052E-02  -6.4662157E-03
   12   4.1151124E-02  -6.4525472E-03
   13   3.9862255E-02  -6.4355504E-03
   14   3.9219186E-02  -6.4256729E-03
   15   3.7936268E-02  -6.4027899E-03
   16   3.6658374E-02  -6.3753480E-03
   17   3.5386469E-02  -6.3428052E-03
   18   3.4121628E-02  -6.3046180E-03
   19   3.2865031E-02  -6.2602964E-03
   20   3.1617946E-02  -6.2094314E-03
   21   3.0381716E-02  -6.1516947E-03
   22   2.9157742E-02  -6.0868404E-03
   23   2.7947465E-02  -6.0147053E-03
   24   2.6752351E-02  -5.9352056E-03
   25   2.5573874E-02  -5.8483389E-03
   26   2.4413502E-02  -5.7541836E-03
   27   2.3272682E-02  -5.6528997E-03
   28   2.2152807E-02  -5.5447266E-03
   29   2.1055229E-02  -5.4299872E-03
   30   1.9981223E-02  -5.3090862E-03
   31   1.8931973E-02  -5.1825090E-03
   32   1.7908565E-02  -5.0508229E-03
   33   1.6911946E-02  -4.9146741E-03
   34   1.5942945E-02  -4.7747807E-03
   35   1.5002236E-02  -4.6318539E-03
   36   1.4090363E-02  -4.4865337E-03
   37   1.3207744E-02  -4.3393909E-03
   38   1.2354698E-02  -4.1909298E-03
   39   1.1531436E-02  -4.0415860E-03
   40   1.0738098E-02  -3.8917327E-03
   41   9.9747558E-03  -3.7416790E-03
   42   9.2414233E-03  -3.5916723E-03
   43   8.5380747E-03  -3.4419012E-03
   44   7.8646421E-03  -3.2924942E-03
   45   7.2210477E-03  -3.1435261E-03
   46   6.6072011E-03  -2.9950162E-03
   47   6.0230130E-03  -2.8469305E-03
   48   5.4684090E-03  -2.6991841E-03
   49   4.9433286E-03  -2.5516404E-03
   50   4.4477516E-03  -2.4041164E-03
   51   3.9816577E-03  -2.2569573E-03
   52   3.5448975E-03  -2.1110268E-03
   53   3.1371241E-03  -1.9671049E-03
   54   2.7578735E-03  -1.8259136E-03
   55   2.4065331E-03  -1.6881068E-03
   56   2.0823656E-03  -1.5542782E-03
   57   1.7845207E-03  -1.4249656E-03
   58   1.5120459E-03  -1.3006550E-03
   59   1.2638960E-03  -1.1817849E-03
   60   1.0389428E-03  -1.0687508E-03
   61   8.3598293E-04  -9.6190823E-04
```

62	6.5374548E-04	-8.6157653E-04
63	4.9089940E-04	-7.6803848E-04
64	3.4606159E-04	-6.8152798E-04
65	2.1780782E-04	-6.0222343E-04
66	1.0468468E-04	-5.3023185E-04
67	5.2277575E-06	-4.6555002E-04
68	-8.2014328E-05	-4.0805324E-04
69	-1.5845834E-04	-3.5752846E-04
70	-2.2547229E-04	-3.1370236E-04
71	-2.8436405E-04	-2.7624776E-04
72	-3.3637112E-04	-2.4478915E-04
73	-3.8265151E-04	-2.1890752E-04
74	-4.2427540E-04	-1.9814490E-04
75	-4.6221784E-04	-1.8200790E-04
76	-4.9735185E-04	-1.6997024E-04
77	-5.3044212E-04	-1.6147525E-04
78	-5.6213912E-04	-1.5593785E-04
79	-5.9297361E-04	-1.5274584E-04
80	-6.2335126E-04	-1.5126085E-04
81	-6.5354750E-04	-1.5081902E-04
82	-6.6862942E-04	-1.5079668E-04

PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017*

NewProject.BaseDesignSection_28.A2M2R1_3514

Exe Time :24 July 2019 10:49:27

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 82
C U R R E N T T I M E I S 3.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	2.204	-5.5432E-02	28.00	22.04	28.00	22.20	ACTIVE	0.000	0.000	0.000	1.000	1.000	22.04	0.000	0.000	Strato1_2_8_L_0
2 D	3.292	-5.4131E-02	20.91	16.46	20.91	16.61	ACTIVE	0.000	-0.2000	0.000	1.000	1.000	16.46	0.000	0.000	Strato1_2_8_L_0
3 D	4.260	-5.2831E-02	27.06	21.30	27.06	21.44	ACTIVE	0.000	-0.4000	0.000	1.000	1.000	21.30	0.000	0.000	Strato1_2_8_L_0
4 D	4.781	-5.1530E-02	30.37	23.90	30.37	24.03	ACTIVE	0.000	-0.6000	0.000	1.000	1.000	23.90	0.000	0.000	Strato1_2_8_L_0
5 D	5.511	-5.0230E-02	35.02	27.56	35.02	27.68	ACTIVE	0.000	-0.8000	0.000	1.000	1.000	27.56	0.000	0.000	Strato1_2_8_L_0
6 D	6.049	-4.8930E-02	38.43	30.25	38.43	30.35	ACTIVE	0.000	-1.000	0.000	1.000	1.000	30.25	0.000	0.000	Strato1_2_8_L_0
7 D	6.727	-4.7630E-02	42.74	33.64	42.74	33.73	ACTIVE	0.000	-1.200	0.000	1.000	1.000	33.64	0.000	0.000	Strato1_2_8_L_0
8 D	7.278	-4.6331E-02	46.24	36.39	46.24	36.48	ACTIVE	0.000	-1.400	0.000	1.000	1.000	36.39	0.000	0.000	Strato1_2_8_L_0
9 D	7.796	-4.5034E-02	49.53	38.98	49.53	39.06	ACTIVE	0.000	-1.600	0.000	1.000	1.000	38.98	0.000	0.000	Strato1_2_8_L_0
10 D	8.371	-4.3737E-02	53.19	41.86	53.19	41.92	ACTIVE	0.000	-1.800	0.000	1.000	1.000	41.86	0.000	0.000	Strato1_2_8_L_0
11 D	9.026	-4.2443E-02	57.34	45.13	57.34	45.18	ACTIVE	0.000	-2.000	0.000	1.000	1.000	45.13	0.000	0.000	Strato1_2_8_L_0
12 D	9.602	-4.1151E-02	61.00	48.01	61.00	48.05	ACTIVE	0.000	-2.200	0.000	1.000	1.000	48.01	0.000	0.000	Strato1_2_8_L_0
13 D	7.683	-3.9862E-02	65.08	51.22	65.08	51.25	ACTIVE	0.000	-2.400	0.000	1.000	1.000	51.22	0.000	0.000	Strato1_2_8_L_0
14 D	7.888	-3.9219E-02	66.82	52.59	66.82	52.61	ACTIVE	0.000	-2.500	0.000	1.000	1.000	52.59	0.000	0.000	Strato1_2_8_L_0
15 D	11.10	-3.7936E-02	70.51	55.49	70.51	55.50	ACTIVE	0.000	-2.700	0.000	1.000	1.000	55.49	0.000	0.000	Strato1_2_8_L_0
16 D	11.73	-3.6658E-02	74.54	58.66	74.54	58.67	ACTIVE	0.000	-2.900	0.000	1.000	1.000	58.66	0.000	0.000	Strato1_2_8_L_0
17 D	12.31	-3.5386E-02	78.23	61.57	78.23	61.57	ACTIVE	0.000	-3.100	0.000	1.000	1.000	61.57	0.000	0.000	Strato1_2_8_L_0
18 D	12.94	-3.4122E-02	82.23	64.72	82.23	64.72	ACTIVE	0.000	-3.300	0.000	1.000	1.000	64.72	0.000	0.000	Strato1_2_8_L_0
19 D	13.53	-3.2865E-02	85.93	67.63	85.93	67.63	ACTIVE	0.000	-3.500	0.000	1.000	1.000				

67.63	0.000	0.000	Strato1_2_8_L_0										
20 D	14.15	-3.1618E-02	89.90	70.75	89.90	70.75	ACTIVE	0.000	-3.700	0.000	1.000	1.000	
70.75	0.000	0.000	Strato1_2_8_L_0										
21 D	14.68	-3.0382E-02	93.24	73.38	93.24	73.38	ACTIVE	0.000	-3.900	0.000	1.000	1.000	
73.38	0.000	0.000	Strato1_2_8_L_0										
22 D	15.30	-2.9158E-02	97.21	76.50	97.21	76.50	ACTIVE	0.000	-4.100	0.000	1.000	1.000	
76.50	0.000	0.000	Strato1_2_8_L_0										
23 D	15.92	-2.7947E-02	101.2	79.61	101.2	79.61	ACTIVE	0.000	-4.300	0.000	1.000	1.000	
79.61	0.000	0.000	Strato1_2_8_L_0										
24 D	16.51	-2.6752E-02	104.9	82.55	104.9	82.55	ACTIVE	0.000	-4.500	0.000	1.000	1.000	
82.55	0.000	0.000	Strato1_2_8_L_0										
25 D	17.13	-2.5574E-02	108.8	85.64	108.8	85.64	ACTIVE	0.000	-4.700	0.000	1.000	1.000	
85.64	0.000	0.000	Strato1_2_8_L_0										
26 D	17.72	-2.4414E-02	112.6	88.58	112.6	88.58	ACTIVE	0.000	-4.900	0.000	1.000	1.000	
88.58	0.000	0.000	Strato1_2_8_L_0										
27 D	18.33	-2.3273E-02	116.5	91.67	116.5	91.67	ACTIVE	0.000	-5.100	0.000	1.000	1.000	
91.67	0.000	0.000	Strato1_2_8_L_0										
28 D	18.88	-2.2153E-02	119.9	94.39	119.9	94.39	ACTIVE	0.000	-5.300	0.000	1.000	1.000	
94.39	0.000	0.000	Strato1_2_8_L_0										
29 D	19.49	-2.1055E-02	123.9	97.47	123.9	97.47	ACTIVE	0.000	-5.500	0.000	1.000	1.000	
97.47	0.000	0.000	Strato1_2_8_L_0										
30 D	20.08	-1.9981E-02	127.6	100.4	127.6	100.4	ACTIVE	0.000	-5.700	0.000	1.000	1.000	
100.4	0.000	0.000	Strato1_2_8_L_0										
31 D	20.70	-1.8932E-02	131.5	103.5	131.5	103.5	ACTIVE	0.000	-5.900	0.000	1.000	1.000	
103.5	0.000	0.000	Strato1_2_8_L_0										
32 D	21.29	-1.7909E-02	135.3	106.5	135.3	106.5	ACTIVE	0.000	-6.100	0.000	1.000	1.000	
106.5	0.000	0.000	Strato1_2_8_L_0										
33 D	21.90	-1.6912E-02	139.2	109.5	139.2	109.5	ACTIVE	0.000	-6.300	0.000	1.000	1.000	
109.5	0.000	0.000	Strato1_2_8_L_0										
34 D	22.49	-1.5943E-02	142.9	112.5	142.9	112.5	ACTIVE	0.000	-6.500	0.000	1.000	1.000	
112.5	0.000	0.000	Strato1_2_8_L_0										
35 D	23.11	-1.5002E-02	146.8	115.5	146.8	115.5	ACTIVE	0.000	-6.700	0.000	1.000	1.000	
115.5	0.000	0.000	Strato1_2_8_L_0										
36 D	23.69	-1.4090E-02	150.5	118.4	150.5	118.4	ACTIVE	0.000	-6.900	0.000	1.000	1.000	
118.4	0.000	0.000	Strato1_2_8_L_0										
37 D	24.28	-1.3208E-02	154.2	121.4	154.2	121.4	ACTIVE	0.000	-7.100	0.000	1.000	1.000	
121.4	0.000	0.000	Strato1_2_8_L_0										
38 D	24.89	-1.2355E-02	158.1	124.4	158.1	124.5	ACTIVE	0.000	-7.300	0.000	1.000	1.000	
124.4	0.000	0.000	Strato1_2_8_L_0										
39 D	25.48	-1.1531E-02	161.9	127.4	161.9	127.4	ACTIVE	0.000	-7.500	0.000	1.000	1.000	
127.4	0.000	0.000	Strato1_2_8_L_0										
40 D	26.09	-1.0738E-02	165.8	130.5	165.8	130.5	ACTIVE	0.000	-7.700	0.000	1.000	1.000	
130.5	0.000	0.000	Strato1_2_8_L_0										
41 D	26.68	-9.9748E-03	169.5	133.4	169.5	133.4	ACTIVE	0.000	-7.900	0.000	1.000	1.000	
133.4	0.000	0.000	Strato1_2_8_L_0										
42 D	27.29	-9.2414E-03	173.4	136.5	173.4	136.5	ACTIVE	0.000	-8.100	0.000	1.000	1.000	
136.5	0.000	0.000	Strato1_2_8_L_0										
43 D	27.86	-8.5381E-03	177.0	139.3	177.0	139.3	ACTIVE	0.000	-8.300	0.000	1.000	1.000	
139.3	0.000	0.000	Strato1_2_8_L_0										
44 D	28.47	-7.8646E-03	180.9	142.3	180.9	142.3	ACTIVE	0.000	-8.500	0.000	1.000	1.000	
142.3	0.000	0.000	Strato1_2_8_L_0										
45 D	29.06	-7.2210E-03	184.6	145.3	184.6	145.3	ACTIVE	0.000	-8.700	0.000	1.000	1.000	
145.3	0.000	0.000	Strato1_2_8_L_0										
46 D	29.67	-6.6072E-03	188.5	148.4	188.5	148.4	ACTIVE	0.000	-8.900	0.000	1.000	1.000	
148.4	0.000	0.000	Strato1_2_8_L_0										
47 D	30.26	-6.0230E-03	192.3	151.3	192.3	151.3	ACTIVE	0.000	-9.100	0.000	1.000	1.000	
151.3	0.000	0.000	Strato1_2_8_L_0										
48 D	30.87	-5.4684E-03	196.1	154.4	196.1	154.4	ACTIVE	0.000	-9.300	0.000	1.000	1.000	
154.4	0.000	0.000	Strato1_2_8_L_0										
49 D	31.48	-4.9433E-03	200.0	157.4	200.0	157.4	ACTIVE	0.000	-9.500	0.000	1.000	1.000	
157.4	0.000	0.000	Strato1_2_8_L_0										
50 D	14.79	-4.4478E-03	204.0	73.93	204.0	102.0	ACTIVE	0.000	-9.700	0.000	1.000	1.000	
73.93	0.000	0.000	Strato2_3095_82743_L_0										
51 D	15.15	-3.9817E-03	207.9	75.77	207.9	103.9	ACTIVE	0.000	-9.900	0.000	1.000	1.000	
75.77	0.000	0.000	Strato2_3095_82743_L_0										
52 D	15.53	-3.5449E-03	211.9	77.63	211.9	105.9	ACTIVE	0.000	-10.10	0.000	1.000	1.000	
77.63	0.000	0.000	Strato2_3095_82743_L_0										
53 D	15.91	-3.1371E-03	215.9	79.54	215.9	108.0	ACTIVE	0.000	-10.30	0.000	1.000	1.000	
79.54	0.000	0.000	Strato2_3095_82743_L_0										
54 D	16.28	-2.7579E-03	219.9	81.41	219.9	109.9	ACTIVE	0.000	-10.50	0.000	1.000	1.000	
81.41	0.000	0.000	Strato2_3095_82743_L_0										
55 D	16.66	-2.4065E-03	223.9	83.32	223.9	112.0	ACTIVE	0.000	-10.70	0.000	1.000	1.000	
83.32	0.000	0.000	Strato2_3095_82743_L_0										
56 D	17.04	-2.0824E-03	227.9	85.18	227.9	114.0	ACTIVE	0.000	-10.90	0.000	1.000	1.000	
85.18	0.000	0.000	Strato2_3095_82743_L_0										
57 D	17.42	-1.7845E-03	232.0	87.09	232.0	116.0	ACTIVE	0.000	-11.10	0.000	1.000	1.000	
87.09	0.000	0.000	Strato2_3095_82743_L_0										
58 D	17.78	-1.5120E-03	235.8	88.89	235.8	117.9	ACTIVE	0.000	-11.30	0.000	1.000	1.000	
88.89	0.000	0.000	Strato2_3095_82743_L_0										
59 D	18.16	-1.2639E-03	239.9	90.80	239.9	119.9	ACTIVE	0.000	-11.50	0.000	1.000	1.000	
90.80	0.000	0.000	Strato2_3095_82743_L_0										
60 D	18.53	-1.0389E-03	243.8	92.67	243.8	121.9	ACTIVE	0.000	-11.70	0.000	1.000	1.000	
92.67	0.000	0.000	Strato2_3095_82743_L_0										
61 D	18.92	-8.3598E-04	247.9	94.58	247.9	124.0	ACTIVE	0.000	-11.90	0.000	1.000	1.000	
94.58	0.000	0.000	Strato2_3095_82743_L_0										

62 D	19.30	-6.5375E-04	252.0	96.48	252.0	126.0	ACTIVE	0.000	-12.10	0.000	1.000	1.000
96.48	0.000	0.000	Strato2_3095_82743_L_0									
63 D	19.67	-4.9090E-04	255.9	98.35	255.9	128.0	ACTIVE	0.000	-12.30	0.000	1.000	1.000
98.35	0.000	0.000	Strato2_3095_82743_L_0									
64 D	20.05	-3.4606E-04	260.0	100.3	260.0	130.0	ACTIVE	0.000	-12.50	0.000	1.000	1.000
100.3	0.000	0.000	Strato2_3095_82743_L_0									
65 D	21.37	-2.1781E-04	263.8	106.8	263.8	131.9	UL-RL	6.3994E+04	-12.70	0.000	1.000	1.000
106.8	0.000	0.000	Strato2_3095_82743_L_0									
66 D	23.64	-1.0468E-04	267.9	118.2	267.9	133.9	UL-RL	6.3994E+04	-12.90	0.000	1.000	1.000
118.2	0.000	0.000	Strato2_3095_82743_L_0									
67 D	25.66	-5.2278E-06	271.8	128.3	271.8	135.9	UL-RL	6.3994E+04	-13.10	0.000	1.000	1.000
128.3	0.000	0.000	Strato2_3095_82743_L_0									
68 D	26.73	8.2014E-05	275.7	133.7	275.7	139.8	UL-RL	6.3994E+04	-13.30	0.000	1.000	1.000
133.7	0.000	0.000	Strato2_3095_82743_L_0									
69 D	27.75	1.5846E-04	279.6	138.8	279.6	143.4	UL-RL	6.3994E+04	-13.50	0.000	1.000	1.000
138.8	0.000	0.000	Strato2_3095_82743_L_0									
70 D	28.72	2.2547E-04	283.5	143.6	283.5	146.7	UL-RL	6.3994E+04	-13.70	0.000	1.000	1.000
143.6	0.000	0.000	Strato2_3095_82743_L_0									
71 D	29.64	2.8436E-04	287.4	148.2	287.4	149.9	UL-RL	6.3994E+04	-13.90	0.000	1.000	1.000
148.2	0.000	0.000	Strato2_3095_82743_L_0									
72 D	30.52	3.3637E-04	291.3	152.6	291.3	152.8	UL-RL	6.3994E+04	-14.10	0.000	1.000	1.000
152.6	0.000	0.000	Strato2_3095_82743_L_0									
73 D	31.19	3.8265E-04	295.1	155.9	295.1	156.0	UL-RL	6.3994E+04	-14.30	0.000	1.000	1.000
155.9	0.000	0.000	Strato2_3095_82743_L_0									
74 D	31.83	4.2428E-04	299.0	159.1	299.0	159.1	V-C	2.1331E+04	-14.50	0.000	1.000	1.000
159.1	0.000	0.000	Strato2_3095_82743_L_0									
75 D	32.44	4.6222E-04	303.0	162.2	303.0	162.2	V-C	2.1331E+04	-14.70	0.000	1.000	1.000
162.2	0.000	0.000	Strato2_3095_82743_L_0									
76 D	33.04	4.9735E-04	306.9	165.2	306.9	165.2	V-C	2.1331E+04	-14.90	0.000	1.000	1.000
165.2	0.000	0.000	Strato2_3095_82743_L_0									
77 D	33.62	5.3044E-04	310.8	168.1	310.8	168.1	V-C	2.1331E+04	-15.10	0.000	1.000	1.000
168.1	0.000	0.000	Strato2_3095_82743_L_0									
78 D	34.20	5.6214E-04	314.7	171.0	314.7	171.0	V-C	2.1331E+04	-15.30	0.000	1.000	1.000
171.0	0.000	0.000	Strato2_3095_82743_L_0									
79 D	34.77	5.9297E-04	318.7	173.9	318.7	173.9	V-C	2.1331E+04	-15.50	0.000	1.000	1.000
173.9	0.000	0.000	Strato2_3095_82743_L_0									
80 D	35.34	6.2335E-04	322.5	176.7	322.5	176.7	V-C	2.1331E+04	-15.70	0.000	1.000	1.000
176.7	0.000	0.000	Strato2_3095_82743_L_0									
81 D	26.93	6.5355E-04	326.4	179.5	326.4	179.5	V-C	2.1331E+04	-15.90	0.000	1.000	1.000
179.5	0.000	0.000	Strato2_3095_82743_L_0									
82 D	9.049	6.6863E-04	328.4	181.0	328.4	181.0	V-C	2.1331E+04	-16.00	0.000	1.000	1.000
181.0	0.000	0.000	Strato2_3095_82743_L_0									

PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017*

NewProject.BaseDesignSection_28.A2M2R1_3514

Exe Time :24 July 2019 10:49:27

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 2

0_R :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 82
C U R R E N T T I M E I S 3.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR
Peq	Su_a	Su_p	LAYER									
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									

9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000
0.000	0.000	0.000	not available									
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000
0.000	0.000	0.000	not available									
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
14	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									
15	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000
0.000	0.000	0.000	not available									
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000
0.000	0.000	0.000	not available									
17 D	1.154	3.5386E-02	1.900	5.772	58.90	65.82	PASSIVE	0.000	-3.100	0.000	1.000	1.000
5.772	0.000	0.000	Strato1_2_8_L_0									
18 D	3.463	3.4122E-02	5.700	17.32	62.70	67.88	PASSIVE	0.000	-3.300	0.000	1.000	1.000
17.32	0.000	0.000	Strato1_2_8_L_0									
19 D	5.772	3.2865E-02	9.500	28.86	66.50	69.91	PASSIVE	0.000	-3.500	0.000	1.000	1.000
28.86	0.000	0.000	Strato1_2_8_L_0									
20 D	8.081	3.1618E-02	13.30	40.41	70.30	71.93	PASSIVE	0.000	-3.700	0.000	1.000	1.000
40.41	0.000	0.000	Strato1_2_8_L_0									
21 D	10.39	3.0382E-02	17.10	51.95	74.10	73.92	PASSIVE	0.000	-3.900	0.000	1.000	1.000
51.95	0.000	0.000	Strato1_2_8_L_0									
22 D	12.70	2.9158E-02	20.90	63.49	77.90	75.89	PASSIVE	0.000	-4.100	0.000	1.000	1.000
63.49	0.000	0.000	Strato1_2_8_L_0									
23 D	15.01	2.7947E-02	24.70	75.04	81.70	77.82	PASSIVE	0.000	-4.300	0.000	1.000	1.000
75.04	0.000	0.000	Strato1_2_8_L_0									
24 D	17.32	2.6752E-02	28.50	86.58	85.50	86.58	PASSIVE	0.000	-4.500	0.000	1.000	1.000
86.58	0.000	0.000	Strato1_2_8_L_0									
25 D	19.63	2.5574E-02	32.30	98.13	89.30	98.13	PASSIVE	0.000	-4.700	0.000	1.000	1.000
98.13	0.000	0.000	Strato1_2_8_L_0									
26 D	21.93	2.4414E-02	36.10	109.7	93.10	109.7	PASSIVE	0.000	-4.900	0.000	1.000	1.000
109.7	0.000	0.000	Strato1_2_8_L_0									
27 D	24.24	2.3273E-02	39.90	121.2	96.90	121.2	PASSIVE	0.000	-5.100	0.000	1.000	1.000
121.2	0.000	0.000	Strato1_2_8_L_0									
28 D	26.55	2.2153E-02	43.70	132.8	100.7	132.8	PASSIVE	0.000	-5.300	0.000	1.000	1.000
132.8	0.000	0.000	Strato1_2_8_L_0									
29 D	28.86	2.1055E-02	47.50	144.3	104.5	144.3	PASSIVE	0.000	-5.500	0.000	1.000	1.000
144.3	0.000	0.000	Strato1_2_8_L_0									
30 D	31.17	1.9981E-02	51.30	155.8	108.3	155.8	PASSIVE	0.000	-5.700	0.000	1.000	1.000
155.8	0.000	0.000	Strato1_2_8_L_0									
31 D	33.48	1.8932E-02	55.10	167.4	112.1	167.4	PASSIVE	0.000	-5.900	0.000	1.000	1.000
167.4	0.000	0.000	Strato1_2_8_L_0									
32 D	35.79	1.7909E-02	58.90	178.9	115.9	178.9	PASSIVE	0.000	-6.100	0.000	1.000	1.000
178.9	0.000	0.000	Strato1_2_8_L_0									
33 D	37.63	1.6912E-02	62.70	188.2	119.7	188.2	V-C	6505.	-6.300	0.000	1.000	1.000
188.2	0.000	0.000	Strato1_2_8_L_0									
34 D	36.72	1.5943E-02	66.50	183.6	123.5	183.6	V-C	6505.	-6.500	0.000	1.000	1.000
183.6	0.000	0.000	Strato1_2_8_L_0									
35 D	35.84	1.5002E-02	70.30	179.2	127.3	179.2	V-C	6505.	-6.700	0.000	1.000	1.000
179.2	0.000	0.000	Strato1_2_8_L_0									
36 D	34.99	1.4090E-02	74.10	175.0	131.1	175.0	V-C	6505.	-6.900	0.000	1.000	1.000
175.0	0.000	0.000	Strato1_2_8_L_0									
37 D	34.18	1.3208E-02	77.90	170.9	134.9	170.9	V-C	6505.	-7.100	0.000	1.000	1.000
170.9	0.000	0.000	Strato1_2_8_L_0									
38 D	33.40	1.2355E-02	81.70	167.0	138.7	167.0	V-C	6505.	-7.300	0.000	1.000	1.000
167.0	0.000	0.000	Strato1_2_8_L_0									
39 D	32.65	1.1531E-02	85.50	163.3	142.5	163.3	V-C	6505.	-7.500	0.000	1.000	1.000
163.3	0.000	0.000	Strato1_2_8_L_0									
40 D	31.94	1.0738E-02	89.30	159.7	146.3	159.7	V-C	6505.	-7.700	0.000	1.000	1.000
159.7	0.000	0.000	Strato1_2_8_L_0									
41 D	31.26	9.9748E-03	93.10	156.3	150.1	156.3	V-C	6505.	-7.900	0.000	1.000	1.000
156.3	0.000	0.000	Strato1_2_8_L_0									
42 D	30.62	9.2414E-03	96.90	153.1	153.9	153.1	V-C	6505.	-8.100	0.000	1.000	1.000
153.1	0.000	0.000	Strato1_2_8_L_0									
43 D	30.01	8.5381E-03	100.7	150.1	157.7	150.1	V-C	6505.	-8.300	0.000	1.000	1.000
150.1	0.000	0.000	Strato1_2_8_L_0									
44 D	29.44	7.8646E-03	104.5	147.2	161.5	147.2	V-C	6505.	-8.500	0.000	1.000	1.000
147.2	0.000	0.000	Strato1_2_8_L_0									
45 D	28.90	7.2210E-03	108.3	144.5	165.3	144.5	V-C	6505.	-8.700	0.000	1.000	1.000
144.5	0.000	0.000	Strato1_2_8_L_0									
46 D	28.40	6.6072E-03	112.1	142.0	169.1	142.0	V-C	6505.	-8.900	0.000	1.000	1.000
142.0	0.000	0.000	Strato1_2_8_L_0									
47 D	27.93	6.0230E-03	115.9	139.7	172.9	139.7	V-C	6505.	-9.100	0.000	1.000	1.000
139.7	0.000	0.000	Strato1_2_8_L_0									
48 D	27.51	5.4684E-03	119.7	137.5	176.7	137.5	V-C	6505.	-9.300	0.000	1.000	1.000
137.5	0.000	0.000	Strato1_2_8_L_0									
49 D	27.11	4.9433E-03	123.5	135.6	180.5	135.6	V-C	6505.	-9.500	0.000	1.000	1.000
135.6	0.000	0.000	Strato1_2_8_L_0									
50 D	33.69	4.4478E-03	127.5	168.4	184.5	168.4	V-C	1.4650E+04	-9.700	0.000	1.000	1.000
168.4	0.000	0.000	Strato2_3095_82743_L_0									
51 D	32.48	3.9817E-03	131.5	162.4	188.5	162.4	V-C	1.4650E+04	-9.900	0.000	1.000	1.000

```
162.4       0.000       0.000     Strato2_3095_82743_L_0
  52 D   31.36      3.5449E-03  135.5       156.8       192.5       156.8            V-C  1.4650E+04  -10.10       0.000       1.000       1.000
156.8       0.000       0.000     Strato2_3095_82743_L_0
  53 D   30.34      3.1371E-03  139.5       151.7       196.5       151.7            V-C  1.4650E+04  -10.30       0.000       1.000       1.000
151.7       0.000       0.000     Strato2_3095_82743_L_0
  54 D   29.40      2.7579E-03  143.5       147.0       200.5       147.0            V-C  1.4650E+04  -10.50       0.000       1.000       1.000
147.0       0.000       0.000     Strato2_3095_82743_L_0
  55 D   28.55      2.4065E-03  147.5       142.8       204.5       142.8            V-C  1.4650E+04  -10.70       0.000       1.000       1.000
142.8       0.000       0.000     Strato2_3095_82743_L_0
  56 D   27.80      2.0824E-03  151.5       139.0       208.5       139.0            V-C  1.4650E+04  -10.90       0.000       1.000       1.000
139.0       0.000       0.000     Strato2_3095_82743_L_0
  57 D   27.13      1.7845E-03  155.5       135.6       212.5       135.6            V-C  1.4650E+04  -11.10       0.000       1.000       1.000
135.6       0.000       0.000     Strato2_3095_82743_L_0
  58 D   26.55      1.5120E-03  159.5       132.7       216.5       132.7            V-C  1.4650E+04  -11.30       0.000       1.000       1.000
132.7       0.000       0.000     Strato2_3095_82743_L_0
  59 D   26.05      1.2639E-03  163.5       130.2       220.5       130.2            V-C  1.4650E+04  -11.50       0.000       1.000       1.000
130.2       0.000       0.000     Strato2_3095_82743_L_0
  60 D   25.62      1.0389E-03  167.5       128.1       224.5       128.1            V-C  1.4650E+04  -11.70       0.000       1.000       1.000
128.1       0.000       0.000     Strato2_3095_82743_L_0
  61 D   25.28      8.3598E-04  171.5       126.4       228.5       126.4            V-C  1.4650E+04  -11.90       0.000       1.000       1.000
126.4       0.000       0.000     Strato2_3095_82743_L_0
  62 D   24.84      6.5375E-04  175.5       124.2       232.5       125.5          UL-RL  4.3949E+04  -12.10       0.000       1.000       1.000
124.2       0.000       0.000     Strato2_3095_82743_L_0
  63 D   23.98      4.9090E-04  179.5       119.9       236.5       126.1          UL-RL  4.3949E+04  -12.30       0.000       1.000       1.000
119.9       0.000       0.000     Strato2_3095_82743_L_0
  64 D   23.26      3.4606E-04  183.5       116.3       240.5       126.8          UL-RL  4.3949E+04  -12.50       0.000       1.000       1.000
116.3       0.000       0.000     Strato2_3095_82743_L_0
  65 D   22.67      2.1781E-04  187.5       113.3       244.5       127.7          UL-RL  4.3949E+04  -12.70       0.000       1.000       1.000
113.3       0.000       0.000     Strato2_3095_82743_L_0
  66 D   22.20      1.0468E-04  191.5       111.0       248.5       128.7          UL-RL  4.3949E+04  -12.90       0.000       1.000       1.000
111.0       0.000       0.000     Strato2_3095_82743_L_0
  67 D   21.84      5.2278E-06  195.5       109.2       252.5       129.8          UL-RL  4.3949E+04  -13.10       0.000       1.000       1.000
109.2       0.000       0.000     Strato2_3095_82743_L_0
  68 D   21.58     -8.2014E-05  199.5       107.9       256.5       130.9          UL-RL  4.3949E+04  -13.30       0.000       1.000       1.000
107.9       0.000       0.000     Strato2_3095_82743_L_0
  69 D   21.40     -1.5846E-04  203.5       107.0       260.5       132.2          UL-RL  4.3949E+04  -13.50       0.000       1.000       1.000
107.0       0.000       0.000     Strato2_3095_82743_L_0
  70 D   21.29     -2.2547E-04  207.5       106.5       264.5       133.5          UL-RL  4.3949E+04  -13.70       0.000       1.000       1.000
106.5       0.000       0.000     Strato2_3095_82743_L_0
  71 D   21.25     -2.8436E-04  211.5       106.2       268.5       134.9          UL-RL  4.3949E+04  -13.90       0.000       1.000       1.000
106.2       0.000       0.000     Strato2_3095_82743_L_0
  72 D   21.26     -3.3637E-04  215.5       106.3       272.5       136.4          UL-RL  4.3949E+04  -14.10       0.000       1.000       1.000
106.3       0.000       0.000     Strato2_3095_82743_L_0
  73 D   21.17     -3.8265E-04  219.5       105.8       276.5       138.2          UL-RL  4.3949E+04  -14.30       0.000       1.000       1.000
105.8       0.000       0.000     Strato2_3095_82743_L_0
  74 D   21.08     -4.2428E-04  223.5       105.4       280.5       140.2          UL-RL  4.3949E+04  -14.50       0.000       1.000       1.000
105.4       0.000       0.000     Strato2_3095_82743_L_0
  75 D   21.02     -4.6222E-04  227.5       105.1       284.5       142.2          UL-RL  4.3949E+04  -14.70       0.000       1.000       1.000
105.1       0.000       0.000     Strato2_3095_82743_L_0
  76 D   21.01     -4.9735E-04  231.5       105.0       288.5       144.2          UL-RL  4.3949E+04  -14.90       0.000       1.000       1.000
105.0       0.000       0.000     Strato2_3095_82743_L_0
  77 D   21.01     -5.3044E-04  235.5       105.0       292.5       146.2          UL-RL  4.3949E+04  -15.10       0.000       1.000       1.000
105.0       0.000       0.000     Strato2_3095_82743_L_0
  78 D   21.03     -5.6214E-04  239.5       105.1       296.5       148.2          UL-RL  4.3949E+04  -15.30       0.000       1.000       1.000
105.1       0.000       0.000     Strato2_3095_82743_L_0
  79 D   21.06     -5.9297E-04  243.5       105.3       300.5       150.2          UL-RL  4.3949E+04  -15.50       0.000       1.000       1.000
105.3       0.000       0.000     Strato2_3095_82743_L_0
  80 D   21.09     -6.2335E-04  247.5       105.5       304.5       152.2          UL-RL  4.3949E+04  -15.70       0.000       1.000       1.000
105.5       0.000       0.000     Strato2_3095_82743_L_0
  81 D   15.85     -6.5355E-04  251.5       105.6       308.5       154.2          UL-RL  4.3949E+04  -15.90       0.000       1.000       1.000
105.6       0.000       0.000     Strato2_3095_82743_L_0
  82 D   5.286     -6.6863E-04  253.5       105.7       310.5       155.2          UL-RL  4.3949E+04  -16.00       0.000       1.000       1.000
105.7       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
 |                                                                                                                               |
 |                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                              |
 |                                  Exe Time :24 July 2019      10:49:27                                                         |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

 WallElement_33                 :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   81
 C U R R E N T   T I M E   I S      3.0000

  WALL2D ELEMENT

    EL      TA          TB          MA          MB
```

1	2.2036	-2.2036	3.26383E-10	0.44072
2	5.4956	-5.4956	-0.44072	1.5398
3	9.7554	-9.7554	-1.5398	3.4909
4	14.536	-14.536	-3.4909	6.3981
5	20.047	-20.047	-6.3981	10.408
6	26.097	-26.097	-10.408	15.627
7	32.824	-32.824	-15.627	22.192
8	40.102	-40.102	-22.192	30.212
9	47.898	-47.898	-30.212	39.792
10	56.270	-56.270	-39.792	51.046
11	65.295	-65.295	-51.046	64.105
12	74.897	-74.897	-64.105	79.084
13	82.580	-82.580	-79.084	87.342
14	90.468	-90.468	-87.342	105.44
15	101.57	-101.57	-105.44	125.75
16	113.30	-113.30	-125.75	148.41
17	124.46	-124.46	-148.41	173.30
18	133.94	-133.94	-173.30	200.09
19	141.69	-141.69	-200.09	228.43
20	147.76	-147.76	-228.43	257.98
21	152.05	-152.05	-257.98	288.39
22	154.65	-154.65	-288.39	319.32
23	155.56	-155.56	-319.32	350.43
24	154.76	-154.76	-350.43	381.38
25	152.26	-152.26	-381.38	411.83
26	148.04	-148.04	-411.83	441.44
27	142.13	-142.13	-441.44	469.87
28	134.46	-134.46	-469.87	496.76
29	125.09	-125.09	-496.76	521.77
30	114.00	-114.00	-521.77	544.58
31	101.23	-101.23	-544.58	564.82
32	86.728	-86.728	-564.82	582.17
33	71.001	-71.001	-582.17	596.37
34	56.775	-56.775	-596.37	607.72
35	44.041	-44.041	-607.72	616.53
36	32.733	-32.733	-616.53	623.08
37	22.829	-22.829	-623.08	627.64
38	14.319	-14.319	-627.64	630.51
39	7.1459	-7.1459	-630.51	631.94
40	1.2971	-1.2971	-631.94	632.19
41	-3.2821	3.2821	-632.19	631.54
42	-6.6073	6.6073	-631.54	630.22
43	-8.7605	8.7605	-630.22	628.46
44	-9.7299	9.7299	-628.46	626.52
45	-9.5692	9.5692	-626.52	624.60
46	-8.2970	8.2970	-624.60	622.95
47	-5.9671	5.9671	-622.95	621.75
48	-2.5998	2.5998	-621.75	621.23
49	1.7665	-1.7665	-621.23	621.59
50	-17.136	17.136	-621.59	618.16
51	-34.462	34.462	-618.16	611.27
52	-50.297	50.297	-611.27	601.21
53	-64.724	64.724	-601.21	588.26
54	-77.841	77.841	-588.26	572.69
55	-89.731	89.731	-572.69	554.75
56	-100.49	100.49	-554.75	534.65
57	-110.20	110.20	-534.65	512.61
58	-118.97	118.97	-512.61	488.81
59	-126.85	126.85	-488.81	463.44
60	-133.95	133.95	-463.44	436.65
61	-140.31	140.31	-436.65	408.59
62	-145.86	145.86	-408.59	379.42
63	-150.16	150.16	-379.42	349.39
64	-153.37	153.37	-349.39	318.71
65	-154.67	154.67	-318.71	287.78
66	-153.23	153.23	-287.78	257.13
67	-149.42	149.42	-257.13	227.25
68	-144.26	144.26	-227.25	198.40
69	-137.91	137.91	-198.40	170.82
70	-130.48	130.48	-170.82	144.72
71	-122.09	122.09	-144.72	120.30
72	-112.83	112.83	-120.30	97.737
73	-102.80	102.80	-97.737	77.178
74	-92.045	92.045	-77.178	58.769
75	-80.629	80.629	-58.769	42.643
76	-68.597	68.597	-42.643	28.923
77	-55.984	55.984	-28.923	17.727
78	-42.811	42.811	-17.727	9.1645
79	-29.093	29.093	-9.1645	3.3459
80	-14.848	14.848	-3.3459	0.37633
81	-3.7629	3.7629	-0.37633	-1.47840E-12

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                          |
|                                  Exe Time :24 July 2019      10:49:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    4

Tieback_768111                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      3.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-----------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1588E+07 RIMNOR=0.2706E+08
           RENORM=0.2497E+05 REMNOR=0.3846E-17 RATIO =0.1254     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 158.0     RMMAX = 632.2
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.1588E+07 RDR   =0.2706E+08
           RATIOT=0.1254     RATIOR= 0.000
           MAX UN=0.1881E-07 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           MIN UN=-158.0     IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1588E+07 RIMNOR=0.2706E+08
           RENORM= 235.0     REMNOR=0.2035E-17 RATIO =0.1217E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 158.0     RMMAX = 632.2
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.1588E+07 RDR   =0.2706E+08
           RATIOT=0.1217E-01 RATIOR= 0.000
           MAX UN=0.1016     IEQ=    91 NODE     46 DOF   1  Y-DISPL.F
           MIN UN=-4.485     IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1588E+07 RIMNOR=0.2706E+08
           RENORM= 4.038     REMNOR=0.1455E-17 RATIO =0.1595E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 158.0     RMMAX = 632.2
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.1588E+07 RDR   =0.2706E+08
           RATIOT=0.1595E-02 RATIOR= 0.000
           MAX UN=0.3121     IEQ=    95 NODE     48 DOF   1  Y-DISPL.F
           MIN UN=-1.951     IEQ=    37 NODE     19 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1588E+07 RIMNOR=0.2706E+08
           RENORM=0.4354E-14 REMNOR=0.7363E-17 RATIO =0.5236E-10 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 158.0     RMMAX = 632.2
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.1588E+07 RDR   =0.2706E+08
           RATIOT=0.5236E-10 RATIOR= 0.000
           MAX UN=0.3929E-07 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           MIN UN=-.4354E-07 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0




+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                          |
|                                  Exe Time :24 July 2019      10:49:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     4 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    4     ( AT TIME   4.000     )
```

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

	Y-DISPL.F (02)	X-ROT. F (04)	(
1	5.1848054E-02	-6.0428072E-03	
2	5.0639501E-02	-6.0426892E-03	
3	4.9431008E-02	-6.0421293E-03	
4	4.8222707E-02	-6.0406957E-03	
5	4.7014819E-02	-6.0379281E-03	
6	4.5807657E-02	-6.0333436E-03	
7	4.4601636E-02	-6.0264355E-03	
8	4.3397273E-02	-6.0166755E-03	
9	4.2195193E-02	-6.0035130E-03	
10	4.0996133E-02	-5.9863788E-03	
11	3.9800945E-02	-5.9646850E-03	
12	3.8610603E-02	-5.9378219E-03	
13	3.7426203E-02	-5.9051578E-03	
14	3.6836608E-02	-5.8864678E-03	
15	3.5663206E-02	-5.8476216E-03	
16	3.4497558E-02	-5.8088069E-03	
17	3.3339728E-02	-5.7693198E-03	
18	3.2189922E-02	-5.7284393E-03	
19	3.1048494E-02	-5.6854340E-03	
20	2.9915940E-02	-5.6395658E-03	
21	2.8792907E-02	-5.5901004E-03	
22	2.7680184E-02	-5.5363670E-03	
23	2.6578682E-02	-5.4778058E-03	
24	2.5489414E-02	-5.4139660E-03	
25	2.4413471E-02	-5.3445049E-03	
26	2.3352002E-02	-5.2691881E-03	
27	2.2306199E-02	-5.1878884E-03	
28	2.1277252E-02	-5.1005835E-03	
29	2.0266361E-02	-5.0073585E-03	
30	1.9274691E-02	-4.9084028E-03	
31	1.8303362E-02	-4.8040090E-03	
32	1.7353428E-02	-4.6945715E-03	
33	1.6425842E-02	-4.5805840E-03	
34	1.5521459E-02	-4.4626301E-03	
35	1.4641014E-02	-4.3413037E-03	
36	1.3785127E-02	-4.2171437E-03	
37	1.2954313E-02	-4.0906347E-03	
38	1.2149005E-02	-3.9622090E-03	
39	1.1369537E-02	-3.8322429E-03	
40	1.0616188E-02	-3.7010621E-03	
41	9.8891745E-03	-3.5689401E-03	
42	9.1886601E-03	-3.4361010E-03	
43	8.5147736E-03	-3.3027191E-03	
44	7.8676039E-03	-3.1689162E-03	
45	7.2472304E-03	-3.0347649E-03	
46	6.6537198E-03	-2.9002853E-03	
47	6.0871402E-03	-2.7654457E-03	
48	5.5475736E-03	-2.6301647E-03	
49	5.0351153E-03	-2.4943100E-03	
50	4.5498997E-03	-2.3577041E-03	
51	4.0920601E-03	-2.2207020E-03	
52	3.6615974E-03	-2.0841819E-03	
53	3.2583130E-03	-1.9489400E-03	
54	2.8818870E-03	-1.8157148E-03	
55	2.5318479E-03	-1.6851772E-03	
56	2.2075962E-03	-1.5579383E-03	
57	1.9084157E-03	-1.4345531E-03	
58	1.6334845E-03	-1.3155251E-03	
59	1.3818848E-03	-1.2013100E-03	
60	1.1526122E-03	-1.0923196E-03	
61	9.4458382E-04	-9.8892581E-04	
62	7.5664641E-04	-8.9146335E-04	
63	5.8758296E-04	-8.0023372E-04	
64	4.3611972E-04	-7.1550211E-04	
65	3.0093442E-04	-6.3748590E-04	
66	1.8066661E-04	-5.6635094E-04	
67	7.3930246E-05	-5.0217296E-04	
68	-2.0663009E-05	-4.4490143E-04	
69	-1.0448100E-04	-3.9438995E-04	
70	-1.7885538E-04	-3.5042432E-04	
71	-2.4506874E-04	-3.1272889E-04	
72	-3.0434285E-04	-2.8097222E-04	
73	-3.5782804E-04	-2.5477182E-04	
74	-4.0659342E-04	-2.3369906E-04	
75	-4.5161808E-04	-2.1728249E-04	
76	-4.9378271E-04	-2.0501034E-04	
77	-5.3386188E-04	-1.9633319E-04	
78	-5.7251670E-04	-1.9066674E-04	
79	-6.1028819E-04	-1.8739451E-04	
80	-6.4759099E-04	-1.8586954E-04	
81	-6.8470738E-04	-1.8541510E-04	

82 -7.0324921E-04 -1.8539209E-04

PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017*

NewProject.BaseDesignSection_28.A2M2R1_3514
Exe Time :24 July 2019 10:49:27

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 82
C U R R E N T T I M E I S 4.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	4.969	-5.1848E-02	28.00	49.69	28.00	49.69	V-C	7686.	0.000	0.000	1.000	1.000	49.69	0.000	0.000	Strato1_2_8_L_0
2 D	8.680	-5.0640E-02	20.91	43.40	20.91	43.40	V-C	7686.	-0.2000	0.000	1.000	1.000	43.40	0.000	0.000	Strato1_2_8_L_0
3 D	9.504	-4.9431E-02	27.06	47.52	27.06	47.52	V-C	7686.	-0.4000	0.000	1.000	1.000	47.52	0.000	0.000	Strato1_2_8_L_0
4 D	9.882	-4.8223E-02	30.37	49.41	30.37	49.41	V-C	7686.	-0.6000	0.000	1.000	1.000	49.41	0.000	0.000	Strato1_2_8_L_0
5 D	10.47	-4.7015E-02	35.02	52.35	35.02	52.35	V-C	7686.	-0.8000	0.000	1.000	1.000	52.35	0.000	0.000	Strato1_2_8_L_0
6 D	10.86	-4.5808E-02	38.43	54.32	38.43	54.32	V-C	7686.	-1.000	0.000	1.000	1.000	54.32	0.000	0.000	Strato1_2_8_L_0
7 D	11.40	-4.4602E-02	42.74	56.98	42.74	56.98	V-C	7686.	-1.200	0.000	1.000	1.000	56.98	0.000	0.000	Strato1_2_8_L_0
8 D	11.80	-4.3397E-02	46.24	59.00	46.24	59.00	V-C	7686.	-1.400	0.000	1.000	1.000	59.00	0.000	0.000	Strato1_2_8_L_0
9 D	12.17	-4.2195E-02	49.53	60.85	49.53	60.85	V-C	7686.	-1.600	0.000	1.000	1.000	60.85	0.000	0.000	Strato1_2_8_L_0
10 D	12.59	-4.0996E-02	53.19	62.97	53.19	62.97	V-C	7686.	-1.800	0.000	1.000	1.000	62.97	0.000	0.000	Strato1_2_8_L_0
11 D	13.09	-3.9801E-02	57.34	65.47	57.34	65.47	V-C	7686.	-2.000	0.000	1.000	1.000	65.47	0.000	0.000	Strato1_2_8_L_0
12 D	13.51	-3.8611E-02	61.00	67.56	61.00	67.56	V-C	7686.	-2.200	0.000	1.000	1.000	67.56	0.000	0.000	Strato1_2_8_L_0
13 D	10.49	-3.7426E-02	65.08	69.97	65.08	69.97	V-C	7686.	-2.400	0.000	1.000	1.000	69.97	0.000	0.000	Strato1_2_8_L_0
14 D	10.64	-3.6837E-02	66.82	70.92	66.82	70.92	V-C	7686.	-2.500	0.000	1.000	1.000	70.92	0.000	0.000	Strato1_2_8_L_0
15 D	14.59	-3.5663E-02	70.51	72.97	70.51	72.97	V-C	7686.	-2.700	0.000	1.000	1.000	72.97	0.000	0.000	Strato1_2_8_L_0
16 D	15.05	-3.4498E-02	74.54	75.27	74.54	75.27	V-C	7686.	-2.900	0.000	1.000	1.000	75.27	0.000	0.000	Strato1_2_8_L_0
17 D	15.46	-3.3340E-02	78.23	77.30	78.23	77.30	V-C	7686.	-3.100	0.000	1.000	1.000	77.30	0.000	0.000	Strato1_2_8_L_0
18 D	15.91	-3.2190E-02	82.23	79.56	82.23	79.56	V-C	7686.	-3.300	0.000	1.000	1.000	79.56	0.000	0.000	Strato1_2_8_L_0
19 D	16.32	-3.1048E-02	85.93	81.59	85.93	81.59	V-C	7686.	-3.500	0.000	1.000	1.000	81.59	0.000	0.000	Strato1_2_8_L_0
20 D	16.77	-2.9916E-02	89.90	83.84	89.90	83.84	V-C	7686.	-3.700	0.000	1.000	1.000	83.84	0.000	0.000	Strato1_2_8_L_0
21 D	17.12	-2.8793E-02	93.24	85.59	93.24	85.59	V-C	7686.	-3.900	0.000	1.000	1.000	85.59	0.000	0.000	Strato1_2_8_L_0
22 D	17.57	-2.7680E-02	97.21	87.86	97.21	87.86	V-C	7686.	-4.100	0.000	1.000	1.000	87.86	0.000	0.000	Strato1_2_8_L_0
23 D	18.03	-2.6579E-02	101.2	90.13	101.2	90.13	V-C	7686.	-4.300	0.000	1.000	1.000	90.13	0.000	0.000	Strato1_2_8_L_0
24 D	18.45	-2.5489E-02	104.9	92.25	104.9	92.25	V-C	7686.	-4.500	0.000	1.000	1.000	92.25	0.000	0.000	Strato1_2_8_L_0
25 D	18.91	-2.4413E-02	108.8	94.56	108.8	94.56	V-C	7686.	-4.700	0.000	1.000	1.000	94.56	0.000	0.000	Strato1_2_8_L_0
26 D	19.35	-2.3352E-02	112.6	96.74	112.6	96.74	V-C	7686.	-4.900	0.000	1.000	1.000	96.74	0.000	0.000	Strato1_2_8_L_0
27 D	19.82	-2.2306E-02	116.5	99.10	116.5	99.10	V-C	7686.	-5.100	0.000	1.000	1.000	99.10	0.000	0.000	Strato1_2_8_L_0
28 D	20.22	-2.1277E-02	119.9	101.1	119.9	101.1	V-C	7686.	-5.300	0.000	1.000	1.000	101.1	0.000	0.000	Strato1_2_8_L_0
29 D	20.71	-2.0266E-02	123.9	103.5	123.9	103.5	V-C	7686.	-5.500	0.000	1.000	1.000				

103.5	0.000	0.000	Strato1_2_8_L_0										
30 D	21.17	-1.9275E-02	127.6	105.9	127.6	105.9	V-C	7686.	-5.700	0.000	1.000	1.000	
105.9	0.000	0.000	Strato1_2_8_L_0										
31 D	21.67	-1.8303E-02	131.5	108.3	131.5	108.3	V-C	7686.	-5.900	0.000	1.000	1.000	
108.3	0.000	0.000	Strato1_2_8_L_0										
32 D	22.14	-1.7353E-02	135.3	110.7	135.3	110.7	V-C	7686.	-6.100	0.000	1.000	1.000	
110.7	0.000	0.000	Strato1_2_8_L_0										
33 D	22.65	-1.6426E-02	139.2	113.3	139.2	113.3	V-C	7686.	-6.300	0.000	1.000	1.000	
113.3	0.000	0.000	Strato1_2_8_L_0										
34 D	23.14	-1.5521E-02	142.9	115.7	142.9	115.7	V-C	7686.	-6.500	0.000	1.000	1.000	
115.7	0.000	0.000	Strato1_2_8_L_0										
35 D	23.66	-1.4641E-02	146.8	118.3	146.8	118.3	V-C	7686.	-6.700	0.000	1.000	1.000	
118.3	0.000	0.000	Strato1_2_8_L_0										
36 D	24.16	-1.3785E-02	150.5	120.8	150.5	120.8	V-C	7686.	-6.900	0.000	1.000	1.000	
120.8	0.000	0.000	Strato1_2_8_L_0										
37 D	24.67	-1.2954E-02	154.2	123.3	154.2	123.3	V-C	7686.	-7.100	0.000	1.000	1.000	
123.3	0.000	0.000	Strato1_2_8_L_0										
38 D	25.21	-1.2149E-02	158.1	126.0	158.1	126.0	V-C	7686.	-7.300	0.000	1.000	1.000	
126.0	0.000	0.000	Strato1_2_8_L_0										
39 D	25.73	-1.1370E-02	161.9	128.6	161.9	128.7	UL-RL	2.3058E+04	-7.500	0.000	1.000	1.000	
128.6	0.000	0.000	Strato1_2_8_L_0										
40 D	26.23	-1.0616E-02	165.8	131.2	165.8	131.5	UL-RL	2.3058E+04	-7.700	0.000	1.000	1.000	
131.2	0.000	0.000	Strato1_2_8_L_0										
41 D	26.73	-9.8892E-03	169.5	133.6	169.5	134.3	UL-RL	2.3058E+04	-7.900	0.000	1.000	1.000	
133.6	0.000	0.000	Strato1_2_8_L_0										
42 D	27.29	-9.1887E-03	173.4	136.5	173.4	137.2	ACTIVE	0.000	-8.100	0.000	1.000	1.000	
136.5	0.000	0.000	Strato1_2_8_L_0										
43 D	27.86	-8.5148E-03	177.0	139.3	177.0	139.9	ACTIVE	0.000	-8.300	0.000	1.000	1.000	
139.3	0.000	0.000	Strato1_2_8_L_0										
44 D	28.47	-7.8676E-03	180.9	142.3	180.9	142.8	ACTIVE	0.000	-8.500	0.000	1.000	1.000	
142.3	0.000	0.000	Strato1_2_8_L_0										
45 D	29.06	-7.2472E-03	184.6	145.3	184.6	145.6	ACTIVE	0.000	-8.700	0.000	1.000	1.000	
145.3	0.000	0.000	Strato1_2_8_L_0										
46 D	29.67	-6.6537E-03	188.5	148.4	188.5	148.5	ACTIVE	0.000	-8.900	0.000	1.000	1.000	
148.4	0.000	0.000	Strato1_2_8_L_0										
47 D	30.26	-6.0871E-03	192.3	151.3	192.3	151.4	ACTIVE	0.000	-9.100	0.000	1.000	1.000	
151.3	0.000	0.000	Strato1_2_8_L_0										
48 D	30.87	-5.5476E-03	196.1	154.4	196.1	154.4	ACTIVE	0.000	-9.300	0.000	1.000	1.000	
154.4	0.000	0.000	Strato1_2_8_L_0										
49 D	31.48	-5.0351E-03	200.0	157.4	200.0	157.4	ACTIVE	0.000	-9.500	0.000	1.000	1.000	
157.4	0.000	0.000	Strato1_2_8_L_0										
50 D	14.79	-4.5499E-03	204.0	73.93	204.0	102.0	ACTIVE	0.000	-9.700	0.000	1.000	1.000	
73.93	0.000	0.000	Strato2_3095_82743_L_0										
51 D	15.15	-4.0921E-03	207.9	75.77	207.9	103.9	ACTIVE	0.000	-9.900	0.000	1.000	1.000	
75.77	0.000	0.000	Strato2_3095_82743_L_0										
52 D	15.53	-3.6616E-03	211.9	77.63	211.9	105.9	ACTIVE	0.000	-10.10	0.000	1.000	1.000	
77.63	0.000	0.000	Strato2_3095_82743_L_0										
53 D	15.91	-3.2583E-03	215.9	79.54	215.9	108.0	ACTIVE	0.000	-10.30	0.000	1.000	1.000	
79.54	0.000	0.000	Strato2_3095_82743_L_0										
54 D	16.28	-2.8819E-03	219.9	81.41	219.9	109.9	ACTIVE	0.000	-10.50	0.000	1.000	1.000	
81.41	0.000	0.000	Strato2_3095_82743_L_0										
55 D	16.66	-2.5318E-03	223.9	83.32	223.9	112.0	ACTIVE	0.000	-10.70	0.000	1.000	1.000	
83.32	0.000	0.000	Strato2_3095_82743_L_0										
56 D	17.04	-2.2076E-03	227.9	85.18	227.9	114.0	ACTIVE	0.000	-10.90	0.000	1.000	1.000	
85.18	0.000	0.000	Strato2_3095_82743_L_0										
57 D	17.42	-1.9084E-03	232.0	87.09	232.0	116.0	ACTIVE	0.000	-11.10	0.000	1.000	1.000	
87.09	0.000	0.000	Strato2_3095_82743_L_0										
58 D	17.78	-1.6335E-03	235.8	88.89	235.8	117.9	ACTIVE	0.000	-11.30	0.000	1.000	1.000	
88.89	0.000	0.000	Strato2_3095_82743_L_0										
59 D	18.16	-1.3819E-03	239.9	90.80	239.9	119.9	ACTIVE	0.000	-11.50	0.000	1.000	1.000	
90.80	0.000	0.000	Strato2_3095_82743_L_0										
60 D	18.53	-1.1526E-03	243.8	92.67	243.8	121.9	ACTIVE	0.000	-11.70	0.000	1.000	1.000	
92.67	0.000	0.000	Strato2_3095_82743_L_0										
61 D	18.92	-9.4458E-04	247.9	94.58	247.9	124.0	ACTIVE	0.000	-11.90	0.000	1.000	1.000	
94.58	0.000	0.000	Strato2_3095_82743_L_0										
62 D	19.30	-7.5665E-04	252.0	96.48	252.0	126.0	ACTIVE	0.000	-12.10	0.000	1.000	1.000	
96.48	0.000	0.000	Strato2_3095_82743_L_0										
63 D	19.67	-5.8758E-04	255.9	98.35	255.9	128.0	ACTIVE	0.000	-12.30	0.000	1.000	1.000	
98.35	0.000	0.000	Strato2_3095_82743_L_0										
64 D	20.05	-4.3612E-04	260.0	100.3	260.0	130.0	ACTIVE	0.000	-12.50	0.000	1.000	1.000	
100.3	0.000	0.000	Strato2_3095_82743_L_0										
65 D	20.41	-3.0093E-04	263.8	102.1	263.8	131.9	ACTIVE	0.000	-12.70	0.000	1.000	1.000	
102.1	0.000	0.000	Strato2_3095_82743_L_0										
66 D	22.67	-1.8067E-04	267.9	113.3	267.9	133.9	UL-RL	6.3994E+04	-12.90	0.000	1.000	1.000	
113.3	0.000	0.000	Strato2_3095_82743_L_0										
67 D	24.78	-7.3930E-05	271.8	123.9	271.8	135.9	UL-RL	6.3994E+04	-13.10	0.000	1.000	1.000	
123.9	0.000	0.000	Strato2_3095_82743_L_0										
68 D	25.95	2.0663E-05	275.7	129.7	275.7	139.8	UL-RL	6.3994E+04	-13.30	0.000	1.000	1.000	
129.7	0.000	0.000	Strato2_3095_82743_L_0										
69 D	27.06	1.0448E-04	279.6	135.3	279.6	143.4	UL-RL	6.3994E+04	-13.50	0.000	1.000	1.000	
135.3	0.000	0.000	Strato2_3095_82743_L_0										
70 D	28.12	1.7886E-04	283.5	140.6	283.5	146.7	UL-RL	6.3994E+04	-13.70	0.000	1.000	1.000	
140.6	0.000	0.000	Strato2_3095_82743_L_0										
71 D	29.14	2.4507E-04	287.4	145.7	287.4	149.9	UL-RL	6.3994E+04	-13.90	0.000	1.000	1.000	
145.7	0.000	0.000	Strato2_3095_82743_L_0										

```
  72 D   30.11       3.0434E-04   291.3       150.6       291.3       152.8            UL-RL  6.3994E+04  -14.10        0.000        1.000        1.000
150.6       0.000       0.000     Strato2_3095_82743_L_0
  73 D   30.87       3.5783E-04   295.1       154.4       295.1       156.0            UL-RL  6.3994E+04  -14.30        0.000        1.000        1.000
154.4       0.000       0.000     Strato2_3095_82743_L_0
  74 D   31.60       4.0659E-04   299.0       158.0       299.0       159.1            UL-RL  6.3994E+04  -14.50        0.000        1.000        1.000
158.0       0.000       0.000     Strato2_3095_82743_L_0
  75 D   32.30       4.5162E-04   303.0       161.5       303.0       162.2            UL-RL  6.3994E+04  -14.70        0.000        1.000        1.000
161.5       0.000       0.000     Strato2_3095_82743_L_0
  76 D   32.99       4.9378E-04   306.9       165.0       306.9       165.2            UL-RL  6.3994E+04  -14.90        0.000        1.000        1.000
165.0       0.000       0.000     Strato2_3095_82743_L_0
  77 D   33.64       5.3386E-04   310.8       168.2       310.8       168.2              V-C  2.1331E+04  -15.10        0.000        1.000        1.000
168.2       0.000       0.000     Strato2_3095_82743_L_0
  78 D   34.25       5.7252E-04   314.7       171.2       314.7       171.2              V-C  2.1331E+04  -15.30        0.000        1.000        1.000
171.2       0.000       0.000     Strato2_3095_82743_L_0
  79 D   34.85       6.1029E-04   318.7       174.2       318.7       174.2              V-C  2.1331E+04  -15.50        0.000        1.000        1.000
174.2       0.000       0.000     Strato2_3095_82743_L_0
  80 D   35.44       6.4759E-04   322.5       177.2       322.5       177.2              V-C  2.1331E+04  -15.70        0.000        1.000        1.000
177.2       0.000       0.000     Strato2_3095_82743_L_0
  81 D   27.03       6.8471E-04   326.4       180.2       326.4       180.2              V-C  2.1331E+04  -15.90        0.000        1.000        1.000
180.2       0.000       0.000     Strato2_3095_82743_L_0
  82 D   9.086       7.0325E-04   328.4       181.7       328.4       181.7              V-C  2.1331E+04  -16.00        0.000        1.000        1.000
181.7       0.000       0.000     Strato2_3095_82743_L_0
```

```
+----------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1     FULL VERSION  *Build date:Jul 11, 2017*  |
|                                                                                                          |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                          |
|                                  Exe Time :24 July 2019      10:49:27                                    |
+----------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P  N O.   2

0_R                                 :
ELEMENT TYPE     5 NO.OF ELEMENTS. IN THIS GROUP   82
C U R R E N T    T I M E    I S      4.0000

 HARDENING 2D SOIL ELEMENT

 ****** TOTAL STRESS FORMULATION *****

 EL *    FORCE      DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P            STATE   STIFFNESS Z-LEVEL       PORE         E FACTOR     UFACTOR
Peq          Su_a         Su_p      LAYER
-------------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1     0.000       --          --          --          --          --          REMOVED     --        0.000        0.000        1.000        1.000
0.000       0.000       0.000     not available
   2     0.000       --          --          --          --          --          REMOVED     --       -0.2000       0.000        1.000        1.000
0.000       0.000       0.000     not available
   3     0.000       --          --          --          --          --          REMOVED     --       -0.4000       0.000        1.000        1.000
0.000       0.000       0.000     not available
   4     0.000       --          --          --          --          --          REMOVED     --       -0.6000       0.000        1.000        1.000
0.000       0.000       0.000     not available
   5     0.000       --          --          --          --          --          REMOVED     --       -0.8000       0.000        1.000        1.000
0.000       0.000       0.000     not available
   6     0.000       --          --          --          --          --          REMOVED     --       -1.000        0.000        1.000        1.000
0.000       0.000       0.000     not available
   7     0.000       --          --          --          --          --          REMOVED     --       -1.200        0.000        1.000        1.000
0.000       0.000       0.000     not available
   8     0.000       --          --          --          --          --          REMOVED     --       -1.400        0.000        1.000        1.000
0.000       0.000       0.000     not available
   9     0.000       --          --          --          --          --          REMOVED     --       -1.600        0.000        1.000        1.000
0.000       0.000       0.000     not available
  10     0.000       --          --          --          --          --          REMOVED     --       -1.800        0.000        1.000        1.000
0.000       0.000       0.000     not available
  11     0.000       --          --          --          --          --          REMOVED     --       -2.000        0.000        1.000        1.000
0.000       0.000       0.000     not available
  12     0.000       --          --          --          --          --          REMOVED     --       -2.200        0.000        1.000        1.000
0.000       0.000       0.000     not available
  13     0.000       --          --          --          --          --          REMOVED     --       -2.400        0.000        1.000        1.000
0.000       0.000       0.000     not available
  14     0.000       --          --          --          --          --          REMOVED     --       -2.500        0.000        1.000        1.000
0.000       0.000       0.000     not available
  15     0.000       --          --          --          --          --          REMOVED     --       -2.700        0.000        1.000        1.000
0.000       0.000       0.000     not available
  16     0.000       --          --          --          --          --          REMOVED     --       -2.900        0.000        1.000        1.000
0.000       0.000       0.000     not available
  17 D  0.1425       3.3340E-02   1.900       0.7125      58.90       65.82         ACTIVE   0.000       -3.100        0.000        1.000        1.000
0.7125       0.000       0.000     Strato1_2_8_L_0
  18 D  0.4275       3.2190E-02   5.700       2.137       62.70       67.88         ACTIVE   0.000       -3.300        0.000        1.000        1.000
2.137       0.000       0.000     Strato1_2_8_L_0
```

19 D	0.7125	3.1048E-02	9.500	3.562	66.50	69.91	ACTIVE	0.000	-3.500	0.000	1.000	1.000	
3.562	0.000	0.000	Strato1_2_8_L_0										
20 D	1.438	2.9916E-02	13.30	7.189	70.30	71.93	UL-RL	1.9516E+04	-3.700	0.000	1.000	1.000	
7.189	0.000	0.000	Strato1_2_8_L_0										
21 D	4.189	2.8793E-02	17.10	20.94	74.10	73.92	UL-RL	1.9516E+04	-3.900	0.000	1.000	1.000	
20.94	0.000	0.000	Strato1_2_8_L_0										
22 D	6.932	2.7680E-02	20.90	34.66	77.90	75.89	UL-RL	1.9516E+04	-4.100	0.000	1.000	1.000	
34.66	0.000	0.000	Strato1_2_8_L_0										
23 D	9.665	2.6579E-02	24.70	48.33	81.70	77.82	UL-RL	1.9516E+04	-4.300	0.000	1.000	1.000	
48.33	0.000	0.000	Strato1_2_8_L_0										
24 D	12.39	2.5489E-02	28.50	61.94	85.50	86.58	UL-RL	1.9516E+04	-4.500	0.000	1.000	1.000	
61.94	0.000	0.000	Strato1_2_8_L_0										
25 D	15.10	2.4413E-02	32.30	75.48	89.30	98.13	UL-RL	1.9516E+04	-4.700	0.000	1.000	1.000	
75.48	0.000	0.000	Strato1_2_8_L_0										
26 D	17.79	2.3352E-02	36.10	88.96	93.10	109.7	UL-RL	1.9516E+04	-4.900	0.000	1.000	1.000	
88.96	0.000	0.000	Strato1_2_8_L_0										
27 D	20.47	2.2306E-02	39.90	102.4	96.90	121.2	UL-RL	1.9516E+04	-5.100	0.000	1.000	1.000	
102.4	0.000	0.000	Strato1_2_8_L_0										
28 D	23.13	2.1277E-02	43.70	115.7	100.7	132.8	UL-RL	1.9516E+04	-5.300	0.000	1.000	1.000	
115.7	0.000	0.000	Strato1_2_8_L_0										
29 D	25.78	2.0266E-02	47.50	128.9	104.5	144.3	UL-RL	1.9516E+04	-5.500	0.000	1.000	1.000	
128.9	0.000	0.000	Strato1_2_8_L_0										
30 D	28.41	1.9275E-02	51.30	142.1	108.3	155.8	UL-RL	1.9516E+04	-5.700	0.000	1.000	1.000	
142.1	0.000	0.000	Strato1_2_8_L_0										
31 D	31.03	1.8303E-02	55.10	155.1	112.1	167.4	UL-RL	1.9516E+04	-5.900	0.000	1.000	1.000	
155.1	0.000	0.000	Strato1_2_8_L_0										
32 D	33.62	1.7353E-02	58.90	168.1	115.9	178.9	UL-RL	1.9516E+04	-6.100	0.000	1.000	1.000	
168.1	0.000	0.000	Strato1_2_8_L_0										
33 D	35.73	1.6426E-02	62.70	178.7	119.7	188.2	UL-RL	1.9516E+04	-6.300	0.000	1.000	1.000	
178.7	0.000	0.000	Strato1_2_8_L_0										
34 D	35.08	1.5521E-02	66.50	175.4	123.5	183.6	UL-RL	1.9516E+04	-6.500	0.000	1.000	1.000	
175.4	0.000	0.000	Strato1_2_8_L_0										
35 D	34.43	1.4641E-02	70.30	172.2	127.3	179.2	UL-RL	1.9516E+04	-6.700	0.000	1.000	1.000	
172.2	0.000	0.000	Strato1_2_8_L_0										
36 D	33.80	1.3785E-02	74.10	169.0	131.1	175.0	UL-RL	1.9516E+04	-6.900	0.000	1.000	1.000	
169.0	0.000	0.000	Strato1_2_8_L_0										
37 D	33.19	1.2954E-02	77.90	166.0	134.9	170.9	UL-RL	1.9516E+04	-7.100	0.000	1.000	1.000	
166.0	0.000	0.000	Strato1_2_8_L_0										
38 D	32.60	1.2149E-02	81.70	163.0	138.7	167.0	UL-RL	1.9516E+04	-7.300	0.000	1.000	1.000	
163.0	0.000	0.000	Strato1_2_8_L_0										
39 D	32.02	1.1370E-02	85.50	160.1	142.5	163.3	UL-RL	1.9516E+04	-7.500	0.000	1.000	1.000	
160.1	0.000	0.000	Strato1_2_8_L_0										
40 D	31.47	1.0616E-02	89.30	157.3	146.3	159.7	UL-RL	1.9516E+04	-7.700	0.000	1.000	1.000	
157.3	0.000	0.000	Strato1_2_8_L_0										
41 D	30.93	9.8892E-03	93.10	154.6	150.1	156.3	UL-RL	1.9516E+04	-7.900	0.000	1.000	1.000	
154.6	0.000	0.000	Strato1_2_8_L_0										
42 D	30.41	9.1887E-03	96.90	152.1	153.9	153.1	UL-RL	1.9516E+04	-8.100	0.000	1.000	1.000	
152.1	0.000	0.000	Strato1_2_8_L_0										
43 D	29.92	8.5148E-03	100.7	149.6	157.7	150.1	UL-RL	1.9516E+04	-8.300	0.000	1.000	1.000	
149.6	0.000	0.000	Strato1_2_8_L_0										
44 D	29.44	7.8676E-03	104.5	147.2	161.5	147.2	V-C	6505.	-8.500	0.000	1.000	1.000	
147.2	0.000	0.000	Strato1_2_8_L_0										
45 D	28.93	7.2472E-03	108.3	144.7	165.3	144.7	V-C	6505.	-8.700	0.000	1.000	1.000	
144.7	0.000	0.000	Strato1_2_8_L_0										
46 D	28.46	6.6537E-03	112.1	142.3	169.1	142.3	V-C	6505.	-8.900	0.000	1.000	1.000	
142.3	0.000	0.000	Strato1_2_8_L_0										
47 D	28.02	6.0871E-03	115.9	140.1	172.9	140.1	V-C	6505.	-9.100	0.000	1.000	1.000	
140.1	0.000	0.000	Strato1_2_8_L_0										
48 D	27.61	5.5476E-03	119.7	138.0	176.7	138.0	V-C	6505.	-9.300	0.000	1.000	1.000	
138.0	0.000	0.000	Strato1_2_8_L_0										
49 D	27.23	5.0351E-03	123.5	136.2	180.5	136.2	V-C	6505.	-9.500	0.000	1.000	1.000	
136.2	0.000	0.000	Strato1_2_8_L_0										
50 D	33.99	4.5499E-03	127.5	169.9	184.5	169.9	V-C	1.4650E+04	-9.700	0.000	1.000	1.000	
169.9	0.000	0.000	Strato2_3095_82743_L_0										
51 D	32.80	4.0921E-03	131.5	164.0	188.5	164.0	V-C	1.4650E+04	-9.900	0.000	1.000	1.000	
164.0	0.000	0.000	Strato2_3095_82743_L_0										
52 D	31.70	3.6616E-03	135.5	158.5	192.5	158.5	V-C	1.4650E+04	-10.10	0.000	1.000	1.000	
158.5	0.000	0.000	Strato2_3095_82743_L_0										
53 D	30.69	3.2583E-03	139.5	153.5	196.5	153.5	V-C	1.4650E+04	-10.30	0.000	1.000	1.000	
153.5	0.000	0.000	Strato2_3095_82743_L_0										
54 D	29.76	2.8819E-03	143.5	148.8	200.5	148.8	V-C	1.4650E+04	-10.50	0.000	1.000	1.000	
148.8	0.000	0.000	Strato2_3095_82743_L_0										
55 D	28.92	2.5318E-03	147.5	144.6	204.5	144.6	V-C	1.4650E+04	-10.70	0.000	1.000	1.000	
144.6	0.000	0.000	Strato2_3095_82743_L_0										
56 D	28.16	2.2076E-03	151.5	140.8	208.5	140.8	V-C	1.4650E+04	-10.90	0.000	1.000	1.000	
140.8	0.000	0.000	Strato2_3095_82743_L_0										
57 D	27.49	1.9084E-03	155.5	137.5	212.5	137.5	V-C	1.4650E+04	-11.10	0.000	1.000	1.000	
137.5	0.000	0.000	Strato2_3095_82743_L_0										
58 D	26.90	1.6335E-03	159.5	134.5	216.5	134.5	V-C	1.4650E+04	-11.30	0.000	1.000	1.000	
134.5	0.000	0.000	Strato2_3095_82743_L_0										
59 D	26.39	1.3819E-03	163.5	132.0	220.5	132.0	V-C	1.4650E+04	-11.50	0.000	1.000	1.000	
132.0	0.000	0.000	Strato2_3095_82743_L_0										
60 D	25.96	1.1526E-03	167.5	129.8	224.5	129.8	V-C	1.4650E+04	-11.70	0.000	1.000	1.000	
129.8	0.000	0.000	Strato2_3095_82743_L_0										
61 D	25.60	9.4458E-04	171.5	128.0	228.5	128.0	V-C	1.4650E+04	-11.90	0.000	1.000	1.000	

```
128.0       0.000       0.000     Strato2_3095_82743_L_0
  62 D   25.31      7.5665E-04   175.5       126.5       232.5       126.5            V-C  1.4650E+04  -12.10       0.000       1.000       1.000
126.5       0.000       0.000     Strato2_3095_82743_L_0
  63 D   24.83      5.8758E-04   179.5       124.1       236.5       126.1          UL-RL  4.3949E+04  -12.30       0.000       1.000       1.000
124.1       0.000       0.000     Strato2_3095_82743_L_0
  64 D   24.05      4.3612E-04   183.5       120.2       240.5       126.8          UL-RL  4.3949E+04  -12.50       0.000       1.000       1.000
120.2       0.000       0.000     Strato2_3095_82743_L_0
  65 D   23.40      3.0093E-04   187.5       117.0       244.5       127.7          UL-RL  4.3949E+04  -12.70       0.000       1.000       1.000
117.0       0.000       0.000     Strato2_3095_82743_L_0
  66 D   22.87      1.8067E-04   191.5       114.3       248.5       128.7          UL-RL  4.3949E+04  -12.90       0.000       1.000       1.000
114.3       0.000       0.000     Strato2_3095_82743_L_0
  67 D   22.44      7.3930E-05   195.5       112.2       252.5       129.8          UL-RL  4.3949E+04  -13.10       0.000       1.000       1.000
112.2       0.000       0.000     Strato2_3095_82743_L_0
  68 D   22.12     -2.0663E-05   199.5       110.6       256.5       130.9          UL-RL  4.3949E+04  -13.30       0.000       1.000       1.000
110.6       0.000       0.000     Strato2_3095_82743_L_0
  69 D   21.87     -1.0448E-04   203.5       109.4       260.5       132.2          UL-RL  4.3949E+04  -13.50       0.000       1.000       1.000
109.4       0.000       0.000     Strato2_3095_82743_L_0
  70 D   21.70     -1.7886E-04   207.5       108.5       264.5       133.5          UL-RL  4.3949E+04  -13.70       0.000       1.000       1.000
108.5       0.000       0.000     Strato2_3095_82743_L_0
  71 D   21.59     -2.4507E-04   211.5       108.0       268.5       134.9          UL-RL  4.3949E+04  -13.90       0.000       1.000       1.000
108.0       0.000       0.000     Strato2_3095_82743_L_0
  72 D   21.54     -3.0434E-04   215.5       107.7       272.5       136.4          UL-RL  4.3949E+04  -14.10       0.000       1.000       1.000
107.7       0.000       0.000     Strato2_3095_82743_L_0
  73 D   21.39     -3.5783E-04   219.5       106.9       276.5       138.2          UL-RL  4.3949E+04  -14.30       0.000       1.000       1.000
106.9       0.000       0.000     Strato2_3095_82743_L_0
  74 D   21.23     -4.0659E-04   223.5       106.2       280.5       140.2          UL-RL  4.3949E+04  -14.50       0.000       1.000       1.000
106.2       0.000       0.000     Strato2_3095_82743_L_0
  75 D   21.12     -4.5162E-04   227.5       105.6       284.5       142.2          UL-RL  4.3949E+04  -14.70       0.000       1.000       1.000
105.6       0.000       0.000     Strato2_3095_82743_L_0
  76 D   21.04     -4.9378E-04   231.5       105.2       288.5       144.2          UL-RL  4.3949E+04  -14.90       0.000       1.000       1.000
105.2       0.000       0.000     Strato2_3095_82743_L_0
  77 D   20.98     -5.3386E-04   235.5       104.9       292.5       146.2          UL-RL  4.3949E+04  -15.10       0.000       1.000       1.000
104.9       0.000       0.000     Strato2_3095_82743_L_0
  78 D   20.94     -5.7252E-04   239.5       104.7       296.5       148.2          UL-RL  4.3949E+04  -15.30       0.000       1.000       1.000
104.7       0.000       0.000     Strato2_3095_82743_L_0
  79 D   20.90     -6.1029E-04   243.5       104.5       300.5       150.2          UL-RL  4.3949E+04  -15.50       0.000       1.000       1.000
104.5       0.000       0.000     Strato2_3095_82743_L_0
  80 D   20.88     -6.4759E-04   247.5       104.4       304.5       152.2          UL-RL  4.3949E+04  -15.70       0.000       1.000       1.000
104.4       0.000       0.000     Strato2_3095_82743_L_0
  81 D   15.64     -6.8471E-04   251.5       104.3       308.5       154.2          UL-RL  4.3949E+04  -15.90       0.000       1.000       1.000
104.3       0.000       0.000     Strato2_3095_82743_L_0
  82 D   5.210     -7.0325E-04   253.5       104.2       310.5       155.2          UL-RL  4.3949E+04  -16.00       0.000       1.000       1.000
104.2       0.000       0.000     Strato2_3095_82743_L_0
```

```
+-------------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                              |
|                                   Exe Time :24 July 2019      10:49:27                                                        |
+-------------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   81
C U R R E N T   T I M E   I S     4.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
 ------------------------------------------------------
    1  4.9689     -4.9689    -2.75482E-10 0.99378
    2  13.648     -13.648    -0.99378      3.7235
    3  23.153     -23.153     -3.7235      8.3540
    4  33.035     -33.035     -8.3540      14.961
    5  43.504     -43.504     -14.961      23.662
    6  54.367     -54.367     -23.662      34.535
    7  65.763     -65.763     -34.535      47.688
    8  77.563     -77.563     -47.688      63.200
    9  89.732     -89.732     -63.200      81.147
   10  102.33     -102.33     -81.147      101.61
   11  115.42     -115.42     -101.61      124.70
   12  128.93     -128.93     -124.70      150.48
   13  139.43     -139.43     -150.48      164.43
   14 -7.9596      7.9596     -164.43      162.83
   15  6.6345     -6.6345     -162.83      164.16
   16  21.689     -21.689     -164.16      168.50
   17  37.007     -37.007     -168.50      175.90
   18  52.492     -52.492     -175.90      186.40
   19  68.098     -68.098     -186.40      200.02
```

20	83.427	-83.427	-200.02	216.70
21	96.356	-96.356	-216.70	235.97
22	107.00	-107.00	-235.97	257.37
23	115.36	-115.36	-257.37	280.45
24	121.42	-121.42	-280.45	304.73
25	125.24	-125.24	-304.73	329.78
26	126.79	-126.79	-329.78	355.14
27	126.14	-126.14	-355.14	380.36
28	123.23	-123.23	-380.36	405.01
29	118.16	-118.16	-405.01	428.64
30	110.92	-110.92	-428.64	450.83
31	101.56	-101.56	-450.83	471.14
32	90.079	-90.079	-471.14	489.15
33	76.997	-76.997	-489.15	504.55
34	65.063	-65.063	-504.55	517.56
35	54.295	-54.295	-517.56	528.42
36	44.647	-44.647	-528.42	537.35
37	36.123	-36.123	-537.35	544.58
38	28.731	-28.731	-544.58	550.32
39	22.437	-22.437	-550.32	554.81
40	17.205	-17.205	-554.81	558.25
41	13.005	-13.005	-558.25	560.85
42	9.8855	-9.8855	-560.85	562.83
43	7.8233	-7.8233	-562.83	564.39
44	6.8500	-6.8500	-564.39	565.76
45	6.9767	-6.9767	-565.76	567.16
46	8.1884	-8.1884	-567.16	568.80
47	10.435	-10.435	-568.80	570.88
48	13.699	-13.699	-570.88	573.62
49	17.946	-17.946	-573.62	577.21
50	-1.2556	1.2556	-577.21	576.96
51	-18.905	18.905	-576.96	573.18
52	-35.083	35.083	-573.18	566.17
53	-49.864	49.864	-566.17	556.19
54	-63.345	63.345	-556.19	543.52
55	-75.602	75.602	-543.52	528.40
56	-86.730	86.730	-528.40	511.06
57	-96.804	96.804	-511.06	491.70
58	-105.93	105.93	-491.70	470.51
59	-114.16	114.16	-470.51	447.68
60	-121.58	121.58	-447.68	423.36
61	-128.26	128.26	-423.36	397.71
62	-134.28	134.28	-397.71	370.85
63	-139.44	139.44	-370.85	342.97
64	-143.43	143.43	-342.97	314.28
65	-146.42	146.42	-314.28	285.00
66	-146.62	146.62	-285.00	255.67
67	-144.29	144.29	-255.67	226.81
68	-140.46	140.46	-226.81	198.72
69	-135.27	135.27	-198.72	171.67
70	-128.85	128.85	-171.67	145.90
71	-121.31	121.31	-145.90	121.64
72	-112.74	112.74	-121.64	99.089
73	-103.25	103.25	-99.089	78.439
74	-92.880	92.880	-78.439	59.863
75	-81.693	81.693	-59.863	43.524
76	-69.738	69.738	-43.524	29.577
77	-57.080	57.080	-29.577	18.161
78	-43.771	43.771	-18.161	9.4063
79	-29.828	29.828	-9.4063	3.4408
80	-15.266	15.266	-3.4408	0.38763
81	-3.8759	3.8759	-0.38763	-3.58260E-11

PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017*

NewProject.BaseDesignSection_28.A2M2R1_3514
Exe Time :24 July 2019 10:49:27

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 4

Tieback_768111 :
ELEMENT TYPE 6 NO.OF ELEMENTS. IN THIS GROUP 1
C U R R E N T T I M E I S 4.0000

POST-TENSION 2D-BOUNDARY ELEMENT

EL	FORCE	d0	EDISPL	pl. eps	K	-ve limit	+ve limit

```
ANCHOR    1   163.60     -2.30139E-03 -2.30139E-03   0.0000       0.0000       0.0000       0.0000     BORN NOW JUST ACTIVATED

ITER      0 RNORM = 0.000     RMNORM= 0.000
            RINORM=0.1291E+07 RIMNOR=0.2206E+08
            RENORM=0.1400E+05 REMNOR=0.7363E-17 RATIO =0.1041     TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 158.0     RMMAX = 577.2
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
            RDT   =0.1291E+07 RDR   =0.2206E+08
            RATIOT=0.1041     RATIOR= 0.000
            MAX UN= 35.73     IEQ=    65 NODE     33 DOF   1  Y-DISPL.F
            MIN UN=-.4354E-07 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER      2 RNORM = 0.000     RMNORM= 0.000
            RINORM=0.1291E+07 RIMNOR=0.2206E+08
            RENORM= 3786.     REMNOR=0.4278E-17 RATIO =0.5416E-01 TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 158.0     RMMAX = 577.2
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
            RDT   =0.1291E+07 RDR   =0.2206E+08
            RATIOT=0.5416E-01 RATIOR= 0.000
            MAX UN= 13.21     IEQ=    73 NODE     37 DOF   1  Y-DISPL.F
            MIN UN=-.7775E-08 IEQ=    13 NODE      7 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER      3 RNORM = 0.000     RMNORM= 0.000
            RINORM=0.1291E+07 RIMNOR=0.2206E+08
            RENORM= 1911.     REMNOR=0.1438E-16 RATIO =0.3848E-01 TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 158.0     RMMAX = 577.2
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
            RDT   =0.1291E+07 RDR   =0.2206E+08
            RATIOT=0.3848E-01 RATIOR= 0.000
            MAX UN= 18.28     IEQ=    15 NODE      8 DOF   1  Y-DISPL.F
            MIN UN=-1.768     IEQ=   161 NODE     81 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER      4 RNORM = 0.000     RMNORM= 0.000
            RINORM=0.1291E+07 RIMNOR=0.2206E+08
            RENORM= 22.34     REMNOR=0.7740E-16 RATIO =0.4160E-02 TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 158.0     RMMAX = 577.2
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
            RDT   =0.1291E+07 RDR   =0.2206E+08
            RATIOT=0.4160E-02 RATIOR= 0.000
            MAX UN=0.2329     IEQ=    99 NODE     50 DOF   1  Y-DISPL.F
            MIN UN=-4.508     IEQ=   159 NODE     80 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER      5 RNORM = 0.000     RMNORM= 0.000
            RINORM=0.1291E+07 RIMNOR=0.2206E+08
            RENORM= 2.143     REMNOR=0.4358E-16 RATIO =0.1288E-02 TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 158.0     RMMAX = 577.2
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
            RDT   =0.1291E+07 RDR   =0.2206E+08
            RATIOT=0.1288E-02 RATIOR= 0.000
            MAX UN=0.6319     IEQ=   141 NODE     71 DOF   1  Y-DISPL.F
            MIN UN=-.4066E-01 IEQ=   149 NODE     75 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER      6 RNORM = 0.000     RMNORM= 0.000
            RINORM=0.1291E+07 RIMNOR=0.2206E+08
            RENORM=0.2133     REMNOR=0.5334E-16 RATIO =0.4065E-03 TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 158.0     RMMAX = 577.2
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
            RDT   =0.1291E+07 RDR   =0.2206E+08
            RATIOT=0.4065E-03 RATIOR= 0.000
            MAX UN=0.1512     IEQ=   119 NODE     60 DOF   1  Y-DISPL.F
            MIN UN=-.2185     IEQ=   159 NODE     80 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER      7 RNORM = 0.000     RMNORM= 0.000
            RINORM=0.1291E+07 RIMNOR=0.2206E+08
            RENORM=0.8196E-03 REMNOR=0.1391E-16 RATIO =0.2520E-04 TOLER =0.1000E-03      CONVERGED !
            RFMAX = 158.0     RMMAX = 577.2
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
            RDT   =0.1291E+07 RDR   =0.2206E+08
            RATIOT=0.2520E-04 RATIOR= 0.000
            MAX UN=0.1461E-01 IEQ=    35 NODE     18 DOF   1  Y-DISPL.F
            MIN UN=-.1855E-07 IEQ=    45 NODE     23 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                        |
|                                   Exe Time :24 July 2019      10:49:27                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     7 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    5     ( AT TIME   5.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)            (
    1   9.0561949E-02  -6.2921838E-03
    2   8.9303516E-02  -6.2921313E-03
    3   8.8045109E-02  -6.2918958E-03
    4   8.6786782E-02  -6.2912975E-03
    5   8.5528628E-02  -6.2901216E-03
    6   8.4270788E-02  -6.2881237E-03
    7   8.3013452E-02  -6.2850290E-03
    8   8.1756870E-02  -6.2805344E-03
    9   8.0501354E-02  -6.2743074E-03
   10   7.9247286E-02  -6.2659900E-03
   11   7.7995123E-02  -6.2551988E-03
   12   7.6745399E-02  -6.2415209E-03
   13   7.5498736E-02  -6.2245144E-03
   14   7.4876771E-02  -6.2146319E-03
   15   7.3635563E-02  -6.1992185E-03
   16   7.2396390E-02  -6.1942056E-03
   17   7.1157224E-02  -6.1990515E-03
   18   6.9916150E-02  -6.2131861E-03
   19   6.8671370E-02  -6.2360104E-03
   20   6.7421209E-02  -6.2668963E-03
   21   6.6164118E-02  -6.3051869E-03
   22   6.4898686E-02  -6.3501977E-03
   23   6.3623638E-02  -6.4012171E-03
   24   6.2337848E-02  -6.4575040E-03
   25   6.1040337E-02  -6.5182883E-03
   26   5.9730286E-02  -6.5827715E-03
   27   5.8407044E-02  -6.6501260E-03
   28   5.7070108E-02  -6.7194967E-03
   29   5.5719169E-02  -6.7899998E-03
   30   5.4354093E-02  -6.8607244E-03
   31   5.2974927E-02  -6.9307309E-03
   32   5.1581920E-02  -6.9990506E-03
   33   5.0175493E-02  -7.0646874E-03
   34   4.8756292E-02  -7.1266155E-03
   35   4.7325164E-02  -7.1837808E-03
   36   4.5883170E-02  -7.2351008E-03
   37   4.4431585E-02  -7.2795111E-03
   38   4.2971899E-02  -7.3160209E-03
   39   4.1505771E-02  -7.3437209E-03
   40   4.0035053E-02  -7.3617823E-03
   41   3.8561750E-02  -7.3694577E-03
   42   3.7088007E-02  -7.3660806E-03
   43   3.5616101E-02  -7.3510659E-03
   44   3.4148398E-02  -7.3239097E-03
   45   3.2687375E-02  -7.2841903E-03
   46   3.1235582E-02  -7.2315670E-03
   47   2.9795626E-02  -7.1657800E-03
   48   2.8370166E-02  -7.0866513E-03
   49   2.6961868E-02  -6.9940825E-03
   50   2.5573430E-02  -6.8880572E-03
   51   2.4207471E-02  -6.7696469E-03
   52   2.2866293E-02  -6.6409172E-03
   53   2.1551697E-02  -6.5038046E-03
   54   2.0265209E-02  -6.3601310E-03
   55   1.9007969E-02  -6.2115958E-03
   56   1.7780789E-02  -6.0597827E-03
   57   1.6584176E-02  -5.9061643E-03
   58   1.5418352E-02  -5.7521061E-03
   59   1.4283279E-02  -5.5988710E-03
   60   1.3178671E-02  -5.4476239E-03
   61   1.2104025E-02  -5.2994352E-03
   62   1.1058628E-02  -5.1552854E-03
   63   1.0041582E-02  -5.0160680E-03
   64   9.0518180E-03  -4.8825946E-03
   65   8.0881125E-03  -4.7555974E-03
```

66	7.1491035E-03	-4.6357326E-03
67	6.2333052E-03	-4.5235815E-03
68	5.3391227E-03	-4.4196540E-03
69	4.4648660E-03	-4.3243914E-03
70	3.6087635E-03	-4.2381687E-03
71	2.7689751E-03	-4.1612969E-03
72	1.9436047E-03	-4.0940249E-03
73	1.1307137E-03	-4.0365242E-03
74	3.2834088E-04	-3.9888359E-03
75	-4.6546129E-04	-3.9507572E-03
76	-1.2525658E-03	-3.9217360E-03
77	-2.0347021E-03	-3.9009116E-03
78	-2.8134037E-03	-3.8871856E-03
79	-3.5899607E-03	-3.8792240E-03
80	-4.3653761E-03	-3.8755050E-03
81	-5.1403366E-03	-3.8743944E-03
82	-5.5278110E-03	-3.8743381E-03

```
+-----------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1     FULL VERSION  *Build date:Jul 11, 2017*  |
|                                                                                                           |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                           |
|                                  Exe Time :24 July 2019      10:49:27                                     |
+-----------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    1

0_L                             :
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
C U R R E N T    T I M E    I S      5.0000

 HARDENING 2D SOIL ELEMENT

 ****** TOTAL STRESS FORMULATION *****
```

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	2.208	-9.0562E-02	28.00	22.08	28.00	49.69	UL-RL	1.0279E+04	0.000	0.000	1.000	1.000	22.08	0.000	0.000	Strato1_2_8_L_0
2 D	3.299	-8.9304E-02	20.91	16.50	20.91	43.40	UL-RL	1.0279E+04	-0.2000	0.000	1.000	1.000	16.50	0.000	0.000	Strato1_2_8_L_0
3 D	4.265	-8.8045E-02	27.06	21.33	27.06	47.52	UL-RL	1.0279E+04	-0.4000	0.000	1.000	1.000	21.33	0.000	0.000	Strato1_2_8_L_0
4 D	4.785	-8.6787E-02	30.37	23.92	30.37	49.41	UL-RL	1.0279E+04	-0.6000	0.000	1.000	1.000	23.92	0.000	0.000	Strato1_2_8_L_0
5 D	5.514	-8.5529E-02	35.02	27.57	35.02	52.35	UL-RL	1.0279E+04	-0.8000	0.000	1.000	1.000	27.57	0.000	0.000	Strato1_2_8_L_0
6 D	6.051	-8.4271E-02	38.43	30.25	38.43	54.32	UL-RL	1.0279E+04	-1.000	0.000	1.000	1.000	30.25	0.000	0.000	Strato1_2_8_L_0
7 D	6.727	-8.3013E-02	42.74	33.64	42.74	56.98	UL-RL	1.0279E+04	-1.200	0.000	1.000	1.000	33.64	0.000	0.000	Strato1_2_8_L_0
8 D	7.278	-8.1757E-02	46.24	36.39	46.24	59.00	ACTIVE	0.000	-1.400	0.000	1.000	1.000	36.39	0.000	0.000	Strato1_2_8_L_0
9 D	7.796	-8.0501E-02	49.53	38.98	49.53	60.85	ACTIVE	0.000	-1.600	0.000	1.000	1.000	38.98	0.000	0.000	Strato1_2_8_L_0
10 D	8.371	-7.9247E-02	53.19	41.86	53.19	62.97	ACTIVE	0.000	-1.800	0.000	1.000	1.000	41.86	0.000	0.000	Strato1_2_8_L_0
11 D	9.026	-7.7995E-02	57.34	45.13	57.34	65.47	ACTIVE	0.000	-2.000	0.000	1.000	1.000	45.13	0.000	0.000	Strato1_2_8_L_0
12 D	9.602	-7.6745E-02	61.00	48.01	61.00	67.56	ACTIVE	0.000	-2.200	0.000	1.000	1.000	48.01	0.000	0.000	Strato1_2_8_L_0
13 D	7.683	-7.5499E-02	65.08	51.22	65.08	69.97	ACTIVE	0.000	-2.400	0.000	1.000	1.000	51.22	0.000	0.000	Strato1_2_8_L_0
14 D	7.888	-7.4877E-02	66.82	52.59	66.82	70.92	ACTIVE	0.000	-2.500	0.000	1.000	1.000	52.59	0.000	0.000	Strato1_2_8_L_0
15 D	11.10	-7.3636E-02	70.51	55.49	70.51	72.97	ACTIVE	0.000	-2.700	0.000	1.000	1.000	55.49	0.000	0.000	Strato1_2_8_L_0
16 D	11.73	-7.2396E-02	74.54	58.66	74.54	75.27	ACTIVE	0.000	-2.900	0.000	1.000	1.000	58.66	0.000	0.000	Strato1_2_8_L_0
17 D	12.31	-7.1157E-02	78.23	61.57	78.23	77.30	ACTIVE	0.000	-3.100	0.000	1.000	1.000	61.57	0.000	0.000	Strato1_2_8_L_0
18 D	12.94	-6.9916E-02	82.23	64.72	82.23	79.56	ACTIVE	0.000	-3.300	0.000	1.000	1.000	64.72	0.000	0.000	Strato1_2_8_L_0
19 D	13.53	-6.8671E-02	85.93	67.63	85.93	81.59	ACTIVE	0.000	-3.500	0.000	1.000	1.000	67.63	0.000	0.000	Strato1_2_8_L_0
20 D	14.15	-6.7421E-02	89.90	70.75	89.90	83.84	ACTIVE	0.000	-3.700	0.000	1.000	1.000	70.75	0.000	0.000	Strato1_2_8_L_0
21 D	14.68	-6.6164E-02	93.24	73.38	93.24	85.59	ACTIVE	0.000	-3.900	0.000	1.000	1.000	73.38	0.000	0.000	Strato1_2_8_L_0
22 D	15.30	-6.4899E-02	97.21	76.50	97.21	87.86	ACTIVE	0.000	-4.100	0.000	1.000	1.000	76.50	0.000	0.000	Strato1_2_8_L_0
23 D	15.92	-6.3624E-02	101.2	79.61	101.2	90.13	ACTIVE	0.000	-4.300	0.000	1.000	1.000	79.61	0.000	0.000	Strato1_2_8_L_0
24 D	16.51	-6.2338E-02	104.9	82.55	104.9	92.25	ACTIVE	0.000	-4.500	0.000	1.000	1.000	82.55	0.000	0.000	Strato1_2_8_L_0
25 D	17.13	-6.1040E-02	108.8	85.64	108.8	94.56	ACTIVE	0.000	-4.700	0.000	1.000	1.000	85.64	0.000	0.000	Strato1_2_8_L_0
26 D	17.72	-5.9730E-02	112.6	88.58	112.6	96.74	ACTIVE	0.000	-4.900	0.000	1.000	1.000	88.58	0.000	0.000	Strato1_2_8_L_0
27 D	18.33	-5.8407E-02	116.5	91.67	116.5	99.10	ACTIVE	0.000	-5.100	0.000	1.000	1.000	91.67	0.000	0.000	Strato1_2_8_L_0
28 D	18.88	-5.7070E-02	119.9	94.39	119.9	101.1	ACTIVE	0.000	-5.300	0.000	1.000	1.000	94.39	0.000	0.000	Strato1_2_8_L_0
29 D	19.49	-5.5719E-02	123.9	97.47	123.9	103.5	ACTIVE	0.000	-5.500	0.000	1.000	1.000	97.47	0.000	0.000	Strato1_2_8_L_0
30 D	20.08	-5.4354E-02	127.6	100.4	127.6	105.9	ACTIVE	0.000	-5.700	0.000	1.000	1.000				

100.4	0.000	0.000	Strato1_2_8_L_0									
31 D	20.70	-5.2975E-02	131.5	103.5	131.5	108.3	ACTIVE	0.000	-5.900	0.000	1.000	1.000
103.5	0.000	0.000	Strato1_2_8_L_0									
32 D	21.29	-5.1582E-02	135.3	106.5	135.3	110.7	ACTIVE	0.000	-6.100	0.000	1.000	1.000
106.5	0.000	0.000	Strato1_2_8_L_0									
33 D	21.90	-5.0175E-02	139.2	109.5	139.2	113.3	ACTIVE	0.000	-6.300	0.000	1.000	1.000
109.5	0.000	0.000	Strato1_2_8_L_0									
34 D	22.49	-4.8756E-02	142.9	112.5	142.9	115.7	ACTIVE	0.000	-6.500	0.000	1.000	1.000
112.5	0.000	0.000	Strato1_2_8_L_0									
35 D	23.11	-4.7325E-02	146.8	115.5	146.8	118.3	ACTIVE	0.000	-6.700	0.000	1.000	1.000
115.5	0.000	0.000	Strato1_2_8_L_0									
36 D	23.69	-4.5883E-02	150.5	118.4	150.5	120.8	ACTIVE	0.000	-6.900	0.000	1.000	1.000
118.4	0.000	0.000	Strato1_2_8_L_0									
37 D	24.28	-4.4432E-02	154.2	121.4	154.2	123.3	ACTIVE	0.000	-7.100	0.000	1.000	1.000
121.4	0.000	0.000	Strato1_2_8_L_0									
38 D	24.89	-4.2972E-02	158.1	124.4	158.1	126.0	ACTIVE	0.000	-7.300	0.000	1.000	1.000
124.4	0.000	0.000	Strato1_2_8_L_0									
39 D	25.48	-4.1506E-02	161.9	127.4	161.9	128.7	ACTIVE	0.000	-7.500	0.000	1.000	1.000
127.4	0.000	0.000	Strato1_2_8_L_0									
40 D	26.09	-4.0035E-02	165.8	130.5	165.8	131.5	ACTIVE	0.000	-7.700	0.000	1.000	1.000
130.5	0.000	0.000	Strato1_2_8_L_0									
41 D	26.68	-3.8562E-02	169.5	133.4	169.5	134.3	ACTIVE	0.000	-7.900	0.000	1.000	1.000
133.4	0.000	0.000	Strato1_2_8_L_0									
42 D	27.29	-3.7088E-02	173.4	136.5	173.4	137.2	ACTIVE	0.000	-8.100	0.000	1.000	1.000
136.5	0.000	0.000	Strato1_2_8_L_0									
43 D	27.86	-3.5616E-02	177.0	139.3	177.0	139.9	ACTIVE	0.000	-8.300	0.000	1.000	1.000
139.3	0.000	0.000	Strato1_2_8_L_0									
44 D	28.47	-3.4148E-02	180.9	142.3	180.9	142.8	ACTIVE	0.000	-8.500	0.000	1.000	1.000
142.3	0.000	0.000	Strato1_2_8_L_0									
45 D	29.06	-3.2687E-02	184.6	145.3	184.6	145.6	ACTIVE	0.000	-8.700	0.000	1.000	1.000
145.3	0.000	0.000	Strato1_2_8_L_0									
46 D	29.67	-3.1236E-02	188.5	148.4	188.5	148.5	ACTIVE	0.000	-8.900	0.000	1.000	1.000
148.4	0.000	0.000	Strato1_2_8_L_0									
47 D	30.26	-2.9796E-02	192.3	151.3	192.3	151.4	ACTIVE	0.000	-9.100	0.000	1.000	1.000
151.3	0.000	0.000	Strato1_2_8_L_0									
48 D	30.87	-2.8370E-02	196.1	154.4	196.1	154.4	ACTIVE	0.000	-9.300	0.000	1.000	1.000
154.4	0.000	0.000	Strato1_2_8_L_0									
49 D	31.48	-2.6962E-02	200.0	157.4	200.0	157.4	ACTIVE	0.000	-9.500	0.000	1.000	1.000
157.4	0.000	0.000	Strato1_2_8_L_0									
50 D	14.79	-2.5573E-02	204.0	73.93	204.0	102.0	ACTIVE	0.000	-9.700	0.000	1.000	1.000
73.93	0.000	0.000	Strato2_3095_82743_L_0									
51 D	15.15	-2.4207E-02	207.9	75.77	207.9	103.9	ACTIVE	0.000	-9.900	0.000	1.000	1.000
75.77	0.000	0.000	Strato2_3095_82743_L_0									
52 D	15.53	-2.2866E-02	211.9	77.63	211.9	105.9	ACTIVE	0.000	-10.10	0.000	1.000	1.000
77.63	0.000	0.000	Strato2_3095_82743_L_0									
53 D	15.91	-2.1552E-02	215.9	79.54	215.9	108.0	ACTIVE	0.000	-10.30	0.000	1.000	1.000
79.54	0.000	0.000	Strato2_3095_82743_L_0									
54 D	16.28	-2.0265E-02	219.9	81.41	219.9	109.9	ACTIVE	0.000	-10.50	0.000	1.000	1.000
81.41	0.000	0.000	Strato2_3095_82743_L_0									
55 D	16.66	-1.9008E-02	223.9	83.32	223.9	112.0	ACTIVE	0.000	-10.70	0.000	1.000	1.000
83.32	0.000	0.000	Strato2_3095_82743_L_0									
56 D	17.04	-1.7781E-02	227.9	85.18	227.9	114.0	ACTIVE	0.000	-10.90	0.000	1.000	1.000
85.18	0.000	0.000	Strato2_3095_82743_L_0									
57 D	17.42	-1.6584E-02	232.0	87.09	232.0	116.0	ACTIVE	0.000	-11.10	0.000	1.000	1.000
87.09	0.000	0.000	Strato2_3095_82743_L_0									
58 D	17.78	-1.5418E-02	235.8	88.89	235.8	117.9	ACTIVE	0.000	-11.30	0.000	1.000	1.000
88.89	0.000	0.000	Strato2_3095_82743_L_0									
59 D	18.16	-1.4283E-02	239.9	90.80	239.9	119.9	ACTIVE	0.000	-11.50	0.000	1.000	1.000
90.80	0.000	0.000	Strato2_3095_82743_L_0									
60 D	18.53	-1.3179E-02	243.8	92.67	243.8	121.9	ACTIVE	0.000	-11.70	0.000	1.000	1.000
92.67	0.000	0.000	Strato2_3095_82743_L_0									
61 D	18.92	-1.2104E-02	247.9	94.58	247.9	124.0	ACTIVE	0.000	-11.90	0.000	1.000	1.000
94.58	0.000	0.000	Strato2_3095_82743_L_0									
62 D	19.30	-1.1059E-02	252.0	96.48	252.0	126.0	ACTIVE	0.000	-12.10	0.000	1.000	1.000
96.48	0.000	0.000	Strato2_3095_82743_L_0									
63 D	19.67	-1.0042E-02	255.9	98.35	255.9	128.0	ACTIVE	0.000	-12.30	0.000	1.000	1.000
98.35	0.000	0.000	Strato2_3095_82743_L_0									
64 D	20.05	-9.0518E-03	260.0	100.3	260.0	130.0	UL-RL	2.8526E+04	-12.50	0.000	1.000	1.000
100.3	0.000	0.000	Strato2_3095_82743_L_0									
65 D	20.45	-8.0881E-03	263.8	102.3	263.8	131.9	UL-RL	2.8526E+04	-12.70	0.000	1.000	1.000
102.3	0.000	0.000	Strato2_3095_82743_L_0									
66 D	20.87	-7.1491E-03	267.9	104.4	267.9	133.9	UL-RL	2.8526E+04	-12.90	0.000	1.000	1.000
104.4	0.000	0.000	Strato2_3095_82743_L_0									
67 D	21.28	-6.2333E-03	271.8	106.4	271.8	135.9	UL-RL	2.8526E+04	-13.10	0.000	1.000	1.000
106.4	0.000	0.000	Strato2_3095_82743_L_0									
68 D	21.69	-5.3391E-03	275.7	108.4	275.7	139.8	UL-RL	2.8526E+04	-13.30	0.000	1.000	1.000
108.4	0.000	0.000	Strato2_3095_82743_L_0									
69 D	22.10	-4.4649E-03	279.6	110.5	279.6	143.4	UL-RL	2.8526E+04	-13.50	0.000	1.000	1.000
110.5	0.000	0.000	Strato2_3095_82743_L_0									
70 D	22.51	-3.6088E-03	283.5	112.6	283.5	146.7	UL-RL	2.8526E+04	-13.70	0.000	1.000	1.000
112.6	0.000	0.000	Strato2_3095_82743_L_0									
71 D	22.93	-2.7690E-03	287.4	114.6	287.4	149.9	UL-RL	2.8526E+04	-13.90	0.000	1.000	1.000
114.6	0.000	0.000	Strato2_3095_82743_L_0									
72 D	23.34	-1.9436E-03	291.3	116.7	291.3	152.8	UL-RL	2.8526E+04	-14.10	0.000	1.000	1.000
116.7	0.000	0.000	Strato2_3095_82743_L_0									

73 D	23.75	-1.1307E-03	295.1	118.8	295.1	156.0	UL-RL	2.8526E+04	-14.30	0.000	1.000	1.000	118.8
0.000	0.000	Strato2_3095_82743_L_0											
74 D	27.41	-3.2834E-04	299.0	137.0	299.0	159.1	UL-RL	2.8526E+04	-14.50	0.000	1.000	1.000	137.0
0.000	0.000	Strato2_3095_82743_L_0											
75 D	32.34	4.6546E-04	303.0	161.7	303.0	162.3	UL-RL	2.8526E+04	-14.70	0.000	1.000	1.000	161.7
0.000	0.000	Strato2_3095_82743_L_0											
76 D	34.39	1.2526E-03	306.9	171.9	306.9	172.5	UL-RL	2.8526E+04	-14.90	0.000	1.000	1.000	171.9
0.000	0.000	Strato2_3095_82743_L_0											
77 D	36.42	2.0347E-03	310.8	182.1	310.8	182.6	UL-RL	2.8526E+04	-15.10	0.000	1.000	1.000	182.1
0.000	0.000	Strato2_3095_82743_L_0											
78 D	38.44	2.8134E-03	314.7	192.2	314.7	192.7	UL-RL	2.8526E+04	-15.30	0.000	1.000	1.000	192.2
0.000	0.000	Strato2_3095_82743_L_0											
79 D	40.45	3.5900E-03	318.7	202.3	318.7	202.7	UL-RL	2.8526E+04	-15.50	0.000	1.000	1.000	202.3
0.000	0.000	Strato2_3095_82743_L_0											
80 D	42.45	4.3654E-03	322.5	212.3	322.5	212.7	UL-RL	2.8526E+04	-15.70	0.000	1.000	1.000	212.3
0.000	0.000	Strato2_3095_82743_L_0											
81 D	33.34	5.1403E-03	326.4	222.3	326.4	222.7	UL-RL	2.8526E+04	-15.90	0.000	1.000	1.000	222.3
0.000	0.000	Strato2_3095_82743_L_0											
82 D	11.37	5.5278E-03	328.4	227.3	328.4	227.7	UL-RL	2.8526E+04	-16.00	0.000	1.000	1.000	227.3
0.000	0.000	Strato2_3095_82743_L_0											

```
 +-------------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
 |                                                                                                                               |
 |                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                              |
 |                                  Exe Time :24 July 2019      10:49:27                                                         |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                              :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   82
 C U R R E N T   T I M E   I S      5.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****
```

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq
Su_a	Su_p	LAYER											
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000	0.000
0.000	0.000	not available											
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000	0.000
0.000	0.000	not available											
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000	0.000
0.000	0.000	not available											
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000	0.000
0.000	0.000	not available											
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000	0.000
0.000	0.000	not available											
6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000	0.000
0.000	0.000	not available											
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000	0.000
0.000	0.000	not available											
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000	0.000
0.000	0.000	not available											
9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000	0.000
0.000	0.000	not available											
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000	0.000
0.000	0.000	not available											
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000	0.000
0.000	0.000	not available											
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000	0.000
0.000	0.000	not available											
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000	0.000
0.000	0.000	not available											
14	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000	0.000
0.000	0.000	not available											
15	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000	0.000
0.000	0.000	not available											
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000	0.000
0.000	0.000	not available											
17	0.000	--	--	--	--	--	REMOVED	--	-3.100	0.000	1.000	1.000	0.000
0.000	0.000	not available											
18	0.000	--	--	--	--	--	REMOVED	--	-3.300	0.000	1.000	1.000	0.000
0.000	0.000	not available											
19	0.000	--	--	--	--	--	REMOVED	--	-3.500	0.000	1.000	1.000	0.000
0.000	0.000	not available											

20	0.000	--	--	--	--	--	REMOVED	--	-3.700	0.000	1.000	1.000	0.000	0.000	0.000	not available
21	0.000	--	--	--	--	--	REMOVED	--	-3.900	0.000	1.000	1.000	0.000	0.000	0.000	not available
22	0.000	--	--	--	--	--	REMOVED	--	-4.100	0.000	1.000	1.000	0.000	0.000	0.000	not available
23	0.000	--	--	--	--	--	REMOVED	--	-4.300	0.000	1.000	1.000	0.000	0.000	0.000	not available
24	0.000	--	--	--	--	--	REMOVED	--	-4.500	0.000	1.000	1.000	0.000	0.000	0.000	not available
25	0.000	--	--	--	--	--	REMOVED	--	-4.700	0.000	1.000	1.000	0.000	0.000	0.000	not available
26	0.000	--	--	--	--	--	REMOVED	--	-4.900	0.000	1.000	1.000	0.000	0.000	0.000	not available
27	0.000	--	--	--	--	--	REMOVED	--	-5.100	0.000	1.000	1.000	0.000	0.000	0.000	not available
28	0.000	--	--	--	--	--	REMOVED	--	-5.300	0.000	1.000	1.000	0.000	0.000	0.000	not available
29	0.000	--	--	--	--	--	REMOVED	--	-5.500	0.000	1.000	1.000	0.000	0.000	0.000	not available
30	0.000	--	--	--	--	--	REMOVED	--	-5.700	0.000	1.000	1.000	0.000	0.000	0.000	not available
31	0.000	--	--	--	--	--	REMOVED	--	-5.900	0.000	1.000	1.000	0.000	0.000	0.000	not available
32	0.000	--	--	--	--	--	REMOVED	--	-6.100	0.000	1.000	1.000	0.000	0.000	0.000	not available
33	0.000	--	--	--	--	--	REMOVED	--	-6.300	0.000	1.000	1.000	0.000	0.000	0.000	not available
34	0.000	--	--	--	--	--	REMOVED	--	-6.500	0.000	1.000	1.000	0.000	0.000	0.000	not available
35	0.000	--	--	--	--	--	REMOVED	--	-6.700	0.000	1.000	1.000	0.000	0.000	0.000	not available
36 D	1.963	4.5883E-02	3.230	9.813	131.1	175.0	PASSIVE	0.000	-6.900	0.000	1.000	1.000	9.813	0.000	0.000	Strato1_2_8_L_0
37 D	4.271	4.4432E-02	7.030	21.36	134.9	170.9	PASSIVE	0.000	-7.100	0.000	1.000	1.000	21.36	0.000	0.000	Strato1_2_8_L_0
38 D	6.580	4.2972E-02	10.83	32.90	138.7	167.0	PASSIVE	0.000	-7.300	0.000	1.000	1.000	32.90	0.000	0.000	Strato1_2_8_L_0
39 D	8.889	4.1506E-02	14.63	44.45	142.5	163.3	PASSIVE	0.000	-7.500	0.000	1.000	1.000	44.45	0.000	0.000	Strato1_2_8_L_0
40 D	11.20	4.0035E-02	18.43	55.99	146.3	159.7	PASSIVE	0.000	-7.700	0.000	1.000	1.000	55.99	0.000	0.000	Strato1_2_8_L_0
41 D	13.51	3.8562E-02	22.23	67.53	150.1	156.3	PASSIVE	0.000	-7.900	0.000	1.000	1.000	67.53	0.000	0.000	Strato1_2_8_L_0
42 D	15.82	3.7088E-02	26.03	79.08	153.9	153.1	PASSIVE	0.000	-8.100	0.000	1.000	1.000	79.08	0.000	0.000	Strato1_2_8_L_0
43 D	18.12	3.5616E-02	29.83	90.62	157.7	150.1	PASSIVE	0.000	-8.300	0.000	1.000	1.000	90.62	0.000	0.000	Strato1_2_8_L_0
44 D	20.43	3.4148E-02	33.63	102.2	161.5	147.2	PASSIVE	0.000	-8.500	0.000	1.000	1.000	102.2	0.000	0.000	Strato1_2_8_L_0
45 D	22.74	3.2687E-02	37.43	113.7	165.3	144.7	PASSIVE	0.000	-8.700	0.000	1.000	1.000	113.7	0.000	0.000	Strato1_2_8_L_0
46 D	25.05	3.1236E-02	41.23	125.3	169.1	142.3	PASSIVE	0.000	-8.900	0.000	1.000	1.000	125.3	0.000	0.000	Strato1_2_8_L_0
47 D	27.36	2.9796E-02	45.03	136.8	172.9	140.1	PASSIVE	0.000	-9.100	0.000	1.000	1.000	136.8	0.000	0.000	Strato1_2_8_L_0
48 D	29.67	2.8370E-02	48.83	148.3	176.7	148.3	PASSIVE	0.000	-9.300	0.000	1.000	1.000	148.3	0.000	0.000	Strato1_2_8_L_0
49 D	31.98	2.6962E-02	52.63	159.9	180.5	159.9	PASSIVE	0.000	-9.500	0.000	1.000	1.000	159.9	0.000	0.000	Strato1_2_8_L_0
50 D	59.42	2.5573E-02	56.63	297.1	184.5	297.1	PASSIVE	0.000	-9.700	0.000	1.000	1.000	297.1	0.000	0.000	Strato2_3095_82743_L_0
51 D	57.39	2.4207E-02	60.63	287.0	188.5	287.0	V-C	6530.	-9.900	0.000	1.000	1.000	287.0	0.000	0.000	Strato2_3095_82743_L_0
52 D	55.12	2.2866E-02	64.63	275.6	192.5	275.6	V-C	6530.	-10.10	0.000	1.000	1.000	275.6	0.000	0.000	Strato2_3095_82743_L_0
53 D	52.93	2.1552E-02	68.63	264.7	196.5	264.7	V-C	6530.	-10.30	0.000	1.000	1.000	264.7	0.000	0.000	Strato2_3095_82743_L_0
54 D	50.83	2.0265E-02	72.63	254.2	200.5	254.2	V-C	6530.	-10.50	0.000	1.000	1.000	254.2	0.000	0.000	Strato2_3095_82743_L_0
55 D	48.82	1.9008E-02	76.63	244.1	204.5	244.1	V-C	6530.	-10.70	0.000	1.000	1.000	244.1	0.000	0.000	Strato2_3095_82743_L_0
56 D	46.90	1.7781E-02	80.63	234.5	208.5	234.5	V-C	6530.	-10.90	0.000	1.000	1.000	234.5	0.000	0.000	Strato2_3095_82743_L_0
57 D	45.07	1.6584E-02	84.63	225.4	212.5	225.4	V-C	6530.	-11.10	0.000	1.000	1.000	225.4	0.000	0.000	Strato2_3095_82743_L_0
58 D	43.33	1.5418E-02	88.63	216.6	216.5	216.6	V-C	6530.	-11.30	0.000	1.000	1.000	216.6	0.000	0.000	Strato2_3095_82743_L_0
59 D	41.68	1.4283E-02	92.63	208.4	220.5	208.4	V-C	6530.	-11.50	0.000	1.000	1.000	208.4	0.000	0.000	Strato2_3095_82743_L_0
60 D	40.11	1.3179E-02	96.63	200.6	224.5	200.6	V-C	6530.	-11.70	0.000	1.000	1.000	200.6	0.000	0.000	Strato2_3095_82743_L_0
61 D	38.63	1.2104E-02	100.6	193.1	228.5	193.1	V-C	6530.	-11.90	0.000	1.000	1.000	193.1	0.000	0.000	Strato2_3095_82743_L_0
62 D	37.23	1.1059E-02	104.6	186.2	232.5	186.2	V-C	6530.	-12.10	0.000	1.000	1.000				

```
186.2       0.000       0.000     Strato2_3095_82743_L_0
  63 D   35.91      1.0042E-02   108.6       179.6       236.5       179.6            V-C   6530.      -12.30       0.000       1.000       1.000
179.6       0.000       0.000     Strato2_3095_82743_L_0
  64 D   34.66      9.0518E-03   112.6       173.3       240.5       173.3          UL-RL  1.9591E+04  -12.50       0.000       1.000       1.000
173.3       0.000       0.000     Strato2_3095_82743_L_0
  65 D   33.47      8.0881E-03   116.6       167.4       244.5       167.5          UL-RL  1.9591E+04  -12.70       0.000       1.000       1.000
167.4       0.000       0.000     Strato2_3095_82743_L_0
  66 D   32.35      7.1491E-03   120.6       161.7       248.5       162.0          UL-RL  1.9591E+04  -12.90       0.000       1.000       1.000
161.7       0.000       0.000     Strato2_3095_82743_L_0
  67 D   31.28      6.2333E-03   124.6       156.4       252.5       156.8          UL-RL  1.9591E+04  -13.10       0.000       1.000       1.000
156.4       0.000       0.000     Strato2_3095_82743_L_0
  68 D   30.27      5.3391E-03   128.6       151.4       256.5       151.9          UL-RL  1.9591E+04  -13.30       0.000       1.000       1.000
151.4       0.000       0.000     Strato2_3095_82743_L_0
  69 D   29.31      4.4649E-03   132.6       146.6       260.5       147.3          UL-RL  1.9591E+04  -13.50       0.000       1.000       1.000
146.6       0.000       0.000     Strato2_3095_82743_L_0
  70 D   28.40      3.6088E-03   136.6       142.0       264.5       142.8          UL-RL  1.9591E+04  -13.70       0.000       1.000       1.000
142.0       0.000       0.000     Strato2_3095_82743_L_0
  71 D   27.52      2.7690E-03   140.6       137.6       268.5       138.6          UL-RL  1.9591E+04  -13.90       0.000       1.000       1.000
137.6       0.000       0.000     Strato2_3095_82743_L_0
  72 D   25.97      1.9436E-03   144.6       129.8       272.5       136.4          UL-RL  1.9591E+04  -14.10       0.000       1.000       1.000
129.8       0.000       0.000     Strato2_3095_82743_L_0
  73 D   22.85      1.1307E-03   148.6       114.3       276.5       138.2          UL-RL  1.9591E+04  -14.30       0.000       1.000       1.000
114.3       0.000       0.000     Strato2_3095_82743_L_0
  74 D   19.76      3.2834E-04   152.6       98.82       280.5       140.2          UL-RL  1.9591E+04  -14.50       0.000       1.000       1.000
98.82       0.000       0.000     Strato2_3095_82743_L_0
  75 D   16.73     -4.6546E-04   156.6       83.66       284.5       142.2          UL-RL  1.9591E+04  -14.70       0.000       1.000       1.000
83.66       0.000       0.000     Strato2_3095_82743_L_0
  76 D   13.75     -1.2526E-03   160.6       68.74       288.5       144.2          UL-RL  1.9591E+04  -14.90       0.000       1.000       1.000
68.74       0.000       0.000     Strato2_3095_82743_L_0
  77 D   10.80     -2.0347E-03   164.6       53.98       292.5       146.2          UL-RL  1.9591E+04  -15.10       0.000       1.000       1.000
53.98       0.000       0.000     Strato2_3095_82743_L_0
  78 D   7.869     -2.8134E-03   168.6       39.34       296.5       148.2          UL-RL  1.9591E+04  -15.30       0.000       1.000       1.000
39.34       0.000       0.000     Strato2_3095_82743_L_0
  79 D   6.918     -3.5900E-03   172.6       34.59       300.5       150.2          UL-RL  1.9591E+04  -15.50       0.000       1.000       1.000
34.59       0.000       0.000     Strato2_3095_82743_L_0
  80 D   7.154     -4.3654E-03   176.6       35.77       304.5       152.2          UL-RL  1.9591E+04  -15.70       0.000       1.000       1.000
35.77       0.000       0.000     Strato2_3095_82743_L_0
  81 D   5.542     -5.1403E-03   180.6       36.95       308.5       154.2          UL-RL  1.9591E+04  -15.90       0.000       1.000       1.000
36.95       0.000       0.000     Strato2_3095_82743_L_0
  82 D   1.877     -5.5278E-03   182.6       37.54       310.5       155.2          UL-RL  1.9591E+04  -16.00       0.000       1.000       1.000
37.54       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                  |
 |                                                                                                                               |
 |                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                              |
 |                                   Exe Time :24 July 2019      10:49:27                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

 WallElement_33                :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   81
 C U R R E N T   T I M E   I S     5.0000

  WALL2D ELEMENT

    EL      TA          TB          MA          MB
 ------------------------------------------------------
     1  2.2078     -2.2078     6.67580E-10 0.44156
     2  5.5068     -5.5068     -0.44156     1.5429
     3  9.7722     -9.7722     -1.5429      3.4974
     4  14.557     -14.557     -3.4974      6.4088
     5  20.071     -20.071     -6.4088      10.423
     6  26.122     -26.122     -10.423      15.648
     7  32.849     -32.849     -15.648      22.217
     8  40.127     -40.127     -22.217      30.243
     9  47.920     -47.920     -30.243      39.827
    10  56.287     -56.287     -39.827      51.084
    11  65.307     -65.307     -51.084      64.146
    12  74.902     -74.902     -64.146      79.126
    13  82.579     -82.579     -79.126      87.384
    14 -224.59      224.59     -87.384      42.466
    15 -213.50      213.50     -42.466     -0.23425
    16 -201.78      201.78     0.23425      -40.590
    17 -189.48      189.48      40.590      -78.487
    18 -176.55      176.55      78.487      -113.80
    19 -163.03      163.03      113.80      -146.40
    20 -148.88      148.88      146.40      -176.18
    21 -134.20      134.20      176.18      -203.02
```

22	-118.90	118.90	203.02	-226.80
23	-102.98	102.98	226.80	-247.39
24	-86.468	86.468	247.39	-264.69
25	-69.339	69.339	264.69	-278.55
26	-51.623	51.623	278.55	-288.88
27	-33.289	33.289	288.88	-295.54
28	-14.412	14.412	295.54	-298.42
29	5.0830	-5.0830	298.42	-297.40
30	25.167	-25.167	297.40	-292.37
31	45.868	-45.868	292.37	-283.19
32	67.158	-67.158	283.19	-269.76
33	89.062	-89.062	269.76	-251.95
34	111.56	-111.56	251.95	-229.64
35	134.66	-134.66	229.64	-202.71
36	156.39	-156.39	202.71	-171.43
37	176.39	-176.39	171.43	-136.15
38	194.70	-194.70	136.15	-97.209
39	211.30	-211.30	97.209	-54.950
40	226.19	-226.19	54.950	-9.7117
41	239.37	-239.37	9.7117	38.162
42	250.85	-250.85	-38.162	88.331
43	260.58	-260.58	-88.331	140.45
44	268.61	-268.61	-140.45	194.17
45	274.93	-274.93	-194.17	249.16
46	279.55	-279.55	-249.16	305.07
47	282.46	-282.46	-305.07	361.56
48	283.66	-283.66	-361.56	418.29
49	283.16	-283.16	-418.29	474.92
50	238.53	-238.53	-474.92	522.63
51	196.29	-196.29	-522.63	561.88
52	156.69	-156.69	-561.88	593.22
53	119.67	-119.67	-593.22	617.16
54	85.115	-85.115	-617.16	634.18
55	52.956	-52.956	-634.18	644.77
56	23.090	-23.090	-644.77	649.39
57	-4.5620	4.5620	-649.39	648.48
58	-30.112	30.112	-648.48	642.45
59	-53.627	53.627	-642.45	631.73
60	-75.204	75.204	-631.73	616.69
61	-94.918	94.918	-616.69	597.70
62	-112.85	112.85	-597.70	575.13
63	-129.09	129.09	-575.13	549.31
64	-143.70	143.70	-549.31	520.57
65	-156.72	156.72	-520.57	489.23
66	-168.20	168.20	-489.23	455.59
67	-178.20	178.20	-455.59	419.95
68	-186.79	186.79	-419.95	382.59
69	-194.00	194.00	-382.59	343.79
70	-199.89	199.89	-343.79	303.82
71	-204.48	204.48	-303.82	262.92
72	-207.11	207.11	-262.92	221.50
73	-206.21	206.21	-221.50	180.25
74	-198.57	198.57	-180.25	140.54
75	-182.96	182.96	-140.54	103.95
76	-162.31	162.31	-103.95	71.486
77	-136.69	136.69	-71.486	44.148
78	-106.12	106.12	-44.148	22.924
79	-72.586	72.586	-22.924	8.4070
80	-37.290	37.290	-8.4070	0.94903
81	-9.4894	9.4894	-0.94903	1.41848E-10

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                         |
|                                  Exe Time :24 July 2019      10:49:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_768111                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S     5.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------
ANCHOR    1   326.16     -2.30139E-03  3.44426E-02   0.0000       4424.2       0.0000       0.0000     ELASTIC  ORIGINAL YOUNG MODULUS
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                          |
|                                 Exe Time :24 July 2019      10:49:27                                                    |
+-------------------------------------------------------------------------------------------------------------------------+


     F I N A L    I N C R E M E N T A L    A N A L Y S I S

                    S U M M A R Y

     STEP                                    NO. OF ITERATIONS

        1           CONVERGENCE :YES                        2
        2           CONVERGENCE :YES                        6
        3           CONVERGENCE :YES                        5
        4           CONVERGENCE :YES                        4
        5           CONVERGENCE :YES                        7


 END OF PROCESS FOR PROBLEM
New Project
NONLINEAR SOLUTION CPU TIME ....     0.07 [sec]
DATABASE  CREATION CPU TIME.....     0.26 [sec]
```

2. SEZIONE 2 – PARATIA DI PALI

2.1. Design Assumption : Nominal - File di Paratie - File di input (.d)

```
* PARATIE ANALYSIS FOR DESIGN SECTION:Base Design Section USING ASSUMPTION: Nominal
 * Time:mercoledì 24 luglio 2019 11:09:26
 * 1: Defining general settings
 UNIT  m kN
 TITLE New Project
 DELTA 0.2
 option param itemax 100
 option control hinges 0 0.0001 0.001

 * 2: Defining wall(s)
 WALL LeftWall_32 0 -12 0 1

 * 3: Defining surfaces for wall(s)
 SOIL 0_L LeftWall_32 -12 0 1 0
 SOIL 0_R LeftWall_32 -12 0 2 180

 * 4: Defining soil layers
 *
 * Soil Profile (Strato1_2_8_L_0)
 *
 LDATA Strato1_2_8_L_0 0 LeftWall_32
 ATREST 0.53 1 1
 WEIGHT 19 9 10
 PERMEABILITY 1E-06
 RESISTANCE 0 29
 YOUNG 2E+04 6E+04
 ENDL
 *
 * Soil Profile (Strato2_3095_82743_L_0)
 *
 LDATA Strato2_3095_82743_L_0 -7.8 LeftWall_32
 ATREST 0.5 0.5 1
 WEIGHT 20 10 10
 PERMEABILITY 0.0001
 RESISTANCE 20 35
 YOUNG 5E+04 1.5E+05
 ENDL

 * 5: Defining structural materials
 * Steel material: 108 Name=Fe360 E=206000200 kPa
 MATERIAL Fe360_108 2.06E+08
 * Concrete material: 104 Name=C25/30 E=31475800 kPa
 MATERIAL C2530_104 3.148E+07
 * Rebar material: 124 Name=acciaio armonico E=200100000 kPa
 MATERIAL acciaioarmonico_124 2.001E+08
 * Concrete material: 103 Name=C20/25 E=29962000 kPa
 MATERIAL C2025_103 2.996E+07

 * 6: Defining structural elements
 * 6.1: Beams and combined Wall Elements
 BEAM WallElement_33 LeftWall_32 -12 0 C2530_104 0.6848 00 00 0


 * 6.2: Supports
 WIRE Tieback_778405 LeftWall_32 -2.5 acciaioarmonico_124 2.34E-05 136.4 15 0 0




 * 6.3: Strips
 STRIP LeftWall_32 2 5 0 40 0 10 30

 * 7: Defining Steps
 STEP Stage0_31
 CHANGE Strato1_2_8_L_0 U-FRICT=29 LeftWall_32
 CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
 CHANGE Strato1_2_8_L_0 U-KA=0.304 LeftWall_32
 CHANGE Strato1_2_8_L_0 U-KP=4.041 LeftWall_32
 CHANGE Strato1_2_8_L_0 D-KA=0.304 LeftWall_32
 CHANGE Strato1_2_8_L_0 D-KP=4.041 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 U-FRICT=35 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 U-KA=0.235 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 U-KP=5.879 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 D-KA=0.235 LeftWall_32
 CHANGE Strato2_3095_82743_L_0 D-KP=5.879 LeftWall_32
 CHANGE Strato1_2_8_L_0 U-COHE=0 LeftWall_32
```

```
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-COHE=20 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -26 0 -12 0 0
ADD WallElement_33
ENDSTEP

STEP Stage1_759103
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -26 0 -12 0 0
ENDSTEP

STEP Stage3_775251
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -3
WATER -26 0 -12 0 0
ENDSTEP

STEP Stage4_775610
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -3
WATER -26 0 -12 0 0
ADD Tieback_778405
ENDSTEP

STEP Stage5_714
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -4.96
WATER -26 0 -12 0 0
ENDSTEP
```

2.2. Design Assumption : Nominal - File di Paratie - File di output (.out)

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                       NewProject.BaseDesignSection_28.Nominal_63                                        |
|                                   Exe Time :24 July 2019      11:09:26                                                  |
+-------------------------------------------------------------------------------------------------------------------------+

                  ***********************************************************
                  *                                                         *
                  *  PARATIE PLUS Non-Linear Spring Engine                  *
                  *                                                         *
                  *          AN ELASTOPLASTIC FINITE ELEMENT PROGRAM        *
                  *          FOR FLEXIBLE EARTH-RETAINING STRUCTURES        *
                  *                                                         *
                  *          Written by Ce.A.S. s.r.l. (ITALY)              *
                  *          with the scientific supervision of             *
                  *          Roberto Nova - full professor SOIL MECHANICS   *
                  *          at Politecnico di Milano (ITALY)               *
                  *                                                         *
                  ***********************************************************
                  *                                                         *
                  *  RELEASE   2017.1     *Build date:Jul 11, 2017*    *    *
                  *                                                         *
                  *                                                         *
                  *  Ce.A.S.     S.R.L   CENTRO DI ANALISI STRUTTURALE      *
                  *              VIALE   GIUSTINIANO 10                     *
                  *              20129   M I L A N O  (ITALIA)              *
                  *  TEL.        +39 02 2020221   (+39 035 23 67 19)        *
                  *  FAX         +39 02 29512533  (+39 035 42285 49)        *
```

```
                  *  email       bruno.becci@ceas.it                      *
                  *  Web Page    www.ceas.it                              *
                  ************************************************************



 JOB : NewProject.BaseDesignSection_28.Nominal_63
 STARTING
ACCEPTED   <FILE,GENW                                                      >
ACCEPTED   <FILE,PLOTTER,BINARY                                            >
ACCEPTED   <SOLVE TOTAL_STRESS                                             >
ACCEPTED   <PARAM ITEMAX 100                                               >
ACCEPTED   <CONTROL HINGES 0 0.0001 0.001                                  >



                  ************************************************************
                  *                                                          *
                  *  WARNING : PORE PRESSURES ARE AUTOMATICALLY COMPUTED     *
                  *    BY THE PROGRAM.                                       *
                  ************************************************************

PRELIMINARY OPERATIONS CPU TIME     0.00 [sec]



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      11:09:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


INPUT FILE HAS BEEN GENERATED BY WALGEN PROGRAM


New Project


NO. OF NODAL POINTS (NUMNP) ...................    62
NO. OF COORDINATES  (NCOORD)...................     2
NO. OF NODE DOFS    (NDOF).....................     2
NO. OF EQUATIONS    (NEQ)......................   124
NO. OF CONSTRAINTS CARDS (NVINC)...............     0
NO. OF ELEMENT GROUPS (NEG)....................     4
NO. OF SOLUTION STEPS (NSTE)...................     5
NO. OF ELEMENT SETS ATTACHED TO SLAVE NODES ...     0
NO. OF RECORD FROM WALGEN .....................    88
NO. OF LONG NAMES (LASTNAME) ..................    21
LENGTH UNIT CHOICE ............................     3 (M   )
FORCE  UNIT CHOICE ............................     3 (KN  )
MAX PORE PRESSURE TABLE LENGTH.................     1
NO. OF ELEMENT GROUPS REQUIRING ADD. SLIP DOF .     0


IDOFA (01) =  2  Y-DISPL.F
IDOFA (02) =  4   X-ROT. F

 RELEVANT ITEMS UNITS

 STRESSES                  kPa
 Y-DISPLACEMENTS           m
 ROTATIONS                 RADIANS
 BEAM AND SLAB MOMENTS     kN*m/m
 BEAM SHEAR FORCES         kN/m
 ANCHOR FORCES             kN/m
 AXIAL FORCES IN TRUSSES   kN/m
 AXIAL FORCES SPRINGS      kN/m
 Y-REACTIONS               kN/m
 X-MOMENT REACTIONS        kN*m/m
 ETC.



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      11:09:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
                  P R E P R O C E S S O R     D A T A
```

N O. O F C O M M A N D S 88

```
 1 : UNIT  m kN
 2 : TITLE New Project
 3 : DELTA 0.2
 4 : option param itemax 100
 5 : option control hinges 0 0.0001 0.001
 6 : WALL LeftWall_32 0 -12 0 1
 7 : SOIL 0_L LeftWall_32 -12 0 1 0
 8 : SOIL 0_R LeftWall_32 -12 0 2 180
 9 : LDATA Strato1_2_8_L_0 0 LeftWall_32
10 : ATREST 0.53 1 1
11 : WEIGHT 19 9 10
12 : PERMEABILITY 1E-06
13 : RESISTANCE 0 29
14 : YOUNG 2E+04 6E+04
15 : ENDL
16 : LDATA Strato2_3095_82743_L_0 -7.8 LeftWall_32
17 : ATREST 0.5 0.5 1
18 : WEIGHT 20 10 10
19 : PERMEABILITY 0.0001
20 : RESISTANCE 20 35
21 : YOUNG 5E+04 1.5E+05
22 : ENDL
23 : MATERIAL Fe360_108 2.06E+08
24 : MATERIAL C2530_104 3.148E+07
25 : MATERIAL acciaioarmonico_124 2.001E+08
26 : MATERIAL C2025_103 2.996E+07
27 : BEAM WallElement_33 LeftWall_32 -12 0 C2530_104 0.6848 00 00 0
28 : WIRE Tieback_778405 LeftWall_32 -2.5 acciaioarmonico_124 2.34E-05 136.4 15 0 0
29 : STRIP LeftWall_32 2 5 0 40 0 10 30
30 : STEP Stage0_31
31 : CHANGE Strato1_2_8_L_0 U-FRICT=29 LeftWall_32
32 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
33 : CHANGE Strato1_2_8_L_0 U-KA=0.304 LeftWall_32
34 : CHANGE Strato1_2_8_L_0 U-KP=4.041 LeftWall_32
35 : CHANGE Strato1_2_8_L_0 D-KA=0.304 LeftWall_32
36 : CHANGE Strato1_2_8_L_0 D-KP=4.041 LeftWall_32
37 : CHANGE Strato2_3095_82743_L_0 U-FRICT=35 LeftWall_32
38 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
39 : CHANGE Strato2_3095_82743_L_0 U-KA=0.235 LeftWall_32
40 : CHANGE Strato2_3095_82743_L_0 U-KP=5.879 LeftWall_32
41 : CHANGE Strato2_3095_82743_L_0 D-KA=0.235 LeftWall_32
42 : CHANGE Strato2_3095_82743_L_0 D-KP=5.879 LeftWall_32
43 : CHANGE Strato1_2_8_L_0 U-COHE=0 LeftWall_32
44 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
45 : CHANGE Strato2_3095_82743_L_0 U-COHE=20 LeftWall_32
46 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
47 : SETWALL LeftWall_32
48 : GEOM 0 0
49 : WATER -26 0 -12 0 0
50 : ADD WallElement_33
51 : ENDSTEP
52 : STEP Stage1_759103
53 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
54 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
55 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
56 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
57 : SETWALL LeftWall_32
58 : GEOM 0 0
59 : WATER -26 0 -12 0 0
60 : ENDSTEP
61 : STEP Stage3_775251
62 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
63 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
64 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
65 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
66 : SETWALL LeftWall_32
67 : GEOM 0 -3
68 : WATER -26 0 -12 0 0
69 : ENDSTEP
70 : STEP Stage4_775610
71 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
72 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
73 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
74 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
75 : SETWALL LeftWall_32
76 : GEOM 0 -3
77 : WATER -26 0 -12 0 0
78 : ADD Tieback_778405
79 : ENDSTEP
80 : STEP Stage5_714
81 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
82 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
83 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
```

```
   84 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
   85 : SETWALL LeftWall_32
   86 : GEOM 0 -4.96
   87 : WATER -26 0 -12 0 0
   88 : ENDSTEP



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                   Exe Time :24 July 2019      11:09:26                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
N O D A L    P O I N T    D A T A
---------------------------------

NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD /

   1  0.0000      0.0000     /    2  0.0000    -0.20000     /    3  0.0000    -0.40000     /    4  0.0000    -0.60000     /
   5  0.0000    -0.80000     /    6  0.0000     -1.0000     /    7  0.0000     -1.2000     /    8  0.0000     -1.4000     /
   9  0.0000     -1.6000     /   10  0.0000     -1.8000     /   11  0.0000     -2.0000     /   12  0.0000     -2.2000     /
  13  0.0000     -2.4000     /   14  0.0000     -2.5000     /   15  0.0000     -2.7000     /   16  0.0000     -2.9000     /
  17  0.0000     -3.1000     /   18  0.0000     -3.3000     /   19  0.0000     -3.5000     /   20  0.0000     -3.7000     /
  21  0.0000     -3.9000     /   22  0.0000     -4.1000     /   23  0.0000     -4.3000     /   24  0.0000     -4.5000     /
  25  0.0000     -4.7000     /   26  0.0000     -4.9000     /   27  0.0000     -5.1000     /   28  0.0000     -5.3000     /
  29  0.0000     -5.5000     /   30  0.0000     -5.7000     /   31  0.0000     -5.9000     /   32  0.0000     -6.1000     /
  33  0.0000     -6.3000     /   34  0.0000     -6.5000     /   35  0.0000     -6.7000     /   36  0.0000     -6.9000     /
  37  0.0000     -7.1000     /   38  0.0000     -7.3000     /   39  0.0000     -7.5000     /   40  0.0000     -7.7000     /
  41  0.0000     -7.9000     /   42  0.0000     -8.1000     /   43  0.0000     -8.3000     /   44  0.0000     -8.5000     /
  45  0.0000     -8.7000     /   46  0.0000     -8.9000     /   47  0.0000     -9.1000     /   48  0.0000     -9.3000     /
  49  0.0000     -9.5000     /   50  0.0000     -9.7000     /   51  0.0000     -9.9000     /   52  0.0000     -10.100     /
  53  0.0000     -10.300     /   54  0.0000     -10.500     /   55  0.0000     -10.700     /   56  0.0000     -10.900     /
  57  0.0000     -11.100     /   58  0.0000     -11.300     /   59  0.0000     -11.500     /   60  0.0000     -11.700     /
  61  0.0000     -11.900     /   62  0.0000     -12.000     /



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                   Exe Time :24 July 2019      11:09:26                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  1

0_L                             :
   5  62   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
.....2D PLASTIC SOIL .....
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area      .....      .....      .....      flag
-------------------------------------------------------------------

    1    1    1   0.1000      0.000      0.000      0.000      1.000
    2    2    1   0.2000      0.000      0.000      0.000      1.000
    3    3    1   0.2000      0.000      0.000      0.000      1.000
    4    4    1   0.2000      0.000      0.000      0.000      1.000
    5    5    1   0.2000      0.000      0.000      0.000      1.000
```

6	6	1	0.2000	0.000	0.000	0.000	1.000
7	7	1	0.2000	0.000	0.000	0.000	1.000
8	8	1	0.2000	0.000	0.000	0.000	1.000
9	9	1	0.2000	0.000	0.000	0.000	1.000
10	10	1	0.2000	0.000	0.000	0.000	1.000
11	11	1	0.2000	0.000	0.000	0.000	1.000
12	12	1	0.2000	0.000	0.000	0.000	1.000
13	13	1	0.1500	0.000	0.000	0.000	1.000
14	14	1	0.1500	0.000	0.000	0.000	1.000
15	15	1	0.2000	0.000	0.000	0.000	1.000
16	16	1	0.2000	0.000	0.000	0.000	1.000
17	17	1	0.2000	0.000	0.000	0.000	1.000
18	18	1	0.2000	0.000	0.000	0.000	1.000
19	19	1	0.2000	0.000	0.000	0.000	1.000
20	20	1	0.2000	0.000	0.000	0.000	1.000
21	21	1	0.2000	0.000	0.000	0.000	1.000
22	22	1	0.2000	0.000	0.000	0.000	1.000
23	23	1	0.2000	0.000	0.000	0.000	1.000
24	24	1	0.2000	0.000	0.000	0.000	1.000
25	25	1	0.2000	0.000	0.000	0.000	1.000
26	26	1	0.2000	0.000	0.000	0.000	1.000
27	27	1	0.2000	0.000	0.000	0.000	1.000
28	28	1	0.2000	0.000	0.000	0.000	1.000
29	29	1	0.2000	0.000	0.000	0.000	1.000
30	30	1	0.2000	0.000	0.000	0.000	1.000
31	31	1	0.2000	0.000	0.000	0.000	1.000
32	32	1	0.2000	0.000	0.000	0.000	1.000
33	33	1	0.2000	0.000	0.000	0.000	1.000
34	34	1	0.2000	0.000	0.000	0.000	1.000
35	35	1	0.2000	0.000	0.000	0.000	1.000
36	36	1	0.2000	0.000	0.000	0.000	1.000
37	37	1	0.2000	0.000	0.000	0.000	1.000
38	38	1	0.2000	0.000	0.000	0.000	1.000
39	39	1	0.2000	0.000	0.000	0.000	1.000
40	40	1	0.2000	0.000	0.000	0.000	1.000
41	41	2	0.2000	0.000	0.000	0.000	1.000
42	42	2	0.2000	0.000	0.000	0.000	1.000
43	43	2	0.2000	0.000	0.000	0.000	1.000
44	44	2	0.2000	0.000	0.000	0.000	1.000
45	45	2	0.2000	0.000	0.000	0.000	1.000
46	46	2	0.2000	0.000	0.000	0.000	1.000
47	47	2	0.2000	0.000	0.000	0.000	1.000
48	48	2	0.2000	0.000	0.000	0.000	1.000
49	49	2	0.2000	0.000	0.000	0.000	1.000
50	50	2	0.2000	0.000	0.000	0.000	1.000
51	51	2	0.2000	0.000	0.000	0.000	1.000
52	52	2	0.2000	0.000	0.000	0.000	1.000
53	53	2	0.2000	0.000	0.000	0.000	1.000
54	54	2	0.2000	0.000	0.000	0.000	1.000
55	55	2	0.2000	0.000	0.000	0.000	1.000
56	56	2	0.2000	0.000	0.000	0.000	1.000
57	57	2	0.2000	0.000	0.000	0.000	1.000
58	58	2	0.2000	0.000	0.000	0.000	1.000
59	59	2	0.2000	0.000	0.000	0.000	1.000
60	60	2	0.2000	0.000	0.000	0.000	1.000
61	61	2	0.1500	0.000	0.000	0.000	1.000
62	62	2	0.5000E-01	0.000	0.000	0.000	1.000

```
+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.Nominal_63                                     |
|                                 Exe Time :24 July 2019      11:09:26                                              |
+-------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  2

0_R                          :
   5  62   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
.........2D PLASTIC SOIL ..........
.....................................

element group behaviour throughout stage analysis

stage   status
------------------
    1   active
    2   active
    3   active
    4   active
    5   active
```

material set no. 1

prop(1) angle 180.000
prop(2) layer as foreseen 1.00000

material set no. 2

prop(1) angle 180.000
prop(2) layer as foreseen 2.00000

element data

el	n	mat	area	.....	.....	.....	flag
1	1	1	0.1000	0.000	0.000	0.000	2.000
2	2	1	0.2000	0.000	0.000	0.000	2.000
3	3	1	0.2000	0.000	0.000	0.000	2.000
4	4	1	0.2000	0.000	0.000	0.000	2.000
5	5	1	0.2000	0.000	0.000	0.000	2.000
6	6	1	0.2000	0.000	0.000	0.000	2.000
7	7	1	0.2000	0.000	0.000	0.000	2.000
8	8	1	0.2000	0.000	0.000	0.000	2.000
9	9	1	0.2000	0.000	0.000	0.000	2.000
10	10	1	0.2000	0.000	0.000	0.000	2.000
11	11	1	0.2000	0.000	0.000	0.000	2.000
12	12	1	0.2000	0.000	0.000	0.000	2.000
13	13	1	0.1500	0.000	0.000	0.000	2.000
14	14	1	0.1500	0.000	0.000	0.000	2.000
15	15	1	0.2000	0.000	0.000	0.000	2.000
16	16	1	0.2000	0.000	0.000	0.000	2.000
17	17	1	0.2000	0.000	0.000	0.000	2.000
18	18	1	0.2000	0.000	0.000	0.000	2.000
19	19	1	0.2000	0.000	0.000	0.000	2.000
20	20	1	0.2000	0.000	0.000	0.000	2.000
21	21	1	0.2000	0.000	0.000	0.000	2.000
22	22	1	0.2000	0.000	0.000	0.000	2.000
23	23	1	0.2000	0.000	0.000	0.000	2.000
24	24	1	0.2000	0.000	0.000	0.000	2.000
25	25	1	0.2000	0.000	0.000	0.000	2.000
26	26	1	0.2000	0.000	0.000	0.000	2.000
27	27	1	0.2000	0.000	0.000	0.000	2.000
28	28	1	0.2000	0.000	0.000	0.000	2.000
29	29	1	0.2000	0.000	0.000	0.000	2.000
30	30	1	0.2000	0.000	0.000	0.000	2.000
31	31	1	0.2000	0.000	0.000	0.000	2.000
32	32	1	0.2000	0.000	0.000	0.000	2.000
33	33	1	0.2000	0.000	0.000	0.000	2.000
34	34	1	0.2000	0.000	0.000	0.000	2.000
35	35	1	0.2000	0.000	0.000	0.000	2.000
36	36	1	0.2000	0.000	0.000	0.000	2.000
37	37	1	0.2000	0.000	0.000	0.000	2.000
38	38	1	0.2000	0.000	0.000	0.000	2.000
39	39	1	0.2000	0.000	0.000	0.000	2.000
40	40	1	0.2000	0.000	0.000	0.000	2.000
41	41	2	0.2000	0.000	0.000	0.000	2.000
42	42	2	0.2000	0.000	0.000	0.000	2.000
43	43	2	0.2000	0.000	0.000	0.000	2.000
44	44	2	0.2000	0.000	0.000	0.000	2.000
45	45	2	0.2000	0.000	0.000	0.000	2.000
46	46	2	0.2000	0.000	0.000	0.000	2.000
47	47	2	0.2000	0.000	0.000	0.000	2.000
48	48	2	0.2000	0.000	0.000	0.000	2.000
49	49	2	0.2000	0.000	0.000	0.000	2.000
50	50	2	0.2000	0.000	0.000	0.000	2.000
51	51	2	0.2000	0.000	0.000	0.000	2.000
52	52	2	0.2000	0.000	0.000	0.000	2.000
53	53	2	0.2000	0.000	0.000	0.000	2.000
54	54	2	0.2000	0.000	0.000	0.000	2.000
55	55	2	0.2000	0.000	0.000	0.000	2.000
56	56	2	0.2000	0.000	0.000	0.000	2.000
57	57	2	0.2000	0.000	0.000	0.000	2.000
58	58	2	0.2000	0.000	0.000	0.000	2.000
59	59	2	0.2000	0.000	0.000	0.000	2.000
60	60	2	0.2000	0.000	0.000	0.000	2.000
61	61	2	0.1500	0.000	0.000	0.000	2.000
62	62	2	0.5000E-01	0.000	0.000	0.000	2.000

```
|                                                                                                                           |
|                                       NewProject.BaseDesignSection_28.Nominal_63                                          |
|                                   Exe Time :24 July 2019      11:09:26                                                    |
+---------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  3

WallElement_33                   :
   2  61   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   1   0
....................................
..........2D WALL ELEMENT...........
....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) young modulus      0.314800E+08
 prop( 2) modification  time  0.00000
 prop( 3) new young modulus   0.00000
 prop( 4) poisson ratio       0.00000
 prop( 5) future ............0.252200E-43

 no. of step variable items:     1
 step  inertia multipier
--------------------------
    1   1.000
    2   1.000
    3   1.000
    4   1.000
    5   1.000

 element data

   el   na   nb  mat      erc1      erc2     thick      by-i      by-j
------------------------------------------------------------

    1    1    2    1    0.000     0.000    0.6848     0.000     0.000
    2    2    3    1    0.000     0.000    0.6848     0.000     0.000
    3    3    4    1    0.000     0.000    0.6848     0.000     0.000
    4    4    5    1    0.000     0.000    0.6848     0.000     0.000
    5    5    6    1    0.000     0.000    0.6848     0.000     0.000
    6    6    7    1    0.000     0.000    0.6848     0.000     0.000
    7    7    8    1    0.000     0.000    0.6848     0.000     0.000
    8    8    9    1    0.000     0.000    0.6848     0.000     0.000
    9    9   10    1    0.000     0.000    0.6848     0.000     0.000
   10   10   11    1    0.000     0.000    0.6848     0.000     0.000
   11   11   12    1    0.000     0.000    0.6848     0.000     0.000
   12   12   13    1    0.000     0.000    0.6848     0.000     0.000
   13   13   14    1    0.000     0.000    0.6848     0.000     0.000
   14   14   15    1    0.000     0.000    0.6848     0.000     0.000
   15   15   16    1    0.000     0.000    0.6848     0.000     0.000
   16   16   17    1    0.000     0.000    0.6848     0.000     0.000
   17   17   18    1    0.000     0.000    0.6848     0.000     0.000
   18   18   19    1    0.000     0.000    0.6848     0.000     0.000
   19   19   20    1    0.000     0.000    0.6848     0.000     0.000
   20   20   21    1    0.000     0.000    0.6848     0.000     0.000
   21   21   22    1    0.000     0.000    0.6848     0.000     0.000
   22   22   23    1    0.000     0.000    0.6848     0.000     0.000
   23   23   24    1    0.000     0.000    0.6848     0.000     0.000
   24   24   25    1    0.000     0.000    0.6848     0.000     0.000
   25   25   26    1    0.000     0.000    0.6848     0.000     0.000
   26   26   27    1    0.000     0.000    0.6848     0.000     0.000
   27   27   28    1    0.000     0.000    0.6848     0.000     0.000
   28   28   29    1    0.000     0.000    0.6848     0.000     0.000
   29   29   30    1    0.000     0.000    0.6848     0.000     0.000
   30   30   31    1    0.000     0.000    0.6848     0.000     0.000
   31   31   32    1    0.000     0.000    0.6848     0.000     0.000
   32   32   33    1    0.000     0.000    0.6848     0.000     0.000
   33   33   34    1    0.000     0.000    0.6848     0.000     0.000
   34   34   35    1    0.000     0.000    0.6848     0.000     0.000
   35   35   36    1    0.000     0.000    0.6848     0.000     0.000
   36   36   37    1    0.000     0.000    0.6848     0.000     0.000
   37   37   38    1    0.000     0.000    0.6848     0.000     0.000
   38   38   39    1    0.000     0.000    0.6848     0.000     0.000
   39   39   40    1    0.000     0.000    0.6848     0.000     0.000
   40   40   41    1    0.000     0.000    0.6848     0.000     0.000
   41   41   42    1    0.000     0.000    0.6848     0.000     0.000
```

42	42	43	1	0.000	0.000	0.6848	0.000	0.000
43	43	44	1	0.000	0.000	0.6848	0.000	0.000
44	44	45	1	0.000	0.000	0.6848	0.000	0.000
45	45	46	1	0.000	0.000	0.6848	0.000	0.000
46	46	47	1	0.000	0.000	0.6848	0.000	0.000
47	47	48	1	0.000	0.000	0.6848	0.000	0.000
48	48	49	1	0.000	0.000	0.6848	0.000	0.000
49	49	50	1	0.000	0.000	0.6848	0.000	0.000
50	50	51	1	0.000	0.000	0.6848	0.000	0.000
51	51	52	1	0.000	0.000	0.6848	0.000	0.000
52	52	53	1	0.000	0.000	0.6848	0.000	0.000
53	53	54	1	0.000	0.000	0.6848	0.000	0.000
54	54	55	1	0.000	0.000	0.6848	0.000	0.000
55	55	56	1	0.000	0.000	0.6848	0.000	0.000
56	56	57	1	0.000	0.000	0.6848	0.000	0.000
57	57	58	1	0.000	0.000	0.6848	0.000	0.000
58	58	59	1	0.000	0.000	0.6848	0.000	0.000
59	59	60	1	0.000	0.000	0.6848	0.000	0.000
60	60	61	1	0.000	0.000	0.6848	0.000	0.000
61	61	62	1	0.000	0.000	0.6848	0.000	0.000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      11:09:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  4

Tieback_778405                   :
   6   1   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   2   0
.....................................
.........2D POST-TENSION ANCHOR....
.....................................

element group behaviour throughout stage analysis

stage   status
------------------
    1  inactive
    2  inactive
    3  inactive
    4   active
    5   active

 material set no.    1

 prop( 1) angle          15.0000
 prop( 2) young modulus 0.200100E+09
 prop( 3) modification  time  0.00000
 prop( 4) new young modulus   0.00000

 no. of step variable items:     2
 step   -ve lim     +ve lim
-----------------------------
    1   0.000       0.000
    2   0.000       0.000
    3   0.000       0.000
    4   0.000       0.000
    5   0.000       0.000

 element data

   el    n  mat       a/l     pinit    yieldc    yieldt
-----------------------------------------------------------

    1   14    1   0.2340E-04 136.4     0.000     0.000



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      11:09:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


NO. OF NODAL LOADS  (NLOAD) ...................    0
NO. OF LOAD CURVES  (NLCUR) ...................   10
MAXIMUM POINTS/LCURVE (NPTM)...................    5
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      11:09:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
L O A D     D A T A


    LOAD FUNCTION NUMBER   =    1
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       1.20000    0.0000E+00
       6.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    2
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       2.20000    0.0000E+00
       6.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    3
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       3.20000    0.0000E+00
       6.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    4
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       3.80000    0.0000E+00
       4.00000    0.1000E+01
       4.20000    0.0000E+00
       6.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    5
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       4.80000    0.0000E+00
       5.00000    0.1000E+01
       5.20000    0.0000E+00
       6.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    6
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       6.00000    0.1000E+01
```

```
    LOAD FUNCTION NUMBER   =    7
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =    8
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =    9
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       3.80000    0.0000E+00
       4.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =   10
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       4.80000    0.0000E+00
       5.00000    0.1000E+01
       6.00000    0.1000E+01


NO. OF DISTRIBUTED LOAD CARDS     0
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      11:09:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
L O A D     B A L A N C E

STEP     1 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     1 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     2 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     2 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     3 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     3 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     4 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     4 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     5 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     5 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000


                     LOAD INPUT SECTION COMPLETED



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      11:09:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


NO. OF LAYERS .................................    2
NO. OF DATA PER LAYER.........................  100



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                  Exe Time :24 July 2019      11:09:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+

LAYER DESCRIPTORS FOR STEP NO.    1


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.30400     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.0410     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    1
```

```
ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.23500     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.8790     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    2


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.30400     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.0410     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.23500     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.8790     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    3
```

```
 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.30400     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.0410     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.23500     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.8790     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    4


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    4

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.30400     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.0410     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)
```

```
 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    4

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.23500     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.8790     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    5


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    5

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.30400     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.0410     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    5

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.23500     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.8790     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)
```

DEFAULT WATER UNIT WEIGHT = 10.000
AVERAGED ON 10 VALUES

+----------+
| PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017* |
| NewProject.BaseDesignSection_28.Nominal_63 |
| Exe Time :24 July 2019 11:09:26 |
+----------+

PHASE DESCRIPTORS

STEP NO. 1

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	0.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-12.00	-12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 1

STEP NO. 2

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	0.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-12.00	-12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000

Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 2

STEP NO. 3

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-3.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-12.00	-12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 3

STEP NO. 4

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-3.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-12.00	-12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 4

```
STEP  NO.     5
                                    LEFT WALL    RIGHT WALL
Y                                    0.000       -0.9990E+30
Z-PC                                 0.000         0.000
Z-EXCAVATION                        -4.960         0.000
Z-WATER_TABLE                       -26.00        -0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL            0.000         0.000
ZQ                                   0.000         0.000
DZW_OF_THE_WATER_TABLE               0.000         0.000
QS_ON_THE_EXCAVATION_SIDE            0.000         0.000
ZQS                                 -0.9990E+30   -0.9990E+30
ZCUT                                 0.000         0.000
BALANCE LEVEL FOR PORE PRESSURES    -12.00        -12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)    0.000         0.000
PORE_UPDATE_FLAG                     0.000         0.000
PORE_TAB. _FLAG (gt.0= use tabs)     0.000         0.000
lateral thrusts reduction elevatio   0.000         0.000
Downhill reduction factor for effe   0.000         0.000
Downhill reduction factor for pore   0.000         0.000
Uphill reduction factor for effect   0.000         0.000
Uphill reduction factor for pore p   0.000         0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]     0.000         0.000
UPHILL VERTICAL ACCEL.  Kv_uh [g]    0.000         0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]    0.000         0.000
UPHILL BETA ANGLE (SLOPE) [deg]      0.000         0.000
UPHILL DELTA/PHI RATIO               0.000         0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]    0.000         0.000
DOWNHILL DELTA/PHI RATIO             0.000         0.000
DYN.WATER BEHAVIOUR                  0.000         0.000
Excess pore pressure RATIO Ru        0.000         0.000
SEISMIC PRESSURE LOWER VALUE         0.000         0.000
SEISMIC PRESSURE UPPER VALUE         0.000         0.000
SEISMIC PRESSURE LOWER LEVEL         0.000         0.000
SEISMIC PRESSURE UPPER LEVEL         0.000         0.000

================================================================================================================end of step    5


 LEFT-HAND WALL

 LOWER  LEVEL         -12.00000
 UPPER  LEVEL           0.00000

 RIGHT-HAND WALL

 LOWER  LEVEL         -12.00000
 UPPER  LEVEL           0.00000




+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                     NewProject.BaseDesignSection_28.Nominal_63                                        |
|                                  Exe Time :24 July 2019      11:09:26                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
 I N I T I A L    S T R E S S    T A B L E S

            S E C T I O N

 NUMBER OF DEFINED TABLES             1


INPUT DATA FOR INITIAL STRESS SET NO.    1
PERTAINING SOIL ELEMENTS AT Y-COORD    0.0000

ACTIVATION TIME                              2.0000
END TIME (TIME BEYOND WHICH IT IS REMOVED)   5.0000

TYPE BOUSSINESQ

 HORIZONTAL DISTANCE (DY)          0.000000000000000E+000
 FOUNDATION WIDTH    (B)            40.0000000000000
 ZETA-F.........                   0.000000000000000E+000
 Q-F ............                   10.0000000000000
 BETA ...........                   30.0000000000000
 BEHAVIOUR (0=FREE, 1=REFLECTING)  0.000000000000000E+000


 ELEMENT GROUPS BACKUP AREA CAN STAY IN CORE AT
 POSITION        3534
```

```
 NO. OF D.P.W  FOR THIS AREA       7376
 MAX NO. OF D.P.W. AVAILABLE      81920
 ** MAX NO OF ITERATIONS SET TO         100

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2144E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 22.62     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2144E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   124 NODE     62 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     1 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2144E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 22.62     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2144E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   124 NODE     62 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2144E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 22.62     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2144E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   124 NODE     62 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0
```

```
+----------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*  |
|                                                                                                            |
|                                       NewProject.BaseDesignSection_28.Nominal_63                          |
|                                   Exe Time :24 July 2019      11:09:26                                    |
+----------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     2 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    1     ( AT TIME   1.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F         X-ROT. F
           (02)             (04)            (


ALL NODAL POINTS HAVE ZERO DISPLACEMENT COMPONENTS
```


```
+----------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*  |
|                                                                                                            |
|                                       NewProject.BaseDesignSection_28.Nominal_63                          |
|                                   Exe Time :24 July 2019      11:09:26                                    |
+----------------------------------------------------------------------------------------------------------+
New Project
```


```
S T R E S S    R E S U L T S    F O R    G R O U P   N O.    1

0_L                                :
ELEMENT TYPE      5 NO.OF ELEMENTS. IN THIS GROUP    62
C U R R E N T    T I M E    I S      1.0000

 HARDENING 2D SOIL ELEMENT

 ****** TOTAL STRESS FORMULATION *****
```

EL	*	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1	D	0.000	0.000	0.000	0.000	0.000	0.000	V-C	2.1221E+04	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_2_8_L_0
2	D	0.4028	0.000	3.800	2.014	3.800	2.014	V-C	2.1221E+04	-0.2000	0.000	1.000	1.000	2.014	0.000	0.000	Strato1_2_8_L_0
3	D	0.8056	0.000	7.600	4.028	7.600	4.028	V-C	2.1221E+04	-0.4000	0.000	1.000	1.000	4.028	0.000	0.000	Strato1_2_8_L_0
4	D	1.208	0.000	11.40	6.042	11.40	6.042	V-C	2.1221E+04	-0.6000	0.000	1.000	1.000	6.042	0.000	0.000	Strato1_2_8_L_0
5	D	1.611	0.000	15.20	8.056	15.20	8.056	V-C	2.1221E+04	-0.8000	0.000	1.000	1.000	8.056	0.000	0.000	Strato1_2_8_L_0
6	D	2.014	0.000	19.00	10.07	19.00	10.07	V-C	2.1221E+04	-1.000	0.000	1.000	1.000	10.07	0.000	0.000	Strato1_2_8_L_0
7	D	2.417	0.000	22.80	12.08	22.80	12.08	V-C	2.1221E+04	-1.200	0.000	1.000	1.000	12.08	0.000	0.000	Strato1_2_8_L_0
8	D	2.820	0.000	26.60	14.10	26.60	14.10	V-C	2.1221E+04	-1.400	0.000	1.000	1.000	14.10	0.000	0.000	Strato1_2_8_L_0
9	D	3.222	0.000	30.40	16.11	30.40	16.11	V-C	2.1221E+04	-1.600	0.000	1.000	1.000	16.11	0.000	0.000	Strato1_2_8_L_0
10	D	3.625	0.000	34.20	18.13	34.20	18.13	V-C	2.1221E+04	-1.800	0.000	1.000	1.000	18.13	0.000	0.000	Strato1_2_8_L_0
11	D	4.028	0.000	38.00	20.14	38.00	20.14	V-C	2.1221E+04	-2.000	0.000	1.000	1.000	20.14	0.000	0.000	Strato1_2_8_L_0
12	D	4.431	0.000	41.80	22.15	41.80	22.15	V-C	2.1221E+04	-2.200	0.000	1.000	1.000	22.15	0.000	0.000	Strato1_2_8_L_0
13	D	3.625	0.000	45.60	24.17	45.60	24.17	V-C	2.1221E+04	-2.400	0.000	1.000	1.000	24.17	0.000	0.000	Strato1_2_8_L_0
14	D	3.776	0.000	47.50	25.18	47.50	25.18	V-C	2.1221E+04	-2.500	0.000	1.000	1.000	25.18	0.000	0.000	Strato1_2_8_L_0
15	D	5.438	0.000	51.30	27.19	51.30	27.19	V-C	2.1221E+04	-2.700	0.000	1.000	1.000	27.19	0.000	0.000	Strato1_2_8_L_0
16	D	5.841	0.000	55.10	29.20	55.10	29.20	V-C	2.1221E+04	-2.900	0.000	1.000	1.000	29.20	0.000	0.000	Strato1_2_8_L_0
17	D	6.243	0.000	58.90	31.22	58.90	31.22	V-C	2.1221E+04	-3.100	0.000	1.000	1.000	31.22	0.000	0.000	Strato1_2_8_L_0
18	D	6.646	0.000	62.70	33.23	62.70	33.23	V-C	2.1221E+04	-3.300	0.000	1.000	1.000				

33.23	0.000	0.000	Strato1_2_8_L_0										
19 D	7.049	0.000	66.50	35.25	66.50	35.25	V-C	2.1221E+04	-3.500	0.000	1.000	1.000	
35.25	0.000	0.000	Strato1_2_8_L_0										
20 D	7.452	0.000	70.30	37.26	70.30	37.26	V-C	2.1221E+04	-3.700	0.000	1.000	1.000	
37.26	0.000	0.000	Strato1_2_8_L_0										
21 D	7.855	0.000	74.10	39.27	74.10	39.27	V-C	2.1221E+04	-3.900	0.000	1.000	1.000	
39.27	0.000	0.000	Strato1_2_8_L_0										
22 D	8.257	0.000	77.90	41.29	77.90	41.29	V-C	2.1221E+04	-4.100	0.000	1.000	1.000	
41.29	0.000	0.000	Strato1_2_8_L_0										
23 D	8.660	0.000	81.70	43.30	81.70	43.30	V-C	2.1221E+04	-4.300	0.000	1.000	1.000	
43.30	0.000	0.000	Strato1_2_8_L_0										
24 D	9.063	0.000	85.50	45.32	85.50	45.32	V-C	2.1221E+04	-4.500	0.000	1.000	1.000	
45.31	0.000	0.000	Strato1_2_8_L_0										
25 D	9.466	0.000	89.30	47.33	89.30	47.33	V-C	2.1221E+04	-4.700	0.000	1.000	1.000	
47.33	0.000	0.000	Strato1_2_8_L_0										
26 D	9.869	0.000	93.10	49.34	93.10	49.34	V-C	2.1221E+04	-4.900	0.000	1.000	1.000	
49.34	0.000	0.000	Strato1_2_8_L_0										
27 D	10.27	0.000	96.90	51.36	96.90	51.36	V-C	2.1221E+04	-5.100	0.000	1.000	1.000	
51.36	0.000	0.000	Strato1_2_8_L_0										
28 D	10.67	0.000	100.7	53.37	100.7	53.37	V-C	2.1221E+04	-5.300	0.000	1.000	1.000	
53.37	0.000	0.000	Strato1_2_8_L_0										
29 D	11.08	0.000	104.5	55.38	104.5	55.38	V-C	2.1221E+04	-5.500	0.000	1.000	1.000	
55.38	0.000	0.000	Strato1_2_8_L_0										
30 D	11.48	0.000	108.3	57.40	108.3	57.40	V-C	2.1221E+04	-5.700	0.000	1.000	1.000	
57.40	0.000	0.000	Strato1_2_8_L_0										
31 D	11.88	0.000	112.1	59.41	112.1	59.41	V-C	2.1221E+04	-5.900	0.000	1.000	1.000	
59.41	0.000	0.000	Strato1_2_8_L_0										
32 D	12.29	0.000	115.9	61.43	115.9	61.43	V-C	2.1221E+04	-6.100	0.000	1.000	1.000	
61.43	0.000	0.000	Strato1_2_8_L_0										
33 D	12.69	0.000	119.7	63.44	119.7	63.44	V-C	2.1221E+04	-6.300	0.000	1.000	1.000	
63.44	0.000	0.000	Strato1_2_8_L_0										
34 D	13.09	0.000	123.5	65.45	123.5	65.45	V-C	2.1221E+04	-6.500	0.000	1.000	1.000	
65.45	0.000	0.000	Strato1_2_8_L_0										
35 D	13.49	0.000	127.3	67.47	127.3	67.47	V-C	2.1221E+04	-6.700	0.000	1.000	1.000	
67.47	0.000	0.000	Strato1_2_8_L_0										
36 D	13.90	0.000	131.1	69.48	131.1	69.48	V-C	2.1221E+04	-6.900	0.000	1.000	1.000	
69.48	0.000	0.000	Strato1_2_8_L_0										
37 D	14.30	0.000	134.9	71.50	134.9	71.50	V-C	2.1221E+04	-7.100	0.000	1.000	1.000	
71.50	0.000	0.000	Strato1_2_8_L_0										
38 D	14.70	0.000	138.7	73.51	138.7	73.51	V-C	2.1221E+04	-7.300	0.000	1.000	1.000	
73.51	0.000	0.000	Strato1_2_8_L_0										
39 D	15.10	0.000	142.5	75.52	142.5	75.52	V-C	2.1221E+04	-7.500	0.000	1.000	1.000	
75.52	0.000	0.000	Strato1_2_8_L_0										
40 D	15.51	0.000	146.3	77.54	146.3	77.54	V-C	2.1221E+04	-7.700	0.000	1.000	1.000	
77.54	0.000	0.000	Strato1_2_8_L_0										
41 D	15.02	0.000	150.2	75.10	150.2	75.10	V-C	6.0031E+04	-7.900	0.000	1.000	1.000	
75.10	0.000	0.000	Strato2_3095_82743_L_0										
42 D	15.42	0.000	154.2	77.10	154.2	77.10	V-C	6.0031E+04	-8.100	0.000	1.000	1.000	
77.10	0.000	0.000	Strato2_3095_82743_L_0										
43 D	15.82	0.000	158.2	79.10	158.2	79.10	V-C	6.0031E+04	-8.300	0.000	1.000	1.000	
79.10	0.000	0.000	Strato2_3095_82743_L_0										
44 D	16.22	0.000	162.2	81.10	162.2	81.10	V-C	6.0031E+04	-8.500	0.000	1.000	1.000	
81.10	0.000	0.000	Strato2_3095_82743_L_0										
45 D	16.62	0.000	166.2	83.10	166.2	83.10	V-C	6.0031E+04	-8.700	0.000	1.000	1.000	
83.10	0.000	0.000	Strato2_3095_82743_L_0										
46 D	17.02	0.000	170.2	85.10	170.2	85.10	V-C	6.0031E+04	-8.900	0.000	1.000	1.000	
85.10	0.000	0.000	Strato2_3095_82743_L_0										
47 D	17.42	0.000	174.2	87.10	174.2	87.10	V-C	6.0031E+04	-9.100	0.000	1.000	1.000	
87.10	0.000	0.000	Strato2_3095_82743_L_0										
48 D	17.82	0.000	178.2	89.10	178.2	89.10	V-C	6.0031E+04	-9.300	0.000	1.000	1.000	
89.10	0.000	0.000	Strato2_3095_82743_L_0										
49 D	18.22	0.000	182.2	91.10	182.2	91.10	V-C	6.0031E+04	-9.500	0.000	1.000	1.000	
91.10	0.000	0.000	Strato2_3095_82743_L_0										
50 D	18.62	0.000	186.2	93.10	186.2	93.10	V-C	6.0031E+04	-9.700	0.000	1.000	1.000	
93.10	0.000	0.000	Strato2_3095_82743_L_0										
51 D	19.02	0.000	190.2	95.10	190.2	95.10	V-C	6.0031E+04	-9.900	0.000	1.000	1.000	
95.10	0.000	0.000	Strato2_3095_82743_L_0										
52 D	19.42	0.000	194.2	97.10	194.2	97.10	V-C	6.0031E+04	-10.10	0.000	1.000	1.000	
97.10	0.000	0.000	Strato2_3095_82743_L_0										
53 D	19.82	0.000	198.2	99.10	198.2	99.10	V-C	6.0031E+04	-10.30	0.000	1.000	1.000	
99.10	0.000	0.000	Strato2_3095_82743_L_0										
54 D	20.22	0.000	202.2	101.1	202.2	101.1	V-C	6.0031E+04	-10.50	0.000	1.000	1.000	
101.1	0.000	0.000	Strato2_3095_82743_L_0										
55 D	20.62	0.000	206.2	103.1	206.2	103.1	V-C	6.0031E+04	-10.70	0.000	1.000	1.000	
103.1	0.000	0.000	Strato2_3095_82743_L_0										
56 D	21.02	0.000	210.2	105.1	210.2	105.1	V-C	6.0031E+04	-10.90	0.000	1.000	1.000	
105.1	0.000	0.000	Strato2_3095_82743_L_0										
57 D	21.42	0.000	214.2	107.1	214.2	107.1	V-C	6.0031E+04	-11.10	0.000	1.000	1.000	
107.1	0.000	0.000	Strato2_3095_82743_L_0										
58 D	21.82	0.000	218.2	109.1	218.2	109.1	V-C	6.0031E+04	-11.30	0.000	1.000	1.000	
109.1	0.000	0.000	Strato2_3095_82743_L_0										
59 D	22.22	0.000	222.2	111.1	222.2	111.1	V-C	6.0031E+04	-11.50	0.000	1.000	1.000	
111.1	0.000	0.000	Strato2_3095_82743_L_0										
60 D	22.62	0.000	226.2	113.1	226.2	113.1	V-C	6.0031E+04	-11.70	0.000	1.000	1.000	
113.1	0.000	0.000	Strato2_3095_82743_L_0										

```
  61 D   17.26       0.000       230.2       115.1       230.2       115.1            V-C  6.0031E+04  -11.90       0.000       1.000       1.000
115.1       0.000       0.000     Strato2_3095_82743_L_0
  62 D   5.805       0.000       232.2       116.1       232.2       116.1            V-C  6.0031E+04  -12.00       0.000       1.000       1.000
116.1       0.000       0.000     Strato2_3095_82743_L_0
```

```
+----------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1     FULL VERSION  *Build date:Jul 11, 2017*   |
|                                                                                                          |
|                                        NewProject.BaseDesignSection_28.Nominal_63                        |
|                                Exe Time :24 July 2019      11:09:26                                      |
+----------------------------------------------------------------------------------------------------------+
```

New Project

S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

0_R :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 62
C U R R E N T   T I M E   I S   1.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.000	0.000	0.000	0.000	0.000	0.000	V-C	1.4726E+04	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_2_8_L_0
2 D	0.4028	0.000	3.800	2.014	3.800	2.014	V-C	1.4726E+04	-0.2000	0.000	1.000	1.000	2.014	0.000	0.000	Strato1_2_8_L_0
3 D	0.8056	0.000	7.600	4.028	7.600	4.028	V-C	1.4726E+04	-0.4000	0.000	1.000	1.000	4.028	0.000	0.000	Strato1_2_8_L_0
4 D	1.208	0.000	11.40	6.042	11.40	6.042	V-C	1.4726E+04	-0.6000	0.000	1.000	1.000	6.042	0.000	0.000	Strato1_2_8_L_0
5 D	1.611	0.000	15.20	8.056	15.20	8.056	V-C	1.4726E+04	-0.8000	0.000	1.000	1.000	8.056	0.000	0.000	Strato1_2_8_L_0
6 D	2.014	0.000	19.00	10.07	19.00	10.07	V-C	1.4726E+04	-1.000	0.000	1.000	1.000	10.07	0.000	0.000	Strato1_2_8_L_0
7 D	2.417	0.000	22.80	12.08	22.80	12.08	V-C	1.4726E+04	-1.200	0.000	1.000	1.000	12.08	0.000	0.000	Strato1_2_8_L_0
8 D	2.820	0.000	26.60	14.10	26.60	14.10	V-C	1.4726E+04	-1.400	0.000	1.000	1.000	14.10	0.000	0.000	Strato1_2_8_L_0
9 D	3.222	0.000	30.40	16.11	30.40	16.11	V-C	1.4726E+04	-1.600	0.000	1.000	1.000	16.11	0.000	0.000	Strato1_2_8_L_0
10 D	3.625	0.000	34.20	18.13	34.20	18.13	V-C	1.4726E+04	-1.800	0.000	1.000	1.000	18.13	0.000	0.000	Strato1_2_8_L_0
11 D	4.028	0.000	38.00	20.14	38.00	20.14	V-C	1.4726E+04	-2.000	0.000	1.000	1.000	20.14	0.000	0.000	Strato1_2_8_L_0
12 D	4.431	0.000	41.80	22.15	41.80	22.15	V-C	1.4726E+04	-2.200	0.000	1.000	1.000	22.15	0.000	0.000	Strato1_2_8_L_0
13 D	3.625	0.000	45.60	24.17	45.60	24.17	V-C	1.4726E+04	-2.400	0.000	1.000	1.000	24.17	0.000	0.000	Strato1_2_8_L_0
14 D	3.776	0.000	47.50	25.18	47.50	25.18	V-C	1.4726E+04	-2.500	0.000	1.000	1.000	25.18	0.000	0.000	Strato1_2_8_L_0
15 D	5.438	0.000	51.30	27.19	51.30	27.19	V-C	1.4726E+04	-2.700	0.000	1.000	1.000	27.19	0.000	0.000	Strato1_2_8_L_0
16 D	5.841	0.000	55.10	29.20	55.10	29.20	V-C	1.4726E+04	-2.900	0.000	1.000	1.000	29.20	0.000	0.000	Strato1_2_8_L_0
17 D	6.243	0.000	58.90	31.22	58.90	31.22	V-C	1.4726E+04	-3.100	0.000	1.000	1.000	31.22	0.000	0.000	Strato1_2_8_L_0
18 D	6.646	0.000	62.70	33.23	62.70	33.23	V-C	1.4726E+04	-3.300	0.000	1.000	1.000	33.23	0.000	0.000	Strato1_2_8_L_0
19 D	7.049	0.000	66.50	35.25	66.50	35.25	V-C	1.4726E+04	-3.500	0.000	1.000	1.000	35.25	0.000	0.000	Strato1_2_8_L_0
20 D	7.452	0.000	70.30	37.26	70.30	37.26	V-C	1.4726E+04	-3.700	0.000	1.000	1.000	37.26	0.000	0.000	Strato1_2_8_L_0
21 D	7.855	0.000	74.10	39.27	74.10	39.27	V-C	1.4726E+04	-3.900	0.000	1.000	1.000	39.27	0.000	0.000	Strato1_2_8_L_0
22 D	8.257	0.000	77.90	41.29	77.90	41.29	V-C	1.4726E+04	-4.100	0.000	1.000	1.000	41.29	0.000	0.000	Strato1_2_8_L_0
23 D	8.660	0.000	81.70	43.30	81.70	43.30	V-C	1.4726E+04	-4.300	0.000	1.000	1.000	43.30	0.000	0.000	Strato1_2_8_L_0
24 D	9.063	0.000	85.50	45.32	85.50	45.32	V-C	1.4726E+04	-4.500	0.000	1.000	1.000	45.31	0.000	0.000	Strato1_2_8_L_0
25 D	9.466	0.000	89.30	47.33	89.30	47.33	V-C	1.4726E+04	-4.700	0.000	1.000	1.000	47.33	0.000	0.000	Strato1_2_8_L_0
26 D	9.869	0.000	93.10	49.34	93.10	49.34	V-C	1.4726E+04	-4.900	0.000	1.000	1.000	49.34	0.000	0.000	Strato1_2_8_L_0
27 D	10.27	0.000	96.90	51.36	96.90	51.36	V-C	1.4726E+04	-5.100	0.000	1.000	1.000	51.36	0.000	0.000	Strato1_2_8_L_0
28 D	10.67	0.000	100.7	53.37	100.7	53.37	V-C	1.4726E+04	-5.300	0.000	1.000	1.000	53.37	0.000	0.000	Strato1_2_8_L_0
29 D	11.08	0.000	104.5	55.38	104.5	55.38	V-C	1.4726E+04	-5.500	0.000	1.000	1.000	55.38	0.000	0.000	Strato1_2_8_L_0
30 D	11.48	0.000	108.3	57.40	108.3	57.40	V-C	1.4726E+04	-5.700	0.000	1.000	1.000				

57.40	0.000	0.000	Strato1_2_8_L_0									
31 D	11.88	0.000	112.1	59.41	112.1	59.41	V-C	1.4726E+04	-5.900	0.000	1.000	1.000
59.41	0.000	0.000	Strato1_2_8_L_0									
32 D	12.29	0.000	115.9	61.43	115.9	61.43	V-C	1.4726E+04	-6.100	0.000	1.000	1.000
61.43	0.000	0.000	Strato1_2_8_L_0									
33 D	12.69	0.000	119.7	63.44	119.7	63.44	V-C	1.4726E+04	-6.300	0.000	1.000	1.000
63.44	0.000	0.000	Strato1_2_8_L_0									
34 D	13.09	0.000	123.5	65.45	123.5	65.45	V-C	1.4726E+04	-6.500	0.000	1.000	1.000
65.45	0.000	0.000	Strato1_2_8_L_0									
35 D	13.49	0.000	127.3	67.47	127.3	67.47	V-C	1.4726E+04	-6.700	0.000	1.000	1.000
67.47	0.000	0.000	Strato1_2_8_L_0									
36 D	13.90	0.000	131.1	69.48	131.1	69.48	V-C	1.4726E+04	-6.900	0.000	1.000	1.000
69.48	0.000	0.000	Strato1_2_8_L_0									
37 D	14.30	0.000	134.9	71.50	134.9	71.50	V-C	1.4726E+04	-7.100	0.000	1.000	1.000
71.50	0.000	0.000	Strato1_2_8_L_0									
38 D	14.70	0.000	138.7	73.51	138.7	73.51	V-C	1.4726E+04	-7.300	0.000	1.000	1.000
73.51	0.000	0.000	Strato1_2_8_L_0									
39 D	15.10	0.000	142.5	75.52	142.5	75.52	V-C	1.4726E+04	-7.500	0.000	1.000	1.000
75.52	0.000	0.000	Strato1_2_8_L_0									
40 D	15.51	0.000	146.3	77.54	146.3	77.54	V-C	1.4726E+04	-7.700	0.000	1.000	1.000
77.54	0.000	0.000	Strato1_2_8_L_0									
41 D	15.02	0.000	150.2	75.10	150.2	75.10	V-C	3.2535E+04	-7.900	0.000	1.000	1.000
75.10	0.000	0.000	Strato2_3095_82743_L_0									
42 D	15.42	0.000	154.2	77.10	154.2	77.10	V-C	3.2535E+04	-8.100	0.000	1.000	1.000
77.10	0.000	0.000	Strato2_3095_82743_L_0									
43 D	15.82	0.000	158.2	79.10	158.2	79.10	V-C	3.2535E+04	-8.300	0.000	1.000	1.000
79.10	0.000	0.000	Strato2_3095_82743_L_0									
44 D	16.22	0.000	162.2	81.10	162.2	81.10	V-C	3.2535E+04	-8.500	0.000	1.000	1.000
81.10	0.000	0.000	Strato2_3095_82743_L_0									
45 D	16.62	0.000	166.2	83.10	166.2	83.10	V-C	3.2535E+04	-8.700	0.000	1.000	1.000
83.10	0.000	0.000	Strato2_3095_82743_L_0									
46 D	17.02	0.000	170.2	85.10	170.2	85.10	V-C	3.2535E+04	-8.900	0.000	1.000	1.000
85.10	0.000	0.000	Strato2_3095_82743_L_0									
47 D	17.42	0.000	174.2	87.10	174.2	87.10	V-C	3.2535E+04	-9.100	0.000	1.000	1.000
87.10	0.000	0.000	Strato2_3095_82743_L_0									
48 D	17.82	0.000	178.2	89.10	178.2	89.10	V-C	3.2535E+04	-9.300	0.000	1.000	1.000
89.10	0.000	0.000	Strato2_3095_82743_L_0									
49 D	18.22	0.000	182.2	91.10	182.2	91.10	V-C	3.2535E+04	-9.500	0.000	1.000	1.000
91.10	0.000	0.000	Strato2_3095_82743_L_0									
50 D	18.62	0.000	186.2	93.10	186.2	93.10	V-C	3.2535E+04	-9.700	0.000	1.000	1.000
93.10	0.000	0.000	Strato2_3095_82743_L_0									
51 D	19.02	0.000	190.2	95.10	190.2	95.10	V-C	3.2535E+04	-9.900	0.000	1.000	1.000
95.10	0.000	0.000	Strato2_3095_82743_L_0									
52 D	19.42	0.000	194.2	97.10	194.2	97.10	V-C	3.2535E+04	-10.10	0.000	1.000	1.000
97.10	0.000	0.000	Strato2_3095_82743_L_0									
53 D	19.82	0.000	198.2	99.10	198.2	99.10	V-C	3.2535E+04	-10.30	0.000	1.000	1.000
99.10	0.000	0.000	Strato2_3095_82743_L_0									
54 D	20.22	0.000	202.2	101.1	202.2	101.1	V-C	3.2535E+04	-10.50	0.000	1.000	1.000
101.1	0.000	0.000	Strato2_3095_82743_L_0									
55 D	20.62	0.000	206.2	103.1	206.2	103.1	V-C	3.2535E+04	-10.70	0.000	1.000	1.000
103.1	0.000	0.000	Strato2_3095_82743_L_0									
56 D	21.02	0.000	210.2	105.1	210.2	105.1	V-C	3.2535E+04	-10.90	0.000	1.000	1.000
105.1	0.000	0.000	Strato2_3095_82743_L_0									
57 D	21.42	0.000	214.2	107.1	214.2	107.1	V-C	3.2535E+04	-11.10	0.000	1.000	1.000
107.1	0.000	0.000	Strato2_3095_82743_L_0									
58 D	21.82	0.000	218.2	109.1	218.2	109.1	V-C	3.2535E+04	-11.30	0.000	1.000	1.000
109.1	0.000	0.000	Strato2_3095_82743_L_0									
59 D	22.22	0.000	222.2	111.1	222.2	111.1	V-C	3.2535E+04	-11.50	0.000	1.000	1.000
111.1	0.000	0.000	Strato2_3095_82743_L_0									
60 D	22.62	0.000	226.2	113.1	226.2	113.1	V-C	3.2535E+04	-11.70	0.000	1.000	1.000
113.1	0.000	0.000	Strato2_3095_82743_L_0									
61 D	17.26	0.000	230.2	115.1	230.2	115.1	V-C	3.2535E+04	-11.90	0.000	1.000	1.000
115.1	0.000	0.000	Strato2_3095_82743_L_0									
62 D	5.805	0.000	232.2	116.1	232.2	116.1	V-C	3.2535E+04	-12.00	0.000	1.000	1.000
116.1	0.000	0.000	Strato2_3095_82743_L_0									

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                        NewProject.BaseDesignSection_28.Nominal_63                                       |
|                                  Exe Time :24 July 2019      11:09:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P    N O.    3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
C U R R E N T    T I M E    I S      1.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-------------------------------------------------------
    1  0.0000      0.0000      0.0000      0.0000
    2  0.0000      0.0000      0.0000      0.0000
    3  0.0000      0.0000      0.0000      0.0000
    4  0.0000      0.0000      0.0000      0.0000
    5  0.0000      0.0000      0.0000      0.0000
    6  0.0000      0.0000      0.0000      0.0000
    7  0.0000      0.0000      0.0000      0.0000
    8  0.0000      0.0000      0.0000      0.0000
    9  0.0000      0.0000      0.0000      0.0000
   10  0.0000      0.0000      0.0000      0.0000
   11  0.0000      0.0000      0.0000      0.0000
   12  0.0000      0.0000      0.0000      0.0000
   13  0.0000      0.0000      0.0000      0.0000
   14  0.0000      0.0000      0.0000      0.0000
   15  0.0000      0.0000      0.0000      0.0000
   16  0.0000      0.0000      0.0000      0.0000
   17  0.0000      0.0000      0.0000      0.0000
   18  0.0000      0.0000      0.0000      0.0000
   19  0.0000      0.0000      0.0000      0.0000
   20  0.0000      0.0000      0.0000      0.0000
   21  0.0000      0.0000      0.0000      0.0000
   22  0.0000      0.0000      0.0000      0.0000
   23  0.0000      0.0000      0.0000      0.0000
   24  0.0000      0.0000      0.0000      0.0000
   25  0.0000      0.0000      0.0000      0.0000
   26  0.0000      0.0000      0.0000      0.0000
   27  0.0000      0.0000      0.0000      0.0000
   28  0.0000      0.0000      0.0000      0.0000
   29  0.0000      0.0000      0.0000      0.0000
   30  0.0000      0.0000      0.0000      0.0000
   31  0.0000      0.0000      0.0000      0.0000
   32  0.0000      0.0000      0.0000      0.0000
   33  0.0000      0.0000      0.0000      0.0000
   34  0.0000      0.0000      0.0000      0.0000
   35  0.0000      0.0000      0.0000      0.0000
   36  0.0000      0.0000      0.0000      0.0000
   37  0.0000      0.0000      0.0000      0.0000
   38  0.0000      0.0000      0.0000      0.0000
   39  0.0000      0.0000      0.0000      0.0000
   40  0.0000      0.0000      0.0000      0.0000
   41  0.0000      0.0000      0.0000      0.0000
   42  0.0000      0.0000      0.0000      0.0000
   43  0.0000      0.0000      0.0000      0.0000
   44  0.0000      0.0000      0.0000      0.0000
   45  0.0000      0.0000      0.0000      0.0000
   46  0.0000      0.0000      0.0000      0.0000
   47  0.0000      0.0000      0.0000      0.0000
   48  0.0000      0.0000      0.0000      0.0000
   49  0.0000      0.0000      0.0000      0.0000
   50  0.0000      0.0000      0.0000      0.0000
   51  0.0000      0.0000      0.0000      0.0000
   52  0.0000      0.0000      0.0000      0.0000
   53  0.0000      0.0000      0.0000      0.0000
   54  0.0000      0.0000      0.0000      0.0000
   55  0.0000      0.0000      0.0000      0.0000
   56  0.0000      0.0000      0.0000      0.0000
   57  0.0000      0.0000      0.0000      0.0000
   58  0.0000      0.0000      0.0000      0.0000
   59  0.0000      0.0000      0.0000      0.0000
   60  0.0000      0.0000      0.0000      0.0000
   61  0.0000      0.0000      0.0000      0.0000
```

```
+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                               |
|                                  Exe Time :24 July 2019      11:09:26                                                         |
+-------------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    4

Tieback_778405                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      1.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2246E+05 RIMNOR= 0.000
           RENORM= 30.48     REMNOR= 0.000     RATIO =0.3684E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 23.31     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2246E+05 RDR   = 0.000
           RATIOT=0.3684E-01 RATIOR= 0.000
           MAX UN=0.7687     IEQ=    15 NODE      8 DOF   1  Y-DISPL.F
           MIN UN= 0.000     IEQ=     2 NODE      1 DOF   2   X-ROT. F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2246E+05 RIMNOR= 0.000
           RENORM=0.5257E-01 REMNOR=0.3599E-22 RATIO =0.1530E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 23.31     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2246E+05 RDR   = 0.000
           RATIOT=0.1530E-02 RATIOR= 0.000
           MAX UN=0.2119     IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           MIN UN=-.8085E-10 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2246E+05 RIMNOR= 0.000
           RENORM=0.1056E-02 REMNOR=0.1301E-22 RATIO =0.2169E-03 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 23.31     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2246E+05 RDR   = 0.000
           RATIOT=0.2169E-03 RATIOR= 0.000
           MAX UN=0.3210E-01 IEQ=     5 NODE      3 DOF   1  Y-DISPL.F
           MIN UN=-.5150E-10 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2246E+05 RIMNOR= 0.000
           RENORM=0.2270E-08 REMNOR=0.9387E-23 RATIO =0.3179E-06 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 23.31     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2246E+05 RDR   = 0.000
           RATIOT=0.3179E-06 RATIOR= 0.000
           MAX UN=0.2873E-04 IEQ=    45 NODE     23 DOF   1  Y-DISPL.F
           MIN UN=-.3272E-10 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                 Exe Time :24 July 2019      11:09:26                                                    |
+-------------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     4 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    2     ( AT TIME   2.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (
    1   5.3061832E-05  -1.8612385E-06
    2   5.2690065E-05  -1.8540215E-06
    3   5.2321183E-05  -1.8323969E-06
    4   5.1957887E-05  -1.7990541E-06
    5   5.1602007E-05  -1.7590320E-06
    6   5.1254448E-05  -1.7164060E-06
    7   5.0915423E-05  -1.6741036E-06
    8   5.0584645E-05  -1.6342234E-06
    9   5.0261476E-05  -1.5982121E-06
   10   4.9944930E-05  -1.5686610E-06
   11   4.9633339E-05  -1.5491920E-06
   12   4.9324390E-05  -1.5426737E-06
   13   4.9015259E-05  -1.5513230E-06
   14   4.8859637E-05  -1.5618221E-06
   15   4.8544117E-05  -1.5965156E-06
   16   4.8219721E-05  -1.6508543E-06
   17   4.7882373E-05  -1.7262307E-06
   18   4.7527768E-05  -1.8235226E-06
   19   4.7151477E-05  -1.9431153E-06
   20   4.6749041E-05  -2.0849150E-06
   21   4.6316068E-05  -2.2483539E-06
   22   4.5848279E-05  -2.4331104E-06
   23   4.5341411E-05  -2.6390637E-06
   24   4.4791286E-05  -2.8655279E-06
   25   4.4193917E-05  -3.1112327E-06
   26   4.3545635E-05  -3.3743005E-06
   27   4.2843210E-05  -3.6522248E-06
   28   4.2083968E-05  -3.9418510E-06
   29   4.1265910E-05  -4.2398758E-06
   30   4.0387692E-05  -4.5428002E-06
   31   3.9448749E-05  -4.8463396E-06
   32   3.8449460E-05  -5.1453883E-06
   33   3.7391295E-05  -5.4339920E-06
   34   3.6277016E-05  -5.7053035E-06
   35   3.5110844E-05  -5.9515544E-06
   36   3.3898647E-05  -6.1640215E-06
   37   3.2648107E-05  -6.3334104E-06
   38   3.1368821E-05  -6.4498178E-06
   39   3.0072449E-05  -6.5022893E-06
   40   2.8772969E-05  -6.4788054E-06
   41   2.7486863E-05  -6.3662825E-06
   42   2.6232101E-05  -6.1690767E-06
   43   2.5023482E-05  -5.9082118E-06
   44   2.3871815E-05  -5.6024711E-06
   45   2.2784375E-05  -5.2685047E-06
   46   2.1765341E-05  -4.9206171E-06
   47   2.0816250E-05  -4.5709063E-06
   48   1.9936435E-05  -4.2294087E-06
   49   1.9123403E-05  -3.9042358E-06
   50   1.8373230E-05  -3.6017251E-06
   51   1.7680889E-05  -3.3265668E-06
   52   1.7040566E-05  -3.0822091E-06
   53   1.6445816E-05  -2.8709421E-06
   54   1.5889917E-05  -2.6937568E-06
   55   1.5366057E-05  -2.5504056E-06
   56   1.4867593E-05  -2.4394820E-06
   57   1.4388270E-05  -2.3584813E-06
   58   1.3922442E-05  -2.3038476E-06
   59   1.3465262E-05  -2.2712494E-06
   60   1.3012813E-05  -2.2555997E-06
   61   1.2562297E-05  -2.2508273E-06
   62   1.2337208E-05  -2.2505838E-06
```

```
+---------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1     FULL VERSION  *Build date:Jul 11, 2017*   |
|                                                                                                         |
|                                       NewProject.BaseDesignSection_28.Nominal_63                        |
|                                   Exe Time :24 July 2019      11:09:26                                  |
+---------------------------------------------------------------------------------------------------------+
```

New Project

S T R E S S   R E S U L T S   F O R   G R O U P   N O.   1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 62
C U R R E N T   T I M E   I S   2.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL	*	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1	D	0.3040	-5.3062E-05	10.00	3.040	10.00	5.300	ACTIVE	0.000	0.000	0.000	1.000	1.000	3.040	0.000	0.000	Strato1_2_8_L_0
2	D	0.5569	-5.2690E-05	9.159	2.784	9.159	4.854	ACTIVE	0.000	-0.2000	0.000	1.000	1.000	2.784	0.000	0.000	Strato1_2_8_L_0
3	D	0.8475	-5.2321E-05	13.94	4.238	13.94	7.388	ACTIVE	0.000	-0.4000	0.000	1.000	1.000	4.238	0.000	0.000	Strato1_2_8_L_0
4	D	1.261	-5.1958E-05	18.14	6.307	18.14	9.614	UL-RL	6.3662E+04	-0.6000	0.000	1.000	1.000	6.307	0.000	0.000	Strato1_2_8_L_0
5	D	1.692	-5.1602E-05	22.16	8.458	22.16	11.74	UL-RL	6.3662E+04	-0.8000	0.000	1.000	1.000	8.458	0.000	0.000	Strato1_2_8_L_0
6	D	2.113	-5.1254E-05	26.09	10.57	26.09	13.83	UL-RL	6.3662E+04	-1.000	0.000	1.000	1.000	10.57	0.000	0.000	Strato1_2_8_L_0
7	D	2.530	-5.0915E-05	29.98	12.65	29.98	15.89	UL-RL	6.3662E+04	-1.200	0.000	1.000	1.000	12.65	0.000	0.000	Strato1_2_8_L_0
8	D	2.944	-5.0585E-05	33.85	14.72	33.85	17.94	UL-RL	6.3662E+04	-1.400	0.000	1.000	1.000	14.72	0.000	0.000	Strato1_2_8_L_0
9	D	3.286	-5.0261E-05	37.03	16.43	37.03	19.63	UL-RL	6.3662E+04	-1.600	0.000	1.000	1.000	16.43	0.000	0.000	Strato1_2_8_L_0
10	D	3.705	-4.9945E-05	40.95	18.52	40.95	21.70	UL-RL	6.3662E+04	-1.800	0.000	1.000	1.000	18.52	0.000	0.000	Strato1_2_8_L_0
11	D	4.121	-4.9633E-05	44.84	20.61	44.84	23.77	UL-RL	6.3662E+04	-2.000	0.000	1.000	1.000	20.61	0.000	0.000	Strato1_2_8_L_0
12	D	4.536	-4.9324E-05	48.72	22.68	48.72	25.82	UL-RL	6.3662E+04	-2.200	0.000	1.000	1.000	22.68	0.000	0.000	Strato1_2_8_L_0
13	D	3.712	-4.9015E-05	52.58	24.75	52.58	27.87	UL-RL	6.3662E+04	-2.400	0.000	1.000	1.000	24.75	0.000	0.000	Strato1_2_8_L_0
14	D	3.849	-4.8860E-05	54.28	25.66	54.28	28.77	UL-RL	6.3662E+04	-2.500	0.000	1.000	1.000	25.66	0.000	0.000	Strato1_2_8_L_0
15	D	5.546	-4.8544E-05	58.15	27.73	58.15	30.82	UL-RL	6.3662E+04	-2.700	0.000	1.000	1.000	27.73	0.000	0.000	Strato1_2_8_L_0
16	D	5.959	-4.8220E-05	62.01	29.79	62.01	32.86	UL-RL	6.3662E+04	-2.900	0.000	1.000	1.000	29.79	0.000	0.000	Strato1_2_8_L_0
17	D	6.371	-4.7882E-05	65.86	31.86	65.86	34.90	UL-RL	6.3662E+04	-3.100	0.000	1.000	1.000	31.86	0.000	0.000	Strato1_2_8_L_0
18	D	6.783	-4.7528E-05	69.70	33.92	69.70	36.94	UL-RL	6.3662E+04	-3.300	0.000	1.000	1.000	33.92	0.000	0.000	Strato1_2_8_L_0
19	D	7.195	-4.7151E-05	73.54	35.97	73.54	38.98	UL-RL	6.3662E+04	-3.500	0.000	1.000	1.000	35.97	0.000	0.000	Strato1_2_8_L_0
20	D	7.606	-4.6749E-05	77.37	38.03	77.37	41.01	UL-RL	6.3662E+04	-3.700	0.000	1.000	1.000	38.03	0.000	0.000	Strato1_2_8_L_0
21	D	7.988	-4.6316E-05	80.92	39.94	80.92	42.89	UL-RL	6.3662E+04	-3.900	0.000	1.000	1.000	39.94	0.000	0.000	Strato1_2_8_L_0
22	D	8.401	-4.5848E-05	84.76	42.00	84.76	44.92	UL-RL	6.3662E+04	-4.100	0.000	1.000	1.000	42.00	0.000	0.000	Strato1_2_8_L_0
23	D	8.814	-4.5341E-05	88.60	44.07	88.60	46.96	UL-RL	6.3662E+04	-4.300	0.000	1.000	1.000	44.07	0.000	0.000	Strato1_2_8_L_0
24	D	9.228	-4.4791E-05	92.43	46.14	92.43	48.99	UL-RL	6.3662E+04	-4.500	0.000	1.000	1.000	46.14	0.000	0.000	Strato1_2_8_L_0
25	D	9.642	-4.4194E-05	96.27	48.21	96.27	51.02	UL-RL	6.3662E+04	-4.700	0.000	1.000	1.000	48.21	0.000	0.000	Strato1_2_8_L_0
26	D	10.06	-4.3546E-05	100.1	50.28	100.1	53.05	UL-RL	6.3662E+04	-4.900	0.000	1.000	1.000	50.28	0.000	0.000	Strato1_2_8_L_0
27	D	10.47	-4.2843E-05	103.9	52.35	103.9	55.08	UL-RL	6.3662E+04	-5.100	0.000	1.000	1.000	52.35	0.000	0.000	Strato1_2_8_L_0
28	D	10.86	-4.2084E-05	107.5	54.31	107.5	56.99	UL-RL	6.3662E+04	-5.300	0.000	1.000	1.000	54.31	0.000	0.000	Strato1_2_8_L_0
29	D	11.28	-4.1266E-05	111.4	56.40	111.4	59.02	UL-RL	6.3662E+04	-5.500	0.000	1.000	1.000	56.40	0.000	0.000	Strato1_2_8_L_0
30	D	11.70	-4.0388E-05	115.2	58.48	115.2	61.05	UL-RL	6.3662E+04	-5.700	0.000	1.000	1.000				

```
58.48       0.000       0.000     Strato1_2_8_L_0
  31 D   12.11     -3.9449E-05  119.0       60.57       119.0       63.08          UL-RL  6.3662E+04  -5.900       0.000       1.000       1.000
60.57       0.000       0.000     Strato1_2_8_L_0
  32 D   12.53     -3.8449E-05  122.8       62.66       122.8       65.11          UL-RL  6.3662E+04  -6.100       0.000       1.000       1.000
62.66       0.000       0.000     Strato1_2_8_L_0
  33 D   12.95     -3.7391E-05  126.7       64.75       126.7       67.14          UL-RL  6.3662E+04  -6.300       0.000       1.000       1.000
64.75       0.000       0.000     Strato1_2_8_L_0
  34 D   13.37     -3.6277E-05  130.5       66.85       130.5       69.16          UL-RL  6.3662E+04  -6.500       0.000       1.000       1.000
66.85       0.000       0.000     Strato1_2_8_L_0
  35 D   13.79     -3.5111E-05  134.3       68.95       134.3       71.19          UL-RL  6.3662E+04  -6.700       0.000       1.000       1.000
68.95       0.000       0.000     Strato1_2_8_L_0
  36 D   14.19     -3.3899E-05  138.0       70.97       138.0       73.12          UL-RL  6.3662E+04  -6.900       0.000       1.000       1.000
70.97       0.000       0.000     Strato1_2_8_L_0
  37 D   14.61     -3.2648E-05  141.8       73.07       141.8       75.15          UL-RL  6.3662E+04  -7.100       0.000       1.000       1.000
73.07       0.000       0.000     Strato1_2_8_L_0
  38 D   15.04     -3.1369E-05  145.6       75.18       145.6       77.18          UL-RL  6.3662E+04  -7.300       0.000       1.000       1.000
75.18       0.000       0.000     Strato1_2_8_L_0
  39 D   15.46     -3.0072E-05  149.4       77.29       149.4       79.20          UL-RL  6.3662E+04  -7.500       0.000       1.000       1.000
77.29       0.000       0.000     Strato1_2_8_L_0
  40 D   15.88     -2.8773E-05  153.3       79.39       153.3       81.22          UL-RL  6.3662E+04  -7.700       0.000       1.000       1.000
79.39       0.000       0.000     Strato1_2_8_L_0
  41 D   14.73     -2.7487E-05  157.2       73.64       157.2       78.59          UL-RL  1.8009E+05  -7.900       0.000       1.000       1.000
73.64       0.000       0.000     Strato2_3095_82743_L_0
  42 D   15.17     -2.6232E-05  161.2       75.87       161.2       80.60          UL-RL  1.8009E+05  -8.100       0.000       1.000       1.000
75.87       0.000       0.000     Strato2_3095_82743_L_0
  43 D   15.61     -2.5023E-05  165.1       78.03       165.1       82.54          UL-RL  1.8009E+05  -8.300       0.000       1.000       1.000
78.03       0.000       0.000     Strato2_3095_82743_L_0
  44 D   16.05     -2.3872E-05  169.1       80.25       169.1       84.55          UL-RL  1.8009E+05  -8.500       0.000       1.000       1.000
80.25       0.000       0.000     Strato2_3095_82743_L_0
  45 D   16.49     -2.2784E-05  173.1       82.45       173.1       86.55          UL-RL  1.8009E+05  -8.700       0.000       1.000       1.000
82.45       0.000       0.000     Strato2_3095_82743_L_0
  46 D   16.93     -2.1765E-05  177.1       84.64       177.1       88.56          UL-RL  1.8009E+05  -8.900       0.000       1.000       1.000
84.64       0.000       0.000     Strato2_3095_82743_L_0
  47 D   17.36     -2.0816E-05  181.1       86.82       181.1       90.57          UL-RL  1.8009E+05  -9.100       0.000       1.000       1.000
86.82       0.000       0.000     Strato2_3095_82743_L_0
  48 D   17.80     -1.9936E-05  185.2       88.99       185.2       92.58          UL-RL  1.8009E+05  -9.300       0.000       1.000       1.000
88.99       0.000       0.000     Strato2_3095_82743_L_0
  49 D   18.23     -1.9123E-05  189.2       91.14       189.2       94.59          UL-RL  1.8009E+05  -9.500       0.000       1.000       1.000
91.14       0.000       0.000     Strato2_3095_82743_L_0
  50 D   18.66     -1.8373E-05  193.2       93.29       193.2       96.59          UL-RL  1.8009E+05  -9.700       0.000       1.000       1.000
93.29       0.000       0.000     Strato2_3095_82743_L_0
  51 D   19.07     -1.7681E-05  197.1       95.36       197.1       98.54          UL-RL  1.8009E+05  -9.900       0.000       1.000       1.000
95.36       0.000       0.000     Strato2_3095_82743_L_0
  52 D   19.50     -1.7041E-05  201.1       97.48       201.1       100.6          UL-RL  1.8009E+05  -10.10       0.000       1.000       1.000
97.48       0.000       0.000     Strato2_3095_82743_L_0
  53 D   19.92     -1.6446E-05  205.1       99.60       205.1       102.6          UL-RL  1.8009E+05  -10.30       0.000       1.000       1.000
99.60       0.000       0.000     Strato2_3095_82743_L_0
  54 D   20.34     -1.5890E-05  209.1       101.7       209.1       104.6          UL-RL  1.8009E+05  -10.50       0.000       1.000       1.000
101.7       0.000       0.000     Strato2_3095_82743_L_0
  55 D   20.76     -1.5366E-05  213.1       103.8       213.1       106.6          UL-RL  1.8009E+05  -10.70       0.000       1.000       1.000
103.8       0.000       0.000     Strato2_3095_82743_L_0
  56 D   21.18     -1.4868E-05  217.2       105.9       217.2       108.6          UL-RL  1.8009E+05  -10.90       0.000       1.000       1.000
105.9       0.000       0.000     Strato2_3095_82743_L_0
  57 D   21.60     -1.4388E-05  221.2       108.0       221.2       110.6          UL-RL  1.8009E+05  -11.10       0.000       1.000       1.000
108.0       0.000       0.000     Strato2_3095_82743_L_0
  58 D   22.01     -1.3922E-05  225.1       110.0       225.1       112.5          UL-RL  1.8009E+05  -11.30       0.000       1.000       1.000
110.0       0.000       0.000     Strato2_3095_82743_L_0
  59 D   22.43     -1.3465E-05  229.1       112.1       229.1       114.6          UL-RL  1.8009E+05  -11.50       0.000       1.000       1.000
112.1       0.000       0.000     Strato2_3095_82743_L_0
  60 D   22.84     -1.3013E-05  233.1       114.2       233.1       116.6          UL-RL  1.8009E+05  -11.70       0.000       1.000       1.000
114.2       0.000       0.000     Strato2_3095_82743_L_0
  61 D   17.45     -1.2562E-05  237.1       116.3       237.1       118.6          UL-RL  1.8009E+05  -11.90       0.000       1.000       1.000
116.3       0.000       0.000     Strato2_3095_82743_L_0
  62 D   5.866     -1.2337E-05  239.1       117.3       239.1       119.5          UL-RL  1.8009E+05  -12.00       0.000       1.000       1.000
117.3       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
 |                                                                                                                               |
 |                                        NewProject.BaseDesignSection_28.Nominal_63                                             |
 |                                   Exe Time :24 July 2019      11:09:26                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                          :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
 C U R R E N T   T I M E   I S      2.0000

  HARDENING 2D SOIL ELEMENT
```

****** TOTAL STRESS FORMULATION *****

EL * Peq	FORCE Su_a	DISPL-Y Su_p	VERTICAL-P LAYER	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR
1 D	0.000	5.3062E-05	0.000	0.000	0.000	0.000	PASSIVE	0.000	0.000	0.000	1.000	1.000
0.000	0.000	0.000	Strato1_2_8_L_0									
2 D	0.5580	5.2690E-05	3.800	2.790	3.800	2.790	V-C	1.4726E+04	-0.2000	0.000	1.000	1.000
2.790	0.000	0.000	Strato1_2_8_L_0									
3 D	0.9597	5.2321E-05	7.600	4.798	7.600	4.798	V-C	1.4726E+04	-0.4000	0.000	1.000	1.000
4.798	0.000	0.000	Strato1_2_8_L_0									
4 D	1.361	5.1958E-05	11.40	6.807	11.40	6.807	V-C	1.4726E+04	-0.6000	0.000	1.000	1.000
6.807	0.000	0.000	Strato1_2_8_L_0									
5 D	1.763	5.1602E-05	15.20	8.816	15.20	8.816	V-C	1.4726E+04	-0.8000	0.000	1.000	1.000
8.816	0.000	0.000	Strato1_2_8_L_0									
6 D	2.165	5.1254E-05	19.00	10.82	19.00	10.82	V-C	1.4726E+04	-1.000	0.000	1.000	1.000
10.82	0.000	0.000	Strato1_2_8_L_0									
7 D	2.567	5.0915E-05	22.80	12.83	22.80	12.83	V-C	1.4726E+04	-1.200	0.000	1.000	1.000
12.83	0.000	0.000	Strato1_2_8_L_0									
8 D	2.969	5.0585E-05	26.60	14.84	26.60	14.84	V-C	1.4726E+04	-1.400	0.000	1.000	1.000
14.84	0.000	0.000	Strato1_2_8_L_0									
9 D	3.370	5.0261E-05	30.40	16.85	30.40	16.85	V-C	1.4726E+04	-1.600	0.000	1.000	1.000
16.85	0.000	0.000	Strato1_2_8_L_0									
10 D	3.772	4.9945E-05	34.20	18.86	34.20	18.86	V-C	1.4726E+04	-1.800	0.000	1.000	1.000
18.86	0.000	0.000	Strato1_2_8_L_0									
11 D	4.174	4.9633E-05	38.00	20.87	38.00	20.87	V-C	1.4726E+04	-2.000	0.000	1.000	1.000
20.87	0.000	0.000	Strato1_2_8_L_0									
12 D	4.576	4.9324E-05	41.80	22.88	41.80	22.88	V-C	1.4726E+04	-2.200	0.000	1.000	1.000
22.88	0.000	0.000	Strato1_2_8_L_0									
13 D	3.733	4.9015E-05	45.60	24.89	45.60	24.89	V-C	1.4726E+04	-2.400	0.000	1.000	1.000
24.89	0.000	0.000	Strato1_2_8_L_0									
14 D	3.884	4.8860E-05	47.50	25.89	47.50	25.89	V-C	1.4726E+04	-2.500	0.000	1.000	1.000
25.89	0.000	0.000	Strato1_2_8_L_0									
15 D	5.581	4.8544E-05	51.30	27.90	51.30	27.90	V-C	1.4726E+04	-2.700	0.000	1.000	1.000
27.90	0.000	0.000	Strato1_2_8_L_0									
16 D	5.983	4.8220E-05	55.10	29.91	55.10	29.91	V-C	1.4726E+04	-2.900	0.000	1.000	1.000
29.91	0.000	0.000	Strato1_2_8_L_0									
17 D	6.384	4.7882E-05	58.90	31.92	58.90	31.92	V-C	1.4726E+04	-3.100	0.000	1.000	1.000
31.92	0.000	0.000	Strato1_2_8_L_0									
18 D	6.786	4.7528E-05	62.70	33.93	62.70	33.93	V-C	1.4726E+04	-3.300	0.000	1.000	1.000
33.93	0.000	0.000	Strato1_2_8_L_0									
19 D	7.188	4.7151E-05	66.50	35.94	66.50	35.94	V-C	1.4726E+04	-3.500	0.000	1.000	1.000
35.94	0.000	0.000	Strato1_2_8_L_0									
20 D	7.589	4.6749E-05	70.30	37.95	70.30	37.95	V-C	1.4726E+04	-3.700	0.000	1.000	1.000
37.95	0.000	0.000	Strato1_2_8_L_0									
21 D	7.991	4.6316E-05	74.10	39.96	74.10	39.96	V-C	1.4726E+04	-3.900	0.000	1.000	1.000
39.96	0.000	0.000	Strato1_2_8_L_0									
22 D	8.392	4.5848E-05	77.90	41.96	77.90	41.96	V-C	1.4726E+04	-4.100	0.000	1.000	1.000
41.96	0.000	0.000	Strato1_2_8_L_0									
23 D	8.794	4.5341E-05	81.70	43.97	81.70	43.97	V-C	1.4726E+04	-4.300	0.000	1.000	1.000
43.97	0.000	0.000	Strato1_2_8_L_0									
24 D	9.195	4.4791E-05	85.50	45.97	85.50	45.98	UL-RL	4.4178E+04	-4.500	0.000	1.000	1.000
45.97	0.000	0.000	Strato1_2_8_L_0									
25 D	9.595	4.4194E-05	89.30	47.98	89.30	47.98	UL-RL	4.4178E+04	-4.700	0.000	1.000	1.000
47.98	0.000	0.000	Strato1_2_8_L_0									
26 D	9.996	4.3546E-05	93.10	49.98	93.10	49.99	UL-RL	4.4178E+04	-4.900	0.000	1.000	1.000
49.98	0.000	0.000	Strato1_2_8_L_0									
27 D	10.40	4.2843E-05	96.90	51.98	96.90	51.99	UL-RL	4.4178E+04	-5.100	0.000	1.000	1.000
51.98	0.000	0.000	Strato1_2_8_L_0									
28 D	10.80	4.2084E-05	100.7	53.99	100.7	53.99	UL-RL	4.4178E+04	-5.300	0.000	1.000	1.000
53.99	0.000	0.000	Strato1_2_8_L_0									
29 D	11.20	4.1266E-05	104.5	55.99	104.5	56.00	UL-RL	4.4178E+04	-5.500	0.000	1.000	1.000
55.99	0.000	0.000	Strato1_2_8_L_0									
30 D	11.60	4.0388E-05	108.3	57.99	108.3	58.00	UL-RL	4.4178E+04	-5.700	0.000	1.000	1.000
57.99	0.000	0.000	Strato1_2_8_L_0									
31 D	12.00	3.9449E-05	112.1	59.99	112.1	60.00	UL-RL	4.4178E+04	-5.900	0.000	1.000	1.000
59.99	0.000	0.000	Strato1_2_8_L_0									
32 D	12.40	3.8449E-05	115.9	61.99	115.9	62.00	UL-RL	4.4178E+04	-6.100	0.000	1.000	1.000
61.99	0.000	0.000	Strato1_2_8_L_0									
33 D	12.80	3.7391E-05	119.7	63.99	119.7	63.99	UL-RL	4.4178E+04	-6.300	0.000	1.000	1.000
63.99	0.000	0.000	Strato1_2_8_L_0									
34 D	13.20	3.6277E-05	123.5	65.98	123.5	65.99	UL-RL	4.4178E+04	-6.500	0.000	1.000	1.000
65.98	0.000	0.000	Strato1_2_8_L_0									
35 D	13.60	3.5111E-05	127.3	67.98	127.3	67.99	UL-RL	4.4178E+04	-6.700	0.000	1.000	1.000
67.98	0.000	0.000	Strato1_2_8_L_0									
36 D	14.00	3.3899E-05	131.1	69.98	131.1	69.98	UL-RL	4.4178E+04	-6.900	0.000	1.000	1.000
69.98	0.000	0.000	Strato1_2_8_L_0									
37 D	14.39	3.2648E-05	134.9	71.97	134.9	71.98	UL-RL	4.4178E+04	-7.100	0.000	1.000	1.000
71.97	0.000	0.000	Strato1_2_8_L_0									
38 D	14.79	3.1369E-05	138.7	73.97	138.7	73.97	UL-RL	4.4178E+04	-7.300	0.000	1.000	1.000
73.97	0.000	0.000	Strato1_2_8_L_0									
39 D	15.19	3.0072E-05	142.5	75.96	142.5	75.97	UL-RL	4.4178E+04	-7.500	0.000	1.000	1.000
75.96	0.000	0.000	Strato1_2_8_L_0									

40 D	15.59	2.8773E-05	146.3	77.96	146.3	77.96	UL-RL	4.4178E+04	-7.700	0.000	1.000	1.000
77.96	0.000	0.000	Strato1_2_8_L_0									
41 D	15.20	2.7487E-05	150.2	75.99	150.2	76.00	UL-RL	9.7606E+04	-7.900	0.000	1.000	1.000
75.99	0.000	0.000	Strato2_3095_82743_L_0									
42 D	15.59	2.6232E-05	154.2	77.95	154.2	77.96	UL-RL	9.7606E+04	-8.100	0.000	1.000	1.000
77.95	0.000	0.000	Strato2_3095_82743_L_0									
43 D	15.98	2.5023E-05	158.2	79.91	158.2	79.92	UL-RL	9.7606E+04	-8.300	0.000	1.000	1.000
79.91	0.000	0.000	Strato2_3095_82743_L_0									
44 D	16.37	2.3872E-05	162.2	81.87	162.2	81.88	UL-RL	9.7606E+04	-8.500	0.000	1.000	1.000
81.87	0.000	0.000	Strato2_3095_82743_L_0									
45 D	16.77	2.2784E-05	166.2	83.84	166.2	83.84	UL-RL	9.7606E+04	-8.700	0.000	1.000	1.000
83.84	0.000	0.000	Strato2_3095_82743_L_0									
46 D	17.16	2.1765E-05	170.2	85.80	170.2	85.81	UL-RL	9.7606E+04	-8.900	0.000	1.000	1.000
85.80	0.000	0.000	Strato2_3095_82743_L_0									
47 D	17.55	2.0816E-05	174.2	87.77	174.2	87.78	UL-RL	9.7606E+04	-9.100	0.000	1.000	1.000
87.77	0.000	0.000	Strato2_3095_82743_L_0									
48 D	17.95	1.9936E-05	178.2	89.75	178.2	89.75	UL-RL	9.7606E+04	-9.300	0.000	1.000	1.000
89.75	0.000	0.000	Strato2_3095_82743_L_0									
49 D	18.34	1.9123E-05	182.2	91.72	182.2	91.72	UL-RL	9.7606E+04	-9.500	0.000	1.000	1.000
91.72	0.000	0.000	Strato2_3095_82743_L_0									
50 D	18.74	1.8373E-05	186.2	93.70	186.2	93.70	UL-RL	9.7606E+04	-9.700	0.000	1.000	1.000
93.70	0.000	0.000	Strato2_3095_82743_L_0									
51 D	19.13	1.7681E-05	190.2	95.67	190.2	95.68	UL-RL	9.7606E+04	-9.900	0.000	1.000	1.000
95.67	0.000	0.000	Strato2_3095_82743_L_0									
52 D	19.53	1.7041E-05	194.2	97.65	194.2	97.65	UL-RL	9.7606E+04	-10.10	0.000	1.000	1.000
97.65	0.000	0.000	Strato2_3095_82743_L_0									
53 D	19.93	1.6446E-05	198.2	99.63	198.2	99.63	V-C	3.2535E+04	-10.30	0.000	1.000	1.000
99.63	0.000	0.000	Strato2_3095_82743_L_0									
54 D	20.32	1.5890E-05	202.2	101.6	202.2	101.6	V-C	3.2535E+04	-10.50	0.000	1.000	1.000
101.6	0.000	0.000	Strato2_3095_82743_L_0									
55 D	20.72	1.5366E-05	206.2	103.6	206.2	103.6	V-C	3.2535E+04	-10.70	0.000	1.000	1.000
103.6	0.000	0.000	Strato2_3095_82743_L_0									
56 D	21.12	1.4868E-05	210.2	105.6	210.2	105.6	V-C	3.2535E+04	-10.90	0.000	1.000	1.000
105.6	0.000	0.000	Strato2_3095_82743_L_0									
57 D	21.51	1.4388E-05	214.2	107.6	214.2	107.6	V-C	3.2535E+04	-11.10	0.000	1.000	1.000
107.6	0.000	0.000	Strato2_3095_82743_L_0									
58 D	21.91	1.3922E-05	218.2	109.6	218.2	109.6	V-C	3.2535E+04	-11.30	0.000	1.000	1.000
109.6	0.000	0.000	Strato2_3095_82743_L_0									
59 D	22.31	1.3465E-05	222.2	111.5	222.2	111.5	UL-RL	9.7606E+04	-11.50	0.000	1.000	1.000
111.5	0.000	0.000	Strato2_3095_82743_L_0									
60 D	22.70	1.3013E-05	226.2	113.5	226.2	113.5	UL-RL	9.7606E+04	-11.70	0.000	1.000	1.000
113.5	0.000	0.000	Strato2_3095_82743_L_0									
61 D	17.33	1.2562E-05	230.2	115.5	230.2	115.5	UL-RL	9.7606E+04	-11.90	0.000	1.000	1.000
115.5	0.000	0.000	Strato2_3095_82743_L_0									
62 D	5.825	1.2337E-05	232.2	116.5	232.2	116.5	UL-RL	9.7606E+04	-12.00	0.000	1.000	1.000
116.5	0.000	0.000	Strato2_3095_82743_L_0									

```
+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.Nominal_63                                     |
|                                 Exe Time :24 July 2019      11:09:26                                              |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
C U R R E N T   T I M E   I S      2.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-------------------------------------------------------------
    1 0.30400    -0.30400    -3.00981E-13 6.08000E-02
    2 0.30288    -0.30288    -6.08000E-02 0.12138
    3 0.19072    -0.19072    -0.12138     0.15952
    4 9.06247E-02-9.06247E-02-0.15952     0.17765
    5 1.90629E-02-1.90629E-02-0.17765     0.18146
    6-3.26980E-02 3.26980E-02-0.18146     0.17492
    7-6.93291E-02 6.93291E-02-0.17492     0.16105
    8-9.36414E-02 9.36414E-02-0.16105     0.14232
    9-0.17848     0.17848    -0.14232     0.10663
   10-0.24621     0.24621    -0.10663     5.73879E-02
   11-0.29931     0.29931    -5.73879E-02-2.47437E-03
   12-0.33959     0.33959     2.47437E-03-7.03917E-02
   13-0.36116     0.36116     7.03917E-02-0.10651
   14-0.39630     0.39630     0.10651    -0.18577
   15-0.43120     0.43120     0.18577    -0.27201
   16-0.45496     0.45496     0.27201    -0.36300
```

```
   17-0.46817     0.46817     0.36300    -0.45664
   18-0.47119     0.47119     0.45664    -0.55087
   19-0.46422     0.46422     0.55087    -0.64372
   20-0.44728     0.44728     0.64372    -0.73318
   21-0.45066     0.45066     0.73318    -0.82331
   22-0.44221     0.44221     0.82331    -0.91175
   23-0.42176     0.42176     0.91175    -0.99610
   24-0.38870     0.38870     0.99610     -1.0738
   25-0.34267     0.34267      1.0738     -1.1424
   26-0.28318     0.28318      1.1424     -1.1990
   27-0.20968     0.20968      1.1990     -1.2409
   28-0.14409     0.14409      1.2409     -1.2698
   29-6.22949E-02 6.22949E-02  1.2698     -1.2822
   30 3.63963E-02-3.63963E-02  1.2822     -1.2749
   31 0.15270    -0.15270      1.2749     -1.2444
   32 0.28734    -0.28734      1.2444     -1.1869
   33 0.44106    -0.44106      1.1869     -1.0987
   34 0.61456    -0.61456      1.0987    -0.97582
   35 0.80850    -0.80850     0.97582    -0.81412
   36  1.0061     -1.0061     0.81412    -0.61290
   37  1.2256     -1.2256     0.61290    -0.36778
   38  1.4675     -1.4675     0.36778    -7.42698E-02
   39  1.7319     -1.7319     7.42698E-02 0.27211
   40  2.0187     -2.0187    -0.27211     0.67584
   41  1.5484     -1.5484    -0.67584     0.98552
   42  1.1331     -1.1331    -0.98552      1.2121
   43 0.75710    -0.75710     -1.2121      1.3636
   44 0.43184    -0.43184     -1.3636      1.4499
   45 0.15455    -0.15455     -1.4499      1.4808
   46-7.77566E-02 7.77566E-02 -1.4808      1.4653
   47-0.26813     0.26813     -1.4653      1.4117
   48-0.41958     0.41958     -1.4117      1.3278
   49-0.53501     0.53501     -1.3278      1.2208
   50-0.61715     0.61715     -1.2208      1.0973
   51-0.68001     0.68001     -1.0973     0.96132
   52-0.71413     0.71413    -0.96132     0.81850
   53-0.72148     0.72148    -0.81850     0.67420
   54-0.70370     0.70370    -0.67420     0.53346
   55-0.66223     0.66223    -0.53346     0.40102
   56-0.59819     0.59819    -0.40102     0.28138
   57-0.51245     0.51245    -0.28138     0.17889
   58-0.41574     0.41574    -0.17889     9.57378E-02
   59-0.29817     0.29817    -9.57378E-02 3.61031E-02
   60-0.16000     0.16000    -3.61031E-02 4.10245E-03
   61-4.10204E-02 4.10204E-02-4.10245E-03 3.04395E-13



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                     NewProject.BaseDesignSection_28.Nominal_63                                        |
|                                  Exe Time :24 July 2019      11:09:26                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_778405                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S      2.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-----------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1933E+05 RIMNOR= 82.75
           RENORM= 414.0     REMNOR=0.9387E-23 RATIO =0.1464     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 22.84     RMMAX = 1.481
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1933E+05 RDR   = 82.75
           RATIOT=0.1464     RATIOR= 0.000
           MAX UN= 5.983     IEQ=    31 NODE     16 DOF   1  Y-DISPL.F
           MIN UN=-.1083E-10 IEQ=    71 NODE     36 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1933E+05 RIMNOR= 82.75
```

```
           RENORM= 42.95     REMNOR=0.4892E-20 RATIO =0.4714E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 22.84     RMMAX = 1.481
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1933E+05 RDR   = 82.75
           RATIOT=0.4714E-01 RATIOR= 0.000
           MAX UN= 3.168     IEQ=     7 NODE      4 DOF   1  Y-DISPL.F
           MIN UN=-.2432E-03 IEQ=    47 NODE     24 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1933E+05 RIMNOR= 82.75
           RENORM= 19.23     REMNOR=0.2399E-19 RATIO =0.3154E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 22.84     RMMAX = 1.481
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1933E+05 RDR   = 82.75
           RATIOT=0.3154E-01 RATIOR= 0.000
           MAX UN= 2.775     IEQ=    31 NODE     16 DOF   1  Y-DISPL.F
           MIN UN=-.1527E-08 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1933E+05 RIMNOR= 82.75
           RENORM=0.9534     REMNOR=0.9341E-20 RATIO =0.7023E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 22.84     RMMAX = 1.481
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1933E+05 RDR   = 82.75
           RATIOT=0.7023E-02 RATIOR= 0.000
           MAX UN=0.9024     IEQ=    43 NODE     22 DOF   1  Y-DISPL.F
           MIN UN=-.6860E-09 IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     5 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1933E+05 RIMNOR= 82.75
           RENORM=0.4039E-17 REMNOR=0.1082E-19 RATIO =0.1446E-10 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 22.84     RMMAX = 1.481
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1933E+05 RDR   = 82.75
           RATIOT=0.1446E-10 RATIOR= 0.000
           MAX UN=0.1189E-08 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           MIN UN=-.1365E-08 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                     NewProject.BaseDesignSection_28.Nominal_63                                        |
|                                  Exe Time :24 July 2019      11:09:26                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     5 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    3     ( AT TIME   3.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)          (
    1   2.7028241E-03  -4.6579270E-04
    2   2.6096660E-03  -4.6578548E-04
    3   2.5165117E-03  -4.6575061E-04
    4   2.4233698E-03  -4.6565475E-04
    5   2.3302570E-03  -4.6545158E-04
    6   2.2372002E-03  -4.6508295E-04
    7   2.1442395E-03  -4.6447921E-04
    8   2.0514296E-03  -4.6355942E-04
    9   1.9588429E-03  -4.6223143E-04
   10   1.8665711E-03  -4.6039293E-04
   11   1.7747273E-03  -4.5793137E-04
   12   1.6834483E-03  -4.5472290E-04
   13   1.5928969E-03  -4.5063250E-04
   14   1.5479523E-03  -4.4821598E-04
   15   1.4588585E-03  -4.4252460E-04
   16   1.3710269E-03  -4.3556566E-04
   17   1.2847283E-03  -4.2716573E-04
   18   1.2002666E-03  -4.1717670E-04
   19   1.1179669E-03  -4.0554873E-04
   20   1.0381507E-03  -3.9236670E-04
   21   9.6111231E-04  -3.7780296E-04
```

22	8.8710865E-04	-3.6205222E-04
23	8.1635729E-04	-3.4531342E-04
24	7.4903563E-04	-3.2778940E-04
25	6.8528011E-04	-3.0968669E-04
26	6.2518630E-04	-2.9120371E-04
27	5.6881228E-04	-2.7252012E-04
28	5.1618114E-04	-2.5379749E-04
29	4.6728617E-04	-2.3518156E-04
30	4.2209271E-04	-2.1680286E-04
31	3.8054147E-04	-1.9877743E-04
32	3.4255153E-04	-1.8120788E-04
33	3.0802212E-04	-1.6418421E-04
34	2.7683620E-04	-1.4778526E-04
35	2.4886181E-04	-1.3207942E-04
36	2.2395429E-04	-1.1712565E-04
37	2.0195802E-04	-1.0297482E-04
38	1.8270802E-04	-8.9670628E-05
39	1.6603098E-04	-7.7249771E-05
40	1.5174716E-04	-6.5743104E-05
41	1.3967109E-04	-5.5176127E-05
42	1.2961366E-04	-4.5554991E-05
43	1.2138717E-04	-3.6863329E-05
44	1.1480817E-04	-2.9074569E-05
45	1.0969946E-04	-2.2154050E-05
46	1.0589144E-04	-1.6060185E-05
47	1.0322341E-04	-1.0746008E-05
48	1.0154447E-04	-6.1605306E-06
49	1.0071422E-04	-2.2498234E-06
50	1.0060327E-04	1.0418272E-06
51	1.0109346E-04	3.7711421E-06
52	1.0207798E-04	5.9947612E-06
53	1.0346137E-04	7.7688424E-06
54	1.0515923E-04	9.1485014E-06
55	1.0709807E-04	1.0187641E-05
56	1.0921507E-04	1.0938575E-05
57	1.1145765E-04	1.1451789E-05
58	1.1378317E-04	1.1775763E-05
59	1.1615842E-04	1.1956621E-05
60	1.1855919E-04	1.2038056E-05
61	1.2096978E-04	1.2061539E-05
62	1.2217613E-04	1.2062689E-05

```
+-----------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1     FULL VERSION   *Build date:Jul 11, 2017*  |
|                                                                                                           |
|                                       NewProject.BaseDesignSection_28.Nominal_63                          |
|                                   Exe Time :24 July 2019      11:09:26                                    |
+-----------------------------------------------------------------------------------------------------------+
```

New Project

S T R E S S   R E S U L T S   F O R   G R O U P   N O.   1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 62
C U R R E N T   T I M E   I S   3.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.3040	-2.7028E-03	10.00	3.040	10.00	5.300	ACTIVE	0.000	0.000	0.000	1.000	1.000	3.040	0.000	0.000	Strato1_2_8_L_0
2 D	0.5569	-2.6097E-03	9.159	2.784	9.159	4.854	ACTIVE	0.000	-0.2000	0.000	1.000	1.000	2.784	0.000	0.000	Strato1_2_8_L_0
3 D	0.8475	-2.5165E-03	13.94	4.238	13.94	7.388	ACTIVE	0.000	-0.4000	0.000	1.000	1.000	4.238	0.000	0.000	Strato1_2_8_L_0
4 D	1.103	-2.4234E-03	18.14	5.515	18.14	9.614	ACTIVE	0.000	-0.6000	0.000	1.000	1.000	5.515	0.000	0.000	Strato1_2_8_L_0
5 D	1.347	-2.3303E-03	22.16	6.736	22.16	11.74	ACTIVE	0.000	-0.8000	0.000	1.000	1.000	6.736	0.000	0.000	Strato1_2_8_L_0
6 D	1.586	-2.2372E-03	26.09	7.932	26.09	13.83	ACTIVE	0.000	-1.000	0.000	1.000	1.000	7.932	0.000	0.000	Strato1_2_8_L_0
7 D	1.823	-2.1442E-03	29.98	9.115	29.98	15.89	ACTIVE	0.000	-1.200	0.000	1.000	1.000	9.115	0.000	0.000	Strato1_2_8_L_0
8 D	2.058	-2.0514E-03	33.85	10.29	33.85	17.94	ACTIVE	0.000	-1.400	0.000	1.000	1.000	10.29	0.000	0.000	Strato1_2_8_L_0
9 D	2.252	-1.9588E-03	37.03	11.26	37.03	19.63	ACTIVE	0.000	-1.600	0.000	1.000	1.000	11.26	0.000	0.000	Strato1_2_8_L_0
10 D	2.490	-1.8666E-03	40.95	12.45	40.95	21.70	ACTIVE	0.000	-1.800	0.000	1.000	1.000	12.45	0.000	0.000	Strato1_2_8_L_0
11 D	2.726	-1.7747E-03	44.84	13.63	44.84	23.77	ACTIVE	0.000	-2.000	0.000	1.000	1.000	13.63	0.000	0.000	Strato1_2_8_L_0
12 D	2.962	-1.6834E-03	48.72	14.81	48.72	25.82	ACTIVE	0.000	-2.200	0.000	1.000	1.000	14.81	0.000	0.000	Strato1_2_8_L_0
13 D	2.398	-1.5929E-03	52.58	15.98	52.58	27.87	ACTIVE	0.000	-2.400	0.000	1.000	1.000	15.98	0.000	0.000	Strato1_2_8_L_0
14 D	2.475	-1.5480E-03	54.28	16.50	54.28	28.77	ACTIVE	0.000	-2.500	0.000	1.000	1.000	16.50	0.000	0.000	Strato1_2_8_L_0
15 D	3.536	-1.4589E-03	58.15	17.68	58.15	30.82	ACTIVE	0.000	-2.700	0.000	1.000	1.000	17.68	0.000	0.000	Strato1_2_8_L_0
16 D	3.770	-1.3710E-03	62.01	18.85	62.01	32.86	ACTIVE	0.000	-2.900	0.000	1.000	1.000	18.85	0.000	0.000	Strato1_2_8_L_0
17 D	4.004	-1.2847E-03	65.86	20.02	65.86	34.90	ACTIVE	0.000	-3.100	0.000	1.000	1.000	20.02	0.000	0.000	Strato1_2_8_L_0
18 D	4.238	-1.2003E-03	69.70	21.19	69.70	36.94	ACTIVE	0.000	-3.300	0.000	1.000	1.000	21.19	0.000	0.000	Strato1_2_8_L_0
19 D	4.471	-1.1180E-03	73.54	22.36	73.54	38.98	ACTIVE	0.000	-3.500	0.000	1.000	1.000	22.36	0.000	0.000	Strato1_2_8_L_0
20 D	4.704	-1.0382E-03	77.37	23.52	77.37	41.01	ACTIVE	0.000	-3.700	0.000	1.000	1.000	23.52	0.000	0.000	Strato1_2_8_L_0
21 D	4.920	-9.6111E-04	80.92	24.60	80.92	42.89	ACTIVE	0.000	-3.900	0.000	1.000	1.000	24.60	0.000	0.000	Strato1_2_8_L_0
22 D	5.153	-8.8711E-04	84.76	25.77	84.76	44.92	ACTIVE	0.000	-4.100	0.000	1.000	1.000	25.77	0.000	0.000	Strato1_2_8_L_0
23 D	5.387	-8.1636E-04	88.60	26.93	88.60	46.96	ACTIVE	0.000	-4.300	0.000	1.000	1.000	26.93	0.000	0.000	Strato1_2_8_L_0
24 D	5.641	-7.4904E-04	92.43	28.21	92.43	48.99	UL-RL	2.5465E+04	-4.500	0.000	1.000	1.000	28.21	0.000	0.000	Strato1_2_8_L_0
25 D	6.376	-6.8528E-04	96.27	31.88	96.27	51.02	UL-RL	2.5465E+04	-4.700	0.000	1.000	1.000	31.88	0.000	0.000	Strato1_2_8_L_0
26 D	7.093	-6.2519E-04	100.1	35.47	100.1	53.05	UL-RL	2.5465E+04	-4.900	0.000	1.000	1.000	35.47	0.000	0.000	Strato1_2_8_L_0
27 D	7.792	-5.6881E-04	103.9	38.96	103.9	55.08	UL-RL	2.5465E+04	-5.100	0.000	1.000	1.000	38.96	0.000	0.000	Strato1_2_8_L_0
28 D	8.448	-5.1618E-04	107.5	42.24	107.5	56.99	UL-RL	2.5465E+04	-5.300	0.000	1.000	1.000	42.24	0.000	0.000	Strato1_2_8_L_0
29 D	9.110	-4.6729E-04	111.4	45.55	111.4	59.02	UL-RL	2.5465E+04	-5.500	0.000	1.000	1.000	45.55	0.000	0.000	Strato1_2_8_L_0
30 D	9.752	-4.2209E-04	115.2	48.76	115.2	61.05	UL-RL	2.5465E+04	-5.700	0.000	1.000	1.000				

```
48.76       0.000       0.000     Strato1_2_8_L_0
  31 D   10.38     -3.8054E-04  119.0       51.88       119.0       63.08          UL-RL  2.5465E+04  -5.900       0.000       1.000       1.000
51.88       0.000       0.000     Strato1_2_8_L_0
  32 D   10.98     -3.4255E-04  122.8       54.92       122.8       65.11          UL-RL  2.5465E+04  -6.100       0.000       1.000       1.000
54.92       0.000       0.000     Strato1_2_8_L_0
  33 D   11.57     -3.0802E-04  126.7       57.86       126.7       67.14          UL-RL  2.5465E+04  -6.300       0.000       1.000       1.000
57.86       0.000       0.000     Strato1_2_8_L_0
  34 D   12.15     -2.7684E-04  130.5       60.73       130.5       69.16          UL-RL  2.5465E+04  -6.500       0.000       1.000       1.000
60.73       0.000       0.000     Strato1_2_8_L_0
  35 D   12.70     -2.4886E-04  134.3       63.51       134.3       71.19          UL-RL  2.5465E+04  -6.700       0.000       1.000       1.000
63.51       0.000       0.000     Strato1_2_8_L_0
  36 D   13.23     -2.2395E-04  138.0       66.13       138.0       73.12          UL-RL  2.5465E+04  -6.900       0.000       1.000       1.000
66.13       0.000       0.000     Strato1_2_8_L_0
  37 D   13.75     -2.0196E-04  141.8       68.76       141.8       75.15          UL-RL  2.5465E+04  -7.100       0.000       1.000       1.000
68.76       0.000       0.000     Strato1_2_8_L_0
  38 D   14.26     -1.8271E-04  145.6       71.32       145.6       77.18          UL-RL  2.5465E+04  -7.300       0.000       1.000       1.000
71.32       0.000       0.000     Strato1_2_8_L_0
  39 D   14.76     -1.6603E-04  149.4       73.82       149.4       79.20          UL-RL  2.5465E+04  -7.500       0.000       1.000       1.000
73.82       0.000       0.000     Strato1_2_8_L_0
  40 D   15.25     -1.5175E-04  153.3       76.26       153.3       81.22          UL-RL  2.5465E+04  -7.700       0.000       1.000       1.000
76.26       0.000       0.000     Strato1_2_8_L_0
  41 D   13.11     -1.3967E-04  157.2       65.56       157.2       78.59          UL-RL  7.2037E+04  -7.900       0.000       1.000       1.000
65.56       0.000       0.000     Strato2_3095_82743_L_0
  42 D   13.68     -1.2961E-04  161.2       68.42       161.2       80.60          UL-RL  7.2037E+04  -8.100       0.000       1.000       1.000
68.42       0.000       0.000     Strato2_3095_82743_L_0
  43 D   14.22     -1.2139E-04  165.1       71.09       165.1       82.54          UL-RL  7.2037E+04  -8.300       0.000       1.000       1.000
71.09       0.000       0.000     Strato2_3095_82743_L_0
  44 D   14.74     -1.1481E-04  169.1       73.70       169.1       84.55          UL-RL  7.2037E+04  -8.500       0.000       1.000       1.000
73.70       0.000       0.000     Strato2_3095_82743_L_0
  45 D   15.24     -1.0970E-04  173.1       76.19       173.1       86.55          UL-RL  7.2037E+04  -8.700       0.000       1.000       1.000
76.19       0.000       0.000     Strato2_3095_82743_L_0
  46 D   15.72     -1.0589E-04  177.1       78.58       177.1       88.56          UL-RL  7.2037E+04  -8.900       0.000       1.000       1.000
78.58       0.000       0.000     Strato2_3095_82743_L_0
  47 D   16.18     -1.0322E-04  181.1       80.89       181.1       90.57          UL-RL  7.2037E+04  -9.100       0.000       1.000       1.000
80.89       0.000       0.000     Strato2_3095_82743_L_0
  48 D   16.62     -1.0154E-04  185.2       83.11       185.2       92.58          UL-RL  7.2037E+04  -9.300       0.000       1.000       1.000
83.11       0.000       0.000     Strato2_3095_82743_L_0
  49 D   17.05     -1.0071E-04  189.2       85.27       189.2       94.59          UL-RL  7.2037E+04  -9.500       0.000       1.000       1.000
85.27       0.000       0.000     Strato2_3095_82743_L_0
  50 D   17.47     -1.0060E-04  193.2       87.36       193.2       96.59          UL-RL  7.2037E+04  -9.700       0.000       1.000       1.000
87.36       0.000       0.000     Strato2_3095_82743_L_0
  51 D   17.87     -1.0109E-04  197.1       89.35       197.1       98.54          UL-RL  7.2037E+04  -9.900       0.000       1.000       1.000
89.35       0.000       0.000     Strato2_3095_82743_L_0
  52 D   18.27     -1.0208E-04  201.1       91.36       201.1       100.6          UL-RL  7.2037E+04  -10.10       0.000       1.000       1.000
91.36       0.000       0.000     Strato2_3095_82743_L_0
  53 D   18.67     -1.0346E-04  205.1       93.33       205.1       102.6          UL-RL  7.2037E+04  -10.30       0.000       1.000       1.000
93.33       0.000       0.000     Strato2_3095_82743_L_0
  54 D   19.06     -1.0516E-04  209.1       95.28       209.1       104.6          UL-RL  7.2037E+04  -10.50       0.000       1.000       1.000
95.28       0.000       0.000     Strato2_3095_82743_L_0
  55 D   19.44     -1.0710E-04  213.1       97.20       213.1       106.6          UL-RL  7.2037E+04  -10.70       0.000       1.000       1.000
97.20       0.000       0.000     Strato2_3095_82743_L_0
  56 D   19.82     -1.0922E-04  217.2       99.11       217.2       108.6          UL-RL  7.2037E+04  -10.90       0.000       1.000       1.000
99.11       0.000       0.000     Strato2_3095_82743_L_0
  57 D   20.20     -1.1146E-04  221.2       101.0       221.2       110.6          UL-RL  7.2037E+04  -11.10       0.000       1.000       1.000
101.0       0.000       0.000     Strato2_3095_82743_L_0
  58 D   20.57     -1.1378E-04  225.1       102.8       225.1       112.5          UL-RL  7.2037E+04  -11.30       0.000       1.000       1.000
102.8       0.000       0.000     Strato2_3095_82743_L_0
  59 D   20.95     -1.1616E-04  229.1       104.7       229.1       114.6          UL-RL  7.2037E+04  -11.50       0.000       1.000       1.000
104.7       0.000       0.000     Strato2_3095_82743_L_0
  60 D   21.32     -1.1856E-04  233.1       106.6       233.1       116.6          UL-RL  7.2037E+04  -11.70       0.000       1.000       1.000
106.6       0.000       0.000     Strato2_3095_82743_L_0
  61 D   16.27     -1.2097E-04  237.1       108.5       237.1       118.6          UL-RL  7.2037E+04  -11.90       0.000       1.000       1.000
108.5       0.000       0.000     Strato2_3095_82743_L_0
  62 D   5.470     -1.2218E-04  239.1       109.4       239.1       119.5          UL-RL  7.2037E+04  -12.00       0.000       1.000       1.000
109.4       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
 |                                                                                                                               |
 |                                        NewProject.BaseDesignSection_28.Nominal_63                                             |
 |                                   Exe Time :24 July 2019      11:09:26                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                          :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
 C U R R E N T   T I M E   I S      3.0000

  HARDENING 2D SOIL ELEMENT
```

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR
Peq	Su_a	Su_p	LAYER									
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000
0.000	0.000	0.000	not available									
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000
0.000	0.000	0.000	not available									
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
14	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									
15	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000
0.000	0.000	0.000	not available									
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000
0.000	0.000	0.000	not available									
17 D	1.536	1.2847E-03	1.900	7.678	58.90	31.92	PASSIVE	0.000	-3.100	0.000	1.000	1.000
7.678	0.000	0.000	Strato1_2_8_L_0									
18 D	4.607	1.2003E-03	5.700	23.03	62.70	33.93	PASSIVE	0.000	-3.300	0.000	1.000	1.000
23.03	0.000	0.000	Strato1_2_8_L_0									
19 D	7.678	1.1180E-03	9.500	38.39	66.50	38.39	PASSIVE	0.000	-3.500	0.000	1.000	1.000
38.39	0.000	0.000	Strato1_2_8_L_0									
20 D	8.757	1.0382E-03	13.30	43.79	70.30	43.79	V-C	5890.	-3.700	0.000	1.000	1.000
43.79	0.000	0.000	Strato1_2_8_L_0									
21 D	9.069	9.6111E-04	17.10	45.34	74.10	45.34	V-C	5890.	-3.900	0.000	1.000	1.000
45.34	0.000	0.000	Strato1_2_8_L_0									
22 D	9.384	8.8711E-04	20.90	46.92	77.90	46.92	V-C	5890.	-4.100	0.000	1.000	1.000
46.92	0.000	0.000	Strato1_2_8_L_0									
23 D	9.702	8.1636E-04	24.70	48.51	81.70	48.51	V-C	5890.	-4.300	0.000	1.000	1.000
48.51	0.000	0.000	Strato1_2_8_L_0									
24 D	10.02	7.4904E-04	28.50	50.12	85.50	50.12	V-C	5890.	-4.500	0.000	1.000	1.000
50.12	0.000	0.000	Strato1_2_8_L_0									
25 D	10.35	6.8528E-04	32.30	51.76	89.30	51.76	V-C	5890.	-4.700	0.000	1.000	1.000
51.76	0.000	0.000	Strato1_2_8_L_0									
26 D	10.68	6.2519E-04	36.10	53.41	93.10	53.41	V-C	5890.	-4.900	0.000	1.000	1.000
53.41	0.000	0.000	Strato1_2_8_L_0									
27 D	11.02	5.6881E-04	39.90	55.09	96.90	55.09	V-C	5890.	-5.100	0.000	1.000	1.000
55.09	0.000	0.000	Strato1_2_8_L_0									
28 D	11.36	5.1618E-04	43.70	56.78	100.7	56.78	V-C	5890.	-5.300	0.000	1.000	1.000
56.78	0.000	0.000	Strato1_2_8_L_0									
29 D	11.70	4.6729E-04	47.50	58.50	104.5	58.50	V-C	5890.	-5.500	0.000	1.000	1.000
58.50	0.000	0.000	Strato1_2_8_L_0									
30 D	12.05	4.2209E-04	51.30	60.24	108.3	60.24	V-C	5890.	-5.700	0.000	1.000	1.000
60.24	0.000	0.000	Strato1_2_8_L_0									
31 D	12.40	3.8054E-04	55.10	62.00	112.1	62.00	V-C	5890.	-5.900	0.000	1.000	1.000
62.00	0.000	0.000	Strato1_2_8_L_0									
32 D	12.76	3.4255E-04	58.90	63.78	115.9	63.78	V-C	5890.	-6.100	0.000	1.000	1.000
63.78	0.000	0.000	Strato1_2_8_L_0									
33 D	13.12	3.0802E-04	62.70	65.59	119.7	65.59	V-C	5890.	-6.300	0.000	1.000	1.000
65.59	0.000	0.000	Strato1_2_8_L_0									
34 D	13.48	2.7684E-04	66.50	67.41	123.5	67.41	V-C	5890.	-6.500	0.000	1.000	1.000
67.41	0.000	0.000	Strato1_2_8_L_0									
35 D	13.85	2.4886E-04	70.30	69.25	127.3	69.25	V-C	5890.	-6.700	0.000	1.000	1.000
69.25	0.000	0.000	Strato1_2_8_L_0									
36 D	14.22	2.2395E-04	74.10	71.10	131.1	71.10	V-C	5890.	-6.900	0.000	1.000	1.000
71.10	0.000	0.000	Strato1_2_8_L_0									
37 D	14.60	2.0196E-04	77.90	72.98	134.9	72.98	V-C	5890.	-7.100	0.000	1.000	1.000
72.98	0.000	0.000	Strato1_2_8_L_0									
38 D	14.97	1.8271E-04	81.70	74.86	138.7	74.86	V-C	5890.	-7.300	0.000	1.000	1.000
74.86	0.000	0.000	Strato1_2_8_L_0									
39 D	15.35	1.6603E-04	85.50	76.77	142.5	76.77	V-C	5890.	-7.500	0.000	1.000	1.000
76.77	0.000	0.000	Strato1_2_8_L_0									

40 D	15.74	1.5175E-04	89.30	78.69	146.3	78.69	V-C	5890.	-7.700	0.000	1.000	1.000
78.69	0.000	0.000	Strato1_2_8_L_0									
41 D	12.89	1.3967E-04	93.20	64.43	150.2	76.00	UL-RL	3.9043E+04	-7.900	0.000	1.000	1.000
64.43	0.000	0.000	Strato2_3095_82743_L_0									
42 D	13.22	1.2961E-04	97.20	66.10	154.2	77.96	UL-RL	3.9043E+04	-8.100	0.000	1.000	1.000
66.10	0.000	0.000	Strato2_3095_82743_L_0									
43 D	13.57	1.2139E-04	101.2	67.84	158.2	79.92	UL-RL	3.9043E+04	-8.300	0.000	1.000	1.000
67.84	0.000	0.000	Strato2_3095_82743_L_0									
44 D	13.93	1.1481E-04	105.2	69.64	162.2	81.88	UL-RL	3.9043E+04	-8.500	0.000	1.000	1.000
69.64	0.000	0.000	Strato2_3095_82743_L_0									
45 D	14.30	1.0970E-04	109.2	71.49	166.2	83.84	UL-RL	3.9043E+04	-8.700	0.000	1.000	1.000
71.49	0.000	0.000	Strato2_3095_82743_L_0									
46 D	14.68	1.0589E-04	113.2	73.39	170.2	85.81	UL-RL	3.9043E+04	-8.900	0.000	1.000	1.000
73.39	0.000	0.000	Strato2_3095_82743_L_0									
47 D	15.07	1.0322E-04	117.2	75.33	174.2	87.78	UL-RL	3.9043E+04	-9.100	0.000	1.000	1.000
75.33	0.000	0.000	Strato2_3095_82743_L_0									
48 D	15.46	1.0154E-04	121.2	77.31	178.2	89.75	UL-RL	3.9043E+04	-9.300	0.000	1.000	1.000
77.31	0.000	0.000	Strato2_3095_82743_L_0									
49 D	15.86	1.0071E-04	125.2	79.32	182.2	91.72	UL-RL	3.9043E+04	-9.500	0.000	1.000	1.000
79.32	0.000	0.000	Strato2_3095_82743_L_0									
50 D	16.27	1.0060E-04	129.2	81.36	186.2	93.70	UL-RL	3.9043E+04	-9.700	0.000	1.000	1.000
81.36	0.000	0.000	Strato2_3095_82743_L_0									
51 D	16.68	1.0109E-04	133.2	83.42	190.2	95.68	UL-RL	3.9043E+04	-9.900	0.000	1.000	1.000
83.42	0.000	0.000	Strato2_3095_82743_L_0									
52 D	17.10	1.0208E-04	137.2	85.49	194.2	97.65	UL-RL	3.9043E+04	-10.10	0.000	1.000	1.000
85.49	0.000	0.000	Strato2_3095_82743_L_0									
53 D	17.52	1.0346E-04	141.2	87.58	198.2	99.63	UL-RL	3.9043E+04	-10.30	0.000	1.000	1.000
87.58	0.000	0.000	Strato2_3095_82743_L_0									
54 D	17.94	1.0516E-04	145.2	89.68	202.2	101.6	UL-RL	3.9043E+04	-10.50	0.000	1.000	1.000
89.68	0.000	0.000	Strato2_3095_82743_L_0									
55 D	18.36	1.0710E-04	149.2	91.78	206.2	103.6	UL-RL	3.9043E+04	-10.70	0.000	1.000	1.000
91.78	0.000	0.000	Strato2_3095_82743_L_0									
56 D	18.78	1.0922E-04	153.2	93.89	210.2	105.6	UL-RL	3.9043E+04	-10.90	0.000	1.000	1.000
93.89	0.000	0.000	Strato2_3095_82743_L_0									
57 D	19.20	1.1146E-04	157.2	96.01	214.2	107.6	UL-RL	3.9043E+04	-11.10	0.000	1.000	1.000
96.01	0.000	0.000	Strato2_3095_82743_L_0									
58 D	19.63	1.1378E-04	161.2	98.13	218.2	109.6	UL-RL	3.9043E+04	-11.30	0.000	1.000	1.000
98.13	0.000	0.000	Strato2_3095_82743_L_0									
59 D	20.05	1.1616E-04	165.2	100.2	222.2	111.5	UL-RL	3.9043E+04	-11.50	0.000	1.000	1.000
100.2	0.000	0.000	Strato2_3095_82743_L_0									
60 D	20.47	1.1856E-04	169.2	102.4	226.2	113.5	UL-RL	3.9043E+04	-11.70	0.000	1.000	1.000
102.4	0.000	0.000	Strato2_3095_82743_L_0									
61 D	15.67	1.2097E-04	173.2	104.5	230.2	115.5	UL-RL	3.9043E+04	-11.90	0.000	1.000	1.000
104.5	0.000	0.000	Strato2_3095_82743_L_0									
62 D	5.277	1.2218E-04	175.2	105.5	232.2	116.5	UL-RL	3.9043E+04	-12.00	0.000	1.000	1.000
105.5	0.000	0.000	Strato2_3095_82743_L_0									

```
+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.Nominal_63                                     |
|                                 Exe Time :24 July 2019      11:09:26                                              |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
C U R R E N T   T I M E   I S      3.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-------------------------------------------------------------
    1 0.30400    -0.30400     4.67282E-12 6.08000E-02
    2 0.86087    -0.86087    -6.08000E-02 0.23297
    3  1.7084     -1.7084    -0.23297     0.57465
    4  2.8113     -2.8113    -0.57465      1.1369
    5  4.1585     -4.1585     -1.1369      1.9686
    6  5.7449     -5.7449     -1.9686      3.1176
    7  7.5680     -7.5680     -3.1176      4.6312
    8  9.6262     -9.6262     -4.6312      6.5564
    9  11.878     -11.878     -6.5564      8.9320
   10  14.367     -14.367     -8.9320      11.805
   11  17.094     -17.094     -11.805      15.224
   12  20.056     -20.056     -15.224      19.235
   13  22.453     -22.453     -19.235      21.481
   14  24.929     -24.929     -21.481      26.466
   15  28.464     -28.464     -26.466      32.159
   16  32.234     -32.234     -32.159      38.606
```

```
   17  34.703     -34.703     -38.606      45.547
   18  34.334     -34.334     -45.547      52.413
   19  31.127     -31.127     -52.413      58.639
   20  27.074     -27.074     -58.639      64.054
   21  22.925     -22.925     -64.054      68.639
   22  18.695     -18.695     -68.639      72.378
   23  14.380     -14.380     -72.378      75.254
   24  9.9963     -9.9963     -75.254      77.253
   25  6.0216     -6.0216     -77.253      78.457
   26  2.4329     -2.4329     -78.457      78.944
   27-0.79280     0.79280     -78.944      78.785
   28 -3.7012      3.7012     -78.785      78.045
   29 -6.2920      6.2920     -78.045      76.787
   30 -8.5880      8.5880     -76.787      75.069
   31 -10.612      10.612     -75.069      72.947
   32 -12.385      12.385     -72.947      70.470
   33 -13.930      13.930     -70.470      67.684
   34 -15.266      15.266     -67.684      64.630
   35 -16.413      16.413     -64.630      61.348
   36 -17.409      17.409     -61.348      57.866
   37 -18.252      18.252     -57.866      54.216
   38 -18.960      18.960     -54.216      50.424
   39 -19.549      19.549     -50.424      46.514
   40 -20.034      20.034     -46.514      42.507
   41 -19.808      19.808     -42.507      38.546
   42 -19.342      19.342     -38.546      34.677
   43 -18.692      18.692     -34.677      30.939
   44 -17.880      17.880     -30.939      27.363
   45 -16.940      16.940     -27.363      23.975
   46 -15.902      15.902     -23.975      20.794
   47 -14.792      14.792     -20.794      17.836
   48 -13.632      13.632     -17.836      15.110
   49 -12.444      12.444     -15.110      12.621
   50 -11.243      11.243     -12.621      10.372
   51 -10.056      10.056     -10.372      8.3611
   52 -8.8823      8.8823     -8.3611      6.5847
   53 -7.7318      7.7318     -6.5847      5.0383
   54 -6.6118      6.6118     -5.0383      3.7159
   55 -5.5282      5.5282     -3.7159      2.6103
   56 -4.4852      4.4852     -2.6103      1.7133
   57 -3.4860      3.4860     -1.7133      1.0161
   58 -2.5425      2.5425     -1.0161     0.50757
   59 -1.6455      1.6455    -0.50757     0.17848
   60-0.79559     0.79559    -0.17848     1.93599E-02
   61-0.19358     0.19358    -1.93599E-02 5.86795E-12



+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                   |
|                                  Exe Time :24 July 2019      11:09:26                                             |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_778405                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S      3.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.6623E+05 RIMNOR=0.2335E+06
           RENORM=0.1736E+05 REMNOR=0.1082E-19 RATIO =0.5119     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 131.8     RMMAX = 78.94
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
           RDT   =0.6623E+05 RDR   =0.2335E+06
           RATIOT=0.5119     RATIOR= 0.000
           MAX UN=0.1189E-08 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           MIN UN=-131.8     IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.6623E+05 RIMNOR=0.2335E+06
```

```
            RENORM= 69.38      REMNOR=0.7345E-20 RATIO =0.3236E-01 TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 131.8      RMMAX = 78.94
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
            RDT    =0.6623E+05 RDR    =0.2335E+06
            RATIOT=0.3236E-01 RATIOR= 0.000
            MAX UN=0.4611E-09 IEQ=     39 NODE     20 DOF   1  Y-DISPL.F
            MIN UN=-3.141      IEQ=      3 NODE      2 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


 ITER      3 RNORM = 0.000      RMNORM= 0.000
            RINORM=0.6623E+05 RIMNOR=0.2335E+06
            RENORM= 1.883      REMNOR=0.5101E-20 RATIO =0.5332E-02 TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 131.8      RMMAX = 78.94
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
            RDT    =0.6623E+05 RDR    =0.2335E+06
            RATIOT=0.5332E-02 RATIOR= 0.000
            MAX UN=0.3919E-09 IEQ=     25 NODE     13 DOF   1  Y-DISPL.F
            MIN UN=-1.087      IEQ=     37 NODE     19 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


 ITER      4 RNORM = 0.000      RMNORM= 0.000
            RINORM=0.6623E+05 RIMNOR=0.2335E+06
            RENORM=0.1049E-18 REMNOR=0.5042E-21 RATIO =0.1258E-11 TOLER =0.1000E-03      CONVERGED !
            RFMAX = 131.8      RMMAX = 78.94
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
            RDT    =0.6623E+05 RDR    =0.2335E+06
            RATIOT=0.1258E-11 RATIOR= 0.000
            MAX UN=0.1282E-09 IEQ=    121 NODE     61 DOF   1  Y-DISPL.F
            MIN UN=-.1397E-09 IEQ=     25 NODE     13 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.Nominal_63                                         |
|                                 Exe Time :24 July 2019      11:09:26                                                    |
+-------------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     4 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    4     ( AT TIME   4.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)            (
    1   6.5186274E-04  -1.9554286E-04
    2   6.1275765E-04  -1.9549074E-04
    3   5.7368008E-04  -1.9523412E-04
    4   5.3469154E-04  -1.9456434E-04
    5   4.9589680E-04  -1.9325774E-04
    6   4.5744670E-04  -1.9107728E-04
    7   4.1954080E-04  -1.8777313E-04
    8   3.8242985E-04  -1.8308299E-04
    9   3.4641831E-04  -1.7673228E-04
   10   3.1186666E-04  -1.6843573E-04
   11   2.7919347E-04  -1.5789733E-04
   12   2.4887773E-04  -1.4480897E-04
   13   2.2146122E-04  -1.2885058E-04
   14   2.0902673E-04  -1.1970236E-04
   15   1.8690763E-04  -1.0194076E-04
   16   1.6808136E-04  -8.6715122E-05
   17   1.5207646E-04  -7.3666310E-05
   18   1.3849421E-04  -6.2426900E-05
   19   1.2700894E-04  -5.2638830E-05
   20   1.1736009E-04  -4.4029553E-05
   21   1.0933007E-04  -3.6426003E-05
   22   1.0273189E-04  -2.9689493E-05
   23   9.7404663E-05  -2.3697197E-05
   24   9.3210226E-05  -1.8346669E-05
   25   9.0028215E-05  -1.3562847E-05
   26   8.7751161E-05  -9.2879229E-06
   27   8.6282621E-05  -5.4694823E-06
   28   8.5536088E-05  -2.0603592E-06
   29   8.5433948E-05   9.8083175E-07
   30   8.5906282E-05   3.6899482E-06
   31   8.6889859E-05   6.0980398E-06
   32   8.8327185E-05   8.2315423E-06
   33   9.0165636E-05   1.0112542E-05
   34   9.2356562E-05   1.1758948E-05
   35   9.4854510E-05   1.3184779E-05
   36   9.7616460E-05   1.4400401E-05
   37   1.0060109E-04   1.5412365E-05
   38   1.0376801E-04   1.6223660E-05
   39   1.0707717E-04   1.6834402E-05
   40   1.1048823E-04   1.7242037E-05
   41   1.1396011E-04   1.7441593E-05
   42   1.1745205E-04   1.7448925E-05
   43   1.2092928E-04   1.7300422E-05
   44   1.2436403E-04   1.7029219E-05
   45   1.2773478E-04   1.6665227E-05
   46   1.3102573E-04   1.6235481E-05
   47   1.3422620E-04   1.5764178E-05
   48   1.3733005E-04   1.5272724E-05
   49   1.4033518E-04   1.4779771E-05
   50   1.4324292E-04   1.4301291E-05
   51   1.4605755E-04   1.3850620E-05
   52   1.4878565E-04   1.3438253E-05
   53   1.5143584E-04   1.3071867E-05
   54   1.5401781E-04   1.2756716E-05
   55   1.5654213E-04   1.2495631E-05
   56   1.5901970E-04   1.2289079E-05
   57   1.6146128E-04   1.2135201E-05
   58   1.6387702E-04   1.2029839E-05
   59   1.6627600E-04   1.1966322E-05
   60   1.6866573E-04   1.1935493E-05
   61   1.7105162E-04   1.1925962E-05
   62   1.7224430E-04   1.1925461E-05
```

```
+------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1     FULL VERSION  *Build date:Jul 11, 2017*  |
|                                                                                                            |
|                                       NewProject.BaseDesignSection_28.Nominal_63                          |
|                                   Exe Time :24 July 2019      11:09:26                                    |
+------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    1

0_L                               :
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
C U R R E N T    T I M E    I S      4.0000

 HARDENING 2D SOIL ELEMENT

 ****** TOTAL STRESS FORMULATION *****

 EL *    FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P            STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR     UFACTOR
Peq           Su_a         Su_p      LAYER
---------------------------------------------------------------------------------------------------------------------------------------------------
-----------------------------------------------------------------------
   1 D   2.196     -6.5186E-04  10.00        21.96       10.00       21.96            V-C   8488.       0.000      0.000        1.000        1.000
21.96       0.000        0.000     Strato1_2_8_L_0
   2 D   4.223     -6.1276E-04  9.159        21.11       9.159       21.11            V-C   8488.     -0.2000      0.000        1.000        1.000
21.11       0.000        0.000     Strato1_2_8_L_0
   3 D   4.566     -5.7368E-04  13.94        22.83       13.94       22.83            V-C   8488.     -0.4000      0.000        1.000        1.000
22.83       0.000        0.000     Strato1_2_8_L_0
   4 D   4.856     -5.3469E-04  18.14        24.28       18.14       24.28            V-C   8488.     -0.6000      0.000        1.000        1.000
24.28       0.000        0.000     Strato1_2_8_L_0
   5 D   5.129     -4.9590E-04  22.16        25.64       22.16       25.64            V-C   8488.     -0.8000      0.000        1.000        1.000
25.64       0.000        0.000     Strato1_2_8_L_0
   6 D   5.394     -4.5745E-04  26.09        26.97       26.09       26.97            V-C   8488.      -1.000      0.000        1.000        1.000
26.97       0.000        0.000     Strato1_2_8_L_0
   7 D   5.655     -4.1954E-04  29.98        28.27       29.98       28.27            V-C   8488.      -1.200      0.000        1.000        1.000
28.27       0.000        0.000     Strato1_2_8_L_0
   8 D   5.912     -3.8243E-04  33.85        29.56       33.85       29.56            V-C   8488.      -1.400      0.000        1.000        1.000
29.56       0.000        0.000     Strato1_2_8_L_0
   9 D   6.105     -3.4642E-04  37.03        30.52       37.03       30.52            V-C   8488.      -1.600      0.000        1.000        1.000
30.52       0.000        0.000     Strato1_2_8_L_0
  10 D   6.363     -3.1187E-04  40.95        31.81       40.95       31.81            V-C   8488.      -1.800      0.000        1.000        1.000
31.81       0.000        0.000     Strato1_2_8_L_0
  11 D   6.616     -2.7919E-04  44.84        33.08       44.84       33.08            V-C   8488.      -2.000      0.000        1.000        1.000
33.08       0.000        0.000     Strato1_2_8_L_0
  12 D   6.865     -2.4888E-04  48.72        34.33       48.72       34.33            V-C   8488.      -2.200      0.000        1.000        1.000
34.33       0.000        0.000     Strato1_2_8_L_0
  13 D   5.332     -2.2146E-04  52.58        35.55       52.58       35.55            V-C   8488.      -2.400      0.000        1.000        1.000
35.55       0.000        0.000     Strato1_2_8_L_0
  14 D   5.407     -2.0903E-04  54.28        36.05       54.28       36.05            V-C   8488.      -2.500      0.000        1.000        1.000
36.05       0.000        0.000     Strato1_2_8_L_0
  15 D   7.447     -1.8691E-04  58.15        37.24       58.15       37.24            V-C   8488.      -2.700      0.000        1.000        1.000
37.24       0.000        0.000     Strato1_2_8_L_0
  16 D   7.681     -1.6808E-04  62.01        38.40       62.01       38.40            V-C   8488.      -2.900      0.000        1.000        1.000
38.40       0.000        0.000     Strato1_2_8_L_0
  17 D   7.911     -1.5208E-04  65.86        39.56       65.86       39.56            V-C   8488.      -3.100      0.000        1.000        1.000
39.56       0.000        0.000     Strato1_2_8_L_0
  18 D   8.141     -1.3849E-04  69.70        40.70       69.70       40.70            V-C   8488.      -3.300      0.000        1.000        1.000
40.70       0.000        0.000     Strato1_2_8_L_0
  19 D   8.370     -1.2701E-04  73.54        41.85       73.54       41.85            V-C   8488.      -3.500      0.000        1.000        1.000
41.85       0.000        0.000     Strato1_2_8_L_0
  20 D   8.599     -1.1736E-04  77.37        43.00       77.37       43.00            V-C   8488.      -3.700      0.000        1.000        1.000
43.00       0.000        0.000     Strato1_2_8_L_0
  21 D   8.804     -1.0933E-04  80.92        44.02       80.92       44.02            V-C   8488.      -3.900      0.000        1.000        1.000
44.02       0.000        0.000     Strato1_2_8_L_0
  22 D   9.039     -1.0273E-04  84.76        45.20       84.76       45.20            V-C   8488.      -4.100      0.000        1.000        1.000
45.20       0.000        0.000     Strato1_2_8_L_0
  23 D   9.048     -9.7405E-05  88.60        45.24       88.60       46.96          UL-RL  2.5465E+04  -4.300      0.000        1.000        1.000
45.24       0.000        0.000     Strato1_2_8_L_0
  24 D   8.981     -9.3210E-05  92.43        44.91       92.43       48.99          UL-RL  2.5465E+04  -4.500      0.000        1.000        1.000
44.91       0.000        0.000     Strato1_2_8_L_0
  25 D   9.408     -9.0028E-05  96.27        47.04       96.27       51.02          UL-RL  2.5465E+04  -4.700      0.000        1.000        1.000
47.04       0.000        0.000     Strato1_2_8_L_0
  26 D   9.831     -8.7751E-05  100.1        49.15       100.1       53.05          UL-RL  2.5465E+04  -4.900      0.000        1.000        1.000
49.15       0.000        0.000     Strato1_2_8_L_0
  27 D   10.25     -8.6283E-05  103.9        51.25       103.9       55.08          UL-RL  2.5465E+04  -5.100      0.000        1.000        1.000
51.25       0.000        0.000     Strato1_2_8_L_0
  28 D   10.64     -8.5536E-05  107.5        53.21       107.5       56.99          UL-RL  2.5465E+04  -5.300      0.000        1.000        1.000
53.21       0.000        0.000     Strato1_2_8_L_0
  29 D   11.05     -8.5434E-05  111.4        55.27       111.4       59.02          UL-RL  2.5465E+04  -5.500      0.000        1.000        1.000
55.27       0.000        0.000     Strato1_2_8_L_0
  30 D   11.46     -8.5906E-05  115.2        57.32       115.2       61.05          UL-RL  2.5465E+04  -5.700      0.000        1.000        1.000
```

```
57.32       0.000       0.000     Strato1_2_8_L_0
  31 D   11.87     -8.6890E-05  119.0       59.36       119.0       63.08          UL-RL  2.5465E+04  -5.900       0.000       1.000       1.000
59.36       0.000       0.000     Strato1_2_8_L_0
  32 D   12.28     -8.8327E-05  122.8       61.39       122.8       65.11          UL-RL  2.5465E+04  -6.100       0.000       1.000       1.000
61.39       0.000       0.000     Strato1_2_8_L_0
  33 D   12.68     -9.0166E-05  126.7       63.41       126.7       67.14          UL-RL  2.5465E+04  -6.300       0.000       1.000       1.000
63.41       0.000       0.000     Strato1_2_8_L_0
  34 D   13.08     -9.2357E-05  130.5       65.42       130.5       69.16          UL-RL  2.5465E+04  -6.500       0.000       1.000       1.000
65.42       0.000       0.000     Strato1_2_8_L_0
  35 D   13.49     -9.4855E-05  134.3       67.43       134.3       71.19          UL-RL  2.5465E+04  -6.700       0.000       1.000       1.000
67.43       0.000       0.000     Strato1_2_8_L_0
  36 D   13.87     -9.7616E-05  138.0       69.34       138.0       73.12          UL-RL  2.5465E+04  -6.900       0.000       1.000       1.000
69.34       0.000       0.000     Strato1_2_8_L_0
  37 D   14.27     -1.0060E-04  141.8       71.34       141.8       75.15          UL-RL  2.5465E+04  -7.100       0.000       1.000       1.000
71.34       0.000       0.000     Strato1_2_8_L_0
  38 D   14.67     -1.0377E-04  145.6       73.33       145.6       77.18          UL-RL  2.5465E+04  -7.300       0.000       1.000       1.000
73.33       0.000       0.000     Strato1_2_8_L_0
  39 D   15.07     -1.0708E-04  149.4       75.33       149.4       79.20          UL-RL  2.5465E+04  -7.500       0.000       1.000       1.000
75.33       0.000       0.000     Strato1_2_8_L_0
  40 D   15.46     -1.1049E-04  153.3       77.31       153.3       81.22          UL-RL  2.5465E+04  -7.700       0.000       1.000       1.000
77.31       0.000       0.000     Strato1_2_8_L_0
  41 D   13.48     -1.1396E-04  157.2       67.41       157.2       78.59          UL-RL  7.2037E+04  -7.900       0.000       1.000       1.000
67.41       0.000       0.000     Strato2_3095_82743_L_0
  42 D   13.86     -1.1745E-04  161.2       69.30       161.2       80.60          UL-RL  7.2037E+04  -8.100       0.000       1.000       1.000
69.30       0.000       0.000     Strato2_3095_82743_L_0
  43 D   14.22     -1.2093E-04  165.1       71.12       165.1       82.54          UL-RL  7.2037E+04  -8.300       0.000       1.000       1.000
71.12       0.000       0.000     Strato2_3095_82743_L_0
  44 D   14.60     -1.2436E-04  169.1       73.01       169.1       84.55          UL-RL  7.2037E+04  -8.500       0.000       1.000       1.000
73.01       0.000       0.000     Strato2_3095_82743_L_0
  45 D   14.98     -1.2773E-04  173.1       74.89       173.1       86.55          UL-RL  7.2037E+04  -8.700       0.000       1.000       1.000
74.89       0.000       0.000     Strato2_3095_82743_L_0
  46 D   15.35     -1.3103E-04  177.1       76.77       177.1       88.56          UL-RL  7.2037E+04  -8.900       0.000       1.000       1.000
76.77       0.000       0.000     Strato2_3095_82743_L_0
  47 D   15.73     -1.3423E-04  181.1       78.65       181.1       90.57          UL-RL  7.2037E+04  -9.100       0.000       1.000       1.000
78.65       0.000       0.000     Strato2_3095_82743_L_0
  48 D   16.11     -1.3733E-04  185.2       80.53       185.2       92.58          UL-RL  7.2037E+04  -9.300       0.000       1.000       1.000
80.53       0.000       0.000     Strato2_3095_82743_L_0
  49 D   16.48     -1.4034E-04  189.2       82.41       189.2       94.59          UL-RL  7.2037E+04  -9.500       0.000       1.000       1.000
82.41       0.000       0.000     Strato2_3095_82743_L_0
  50 D   16.86     -1.4324E-04  193.2       84.29       193.2       96.59          UL-RL  7.2037E+04  -9.700       0.000       1.000       1.000
84.29       0.000       0.000     Strato2_3095_82743_L_0
  51 D   17.22     -1.4606E-04  197.1       86.11       197.1       98.54          UL-RL  7.2037E+04  -9.900       0.000       1.000       1.000
86.11       0.000       0.000     Strato2_3095_82743_L_0
  52 D   17.60     -1.4879E-04  201.1       87.99       201.1       100.6          UL-RL  7.2037E+04  -10.10       0.000       1.000       1.000
87.99       0.000       0.000     Strato2_3095_82743_L_0
  53 D   17.97     -1.5144E-04  205.1       89.87       205.1       102.6          UL-RL  7.2037E+04  -10.30       0.000       1.000       1.000
89.87       0.000       0.000     Strato2_3095_82743_L_0
  54 D   18.35     -1.5402E-04  209.1       91.76       209.1       104.6          UL-RL  7.2037E+04  -10.50       0.000       1.000       1.000
91.76       0.000       0.000     Strato2_3095_82743_L_0
  55 D   18.73     -1.5654E-04  213.1       93.64       213.1       106.6          UL-RL  7.2037E+04  -10.70       0.000       1.000       1.000
93.64       0.000       0.000     Strato2_3095_82743_L_0
  56 D   19.10     -1.5902E-04  217.2       95.52       217.2       108.6          UL-RL  7.2037E+04  -10.90       0.000       1.000       1.000
95.52       0.000       0.000     Strato2_3095_82743_L_0
  57 D   19.48     -1.6146E-04  221.2       97.40       221.2       110.6          UL-RL  7.2037E+04  -11.10       0.000       1.000       1.000
97.40       0.000       0.000     Strato2_3095_82743_L_0
  58 D   19.85     -1.6388E-04  225.1       99.23       225.1       112.5          UL-RL  7.2037E+04  -11.30       0.000       1.000       1.000
99.23       0.000       0.000     Strato2_3095_82743_L_0
  59 D   20.22     -1.6628E-04  229.1       101.1       229.1       114.6          UL-RL  7.2037E+04  -11.50       0.000       1.000       1.000
101.1       0.000       0.000     Strato2_3095_82743_L_0
  60 D   20.60     -1.6867E-04  233.1       103.0       233.1       116.6          UL-RL  7.2037E+04  -11.70       0.000       1.000       1.000
103.0       0.000       0.000     Strato2_3095_82743_L_0
  61 D   15.73     -1.7105E-04  237.1       104.9       237.1       118.6          UL-RL  7.2037E+04  -11.90       0.000       1.000       1.000
104.9       0.000       0.000     Strato2_3095_82743_L_0
  62 D   5.290     -1.7224E-04  239.1       105.8       239.1       119.5          UL-RL  7.2037E+04  -12.00       0.000       1.000       1.000
105.8       0.000       0.000     Strato2_3095_82743_L_0


 +-----------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                 |
 |                                                                                                                             |
 |                                        NewProject.BaseDesignSection_28.Nominal_63                                           |
 |                                   Exe Time :24 July 2019      11:09:26                                                      |
 +-----------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                          :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
 C U R R E N T   T I M E   I S      4.0000

  HARDENING 2D SOIL ELEMENT
```

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR
Peq	Su_a	Su_p	LAYER									
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000
0.000	0.000	0.000	not available									
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000
0.000	0.000	0.000	not available									
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
14	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									
15	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000
0.000	0.000	0.000	not available									
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000
0.000	0.000	0.000	not available									
17 D	0.1155	1.5208E-04	1.900	0.5776	58.90	31.92	ACTIVE	0.000	-3.100	0.000	1.000	1.000
0.5776	0.000	0.000	Strato1_2_8_L_0									
18 D	0.8541	1.3849E-04	5.700	4.271	62.70	33.93	UL-RL	1.7671E+04	-3.300	0.000	1.000	1.000
4.271	0.000	0.000	Strato1_2_8_L_0									
19 D	4.176	1.2701E-04	9.500	20.88	66.50	38.39	UL-RL	1.7671E+04	-3.500	0.000	1.000	1.000
20.88	0.000	0.000	Strato1_2_8_L_0									
20 D	5.503	1.1736E-04	13.30	27.52	70.30	43.79	UL-RL	1.7671E+04	-3.700	0.000	1.000	1.000
27.52	0.000	0.000	Strato1_2_8_L_0									
21 D	6.058	1.0933E-04	17.10	30.29	74.10	45.34	UL-RL	1.7671E+04	-3.900	0.000	1.000	1.000
30.29	0.000	0.000	Strato1_2_8_L_0									
22 D	6.611	1.0273E-04	20.90	33.06	77.90	46.92	UL-RL	1.7671E+04	-4.100	0.000	1.000	1.000
33.06	0.000	0.000	Strato1_2_8_L_0									
23 D	7.161	9.7405E-05	24.70	35.81	81.70	48.51	UL-RL	1.7671E+04	-4.300	0.000	1.000	1.000
35.81	0.000	0.000	Strato1_2_8_L_0									
24 D	7.707	9.3210E-05	28.50	38.53	85.50	50.12	UL-RL	1.7671E+04	-4.500	0.000	1.000	1.000
38.53	0.000	0.000	Strato1_2_8_L_0									
25 D	8.247	9.0028E-05	32.30	41.24	89.30	51.76	UL-RL	1.7671E+04	-4.700	0.000	1.000	1.000
41.24	0.000	0.000	Strato1_2_8_L_0									
26 D	8.783	8.7751E-05	36.10	43.91	93.10	53.41	UL-RL	1.7671E+04	-4.900	0.000	1.000	1.000
43.91	0.000	0.000	Strato1_2_8_L_0									
27 D	9.312	8.6283E-05	39.90	46.56	96.90	55.09	UL-RL	1.7671E+04	-5.100	0.000	1.000	1.000
46.56	0.000	0.000	Strato1_2_8_L_0									
28 D	9.835	8.5536E-05	43.70	49.17	100.7	56.78	UL-RL	1.7671E+04	-5.300	0.000	1.000	1.000
49.17	0.000	0.000	Strato1_2_8_L_0									
29 D	10.35	8.5434E-05	47.50	51.75	104.5	58.50	UL-RL	1.7671E+04	-5.500	0.000	1.000	1.000
51.75	0.000	0.000	Strato1_2_8_L_0									
30 D	10.86	8.5906E-05	51.30	54.30	108.3	60.24	UL-RL	1.7671E+04	-5.700	0.000	1.000	1.000
54.30	0.000	0.000	Strato1_2_8_L_0									
31 D	11.36	8.6890E-05	55.10	56.81	112.1	62.00	UL-RL	1.7671E+04	-5.900	0.000	1.000	1.000
56.81	0.000	0.000	Strato1_2_8_L_0									
32 D	11.86	8.8327E-05	58.90	59.29	115.9	63.78	UL-RL	1.7671E+04	-6.100	0.000	1.000	1.000
59.29	0.000	0.000	Strato1_2_8_L_0									
33 D	12.35	9.0166E-05	62.70	61.74	119.7	65.59	UL-RL	1.7671E+04	-6.300	0.000	1.000	1.000
61.74	0.000	0.000	Strato1_2_8_L_0									
34 D	12.83	9.2357E-05	66.50	64.15	123.5	67.41	UL-RL	1.7671E+04	-6.500	0.000	1.000	1.000
64.15	0.000	0.000	Strato1_2_8_L_0									
35 D	13.30	9.4855E-05	70.30	66.52	127.3	69.25	UL-RL	1.7671E+04	-6.700	0.000	1.000	1.000
66.52	0.000	0.000	Strato1_2_8_L_0									
36 D	13.77	9.7616E-05	74.10	68.87	131.1	71.10	UL-RL	1.7671E+04	-6.900	0.000	1.000	1.000
68.87	0.000	0.000	Strato1_2_8_L_0									
37 D	14.24	1.0060E-04	77.90	71.18	134.9	72.98	UL-RL	1.7671E+04	-7.100	0.000	1.000	1.000
71.18	0.000	0.000	Strato1_2_8_L_0									
38 D	14.69	1.0377E-04	81.70	73.47	138.7	74.86	UL-RL	1.7671E+04	-7.300	0.000	1.000	1.000
73.47	0.000	0.000	Strato1_2_8_L_0									
39 D	15.15	1.0708E-04	85.50	75.73	142.5	76.77	UL-RL	1.7671E+04	-7.500	0.000	1.000	1.000
75.73	0.000	0.000	Strato1_2_8_L_0									

40 D	15.59	1.1049E-04	89.30	77.96	146.3	78.69	UL-RL	1.7671E+04	-7.700	0.000	1.000	1.000
77.96	0.000	0.000	Strato1_2_8_L_0									
41 D	12.68	1.1396E-04	93.20	63.42	150.2	76.00	UL-RL	3.9043E+04	-7.900	0.000	1.000	1.000
63.42	0.000	0.000	Strato2_3095_82743_L_0									
42 D	13.12	1.1745E-04	97.20	65.62	154.2	77.96	UL-RL	3.9043E+04	-8.100	0.000	1.000	1.000
65.62	0.000	0.000	Strato2_3095_82743_L_0									
43 D	13.56	1.2093E-04	101.2	67.82	158.2	79.92	UL-RL	3.9043E+04	-8.300	0.000	1.000	1.000
67.82	0.000	0.000	Strato2_3095_82743_L_0									
44 D	14.00	1.2436E-04	105.2	70.01	162.2	81.88	UL-RL	3.9043E+04	-8.500	0.000	1.000	1.000
70.01	0.000	0.000	Strato2_3095_82743_L_0									
45 D	14.44	1.2773E-04	109.2	72.19	166.2	83.84	UL-RL	3.9043E+04	-8.700	0.000	1.000	1.000
72.19	0.000	0.000	Strato2_3095_82743_L_0									
46 D	14.87	1.3103E-04	113.2	74.37	170.2	85.81	UL-RL	3.9043E+04	-8.900	0.000	1.000	1.000
74.37	0.000	0.000	Strato2_3095_82743_L_0									
47 D	15.31	1.3423E-04	117.2	76.55	174.2	87.78	UL-RL	3.9043E+04	-9.100	0.000	1.000	1.000
76.55	0.000	0.000	Strato2_3095_82743_L_0									
48 D	15.74	1.3733E-04	121.2	78.71	178.2	89.75	UL-RL	3.9043E+04	-9.300	0.000	1.000	1.000
78.71	0.000	0.000	Strato2_3095_82743_L_0									
49 D	16.17	1.4034E-04	125.2	80.87	182.2	91.72	UL-RL	3.9043E+04	-9.500	0.000	1.000	1.000
80.87	0.000	0.000	Strato2_3095_82743_L_0									
50 D	16.60	1.4324E-04	129.2	83.02	186.2	93.70	UL-RL	3.9043E+04	-9.700	0.000	1.000	1.000
83.02	0.000	0.000	Strato2_3095_82743_L_0									
51 D	17.03	1.4606E-04	133.2	85.17	190.2	95.68	UL-RL	3.9043E+04	-9.900	0.000	1.000	1.000
85.17	0.000	0.000	Strato2_3095_82743_L_0									
52 D	17.46	1.4879E-04	137.2	87.31	194.2	97.65	UL-RL	3.9043E+04	-10.10	0.000	1.000	1.000
87.31	0.000	0.000	Strato2_3095_82743_L_0									
53 D	17.89	1.5144E-04	141.2	89.45	198.2	99.63	UL-RL	3.9043E+04	-10.30	0.000	1.000	1.000
89.45	0.000	0.000	Strato2_3095_82743_L_0									
54 D	18.32	1.5402E-04	145.2	91.58	202.2	101.6	UL-RL	3.9043E+04	-10.50	0.000	1.000	1.000
91.58	0.000	0.000	Strato2_3095_82743_L_0									
55 D	18.74	1.5654E-04	149.2	93.71	206.2	103.6	UL-RL	3.9043E+04	-10.70	0.000	1.000	1.000
93.71	0.000	0.000	Strato2_3095_82743_L_0									
56 D	19.17	1.5902E-04	153.2	95.84	210.2	105.6	UL-RL	3.9043E+04	-10.90	0.000	1.000	1.000
95.84	0.000	0.000	Strato2_3095_82743_L_0									
57 D	19.59	1.6146E-04	157.2	97.96	214.2	107.6	UL-RL	3.9043E+04	-11.10	0.000	1.000	1.000
97.96	0.000	0.000	Strato2_3095_82743_L_0									
58 D	20.02	1.6388E-04	161.2	100.1	218.2	109.6	UL-RL	3.9043E+04	-11.30	0.000	1.000	1.000
100.1	0.000	0.000	Strato2_3095_82743_L_0									
59 D	20.44	1.6628E-04	165.2	102.2	222.2	111.5	UL-RL	3.9043E+04	-11.50	0.000	1.000	1.000
102.2	0.000	0.000	Strato2_3095_82743_L_0									
60 D	20.86	1.6867E-04	169.2	104.3	226.2	113.5	UL-RL	3.9043E+04	-11.70	0.000	1.000	1.000
104.3	0.000	0.000	Strato2_3095_82743_L_0									
61 D	15.97	1.7105E-04	173.2	106.4	230.2	115.5	UL-RL	3.9043E+04	-11.90	0.000	1.000	1.000
106.4	0.000	0.000	Strato2_3095_82743_L_0									
62 D	5.375	1.7224E-04	175.2	107.5	232.2	116.5	UL-RL	3.9043E+04	-12.00	0.000	1.000	1.000
107.5	0.000	0.000	Strato2_3095_82743_L_0									

```
+-------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*           |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.Nominal_63                                     |
|                                Exe Time :24 July 2019      11:09:26                                               |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
C U R R E N T   T I M E   I S      4.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-------------------------------------------------------
    1  2.1956     -2.1956     1.08634E-11 0.43912
    2  6.4185     -6.4185    -0.43912     1.7228
    3  10.984     -10.984     -1.7228     3.9197
    4  15.840     -15.840     -3.9197     7.0878
    5  20.969     -20.969     -7.0878     11.282
    6  26.363     -26.363     -11.282     16.554
    7  32.018     -32.018     -16.554     22.958
    8  37.930     -37.930     -22.958     30.544
    9  44.035     -44.035     -30.544     39.351
   10  50.397     -50.397     -39.351     49.430
   11  57.014     -57.014     -49.430     60.833
   12  63.879     -63.879     -60.833     73.609
   13  69.211     -69.211     -73.609     80.530
   14 -57.134      57.134     -80.530     69.103
   15 -49.687      49.687     -69.103     59.166
   16 -42.006      42.006     -59.166     50.764
```

```
   17 -34.210      34.210     -50.764      43.922
   18 -26.924      26.924     -43.922      38.537
   19 -22.730      22.730     -38.537      33.991
   20 -19.634      19.634     -33.991      30.065
   21 -16.888      16.888     -30.065      26.687
   22 -14.460      14.460     -26.687      23.795
   23 -12.573      12.573     -23.795      21.281
   24 -11.298      11.298     -21.281      19.021
   25 -10.138      10.138     -19.021      16.993
   26 -9.0898      9.0898     -16.993      15.175
   27 -8.1526      8.1526     -15.175      13.545
   28 -7.3457      7.3457     -13.545      12.076
   29 -6.6421      6.6421     -12.076      10.747
   30 -6.0378      6.0378     -10.747      9.5397
   31 -5.5282      5.5282     -9.5397      8.4341
   32 -5.1084      5.1084     -8.4341      7.4124
   33 -4.7733      4.7733     -7.4124      6.4577
   34 -4.5179      4.5179     -6.4577      5.5542
   35 -4.3367      4.3367     -5.5542      4.6868
   36 -4.2419      4.2419     -4.6868      3.8385
   37 -4.2106      4.2106     -3.8385      2.9963
   38 -4.2375      4.2375     -2.9963      2.1489
   39 -4.3179      4.3179     -2.1489      1.2853
   40 -4.4470      4.4470     -1.2853     0.39588
   41 -3.6499      3.6499    -0.39588    -0.33410
   42 -2.9144      2.9144     0.33410    -0.91697
   43 -2.2540      2.2540     0.91697     -1.3678
   44 -1.6545      1.6545      1.3678     -1.6987
   45 -1.1152      1.1152      1.6987     -1.9217
   46-0.63526     0.63526      1.9217     -2.0488
   47-0.21368     0.21368      2.0488     -2.0915
   48 0.15067    -0.15067      2.0915     -2.0614
   49 0.45896    -0.45896      2.0614     -1.9696
   50 0.71240    -0.71240      1.9696     -1.8271
   51 0.90067    -0.90067      1.8271     -1.6470
   52  1.0367     -1.0367      1.6470     -1.4396
   53  1.1214     -1.1214      1.4396     -1.2154
   54  1.1560     -1.1560      1.2154    -0.98416
   55  1.1411     -1.1411     0.98416    -0.75593
   56  1.0776     -1.0776     0.75593    -0.54041
   57 0.96600    -0.96600     0.54041    -0.34721
   58 0.79665    -0.79665     0.34721    -0.18788
   59 0.58022    -0.58022     0.18788    -7.18399E-02
   60 0.31695    -0.31695    7.18399E-02-8.45062E-03
   61 8.44977E-02-8.44977E-02 8.45062E-03-6.32142E-12



+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                     NewProject.BaseDesignSection_28.Nominal_63                                    |
|                                  Exe Time :24 July 2019      11:09:26                                             |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_778405                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S      4.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-----------------------------------------------------------------------------------------------------
ANCHOR    1   136.40     -1.29330E-03 -1.29330E-03   0.0000       0.0000       0.0000       0.0000     BORN NOW JUST ACTIVATED

ITER     0 RNORM = 0.000      RMNORM= 0.000
           RINORM=0.9841E+05 RIMNOR=0.8258E+05
           RENORM= 583.8     REMNOR=0.5042E-21 RATIO =0.7702E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 131.8     RMMAX = 80.53
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
           RDT   =0.9841E+05 RDR   =0.8258E+05
           RATIOT=0.7702E-01 RATIOR= 0.000
           MAX UN= 8.783     IEQ=    51 NODE     26 DOF   1  Y-DISPL.F
           MIN UN=-.1397E-09 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000      RMNORM= 0.000
           RINORM=0.9841E+05 RIMNOR=0.8258E+05
           RENORM=0.9027     REMNOR=0.6363E-20 RATIO =0.3029E-02 TOLER =0.1000E-03  NOT CONVERGED
```

```
            RFMAX = 131.8      RMMAX = 80.53
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
            RDT   =0.9841E+05 RDR   =0.8258E+05
            RATIOT=0.3029E-02 RATIOR= 0.000
            MAX UN=0.5307      IEQ=    59 NODE     30 DOF   1  Y-DISPL.F
            MIN UN=-.6654E-09 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER      3 RNORM = 0.000      RMNORM= 0.000
            RINORM=0.9841E+05 RIMNOR=0.8258E+05
            RENORM=0.1488E-17 REMNOR=0.2666E-20 RATIO =0.3888E-11 TOLER =0.1000E-03      CONVERGED !
            RFMAX = 131.8      RMMAX = 80.53
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
            RDT   =0.9841E+05 RDR   =0.8258E+05
            RATIOT=0.3888E-11 RATIOR= 0.000
            MAX UN=0.7780E-09 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
            MIN UN=-.7139E-09 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                       NewProject.BaseDesignSection_28.Nominal_63                                        |
|                                  Exe Time :24 July 2019      11:09:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     3 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    5     ( AT TIME   5.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)            (
    1   9.1653711E-04  -1.0865607E-04
    2   8.9480872E-04  -1.0861363E-04
    3   8.7310263E-04  -1.0840666E-04
    4   8.5146810E-04  -1.0786905E-04
    5   8.2998895E-04  -1.0682219E-04
    6   8.0878581E-04  -1.0507662E-04
    7   7.8801820E-04  -1.0243267E-04
    8   7.6788661E-04  -9.8680656E-05
    9   7.4863444E-04  -9.3601143E-05
   10   7.3054983E-04  -8.6966453E-05
   11   7.1396726E-04  -7.8540628E-05
   12   6.9926937E-04  -6.8077951E-05
   13   6.8688889E-04  -5.5323098E-05
   14   6.8171667E-04  -4.8012075E-05
   15   6.7352458E-04  -3.4496197E-05
   16   6.6769264E-04  -2.4363614E-05
   17   6.6357272E-04  -1.7327308E-05
   18   6.6057504E-04  -1.3091058E-05
   19   6.5816999E-04  -1.1349366E-05
   20   6.5588999E-04  -1.1787302E-05
   21   6.5333140E-04  -1.4080253E-05
   22   6.5015649E-04  -1.7894226E-05
   23   6.4609523E-04  -2.2885431E-05
   24   6.4094711E-04  -2.8704623E-05
   25   6.3458137E-04  -3.5003955E-05
   26   6.2693730E-04  -4.1426743E-05
   27   6.1802766E-04  -4.7595481E-05
   28   6.0793924E-04  -5.3162890E-05
   29   5.9681885E-04  -5.7885064E-05
   30   5.8484948E-04  -6.1643341E-05
   31   5.7222538E-04  -6.4443624E-05
   32   5.5913048E-04  -6.6368013E-05
   33   5.4573032E-04  -6.7511197E-05
   34   5.3217196E-04  -6.7965070E-05
   35   5.1858431E-04  -6.7818743E-05
   36   5.0507872E-04  -6.7158542E-05
   37   4.9174955E-04  -6.6068445E-05
   38   4.7867462E-04  -6.4630114E-05
   39   4.6591552E-04  -6.2922496E-05
   40   4.5351849E-04  -6.1021927E-05
   41   4.4151470E-04  -5.9002189E-05
   42   4.2992165E-04  -5.6921875E-05
   43   4.1874723E-04  -5.4823174E-05
   44   4.0799116E-04  -5.2743659E-05
   45   3.9764627E-04  -5.0716467E-05
   46   3.8769919E-04  -4.8770082E-05
   47   3.7813126E-04  -4.6928495E-05
   48   3.6891953E-04  -4.5211376E-05
   49   3.6003742E-04  -4.3634197E-05
   50   3.5145576E-04  -4.2208435E-05
   51   3.4314345E-04  -4.0941672E-05
   52   3.3506842E-04  -3.9838025E-05
   53   3.2719752E-04  -3.8898147E-05
   54   3.1949843E-04  -3.8119199E-05
   55   3.1193954E-04  -3.7494810E-05
   56   3.0449086E-04  -3.7015158E-05
   57   2.9712471E-04  -3.6667011E-05
   58   2.8981640E-04  -3.6433749E-05
   59   2.8254487E-04  -3.6295609E-05
   60   2.7529334E-04  -3.6229674E-05
   61   2.6804994E-04  -3.6209619E-05
   62   2.6442868E-04  -3.6208588E-05
```

```
+----------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*  |
|                                                                                                          |
|                                      NewProject.BaseDesignSection_28.Nominal_63                          |
|                                  Exe Time :24 July 2019      11:09:26                                    |
+----------------------------------------------------------------------------------------------------------+
New Project
```

S T R E S S   R E S U L T S   F O R   G R O U P   N O.   1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 62
C U R R E N T   T I M E   I S   5.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	1.788	-9.1654E-04	10.00	17.88	10.00	21.96	UL-RL	1.5402E+04	0.000	0.000	1.000	1.000	17.88	0.000	0.000	Strato1_2_8_L_0
2 D	3.354	-8.9481E-04	9.159	16.77	9.159	21.11	UL-RL	1.5402E+04	-0.2000	0.000	1.000	1.000	16.77	0.000	0.000	Strato1_2_8_L_0
3 D	3.644	-8.7310E-04	13.94	18.22	13.94	22.83	UL-RL	1.5402E+04	-0.4000	0.000	1.000	1.000	18.22	0.000	0.000	Strato1_2_8_L_0
4 D	3.880	-8.5147E-04	18.14	19.40	18.14	24.28	UL-RL	1.5402E+04	-0.6000	0.000	1.000	1.000	19.40	0.000	0.000	Strato1_2_8_L_0
5 D	4.100	-8.2999E-04	22.16	20.50	22.16	25.64	UL-RL	1.5402E+04	-0.8000	0.000	1.000	1.000	20.50	0.000	0.000	Strato1_2_8_L_0
6 D	4.312	-8.0879E-04	26.09	21.56	26.09	26.97	UL-RL	1.5402E+04	-1.000	0.000	1.000	1.000	21.56	0.000	0.000	Strato1_2_8_L_0
7 D	4.520	-7.8802E-04	29.98	22.60	29.98	28.27	UL-RL	1.5402E+04	-1.200	0.000	1.000	1.000	22.60	0.000	0.000	Strato1_2_8_L_0
8 D	4.724	-7.6789E-04	33.85	23.62	33.85	29.56	UL-RL	1.5402E+04	-1.400	0.000	1.000	1.000	23.62	0.000	0.000	Strato1_2_8_L_0
9 D	4.866	-7.4863E-04	37.03	24.33	37.03	30.52	UL-RL	1.5402E+04	-1.600	0.000	1.000	1.000	24.33	0.000	0.000	Strato1_2_8_L_0
10 D	5.073	-7.3055E-04	40.95	25.37	40.95	31.81	UL-RL	1.5402E+04	-1.800	0.000	1.000	1.000	25.37	0.000	0.000	Strato1_2_8_L_0
11 D	5.277	-7.1397E-04	44.84	26.39	44.84	33.08	UL-RL	1.5402E+04	-2.000	0.000	1.000	1.000	26.39	0.000	0.000	Strato1_2_8_L_0
12 D	5.478	-6.9927E-04	48.72	27.39	48.72	34.33	UL-RL	1.5402E+04	-2.200	0.000	1.000	1.000	27.39	0.000	0.000	Strato1_2_8_L_0
13 D	4.257	-6.8689E-04	52.58	28.38	52.58	35.55	UL-RL	1.5402E+04	-2.400	0.000	1.000	1.000	28.38	0.000	0.000	Strato1_2_8_L_0
14 D	4.315	-6.8172E-04	54.28	28.77	54.28	36.05	UL-RL	1.5402E+04	-2.500	0.000	1.000	1.000	28.77	0.000	0.000	Strato1_2_8_L_0
15 D	5.948	-6.7352E-04	58.15	29.74	58.15	37.24	UL-RL	1.5402E+04	-2.700	0.000	1.000	1.000	29.74	0.000	0.000	Strato1_2_8_L_0
16 D	6.142	-6.6769E-04	62.01	30.71	62.01	38.40	UL-RL	1.5402E+04	-2.900	0.000	1.000	1.000	30.71	0.000	0.000	Strato1_2_8_L_0
17 D	6.336	-6.6357E-04	65.86	31.68	65.86	39.56	UL-RL	1.5402E+04	-3.100	0.000	1.000	1.000	31.68	0.000	0.000	Strato1_2_8_L_0
18 D	6.532	-6.6058E-04	69.70	32.66	69.70	40.70	UL-RL	1.5402E+04	-3.300	0.000	1.000	1.000	32.66	0.000	0.000	Strato1_2_8_L_0
19 D	6.733	-6.5817E-04	73.54	33.67	73.54	41.85	UL-RL	1.5402E+04	-3.500	0.000	1.000	1.000	33.67	0.000	0.000	Strato1_2_8_L_0
20 D	6.940	-6.5589E-04	77.37	34.70	77.37	43.00	UL-RL	1.5402E+04	-3.700	0.000	1.000	1.000	34.70	0.000	0.000	Strato1_2_8_L_0
21 D	7.128	-6.5333E-04	80.92	35.64	80.92	44.02	UL-RL	1.5402E+04	-3.900	0.000	1.000	1.000	35.64	0.000	0.000	Strato1_2_8_L_0
22 D	7.353	-6.5016E-04	84.76	36.76	84.76	45.20	UL-RL	1.5402E+04	-4.100	0.000	1.000	1.000	36.76	0.000	0.000	Strato1_2_8_L_0
23 D	7.358	-6.4610E-04	88.60	36.79	88.60	46.96	UL-RL	1.5402E+04	-4.300	0.000	1.000	1.000	36.79	0.000	0.000	Strato1_2_8_L_0
24 D	7.294	-6.4095E-04	92.43	36.47	92.43	48.99	UL-RL	1.5402E+04	-4.500	0.000	1.000	1.000	36.47	0.000	0.000	Strato1_2_8_L_0
25 D	7.731	-6.3458E-04	96.27	38.65	96.27	51.02	UL-RL	1.5402E+04	-4.700	0.000	1.000	1.000	38.65	0.000	0.000	Strato1_2_8_L_0
26 D	8.170	-6.2694E-04	100.1	40.85	100.1	53.05	UL-RL	1.5402E+04	-4.900	0.000	1.000	1.000	40.85	0.000	0.000	Strato1_2_8_L_0
27 D	8.611	-6.1803E-04	103.9	43.06	103.9	55.08	UL-RL	1.5402E+04	-5.100	0.000	1.000	1.000	43.06	0.000	0.000	Strato1_2_8_L_0
28 D	9.032	-6.0794E-04	107.5	45.16	107.5	56.99	UL-RL	1.5402E+04	-5.300	0.000	1.000	1.000	45.16	0.000	0.000	Strato1_2_8_L_0
29 D	9.479	-5.9682E-04	111.4	47.40	111.4	59.02	UL-RL	1.5402E+04	-5.500	0.000	1.000	1.000	47.40	0.000	0.000	Strato1_2_8_L_0
30 D	9.928	-5.8485E-04	115.2	49.64	115.2	61.05	UL-RL	1.5402E+04	-5.700	0.000	1.000	1.000				

```
49.64       0.000       0.000     Strato1_2_8_L_0
  31 D   10.38     -5.7223E-04  119.0       51.89       119.0       63.08          UL-RL  1.5402E+04  -5.900       0.000       1.000       1.000
51.89       0.000       0.000     Strato1_2_8_L_0
  32 D   10.83     -5.5913E-04  122.8       54.14       122.8       65.11          UL-RL  1.5402E+04  -6.100       0.000       1.000       1.000
54.14       0.000       0.000     Strato1_2_8_L_0
  33 D   11.28     -5.4573E-04  126.7       56.39       126.7       67.14          UL-RL  1.5402E+04  -6.300       0.000       1.000       1.000
56.39       0.000       0.000     Strato1_2_8_L_0
  34 D   11.73     -5.3217E-04  130.5       58.65       130.5       69.16          UL-RL  1.5402E+04  -6.500       0.000       1.000       1.000
58.65       0.000       0.000     Strato1_2_8_L_0
  35 D   12.18     -5.1858E-04  134.3       60.90       134.3       71.19          UL-RL  1.5402E+04  -6.700       0.000       1.000       1.000
60.90       0.000       0.000     Strato1_2_8_L_0
  36 D   12.61     -5.0508E-04  138.0       63.07       138.0       73.12          UL-RL  1.5402E+04  -6.900       0.000       1.000       1.000
63.07       0.000       0.000     Strato1_2_8_L_0
  37 D   13.06     -4.9175E-04  141.8       65.32       141.8       75.15          UL-RL  1.5402E+04  -7.100       0.000       1.000       1.000
65.32       0.000       0.000     Strato1_2_8_L_0
  38 D   13.51     -4.7867E-04  145.6       67.56       145.6       77.18          UL-RL  1.5402E+04  -7.300       0.000       1.000       1.000
67.56       0.000       0.000     Strato1_2_8_L_0
  39 D   13.96     -4.6592E-04  149.4       69.80       149.4       79.20          UL-RL  1.5402E+04  -7.500       0.000       1.000       1.000
69.80       0.000       0.000     Strato1_2_8_L_0
  40 D   14.41     -4.5352E-04  153.3       72.03       153.3       81.22          UL-RL  1.5402E+04  -7.700       0.000       1.000       1.000
72.03       0.000       0.000     Strato1_2_8_L_0
  41 D   10.63     -4.4151E-04  157.2       53.14       157.2       78.59          UL-RL  4.3571E+04  -7.900       0.000       1.000       1.000
53.14       0.000       0.000     Strato2_3095_82743_L_0
  42 D   11.14     -4.2992E-04  161.2       55.69       161.2       80.60          UL-RL  4.3571E+04  -8.100       0.000       1.000       1.000
55.69       0.000       0.000     Strato2_3095_82743_L_0
  43 D   11.63     -4.1875E-04  165.1       58.14       165.1       82.54          UL-RL  4.3571E+04  -8.300       0.000       1.000       1.000
58.14       0.000       0.000     Strato2_3095_82743_L_0
  44 D   12.13     -4.0799E-04  169.1       60.65       169.1       84.55          UL-RL  4.3571E+04  -8.500       0.000       1.000       1.000
60.65       0.000       0.000     Strato2_3095_82743_L_0
  45 D   12.63     -3.9765E-04  173.1       63.13       173.1       86.55          UL-RL  4.3571E+04  -8.700       0.000       1.000       1.000
63.13       0.000       0.000     Strato2_3095_82743_L_0
  46 D   13.12     -3.8770E-04  177.1       65.59       177.1       88.56          UL-RL  4.3571E+04  -8.900       0.000       1.000       1.000
65.59       0.000       0.000     Strato2_3095_82743_L_0
  47 D   13.61     -3.7813E-04  181.1       68.03       181.1       90.57          UL-RL  4.3571E+04  -9.100       0.000       1.000       1.000
68.03       0.000       0.000     Strato2_3095_82743_L_0
  48 D   14.09     -3.6892E-04  185.2       70.44       185.2       92.58          UL-RL  4.3571E+04  -9.300       0.000       1.000       1.000
70.44       0.000       0.000     Strato2_3095_82743_L_0
  49 D   14.57     -3.6004E-04  189.2       72.84       189.2       94.59          UL-RL  4.3571E+04  -9.500       0.000       1.000       1.000
72.84       0.000       0.000     Strato2_3095_82743_L_0
  50 D   15.04     -3.5146E-04  193.2       75.22       193.2       96.59          UL-RL  4.3571E+04  -9.700       0.000       1.000       1.000
75.22       0.000       0.000     Strato2_3095_82743_L_0
  51 D   15.51     -3.4314E-04  197.1       77.53       197.1       98.54          UL-RL  4.3571E+04  -9.900       0.000       1.000       1.000
77.53       0.000       0.000     Strato2_3095_82743_L_0
  52 D   15.98     -3.3507E-04  201.1       79.88       201.1       100.6          UL-RL  4.3571E+04  -10.10       0.000       1.000       1.000
79.88       0.000       0.000     Strato2_3095_82743_L_0
  53 D   16.44     -3.2720E-04  205.1       82.22       205.1       102.6          UL-RL  4.3571E+04  -10.30       0.000       1.000       1.000
82.22       0.000       0.000     Strato2_3095_82743_L_0
  54 D   16.91     -3.1950E-04  209.1       84.55       209.1       104.6          UL-RL  4.3571E+04  -10.50       0.000       1.000       1.000
84.55       0.000       0.000     Strato2_3095_82743_L_0
  55 D   17.37     -3.1194E-04  213.1       86.87       213.1       106.6          UL-RL  4.3571E+04  -10.70       0.000       1.000       1.000
86.87       0.000       0.000     Strato2_3095_82743_L_0
  56 D   17.84     -3.0449E-04  217.2       89.18       217.2       108.6          UL-RL  4.3571E+04  -10.90       0.000       1.000       1.000
89.18       0.000       0.000     Strato2_3095_82743_L_0
  57 D   18.30     -2.9712E-04  221.2       91.49       221.2       110.6          UL-RL  4.3571E+04  -11.10       0.000       1.000       1.000
91.49       0.000       0.000     Strato2_3095_82743_L_0
  58 D   18.75     -2.8982E-04  225.1       93.75       225.1       112.5          UL-RL  4.3571E+04  -11.30       0.000       1.000       1.000
93.75       0.000       0.000     Strato2_3095_82743_L_0
  59 D   19.21     -2.8254E-04  229.1       96.05       229.1       114.6          UL-RL  4.3571E+04  -11.50       0.000       1.000       1.000
96.05       0.000       0.000     Strato2_3095_82743_L_0
  60 D   19.67     -2.7529E-04  233.1       98.36       233.1       116.6          UL-RL  4.3571E+04  -11.70       0.000       1.000       1.000
98.36       0.000       0.000     Strato2_3095_82743_L_0
  61 D   15.10     -2.6805E-04  237.1       100.7       237.1       118.6          UL-RL  4.3571E+04  -11.90       0.000       1.000       1.000
100.7       0.000       0.000     Strato2_3095_82743_L_0
  62 D   5.089     -2.6443E-04  239.1       101.8       239.1       119.5          UL-RL  4.3571E+04  -12.00       0.000       1.000       1.000
101.8       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                  |
 |                                                                                                                               |
 |                                        NewProject.BaseDesignSection_28.Nominal_63                                             |
 |                                   Exe Time :24 July 2019      11:09:26                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                          :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
 C U R R E N T   T I M E   I S      5.0000

  HARDENING 2D SOIL ELEMENT
```

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR
Peq	Su_a	Su_p	LAYER									
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000
0.000	0.000	0.000	not available									
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000
0.000	0.000	0.000	not available									
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
14	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									
15	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000
0.000	0.000	0.000	not available									
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000
0.000	0.000	0.000	not available									
17	0.000	--	--	--	--	--	REMOVED	--	-3.100	0.000	1.000	1.000
0.000	0.000	0.000	not available									
18	0.000	--	--	--	--	--	REMOVED	--	-3.300	0.000	1.000	1.000
0.000	0.000	0.000	not available									
19	0.000	--	--	--	--	--	REMOVED	--	-3.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									
20	0.000	--	--	--	--	--	REMOVED	--	-3.700	0.000	1.000	1.000
0.000	0.000	0.000	not available									
21	0.000	--	--	--	--	--	REMOVED	--	-3.900	0.000	1.000	1.000
0.000	0.000	0.000	not available									
22	0.000	--	--	--	--	--	REMOVED	--	-4.100	0.000	1.000	1.000
0.000	0.000	0.000	not available									
23	0.000	--	--	--	--	--	REMOVED	--	-4.300	0.000	1.000	1.000
0.000	0.000	0.000	not available									
24	0.000	--	--	--	--	--	REMOVED	--	-4.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									
25	0.000	--	--	--	--	--	REMOVED	--	-4.700	0.000	1.000	1.000
0.000	0.000	0.000	not available									
26	0.000	--	--	--	--	--	REMOVED	--	-4.900	0.000	1.000	1.000
0.000	0.000	0.000	not available									
27 D	2.150	6.1803E-04	2.660	10.75	96.90	55.09	PASSIVE	0.000	-5.100	0.000	1.000	1.000
10.75	0.000	0.000	Strato1_2_8_L_0									
28 D	5.221	6.0794E-04	6.460	26.10	100.7	56.78	PASSIVE	0.000	-5.300	0.000	1.000	1.000
26.10	0.000	0.000	Strato1_2_8_L_0									
29 D	8.292	5.9682E-04	10.26	41.46	104.5	58.50	PASSIVE	0.000	-5.500	0.000	1.000	1.000
41.46	0.000	0.000	Strato1_2_8_L_0									
30 D	11.36	5.8485E-04	14.06	56.82	108.3	60.24	PASSIVE	0.000	-5.700	0.000	1.000	1.000
56.82	0.000	0.000	Strato1_2_8_L_0									
31 D	12.40	5.7223E-04	17.86	62.00	112.1	62.00	UL-RL	1.0688E+04	-5.900	0.000	1.000	1.000
62.00	0.000	0.000	Strato1_2_8_L_0									
32 D	12.79	5.5913E-04	21.66	63.96	115.9	63.96	V-C	3563.	-6.100	0.000	1.000	1.000
63.96	0.000	0.000	Strato1_2_8_L_0									
33 D	13.19	5.4573E-04	25.46	65.93	119.7	65.93	V-C	3563.	-6.300	0.000	1.000	1.000
65.93	0.000	0.000	Strato1_2_8_L_0									
34 D	13.58	5.3217E-04	29.26	67.89	123.5	67.89	V-C	3563.	-6.500	0.000	1.000	1.000
67.89	0.000	0.000	Strato1_2_8_L_0									
35 D	13.97	5.1858E-04	33.06	69.85	127.3	69.85	V-C	3563.	-6.700	0.000	1.000	1.000
69.85	0.000	0.000	Strato1_2_8_L_0									
36 D	14.36	5.0508E-04	36.86	71.81	131.1	71.81	V-C	3563.	-6.900	0.000	1.000	1.000
71.81	0.000	0.000	Strato1_2_8_L_0									
37 D	14.75	4.9175E-04	40.66	73.77	134.9	73.77	V-C	3563.	-7.100	0.000	1.000	1.000
73.77	0.000	0.000	Strato1_2_8_L_0									
38 D	15.15	4.7867E-04	44.46	75.74	138.7	75.74	V-C	3563.	-7.300	0.000	1.000	1.000
75.74	0.000	0.000	Strato1_2_8_L_0									
39 D	15.54	4.6592E-04	48.26	77.70	142.5	77.70	V-C	3563.	-7.500	0.000	1.000	1.000
77.70	0.000	0.000	Strato1_2_8_L_0									

40 D	15.93	4.5352E-04	52.06	79.67	146.3	79.67	V-C	3563.	-7.700	0.000	1.000	1.000
79.67	0.000	0.000	Strato1_2_8_L_0									
41 D	11.57	4.4151E-04	55.96	57.84	150.2	76.00	UL-RL	2.3614E+04	-7.900	0.000	1.000	1.000
57.84	0.000	0.000	Strato2_3095_82743_L_0									
42 D	11.97	4.2992E-04	59.96	59.87	154.2	77.96	UL-RL	2.3614E+04	-8.100	0.000	1.000	1.000
59.87	0.000	0.000	Strato2_3095_82743_L_0									
43 D	12.38	4.1875E-04	63.96	61.88	158.2	79.92	UL-RL	2.3614E+04	-8.300	0.000	1.000	1.000
61.88	0.000	0.000	Strato2_3095_82743_L_0									
44 D	12.78	4.0799E-04	67.96	63.89	162.2	81.88	UL-RL	2.3614E+04	-8.500	0.000	1.000	1.000
63.89	0.000	0.000	Strato2_3095_82743_L_0									
45 D	13.18	3.9765E-04	71.96	65.89	166.2	83.84	UL-RL	2.3614E+04	-8.700	0.000	1.000	1.000
65.89	0.000	0.000	Strato2_3095_82743_L_0									
46 D	13.58	3.8770E-04	75.96	67.88	170.2	85.81	UL-RL	2.3614E+04	-8.900	0.000	1.000	1.000
67.88	0.000	0.000	Strato2_3095_82743_L_0									
47 D	13.97	3.7813E-04	79.96	69.87	174.2	87.78	UL-RL	2.3614E+04	-9.100	0.000	1.000	1.000
69.87	0.000	0.000	Strato2_3095_82743_L_0									
48 D	14.37	3.6892E-04	83.96	71.86	178.2	89.75	UL-RL	2.3614E+04	-9.300	0.000	1.000	1.000
71.86	0.000	0.000	Strato2_3095_82743_L_0									
49 D	14.77	3.6004E-04	87.96	73.84	182.2	91.72	UL-RL	2.3614E+04	-9.500	0.000	1.000	1.000
73.84	0.000	0.000	Strato2_3095_82743_L_0									
50 D	15.16	3.5146E-04	91.96	75.82	186.2	93.70	UL-RL	2.3614E+04	-9.700	0.000	1.000	1.000
75.82	0.000	0.000	Strato2_3095_82743_L_0									
51 D	15.56	3.4314E-04	95.96	77.79	190.2	95.68	UL-RL	2.3614E+04	-9.900	0.000	1.000	1.000
77.79	0.000	0.000	Strato2_3095_82743_L_0									
52 D	15.95	3.3507E-04	99.96	79.76	194.2	97.65	UL-RL	2.3614E+04	-10.10	0.000	1.000	1.000
79.76	0.000	0.000	Strato2_3095_82743_L_0									
53 D	16.35	3.2720E-04	104.0	81.73	198.2	99.63	UL-RL	2.3614E+04	-10.30	0.000	1.000	1.000
81.73	0.000	0.000	Strato2_3095_82743_L_0									
54 D	16.74	3.1950E-04	108.0	83.69	202.2	101.6	UL-RL	2.3614E+04	-10.50	0.000	1.000	1.000
83.69	0.000	0.000	Strato2_3095_82743_L_0									
55 D	17.13	3.1194E-04	112.0	85.65	206.2	103.6	UL-RL	2.3614E+04	-10.70	0.000	1.000	1.000
85.65	0.000	0.000	Strato2_3095_82743_L_0									
56 D	17.52	3.0449E-04	116.0	87.61	210.2	105.6	UL-RL	2.3614E+04	-10.90	0.000	1.000	1.000
87.61	0.000	0.000	Strato2_3095_82743_L_0									
57 D	17.91	2.9712E-04	120.0	89.56	214.2	107.6	UL-RL	2.3614E+04	-11.10	0.000	1.000	1.000
89.56	0.000	0.000	Strato2_3095_82743_L_0									
58 D	18.30	2.8982E-04	124.0	91.51	218.2	109.6	UL-RL	2.3614E+04	-11.30	0.000	1.000	1.000
91.51	0.000	0.000	Strato2_3095_82743_L_0									
59 D	18.69	2.8254E-04	128.0	93.46	222.2	111.5	UL-RL	2.3614E+04	-11.50	0.000	1.000	1.000
93.46	0.000	0.000	Strato2_3095_82743_L_0									
60 D	19.08	2.7529E-04	132.0	95.40	226.2	113.5	UL-RL	2.3614E+04	-11.70	0.000	1.000	1.000
95.40	0.000	0.000	Strato2_3095_82743_L_0									
61 D	14.60	2.6805E-04	136.0	97.34	230.2	115.5	UL-RL	2.3614E+04	-11.90	0.000	1.000	1.000
97.34	0.000	0.000	Strato2_3095_82743_L_0									
62 D	4.916	2.6443E-04	138.0	98.31	232.2	116.5	UL-RL	2.3614E+04	-12.00	0.000	1.000	1.000
98.31	0.000	0.000	Strato2_3095_82743_L_0									

```
+-------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*           |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.Nominal_63                                     |
|                                 Exe Time :24 July 2019      11:09:26                                              |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
C U R R E N T   T I M E   I S      5.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-------------------------------------------------------
    1  1.7879     -1.7879    -8.52374E-12 0.35759
    2  5.1420     -5.1420     -0.35759      1.3860
    3  8.7855     -8.7855      -1.3860      3.1431
    4  12.666     -12.666      -3.1431      5.6762
    5  16.765     -16.765      -5.6762      9.0293
    6  21.077     -21.077      -9.0293      13.245
    7  25.597     -25.597      -13.245      18.364
    8  30.321     -30.321      -18.364      24.428
    9  35.187     -35.187      -24.428      31.466
   10  40.260     -40.260      -31.466      39.518
   11  45.537     -45.537      -39.518      48.625
   12  51.015     -51.015      -48.625      58.828
   13  55.272     -55.272      -58.828      64.355
   14 -74.231      74.231      -64.355      49.509
   15 -68.282      68.282      -49.509      35.853
   16 -62.141      62.141      -35.853      23.425
```

17	-55.805	55.805	-23.425	12.264
18	-49.272	49.272	-12.264	2.4092
19	-42.539	42.539	-2.4092	-6.0986
20	-35.599	35.599	6.0986	-13.218
21	-28.470	28.470	13.218	-18.912
22	-21.118	21.118	18.912	-23.136
23	-13.759	13.759	23.136	-25.888
24	-6.4655	6.4655	25.888	-27.181
25	1.2652	-1.2652	27.181	-26.928
26	9.4348	-9.4348	26.928	-25.041
27	15.896	-15.896	25.041	-21.862
28	19.707	-19.707	21.862	-17.920
29	20.894	-20.894	17.920	-13.741
30	19.459	-19.459	13.741	-9.8496
31	17.436	-17.436	9.8496	-6.3625
32	15.471	-15.471	6.3625	-3.2683
33	13.565	-13.565	3.2683	-0.55536
34	11.717	-11.717	0.55536	1.7881
35	9.9284	-9.9284	-1.7881	3.7738
36	8.1799	-8.1799	-3.7738	5.4098
37	6.4889	-6.4889	-5.4098	6.7075
38	4.8539	-4.8539	-6.7075	7.6783
39	3.2736	-3.2736	-7.6783	8.3330
40	1.7461	-1.7461	-8.3330	8.6823
41	0.80546	-0.80546	-8.6823	8.8434
42	-3.05188E-02	3.05188E-02	-8.8434	8.8373
43	-0.77804	0.77804	-8.8373	8.6816
44	-1.4260	1.4260	-8.6816	8.3964
45	-1.9777	1.9777	-8.3964	8.0009
46	-2.4366	2.4366	-8.0009	7.5136
47	-2.8060	2.8060	-7.5136	6.9524
48	-3.0891	3.0891	-6.9524	6.3346
49	-3.2890	3.2890	-6.3346	5.6768
50	-3.4084	3.4084	-5.6768	4.9951
51	-3.4614	3.4614	-4.9951	4.3028
52	-3.4382	3.4382	-4.3028	3.6152
53	-3.3406	3.3406	-3.6152	2.9471
54	-3.1698	3.1698	-2.9471	2.3131
55	-2.9269	2.9269	-2.3131	1.7277
56	-2.6125	2.6125	-1.7277	1.2052
57	-2.2268	2.2268	-1.2052	0.75988
58	-1.7800	1.7800	-0.75988	0.40389
59	-1.2615	1.2615	-0.40389	0.15158
60	-0.67103	0.67103	-0.15158	1.73726E-02
61	-0.17371	0.17371	-1.73726E-02	3.56934E-12

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.Nominal_63                                          |
|                                  Exe Time :24 July 2019      11:09:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_778405                 :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S      5.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------
ANCHOR    1   138.54     -1.29330E-03 -8.36719E-04   0.0000       4682.3       0.0000       0.0000     ELASTIC  ORIGINAL YOUNG MODULUS



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.Nominal_63                                          |
|                                  Exe Time :24 July 2019      11:09:26                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


    F I N A L   I N C R E M E N T A L   A N A L Y S I S

                  S U M M A R Y

    STEP                                NO. OF ITERATIONS
```

```
        1           CONVERGENCE :YES                    2
        2           CONVERGENCE :YES                    4
        3           CONVERGENCE :YES                    5
        4           CONVERGENCE :YES                    4
        5           CONVERGENCE :YES                    3


 END OF PROCESS FOR PROBLEM
New Project
NONLINEAR SOLUTION CPU TIME ....    0.05 [sec]
DATABASE  CREATION CPU TIME.....    0.22 [sec]
```

2.3. Design Assumption : SLE (Rara) - File di Paratie - File di input (.d)

```
* PARATIE ANALYSIS FOR DESIGN SECTION:Base Design Section USING ASSUMPTION: SLE (Rara)
 * Time:mercoledì 24 luglio 2019 11:09:27
 * 1: Defining general settings
 UNIT  m kN
 TITLE New Project
 DELTA 0.2
 option param itemax 100
 option control hinges 0 0.0001 0.001

 * 2: Defining wall(s)
 WALL LeftWall_32 0 -12 0 1

 * 3: Defining surfaces for wall(s)
 SOIL 0_L LeftWall_32 -12 0 1 0
 SOIL 0_R LeftWall_32 -12 0 2 180

 * 4: Defining soil layers
 *
 * Soil Profile (Strato1_2_8_L_0)
 *
 LDATA Strato1_2_8_L_0 0 LeftWall_32
 ATREST 0.53 1 1
 WEIGHT 19 9 10
 PERMEABILITY 1E-06
 RESISTANCE 0 29
 YOUNG 2E+04 6E+04
 ENDL
 *
 * Soil Profile (Strato2_3095_82743_L_0)
 *
 LDATA Strato2_3095_82743_L_0 -7.8 LeftWall_32
 ATREST 0.5 0.5 1
 WEIGHT 20 10 10
 PERMEABILITY 0.0001
 RESISTANCE 20 35
 YOUNG 5E+04 1.5E+05
 ENDL

 * 5: Defining structural materials
 * Steel material: 108 Name=Fe360 E=206000200 kPa
 MATERIAL Fe360_108 2.06E+08
 * Concrete material: 104 Name=C25/30 E=31475800 kPa
 MATERIAL C2530_104 3.148E+07
 * Rebar material: 124 Name=acciaio armonico E=200100000 kPa
 MATERIAL acciaioarmonico_124 2.001E+08
 * Concrete material: 103 Name=C20/25 E=29962000 kPa
 MATERIAL C2025_103 2.996E+07

 * 6: Defining structural elements
 * 6.1: Beams and combined Wall Elements
 BEAM WallElement_33 LeftWall_32 -12 0 C2530_104 0.6848 00 00 0


 * 6.2: Supports
 WIRE Tieback_778405 LeftWall_32 -2.5 acciaioarmonico_124 2.34E-05 136.4 15 0 0




 * 6.3: Strips
 STRIP LeftWall_32 2 5 0 40 0 10 30

 * 7: Defining Steps
 STEP Stage0_31
 CHANGE Strato1_2_8_L_0 U-FRICT=29 LeftWall_32
```

```
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato1_2_8_L_0 U-KA=0.304 LeftWall_32
CHANGE Strato1_2_8_L_0 U-KP=4.041 LeftWall_32
CHANGE Strato1_2_8_L_0 D-KA=0.304 LeftWall_32
CHANGE Strato1_2_8_L_0 D-KP=4.041 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-FRICT=35 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-KA=0.235 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-KP=5.879 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-KA=0.235 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-KP=5.879 LeftWall_32
CHANGE Strato1_2_8_L_0 U-COHE=0 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-COHE=20 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -26 0 -12 0 0
ADD WallElement_33
ENDSTEP

STEP Stage1_759103
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -26 0 -12 0 0
ENDSTEP

STEP Stage3_775251
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -3
WATER -26 0 -12 0 0
ENDSTEP

STEP Stage4_775610
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -3
WATER -26 0 -12 0 0
ADD Tieback_778405
ENDSTEP

STEP Stage5_714
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -4.96
WATER -26 0 -12 0 0
ENDSTEP
```

2.4. Design Assumption : SLE (Rara) - File di Paratie - File di output (.out)

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                   Exe Time :24 July 2019      11:09:27                                                  |
+-------------------------------------------------------------------------------------------------------------------------+

                  ***********************************************************
                  *                                                         *
                  *  PARATIE PLUS Non-Linear Spring Engine                  *
                  *                                                         *
                  *          AN ELASTOPLASTIC FINITE ELEMENT PROGRAM        *
                  *          FOR FLEXIBLE EARTH-RETAINING STRUCTURES        *
                  *                                                         *
                  *          Written by Ce.A.S. s.r.l. (ITALY)              *
                  *          with the scientific supervision of             *
                  *          Roberto Nova - full professor SOIL MECHANICS   *
```

```
*          at Politecnico di Milano (ITALY)              *
*                                                        *
**********************************************************
*                                                        *
*  RELEASE   2017.1     *Build date:Jul 11, 2017*    *
*                                                        *
*                                                        *
*  Ce.A.S.     S.R.L   CENTRO DI ANALISI STRUTTURALE     *
*              VIALE   GIUSTINIANO 10                    *
*              20129   M I L A N O  (ITALIA)             *
*  TEL.        +39 02 2020221   (+39 035 23 67 19)       *
*  FAX         +39 02 29512533  (+39 035 42285 49)       *
*  email       bruno.becci@ceas.it                       *
*  Web Page    www.ceas.it                               *
**********************************************************



 JOB : NewProject.BaseDesignSection_28.SLERara_3454
 STARTING
ACCEPTED   <FILE,GENW                                                    >
ACCEPTED   <FILE,PLOTTER,BINARY                                          >
ACCEPTED   <SOLVE TOTAL_STRESS                                           >
ACCEPTED   <PARAM ITEMAX 100                                             >
ACCEPTED   <CONTROL HINGES 0 0.0001 0.001                                >



**********************************************************
*                                                        *
*  WARNING : PORE PRESSURES ARE AUTOMATICALLY COMPUTED   *
*    BY THE PROGRAM.                                     *
**********************************************************

PRELIMINARY OPERATIONS CPU TIME     0.00 [sec]
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.SLERara_3454                                        |
|                                  Exe Time :24 July 2019      11:09:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


INPUT FILE HAS BEEN GENERATED BY WALGEN PROGRAM


New Project


NO. OF NODAL POINTS (NUMNP) ...................   62
NO. OF COORDINATES  (NCOORD)...................    2
NO. OF NODE DOFS    (NDOF).....................    2
NO. OF EQUATIONS    (NEQ)...................... 124
NO. OF CONSTRAINTS CARDS (NVINC)...............    0
NO. OF ELEMENT GROUPS (NEG).....................    4
NO. OF SOLUTION STEPS (NSTE)...................    5
NO. OF ELEMENT SETS ATTACHED TO SLAVE NODES ...    0
NO. OF RECORD FROM WALGEN .....................   88
NO. OF LONG NAMES (LASTNAME) ..................   21
LENGTH UNIT CHOICE ............................    3 (M   )
FORCE  UNIT CHOICE ............................    3 (KN  )
MAX PORE PRESSURE TABLE LENGTH.................    1
NO. OF ELEMENT GROUPS REQUIRING ADD. SLIP DOF .    0


IDOFA (01) =  2  Y-DISPL.F
IDOFA (02) =  4   X-ROT. F

 RELEVANT ITEMS UNITS

 STRESSES                  kPa
 Y-DISPLACEMENTS           m
 ROTATIONS                 RADIANS
 BEAM AND SLAB MOMENTS     kN*m/m
 BEAM SHEAR FORCES         kN/m
 ANCHOR FORCES             kN/m
 AXIAL FORCES IN TRUSSES   kN/m
 AXIAL FORCES SPRINGS      kN/m
 Y-REACTIONS               kN/m
 X-MOMENT REACTIONS        kN*m/m
 ETC.



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.SLERara_3454                                        |
|                                  Exe Time :24 July 2019      11:09:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
                   P R E P R O C E S S O R     D A T A

                   N O.  O F   C O M M A N D S     88

    1 : UNIT  m kN
    2 : TITLE New Project
    3 : DELTA 0.2
    4 : option param itemax 100
    5 : option control hinges 0 0.0001 0.001
    6 : WALL LeftWall_32 0 -12 0 1
    7 : SOIL 0_L LeftWall_32 -12 0 1 0
    8 : SOIL 0_R LeftWall_32 -12 0 2 180
    9 : LDATA Strato1_2_8_L_0 0 LeftWall_32
   10 : ATREST 0.53 1 1
   11 : WEIGHT 19 9 10
   12 : PERMEABILITY 1E-06
   13 : RESISTANCE 0 29
   14 : YOUNG 2E+04 6E+04
   15 : ENDL
   16 : LDATA Strato2_3095_82743_L_0 -7.8 LeftWall_32
   17 : ATREST 0.5 0.5 1
   18 : WEIGHT 20 10 10
   19 : PERMEABILITY 0.0001
   20 : RESISTANCE 20 35
   21 : YOUNG 5E+04 1.5E+05
   22 : ENDL
```

```
   23 : MATERIAL Fe360_108 2.06E+08
   24 : MATERIAL C2530_104 3.148E+07
   25 : MATERIAL acciaioarmonico_124 2.001E+08
   26 : MATERIAL C2025_103 2.996E+07
   27 : BEAM WallElement_33 LeftWall_32 -12 0 C2530_104 0.6848 00 00 0
   28 : WIRE Tieback_778405 LeftWall_32 -2.5 acciaioarmonico_124 2.34E-05 136.4 15 0 0
   29 : STRIP LeftWall_32 2 5 0 40 0 10 30
   30 : STEP Stage0_31
   31 : CHANGE Strato1_2_8_L_0 U-FRICT=29 LeftWall_32
   32 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
   33 : CHANGE Strato1_2_8_L_0 U-KA=0.304 LeftWall_32
   34 : CHANGE Strato1_2_8_L_0 U-KP=4.041 LeftWall_32
   35 : CHANGE Strato1_2_8_L_0 D-KA=0.304 LeftWall_32
   36 : CHANGE Strato1_2_8_L_0 D-KP=4.041 LeftWall_32
   37 : CHANGE Strato2_3095_82743_L_0 U-FRICT=35 LeftWall_32
   38 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
   39 : CHANGE Strato2_3095_82743_L_0 U-KA=0.235 LeftWall_32
   40 : CHANGE Strato2_3095_82743_L_0 U-KP=5.879 LeftWall_32
   41 : CHANGE Strato2_3095_82743_L_0 D-KA=0.235 LeftWall_32
   42 : CHANGE Strato2_3095_82743_L_0 D-KP=5.879 LeftWall_32
   43 : CHANGE Strato1_2_8_L_0 U-COHE=0 LeftWall_32
   44 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
   45 : CHANGE Strato2_3095_82743_L_0 U-COHE=20 LeftWall_32
   46 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
   47 : SETWALL LeftWall_32
   48 : GEOM 0 0
   49 : WATER -26 0 -12 0 0
   50 : ADD WallElement_33
   51 : ENDSTEP
   52 : STEP Stage1_759103
   53 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
   54 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
   55 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
   56 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
   57 : SETWALL LeftWall_32
   58 : GEOM 0 0
   59 : WATER -26 0 -12 0 0
   60 : ENDSTEP
   61 : STEP Stage3_775251
   62 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
   63 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
   64 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
   65 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
   66 : SETWALL LeftWall_32
   67 : GEOM 0 -3
   68 : WATER -26 0 -12 0 0
   69 : ENDSTEP
   70 : STEP Stage4_775610
   71 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
   72 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
   73 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
   74 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
   75 : SETWALL LeftWall_32
   76 : GEOM 0 -3
   77 : WATER -26 0 -12 0 0
   78 : ADD Tieback_778405
   79 : ENDSTEP
   80 : STEP Stage5_714
   81 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
   82 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
   83 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
   84 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
   85 : SETWALL LeftWall_32
   86 : GEOM 0 -4.96
   87 : WATER -26 0 -12 0 0
   88 : ENDSTEP


+-----------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                  Exe Time :24 July 2019      11:09:27                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
N O D A L    P O I N T    D A T A
--------------------------------

NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD /

   1  0.0000      0.0000     /    2  0.0000    -0.20000     /    3  0.0000    -0.40000     /    4  0.0000    -0.60000     /
   5  0.0000    -0.80000     /    6  0.0000     -1.0000     /    7  0.0000     -1.2000     /    8  0.0000     -1.4000     /
   9  0.0000     -1.6000     /   10  0.0000     -1.8000     /   11  0.0000     -2.0000     /   12  0.0000     -2.2000     /
  13  0.0000     -2.4000     /   14  0.0000     -2.5000     /   15  0.0000     -2.7000     /   16  0.0000     -2.9000     /
```

```
  17  0.0000     -3.1000     /   18  0.0000     -3.3000     /   19  0.0000     -3.5000     /   20  0.0000     -3.7000     /
  21  0.0000     -3.9000     /   22  0.0000     -4.1000     /   23  0.0000     -4.3000     /   24  0.0000     -4.5000     /
  25  0.0000     -4.7000     /   26  0.0000     -4.9000     /   27  0.0000     -5.1000     /   28  0.0000     -5.3000     /
  29  0.0000     -5.5000     /   30  0.0000     -5.7000     /   31  0.0000     -5.9000     /   32  0.0000     -6.1000     /
  33  0.0000     -6.3000     /   34  0.0000     -6.5000     /   35  0.0000     -6.7000     /   36  0.0000     -6.9000     /
  37  0.0000     -7.1000     /   38  0.0000     -7.3000     /   39  0.0000     -7.5000     /   40  0.0000     -7.7000     /
  41  0.0000     -7.9000     /   42  0.0000     -8.1000     /   43  0.0000     -8.3000     /   44  0.0000     -8.5000     /
  45  0.0000     -8.7000     /   46  0.0000     -8.9000     /   47  0.0000     -9.1000     /   48  0.0000     -9.3000     /
  49  0.0000     -9.5000     /   50  0.0000     -9.7000     /   51  0.0000     -9.9000     /   52  0.0000     -10.100     /
  53  0.0000     -10.300     /   54  0.0000     -10.500     /   55  0.0000     -10.700     /   56  0.0000     -10.900     /
  57  0.0000     -11.100     /   58  0.0000     -11.300     /   59  0.0000     -11.500     /   60  0.0000     -11.700     /
  61  0.0000     -11.900     /   62  0.0000     -12.000     /


+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                   Exe Time :24 July 2019      11:09:27                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  1

0_L                            :
   5  62   0   1   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
.........2D PLASTIC SOIL ..........
.....................................

element group behaviour throughout stage analysis

stage   status
------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area      .....     .....     .....      flag
-------------------------------------------------------------------

    1    1    1   0.1000     0.000     0.000     0.000     1.000
    2    2    1   0.2000     0.000     0.000     0.000     1.000
    3    3    1   0.2000     0.000     0.000     0.000     1.000
    4    4    1   0.2000     0.000     0.000     0.000     1.000
    5    5    1   0.2000     0.000     0.000     0.000     1.000
    6    6    1   0.2000     0.000     0.000     0.000     1.000
    7    7    1   0.2000     0.000     0.000     0.000     1.000
    8    8    1   0.2000     0.000     0.000     0.000     1.000
    9    9    1   0.2000     0.000     0.000     0.000     1.000
   10   10    1   0.2000     0.000     0.000     0.000     1.000
   11   11    1   0.2000     0.000     0.000     0.000     1.000
   12   12    1   0.2000     0.000     0.000     0.000     1.000
   13   13    1   0.1500     0.000     0.000     0.000     1.000
   14   14    1   0.1500     0.000     0.000     0.000     1.000
   15   15    1   0.2000     0.000     0.000     0.000     1.000
   16   16    1   0.2000     0.000     0.000     0.000     1.000
   17   17    1   0.2000     0.000     0.000     0.000     1.000
   18   18    1   0.2000     0.000     0.000     0.000     1.000
   19   19    1   0.2000     0.000     0.000     0.000     1.000
   20   20    1   0.2000     0.000     0.000     0.000     1.000
   21   21    1   0.2000     0.000     0.000     0.000     1.000
   22   22    1   0.2000     0.000     0.000     0.000     1.000
   23   23    1   0.2000     0.000     0.000     0.000     1.000
   24   24    1   0.2000     0.000     0.000     0.000     1.000
   25   25    1   0.2000     0.000     0.000     0.000     1.000
   26   26    1   0.2000     0.000     0.000     0.000     1.000
   27   27    1   0.2000     0.000     0.000     0.000     1.000
   28   28    1   0.2000     0.000     0.000     0.000     1.000
```

29	29	1	0.2000	0.000	0.000	0.000	1.000
30	30	1	0.2000	0.000	0.000	0.000	1.000
31	31	1	0.2000	0.000	0.000	0.000	1.000
32	32	1	0.2000	0.000	0.000	0.000	1.000
33	33	1	0.2000	0.000	0.000	0.000	1.000
34	34	1	0.2000	0.000	0.000	0.000	1.000
35	35	1	0.2000	0.000	0.000	0.000	1.000
36	36	1	0.2000	0.000	0.000	0.000	1.000
37	37	1	0.2000	0.000	0.000	0.000	1.000
38	38	1	0.2000	0.000	0.000	0.000	1.000
39	39	1	0.2000	0.000	0.000	0.000	1.000
40	40	1	0.2000	0.000	0.000	0.000	1.000
41	41	2	0.2000	0.000	0.000	0.000	1.000
42	42	2	0.2000	0.000	0.000	0.000	1.000
43	43	2	0.2000	0.000	0.000	0.000	1.000
44	44	2	0.2000	0.000	0.000	0.000	1.000
45	45	2	0.2000	0.000	0.000	0.000	1.000
46	46	2	0.2000	0.000	0.000	0.000	1.000
47	47	2	0.2000	0.000	0.000	0.000	1.000
48	48	2	0.2000	0.000	0.000	0.000	1.000
49	49	2	0.2000	0.000	0.000	0.000	1.000
50	50	2	0.2000	0.000	0.000	0.000	1.000
51	51	2	0.2000	0.000	0.000	0.000	1.000
52	52	2	0.2000	0.000	0.000	0.000	1.000
53	53	2	0.2000	0.000	0.000	0.000	1.000
54	54	2	0.2000	0.000	0.000	0.000	1.000
55	55	2	0.2000	0.000	0.000	0.000	1.000
56	56	2	0.2000	0.000	0.000	0.000	1.000
57	57	2	0.2000	0.000	0.000	0.000	1.000
58	58	2	0.2000	0.000	0.000	0.000	1.000
59	59	2	0.2000	0.000	0.000	0.000	1.000
60	60	2	0.2000	0.000	0.000	0.000	1.000
61	61	2	0.1500	0.000	0.000	0.000	1.000
62	62	2	0.5000E-01	0.000	0.000	0.000	1.000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                         |
|                                 Exe Time :24 July 2019      11:09:27                                                    |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  2

0_R                             :
   5  62   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
..........2D PLASTIC SOIL ..........
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area      .....     .....     .....      flag
-------------------------------------------------------------------
```

1	1	1	0.1000	0.000	0.000	0.000	2.000
2	2	1	0.2000	0.000	0.000	0.000	2.000
3	3	1	0.2000	0.000	0.000	0.000	2.000
4	4	1	0.2000	0.000	0.000	0.000	2.000
5	5	1	0.2000	0.000	0.000	0.000	2.000
6	6	1	0.2000	0.000	0.000	0.000	2.000

7	7	1	0.2000	0.000	0.000	0.000	2.000
8	8	1	0.2000	0.000	0.000	0.000	2.000
9	9	1	0.2000	0.000	0.000	0.000	2.000
10	10	1	0.2000	0.000	0.000	0.000	2.000
11	11	1	0.2000	0.000	0.000	0.000	2.000
12	12	1	0.2000	0.000	0.000	0.000	2.000
13	13	1	0.1500	0.000	0.000	0.000	2.000
14	14	1	0.1500	0.000	0.000	0.000	2.000
15	15	1	0.2000	0.000	0.000	0.000	2.000
16	16	1	0.2000	0.000	0.000	0.000	2.000
17	17	1	0.2000	0.000	0.000	0.000	2.000
18	18	1	0.2000	0.000	0.000	0.000	2.000
19	19	1	0.2000	0.000	0.000	0.000	2.000
20	20	1	0.2000	0.000	0.000	0.000	2.000
21	21	1	0.2000	0.000	0.000	0.000	2.000
22	22	1	0.2000	0.000	0.000	0.000	2.000
23	23	1	0.2000	0.000	0.000	0.000	2.000
24	24	1	0.2000	0.000	0.000	0.000	2.000
25	25	1	0.2000	0.000	0.000	0.000	2.000
26	26	1	0.2000	0.000	0.000	0.000	2.000
27	27	1	0.2000	0.000	0.000	0.000	2.000
28	28	1	0.2000	0.000	0.000	0.000	2.000
29	29	1	0.2000	0.000	0.000	0.000	2.000
30	30	1	0.2000	0.000	0.000	0.000	2.000
31	31	1	0.2000	0.000	0.000	0.000	2.000
32	32	1	0.2000	0.000	0.000	0.000	2.000
33	33	1	0.2000	0.000	0.000	0.000	2.000
34	34	1	0.2000	0.000	0.000	0.000	2.000
35	35	1	0.2000	0.000	0.000	0.000	2.000
36	36	1	0.2000	0.000	0.000	0.000	2.000
37	37	1	0.2000	0.000	0.000	0.000	2.000
38	38	1	0.2000	0.000	0.000	0.000	2.000
39	39	1	0.2000	0.000	0.000	0.000	2.000
40	40	1	0.2000	0.000	0.000	0.000	2.000
41	41	2	0.2000	0.000	0.000	0.000	2.000
42	42	2	0.2000	0.000	0.000	0.000	2.000
43	43	2	0.2000	0.000	0.000	0.000	2.000
44	44	2	0.2000	0.000	0.000	0.000	2.000
45	45	2	0.2000	0.000	0.000	0.000	2.000
46	46	2	0.2000	0.000	0.000	0.000	2.000
47	47	2	0.2000	0.000	0.000	0.000	2.000
48	48	2	0.2000	0.000	0.000	0.000	2.000
49	49	2	0.2000	0.000	0.000	0.000	2.000
50	50	2	0.2000	0.000	0.000	0.000	2.000
51	51	2	0.2000	0.000	0.000	0.000	2.000
52	52	2	0.2000	0.000	0.000	0.000	2.000
53	53	2	0.2000	0.000	0.000	0.000	2.000
54	54	2	0.2000	0.000	0.000	0.000	2.000
55	55	2	0.2000	0.000	0.000	0.000	2.000
56	56	2	0.2000	0.000	0.000	0.000	2.000
57	57	2	0.2000	0.000	0.000	0.000	2.000
58	58	2	0.2000	0.000	0.000	0.000	2.000
59	59	2	0.2000	0.000	0.000	0.000	2.000
60	60	2	0.2000	0.000	0.000	0.000	2.000
61	61	2	0.1500	0.000	0.000	0.000	2.000
62	62	2	0.5000E-01	0.000	0.000	0.000	2.000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                   Exe Time :24 July 2019      11:09:27                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  3

WallElement_33                  :
   2  61   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   1   0
.....................................
.....2D WALL ELEMENT.....
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1
```

```
 prop( 1) young modulus      0.314800E+08
 prop( 2) modification  time  0.00000
 prop( 3) new young modulus   0.00000
 prop( 4) poisson ratio       0.00000
 prop( 5) future .............0.252200E-43

 no. of step variable items:     1
 step  inertia multipier
--------------------------
    1   1.000
    2   1.000
    3   1.000
    4   1.000
    5   1.000

 element data
```

el	na	nb	mat	erc1	erc2	thick	by-i	by-j
1	1	2	1	0.000	0.000	0.6848	0.000	0.000
2	2	3	1	0.000	0.000	0.6848	0.000	0.000
3	3	4	1	0.000	0.000	0.6848	0.000	0.000
4	4	5	1	0.000	0.000	0.6848	0.000	0.000
5	5	6	1	0.000	0.000	0.6848	0.000	0.000
6	6	7	1	0.000	0.000	0.6848	0.000	0.000
7	7	8	1	0.000	0.000	0.6848	0.000	0.000
8	8	9	1	0.000	0.000	0.6848	0.000	0.000
9	9	10	1	0.000	0.000	0.6848	0.000	0.000
10	10	11	1	0.000	0.000	0.6848	0.000	0.000
11	11	12	1	0.000	0.000	0.6848	0.000	0.000
12	12	13	1	0.000	0.000	0.6848	0.000	0.000
13	13	14	1	0.000	0.000	0.6848	0.000	0.000
14	14	15	1	0.000	0.000	0.6848	0.000	0.000
15	15	16	1	0.000	0.000	0.6848	0.000	0.000
16	16	17	1	0.000	0.000	0.6848	0.000	0.000
17	17	18	1	0.000	0.000	0.6848	0.000	0.000
18	18	19	1	0.000	0.000	0.6848	0.000	0.000
19	19	20	1	0.000	0.000	0.6848	0.000	0.000
20	20	21	1	0.000	0.000	0.6848	0.000	0.000
21	21	22	1	0.000	0.000	0.6848	0.000	0.000
22	22	23	1	0.000	0.000	0.6848	0.000	0.000
23	23	24	1	0.000	0.000	0.6848	0.000	0.000
24	24	25	1	0.000	0.000	0.6848	0.000	0.000
25	25	26	1	0.000	0.000	0.6848	0.000	0.000
26	26	27	1	0.000	0.000	0.6848	0.000	0.000
27	27	28	1	0.000	0.000	0.6848	0.000	0.000
28	28	29	1	0.000	0.000	0.6848	0.000	0.000
29	29	30	1	0.000	0.000	0.6848	0.000	0.000
30	30	31	1	0.000	0.000	0.6848	0.000	0.000
31	31	32	1	0.000	0.000	0.6848	0.000	0.000
32	32	33	1	0.000	0.000	0.6848	0.000	0.000
33	33	34	1	0.000	0.000	0.6848	0.000	0.000
34	34	35	1	0.000	0.000	0.6848	0.000	0.000
35	35	36	1	0.000	0.000	0.6848	0.000	0.000
36	36	37	1	0.000	0.000	0.6848	0.000	0.000
37	37	38	1	0.000	0.000	0.6848	0.000	0.000
38	38	39	1	0.000	0.000	0.6848	0.000	0.000
39	39	40	1	0.000	0.000	0.6848	0.000	0.000
40	40	41	1	0.000	0.000	0.6848	0.000	0.000
41	41	42	1	0.000	0.000	0.6848	0.000	0.000
42	42	43	1	0.000	0.000	0.6848	0.000	0.000
43	43	44	1	0.000	0.000	0.6848	0.000	0.000
44	44	45	1	0.000	0.000	0.6848	0.000	0.000
45	45	46	1	0.000	0.000	0.6848	0.000	0.000
46	46	47	1	0.000	0.000	0.6848	0.000	0.000
47	47	48	1	0.000	0.000	0.6848	0.000	0.000
48	48	49	1	0.000	0.000	0.6848	0.000	0.000
49	49	50	1	0.000	0.000	0.6848	0.000	0.000
50	50	51	1	0.000	0.000	0.6848	0.000	0.000
51	51	52	1	0.000	0.000	0.6848	0.000	0.000
52	52	53	1	0.000	0.000	0.6848	0.000	0.000
53	53	54	1	0.000	0.000	0.6848	0.000	0.000
54	54	55	1	0.000	0.000	0.6848	0.000	0.000
55	55	56	1	0.000	0.000	0.6848	0.000	0.000
56	56	57	1	0.000	0.000	0.6848	0.000	0.000
57	57	58	1	0.000	0.000	0.6848	0.000	0.000
58	58	59	1	0.000	0.000	0.6848	0.000	0.000
59	59	60	1	0.000	0.000	0.6848	0.000	0.000
60	60	61	1	0.000	0.000	0.6848	0.000	0.000
61	61	62	1	0.000	0.000	0.6848	0.000	0.000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.SLERara_3454                                        |
|                                  Exe Time :24 July 2019      11:09:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  4

Tieback_778405                  :
   6   1   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   2   0
.....................................
.....2D POST-TENSION ANCHOR....
.....................................

element group behaviour throughout stage analysis

stage   status
------------------
    1  inactive
    2  inactive
    3  inactive
    4   active
    5   active

 material set no.    1

 prop( 1) angle          15.0000
 prop( 2) young modulus 0.200100E+09
 prop( 3) modification  time  0.00000
 prop( 4) new young modulus   0.00000

 no. of step variable items:     2
 step   -ve lim     +ve lim
-----------------------------
    1   0.000       0.000
    2   0.000       0.000
    3   0.000       0.000
    4   0.000       0.000
    5   0.000       0.000

 element data

   el    n  mat       a/l     pinit    yieldc    yieldt
-----------------------------------------------------------

    1   14    1   0.2340E-04 136.4     0.000     0.000
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.SLERara_3454                                        |
|                                  Exe Time :24 July 2019      11:09:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


NO. OF NODAL LOADS  (NLOAD) ...................    0
NO. OF LOAD CURVES  (NLCUR) ...................   10
MAXIMUM POINTS/LCURVE (NPTM)...................    5



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.SLERara_3454                                        |
|                                  Exe Time :24 July 2019      11:09:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
L O A D     D A T A


    LOAD FUNCTION NUMBER   =    1
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       1.20000    0.0000E+00
       6.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    2
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       2.20000    0.0000E+00
       6.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    3
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       3.20000    0.0000E+00
       6.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    4
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       3.80000    0.0000E+00
       4.00000    0.1000E+01
       4.20000    0.0000E+00
       6.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    5
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION
```

```
       0.00000    0.0000E+00
       4.80000    0.0000E+00
       5.00000    0.1000E+01
       5.20000    0.0000E+00
       6.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    6
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =    7
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =    8
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =    9
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       3.80000    0.0000E+00
       4.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =   10
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       4.80000    0.0000E+00
       5.00000    0.1000E+01
       6.00000    0.1000E+01


NO. OF DISTRIBUTED LOAD CARDS     0




+-----------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                  Exe Time :24 July 2019      11:09:27                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
L O A D     B A L A N C E

STEP     1 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     1 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000
```

```
STEP     2 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     2 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     3 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     3 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     4 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     4 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     5 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     5 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000


                     LOAD INPUT SECTION COMPLETED



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                       |
|                                     NewProject.BaseDesignSection_28.SLERara_3454                                      |
|                                  Exe Time :24 July 2019      11:09:27                                                 |
+-----------------------------------------------------------------------------------------------------------------------+


NO. OF LAYERS ..............................    2
NO. OF DATA PER LAYER.......................  100



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                       |
|                                     NewProject.BaseDesignSection_28.SLERara_3454                                      |
|                                  Exe Time :24 July 2019      11:09:27                                                 |
+-----------------------------------------------------------------------------------------------------------------------+

LAYER DESCRIPTORS FOR STEP NO.    1


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.30400     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.0410     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.23500     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.8790     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
```

```
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    2


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.30400     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.0410     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.23500     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.8790     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    3


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.30400     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.0410     WALL NO.        1
```

```
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.23500     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.8790     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    4


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    4

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.30400     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.0410     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    4

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.23500     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.8790     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
```

```
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    5


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    5

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.30400     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.0410     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    5

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.23500     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.8790     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)


DEFAULT WATER UNIT WEIGHT =  10.000
AVERAGED ON    10 VALUES




+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                  Exe Time :24 July 2019      11:09:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
```

PHASE DESCRIPTORS

STEP NO. 1

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	0.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-12.00	-12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 1

STEP NO. 2

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	0.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-12.00	-12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 2

STEP NO. 3

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-3.000	0.000

Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-12.00	-12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 3

STEP NO. 4

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-3.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-12.00	-12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 4

STEP NO. 5

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-4.960	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-12.00	-12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000

```
PORE_UPDATE_FLAG                          0.000         0.000
PORE_TAB. _FLAG (gt.0= use tabs)          0.000         0.000
lateral thrusts reduction elevatio        0.000         0.000
Downhill reduction factor for effe        0.000         0.000
Downhill reduction factor for pore        0.000         0.000
Uphill reduction factor for effect        0.000         0.000
Uphill reduction factor for pore p        0.000         0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]          0.000         0.000
UPHILL VERTICAL ACCEL.  Kv_uh [g]         0.000         0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]         0.000         0.000
UPHILL BETA ANGLE (SLOPE) [deg]           0.000         0.000
UPHILL DELTA/PHI RATIO                    0.000         0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]         0.000         0.000
DOWNHILL DELTA/PHI RATIO                  0.000         0.000
DYN.WATER BEHAVIOUR                       0.000         0.000
Excess pore pressure RATIO Ru             0.000         0.000
SEISMIC PRESSURE LOWER VALUE              0.000         0.000
SEISMIC PRESSURE UPPER VALUE              0.000         0.000
SEISMIC PRESSURE LOWER LEVEL              0.000         0.000
SEISMIC PRESSURE UPPER LEVEL              0.000         0.000

================================================================================================================end of step    5


 LEFT-HAND WALL

 LOWER  LEVEL         -12.00000
 UPPER  LEVEL           0.00000

 RIGHT-HAND WALL

 LOWER  LEVEL         -12.00000
 UPPER  LEVEL           0.00000




+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                         |
|                                Exe Time :24 July 2019      11:09:27                                                     |
+-------------------------------------------------------------------------------------------------------------------------+
 I N I T I A L    S T R E S S    T A B L E S

            S E C T I O N

 NUMBER OF DEFINED TABLES             1


INPUT DATA FOR INITIAL STRESS SET NO.    1
PERTAINING SOIL ELEMENTS AT Y-COORD    0.0000

ACTIVATION TIME                              2.0000
END TIME (TIME BEYOND WHICH IT IS REMOVED)   5.0000

TYPE BOUSSINESQ

 HORIZONTAL DISTANCE (DY)          0.000000000000000E+000
 FOUNDATION WIDTH    (B)            40.0000000000000
 ZETA-F.....                       0.000000000000000E+000
 Q-F .....                          10.0000000000000
 BETA .....                         30.0000000000000
 BEHAVIOUR (0=FREE, 1=REFLECTING)  0.000000000000000E+000


 ELEMENT GROUPS BACKUP AREA CAN STAY IN CORE AT
 POSITION        3534

 NO. OF D.P.W  FOR THIS AREA       7376
 MAX NO. OF D.P.W. AVAILABLE      81920
 ** MAX NO OF ITERATIONS SET TO         100

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2144E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 22.62     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2144E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   124 NODE     62 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1   Y-DISPL.F
```

```
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     1 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2144E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 22.62     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2144E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   124 NODE     62 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2144E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 22.62     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2144E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   124 NODE     62 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                 Exe Time :24 July 2019      11:09:27                                                  |
+-----------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     2 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    1     ( AT TIME   1.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (


ALL NODAL POINTS HAVE ZERO DISPLACEMENT COMPONENTS
```

```
+----------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1     FULL VERSION  *Build date:Jul 11, 2017* |
|                                                                                                          |
|                                      NewProject.BaseDesignSection_28.SLERara_3454                        |
|                                   Exe Time :24 July 2019      11:09:27                                   |
+----------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P   N O.   1

0_L                               :
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
C U R R E N T    T I M E    I S      1.0000

 HARDENING 2D SOIL ELEMENT

 ****** TOTAL STRESS FORMULATION *****
```

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.000	0.000	0.000	0.000	0.000	0.000	V-C	2.1221E+04	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_2_8_L_0
2 D	0.4028	0.000	3.800	2.014	3.800	2.014	V-C	2.1221E+04	-0.2000	0.000	1.000	1.000	2.014	0.000	0.000	Strato1_2_8_L_0
3 D	0.8056	0.000	7.600	4.028	7.600	4.028	V-C	2.1221E+04	-0.4000	0.000	1.000	1.000	4.028	0.000	0.000	Strato1_2_8_L_0
4 D	1.208	0.000	11.40	6.042	11.40	6.042	V-C	2.1221E+04	-0.6000	0.000	1.000	1.000	6.042	0.000	0.000	Strato1_2_8_L_0
5 D	1.611	0.000	15.20	8.056	15.20	8.056	V-C	2.1221E+04	-0.8000	0.000	1.000	1.000	8.056	0.000	0.000	Strato1_2_8_L_0
6 D	2.014	0.000	19.00	10.07	19.00	10.07	V-C	2.1221E+04	-1.000	0.000	1.000	1.000	10.07	0.000	0.000	Strato1_2_8_L_0
7 D	2.417	0.000	22.80	12.08	22.80	12.08	V-C	2.1221E+04	-1.200	0.000	1.000	1.000	12.08	0.000	0.000	Strato1_2_8_L_0
8 D	2.820	0.000	26.60	14.10	26.60	14.10	V-C	2.1221E+04	-1.400	0.000	1.000	1.000	14.10	0.000	0.000	Strato1_2_8_L_0
9 D	3.222	0.000	30.40	16.11	30.40	16.11	V-C	2.1221E+04	-1.600	0.000	1.000	1.000	16.11	0.000	0.000	Strato1_2_8_L_0
10 D	3.625	0.000	34.20	18.13	34.20	18.13	V-C	2.1221E+04	-1.800	0.000	1.000	1.000	18.13	0.000	0.000	Strato1_2_8_L_0
11 D	4.028	0.000	38.00	20.14	38.00	20.14	V-C	2.1221E+04	-2.000	0.000	1.000	1.000	20.14	0.000	0.000	Strato1_2_8_L_0
12 D	4.431	0.000	41.80	22.15	41.80	22.15	V-C	2.1221E+04	-2.200	0.000	1.000	1.000	22.15	0.000	0.000	Strato1_2_8_L_0
13 D	3.625	0.000	45.60	24.17	45.60	24.17	V-C	2.1221E+04	-2.400	0.000	1.000	1.000	24.17	0.000	0.000	Strato1_2_8_L_0
14 D	3.776	0.000	47.50	25.18	47.50	25.18	V-C	2.1221E+04	-2.500	0.000	1.000	1.000	25.18	0.000	0.000	Strato1_2_8_L_0
15 D	5.438	0.000	51.30	27.19	51.30	27.19	V-C	2.1221E+04	-2.700	0.000	1.000	1.000	27.19	0.000	0.000	Strato1_2_8_L_0
16 D	5.841	0.000	55.10	29.20	55.10	29.20	V-C	2.1221E+04	-2.900	0.000	1.000	1.000	29.20	0.000	0.000	Strato1_2_8_L_0
17 D	6.243	0.000	58.90	31.22	58.90	31.22	V-C	2.1221E+04	-3.100	0.000	1.000	1.000	31.22	0.000	0.000	Strato1_2_8_L_0
18 D	6.646	0.000	62.70	33.23	62.70	33.23	V-C	2.1221E+04	-3.300	0.000	1.000	1.000	33.23	0.000	0.000	Strato1_2_8_L_0
19 D	7.049	0.000	66.50	35.25	66.50	35.25	V-C	2.1221E+04	-3.500	0.000	1.000	1.000	35.25	0.000	0.000	Strato1_2_8_L_0
20 D	7.452	0.000	70.30	37.26	70.30	37.26	V-C	2.1221E+04	-3.700	0.000	1.000	1.000	37.26	0.000	0.000	Strato1_2_8_L_0
21 D	7.855	0.000	74.10	39.27	74.10	39.27	V-C	2.1221E+04	-3.900	0.000	1.000	1.000	39.27	0.000	0.000	Strato1_2_8_L_0
22 D	8.257	0.000	77.90	41.29	77.90	41.29	V-C	2.1221E+04	-4.100	0.000	1.000	1.000	41.29	0.000	0.000	Strato1_2_8_L_0
23 D	8.660	0.000	81.70	43.30	81.70	43.30	V-C	2.1221E+04	-4.300	0.000	1.000	1.000	43.30	0.000	0.000	Strato1_2_8_L_0
24 D	9.063	0.000	85.50	45.32	85.50	45.32	V-C	2.1221E+04	-4.500	0.000	1.000	1.000	45.31	0.000	0.000	Strato1_2_8_L_0
25 D	9.466	0.000	89.30	47.33	89.30	47.33	V-C	2.1221E+04	-4.700	0.000	1.000	1.000	47.33	0.000	0.000	Strato1_2_8_L_0
26 D	9.869	0.000	93.10	49.34	93.10	49.34	V-C	2.1221E+04	-4.900	0.000	1.000	1.000	49.34	0.000	0.000	Strato1_2_8_L_0
27 D	10.27	0.000	96.90	51.36	96.90	51.36	V-C	2.1221E+04	-5.100	0.000	1.000	1.000	51.36	0.000	0.000	Strato1_2_8_L_0
28 D	10.67	0.000	100.7	53.37	100.7	53.37	V-C	2.1221E+04	-5.300	0.000	1.000	1.000	53.37	0.000	0.000	Strato1_2_8_L_0
29 D	11.08	0.000	104.5	55.38	104.5	55.38	V-C	2.1221E+04	-5.500	0.000	1.000	1.000	55.38	0.000	0.000	Strato1_2_8_L_0
30 D	11.48	0.000	108.3	57.40	108.3	57.40	V-C	2.1221E+04	-5.700	0.000	1.000	1.000				

```
57.40       0.000       0.000     Strato1_2_8_L_0
  31 D   11.88       0.000       112.1       59.41       112.1       59.41             V-C  2.1221E+04  -5.900       0.000       1.000       1.000
59.41       0.000       0.000     Strato1_2_8_L_0
  32 D   12.29       0.000       115.9       61.43       115.9       61.43             V-C  2.1221E+04  -6.100       0.000       1.000       1.000
61.43       0.000       0.000     Strato1_2_8_L_0
  33 D   12.69       0.000       119.7       63.44       119.7       63.44             V-C  2.1221E+04  -6.300       0.000       1.000       1.000
63.44       0.000       0.000     Strato1_2_8_L_0
  34 D   13.09       0.000       123.5       65.45       123.5       65.45             V-C  2.1221E+04  -6.500       0.000       1.000       1.000
65.45       0.000       0.000     Strato1_2_8_L_0
  35 D   13.49       0.000       127.3       67.47       127.3       67.47             V-C  2.1221E+04  -6.700       0.000       1.000       1.000
67.47       0.000       0.000     Strato1_2_8_L_0
  36 D   13.90       0.000       131.1       69.48       131.1       69.48             V-C  2.1221E+04  -6.900       0.000       1.000       1.000
69.48       0.000       0.000     Strato1_2_8_L_0
  37 D   14.30       0.000       134.9       71.50       134.9       71.50             V-C  2.1221E+04  -7.100       0.000       1.000       1.000
71.50       0.000       0.000     Strato1_2_8_L_0
  38 D   14.70       0.000       138.7       73.51       138.7       73.51             V-C  2.1221E+04  -7.300       0.000       1.000       1.000
73.51       0.000       0.000     Strato1_2_8_L_0
  39 D   15.10       0.000       142.5       75.52       142.5       75.52             V-C  2.1221E+04  -7.500       0.000       1.000       1.000
75.52       0.000       0.000     Strato1_2_8_L_0
  40 D   15.51       0.000       146.3       77.54       146.3       77.54             V-C  2.1221E+04  -7.700       0.000       1.000       1.000
77.54       0.000       0.000     Strato1_2_8_L_0
  41 D   15.02       0.000       150.2       75.10       150.2       75.10             V-C  6.0031E+04  -7.900       0.000       1.000       1.000
75.10       0.000       0.000     Strato2_3095_82743_L_0
  42 D   15.42       0.000       154.2       77.10       154.2       77.10             V-C  6.0031E+04  -8.100       0.000       1.000       1.000
77.10       0.000       0.000     Strato2_3095_82743_L_0
  43 D   15.82       0.000       158.2       79.10       158.2       79.10             V-C  6.0031E+04  -8.300       0.000       1.000       1.000
79.10       0.000       0.000     Strato2_3095_82743_L_0
  44 D   16.22       0.000       162.2       81.10       162.2       81.10             V-C  6.0031E+04  -8.500       0.000       1.000       1.000
81.10       0.000       0.000     Strato2_3095_82743_L_0
  45 D   16.62       0.000       166.2       83.10       166.2       83.10             V-C  6.0031E+04  -8.700       0.000       1.000       1.000
83.10       0.000       0.000     Strato2_3095_82743_L_0
  46 D   17.02       0.000       170.2       85.10       170.2       85.10             V-C  6.0031E+04  -8.900       0.000       1.000       1.000
85.10       0.000       0.000     Strato2_3095_82743_L_0
  47 D   17.42       0.000       174.2       87.10       174.2       87.10             V-C  6.0031E+04  -9.100       0.000       1.000       1.000
87.10       0.000       0.000     Strato2_3095_82743_L_0
  48 D   17.82       0.000       178.2       89.10       178.2       89.10             V-C  6.0031E+04  -9.300       0.000       1.000       1.000
89.10       0.000       0.000     Strato2_3095_82743_L_0
  49 D   18.22       0.000       182.2       91.10       182.2       91.10             V-C  6.0031E+04  -9.500       0.000       1.000       1.000
91.10       0.000       0.000     Strato2_3095_82743_L_0
  50 D   18.62       0.000       186.2       93.10       186.2       93.10             V-C  6.0031E+04  -9.700       0.000       1.000       1.000
93.10       0.000       0.000     Strato2_3095_82743_L_0
  51 D   19.02       0.000       190.2       95.10       190.2       95.10             V-C  6.0031E+04  -9.900       0.000       1.000       1.000
95.10       0.000       0.000     Strato2_3095_82743_L_0
  52 D   19.42       0.000       194.2       97.10       194.2       97.10             V-C  6.0031E+04  -10.10       0.000       1.000       1.000
97.10       0.000       0.000     Strato2_3095_82743_L_0
  53 D   19.82       0.000       198.2       99.10       198.2       99.10             V-C  6.0031E+04  -10.30       0.000       1.000       1.000
99.10       0.000       0.000     Strato2_3095_82743_L_0
  54 D   20.22       0.000       202.2       101.1       202.2       101.1             V-C  6.0031E+04  -10.50       0.000       1.000       1.000
101.1       0.000       0.000     Strato2_3095_82743_L_0
  55 D   20.62       0.000       206.2       103.1       206.2       103.1             V-C  6.0031E+04  -10.70       0.000       1.000       1.000
103.1       0.000       0.000     Strato2_3095_82743_L_0
  56 D   21.02       0.000       210.2       105.1       210.2       105.1             V-C  6.0031E+04  -10.90       0.000       1.000       1.000
105.1       0.000       0.000     Strato2_3095_82743_L_0
  57 D   21.42       0.000       214.2       107.1       214.2       107.1             V-C  6.0031E+04  -11.10       0.000       1.000       1.000
107.1       0.000       0.000     Strato2_3095_82743_L_0
  58 D   21.82       0.000       218.2       109.1       218.2       109.1             V-C  6.0031E+04  -11.30       0.000       1.000       1.000
109.1       0.000       0.000     Strato2_3095_82743_L_0
  59 D   22.22       0.000       222.2       111.1       222.2       111.1             V-C  6.0031E+04  -11.50       0.000       1.000       1.000
111.1       0.000       0.000     Strato2_3095_82743_L_0
  60 D   22.62       0.000       226.2       113.1       226.2       113.1             V-C  6.0031E+04  -11.70       0.000       1.000       1.000
113.1       0.000       0.000     Strato2_3095_82743_L_0
  61 D   17.26       0.000       230.2       115.1       230.2       115.1             V-C  6.0031E+04  -11.90       0.000       1.000       1.000
115.1       0.000       0.000     Strato2_3095_82743_L_0
  62 D   5.805       0.000       232.2       116.1       232.2       116.1             V-C  6.0031E+04  -12.00       0.000       1.000       1.000
116.1       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
 |                                                                                                                               |
 |                                      NewProject.BaseDesignSection_28.SLERara_3454                                             |
 |                                   Exe Time :24 July 2019      11:09:27                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S    R E S U L T S    F O R    G R O U P    N O.    2

 0_R                              :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
 C U R R E N T    T I M E    I S      1.0000

  HARDENING 2D SOIL ELEMENT
```

****** TOTAL STRESS FORMULATION *****

EL * Peq	FORCE	DISPL-Y Su_a	VERTICAL-P Su_p	HORIZON.-P LAYER	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR
1 D	0.000	0.000	0.000	0.000	0.000	0.000	V-C	1.4726E+04	0.000	0.000	1.000	1.000
0.000	0.000	0.000	Strato1_2_8_L_0									
2 D	0.4028	0.000	3.800	2.014	3.800	2.014	V-C	1.4726E+04	-0.2000	0.000	1.000	1.000
2.014	0.000	0.000	Strato1_2_8_L_0									
3 D	0.8056	0.000	7.600	4.028	7.600	4.028	V-C	1.4726E+04	-0.4000	0.000	1.000	1.000
4.028	0.000	0.000	Strato1_2_8_L_0									
4 D	1.208	0.000	11.40	6.042	11.40	6.042	V-C	1.4726E+04	-0.6000	0.000	1.000	1.000
6.042	0.000	0.000	Strato1_2_8_L_0									
5 D	1.611	0.000	15.20	8.056	15.20	8.056	V-C	1.4726E+04	-0.8000	0.000	1.000	1.000
8.056	0.000	0.000	Strato1_2_8_L_0									
6 D	2.014	0.000	19.00	10.07	19.00	10.07	V-C	1.4726E+04	-1.000	0.000	1.000	1.000
10.07	0.000	0.000	Strato1_2_8_L_0									
7 D	2.417	0.000	22.80	12.08	22.80	12.08	V-C	1.4726E+04	-1.200	0.000	1.000	1.000
12.08	0.000	0.000	Strato1_2_8_L_0									
8 D	2.820	0.000	26.60	14.10	26.60	14.10	V-C	1.4726E+04	-1.400	0.000	1.000	1.000
14.10	0.000	0.000	Strato1_2_8_L_0									
9 D	3.222	0.000	30.40	16.11	30.40	16.11	V-C	1.4726E+04	-1.600	0.000	1.000	1.000
16.11	0.000	0.000	Strato1_2_8_L_0									
10 D	3.625	0.000	34.20	18.13	34.20	18.13	V-C	1.4726E+04	-1.800	0.000	1.000	1.000
18.13	0.000	0.000	Strato1_2_8_L_0									
11 D	4.028	0.000	38.00	20.14	38.00	20.14	V-C	1.4726E+04	-2.000	0.000	1.000	1.000
20.14	0.000	0.000	Strato1_2_8_L_0									
12 D	4.431	0.000	41.80	22.15	41.80	22.15	V-C	1.4726E+04	-2.200	0.000	1.000	1.000
22.15	0.000	0.000	Strato1_2_8_L_0									
13 D	3.625	0.000	45.60	24.17	45.60	24.17	V-C	1.4726E+04	-2.400	0.000	1.000	1.000
24.17	0.000	0.000	Strato1_2_8_L_0									
14 D	3.776	0.000	47.50	25.18	47.50	25.18	V-C	1.4726E+04	-2.500	0.000	1.000	1.000
25.18	0.000	0.000	Strato1_2_8_L_0									
15 D	5.438	0.000	51.30	27.19	51.30	27.19	V-C	1.4726E+04	-2.700	0.000	1.000	1.000
27.19	0.000	0.000	Strato1_2_8_L_0									
16 D	5.841	0.000	55.10	29.20	55.10	29.20	V-C	1.4726E+04	-2.900	0.000	1.000	1.000
29.20	0.000	0.000	Strato1_2_8_L_0									
17 D	6.243	0.000	58.90	31.22	58.90	31.22	V-C	1.4726E+04	-3.100	0.000	1.000	1.000
31.22	0.000	0.000	Strato1_2_8_L_0									
18 D	6.646	0.000	62.70	33.23	62.70	33.23	V-C	1.4726E+04	-3.300	0.000	1.000	1.000
33.23	0.000	0.000	Strato1_2_8_L_0									
19 D	7.049	0.000	66.50	35.25	66.50	35.25	V-C	1.4726E+04	-3.500	0.000	1.000	1.000
35.25	0.000	0.000	Strato1_2_8_L_0									
20 D	7.452	0.000	70.30	37.26	70.30	37.26	V-C	1.4726E+04	-3.700	0.000	1.000	1.000
37.26	0.000	0.000	Strato1_2_8_L_0									
21 D	7.855	0.000	74.10	39.27	74.10	39.27	V-C	1.4726E+04	-3.900	0.000	1.000	1.000
39.27	0.000	0.000	Strato1_2_8_L_0									
22 D	8.257	0.000	77.90	41.29	77.90	41.29	V-C	1.4726E+04	-4.100	0.000	1.000	1.000
41.29	0.000	0.000	Strato1_2_8_L_0									
23 D	8.660	0.000	81.70	43.30	81.70	43.30	V-C	1.4726E+04	-4.300	0.000	1.000	1.000
43.30	0.000	0.000	Strato1_2_8_L_0									
24 D	9.063	0.000	85.50	45.32	85.50	45.32	V-C	1.4726E+04	-4.500	0.000	1.000	1.000
45.31	0.000	0.000	Strato1_2_8_L_0									
25 D	9.466	0.000	89.30	47.33	89.30	47.33	V-C	1.4726E+04	-4.700	0.000	1.000	1.000
47.33	0.000	0.000	Strato1_2_8_L_0									
26 D	9.869	0.000	93.10	49.34	93.10	49.34	V-C	1.4726E+04	-4.900	0.000	1.000	1.000
49.34	0.000	0.000	Strato1_2_8_L_0									
27 D	10.27	0.000	96.90	51.36	96.90	51.36	V-C	1.4726E+04	-5.100	0.000	1.000	1.000
51.36	0.000	0.000	Strato1_2_8_L_0									
28 D	10.67	0.000	100.7	53.37	100.7	53.37	V-C	1.4726E+04	-5.300	0.000	1.000	1.000
53.37	0.000	0.000	Strato1_2_8_L_0									
29 D	11.08	0.000	104.5	55.38	104.5	55.38	V-C	1.4726E+04	-5.500	0.000	1.000	1.000
55.38	0.000	0.000	Strato1_2_8_L_0									
30 D	11.48	0.000	108.3	57.40	108.3	57.40	V-C	1.4726E+04	-5.700	0.000	1.000	1.000
57.40	0.000	0.000	Strato1_2_8_L_0									
31 D	11.88	0.000	112.1	59.41	112.1	59.41	V-C	1.4726E+04	-5.900	0.000	1.000	1.000
59.41	0.000	0.000	Strato1_2_8_L_0									
32 D	12.29	0.000	115.9	61.43	115.9	61.43	V-C	1.4726E+04	-6.100	0.000	1.000	1.000
61.43	0.000	0.000	Strato1_2_8_L_0									
33 D	12.69	0.000	119.7	63.44	119.7	63.44	V-C	1.4726E+04	-6.300	0.000	1.000	1.000
63.44	0.000	0.000	Strato1_2_8_L_0									
34 D	13.09	0.000	123.5	65.45	123.5	65.45	V-C	1.4726E+04	-6.500	0.000	1.000	1.000
65.45	0.000	0.000	Strato1_2_8_L_0									
35 D	13.49	0.000	127.3	67.47	127.3	67.47	V-C	1.4726E+04	-6.700	0.000	1.000	1.000
67.47	0.000	0.000	Strato1_2_8_L_0									
36 D	13.90	0.000	131.1	69.48	131.1	69.48	V-C	1.4726E+04	-6.900	0.000	1.000	1.000
69.48	0.000	0.000	Strato1_2_8_L_0									
37 D	14.30	0.000	134.9	71.50	134.9	71.50	V-C	1.4726E+04	-7.100	0.000	1.000	1.000
71.50	0.000	0.000	Strato1_2_8_L_0									
38 D	14.70	0.000	138.7	73.51	138.7	73.51	V-C	1.4726E+04	-7.300	0.000	1.000	1.000
73.51	0.000	0.000	Strato1_2_8_L_0									
39 D	15.10	0.000	142.5	75.52	142.5	75.52	V-C	1.4726E+04	-7.500	0.000	1.000	1.000
75.52	0.000	0.000	Strato1_2_8_L_0									

40 D	15.51	0.000	146.3	77.54	146.3	77.54	V-C	1.4726E+04	-7.700	0.000	1.000	1.000
77.54	0.000	0.000	Strato1_2_8_L_0									
41 D	15.02	0.000	150.2	75.10	150.2	75.10	V-C	3.2535E+04	-7.900	0.000	1.000	1.000
75.10	0.000	0.000	Strato2_3095_82743_L_0									
42 D	15.42	0.000	154.2	77.10	154.2	77.10	V-C	3.2535E+04	-8.100	0.000	1.000	1.000
77.10	0.000	0.000	Strato2_3095_82743_L_0									
43 D	15.82	0.000	158.2	79.10	158.2	79.10	V-C	3.2535E+04	-8.300	0.000	1.000	1.000
79.10	0.000	0.000	Strato2_3095_82743_L_0									
44 D	16.22	0.000	162.2	81.10	162.2	81.10	V-C	3.2535E+04	-8.500	0.000	1.000	1.000
81.10	0.000	0.000	Strato2_3095_82743_L_0									
45 D	16.62	0.000	166.2	83.10	166.2	83.10	V-C	3.2535E+04	-8.700	0.000	1.000	1.000
83.10	0.000	0.000	Strato2_3095_82743_L_0									
46 D	17.02	0.000	170.2	85.10	170.2	85.10	V-C	3.2535E+04	-8.900	0.000	1.000	1.000
85.10	0.000	0.000	Strato2_3095_82743_L_0									
47 D	17.42	0.000	174.2	87.10	174.2	87.10	V-C	3.2535E+04	-9.100	0.000	1.000	1.000
87.10	0.000	0.000	Strato2_3095_82743_L_0									
48 D	17.82	0.000	178.2	89.10	178.2	89.10	V-C	3.2535E+04	-9.300	0.000	1.000	1.000
89.10	0.000	0.000	Strato2_3095_82743_L_0									
49 D	18.22	0.000	182.2	91.10	182.2	91.10	V-C	3.2535E+04	-9.500	0.000	1.000	1.000
91.10	0.000	0.000	Strato2_3095_82743_L_0									
50 D	18.62	0.000	186.2	93.10	186.2	93.10	V-C	3.2535E+04	-9.700	0.000	1.000	1.000
93.10	0.000	0.000	Strato2_3095_82743_L_0									
51 D	19.02	0.000	190.2	95.10	190.2	95.10	V-C	3.2535E+04	-9.900	0.000	1.000	1.000
95.10	0.000	0.000	Strato2_3095_82743_L_0									
52 D	19.42	0.000	194.2	97.10	194.2	97.10	V-C	3.2535E+04	-10.10	0.000	1.000	1.000
97.10	0.000	0.000	Strato2_3095_82743_L_0									
53 D	19.82	0.000	198.2	99.10	198.2	99.10	V-C	3.2535E+04	-10.30	0.000	1.000	1.000
99.10	0.000	0.000	Strato2_3095_82743_L_0									
54 D	20.22	0.000	202.2	101.1	202.2	101.1	V-C	3.2535E+04	-10.50	0.000	1.000	1.000
101.1	0.000	0.000	Strato2_3095_82743_L_0									
55 D	20.62	0.000	206.2	103.1	206.2	103.1	V-C	3.2535E+04	-10.70	0.000	1.000	1.000
103.1	0.000	0.000	Strato2_3095_82743_L_0									
56 D	21.02	0.000	210.2	105.1	210.2	105.1	V-C	3.2535E+04	-10.90	0.000	1.000	1.000
105.1	0.000	0.000	Strato2_3095_82743_L_0									
57 D	21.42	0.000	214.2	107.1	214.2	107.1	V-C	3.2535E+04	-11.10	0.000	1.000	1.000
107.1	0.000	0.000	Strato2_3095_82743_L_0									
58 D	21.82	0.000	218.2	109.1	218.2	109.1	V-C	3.2535E+04	-11.30	0.000	1.000	1.000
109.1	0.000	0.000	Strato2_3095_82743_L_0									
59 D	22.22	0.000	222.2	111.1	222.2	111.1	V-C	3.2535E+04	-11.50	0.000	1.000	1.000
111.1	0.000	0.000	Strato2_3095_82743_L_0									
60 D	22.62	0.000	226.2	113.1	226.2	113.1	V-C	3.2535E+04	-11.70	0.000	1.000	1.000
113.1	0.000	0.000	Strato2_3095_82743_L_0									
61 D	17.26	0.000	230.2	115.1	230.2	115.1	V-C	3.2535E+04	-11.90	0.000	1.000	1.000
115.1	0.000	0.000	Strato2_3095_82743_L_0									
62 D	5.805	0.000	232.2	116.1	232.2	116.1	V-C	3.2535E+04	-12.00	0.000	1.000	1.000
116.1	0.000	0.000	Strato2_3095_82743_L_0									

```
+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                   |
|                                  Exe Time :24 July 2019      11:09:27                                             |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
C U R R E N T   T I M E   I S      1.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-------------------------------------------------------
    1  0.0000      0.0000      0.0000      0.0000
    2  0.0000      0.0000      0.0000      0.0000
    3  0.0000      0.0000      0.0000      0.0000
    4  0.0000      0.0000      0.0000      0.0000
    5  0.0000      0.0000      0.0000      0.0000
    6  0.0000      0.0000      0.0000      0.0000
    7  0.0000      0.0000      0.0000      0.0000
    8  0.0000      0.0000      0.0000      0.0000
    9  0.0000      0.0000      0.0000      0.0000
   10  0.0000      0.0000      0.0000      0.0000
   11  0.0000      0.0000      0.0000      0.0000
   12  0.0000      0.0000      0.0000      0.0000
   13  0.0000      0.0000      0.0000      0.0000
   14  0.0000      0.0000      0.0000      0.0000
   15  0.0000      0.0000      0.0000      0.0000
   16  0.0000      0.0000      0.0000      0.0000
```

17	0.0000	0.0000	0.0000	0.0000
18	0.0000	0.0000	0.0000	0.0000
19	0.0000	0.0000	0.0000	0.0000
20	0.0000	0.0000	0.0000	0.0000
21	0.0000	0.0000	0.0000	0.0000
22	0.0000	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0000
24	0.0000	0.0000	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000
26	0.0000	0.0000	0.0000	0.0000
27	0.0000	0.0000	0.0000	0.0000
28	0.0000	0.0000	0.0000	0.0000
29	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000
31	0.0000	0.0000	0.0000	0.0000
32	0.0000	0.0000	0.0000	0.0000
33	0.0000	0.0000	0.0000	0.0000
34	0.0000	0.0000	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000
36	0.0000	0.0000	0.0000	0.0000
37	0.0000	0.0000	0.0000	0.0000
38	0.0000	0.0000	0.0000	0.0000
39	0.0000	0.0000	0.0000	0.0000
40	0.0000	0.0000	0.0000	0.0000
41	0.0000	0.0000	0.0000	0.0000
42	0.0000	0.0000	0.0000	0.0000
43	0.0000	0.0000	0.0000	0.0000
44	0.0000	0.0000	0.0000	0.0000
45	0.0000	0.0000	0.0000	0.0000
46	0.0000	0.0000	0.0000	0.0000
47	0.0000	0.0000	0.0000	0.0000
48	0.0000	0.0000	0.0000	0.0000
49	0.0000	0.0000	0.0000	0.0000
50	0.0000	0.0000	0.0000	0.0000
51	0.0000	0.0000	0.0000	0.0000
52	0.0000	0.0000	0.0000	0.0000
53	0.0000	0.0000	0.0000	0.0000
54	0.0000	0.0000	0.0000	0.0000
55	0.0000	0.0000	0.0000	0.0000
56	0.0000	0.0000	0.0000	0.0000
57	0.0000	0.0000	0.0000	0.0000
58	0.0000	0.0000	0.0000	0.0000
59	0.0000	0.0000	0.0000	0.0000
60	0.0000	0.0000	0.0000	0.0000
61	0.0000	0.0000	0.0000	0.0000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                         |
|                                 Exe Time :24 July 2019      11:09:27                                                    |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_778405                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S      1.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2246E+05 RIMNOR= 0.000
           RENORM= 30.48     REMNOR= 0.000     RATIO =0.3684E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 23.31     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2246E+05 RDR   = 0.000
           RATIOT=0.3684E-01 RATIOR= 0.000
           MAX UN=0.7687     IEQ=    15 NODE      8 DOF   1  Y-DISPL.F
           MIN UN= 0.000     IEQ=     2 NODE      1 DOF   2   X-ROT. F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2246E+05 RIMNOR= 0.000
```

```
            RENORM=0.5257E-01 REMNOR=0.3599E-22 RATIO =0.1530E-02 TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 23.31     RMMAX = 0.000
            RTSMAL=0.1000E-03 RMSMAL= 0.000
            RDT   =0.2246E+05 RDR   = 0.000
            RATIOT=0.1530E-02 RATIOR= 0.000
            MAX UN=0.2119     IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
            MIN UN=-.8085E-10 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


 ITER     3 RNORM = 0.000     RMNORM= 0.000
            RINORM=0.2246E+05 RIMNOR= 0.000
            RENORM=0.1056E-02 REMNOR=0.1301E-22 RATIO =0.2169E-03 TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 23.31     RMMAX = 0.000
            RTSMAL=0.1000E-03 RMSMAL= 0.000
            RDT   =0.2246E+05 RDR   = 0.000
            RATIOT=0.2169E-03 RATIOR= 0.000
            MAX UN=0.3210E-01 IEQ=     5 NODE      3 DOF   1  Y-DISPL.F
            MIN UN=-.5150E-10 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


 ITER     4 RNORM = 0.000     RMNORM= 0.000
            RINORM=0.2246E+05 RIMNOR= 0.000
            RENORM=0.2270E-08 REMNOR=0.9387E-23 RATIO =0.3179E-06 TOLER =0.1000E-03      CONVERGED !
            RFMAX = 23.31     RMMAX = 0.000
            RTSMAL=0.1000E-03 RMSMAL= 0.000
            RDT   =0.2246E+05 RDR   = 0.000
            RATIOT=0.3179E-06 RATIOR= 0.000
            MAX UN=0.2873E-04 IEQ=    45 NODE     23 DOF   1  Y-DISPL.F
            MIN UN=-.3272E-10 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                  Exe Time :24 July 2019      11:09:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     4 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    2     ( AT TIME   2.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (
    1   5.3061832E-05  -1.8612385E-06
    2   5.2690065E-05  -1.8540215E-06
    3   5.2321183E-05  -1.8323969E-06
    4   5.1957887E-05  -1.7990541E-06
    5   5.1602007E-05  -1.7590320E-06
    6   5.1254448E-05  -1.7164060E-06
    7   5.0915423E-05  -1.6741036E-06
    8   5.0584645E-05  -1.6342234E-06
    9   5.0261476E-05  -1.5982121E-06
   10   4.9944930E-05  -1.5686610E-06
   11   4.9633339E-05  -1.5491920E-06
   12   4.9324390E-05  -1.5426737E-06
   13   4.9015259E-05  -1.5513230E-06
   14   4.8859637E-05  -1.5618221E-06
   15   4.8544117E-05  -1.5965156E-06
   16   4.8219721E-05  -1.6508543E-06
   17   4.7882373E-05  -1.7262307E-06
   18   4.7527768E-05  -1.8235226E-06
   19   4.7151477E-05  -1.9431153E-06
   20   4.6749041E-05  -2.0849150E-06
   21   4.6316068E-05  -2.2483539E-06
   22   4.5848279E-05  -2.4331104E-06
   23   4.5341411E-05  -2.6390637E-06
   24   4.4791286E-05  -2.8655279E-06
   25   4.4193917E-05  -3.1112327E-06
   26   4.3545635E-05  -3.3743005E-06
   27   4.2843210E-05  -3.6522248E-06
   28   4.2083968E-05  -3.9418510E-06
   29   4.1265910E-05  -4.2398758E-06
   30   4.0387692E-05  -4.5428002E-06
   31   3.9448749E-05  -4.8463396E-06
   32   3.8449460E-05  -5.1453883E-06
   33   3.7391295E-05  -5.4339920E-06
   34   3.6277016E-05  -5.7053035E-06
   35   3.5110844E-05  -5.9515544E-06
   36   3.3898647E-05  -6.1640215E-06
   37   3.2648107E-05  -6.3334104E-06
   38   3.1368821E-05  -6.4498178E-06
   39   3.0072449E-05  -6.5022893E-06
   40   2.8772969E-05  -6.4788054E-06
   41   2.7486863E-05  -6.3662825E-06
   42   2.6232101E-05  -6.1690767E-06
   43   2.5023482E-05  -5.9082118E-06
   44   2.3871815E-05  -5.6024711E-06
   45   2.2784375E-05  -5.2685047E-06
   46   2.1765341E-05  -4.9206171E-06
   47   2.0816250E-05  -4.5709063E-06
   48   1.9936435E-05  -4.2294087E-06
   49   1.9123403E-05  -3.9042358E-06
   50   1.8373230E-05  -3.6017251E-06
   51   1.7680889E-05  -3.3265668E-06
   52   1.7040566E-05  -3.0822091E-06
   53   1.6445816E-05  -2.8709421E-06
   54   1.5889917E-05  -2.6937568E-06
   55   1.5366057E-05  -2.5504056E-06
   56   1.4867593E-05  -2.4394820E-06
   57   1.4388270E-05  -2.3584813E-06
   58   1.3922442E-05  -2.3038476E-06
   59   1.3465262E-05  -2.2712494E-06
   60   1.3012813E-05  -2.2555997E-06
   61   1.2562297E-05  -2.2508273E-06
   62   1.2337208E-05  -2.2505838E-06
```

```
+------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017* |
|                                                                                                      |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                      |
|                                 Exe Time :24 July 2019      11:09:27                                |
+------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P  N O.   1

0_L                              :
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
C U R R E N T   T I M E   I S      2.0000

 HARDENING 2D SOIL ELEMENT

 ****** TOTAL STRESS FORMULATION *****
```

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.3040	-5.3062E-05	10.00	3.040	10.00	5.300	ACTIVE	0.000	0.000	0.000	1.000	1.000	3.040	0.000	0.000	Strato1_2_8_L_0
2 D	0.5569	-5.2690E-05	9.159	2.784	9.159	4.854	ACTIVE	0.000	-0.2000	0.000	1.000	1.000	2.784	0.000	0.000	Strato1_2_8_L_0
3 D	0.8475	-5.2321E-05	13.94	4.238	13.94	7.388	ACTIVE	0.000	-0.4000	0.000	1.000	1.000	4.238	0.000	0.000	Strato1_2_8_L_0
4 D	1.261	-5.1958E-05	18.14	6.307	18.14	9.614	UL-RL	6.3662E+04	-0.6000	0.000	1.000	1.000	6.307	0.000	0.000	Strato1_2_8_L_0
5 D	1.692	-5.1602E-05	22.16	8.458	22.16	11.74	UL-RL	6.3662E+04	-0.8000	0.000	1.000	1.000	8.458	0.000	0.000	Strato1_2_8_L_0
6 D	2.113	-5.1254E-05	26.09	10.57	26.09	13.83	UL-RL	6.3662E+04	-1.000	0.000	1.000	1.000	10.57	0.000	0.000	Strato1_2_8_L_0
7 D	2.530	-5.0915E-05	29.98	12.65	29.98	15.89	UL-RL	6.3662E+04	-1.200	0.000	1.000	1.000	12.65	0.000	0.000	Strato1_2_8_L_0
8 D	2.944	-5.0585E-05	33.85	14.72	33.85	17.94	UL-RL	6.3662E+04	-1.400	0.000	1.000	1.000	14.72	0.000	0.000	Strato1_2_8_L_0
9 D	3.286	-5.0261E-05	37.03	16.43	37.03	19.63	UL-RL	6.3662E+04	-1.600	0.000	1.000	1.000	16.43	0.000	0.000	Strato1_2_8_L_0
10 D	3.705	-4.9945E-05	40.95	18.52	40.95	21.70	UL-RL	6.3662E+04	-1.800	0.000	1.000	1.000	18.52	0.000	0.000	Strato1_2_8_L_0
11 D	4.121	-4.9633E-05	44.84	20.61	44.84	23.77	UL-RL	6.3662E+04	-2.000	0.000	1.000	1.000	20.61	0.000	0.000	Strato1_2_8_L_0
12 D	4.536	-4.9324E-05	48.72	22.68	48.72	25.82	UL-RL	6.3662E+04	-2.200	0.000	1.000	1.000	22.68	0.000	0.000	Strato1_2_8_L_0
13 D	3.712	-4.9015E-05	52.58	24.75	52.58	27.87	UL-RL	6.3662E+04	-2.400	0.000	1.000	1.000	24.75	0.000	0.000	Strato1_2_8_L_0
14 D	3.849	-4.8860E-05	54.28	25.66	54.28	28.77	UL-RL	6.3662E+04	-2.500	0.000	1.000	1.000	25.66	0.000	0.000	Strato1_2_8_L_0
15 D	5.546	-4.8544E-05	58.15	27.73	58.15	30.82	UL-RL	6.3662E+04	-2.700	0.000	1.000	1.000	27.73	0.000	0.000	Strato1_2_8_L_0
16 D	5.959	-4.8220E-05	62.01	29.79	62.01	32.86	UL-RL	6.3662E+04	-2.900	0.000	1.000	1.000	29.79	0.000	0.000	Strato1_2_8_L_0
17 D	6.371	-4.7882E-05	65.86	31.86	65.86	34.90	UL-RL	6.3662E+04	-3.100	0.000	1.000	1.000	31.86	0.000	0.000	Strato1_2_8_L_0
18 D	6.783	-4.7528E-05	69.70	33.92	69.70	36.94	UL-RL	6.3662E+04	-3.300	0.000	1.000	1.000	33.92	0.000	0.000	Strato1_2_8_L_0
19 D	7.195	-4.7151E-05	73.54	35.97	73.54	38.98	UL-RL	6.3662E+04	-3.500	0.000	1.000	1.000	35.97	0.000	0.000	Strato1_2_8_L_0
20 D	7.606	-4.6749E-05	77.37	38.03	77.37	41.01	UL-RL	6.3662E+04	-3.700	0.000	1.000	1.000	38.03	0.000	0.000	Strato1_2_8_L_0
21 D	7.988	-4.6316E-05	80.92	39.94	80.92	42.89	UL-RL	6.3662E+04	-3.900	0.000	1.000	1.000	39.94	0.000	0.000	Strato1_2_8_L_0
22 D	8.401	-4.5848E-05	84.76	42.00	84.76	44.92	UL-RL	6.3662E+04	-4.100	0.000	1.000	1.000	42.00	0.000	0.000	Strato1_2_8_L_0
23 D	8.814	-4.5341E-05	88.60	44.07	88.60	46.96	UL-RL	6.3662E+04	-4.300	0.000	1.000	1.000	44.07	0.000	0.000	Strato1_2_8_L_0
24 D	9.228	-4.4791E-05	92.43	46.14	92.43	48.99	UL-RL	6.3662E+04	-4.500	0.000	1.000	1.000	46.14	0.000	0.000	Strato1_2_8_L_0
25 D	9.642	-4.4194E-05	96.27	48.21	96.27	51.02	UL-RL	6.3662E+04	-4.700	0.000	1.000	1.000	48.21	0.000	0.000	Strato1_2_8_L_0
26 D	10.06	-4.3546E-05	100.1	50.28	100.1	53.05	UL-RL	6.3662E+04	-4.900	0.000	1.000	1.000	50.28	0.000	0.000	Strato1_2_8_L_0
27 D	10.47	-4.2843E-05	103.9	52.35	103.9	55.08	UL-RL	6.3662E+04	-5.100	0.000	1.000	1.000	52.35	0.000	0.000	Strato1_2_8_L_0
28 D	10.86	-4.2084E-05	107.5	54.31	107.5	56.99	UL-RL	6.3662E+04	-5.300	0.000	1.000	1.000	54.31	0.000	0.000	Strato1_2_8_L_0
29 D	11.28	-4.1266E-05	111.4	56.40	111.4	59.02	UL-RL	6.3662E+04	-5.500	0.000	1.000	1.000	56.40	0.000	0.000	Strato1_2_8_L_0
30 D	11.70	-4.0388E-05	115.2	58.48	115.2	61.05	UL-RL	6.3662E+04	-5.700	0.000	1.000	1.000				

```
58.48       0.000       0.000     Strato1_2_8_L_0
  31 D   12.11     -3.9449E-05  119.0       60.57       119.0       63.08          UL-RL  6.3662E+04  -5.900       0.000       1.000       1.000
60.57       0.000       0.000     Strato1_2_8_L_0
  32 D   12.53     -3.8449E-05  122.8       62.66       122.8       65.11          UL-RL  6.3662E+04  -6.100       0.000       1.000       1.000
62.66       0.000       0.000     Strato1_2_8_L_0
  33 D   12.95     -3.7391E-05  126.7       64.75       126.7       67.14          UL-RL  6.3662E+04  -6.300       0.000       1.000       1.000
64.75       0.000       0.000     Strato1_2_8_L_0
  34 D   13.37     -3.6277E-05  130.5       66.85       130.5       69.16          UL-RL  6.3662E+04  -6.500       0.000       1.000       1.000
66.85       0.000       0.000     Strato1_2_8_L_0
  35 D   13.79     -3.5111E-05  134.3       68.95       134.3       71.19          UL-RL  6.3662E+04  -6.700       0.000       1.000       1.000
68.95       0.000       0.000     Strato1_2_8_L_0
  36 D   14.19     -3.3899E-05  138.0       70.97       138.0       73.12          UL-RL  6.3662E+04  -6.900       0.000       1.000       1.000
70.97       0.000       0.000     Strato1_2_8_L_0
  37 D   14.61     -3.2648E-05  141.8       73.07       141.8       75.15          UL-RL  6.3662E+04  -7.100       0.000       1.000       1.000
73.07       0.000       0.000     Strato1_2_8_L_0
  38 D   15.04     -3.1369E-05  145.6       75.18       145.6       77.18          UL-RL  6.3662E+04  -7.300       0.000       1.000       1.000
75.18       0.000       0.000     Strato1_2_8_L_0
  39 D   15.46     -3.0072E-05  149.4       77.29       149.4       79.20          UL-RL  6.3662E+04  -7.500       0.000       1.000       1.000
77.29       0.000       0.000     Strato1_2_8_L_0
  40 D   15.88     -2.8773E-05  153.3       79.39       153.3       81.22          UL-RL  6.3662E+04  -7.700       0.000       1.000       1.000
79.39       0.000       0.000     Strato1_2_8_L_0
  41 D   14.73     -2.7487E-05  157.2       73.64       157.2       78.59          UL-RL  1.8009E+05  -7.900       0.000       1.000       1.000
73.64       0.000       0.000     Strato2_3095_82743_L_0
  42 D   15.17     -2.6232E-05  161.2       75.87       161.2       80.60          UL-RL  1.8009E+05  -8.100       0.000       1.000       1.000
75.87       0.000       0.000     Strato2_3095_82743_L_0
  43 D   15.61     -2.5023E-05  165.1       78.03       165.1       82.54          UL-RL  1.8009E+05  -8.300       0.000       1.000       1.000
78.03       0.000       0.000     Strato2_3095_82743_L_0
  44 D   16.05     -2.3872E-05  169.1       80.25       169.1       84.55          UL-RL  1.8009E+05  -8.500       0.000       1.000       1.000
80.25       0.000       0.000     Strato2_3095_82743_L_0
  45 D   16.49     -2.2784E-05  173.1       82.45       173.1       86.55          UL-RL  1.8009E+05  -8.700       0.000       1.000       1.000
82.45       0.000       0.000     Strato2_3095_82743_L_0
  46 D   16.93     -2.1765E-05  177.1       84.64       177.1       88.56          UL-RL  1.8009E+05  -8.900       0.000       1.000       1.000
84.64       0.000       0.000     Strato2_3095_82743_L_0
  47 D   17.36     -2.0816E-05  181.1       86.82       181.1       90.57          UL-RL  1.8009E+05  -9.100       0.000       1.000       1.000
86.82       0.000       0.000     Strato2_3095_82743_L_0
  48 D   17.80     -1.9936E-05  185.2       88.99       185.2       92.58          UL-RL  1.8009E+05  -9.300       0.000       1.000       1.000
88.99       0.000       0.000     Strato2_3095_82743_L_0
  49 D   18.23     -1.9123E-05  189.2       91.14       189.2       94.59          UL-RL  1.8009E+05  -9.500       0.000       1.000       1.000
91.14       0.000       0.000     Strato2_3095_82743_L_0
  50 D   18.66     -1.8373E-05  193.2       93.29       193.2       96.59          UL-RL  1.8009E+05  -9.700       0.000       1.000       1.000
93.29       0.000       0.000     Strato2_3095_82743_L_0
  51 D   19.07     -1.7681E-05  197.1       95.36       197.1       98.54          UL-RL  1.8009E+05  -9.900       0.000       1.000       1.000
95.36       0.000       0.000     Strato2_3095_82743_L_0
  52 D   19.50     -1.7041E-05  201.1       97.48       201.1       100.6          UL-RL  1.8009E+05  -10.10       0.000       1.000       1.000
97.48       0.000       0.000     Strato2_3095_82743_L_0
  53 D   19.92     -1.6446E-05  205.1       99.60       205.1       102.6          UL-RL  1.8009E+05  -10.30       0.000       1.000       1.000
99.60       0.000       0.000     Strato2_3095_82743_L_0
  54 D   20.34     -1.5890E-05  209.1       101.7       209.1       104.6          UL-RL  1.8009E+05  -10.50       0.000       1.000       1.000
101.7       0.000       0.000     Strato2_3095_82743_L_0
  55 D   20.76     -1.5366E-05  213.1       103.8       213.1       106.6          UL-RL  1.8009E+05  -10.70       0.000       1.000       1.000
103.8       0.000       0.000     Strato2_3095_82743_L_0
  56 D   21.18     -1.4868E-05  217.2       105.9       217.2       108.6          UL-RL  1.8009E+05  -10.90       0.000       1.000       1.000
105.9       0.000       0.000     Strato2_3095_82743_L_0
  57 D   21.60     -1.4388E-05  221.2       108.0       221.2       110.6          UL-RL  1.8009E+05  -11.10       0.000       1.000       1.000
108.0       0.000       0.000     Strato2_3095_82743_L_0
  58 D   22.01     -1.3922E-05  225.1       110.0       225.1       112.5          UL-RL  1.8009E+05  -11.30       0.000       1.000       1.000
110.0       0.000       0.000     Strato2_3095_82743_L_0
  59 D   22.43     -1.3465E-05  229.1       112.1       229.1       114.6          UL-RL  1.8009E+05  -11.50       0.000       1.000       1.000
112.1       0.000       0.000     Strato2_3095_82743_L_0
  60 D   22.84     -1.3013E-05  233.1       114.2       233.1       116.6          UL-RL  1.8009E+05  -11.70       0.000       1.000       1.000
114.2       0.000       0.000     Strato2_3095_82743_L_0
  61 D   17.45     -1.2562E-05  237.1       116.3       237.1       118.6          UL-RL  1.8009E+05  -11.90       0.000       1.000       1.000
116.3       0.000       0.000     Strato2_3095_82743_L_0
  62 D   5.866     -1.2337E-05  239.1       117.3       239.1       119.5          UL-RL  1.8009E+05  -12.00       0.000       1.000       1.000
117.3       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
 |                                                                                                                               |
 |                                      NewProject.BaseDesignSection_28.SLERara_3454                                             |
 |                                   Exe Time :24 July 2019      11:09:27                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                          :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
 C U R R E N T   T I M E   I S      2.0000

  HARDENING 2D SOIL ELEMENT
```

****** TOTAL STRESS FORMULATION *****

EL * Peq	FORCE	DISPL-Y Su_a	VERTICAL-P Su_p	HORIZON.-P LAYER	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR
1 D	0.000	5.3062E-05	0.000	0.000	0.000	0.000	PASSIVE	0.000	0.000	0.000	1.000	1.000
0.000	0.000	0.000	Strato1_2_8_L_0									
2 D	0.5580	5.2690E-05	3.800	2.790	3.800	2.790	V-C	1.4726E+04	-0.2000	0.000	1.000	1.000
2.790	0.000	0.000	Strato1_2_8_L_0									
3 D	0.9597	5.2321E-05	7.600	4.798	7.600	4.798	V-C	1.4726E+04	-0.4000	0.000	1.000	1.000
4.798	0.000	0.000	Strato1_2_8_L_0									
4 D	1.361	5.1958E-05	11.40	6.807	11.40	6.807	V-C	1.4726E+04	-0.6000	0.000	1.000	1.000
6.807	0.000	0.000	Strato1_2_8_L_0									
5 D	1.763	5.1602E-05	15.20	8.816	15.20	8.816	V-C	1.4726E+04	-0.8000	0.000	1.000	1.000
8.816	0.000	0.000	Strato1_2_8_L_0									
6 D	2.165	5.1254E-05	19.00	10.82	19.00	10.82	V-C	1.4726E+04	-1.000	0.000	1.000	1.000
10.82	0.000	0.000	Strato1_2_8_L_0									
7 D	2.567	5.0915E-05	22.80	12.83	22.80	12.83	V-C	1.4726E+04	-1.200	0.000	1.000	1.000
12.83	0.000	0.000	Strato1_2_8_L_0									
8 D	2.969	5.0585E-05	26.60	14.84	26.60	14.84	V-C	1.4726E+04	-1.400	0.000	1.000	1.000
14.84	0.000	0.000	Strato1_2_8_L_0									
9 D	3.370	5.0261E-05	30.40	16.85	30.40	16.85	V-C	1.4726E+04	-1.600	0.000	1.000	1.000
16.85	0.000	0.000	Strato1_2_8_L_0									
10 D	3.772	4.9945E-05	34.20	18.86	34.20	18.86	V-C	1.4726E+04	-1.800	0.000	1.000	1.000
18.86	0.000	0.000	Strato1_2_8_L_0									
11 D	4.174	4.9633E-05	38.00	20.87	38.00	20.87	V-C	1.4726E+04	-2.000	0.000	1.000	1.000
20.87	0.000	0.000	Strato1_2_8_L_0									
12 D	4.576	4.9324E-05	41.80	22.88	41.80	22.88	V-C	1.4726E+04	-2.200	0.000	1.000	1.000
22.88	0.000	0.000	Strato1_2_8_L_0									
13 D	3.733	4.9015E-05	45.60	24.89	45.60	24.89	V-C	1.4726E+04	-2.400	0.000	1.000	1.000
24.89	0.000	0.000	Strato1_2_8_L_0									
14 D	3.884	4.8860E-05	47.50	25.89	47.50	25.89	V-C	1.4726E+04	-2.500	0.000	1.000	1.000
25.89	0.000	0.000	Strato1_2_8_L_0									
15 D	5.581	4.8544E-05	51.30	27.90	51.30	27.90	V-C	1.4726E+04	-2.700	0.000	1.000	1.000
27.90	0.000	0.000	Strato1_2_8_L_0									
16 D	5.983	4.8220E-05	55.10	29.91	55.10	29.91	V-C	1.4726E+04	-2.900	0.000	1.000	1.000
29.91	0.000	0.000	Strato1_2_8_L_0									
17 D	6.384	4.7882E-05	58.90	31.92	58.90	31.92	V-C	1.4726E+04	-3.100	0.000	1.000	1.000
31.92	0.000	0.000	Strato1_2_8_L_0									
18 D	6.786	4.7528E-05	62.70	33.93	62.70	33.93	V-C	1.4726E+04	-3.300	0.000	1.000	1.000
33.93	0.000	0.000	Strato1_2_8_L_0									
19 D	7.188	4.7151E-05	66.50	35.94	66.50	35.94	V-C	1.4726E+04	-3.500	0.000	1.000	1.000
35.94	0.000	0.000	Strato1_2_8_L_0									
20 D	7.589	4.6749E-05	70.30	37.95	70.30	37.95	V-C	1.4726E+04	-3.700	0.000	1.000	1.000
37.95	0.000	0.000	Strato1_2_8_L_0									
21 D	7.991	4.6316E-05	74.10	39.96	74.10	39.96	V-C	1.4726E+04	-3.900	0.000	1.000	1.000
39.96	0.000	0.000	Strato1_2_8_L_0									
22 D	8.392	4.5848E-05	77.90	41.96	77.90	41.96	V-C	1.4726E+04	-4.100	0.000	1.000	1.000
41.96	0.000	0.000	Strato1_2_8_L_0									
23 D	8.794	4.5341E-05	81.70	43.97	81.70	43.97	V-C	1.4726E+04	-4.300	0.000	1.000	1.000
43.97	0.000	0.000	Strato1_2_8_L_0									
24 D	9.195	4.4791E-05	85.50	45.97	85.50	45.98	UL-RL	4.4178E+04	-4.500	0.000	1.000	1.000
45.97	0.000	0.000	Strato1_2_8_L_0									
25 D	9.595	4.4194E-05	89.30	47.98	89.30	47.98	UL-RL	4.4178E+04	-4.700	0.000	1.000	1.000
47.98	0.000	0.000	Strato1_2_8_L_0									
26 D	9.996	4.3546E-05	93.10	49.98	93.10	49.99	UL-RL	4.4178E+04	-4.900	0.000	1.000	1.000
49.98	0.000	0.000	Strato1_2_8_L_0									
27 D	10.40	4.2843E-05	96.90	51.98	96.90	51.99	UL-RL	4.4178E+04	-5.100	0.000	1.000	1.000
51.98	0.000	0.000	Strato1_2_8_L_0									
28 D	10.80	4.2084E-05	100.7	53.99	100.7	53.99	UL-RL	4.4178E+04	-5.300	0.000	1.000	1.000
53.99	0.000	0.000	Strato1_2_8_L_0									
29 D	11.20	4.1266E-05	104.5	55.99	104.5	56.00	UL-RL	4.4178E+04	-5.500	0.000	1.000	1.000
55.99	0.000	0.000	Strato1_2_8_L_0									
30 D	11.60	4.0388E-05	108.3	57.99	108.3	58.00	UL-RL	4.4178E+04	-5.700	0.000	1.000	1.000
57.99	0.000	0.000	Strato1_2_8_L_0									
31 D	12.00	3.9449E-05	112.1	59.99	112.1	60.00	UL-RL	4.4178E+04	-5.900	0.000	1.000	1.000
59.99	0.000	0.000	Strato1_2_8_L_0									
32 D	12.40	3.8449E-05	115.9	61.99	115.9	62.00	UL-RL	4.4178E+04	-6.100	0.000	1.000	1.000
61.99	0.000	0.000	Strato1_2_8_L_0									
33 D	12.80	3.7391E-05	119.7	63.99	119.7	63.99	UL-RL	4.4178E+04	-6.300	0.000	1.000	1.000
63.99	0.000	0.000	Strato1_2_8_L_0									
34 D	13.20	3.6277E-05	123.5	65.98	123.5	65.99	UL-RL	4.4178E+04	-6.500	0.000	1.000	1.000
65.98	0.000	0.000	Strato1_2_8_L_0									
35 D	13.60	3.5111E-05	127.3	67.98	127.3	67.99	UL-RL	4.4178E+04	-6.700	0.000	1.000	1.000
67.98	0.000	0.000	Strato1_2_8_L_0									
36 D	14.00	3.3899E-05	131.1	69.98	131.1	69.98	UL-RL	4.4178E+04	-6.900	0.000	1.000	1.000
69.98	0.000	0.000	Strato1_2_8_L_0									
37 D	14.39	3.2648E-05	134.9	71.97	134.9	71.98	UL-RL	4.4178E+04	-7.100	0.000	1.000	1.000
71.97	0.000	0.000	Strato1_2_8_L_0									
38 D	14.79	3.1369E-05	138.7	73.97	138.7	73.97	UL-RL	4.4178E+04	-7.300	0.000	1.000	1.000
73.97	0.000	0.000	Strato1_2_8_L_0									
39 D	15.19	3.0072E-05	142.5	75.96	142.5	75.97	UL-RL	4.4178E+04	-7.500	0.000	1.000	1.000
75.96	0.000	0.000	Strato1_2_8_L_0									

40 D	15.59	2.8773E-05	146.3	77.96	146.3	77.96	UL-RL	4.4178E+04	-7.700	0.000	1.000	1.000
77.96	0.000	0.000	Strato1_2_8_L_0									
41 D	15.20	2.7487E-05	150.2	75.99	150.2	76.00	UL-RL	9.7606E+04	-7.900	0.000	1.000	1.000
75.99	0.000	0.000	Strato2_3095_82743_L_0									
42 D	15.59	2.6232E-05	154.2	77.95	154.2	77.96	UL-RL	9.7606E+04	-8.100	0.000	1.000	1.000
77.95	0.000	0.000	Strato2_3095_82743_L_0									
43 D	15.98	2.5023E-05	158.2	79.91	158.2	79.92	UL-RL	9.7606E+04	-8.300	0.000	1.000	1.000
79.91	0.000	0.000	Strato2_3095_82743_L_0									
44 D	16.37	2.3872E-05	162.2	81.87	162.2	81.88	UL-RL	9.7606E+04	-8.500	0.000	1.000	1.000
81.87	0.000	0.000	Strato2_3095_82743_L_0									
45 D	16.77	2.2784E-05	166.2	83.84	166.2	83.84	UL-RL	9.7606E+04	-8.700	0.000	1.000	1.000
83.84	0.000	0.000	Strato2_3095_82743_L_0									
46 D	17.16	2.1765E-05	170.2	85.80	170.2	85.81	UL-RL	9.7606E+04	-8.900	0.000	1.000	1.000
85.80	0.000	0.000	Strato2_3095_82743_L_0									
47 D	17.55	2.0816E-05	174.2	87.77	174.2	87.78	UL-RL	9.7606E+04	-9.100	0.000	1.000	1.000
87.77	0.000	0.000	Strato2_3095_82743_L_0									
48 D	17.95	1.9936E-05	178.2	89.75	178.2	89.75	UL-RL	9.7606E+04	-9.300	0.000	1.000	1.000
89.75	0.000	0.000	Strato2_3095_82743_L_0									
49 D	18.34	1.9123E-05	182.2	91.72	182.2	91.72	UL-RL	9.7606E+04	-9.500	0.000	1.000	1.000
91.72	0.000	0.000	Strato2_3095_82743_L_0									
50 D	18.74	1.8373E-05	186.2	93.70	186.2	93.70	UL-RL	9.7606E+04	-9.700	0.000	1.000	1.000
93.70	0.000	0.000	Strato2_3095_82743_L_0									
51 D	19.13	1.7681E-05	190.2	95.67	190.2	95.68	UL-RL	9.7606E+04	-9.900	0.000	1.000	1.000
95.67	0.000	0.000	Strato2_3095_82743_L_0									
52 D	19.53	1.7041E-05	194.2	97.65	194.2	97.65	UL-RL	9.7606E+04	-10.10	0.000	1.000	1.000
97.65	0.000	0.000	Strato2_3095_82743_L_0									
53 D	19.93	1.6446E-05	198.2	99.63	198.2	99.63	V-C	3.2535E+04	-10.30	0.000	1.000	1.000
99.63	0.000	0.000	Strato2_3095_82743_L_0									
54 D	20.32	1.5890E-05	202.2	101.6	202.2	101.6	V-C	3.2535E+04	-10.50	0.000	1.000	1.000
101.6	0.000	0.000	Strato2_3095_82743_L_0									
55 D	20.72	1.5366E-05	206.2	103.6	206.2	103.6	V-C	3.2535E+04	-10.70	0.000	1.000	1.000
103.6	0.000	0.000	Strato2_3095_82743_L_0									
56 D	21.12	1.4868E-05	210.2	105.6	210.2	105.6	V-C	3.2535E+04	-10.90	0.000	1.000	1.000
105.6	0.000	0.000	Strato2_3095_82743_L_0									
57 D	21.51	1.4388E-05	214.2	107.6	214.2	107.6	V-C	3.2535E+04	-11.10	0.000	1.000	1.000
107.6	0.000	0.000	Strato2_3095_82743_L_0									
58 D	21.91	1.3922E-05	218.2	109.6	218.2	109.6	V-C	3.2535E+04	-11.30	0.000	1.000	1.000
109.6	0.000	0.000	Strato2_3095_82743_L_0									
59 D	22.31	1.3465E-05	222.2	111.5	222.2	111.5	UL-RL	9.7606E+04	-11.50	0.000	1.000	1.000
111.5	0.000	0.000	Strato2_3095_82743_L_0									
60 D	22.70	1.3013E-05	226.2	113.5	226.2	113.5	UL-RL	9.7606E+04	-11.70	0.000	1.000	1.000
113.5	0.000	0.000	Strato2_3095_82743_L_0									
61 D	17.33	1.2562E-05	230.2	115.5	230.2	115.5	UL-RL	9.7606E+04	-11.90	0.000	1.000	1.000
115.5	0.000	0.000	Strato2_3095_82743_L_0									
62 D	5.825	1.2337E-05	232.2	116.5	232.2	116.5	UL-RL	9.7606E+04	-12.00	0.000	1.000	1.000
116.5	0.000	0.000	Strato2_3095_82743_L_0									

```
+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                   |
|                                  Exe Time :24 July 2019      11:09:27                                             |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
C U R R E N T   T I M E   I S     2.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-------------------------------------------------------------
    1 0.30400    -0.30400    -3.00981E-13 6.08000E-02
    2 0.30288    -0.30288    -6.08000E-02 0.12138
    3 0.19072    -0.19072    -0.12138     0.15952
    4 9.06247E-02-9.06247E-02-0.15952     0.17765
    5 1.90629E-02-1.90629E-02-0.17765     0.18146
    6-3.26980E-02 3.26980E-02-0.18146     0.17492
    7-6.93291E-02 6.93291E-02-0.17492     0.16105
    8-9.36414E-02 9.36414E-02-0.16105     0.14232
    9-0.17848     0.17848    -0.14232     0.10663
   10-0.24621     0.24621    -0.10663     5.73879E-02
   11-0.29931     0.29931    -5.73879E-02-2.47437E-03
   12-0.33959     0.33959     2.47437E-03-7.03917E-02
   13-0.36116     0.36116     7.03917E-02-0.10651
   14-0.39630     0.39630     0.10651    -0.18577
   15-0.43120     0.43120     0.18577    -0.27201
   16-0.45496     0.45496     0.27201    -0.36300
```

```
   17-0.46817     0.46817     0.36300    -0.45664
   18-0.47119     0.47119     0.45664    -0.55087
   19-0.46422     0.46422     0.55087    -0.64372
   20-0.44728     0.44728     0.64372    -0.73318
   21-0.45066     0.45066     0.73318    -0.82331
   22-0.44221     0.44221     0.82331    -0.91175
   23-0.42176     0.42176     0.91175    -0.99610
   24-0.38870     0.38870     0.99610     -1.0738
   25-0.34267     0.34267      1.0738     -1.1424
   26-0.28318     0.28318      1.1424     -1.1990
   27-0.20968     0.20968      1.1990     -1.2409
   28-0.14409     0.14409      1.2409     -1.2698
   29-6.22949E-02 6.22949E-02  1.2698     -1.2822
   30 3.63963E-02-3.63963E-02  1.2822     -1.2749
   31 0.15270    -0.15270      1.2749     -1.2444
   32 0.28734    -0.28734      1.2444     -1.1869
   33 0.44106    -0.44106      1.1869     -1.0987
   34 0.61456    -0.61456      1.0987    -0.97582
   35 0.80850    -0.80850     0.97582    -0.81412
   36  1.0061     -1.0061     0.81412    -0.61290
   37  1.2256     -1.2256     0.61290    -0.36778
   38  1.4675     -1.4675     0.36778    -7.42698E-02
   39  1.7319     -1.7319     7.42698E-02 0.27211
   40  2.0187     -2.0187    -0.27211     0.67584
   41  1.5484     -1.5484    -0.67584     0.98552
   42  1.1331     -1.1331    -0.98552      1.2121
   43 0.75710    -0.75710     -1.2121      1.3636
   44 0.43184    -0.43184     -1.3636      1.4499
   45 0.15455    -0.15455     -1.4499      1.4808
   46-7.77566E-02 7.77566E-02 -1.4808      1.4653
   47-0.26813     0.26813     -1.4653      1.4117
   48-0.41958     0.41958     -1.4117      1.3278
   49-0.53501     0.53501     -1.3278      1.2208
   50-0.61715     0.61715     -1.2208      1.0973
   51-0.68001     0.68001     -1.0973     0.96132
   52-0.71413     0.71413    -0.96132     0.81850
   53-0.72148     0.72148    -0.81850     0.67420
   54-0.70370     0.70370    -0.67420     0.53346
   55-0.66223     0.66223    -0.53346     0.40102
   56-0.59819     0.59819    -0.40102     0.28138
   57-0.51245     0.51245    -0.28138     0.17889
   58-0.41574     0.41574    -0.17889     9.57378E-02
   59-0.29817     0.29817    -9.57378E-02 3.61031E-02
   60-0.16000     0.16000    -3.61031E-02 4.10245E-03
   61-4.10204E-02 4.10204E-02-4.10245E-03 3.04395E-13



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                     NewProject.BaseDesignSection_28.SLERara_3454                                      |
|                                  Exe Time :24 July 2019      11:09:27                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_778405                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S      2.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-----------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1933E+05 RIMNOR= 82.75
           RENORM= 414.0     REMNOR=0.9387E-23 RATIO =0.1464     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 22.84     RMMAX = 1.481
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1933E+05 RDR   = 82.75
           RATIOT=0.1464     RATIOR= 0.000
           MAX UN= 5.983     IEQ=    31 NODE     16 DOF   1  Y-DISPL.F
           MIN UN=-.1083E-10 IEQ=    71 NODE     36 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1933E+05 RIMNOR= 82.75
```

```
           RENORM= 42.95     REMNOR=0.4892E-20 RATIO =0.4714E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 22.84     RMMAX = 1.481
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1933E+05 RDR   = 82.75
           RATIOT=0.4714E-01 RATIOR= 0.000
           MAX UN= 3.168     IEQ=     7 NODE      4 DOF   1  Y-DISPL.F
           MIN UN=-.2432E-03 IEQ=    47 NODE     24 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1933E+05 RIMNOR= 82.75
           RENORM= 19.23     REMNOR=0.2399E-19 RATIO =0.3154E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 22.84     RMMAX = 1.481
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1933E+05 RDR   = 82.75
           RATIOT=0.3154E-01 RATIOR= 0.000
           MAX UN= 2.775     IEQ=    31 NODE     16 DOF   1  Y-DISPL.F
           MIN UN=-.1527E-08 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1933E+05 RIMNOR= 82.75
           RENORM=0.9534     REMNOR=0.9341E-20 RATIO =0.7023E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 22.84     RMMAX = 1.481
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1933E+05 RDR   = 82.75
           RATIOT=0.7023E-02 RATIOR= 0.000
           MAX UN=0.9024     IEQ=    43 NODE     22 DOF   1  Y-DISPL.F
           MIN UN=-.6860E-09 IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     5 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1933E+05 RIMNOR= 82.75
           RENORM=0.4039E-17 REMNOR=0.1082E-19 RATIO =0.1446E-10 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 22.84     RMMAX = 1.481
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1933E+05 RDR   = 82.75
           RATIOT=0.1446E-10 RATIOR= 0.000
           MAX UN=0.1189E-08 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           MIN UN=-.1365E-08 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                 Exe Time :24 July 2019      11:09:27                                                  |
+-----------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     5 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    3     ( AT TIME   3.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)          (
    1   2.7028241E-03  -4.6579270E-04
    2   2.6096660E-03  -4.6578548E-04
    3   2.5165117E-03  -4.6575061E-04
    4   2.4233698E-03  -4.6565475E-04
    5   2.3302570E-03  -4.6545158E-04
    6   2.2372002E-03  -4.6508295E-04
    7   2.1442395E-03  -4.6447921E-04
    8   2.0514296E-03  -4.6355942E-04
    9   1.9588429E-03  -4.6223143E-04
   10   1.8665711E-03  -4.6039293E-04
   11   1.7747273E-03  -4.5793137E-04
   12   1.6834483E-03  -4.5472290E-04
   13   1.5928969E-03  -4.5063250E-04
   14   1.5479523E-03  -4.4821598E-04
   15   1.4588585E-03  -4.4252460E-04
   16   1.3710269E-03  -4.3556566E-04
   17   1.2847283E-03  -4.2716573E-04
   18   1.2002666E-03  -4.1717670E-04
   19   1.1179669E-03  -4.0554873E-04
   20   1.0381507E-03  -3.9236670E-04
   21   9.6111231E-04  -3.7780296E-04
```

22	8.8710865E-04	-3.6205222E-04
23	8.1635729E-04	-3.4531342E-04
24	7.4903563E-04	-3.2778940E-04
25	6.8528011E-04	-3.0968669E-04
26	6.2518630E-04	-2.9120371E-04
27	5.6881228E-04	-2.7252012E-04
28	5.1618114E-04	-2.5379749E-04
29	4.6728617E-04	-2.3518156E-04
30	4.2209271E-04	-2.1680286E-04
31	3.8054147E-04	-1.9877743E-04
32	3.4255153E-04	-1.8120788E-04
33	3.0802212E-04	-1.6418421E-04
34	2.7683620E-04	-1.4778526E-04
35	2.4886181E-04	-1.3207942E-04
36	2.2395429E-04	-1.1712565E-04
37	2.0195802E-04	-1.0297482E-04
38	1.8270802E-04	-8.9670628E-05
39	1.6603098E-04	-7.7249771E-05
40	1.5174716E-04	-6.5743104E-05
41	1.3967109E-04	-5.5176127E-05
42	1.2961366E-04	-4.5554991E-05
43	1.2138717E-04	-3.6863329E-05
44	1.1480817E-04	-2.9074569E-05
45	1.0969946E-04	-2.2154050E-05
46	1.0589144E-04	-1.6060185E-05
47	1.0322341E-04	-1.0746008E-05
48	1.0154447E-04	-6.1605306E-06
49	1.0071422E-04	-2.2498234E-06
50	1.0060327E-04	1.0418272E-06
51	1.0109346E-04	3.7711421E-06
52	1.0207798E-04	5.9947612E-06
53	1.0346137E-04	7.7688424E-06
54	1.0515923E-04	9.1485014E-06
55	1.0709807E-04	1.0187641E-05
56	1.0921507E-04	1.0938575E-05
57	1.1145765E-04	1.1451789E-05
58	1.1378317E-04	1.1775763E-05
59	1.1615842E-04	1.1956621E-05
60	1.1855919E-04	1.2038056E-05
61	1.2096978E-04	1.2061539E-05
62	1.2217613E-04	1.2062689E-05

PARATIEPLUS(TM)   NLS ENGINE RELEASE 2017.1   FULL VERSION *Build date:Jul 11, 2017*

NewProject.BaseDesignSection_28.SLERara_3454
Exe Time :24 July 2019   11:09:27

New Project

S T R E S S   R E S U L T S   F O R   G R O U P   N O.   1

0_L :
ELEMENT TYPE   5 NO.OF ELEMENTS. IN THIS GROUP   62
C U R R E N T   T I M E   I S   3.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.3040	-2.7028E-03	10.00	3.040	10.00	5.300	ACTIVE	0.000	0.000	0.000	1.000	1.000	3.040	0.000	0.000	Strato1_2_8_L_0
2 D	0.5569	-2.6097E-03	9.159	2.784	9.159	4.854	ACTIVE	0.000	-0.2000	0.000	1.000	1.000	2.784	0.000	0.000	Strato1_2_8_L_0
3 D	0.8475	-2.5165E-03	13.94	4.238	13.94	7.388	ACTIVE	0.000	-0.4000	0.000	1.000	1.000	4.238	0.000	0.000	Strato1_2_8_L_0
4 D	1.103	-2.4234E-03	18.14	5.515	18.14	9.614	ACTIVE	0.000	-0.6000	0.000	1.000	1.000	5.515	0.000	0.000	Strato1_2_8_L_0
5 D	1.347	-2.3303E-03	22.16	6.736	22.16	11.74	ACTIVE	0.000	-0.8000	0.000	1.000	1.000	6.736	0.000	0.000	Strato1_2_8_L_0
6 D	1.586	-2.2372E-03	26.09	7.932	26.09	13.83	ACTIVE	0.000	-1.000	0.000	1.000	1.000	7.932	0.000	0.000	Strato1_2_8_L_0
7 D	1.823	-2.1442E-03	29.98	9.115	29.98	15.89	ACTIVE	0.000	-1.200	0.000	1.000	1.000	9.115	0.000	0.000	Strato1_2_8_L_0
8 D	2.058	-2.0514E-03	33.85	10.29	33.85	17.94	ACTIVE	0.000	-1.400	0.000	1.000	1.000	10.29	0.000	0.000	Strato1_2_8_L_0
9 D	2.252	-1.9588E-03	37.03	11.26	37.03	19.63	ACTIVE	0.000	-1.600	0.000	1.000	1.000	11.26	0.000	0.000	Strato1_2_8_L_0
10 D	2.490	-1.8666E-03	40.95	12.45	40.95	21.70	ACTIVE	0.000	-1.800	0.000	1.000	1.000	12.45	0.000	0.000	Strato1_2_8_L_0
11 D	2.726	-1.7747E-03	44.84	13.63	44.84	23.77	ACTIVE	0.000	-2.000	0.000	1.000	1.000	13.63	0.000	0.000	Strato1_2_8_L_0
12 D	2.962	-1.6834E-03	48.72	14.81	48.72	25.82	ACTIVE	0.000	-2.200	0.000	1.000	1.000	14.81	0.000	0.000	Strato1_2_8_L_0
13 D	2.398	-1.5929E-03	52.58	15.98	52.58	27.87	ACTIVE	0.000	-2.400	0.000	1.000	1.000	15.98	0.000	0.000	Strato1_2_8_L_0
14 D	2.475	-1.5480E-03	54.28	16.50	54.28	28.77	ACTIVE	0.000	-2.500	0.000	1.000	1.000	16.50	0.000	0.000	Strato1_2_8_L_0
15 D	3.536	-1.4589E-03	58.15	17.68	58.15	30.82	ACTIVE	0.000	-2.700	0.000	1.000	1.000	17.68	0.000	0.000	Strato1_2_8_L_0
16 D	3.770	-1.3710E-03	62.01	18.85	62.01	32.86	ACTIVE	0.000	-2.900	0.000	1.000	1.000	18.85	0.000	0.000	Strato1_2_8_L_0
17 D	4.004	-1.2847E-03	65.86	20.02	65.86	34.90	ACTIVE	0.000	-3.100	0.000	1.000	1.000	20.02	0.000	0.000	Strato1_2_8_L_0
18 D	4.238	-1.2003E-03	69.70	21.19	69.70	36.94	ACTIVE	0.000	-3.300	0.000	1.000	1.000	21.19	0.000	0.000	Strato1_2_8_L_0
19 D	4.471	-1.1180E-03	73.54	22.36	73.54	38.98	ACTIVE	0.000	-3.500	0.000	1.000	1.000	22.36	0.000	0.000	Strato1_2_8_L_0
20 D	4.704	-1.0382E-03	77.37	23.52	77.37	41.01	ACTIVE	0.000	-3.700	0.000	1.000	1.000	23.52	0.000	0.000	Strato1_2_8_L_0
21 D	4.920	-9.6111E-04	80.92	24.60	80.92	42.89	ACTIVE	0.000	-3.900	0.000	1.000	1.000	24.60	0.000	0.000	Strato1_2_8_L_0
22 D	5.153	-8.8711E-04	84.76	25.77	84.76	44.92	ACTIVE	0.000	-4.100	0.000	1.000	1.000	25.77	0.000	0.000	Strato1_2_8_L_0
23 D	5.387	-8.1636E-04	88.60	26.93	88.60	46.96	ACTIVE	0.000	-4.300	0.000	1.000	1.000	26.93	0.000	0.000	Strato1_2_8_L_0
24 D	5.641	-7.4904E-04	92.43	28.21	92.43	48.99	UL-RL	2.5465E+04	-4.500	0.000	1.000	1.000	28.21	0.000	0.000	Strato1_2_8_L_0
25 D	6.376	-6.8528E-04	96.27	31.88	96.27	51.02	UL-RL	2.5465E+04	-4.700	0.000	1.000	1.000	31.88	0.000	0.000	Strato1_2_8_L_0
26 D	7.093	-6.2519E-04	100.1	35.47	100.1	53.05	UL-RL	2.5465E+04	-4.900	0.000	1.000	1.000	35.47	0.000	0.000	Strato1_2_8_L_0
27 D	7.792	-5.6881E-04	103.9	38.96	103.9	55.08	UL-RL	2.5465E+04	-5.100	0.000	1.000	1.000	38.96	0.000	0.000	Strato1_2_8_L_0
28 D	8.448	-5.1618E-04	107.5	42.24	107.5	56.99	UL-RL	2.5465E+04	-5.300	0.000	1.000	1.000	42.24	0.000	0.000	Strato1_2_8_L_0
29 D	9.110	-4.6729E-04	111.4	45.55	111.4	59.02	UL-RL	2.5465E+04	-5.500	0.000	1.000	1.000	45.55	0.000	0.000	Strato1_2_8_L_0
30 D	9.752	-4.2209E-04	115.2	48.76	115.2	61.05	UL-RL	2.5465E+04	-5.700	0.000	1.000	1.000				

48.76	0.000	0.000	Strato1_2_8_L_0										
31 D	10.38	-3.8054E-04	119.0	51.88	119.0	63.08	UL-RL	2.5465E+04	-5.900	0.000	1.000	1.000	
51.88	0.000	0.000	Strato1_2_8_L_0										
32 D	10.98	-3.4255E-04	122.8	54.92	122.8	65.11	UL-RL	2.5465E+04	-6.100	0.000	1.000	1.000	
54.92	0.000	0.000	Strato1_2_8_L_0										
33 D	11.57	-3.0802E-04	126.7	57.86	126.7	67.14	UL-RL	2.5465E+04	-6.300	0.000	1.000	1.000	
57.86	0.000	0.000	Strato1_2_8_L_0										
34 D	12.15	-2.7684E-04	130.5	60.73	130.5	69.16	UL-RL	2.5465E+04	-6.500	0.000	1.000	1.000	
60.73	0.000	0.000	Strato1_2_8_L_0										
35 D	12.70	-2.4886E-04	134.3	63.51	134.3	71.19	UL-RL	2.5465E+04	-6.700	0.000	1.000	1.000	
63.51	0.000	0.000	Strato1_2_8_L_0										
36 D	13.23	-2.2395E-04	138.0	66.13	138.0	73.12	UL-RL	2.5465E+04	-6.900	0.000	1.000	1.000	
66.13	0.000	0.000	Strato1_2_8_L_0										
37 D	13.75	-2.0196E-04	141.8	68.76	141.8	75.15	UL-RL	2.5465E+04	-7.100	0.000	1.000	1.000	
68.76	0.000	0.000	Strato1_2_8_L_0										
38 D	14.26	-1.8271E-04	145.6	71.32	145.6	77.18	UL-RL	2.5465E+04	-7.300	0.000	1.000	1.000	
71.32	0.000	0.000	Strato1_2_8_L_0										
39 D	14.76	-1.6603E-04	149.4	73.82	149.4	79.20	UL-RL	2.5465E+04	-7.500	0.000	1.000	1.000	
73.82	0.000	0.000	Strato1_2_8_L_0										
40 D	15.25	-1.5175E-04	153.3	76.26	153.3	81.22	UL-RL	2.5465E+04	-7.700	0.000	1.000	1.000	
76.26	0.000	0.000	Strato1_2_8_L_0										
41 D	13.11	-1.3967E-04	157.2	65.56	157.2	78.59	UL-RL	7.2037E+04	-7.900	0.000	1.000	1.000	
65.56	0.000	0.000	Strato2_3095_82743_L_0										
42 D	13.68	-1.2961E-04	161.2	68.42	161.2	80.60	UL-RL	7.2037E+04	-8.100	0.000	1.000	1.000	
68.42	0.000	0.000	Strato2_3095_82743_L_0										
43 D	14.22	-1.2139E-04	165.1	71.09	165.1	82.54	UL-RL	7.2037E+04	-8.300	0.000	1.000	1.000	
71.09	0.000	0.000	Strato2_3095_82743_L_0										
44 D	14.74	-1.1481E-04	169.1	73.70	169.1	84.55	UL-RL	7.2037E+04	-8.500	0.000	1.000	1.000	
73.70	0.000	0.000	Strato2_3095_82743_L_0										
45 D	15.24	-1.0970E-04	173.1	76.19	173.1	86.55	UL-RL	7.2037E+04	-8.700	0.000	1.000	1.000	
76.19	0.000	0.000	Strato2_3095_82743_L_0										
46 D	15.72	-1.0589E-04	177.1	78.58	177.1	88.56	UL-RL	7.2037E+04	-8.900	0.000	1.000	1.000	
78.58	0.000	0.000	Strato2_3095_82743_L_0										
47 D	16.18	-1.0322E-04	181.1	80.89	181.1	90.57	UL-RL	7.2037E+04	-9.100	0.000	1.000	1.000	
80.89	0.000	0.000	Strato2_3095_82743_L_0										
48 D	16.62	-1.0154E-04	185.2	83.11	185.2	92.58	UL-RL	7.2037E+04	-9.300	0.000	1.000	1.000	
83.11	0.000	0.000	Strato2_3095_82743_L_0										
49 D	17.05	-1.0071E-04	189.2	85.27	189.2	94.59	UL-RL	7.2037E+04	-9.500	0.000	1.000	1.000	
85.27	0.000	0.000	Strato2_3095_82743_L_0										
50 D	17.47	-1.0060E-04	193.2	87.36	193.2	96.59	UL-RL	7.2037E+04	-9.700	0.000	1.000	1.000	
87.36	0.000	0.000	Strato2_3095_82743_L_0										
51 D	17.87	-1.0109E-04	197.1	89.35	197.1	98.54	UL-RL	7.2037E+04	-9.900	0.000	1.000	1.000	
89.35	0.000	0.000	Strato2_3095_82743_L_0										
52 D	18.27	-1.0208E-04	201.1	91.36	201.1	100.6	UL-RL	7.2037E+04	-10.10	0.000	1.000	1.000	
91.36	0.000	0.000	Strato2_3095_82743_L_0										
53 D	18.67	-1.0346E-04	205.1	93.33	205.1	102.6	UL-RL	7.2037E+04	-10.30	0.000	1.000	1.000	
93.33	0.000	0.000	Strato2_3095_82743_L_0										
54 D	19.06	-1.0516E-04	209.1	95.28	209.1	104.6	UL-RL	7.2037E+04	-10.50	0.000	1.000	1.000	
95.28	0.000	0.000	Strato2_3095_82743_L_0										
55 D	19.44	-1.0710E-04	213.1	97.20	213.1	106.6	UL-RL	7.2037E+04	-10.70	0.000	1.000	1.000	
97.20	0.000	0.000	Strato2_3095_82743_L_0										
56 D	19.82	-1.0922E-04	217.2	99.11	217.2	108.6	UL-RL	7.2037E+04	-10.90	0.000	1.000	1.000	
99.11	0.000	0.000	Strato2_3095_82743_L_0										
57 D	20.20	-1.1146E-04	221.2	101.0	221.2	110.6	UL-RL	7.2037E+04	-11.10	0.000	1.000	1.000	
101.0	0.000	0.000	Strato2_3095_82743_L_0										
58 D	20.57	-1.1378E-04	225.1	102.8	225.1	112.5	UL-RL	7.2037E+04	-11.30	0.000	1.000	1.000	
102.8	0.000	0.000	Strato2_3095_82743_L_0										
59 D	20.95	-1.1616E-04	229.1	104.7	229.1	114.6	UL-RL	7.2037E+04	-11.50	0.000	1.000	1.000	
104.7	0.000	0.000	Strato2_3095_82743_L_0										
60 D	21.32	-1.1856E-04	233.1	106.6	233.1	116.6	UL-RL	7.2037E+04	-11.70	0.000	1.000	1.000	
106.6	0.000	0.000	Strato2_3095_82743_L_0										
61 D	16.27	-1.2097E-04	237.1	108.5	237.1	118.6	UL-RL	7.2037E+04	-11.90	0.000	1.000	1.000	
108.5	0.000	0.000	Strato2_3095_82743_L_0										
62 D	5.470	-1.2218E-04	239.1	109.4	239.1	119.5	UL-RL	7.2037E+04	-12.00	0.000	1.000	1.000	
109.4	0.000	0.000	Strato2_3095_82743_L_0										

```
+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                   |
|                                 Exe Time :24 July 2019      11:09:27                                              |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

0_R                          :
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
C U R R E N T   T I M E   I S      3.0000

 HARDENING 2D SOIL ELEMENT
```

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000	0.000	0.000	0.000	not available
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000	0.000	0.000	0.000	not available
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000	0.000	0.000	0.000	not available
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000	0.000	0.000	0.000	not available
6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000	0.000	0.000	0.000	not available
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000	0.000	0.000	0.000	not available
9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000	0.000	0.000	0.000	not available
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000	0.000	0.000	0.000	not available
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000	0.000	0.000	0.000	not available
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000	0.000	0.000	0.000	not available
14	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000	0.000	0.000	0.000	not available
15	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000	0.000	0.000	0.000	not available
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000	0.000	0.000	0.000	not available
17 D	1.536	1.2847E-03	1.900	7.678	58.90	31.92	PASSIVE	0.000	-3.100	0.000	1.000	1.000	7.678	0.000	0.000	Strato1_2_8_L_0
18 D	4.607	1.2003E-03	5.700	23.03	62.70	33.93	PASSIVE	0.000	-3.300	0.000	1.000	1.000	23.03	0.000	0.000	Strato1_2_8_L_0
19 D	7.678	1.1180E-03	9.500	38.39	66.50	38.39	PASSIVE	0.000	-3.500	0.000	1.000	1.000	38.39	0.000	0.000	Strato1_2_8_L_0
20 D	8.757	1.0382E-03	13.30	43.79	70.30	43.79	V-C	5890.	-3.700	0.000	1.000	1.000	43.79	0.000	0.000	Strato1_2_8_L_0
21 D	9.069	9.6111E-04	17.10	45.34	74.10	45.34	V-C	5890.	-3.900	0.000	1.000	1.000	45.34	0.000	0.000	Strato1_2_8_L_0
22 D	9.384	8.8711E-04	20.90	46.92	77.90	46.92	V-C	5890.	-4.100	0.000	1.000	1.000	46.92	0.000	0.000	Strato1_2_8_L_0
23 D	9.702	8.1636E-04	24.70	48.51	81.70	48.51	V-C	5890.	-4.300	0.000	1.000	1.000	48.51	0.000	0.000	Strato1_2_8_L_0
24 D	10.02	7.4904E-04	28.50	50.12	85.50	50.12	V-C	5890.	-4.500	0.000	1.000	1.000	50.12	0.000	0.000	Strato1_2_8_L_0
25 D	10.35	6.8528E-04	32.30	51.76	89.30	51.76	V-C	5890.	-4.700	0.000	1.000	1.000	51.76	0.000	0.000	Strato1_2_8_L_0
26 D	10.68	6.2519E-04	36.10	53.41	93.10	53.41	V-C	5890.	-4.900	0.000	1.000	1.000	53.41	0.000	0.000	Strato1_2_8_L_0
27 D	11.02	5.6881E-04	39.90	55.09	96.90	55.09	V-C	5890.	-5.100	0.000	1.000	1.000	55.09	0.000	0.000	Strato1_2_8_L_0
28 D	11.36	5.1618E-04	43.70	56.78	100.7	56.78	V-C	5890.	-5.300	0.000	1.000	1.000	56.78	0.000	0.000	Strato1_2_8_L_0
29 D	11.70	4.6729E-04	47.50	58.50	104.5	58.50	V-C	5890.	-5.500	0.000	1.000	1.000	58.50	0.000	0.000	Strato1_2_8_L_0
30 D	12.05	4.2209E-04	51.30	60.24	108.3	60.24	V-C	5890.	-5.700	0.000	1.000	1.000	60.24	0.000	0.000	Strato1_2_8_L_0
31 D	12.40	3.8054E-04	55.10	62.00	112.1	62.00	V-C	5890.	-5.900	0.000	1.000	1.000	62.00	0.000	0.000	Strato1_2_8_L_0
32 D	12.76	3.4255E-04	58.90	63.78	115.9	63.78	V-C	5890.	-6.100	0.000	1.000	1.000	63.78	0.000	0.000	Strato1_2_8_L_0
33 D	13.12	3.0802E-04	62.70	65.59	119.7	65.59	V-C	5890.	-6.300	0.000	1.000	1.000	65.59	0.000	0.000	Strato1_2_8_L_0
34 D	13.48	2.7684E-04	66.50	67.41	123.5	67.41	V-C	5890.	-6.500	0.000	1.000	1.000	67.41	0.000	0.000	Strato1_2_8_L_0
35 D	13.85	2.4886E-04	70.30	69.25	127.3	69.25	V-C	5890.	-6.700	0.000	1.000	1.000	69.25	0.000	0.000	Strato1_2_8_L_0
36 D	14.22	2.2395E-04	74.10	71.10	131.1	71.10	V-C	5890.	-6.900	0.000	1.000	1.000	71.10	0.000	0.000	Strato1_2_8_L_0
37 D	14.60	2.0196E-04	77.90	72.98	134.9	72.98	V-C	5890.	-7.100	0.000	1.000	1.000	72.98	0.000	0.000	Strato1_2_8_L_0
38 D	14.97	1.8271E-04	81.70	74.86	138.7	74.86	V-C	5890.	-7.300	0.000	1.000	1.000	74.86	0.000	0.000	Strato1_2_8_L_0
39 D	15.35	1.6603E-04	85.50	76.77	142.5	76.77	V-C	5890.	-7.500	0.000	1.000	1.000	76.77	0.000	0.000	Strato1_2_8_L_0

40 D	15.74	1.5175E-04	89.30	78.69	146.3	78.69	V-C	5890.	-7.700	0.000	1.000	1.000
78.69	0.000	0.000	Strato1_2_8_L_0									
41 D	12.89	1.3967E-04	93.20	64.43	150.2	76.00	UL-RL	3.9043E+04	-7.900	0.000	1.000	1.000
64.43	0.000	0.000	Strato2_3095_82743_L_0									
42 D	13.22	1.2961E-04	97.20	66.10	154.2	77.96	UL-RL	3.9043E+04	-8.100	0.000	1.000	1.000
66.10	0.000	0.000	Strato2_3095_82743_L_0									
43 D	13.57	1.2139E-04	101.2	67.84	158.2	79.92	UL-RL	3.9043E+04	-8.300	0.000	1.000	1.000
67.84	0.000	0.000	Strato2_3095_82743_L_0									
44 D	13.93	1.1481E-04	105.2	69.64	162.2	81.88	UL-RL	3.9043E+04	-8.500	0.000	1.000	1.000
69.64	0.000	0.000	Strato2_3095_82743_L_0									
45 D	14.30	1.0970E-04	109.2	71.49	166.2	83.84	UL-RL	3.9043E+04	-8.700	0.000	1.000	1.000
71.49	0.000	0.000	Strato2_3095_82743_L_0									
46 D	14.68	1.0589E-04	113.2	73.39	170.2	85.81	UL-RL	3.9043E+04	-8.900	0.000	1.000	1.000
73.39	0.000	0.000	Strato2_3095_82743_L_0									
47 D	15.07	1.0322E-04	117.2	75.33	174.2	87.78	UL-RL	3.9043E+04	-9.100	0.000	1.000	1.000
75.33	0.000	0.000	Strato2_3095_82743_L_0									
48 D	15.46	1.0154E-04	121.2	77.31	178.2	89.75	UL-RL	3.9043E+04	-9.300	0.000	1.000	1.000
77.31	0.000	0.000	Strato2_3095_82743_L_0									
49 D	15.86	1.0071E-04	125.2	79.32	182.2	91.72	UL-RL	3.9043E+04	-9.500	0.000	1.000	1.000
79.32	0.000	0.000	Strato2_3095_82743_L_0									
50 D	16.27	1.0060E-04	129.2	81.36	186.2	93.70	UL-RL	3.9043E+04	-9.700	0.000	1.000	1.000
81.36	0.000	0.000	Strato2_3095_82743_L_0									
51 D	16.68	1.0109E-04	133.2	83.42	190.2	95.68	UL-RL	3.9043E+04	-9.900	0.000	1.000	1.000
83.42	0.000	0.000	Strato2_3095_82743_L_0									
52 D	17.10	1.0208E-04	137.2	85.49	194.2	97.65	UL-RL	3.9043E+04	-10.10	0.000	1.000	1.000
85.49	0.000	0.000	Strato2_3095_82743_L_0									
53 D	17.52	1.0346E-04	141.2	87.58	198.2	99.63	UL-RL	3.9043E+04	-10.30	0.000	1.000	1.000
87.58	0.000	0.000	Strato2_3095_82743_L_0									
54 D	17.94	1.0516E-04	145.2	89.68	202.2	101.6	UL-RL	3.9043E+04	-10.50	0.000	1.000	1.000
89.68	0.000	0.000	Strato2_3095_82743_L_0									
55 D	18.36	1.0710E-04	149.2	91.78	206.2	103.6	UL-RL	3.9043E+04	-10.70	0.000	1.000	1.000
91.78	0.000	0.000	Strato2_3095_82743_L_0									
56 D	18.78	1.0922E-04	153.2	93.89	210.2	105.6	UL-RL	3.9043E+04	-10.90	0.000	1.000	1.000
93.89	0.000	0.000	Strato2_3095_82743_L_0									
57 D	19.20	1.1146E-04	157.2	96.01	214.2	107.6	UL-RL	3.9043E+04	-11.10	0.000	1.000	1.000
96.01	0.000	0.000	Strato2_3095_82743_L_0									
58 D	19.63	1.1378E-04	161.2	98.13	218.2	109.6	UL-RL	3.9043E+04	-11.30	0.000	1.000	1.000
98.13	0.000	0.000	Strato2_3095_82743_L_0									
59 D	20.05	1.1616E-04	165.2	100.2	222.2	111.5	UL-RL	3.9043E+04	-11.50	0.000	1.000	1.000
100.2	0.000	0.000	Strato2_3095_82743_L_0									
60 D	20.47	1.1856E-04	169.2	102.4	226.2	113.5	UL-RL	3.9043E+04	-11.70	0.000	1.000	1.000
102.4	0.000	0.000	Strato2_3095_82743_L_0									
61 D	15.67	1.2097E-04	173.2	104.5	230.2	115.5	UL-RL	3.9043E+04	-11.90	0.000	1.000	1.000
104.5	0.000	0.000	Strato2_3095_82743_L_0									
62 D	5.277	1.2218E-04	175.2	105.5	232.2	116.5	UL-RL	3.9043E+04	-12.00	0.000	1.000	1.000
105.5	0.000	0.000	Strato2_3095_82743_L_0									

```
+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                   |
|                                 Exe Time :24 July 2019      11:09:27                                              |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
C U R R E N T   T I M E   I S      3.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-------------------------------------------------------------
    1 0.30400    -0.30400     4.67282E-12 6.08000E-02
    2 0.86087    -0.86087    -6.08000E-02 0.23297
    3  1.7084     -1.7084    -0.23297     0.57465
    4  2.8113     -2.8113    -0.57465      1.1369
    5  4.1585     -4.1585     -1.1369      1.9686
    6  5.7449     -5.7449     -1.9686      3.1176
    7  7.5680     -7.5680     -3.1176      4.6312
    8  9.6262     -9.6262     -4.6312      6.5564
    9  11.878     -11.878     -6.5564      8.9320
   10  14.367     -14.367     -8.9320      11.805
   11  17.094     -17.094     -11.805      15.224
   12  20.056     -20.056     -15.224      19.235
   13  22.453     -22.453     -19.235      21.481
   14  24.929     -24.929     -21.481      26.466
   15  28.464     -28.464     -26.466      32.159
   16  32.234     -32.234     -32.159      38.606
```

```
   17  34.703     -34.703     -38.606      45.547
   18  34.334     -34.334     -45.547      52.413
   19  31.127     -31.127     -52.413      58.639
   20  27.074     -27.074     -58.639      64.054
   21  22.925     -22.925     -64.054      68.639
   22  18.695     -18.695     -68.639      72.378
   23  14.380     -14.380     -72.378      75.254
   24  9.9963     -9.9963     -75.254      77.253
   25  6.0216     -6.0216     -77.253      78.457
   26  2.4329     -2.4329     -78.457      78.944
   27-0.79280     0.79280     -78.944      78.785
   28 -3.7012      3.7012     -78.785      78.045
   29 -6.2920      6.2920     -78.045      76.787
   30 -8.5880      8.5880     -76.787      75.069
   31 -10.612      10.612     -75.069      72.947
   32 -12.385      12.385     -72.947      70.470
   33 -13.930      13.930     -70.470      67.684
   34 -15.266      15.266     -67.684      64.630
   35 -16.413      16.413     -64.630      61.348
   36 -17.409      17.409     -61.348      57.866
   37 -18.252      18.252     -57.866      54.216
   38 -18.960      18.960     -54.216      50.424
   39 -19.549      19.549     -50.424      46.514
   40 -20.034      20.034     -46.514      42.507
   41 -19.808      19.808     -42.507      38.546
   42 -19.342      19.342     -38.546      34.677
   43 -18.692      18.692     -34.677      30.939
   44 -17.880      17.880     -30.939      27.363
   45 -16.940      16.940     -27.363      23.975
   46 -15.902      15.902     -23.975      20.794
   47 -14.792      14.792     -20.794      17.836
   48 -13.632      13.632     -17.836      15.110
   49 -12.444      12.444     -15.110      12.621
   50 -11.243      11.243     -12.621      10.372
   51 -10.056      10.056     -10.372      8.3611
   52 -8.8823      8.8823     -8.3611      6.5847
   53 -7.7318      7.7318     -6.5847      5.0383
   54 -6.6118      6.6118     -5.0383      3.7159
   55 -5.5282      5.5282     -3.7159      2.6103
   56 -4.4852      4.4852     -2.6103      1.7133
   57 -3.4860      3.4860     -1.7133      1.0161
   58 -2.5425      2.5425     -1.0161     0.50757
   59 -1.6455      1.6455    -0.50757     0.17848
   60-0.79559     0.79559    -0.17848     1.93599E-02
   61-0.19358     0.19358    -1.93599E-02 5.86795E-12



+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                   |
|                                 Exe Time :24 July 2019      11:09:27                                              |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_778405                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S      3.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.6623E+05 RIMNOR=0.2335E+06
           RENORM=0.1736E+05 REMNOR=0.1082E-19 RATIO =0.5119     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 131.8     RMMAX = 78.94
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
           RDT   =0.6623E+05 RDR   =0.2335E+06
           RATIOT=0.5119     RATIOR= 0.000
           MAX UN=0.1189E-08 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           MIN UN=-131.8     IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.6623E+05 RIMNOR=0.2335E+06
```

```
            RENORM= 69.38      REMNOR=0.7345E-20 RATIO =0.3236E-01 TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 131.8      RMMAX = 78.94
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
            RDT    =0.6623E+05 RDR    =0.2335E+06
            RATIOT=0.3236E-01 RATIOR= 0.000
            MAX UN=0.4611E-09 IEQ=     39 NODE     20 DOF   1  Y-DISPL.F
            MIN UN=-3.141      IEQ=      3 NODE      2 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


 ITER      3 RNORM = 0.000      RMNORM= 0.000
            RINORM=0.6623E+05 RIMNOR=0.2335E+06
            RENORM= 1.883      REMNOR=0.5101E-20 RATIO =0.5332E-02 TOLER =0.1000E-03  NOT CONVERGED
            RFMAX = 131.8      RMMAX = 78.94
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
            RDT    =0.6623E+05 RDR    =0.2335E+06
            RATIOT=0.5332E-02 RATIOR= 0.000
            MAX UN=0.3919E-09 IEQ=     25 NODE     13 DOF   1  Y-DISPL.F
            MIN UN=-1.087      IEQ=     37 NODE     19 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


 ITER      4 RNORM = 0.000      RMNORM= 0.000
            RINORM=0.6623E+05 RIMNOR=0.2335E+06
            RENORM=0.1049E-18 REMNOR=0.5042E-21 RATIO =0.1258E-11 TOLER =0.1000E-03      CONVERGED !
            RFMAX = 131.8      RMMAX = 78.94
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
            RDT    =0.6623E+05 RDR    =0.2335E+06
            RATIOT=0.1258E-11 RATIOR= 0.000
            MAX UN=0.1282E-09 IEQ=    121 NODE     61 DOF   1  Y-DISPL.F
            MIN UN=-.1397E-09 IEQ=     25 NODE     13 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                  Exe Time :24 July 2019      11:09:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     4 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    4     ( AT TIME   4.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)            (
    1   6.5186274E-04  -1.9554286E-04
    2   6.1275765E-04  -1.9549074E-04
    3   5.7368008E-04  -1.9523412E-04
    4   5.3469154E-04  -1.9456434E-04
    5   4.9589680E-04  -1.9325774E-04
    6   4.5744670E-04  -1.9107728E-04
    7   4.1954080E-04  -1.8777313E-04
    8   3.8242985E-04  -1.8308299E-04
    9   3.4641831E-04  -1.7673228E-04
   10   3.1186666E-04  -1.6843573E-04
   11   2.7919347E-04  -1.5789733E-04
   12   2.4887773E-04  -1.4480897E-04
   13   2.2146122E-04  -1.2885058E-04
   14   2.0902673E-04  -1.1970236E-04
   15   1.8690763E-04  -1.0194076E-04
   16   1.6808136E-04  -8.6715122E-05
   17   1.5207646E-04  -7.3666310E-05
   18   1.3849421E-04  -6.2426900E-05
   19   1.2700894E-04  -5.2638830E-05
   20   1.1736009E-04  -4.4029553E-05
   21   1.0933007E-04  -3.6426003E-05
   22   1.0273189E-04  -2.9689493E-05
   23   9.7404663E-05  -2.3697197E-05
   24   9.3210226E-05  -1.8346669E-05
   25   9.0028215E-05  -1.3562847E-05
   26   8.7751161E-05  -9.2879229E-06
   27   8.6282621E-05  -5.4694823E-06
   28   8.5536088E-05  -2.0603592E-06
   29   8.5433948E-05   9.8083175E-07
   30   8.5906282E-05   3.6899482E-06
   31   8.6889859E-05   6.0980398E-06
   32   8.8327185E-05   8.2315423E-06
   33   9.0165636E-05   1.0112542E-05
   34   9.2356562E-05   1.1758948E-05
   35   9.4854510E-05   1.3184779E-05
   36   9.7616460E-05   1.4400401E-05
   37   1.0060109E-04   1.5412365E-05
   38   1.0376801E-04   1.6223660E-05
   39   1.0707717E-04   1.6834402E-05
   40   1.1048823E-04   1.7242037E-05
   41   1.1396011E-04   1.7441593E-05
   42   1.1745205E-04   1.7448925E-05
   43   1.2092928E-04   1.7300422E-05
   44   1.2436403E-04   1.7029219E-05
   45   1.2773478E-04   1.6665227E-05
   46   1.3102573E-04   1.6235481E-05
   47   1.3422620E-04   1.5764178E-05
   48   1.3733005E-04   1.5272724E-05
   49   1.4033518E-04   1.4779771E-05
   50   1.4324292E-04   1.4301291E-05
   51   1.4605755E-04   1.3850620E-05
   52   1.4878565E-04   1.3438253E-05
   53   1.5143584E-04   1.3071867E-05
   54   1.5401781E-04   1.2756716E-05
   55   1.5654213E-04   1.2495631E-05
   56   1.5901970E-04   1.2289079E-05
   57   1.6146128E-04   1.2135201E-05
   58   1.6387702E-04   1.2029839E-05
   59   1.6627600E-04   1.1966322E-05
   60   1.6866573E-04   1.1935493E-05
   61   1.7105162E-04   1.1925962E-05
   62   1.7224430E-04   1.1925461E-05
```

```
+----------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1     FULL VERSION  *Build date:Jul 11, 2017* |
|                                                                                                          |
|                                   NewProject.BaseDesignSection_28.SLERara_3454                           |
|                                Exe Time :24 July 2019      11:09:27                                      |
+----------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    1

0_L                             :
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
C U R R E N T    T I M E    I S      4.0000

 HARDENING 2D SOIL ELEMENT

 ****** TOTAL STRESS FORMULATION *****
```

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	2.196	-6.5186E-04	10.00	21.96	10.00	21.96	V-C	8488.	0.000	0.000	1.000	1.000	21.96	0.000	0.000	Strato1_2_8_L_0
2 D	4.223	-6.1276E-04	9.159	21.11	9.159	21.11	V-C	8488.	-0.2000	0.000	1.000	1.000	21.11	0.000	0.000	Strato1_2_8_L_0
3 D	4.566	-5.7368E-04	13.94	22.83	13.94	22.83	V-C	8488.	-0.4000	0.000	1.000	1.000	22.83	0.000	0.000	Strato1_2_8_L_0
4 D	4.856	-5.3469E-04	18.14	24.28	18.14	24.28	V-C	8488.	-0.6000	0.000	1.000	1.000	24.28	0.000	0.000	Strato1_2_8_L_0
5 D	5.129	-4.9590E-04	22.16	25.64	22.16	25.64	V-C	8488.	-0.8000	0.000	1.000	1.000	25.64	0.000	0.000	Strato1_2_8_L_0
6 D	5.394	-4.5745E-04	26.09	26.97	26.09	26.97	V-C	8488.	-1.000	0.000	1.000	1.000	26.97	0.000	0.000	Strato1_2_8_L_0
7 D	5.655	-4.1954E-04	29.98	28.27	29.98	28.27	V-C	8488.	-1.200	0.000	1.000	1.000	28.27	0.000	0.000	Strato1_2_8_L_0
8 D	5.912	-3.8243E-04	33.85	29.56	33.85	29.56	V-C	8488.	-1.400	0.000	1.000	1.000	29.56	0.000	0.000	Strato1_2_8_L_0
9 D	6.105	-3.4642E-04	37.03	30.52	37.03	30.52	V-C	8488.	-1.600	0.000	1.000	1.000	30.52	0.000	0.000	Strato1_2_8_L_0
10 D	6.363	-3.1187E-04	40.95	31.81	40.95	31.81	V-C	8488.	-1.800	0.000	1.000	1.000	31.81	0.000	0.000	Strato1_2_8_L_0
11 D	6.616	-2.7919E-04	44.84	33.08	44.84	33.08	V-C	8488.	-2.000	0.000	1.000	1.000	33.08	0.000	0.000	Strato1_2_8_L_0
12 D	6.865	-2.4888E-04	48.72	34.33	48.72	34.33	V-C	8488.	-2.200	0.000	1.000	1.000	34.33	0.000	0.000	Strato1_2_8_L_0
13 D	5.332	-2.2146E-04	52.58	35.55	52.58	35.55	V-C	8488.	-2.400	0.000	1.000	1.000	35.55	0.000	0.000	Strato1_2_8_L_0
14 D	5.407	-2.0903E-04	54.28	36.05	54.28	36.05	V-C	8488.	-2.500	0.000	1.000	1.000	36.05	0.000	0.000	Strato1_2_8_L_0
15 D	7.447	-1.8691E-04	58.15	37.24	58.15	37.24	V-C	8488.	-2.700	0.000	1.000	1.000	37.24	0.000	0.000	Strato1_2_8_L_0
16 D	7.681	-1.6808E-04	62.01	38.40	62.01	38.40	V-C	8488.	-2.900	0.000	1.000	1.000	38.40	0.000	0.000	Strato1_2_8_L_0
17 D	7.911	-1.5208E-04	65.86	39.56	65.86	39.56	V-C	8488.	-3.100	0.000	1.000	1.000	39.56	0.000	0.000	Strato1_2_8_L_0
18 D	8.141	-1.3849E-04	69.70	40.70	69.70	40.70	V-C	8488.	-3.300	0.000	1.000	1.000	40.70	0.000	0.000	Strato1_2_8_L_0
19 D	8.370	-1.2701E-04	73.54	41.85	73.54	41.85	V-C	8488.	-3.500	0.000	1.000	1.000	41.85	0.000	0.000	Strato1_2_8_L_0
20 D	8.599	-1.1736E-04	77.37	43.00	77.37	43.00	V-C	8488.	-3.700	0.000	1.000	1.000	43.00	0.000	0.000	Strato1_2_8_L_0
21 D	8.804	-1.0933E-04	80.92	44.02	80.92	44.02	V-C	8488.	-3.900	0.000	1.000	1.000	44.02	0.000	0.000	Strato1_2_8_L_0
22 D	9.039	-1.0273E-04	84.76	45.20	84.76	45.20	V-C	8488.	-4.100	0.000	1.000	1.000	45.20	0.000	0.000	Strato1_2_8_L_0
23 D	9.048	-9.7405E-05	88.60	45.24	88.60	46.96	UL-RL	2.5465E+04	-4.300	0.000	1.000	1.000	45.24	0.000	0.000	Strato1_2_8_L_0
24 D	8.981	-9.3210E-05	92.43	44.91	92.43	48.99	UL-RL	2.5465E+04	-4.500	0.000	1.000	1.000	44.91	0.000	0.000	Strato1_2_8_L_0
25 D	9.408	-9.0028E-05	96.27	47.04	96.27	51.02	UL-RL	2.5465E+04	-4.700	0.000	1.000	1.000	47.04	0.000	0.000	Strato1_2_8_L_0
26 D	9.831	-8.7751E-05	100.1	49.15	100.1	53.05	UL-RL	2.5465E+04	-4.900	0.000	1.000	1.000	49.15	0.000	0.000	Strato1_2_8_L_0
27 D	10.25	-8.6283E-05	103.9	51.25	103.9	55.08	UL-RL	2.5465E+04	-5.100	0.000	1.000	1.000	51.25	0.000	0.000	Strato1_2_8_L_0
28 D	10.64	-8.5536E-05	107.5	53.21	107.5	56.99	UL-RL	2.5465E+04	-5.300	0.000	1.000	1.000	53.21	0.000	0.000	Strato1_2_8_L_0
29 D	11.05	-8.5434E-05	111.4	55.27	111.4	59.02	UL-RL	2.5465E+04	-5.500	0.000	1.000	1.000	55.27	0.000	0.000	Strato1_2_8_L_0
30 D	11.46	-8.5906E-05	115.2	57.32	115.2	61.05	UL-RL	2.5465E+04	-5.700	0.000	1.000	1.000				

```
57.32       0.000       0.000     Strato1_2_8_L_0
  31 D   11.87     -8.6890E-05  119.0       59.36       119.0       63.08          UL-RL  2.5465E+04  -5.900       0.000       1.000       1.000
59.36       0.000       0.000     Strato1_2_8_L_0
  32 D   12.28     -8.8327E-05  122.8       61.39       122.8       65.11          UL-RL  2.5465E+04  -6.100       0.000       1.000       1.000
61.39       0.000       0.000     Strato1_2_8_L_0
  33 D   12.68     -9.0166E-05  126.7       63.41       126.7       67.14          UL-RL  2.5465E+04  -6.300       0.000       1.000       1.000
63.41       0.000       0.000     Strato1_2_8_L_0
  34 D   13.08     -9.2357E-05  130.5       65.42       130.5       69.16          UL-RL  2.5465E+04  -6.500       0.000       1.000       1.000
65.42       0.000       0.000     Strato1_2_8_L_0
  35 D   13.49     -9.4855E-05  134.3       67.43       134.3       71.19          UL-RL  2.5465E+04  -6.700       0.000       1.000       1.000
67.43       0.000       0.000     Strato1_2_8_L_0
  36 D   13.87     -9.7616E-05  138.0       69.34       138.0       73.12          UL-RL  2.5465E+04  -6.900       0.000       1.000       1.000
69.34       0.000       0.000     Strato1_2_8_L_0
  37 D   14.27     -1.0060E-04  141.8       71.34       141.8       75.15          UL-RL  2.5465E+04  -7.100       0.000       1.000       1.000
71.34       0.000       0.000     Strato1_2_8_L_0
  38 D   14.67     -1.0377E-04  145.6       73.33       145.6       77.18          UL-RL  2.5465E+04  -7.300       0.000       1.000       1.000
73.33       0.000       0.000     Strato1_2_8_L_0
  39 D   15.07     -1.0708E-04  149.4       75.33       149.4       79.20          UL-RL  2.5465E+04  -7.500       0.000       1.000       1.000
75.33       0.000       0.000     Strato1_2_8_L_0
  40 D   15.46     -1.1049E-04  153.3       77.31       153.3       81.22          UL-RL  2.5465E+04  -7.700       0.000       1.000       1.000
77.31       0.000       0.000     Strato1_2_8_L_0
  41 D   13.48     -1.1396E-04  157.2       67.41       157.2       78.59          UL-RL  7.2037E+04  -7.900       0.000       1.000       1.000
67.41       0.000       0.000     Strato2_3095_82743_L_0
  42 D   13.86     -1.1745E-04  161.2       69.30       161.2       80.60          UL-RL  7.2037E+04  -8.100       0.000       1.000       1.000
69.30       0.000       0.000     Strato2_3095_82743_L_0
  43 D   14.22     -1.2093E-04  165.1       71.12       165.1       82.54          UL-RL  7.2037E+04  -8.300       0.000       1.000       1.000
71.12       0.000       0.000     Strato2_3095_82743_L_0
  44 D   14.60     -1.2436E-04  169.1       73.01       169.1       84.55          UL-RL  7.2037E+04  -8.500       0.000       1.000       1.000
73.01       0.000       0.000     Strato2_3095_82743_L_0
  45 D   14.98     -1.2773E-04  173.1       74.89       173.1       86.55          UL-RL  7.2037E+04  -8.700       0.000       1.000       1.000
74.89       0.000       0.000     Strato2_3095_82743_L_0
  46 D   15.35     -1.3103E-04  177.1       76.77       177.1       88.56          UL-RL  7.2037E+04  -8.900       0.000       1.000       1.000
76.77       0.000       0.000     Strato2_3095_82743_L_0
  47 D   15.73     -1.3423E-04  181.1       78.65       181.1       90.57          UL-RL  7.2037E+04  -9.100       0.000       1.000       1.000
78.65       0.000       0.000     Strato2_3095_82743_L_0
  48 D   16.11     -1.3733E-04  185.2       80.53       185.2       92.58          UL-RL  7.2037E+04  -9.300       0.000       1.000       1.000
80.53       0.000       0.000     Strato2_3095_82743_L_0
  49 D   16.48     -1.4034E-04  189.2       82.41       189.2       94.59          UL-RL  7.2037E+04  -9.500       0.000       1.000       1.000
82.41       0.000       0.000     Strato2_3095_82743_L_0
  50 D   16.86     -1.4324E-04  193.2       84.29       193.2       96.59          UL-RL  7.2037E+04  -9.700       0.000       1.000       1.000
84.29       0.000       0.000     Strato2_3095_82743_L_0
  51 D   17.22     -1.4606E-04  197.1       86.11       197.1       98.54          UL-RL  7.2037E+04  -9.900       0.000       1.000       1.000
86.11       0.000       0.000     Strato2_3095_82743_L_0
  52 D   17.60     -1.4879E-04  201.1       87.99       201.1       100.6          UL-RL  7.2037E+04  -10.10       0.000       1.000       1.000
87.99       0.000       0.000     Strato2_3095_82743_L_0
  53 D   17.97     -1.5144E-04  205.1       89.87       205.1       102.6          UL-RL  7.2037E+04  -10.30       0.000       1.000       1.000
89.87       0.000       0.000     Strato2_3095_82743_L_0
  54 D   18.35     -1.5402E-04  209.1       91.76       209.1       104.6          UL-RL  7.2037E+04  -10.50       0.000       1.000       1.000
91.76       0.000       0.000     Strato2_3095_82743_L_0
  55 D   18.73     -1.5654E-04  213.1       93.64       213.1       106.6          UL-RL  7.2037E+04  -10.70       0.000       1.000       1.000
93.64       0.000       0.000     Strato2_3095_82743_L_0
  56 D   19.10     -1.5902E-04  217.2       95.52       217.2       108.6          UL-RL  7.2037E+04  -10.90       0.000       1.000       1.000
95.52       0.000       0.000     Strato2_3095_82743_L_0
  57 D   19.48     -1.6146E-04  221.2       97.40       221.2       110.6          UL-RL  7.2037E+04  -11.10       0.000       1.000       1.000
97.40       0.000       0.000     Strato2_3095_82743_L_0
  58 D   19.85     -1.6388E-04  225.1       99.23       225.1       112.5          UL-RL  7.2037E+04  -11.30       0.000       1.000       1.000
99.23       0.000       0.000     Strato2_3095_82743_L_0
  59 D   20.22     -1.6628E-04  229.1       101.1       229.1       114.6          UL-RL  7.2037E+04  -11.50       0.000       1.000       1.000
101.1       0.000       0.000     Strato2_3095_82743_L_0
  60 D   20.60     -1.6867E-04  233.1       103.0       233.1       116.6          UL-RL  7.2037E+04  -11.70       0.000       1.000       1.000
103.0       0.000       0.000     Strato2_3095_82743_L_0
  61 D   15.73     -1.7105E-04  237.1       104.9       237.1       118.6          UL-RL  7.2037E+04  -11.90       0.000       1.000       1.000
104.9       0.000       0.000     Strato2_3095_82743_L_0
  62 D   5.290     -1.7224E-04  239.1       105.8       239.1       119.5          UL-RL  7.2037E+04  -12.00       0.000       1.000       1.000
105.8       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                  |
 |                                                                                                                               |
 |                                      NewProject.BaseDesignSection_28.SLERara_3454                                             |
 |                                   Exe Time :24 July 2019      11:09:27                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                          :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
 C U R R E N T   T I M E   I S      4.0000

  HARDENING 2D SOIL ELEMENT
```

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR
Peq	Su_a	Su_p	LAYER									
1	0.000	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000	
0.000	0.000	0.000	not available									
2	0.000	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000	
0.000	0.000	0.000	not available									
3	0.000	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000	
0.000	0.000	0.000	not available									
4	0.000	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000	
0.000	0.000	0.000	not available									
5	0.000	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000	
0.000	0.000	0.000	not available									
6	0.000	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000	
0.000	0.000	0.000	not available									
7	0.000	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000	
0.000	0.000	0.000	not available									
8	0.000	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000	
0.000	0.000	0.000	not available									
9	0.000	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000	
0.000	0.000	0.000	not available									
10	0.000	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000	
0.000	0.000	0.000	not available									
11	0.000	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000	
0.000	0.000	0.000	not available									
12	0.000	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000	
0.000	0.000	0.000	not available									
13	0.000	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000	
0.000	0.000	0.000	not available									
14	0.000	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000	
0.000	0.000	0.000	not available									
15	0.000	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000	
0.000	0.000	0.000	not available									
16	0.000	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000	
0.000	0.000	0.000	not available									
17 D	0.1155	1.5208E-04	1.900	0.5776	58.90	31.92	ACTIVE	0.000	-3.100	0.000	1.000	1.000
0.5776	0.000	0.000	Strato1_2_8_L_0									
18 D	0.8541	1.3849E-04	5.700	4.271	62.70	33.93	UL-RL	1.7671E+04	-3.300	0.000	1.000	1.000
4.271	0.000	0.000	Strato1_2_8_L_0									
19 D	4.176	1.2701E-04	9.500	20.88	66.50	38.39	UL-RL	1.7671E+04	-3.500	0.000	1.000	1.000
20.88	0.000	0.000	Strato1_2_8_L_0									
20 D	5.503	1.1736E-04	13.30	27.52	70.30	43.79	UL-RL	1.7671E+04	-3.700	0.000	1.000	1.000
27.52	0.000	0.000	Strato1_2_8_L_0									
21 D	6.058	1.0933E-04	17.10	30.29	74.10	45.34	UL-RL	1.7671E+04	-3.900	0.000	1.000	1.000
30.29	0.000	0.000	Strato1_2_8_L_0									
22 D	6.611	1.0273E-04	20.90	33.06	77.90	46.92	UL-RL	1.7671E+04	-4.100	0.000	1.000	1.000
33.06	0.000	0.000	Strato1_2_8_L_0									
23 D	7.161	9.7405E-05	24.70	35.81	81.70	48.51	UL-RL	1.7671E+04	-4.300	0.000	1.000	1.000
35.81	0.000	0.000	Strato1_2_8_L_0									
24 D	7.707	9.3210E-05	28.50	38.53	85.50	50.12	UL-RL	1.7671E+04	-4.500	0.000	1.000	1.000
38.53	0.000	0.000	Strato1_2_8_L_0									
25 D	8.247	9.0028E-05	32.30	41.24	89.30	51.76	UL-RL	1.7671E+04	-4.700	0.000	1.000	1.000
41.24	0.000	0.000	Strato1_2_8_L_0									
26 D	8.783	8.7751E-05	36.10	43.91	93.10	53.41	UL-RL	1.7671E+04	-4.900	0.000	1.000	1.000
43.91	0.000	0.000	Strato1_2_8_L_0									
27 D	9.312	8.6283E-05	39.90	46.56	96.90	55.09	UL-RL	1.7671E+04	-5.100	0.000	1.000	1.000
46.56	0.000	0.000	Strato1_2_8_L_0									
28 D	9.835	8.5536E-05	43.70	49.17	100.7	56.78	UL-RL	1.7671E+04	-5.300	0.000	1.000	1.000
49.17	0.000	0.000	Strato1_2_8_L_0									
29 D	10.35	8.5434E-05	47.50	51.75	104.5	58.50	UL-RL	1.7671E+04	-5.500	0.000	1.000	1.000
51.75	0.000	0.000	Strato1_2_8_L_0									
30 D	10.86	8.5906E-05	51.30	54.30	108.3	60.24	UL-RL	1.7671E+04	-5.700	0.000	1.000	1.000
54.30	0.000	0.000	Strato1_2_8_L_0									
31 D	11.36	8.6890E-05	55.10	56.81	112.1	62.00	UL-RL	1.7671E+04	-5.900	0.000	1.000	1.000
56.81	0.000	0.000	Strato1_2_8_L_0									
32 D	11.86	8.8327E-05	58.90	59.29	115.9	63.78	UL-RL	1.7671E+04	-6.100	0.000	1.000	1.000
59.29	0.000	0.000	Strato1_2_8_L_0									
33 D	12.35	9.0166E-05	62.70	61.74	119.7	65.59	UL-RL	1.7671E+04	-6.300	0.000	1.000	1.000
61.74	0.000	0.000	Strato1_2_8_L_0									
34 D	12.83	9.2357E-05	66.50	64.15	123.5	67.41	UL-RL	1.7671E+04	-6.500	0.000	1.000	1.000
64.15	0.000	0.000	Strato1_2_8_L_0									
35 D	13.30	9.4855E-05	70.30	66.52	127.3	69.25	UL-RL	1.7671E+04	-6.700	0.000	1.000	1.000
66.52	0.000	0.000	Strato1_2_8_L_0									
36 D	13.77	9.7616E-05	74.10	68.87	131.1	71.10	UL-RL	1.7671E+04	-6.900	0.000	1.000	1.000
68.87	0.000	0.000	Strato1_2_8_L_0									
37 D	14.24	1.0060E-04	77.90	71.18	134.9	72.98	UL-RL	1.7671E+04	-7.100	0.000	1.000	1.000
71.18	0.000	0.000	Strato1_2_8_L_0									
38 D	14.69	1.0377E-04	81.70	73.47	138.7	74.86	UL-RL	1.7671E+04	-7.300	0.000	1.000	1.000
73.47	0.000	0.000	Strato1_2_8_L_0									
39 D	15.15	1.0708E-04	85.50	75.73	142.5	76.77	UL-RL	1.7671E+04	-7.500	0.000	1.000	1.000
75.73	0.000	0.000	Strato1_2_8_L_0									

40 D	15.59	1.1049E-04	89.30	77.96	146.3	78.69	UL-RL	1.7671E+04	-7.700	0.000	1.000	1.000
77.96	0.000	0.000	Strato1_2_8_L_0									
41 D	12.68	1.1396E-04	93.20	63.42	150.2	76.00	UL-RL	3.9043E+04	-7.900	0.000	1.000	1.000
63.42	0.000	0.000	Strato2_3095_82743_L_0									
42 D	13.12	1.1745E-04	97.20	65.62	154.2	77.96	UL-RL	3.9043E+04	-8.100	0.000	1.000	1.000
65.62	0.000	0.000	Strato2_3095_82743_L_0									
43 D	13.56	1.2093E-04	101.2	67.82	158.2	79.92	UL-RL	3.9043E+04	-8.300	0.000	1.000	1.000
67.82	0.000	0.000	Strato2_3095_82743_L_0									
44 D	14.00	1.2436E-04	105.2	70.01	162.2	81.88	UL-RL	3.9043E+04	-8.500	0.000	1.000	1.000
70.01	0.000	0.000	Strato2_3095_82743_L_0									
45 D	14.44	1.2773E-04	109.2	72.19	166.2	83.84	UL-RL	3.9043E+04	-8.700	0.000	1.000	1.000
72.19	0.000	0.000	Strato2_3095_82743_L_0									
46 D	14.87	1.3103E-04	113.2	74.37	170.2	85.81	UL-RL	3.9043E+04	-8.900	0.000	1.000	1.000
74.37	0.000	0.000	Strato2_3095_82743_L_0									
47 D	15.31	1.3423E-04	117.2	76.55	174.2	87.78	UL-RL	3.9043E+04	-9.100	0.000	1.000	1.000
76.55	0.000	0.000	Strato2_3095_82743_L_0									
48 D	15.74	1.3733E-04	121.2	78.71	178.2	89.75	UL-RL	3.9043E+04	-9.300	0.000	1.000	1.000
78.71	0.000	0.000	Strato2_3095_82743_L_0									
49 D	16.17	1.4034E-04	125.2	80.87	182.2	91.72	UL-RL	3.9043E+04	-9.500	0.000	1.000	1.000
80.87	0.000	0.000	Strato2_3095_82743_L_0									
50 D	16.60	1.4324E-04	129.2	83.02	186.2	93.70	UL-RL	3.9043E+04	-9.700	0.000	1.000	1.000
83.02	0.000	0.000	Strato2_3095_82743_L_0									
51 D	17.03	1.4606E-04	133.2	85.17	190.2	95.68	UL-RL	3.9043E+04	-9.900	0.000	1.000	1.000
85.17	0.000	0.000	Strato2_3095_82743_L_0									
52 D	17.46	1.4879E-04	137.2	87.31	194.2	97.65	UL-RL	3.9043E+04	-10.10	0.000	1.000	1.000
87.31	0.000	0.000	Strato2_3095_82743_L_0									
53 D	17.89	1.5144E-04	141.2	89.45	198.2	99.63	UL-RL	3.9043E+04	-10.30	0.000	1.000	1.000
89.45	0.000	0.000	Strato2_3095_82743_L_0									
54 D	18.32	1.5402E-04	145.2	91.58	202.2	101.6	UL-RL	3.9043E+04	-10.50	0.000	1.000	1.000
91.58	0.000	0.000	Strato2_3095_82743_L_0									
55 D	18.74	1.5654E-04	149.2	93.71	206.2	103.6	UL-RL	3.9043E+04	-10.70	0.000	1.000	1.000
93.71	0.000	0.000	Strato2_3095_82743_L_0									
56 D	19.17	1.5902E-04	153.2	95.84	210.2	105.6	UL-RL	3.9043E+04	-10.90	0.000	1.000	1.000
95.84	0.000	0.000	Strato2_3095_82743_L_0									
57 D	19.59	1.6146E-04	157.2	97.96	214.2	107.6	UL-RL	3.9043E+04	-11.10	0.000	1.000	1.000
97.96	0.000	0.000	Strato2_3095_82743_L_0									
58 D	20.02	1.6388E-04	161.2	100.1	218.2	109.6	UL-RL	3.9043E+04	-11.30	0.000	1.000	1.000
100.1	0.000	0.000	Strato2_3095_82743_L_0									
59 D	20.44	1.6628E-04	165.2	102.2	222.2	111.5	UL-RL	3.9043E+04	-11.50	0.000	1.000	1.000
102.2	0.000	0.000	Strato2_3095_82743_L_0									
60 D	20.86	1.6867E-04	169.2	104.3	226.2	113.5	UL-RL	3.9043E+04	-11.70	0.000	1.000	1.000
104.3	0.000	0.000	Strato2_3095_82743_L_0									
61 D	15.97	1.7105E-04	173.2	106.4	230.2	115.5	UL-RL	3.9043E+04	-11.90	0.000	1.000	1.000
106.4	0.000	0.000	Strato2_3095_82743_L_0									
62 D	5.375	1.7224E-04	175.2	107.5	232.2	116.5	UL-RL	3.9043E+04	-12.00	0.000	1.000	1.000
107.5	0.000	0.000	Strato2_3095_82743_L_0									

```
+-------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*           |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                   |
|                                 Exe Time :24 July 2019      11:09:27                                              |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
C U R R E N T   T I M E   I S     4.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-------------------------------------------------------
    1  2.1956     -2.1956     1.08634E-11 0.43912
    2  6.4185     -6.4185    -0.43912     1.7228
    3  10.984     -10.984     -1.7228     3.9197
    4  15.840     -15.840     -3.9197     7.0878
    5  20.969     -20.969     -7.0878     11.282
    6  26.363     -26.363     -11.282     16.554
    7  32.018     -32.018     -16.554     22.958
    8  37.930     -37.930     -22.958     30.544
    9  44.035     -44.035     -30.544     39.351
   10  50.397     -50.397     -39.351     49.430
   11  57.014     -57.014     -49.430     60.833
   12  63.879     -63.879     -60.833     73.609
   13  69.211     -69.211     -73.609     80.530
   14 -57.134      57.134     -80.530     69.103
   15 -49.687      49.687     -69.103     59.166
   16 -42.006      42.006     -59.166     50.764
```

```
   17 -34.210      34.210     -50.764      43.922
   18 -26.924      26.924     -43.922      38.537
   19 -22.730      22.730     -38.537      33.991
   20 -19.634      19.634     -33.991      30.065
   21 -16.888      16.888     -30.065      26.687
   22 -14.460      14.460     -26.687      23.795
   23 -12.573      12.573     -23.795      21.281
   24 -11.298      11.298     -21.281      19.021
   25 -10.138      10.138     -19.021      16.993
   26 -9.0898      9.0898     -16.993      15.175
   27 -8.1526      8.1526     -15.175      13.545
   28 -7.3457      7.3457     -13.545      12.076
   29 -6.6421      6.6421     -12.076      10.747
   30 -6.0378      6.0378     -10.747      9.5397
   31 -5.5282      5.5282     -9.5397      8.4341
   32 -5.1084      5.1084     -8.4341      7.4124
   33 -4.7733      4.7733     -7.4124      6.4577
   34 -4.5179      4.5179     -6.4577      5.5542
   35 -4.3367      4.3367     -5.5542      4.6868
   36 -4.2419      4.2419     -4.6868      3.8385
   37 -4.2106      4.2106     -3.8385      2.9963
   38 -4.2375      4.2375     -2.9963      2.1489
   39 -4.3179      4.3179     -2.1489      1.2853
   40 -4.4470      4.4470     -1.2853     0.39588
   41 -3.6499      3.6499    -0.39588    -0.33410
   42 -2.9144      2.9144     0.33410    -0.91697
   43 -2.2540      2.2540     0.91697     -1.3678
   44 -1.6545      1.6545      1.3678     -1.6987
   45 -1.1152      1.1152      1.6987     -1.9217
   46-0.63526     0.63526      1.9217     -2.0488
   47-0.21368     0.21368      2.0488     -2.0915
   48 0.15067    -0.15067      2.0915     -2.0614
   49 0.45896    -0.45896      2.0614     -1.9696
   50 0.71240    -0.71240      1.9696     -1.8271
   51 0.90067    -0.90067      1.8271     -1.6470
   52  1.0367     -1.0367      1.6470     -1.4396
   53  1.1214     -1.1214      1.4396     -1.2154
   54  1.1560     -1.1560      1.2154    -0.98416
   55  1.1411     -1.1411     0.98416    -0.75593
   56  1.0776     -1.0776     0.75593    -0.54041
   57 0.96600    -0.96600     0.54041    -0.34721
   58 0.79665    -0.79665     0.34721    -0.18788
   59 0.58022    -0.58022     0.18788    -7.18399E-02
   60 0.31695    -0.31695    7.18399E-02-8.45062E-03
   61 8.44977E-02-8.44977E-02 8.45062E-03-6.32142E-12


+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                   |
|                                 Exe Time :24 July 2019      11:09:27                                              |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_778405                 :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S      4.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------
ANCHOR    1   136.40     -1.29330E-03 -1.29330E-03   0.0000       0.0000       0.0000       0.0000     BORN NOW JUST ACTIVATED

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.9841E+05 RIMNOR=0.8258E+05
           RENORM= 583.8     REMNOR=0.5042E-21 RATIO =0.7702E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 131.8     RMMAX = 80.53
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
           RDT   =0.9841E+05 RDR   =0.8258E+05
           RATIOT=0.7702E-01 RATIOR= 0.000
           MAX UN= 8.783     IEQ=    51 NODE     26 DOF   1  Y-DISPL.F
           MIN UN=-.1397E-09 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.9841E+05 RIMNOR=0.8258E+05
           RENORM=0.9027     REMNOR=0.6363E-20 RATIO =0.3029E-02 TOLER =0.1000E-03  NOT CONVERGED
```

```
            RFMAX = 131.8      RMMAX = 80.53
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
            RDT   =0.9841E+05 RDR   =0.8258E+05
            RATIOT=0.3029E-02 RATIOR= 0.000
            MAX UN=0.5307      IEQ=    59 NODE     30 DOF   1  Y-DISPL.F
            MIN UN=-.6654E-09 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER      3 RNORM = 0.000      RMNORM= 0.000
            RINORM=0.9841E+05 RIMNOR=0.8258E+05
            RENORM=0.1488E-17 REMNOR=0.2666E-20 RATIO =0.3888E-11 TOLER =0.1000E-03      CONVERGED !
            RFMAX = 131.8      RMMAX = 80.53
            RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
            RDT   =0.9841E+05 RDR   =0.8258E+05
            RATIOT=0.3888E-11 RATIOR= 0.000
            MAX UN=0.7780E-09 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
            MIN UN=-.7139E-09 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS     0
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.SLERara_3454                                       |
|                                  Exe Time :24 July 2019      11:09:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     3 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    5     ( AT TIME   5.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)            (
    1   9.1653711E-04  -1.0865607E-04
    2   8.9480872E-04  -1.0861363E-04
    3   8.7310263E-04  -1.0840666E-04
    4   8.5146810E-04  -1.0786905E-04
    5   8.2998895E-04  -1.0682219E-04
    6   8.0878581E-04  -1.0507662E-04
    7   7.8801820E-04  -1.0243267E-04
    8   7.6788661E-04  -9.8680656E-05
    9   7.4863444E-04  -9.3601143E-05
   10   7.3054983E-04  -8.6966453E-05
   11   7.1396726E-04  -7.8540628E-05
   12   6.9926937E-04  -6.8077951E-05
   13   6.8688889E-04  -5.5323098E-05
   14   6.8171667E-04  -4.8012075E-05
   15   6.7352458E-04  -3.4496197E-05
   16   6.6769264E-04  -2.4363614E-05
   17   6.6357272E-04  -1.7327308E-05
   18   6.6057504E-04  -1.3091058E-05
   19   6.5816999E-04  -1.1349366E-05
   20   6.5588999E-04  -1.1787302E-05
   21   6.5333140E-04  -1.4080253E-05
   22   6.5015649E-04  -1.7894226E-05
   23   6.4609523E-04  -2.2885431E-05
   24   6.4094711E-04  -2.8704623E-05
   25   6.3458137E-04  -3.5003955E-05
   26   6.2693730E-04  -4.1426743E-05
   27   6.1802766E-04  -4.7595481E-05
   28   6.0793924E-04  -5.3162890E-05
   29   5.9681885E-04  -5.7885064E-05
   30   5.8484948E-04  -6.1643341E-05
   31   5.7222538E-04  -6.4443624E-05
   32   5.5913048E-04  -6.6368013E-05
   33   5.4573032E-04  -6.7511197E-05
   34   5.3217196E-04  -6.7965070E-05
   35   5.1858431E-04  -6.7818743E-05
   36   5.0507872E-04  -6.7158542E-05
   37   4.9174955E-04  -6.6068445E-05
   38   4.7867462E-04  -6.4630114E-05
   39   4.6591552E-04  -6.2922496E-05
   40   4.5351849E-04  -6.1021927E-05
   41   4.4151470E-04  -5.9002189E-05
   42   4.2992165E-04  -5.6921875E-05
   43   4.1874723E-04  -5.4823174E-05
   44   4.0799116E-04  -5.2743659E-05
   45   3.9764627E-04  -5.0716467E-05
   46   3.8769919E-04  -4.8770082E-05
   47   3.7813126E-04  -4.6928495E-05
   48   3.6891953E-04  -4.5211376E-05
   49   3.6003742E-04  -4.3634197E-05
   50   3.5145576E-04  -4.2208435E-05
   51   3.4314345E-04  -4.0941672E-05
   52   3.3506842E-04  -3.9838025E-05
   53   3.2719752E-04  -3.8898147E-05
   54   3.1949843E-04  -3.8119199E-05
   55   3.1193954E-04  -3.7494810E-05
   56   3.0449086E-04  -3.7015158E-05
   57   2.9712471E-04  -3.6667011E-05
   58   2.8981640E-04  -3.6433749E-05
   59   2.8254487E-04  -3.6295609E-05
   60   2.7529334E-04  -3.6229674E-05
   61   2.6804994E-04  -3.6209619E-05
   62   2.6442868E-04  -3.6208588E-05
```

```
+----------------------------------------------------------------------------------------------------------+
|                 PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1     FULL VERSION  *Build date:Jul 11, 2017*  |
|                                                                                                            |
|                                  NewProject.BaseDesignSection_28.SLERara_3454                              |
|                               Exe Time :24 July 2019      11:09:27                                         |
+----------------------------------------------------------------------------------------------------------+
New Project
```

S T R E S S   R E S U L T S   F O R   G R O U P   N O.   1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 62
C U R R E N T   T I M E   I S   5.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	1.788	-9.1654E-04	10.00	17.88	10.00	21.96	UL-RL	1.5402E+04	0.000	0.000	1.000	1.000	17.88	0.000	0.000	Strato1_2_8_L_0
2 D	3.354	-8.9481E-04	9.159	16.77	9.159	21.11	UL-RL	1.5402E+04	-0.2000	0.000	1.000	1.000	16.77	0.000	0.000	Strato1_2_8_L_0
3 D	3.644	-8.7310E-04	13.94	18.22	13.94	22.83	UL-RL	1.5402E+04	-0.4000	0.000	1.000	1.000	18.22	0.000	0.000	Strato1_2_8_L_0
4 D	3.880	-8.5147E-04	18.14	19.40	18.14	24.28	UL-RL	1.5402E+04	-0.6000	0.000	1.000	1.000	19.40	0.000	0.000	Strato1_2_8_L_0
5 D	4.100	-8.2999E-04	22.16	20.50	22.16	25.64	UL-RL	1.5402E+04	-0.8000	0.000	1.000	1.000	20.50	0.000	0.000	Strato1_2_8_L_0
6 D	4.312	-8.0879E-04	26.09	21.56	26.09	26.97	UL-RL	1.5402E+04	-1.000	0.000	1.000	1.000	21.56	0.000	0.000	Strato1_2_8_L_0
7 D	4.520	-7.8802E-04	29.98	22.60	29.98	28.27	UL-RL	1.5402E+04	-1.200	0.000	1.000	1.000	22.60	0.000	0.000	Strato1_2_8_L_0
8 D	4.724	-7.6789E-04	33.85	23.62	33.85	29.56	UL-RL	1.5402E+04	-1.400	0.000	1.000	1.000	23.62	0.000	0.000	Strato1_2_8_L_0
9 D	4.866	-7.4863E-04	37.03	24.33	37.03	30.52	UL-RL	1.5402E+04	-1.600	0.000	1.000	1.000	24.33	0.000	0.000	Strato1_2_8_L_0
10 D	5.073	-7.3055E-04	40.95	25.37	40.95	31.81	UL-RL	1.5402E+04	-1.800	0.000	1.000	1.000	25.37	0.000	0.000	Strato1_2_8_L_0
11 D	5.277	-7.1397E-04	44.84	26.39	44.84	33.08	UL-RL	1.5402E+04	-2.000	0.000	1.000	1.000	26.39	0.000	0.000	Strato1_2_8_L_0
12 D	5.478	-6.9927E-04	48.72	27.39	48.72	34.33	UL-RL	1.5402E+04	-2.200	0.000	1.000	1.000	27.39	0.000	0.000	Strato1_2_8_L_0
13 D	4.257	-6.8689E-04	52.58	28.38	52.58	35.55	UL-RL	1.5402E+04	-2.400	0.000	1.000	1.000	28.38	0.000	0.000	Strato1_2_8_L_0
14 D	4.315	-6.8172E-04	54.28	28.77	54.28	36.05	UL-RL	1.5402E+04	-2.500	0.000	1.000	1.000	28.77	0.000	0.000	Strato1_2_8_L_0
15 D	5.948	-6.7352E-04	58.15	29.74	58.15	37.24	UL-RL	1.5402E+04	-2.700	0.000	1.000	1.000	29.74	0.000	0.000	Strato1_2_8_L_0
16 D	6.142	-6.6769E-04	62.01	30.71	62.01	38.40	UL-RL	1.5402E+04	-2.900	0.000	1.000	1.000	30.71	0.000	0.000	Strato1_2_8_L_0
17 D	6.336	-6.6357E-04	65.86	31.68	65.86	39.56	UL-RL	1.5402E+04	-3.100	0.000	1.000	1.000	31.68	0.000	0.000	Strato1_2_8_L_0
18 D	6.532	-6.6058E-04	69.70	32.66	69.70	40.70	UL-RL	1.5402E+04	-3.300	0.000	1.000	1.000	32.66	0.000	0.000	Strato1_2_8_L_0
19 D	6.733	-6.5817E-04	73.54	33.67	73.54	41.85	UL-RL	1.5402E+04	-3.500	0.000	1.000	1.000	33.67	0.000	0.000	Strato1_2_8_L_0
20 D	6.940	-6.5589E-04	77.37	34.70	77.37	43.00	UL-RL	1.5402E+04	-3.700	0.000	1.000	1.000	34.70	0.000	0.000	Strato1_2_8_L_0
21 D	7.128	-6.5333E-04	80.92	35.64	80.92	44.02	UL-RL	1.5402E+04	-3.900	0.000	1.000	1.000	35.64	0.000	0.000	Strato1_2_8_L_0
22 D	7.353	-6.5016E-04	84.76	36.76	84.76	45.20	UL-RL	1.5402E+04	-4.100	0.000	1.000	1.000	36.76	0.000	0.000	Strato1_2_8_L_0
23 D	7.358	-6.4610E-04	88.60	36.79	88.60	46.96	UL-RL	1.5402E+04	-4.300	0.000	1.000	1.000	36.79	0.000	0.000	Strato1_2_8_L_0
24 D	7.294	-6.4095E-04	92.43	36.47	92.43	48.99	UL-RL	1.5402E+04	-4.500	0.000	1.000	1.000	36.47	0.000	0.000	Strato1_2_8_L_0
25 D	7.731	-6.3458E-04	96.27	38.65	96.27	51.02	UL-RL	1.5402E+04	-4.700	0.000	1.000	1.000	38.65	0.000	0.000	Strato1_2_8_L_0
26 D	8.170	-6.2694E-04	100.1	40.85	100.1	53.05	UL-RL	1.5402E+04	-4.900	0.000	1.000	1.000	40.85	0.000	0.000	Strato1_2_8_L_0
27 D	8.611	-6.1803E-04	103.9	43.06	103.9	55.08	UL-RL	1.5402E+04	-5.100	0.000	1.000	1.000	43.06	0.000	0.000	Strato1_2_8_L_0
28 D	9.032	-6.0794E-04	107.5	45.16	107.5	56.99	UL-RL	1.5402E+04	-5.300	0.000	1.000	1.000	45.16	0.000	0.000	Strato1_2_8_L_0
29 D	9.479	-5.9682E-04	111.4	47.40	111.4	59.02	UL-RL	1.5402E+04	-5.500	0.000	1.000	1.000	47.40	0.000	0.000	Strato1_2_8_L_0
30 D	9.928	-5.8485E-04	115.2	49.64	115.2	61.05	UL-RL	1.5402E+04	-5.700	0.000	1.000	1.000				

```
49.64      0.000      0.000     Strato1_2_8_L_0
  31 D   10.38    -5.7223E-04   119.0       51.89        119.0       63.08          UL-RL  1.5402E+04  -5.900       0.000       1.000       1.000
51.89      0.000      0.000     Strato1_2_8_L_0
  32 D   10.83    -5.5913E-04   122.8       54.14        122.8       65.11          UL-RL  1.5402E+04  -6.100       0.000       1.000       1.000
54.14      0.000      0.000     Strato1_2_8_L_0
  33 D   11.28    -5.4573E-04   126.7       56.39        126.7       67.14          UL-RL  1.5402E+04  -6.300       0.000       1.000       1.000
56.39      0.000      0.000     Strato1_2_8_L_0
  34 D   11.73    -5.3217E-04   130.5       58.65        130.5       69.16          UL-RL  1.5402E+04  -6.500       0.000       1.000       1.000
58.65      0.000      0.000     Strato1_2_8_L_0
  35 D   12.18    -5.1858E-04   134.3       60.90        134.3       71.19          UL-RL  1.5402E+04  -6.700       0.000       1.000       1.000
60.90      0.000      0.000     Strato1_2_8_L_0
  36 D   12.61    -5.0508E-04   138.0       63.07        138.0       73.12          UL-RL  1.5402E+04  -6.900       0.000       1.000       1.000
63.07      0.000      0.000     Strato1_2_8_L_0
  37 D   13.06    -4.9175E-04   141.8       65.32        141.8       75.15          UL-RL  1.5402E+04  -7.100       0.000       1.000       1.000
65.32      0.000      0.000     Strato1_2_8_L_0
  38 D   13.51    -4.7867E-04   145.6       67.56        145.6       77.18          UL-RL  1.5402E+04  -7.300       0.000       1.000       1.000
67.56      0.000      0.000     Strato1_2_8_L_0
  39 D   13.96    -4.6592E-04   149.4       69.80        149.4       79.20          UL-RL  1.5402E+04  -7.500       0.000       1.000       1.000
69.80      0.000      0.000     Strato1_2_8_L_0
  40 D   14.41    -4.5352E-04   153.3       72.03        153.3       81.22          UL-RL  1.5402E+04  -7.700       0.000       1.000       1.000
72.03      0.000      0.000     Strato1_2_8_L_0
  41 D   10.63    -4.4151E-04   157.2       53.14        157.2       78.59          UL-RL  4.3571E+04  -7.900       0.000       1.000       1.000
53.14      0.000      0.000     Strato2_3095_82743_L_0
  42 D   11.14    -4.2992E-04   161.2       55.69        161.2       80.60          UL-RL  4.3571E+04  -8.100       0.000       1.000       1.000
55.69      0.000      0.000     Strato2_3095_82743_L_0
  43 D   11.63    -4.1875E-04   165.1       58.14        165.1       82.54          UL-RL  4.3571E+04  -8.300       0.000       1.000       1.000
58.14      0.000      0.000     Strato2_3095_82743_L_0
  44 D   12.13    -4.0799E-04   169.1       60.65        169.1       84.55          UL-RL  4.3571E+04  -8.500       0.000       1.000       1.000
60.65      0.000      0.000     Strato2_3095_82743_L_0
  45 D   12.63    -3.9765E-04   173.1       63.13        173.1       86.55          UL-RL  4.3571E+04  -8.700       0.000       1.000       1.000
63.13      0.000      0.000     Strato2_3095_82743_L_0
  46 D   13.12    -3.8770E-04   177.1       65.59        177.1       88.56          UL-RL  4.3571E+04  -8.900       0.000       1.000       1.000
65.59      0.000      0.000     Strato2_3095_82743_L_0
  47 D   13.61    -3.7813E-04   181.1       68.03        181.1       90.57          UL-RL  4.3571E+04  -9.100       0.000       1.000       1.000
68.03      0.000      0.000     Strato2_3095_82743_L_0
  48 D   14.09    -3.6892E-04   185.2       70.44        185.2       92.58          UL-RL  4.3571E+04  -9.300       0.000       1.000       1.000
70.44      0.000      0.000     Strato2_3095_82743_L_0
  49 D   14.57    -3.6004E-04   189.2       72.84        189.2       94.59          UL-RL  4.3571E+04  -9.500       0.000       1.000       1.000
72.84      0.000      0.000     Strato2_3095_82743_L_0
  50 D   15.04    -3.5146E-04   193.2       75.22        193.2       96.59          UL-RL  4.3571E+04  -9.700       0.000       1.000       1.000
75.22      0.000      0.000     Strato2_3095_82743_L_0
  51 D   15.51    -3.4314E-04   197.1       77.53        197.1       98.54          UL-RL  4.3571E+04  -9.900       0.000       1.000       1.000
77.53      0.000      0.000     Strato2_3095_82743_L_0
  52 D   15.98    -3.3507E-04   201.1       79.88        201.1       100.6          UL-RL  4.3571E+04  -10.10       0.000       1.000       1.000
79.88      0.000      0.000     Strato2_3095_82743_L_0
  53 D   16.44    -3.2720E-04   205.1       82.22        205.1       102.6          UL-RL  4.3571E+04  -10.30       0.000       1.000       1.000
82.22      0.000      0.000     Strato2_3095_82743_L_0
  54 D   16.91    -3.1950E-04   209.1       84.55        209.1       104.6          UL-RL  4.3571E+04  -10.50       0.000       1.000       1.000
84.55      0.000      0.000     Strato2_3095_82743_L_0
  55 D   17.37    -3.1194E-04   213.1       86.87        213.1       106.6          UL-RL  4.3571E+04  -10.70       0.000       1.000       1.000
86.87      0.000      0.000     Strato2_3095_82743_L_0
  56 D   17.84    -3.0449E-04   217.2       89.18        217.2       108.6          UL-RL  4.3571E+04  -10.90       0.000       1.000       1.000
89.18      0.000      0.000     Strato2_3095_82743_L_0
  57 D   18.30    -2.9712E-04   221.2       91.49        221.2       110.6          UL-RL  4.3571E+04  -11.10       0.000       1.000       1.000
91.49      0.000      0.000     Strato2_3095_82743_L_0
  58 D   18.75    -2.8982E-04   225.1       93.75        225.1       112.5          UL-RL  4.3571E+04  -11.30       0.000       1.000       1.000
93.75      0.000      0.000     Strato2_3095_82743_L_0
  59 D   19.21    -2.8254E-04   229.1       96.05        229.1       114.6          UL-RL  4.3571E+04  -11.50       0.000       1.000       1.000
96.05      0.000      0.000     Strato2_3095_82743_L_0
  60 D   19.67    -2.7529E-04   233.1       98.36        233.1       116.6          UL-RL  4.3571E+04  -11.70       0.000       1.000       1.000
98.36      0.000      0.000     Strato2_3095_82743_L_0
  61 D   15.10    -2.6805E-04   237.1       100.7        237.1       118.6          UL-RL  4.3571E+04  -11.90       0.000       1.000       1.000
100.7      0.000      0.000     Strato2_3095_82743_L_0
  62 D   5.089    -2.6443E-04   239.1       101.8        239.1       119.5          UL-RL  4.3571E+04  -12.00       0.000       1.000       1.000
101.8      0.000      0.000     Strato2_3095_82743_L_0


 +-----------------------------------------------------------------------------------------------------------------------+
 |                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
 |                                                                                                                       |
 |                                       NewProject.BaseDesignSection_28.SLERara_3454                                    |
 |                                    Exe Time :24 July 2019      11:09:27                                               |
 +-----------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S    R E S U L T S    F O R    G R O U P   N O.   2

 0_R                                :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
 C U R R E N T    T I M E    I S      5.0000

  HARDENING 2D SOIL ELEMENT
```

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR
Peq	Su_a	Su_p	LAYER									
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000
0.000	0.000	0.000	not available									
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000
0.000	0.000	0.000	not available									
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
14	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									
15	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000
0.000	0.000	0.000	not available									
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000
0.000	0.000	0.000	not available									
17	0.000	--	--	--	--	--	REMOVED	--	-3.100	0.000	1.000	1.000
0.000	0.000	0.000	not available									
18	0.000	--	--	--	--	--	REMOVED	--	-3.300	0.000	1.000	1.000
0.000	0.000	0.000	not available									
19	0.000	--	--	--	--	--	REMOVED	--	-3.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									
20	0.000	--	--	--	--	--	REMOVED	--	-3.700	0.000	1.000	1.000
0.000	0.000	0.000	not available									
21	0.000	--	--	--	--	--	REMOVED	--	-3.900	0.000	1.000	1.000
0.000	0.000	0.000	not available									
22	0.000	--	--	--	--	--	REMOVED	--	-4.100	0.000	1.000	1.000
0.000	0.000	0.000	not available									
23	0.000	--	--	--	--	--	REMOVED	--	-4.300	0.000	1.000	1.000
0.000	0.000	0.000	not available									
24	0.000	--	--	--	--	--	REMOVED	--	-4.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									
25	0.000	--	--	--	--	--	REMOVED	--	-4.700	0.000	1.000	1.000
0.000	0.000	0.000	not available									
26	0.000	--	--	--	--	--	REMOVED	--	-4.900	0.000	1.000	1.000
0.000	0.000	0.000	not available									
27 D	2.150	6.1803E-04	2.660	10.75	96.90	55.09	PASSIVE	0.000	-5.100	0.000	1.000	1.000
10.75	0.000	0.000	Strato1_2_8_L_0									
28 D	5.221	6.0794E-04	6.460	26.10	100.7	56.78	PASSIVE	0.000	-5.300	0.000	1.000	1.000
26.10	0.000	0.000	Strato1_2_8_L_0									
29 D	8.292	5.9682E-04	10.26	41.46	104.5	58.50	PASSIVE	0.000	-5.500	0.000	1.000	1.000
41.46	0.000	0.000	Strato1_2_8_L_0									
30 D	11.36	5.8485E-04	14.06	56.82	108.3	60.24	PASSIVE	0.000	-5.700	0.000	1.000	1.000
56.82	0.000	0.000	Strato1_2_8_L_0									
31 D	12.40	5.7223E-04	17.86	62.00	112.1	62.00	UL-RL	1.0688E+04	-5.900	0.000	1.000	1.000
62.00	0.000	0.000	Strato1_2_8_L_0									
32 D	12.79	5.5913E-04	21.66	63.96	115.9	63.96	V-C	3563.	-6.100	0.000	1.000	1.000
63.96	0.000	0.000	Strato1_2_8_L_0									
33 D	13.19	5.4573E-04	25.46	65.93	119.7	65.93	V-C	3563.	-6.300	0.000	1.000	1.000
65.93	0.000	0.000	Strato1_2_8_L_0									
34 D	13.58	5.3217E-04	29.26	67.89	123.5	67.89	V-C	3563.	-6.500	0.000	1.000	1.000
67.89	0.000	0.000	Strato1_2_8_L_0									
35 D	13.97	5.1858E-04	33.06	69.85	127.3	69.85	V-C	3563.	-6.700	0.000	1.000	1.000
69.85	0.000	0.000	Strato1_2_8_L_0									
36 D	14.36	5.0508E-04	36.86	71.81	131.1	71.81	V-C	3563.	-6.900	0.000	1.000	1.000
71.81	0.000	0.000	Strato1_2_8_L_0									
37 D	14.75	4.9175E-04	40.66	73.77	134.9	73.77	V-C	3563.	-7.100	0.000	1.000	1.000
73.77	0.000	0.000	Strato1_2_8_L_0									
38 D	15.15	4.7867E-04	44.46	75.74	138.7	75.74	V-C	3563.	-7.300	0.000	1.000	1.000
75.74	0.000	0.000	Strato1_2_8_L_0									
39 D	15.54	4.6592E-04	48.26	77.70	142.5	77.70	V-C	3563.	-7.500	0.000	1.000	1.000
77.70	0.000	0.000	Strato1_2_8_L_0									

40 D	15.93	4.5352E-04	52.06	79.67	146.3	79.67	V-C	3563.	-7.700	0.000	1.000	1.000
79.67	0.000	0.000	Strato1_2_8_L_0									
41 D	11.57	4.4151E-04	55.96	57.84	150.2	76.00	UL-RL	2.3614E+04	-7.900	0.000	1.000	1.000
57.84	0.000	0.000	Strato2_3095_82743_L_0									
42 D	11.97	4.2992E-04	59.96	59.87	154.2	77.96	UL-RL	2.3614E+04	-8.100	0.000	1.000	1.000
59.87	0.000	0.000	Strato2_3095_82743_L_0									
43 D	12.38	4.1875E-04	63.96	61.88	158.2	79.92	UL-RL	2.3614E+04	-8.300	0.000	1.000	1.000
61.88	0.000	0.000	Strato2_3095_82743_L_0									
44 D	12.78	4.0799E-04	67.96	63.89	162.2	81.88	UL-RL	2.3614E+04	-8.500	0.000	1.000	1.000
63.89	0.000	0.000	Strato2_3095_82743_L_0									
45 D	13.18	3.9765E-04	71.96	65.89	166.2	83.84	UL-RL	2.3614E+04	-8.700	0.000	1.000	1.000
65.89	0.000	0.000	Strato2_3095_82743_L_0									
46 D	13.58	3.8770E-04	75.96	67.88	170.2	85.81	UL-RL	2.3614E+04	-8.900	0.000	1.000	1.000
67.88	0.000	0.000	Strato2_3095_82743_L_0									
47 D	13.97	3.7813E-04	79.96	69.87	174.2	87.78	UL-RL	2.3614E+04	-9.100	0.000	1.000	1.000
69.87	0.000	0.000	Strato2_3095_82743_L_0									
48 D	14.37	3.6892E-04	83.96	71.86	178.2	89.75	UL-RL	2.3614E+04	-9.300	0.000	1.000	1.000
71.86	0.000	0.000	Strato2_3095_82743_L_0									
49 D	14.77	3.6004E-04	87.96	73.84	182.2	91.72	UL-RL	2.3614E+04	-9.500	0.000	1.000	1.000
73.84	0.000	0.000	Strato2_3095_82743_L_0									
50 D	15.16	3.5146E-04	91.96	75.82	186.2	93.70	UL-RL	2.3614E+04	-9.700	0.000	1.000	1.000
75.82	0.000	0.000	Strato2_3095_82743_L_0									
51 D	15.56	3.4314E-04	95.96	77.79	190.2	95.68	UL-RL	2.3614E+04	-9.900	0.000	1.000	1.000
77.79	0.000	0.000	Strato2_3095_82743_L_0									
52 D	15.95	3.3507E-04	99.96	79.76	194.2	97.65	UL-RL	2.3614E+04	-10.10	0.000	1.000	1.000
79.76	0.000	0.000	Strato2_3095_82743_L_0									
53 D	16.35	3.2720E-04	104.0	81.73	198.2	99.63	UL-RL	2.3614E+04	-10.30	0.000	1.000	1.000
81.73	0.000	0.000	Strato2_3095_82743_L_0									
54 D	16.74	3.1950E-04	108.0	83.69	202.2	101.6	UL-RL	2.3614E+04	-10.50	0.000	1.000	1.000
83.69	0.000	0.000	Strato2_3095_82743_L_0									
55 D	17.13	3.1194E-04	112.0	85.65	206.2	103.6	UL-RL	2.3614E+04	-10.70	0.000	1.000	1.000
85.65	0.000	0.000	Strato2_3095_82743_L_0									
56 D	17.52	3.0449E-04	116.0	87.61	210.2	105.6	UL-RL	2.3614E+04	-10.90	0.000	1.000	1.000
87.61	0.000	0.000	Strato2_3095_82743_L_0									
57 D	17.91	2.9712E-04	120.0	89.56	214.2	107.6	UL-RL	2.3614E+04	-11.10	0.000	1.000	1.000
89.56	0.000	0.000	Strato2_3095_82743_L_0									
58 D	18.30	2.8982E-04	124.0	91.51	218.2	109.6	UL-RL	2.3614E+04	-11.30	0.000	1.000	1.000
91.51	0.000	0.000	Strato2_3095_82743_L_0									
59 D	18.69	2.8254E-04	128.0	93.46	222.2	111.5	UL-RL	2.3614E+04	-11.50	0.000	1.000	1.000
93.46	0.000	0.000	Strato2_3095_82743_L_0									
60 D	19.08	2.7529E-04	132.0	95.40	226.2	113.5	UL-RL	2.3614E+04	-11.70	0.000	1.000	1.000
95.40	0.000	0.000	Strato2_3095_82743_L_0									
61 D	14.60	2.6805E-04	136.0	97.34	230.2	115.5	UL-RL	2.3614E+04	-11.90	0.000	1.000	1.000
97.34	0.000	0.000	Strato2_3095_82743_L_0									
62 D	4.916	2.6443E-04	138.0	98.31	232.2	116.5	UL-RL	2.3614E+04	-12.00	0.000	1.000	1.000
98.31	0.000	0.000	Strato2_3095_82743_L_0									

```
+-------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*           |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                   |
|                                 Exe Time :24 July 2019      11:09:27                                              |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
C U R R E N T   T I M E   I S      5.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-------------------------------------------------------
    1  1.7879     -1.7879    -8.52374E-12 0.35759
    2  5.1420     -5.1420    -0.35759      1.3860
    3  8.7855     -8.7855     -1.3860      3.1431
    4  12.666     -12.666     -3.1431      5.6762
    5  16.765     -16.765     -5.6762      9.0293
    6  21.077     -21.077     -9.0293      13.245
    7  25.597     -25.597     -13.245      18.364
    8  30.321     -30.321     -18.364      24.428
    9  35.187     -35.187     -24.428      31.466
   10  40.260     -40.260     -31.466      39.518
   11  45.537     -45.537     -39.518      48.625
   12  51.015     -51.015     -48.625      58.828
   13  55.272     -55.272     -58.828      64.355
   14 -74.231      74.231     -64.355      49.509
   15 -68.282      68.282     -49.509      35.853
   16 -62.141      62.141     -35.853      23.425
```

17	-55.805	55.805	-23.425	12.264
18	-49.272	49.272	-12.264	2.4092
19	-42.539	42.539	-2.4092	-6.0986
20	-35.599	35.599	6.0986	-13.218
21	-28.470	28.470	13.218	-18.912
22	-21.118	21.118	18.912	-23.136
23	-13.759	13.759	23.136	-25.888
24	-6.4655	6.4655	25.888	-27.181
25	1.2652	-1.2652	27.181	-26.928
26	9.4348	-9.4348	26.928	-25.041
27	15.896	-15.896	25.041	-21.862
28	19.707	-19.707	21.862	-17.920
29	20.894	-20.894	17.920	-13.741
30	19.459	-19.459	13.741	-9.8496
31	17.436	-17.436	9.8496	-6.3625
32	15.471	-15.471	6.3625	-3.2683
33	13.565	-13.565	3.2683	-0.55536
34	11.717	-11.717	0.55536	1.7881
35	9.9284	-9.9284	-1.7881	3.7738
36	8.1799	-8.1799	-3.7738	5.4098
37	6.4889	-6.4889	-5.4098	6.7075
38	4.8539	-4.8539	-6.7075	7.6783
39	3.2736	-3.2736	-7.6783	8.3330
40	1.7461	-1.7461	-8.3330	8.6823
41	0.80546	-0.80546	-8.6823	8.8434
42	-3.05188E-02	3.05188E-02	-8.8434	8.8373
43	-0.77804	0.77804	-8.8373	8.6816
44	-1.4260	1.4260	-8.6816	8.3964
45	-1.9777	1.9777	-8.3964	8.0009
46	-2.4366	2.4366	-8.0009	7.5136
47	-2.8060	2.8060	-7.5136	6.9524
48	-3.0891	3.0891	-6.9524	6.3346
49	-3.2890	3.2890	-6.3346	5.6768
50	-3.4084	3.4084	-5.6768	4.9951
51	-3.4614	3.4614	-4.9951	4.3028
52	-3.4382	3.4382	-4.3028	3.6152
53	-3.3406	3.3406	-3.6152	2.9471
54	-3.1698	3.1698	-2.9471	2.3131
55	-2.9269	2.9269	-2.3131	1.7277
56	-2.6125	2.6125	-1.7277	1.2052
57	-2.2268	2.2268	-1.2052	0.75988
58	-1.7800	1.7800	-0.75988	0.40389
59	-1.2615	1.2615	-0.40389	0.15158
60	-0.67103	0.67103	-0.15158	1.73726E-02
61	-0.17371	0.17371	-1.73726E-02	3.56934E-12

```
+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                   |
|                                 Exe Time :24 July 2019      11:09:27                                              |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_778405                 :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S      5.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------
ANCHOR    1   138.54     -1.29330E-03 -8.36719E-04   0.0000       4682.3       0.0000       0.0000     ELASTIC  ORIGINAL YOUNG MODULUS



+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.SLERara_3454                                   |
|                                 Exe Time :24 July 2019      11:09:27                                              |
+-------------------------------------------------------------------------------------------------------------------+


    F I N A L   I N C R E M E N T A L   A N A L Y S I S

                  S U M M A R Y

    STEP                                NO. OF ITERATIONS
```

```
        1           CONVERGENCE :YES                    2
        2           CONVERGENCE :YES                    4
        3           CONVERGENCE :YES                    5
        4           CONVERGENCE :YES                    4
        5           CONVERGENCE :YES                    3


 END OF PROCESS FOR PROBLEM
New Project
NONLINEAR SOLUTION CPU TIME ....    0.05 [sec]
DATABASE  CREATION CPU TIME.....    0.21 [sec]
```

2.5. Design Assumption : A1+M1+R1 - File di Paratie - File di input (.d)

```
* PARATIE ANALYSIS FOR DESIGN SECTION:Base Design Section USING ASSUMPTION: A1+M1+R1
 * Time:mercoledì 24 luglio 2019 11:09:27
 * 1: Defining general settings
 UNIT  m kN
 TITLE New Project
 DELTA 0.2
 option param itemax 100
 option control hinges 0 0.0001 0.001

 * 2: Defining wall(s)
 WALL LeftWall_32 0 -12 0 1

 * 3: Defining surfaces for wall(s)
 SOIL 0_L LeftWall_32 -12 0 1 0
 SOIL 0_R LeftWall_32 -12 0 2 180

 * 4: Defining soil layers
 *
 * Soil Profile (Strato1_2_8_L_0)
 *
 LDATA Strato1_2_8_L_0 0 LeftWall_32
 ATREST 0.53 1 1
 WEIGHT 19 9 10
 PERMEABILITY 1E-06
 RESISTANCE 0 29
 YOUNG 2E+04 6E+04
 ENDL
 *
 * Soil Profile (Strato2_3095_82743_L_0)
 *
 LDATA Strato2_3095_82743_L_0 -7.8 LeftWall_32
 ATREST 0.5 0.5 1
 WEIGHT 20 10 10
 PERMEABILITY 0.0001
 RESISTANCE 20 35
 YOUNG 5E+04 1.5E+05
 ENDL

 * 5: Defining structural materials
 * Steel material: 108 Name=Fe360 E=206000200 kPa
 MATERIAL Fe360_108 2.06E+08
 * Concrete material: 104 Name=C25/30 E=31475800 kPa
 MATERIAL C2530_104 3.148E+07
 * Rebar material: 124 Name=acciaio armonico E=200100000 kPa
 MATERIAL acciaioarmonico_124 2.001E+08
 * Concrete material: 103 Name=C20/25 E=29962000 kPa
 MATERIAL C2025_103 2.996E+07

 * 6: Defining structural elements
 * 6.1: Beams and combined Wall Elements
 BEAM WallElement_33 LeftWall_32 -12 0 C2530_104 0.6848 00 00 0


 * 6.2: Supports
 WIRE Tieback_778405 LeftWall_32 -2.5 acciaioarmonico_124 2.34E-05 136.4 15 0 0




 * 6.3: Strips
 STRIP LeftWall_32 2 5 0 40 0 11.54 30

 * 7: Defining Steps
 STEP Stage0_31
 CHANGE Strato1_2_8_L_0 U-FRICT=29 LeftWall_32
```

```
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato1_2_8_L_0 U-KA=0.304 LeftWall_32
CHANGE Strato1_2_8_L_0 U-KP=4.041 LeftWall_32
CHANGE Strato1_2_8_L_0 D-KA=0.304 LeftWall_32
CHANGE Strato1_2_8_L_0 D-KP=4.041 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-FRICT=35 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-KA=0.235 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-KP=5.879 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-KA=0.235 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-KP=5.879 LeftWall_32
CHANGE Strato1_2_8_L_0 U-COHE=0 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-COHE=20 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -26 0 -12 0 0
ADD WallElement_33
ENDSTEP

STEP Stage1_759103
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -26 0 -12 0 0
ENDSTEP

STEP Stage3_775251
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -3
WATER -26 0 -12 0 0
ENDSTEP

STEP Stage4_775610
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -3
WATER -26 0 -12 0 0
ADD Tieback_778405
ENDSTEP

STEP Stage5_714
CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -4.96
WATER -26 0 -12 0 0
ENDSTEP
```

2.6. Design Assumption : A1+M1+R1 - File di Paratie - File di output (.out)

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                   Exe Time :24 July 2019      11:09:27                                                  |
+-------------------------------------------------------------------------------------------------------------------------+

                  ***********************************************************
                  *                                                         *
                  *  PARATIE PLUS Non-Linear Spring Engine                  *
                  *                                                         *
                  *          AN ELASTOPLASTIC FINITE ELEMENT PROGRAM        *
                  *          FOR FLEXIBLE EARTH-RETAINING STRUCTURES        *
                  *                                                         *
                  *          Written by Ce.A.S. s.r.l. (ITALY)              *
                  *          with the scientific supervision of             *
                  *          Roberto Nova - full professor SOIL MECHANICS   *
```

```
*          at Politecnico di Milano (ITALY)             *
*                                                       *
*********************************************************
*                                                       *
*  RELEASE   2017.1     *Build date:Jul 11, 2017*    *
*                                                       *
*                                                       *
*  Ce.A.S.     S.R.L   CENTRO DI ANALISI STRUTTURALE     *
*              VIALE   GIUSTINIANO 10                   *
*              20129   M I L A N O  (ITALIA)            *
*  TEL.        +39 02 2020221   (+39 035 23 67 19)      *
*  FAX         +39 02 29512533  (+39 035 42285 49)      *
*  email       bruno.becci@ceas.it                      *
*  Web Page    www.ceas.it                              *
*********************************************************



 JOB : NewProject.BaseDesignSection_28.A1M1R1_3484
 STARTING
ACCEPTED   <FILE,GENW                                                    >
ACCEPTED   <FILE,PLOTTER,BINARY                                          >
ACCEPTED   <SOLVE TOTAL_STRESS                                           >
ACCEPTED   <PARAM ITEMAX 100                                             >
ACCEPTED   <CONTROL HINGES 0 0.0001 0.001                                >



                *********************************************************
                *                                                       *
                *  WARNING : PORE PRESSURES ARE AUTOMATICALLY COMPUTED  *
                *    BY THE PROGRAM.                                    *
                *********************************************************

PRELIMINARY OPERATIONS CPU TIME     0.01 [sec]



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                  Exe Time :24 July 2019      11:09:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


INPUT FILE HAS BEEN GENERATED BY WALGEN PROGRAM


New Project


NO. OF NODAL POINTS (NUMNP) ...................   62
NO. OF COORDINATES  (NCOORD)...................    2
NO. OF NODE DOFS    (NDOF).....................    2
NO. OF EQUATIONS    (NEQ)...................... 124
NO. OF CONSTRAINTS CARDS (NVINC)...............    0
NO. OF ELEMENT GROUPS (NEG)....................    4
NO. OF SOLUTION STEPS (NSTE)...................    5
NO. OF ELEMENT SETS ATTACHED TO SLAVE NODES ...    0
NO. OF RECORD FROM WALGEN .....................   88
NO. OF LONG NAMES (LASTNAME) ..................   21
LENGTH UNIT CHOICE ............................    3 (M   )
FORCE  UNIT CHOICE ............................    3 (KN  )
MAX PORE PRESSURE TABLE LENGTH.................    1
NO. OF ELEMENT GROUPS REQUIRING ADD. SLIP DOF .    0


IDOFA (01) =  2  Y-DISPL.F
IDOFA (02) =  4   X-ROT. F

 RELEVANT ITEMS UNITS

 STRESSES                  kPa
 Y-DISPLACEMENTS           m
 ROTATIONS                 RADIANS
 BEAM AND SLAB MOMENTS     kN*m/m
 BEAM SHEAR FORCES         kN/m
 ANCHOR FORCES             kN/m
 AXIAL FORCES IN TRUSSES   kN/m
 AXIAL FORCES SPRINGS      kN/m
 Y-REACTIONS               kN/m
 X-MOMENT REACTIONS        kN*m/m
```

ETC.

```
+---------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*            |
|                                                                                                                     |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                      |
|                                 Exe Time :24 July 2019      11:09:27                                                |
+---------------------------------------------------------------------------------------------------------------------+
                   P R E P R O C E S S O R     D A T A

                   N O.  O F   C O M M A N D S     88

    1 : UNIT  m kN
    2 : TITLE New Project
    3 : DELTA 0.2
    4 : option param itemax 100
    5 : option control hinges 0 0.0001 0.001
    6 : WALL LeftWall_32 0 -12 0 1
    7 : SOIL 0_L LeftWall_32 -12 0 1 0
    8 : SOIL 0_R LeftWall_32 -12 0 2 180
    9 : LDATA Strato1_2_8_L_0 0 LeftWall_32
   10 : ATREST 0.53 1 1
   11 : WEIGHT 19 9 10
   12 : PERMEABILITY 1E-06
   13 : RESISTANCE 0 29
   14 : YOUNG 2E+04 6E+04
   15 : ENDL
   16 : LDATA Strato2_3095_82743_L_0 -7.8 LeftWall_32
   17 : ATREST 0.5 0.5 1
   18 : WEIGHT 20 10 10
   19 : PERMEABILITY 0.0001
   20 : RESISTANCE 20 35
   21 : YOUNG 5E+04 1.5E+05
   22 : ENDL
   23 : MATERIAL Fe360_108 2.06E+08
   24 : MATERIAL C2530_104 3.148E+07
   25 : MATERIAL acciaioarmonico_124 2.001E+08
   26 : MATERIAL C2025_103 2.996E+07
   27 : BEAM WallElement_33 LeftWall_32 -12 0 C2530_104 0.6848 00 00 0
   28 : WIRE Tieback_778405 LeftWall_32 -2.5 acciaioarmonico_124 2.34E-05 136.4 15 0 0
   29 : STRIP LeftWall_32 2 5 0 40 0 11.54 30
   30 : STEP Stage0_31
   31 : CHANGE Strato1_2_8_L_0 U-FRICT=29 LeftWall_32
   32 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
   33 : CHANGE Strato1_2_8_L_0 U-KA=0.304 LeftWall_32
   34 : CHANGE Strato1_2_8_L_0 U-KP=4.041 LeftWall_32
   35 : CHANGE Strato1_2_8_L_0 D-KA=0.304 LeftWall_32
   36 : CHANGE Strato1_2_8_L_0 D-KP=4.041 LeftWall_32
   37 : CHANGE Strato2_3095_82743_L_0 U-FRICT=35 LeftWall_32
   38 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
   39 : CHANGE Strato2_3095_82743_L_0 U-KA=0.235 LeftWall_32
   40 : CHANGE Strato2_3095_82743_L_0 U-KP=5.879 LeftWall_32
   41 : CHANGE Strato2_3095_82743_L_0 D-KA=0.235 LeftWall_32
   42 : CHANGE Strato2_3095_82743_L_0 D-KP=5.879 LeftWall_32
   43 : CHANGE Strato1_2_8_L_0 U-COHE=0 LeftWall_32
   44 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
   45 : CHANGE Strato2_3095_82743_L_0 U-COHE=20 LeftWall_32
   46 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
   47 : SETWALL LeftWall_32
   48 : GEOM 0 0
   49 : WATER -26 0 -12 0 0
   50 : ADD WallElement_33
   51 : ENDSTEP
   52 : STEP Stage1_759103
   53 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
   54 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
   55 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
   56 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
   57 : SETWALL LeftWall_32
   58 : GEOM 0 0
   59 : WATER -26 0 -12 0 0
   60 : ENDSTEP
   61 : STEP Stage3_775251
   62 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
   63 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
   64 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
   65 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
   66 : SETWALL LeftWall_32
   67 : GEOM 0 -3
   68 : WATER -26 0 -12 0 0
   69 : ENDSTEP
   70 : STEP Stage4_775610
```

```
   71 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
   72 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
   73 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
   74 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
   75 : SETWALL LeftWall_32
   76 : GEOM 0 -3
   77 : WATER -26 0 -12 0 0
   78 : ADD Tieback_778405
   79 : ENDSTEP
   80 : STEP Stage5_714
   81 : CHANGE Strato1_2_8_L_0 D-FRICT=29 LeftWall_32
   82 : CHANGE Strato2_3095_82743_L_0 D-FRICT=35 LeftWall_32
   83 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
   84 : CHANGE Strato2_3095_82743_L_0 D-COHE=20 LeftWall_32
   85 : SETWALL LeftWall_32
   86 : GEOM 0 -4.96
   87 : WATER -26 0 -12 0 0
   88 : ENDSTEP
```

```
+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                 Exe Time :24 July 2019      11:09:27                                                  |
+-----------------------------------------------------------------------------------------------------------------------+
N O D A L    P O I N T    D A T A
--------------------------------
```

NODE	Y-COORD	Z-COORD	/ NODE	Y-COORD	Z-COORD	/ NODE	Y-COORD	Z-COORD	/ NODE	Y-COORD	Z-COORD	/
1	0.0000	0.0000	/ 2	0.0000	-0.20000	/ 3	0.0000	-0.40000	/ 4	0.0000	-0.60000	/
5	0.0000	-0.80000	/ 6	0.0000	-1.0000	/ 7	0.0000	-1.2000	/ 8	0.0000	-1.4000	/
9	0.0000	-1.6000	/ 10	0.0000	-1.8000	/ 11	0.0000	-2.0000	/ 12	0.0000	-2.2000	/
13	0.0000	-2.4000	/ 14	0.0000	-2.5000	/ 15	0.0000	-2.7000	/ 16	0.0000	-2.9000	/
17	0.0000	-3.1000	/ 18	0.0000	-3.3000	/ 19	0.0000	-3.5000	/ 20	0.0000	-3.7000	/
21	0.0000	-3.9000	/ 22	0.0000	-4.1000	/ 23	0.0000	-4.3000	/ 24	0.0000	-4.5000	/
25	0.0000	-4.7000	/ 26	0.0000	-4.9000	/ 27	0.0000	-5.1000	/ 28	0.0000	-5.3000	/
29	0.0000	-5.5000	/ 30	0.0000	-5.7000	/ 31	0.0000	-5.9000	/ 32	0.0000	-6.1000	/
33	0.0000	-6.3000	/ 34	0.0000	-6.5000	/ 35	0.0000	-6.7000	/ 36	0.0000	-6.9000	/
37	0.0000	-7.1000	/ 38	0.0000	-7.3000	/ 39	0.0000	-7.5000	/ 40	0.0000	-7.7000	/
41	0.0000	-7.9000	/ 42	0.0000	-8.1000	/ 43	0.0000	-8.3000	/ 44	0.0000	-8.5000	/
45	0.0000	-8.7000	/ 46	0.0000	-8.9000	/ 47	0.0000	-9.1000	/ 48	0.0000	-9.3000	/
49	0.0000	-9.5000	/ 50	0.0000	-9.7000	/ 51	0.0000	-9.9000	/ 52	0.0000	-10.100	/
53	0.0000	-10.300	/ 54	0.0000	-10.500	/ 55	0.0000	-10.700	/ 56	0.0000	-10.900	/
57	0.0000	-11.100	/ 58	0.0000	-11.300	/ 59	0.0000	-11.500	/ 60	0.0000	-11.700	/
61	0.0000	-11.900	/ 62	0.0000	-12.000	/						

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                  Exe Time :24 July 2019      11:09:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  1

0_L                             :
   5  62   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
.........2D PLASTIC SOIL ..........
.....................................

element group behaviour throughout stage analysis

stage   status
------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area      .....     .....     .....      flag
-------------------------------------------------------------------

    1    1    1   0.1000     0.000     0.000     0.000     1.000
    2    2    1   0.2000     0.000     0.000     0.000     1.000
    3    3    1   0.2000     0.000     0.000     0.000     1.000
    4    4    1   0.2000     0.000     0.000     0.000     1.000
    5    5    1   0.2000     0.000     0.000     0.000     1.000
    6    6    1   0.2000     0.000     0.000     0.000     1.000
    7    7    1   0.2000     0.000     0.000     0.000     1.000
    8    8    1   0.2000     0.000     0.000     0.000     1.000
    9    9    1   0.2000     0.000     0.000     0.000     1.000
   10   10    1   0.2000     0.000     0.000     0.000     1.000
   11   11    1   0.2000     0.000     0.000     0.000     1.000
   12   12    1   0.2000     0.000     0.000     0.000     1.000
   13   13    1   0.1500     0.000     0.000     0.000     1.000
   14   14    1   0.1500     0.000     0.000     0.000     1.000
   15   15    1   0.2000     0.000     0.000     0.000     1.000
   16   16    1   0.2000     0.000     0.000     0.000     1.000
   17   17    1   0.2000     0.000     0.000     0.000     1.000
   18   18    1   0.2000     0.000     0.000     0.000     1.000
   19   19    1   0.2000     0.000     0.000     0.000     1.000
   20   20    1   0.2000     0.000     0.000     0.000     1.000
   21   21    1   0.2000     0.000     0.000     0.000     1.000
   22   22    1   0.2000     0.000     0.000     0.000     1.000
   23   23    1   0.2000     0.000     0.000     0.000     1.000
   24   24    1   0.2000     0.000     0.000     0.000     1.000
   25   25    1   0.2000     0.000     0.000     0.000     1.000
   26   26    1   0.2000     0.000     0.000     0.000     1.000
   27   27    1   0.2000     0.000     0.000     0.000     1.000
   28   28    1   0.2000     0.000     0.000     0.000     1.000
   29   29    1   0.2000     0.000     0.000     0.000     1.000
   30   30    1   0.2000     0.000     0.000     0.000     1.000
   31   31    1   0.2000     0.000     0.000     0.000     1.000
   32   32    1   0.2000     0.000     0.000     0.000     1.000
   33   33    1   0.2000     0.000     0.000     0.000     1.000
   34   34    1   0.2000     0.000     0.000     0.000     1.000
   35   35    1   0.2000     0.000     0.000     0.000     1.000
   36   36    1   0.2000     0.000     0.000     0.000     1.000
   37   37    1   0.2000     0.000     0.000     0.000     1.000
   38   38    1   0.2000     0.000     0.000     0.000     1.000
   39   39    1   0.2000     0.000     0.000     0.000     1.000
   40   40    1   0.2000     0.000     0.000     0.000     1.000
   41   41    2   0.2000     0.000     0.000     0.000     1.000
```

42	42	2	0.2000	0.000	0.000	0.000	1.000
43	43	2	0.2000	0.000	0.000	0.000	1.000
44	44	2	0.2000	0.000	0.000	0.000	1.000
45	45	2	0.2000	0.000	0.000	0.000	1.000
46	46	2	0.2000	0.000	0.000	0.000	1.000
47	47	2	0.2000	0.000	0.000	0.000	1.000
48	48	2	0.2000	0.000	0.000	0.000	1.000
49	49	2	0.2000	0.000	0.000	0.000	1.000
50	50	2	0.2000	0.000	0.000	0.000	1.000
51	51	2	0.2000	0.000	0.000	0.000	1.000
52	52	2	0.2000	0.000	0.000	0.000	1.000
53	53	2	0.2000	0.000	0.000	0.000	1.000
54	54	2	0.2000	0.000	0.000	0.000	1.000
55	55	2	0.2000	0.000	0.000	0.000	1.000
56	56	2	0.2000	0.000	0.000	0.000	1.000
57	57	2	0.2000	0.000	0.000	0.000	1.000
58	58	2	0.2000	0.000	0.000	0.000	1.000
59	59	2	0.2000	0.000	0.000	0.000	1.000
60	60	2	0.2000	0.000	0.000	0.000	1.000
61	61	2	0.1500	0.000	0.000	0.000	1.000
62	62	2	0.5000E-01	0.000	0.000	0.000	1.000

```
+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                 Exe Time :24 July 2019      11:09:27                                                  |
+-----------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  2

0_R                              :
   5  62   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
.....2D PLASTIC SOIL .....
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area      .....     .....     .....      flag
-----------------------------------------------------------------
```

1	1	1	0.1000	0.000	0.000	0.000	2.000
2	2	1	0.2000	0.000	0.000	0.000	2.000
3	3	1	0.2000	0.000	0.000	0.000	2.000
4	4	1	0.2000	0.000	0.000	0.000	2.000
5	5	1	0.2000	0.000	0.000	0.000	2.000
6	6	1	0.2000	0.000	0.000	0.000	2.000
7	7	1	0.2000	0.000	0.000	0.000	2.000
8	8	1	0.2000	0.000	0.000	0.000	2.000
9	9	1	0.2000	0.000	0.000	0.000	2.000
10	10	1	0.2000	0.000	0.000	0.000	2.000
11	11	1	0.2000	0.000	0.000	0.000	2.000
12	12	1	0.2000	0.000	0.000	0.000	2.000
13	13	1	0.1500	0.000	0.000	0.000	2.000
14	14	1	0.1500	0.000	0.000	0.000	2.000
15	15	1	0.2000	0.000	0.000	0.000	2.000
16	16	1	0.2000	0.000	0.000	0.000	2.000
17	17	1	0.2000	0.000	0.000	0.000	2.000
18	18	1	0.2000	0.000	0.000	0.000	2.000
19	19	1	0.2000	0.000	0.000	0.000	2.000

20	20	1	0.2000	0.000	0.000	0.000	2.000
21	21	1	0.2000	0.000	0.000	0.000	2.000
22	22	1	0.2000	0.000	0.000	0.000	2.000
23	23	1	0.2000	0.000	0.000	0.000	2.000
24	24	1	0.2000	0.000	0.000	0.000	2.000
25	25	1	0.2000	0.000	0.000	0.000	2.000
26	26	1	0.2000	0.000	0.000	0.000	2.000
27	27	1	0.2000	0.000	0.000	0.000	2.000
28	28	1	0.2000	0.000	0.000	0.000	2.000
29	29	1	0.2000	0.000	0.000	0.000	2.000
30	30	1	0.2000	0.000	0.000	0.000	2.000
31	31	1	0.2000	0.000	0.000	0.000	2.000
32	32	1	0.2000	0.000	0.000	0.000	2.000
33	33	1	0.2000	0.000	0.000	0.000	2.000
34	34	1	0.2000	0.000	0.000	0.000	2.000
35	35	1	0.2000	0.000	0.000	0.000	2.000
36	36	1	0.2000	0.000	0.000	0.000	2.000
37	37	1	0.2000	0.000	0.000	0.000	2.000
38	38	1	0.2000	0.000	0.000	0.000	2.000
39	39	1	0.2000	0.000	0.000	0.000	2.000
40	40	1	0.2000	0.000	0.000	0.000	2.000
41	41	2	0.2000	0.000	0.000	0.000	2.000
42	42	2	0.2000	0.000	0.000	0.000	2.000
43	43	2	0.2000	0.000	0.000	0.000	2.000
44	44	2	0.2000	0.000	0.000	0.000	2.000
45	45	2	0.2000	0.000	0.000	0.000	2.000
46	46	2	0.2000	0.000	0.000	0.000	2.000
47	47	2	0.2000	0.000	0.000	0.000	2.000
48	48	2	0.2000	0.000	0.000	0.000	2.000
49	49	2	0.2000	0.000	0.000	0.000	2.000
50	50	2	0.2000	0.000	0.000	0.000	2.000
51	51	2	0.2000	0.000	0.000	0.000	2.000
52	52	2	0.2000	0.000	0.000	0.000	2.000
53	53	2	0.2000	0.000	0.000	0.000	2.000
54	54	2	0.2000	0.000	0.000	0.000	2.000
55	55	2	0.2000	0.000	0.000	0.000	2.000
56	56	2	0.2000	0.000	0.000	0.000	2.000
57	57	2	0.2000	0.000	0.000	0.000	2.000
58	58	2	0.2000	0.000	0.000	0.000	2.000
59	59	2	0.2000	0.000	0.000	0.000	2.000
60	60	2	0.2000	0.000	0.000	0.000	2.000
61	61	2	0.1500	0.000	0.000	0.000	2.000
62	62	2	0.5000E-01	0.000	0.000	0.000	2.000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                       NewProject.BaseDesignSection_28.A1M1R1_3484                                       |
|                                   Exe Time :24 July 2019      11:09:27                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  3

WallElement_33                  :
   2  61   0   1   0   0   0   0   0   0   0   0   0   0   1   0   0   1   0
.....................................
.........2D WALL ELEMENT............
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) young modulus      0.314800E+08
 prop( 2) modification  time  0.00000
 prop( 3) new young modulus   0.00000
 prop( 4) poisson ratio       0.00000
 prop( 5) future .............0.252200E-43

 no. of step variable items:     1
 step  inertia multipier
-------------------------
    1   1.000
    2   1.000
    3   1.000
```

```
    4   1.000
    5   1.000

 element data

   el   na   nb  mat      erc1      erc2     thick      by-i      by-j
-------------------------------------------------------------------

    1    1    2    1     0.000     0.000    0.6848     0.000     0.000
    2    2    3    1     0.000     0.000    0.6848     0.000     0.000
    3    3    4    1     0.000     0.000    0.6848     0.000     0.000
    4    4    5    1     0.000     0.000    0.6848     0.000     0.000
    5    5    6    1     0.000     0.000    0.6848     0.000     0.000
    6    6    7    1     0.000     0.000    0.6848     0.000     0.000
    7    7    8    1     0.000     0.000    0.6848     0.000     0.000
    8    8    9    1     0.000     0.000    0.6848     0.000     0.000
    9    9   10    1     0.000     0.000    0.6848     0.000     0.000
   10   10   11    1     0.000     0.000    0.6848     0.000     0.000
   11   11   12    1     0.000     0.000    0.6848     0.000     0.000
   12   12   13    1     0.000     0.000    0.6848     0.000     0.000
   13   13   14    1     0.000     0.000    0.6848     0.000     0.000
   14   14   15    1     0.000     0.000    0.6848     0.000     0.000
   15   15   16    1     0.000     0.000    0.6848     0.000     0.000
   16   16   17    1     0.000     0.000    0.6848     0.000     0.000
   17   17   18    1     0.000     0.000    0.6848     0.000     0.000
   18   18   19    1     0.000     0.000    0.6848     0.000     0.000
   19   19   20    1     0.000     0.000    0.6848     0.000     0.000
   20   20   21    1     0.000     0.000    0.6848     0.000     0.000
   21   21   22    1     0.000     0.000    0.6848     0.000     0.000
   22   22   23    1     0.000     0.000    0.6848     0.000     0.000
   23   23   24    1     0.000     0.000    0.6848     0.000     0.000
   24   24   25    1     0.000     0.000    0.6848     0.000     0.000
   25   25   26    1     0.000     0.000    0.6848     0.000     0.000
   26   26   27    1     0.000     0.000    0.6848     0.000     0.000
   27   27   28    1     0.000     0.000    0.6848     0.000     0.000
   28   28   29    1     0.000     0.000    0.6848     0.000     0.000
   29   29   30    1     0.000     0.000    0.6848     0.000     0.000
   30   30   31    1     0.000     0.000    0.6848     0.000     0.000
   31   31   32    1     0.000     0.000    0.6848     0.000     0.000
   32   32   33    1     0.000     0.000    0.6848     0.000     0.000
   33   33   34    1     0.000     0.000    0.6848     0.000     0.000
   34   34   35    1     0.000     0.000    0.6848     0.000     0.000
   35   35   36    1     0.000     0.000    0.6848     0.000     0.000
   36   36   37    1     0.000     0.000    0.6848     0.000     0.000
   37   37   38    1     0.000     0.000    0.6848     0.000     0.000
   38   38   39    1     0.000     0.000    0.6848     0.000     0.000
   39   39   40    1     0.000     0.000    0.6848     0.000     0.000
   40   40   41    1     0.000     0.000    0.6848     0.000     0.000
   41   41   42    1     0.000     0.000    0.6848     0.000     0.000
   42   42   43    1     0.000     0.000    0.6848     0.000     0.000
   43   43   44    1     0.000     0.000    0.6848     0.000     0.000
   44   44   45    1     0.000     0.000    0.6848     0.000     0.000
   45   45   46    1     0.000     0.000    0.6848     0.000     0.000
   46   46   47    1     0.000     0.000    0.6848     0.000     0.000
   47   47   48    1     0.000     0.000    0.6848     0.000     0.000
   48   48   49    1     0.000     0.000    0.6848     0.000     0.000
   49   49   50    1     0.000     0.000    0.6848     0.000     0.000
   50   50   51    1     0.000     0.000    0.6848     0.000     0.000
   51   51   52    1     0.000     0.000    0.6848     0.000     0.000
   52   52   53    1     0.000     0.000    0.6848     0.000     0.000
   53   53   54    1     0.000     0.000    0.6848     0.000     0.000
   54   54   55    1     0.000     0.000    0.6848     0.000     0.000
   55   55   56    1     0.000     0.000    0.6848     0.000     0.000
   56   56   57    1     0.000     0.000    0.6848     0.000     0.000
   57   57   58    1     0.000     0.000    0.6848     0.000     0.000
   58   58   59    1     0.000     0.000    0.6848     0.000     0.000
   59   59   60    1     0.000     0.000    0.6848     0.000     0.000
   60   60   61    1     0.000     0.000    0.6848     0.000     0.000
   61   61   62    1     0.000     0.000    0.6848     0.000     0.000



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                 Exe Time :24 July 2019      11:09:27                                                  |
+-----------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  4

Tieback_778405                  :
   6   1   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   2   0
.....................................
.........2D POST-TENSION ANCHOR....
```

```
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1  inactive
    2  inactive
    3  inactive
    4   active
    5   active

 material set no.    1

 prop( 1) angle          15.0000
 prop( 2) young modulus 0.200100E+09
 prop( 3) modification  time  0.00000
 prop( 4) new young modulus   0.00000

 no. of step variable items:     2
 step   -ve lim     +ve lim
-----------------------------
    1   0.000       0.000
    2   0.000       0.000
    3   0.000       0.000
    4   0.000       0.000
    5   0.000       0.000

 element data

   el    n  mat       a/l     pinit    yieldc    yieldt
-----------------------------------------------------

    1   14    1   0.2340E-04 136.4     0.000     0.000



+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                   |
|                                  Exe Time :24 July 2019      11:09:27                                             |
+-------------------------------------------------------------------------------------------------------------------+


NO. OF NODAL LOADS  (NLOAD) ...................    0
NO. OF LOAD CURVES  (NLCUR) ...................   10
MAXIMUM POINTS/LCURVE (NPTM)...................    5



+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                   |
|                                  Exe Time :24 July 2019      11:09:27                                             |
+-------------------------------------------------------------------------------------------------------------------+
L O A D     D A T A


    LOAD FUNCTION NUMBER   =    1
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       1.20000    0.0000E+00
       6.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    2
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       2.20000    0.0000E+00
       6.00000    0.0000E+00
```

```
LOAD FUNCTION NUMBER   =    3
NUMBER OF TIME POINTS  =    5

TIME VALUE      FUNCTION

   0.00000    0.0000E+00
   2.80000    0.0000E+00
   3.00000    0.1000E+01
   3.20000    0.0000E+00
   6.00000    0.0000E+00


LOAD FUNCTION NUMBER   =    4
NUMBER OF TIME POINTS  =    5

TIME VALUE      FUNCTION

   0.00000    0.0000E+00
   3.80000    0.0000E+00
   4.00000    0.1000E+01
   4.20000    0.0000E+00
   6.00000    0.0000E+00


LOAD FUNCTION NUMBER   =    5
NUMBER OF TIME POINTS  =    5

TIME VALUE      FUNCTION

   0.00000    0.0000E+00
   4.80000    0.0000E+00
   5.00000    0.1000E+01
   5.20000    0.0000E+00
   6.00000    0.0000E+00


LOAD FUNCTION NUMBER   =    6
NUMBER OF TIME POINTS  =    4

TIME VALUE      FUNCTION

   0.00000    0.0000E+00
   0.80000    0.0000E+00
   1.00000    0.1000E+01
   6.00000    0.1000E+01


LOAD FUNCTION NUMBER   =    7
NUMBER OF TIME POINTS  =    4

TIME VALUE      FUNCTION

   0.00000    0.0000E+00
   1.80000    0.0000E+00
   2.00000    0.1000E+01
   6.00000    0.1000E+01


LOAD FUNCTION NUMBER   =    8
NUMBER OF TIME POINTS  =    4

TIME VALUE      FUNCTION

   0.00000    0.0000E+00
   2.80000    0.0000E+00
   3.00000    0.1000E+01
   6.00000    0.1000E+01


LOAD FUNCTION NUMBER   =    9
NUMBER OF TIME POINTS  =    4

TIME VALUE      FUNCTION

   0.00000    0.0000E+00
   3.80000    0.0000E+00
```

```
       4.00000    0.1000E+01
       6.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =   10
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       4.80000    0.0000E+00
       5.00000    0.1000E+01
       6.00000    0.1000E+01


NO. OF DISTRIBUTED LOAD CARDS     0




+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                         |
|                                  Exe Time :24 July 2019      11:09:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
L O A D     B A L A N C E

STEP     1 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     1 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     2 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     2 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     3 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     3 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     4 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     4 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     5 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     5 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000


                      LOAD INPUT SECTION COMPLETED




+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                         |
|                                  Exe Time :24 July 2019      11:09:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


NO. OF LAYERS .................................    2
NO. OF DATA PER LAYER.........................  100



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                         |
|                                  Exe Time :24 July 2019      11:09:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+

LAYER DESCRIPTORS FOR STEP NO.    1


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
```

```
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.30400     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.0410     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.23500     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.8790     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    2


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.30400     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.0410     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
```

```
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.23500     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.8790     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    3


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.30400     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.0410     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.23500     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.8790     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    4


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    4

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
```

```
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.30400     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.0410     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    4

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.23500     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.8790     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    5


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    5

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.30400     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.0410     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.30400     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.0410     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    5

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
```

```
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.23500     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.8790     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.23500     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.8790     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)


DEFAULT WATER UNIT WEIGHT =  10.000
AVERAGED ON    10 VALUES



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                  Exe Time :24 July 2019      11:09:27                                                 |
+-----------------------------------------------------------------------------------------------------------------------+

PHASE DESCRIPTORS


STEP  NO.     1
                                    LEFT WALL    RIGHT WALL
Y                                    0.000       -0.9990E+30
Z-PC                                 0.000         0.000
Z-EXCAVATION                         0.000         0.000
Z-WATER_TABLE                       -26.00       -0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL            0.000         0.000
ZQ                                   0.000         0.000
DZW_OF_THE_WATER_TABLE               0.000         0.000
QS_ON_THE_EXCAVATION_SIDE            0.000         0.000
ZQS                                 -0.9990E+30   -0.9990E+30
ZCUT                                 0.000         0.000
BALANCE LEVEL FOR PORE PRESSURES    -12.00        -12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)    0.000         0.000
PORE_UPDATE_FLAG                     0.000         0.000
PORE_TAB. _FLAG (gt.0= use tabs)     0.000         0.000
lateral thrusts reduction elevatio   0.000         0.000
Downhill reduction factor for effe   0.000         0.000
Downhill reduction factor for pore   0.000         0.000
Uphill reduction factor for effect   0.000         0.000
Uphill reduction factor for pore p   0.000         0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]     0.000         0.000
UPHILL VERTICAL ACCEL.  Kv_uh [g]    0.000         0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]    0.000         0.000
UPHILL BETA ANGLE (SLOPE) [deg]      0.000         0.000
UPHILL DELTA/PHI RATIO               0.000         0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]    0.000         0.000
DOWNHILL DELTA/PHI RATIO             0.000         0.000
DYN.WATER BEHAVIOUR                  0.000         0.000
Excess pore pressure RATIO Ru        0.000         0.000
SEISMIC PRESSURE LOWER VALUE         0.000         0.000
SEISMIC PRESSURE UPPER VALUE         0.000         0.000
SEISMIC PRESSURE LOWER LEVEL         0.000         0.000
SEISMIC PRESSURE UPPER LEVEL         0.000         0.000

================================================================================================================end of step    1


STEP  NO.     2
                                    LEFT WALL    RIGHT WALL
Y                                    0.000       -0.9990E+30
Z-PC                                 0.000         0.000
Z-EXCAVATION                         0.000         0.000
Z-WATER_TABLE                       -26.00       -0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL            0.000         0.000
ZQ                                   0.000         0.000
DZW_OF_THE_WATER_TABLE               0.000         0.000
QS_ON_THE_EXCAVATION_SIDE            0.000         0.000
```

ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-12.00	-12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 2

STEP NO. 3

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-3.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-12.00	-12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 3

STEP NO. 4

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-3.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-12.00	-12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000

Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 4

STEP NO. 5

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-4.960	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-12.00	-12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 5

LEFT-HAND WALL

LOWER LEVEL -12.00000
UPPER LEVEL 0.00000

RIGHT-HAND WALL

LOWER LEVEL -12.00000
UPPER LEVEL 0.00000

+----------+
| PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017* |
| NewProject.BaseDesignSection_28.A1M1R1_3484 |
| Exe Time :24 July 2019 11:09:27 |
+----------+

I N I T I A L S T R E S S T A B L E S

S E C T I O N

NUMBER OF DEFINED TABLES 1

```
INPUT DATA FOR INITIAL STRESS SET NO.    1
PERTAINING SOIL ELEMENTS AT Y-COORD    0.0000

ACTIVATION TIME                              2.0000
END TIME (TIME BEYOND WHICH IT IS REMOVED)   5.0000

TYPE BOUSSINESQ

 HORIZONTAL DISTANCE (DY)          0.000000000000000E+000
 FOUNDATION WIDTH    (B)            40.0000000000000
 ZETA-F.....                       0.000000000000000E+000
 Q-F .....                          11.5400000000000
 BETA .....                         30.0000000000000
 BEHAVIOUR (0=FREE, 1=REFLECTING)  0.000000000000000E+000


 ELEMENT GROUPS BACKUP AREA CAN STAY IN CORE AT
 POSITION        3534

 NO. OF D.P.W  FOR THIS AREA       7376
 MAX NO. OF D.P.W. AVAILABLE      81920
 ** MAX NO OF ITERATIONS SET TO         100

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2144E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 22.62     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2144E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   124 NODE     62 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     1 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2144E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 22.62     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2144E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   124 NODE     62 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2144E+05 RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 22.62     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2144E+05 RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=   124 NODE     62 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0




+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                  Exe Time :24 July 2019      11:09:27                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     2 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    1     ( AT TIME   1.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (


ALL NODAL POINTS HAVE ZERO DISPLACEMENT COMPONENTS
```

```
+-----------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*   |
|                                                                                                           |
|                                   NewProject.BaseDesignSection_28.A1M1R1_3484                             |
|                                Exe Time :24 July 2019      11:09:27                                       |
+-----------------------------------------------------------------------------------------------------------+
```

New Project

S T R E S S   R E S U L T S   F O R   G R O U P   N O.   1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 62
C U R R E N T   T I M E   I S   1.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.000	0.000	0.000	0.000	0.000	0.000	V-C	2.1221E+04	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_2_8_L_0
2 D	0.4028	0.000	3.800	2.014	3.800	2.014	V-C	2.1221E+04	-0.2000	0.000	1.000	1.000	2.014	0.000	0.000	Strato1_2_8_L_0
3 D	0.8056	0.000	7.600	4.028	7.600	4.028	V-C	2.1221E+04	-0.4000	0.000	1.000	1.000	4.028	0.000	0.000	Strato1_2_8_L_0
4 D	1.208	0.000	11.40	6.042	11.40	6.042	V-C	2.1221E+04	-0.6000	0.000	1.000	1.000	6.042	0.000	0.000	Strato1_2_8_L_0
5 D	1.611	0.000	15.20	8.056	15.20	8.056	V-C	2.1221E+04	-0.8000	0.000	1.000	1.000	8.056	0.000	0.000	Strato1_2_8_L_0
6 D	2.014	0.000	19.00	10.07	19.00	10.07	V-C	2.1221E+04	-1.000	0.000	1.000	1.000	10.07	0.000	0.000	Strato1_2_8_L_0
7 D	2.417	0.000	22.80	12.08	22.80	12.08	V-C	2.1221E+04	-1.200	0.000	1.000	1.000	12.08	0.000	0.000	Strato1_2_8_L_0
8 D	2.820	0.000	26.60	14.10	26.60	14.10	V-C	2.1221E+04	-1.400	0.000	1.000	1.000	14.10	0.000	0.000	Strato1_2_8_L_0
9 D	3.222	0.000	30.40	16.11	30.40	16.11	V-C	2.1221E+04	-1.600	0.000	1.000	1.000	16.11	0.000	0.000	Strato1_2_8_L_0
10 D	3.625	0.000	34.20	18.13	34.20	18.13	V-C	2.1221E+04	-1.800	0.000	1.000	1.000	18.13	0.000	0.000	Strato1_2_8_L_0
11 D	4.028	0.000	38.00	20.14	38.00	20.14	V-C	2.1221E+04	-2.000	0.000	1.000	1.000	20.14	0.000	0.000	Strato1_2_8_L_0
12 D	4.431	0.000	41.80	22.15	41.80	22.15	V-C	2.1221E+04	-2.200	0.000	1.000	1.000	22.15	0.000	0.000	Strato1_2_8_L_0
13 D	3.625	0.000	45.60	24.17	45.60	24.17	V-C	2.1221E+04	-2.400	0.000	1.000	1.000	24.17	0.000	0.000	Strato1_2_8_L_0
14 D	3.776	0.000	47.50	25.18	47.50	25.18	V-C	2.1221E+04	-2.500	0.000	1.000	1.000	25.18	0.000	0.000	Strato1_2_8_L_0
15 D	5.438	0.000	51.30	27.19	51.30	27.19	V-C	2.1221E+04	-2.700	0.000	1.000	1.000	27.19	0.000	0.000	Strato1_2_8_L_0
16 D	5.841	0.000	55.10	29.20	55.10	29.20	V-C	2.1221E+04	-2.900	0.000	1.000	1.000	29.20	0.000	0.000	Strato1_2_8_L_0
17 D	6.243	0.000	58.90	31.22	58.90	31.22	V-C	2.1221E+04	-3.100	0.000	1.000	1.000	31.22	0.000	0.000	Strato1_2_8_L_0
18 D	6.646	0.000	62.70	33.23	62.70	33.23	V-C	2.1221E+04	-3.300	0.000	1.000	1.000	33.23	0.000	0.000	Strato1_2_8_L_0
19 D	7.049	0.000	66.50	35.25	66.50	35.25	V-C	2.1221E+04	-3.500	0.000	1.000	1.000	35.25	0.000	0.000	Strato1_2_8_L_0
20 D	7.452	0.000	70.30	37.26	70.30	37.26	V-C	2.1221E+04	-3.700	0.000	1.000	1.000	37.26	0.000	0.000	Strato1_2_8_L_0
21 D	7.855	0.000	74.10	39.27	74.10	39.27	V-C	2.1221E+04	-3.900	0.000	1.000	1.000	39.27	0.000	0.000	Strato1_2_8_L_0
22 D	8.257	0.000	77.90	41.29	77.90	41.29	V-C	2.1221E+04	-4.100	0.000	1.000	1.000	41.29	0.000	0.000	Strato1_2_8_L_0
23 D	8.660	0.000	81.70	43.30	81.70	43.30	V-C	2.1221E+04	-4.300	0.000	1.000	1.000	43.30	0.000	0.000	Strato1_2_8_L_0
24 D	9.063	0.000	85.50	45.32	85.50	45.32	V-C	2.1221E+04	-4.500	0.000	1.000	1.000	45.31	0.000	0.000	Strato1_2_8_L_0
25 D	9.466	0.000	89.30	47.33	89.30	47.33	V-C	2.1221E+04	-4.700	0.000	1.000	1.000	47.33	0.000	0.000	Strato1_2_8_L_0
26 D	9.869	0.000	93.10	49.34	93.10	49.34	V-C	2.1221E+04	-4.900	0.000	1.000	1.000	49.34	0.000	0.000	Strato1_2_8_L_0
27 D	10.27	0.000	96.90	51.36	96.90	51.36	V-C	2.1221E+04	-5.100	0.000	1.000	1.000	51.36	0.000	0.000	Strato1_2_8_L_0
28 D	10.67	0.000	100.7	53.37	100.7	53.37	V-C	2.1221E+04	-5.300	0.000	1.000	1.000	53.37	0.000	0.000	Strato1_2_8_L_0
29 D	11.08	0.000	104.5	55.38	104.5	55.38	V-C	2.1221E+04	-5.500	0.000	1.000	1.000	55.38	0.000	0.000	Strato1_2_8_L_0
30 D	11.48	0.000	108.3	57.40	108.3	57.40	V-C	2.1221E+04	-5.700	0.000	1.000	1.000	57.40	0.000	0.000	Strato1_2_8_L_0
31 D	11.88	0.000	112.1	59.41	112.1	59.41	V-C	2.1221E+04	-5.900	0.000	1.000	1.000				

```
59.41       0.000       0.000     Strato1_2_8_L_0
  32 D   12.29      0.000       115.9       61.43       115.9       61.43               V-C  2.1221E+04  -6.100      0.000      1.000      1.000
61.43       0.000       0.000     Strato1_2_8_L_0
  33 D   12.69      0.000       119.7       63.44       119.7       63.44               V-C  2.1221E+04  -6.300      0.000      1.000      1.000
63.44       0.000       0.000     Strato1_2_8_L_0
  34 D   13.09      0.000       123.5       65.45       123.5       65.45               V-C  2.1221E+04  -6.500      0.000      1.000      1.000
65.45       0.000       0.000     Strato1_2_8_L_0
  35 D   13.49      0.000       127.3       67.47       127.3       67.47               V-C  2.1221E+04  -6.700      0.000      1.000      1.000
67.47       0.000       0.000     Strato1_2_8_L_0
  36 D   13.90      0.000       131.1       69.48       131.1       69.48               V-C  2.1221E+04  -6.900      0.000      1.000      1.000
69.48       0.000       0.000     Strato1_2_8_L_0
  37 D   14.30      0.000       134.9       71.50       134.9       71.50               V-C  2.1221E+04  -7.100      0.000      1.000      1.000
71.50       0.000       0.000     Strato1_2_8_L_0
  38 D   14.70      0.000       138.7       73.51       138.7       73.51               V-C  2.1221E+04  -7.300      0.000      1.000      1.000
73.51       0.000       0.000     Strato1_2_8_L_0
  39 D   15.10      0.000       142.5       75.52       142.5       75.52               V-C  2.1221E+04  -7.500      0.000      1.000      1.000
75.52       0.000       0.000     Strato1_2_8_L_0
  40 D   15.51      0.000       146.3       77.54       146.3       77.54               V-C  2.1221E+04  -7.700      0.000      1.000      1.000
77.54       0.000       0.000     Strato1_2_8_L_0
  41 D   15.02      0.000       150.2       75.10       150.2       75.10               V-C  6.0031E+04  -7.900      0.000      1.000      1.000
75.10       0.000       0.000     Strato2_3095_82743_L_0
  42 D   15.42      0.000       154.2       77.10       154.2       77.10               V-C  6.0031E+04  -8.100      0.000      1.000      1.000
77.10       0.000       0.000     Strato2_3095_82743_L_0
  43 D   15.82      0.000       158.2       79.10       158.2       79.10               V-C  6.0031E+04  -8.300      0.000      1.000      1.000
79.10       0.000       0.000     Strato2_3095_82743_L_0
  44 D   16.22      0.000       162.2       81.10       162.2       81.10               V-C  6.0031E+04  -8.500      0.000      1.000      1.000
81.10       0.000       0.000     Strato2_3095_82743_L_0
  45 D   16.62      0.000       166.2       83.10       166.2       83.10               V-C  6.0031E+04  -8.700      0.000      1.000      1.000
83.10       0.000       0.000     Strato2_3095_82743_L_0
  46 D   17.02      0.000       170.2       85.10       170.2       85.10               V-C  6.0031E+04  -8.900      0.000      1.000      1.000
85.10       0.000       0.000     Strato2_3095_82743_L_0
  47 D   17.42      0.000       174.2       87.10       174.2       87.10               V-C  6.0031E+04  -9.100      0.000      1.000      1.000
87.10       0.000       0.000     Strato2_3095_82743_L_0
  48 D   17.82      0.000       178.2       89.10       178.2       89.10               V-C  6.0031E+04  -9.300      0.000      1.000      1.000
89.10       0.000       0.000     Strato2_3095_82743_L_0
  49 D   18.22      0.000       182.2       91.10       182.2       91.10               V-C  6.0031E+04  -9.500      0.000      1.000      1.000
91.10       0.000       0.000     Strato2_3095_82743_L_0
  50 D   18.62      0.000       186.2       93.10       186.2       93.10               V-C  6.0031E+04  -9.700      0.000      1.000      1.000
93.10       0.000       0.000     Strato2_3095_82743_L_0
  51 D   19.02      0.000       190.2       95.10       190.2       95.10               V-C  6.0031E+04  -9.900      0.000      1.000      1.000
95.10       0.000       0.000     Strato2_3095_82743_L_0
  52 D   19.42      0.000       194.2       97.10       194.2       97.10               V-C  6.0031E+04  -10.10      0.000      1.000      1.000
97.10       0.000       0.000     Strato2_3095_82743_L_0
  53 D   19.82      0.000       198.2       99.10       198.2       99.10               V-C  6.0031E+04  -10.30      0.000      1.000      1.000
99.10       0.000       0.000     Strato2_3095_82743_L_0
  54 D   20.22      0.000       202.2       101.1       202.2       101.1               V-C  6.0031E+04  -10.50      0.000      1.000      1.000
101.1       0.000       0.000     Strato2_3095_82743_L_0
  55 D   20.62      0.000       206.2       103.1       206.2       103.1               V-C  6.0031E+04  -10.70      0.000      1.000      1.000
103.1       0.000       0.000     Strato2_3095_82743_L_0
  56 D   21.02      0.000       210.2       105.1       210.2       105.1               V-C  6.0031E+04  -10.90      0.000      1.000      1.000
105.1       0.000       0.000     Strato2_3095_82743_L_0
  57 D   21.42      0.000       214.2       107.1       214.2       107.1               V-C  6.0031E+04  -11.10      0.000      1.000      1.000
107.1       0.000       0.000     Strato2_3095_82743_L_0
  58 D   21.82      0.000       218.2       109.1       218.2       109.1               V-C  6.0031E+04  -11.30      0.000      1.000      1.000
109.1       0.000       0.000     Strato2_3095_82743_L_0
  59 D   22.22      0.000       222.2       111.1       222.2       111.1               V-C  6.0031E+04  -11.50      0.000      1.000      1.000
111.1       0.000       0.000     Strato2_3095_82743_L_0
  60 D   22.62      0.000       226.2       113.1       226.2       113.1               V-C  6.0031E+04  -11.70      0.000      1.000      1.000
113.1       0.000       0.000     Strato2_3095_82743_L_0
  61 D   17.26      0.000       230.2       115.1       230.2       115.1               V-C  6.0031E+04  -11.90      0.000      1.000      1.000
115.1       0.000       0.000     Strato2_3095_82743_L_0
  62 D   5.805      0.000       232.2       116.1       232.2       116.1               V-C  6.0031E+04  -12.00      0.000      1.000      1.000
116.1       0.000       0.000     Strato2_3095_82743_L_0


 +------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                |
 |                                                                                                                        |
 |                                       NewProject.BaseDesignSection_28.A1M1R1_3484                                     |
 |                                    Exe Time :24 July 2019      11:09:27                                                |
 +------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S    R E S U L T S    F O R    G R O U P  N O.   2

 0_R                                :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
 C U R R E N T    T I M E    I S      1.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****
```

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.000	0.000	0.000	0.000	0.000	0.000	V-C	1.4726E+04	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_2_8_L_0
2 D	0.4028	0.000	3.800	2.014	3.800	2.014	V-C	1.4726E+04	-0.2000	0.000	1.000	1.000	2.014	0.000	0.000	Strato1_2_8_L_0
3 D	0.8056	0.000	7.600	4.028	7.600	4.028	V-C	1.4726E+04	-0.4000	0.000	1.000	1.000	4.028	0.000	0.000	Strato1_2_8_L_0
4 D	1.208	0.000	11.40	6.042	11.40	6.042	V-C	1.4726E+04	-0.6000	0.000	1.000	1.000	6.042	0.000	0.000	Strato1_2_8_L_0
5 D	1.611	0.000	15.20	8.056	15.20	8.056	V-C	1.4726E+04	-0.8000	0.000	1.000	1.000	8.056	0.000	0.000	Strato1_2_8_L_0
6 D	2.014	0.000	19.00	10.07	19.00	10.07	V-C	1.4726E+04	-1.000	0.000	1.000	1.000	10.07	0.000	0.000	Strato1_2_8_L_0
7 D	2.417	0.000	22.80	12.08	22.80	12.08	V-C	1.4726E+04	-1.200	0.000	1.000	1.000	12.08	0.000	0.000	Strato1_2_8_L_0
8 D	2.820	0.000	26.60	14.10	26.60	14.10	V-C	1.4726E+04	-1.400	0.000	1.000	1.000	14.10	0.000	0.000	Strato1_2_8_L_0
9 D	3.222	0.000	30.40	16.11	30.40	16.11	V-C	1.4726E+04	-1.600	0.000	1.000	1.000	16.11	0.000	0.000	Strato1_2_8_L_0
10 D	3.625	0.000	34.20	18.13	34.20	18.13	V-C	1.4726E+04	-1.800	0.000	1.000	1.000	18.13	0.000	0.000	Strato1_2_8_L_0
11 D	4.028	0.000	38.00	20.14	38.00	20.14	V-C	1.4726E+04	-2.000	0.000	1.000	1.000	20.14	0.000	0.000	Strato1_2_8_L_0
12 D	4.431	0.000	41.80	22.15	41.80	22.15	V-C	1.4726E+04	-2.200	0.000	1.000	1.000	22.15	0.000	0.000	Strato1_2_8_L_0
13 D	3.625	0.000	45.60	24.17	45.60	24.17	V-C	1.4726E+04	-2.400	0.000	1.000	1.000	24.17	0.000	0.000	Strato1_2_8_L_0
14 D	3.776	0.000	47.50	25.18	47.50	25.18	V-C	1.4726E+04	-2.500	0.000	1.000	1.000	25.18	0.000	0.000	Strato1_2_8_L_0
15 D	5.438	0.000	51.30	27.19	51.30	27.19	V-C	1.4726E+04	-2.700	0.000	1.000	1.000	27.19	0.000	0.000	Strato1_2_8_L_0
16 D	5.841	0.000	55.10	29.20	55.10	29.20	V-C	1.4726E+04	-2.900	0.000	1.000	1.000	29.20	0.000	0.000	Strato1_2_8_L_0
17 D	6.243	0.000	58.90	31.22	58.90	31.22	V-C	1.4726E+04	-3.100	0.000	1.000	1.000	31.22	0.000	0.000	Strato1_2_8_L_0
18 D	6.646	0.000	62.70	33.23	62.70	33.23	V-C	1.4726E+04	-3.300	0.000	1.000	1.000	33.23	0.000	0.000	Strato1_2_8_L_0
19 D	7.049	0.000	66.50	35.25	66.50	35.25	V-C	1.4726E+04	-3.500	0.000	1.000	1.000	35.25	0.000	0.000	Strato1_2_8_L_0
20 D	7.452	0.000	70.30	37.26	70.30	37.26	V-C	1.4726E+04	-3.700	0.000	1.000	1.000	37.26	0.000	0.000	Strato1_2_8_L_0
21 D	7.855	0.000	74.10	39.27	74.10	39.27	V-C	1.4726E+04	-3.900	0.000	1.000	1.000	39.27	0.000	0.000	Strato1_2_8_L_0
22 D	8.257	0.000	77.90	41.29	77.90	41.29	V-C	1.4726E+04	-4.100	0.000	1.000	1.000	41.29	0.000	0.000	Strato1_2_8_L_0
23 D	8.660	0.000	81.70	43.30	81.70	43.30	V-C	1.4726E+04	-4.300	0.000	1.000	1.000	43.30	0.000	0.000	Strato1_2_8_L_0
24 D	9.063	0.000	85.50	45.32	85.50	45.32	V-C	1.4726E+04	-4.500	0.000	1.000	1.000	45.31	0.000	0.000	Strato1_2_8_L_0
25 D	9.466	0.000	89.30	47.33	89.30	47.33	V-C	1.4726E+04	-4.700	0.000	1.000	1.000	47.33	0.000	0.000	Strato1_2_8_L_0
26 D	9.869	0.000	93.10	49.34	93.10	49.34	V-C	1.4726E+04	-4.900	0.000	1.000	1.000	49.34	0.000	0.000	Strato1_2_8_L_0
27 D	10.27	0.000	96.90	51.36	96.90	51.36	V-C	1.4726E+04	-5.100	0.000	1.000	1.000	51.36	0.000	0.000	Strato1_2_8_L_0
28 D	10.67	0.000	100.7	53.37	100.7	53.37	V-C	1.4726E+04	-5.300	0.000	1.000	1.000	53.37	0.000	0.000	Strato1_2_8_L_0
29 D	11.08	0.000	104.5	55.38	104.5	55.38	V-C	1.4726E+04	-5.500	0.000	1.000	1.000	55.38	0.000	0.000	Strato1_2_8_L_0
30 D	11.48	0.000	108.3	57.40	108.3	57.40	V-C	1.4726E+04	-5.700	0.000	1.000	1.000	57.40	0.000	0.000	Strato1_2_8_L_0
31 D	11.88	0.000	112.1	59.41	112.1	59.41	V-C	1.4726E+04	-5.900	0.000	1.000	1.000	59.41	0.000	0.000	Strato1_2_8_L_0
32 D	12.29	0.000	115.9	61.43	115.9	61.43	V-C	1.4726E+04	-6.100	0.000	1.000	1.000	61.43	0.000	0.000	Strato1_2_8_L_0
33 D	12.69	0.000	119.7	63.44	119.7	63.44	V-C	1.4726E+04	-6.300	0.000	1.000	1.000	63.44	0.000	0.000	Strato1_2_8_L_0
34 D	13.09	0.000	123.5	65.45	123.5	65.45	V-C	1.4726E+04	-6.500	0.000	1.000	1.000	65.45	0.000	0.000	Strato1_2_8_L_0
35 D	13.49	0.000	127.3	67.47	127.3	67.47	V-C	1.4726E+04	-6.700	0.000	1.000	1.000	67.47	0.000	0.000	Strato1_2_8_L_0
36 D	13.90	0.000	131.1	69.48	131.1	69.48	V-C	1.4726E+04	-6.900	0.000	1.000	1.000	69.48	0.000	0.000	Strato1_2_8_L_0
37 D	14.30	0.000	134.9	71.50	134.9	71.50	V-C	1.4726E+04	-7.100	0.000	1.000	1.000	71.50	0.000	0.000	Strato1_2_8_L_0
38 D	14.70	0.000	138.7	73.51	138.7	73.51	V-C	1.4726E+04	-7.300	0.000	1.000	1.000	73.51	0.000	0.000	Strato1_2_8_L_0
39 D	15.10	0.000	142.5	75.52	142.5	75.52	V-C	1.4726E+04	-7.500	0.000	1.000	1.000	75.52	0.000	0.000	Strato1_2_8_L_0
40 D	15.51	0.000	146.3	77.54	146.3	77.54	V-C	1.4726E+04	-7.700	0.000	1.000	1.000	77.54	0.000	0.000	Strato1_2_8_L_0

41 D	15.02	0.000	150.2	75.10	150.2	75.10	V-C	3.2535E+04	-7.900	0.000	1.000	1.000
75.10	0.000	0.000	Strato2_3095_82743_L_0									
42 D	15.42	0.000	154.2	77.10	154.2	77.10	V-C	3.2535E+04	-8.100	0.000	1.000	1.000
77.10	0.000	0.000	Strato2_3095_82743_L_0									
43 D	15.82	0.000	158.2	79.10	158.2	79.10	V-C	3.2535E+04	-8.300	0.000	1.000	1.000
79.10	0.000	0.000	Strato2_3095_82743_L_0									
44 D	16.22	0.000	162.2	81.10	162.2	81.10	V-C	3.2535E+04	-8.500	0.000	1.000	1.000
81.10	0.000	0.000	Strato2_3095_82743_L_0									
45 D	16.62	0.000	166.2	83.10	166.2	83.10	V-C	3.2535E+04	-8.700	0.000	1.000	1.000
83.10	0.000	0.000	Strato2_3095_82743_L_0									
46 D	17.02	0.000	170.2	85.10	170.2	85.10	V-C	3.2535E+04	-8.900	0.000	1.000	1.000
85.10	0.000	0.000	Strato2_3095_82743_L_0									
47 D	17.42	0.000	174.2	87.10	174.2	87.10	V-C	3.2535E+04	-9.100	0.000	1.000	1.000
87.10	0.000	0.000	Strato2_3095_82743_L_0									
48 D	17.82	0.000	178.2	89.10	178.2	89.10	V-C	3.2535E+04	-9.300	0.000	1.000	1.000
89.10	0.000	0.000	Strato2_3095_82743_L_0									
49 D	18.22	0.000	182.2	91.10	182.2	91.10	V-C	3.2535E+04	-9.500	0.000	1.000	1.000
91.10	0.000	0.000	Strato2_3095_82743_L_0									
50 D	18.62	0.000	186.2	93.10	186.2	93.10	V-C	3.2535E+04	-9.700	0.000	1.000	1.000
93.10	0.000	0.000	Strato2_3095_82743_L_0									
51 D	19.02	0.000	190.2	95.10	190.2	95.10	V-C	3.2535E+04	-9.900	0.000	1.000	1.000
95.10	0.000	0.000	Strato2_3095_82743_L_0									
52 D	19.42	0.000	194.2	97.10	194.2	97.10	V-C	3.2535E+04	-10.10	0.000	1.000	1.000
97.10	0.000	0.000	Strato2_3095_82743_L_0									
53 D	19.82	0.000	198.2	99.10	198.2	99.10	V-C	3.2535E+04	-10.30	0.000	1.000	1.000
99.10	0.000	0.000	Strato2_3095_82743_L_0									
54 D	20.22	0.000	202.2	101.1	202.2	101.1	V-C	3.2535E+04	-10.50	0.000	1.000	1.000
101.1	0.000	0.000	Strato2_3095_82743_L_0									
55 D	20.62	0.000	206.2	103.1	206.2	103.1	V-C	3.2535E+04	-10.70	0.000	1.000	1.000
103.1	0.000	0.000	Strato2_3095_82743_L_0									
56 D	21.02	0.000	210.2	105.1	210.2	105.1	V-C	3.2535E+04	-10.90	0.000	1.000	1.000
105.1	0.000	0.000	Strato2_3095_82743_L_0									
57 D	21.42	0.000	214.2	107.1	214.2	107.1	V-C	3.2535E+04	-11.10	0.000	1.000	1.000
107.1	0.000	0.000	Strato2_3095_82743_L_0									
58 D	21.82	0.000	218.2	109.1	218.2	109.1	V-C	3.2535E+04	-11.30	0.000	1.000	1.000
109.1	0.000	0.000	Strato2_3095_82743_L_0									
59 D	22.22	0.000	222.2	111.1	222.2	111.1	V-C	3.2535E+04	-11.50	0.000	1.000	1.000
111.1	0.000	0.000	Strato2_3095_82743_L_0									
60 D	22.62	0.000	226.2	113.1	226.2	113.1	V-C	3.2535E+04	-11.70	0.000	1.000	1.000
113.1	0.000	0.000	Strato2_3095_82743_L_0									
61 D	17.26	0.000	230.2	115.1	230.2	115.1	V-C	3.2535E+04	-11.90	0.000	1.000	1.000
115.1	0.000	0.000	Strato2_3095_82743_L_0									
62 D	5.805	0.000	232.2	116.1	232.2	116.1	V-C	3.2535E+04	-12.00	0.000	1.000	1.000
116.1	0.000	0.000	Strato2_3095_82743_L_0									

```
 +-------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
 |                                                                                                                         |
 |                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
 |                                  Exe Time :24 July 2019      11:09:27                                                   |
 +-------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

 WallElement_33                  :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
 C U R R E N T   T I M E   I S     1.0000

  WALL2D ELEMENT

    EL      TA          TB          MA          MB
 ---------------------------------------------------------
     1  0.0000      0.0000      0.0000      0.0000
     2  0.0000      0.0000      0.0000      0.0000
     3  0.0000      0.0000      0.0000      0.0000
     4  0.0000      0.0000      0.0000      0.0000
     5  0.0000      0.0000      0.0000      0.0000
     6  0.0000      0.0000      0.0000      0.0000
     7  0.0000      0.0000      0.0000      0.0000
     8  0.0000      0.0000      0.0000      0.0000
     9  0.0000      0.0000      0.0000      0.0000
    10  0.0000      0.0000      0.0000      0.0000
    11  0.0000      0.0000      0.0000      0.0000
    12  0.0000      0.0000      0.0000      0.0000
    13  0.0000      0.0000      0.0000      0.0000
    14  0.0000      0.0000      0.0000      0.0000
    15  0.0000      0.0000      0.0000      0.0000
    16  0.0000      0.0000      0.0000      0.0000
    17  0.0000      0.0000      0.0000      0.0000
    18  0.0000      0.0000      0.0000      0.0000
```

19	0.0000	0.0000	0.0000	0.0000
20	0.0000	0.0000	0.0000	0.0000
21	0.0000	0.0000	0.0000	0.0000
22	0.0000	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0000
24	0.0000	0.0000	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000
26	0.0000	0.0000	0.0000	0.0000
27	0.0000	0.0000	0.0000	0.0000
28	0.0000	0.0000	0.0000	0.0000
29	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000
31	0.0000	0.0000	0.0000	0.0000
32	0.0000	0.0000	0.0000	0.0000
33	0.0000	0.0000	0.0000	0.0000
34	0.0000	0.0000	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000
36	0.0000	0.0000	0.0000	0.0000
37	0.0000	0.0000	0.0000	0.0000
38	0.0000	0.0000	0.0000	0.0000
39	0.0000	0.0000	0.0000	0.0000
40	0.0000	0.0000	0.0000	0.0000
41	0.0000	0.0000	0.0000	0.0000
42	0.0000	0.0000	0.0000	0.0000
43	0.0000	0.0000	0.0000	0.0000
44	0.0000	0.0000	0.0000	0.0000
45	0.0000	0.0000	0.0000	0.0000
46	0.0000	0.0000	0.0000	0.0000
47	0.0000	0.0000	0.0000	0.0000
48	0.0000	0.0000	0.0000	0.0000
49	0.0000	0.0000	0.0000	0.0000
50	0.0000	0.0000	0.0000	0.0000
51	0.0000	0.0000	0.0000	0.0000
52	0.0000	0.0000	0.0000	0.0000
53	0.0000	0.0000	0.0000	0.0000
54	0.0000	0.0000	0.0000	0.0000
55	0.0000	0.0000	0.0000	0.0000
56	0.0000	0.0000	0.0000	0.0000
57	0.0000	0.0000	0.0000	0.0000
58	0.0000	0.0000	0.0000	0.0000
59	0.0000	0.0000	0.0000	0.0000
60	0.0000	0.0000	0.0000	0.0000
61	0.0000	0.0000	0.0000	0.0000

```
+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                               |
|                                  Exe Time :24 July 2019      11:09:27                                                         |
+-------------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    4

Tieback_778405                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      1.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2262E+05 RIMNOR= 0.000
           RENORM= 40.59     REMNOR= 0.000     RATIO =0.4236E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 23.42     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2262E+05 RDR   = 0.000
           RATIOT=0.4236E-01 RATIOR= 0.000
           MAX UN=0.8871     IEQ=    15 NODE      8 DOF   1  Y-DISPL.F
           MIN UN= 0.000     IEQ=     2 NODE      1 DOF   2   X-ROT. F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2262E+05 RIMNOR= 0.000
           RENORM=0.8583E-01 REMNOR=0.5709E-22 RATIO =0.1948E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 23.42     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2262E+05 RDR   = 0.000
           RATIOT=0.1948E-02 RATIOR= 0.000
           MAX UN=0.2710     IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           MIN UN=-.6492E-10 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2262E+05 RIMNOR= 0.000
           RENORM=0.6012E-04 REMNOR=0.8523E-23 RATIO =0.5155E-04 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 23.42     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2262E+05 RDR   = 0.000
           RATIOT=0.5155E-04 RATIOR= 0.000
           MAX UN=0.2397E-02 IEQ=    81 NODE     41 DOF   1  Y-DISPL.F
           MIN UN=-.1892E-10 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0




+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                               |
|                                  Exe Time :24 July 2019      11:09:27                                                         |
+-------------------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     3 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    2     ( AT TIME   2.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)            (
    1   6.2198452E-05  -2.4852646E-06
    2   6.1701954E-05  -2.4769362E-06
    3   6.1208823E-05  -2.4514162E-06
    4   6.0722444E-05  -2.4100452E-06
    5   6.0245535E-05  -2.3577242E-06
    6   5.9779735E-05  -2.2996994E-06
```

7	5.9325777E-05	-2.2398440E-06
8	5.8883728E-05	-2.1810268E-06
9	5.8453159E-05	-2.1253188E-06
10	5.8033170E-05	-2.0760677E-06
11	5.7622002E-05	-2.0377689E-06
12	5.7217093E-05	-2.0140090E-06
13	5.6815243E-05	-2.0075849E-06
14	5.6614330E-05	-2.0114944E-06
15	5.6210022E-05	-2.0352448E-06
16	5.5798702E-05	-2.0819484E-06
17	5.5375597E-05	-2.1533403E-06
18	5.4935646E-05	-2.2505346E-06
19	5.4473628E-05	-2.3740535E-06
20	5.3984273E-05	-2.5238442E-06
21	5.3462380E-05	-2.6992877E-06
22	5.2902871E-05	-2.9000310E-06
23	5.2300690E-05	-3.1259379E-06
24	5.1650872E-05	-3.3762047E-06
25	5.0948683E-05	-3.6493488E-06
26	5.0189753E-05	-3.9431895E-06
27	4.9370225E-05	-4.2548230E-06
28	4.8486885E-05	-4.5805987E-06
29	4.7537297E-05	-4.9166957E-06
30	4.6519788E-05	-5.2590675E-06
31	4.5433582E-05	-5.6027603E-06
32	4.4278995E-05	-5.9418733E-06
33	4.3057603E-05	-6.2695250E-06
34	4.1772477E-05	-6.5778025E-06
35	4.0428372E-05	-6.8577296E-06
36	3.9031947E-05	-7.0992267E-06
37	3.7591959E-05	-7.2915543E-06
38	3.6119374E-05	-7.4232695E-06
39	3.4627543E-05	-7.4817153E-06
40	3.3132498E-05	-7.4530054E-06
41	3.1653159E-05	-7.3220249E-06
42	3.0210173E-05	-7.0937613E-06
43	2.8820534E-05	-6.7924152E-06
44	2.7496645E-05	-6.4396033E-06
45	2.6246846E-05	-6.0544834E-06
46	2.5075909E-05	-5.6535095E-06
47	2.3985572E-05	-5.2505924E-06
48	2.2975038E-05	-4.8572671E-06
49	2.2041410E-05	-4.4828513E-06
50	2.1180151E-05	-4.1346194E-06
51	2.0385458E-05	-3.8179486E-06
52	1.9650623E-05	-3.5367870E-06
53	1.8968220E-05	-3.2937504E-06
54	1.8330506E-05	-3.0899593E-06
55	1.7729640E-05	-2.9251112E-06
56	1.7157974E-05	-2.7975737E-06
57	1.6608316E-05	-2.7044541E-06
58	1.6074171E-05	-2.6416542E-06
59	1.5549966E-05	-2.6041874E-06
60	1.5031198E-05	-2.5862021E-06
61	1.4514651E-05	-2.5807180E-06
62	1.4256572E-05	-2.5804382E-06

```
 +-----------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
 |                                                                                                                       |
 |                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                       |
 |                                  Exe Time :24 July 2019      11:09:27                                                 |
 +-----------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   1

 0_L                              :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
 C U R R E N T   T I M E   I S     2.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P          STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1 D  0.3508     -6.2198E-05   11.54       3.508       11.54       6.116          ACTIVE   0.000       0.000       0.000        1.000       1.000
3.508       0.000       0.000     Strato1_2_8_L_0
```

2 D	0.6070	-6.1702E-05	9.984	3.035	9.984	5.292	ACTIVE	0.000	-0.2000	0.000	1.000	1.000	3.035
0.000	0.000	Strato1_2_8_L_0											
3 D	0.9069	-6.1209E-05	14.92	4.534	14.92	7.906	ACTIVE	0.000	-0.4000	0.000	1.000	1.000	4.534
0.000	0.000	Strato1_2_8_L_0											
4 D	1.260	-6.0722E-05	19.18	6.299	19.18	10.16	UL-RL	6.3662E+04	-0.6000	0.000	1.000	1.000	6.299
0.000	0.000	Strato1_2_8_L_0											
5 D	1.695	-6.0246E-05	23.23	8.476	23.23	12.31	UL-RL	6.3662E+04	-0.8000	0.000	1.000	1.000	8.476
0.000	0.000	Strato1_2_8_L_0											
6 D	2.120	-5.9780E-05	27.18	10.60	27.18	14.41	UL-RL	6.3662E+04	-1.000	0.000	1.000	1.000	10.60
0.000	0.000	Strato1_2_8_L_0											
7 D	2.540	-5.9326E-05	31.09	12.70	31.09	16.48	UL-RL	6.3662E+04	-1.200	0.000	1.000	1.000	12.70
0.000	0.000	Strato1_2_8_L_0											
8 D	2.957	-5.8884E-05	34.97	14.78	34.97	18.53	UL-RL	6.3662E+04	-1.400	0.000	1.000	1.000	14.78
0.000	0.000	Strato1_2_8_L_0											
9 D	3.290	-5.8453E-05	38.06	16.45	38.06	20.17	UL-RL	6.3662E+04	-1.600	0.000	1.000	1.000	16.45
0.000	0.000	Strato1_2_8_L_0											
10 D	3.712	-5.8033E-05	41.99	18.56	41.99	22.25	UL-RL	6.3662E+04	-1.800	0.000	1.000	1.000	18.56
0.000	0.000	Strato1_2_8_L_0											
11 D	4.131	-5.7622E-05	45.89	20.66	45.89	24.32	UL-RL	6.3662E+04	-2.000	0.000	1.000	1.000	20.66
0.000	0.000	Strato1_2_8_L_0											
12 D	4.548	-5.7217E-05	49.78	22.74	49.78	26.38	UL-RL	6.3662E+04	-2.200	0.000	1.000	1.000	22.74
0.000	0.000	Strato1_2_8_L_0											
13 D	3.723	-5.6815E-05	53.65	24.82	53.65	28.44	UL-RL	6.3662E+04	-2.400	0.000	1.000	1.000	24.82
0.000	0.000	Strato1_2_8_L_0											
14 D	3.858	-5.6614E-05	55.33	25.72	55.33	29.32	UL-RL	6.3662E+04	-2.500	0.000	1.000	1.000	25.72
0.000	0.000	Strato1_2_8_L_0											
15 D	5.560	-5.6210E-05	59.21	27.80	59.21	31.38	UL-RL	6.3662E+04	-2.700	0.000	1.000	1.000	27.80
0.000	0.000	Strato1_2_8_L_0											
16 D	5.975	-5.5799E-05	63.07	29.88	63.07	33.43	UL-RL	6.3662E+04	-2.900	0.000	1.000	1.000	29.88
0.000	0.000	Strato1_2_8_L_0											
17 D	6.389	-5.5376E-05	66.93	31.95	66.93	35.47	UL-RL	6.3662E+04	-3.100	0.000	1.000	1.000	31.95
0.000	0.000	Strato1_2_8_L_0											
18 D	6.803	-5.4936E-05	70.78	34.02	70.78	37.51	UL-RL	6.3662E+04	-3.300	0.000	1.000	1.000	34.02
0.000	0.000	Strato1_2_8_L_0											
19 D	7.217	-5.4474E-05	74.62	36.08	74.62	39.55	UL-RL	6.3662E+04	-3.500	0.000	1.000	1.000	36.08
0.000	0.000	Strato1_2_8_L_0											
20 D	7.630	-5.3984E-05	78.46	38.15	78.46	41.59	UL-RL	6.3662E+04	-3.700	0.000	1.000	1.000	38.15
0.000	0.000	Strato1_2_8_L_0											
21 D	8.008	-5.3462E-05	81.97	40.04	81.97	43.44	UL-RL	6.3662E+04	-3.900	0.000	1.000	1.000	40.04
0.000	0.000	Strato1_2_8_L_0											
22 D	8.423	-5.2903E-05	85.82	42.12	85.82	45.48	UL-RL	6.3662E+04	-4.100	0.000	1.000	1.000	42.12
0.000	0.000	Strato1_2_8_L_0											
23 D	8.838	-5.2301E-05	89.66	44.19	89.66	47.52	UL-RL	6.3662E+04	-4.300	0.000	1.000	1.000	44.19
0.000	0.000	Strato1_2_8_L_0											
24 D	9.254	-5.1651E-05	93.50	46.27	93.50	49.56	UL-RL	6.3662E+04	-4.500	0.000	1.000	1.000	46.27
0.000	0.000	Strato1_2_8_L_0											
25 D	9.669	-5.0949E-05	97.34	48.35	97.34	51.59	UL-RL	6.3662E+04	-4.700	0.000	1.000	1.000	48.35
0.000	0.000	Strato1_2_8_L_0											
26 D	10.09	-5.0190E-05	101.2	50.43	101.2	53.62	UL-RL	6.3662E+04	-4.900	0.000	1.000	1.000	50.43
0.000	0.000	Strato1_2_8_L_0											
27 D	10.50	-4.9370E-05	105.0	52.51	105.0	55.65	UL-RL	6.3662E+04	-5.100	0.000	1.000	1.000	52.51
0.000	0.000	Strato1_2_8_L_0											
28 D	10.89	-4.8487E-05	108.6	54.46	108.6	57.55	UL-RL	6.3662E+04	-5.300	0.000	1.000	1.000	54.46
0.000	0.000	Strato1_2_8_L_0											
29 D	11.31	-4.7537E-05	112.4	56.56	112.4	59.58	UL-RL	6.3662E+04	-5.500	0.000	1.000	1.000	56.56
0.000	0.000	Strato1_2_8_L_0											
30 D	11.73	-4.6520E-05	116.3	58.65	116.3	61.62	UL-RL	6.3662E+04	-5.700	0.000	1.000	1.000	58.65
0.000	0.000	Strato1_2_8_L_0											
31 D	12.15	-4.5434E-05	120.1	60.75	120.1	63.65	UL-RL	6.3662E+04	-5.900	0.000	1.000	1.000	60.75
0.000	0.000	Strato1_2_8_L_0											
32 D	12.57	-4.4279E-05	123.9	62.86	123.9	65.68	UL-RL	6.3662E+04	-6.100	0.000	1.000	1.000	62.86
0.000	0.000	Strato1_2_8_L_0											
33 D	12.99	-4.3058E-05	127.7	64.96	127.7	67.70	UL-RL	6.3662E+04	-6.300	0.000	1.000	1.000	64.96
0.000	0.000	Strato1_2_8_L_0											
34 D	13.41	-4.1772E-05	131.6	67.07	131.6	69.73	UL-RL	6.3662E+04	-6.500	0.000	1.000	1.000	67.07
0.000	0.000	Strato1_2_8_L_0											
35 D	13.84	-4.0428E-05	135.4	69.18	135.4	71.76	UL-RL	6.3662E+04	-6.700	0.000	1.000	1.000	69.18
0.000	0.000	Strato1_2_8_L_0											
36 D	14.24	-3.9032E-05	139.0	71.20	139.0	73.68	UL-RL	6.3662E+04	-6.900	0.000	1.000	1.000	71.20
0.000	0.000	Strato1_2_8_L_0											
37 D	14.66	-3.7592E-05	142.9	73.32	142.9	75.71	UL-RL	6.3662E+04	-7.100	0.000	1.000	1.000	73.32
0.000	0.000	Strato1_2_8_L_0											
38 D	15.09	-3.6119E-05	146.7	75.44	146.7	77.74	UL-RL	6.3662E+04	-7.300	0.000	1.000	1.000	75.44
0.000	0.000	Strato1_2_8_L_0											
39 D	15.51	-3.4628E-05	150.5	77.56	150.5	79.77	UL-RL	6.3662E+04	-7.500	0.000	1.000	1.000	77.56
0.000	0.000	Strato1_2_8_L_0											
40 D	15.94	-3.3132E-05	154.3	79.68	154.3	81.79	UL-RL	6.3662E+04	-7.700	0.000	1.000	1.000	79.68
0.000	0.000	Strato1_2_8_L_0											
41 D	14.68	-3.1653E-05	158.2	73.42	158.2	79.12	UL-RL	1.8009E+05	-7.900	0.000	1.000	1.000	73.42
0.000	0.000	Strato2_3095_82743_L_0											
42 D	15.14	-3.0210E-05	162.3	75.69	162.3	81.13	UL-RL	1.8009E+05	-8.100	0.000	1.000	1.000	75.69
0.000	0.000	Strato2_3095_82743_L_0											
43 D	15.57	-2.8821E-05	166.1	77.87	166.1	83.06	UL-RL	1.8009E+05	-8.300	0.000	1.000	1.000	77.87
0.000	0.000	Strato2_3095_82743_L_0											
44 D	16.02	-2.7497E-05	170.2	80.12	170.2	85.08	UL-RL	1.8009E+05	-8.500	0.000	1.000	1.000	

```
80.12        0.000       0.000     Strato2_3095_82743_L_0
  45 D   16.47     -2.6247E-05   174.2       82.36       174.2       87.09          UL-RL  1.8009E+05  -8.700       0.000        1.000        1.000
82.36        0.000       0.000     Strato2_3095_82743_L_0
  46 D   16.92     -2.5076E-05   178.2       84.58       178.2       89.10          UL-RL  1.8009E+05  -8.900       0.000        1.000        1.000
84.58        0.000       0.000     Strato2_3095_82743_L_0
  47 D   17.36     -2.3986E-05   182.2       86.79       182.2       91.11          UL-RL  1.8009E+05  -9.100       0.000        1.000        1.000
86.79        0.000       0.000     Strato2_3095_82743_L_0
  48 D   17.80     -2.2975E-05   186.2       88.98       186.2       93.12          UL-RL  1.8009E+05  -9.300       0.000        1.000        1.000
88.98        0.000       0.000     Strato2_3095_82743_L_0
  49 D   18.23     -2.2041E-05   190.2       91.15       190.2       95.12          UL-RL  1.8009E+05  -9.500       0.000        1.000        1.000
91.15        0.000       0.000     Strato2_3095_82743_L_0
  50 D   18.66     -2.1180E-05   194.3       93.32       194.3       97.13          UL-RL  1.8009E+05  -9.700       0.000        1.000        1.000
93.32        0.000       0.000     Strato2_3095_82743_L_0
  51 D   19.08     -2.0385E-05   198.1       95.40       198.1       99.07          UL-RL  1.8009E+05  -9.900       0.000        1.000        1.000
95.40        0.000       0.000     Strato2_3095_82743_L_0
  52 D   19.51     -1.9651E-05   202.2       97.55       202.2       101.1          UL-RL  1.8009E+05  -10.10       0.000        1.000        1.000
97.55        0.000       0.000     Strato2_3095_82743_L_0
  53 D   19.94     -1.8968E-05   206.2       99.68       206.2       103.1          UL-RL  1.8009E+05  -10.30       0.000        1.000        1.000
99.68        0.000       0.000     Strato2_3095_82743_L_0
  54 D   20.36     -1.8331E-05   210.2       101.8       210.2       105.1          UL-RL  1.8009E+05  -10.50       0.000        1.000        1.000
101.8        0.000       0.000     Strato2_3095_82743_L_0
  55 D   20.78     -1.7730E-05   214.2       103.9       214.2       107.1          UL-RL  1.8009E+05  -10.70       0.000        1.000        1.000
103.9        0.000       0.000     Strato2_3095_82743_L_0
  56 D   21.21     -1.7158E-05   218.2       106.0       218.2       109.1          UL-RL  1.8009E+05  -10.90       0.000        1.000        1.000
106.0        0.000       0.000     Strato2_3095_82743_L_0
  57 D   21.63     -1.6608E-05   222.3       108.1       222.3       111.1          UL-RL  1.8009E+05  -11.10       0.000        1.000        1.000
108.1        0.000       0.000     Strato2_3095_82743_L_0
  58 D   22.04     -1.6074E-05   226.1       110.2       226.1       113.1          UL-RL  1.8009E+05  -11.30       0.000        1.000        1.000
110.2        0.000       0.000     Strato2_3095_82743_L_0
  59 D   22.46     -1.5550E-05   230.2       112.3       230.2       115.1          UL-RL  1.8009E+05  -11.50       0.000        1.000        1.000
112.3        0.000       0.000     Strato2_3095_82743_L_0
  60 D   22.88     -1.5031E-05   234.2       114.4       234.2       117.1          UL-RL  1.8009E+05  -11.70       0.000        1.000        1.000
114.4        0.000       0.000     Strato2_3095_82743_L_0
  61 D   17.47     -1.4515E-05   238.2       116.5       238.2       119.1          UL-RL  1.8009E+05  -11.90       0.000        1.000        1.000
116.5        0.000       0.000     Strato2_3095_82743_L_0
  62 D   5.875     -1.4257E-05   240.1       117.5       240.1       120.1          UL-RL  1.8009E+05  -12.00       0.000        1.000        1.000
117.5        0.000       0.000     Strato2_3095_82743_L_0


 +----------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                  |
 |                                                                                                                            |
 |                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                           |
 |                                   Exe Time :24 July 2019      11:09:27                                                     |
 +----------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S    R E S U L T S    F O R    G R O U P   N O.    2

 0_R                                :
 ELEMENT TYPE     5 NO.OF ELEMENTS. IN THIS GROUP   62
 C U R R E N T    T I M E   I S      2.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *    FORCE      DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P           STATE   STIFFNESS Z-LEVEL      PORE        E FACTOR     UFACTOR
Peq          Su_a         Su_p      LAYER
 -----------------------------------------------------------------------------------------------------------------------------------------------------
-----------------------------------------------------------------------
   1 D   0.000       6.2198E-05   0.000       0.000       0.000       0.000        PASSIVE  0.000       0.000       0.000        1.000        1.000
0.000        0.000       0.000     Strato1_2_8_L_0
   2 D  0.5845       6.1702E-05   3.800       2.923       3.800       2.923            V-C  1.4726E+04 -0.2000      0.000        1.000        1.000
2.923        0.000       0.000     Strato1_2_8_L_0
   3 D  0.9859       6.1209E-05   7.600       4.929       7.600       4.929            V-C  1.4726E+04 -0.4000      0.000        1.000        1.000
4.929        0.000       0.000     Strato1_2_8_L_0
   4 D   1.387       6.0722E-05   11.40       6.936       11.40       6.936            V-C  1.4726E+04 -0.6000      0.000        1.000        1.000
6.936        0.000       0.000     Strato1_2_8_L_0
   5 D   1.789       6.0246E-05   15.20       8.943       15.20       8.943            V-C  1.4726E+04 -0.8000      0.000        1.000        1.000
8.943        0.000       0.000     Strato1_2_8_L_0
   6 D   2.190       5.9780E-05   19.00       10.95       19.00       10.95            V-C  1.4726E+04  -1.000      0.000        1.000        1.000
10.95        0.000       0.000     Strato1_2_8_L_0
   7 D   2.592       5.9326E-05   22.80       12.96       22.80       12.96            V-C  1.4726E+04  -1.200      0.000        1.000        1.000
12.96        0.000       0.000     Strato1_2_8_L_0
   8 D   2.993       5.8884E-05   26.60       14.97       26.60       14.97            V-C  1.4726E+04  -1.400      0.000        1.000        1.000
14.97        0.000       0.000     Strato1_2_8_L_0
   9 D   3.395       5.8453E-05   30.40       16.97       30.40       16.97            V-C  1.4726E+04  -1.600      0.000        1.000        1.000
16.97        0.000       0.000     Strato1_2_8_L_0
  10 D   3.796       5.8033E-05   34.20       18.98       34.20       18.98            V-C  1.4726E+04  -1.800      0.000        1.000        1.000
18.98        0.000       0.000     Strato1_2_8_L_0
  11 D   4.198       5.7622E-05   38.00       20.99       38.00       20.99            V-C  1.4726E+04  -2.000      0.000        1.000        1.000
```

20.99	0.000	0.000	Strato1_2_8_L_0										
12 D	4.599	5.7217E-05	41.80	23.00	41.80	23.00	V-C	1.4726E+04	-2.200	0.000	1.000	1.000	
23.00	0.000	0.000	Strato1_2_8_L_0										
13 D	3.751	5.6815E-05	45.60	25.00	45.60	25.00	V-C	1.4726E+04	-2.400	0.000	1.000	1.000	
25.00	0.000	0.000	Strato1_2_8_L_0										
14 D	3.901	5.6614E-05	47.50	26.01	47.50	26.01	V-C	1.4726E+04	-2.500	0.000	1.000	1.000	
26.01	0.000	0.000	Strato1_2_8_L_0										
15 D	5.603	5.6210E-05	51.30	28.02	51.30	28.02	V-C	1.4726E+04	-2.700	0.000	1.000	1.000	
28.02	0.000	0.000	Strato1_2_8_L_0										
16 D	6.005	5.5799E-05	55.10	30.02	55.10	30.02	V-C	1.4726E+04	-2.900	0.000	1.000	1.000	
30.02	0.000	0.000	Strato1_2_8_L_0										
17 D	6.406	5.5376E-05	58.90	32.03	58.90	32.03	V-C	1.4726E+04	-3.100	0.000	1.000	1.000	
32.03	0.000	0.000	Strato1_2_8_L_0										
18 D	6.808	5.4936E-05	62.70	34.04	62.70	34.04	V-C	1.4726E+04	-3.300	0.000	1.000	1.000	
34.04	0.000	0.000	Strato1_2_8_L_0										
19 D	7.209	5.4474E-05	66.50	36.05	66.50	36.05	V-C	1.4726E+04	-3.500	0.000	1.000	1.000	
36.05	0.000	0.000	Strato1_2_8_L_0										
20 D	7.611	5.3984E-05	70.30	38.05	70.30	38.05	V-C	1.4726E+04	-3.700	0.000	1.000	1.000	
38.05	0.000	0.000	Strato1_2_8_L_0										
21 D	8.012	5.3462E-05	74.10	40.06	74.10	40.06	V-C	1.4726E+04	-3.900	0.000	1.000	1.000	
40.06	0.000	0.000	Strato1_2_8_L_0										
22 D	8.413	5.2903E-05	77.90	42.07	77.90	42.07	V-C	1.4726E+04	-4.100	0.000	1.000	1.000	
42.07	0.000	0.000	Strato1_2_8_L_0										
23 D	8.814	5.2301E-05	81.70	44.07	81.70	44.07	UL-RL	4.4178E+04	-4.300	0.000	1.000	1.000	
44.07	0.000	0.000	Strato1_2_8_L_0										
24 D	9.215	5.1651E-05	85.50	46.07	85.50	46.08	UL-RL	4.4178E+04	-4.500	0.000	1.000	1.000	
46.07	0.000	0.000	Strato1_2_8_L_0										
25 D	9.615	5.0949E-05	89.30	48.08	89.30	48.08	UL-RL	4.4178E+04	-4.700	0.000	1.000	1.000	
48.08	0.000	0.000	Strato1_2_8_L_0										
26 D	10.02	5.0190E-05	93.10	50.08	93.10	50.08	UL-RL	4.4178E+04	-4.900	0.000	1.000	1.000	
50.08	0.000	0.000	Strato1_2_8_L_0										
27 D	10.42	4.9370E-05	96.90	52.08	96.90	52.09	UL-RL	4.4178E+04	-5.100	0.000	1.000	1.000	
52.08	0.000	0.000	Strato1_2_8_L_0										
28 D	10.82	4.8487E-05	100.7	54.08	100.7	54.09	UL-RL	4.4178E+04	-5.300	0.000	1.000	1.000	
54.08	0.000	0.000	Strato1_2_8_L_0										
29 D	11.22	4.7537E-05	104.5	56.08	104.5	56.09	UL-RL	4.4178E+04	-5.500	0.000	1.000	1.000	
56.08	0.000	0.000	Strato1_2_8_L_0										
30 D	11.62	4.6520E-05	108.3	58.08	108.3	58.09	UL-RL	4.4178E+04	-5.700	0.000	1.000	1.000	
58.08	0.000	0.000	Strato1_2_8_L_0										
31 D	12.01	4.5434E-05	112.1	60.07	112.1	60.09	UL-RL	4.4178E+04	-5.900	0.000	1.000	1.000	
60.07	0.000	0.000	Strato1_2_8_L_0										
32 D	12.41	4.4279E-05	115.9	62.07	115.9	62.08	UL-RL	4.4178E+04	-6.100	0.000	1.000	1.000	
62.07	0.000	0.000	Strato1_2_8_L_0										
33 D	12.81	4.3058E-05	119.7	64.07	119.7	64.08	UL-RL	4.4178E+04	-6.300	0.000	1.000	1.000	
64.07	0.000	0.000	Strato1_2_8_L_0										
34 D	13.21	4.1772E-05	123.5	66.06	123.5	66.07	UL-RL	4.4178E+04	-6.500	0.000	1.000	1.000	
66.06	0.000	0.000	Strato1_2_8_L_0										
35 D	13.61	4.0428E-05	127.3	68.06	127.3	68.07	UL-RL	4.4178E+04	-6.700	0.000	1.000	1.000	
68.06	0.000	0.000	Strato1_2_8_L_0										
36 D	14.01	3.9032E-05	131.1	70.05	131.1	70.06	UL-RL	4.4178E+04	-6.900	0.000	1.000	1.000	
70.05	0.000	0.000	Strato1_2_8_L_0										
37 D	14.41	3.7592E-05	134.9	72.04	134.9	72.05	UL-RL	4.4178E+04	-7.100	0.000	1.000	1.000	
72.04	0.000	0.000	Strato1_2_8_L_0										
38 D	14.81	3.6119E-05	138.7	74.04	138.7	74.05	UL-RL	4.4178E+04	-7.300	0.000	1.000	1.000	
74.04	0.000	0.000	Strato1_2_8_L_0										
39 D	15.21	3.4628E-05	142.5	76.03	142.5	76.04	UL-RL	4.4178E+04	-7.500	0.000	1.000	1.000	
76.03	0.000	0.000	Strato1_2_8_L_0										
40 D	15.60	3.3132E-05	146.3	78.02	146.3	78.03	UL-RL	4.4178E+04	-7.700	0.000	1.000	1.000	
78.02	0.000	0.000	Strato1_2_8_L_0										
41 D	15.22	3.1653E-05	150.2	76.12	150.2	76.14	UL-RL	9.7606E+04	-7.900	0.000	1.000	1.000	
76.12	0.000	0.000	Strato2_3095_82743_L_0										
42 D	15.61	3.0210E-05	154.2	78.07	154.2	78.09	UL-RL	9.7606E+04	-8.100	0.000	1.000	1.000	
78.07	0.000	0.000	Strato2_3095_82743_L_0										
43 D	16.01	2.8821E-05	158.2	80.03	158.2	80.04	UL-RL	9.7606E+04	-8.300	0.000	1.000	1.000	
80.03	0.000	0.000	Strato2_3095_82743_L_0										
44 D	16.40	2.7497E-05	162.2	81.99	162.2	82.00	UL-RL	9.7606E+04	-8.500	0.000	1.000	1.000	
81.99	0.000	0.000	Strato2_3095_82743_L_0										
45 D	16.79	2.6247E-05	166.2	83.95	166.2	83.96	UL-RL	9.7606E+04	-8.700	0.000	1.000	1.000	
83.95	0.000	0.000	Strato2_3095_82743_L_0										
46 D	17.18	2.5076E-05	170.2	85.91	170.2	85.92	UL-RL	9.7606E+04	-8.900	0.000	1.000	1.000	
85.91	0.000	0.000	Strato2_3095_82743_L_0										
47 D	17.57	2.3986E-05	174.2	87.87	174.2	87.88	UL-RL	9.7606E+04	-9.100	0.000	1.000	1.000	
87.87	0.000	0.000	Strato2_3095_82743_L_0										
48 D	17.97	2.2975E-05	178.2	89.84	178.2	89.85	UL-RL	9.7606E+04	-9.300	0.000	1.000	1.000	
89.84	0.000	0.000	Strato2_3095_82743_L_0										
49 D	18.36	2.2041E-05	182.2	91.81	182.2	91.82	UL-RL	9.7606E+04	-9.500	0.000	1.000	1.000	
91.81	0.000	0.000	Strato2_3095_82743_L_0										
50 D	18.76	2.1180E-05	186.2	93.79	186.2	93.79	UL-RL	9.7606E+04	-9.700	0.000	1.000	1.000	
93.79	0.000	0.000	Strato2_3095_82743_L_0										
51 D	19.15	2.0385E-05	190.2	95.76	190.2	95.76	UL-RL	9.7606E+04	-9.900	0.000	1.000	1.000	
95.76	0.000	0.000	Strato2_3095_82743_L_0										
52 D	19.55	1.9651E-05	194.2	97.74	194.2	97.74	UL-RL	9.7606E+04	-10.10	0.000	1.000	1.000	
97.74	0.000	0.000	Strato2_3095_82743_L_0										
53 D	19.94	1.8968E-05	198.2	99.72	198.2	99.72	UL-RL	9.7606E+04	-10.30	0.000	1.000	1.000	
99.72	0.000	0.000	Strato2_3095_82743_L_0										

```
  54 D   20.34       1.8331E-05   202.2        101.7        202.2        101.7           UL-RL  9.7606E+04  -10.50        0.000         1.000         1.000
101.7       0.000       0.000     Strato2_3095_82743_L_0
  55 D   20.74       1.7730E-05   206.2        103.7        206.2        103.7             V-C  3.2535E+04  -10.70        0.000         1.000         1.000
103.7       0.000       0.000     Strato2_3095_82743_L_0
  56 D   21.13       1.7158E-05   210.2        105.7        210.2        105.7             V-C  3.2535E+04  -10.90        0.000         1.000         1.000
105.7       0.000       0.000     Strato2_3095_82743_L_0
  57 D   21.53       1.6608E-05   214.2        107.6        214.2        107.6             V-C  3.2535E+04  -11.10        0.000         1.000         1.000
107.6       0.000       0.000     Strato2_3095_82743_L_0
  58 D   21.92       1.6074E-05   218.2        109.6        218.2        109.6             V-C  3.2535E+04  -11.30        0.000         1.000         1.000
109.6       0.000       0.000     Strato2_3095_82743_L_0
  59 D   22.32       1.5550E-05   222.2        111.6        222.2        111.6             V-C  3.2535E+04  -11.50        0.000         1.000         1.000
111.6       0.000       0.000     Strato2_3095_82743_L_0
  60 D   22.72       1.5031E-05   226.2        113.6        226.2        113.6             V-C  3.2535E+04  -11.70        0.000         1.000         1.000
113.6       0.000       0.000     Strato2_3095_82743_L_0
  61 D   17.34       1.4515E-05   230.2        115.6        230.2        115.6             V-C  3.2535E+04  -11.90        0.000         1.000         1.000
115.6       0.000       0.000     Strato2_3095_82743_L_0
  62 D   5.828       1.4257E-05   232.2        116.6        232.2        116.6             V-C  3.2535E+04  -12.00        0.000         1.000         1.000
116.6       0.000       0.000     Strato2_3095_82743_L_0
```

```
+--------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                 |
|                                                                                                                          |
|                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                         |
|                                   Exe Time :24 July 2019      11:09:27                                                   |
+--------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    3

WallElement_33                   :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
C U R R E N T    T I M E    I S      2.0000

 WALL2D ELEMENT

   EL      TA           TB           MA           MB
-----------------------------------------------------
    1 0.35082    -0.35082     4.92939E-13 7.01632E-02
    2 0.37333    -0.37333    -7.01632E-02 0.14483
    3 0.29436    -0.29436    -0.14483     0.20370
    4 0.16688    -0.16688    -0.20370     0.23708
    5 7.33757E-02-7.33757E-02-0.23708     0.25175
    6 3.73373E-03-3.73373E-03-0.25175     0.25250
    7-4.74651E-02 4.74651E-02-0.25250     0.24301
    8-8.35022E-02 8.35022E-02-0.24301     0.22631
    9-0.18848     0.18848    -0.22631     0.18861
   10-0.27286     0.27286    -0.18861     0.13404
   11-0.33955     0.33955    -0.13404     6.61279E-02
   12-0.39068     0.39068    -6.61279E-02-1.20087E-02
   13-0.41854     0.41854     1.20087E-02-5.38623E-02
   14-0.46180     0.46180     5.38623E-02-0.14622
   15-0.50505     0.50505     0.14622    -0.24723
   16-0.53488     0.53488     0.24723    -0.35421
   17-0.55199     0.55199     0.35421    -0.46461
   18-0.55687     0.55687     0.46461    -0.57598
   19-0.54977     0.54977     0.57598    -0.68593
   20-0.53079     0.53079     0.68593    -0.79209
   21-0.53490     0.53490     0.79209    -0.89907
   22-0.52505     0.52505     0.89907     -1.0041
   23-0.50105     0.50105      1.0041     -1.1043
   24-0.46259     0.46259      1.1043     -1.1968
   25-0.40921     0.40921      1.1968     -1.2787
   26-0.34034     0.34034      1.2787     -1.3467
   27-0.25531     0.25531      1.3467     -1.3978
   28-0.17944     0.17944      1.3978     -1.4337
   29-8.48649E-02 8.48649E-02  1.4337     -1.4506
   30 2.92155E-02-2.92155E-02  1.4506     -1.4448
   31 0.16363    -0.16363      1.4448     -1.4121
   32 0.31923    -0.31923      1.4121     -1.3482
   33 0.49686    -0.49686      1.3482     -1.2489
   34 0.69734    -0.69734      1.2489     -1.1094
   35 0.92143    -0.92143      1.1094     -0.92510
   36  1.1497     -1.1497     0.92510     -0.69516
   37  1.4034     -1.4034     0.69516     -0.41448
   38  1.6829     -1.6829     0.41448     -7.78986E-02
   39  1.9883     -1.9883     7.78986E-02 0.31977
   40  2.3196     -2.3196    -0.31977     0.78368
   41  1.7782     -1.7782    -0.78368      1.1393
   42  1.3003     -1.3003     -1.1393      1.3994
   43 0.86754    -0.86754     -1.3994      1.5729
   44 0.49335    -0.49335     -1.5729      1.6716
```

```
   45 0.17446    -0.17446     -1.6716      1.7065
   46-9.26038E-02 9.26038E-02 -1.7065      1.6879
   47-0.31135     0.31135     -1.6879      1.6257
   48-0.48525     0.48525     -1.6257      1.5286
   49-0.61767     0.61767     -1.5286      1.4051
   50-0.71176     0.71176     -1.4051      1.2627
   51-0.78370     0.78370     -1.2627      1.1060
   52-0.82254     0.82254     -1.1060     0.94148
   53-0.83058     0.83058    -0.94148     0.77536
   54-0.80980     0.80980    -0.77536     0.61340
   55-0.76182     0.76182    -0.61340     0.46104
   56-0.68795     0.68795    -0.46104     0.32345
   57-0.58919     0.58919    -0.32345     0.20561
   58-0.47791     0.47791    -0.20561     0.11003
   59-0.34271     0.34271    -0.11003     4.14877E-02
   60-0.18387     0.18387    -4.14877E-02 4.71356E-03
   61-4.71309E-02 4.71309E-02-4.71356E-03-3.67928E-13



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                       |
|                                  Exe Time :24 July 2019      11:09:27                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P    N O.    4

Tieback_778405                    :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      2.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-----------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1939E+05 RIMNOR= 107.0
           RENORM= 416.6     REMNOR=0.8523E-23 RATIO =0.1466     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 22.88     RMMAX = 1.706
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1939E+05 RDR   = 107.0
           RATIOT=0.1466     RATIOR= 0.000
           MAX UN= 6.005     IEQ=    31 NODE     16 DOF   1  Y-DISPL.F
           MIN UN=-.9237E-11 IEQ=    43 NODE     22 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1939E+05 RIMNOR= 107.0
           RENORM= 46.08     REMNOR=0.7729E-20 RATIO =0.4875E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 22.88     RMMAX = 1.706
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1939E+05 RDR   = 107.0
           RATIOT=0.4875E-01 RATIOR= 0.000
           MAX UN= 3.255     IEQ=     7 NODE      4 DOF   1  Y-DISPL.F
           MIN UN=-.1041E-03 IEQ=    45 NODE     23 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1939E+05 RIMNOR= 107.0
           RENORM= 22.86     REMNOR=0.1620E-19 RATIO =0.3433E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 22.88     RMMAX = 1.706
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1939E+05 RDR   = 107.0
           RATIOT=0.3433E-01 RATIOR= 0.000
           MAX UN= 2.968     IEQ=    31 NODE     16 DOF   1  Y-DISPL.F
           MIN UN=-.8472E-09 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1939E+05 RIMNOR= 107.0
           RENORM= 1.659     REMNOR=0.1162E-19 RATIO =0.9249E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 22.88     RMMAX = 1.706
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1939E+05 RDR   = 107.0
```

```
           RATIOT=0.9249E-02 RATIOR= 0.000
           MAX UN= 1.141     IEQ=    43 NODE     22 DOF   1  Y-DISPL.F
           MIN UN=-.5412E-09 IEQ=    15 NODE      8 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     5 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1939E+05 RIMNOR= 107.0
           RENORM=0.3717E-17 REMNOR=0.1258E-19 RATIO =0.1384E-10 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 22.88     RMMAX = 1.706
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1939E+05 RDR   = 107.0
           RATIOT=0.1384E-10 RATIOR= 0.000
           MAX UN=0.1299E-08 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           MIN UN=-.1011E-08 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                 Exe Time :24 July 2019      11:09:27                                                  |
+-----------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     5 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    3     ( AT TIME   3.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (
    1   2.8634897E-03  -4.9152771E-04
    2   2.7651847E-03  -4.9151938E-04
    3   2.6668840E-03  -4.9147998E-04
    4   2.5685972E-03  -4.9137358E-04
    5   2.4703423E-03  -4.9115095E-04
    6   2.3721486E-03  -4.9075089E-04
    7   2.2740586E-03  -4.9010063E-04
    8   2.1761306E-03  -4.8911605E-04
    9   2.0784409E-03  -4.8770181E-04
   10   1.9810856E-03  -4.8575250E-04
   11   1.8841832E-03  -4.8315259E-04
   12   1.7878764E-03  -4.7977522E-04
   13   1.6923342E-03  -4.7548231E-04
   14   1.6449102E-03  -4.7295106E-04
   15   1.5508946E-03  -4.6700099E-04
   16   1.4581971E-03  -4.5974210E-04
   17   1.3670968E-03  -4.5099789E-04
   18   1.2779070E-03  -4.4061719E-04
   19   1.1909625E-03  -4.2854704E-04
   20   1.1065954E-03  -4.1486921E-04
   21   1.0251106E-03  -3.9975513E-04
   22   9.4677600E-04  -3.8340072E-04
   23   8.7181968E-04  -3.6600594E-04
   24   8.0042941E-04  -3.4777438E-04
   25   7.3275188E-04  -3.2891356E-04
   26   6.6889227E-04  -3.0962846E-04
   27   6.0891635E-04  -2.9010990E-04
   28   5.5285274E-04  -2.7052943E-04
   29   5.0069840E-04  -2.5104174E-04
   30   4.5242063E-04  -2.3178531E-04
   31   4.0796066E-04  -2.1288311E-04
   32   3.6723674E-04  -1.9444371E-04
   33   3.3014619E-04  -1.7656211E-04
   34   2.9656917E-04  -1.5932130E-04
   35   2.6637017E-04  -1.4279299E-04
   36   2.3940038E-04  -1.2703867E-04
   37   2.1549959E-04  -1.1211106E-04
   38   1.9449795E-04  -9.8055105E-05
   39   1.7621706E-04  -8.4908076E-05
   40   1.6047206E-04  -7.2700816E-05
   41   1.4707242E-04  -6.1458247E-05
   42   1.3582385E-04  -5.1189437E-05
   43   1.2653247E-04  -4.1883972E-05
   44   1.1900755E-04  -3.3519900E-05
   45   1.1306383E-04  -2.6065999E-05
   46   1.0852309E-04  -1.9483007E-05
   47   1.0521561E-04  -1.3725296E-05
   48   1.0298133E-04  -8.7423421E-06
   49   1.0167065E-04  -4.4799083E-06
```

50	1.0114511E-04	-8.8130140E-07
51	1.0127776E-04	2.1117717E-06
52	1.0195334E-04	4.5579933E-06
53	1.0306839E-04	6.5159924E-06
54	1.0453106E-04	8.0437389E-06
55	1.0626101E-04	9.1983503E-06
56	1.0818924E-04	1.0035673E-05
57	1.1025775E-04	1.0610015E-05
58	1.1241922E-04	1.0973956E-05
59	1.1463667E-04	1.1177929E-05
60	1.1688294E-04	1.1270150E-05
61	1.1914036E-04	1.1296849E-05
62	1.2027024E-04	1.1298160E-05

PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017*

NewProject.BaseDesignSection_28.A1M1R1_3484
Exe Time :24 July 2019 11:09:27

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 62
C U R R E N T T I M E I S 3.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.3508	-2.8635E-03	11.54	3.508	11.54	6.116	ACTIVE	0.000	0.000	0.000	1.000	1.000	3.508	0.000	0.000	Strato1_2_8_L_0
2 D	0.6070	-2.7652E-03	9.984	3.035	9.984	5.292	ACTIVE	0.000	-0.2000	0.000	1.000	1.000	3.035	0.000	0.000	Strato1_2_8_L_0
3 D	0.9069	-2.6669E-03	14.92	4.534	14.92	7.906	ACTIVE	0.000	-0.4000	0.000	1.000	1.000	4.534	0.000	0.000	Strato1_2_8_L_0
4 D	1.166	-2.5686E-03	19.18	5.830	19.18	10.16	ACTIVE	0.000	-0.6000	0.000	1.000	1.000	5.830	0.000	0.000	Strato1_2_8_L_0
5 D	1.412	-2.4703E-03	23.23	7.061	23.23	12.31	ACTIVE	0.000	-0.8000	0.000	1.000	1.000	7.061	0.000	0.000	Strato1_2_8_L_0
6 D	1.653	-2.3721E-03	27.18	8.264	27.18	14.41	ACTIVE	0.000	-1.000	0.000	1.000	1.000	8.264	0.000	0.000	Strato1_2_8_L_0
7 D	1.890	-2.2741E-03	31.09	9.452	31.09	16.48	ACTIVE	0.000	-1.200	0.000	1.000	1.000	9.452	0.000	0.000	Strato1_2_8_L_0
8 D	2.126	-2.1761E-03	34.97	10.63	34.97	18.53	ACTIVE	0.000	-1.400	0.000	1.000	1.000	10.63	0.000	0.000	Strato1_2_8_L_0
9 D	2.314	-2.0784E-03	38.06	11.57	38.06	20.17	ACTIVE	0.000	-1.600	0.000	1.000	1.000	11.57	0.000	0.000	Strato1_2_8_L_0
10 D	2.553	-1.9811E-03	41.99	12.76	41.99	22.25	ACTIVE	0.000	-1.800	0.000	1.000	1.000	12.76	0.000	0.000	Strato1_2_8_L_0
11 D	2.790	-1.8842E-03	45.89	13.95	45.89	24.32	ACTIVE	0.000	-2.000	0.000	1.000	1.000	13.95	0.000	0.000	Strato1_2_8_L_0
12 D	3.027	-1.7879E-03	49.78	15.13	49.78	26.38	ACTIVE	0.000	-2.200	0.000	1.000	1.000	15.13	0.000	0.000	Strato1_2_8_L_0
13 D	2.447	-1.6923E-03	53.65	16.31	53.65	28.44	ACTIVE	0.000	-2.400	0.000	1.000	1.000	16.31	0.000	0.000	Strato1_2_8_L_0
14 D	2.523	-1.6449E-03	55.33	16.82	55.33	29.32	ACTIVE	0.000	-2.500	0.000	1.000	1.000	16.82	0.000	0.000	Strato1_2_8_L_0
15 D	3.600	-1.5509E-03	59.21	18.00	59.21	31.38	ACTIVE	0.000	-2.700	0.000	1.000	1.000	18.00	0.000	0.000	Strato1_2_8_L_0
16 D	3.835	-1.4582E-03	63.07	19.17	63.07	33.43	ACTIVE	0.000	-2.900	0.000	1.000	1.000	19.17	0.000	0.000	Strato1_2_8_L_0
17 D	4.069	-1.3671E-03	66.93	20.35	66.93	35.47	ACTIVE	0.000	-3.100	0.000	1.000	1.000	20.35	0.000	0.000	Strato1_2_8_L_0
18 D	4.303	-1.2779E-03	70.78	21.52	70.78	37.51	ACTIVE	0.000	-3.300	0.000	1.000	1.000	21.52	0.000	0.000	Strato1_2_8_L_0
19 D	4.537	-1.1910E-03	74.62	22.69	74.62	39.55	ACTIVE	0.000	-3.500	0.000	1.000	1.000	22.69	0.000	0.000	Strato1_2_8_L_0
20 D	4.771	-1.1066E-03	78.46	23.85	78.46	41.59	ACTIVE	0.000	-3.700	0.000	1.000	1.000	23.85	0.000	0.000	Strato1_2_8_L_0
21 D	4.984	-1.0251E-03	81.97	24.92	81.97	43.44	ACTIVE	0.000	-3.900	0.000	1.000	1.000	24.92	0.000	0.000	Strato1_2_8_L_0
22 D	5.218	-9.4678E-04	85.82	26.09	85.82	45.48	ACTIVE	0.000	-4.100	0.000	1.000	1.000	26.09	0.000	0.000	Strato1_2_8_L_0
23 D	5.451	-8.7182E-04	89.66	27.26	89.66	47.52	ACTIVE	0.000	-4.300	0.000	1.000	1.000				

27.26	0.000	0.000	Strato1_2_8_L_0									
24 D	5.685	-8.0043E-04	93.50	28.42	93.50	49.56	ACTIVE	0.000	-4.500	0.000	1.000	1.000
28.42	0.000	0.000	Strato1_2_8_L_0									
25 D	6.197	-7.3275E-04	97.34	30.98	97.34	51.59	UL-RL	2.5465E+04	-4.700	0.000	1.000	1.000
30.98	0.000	0.000	Strato1_2_8_L_0									
26 D	6.934	-6.6889E-04	101.2	34.67	101.2	53.62	UL-RL	2.5465E+04	-4.900	0.000	1.000	1.000
34.67	0.000	0.000	Strato1_2_8_L_0									
27 D	7.652	-6.0892E-04	105.0	38.26	105.0	55.65	UL-RL	2.5465E+04	-5.100	0.000	1.000	1.000
38.26	0.000	0.000	Strato1_2_8_L_0									
28 D	8.324	-5.5285E-04	108.6	41.62	108.6	57.55	UL-RL	2.5465E+04	-5.300	0.000	1.000	1.000
41.62	0.000	0.000	Strato1_2_8_L_0									
29 D	9.004	-5.0070E-04	112.4	45.02	112.4	59.58	UL-RL	2.5465E+04	-5.500	0.000	1.000	1.000
45.02	0.000	0.000	Strato1_2_8_L_0									
30 D	9.664	-4.5242E-04	116.3	48.32	116.3	61.62	UL-RL	2.5465E+04	-5.700	0.000	1.000	1.000
48.32	0.000	0.000	Strato1_2_8_L_0									
31 D	10.30	-4.0796E-04	120.1	51.52	120.1	63.65	UL-RL	2.5465E+04	-5.900	0.000	1.000	1.000
51.52	0.000	0.000	Strato1_2_8_L_0									
32 D	10.93	-3.6724E-04	123.9	54.63	123.9	65.68	UL-RL	2.5465E+04	-6.100	0.000	1.000	1.000
54.63	0.000	0.000	Strato1_2_8_L_0									
33 D	11.53	-3.3015E-04	127.7	57.65	127.7	67.70	UL-RL	2.5465E+04	-6.300	0.000	1.000	1.000
57.65	0.000	0.000	Strato1_2_8_L_0									
34 D	12.12	-2.9657E-04	131.6	60.58	131.6	69.73	UL-RL	2.5465E+04	-6.500	0.000	1.000	1.000
60.58	0.000	0.000	Strato1_2_8_L_0									
35 D	12.69	-2.6637E-04	135.4	63.43	135.4	71.76	UL-RL	2.5465E+04	-6.700	0.000	1.000	1.000
63.43	0.000	0.000	Strato1_2_8_L_0									
36 D	13.22	-2.3940E-04	139.0	66.10	139.0	73.68	UL-RL	2.5465E+04	-6.900	0.000	1.000	1.000
66.10	0.000	0.000	Strato1_2_8_L_0									
37 D	13.76	-2.1550E-04	142.9	68.79	142.9	75.71	UL-RL	2.5465E+04	-7.100	0.000	1.000	1.000
68.79	0.000	0.000	Strato1_2_8_L_0									
38 D	14.28	-1.9450E-04	146.7	71.41	146.7	77.74	UL-RL	2.5465E+04	-7.300	0.000	1.000	1.000
71.41	0.000	0.000	Strato1_2_8_L_0									
39 D	14.79	-1.7622E-04	150.5	73.96	150.5	79.77	UL-RL	2.5465E+04	-7.500	0.000	1.000	1.000
73.96	0.000	0.000	Strato1_2_8_L_0									
40 D	15.29	-1.6047E-04	154.3	76.44	154.3	81.79	UL-RL	2.5465E+04	-7.700	0.000	1.000	1.000
76.44	0.000	0.000	Strato1_2_8_L_0									
41 D	13.02	-1.4707E-04	158.2	65.11	158.2	79.12	UL-RL	7.2037E+04	-7.900	0.000	1.000	1.000
65.11	0.000	0.000	Strato2_3095_82743_L_0									
42 D	13.62	-1.3582E-04	162.3	68.09	162.3	81.13	UL-RL	7.2037E+04	-8.100	0.000	1.000	1.000
68.09	0.000	0.000	Strato2_3095_82743_L_0									
43 D	14.17	-1.2653E-04	166.1	70.84	166.1	83.06	UL-RL	7.2037E+04	-8.300	0.000	1.000	1.000
70.84	0.000	0.000	Strato2_3095_82743_L_0									
44 D	14.71	-1.1901E-04	170.2	73.53	170.2	85.08	UL-RL	7.2037E+04	-8.500	0.000	1.000	1.000
73.53	0.000	0.000	Strato2_3095_82743_L_0									
45 D	15.22	-1.1306E-04	174.2	76.11	174.2	87.09	UL-RL	7.2037E+04	-8.700	0.000	1.000	1.000
76.11	0.000	0.000	Strato2_3095_82743_L_0									
46 D	15.71	-1.0852E-04	178.2	78.57	178.2	89.10	UL-RL	7.2037E+04	-8.900	0.000	1.000	1.000
78.57	0.000	0.000	Strato2_3095_82743_L_0									
47 D	16.19	-1.0522E-04	182.2	80.94	182.2	91.11	UL-RL	7.2037E+04	-9.100	0.000	1.000	1.000
80.94	0.000	0.000	Strato2_3095_82743_L_0									
48 D	16.64	-1.0298E-04	186.2	83.21	186.2	93.12	UL-RL	7.2037E+04	-9.300	0.000	1.000	1.000
83.21	0.000	0.000	Strato2_3095_82743_L_0									
49 D	17.08	-1.0167E-04	190.2	85.42	190.2	95.12	UL-RL	7.2037E+04	-9.500	0.000	1.000	1.000
85.42	0.000	0.000	Strato2_3095_82743_L_0									
50 D	17.51	-1.0115E-04	194.3	87.56	194.3	97.13	UL-RL	7.2037E+04	-9.700	0.000	1.000	1.000
87.56	0.000	0.000	Strato2_3095_82743_L_0									
51 D	17.92	-1.0128E-04	198.1	89.58	198.1	99.07	UL-RL	7.2037E+04	-9.900	0.000	1.000	1.000
89.58	0.000	0.000	Strato2_3095_82743_L_0									
52 D	18.32	-1.0195E-04	202.2	91.62	202.2	101.1	UL-RL	7.2037E+04	-10.10	0.000	1.000	1.000
91.62	0.000	0.000	Strato2_3095_82743_L_0									
53 D	18.72	-1.0307E-04	206.2	93.62	206.2	103.1	UL-RL	7.2037E+04	-10.30	0.000	1.000	1.000
93.62	0.000	0.000	Strato2_3095_82743_L_0									
54 D	19.12	-1.0453E-04	210.2	95.59	210.2	105.1	UL-RL	7.2037E+04	-10.50	0.000	1.000	1.000
95.59	0.000	0.000	Strato2_3095_82743_L_0									
55 D	19.51	-1.0626E-04	214.2	97.54	214.2	107.1	UL-RL	7.2037E+04	-10.70	0.000	1.000	1.000
97.54	0.000	0.000	Strato2_3095_82743_L_0									
56 D	19.89	-1.0819E-04	218.2	99.47	218.2	109.1	UL-RL	7.2037E+04	-10.90	0.000	1.000	1.000
99.47	0.000	0.000	Strato2_3095_82743_L_0									
57 D	20.28	-1.1026E-04	222.3	101.4	222.3	111.1	UL-RL	7.2037E+04	-11.10	0.000	1.000	1.000
101.4	0.000	0.000	Strato2_3095_82743_L_0									
58 D	20.65	-1.1242E-04	226.1	103.2	226.1	113.1	UL-RL	7.2037E+04	-11.30	0.000	1.000	1.000
103.2	0.000	0.000	Strato2_3095_82743_L_0									
59 D	21.03	-1.1464E-04	230.2	105.1	230.2	115.1	UL-RL	7.2037E+04	-11.50	0.000	1.000	1.000
105.1	0.000	0.000	Strato2_3095_82743_L_0									
60 D	21.41	-1.1688E-04	234.2	107.0	234.2	117.1	UL-RL	7.2037E+04	-11.70	0.000	1.000	1.000
107.0	0.000	0.000	Strato2_3095_82743_L_0									
61 D	16.34	-1.1914E-04	238.2	108.9	238.2	119.1	UL-RL	7.2037E+04	-11.90	0.000	1.000	1.000
108.9	0.000	0.000	Strato2_3095_82743_L_0									
62 D	5.493	-1.2027E-04	240.1	109.9	240.1	120.1	UL-RL	7.2037E+04	-12.00	0.000	1.000	1.000
109.9	0.000	0.000	Strato2_3095_82743_L_0									

NewProject.BaseDesignSection_28.A1M1R1_3484
Exe Time :24 July 2019 11:09:27

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 2

0_R :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 62
C U R R E N T T I M E I S 3.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR
Peq	Su_a	Su_p	LAYER									
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000
0.000	0.000	0.000	not available									
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000
0.000	0.000	0.000	not available									
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
14	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									
15	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000
0.000	0.000	0.000	not available									
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000
0.000	0.000	0.000	not available									
17 D	1.536	1.3671E-03	1.900	7.678	58.90	32.03	PASSIVE	0.000	-3.100	0.000	1.000	1.000
7.678	0.000	0.000	Strato1_2_8_L_0									
18 D	4.607	1.2779E-03	5.700	23.03	62.70	34.04	PASSIVE	0.000	-3.300	0.000	1.000	1.000
23.03	0.000	0.000	Strato1_2_8_L_0									
19 D	7.678	1.1910E-03	9.500	38.39	66.50	38.39	PASSIVE	0.000	-3.500	0.000	1.000	1.000
38.39	0.000	0.000	Strato1_2_8_L_0									
20 D	8.851	1.1066E-03	13.30	44.25	70.30	44.25	V-C	5890.	-3.700	0.000	1.000	1.000
44.25	0.000	0.000	Strato1_2_8_L_0									
21 D	9.157	1.0251E-03	17.10	45.78	74.10	45.78	V-C	5890.	-3.900	0.000	1.000	1.000
45.78	0.000	0.000	Strato1_2_8_L_0									
22 D	9.466	9.4678E-04	20.90	47.33	77.90	47.33	V-C	5890.	-4.100	0.000	1.000	1.000
47.33	0.000	0.000	Strato1_2_8_L_0									
23 D	9.780	8.7182E-04	24.70	48.90	81.70	48.90	V-C	5890.	-4.300	0.000	1.000	1.000
48.90	0.000	0.000	Strato1_2_8_L_0									
24 D	10.10	8.0043E-04	28.50	50.49	85.50	50.49	V-C	5890.	-4.500	0.000	1.000	1.000
50.49	0.000	0.000	Strato1_2_8_L_0									
25 D	10.42	7.3275E-04	32.30	52.10	89.30	52.10	V-C	5890.	-4.700	0.000	1.000	1.000
52.10	0.000	0.000	Strato1_2_8_L_0									
26 D	10.75	6.6889E-04	36.10	53.73	93.10	53.73	V-C	5890.	-4.900	0.000	1.000	1.000
53.73	0.000	0.000	Strato1_2_8_L_0									
27 D	11.08	6.0892E-04	39.90	55.38	96.90	55.38	V-C	5890.	-5.100	0.000	1.000	1.000
55.38	0.000	0.000	Strato1_2_8_L_0									
28 D	11.41	5.5285E-04	43.70	57.06	100.7	57.06	V-C	5890.	-5.300	0.000	1.000	1.000
57.06	0.000	0.000	Strato1_2_8_L_0									
29 D	11.75	5.0070E-04	47.50	58.75	104.5	58.75	V-C	5890.	-5.500	0.000	1.000	1.000
58.75	0.000	0.000	Strato1_2_8_L_0									
30 D	12.09	4.5242E-04	51.30	60.47	108.3	60.47	V-C	5890.	-5.700	0.000	1.000	1.000
60.47	0.000	0.000	Strato1_2_8_L_0									
31 D	12.44	4.0796E-04	55.10	62.22	112.1	62.22	V-C	5890.	-5.900	0.000	1.000	1.000
62.22	0.000	0.000	Strato1_2_8_L_0									
32 D	12.80	3.6724E-04	58.90	63.98	115.9	63.98	V-C	5890.	-6.100	0.000	1.000	1.000
63.98	0.000	0.000	Strato1_2_8_L_0									

33 D	13.15	3.3015E-04	62.70	65.77	119.7	65.77	V-C	5890.	-6.300	0.000	1.000	1.000	65.77
0.000	0.000	Strato1_2_8_L_0											
34 D	13.51	2.9657E-04	66.50	67.57	123.5	67.57	V-C	5890.	-6.500	0.000	1.000	1.000	67.57
0.000	0.000	Strato1_2_8_L_0											
35 D	13.88	2.6637E-04	70.30	69.40	127.3	69.40	V-C	5890.	-6.700	0.000	1.000	1.000	69.40
0.000	0.000	Strato1_2_8_L_0											
36 D	14.25	2.3940E-04	74.10	71.24	131.1	71.24	V-C	5890.	-6.900	0.000	1.000	1.000	71.24
0.000	0.000	Strato1_2_8_L_0											
37 D	14.62	2.1550E-04	77.90	73.10	134.9	73.10	V-C	5890.	-7.100	0.000	1.000	1.000	73.10
0.000	0.000	Strato1_2_8_L_0											
38 D	15.00	1.9450E-04	81.70	74.98	138.7	74.98	V-C	5890.	-7.300	0.000	1.000	1.000	74.98
0.000	0.000	Strato1_2_8_L_0											
39 D	15.37	1.7622E-04	85.50	76.87	142.5	76.87	V-C	5890.	-7.500	0.000	1.000	1.000	76.87
0.000	0.000	Strato1_2_8_L_0											
40 D	15.76	1.6047E-04	89.30	78.78	146.3	78.78	V-C	5890.	-7.700	0.000	1.000	1.000	78.78
0.000	0.000	Strato1_2_8_L_0											
41 D	12.94	1.4707E-04	93.20	64.68	150.2	76.14	UL-RL	3.9043E+04	-7.900	0.000	1.000	1.000	64.68
0.000	0.000	Strato2_3095_82743_L_0											
42 D	13.26	1.3582E-04	97.20	66.31	154.2	78.09	UL-RL	3.9043E+04	-8.100	0.000	1.000	1.000	66.31
0.000	0.000	Strato2_3095_82743_L_0											
43 D	13.60	1.2653E-04	101.2	68.01	158.2	80.04	UL-RL	3.9043E+04	-8.300	0.000	1.000	1.000	68.01
0.000	0.000	Strato2_3095_82743_L_0											
44 D	13.95	1.1901E-04	105.2	69.77	162.2	82.00	UL-RL	3.9043E+04	-8.500	0.000	1.000	1.000	69.77
0.000	0.000	Strato2_3095_82743_L_0											
45 D	14.32	1.1306E-04	109.2	71.60	166.2	83.96	UL-RL	3.9043E+04	-8.700	0.000	1.000	1.000	71.60
0.000	0.000	Strato2_3095_82743_L_0											
46 D	14.69	1.0852E-04	113.2	73.47	170.2	85.92	UL-RL	3.9043E+04	-8.900	0.000	1.000	1.000	73.47
0.000	0.000	Strato2_3095_82743_L_0											
47 D	15.08	1.0522E-04	117.2	75.39	174.2	87.88	UL-RL	3.9043E+04	-9.100	0.000	1.000	1.000	75.39
0.000	0.000	Strato2_3095_82743_L_0											
48 D	15.47	1.0298E-04	121.2	77.35	178.2	89.85	UL-RL	3.9043E+04	-9.300	0.000	1.000	1.000	77.35
0.000	0.000	Strato2_3095_82743_L_0											
49 D	15.87	1.0167E-04	125.2	79.34	182.2	91.82	UL-RL	3.9043E+04	-9.500	0.000	1.000	1.000	79.34
0.000	0.000	Strato2_3095_82743_L_0											
50 D	16.27	1.0115E-04	129.2	81.36	186.2	93.79	UL-RL	3.9043E+04	-9.700	0.000	1.000	1.000	81.36
0.000	0.000	Strato2_3095_82743_L_0											
51 D	16.68	1.0128E-04	133.2	83.40	190.2	95.76	UL-RL	3.9043E+04	-9.900	0.000	1.000	1.000	83.40
0.000	0.000	Strato2_3095_82743_L_0											
52 D	17.09	1.0195E-04	137.2	85.47	194.2	97.74	UL-RL	3.9043E+04	-10.10	0.000	1.000	1.000	85.47
0.000	0.000	Strato2_3095_82743_L_0											
53 D	17.51	1.0307E-04	141.2	87.54	198.2	99.72	UL-RL	3.9043E+04	-10.30	0.000	1.000	1.000	87.54
0.000	0.000	Strato2_3095_82743_L_0											
54 D	17.93	1.0453E-04	145.2	89.63	202.2	101.7	UL-RL	3.9043E+04	-10.50	0.000	1.000	1.000	89.63
0.000	0.000	Strato2_3095_82743_L_0											
55 D	18.35	1.0626E-04	149.2	91.73	206.2	103.7	UL-RL	3.9043E+04	-10.70	0.000	1.000	1.000	91.73
0.000	0.000	Strato2_3095_82743_L_0											
56 D	18.77	1.0819E-04	153.2	93.84	210.2	105.7	UL-RL	3.9043E+04	-10.90	0.000	1.000	1.000	93.84
0.000	0.000	Strato2_3095_82743_L_0											
57 D	19.19	1.1026E-04	157.2	95.95	214.2	107.6	UL-RL	3.9043E+04	-11.10	0.000	1.000	1.000	95.95
0.000	0.000	Strato2_3095_82743_L_0											
58 D	19.61	1.1242E-04	161.2	98.06	218.2	109.6	UL-RL	3.9043E+04	-11.30	0.000	1.000	1.000	98.06
0.000	0.000	Strato2_3095_82743_L_0											
59 D	20.03	1.1464E-04	165.2	100.2	222.2	111.6	UL-RL	3.9043E+04	-11.50	0.000	1.000	1.000	100.2
0.000	0.000	Strato2_3095_82743_L_0											
60 D	20.46	1.1688E-04	169.2	102.3	226.2	113.6	UL-RL	3.9043E+04	-11.70	0.000	1.000	1.000	102.3
0.000	0.000	Strato2_3095_82743_L_0											
61 D	15.66	1.1914E-04	173.2	104.4	230.2	115.6	UL-RL	3.9043E+04	-11.90	0.000	1.000	1.000	104.4
0.000	0.000	Strato2_3095_82743_L_0											
62 D	5.273	1.2027E-04	175.2	105.5	232.2	116.6	UL-RL	3.9043E+04	-12.00	0.000	1.000	1.000	105.5
0.000	0.000	Strato2_3095_82743_L_0											

```
+-------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                       NewProject.BaseDesignSection_28.A1M1R1_3484                                       |
|                                    Exe Time :24 July 2019      11:09:27                                                 |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
C U R R E N T   T I M E   I S      3.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-----------------------------------------------------
    1 0.35082    -0.35082     2.63425E-11 7.01632E-02
    2 0.95786    -0.95786    -7.01632E-02 0.26174
```

3	1.8648	-1.8648	-0.26174	0.63469
4	3.0308	-3.0308	-0.63469	1.2408
5	4.4431	-4.4431	-1.2408	2.1295
6	6.0959	-6.0959	-2.1295	3.3486
7	7.9863	-7.9863	-3.3486	4.9459
8	10.112	-10.112	-4.9459	6.9684
9	12.426	-12.426	-6.9684	9.4536
10	14.979	-14.979	-9.4536	12.449
11	17.769	-17.769	-12.449	16.003
12	20.796	-20.796	-16.003	20.162
13	23.242	-23.242	-20.162	22.487
14	25.765	-25.765	-22.487	27.640
15	29.365	-29.365	-27.640	33.513
16	33.200	-33.200	-33.513	40.153
17	35.734	-35.734	-40.153	47.300
18	35.430	-35.430	-47.300	54.386
19	32.289	-32.289	-54.386	60.843
20	28.209	-28.209	-60.843	66.485
21	24.036	-24.036	-66.485	71.293
22	19.788	-19.788	-71.293	75.250
23	15.459	-15.459	-75.250	78.342
24	11.047	-11.047	-78.342	80.551
25	6.8247	-6.8247	-80.551	81.916
26	3.0136	-3.0136	-81.916	82.519
27	-0.41029	0.41029	-82.519	82.437
28	-3.4973	3.4973	-82.437	81.737
29	-6.2446	6.2446	-81.737	80.489
30	-8.6759	8.6759	-80.489	78.753
31	-10.815	10.815	-78.753	76.590
32	-12.685	12.685	-76.590	74.053
33	-14.307	14.307	-74.053	71.192
34	-15.705	15.705	-71.192	68.051
35	-16.898	16.898	-68.051	64.671
36	-17.926	17.926	-64.671	61.086
37	-18.788	18.788	-61.086	57.329
38	-19.501	19.501	-57.329	53.429
39	-20.084	20.084	-53.429	49.412
40	-20.551	20.551	-49.412	45.301
41	-20.466	20.466	-45.301	41.208
42	-20.111	20.111	-41.208	37.186
43	-19.545	19.545	-37.186	33.277
44	-18.793	18.793	-33.277	29.518
45	-17.891	17.891	-29.518	25.940
46	-16.872	16.872	-25.940	22.566
47	-15.762	15.762	-22.566	19.413
48	-14.589	14.589	-19.413	16.496
49	-13.373	13.373	-16.496	13.821
50	-12.133	12.133	-13.821	11.394
51	-10.899	10.899	-11.394	9.2145
52	-9.6690	9.6690	-9.2145	7.2807
53	-8.4543	8.4543	-7.2807	5.5898
54	-7.2631	7.2631	-5.5898	4.1372
55	-6.1019	6.1019	-4.1372	2.9168
56	-4.9755	4.9755	-2.9168	1.9217
57	-3.8872	3.8872	-1.9217	1.1443
58	-2.8510	2.8510	-1.1443	0.57409
59	-1.8563	1.8563	-0.57409	0.20283
60	-0.90368	0.90368	-0.20283	2.20946E-02
61	-0.22092	0.22092	-2.20946E-02	3.17768E-12

```
+-------------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                          |
|                                 Exe Time :24 July 2019      11:09:27                                                    |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_778405                 :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S     3.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****
```

```
ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.6880E+05 RIMNOR=0.2568E+06
           RENORM=0.1736E+05 REMNOR=0.1258E-19 RATIO =0.5023     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 131.8     RMMAX = 82.52
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
           RDT   =0.6880E+05 RDR   =0.2568E+06
           RATIOT=0.5023     RATIOR= 0.000
           MAX UN=0.4803E-09 IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           MIN UN=-131.8     IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.6880E+05 RIMNOR=0.2568E+06
           RENORM= 67.44     REMNOR=0.1259E-19 RATIO =0.3131E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 131.8     RMMAX = 82.52
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
           RDT   =0.6880E+05 RDR   =0.2568E+06
           RATIOT=0.3131E-01 RATIOR= 0.000
           MAX UN=0.2325E-09 IEQ=    37 NODE     19 DOF   1  Y-DISPL.F
           MIN UN=-3.116     IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.6880E+05 RIMNOR=0.2568E+06
           RENORM= 1.669     REMNOR=0.4542E-20 RATIO =0.4925E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 131.8     RMMAX = 82.52
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
           RDT   =0.6880E+05 RDR   =0.2568E+06
           RATIOT=0.4925E-02 RATIOR= 0.000
           MAX UN=0.3458E-09 IEQ=    15 NODE      8 DOF   1  Y-DISPL.F
           MIN UN=-1.037     IEQ=    37 NODE     19 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.6880E+05 RIMNOR=0.2568E+06
           RENORM=0.1366E-18 REMNOR=0.5267E-21 RATIO =0.1409E-11 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 131.8     RMMAX = 82.52
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
           RDT   =0.6880E+05 RDR   =0.2568E+06
           RATIOT=0.1409E-11 RATIOR= 0.000
           MAX UN=0.2425E-09 IEQ=     9 NODE      5 DOF   1  Y-DISPL.F
           MIN UN=-.1265E-09 IEQ=     7 NODE      4 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                      |
|                                  Exe Time :24 July 2019      11:09:27                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     4 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    4     ( AT TIME   4.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)           (
    1   8.2926877E-04  -2.2422549E-04
    2   7.8442724E-04  -2.2417204E-04
    3   7.3961384E-04  -2.2391031E-04
    4   6.9489109E-04  -2.2322904E-04
    5   6.5036532E-04  -2.2190143E-04
    6   6.0618963E-04  -2.1968708E-04
    7   5.6256649E-04  -2.1633262E-04
    8   5.1975032E-04  -2.1157211E-04
    9   4.7804994E-04  -2.0512720E-04
   10   4.3783099E-04  -1.9670898E-04
   11   3.9951787E-04  -1.8601796E-04
   12   3.6359611E-04  -1.7274240E-04
   13   3.3061480E-04  -1.5655852E-04
   14   3.1541583E-04  -1.4728213E-04
   15   2.8780902E-04  -1.2923047E-04
   16   2.6355777E-04  -1.1366696E-04
   17   2.4220056E-04  -1.0022860E-04
   18   2.2334941E-04  -8.8543987E-05
   19   2.0669015E-04  -7.8251634E-05
```

20	1.9197431E-04	-6.9076050E-05
21	1.7899687E-04	-6.0843294E-05
22	1.6758330E-04	-5.3415837E-05
23	1.5758498E-04	-4.6671708E-05
24	1.4887579E-04	-4.0510064E-05
25	1.4134694E-04	-3.4858677E-05
26	1.3490160E-04	-2.9667961E-05
27	1.2945172E-04	-2.4898155E-05
28	1.2491670E-04	-2.0513402E-05
29	1.2122277E-04	-1.6482454E-05
30	1.1830192E-04	-1.2778447E-05
31	1.1609114E-04	-9.3781696E-06
32	1.1453173E-04	-6.2619278E-06
33	1.1356854E-04	-3.4133222E-06
34	1.1314943E-04	-8.1916472E-07
35	1.1322459E-04	1.5307716E-06
36	1.1374596E-04	3.6439285E-06
37	1.1466667E-04	5.5246796E-06
38	1.1594043E-04	7.1745306E-06
39	1.1752104E-04	8.5928326E-06
40	1.1936195E-04	9.7769154E-06
41	1.2141589E-04	1.0722298E-05
42	1.2363581E-04	1.1441864E-05
43	1.2597960E-04	1.1966029E-05
44	1.2841109E-04	1.2323377E-05
45	1.3089960E-04	1.2540508E-05
46	1.3341961E-04	1.2642318E-05
47	1.3595038E-04	1.2651898E-05
48	1.3847562E-04	1.2590452E-05
49	1.4098310E-04	1.2477240E-05
50	1.4346421E-04	1.2329527E-05
51	1.4591362E-04	1.2162552E-05
52	1.4832875E-04	1.1989197E-05
53	1.5070952E-04	1.1819958E-05
54	1.5305757E-04	1.1663293E-05
55	1.5537610E-04	1.1525599E-05
56	1.5766936E-04	1.1411225E-05
57	1.5994230E-04	1.1322480E-05
58	1.6220008E-04	1.1259642E-05
59	1.6444775E-04	1.1220686E-05
60	1.6668966E-04	1.1201301E-05
61	1.6892915E-04	1.1195178E-05
62	1.7004876E-04	1.1194848E-05

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                         |
|                                  Exe Time :24 July 2019      11:09:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   1

0_L                           :
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
C U R R E N T   T I M E   I S     4.0000

 HARDENING 2D SOIL ELEMENT

 ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P           STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
-------------------------------------------------------------------
   1 D   2.251     -8.2927E-04   11.54       22.51       11.54       22.51            V-C   8488.       0.000       0.000       1.000       1.000
22.51       0.000       0.000     Strato1_2_8_L_0
   2 D   4.271     -7.8443E-04   9.984       21.35       9.984       21.35            V-C   8488.      -0.2000      0.000       1.000       1.000
21.35       0.000       0.000     Strato1_2_8_L_0
   3 D   4.628     -7.3961E-04   14.92       23.14       14.92       23.14            V-C   8488.      -0.4000      0.000       1.000       1.000
23.14       0.000       0.000     Strato1_2_8_L_0
   4 D   4.925     -6.9489E-04   19.18       24.62       19.18       24.62            V-C   8488.      -0.6000      0.000       1.000       1.000
24.62       0.000       0.000     Strato1_2_8_L_0
   5 D   5.202     -6.5037E-04   23.23       26.01       23.23       26.01            V-C   8488.      -0.8000      0.000       1.000       1.000
26.01       0.000       0.000     Strato1_2_8_L_0
   6 D   5.470     -6.0619E-04   27.18       27.35       27.18       27.35            V-C   8488.      -1.000       0.000       1.000       1.000
27.35       0.000       0.000     Strato1_2_8_L_0
   7 D   5.733     -5.6257E-04   31.09       28.66       31.09       28.66            V-C   8488.      -1.200       0.000       1.000       1.000
28.66       0.000       0.000     Strato1_2_8_L_0
   8 D   5.992     -5.1975E-04   34.97       29.96       34.97       29.96            V-C   8488.      -1.400       0.000       1.000       1.000
```

29.96	0.000	0.000	Strato1_2_8_L_0										
9 D	6.177	-4.7805E-04	38.06	30.89	38.06	30.89	V-C	8488.	-1.600	0.000	1.000	1.000	
30.89	0.000	0.000	Strato1_2_8_L_0										
10 D	6.438	-4.3783E-04	41.99	32.19	41.99	32.19	V-C	8488.	-1.800	0.000	1.000	1.000	
32.19	0.000	0.000	Strato1_2_8_L_0										
11 D	6.694	-3.9952E-04	45.89	33.47	45.89	33.47	V-C	8488.	-2.000	0.000	1.000	1.000	
33.47	0.000	0.000	Strato1_2_8_L_0										
12 D	6.945	-3.6360E-04	49.78	34.72	49.78	34.72	V-C	8488.	-2.200	0.000	1.000	1.000	
34.72	0.000	0.000	Strato1_2_8_L_0										
13 D	5.393	-3.3061E-04	53.65	35.95	53.65	35.95	V-C	8488.	-2.400	0.000	1.000	1.000	
35.95	0.000	0.000	Strato1_2_8_L_0										
14 D	5.466	-3.1542E-04	55.33	36.44	55.33	36.44	V-C	8488.	-2.500	0.000	1.000	1.000	
36.44	0.000	0.000	Strato1_2_8_L_0										
15 D	7.528	-2.8781E-04	59.21	37.64	59.21	37.64	V-C	8488.	-2.700	0.000	1.000	1.000	
37.64	0.000	0.000	Strato1_2_8_L_0										
16 D	7.763	-2.6356E-04	63.07	38.82	63.07	38.82	V-C	8488.	-2.900	0.000	1.000	1.000	
38.82	0.000	0.000	Strato1_2_8_L_0										
17 D	7.996	-2.4220E-04	66.93	39.98	66.93	39.98	V-C	8488.	-3.100	0.000	1.000	1.000	
39.98	0.000	0.000	Strato1_2_8_L_0										
18 D	8.226	-2.2335E-04	70.78	41.13	70.78	41.13	V-C	8488.	-3.300	0.000	1.000	1.000	
41.13	0.000	0.000	Strato1_2_8_L_0										
19 D	8.457	-2.0669E-04	74.62	42.28	74.62	42.28	V-C	8488.	-3.500	0.000	1.000	1.000	
42.28	0.000	0.000	Strato1_2_8_L_0										
20 D	8.688	-1.9197E-04	78.46	43.44	78.46	43.44	V-C	8488.	-3.700	0.000	1.000	1.000	
43.44	0.000	0.000	Strato1_2_8_L_0										
21 D	8.890	-1.7900E-04	81.97	44.45	81.97	44.45	V-C	8488.	-3.900	0.000	1.000	1.000	
44.45	0.000	0.000	Strato1_2_8_L_0										
22 D	9.126	-1.6758E-04	85.82	45.63	85.82	45.63	V-C	8488.	-4.100	0.000	1.000	1.000	
45.63	0.000	0.000	Strato1_2_8_L_0										
23 D	9.089	-1.5758E-04	89.66	45.45	89.66	47.52	UL-RL	2.5465E+04	-4.300	0.000	1.000	1.000	
45.45	0.000	0.000	Strato1_2_8_L_0										
24 D	9.003	-1.4888E-04	93.50	45.02	93.50	49.56	UL-RL	2.5465E+04	-4.500	0.000	1.000	1.000	
45.02	0.000	0.000	Strato1_2_8_L_0										
25 D	9.209	-1.4135E-04	97.34	46.04	97.34	51.59	UL-RL	2.5465E+04	-4.700	0.000	1.000	1.000	
46.04	0.000	0.000	Strato1_2_8_L_0										
26 D	9.654	-1.3490E-04	101.2	48.27	101.2	53.62	UL-RL	2.5465E+04	-4.900	0.000	1.000	1.000	
48.27	0.000	0.000	Strato1_2_8_L_0										
27 D	10.09	-1.2945E-04	105.0	50.47	105.0	55.65	UL-RL	2.5465E+04	-5.100	0.000	1.000	1.000	
50.47	0.000	0.000	Strato1_2_8_L_0										
28 D	10.50	-1.2492E-04	108.6	52.52	108.6	57.55	UL-RL	2.5465E+04	-5.300	0.000	1.000	1.000	
52.52	0.000	0.000	Strato1_2_8_L_0										
29 D	10.94	-1.2122E-04	112.4	54.68	112.4	59.58	UL-RL	2.5465E+04	-5.500	0.000	1.000	1.000	
54.68	0.000	0.000	Strato1_2_8_L_0										
30 D	11.37	-1.1830E-04	116.3	56.83	116.3	61.62	UL-RL	2.5465E+04	-5.700	0.000	1.000	1.000	
56.83	0.000	0.000	Strato1_2_8_L_0										
31 D	11.79	-1.1609E-04	120.1	58.95	120.1	63.65	UL-RL	2.5465E+04	-5.900	0.000	1.000	1.000	
58.95	0.000	0.000	Strato1_2_8_L_0										
32 D	12.21	-1.1453E-04	123.9	61.07	123.9	65.68	UL-RL	2.5465E+04	-6.100	0.000	1.000	1.000	
61.07	0.000	0.000	Strato1_2_8_L_0										
33 D	12.63	-1.1357E-04	127.7	63.17	127.7	67.70	UL-RL	2.5465E+04	-6.300	0.000	1.000	1.000	
63.17	0.000	0.000	Strato1_2_8_L_0										
34 D	13.05	-1.1315E-04	131.6	65.25	131.6	69.73	UL-RL	2.5465E+04	-6.500	0.000	1.000	1.000	
65.25	0.000	0.000	Strato1_2_8_L_0										
35 D	13.47	-1.1322E-04	135.4	67.33	135.4	71.76	UL-RL	2.5465E+04	-6.700	0.000	1.000	1.000	
67.33	0.000	0.000	Strato1_2_8_L_0										
36 D	13.86	-1.1375E-04	139.0	69.30	139.0	73.68	UL-RL	2.5465E+04	-6.900	0.000	1.000	1.000	
69.30	0.000	0.000	Strato1_2_8_L_0										
37 D	14.27	-1.1467E-04	142.9	71.36	142.9	75.71	UL-RL	2.5465E+04	-7.100	0.000	1.000	1.000	
71.36	0.000	0.000	Strato1_2_8_L_0										
38 D	14.68	-1.1594E-04	146.7	73.41	146.7	77.74	UL-RL	2.5465E+04	-7.300	0.000	1.000	1.000	
73.41	0.000	0.000	Strato1_2_8_L_0										
39 D	15.09	-1.1752E-04	150.5	75.45	150.5	79.77	UL-RL	2.5465E+04	-7.500	0.000	1.000	1.000	
75.45	0.000	0.000	Strato1_2_8_L_0										
40 D	15.50	-1.1936E-04	154.3	77.49	154.3	81.79	UL-RL	2.5465E+04	-7.700	0.000	1.000	1.000	
77.49	0.000	0.000	Strato1_2_8_L_0										
41 D	13.39	-1.2142E-04	158.2	66.96	158.2	79.12	UL-RL	7.2037E+04	-7.900	0.000	1.000	1.000	
66.96	0.000	0.000	Strato2_3095_82743_L_0										
42 D	13.79	-1.2364E-04	162.3	68.96	162.3	81.13	UL-RL	7.2037E+04	-8.100	0.000	1.000	1.000	
68.96	0.000	0.000	Strato2_3095_82743_L_0										
43 D	14.17	-1.2598E-04	166.1	70.87	166.1	83.06	UL-RL	7.2037E+04	-8.300	0.000	1.000	1.000	
70.87	0.000	0.000	Strato2_3095_82743_L_0										
44 D	14.57	-1.2841E-04	170.2	72.85	170.2	85.08	UL-RL	7.2037E+04	-8.500	0.000	1.000	1.000	
72.85	0.000	0.000	Strato2_3095_82743_L_0										
45 D	14.96	-1.3090E-04	174.2	74.82	174.2	87.09	UL-RL	7.2037E+04	-8.700	0.000	1.000	1.000	
74.82	0.000	0.000	Strato2_3095_82743_L_0										
46 D	15.36	-1.3342E-04	178.2	76.78	178.2	89.10	UL-RL	7.2037E+04	-8.900	0.000	1.000	1.000	
76.78	0.000	0.000	Strato2_3095_82743_L_0										
47 D	15.74	-1.3595E-04	182.2	78.72	182.2	91.11	UL-RL	7.2037E+04	-9.100	0.000	1.000	1.000	
78.72	0.000	0.000	Strato2_3095_82743_L_0										
48 D	16.13	-1.3848E-04	186.2	80.66	186.2	93.12	UL-RL	7.2037E+04	-9.300	0.000	1.000	1.000	
80.66	0.000	0.000	Strato2_3095_82743_L_0										
49 D	16.52	-1.4098E-04	190.2	82.59	190.2	95.12	UL-RL	7.2037E+04	-9.500	0.000	1.000	1.000	
82.59	0.000	0.000	Strato2_3095_82743_L_0										
50 D	16.90	-1.4346E-04	194.3	84.51	194.3	97.13	UL-RL	7.2037E+04	-9.700	0.000	1.000	1.000	
84.51	0.000	0.000	Strato2_3095_82743_L_0										

51 D	17.27	-1.4591E-04	198.1	86.36	198.1	99.07	UL-RL	7.2037E+04	-9.900	0.000	1.000	1.000
86.36	0.000	0.000	Strato2_3095_82743_L_0									
52 D	17.66	-1.4833E-04	202.2	88.28	202.2	101.1	UL-RL	7.2037E+04	-10.10	0.000	1.000	1.000
88.28	0.000	0.000	Strato2_3095_82743_L_0									
53 D	18.04	-1.5071E-04	206.2	90.19	206.2	103.1	UL-RL	7.2037E+04	-10.30	0.000	1.000	1.000
90.19	0.000	0.000	Strato2_3095_82743_L_0									
54 D	18.42	-1.5306E-04	210.2	92.09	210.2	105.1	UL-RL	7.2037E+04	-10.50	0.000	1.000	1.000
92.09	0.000	0.000	Strato2_3095_82743_L_0									
55 D	18.80	-1.5538E-04	214.2	94.00	214.2	107.1	UL-RL	7.2037E+04	-10.70	0.000	1.000	1.000
94.00	0.000	0.000	Strato2_3095_82743_L_0									
56 D	19.18	-1.5767E-04	218.2	95.91	218.2	109.1	UL-RL	7.2037E+04	-10.90	0.000	1.000	1.000
95.91	0.000	0.000	Strato2_3095_82743_L_0									
57 D	19.56	-1.5994E-04	222.3	97.81	222.3	111.1	UL-RL	7.2037E+04	-11.10	0.000	1.000	1.000
97.81	0.000	0.000	Strato2_3095_82743_L_0									
58 D	19.93	-1.6220E-04	226.1	99.65	226.1	113.1	UL-RL	7.2037E+04	-11.30	0.000	1.000	1.000
99.65	0.000	0.000	Strato2_3095_82743_L_0									
59 D	20.31	-1.6445E-04	230.2	101.6	230.2	115.1	UL-RL	7.2037E+04	-11.50	0.000	1.000	1.000
101.6	0.000	0.000	Strato2_3095_82743_L_0									
60 D	20.69	-1.6669E-04	234.2	103.5	234.2	117.1	UL-RL	7.2037E+04	-11.70	0.000	1.000	1.000
103.5	0.000	0.000	Strato2_3095_82743_L_0									
61 D	15.80	-1.6893E-04	238.2	105.4	238.2	119.1	UL-RL	7.2037E+04	-11.90	0.000	1.000	1.000
105.4	0.000	0.000	Strato2_3095_82743_L_0									
62 D	5.314	-1.7005E-04	240.1	106.3	240.1	120.1	UL-RL	7.2037E+04	-12.00	0.000	1.000	1.000
106.3	0.000	0.000	Strato2_3095_82743_L_0									

```
+----------------------------------------------------------------------------------------------------------+
|                 PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*   |
|                                                                                                          |
|                                 NewProject.BaseDesignSection_28.A1M1R1_3484                              |
|                          Exe Time :24 July 2019      11:09:27                                           |
+----------------------------------------------------------------------------------------------------------+
```

New Project

S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

0_R :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 62
C U R R E N T   T I M E   I S   4.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000	0.000	0.000	0.000	not available
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000	0.000	0.000	0.000	not available
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000	0.000	0.000	0.000	not available
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000	0.000	0.000	0.000	not available
6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000	0.000	0.000	0.000	not available
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000	0.000	0.000	0.000	not available
9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000	0.000	0.000	0.000	not available
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000	0.000	0.000	0.000	not available
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000	0.000	0.000	0.000	not available
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000	0.000	0.000	0.000	not available
14	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000	0.000	0.000	0.000	not available
15	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000	0.000	0.000	0.000	not available
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000	0.000	0.000	0.000	not available
17 D	0.1155	2.4220E-04	1.900	0.5776	58.90	32.03	ACTIVE	0.000	-3.100	0.000	1.000	1.000	0.5776	0.000	0.000	Strato1_2_8_L_0
18 D	0.8796	2.2335E-04	5.700	4.398	62.70	34.04	UL-RL	1.7671E+04	-3.300	0.000	1.000	1.000	4.398	0.000	0.000	Strato1_2_8_L_0
19 D	4.199	2.0669E-04	9.500	21.00	66.50	38.39	UL-RL	1.7671E+04	-3.500	0.000	1.000	1.000	21.00	0.000	0.000	Strato1_2_8_L_0
20 D	5.618	1.9197E-04	13.30	28.09	70.30	44.25	UL-RL	1.7671E+04	-3.700	0.000	1.000	1.000	28.09	0.000	0.000	Strato1_2_8_L_0
21 D	6.166	1.7900E-04	17.10	30.83	74.10	45.78	UL-RL	1.7671E+04	-3.900	0.000	1.000	1.000	30.83	0.000	0.000	Strato1_2_8_L_0
22 D	6.712	1.6758E-04	20.90	33.56	77.90	47.33	UL-RL	1.7671E+04	-4.100	0.000	1.000	1.000	33.56	0.000	0.000	Strato1_2_8_L_0
23 D	7.255	1.5758E-04	24.70	36.28	81.70	48.90	UL-RL	1.7671E+04	-4.300	0.000	1.000	1.000	36.28	0.000	0.000	Strato1_2_8_L_0
24 D	7.794	1.4888E-04	28.50	38.97	85.50	50.49	UL-RL	1.7671E+04	-4.500	0.000	1.000	1.000	38.97	0.000	0.000	Strato1_2_8_L_0
25 D	8.329	1.4135E-04	32.30	41.64	89.30	52.10	UL-RL	1.7671E+04	-4.700	0.000	1.000	1.000	41.64	0.000	0.000	Strato1_2_8_L_0
26 D	8.858	1.3490E-04	36.10	44.29	93.10	53.73	UL-RL	1.7671E+04	-4.900	0.000	1.000	1.000	44.29	0.000	0.000	Strato1_2_8_L_0
27 D	9.381	1.2945E-04	39.90	46.91	96.90	55.38	UL-RL	1.7671E+04	-5.100	0.000	1.000	1.000	46.91	0.000	0.000	Strato1_2_8_L_0
28 D	9.899	1.2492E-04	43.70	49.49	100.7	57.06	UL-RL	1.7671E+04	-5.300	0.000	1.000	1.000	49.49	0.000	0.000	Strato1_2_8_L_0
29 D	10.41	1.2122E-04	47.50	52.05	104.5	58.75	UL-RL	1.7671E+04	-5.500	0.000	1.000	1.000	52.05	0.000	0.000	Strato1_2_8_L_0
30 D	10.91	1.1830E-04	51.30	54.57	108.3	60.47	UL-RL	1.7671E+04	-5.700	0.000	1.000	1.000				

54.57	0.000	0.000	Strato1_2_8_L_0										
31 D	11.41	1.1609E-04	55.10	57.06	112.1	62.22	UL-RL	1.7671E+04	-5.900	0.000	1.000	1.000	
57.06	0.000	0.000	Strato1_2_8_L_0										
32 D	11.90	1.1453E-04	58.90	59.52	115.9	63.98	UL-RL	1.7671E+04	-6.100	0.000	1.000	1.000	
59.52	0.000	0.000	Strato1_2_8_L_0										
33 D	12.39	1.1357E-04	62.70	61.94	119.7	65.77	UL-RL	1.7671E+04	-6.300	0.000	1.000	1.000	
61.94	0.000	0.000	Strato1_2_8_L_0										
34 D	12.87	1.1315E-04	66.50	64.33	123.5	67.57	UL-RL	1.7671E+04	-6.500	0.000	1.000	1.000	
64.33	0.000	0.000	Strato1_2_8_L_0										
35 D	13.34	1.1322E-04	70.30	66.69	127.3	69.40	UL-RL	1.7671E+04	-6.700	0.000	1.000	1.000	
66.69	0.000	0.000	Strato1_2_8_L_0										
36 D	13.80	1.1375E-04	74.10	69.02	131.1	71.24	UL-RL	1.7671E+04	-6.900	0.000	1.000	1.000	
69.02	0.000	0.000	Strato1_2_8_L_0										
37 D	14.26	1.1467E-04	77.90	71.32	134.9	73.10	UL-RL	1.7671E+04	-7.100	0.000	1.000	1.000	
71.32	0.000	0.000	Strato1_2_8_L_0										
38 D	14.72	1.1594E-04	81.70	73.59	138.7	74.98	UL-RL	1.7671E+04	-7.300	0.000	1.000	1.000	
73.59	0.000	0.000	Strato1_2_8_L_0										
39 D	15.17	1.1752E-04	85.50	75.83	142.5	76.87	UL-RL	1.7671E+04	-7.500	0.000	1.000	1.000	
75.83	0.000	0.000	Strato1_2_8_L_0										
40 D	15.61	1.1936E-04	89.30	78.05	146.3	78.78	UL-RL	1.7671E+04	-7.700	0.000	1.000	1.000	
78.05	0.000	0.000	Strato1_2_8_L_0										
41 D	12.74	1.2142E-04	93.20	63.68	150.2	76.14	UL-RL	3.9043E+04	-7.900	0.000	1.000	1.000	
63.68	0.000	0.000	Strato2_3095_82743_L_0										
42 D	13.17	1.2364E-04	97.20	65.83	154.2	78.09	UL-RL	3.9043E+04	-8.100	0.000	1.000	1.000	
65.83	0.000	0.000	Strato2_3095_82743_L_0										
43 D	13.60	1.2598E-04	101.2	67.99	158.2	80.04	UL-RL	3.9043E+04	-8.300	0.000	1.000	1.000	
67.99	0.000	0.000	Strato2_3095_82743_L_0										
44 D	14.03	1.2841E-04	105.2	70.14	162.2	82.00	UL-RL	3.9043E+04	-8.500	0.000	1.000	1.000	
70.14	0.000	0.000	Strato2_3095_82743_L_0										
45 D	14.46	1.3090E-04	109.2	72.29	166.2	83.96	UL-RL	3.9043E+04	-8.700	0.000	1.000	1.000	
72.29	0.000	0.000	Strato2_3095_82743_L_0										
46 D	14.89	1.3342E-04	113.2	74.44	170.2	85.92	UL-RL	3.9043E+04	-8.900	0.000	1.000	1.000	
74.44	0.000	0.000	Strato2_3095_82743_L_0										
47 D	15.32	1.3595E-04	117.2	76.59	174.2	87.88	UL-RL	3.9043E+04	-9.100	0.000	1.000	1.000	
76.59	0.000	0.000	Strato2_3095_82743_L_0										
48 D	15.75	1.3848E-04	121.2	78.73	178.2	89.85	UL-RL	3.9043E+04	-9.300	0.000	1.000	1.000	
78.73	0.000	0.000	Strato2_3095_82743_L_0										
49 D	16.17	1.4098E-04	125.2	80.87	182.2	91.82	UL-RL	3.9043E+04	-9.500	0.000	1.000	1.000	
80.87	0.000	0.000	Strato2_3095_82743_L_0										
50 D	16.60	1.4346E-04	129.2	83.01	186.2	93.79	UL-RL	3.9043E+04	-9.700	0.000	1.000	1.000	
83.01	0.000	0.000	Strato2_3095_82743_L_0										
51 D	17.03	1.4591E-04	133.2	85.15	190.2	95.76	UL-RL	3.9043E+04	-9.900	0.000	1.000	1.000	
85.15	0.000	0.000	Strato2_3095_82743_L_0										
52 D	17.46	1.4833E-04	137.2	87.28	194.2	97.74	UL-RL	3.9043E+04	-10.10	0.000	1.000	1.000	
87.28	0.000	0.000	Strato2_3095_82743_L_0										
53 D	17.88	1.5071E-04	141.2	89.40	198.2	99.72	UL-RL	3.9043E+04	-10.30	0.000	1.000	1.000	
89.40	0.000	0.000	Strato2_3095_82743_L_0										
54 D	18.31	1.5306E-04	145.2	91.53	202.2	101.7	UL-RL	3.9043E+04	-10.50	0.000	1.000	1.000	
91.53	0.000	0.000	Strato2_3095_82743_L_0										
55 D	18.73	1.5538E-04	149.2	93.65	206.2	103.7	UL-RL	3.9043E+04	-10.70	0.000	1.000	1.000	
93.65	0.000	0.000	Strato2_3095_82743_L_0										
56 D	19.15	1.5767E-04	153.2	95.77	210.2	105.7	UL-RL	3.9043E+04	-10.90	0.000	1.000	1.000	
95.77	0.000	0.000	Strato2_3095_82743_L_0										
57 D	19.58	1.5994E-04	157.2	97.89	214.2	107.6	UL-RL	3.9043E+04	-11.10	0.000	1.000	1.000	
97.89	0.000	0.000	Strato2_3095_82743_L_0										
58 D	20.00	1.6220E-04	161.2	100.0	218.2	109.6	UL-RL	3.9043E+04	-11.30	0.000	1.000	1.000	
100.0	0.000	0.000	Strato2_3095_82743_L_0										
59 D	20.42	1.6445E-04	165.2	102.1	222.2	111.6	UL-RL	3.9043E+04	-11.50	0.000	1.000	1.000	
102.1	0.000	0.000	Strato2_3095_82743_L_0										
60 D	20.85	1.6669E-04	169.2	104.2	226.2	113.6	UL-RL	3.9043E+04	-11.70	0.000	1.000	1.000	
104.2	0.000	0.000	Strato2_3095_82743_L_0										
61 D	15.95	1.6893E-04	173.2	106.3	230.2	115.6	UL-RL	3.9043E+04	-11.90	0.000	1.000	1.000	
106.3	0.000	0.000	Strato2_3095_82743_L_0										
62 D	5.370	1.7005E-04	175.2	107.4	232.2	116.6	UL-RL	3.9043E+04	-12.00	0.000	1.000	1.000	
107.4	0.000	0.000	Strato2_3095_82743_L_0										

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                       NewProject.BaseDesignSection_28.A1M1R1_3484                                       |
|                                  Exe Time :24 July 2019      11:09:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
C U R R E N T   T I M E   I S     4.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-----------------------------------------------------
    1  2.2514     -2.2514    -2.69562E-12 0.45028
    2  6.5220     -6.5220    -0.45028      1.7547
    3  11.150     -11.150     -1.7547      3.9847
    4  16.075     -16.075     -3.9847      7.1997
    5  21.277     -21.277     -7.1997      11.455
    6  26.747     -26.747     -11.455      16.805
    7  32.480     -32.480     -16.805      23.300
    8  38.472     -38.472     -23.300      30.995
    9  44.649     -44.649     -30.995      39.925
   10  51.087     -51.087     -39.925      50.142
   11  57.781     -57.781     -50.142      61.698
   12  64.725     -64.725     -61.698      74.643
   13  70.118     -70.118     -74.643      81.655
   14 -56.168      56.168     -81.655      70.421
   15 -48.640      48.640     -70.421      60.693
   16 -40.876      40.876     -60.693      52.518
   17 -32.996      32.996     -52.518      45.919
   18 -25.649      25.649     -45.919      40.789
   19 -21.392      21.392     -40.789      36.511
   20 -18.323      18.323     -36.511      32.846
   21 -15.599      15.599     -32.846      29.726
   22 -13.185      13.185     -29.726      27.090
   23 -11.351      11.351     -27.090      24.819
   24 -10.142      10.142     -24.819      22.791
   25 -9.2623      9.2623     -22.791      20.938
   26 -8.4665      8.4665     -20.938      19.245
   27 -7.7540      7.7540     -19.245      17.694
   28 -7.1491      7.1491     -17.694      16.264
   29 -6.6225      6.6225     -16.264      14.940
   30 -6.1713      6.1713     -14.940      13.706
   31 -5.7923      5.7923     -13.706      12.547
   32 -5.4819      5.4819     -12.547      11.451
   33 -5.2361      5.2361     -11.451      10.404
   34 -5.0511      5.0511     -10.404      9.3934
   35 -4.9227      4.9227     -9.3934      8.4089
   36 -4.8669      4.8669     -8.4089      7.4355
   37 -4.8589      4.8589     -7.4355      6.4637
   38 -4.8949      4.8949     -6.4637      5.4848
   39 -4.9710      4.9710     -5.4848      4.4906
   40 -5.0836      5.0836     -4.4906      3.4738
   41 -4.4283      4.4283     -3.4738      2.5882
   42 -3.8023      3.8023     -2.5882      1.8277
   43 -3.2246      3.2246     -1.8277      1.1828
   44 -2.6817      2.6817     -1.1828     0.64644
   45 -2.1759      2.1759    -0.64644     0.21126
   46 -1.7091      1.7091    -0.21126    -0.13056
   47 -1.2827      1.2827     0.13056    -0.38709
   48-0.89786     0.89786     0.38709    -0.56667
   49-0.55541     0.55541     0.56667    -0.67775
   50-0.25592     0.25592     0.67775    -0.72893
   51-1.30351E-02 1.30351E-02 0.72893    -0.73154
   52 0.18663    -0.18663     0.73154    -0.69421
   53 0.34300    -0.34300     0.69421    -0.62561
   54 0.45611    -0.45611     0.62561    -0.53439
   55 0.52619    -0.52619     0.53439    -0.42915
   56 0.55338    -0.55338     0.42915    -0.31848
   57 0.53786    -0.53786     0.31848    -0.21091
   58 0.46813    -0.46813     0.21091    -0.11728
   59 0.35625    -0.35625     0.11728    -4.60287E-02
   60 0.20237    -0.20237     4.60287E-02-5.55496E-03
   61 5.55440E-02-5.55440E-02 5.55496E-03 3.17768E-12
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A1M1R1_3484                                         |
|                                  Exe Time :24 July 2019      11:09:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    4

Tieback_778405                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      4.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-----------------------------------------------------------------------------------------------------
ANCHOR    1   136.40     -1.28419E-03 -1.28419E-03   0.0000       0.0000       0.0000       0.0000     BORN NOW JUST ACTIVATED

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.9827E+05 RIMNOR=0.9002E+05
           RENORM= 595.2     REMNOR=0.5267E-21 RATIO =0.7783E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 131.8     RMMAX = 81.65
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
           RDT   =0.9827E+05 RDR   =0.9002E+05
           RATIOT=0.7783E-01 RATIOR= 0.000
           MAX UN= 8.858     IEQ=    51 NODE     26 DOF   1  Y-DISPL.F
           MIN UN=-.1265E-09 IEQ=     7 NODE      4 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.9827E+05 RIMNOR=0.9002E+05
           RENORM= 1.005     REMNOR=0.1391E-19 RATIO =0.3199E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 131.8     RMMAX = 81.65
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
           RDT   =0.9827E+05 RDR   =0.9002E+05
           RATIOT=0.3199E-02 RATIOR= 0.000
           MAX UN=0.5965     IEQ=    59 NODE     30 DOF   1  Y-DISPL.F
           MIN UN=-.3178E-09 IEQ=   121 NODE     61 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.9827E+05 RIMNOR=0.9002E+05
           RENORM=0.1626E-03 REMNOR=0.5219E-20 RATIO =0.4067E-04 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 131.8     RMMAX = 81.65
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
           RDT   =0.9827E+05 RDR   =0.9002E+05
           RATIOT=0.4067E-04 RATIOR= 0.000
           MAX UN=0.1275E-01 IEQ=    61 NODE     31 DOF   1  Y-DISPL.F
           MIN UN=-.7846E-09 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                        |
|                                  Exe Time :24 July 2019      11:09:27                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     3 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    5     ( AT TIME   5.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)            (
    1   1.0981603E-03  -1.3626727E-04
    2   1.0709098E-03  -1.3622365E-04
    3   1.0436820E-03  -1.3601237E-04
    4   1.0165272E-03  -1.3546534E-04
    5   9.8953035E-04  -1.3440155E-04
    6   9.6281385E-04  -1.3262889E-04
    7   9.3653955E-04  -1.2994490E-04
    8   9.1091081E-04  -1.2613704E-04
    9   8.8617448E-04  -1.2098293E-04
   10   8.6262275E-04  -1.1425213E-04
   11   8.4059465E-04  -1.0570604E-04
   12   8.2047792E-04  -9.5096238E-05
   13   8.0271095E-04  -8.2164622E-05
   14   7.9485951E-04  -7.4753302E-05
   15   7.8134120E-04  -6.1011589E-05
   16   7.7023168E-04  -5.0617871E-05
   17   7.6089018E-04  -4.3282273E-05
   18   7.5273484E-04  -3.8705654E-05
   19   7.4524455E-04  -3.6579539E-05
   20   7.3796085E-04  -3.6585965E-05
   21   7.3048984E-04  -3.8397231E-05
   22   7.2250411E-04  -4.1676297E-05
   23   7.1374459E-04  -4.6076357E-05
   24   7.0402224E-04  -5.1246225E-05
   25   6.9321800E-04  -5.6837654E-05
   26   6.8128250E-04  -6.2499242E-05
   27   6.6823819E-04  -6.7863473E-05
   28   6.5417956E-04  -7.2591977E-05
   29   6.3925951E-04  -7.6448824E-05
   30   6.2366558E-04  -7.9322420E-05
   31   6.0759529E-04  -8.1224784E-05
   32   5.9123458E-04  -8.2244710E-05
   33   5.7474954E-04  -8.2483790E-05
   34   5.5828662E-04  -8.2039515E-05
   35   5.4197304E-04  -8.1005642E-05
   36   5.2591766E-04  -7.9472248E-05
   37   5.1021165E-04  -7.7526274E-05
   38   4.9492914E-04  -7.5251622E-05
   39   4.8012763E-04  -7.2728712E-05
   40   4.6584907E-04  -7.0034671E-05
   41   4.5212024E-04  -6.7243416E-05
   42   4.3895399E-04  -6.4417821E-05
   43   4.2635213E-04  -6.1607959E-05
   44   4.1430690E-04  -5.8857679E-05
   45   4.0280255E-04  -5.6204969E-05
   46   3.9181627E-04  -5.3681808E-05
   47   3.8131944E-04  -5.1314481E-05
   48   3.7127875E-04  -4.9123874E-05
   49   3.6165711E-04  -4.7125708E-05
   50   3.5241491E-04  -4.5330862E-05
   51   3.4351080E-04  -4.3745559E-05
   52   3.3490279E-04  -4.2371933E-05
   53   3.2654825E-04  -4.1208069E-05
   54   3.1840597E-04  -4.0248042E-05
   55   3.1043611E-04  -3.9481898E-05
   56   3.0260121E-04  -3.8895785E-05
   57   2.9486697E-04  -3.8472021E-05
   58   2.8720301E-04  -3.8189144E-05
   59   2.7958359E-04  -3.8022210E-05
   60   2.7198829E-04  -3.7942795E-05
   61   2.6440278E-04  -3.7918709E-05
   62   2.6061061E-04  -3.7917474E-05
```

```
+-----------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*  |
|                                                                                                           |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                           |
|                                Exe Time :24 July 2019      11:09:27                                      |
+-----------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    1

0_L                               :
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
C U R R E N T    T I M E    I S       5.0000

 HARDENING 2D SOIL ELEMENT

 ****** TOTAL STRESS FORMULATION *****
```

EL	*	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1	D	1.837	-1.0982E-03	11.54	18.37	11.54	22.51	UL-RL	1.5402E+04	0.000	0.000	1.000	1.000	18.37	0.000	0.000	Strato1_2_8_L_0
2	D	3.388	-1.0709E-03	9.984	16.94	9.984	21.35	UL-RL	1.5402E+04	-0.2000	0.000	1.000	1.000	16.94	0.000	0.000	Strato1_2_8_L_0
3	D	3.692	-1.0437E-03	14.92	18.46	14.92	23.14	UL-RL	1.5402E+04	-0.4000	0.000	1.000	1.000	18.46	0.000	0.000	Strato1_2_8_L_0
4	D	3.934	-1.0165E-03	19.18	19.67	19.18	24.62	UL-RL	1.5402E+04	-0.6000	0.000	1.000	1.000	19.67	0.000	0.000	Strato1_2_8_L_0
5	D	4.157	-9.8953E-04	23.23	20.79	23.23	26.01	UL-RL	1.5402E+04	-0.8000	0.000	1.000	1.000	20.79	0.000	0.000	Strato1_2_8_L_0
6	D	4.371	-9.6281E-04	27.18	21.86	27.18	27.35	UL-RL	1.5402E+04	-1.000	0.000	1.000	1.000	21.86	0.000	0.000	Strato1_2_8_L_0
7	D	4.581	-9.3654E-04	31.09	22.90	31.09	28.66	UL-RL	1.5402E+04	-1.200	0.000	1.000	1.000	22.90	0.000	0.000	Strato1_2_8_L_0
8	D	4.787	-9.1091E-04	34.97	23.93	34.97	29.96	UL-RL	1.5402E+04	-1.400	0.000	1.000	1.000	23.93	0.000	0.000	Strato1_2_8_L_0
9	D	4.920	-8.8617E-04	38.06	24.60	38.06	30.89	UL-RL	1.5402E+04	-1.600	0.000	1.000	1.000	24.60	0.000	0.000	Strato1_2_8_L_0
10	D	5.129	-8.6262E-04	41.99	25.65	41.99	32.19	UL-RL	1.5402E+04	-1.800	0.000	1.000	1.000	25.65	0.000	0.000	Strato1_2_8_L_0
11	D	5.335	-8.4059E-04	45.89	26.67	45.89	33.47	UL-RL	1.5402E+04	-2.000	0.000	1.000	1.000	26.67	0.000	0.000	Strato1_2_8_L_0
12	D	5.537	-8.2048E-04	49.78	27.69	49.78	34.72	UL-RL	1.5402E+04	-2.200	0.000	1.000	1.000	27.69	0.000	0.000	Strato1_2_8_L_0
13	D	4.302	-8.0271E-04	53.65	28.68	53.65	35.95	UL-RL	1.5402E+04	-2.400	0.000	1.000	1.000	28.68	0.000	0.000	Strato1_2_8_L_0
14	D	4.359	-7.9486E-04	55.33	29.06	55.33	36.44	UL-RL	1.5402E+04	-2.500	0.000	1.000	1.000	29.06	0.000	0.000	Strato1_2_8_L_0
15	D	6.008	-7.8134E-04	59.21	30.04	59.21	37.64	UL-RL	1.5402E+04	-2.700	0.000	1.000	1.000	30.04	0.000	0.000	Strato1_2_8_L_0
16	D	6.203	-7.7023E-04	63.07	31.01	63.07	38.82	UL-RL	1.5402E+04	-2.900	0.000	1.000	1.000	31.01	0.000	0.000	Strato1_2_8_L_0
17	D	6.398	-7.6089E-04	66.93	31.99	66.93	39.98	UL-RL	1.5402E+04	-3.100	0.000	1.000	1.000	31.99	0.000	0.000	Strato1_2_8_L_0
18	D	6.596	-7.5273E-04	70.78	32.98	70.78	41.13	UL-RL	1.5402E+04	-3.300	0.000	1.000	1.000	32.98	0.000	0.000	Strato1_2_8_L_0
19	D	6.798	-7.4524E-04	74.62	33.99	74.62	42.28	UL-RL	1.5402E+04	-3.500	0.000	1.000	1.000	33.99	0.000	0.000	Strato1_2_8_L_0
20	D	7.006	-7.3796E-04	78.46	35.03	78.46	43.44	UL-RL	1.5402E+04	-3.700	0.000	1.000	1.000	35.03	0.000	0.000	Strato1_2_8_L_0
21	D	7.191	-7.3049E-04	81.97	35.96	81.97	44.45	UL-RL	1.5402E+04	-3.900	0.000	1.000	1.000	35.96	0.000	0.000	Strato1_2_8_L_0
22	D	7.417	-7.2250E-04	85.82	37.09	85.82	45.63	UL-RL	1.5402E+04	-4.100	0.000	1.000	1.000	37.09	0.000	0.000	Strato1_2_8_L_0
23	D	7.376	-7.1374E-04	89.66	36.88	89.66	47.52	UL-RL	1.5402E+04	-4.300	0.000	1.000	1.000	36.88	0.000	0.000	Strato1_2_8_L_0
24	D	7.293	-7.0402E-04	93.50	36.47	93.50	49.56	UL-RL	1.5402E+04	-4.500	0.000	1.000	1.000	36.47	0.000	0.000	Strato1_2_8_L_0
25	D	7.509	-6.9322E-04	97.34	37.54	97.34	51.59	UL-RL	1.5402E+04	-4.700	0.000	1.000	1.000	37.54	0.000	0.000	Strato1_2_8_L_0
26	D	7.971	-6.8128E-04	101.2	39.85	101.2	53.62	UL-RL	1.5402E+04	-4.900	0.000	1.000	1.000	39.85	0.000	0.000	Strato1_2_8_L_0
27	D	8.434	-6.6824E-04	105.0	42.17	105.0	55.65	UL-RL	1.5402E+04	-5.100	0.000	1.000	1.000	42.17	0.000	0.000	Strato1_2_8_L_0
28	D	8.873	-6.5418E-04	108.6	44.37	108.6	57.55	UL-RL	1.5402E+04	-5.300	0.000	1.000	1.000	44.37	0.000	0.000	Strato1_2_8_L_0
29	D	9.341	-6.3926E-04	112.4	46.70	112.4	59.58	UL-RL	1.5402E+04	-5.500	0.000	1.000	1.000	46.70	0.000	0.000	Strato1_2_8_L_0
30	D	9.809	-6.2367E-04	116.3	49.04	116.3	61.62	UL-RL	1.5402E+04	-5.700	0.000	1.000	1.000				

```
49.04       0.000       0.000     Strato1_2_8_L_0
  31 D   10.28     -6.0760E-04  120.1       51.38       120.1       63.65          UL-RL  1.5402E+04  -5.900       0.000       1.000       1.000
51.38       0.000       0.000     Strato1_2_8_L_0
  32 D   10.75     -5.9123E-04  123.9       53.73       123.9       65.68          UL-RL  1.5402E+04  -6.100       0.000       1.000       1.000
53.73       0.000       0.000     Strato1_2_8_L_0
  33 D   11.21     -5.7475E-04  127.7       56.06       127.7       67.70          UL-RL  1.5402E+04  -6.300       0.000       1.000       1.000
56.06       0.000       0.000     Strato1_2_8_L_0
  34 D   11.68     -5.5829E-04  131.6       58.40       131.6       69.73          UL-RL  1.5402E+04  -6.500       0.000       1.000       1.000
58.40       0.000       0.000     Strato1_2_8_L_0
  35 D   12.15     -5.4197E-04  135.4       60.73       135.4       71.76          UL-RL  1.5402E+04  -6.700       0.000       1.000       1.000
60.73       0.000       0.000     Strato1_2_8_L_0
  36 D   12.59     -5.2592E-04  139.0       62.95       139.0       73.68          UL-RL  1.5402E+04  -6.900       0.000       1.000       1.000
62.95       0.000       0.000     Strato1_2_8_L_0
  37 D   13.05     -5.1021E-04  142.9       65.26       142.9       75.71          UL-RL  1.5402E+04  -7.100       0.000       1.000       1.000
65.26       0.000       0.000     Strato1_2_8_L_0
  38 D   13.51     -4.9493E-04  146.7       67.57       146.7       77.74          UL-RL  1.5402E+04  -7.300       0.000       1.000       1.000
67.57       0.000       0.000     Strato1_2_8_L_0
  39 D   13.97     -4.8013E-04  150.5       69.87       150.5       79.77          UL-RL  1.5402E+04  -7.500       0.000       1.000       1.000
69.87       0.000       0.000     Strato1_2_8_L_0
  40 D   14.43     -4.6585E-04  154.3       72.15       154.3       81.79          UL-RL  1.5402E+04  -7.700       0.000       1.000       1.000
72.15       0.000       0.000     Strato1_2_8_L_0
  41 D   10.51     -4.5212E-04  158.2       52.55       158.2       79.12          UL-RL  4.3571E+04  -7.900       0.000       1.000       1.000
52.55       0.000       0.000     Strato2_3095_82743_L_0
  42 D   11.04     -4.3895E-04  162.3       55.22       162.3       81.13          UL-RL  4.3571E+04  -8.100       0.000       1.000       1.000
55.22       0.000       0.000     Strato2_3095_82743_L_0
  43 D   11.56     -4.2635E-04  166.1       57.79       166.1       83.06          UL-RL  4.3571E+04  -8.300       0.000       1.000       1.000
57.79       0.000       0.000     Strato2_3095_82743_L_0
  44 D   12.08     -4.1431E-04  170.2       60.40       170.2       85.08          UL-RL  4.3571E+04  -8.500       0.000       1.000       1.000
60.40       0.000       0.000     Strato2_3095_82743_L_0
  45 D   12.59     -4.0280E-04  174.2       62.97       174.2       87.09          UL-RL  4.3571E+04  -8.700       0.000       1.000       1.000
62.97       0.000       0.000     Strato2_3095_82743_L_0
  46 D   13.10     -3.9182E-04  178.2       65.52       178.2       89.10          UL-RL  4.3571E+04  -8.900       0.000       1.000       1.000
65.52       0.000       0.000     Strato2_3095_82743_L_0
  47 D   13.61     -3.8132E-04  182.2       68.03       182.2       91.11          UL-RL  4.3571E+04  -9.100       0.000       1.000       1.000
68.03       0.000       0.000     Strato2_3095_82743_L_0
  48 D   14.10     -3.7128E-04  186.2       70.51       186.2       93.12          UL-RL  4.3571E+04  -9.300       0.000       1.000       1.000
70.51       0.000       0.000     Strato2_3095_82743_L_0
  49 D   14.59     -3.6166E-04  190.2       72.97       190.2       95.12          UL-RL  4.3571E+04  -9.500       0.000       1.000       1.000
72.97       0.000       0.000     Strato2_3095_82743_L_0
  50 D   15.08     -3.5241E-04  194.3       75.41       194.3       97.13          UL-RL  4.3571E+04  -9.700       0.000       1.000       1.000
75.41       0.000       0.000     Strato2_3095_82743_L_0
  51 D   15.55     -3.4351E-04  198.1       77.75       198.1       99.07          UL-RL  4.3571E+04  -9.900       0.000       1.000       1.000
77.75       0.000       0.000     Strato2_3095_82743_L_0
  52 D   16.03     -3.3490E-04  202.2       80.15       202.2       101.1          UL-RL  4.3571E+04  -10.10       0.000       1.000       1.000
80.15       0.000       0.000     Strato2_3095_82743_L_0
  53 D   16.51     -3.2655E-04  206.2       82.53       206.2       103.1          UL-RL  4.3571E+04  -10.30       0.000       1.000       1.000
82.53       0.000       0.000     Strato2_3095_82743_L_0
  54 D   16.98     -3.1841E-04  210.2       84.89       210.2       105.1          UL-RL  4.3571E+04  -10.50       0.000       1.000       1.000
84.89       0.000       0.000     Strato2_3095_82743_L_0
  55 D   17.45     -3.1044E-04  214.2       87.24       214.2       107.1          UL-RL  4.3571E+04  -10.70       0.000       1.000       1.000
87.24       0.000       0.000     Strato2_3095_82743_L_0
  56 D   17.92     -3.0260E-04  218.2       89.59       218.2       109.1          UL-RL  4.3571E+04  -10.90       0.000       1.000       1.000
89.59       0.000       0.000     Strato2_3095_82743_L_0
  57 D   18.39     -2.9487E-04  222.3       91.93       222.3       111.1          UL-RL  4.3571E+04  -11.10       0.000       1.000       1.000
91.93       0.000       0.000     Strato2_3095_82743_L_0
  58 D   18.84     -2.8720E-04  226.1       94.21       226.1       113.1          UL-RL  4.3571E+04  -11.30       0.000       1.000       1.000
94.21       0.000       0.000     Strato2_3095_82743_L_0
  59 D   19.31     -2.7958E-04  230.2       96.54       230.2       115.1          UL-RL  4.3571E+04  -11.50       0.000       1.000       1.000
96.54       0.000       0.000     Strato2_3095_82743_L_0
  60 D   19.77     -2.7199E-04  234.2       98.87       234.2       117.1          UL-RL  4.3571E+04  -11.70       0.000       1.000       1.000
98.87       0.000       0.000     Strato2_3095_82743_L_0
  61 D   15.18     -2.6440E-04  238.2       101.2       238.2       119.1          UL-RL  4.3571E+04  -11.90       0.000       1.000       1.000
101.2       0.000       0.000     Strato2_3095_82743_L_0
  62 D   5.117     -2.6061E-04  240.1       102.3       240.1       120.1          UL-RL  4.3571E+04  -12.00       0.000       1.000       1.000
102.3       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                  |
 |                                                                                                                               |
 |                                      NewProject.BaseDesignSection_28.A1M1R1_3484                                              |
 |                                   Exe Time :24 July 2019      11:09:27                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                          :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
 C U R R E N T   T I M E   I S      5.0000

  HARDENING 2D SOIL ELEMENT
```

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR
Peq	Su_a	Su_p	LAYER									
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000
0.000	0.000	0.000	not available									
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000
0.000	0.000	0.000	not available									
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
14	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									
15	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000
0.000	0.000	0.000	not available									
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000
0.000	0.000	0.000	not available									
17	0.000	--	--	--	--	--	REMOVED	--	-3.100	0.000	1.000	1.000
0.000	0.000	0.000	not available									
18	0.000	--	--	--	--	--	REMOVED	--	-3.300	0.000	1.000	1.000
0.000	0.000	0.000	not available									
19	0.000	--	--	--	--	--	REMOVED	--	-3.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									
20	0.000	--	--	--	--	--	REMOVED	--	-3.700	0.000	1.000	1.000
0.000	0.000	0.000	not available									
21	0.000	--	--	--	--	--	REMOVED	--	-3.900	0.000	1.000	1.000
0.000	0.000	0.000	not available									
22	0.000	--	--	--	--	--	REMOVED	--	-4.100	0.000	1.000	1.000
0.000	0.000	0.000	not available									
23	0.000	--	--	--	--	--	REMOVED	--	-4.300	0.000	1.000	1.000
0.000	0.000	0.000	not available									
24	0.000	--	--	--	--	--	REMOVED	--	-4.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									
25	0.000	--	--	--	--	--	REMOVED	--	-4.700	0.000	1.000	1.000
0.000	0.000	0.000	not available									
26	0.000	--	--	--	--	--	REMOVED	--	-4.900	0.000	1.000	1.000
0.000	0.000	0.000	not available									
27 D	2.150	6.6824E-04	2.660	10.75	96.90	55.38	PASSIVE	0.000	-5.100	0.000	1.000	1.000
10.75	0.000	0.000	Strato1_2_8_L_0									
28 D	5.221	6.5418E-04	6.460	26.10	100.7	57.06	PASSIVE	0.000	-5.300	0.000	1.000	1.000
26.10	0.000	0.000	Strato1_2_8_L_0									
29 D	8.292	6.3926E-04	10.26	41.46	104.5	58.75	PASSIVE	0.000	-5.500	0.000	1.000	1.000
41.46	0.000	0.000	Strato1_2_8_L_0									
30 D	11.36	6.2367E-04	14.06	56.82	108.3	60.47	PASSIVE	0.000	-5.700	0.000	1.000	1.000
56.82	0.000	0.000	Strato1_2_8_L_0									
31 D	12.45	6.0760E-04	17.86	62.25	112.1	62.25	V-C	3563.	-5.900	0.000	1.000	1.000
62.25	0.000	0.000	Strato1_2_8_L_0									
32 D	12.84	5.9123E-04	21.66	64.19	115.9	64.19	V-C	3563.	-6.100	0.000	1.000	1.000
64.19	0.000	0.000	Strato1_2_8_L_0									
33 D	13.23	5.7475E-04	25.46	66.13	119.7	66.13	V-C	3563.	-6.300	0.000	1.000	1.000
66.13	0.000	0.000	Strato1_2_8_L_0									
34 D	13.62	5.5829E-04	29.26	68.08	123.5	68.08	V-C	3563.	-6.500	0.000	1.000	1.000
68.08	0.000	0.000	Strato1_2_8_L_0									
35 D	14.00	5.4197E-04	33.06	70.02	127.3	70.02	V-C	3563.	-6.700	0.000	1.000	1.000
70.02	0.000	0.000	Strato1_2_8_L_0									
36 D	14.39	5.2592E-04	36.86	71.97	131.1	71.97	V-C	3563.	-6.900	0.000	1.000	1.000
71.97	0.000	0.000	Strato1_2_8_L_0									
37 D	14.78	5.1021E-04	40.66	73.91	134.9	73.91	V-C	3563.	-7.100	0.000	1.000	1.000
73.91	0.000	0.000	Strato1_2_8_L_0									
38 D	15.17	4.9493E-04	44.46	75.86	138.7	75.86	V-C	3563.	-7.300	0.000	1.000	1.000
75.86	0.000	0.000	Strato1_2_8_L_0									
39 D	15.56	4.8013E-04	48.26	77.82	142.5	77.82	V-C	3563.	-7.500	0.000	1.000	1.000
77.82	0.000	0.000	Strato1_2_8_L_0									

40 D	15.95	4.6585E-04	52.06	79.77	146.3	79.77	V-C	3563.	-7.700	0.000	1.000	1.000
79.77	0.000	0.000	Strato1_2_8_L_0									
41 D	11.63	4.5212E-04	55.96	58.17	150.2	76.14	UL-RL	2.3614E+04	-7.900	0.000	1.000	1.000
58.17	0.000	0.000	Strato2_3095_82743_L_0									
42 D	12.03	4.3895E-04	59.96	60.14	154.2	78.09	UL-RL	2.3614E+04	-8.100	0.000	1.000	1.000
60.14	0.000	0.000	Strato2_3095_82743_L_0									
43 D	12.42	4.2635E-04	63.96	62.11	158.2	80.04	UL-RL	2.3614E+04	-8.300	0.000	1.000	1.000
62.11	0.000	0.000	Strato2_3095_82743_L_0									
44 D	12.81	4.1431E-04	67.96	64.07	162.2	82.00	UL-RL	2.3614E+04	-8.500	0.000	1.000	1.000
64.07	0.000	0.000	Strato2_3095_82743_L_0									
45 D	13.21	4.0280E-04	71.96	66.03	166.2	83.96	UL-RL	2.3614E+04	-8.700	0.000	1.000	1.000
66.03	0.000	0.000	Strato2_3095_82743_L_0									
46 D	13.60	3.9182E-04	75.96	67.99	170.2	85.92	UL-RL	2.3614E+04	-8.900	0.000	1.000	1.000
67.99	0.000	0.000	Strato2_3095_82743_L_0									
47 D	13.99	3.8132E-04	79.96	69.95	174.2	87.88	UL-RL	2.3614E+04	-9.100	0.000	1.000	1.000
69.95	0.000	0.000	Strato2_3095_82743_L_0									
48 D	14.38	3.7128E-04	83.96	71.91	178.2	89.85	UL-RL	2.3614E+04	-9.300	0.000	1.000	1.000
71.91	0.000	0.000	Strato2_3095_82743_L_0									
49 D	14.77	3.6166E-04	87.96	73.87	182.2	91.82	UL-RL	2.3614E+04	-9.500	0.000	1.000	1.000
73.87	0.000	0.000	Strato2_3095_82743_L_0									
50 D	15.16	3.5241E-04	91.96	75.82	186.2	93.79	UL-RL	2.3614E+04	-9.700	0.000	1.000	1.000
75.82	0.000	0.000	Strato2_3095_82743_L_0									
51 D	15.56	3.4351E-04	95.96	77.78	190.2	95.76	UL-RL	2.3614E+04	-9.900	0.000	1.000	1.000
77.78	0.000	0.000	Strato2_3095_82743_L_0									
52 D	15.95	3.3490E-04	99.96	79.73	194.2	97.74	UL-RL	2.3614E+04	-10.10	0.000	1.000	1.000
79.73	0.000	0.000	Strato2_3095_82743_L_0									
53 D	16.34	3.2655E-04	104.0	81.68	198.2	99.72	UL-RL	2.3614E+04	-10.30	0.000	1.000	1.000
81.68	0.000	0.000	Strato2_3095_82743_L_0									
54 D	16.73	3.1841E-04	108.0	83.64	202.2	101.7	UL-RL	2.3614E+04	-10.50	0.000	1.000	1.000
83.64	0.000	0.000	Strato2_3095_82743_L_0									
55 D	17.12	3.1044E-04	112.0	85.58	206.2	103.7	UL-RL	2.3614E+04	-10.70	0.000	1.000	1.000
85.58	0.000	0.000	Strato2_3095_82743_L_0									
56 D	17.51	3.0260E-04	116.0	87.53	210.2	105.7	UL-RL	2.3614E+04	-10.90	0.000	1.000	1.000
87.53	0.000	0.000	Strato2_3095_82743_L_0									
57 D	17.89	2.9487E-04	120.0	89.47	214.2	107.6	UL-RL	2.3614E+04	-11.10	0.000	1.000	1.000
89.47	0.000	0.000	Strato2_3095_82743_L_0									
58 D	18.28	2.8720E-04	124.0	91.41	218.2	109.6	UL-RL	2.3614E+04	-11.30	0.000	1.000	1.000
91.41	0.000	0.000	Strato2_3095_82743_L_0									
59 D	18.67	2.7958E-04	128.0	93.35	222.2	111.6	UL-RL	2.3614E+04	-11.50	0.000	1.000	1.000
93.35	0.000	0.000	Strato2_3095_82743_L_0									
60 D	19.06	2.7199E-04	132.0	95.28	226.2	113.6	UL-RL	2.3614E+04	-11.70	0.000	1.000	1.000
95.28	0.000	0.000	Strato2_3095_82743_L_0									
61 D	14.58	2.6440E-04	136.0	97.21	230.2	115.6	UL-RL	2.3614E+04	-11.90	0.000	1.000	1.000
97.21	0.000	0.000	Strato2_3095_82743_L_0									
62 D	4.909	2.6061E-04	138.0	98.18	232.2	116.6	UL-RL	2.3614E+04	-12.00	0.000	1.000	1.000
98.18	0.000	0.000	Strato2_3095_82743_L_0									

```
+-------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*           |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                    |
|                                 Exe Time :24 July 2019      11:09:27                                              |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
C U R R E N T   T I M E   I S      5.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-------------------------------------------------------
    1  1.8372     -1.8372    -2.13580E-11 0.36745
    2  5.2253     -5.2253    -0.36745      1.4125
    3  8.9169     -8.9169     -1.4125      3.1959
    4  12.851     -12.851     -3.1959      5.7661
    5  17.008     -17.008     -5.7661      9.1677
    6  21.380     -21.380     -9.1677      13.444
    7  25.960     -25.960     -13.444      18.636
    8  30.747     -30.747     -18.636      24.785
    9  35.667     -35.667     -24.785      31.919
   10  40.797     -40.797     -31.919      40.078
   11  46.132     -46.132     -40.078      49.304
   12  51.669     -51.669     -49.304      59.638
   13  55.971     -55.971     -59.638      65.235
   14 -73.517      73.517     -65.235      50.532
   15 -67.509      67.509     -50.532      37.030
   16 -61.307      61.307     -37.030      24.769
```

17	-54.909	54.909	-24.769	13.787
18	-48.313	48.313	-13.787	4.1244
19	-41.515	41.515	-4.1244	-4.1786
20	-34.509	34.509	4.1786	-11.080
21	-27.318	27.318	11.080	-16.544
22	-19.901	19.901	16.544	-20.524
23	-12.525	12.525	20.524	-23.029
24	-5.2320	5.2320	23.029	-24.076
25	2.2768	-2.2768	24.076	-23.620
26	10.248	-10.248	23.620	-21.571
27	16.532	-16.532	21.571	-18.264
28	20.184	-20.184	18.264	-14.228
29	21.233	-21.233	14.228	-9.9810
30	19.678	-19.678	9.9810	-6.0454
31	17.492	-17.492	6.0454	-2.5470
32	15.399	-15.399	2.5470	0.53286
33	13.385	-13.385	-0.53286	3.2099
34	11.450	-11.450	-3.2099	5.4999
35	9.5912	-9.5912	-5.4999	7.4182
36	7.7876	-7.7876	-7.4182	8.9757
37	6.0577	-6.0577	-8.9757	10.187
38	4.3991	-4.3991	-10.187	11.067
39	2.8093	-2.8093	-11.067	11.629
40	1.2856	-1.2856	-11.629	11.886
41	0.16084	-0.16084	-11.886	11.918
42	-0.82295	0.82295	-11.918	11.754
43	-1.6874	1.6874	-11.754	11.416
44	-2.4225	2.4225	-11.416	10.932
45	-3.0345	3.0345	-10.932	10.325
46	-3.5296	3.5296	-10.325	9.6188
47	-3.9138	3.9138	-9.6188	8.8361
48	-4.1928	4.1928	-8.8361	7.9975
49	-4.3716	4.3716	-7.9975	7.1232
50	-4.4549	4.4549	-7.1232	6.2322
51	-4.4601	4.4601	-6.2322	5.3402
52	-4.3772	4.3772	-5.3402	4.4648
53	-4.2090	4.2090	-4.4648	3.6230
54	-3.9579	3.9579	-3.6230	2.8314
55	-3.6255	3.6255	-2.8314	2.1063
56	-3.2131	3.2131	-2.1063	1.4637
57	-2.7214	2.7214	-1.4637	0.91941
58	-2.1624	2.1624	-0.91941	0.48693
59	-1.5242	1.5242	-0.48693	0.18210
60	-0.80642	0.80642	-0.18210	2.08134E-02
61	-0.20811	0.20811	-2.08134E-02	1.23295E-11

```
+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                    |
|                                 Exe Time :24 July 2019      11:09:27                                              |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_778405                 :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S      5.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------
ANCHOR    1   138.57     -1.28419E-03 -8.21086E-04   0.0000       4682.3       0.0000       0.0000     ELASTIC  ORIGINAL YOUNG MODULUS



+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.A1M1R1_3484                                    |
|                                 Exe Time :24 July 2019      11:09:27                                              |
+-------------------------------------------------------------------------------------------------------------------+


    F I N A L   I N C R E M E N T A L   A N A L Y S I S

                  S U M M A R Y

    STEP                                NO. OF ITERATIONS
```

```
        1           CONVERGENCE :YES                    2
        2           CONVERGENCE :YES                    3
        3           CONVERGENCE :YES                    5
        4           CONVERGENCE :YES                    4
        5           CONVERGENCE :YES                    3


 END OF PROCESS FOR PROBLEM
New Project
NONLINEAR SOLUTION CPU TIME ....    0.05 [sec]
DATABASE  CREATION CPU TIME.....    0.21 [sec]
```

2.7. Design Assumption : A2+M2+R1 - File di Paratie - File di input (.d)

```
* PARATIE ANALYSIS FOR DESIGN SECTION:Base Design Section USING ASSUMPTION: A2+M2+R1
 * Time:mercoledì 24 luglio 2019 11:09:28
 * 1: Defining general settings
 UNIT  m kN
 TITLE New Project
 DELTA 0.2
 option param itemax 100
 option control hinges 0 0.0001 0.001

 * 2: Defining wall(s)
 WALL LeftWall_32 0 -12 0 1

 * 3: Defining surfaces for wall(s)
 SOIL 0_L LeftWall_32 -12 0 1 0
 SOIL 0_R LeftWall_32 -12 0 2 180

 * 4: Defining soil layers
 *
 * Soil Profile (Strato1_2_8_L_0)
 *
 LDATA Strato1_2_8_L_0 0 LeftWall_32
 ATREST 0.53 1 1
 WEIGHT 19 9 10
 PERMEABILITY 1E-06
 RESISTANCE 0 29
 YOUNG 2E+04 6E+04
 ENDL
 *
 * Soil Profile (Strato2_3095_82743_L_0)
 *
 LDATA Strato2_3095_82743_L_0 -7.8 LeftWall_32
 ATREST 0.5 0.5 1
 WEIGHT 20 10 10
 PERMEABILITY 0.0001
 RESISTANCE 20 35
 YOUNG 5E+04 1.5E+05
 ENDL

 * 5: Defining structural materials
 * Steel material: 108 Name=Fe360 E=206000200 kPa
 MATERIAL Fe360_108 2.06E+08
 * Concrete material: 104 Name=C25/30 E=31475800 kPa
 MATERIAL C2530_104 3.148E+07
 * Rebar material: 124 Name=acciaio armonico E=200100000 kPa
 MATERIAL acciaioarmonico_124 2.001E+08
 * Concrete material: 103 Name=C20/25 E=29962000 kPa
 MATERIAL C2025_103 2.996E+07

 * 6: Defining structural elements
 * 6.1: Beams and combined Wall Elements
 BEAM WallElement_33 LeftWall_32 -12 0 C2530_104 0.6848 00 00 0


 * 6.2: Supports
 WIRE Tieback_778405 LeftWall_32 -2.5 acciaioarmonico_124 2.34E-05 136.4 15 0 0




 * 6.3: Strips
 STRIP LeftWall_32 2 5 0 40 0 13 30

 * 7: Defining Steps
 STEP Stage0_31
 CHANGE Strato1_2_8_L_0 U-FRICT=23.91 LeftWall_32
```

```
CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
CHANGE Strato1_2_8_L_0 U-KA=0.375 LeftWall_32
CHANGE Strato1_2_8_L_0 U-KP=3.038 LeftWall_32
CHANGE Strato1_2_8_L_0 D-KA=0.375 LeftWall_32
CHANGE Strato1_2_8_L_0 D-KP=3.038 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-FRICT=29.26 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-KA=0.3 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-KP=4.102 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-KA=0.3 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-KP=4.102 LeftWall_32
CHANGE Strato1_2_8_L_0 U-COHE=0 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 U-COHE=16 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -26 0 -12 0 0
ADD WallElement_33
ENDSTEP

STEP Stage1_759103
CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -26 0 -12 0 0
ENDSTEP

STEP Stage3_775251
CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -3
WATER -26 0 -12 0 0
ENDSTEP

STEP Stage4_775610
CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -3
WATER -26 0 -12 0 0
ADD Tieback_778405
ENDSTEP

STEP Stage5_714
CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -4.96
WATER -26 0 -12 0 0
ENDSTEP
```

2.8. Design Assumption : A2+M2+R1 - File di Paratie - File di output (.out)

```
+-------------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                         |
|                                  Exe Time :24 July 2019      11:09:28                                                   |
+-------------------------------------------------------------------------------------------------------------------------+

                  ***********************************************************
                  *                                                         *
                  *  PARATIE PLUS Non-Linear Spring Engine                  *
                  *                                                         *
                  *          AN ELASTOPLASTIC FINITE ELEMENT PROGRAM        *
                  *          FOR FLEXIBLE EARTH-RETAINING STRUCTURES        *
                  *                                                         *
                  *          Written by Ce.A.S. s.r.l. (ITALY)              *
                  *          with the scientific supervision of             *
                  *          Roberto Nova - full professor SOIL MECHANICS   *
```

```
*          at Politecnico di Milano (ITALY)             *
*                                                       *
*********************************************************
*                                                       *
*  RELEASE   2017.1     *Build date:Jul 11, 2017*    *
*                                                       *
*                                                       *
*  Ce.A.S.     S.R.L   CENTRO DI ANALISI STRUTTURALE     *
*              VIALE   GIUSTINIANO 10                   *
*              20129   M I L A N O  (ITALIA)            *
*  TEL.        +39 02 2020221   (+39 035 23 67 19)      *
*  FAX         +39 02 29512533  (+39 035 42285 49)      *
*  email       bruno.becci@ceas.it                      *
*  Web Page    www.ceas.it                              *
*********************************************************



 JOB : NewProject.BaseDesignSection_28.A2M2R1_3514
 STARTING
ACCEPTED   <FILE,GENW                                                    >
ACCEPTED   <FILE,PLOTTER,BINARY                                          >
ACCEPTED   <SOLVE TOTAL_STRESS                                           >
ACCEPTED   <PARAM ITEMAX 100                                             >
ACCEPTED   <CONTROL HINGES 0 0.0001 0.001                                >



                *********************************************************
                *                                                       *
                *  WARNING : PORE PRESSURES ARE AUTOMATICALLY COMPUTED  *
                *    BY THE PROGRAM.                                    *
                *********************************************************

PRELIMINARY OPERATIONS CPU TIME     0.01 [sec]



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                        |
|                                  Exe Time :24 July 2019      11:09:28                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


INPUT FILE HAS BEEN GENERATED BY WALGEN PROGRAM


New Project


NO. OF NODAL POINTS (NUMNP) ...................   62
NO. OF COORDINATES  (NCOORD)...................    2
NO. OF NODE DOFS    (NDOF).....................    2
NO. OF EQUATIONS    (NEQ)...................... 124
NO. OF CONSTRAINTS CARDS (NVINC)...............    0
NO. OF ELEMENT GROUPS (NEG)....................    4
NO. OF SOLUTION STEPS (NSTE)...................    5
NO. OF ELEMENT SETS ATTACHED TO SLAVE NODES ...    0
NO. OF RECORD FROM WALGEN .....................   88
NO. OF LONG NAMES (LASTNAME) ..................   21
LENGTH UNIT CHOICE ............................    3 (M   )
FORCE  UNIT CHOICE ............................    3 (KN  )
MAX PORE PRESSURE TABLE LENGTH.................    1
NO. OF ELEMENT GROUPS REQUIRING ADD. SLIP DOF .    0


IDOFA (01) =  2  Y-DISPL.F
IDOFA (02) =  4   X-ROT. F

 RELEVANT ITEMS UNITS

 STRESSES                  kPa
 Y-DISPLACEMENTS           m
 ROTATIONS                 RADIANS
 BEAM AND SLAB MOMENTS     kN*m/m
 BEAM SHEAR FORCES         kN/m
 ANCHOR FORCES             kN/m
 AXIAL FORCES IN TRUSSES   kN/m
 AXIAL FORCES SPRINGS      kN/m
 Y-REACTIONS               kN/m
 X-MOMENT REACTIONS        kN*m/m
```

ETC.

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                          |
|                                 Exe Time :24 July 2019      11:09:28                                                    |
+-------------------------------------------------------------------------------------------------------------------------+
                   P R E P R O C E S S O R     D A T A

                   N O.  O F   C O M M A N D S     88

    1 : UNIT  m kN
    2 : TITLE New Project
    3 : DELTA 0.2
    4 : option param itemax 100
    5 : option control hinges 0 0.0001 0.001
    6 : WALL LeftWall_32 0 -12 0 1
    7 : SOIL 0_L LeftWall_32 -12 0 1 0
    8 : SOIL 0_R LeftWall_32 -12 0 2 180
    9 : LDATA Strato1_2_8_L_0 0 LeftWall_32
   10 : ATREST 0.53 1 1
   11 : WEIGHT 19 9 10
   12 : PERMEABILITY 1E-06
   13 : RESISTANCE 0 29
   14 : YOUNG 2E+04 6E+04
   15 : ENDL
   16 : LDATA Strato2_3095_82743_L_0 -7.8 LeftWall_32
   17 : ATREST 0.5 0.5 1
   18 : WEIGHT 20 10 10
   19 : PERMEABILITY 0.0001
   20 : RESISTANCE 20 35
   21 : YOUNG 5E+04 1.5E+05
   22 : ENDL
   23 : MATERIAL Fe360_108 2.06E+08
   24 : MATERIAL C2530_104 3.148E+07
   25 : MATERIAL acciaioarmonico_124 2.001E+08
   26 : MATERIAL C2025_103 2.996E+07
   27 : BEAM WallElement_33 LeftWall_32 -12 0 C2530_104 0.6848 00 00 0
   28 : WIRE Tieback_778405 LeftWall_32 -2.5 acciaioarmonico_124 2.34E-05 136.4 15 0 0
   29 : STRIP LeftWall_32 2 5 0 40 0 13 30
   30 : STEP Stage0_31
   31 : CHANGE Strato1_2_8_L_0 U-FRICT=23.91 LeftWall_32
   32 : CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
   33 : CHANGE Strato1_2_8_L_0 U-KA=0.375 LeftWall_32
   34 : CHANGE Strato1_2_8_L_0 U-KP=3.038 LeftWall_32
   35 : CHANGE Strato1_2_8_L_0 D-KA=0.375 LeftWall_32
   36 : CHANGE Strato1_2_8_L_0 D-KP=3.038 LeftWall_32
   37 : CHANGE Strato2_3095_82743_L_0 U-FRICT=29.26 LeftWall_32
   38 : CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
   39 : CHANGE Strato2_3095_82743_L_0 U-KA=0.3 LeftWall_32
   40 : CHANGE Strato2_3095_82743_L_0 U-KP=4.102 LeftWall_32
   41 : CHANGE Strato2_3095_82743_L_0 D-KA=0.3 LeftWall_32
   42 : CHANGE Strato2_3095_82743_L_0 D-KP=4.102 LeftWall_32
   43 : CHANGE Strato1_2_8_L_0 U-COHE=0 LeftWall_32
   44 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
   45 : CHANGE Strato2_3095_82743_L_0 U-COHE=16 LeftWall_32
   46 : CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
   47 : SETWALL LeftWall_32
   48 : GEOM 0 0
   49 : WATER -26 0 -12 0 0
   50 : ADD WallElement_33
   51 : ENDSTEP
   52 : STEP Stage1_759103
   53 : CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
   54 : CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
   55 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
   56 : CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
   57 : SETWALL LeftWall_32
   58 : GEOM 0 0
   59 : WATER -26 0 -12 0 0
   60 : ENDSTEP
   61 : STEP Stage3_775251
   62 : CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
   63 : CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
   64 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
   65 : CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
   66 : SETWALL LeftWall_32
   67 : GEOM 0 -3
   68 : WATER -26 0 -12 0 0
   69 : ENDSTEP
   70 : STEP Stage4_775610
```

```
   71 : CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
   72 : CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
   73 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
   74 : CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
   75 : SETWALL LeftWall_32
   76 : GEOM 0 -3
   77 : WATER -26 0 -12 0 0
   78 : ADD Tieback_778405
   79 : ENDSTEP
   80 : STEP Stage5_714
   81 : CHANGE Strato1_2_8_L_0 D-FRICT=23.91 LeftWall_32
   82 : CHANGE Strato2_3095_82743_L_0 D-FRICT=29.26 LeftWall_32
   83 : CHANGE Strato1_2_8_L_0 D-COHE=0 LeftWall_32
   84 : CHANGE Strato2_3095_82743_L_0 D-COHE=16 LeftWall_32
   85 : SETWALL LeftWall_32
   86 : GEOM 0 -4.96
   87 : WATER -26 0 -12 0 0
   88 : ENDSTEP



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                       |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                       |
|                                  Exe Time :24 July 2019      11:09:28                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
N O D A L    P O I N T    D A T A
--------------------------------

NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD /

   1  0.0000      0.0000     /    2  0.0000    -0.20000     /    3  0.0000    -0.40000     /    4  0.0000    -0.60000     /
   5  0.0000    -0.80000     /    6  0.0000     -1.0000     /    7  0.0000     -1.2000     /    8  0.0000     -1.4000     /
   9  0.0000     -1.6000     /   10  0.0000     -1.8000     /   11  0.0000     -2.0000     /   12  0.0000     -2.2000     /
  13  0.0000     -2.4000     /   14  0.0000     -2.5000     /   15  0.0000     -2.7000     /   16  0.0000     -2.9000     /
  17  0.0000     -3.1000     /   18  0.0000     -3.3000     /   19  0.0000     -3.5000     /   20  0.0000     -3.7000     /
  21  0.0000     -3.9000     /   22  0.0000     -4.1000     /   23  0.0000     -4.3000     /   24  0.0000     -4.5000     /
  25  0.0000     -4.7000     /   26  0.0000     -4.9000     /   27  0.0000     -5.1000     /   28  0.0000     -5.3000     /
  29  0.0000     -5.5000     /   30  0.0000     -5.7000     /   31  0.0000     -5.9000     /   32  0.0000     -6.1000     /
  33  0.0000     -6.3000     /   34  0.0000     -6.5000     /   35  0.0000     -6.7000     /   36  0.0000     -6.9000     /
  37  0.0000     -7.1000     /   38  0.0000     -7.3000     /   39  0.0000     -7.5000     /   40  0.0000     -7.7000     /
  41  0.0000     -7.9000     /   42  0.0000     -8.1000     /   43  0.0000     -8.3000     /   44  0.0000     -8.5000     /
  45  0.0000     -8.7000     /   46  0.0000     -8.9000     /   47  0.0000     -9.1000     /   48  0.0000     -9.3000     /
  49  0.0000     -9.5000     /   50  0.0000     -9.7000     /   51  0.0000     -9.9000     /   52  0.0000     -10.100     /
  53  0.0000     -10.300     /   54  0.0000     -10.500     /   55  0.0000     -10.700     /   56  0.0000     -10.900     /
  57  0.0000     -11.100     /   58  0.0000     -11.300     /   59  0.0000     -11.500     /   60  0.0000     -11.700     /
  61  0.0000     -11.900     /   62  0.0000     -12.000     /



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                       |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                       |
|                                  Exe Time :24 July 2019      11:09:28                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  1

0_L                              :
   5  62   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
.........2D PLASTIC SOIL ..........
.....................................

element group behaviour throughout stage analysis

stage   status
------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              0.00000
```

prop(2) layer as foreseen 2.00000

element data

el	n	mat	area	.....	.....	.....	flag
1	1	1	0.1000	0.000	0.000	0.000	1.000
2	2	1	0.2000	0.000	0.000	0.000	1.000
3	3	1	0.2000	0.000	0.000	0.000	1.000
4	4	1	0.2000	0.000	0.000	0.000	1.000
5	5	1	0.2000	0.000	0.000	0.000	1.000
6	6	1	0.2000	0.000	0.000	0.000	1.000
7	7	1	0.2000	0.000	0.000	0.000	1.000
8	8	1	0.2000	0.000	0.000	0.000	1.000
9	9	1	0.2000	0.000	0.000	0.000	1.000
10	10	1	0.2000	0.000	0.000	0.000	1.000
11	11	1	0.2000	0.000	0.000	0.000	1.000
12	12	1	0.2000	0.000	0.000	0.000	1.000
13	13	1	0.1500	0.000	0.000	0.000	1.000
14	14	1	0.1500	0.000	0.000	0.000	1.000
15	15	1	0.2000	0.000	0.000	0.000	1.000
16	16	1	0.2000	0.000	0.000	0.000	1.000
17	17	1	0.2000	0.000	0.000	0.000	1.000
18	18	1	0.2000	0.000	0.000	0.000	1.000
19	19	1	0.2000	0.000	0.000	0.000	1.000
20	20	1	0.2000	0.000	0.000	0.000	1.000
21	21	1	0.2000	0.000	0.000	0.000	1.000
22	22	1	0.2000	0.000	0.000	0.000	1.000
23	23	1	0.2000	0.000	0.000	0.000	1.000
24	24	1	0.2000	0.000	0.000	0.000	1.000
25	25	1	0.2000	0.000	0.000	0.000	1.000
26	26	1	0.2000	0.000	0.000	0.000	1.000
27	27	1	0.2000	0.000	0.000	0.000	1.000
28	28	1	0.2000	0.000	0.000	0.000	1.000
29	29	1	0.2000	0.000	0.000	0.000	1.000
30	30	1	0.2000	0.000	0.000	0.000	1.000
31	31	1	0.2000	0.000	0.000	0.000	1.000
32	32	1	0.2000	0.000	0.000	0.000	1.000
33	33	1	0.2000	0.000	0.000	0.000	1.000
34	34	1	0.2000	0.000	0.000	0.000	1.000
35	35	1	0.2000	0.000	0.000	0.000	1.000
36	36	1	0.2000	0.000	0.000	0.000	1.000
37	37	1	0.2000	0.000	0.000	0.000	1.000
38	38	1	0.2000	0.000	0.000	0.000	1.000
39	39	1	0.2000	0.000	0.000	0.000	1.000
40	40	1	0.2000	0.000	0.000	0.000	1.000
41	41	2	0.2000	0.000	0.000	0.000	1.000
42	42	2	0.2000	0.000	0.000	0.000	1.000
43	43	2	0.2000	0.000	0.000	0.000	1.000
44	44	2	0.2000	0.000	0.000	0.000	1.000
45	45	2	0.2000	0.000	0.000	0.000	1.000
46	46	2	0.2000	0.000	0.000	0.000	1.000
47	47	2	0.2000	0.000	0.000	0.000	1.000
48	48	2	0.2000	0.000	0.000	0.000	1.000
49	49	2	0.2000	0.000	0.000	0.000	1.000
50	50	2	0.2000	0.000	0.000	0.000	1.000
51	51	2	0.2000	0.000	0.000	0.000	1.000
52	52	2	0.2000	0.000	0.000	0.000	1.000
53	53	2	0.2000	0.000	0.000	0.000	1.000
54	54	2	0.2000	0.000	0.000	0.000	1.000
55	55	2	0.2000	0.000	0.000	0.000	1.000
56	56	2	0.2000	0.000	0.000	0.000	1.000
57	57	2	0.2000	0.000	0.000	0.000	1.000
58	58	2	0.2000	0.000	0.000	0.000	1.000
59	59	2	0.2000	0.000	0.000	0.000	1.000
60	60	2	0.2000	0.000	0.000	0.000	1.000
61	61	2	0.1500	0.000	0.000	0.000	1.000
62	62	2	0.5000E-01	0.000	0.000	0.000	1.000

+---+
| PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017* |
| |
| NewProject.BaseDesignSection_28.A2M2R1_3514 |
| Exe Time :24 July 2019 11:09:28 |
+---+

ELEMENT GROUP NO. 2

0_R :
5 62 0 1 0 0 0 0 0 0 0 0 0 0 2 0 0 0 0
.....

.....2D PLASTIC SOIL .....
.....

element group behaviour throughout stage analysis

stage	status
1	active
2	active
3	active
4	active
5	active

material set no. 1

prop(1) angle 180.000
prop(2) layer as foreseen 1.00000

material set no. 2

prop(1) angle 180.000
prop(2) layer as foreseen 2.00000

element data

el	n	mat	area	.....	.....	.....	flag
1	1	1	0.1000	0.000	0.000	0.000	2.000
2	2	1	0.2000	0.000	0.000	0.000	2.000
3	3	1	0.2000	0.000	0.000	0.000	2.000
4	4	1	0.2000	0.000	0.000	0.000	2.000
5	5	1	0.2000	0.000	0.000	0.000	2.000
6	6	1	0.2000	0.000	0.000	0.000	2.000
7	7	1	0.2000	0.000	0.000	0.000	2.000
8	8	1	0.2000	0.000	0.000	0.000	2.000
9	9	1	0.2000	0.000	0.000	0.000	2.000
10	10	1	0.2000	0.000	0.000	0.000	2.000
11	11	1	0.2000	0.000	0.000	0.000	2.000
12	12	1	0.2000	0.000	0.000	0.000	2.000
13	13	1	0.1500	0.000	0.000	0.000	2.000
14	14	1	0.1500	0.000	0.000	0.000	2.000
15	15	1	0.2000	0.000	0.000	0.000	2.000
16	16	1	0.2000	0.000	0.000	0.000	2.000
17	17	1	0.2000	0.000	0.000	0.000	2.000
18	18	1	0.2000	0.000	0.000	0.000	2.000
19	19	1	0.2000	0.000	0.000	0.000	2.000
20	20	1	0.2000	0.000	0.000	0.000	2.000
21	21	1	0.2000	0.000	0.000	0.000	2.000
22	22	1	0.2000	0.000	0.000	0.000	2.000
23	23	1	0.2000	0.000	0.000	0.000	2.000
24	24	1	0.2000	0.000	0.000	0.000	2.000
25	25	1	0.2000	0.000	0.000	0.000	2.000
26	26	1	0.2000	0.000	0.000	0.000	2.000
27	27	1	0.2000	0.000	0.000	0.000	2.000
28	28	1	0.2000	0.000	0.000	0.000	2.000
29	29	1	0.2000	0.000	0.000	0.000	2.000
30	30	1	0.2000	0.000	0.000	0.000	2.000
31	31	1	0.2000	0.000	0.000	0.000	2.000
32	32	1	0.2000	0.000	0.000	0.000	2.000
33	33	1	0.2000	0.000	0.000	0.000	2.000
34	34	1	0.2000	0.000	0.000	0.000	2.000
35	35	1	0.2000	0.000	0.000	0.000	2.000
36	36	1	0.2000	0.000	0.000	0.000	2.000
37	37	1	0.2000	0.000	0.000	0.000	2.000
38	38	1	0.2000	0.000	0.000	0.000	2.000
39	39	1	0.2000	0.000	0.000	0.000	2.000
40	40	1	0.2000	0.000	0.000	0.000	2.000
41	41	2	0.2000	0.000	0.000	0.000	2.000
42	42	2	0.2000	0.000	0.000	0.000	2.000
43	43	2	0.2000	0.000	0.000	0.000	2.000
44	44	2	0.2000	0.000	0.000	0.000	2.000
45	45	2	0.2000	0.000	0.000	0.000	2.000
46	46	2	0.2000	0.000	0.000	0.000	2.000
47	47	2	0.2000	0.000	0.000	0.000	2.000
48	48	2	0.2000	0.000	0.000	0.000	2.000
49	49	2	0.2000	0.000	0.000	0.000	2.000
50	50	2	0.2000	0.000	0.000	0.000	2.000
51	51	2	0.2000	0.000	0.000	0.000	2.000
52	52	2	0.2000	0.000	0.000	0.000	2.000
53	53	2	0.2000	0.000	0.000	0.000	2.000
54	54	2	0.2000	0.000	0.000	0.000	2.000
55	55	2	0.2000	0.000	0.000	0.000	2.000

56	56	2	0.2000	0.000	0.000	0.000	2.000
57	57	2	0.2000	0.000	0.000	0.000	2.000
58	58	2	0.2000	0.000	0.000	0.000	2.000
59	59	2	0.2000	0.000	0.000	0.000	2.000
60	60	2	0.2000	0.000	0.000	0.000	2.000
61	61	2	0.1500	0.000	0.000	0.000	2.000
62	62	2	0.5000E-01	0.000	0.000	0.000	2.000

```
+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                        |
|                                  Exe Time :24 July 2019      11:09:28                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  3

WallElement_33                  :
   2  61   0   1   0   0   0   0   0   0   0   0   0   0   1   0   0   1   0
.....................................
.........2D WALL ELEMENT...........
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active
    4   active
    5   active

 material set no.    1

 prop( 1) young modulus      0.314800E+08
 prop( 2) modification  time  0.00000
 prop( 3) new young modulus   0.00000
 prop( 4) poisson ratio       0.00000
 prop( 5) future ............0.252200E-43

 no. of step variable items:     1
 step  inertia multipier
--------------------------
    1   1.000
    2   1.000
    3   1.000
    4   1.000
    5   1.000

 element data
```

el	na	nb	mat	erc1	erc2	thick	by-i	by-j
1	1	2	1	0.000	0.000	0.6848	0.000	0.000
2	2	3	1	0.000	0.000	0.6848	0.000	0.000
3	3	4	1	0.000	0.000	0.6848	0.000	0.000
4	4	5	1	0.000	0.000	0.6848	0.000	0.000
5	5	6	1	0.000	0.000	0.6848	0.000	0.000
6	6	7	1	0.000	0.000	0.6848	0.000	0.000
7	7	8	1	0.000	0.000	0.6848	0.000	0.000
8	8	9	1	0.000	0.000	0.6848	0.000	0.000
9	9	10	1	0.000	0.000	0.6848	0.000	0.000
10	10	11	1	0.000	0.000	0.6848	0.000	0.000
11	11	12	1	0.000	0.000	0.6848	0.000	0.000
12	12	13	1	0.000	0.000	0.6848	0.000	0.000
13	13	14	1	0.000	0.000	0.6848	0.000	0.000
14	14	15	1	0.000	0.000	0.6848	0.000	0.000
15	15	16	1	0.000	0.000	0.6848	0.000	0.000
16	16	17	1	0.000	0.000	0.6848	0.000	0.000
17	17	18	1	0.000	0.000	0.6848	0.000	0.000
18	18	19	1	0.000	0.000	0.6848	0.000	0.000
19	19	20	1	0.000	0.000	0.6848	0.000	0.000
20	20	21	1	0.000	0.000	0.6848	0.000	0.000
21	21	22	1	0.000	0.000	0.6848	0.000	0.000
22	22	23	1	0.000	0.000	0.6848	0.000	0.000
23	23	24	1	0.000	0.000	0.6848	0.000	0.000
24	24	25	1	0.000	0.000	0.6848	0.000	0.000
25	25	26	1	0.000	0.000	0.6848	0.000	0.000
26	26	27	1	0.000	0.000	0.6848	0.000	0.000
27	27	28	1	0.000	0.000	0.6848	0.000	0.000
28	28	29	1	0.000	0.000	0.6848	0.000	0.000

29	29	30	1	0.000	0.000	0.6848	0.000	0.000
30	30	31	1	0.000	0.000	0.6848	0.000	0.000
31	31	32	1	0.000	0.000	0.6848	0.000	0.000
32	32	33	1	0.000	0.000	0.6848	0.000	0.000
33	33	34	1	0.000	0.000	0.6848	0.000	0.000
34	34	35	1	0.000	0.000	0.6848	0.000	0.000
35	35	36	1	0.000	0.000	0.6848	0.000	0.000
36	36	37	1	0.000	0.000	0.6848	0.000	0.000
37	37	38	1	0.000	0.000	0.6848	0.000	0.000
38	38	39	1	0.000	0.000	0.6848	0.000	0.000
39	39	40	1	0.000	0.000	0.6848	0.000	0.000
40	40	41	1	0.000	0.000	0.6848	0.000	0.000
41	41	42	1	0.000	0.000	0.6848	0.000	0.000
42	42	43	1	0.000	0.000	0.6848	0.000	0.000
43	43	44	1	0.000	0.000	0.6848	0.000	0.000
44	44	45	1	0.000	0.000	0.6848	0.000	0.000
45	45	46	1	0.000	0.000	0.6848	0.000	0.000
46	46	47	1	0.000	0.000	0.6848	0.000	0.000
47	47	48	1	0.000	0.000	0.6848	0.000	0.000
48	48	49	1	0.000	0.000	0.6848	0.000	0.000
49	49	50	1	0.000	0.000	0.6848	0.000	0.000
50	50	51	1	0.000	0.000	0.6848	0.000	0.000
51	51	52	1	0.000	0.000	0.6848	0.000	0.000
52	52	53	1	0.000	0.000	0.6848	0.000	0.000
53	53	54	1	0.000	0.000	0.6848	0.000	0.000
54	54	55	1	0.000	0.000	0.6848	0.000	0.000
55	55	56	1	0.000	0.000	0.6848	0.000	0.000
56	56	57	1	0.000	0.000	0.6848	0.000	0.000
57	57	58	1	0.000	0.000	0.6848	0.000	0.000
58	58	59	1	0.000	0.000	0.6848	0.000	0.000
59	59	60	1	0.000	0.000	0.6848	0.000	0.000
60	60	61	1	0.000	0.000	0.6848	0.000	0.000
61	61	62	1	0.000	0.000	0.6848	0.000	0.000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                        |
|                                   Exe Time :24 July 2019      11:09:28                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  4

Tieback_778405                  :
   6   1   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   2   0
.....................................
.........2D POST-TENSION ANCHOR....
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1  inactive
    2  inactive
    3  inactive
    4   active
    5   active

 material set no.    1

 prop( 1) angle          15.0000
 prop( 2) young modulus 0.200100E+09
 prop( 3) modification  time  0.00000
 prop( 4) new young modulus   0.00000

 no. of step variable items:     2
 step   -ve lim     +ve lim
-----------------------------
    1   0.000       0.000
    2   0.000       0.000
    3   0.000       0.000
    4   0.000       0.000
    5   0.000       0.000

 element data

   el    n  mat       a/l     pinit    yieldc    yieldt
-----------------------------------------------------------

    1   14    1   0.2340E-04 136.4     0.000     0.000
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                          |
|                                 Exe Time :24 July 2019      11:09:28                                                    |
+-------------------------------------------------------------------------------------------------------------------------+


NO. OF NODAL LOADS  (NLOAD) ...................    0
NO. OF LOAD CURVES  (NLCUR) ...................   10
MAXIMUM POINTS/LCURVE (NPTM)...................    5



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                          |
|                                 Exe Time :24 July 2019      11:09:28                                                    |
+-------------------------------------------------------------------------------------------------------------------------+
L O A D     D A T A


    LOAD FUNCTION NUMBER   =    1
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       1.20000    0.0000E+00
       6.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    2
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       2.20000    0.0000E+00
       6.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    3
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       3.20000    0.0000E+00
       6.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    4
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       3.80000    0.0000E+00
       4.00000    0.1000E+01
       4.20000    0.0000E+00
       6.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    5
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       4.80000    0.0000E+00
```

```
       5.00000    0.1000E+01
       5.20000    0.0000E+00
       6.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    6
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       6.00000    0.1000E+01



    LOAD FUNCTION NUMBER   =    7
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       6.00000    0.1000E+01



    LOAD FUNCTION NUMBER   =    8
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       6.00000    0.1000E+01



    LOAD FUNCTION NUMBER   =    9
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       3.80000    0.0000E+00
       4.00000    0.1000E+01
       6.00000    0.1000E+01



    LOAD FUNCTION NUMBER   =   10
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       4.80000    0.0000E+00
       5.00000    0.1000E+01
       6.00000    0.1000E+01


NO. OF DISTRIBUTED LOAD CARDS     0




+-----------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                        |
|                                 Exe Time :24 July 2019      11:09:28                                                  |
+-----------------------------------------------------------------------------------------------------------------------+
L O A D     B A L A N C E

STEP     1 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     1 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     2 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     2 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000
```

```
STEP     3 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     3 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     4 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     4 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     5 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     5 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000


                     LOAD INPUT SECTION COMPLETED




+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                         |
|                                   Exe Time :24 July 2019      11:09:28                                                  |
+-------------------------------------------------------------------------------------------------------------------------+


NO. OF LAYERS .................................    2
NO. OF DATA PER LAYER.........................  100



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                         |
|                                   Exe Time :24 July 2019      11:09:28                                                  |
+-------------------------------------------------------------------------------------------------------------------------+

LAYER DESCRIPTORS FOR STEP NO.    1


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  23.910     WALL NO.        1
ITEM NO.   9<U-FRICT >=  29.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.37500     WALL NO.        1
ITEM NO.  11<U-KP    >=  3.0380     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  23.910     WALL NO.        1
ITEM NO.  59<D-FRICT >=  29.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.37500     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.0380     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  16.000     WALL NO.        1
ITEM NO.   8<U-COHE  >=  20.000     WALL NO.        2
ITEM NO.   9<U-FRICT >=  29.260     WALL NO.        1
ITEM NO.   9<U-FRICT >=  35.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.30000     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.1020     WALL NO.        1
```

```
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  16.000     WALL NO.        1
ITEM NO.  58<D-COHE  >=  20.000     WALL NO.        2
ITEM NO.  59<D-FRICT >=  29.260     WALL NO.        1
ITEM NO.  59<D-FRICT >=  35.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.30000     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.1020     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    2


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  23.910     WALL NO.        1
ITEM NO.   9<U-FRICT >=  29.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.37500     WALL NO.        1
ITEM NO.  11<U-KP    >=  3.0380     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  23.910     WALL NO.        1
ITEM NO.  59<D-FRICT >=  29.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.37500     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.0380     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  16.000     WALL NO.        1
ITEM NO.   8<U-COHE  >=  20.000     WALL NO.        2
ITEM NO.   9<U-FRICT >=  29.260     WALL NO.        1
ITEM NO.   9<U-FRICT >=  35.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.30000     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.1020     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  16.000     WALL NO.        1
ITEM NO.  58<D-COHE  >=  20.000     WALL NO.        2
ITEM NO.  59<D-FRICT >=  29.260     WALL NO.        1
ITEM NO.  59<D-FRICT >=  35.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.30000     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.1020     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    3


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    3
```

```
ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  23.910     WALL NO.        1
ITEM NO.   9<U-FRICT >=  29.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.37500     WALL NO.        1
ITEM NO.  11<U-KP    >=  3.0380     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  23.910     WALL NO.        1
ITEM NO.  59<D-FRICT >=  29.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.37500     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.0380     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  16.000     WALL NO.        1
ITEM NO.   8<U-COHE  >=  20.000     WALL NO.        2
ITEM NO.   9<U-FRICT >=  29.260     WALL NO.        1
ITEM NO.   9<U-FRICT >=  35.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.30000     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.1020     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  16.000     WALL NO.        1
ITEM NO.  58<D-COHE  >=  20.000     WALL NO.        2
ITEM NO.  59<D-FRICT >=  29.260     WALL NO.        1
ITEM NO.  59<D-FRICT >=  35.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.30000     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.1020     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    4


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    4

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  23.910     WALL NO.        1
ITEM NO.   9<U-FRICT >=  29.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.37500     WALL NO.        1
ITEM NO.  11<U-KP    >=  3.0380     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  23.910     WALL NO.        1
ITEM NO.  59<D-FRICT >=  29.000     WALL NO.        2
```

```
ITEM NO.  60<D-KA    >= 0.37500     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.0380     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    4

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  16.000     WALL NO.        1
ITEM NO.   8<U-COHE  >=  20.000     WALL NO.        2
ITEM NO.   9<U-FRICT >=  29.260     WALL NO.        1
ITEM NO.   9<U-FRICT >=  35.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.30000     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.1020     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  16.000     WALL NO.        1
ITEM NO.  58<D-COHE  >=  20.000     WALL NO.        2
ITEM NO.  59<D-FRICT >=  29.260     WALL NO.        1
ITEM NO.  59<D-FRICT >=  35.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.30000     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.1020     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    5


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    5

ITEM NO.   1<NAME    >=  14.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  23.910     WALL NO.        1
ITEM NO.   9<U-FRICT >=  29.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.37500     WALL NO.        1
ITEM NO.  11<U-KP    >=  3.0380     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.53000     (BOTH WALLS)
ITEM NO.  13<NEXP    >=  1.0000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  20000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  60000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-05 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  23.910     WALL NO.        1
ITEM NO.  59<D-FRICT >=  29.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.37500     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.0380     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-05 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    5

ITEM NO.   1<NAME    >=  15.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -7.8000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  20.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  10.000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  16.000     WALL NO.        1
ITEM NO.   8<U-COHE  >=  20.000     WALL NO.        2
ITEM NO.   9<U-FRICT >=  29.260     WALL NO.        1
ITEM NO.   9<U-FRICT >=  35.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.30000     WALL NO.        1
ITEM NO.  11<U-KP    >=  4.1020     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
```

```
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-03 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  16.000     WALL NO.        1
ITEM NO.  58<D-COHE  >=  20.000     WALL NO.        2
ITEM NO.  59<D-FRICT >=  29.260     WALL NO.        1
ITEM NO.  59<D-FRICT >=  35.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.30000     WALL NO.        1
ITEM NO.  61<D-KP    >=  4.1020     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-03 (BOTH WALLS)


DEFAULT WATER UNIT WEIGHT =  10.000
AVERAGED ON    10 VALUES
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                        |
|                                  Exe Time :24 July 2019      11:09:28                                                   |
+-------------------------------------------------------------------------------------------------------------------------+

PHASE DESCRIPTORS


STEP  NO.     1
                                      LEFT WALL    RIGHT WALL
Y                                      0.000       -0.9990E+30
Z-PC                                   0.000         0.000
Z-EXCAVATION                           0.000         0.000
Z-WATER_TABLE                        -26.00        -0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL              0.000         0.000
ZQ                                     0.000         0.000
DZW_OF_THE_WATER_TABLE                 0.000         0.000
QS_ON_THE_EXCAVATION_SIDE              0.000         0.000
ZQS                                 -0.9990E+30    -0.9990E+30
ZCUT                                   0.000         0.000
BALANCE LEVEL FOR PORE PRESSURES     -12.00         -12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)      0.000         0.000
PORE_UPDATE_FLAG                       0.000         0.000
PORE_TAB. _FLAG (gt.0= use tabs)       0.000         0.000
lateral thrusts reduction elevatio     0.000         0.000
Downhill reduction factor for effe     0.000         0.000
Downhill reduction factor for pore     0.000         0.000
Uphill reduction factor for effect     0.000         0.000
Uphill reduction factor for pore p     0.000         0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]       0.000         0.000
UPHILL VERTICAL ACCEL.  Kv_uh [g]      0.000         0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]      0.000         0.000
UPHILL BETA ANGLE (SLOPE) [deg]        0.000         0.000
UPHILL DELTA/PHI RATIO                 0.000         0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]      0.000         0.000
DOWNHILL DELTA/PHI RATIO               0.000         0.000
DYN.WATER BEHAVIOUR                    0.000         0.000
Excess pore pressure RATIO Ru          0.000         0.000
SEISMIC PRESSURE LOWER VALUE           0.000         0.000
SEISMIC PRESSURE UPPER VALUE           0.000         0.000
SEISMIC PRESSURE LOWER LEVEL           0.000         0.000
SEISMIC PRESSURE UPPER LEVEL           0.000         0.000

=========================================================================================================end of step    1


STEP  NO.     2
                                      LEFT WALL    RIGHT WALL
Y                                      0.000       -0.9990E+30
Z-PC                                   0.000         0.000
Z-EXCAVATION                           0.000         0.000
Z-WATER_TABLE                        -26.00        -0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL              0.000         0.000
ZQ                                     0.000         0.000
DZW_OF_THE_WATER_TABLE                 0.000         0.000
QS_ON_THE_EXCAVATION_SIDE              0.000         0.000
ZQS                                 -0.9990E+30    -0.9990E+30
ZCUT                                   0.000         0.000
BALANCE LEVEL FOR PORE PRESSURES     -12.00         -12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)      0.000         0.000
PORE_UPDATE_FLAG                       0.000         0.000
PORE_TAB. _FLAG (gt.0= use tabs)       0.000         0.000
lateral thrusts reduction elevatio     0.000         0.000
Downhill reduction factor for effe     0.000         0.000
Downhill reduction factor for pore     0.000         0.000
Uphill reduction factor for effect     0.000         0.000
Uphill reduction factor for pore p     0.000         0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]       0.000         0.000
UPHILL VERTICAL ACCEL.  Kv_uh [g]      0.000         0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]      0.000         0.000
UPHILL BETA ANGLE (SLOPE) [deg]        0.000         0.000
UPHILL DELTA/PHI RATIO                 0.000         0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]      0.000         0.000
DOWNHILL DELTA/PHI RATIO               0.000         0.000
DYN.WATER BEHAVIOUR                    0.000         0.000
Excess pore pressure RATIO Ru          0.000         0.000
SEISMIC PRESSURE LOWER VALUE           0.000         0.000
SEISMIC PRESSURE UPPER VALUE           0.000         0.000
SEISMIC PRESSURE LOWER LEVEL           0.000         0.000
SEISMIC PRESSURE UPPER LEVEL           0.000         0.000
```

==========end of step 2

STEP NO. 3

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-3.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-12.00	-12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 3

STEP NO. 4

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-3.000	0.000
Z-WATER_TABLE	-26.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-12.00	-12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 4

STEP NO. 5

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-4.960	0.000

```
Z-WATER_TABLE                          -26.00       -0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL               0.000         0.000
ZQ                                      0.000         0.000
DZW_OF_THE_WATER_TABLE                  0.000         0.000
QS_ON_THE_EXCAVATION_SIDE               0.000         0.000
ZQS                                  -0.9990E+30   -0.9990E+30
ZCUT                                    0.000         0.000
BALANCE LEVEL FOR PORE PRESSURES       -12.00        -12.00
WATER_BEHAVIOUR_FLAG (LINING OPT)       0.000         0.000
PORE_UPDATE_FLAG                        0.000         0.000
PORE_TAB. _FLAG (gt.0= use tabs)        0.000         0.000
lateral thrusts reduction elevatio      0.000         0.000
Downhill reduction factor for effe      0.000         0.000
Downhill reduction factor for pore      0.000         0.000
Uphill reduction factor for effect      0.000         0.000
Uphill reduction factor for pore p      0.000         0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]        0.000         0.000
UPHILL VERTICAL ACCEL.  Kv_uh [g]       0.000         0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]       0.000         0.000
UPHILL BETA ANGLE (SLOPE) [deg]         0.000         0.000
UPHILL DELTA/PHI RATIO                  0.000         0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]       0.000         0.000
DOWNHILL DELTA/PHI RATIO                0.000         0.000
DYN.WATER BEHAVIOUR                     0.000         0.000
Excess pore pressure RATIO Ru           0.000         0.000
SEISMIC PRESSURE LOWER VALUE            0.000         0.000
SEISMIC PRESSURE UPPER VALUE            0.000         0.000
SEISMIC PRESSURE LOWER LEVEL            0.000         0.000
SEISMIC PRESSURE UPPER LEVEL            0.000         0.000

================================================================================================================end of step     5


 LEFT-HAND WALL

 LOWER  LEVEL          -12.00000
 UPPER  LEVEL            0.00000

 RIGHT-HAND WALL

 LOWER  LEVEL          -12.00000
 UPPER  LEVEL            0.00000




+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*           |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                    |
|                                 Exe Time :24 July 2019      11:09:28                                              |
+-------------------------------------------------------------------------------------------------------------------+
 I N I T I A L    S T R E S S    T A B L E S

            S E C T I O N

 NUMBER OF DEFINED TABLES             1


INPUT DATA FOR INITIAL STRESS SET NO.     1
PERTAINING SOIL ELEMENTS AT Y-COORD    0.0000

ACTIVATION TIME                              2.0000
END TIME (TIME BEYOND WHICH IT IS REMOVED)   5.0000

TYPE BOUSSINESQ

 HORIZONTAL DISTANCE (DY)          0.000000000000000E+000
 FOUNDATION WIDTH    (B)            40.0000000000000
 ZETA-F.....                       0.000000000000000E+000
 Q-F .....                          13.0000000000000
 BETA ....                          30.0000000000000
 BEHAVIOUR (0=FREE, 1=REFLECTING)  0.000000000000000E+000


 ELEMENT GROUPS BACKUP AREA CAN STAY IN CORE AT
 POSITION        3534

 NO. OF D.P.W  FOR THIS AREA       7376
 MAX NO. OF D.P.W. AVAILABLE      81920
 ** MAX NO OF ITERATIONS SET TO         100
```

```
 ITER     0 RNORM = 0.000     RMNORM= 0.000
             RINORM=0.2144E+05 RIMNOR= 0.000
             RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
             RFMAX = 22.62     RMMAX = 0.000
             RTSMAL=0.1000E-03 RMSMAL= 0.000
             RDT   =0.2144E+05 RDR   = 0.000
             RATIOT= 0.000     RATIOR= 0.000
             MAX UN= 0.000     IEQ=   124 NODE     62 DOF   2   X-ROT. F
             MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
             NO. OF CONTACT CONSTRAINT VIOLATIONS     0


 ITER     1 RNORM = 0.000     RMNORM= 0.000
             RINORM=0.2144E+05 RIMNOR= 0.000
             RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
             RFMAX = 22.62     RMMAX = 0.000
             RTSMAL=0.1000E-03 RMSMAL= 0.000
             RDT   =0.2144E+05 RDR   = 0.000
             RATIOT= 0.000     RATIOR= 0.000
             MAX UN= 0.000     IEQ=   124 NODE     62 DOF   2   X-ROT. F
             MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
             NO. OF CONTACT CONSTRAINT VIOLATIONS     0


 ITER     2 RNORM = 0.000     RMNORM= 0.000
             RINORM=0.2144E+05 RIMNOR= 0.000
             RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
             RFMAX = 22.62     RMMAX = 0.000
             RTSMAL=0.1000E-03 RMSMAL= 0.000
             RDT   =0.2144E+05 RDR   = 0.000
             RATIOT= 0.000     RATIOR= 0.000
             MAX UN= 0.000     IEQ=   124 NODE     62 DOF   2   X-ROT. F
             MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
             NO. OF CONTACT CONSTRAINT VIOLATIONS     0



 +-------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
 |                                                                                                                         |
 |                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                         |
 |                                  Exe Time :24 July 2019      11:09:28                                                   |
 +-------------------------------------------------------------------------------------------------------------------------+
 New Project
 SOLUTION REACHED USING     2 ITERATIONS ON  100

 P R I N T   O U T   F O R   T I M E   S T E P    1     ( AT TIME   1.000     )

 PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

           Y-DISPL.F        X-ROT. F
            (02)             (04)           (


 ALL NODAL POINTS HAVE ZERO DISPLACEMENT COMPONENTS




 +-------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
 |                                                                                                                         |
 |                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                         |
 |                                  Exe Time :24 July 2019      11:09:28                                                   |
 +-------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.    1

 0_L                           :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
 C U R R E N T   T I M E   I S      1.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P           STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
------------------------------------------------------------------------
```

1	D	0.000	0.000	0.000	0.000	0.000	0.000	V-C	1.9215E+04	0.000	0.000	1.000	1.000	0.000	0.000	Strato1_2_8_L_0
2	D	0.4028	0.000	3.800	2.014	3.800	2.014	V-C	1.9215E+04	-0.2000	0.000	1.000	1.000	2.014	0.000	Strato1_2_8_L_0
3	D	0.8056	0.000	7.600	4.028	7.600	4.028	V-C	1.9215E+04	-0.4000	0.000	1.000	1.000	4.028	0.000	Strato1_2_8_L_0
4	D	1.208	0.000	11.40	6.042	11.40	6.042	V-C	1.9215E+04	-0.6000	0.000	1.000	1.000	6.042	0.000	Strato1_2_8_L_0
5	D	1.611	0.000	15.20	8.056	15.20	8.056	V-C	1.9215E+04	-0.8000	0.000	1.000	1.000	8.056	0.000	Strato1_2_8_L_0
6	D	2.014	0.000	19.00	10.07	19.00	10.07	V-C	1.9215E+04	-1.000	0.000	1.000	1.000	10.07	0.000	Strato1_2_8_L_0
7	D	2.417	0.000	22.80	12.08	22.80	12.08	V-C	1.9215E+04	-1.200	0.000	1.000	1.000	12.08	0.000	Strato1_2_8_L_0
8	D	2.820	0.000	26.60	14.10	26.60	14.10	V-C	1.9215E+04	-1.400	0.000	1.000	1.000	14.10	0.000	Strato1_2_8_L_0
9	D	3.222	0.000	30.40	16.11	30.40	16.11	V-C	1.9215E+04	-1.600	0.000	1.000	1.000	16.11	0.000	Strato1_2_8_L_0
10	D	3.625	0.000	34.20	18.13	34.20	18.13	V-C	1.9215E+04	-1.800	0.000	1.000	1.000	18.13	0.000	Strato1_2_8_L_0
11	D	4.028	0.000	38.00	20.14	38.00	20.14	V-C	1.9215E+04	-2.000	0.000	1.000	1.000	20.14	0.000	Strato1_2_8_L_0
12	D	4.431	0.000	41.80	22.15	41.80	22.15	V-C	1.9215E+04	-2.200	0.000	1.000	1.000	22.15	0.000	Strato1_2_8_L_0
13	D	3.625	0.000	45.60	24.17	45.60	24.17	V-C	1.9215E+04	-2.400	0.000	1.000	1.000	24.17	0.000	Strato1_2_8_L_0
14	D	3.776	0.000	47.50	25.18	47.50	25.18	V-C	1.9215E+04	-2.500	0.000	1.000	1.000	25.18	0.000	Strato1_2_8_L_0
15	D	5.438	0.000	51.30	27.19	51.30	27.19	V-C	1.9215E+04	-2.700	0.000	1.000	1.000	27.19	0.000	Strato1_2_8_L_0
16	D	5.841	0.000	55.10	29.20	55.10	29.20	V-C	1.9215E+04	-2.900	0.000	1.000	1.000	29.20	0.000	Strato1_2_8_L_0
17	D	6.243	0.000	58.90	31.22	58.90	31.22	V-C	1.9215E+04	-3.100	0.000	1.000	1.000	31.22	0.000	Strato1_2_8_L_0
18	D	6.646	0.000	62.70	33.23	62.70	33.23	V-C	1.9215E+04	-3.300	0.000	1.000	1.000	33.23	0.000	Strato1_2_8_L_0
19	D	7.049	0.000	66.50	35.25	66.50	35.25	V-C	1.9215E+04	-3.500	0.000	1.000	1.000	35.25	0.000	Strato1_2_8_L_0
20	D	7.452	0.000	70.30	37.26	70.30	37.26	V-C	1.9215E+04	-3.700	0.000	1.000	1.000	37.26	0.000	Strato1_2_8_L_0
21	D	7.855	0.000	74.10	39.27	74.10	39.27	V-C	1.9215E+04	-3.900	0.000	1.000	1.000	39.27	0.000	Strato1_2_8_L_0
22	D	8.257	0.000	77.90	41.29	77.90	41.29	V-C	1.9215E+04	-4.100	0.000	1.000	1.000	41.29	0.000	Strato1_2_8_L_0
23	D	8.660	0.000	81.70	43.30	81.70	43.30	V-C	1.9215E+04	-4.300	0.000	1.000	1.000	43.30	0.000	Strato1_2_8_L_0
24	D	9.063	0.000	85.50	45.32	85.50	45.32	V-C	1.9215E+04	-4.500	0.000	1.000	1.000	45.31	0.000	Strato1_2_8_L_0
25	D	9.466	0.000	89.30	47.33	89.30	47.33	V-C	1.9215E+04	-4.700	0.000	1.000	1.000	47.33	0.000	Strato1_2_8_L_0
26	D	9.869	0.000	93.10	49.34	93.10	49.34	V-C	1.9215E+04	-4.900	0.000	1.000	1.000	49.34	0.000	Strato1_2_8_L_0
27	D	10.27	0.000	96.90	51.36	96.90	51.36	V-C	1.9215E+04	-5.100	0.000	1.000	1.000	51.36	0.000	Strato1_2_8_L_0
28	D	10.67	0.000	100.7	53.37	100.7	53.37	V-C	1.9215E+04	-5.300	0.000	1.000	1.000	53.37	0.000	Strato1_2_8_L_0
29	D	11.08	0.000	104.5	55.38	104.5	55.38	V-C	1.9215E+04	-5.500	0.000	1.000	1.000	55.38	0.000	Strato1_2_8_L_0
30	D	11.48	0.000	108.3	57.40	108.3	57.40	V-C	1.9215E+04	-5.700	0.000	1.000	1.000	57.40	0.000	Strato1_2_8_L_0
31	D	11.88	0.000	112.1	59.41	112.1	59.41	V-C	1.9215E+04	-5.900	0.000	1.000	1.000	59.41	0.000	Strato1_2_8_L_0
32	D	12.29	0.000	115.9	61.43	115.9	61.43	V-C	1.9215E+04	-6.100	0.000	1.000	1.000	61.43	0.000	Strato1_2_8_L_0
33	D	12.69	0.000	119.7	63.44	119.7	63.44	V-C	1.9215E+04	-6.300	0.000	1.000	1.000	63.44	0.000	Strato1_2_8_L_0
34	D	13.09	0.000	123.5	65.45	123.5	65.45	V-C	1.9215E+04	-6.500	0.000	1.000	1.000	65.45	0.000	Strato1_2_8_L_0
35	D	13.49	0.000	127.3	67.47	127.3	67.47	V-C	1.9215E+04	-6.700	0.000	1.000	1.000	67.47	0.000	Strato1_2_8_L_0
36	D	13.90	0.000	131.1	69.48	131.1	69.48	V-C	1.9215E+04	-6.900	0.000	1.000	1.000	69.48	0.000	Strato1_2_8_L_0
37	D	14.30	0.000	134.9	71.50	134.9	71.50	V-C	1.9215E+04	-7.100	0.000	1.000	1.000	71.50	0.000	Strato1_2_8_L_0
38	D	14.70	0.000	138.7	73.51	138.7	73.51	V-C	1.9215E+04	-7.300	0.000	1.000	1.000	73.51	0.000	Strato1_2_8_L_0
39	D	15.10	0.000	142.5	75.52	142.5	75.52	V-C	1.9215E+04	-7.500	0.000	1.000	1.000	75.52	0.000	Strato1_2_8_L_0
40	D	15.51	0.000	146.3	77.54	146.3	77.54	V-C	1.9215E+04	-7.700	0.000	1.000	1.000	77.54	0.000	Strato1_2_8_L_0
41	D	15.02	0.000	150.2	75.10	150.2	75.10	V-C	5.3328E+04	-7.900	0.000	1.000	1.000	75.10	0.000	Strato2_3095_82743_L_0
42	D	15.42	0.000	154.2	77.10	154.2	77.10	V-C	5.3328E+04	-8.100	0.000	1.000	1.000	77.10	0.000	Strato2_3095_82743_L_0
43	D	15.82	0.000	158.2	79.10	158.2	79.10	V-C	5.3328E+04	-8.300	0.000	1.000	1.000			

```
79.10       0.000       0.000     Strato2_3095_82743_L_0
  44 D   16.22       0.000       162.2       81.10       162.2       81.10             V-C  5.3328E+04  -8.500       0.000       1.000       1.000
81.10       0.000       0.000     Strato2_3095_82743_L_0
  45 D   16.62       0.000       166.2       83.10       166.2       83.10             V-C  5.3328E+04  -8.700       0.000       1.000       1.000
83.10       0.000       0.000     Strato2_3095_82743_L_0
  46 D   17.02       0.000       170.2       85.10       170.2       85.10             V-C  5.3328E+04  -8.900       0.000       1.000       1.000
85.10       0.000       0.000     Strato2_3095_82743_L_0
  47 D   17.42       0.000       174.2       87.10       174.2       87.10             V-C  5.3328E+04  -9.100       0.000       1.000       1.000
87.10       0.000       0.000     Strato2_3095_82743_L_0
  48 D   17.82       0.000       178.2       89.10       178.2       89.10             V-C  5.3328E+04  -9.300       0.000       1.000       1.000
89.10       0.000       0.000     Strato2_3095_82743_L_0
  49 D   18.22       0.000       182.2       91.10       182.2       91.10             V-C  5.3328E+04  -9.500       0.000       1.000       1.000
91.10       0.000       0.000     Strato2_3095_82743_L_0
  50 D   18.62       0.000       186.2       93.10       186.2       93.10             V-C  5.3328E+04  -9.700       0.000       1.000       1.000
93.10       0.000       0.000     Strato2_3095_82743_L_0
  51 D   19.02       0.000       190.2       95.10       190.2       95.10             V-C  5.3328E+04  -9.900       0.000       1.000       1.000
95.10       0.000       0.000     Strato2_3095_82743_L_0
  52 D   19.42       0.000       194.2       97.10       194.2       97.10             V-C  5.3328E+04  -10.10       0.000       1.000       1.000
97.10       0.000       0.000     Strato2_3095_82743_L_0
  53 D   19.82       0.000       198.2       99.10       198.2       99.10             V-C  5.3328E+04  -10.30       0.000       1.000       1.000
99.10       0.000       0.000     Strato2_3095_82743_L_0
  54 D   20.22       0.000       202.2       101.1       202.2       101.1             V-C  5.3328E+04  -10.50       0.000       1.000       1.000
101.1       0.000       0.000     Strato2_3095_82743_L_0
  55 D   20.62       0.000       206.2       103.1       206.2       103.1             V-C  5.3328E+04  -10.70       0.000       1.000       1.000
103.1       0.000       0.000     Strato2_3095_82743_L_0
  56 D   21.02       0.000       210.2       105.1       210.2       105.1             V-C  5.3328E+04  -10.90       0.000       1.000       1.000
105.1       0.000       0.000     Strato2_3095_82743_L_0
  57 D   21.42       0.000       214.2       107.1       214.2       107.1             V-C  5.3328E+04  -11.10       0.000       1.000       1.000
107.1       0.000       0.000     Strato2_3095_82743_L_0
  58 D   21.82       0.000       218.2       109.1       218.2       109.1             V-C  5.3328E+04  -11.30       0.000       1.000       1.000
109.1       0.000       0.000     Strato2_3095_82743_L_0
  59 D   22.22       0.000       222.2       111.1       222.2       111.1             V-C  5.3328E+04  -11.50       0.000       1.000       1.000
111.1       0.000       0.000     Strato2_3095_82743_L_0
  60 D   22.62       0.000       226.2       113.1       226.2       113.1             V-C  5.3328E+04  -11.70       0.000       1.000       1.000
113.1       0.000       0.000     Strato2_3095_82743_L_0
  61 D   17.26       0.000       230.2       115.1       230.2       115.1             V-C  5.3328E+04  -11.90       0.000       1.000       1.000
115.1       0.000       0.000     Strato2_3095_82743_L_0
  62 D   5.805       0.000       232.2       116.1       232.2       116.1             V-C  5.3328E+04  -12.00       0.000       1.000       1.000
116.1       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)    NLS ENGINE RELEASE  2017.1     FULL VERSION  *Build date:Jul 11, 2017*                            |
 |                                                                                                                                           |
 |                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                                          |
 |                                    Exe Time :24 July 2019      11:09:28                                                                   |
 +-------------------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S    R E S U L T S    F O R    G R O U P    N O.    2

 0_R                              :
 ELEMENT TYPE     5 NO.OF ELEMENTS. IN THIS GROUP    62
 C U R R E N T     T I M E     I S       1.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

   EL *    FORCE      DISPL-Y  VERTICAL-P  HORIZON.-P      MAX-V-P      MAX-H-P           STATE   STIFFNESS Z-LEVEL       PORE       E FACTOR     UFACTOR
Peq           Su_a         Su_p      LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
    1 D    0.000        0.000        0.000        0.000        0.000        0.000             V-C  1.6263E+04   0.000       0.000       1.000       1.000
0.000       0.000        0.000     Strato1_2_8_L_0
    2 D  0.4028        0.000        3.800        2.014        3.800        2.014             V-C  1.6263E+04 -0.2000       0.000       1.000       1.000
2.014       0.000        0.000     Strato1_2_8_L_0
    3 D  0.8056        0.000        7.600        4.028        7.600        4.028             V-C  1.6263E+04 -0.4000       0.000       1.000       1.000
4.028       0.000        0.000     Strato1_2_8_L_0
    4 D   1.208        0.000        11.40        6.042        11.40        6.042             V-C  1.6263E+04 -0.6000       0.000       1.000       1.000
6.042       0.000        0.000     Strato1_2_8_L_0
    5 D   1.611        0.000        15.20        8.056        15.20        8.056             V-C  1.6263E+04 -0.8000       0.000       1.000       1.000
8.056       0.000        0.000     Strato1_2_8_L_0
    6 D   2.014        0.000        19.00        10.07        19.00        10.07             V-C  1.6263E+04  -1.000       0.000       1.000       1.000
10.07       0.000        0.000     Strato1_2_8_L_0
    7 D   2.417        0.000        22.80        12.08        22.80        12.08             V-C  1.6263E+04  -1.200       0.000       1.000       1.000
12.08       0.000        0.000     Strato1_2_8_L_0
    8 D   2.820        0.000        26.60        14.10        26.60        14.10             V-C  1.6263E+04  -1.400       0.000       1.000       1.000
14.10       0.000        0.000     Strato1_2_8_L_0
    9 D   3.222        0.000        30.40        16.11        30.40        16.11             V-C  1.6263E+04  -1.600       0.000       1.000       1.000
16.11       0.000        0.000     Strato1_2_8_L_0
   10 D   3.625        0.000        34.20        18.13        34.20        18.13             V-C  1.6263E+04  -1.800       0.000       1.000       1.000
```

18.13	0.000	0.000	Strato1_2_8_L_0									
11 D	4.028	0.000	38.00	20.14	38.00	20.14	V-C	1.6263E+04	-2.000	0.000	1.000	1.000
20.14	0.000	0.000	Strato1_2_8_L_0									
12 D	4.431	0.000	41.80	22.15	41.80	22.15	V-C	1.6263E+04	-2.200	0.000	1.000	1.000
22.15	0.000	0.000	Strato1_2_8_L_0									
13 D	3.625	0.000	45.60	24.17	45.60	24.17	V-C	1.6263E+04	-2.400	0.000	1.000	1.000
24.17	0.000	0.000	Strato1_2_8_L_0									
14 D	3.776	0.000	47.50	25.18	47.50	25.18	V-C	1.6263E+04	-2.500	0.000	1.000	1.000
25.18	0.000	0.000	Strato1_2_8_L_0									
15 D	5.438	0.000	51.30	27.19	51.30	27.19	V-C	1.6263E+04	-2.700	0.000	1.000	1.000
27.19	0.000	0.000	Strato1_2_8_L_0									
16 D	5.841	0.000	55.10	29.20	55.10	29.20	V-C	1.6263E+04	-2.900	0.000	1.000	1.000
29.20	0.000	0.000	Strato1_2_8_L_0									
17 D	6.243	0.000	58.90	31.22	58.90	31.22	V-C	1.6263E+04	-3.100	0.000	1.000	1.000
31.22	0.000	0.000	Strato1_2_8_L_0									
18 D	6.646	0.000	62.70	33.23	62.70	33.23	V-C	1.6263E+04	-3.300	0.000	1.000	1.000
33.23	0.000	0.000	Strato1_2_8_L_0									
19 D	7.049	0.000	66.50	35.25	66.50	35.25	V-C	1.6263E+04	-3.500	0.000	1.000	1.000
35.25	0.000	0.000	Strato1_2_8_L_0									
20 D	7.452	0.000	70.30	37.26	70.30	37.26	V-C	1.6263E+04	-3.700	0.000	1.000	1.000
37.26	0.000	0.000	Strato1_2_8_L_0									
21 D	7.855	0.000	74.10	39.27	74.10	39.27	V-C	1.6263E+04	-3.900	0.000	1.000	1.000
39.27	0.000	0.000	Strato1_2_8_L_0									
22 D	8.257	0.000	77.90	41.29	77.90	41.29	V-C	1.6263E+04	-4.100	0.000	1.000	1.000
41.29	0.000	0.000	Strato1_2_8_L_0									
23 D	8.660	0.000	81.70	43.30	81.70	43.30	V-C	1.6263E+04	-4.300	0.000	1.000	1.000
43.30	0.000	0.000	Strato1_2_8_L_0									
24 D	9.063	0.000	85.50	45.32	85.50	45.32	V-C	1.6263E+04	-4.500	0.000	1.000	1.000
45.31	0.000	0.000	Strato1_2_8_L_0									
25 D	9.466	0.000	89.30	47.33	89.30	47.33	V-C	1.6263E+04	-4.700	0.000	1.000	1.000
47.33	0.000	0.000	Strato1_2_8_L_0									
26 D	9.869	0.000	93.10	49.34	93.10	49.34	V-C	1.6263E+04	-4.900	0.000	1.000	1.000
49.34	0.000	0.000	Strato1_2_8_L_0									
27 D	10.27	0.000	96.90	51.36	96.90	51.36	V-C	1.6263E+04	-5.100	0.000	1.000	1.000
51.36	0.000	0.000	Strato1_2_8_L_0									
28 D	10.67	0.000	100.7	53.37	100.7	53.37	V-C	1.6263E+04	-5.300	0.000	1.000	1.000
53.37	0.000	0.000	Strato1_2_8_L_0									
29 D	11.08	0.000	104.5	55.38	104.5	55.38	V-C	1.6263E+04	-5.500	0.000	1.000	1.000
55.38	0.000	0.000	Strato1_2_8_L_0									
30 D	11.48	0.000	108.3	57.40	108.3	57.40	V-C	1.6263E+04	-5.700	0.000	1.000	1.000
57.40	0.000	0.000	Strato1_2_8_L_0									
31 D	11.88	0.000	112.1	59.41	112.1	59.41	V-C	1.6263E+04	-5.900	0.000	1.000	1.000
59.41	0.000	0.000	Strato1_2_8_L_0									
32 D	12.29	0.000	115.9	61.43	115.9	61.43	V-C	1.6263E+04	-6.100	0.000	1.000	1.000
61.43	0.000	0.000	Strato1_2_8_L_0									
33 D	12.69	0.000	119.7	63.44	119.7	63.44	V-C	1.6263E+04	-6.300	0.000	1.000	1.000
63.44	0.000	0.000	Strato1_2_8_L_0									
34 D	13.09	0.000	123.5	65.45	123.5	65.45	V-C	1.6263E+04	-6.500	0.000	1.000	1.000
65.45	0.000	0.000	Strato1_2_8_L_0									
35 D	13.49	0.000	127.3	67.47	127.3	67.47	V-C	1.6263E+04	-6.700	0.000	1.000	1.000
67.47	0.000	0.000	Strato1_2_8_L_0									
36 D	13.90	0.000	131.1	69.48	131.1	69.48	V-C	1.6263E+04	-6.900	0.000	1.000	1.000
69.48	0.000	0.000	Strato1_2_8_L_0									
37 D	14.30	0.000	134.9	71.50	134.9	71.50	V-C	1.6263E+04	-7.100	0.000	1.000	1.000
71.50	0.000	0.000	Strato1_2_8_L_0									
38 D	14.70	0.000	138.7	73.51	138.7	73.51	V-C	1.6263E+04	-7.300	0.000	1.000	1.000
73.51	0.000	0.000	Strato1_2_8_L_0									
39 D	15.10	0.000	142.5	75.52	142.5	75.52	V-C	1.6263E+04	-7.500	0.000	1.000	1.000
75.52	0.000	0.000	Strato1_2_8_L_0									
40 D	15.51	0.000	146.3	77.54	146.3	77.54	V-C	1.6263E+04	-7.700	0.000	1.000	1.000
77.54	0.000	0.000	Strato1_2_8_L_0									
41 D	15.02	0.000	150.2	75.10	150.2	75.10	V-C	3.6625E+04	-7.900	0.000	1.000	1.000
75.10	0.000	0.000	Strato2_3095_82743_L_0									
42 D	15.42	0.000	154.2	77.10	154.2	77.10	V-C	3.6625E+04	-8.100	0.000	1.000	1.000
77.10	0.000	0.000	Strato2_3095_82743_L_0									
43 D	15.82	0.000	158.2	79.10	158.2	79.10	V-C	3.6625E+04	-8.300	0.000	1.000	1.000
79.10	0.000	0.000	Strato2_3095_82743_L_0									
44 D	16.22	0.000	162.2	81.10	162.2	81.10	V-C	3.6625E+04	-8.500	0.000	1.000	1.000
81.10	0.000	0.000	Strato2_3095_82743_L_0									
45 D	16.62	0.000	166.2	83.10	166.2	83.10	V-C	3.6625E+04	-8.700	0.000	1.000	1.000
83.10	0.000	0.000	Strato2_3095_82743_L_0									
46 D	17.02	0.000	170.2	85.10	170.2	85.10	V-C	3.6625E+04	-8.900	0.000	1.000	1.000
85.10	0.000	0.000	Strato2_3095_82743_L_0									
47 D	17.42	0.000	174.2	87.10	174.2	87.10	V-C	3.6625E+04	-9.100	0.000	1.000	1.000
87.10	0.000	0.000	Strato2_3095_82743_L_0									
48 D	17.82	0.000	178.2	89.10	178.2	89.10	V-C	3.6625E+04	-9.300	0.000	1.000	1.000
89.10	0.000	0.000	Strato2_3095_82743_L_0									
49 D	18.22	0.000	182.2	91.10	182.2	91.10	V-C	3.6625E+04	-9.500	0.000	1.000	1.000
91.10	0.000	0.000	Strato2_3095_82743_L_0									
50 D	18.62	0.000	186.2	93.10	186.2	93.10	V-C	3.6625E+04	-9.700	0.000	1.000	1.000
93.10	0.000	0.000	Strato2_3095_82743_L_0									
51 D	19.02	0.000	190.2	95.10	190.2	95.10	V-C	3.6625E+04	-9.900	0.000	1.000	1.000
95.10	0.000	0.000	Strato2_3095_82743_L_0									
52 D	19.42	0.000	194.2	97.10	194.2	97.10	V-C	3.6625E+04	-10.10	0.000	1.000	1.000
97.10	0.000	0.000	Strato2_3095_82743_L_0									

```
 53 D   19.82       0.000       198.2       99.10       198.2       99.10             V-C  3.6625E+04  -10.30       0.000       1.000       1.000
99.10       0.000       0.000     Strato2_3095_82743_L_0
 54 D   20.22       0.000       202.2       101.1       202.2       101.1             V-C  3.6625E+04  -10.50       0.000       1.000       1.000
101.1       0.000       0.000     Strato2_3095_82743_L_0
 55 D   20.62       0.000       206.2       103.1       206.2       103.1             V-C  3.6625E+04  -10.70       0.000       1.000       1.000
103.1       0.000       0.000     Strato2_3095_82743_L_0
 56 D   21.02       0.000       210.2       105.1       210.2       105.1             V-C  3.6625E+04  -10.90       0.000       1.000       1.000
105.1       0.000       0.000     Strato2_3095_82743_L_0
 57 D   21.42       0.000       214.2       107.1       214.2       107.1             V-C  3.6625E+04  -11.10       0.000       1.000       1.000
107.1       0.000       0.000     Strato2_3095_82743_L_0
 58 D   21.82       0.000       218.2       109.1       218.2       109.1             V-C  3.6625E+04  -11.30       0.000       1.000       1.000
109.1       0.000       0.000     Strato2_3095_82743_L_0
 59 D   22.22       0.000       222.2       111.1       222.2       111.1             V-C  3.6625E+04  -11.50       0.000       1.000       1.000
111.1       0.000       0.000     Strato2_3095_82743_L_0
 60 D   22.62       0.000       226.2       113.1       226.2       113.1             V-C  3.6625E+04  -11.70       0.000       1.000       1.000
113.1       0.000       0.000     Strato2_3095_82743_L_0
 61 D   17.26       0.000       230.2       115.1       230.2       115.1             V-C  3.6625E+04  -11.90       0.000       1.000       1.000
115.1       0.000       0.000     Strato2_3095_82743_L_0
 62 D   5.805       0.000       232.2       116.1       232.2       116.1             V-C  3.6625E+04  -12.00       0.000       1.000       1.000
116.1       0.000       0.000     Strato2_3095_82743_L_0
```

```
+----------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1     FULL VERSION  *Build date:Jul 11, 2017*  |
|                                                                                                            |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                            |
|                                  Exe Time :24 July 2019      11:09:28                                      |
+----------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    3

WallElement_33                    :
ELEMENT TYPE     2 NO.OF ELEMENTS. IN THIS GROUP   61
C U R R E N T    T I M E    I S      1.0000

 WALL2D ELEMENT
```

EL	TA	TB	MA	MB
1	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000
9	0.0000	0.0000	0.0000	0.0000
10	0.0000	0.0000	0.0000	0.0000
11	0.0000	0.0000	0.0000	0.0000
12	0.0000	0.0000	0.0000	0.0000
13	0.0000	0.0000	0.0000	0.0000
14	0.0000	0.0000	0.0000	0.0000
15	0.0000	0.0000	0.0000	0.0000
16	0.0000	0.0000	0.0000	0.0000
17	0.0000	0.0000	0.0000	0.0000
18	0.0000	0.0000	0.0000	0.0000
19	0.0000	0.0000	0.0000	0.0000
20	0.0000	0.0000	0.0000	0.0000
21	0.0000	0.0000	0.0000	0.0000
22	0.0000	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0000
24	0.0000	0.0000	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000
26	0.0000	0.0000	0.0000	0.0000
27	0.0000	0.0000	0.0000	0.0000
28	0.0000	0.0000	0.0000	0.0000
29	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000
31	0.0000	0.0000	0.0000	0.0000
32	0.0000	0.0000	0.0000	0.0000
33	0.0000	0.0000	0.0000	0.0000
34	0.0000	0.0000	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000
36	0.0000	0.0000	0.0000	0.0000
37	0.0000	0.0000	0.0000	0.0000
38	0.0000	0.0000	0.0000	0.0000
39	0.0000	0.0000	0.0000	0.0000
40	0.0000	0.0000	0.0000	0.0000
41	0.0000	0.0000	0.0000	0.0000
42	0.0000	0.0000	0.0000	0.0000

```
   43  0.0000      0.0000      0.0000      0.0000
   44  0.0000      0.0000      0.0000      0.0000
   45  0.0000      0.0000      0.0000      0.0000
   46  0.0000      0.0000      0.0000      0.0000
   47  0.0000      0.0000      0.0000      0.0000
   48  0.0000      0.0000      0.0000      0.0000
   49  0.0000      0.0000      0.0000      0.0000
   50  0.0000      0.0000      0.0000      0.0000
   51  0.0000      0.0000      0.0000      0.0000
   52  0.0000      0.0000      0.0000      0.0000
   53  0.0000      0.0000      0.0000      0.0000
   54  0.0000      0.0000      0.0000      0.0000
   55  0.0000      0.0000      0.0000      0.0000
   56  0.0000      0.0000      0.0000      0.0000
   57  0.0000      0.0000      0.0000      0.0000
   58  0.0000      0.0000      0.0000      0.0000
   59  0.0000      0.0000      0.0000      0.0000
   60  0.0000      0.0000      0.0000      0.0000
   61  0.0000      0.0000      0.0000      0.0000


+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                         |
|                                   Exe Time :24 July 2019      11:09:28                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    4

Tieback_778405                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      1.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2278E+05 RIMNOR= 0.000
           RENORM= 51.52     REMNOR= 0.000     RATIO =0.4756E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 23.52     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2278E+05 RDR   = 0.000
           RATIOT=0.4756E-01 RATIOR= 0.000
           MAX UN=0.9994     IEQ=    15 NODE      8 DOF   1  Y-DISPL.F
           MIN UN= 0.000     IEQ=     2 NODE      1 DOF   2   X-ROT. F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2278E+05 RIMNOR= 0.000
           RENORM=0.3506     REMNOR=0.1060E-21 RATIO =0.3923E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 23.52     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2278E+05 RDR   = 0.000
           RATIOT=0.3923E-02 RATIOR= 0.000
           MAX UN=0.4510     IEQ=     3 NODE      2 DOF   1  Y-DISPL.F
           MIN UN=-.1960E-09 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2278E+05 RIMNOR= 0.000
           RENORM=0.2025E-02 REMNOR=0.1134E-22 RATIO =0.2982E-03 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 23.52     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   =0.2278E+05 RDR   = 0.000
           RATIOT=0.2982E-03 RATIOR= 0.000
           MAX UN=0.3614E-01 IEQ=    11 NODE      6 DOF   1  Y-DISPL.F
           MIN UN=-.1893E-10 IEQ=     9 NODE      5 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.2278E+05 RIMNOR= 0.000
           RENORM=0.2058E-06 REMNOR=0.1763E-22 RATIO =0.3006E-05 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 23.52     RMMAX = 0.000
```

```
          RTSMAL=0.1000E-03 RMSMAL= 0.000
          RDT   =0.2278E+05 RDR   = 0.000
          RATIOT=0.3006E-05 RATIOR= 0.000
          MAX UN=0.2839E-03 IEQ=   121 NODE     61 DOF   1  Y-DISPL.F
          MIN UN=-.2354E-10 IEQ=     7 NODE      4 DOF   1  Y-DISPL.F
          NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                          |
|                                 Exe Time :24 July 2019      11:09:28                                                    |
+-------------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     4 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    2     ( AT TIME   2.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (
    1   8.5892459E-05  -6.6991053E-06
    2   8.4553409E-05  -6.6875319E-06
    3   8.3219195E-05  -6.6497332E-06
    4   8.1895647E-05  -6.5799751E-06
    5   8.0589571E-05  -6.4747144E-06
    6   7.9308100E-05  -6.3343690E-06
    7   7.8057830E-05  -6.1639358E-06
    8   7.6844026E-05  -5.9709924E-06
    9   7.5670458E-05  -5.7626678E-06
   10   7.4539445E-05  -5.5470567E-06
   11   7.3451525E-05  -5.3330951E-06
   12   7.2405598E-05  -5.1282644E-06
   13   7.1399198E-05  -4.9387508E-06
   14   7.0909746E-05  -4.8512002E-06
   15   6.9955630E-05  -4.6941990E-06
   16   6.9030225E-05  -4.5648139E-06
   17   6.8127613E-05  -4.4668092E-06
   18   6.7241224E-05  -4.4029588E-06
   19   6.6364030E-05  -4.3751035E-06
   20   6.5488720E-05  -4.3841959E-06
   21   6.4607881E-05  -4.4303345E-06
   22   6.3714102E-05  -4.5137250E-06
   23   6.2799889E-05  -4.6346485E-06
   24   6.1857782E-05  -4.7924863E-06
   25   6.0880534E-05  -4.9857285E-06
   26   5.9861291E-05  -5.2119627E-06
   27   5.8793779E-05  -5.4678375E-06
   28   5.7672473E-05  -5.7490400E-06
   29   5.6492781E-05  -6.0509726E-06
   30   5.5251030E-05  -6.3687135E-06
   31   5.3944641E-05  -6.6962706E-06
   32   5.2572347E-05  -7.0265559E-06
   33   5.1134390E-05  -7.3513651E-06
   34   4.9632790E-05  -7.6613377E-06
   35   4.8071547E-05  -7.9459331E-06
   36   4.6456892E-05  -8.1933983E-06
   37   4.4797493E-05  -8.3912779E-06
   38   4.3104575E-05  -8.5263730E-06
   39   4.1392106E-05  -8.5841729E-06
   40   3.9677115E-05  -8.5488419E-06
   41   3.7979921E-05  -8.4032240E-06
   42   3.6322853E-05  -8.1521809E-06
   43   3.4724355E-05  -7.8216688E-06
   44   3.3197941E-05  -7.4349487E-06
   45   3.1752743E-05  -7.0127131E-06
   46   3.0394035E-05  -6.5727930E-06
   47   2.9123796E-05  -6.1303204E-06
   48   2.7941243E-05  -5.6978970E-06
   49   2.6843291E-05  -5.2857533E-06
   50   2.5825054E-05  -4.9019251E-06
   51   2.4880234E-05  -4.5524006E-06
   52   2.4001531E-05  -4.2416304E-06
   53   2.3180820E-05  -3.9726225E-06
   54   2.2409607E-05  -3.7467443E-06
   55   2.1679261E-05  -3.5637935E-06
   56   2.0981340E-05  -3.4220816E-06
   57   2.0307886E-05  -3.3184965E-06
   58   1.9651698E-05  -3.2485634E-06
   59   1.9006583E-05  -3.2067980E-06
```

```
   60   1.8367533E-05  -3.1867304E-06
   61   1.7730961E-05  -3.1806066E-06
   62   1.7412890E-05  -3.1802940E-06
```

```
+-----------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*  |
|                                                                                                           |
|                                   NewProject.BaseDesignSection_28.A2M2R1_3514                             |
|                                Exe Time :24 July 2019      11:09:28                                       |
+-----------------------------------------------------------------------------------------------------------+
New Project
```

S T R E S S   R E S U L T S   F O R   G R O U P   N O.   1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 62
C U R R E N T   T I M E   I S   2.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.4875	-8.5892E-05	13.00	4.875	13.00	6.890	ACTIVE	0.000	0.000	0.000	1.000	1.000	4.875	0.000	0.000	Strato1_2_8_L_0
2 D	0.8075	-8.4553E-05	10.77	4.038	10.77	5.706	ACTIVE	0.000	-0.2000	0.000	1.000	1.000	4.038	0.000	0.000	Strato1_2_8_L_0
3 D	1.188	-8.3219E-05	15.84	5.941	15.84	8.396	ACTIVE	0.000	-0.4000	0.000	1.000	1.000	5.941	0.000	0.000	Strato1_2_8_L_0
4 D	1.512	-8.1896E-05	20.16	7.561	20.16	10.69	ACTIVE	0.000	-0.6000	0.000	1.000	1.000	7.561	0.000	0.000	Strato1_2_8_L_0
5 D	1.818	-8.0590E-05	24.24	9.092	24.24	12.85	ACTIVE	0.000	-0.8000	0.000	1.000	1.000	9.092	0.000	0.000	Strato1_2_8_L_0
6 D	2.117	-7.9308E-05	28.22	10.58	28.22	14.96	ACTIVE	0.000	-1.000	0.000	1.000	1.000	10.58	0.000	0.000	Strato1_2_8_L_0
7 D	2.507	-7.8058E-05	32.14	12.53	32.14	17.03	UL-RL	5.7646E+04	-1.200	0.000	1.000	1.000	12.53	0.000	0.000	Strato1_2_8_L_0
8 D	2.933	-7.6844E-05	36.03	14.67	36.03	19.09	UL-RL	5.7646E+04	-1.400	0.000	1.000	1.000	14.67	0.000	0.000	Strato1_2_8_L_0
9 D	3.264	-7.5670E-05	39.02	16.32	39.02	20.68	UL-RL	5.7646E+04	-1.600	0.000	1.000	1.000	16.32	0.000	0.000	Strato1_2_8_L_0
10 D	3.696	-7.4539E-05	42.97	18.48	42.97	22.78	UL-RL	5.7646E+04	-1.800	0.000	1.000	1.000	18.48	0.000	0.000	Strato1_2_8_L_0
11 D	4.124	-7.3452E-05	46.89	20.62	46.89	24.85	UL-RL	5.7646E+04	-2.000	0.000	1.000	1.000	20.62	0.000	0.000	Strato1_2_8_L_0
12 D	4.549	-7.2406E-05	50.79	22.74	50.79	26.92	UL-RL	5.7646E+04	-2.200	0.000	1.000	1.000	22.74	0.000	0.000	Strato1_2_8_L_0
13 D	3.729	-7.1399E-05	54.67	24.86	54.67	28.98	UL-RL	5.7646E+04	-2.400	0.000	1.000	1.000	24.86	0.000	0.000	Strato1_2_8_L_0
14 D	3.864	-7.0910E-05	56.32	25.76	56.32	29.85	UL-RL	5.7646E+04	-2.500	0.000	1.000	1.000	25.76	0.000	0.000	Strato1_2_8_L_0
15 D	5.575	-6.9956E-05	60.21	27.88	60.21	31.91	UL-RL	5.7646E+04	-2.700	0.000	1.000	1.000	27.88	0.000	0.000	Strato1_2_8_L_0
16 D	5.997	-6.9030E-05	64.08	29.98	64.08	33.96	UL-RL	5.7646E+04	-2.900	0.000	1.000	1.000	29.98	0.000	0.000	Strato1_2_8_L_0
17 D	6.417	-6.8128E-05	67.94	32.08	67.94	36.01	UL-RL	5.7646E+04	-3.100	0.000	1.000	1.000	32.08	0.000	0.000	Strato1_2_8_L_0
18 D	6.836	-6.7241E-05	71.80	34.18	71.80	38.05	UL-RL	5.7646E+04	-3.300	0.000	1.000	1.000	34.18	0.000	0.000	Strato1_2_8_L_0
19 D	7.254	-6.6364E-05	75.65	36.27	75.65	40.10	UL-RL	5.7646E+04	-3.500	0.000	1.000	1.000	36.27	0.000	0.000	Strato1_2_8_L_0
20 D	7.672	-6.5489E-05	79.50	38.36	79.50	42.13	UL-RL	5.7646E+04	-3.700	0.000	1.000	1.000	38.36	0.000	0.000	Strato1_2_8_L_0
21 D	8.049	-6.4608E-05	82.96	40.25	82.96	43.97	UL-RL	5.7646E+04	-3.900	0.000	1.000	1.000	40.25	0.000	0.000	Strato1_2_8_L_0
22 D	8.468	-6.3714E-05	86.82	42.34	86.82	46.01	UL-RL	5.7646E+04	-4.100	0.000	1.000	1.000	42.34	0.000	0.000	Strato1_2_8_L_0
23 D	8.887	-6.2800E-05	90.67	44.43	90.67	48.05	UL-RL	5.7646E+04	-4.300	0.000	1.000	1.000	44.43	0.000	0.000	Strato1_2_8_L_0
24 D	9.305	-6.1858E-05	94.51	46.53	94.51	50.09	UL-RL	5.7646E+04	-4.500	0.000	1.000	1.000	46.53	0.000	0.000	Strato1_2_8_L_0
25 D	9.724	-6.0881E-05	98.36	48.62	98.36	52.13	UL-RL	5.7646E+04	-4.700	0.000	1.000	1.000	48.62	0.000	0.000	Strato1_2_8_L_0
26 D	10.14	-5.9861E-05	102.2	50.71	102.2	54.16	UL-RL	5.7646E+04	-4.900	0.000	1.000	1.000	50.71	0.000	0.000	Strato1_2_8_L_0
27 D	10.56	-5.8794E-05	106.0	52.81	106.0	56.20	UL-RL	5.7646E+04	-5.100	0.000	1.000	1.000	52.81	0.000	0.000	Strato1_2_8_L_0
28 D	10.95	-5.7672E-05	109.6	54.76	109.6	58.08	UL-RL	5.7646E+04	-5.300	0.000	1.000	1.000				

```
54.76       0.000       0.000     Strato1_2_8_L_0
  29 D   11.37   -5.6493E-05   113.4       56.86        113.4        60.12        UL-RL  5.7646E+04  -5.500      0.000      1.000      1.000
56.86       0.000       0.000     Strato1_2_8_L_0
  30 D   11.79   -5.5251E-05   117.3       58.96        117.3        62.15        UL-RL  5.7646E+04  -5.700      0.000      1.000      1.000
58.96       0.000       0.000     Strato1_2_8_L_0
  31 D   12.21   -5.3945E-05   121.1       61.07        121.1        64.18        UL-RL  5.7646E+04  -5.900      0.000      1.000      1.000
61.07       0.000       0.000     Strato1_2_8_L_0
  32 D   12.64   -5.2572E-05   124.9       63.18        124.9        66.21        UL-RL  5.7646E+04  -6.100      0.000      1.000      1.000
63.18       0.000       0.000     Strato1_2_8_L_0
  33 D   13.06   -5.1134E-05   128.8       65.30        128.8        68.24        UL-RL  5.7646E+04  -6.300      0.000      1.000      1.000
65.30       0.000       0.000     Strato1_2_8_L_0
  34 D   13.48   -4.9633E-05   132.6       67.41        132.6        70.27        UL-RL  5.7646E+04  -6.500      0.000      1.000      1.000
67.41       0.000       0.000     Strato1_2_8_L_0
  35 D   13.91   -4.8072E-05   136.4       69.53        136.4        72.30        UL-RL  5.7646E+04  -6.700      0.000      1.000      1.000
69.53       0.000       0.000     Strato1_2_8_L_0
  36 D   14.31   -4.6457E-05   140.0       71.54        140.0        74.22        UL-RL  5.7646E+04  -6.900      0.000      1.000      1.000
71.54       0.000       0.000     Strato1_2_8_L_0
  37 D   14.73   -4.4797E-05   143.9       73.66        143.9        76.25        UL-RL  5.7646E+04  -7.100      0.000      1.000      1.000
73.66       0.000       0.000     Strato1_2_8_L_0
  38 D   15.16   -4.3105E-05   147.7       75.79        147.7        78.27        UL-RL  5.7646E+04  -7.300      0.000      1.000      1.000
75.79       0.000       0.000     Strato1_2_8_L_0
  39 D   15.58   -4.1392E-05   151.5       77.92        151.5        80.30        UL-RL  5.7646E+04  -7.500      0.000      1.000      1.000
77.92       0.000       0.000     Strato1_2_8_L_0
  40 D   16.01   -3.9677E-05   155.3       80.04        155.3        82.33        UL-RL  5.7646E+04  -7.700      0.000      1.000      1.000
80.04       0.000       0.000     Strato1_2_8_L_0
  41 D   14.71   -3.7980E-05   159.3       73.56        159.3        79.63        UL-RL  1.5998E+05  -7.900      0.000      1.000      1.000
73.56       0.000       0.000     Strato2_3095_82743_L_0
  42 D   15.17   -3.6323E-05   163.3       75.83        163.3        81.64        UL-RL  1.5998E+05  -8.100      0.000      1.000      1.000
75.83       0.000       0.000     Strato2_3095_82743_L_0
  43 D   15.60   -3.4724E-05   167.1       78.01        167.1        83.57        UL-RL  1.5998E+05  -8.300      0.000      1.000      1.000
78.01       0.000       0.000     Strato2_3095_82743_L_0
  44 D   16.05   -3.3198E-05   171.2       80.27        171.2        85.58        UL-RL  1.5998E+05  -8.500      0.000      1.000      1.000
80.27       0.000       0.000     Strato2_3095_82743_L_0
  45 D   16.50   -3.1753E-05   175.2       82.51        175.2        87.59        UL-RL  1.5998E+05  -8.700      0.000      1.000      1.000
82.51       0.000       0.000     Strato2_3095_82743_L_0
  46 D   16.95   -3.0394E-05   179.2       84.74        179.2        89.60        UL-RL  1.5998E+05  -8.900      0.000      1.000      1.000
84.74       0.000       0.000     Strato2_3095_82743_L_0
  47 D   17.39   -2.9124E-05   183.2       86.95        183.2        91.61        UL-RL  1.5998E+05  -9.100      0.000      1.000      1.000
86.95       0.000       0.000     Strato2_3095_82743_L_0
  48 D   17.83   -2.7941E-05   187.2       89.15        187.2        93.62        UL-RL  1.5998E+05  -9.300      0.000      1.000      1.000
89.15       0.000       0.000     Strato2_3095_82743_L_0
  49 D   18.27   -2.6843E-05   191.3       91.34        191.3        95.63        UL-RL  1.5998E+05  -9.500      0.000      1.000      1.000
91.34       0.000       0.000     Strato2_3095_82743_L_0
  50 D   18.70   -2.5825E-05   195.3       93.51        195.3        97.64        UL-RL  1.5998E+05  -9.700      0.000      1.000      1.000
93.51       0.000       0.000     Strato2_3095_82743_L_0
  51 D   19.12   -2.4880E-05   199.2       95.60        199.2        99.58        UL-RL  1.5998E+05  -9.900      0.000      1.000      1.000
95.60       0.000       0.000     Strato2_3095_82743_L_0
  52 D   19.55   -2.4002E-05   203.2       97.75        203.2        101.6        UL-RL  1.5998E+05  -10.10      0.000      1.000      1.000
97.75       0.000       0.000     Strato2_3095_82743_L_0
  53 D   19.98   -2.3181E-05   207.2       99.89        207.2        103.6        UL-RL  1.5998E+05  -10.30      0.000      1.000      1.000
99.89       0.000       0.000     Strato2_3095_82743_L_0
  54 D   20.40   -2.2410E-05   211.2       102.0        211.2        105.6        UL-RL  1.5998E+05  -10.50      0.000      1.000      1.000
102.0       0.000       0.000     Strato2_3095_82743_L_0
  55 D   20.83   -2.1679E-05   215.2       104.1        215.2        107.6        UL-RL  1.5998E+05  -10.70      0.000      1.000      1.000
104.1       0.000       0.000     Strato2_3095_82743_L_0
  56 D   21.25   -2.0981E-05   219.3       106.3        219.3        109.6        UL-RL  1.5998E+05  -10.90      0.000      1.000      1.000
106.3       0.000       0.000     Strato2_3095_82743_L_0
  57 D   21.68   -2.0308E-05   223.3       108.4        223.3        111.6        UL-RL  1.5998E+05  -11.10      0.000      1.000      1.000
108.4       0.000       0.000     Strato2_3095_82743_L_0
  58 D   22.09   -1.9652E-05   227.2       110.4        227.2        113.6        UL-RL  1.5998E+05  -11.30      0.000      1.000      1.000
110.4       0.000       0.000     Strato2_3095_82743_L_0
  59 D   22.51   -1.9007E-05   231.2       112.5        231.2        115.6        UL-RL  1.5998E+05  -11.50      0.000      1.000      1.000
112.5       0.000       0.000     Strato2_3095_82743_L_0
  60 D   22.93   -1.8368E-05   235.2       114.7        235.2        117.6        UL-RL  1.5998E+05  -11.70      0.000      1.000      1.000
114.7       0.000       0.000     Strato2_3095_82743_L_0
  61 D   17.52   -1.7731E-05   239.2       116.8        239.2        119.6        UL-RL  1.5998E+05  -11.90      0.000      1.000      1.000
116.8       0.000       0.000     Strato2_3095_82743_L_0
  62 D   5.890   -1.7413E-05   241.2       117.8        241.2        120.6        UL-RL  1.5998E+05  -12.00      0.000      1.000      1.000
117.8       0.000       0.000     Strato2_3095_82743_L_0
```

```
+-----------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*  |
|                                                                                                           |
|                                       NewProject.BaseDesignSection_28.A2M2R1_3514                          |
|                                    Exe Time :24 July 2019       11:09:28                                   |
+-----------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P   N O.   2

0_R                              :
```

ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 62
C U R R E N T T I M E I S 2.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.000	8.5892E-05	0.000	0.000	0.000	0.000	PASSIVE	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_2_8_L_0
2 D	0.6778	8.4553E-05	3.800	3.389	3.800	3.389	V-C	1.6263E+04	-0.2000	0.000	1.000	1.000	3.389	0.000	0.000	Strato1_2_8_L_0
3 D	1.076	8.3219E-05	7.600	5.381	7.600	5.381	V-C	1.6263E+04	-0.4000	0.000	1.000	1.000	5.381	0.000	0.000	Strato1_2_8_L_0
4 D	1.475	8.1896E-05	11.40	7.374	11.40	7.374	V-C	1.6263E+04	-0.6000	0.000	1.000	1.000	7.374	0.000	0.000	Strato1_2_8_L_0
5 D	1.873	8.0590E-05	15.20	9.367	15.20	9.367	V-C	1.6263E+04	-0.8000	0.000	1.000	1.000	9.367	0.000	0.000	Strato1_2_8_L_0
6 D	2.272	7.9308E-05	19.00	11.36	19.00	11.36	V-C	1.6263E+04	-1.000	0.000	1.000	1.000	11.36	0.000	0.000	Strato1_2_8_L_0
7 D	2.671	7.8058E-05	22.80	13.35	22.80	13.35	V-C	1.6263E+04	-1.200	0.000	1.000	1.000	13.35	0.000	0.000	Strato1_2_8_L_0
8 D	3.070	7.6844E-05	26.60	15.35	26.60	15.35	V-C	1.6263E+04	-1.400	0.000	1.000	1.000	15.35	0.000	0.000	Strato1_2_8_L_0
9 D	3.469	7.5670E-05	30.40	17.34	30.40	17.34	V-C	1.6263E+04	-1.600	0.000	1.000	1.000	17.34	0.000	0.000	Strato1_2_8_L_0
10 D	3.868	7.4539E-05	34.20	19.34	34.20	19.34	V-C	1.6263E+04	-1.800	0.000	1.000	1.000	19.34	0.000	0.000	Strato1_2_8_L_0
11 D	4.267	7.3452E-05	38.00	21.33	38.00	21.33	V-C	1.6263E+04	-2.000	0.000	1.000	1.000	21.33	0.000	0.000	Strato1_2_8_L_0
12 D	4.666	7.2406E-05	41.80	23.33	41.80	23.33	V-C	1.6263E+04	-2.200	0.000	1.000	1.000	23.33	0.000	0.000	Strato1_2_8_L_0
13 D	3.799	7.1399E-05	45.60	25.33	45.60	25.33	V-C	1.6263E+04	-2.400	0.000	1.000	1.000	25.33	0.000	0.000	Strato1_2_8_L_0
14 D	3.949	7.0910E-05	47.50	26.33	47.50	26.33	V-C	1.6263E+04	-2.500	0.000	1.000	1.000	26.33	0.000	0.000	Strato1_2_8_L_0
15 D	5.665	6.9956E-05	51.30	28.33	51.30	28.33	V-C	1.6263E+04	-2.700	0.000	1.000	1.000	28.33	0.000	0.000	Strato1_2_8_L_0
16 D	6.065	6.9030E-05	55.10	30.33	55.10	30.33	V-C	1.6263E+04	-2.900	0.000	1.000	1.000	30.33	0.000	0.000	Strato1_2_8_L_0
17 D	6.465	6.8128E-05	58.90	32.32	58.90	32.32	V-C	1.6263E+04	-3.100	0.000	1.000	1.000	32.32	0.000	0.000	Strato1_2_8_L_0
18 D	6.865	6.7241E-05	62.70	34.32	62.70	34.32	V-C	1.6263E+04	-3.300	0.000	1.000	1.000	34.32	0.000	0.000	Strato1_2_8_L_0
19 D	7.265	6.6364E-05	66.50	36.32	66.50	36.32	V-C	1.6263E+04	-3.500	0.000	1.000	1.000	36.32	0.000	0.000	Strato1_2_8_L_0
20 D	7.665	6.5489E-05	70.30	38.32	70.30	38.32	V-C	1.6263E+04	-3.700	0.000	1.000	1.000	38.32	0.000	0.000	Strato1_2_8_L_0
21 D	8.065	6.4608E-05	74.10	40.32	74.10	40.32	V-C	1.6263E+04	-3.900	0.000	1.000	1.000	40.32	0.000	0.000	Strato1_2_8_L_0
22 D	8.465	6.3714E-05	77.90	42.32	77.90	42.32	V-C	1.6263E+04	-4.100	0.000	1.000	1.000	42.32	0.000	0.000	Strato1_2_8_L_0
23 D	8.864	6.2800E-05	81.70	44.32	81.70	44.32	V-C	1.6263E+04	-4.300	0.000	1.000	1.000	44.32	0.000	0.000	Strato1_2_8_L_0
24 D	9.264	6.1858E-05	85.50	46.32	85.50	46.32	V-C	1.6263E+04	-4.500	0.000	1.000	1.000	46.32	0.000	0.000	Strato1_2_8_L_0
25 D	9.663	6.0881E-05	89.30	48.32	89.30	48.32	UL-RL	4.8789E+04	-4.700	0.000	1.000	1.000	48.32	0.000	0.000	Strato1_2_8_L_0
26 D	10.06	5.9861E-05	93.10	50.31	93.10	50.32	UL-RL	4.8789E+04	-4.900	0.000	1.000	1.000	50.31	0.000	0.000	Strato1_2_8_L_0
27 D	10.46	5.8794E-05	96.90	52.30	96.90	52.32	UL-RL	4.8789E+04	-5.100	0.000	1.000	1.000	52.30	0.000	0.000	Strato1_2_8_L_0
28 D	10.86	5.7672E-05	100.7	54.29	100.7	54.32	UL-RL	4.8789E+04	-5.300	0.000	1.000	1.000	54.29	0.000	0.000	Strato1_2_8_L_0
29 D	11.26	5.6493E-05	104.5	56.28	104.5	56.31	UL-RL	4.8789E+04	-5.500	0.000	1.000	1.000	56.28	0.000	0.000	Strato1_2_8_L_0
30 D	11.66	5.5251E-05	108.3	58.28	108.3	58.31	UL-RL	4.8789E+04	-5.700	0.000	1.000	1.000	58.28	0.000	0.000	Strato1_2_8_L_0
31 D	12.05	5.3945E-05	112.1	60.27	112.1	60.30	UL-RL	4.8789E+04	-5.900	0.000	1.000	1.000	60.27	0.000	0.000	Strato1_2_8_L_0
32 D	12.45	5.2572E-05	115.9	62.26	115.9	62.29	UL-RL	4.8789E+04	-6.100	0.000	1.000	1.000	62.26	0.000	0.000	Strato1_2_8_L_0
33 D	12.85	5.1134E-05	119.7	64.25	119.7	64.28	UL-RL	4.8789E+04	-6.300	0.000	1.000	1.000	64.25	0.000	0.000	Strato1_2_8_L_0
34 D	13.25	4.9633E-05	123.5	66.24	123.5	66.27	UL-RL	4.8789E+04	-6.500	0.000	1.000	1.000	66.24	0.000	0.000	Strato1_2_8_L_0
35 D	13.65	4.8072E-05	127.3	68.23	127.3	68.26	UL-RL	4.8789E+04	-6.700	0.000	1.000	1.000	68.23	0.000	0.000	Strato1_2_8_L_0
36 D	14.04	4.6457E-05	131.1	70.22	131.1	70.25	UL-RL	4.8789E+04	-6.900	0.000	1.000	1.000	70.22	0.000	0.000	Strato1_2_8_L_0
37 D	14.44	4.4797E-05	134.9	72.20	134.9	72.24	UL-RL	4.8789E+04	-7.100	0.000	1.000	1.000	72.20	0.000	0.000	Strato1_2_8_L_0

38 D	14.84	4.3105E-05	138.7	74.19	138.7	74.22	UL-RL	4.8789E+04	-7.300	0.000	1.000	1.000
74.19	0.000	0.000	Strato1_2_8_L_0									
39 D	15.24	4.1392E-05	142.5	76.18	142.5	76.21	UL-RL	4.8789E+04	-7.500	0.000	1.000	1.000
76.18	0.000	0.000	Strato1_2_8_L_0									
40 D	15.63	3.9677E-05	146.3	78.17	146.3	78.19	UL-RL	4.8789E+04	-7.700	0.000	1.000	1.000
78.17	0.000	0.000	Strato1_2_8_L_0									
41 D	15.29	3.7980E-05	150.2	76.46	150.2	76.51	UL-RL	1.0987E+05	-7.900	0.000	1.000	1.000
76.46	0.000	0.000	Strato2_3095_82743_L_0									
42 D	15.68	3.6323E-05	154.2	78.40	154.2	78.45	UL-RL	1.0987E+05	-8.100	0.000	1.000	1.000
78.40	0.000	0.000	Strato2_3095_82743_L_0									
43 D	16.07	3.4724E-05	158.2	80.34	158.2	80.39	UL-RL	1.0987E+05	-8.300	0.000	1.000	1.000
80.34	0.000	0.000	Strato2_3095_82743_L_0									
44 D	16.46	3.3198E-05	162.2	82.29	162.2	82.33	UL-RL	1.0987E+05	-8.500	0.000	1.000	1.000
82.29	0.000	0.000	Strato2_3095_82743_L_0									
45 D	16.85	3.1753E-05	166.2	84.24	166.2	84.27	UL-RL	1.0987E+05	-8.700	0.000	1.000	1.000
84.24	0.000	0.000	Strato2_3095_82743_L_0									
46 D	17.24	3.0394E-05	170.2	86.20	170.2	86.22	UL-RL	1.0987E+05	-8.900	0.000	1.000	1.000
86.20	0.000	0.000	Strato2_3095_82743_L_0									
47 D	17.63	2.9124E-05	174.2	88.15	174.2	88.17	UL-RL	1.0987E+05	-9.100	0.000	1.000	1.000
88.15	0.000	0.000	Strato2_3095_82743_L_0									
48 D	18.02	2.7941E-05	178.2	90.11	178.2	90.13	UL-RL	1.0987E+05	-9.300	0.000	1.000	1.000
90.11	0.000	0.000	Strato2_3095_82743_L_0									
49 D	18.41	2.6843E-05	182.2	92.07	182.2	92.09	UL-RL	1.0987E+05	-9.500	0.000	1.000	1.000
92.07	0.000	0.000	Strato2_3095_82743_L_0									
50 D	18.81	2.5825E-05	186.2	94.04	186.2	94.05	UL-RL	1.0987E+05	-9.700	0.000	1.000	1.000
94.04	0.000	0.000	Strato2_3095_82743_L_0									
51 D	19.20	2.4880E-05	190.2	96.01	190.2	96.01	UL-RL	1.0987E+05	-9.900	0.000	1.000	1.000
96.01	0.000	0.000	Strato2_3095_82743_L_0									
52 D	19.60	2.4002E-05	194.2	97.98	194.2	97.98	UL-RL	1.0987E+05	-10.10	0.000	1.000	1.000
97.98	0.000	0.000	Strato2_3095_82743_L_0									
53 D	19.99	2.3181E-05	198.2	99.95	198.2	99.95	UL-RL	1.0987E+05	-10.30	0.000	1.000	1.000
99.95	0.000	0.000	Strato2_3095_82743_L_0									
54 D	20.38	2.2410E-05	202.2	101.9	202.2	101.9	V-C	3.6625E+04	-10.50	0.000	1.000	1.000
101.9	0.000	0.000	Strato2_3095_82743_L_0									
55 D	20.78	2.1679E-05	206.2	103.9	206.2	103.9	V-C	3.6625E+04	-10.70	0.000	1.000	1.000
103.9	0.000	0.000	Strato2_3095_82743_L_0									
56 D	21.17	2.0981E-05	210.2	105.9	210.2	105.9	V-C	3.6625E+04	-10.90	0.000	1.000	1.000
105.9	0.000	0.000	Strato2_3095_82743_L_0									
57 D	21.57	2.0308E-05	214.2	107.8	214.2	107.8	V-C	3.6625E+04	-11.10	0.000	1.000	1.000
107.8	0.000	0.000	Strato2_3095_82743_L_0									
58 D	21.96	1.9652E-05	218.2	109.8	218.2	109.8	UL-RL	1.0987E+05	-11.30	0.000	1.000	1.000
109.8	0.000	0.000	Strato2_3095_82743_L_0									
59 D	22.36	1.9007E-05	222.2	111.8	222.2	111.8	UL-RL	1.0987E+05	-11.50	0.000	1.000	1.000
111.8	0.000	0.000	Strato2_3095_82743_L_0									
60 D	22.75	1.8368E-05	226.2	113.8	226.2	113.8	UL-RL	1.0987E+05	-11.70	0.000	1.000	1.000
113.8	0.000	0.000	Strato2_3095_82743_L_0									
61 D	17.36	1.7731E-05	230.2	115.7	230.2	115.8	UL-RL	1.0987E+05	-11.90	0.000	1.000	1.000
115.7	0.000	0.000	Strato2_3095_82743_L_0									
62 D	5.837	1.7413E-05	232.2	116.7	232.2	116.7	UL-RL	1.0987E+05	-12.00	0.000	1.000	1.000
116.7	0.000	0.000	Strato2_3095_82743_L_0									

```
 +-------------------------------------------------------------------------------------------------------------------+
 |                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*           |
 |                                                                                                                   |
 |                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                    |
 |                                  Exe Time :24 July 2019      11:09:28                                             |
 +-------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

 WallElement_33                  :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
 C U R R E N T   T I M E   I S     2.0000

  WALL2D ELEMENT

    EL      TA          TB          MA          MB
 ------------------------------------------------------
     1 0.48750    -0.48750    -4.03899E-13 9.75000E-02
     2 0.61718    -0.61718    -9.75000E-02 0.22094
     3 0.72902    -0.72902    -0.22094     0.36674
     4 0.76644    -0.76644    -0.36674     0.52003
     5 0.71142    -0.71142    -0.52003     0.66231
     6 0.55596    -0.55596    -0.66231     0.77350
     7 0.39222    -0.39222    -0.77350     0.85195
     8 0.25569    -0.25569    -0.85195     0.90309
     9 5.12352E-02-5.12352E-02-0.90309     0.91333
    10-0.12071     0.12071    -0.91333     0.88919
    11-0.26391     0.26391    -0.88919     0.83641
    12-0.38127     0.38127    -0.83641     0.76015
```

```
   13-0.45164     0.45164    -0.76015     0.71499
   14-0.53660     0.53660    -0.71499     0.60767
   15-0.62666     0.62666    -0.60767     0.48234
   16-0.69517     0.69517    -0.48234     0.34330
   17-0.74350     0.74350    -0.34330     0.19460
   18-0.77271     0.77271    -0.19460     4.00629E-02
   19-0.78362     0.78362    -4.00629E-02-0.11666
   20-0.77685     0.77685     0.11666    -0.27203
   21-0.79230     0.79230     0.27203    -0.43049
   22-0.78868     0.78868     0.43049    -0.58823
   23-0.76625     0.76625     0.58823    -0.74148
   24-0.72507     0.72507     0.74148    -0.88649
   25-0.66464     0.66464     0.88649     -1.0194
   26-0.58396     0.58396      1.0194     -1.1362
   27-0.48286     0.48286      1.1362     -1.2328
   28-0.39035     0.39035      1.2328     -1.3109
   29-0.27553     0.27553      1.3109     -1.3660
   30-0.13795     0.13795      1.3660     -1.3935
   31 2.29557E-02-2.29557E-02  1.3935     -1.3890
   32 0.20778    -0.20778      1.3890     -1.3474
   33 0.41717    -0.41717      1.3474     -1.2640
   34 0.65178    -0.65178      1.2640     -1.1336
   35 0.91223    -0.91223      1.1336    -0.95116
   36  1.1764     -1.1764     0.95116    -0.71588
   37  1.4682     -1.4682     0.71588    -0.42224
   38  1.7877     -1.7877     0.42224    -6.46946E-02
   39  2.1352     -2.1352     6.46946E-02 0.36234
   40  2.5104     -2.5104    -0.36234     0.86442
   41  1.9304     -1.9304    -0.86442      1.2505
   42  1.4171     -1.4171     -1.2505      1.5339
   43 0.95042    -0.95042     -1.5339      1.7240
   44 0.54558    -0.54558     -1.7240      1.8331
   45 0.19933    -0.19933     -1.8331      1.8730
   46-9.18121E-02 9.18121E-02 -1.8730      1.8546
   47-0.33140     0.33140     -1.8546      1.7883
   48-0.52293     0.52293     -1.7883      1.6838
   49-0.66979     0.66979     -1.6838      1.5498
   50-0.77517     0.77517     -1.5498      1.3948
   51-0.85696     0.85696     -1.3948      1.2234
   52-0.90253     0.90253     -1.2234      1.0429
   53-0.91421     0.91421     -1.0429     0.86004
   54-0.89401     0.89401    -0.86004     0.68123
   55-0.84308     0.84308    -0.68123     0.51262
   56-0.76293     0.76293    -0.51262     0.36003
   57-0.65458     0.65458    -0.36003     0.22912
   58-0.53192     0.53192    -0.22912     0.12273
   59-0.38205     0.38205    -0.12273     4.63242E-02
   60-0.20529     0.20529    -4.63242E-02 5.26648E-03
   61-5.26595E-02 5.26595E-02-5.26648E-03 2.33369E-13


+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                        |
|                                  Exe Time :24 July 2019      11:09:28                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_778405                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S      2.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1950E+05 RIMNOR= 119.0
           RENORM= 436.5     REMNOR=0.1763E-22 RATIO =0.1496     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 22.93     RMMAX = 1.873
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1950E+05 RDR   = 119.0
           RATIOT=0.1496     RATIOR= 0.000
           MAX UN= 6.065     IEQ=    31 NODE     16 DOF   1  Y-DISPL.F
           MIN UN=-.2139E-10 IEQ=    39 NODE     20 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0
```

```
ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1950E+05 RIMNOR= 119.0
           RENORM= 91.64     REMNOR=0.1323E-19 RATIO =0.6855E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 22.93     RMMAX = 1.873
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1950E+05 RDR   = 119.0
           RATIOT=0.6855E-01 RATIOR= 0.000
           MAX UN= 4.272     IEQ=    13 NODE      7 DOF   1  Y-DISPL.F
           MIN UN=-.4051E-03 IEQ=    49 NODE     25 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1950E+05 RIMNOR= 119.0
           RENORM= 57.76     REMNOR=0.5090E-19 RATIO =0.5442E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 22.93     RMMAX = 1.873
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1950E+05 RDR   = 119.0
           RATIOT=0.5442E-01 RATIOR= 0.000
           MAX UN= 4.442     IEQ=    43 NODE     22 DOF   1  Y-DISPL.F
           MIN UN=-.1640E-08 IEQ=     5 NODE      3 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1950E+05 RIMNOR= 119.0
           RENORM= 3.224     REMNOR=0.5457E-19 RATIO =0.1286E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 22.93     RMMAX = 1.873
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1950E+05 RDR   = 119.0
           RATIOT=0.1286E-01 RATIOR= 0.000
           MAX UN= 1.466     IEQ=    59 NODE     30 DOF   1  Y-DISPL.F
           MIN UN=-.1351E-08 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     5 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1950E+05 RIMNOR= 119.0
           RENORM=0.3534E-03 REMNOR=0.3428E-19 RATIO =0.1346E-03 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 22.93     RMMAX = 1.873
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1950E+05 RDR   = 119.0
           RATIOT=0.1346E-03 RATIOR= 0.000
           MAX UN=0.1880E-01 IEQ=    65 NODE     33 DOF   1  Y-DISPL.F
           MIN UN=-.1140E-08 IEQ=    15 NODE      8 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     6 RNORM = 0.000     RMNORM= 0.000
           RINORM=0.1950E+05 RIMNOR= 119.0
           RENORM=0.7094E-17 REMNOR=0.2806E-19 RATIO =0.1907E-10 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 22.93     RMMAX = 1.873
           RTSMAL=0.1000E-03 RMSMAL=0.1000E-04
           RDT   =0.1950E+05 RDR   = 119.0
           RATIOT=0.1907E-10 RATIOR= 0.000
           MAX UN=0.1261E-08 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           MIN UN=-.8732E-09 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0




+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                        |
|                                 Exe Time :24 July 2019      11:09:28                                                  |
+-----------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     6 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    3     ( AT TIME   3.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)           (
    1   5.6020953E-03  -8.8605250E-04
    2   5.4248856E-03  -8.8604093E-04
    3   5.2476818E-03  -8.8598704E-04
    4   5.0704967E-03  -8.8584345E-04
    5   4.8933546E-03  -8.8554607E-04
```

```
     6   4.7162938E-03  -8.8501582E-04
     7   4.5393701E-03  -8.8415929E-04
     8   4.3626590E-03  -8.8286900E-04
     9   4.1862595E-03  -8.8102359E-04
    10   4.0102955E-03  -8.7848942E-04
    11   3.8349193E-03  -8.7512050E-04
    12   3.6603136E-03  -8.7075681E-04
    13   3.4866945E-03  -8.6522445E-04
    14   3.4003320E-03  -8.6196784E-04
    15   3.2286767E-03  -8.5432558E-04
    16   3.0587126E-03  -8.4502057E-04
    17   2.8907941E-03  -8.3383152E-04
    18   2.7253194E-03  -8.2055077E-04
    19   2.5627225E-03  -8.0503911E-04
    20   2.4034554E-03  -7.8725328E-04
    21   2.2479693E-03  -7.6724589E-04
    22   2.0966952E-03  -7.4516619E-04
    23   1.9500271E-03  -7.2122229E-04
    24   1.8083161E-03  -6.9563066E-04
    25   1.6718705E-03  -6.6860417E-04
    26   1.5409562E-03  -6.4035247E-04
    27   1.4157980E-03  -6.1108247E-04
    28   1.2965781E-03  -5.8099808E-04
    29   1.1834396E-03  -5.5030197E-04
    30   1.0764847E-03  -5.1919532E-04
    31   9.7577549E-04  -4.8787788E-04
    32   8.8133478E-04  -4.5654847E-04
    33   7.9314420E-04  -4.2540478E-04
    34   7.1114730E-04  -3.9464465E-04
    35   6.3524836E-04  -3.6445430E-04
    36   5.6531668E-04  -3.3499750E-04
    37   5.0119092E-04  -3.0641723E-04
    38   4.4268336E-04  -2.7883755E-04
    39   3.8958246E-04  -2.5236401E-04
    40   3.4165806E-04  -2.2708606E-04
    41   2.9866338E-04  -2.0307797E-04
    42   2.6033519E-04  -1.8044499E-04
    43   2.2638565E-04  -1.5931047E-04
    44   1.9650558E-04  -1.3975989E-04
    45   1.7037259E-04  -1.2184583E-04
    46   1.4765662E-04  -1.0559117E-04
    47   1.2802570E-04  -9.0992922E-05
    48   1.1115080E-04  -7.8025659E-05
    49   9.6709790E-05  -6.6644320E-05
    50   8.4391454E-05  -5.6787314E-05
    51   7.3898309E-05  -4.8378642E-05
    52   6.4949509E-05  -4.1330553E-05
    53   5.7282172E-05  -3.5544637E-05
    54   5.0654635E-05  -3.0914005E-05
    55   4.4847210E-05  -2.7323775E-05
    56   3.9663879E-05  -2.4652236E-05
    57   3.4933588E-05  -2.2771605E-05
    58   3.0511396E-05  -2.1548597E-05
    59   2.6279513E-05  -2.0845136E-05
    60   2.2148213E-05  -2.0518604E-05
    61   1.8056764E-05  -2.0421677E-05
    62   1.6014718E-05  -2.0416792E-05


+--------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                    |
|                                  NewProject.BaseDesignSection_28.A2M2R1_3514                                       |
|                               Exe Time :24 July 2019      11:09:28                                                 |
+--------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P  N O.    1

0_L                               :
ELEMENT TYPE     5 NO.OF ELEMENTS. IN THIS GROUP    62
C U R R E N T    T I M E    I S      3.0000

 HARDENING 2D SOIL ELEMENT

 ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P          STATE   STIFFNESS Z-LEVEL      PORE        E FACTOR     UFACTOR
Peq           Su_a         Su_p       LAYER
---------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1 D  0.4875     -5.6021E-03   13.00        4.875       13.00        6.890          ACTIVE  0.000        0.000       0.000        1.000       1.000
```

4.875	0.000	0.000	Strato1_2_8_L_0										
2 D	0.8075	-5.4249E-03	10.77	4.038	10.77	5.706	ACTIVE	0.000	-0.2000	0.000	1.000	1.000	
4.038	0.000	0.000	Strato1_2_8_L_0										
3 D	1.188	-5.2477E-03	15.84	5.941	15.84	8.396	ACTIVE	0.000	-0.4000	0.000	1.000	1.000	
5.941	0.000	0.000	Strato1_2_8_L_0										
4 D	1.512	-5.0705E-03	20.16	7.561	20.16	10.69	ACTIVE	0.000	-0.6000	0.000	1.000	1.000	
7.561	0.000	0.000	Strato1_2_8_L_0										
5 D	1.818	-4.8934E-03	24.24	9.092	24.24	12.85	ACTIVE	0.000	-0.8000	0.000	1.000	1.000	
9.092	0.000	0.000	Strato1_2_8_L_0										
6 D	2.117	-4.7163E-03	28.22	10.58	28.22	14.96	ACTIVE	0.000	-1.000	0.000	1.000	1.000	
10.58	0.000	0.000	Strato1_2_8_L_0										
7 D	2.411	-4.5394E-03	32.14	12.05	32.14	17.03	ACTIVE	0.000	-1.200	0.000	1.000	1.000	
12.05	0.000	0.000	Strato1_2_8_L_0										
8 D	2.702	-4.3627E-03	36.03	13.51	36.03	19.09	ACTIVE	0.000	-1.400	0.000	1.000	1.000	
13.51	0.000	0.000	Strato1_2_8_L_0										
9 D	2.927	-4.1863E-03	39.02	14.63	39.02	20.68	ACTIVE	0.000	-1.600	0.000	1.000	1.000	
14.63	0.000	0.000	Strato1_2_8_L_0										
10 D	3.223	-4.0103E-03	42.97	16.11	42.97	22.78	ACTIVE	0.000	-1.800	0.000	1.000	1.000	
16.11	0.000	0.000	Strato1_2_8_L_0										
11 D	3.517	-3.8349E-03	46.89	17.58	46.89	24.85	ACTIVE	0.000	-2.000	0.000	1.000	1.000	
17.58	0.000	0.000	Strato1_2_8_L_0										
12 D	3.809	-3.6603E-03	50.79	19.05	50.79	26.92	ACTIVE	0.000	-2.200	0.000	1.000	1.000	
19.05	0.000	0.000	Strato1_2_8_L_0										
13 D	3.075	-3.4867E-03	54.67	20.50	54.67	28.98	ACTIVE	0.000	-2.400	0.000	1.000	1.000	
20.50	0.000	0.000	Strato1_2_8_L_0										
14 D	3.168	-3.4003E-03	56.32	21.12	56.32	29.85	ACTIVE	0.000	-2.500	0.000	1.000	1.000	
21.12	0.000	0.000	Strato1_2_8_L_0										
15 D	4.515	-3.2287E-03	60.21	22.58	60.21	31.91	ACTIVE	0.000	-2.700	0.000	1.000	1.000	
22.58	0.000	0.000	Strato1_2_8_L_0										
16 D	4.806	-3.0587E-03	64.08	24.03	64.08	33.96	ACTIVE	0.000	-2.900	0.000	1.000	1.000	
24.03	0.000	0.000	Strato1_2_8_L_0										
17 D	5.096	-2.8908E-03	67.94	25.48	67.94	36.01	ACTIVE	0.000	-3.100	0.000	1.000	1.000	
25.48	0.000	0.000	Strato1_2_8_L_0										
18 D	5.385	-2.7253E-03	71.80	26.93	71.80	38.05	ACTIVE	0.000	-3.300	0.000	1.000	1.000	
26.93	0.000	0.000	Strato1_2_8_L_0										
19 D	5.674	-2.5627E-03	75.65	28.37	75.65	40.10	ACTIVE	0.000	-3.500	0.000	1.000	1.000	
28.37	0.000	0.000	Strato1_2_8_L_0										
20 D	5.962	-2.4035E-03	79.50	29.81	79.50	42.13	ACTIVE	0.000	-3.700	0.000	1.000	1.000	
29.81	0.000	0.000	Strato1_2_8_L_0										
21 D	6.222	-2.2480E-03	82.96	31.11	82.96	43.97	ACTIVE	0.000	-3.900	0.000	1.000	1.000	
31.11	0.000	0.000	Strato1_2_8_L_0										
22 D	6.511	-2.0967E-03	86.82	32.56	86.82	46.01	ACTIVE	0.000	-4.100	0.000	1.000	1.000	
32.56	0.000	0.000	Strato1_2_8_L_0										
23 D	6.800	-1.9500E-03	90.67	34.00	90.67	48.05	ACTIVE	0.000	-4.300	0.000	1.000	1.000	
34.00	0.000	0.000	Strato1_2_8_L_0										
24 D	7.089	-1.8083E-03	94.51	35.44	94.51	50.09	ACTIVE	0.000	-4.500	0.000	1.000	1.000	
35.44	0.000	0.000	Strato1_2_8_L_0										
25 D	7.377	-1.6719E-03	98.36	36.88	98.36	52.13	ACTIVE	0.000	-4.700	0.000	1.000	1.000	
36.88	0.000	0.000	Strato1_2_8_L_0										
26 D	7.665	-1.5410E-03	102.2	38.32	102.2	54.16	ACTIVE	0.000	-4.900	0.000	1.000	1.000	
38.32	0.000	0.000	Strato1_2_8_L_0										
27 D	7.952	-1.4158E-03	106.0	39.76	106.0	56.20	ACTIVE	0.000	-5.100	0.000	1.000	1.000	
39.76	0.000	0.000	Strato1_2_8_L_0										
28 D	8.219	-1.2966E-03	109.6	41.09	109.6	58.08	ACTIVE	0.000	-5.300	0.000	1.000	1.000	
41.09	0.000	0.000	Strato1_2_8_L_0										
29 D	8.507	-1.1834E-03	113.4	42.53	113.4	60.12	ACTIVE	0.000	-5.500	0.000	1.000	1.000	
42.53	0.000	0.000	Strato1_2_8_L_0										
30 D	8.795	-1.0765E-03	117.3	43.97	117.3	62.15	ACTIVE	0.000	-5.700	0.000	1.000	1.000	
43.97	0.000	0.000	Strato1_2_8_L_0										
31 D	9.082	-9.7578E-04	121.1	45.41	121.1	64.18	ACTIVE	0.000	-5.900	0.000	1.000	1.000	
45.41	0.000	0.000	Strato1_2_8_L_0										
32 D	9.370	-8.8133E-04	124.9	46.85	124.9	66.21	ACTIVE	0.000	-6.100	0.000	1.000	1.000	
46.85	0.000	0.000	Strato1_2_8_L_0										
33 D	9.657	-7.9314E-04	128.8	48.29	128.8	68.24	ACTIVE	0.000	-6.300	0.000	1.000	1.000	
48.29	0.000	0.000	Strato1_2_8_L_0										
34 D	10.43	-7.1115E-04	132.6	52.16	132.6	70.27	UL-RL	2.3058E+04	-6.500	0.000	1.000	1.000	
52.16	0.000	0.000	Strato1_2_8_L_0										
35 D	11.20	-6.3525E-04	136.4	55.99	136.4	72.30	UL-RL	2.3058E+04	-6.700	0.000	1.000	1.000	
55.99	0.000	0.000	Strato1_2_8_L_0										
36 D	11.91	-5.6532E-04	140.0	59.57	140.0	74.22	UL-RL	2.3058E+04	-6.900	0.000	1.000	1.000	
59.57	0.000	0.000	Strato1_2_8_L_0										
37 D	12.63	-5.0119E-04	143.9	63.14	143.9	76.25	UL-RL	2.3058E+04	-7.100	0.000	1.000	1.000	
63.14	0.000	0.000	Strato1_2_8_L_0										
38 D	13.32	-4.4268E-04	147.7	66.58	147.7	78.27	UL-RL	2.3058E+04	-7.300	0.000	1.000	1.000	
66.58	0.000	0.000	Strato1_2_8_L_0										
39 D	13.98	-3.8958E-04	151.5	69.89	151.5	80.30	UL-RL	2.3058E+04	-7.500	0.000	1.000	1.000	
69.89	0.000	0.000	Strato1_2_8_L_0										
40 D	14.62	-3.4166E-04	155.3	73.08	155.3	82.33	UL-RL	2.3058E+04	-7.700	0.000	1.000	1.000	
73.08	0.000	0.000	Strato1_2_8_L_0										
41 D	11.37	-2.9866E-04	159.3	56.87	159.3	79.63	UL-RL	6.3994E+04	-7.900	0.000	1.000	1.000	
56.87	0.000	0.000	Strato2_3095_82743_L_0										
42 D	12.30	-2.6034E-04	163.3	61.50	163.3	81.64	UL-RL	6.3994E+04	-8.100	0.000	1.000	1.000	
61.50	0.000	0.000	Strato2_3095_82743_L_0										
43 D	13.15	-2.2639E-04	167.1	65.75	167.1	83.57	UL-RL	6.3994E+04	-8.300	0.000	1.000	1.000	
65.75	0.000	0.000	Strato2_3095_82743_L_0										

44 D	13.96	-1.9651E-04	171.2	69.82	171.2	85.58	UL-RL	6.3994E+04	-8.500	0.000	1.000	1.000	69.82	0.000	0.000	Strato2_3095_82743_L_0
45 D	14.73	-1.7037E-04	175.2	73.64	175.2	87.59	UL-RL	6.3994E+04	-8.700	0.000	1.000	1.000	73.64	0.000	0.000	Strato2_3095_82743_L_0
46 D	15.45	-1.4766E-04	179.2	77.24	179.2	89.60	UL-RL	6.3994E+04	-8.900	0.000	1.000	1.000	77.24	0.000	0.000	Strato2_3095_82743_L_0
47 D	16.12	-1.2803E-04	183.2	80.62	183.2	91.61	UL-RL	6.3994E+04	-9.100	0.000	1.000	1.000	80.62	0.000	0.000	Strato2_3095_82743_L_0
48 D	16.77	-1.1115E-04	187.2	83.83	187.2	93.62	UL-RL	6.3994E+04	-9.300	0.000	1.000	1.000	83.83	0.000	0.000	Strato2_3095_82743_L_0
49 D	17.37	-9.6710E-05	191.3	86.87	191.3	95.63	UL-RL	6.3994E+04	-9.500	0.000	1.000	1.000	86.87	0.000	0.000	Strato2_3095_82743_L_0
50 D	17.95	-8.4391E-05	195.3	89.76	195.3	97.64	UL-RL	6.3994E+04	-9.700	0.000	1.000	1.000	89.76	0.000	0.000	Strato2_3095_82743_L_0
51 D	18.49	-7.3898E-05	199.2	92.46	199.2	99.58	UL-RL	6.3994E+04	-9.900	0.000	1.000	1.000	92.46	0.000	0.000	Strato2_3095_82743_L_0
52 D	19.03	-6.4950E-05	203.2	95.13	203.2	101.6	UL-RL	6.3994E+04	-10.10	0.000	1.000	1.000	95.13	0.000	0.000	Strato2_3095_82743_L_0
53 D	19.54	-5.7282E-05	207.2	97.71	207.2	103.6	UL-RL	6.3994E+04	-10.30	0.000	1.000	1.000	97.71	0.000	0.000	Strato2_3095_82743_L_0
54 D	20.04	-5.0655E-05	211.2	100.2	211.2	105.6	UL-RL	6.3994E+04	-10.50	0.000	1.000	1.000	100.2	0.000	0.000	Strato2_3095_82743_L_0
55 D	20.53	-4.4847E-05	215.2	102.7	215.2	107.6	UL-RL	6.3994E+04	-10.70	0.000	1.000	1.000	102.7	0.000	0.000	Strato2_3095_82743_L_0
56 D	21.01	-3.9664E-05	219.3	105.1	219.3	109.6	UL-RL	6.3994E+04	-10.90	0.000	1.000	1.000	105.1	0.000	0.000	Strato2_3095_82743_L_0
57 D	21.49	-3.4934E-05	223.3	107.4	223.3	111.6	UL-RL	6.3994E+04	-11.10	0.000	1.000	1.000	107.4	0.000	0.000	Strato2_3095_82743_L_0
58 D	21.95	-3.0511E-05	227.2	109.7	227.2	113.6	UL-RL	6.3994E+04	-11.30	0.000	1.000	1.000	109.7	0.000	0.000	Strato2_3095_82743_L_0
59 D	22.42	-2.6280E-05	231.2	112.1	231.2	115.6	UL-RL	6.3994E+04	-11.50	0.000	1.000	1.000	112.1	0.000	0.000	Strato2_3095_82743_L_0
60 D	22.88	-2.2148E-05	235.2	114.4	235.2	117.6	UL-RL	6.3994E+04	-11.70	0.000	1.000	1.000	114.4	0.000	0.000	Strato2_3095_82743_L_0
61 D	17.51	-1.8057E-05	239.2	116.7	239.2	119.6	UL-RL	6.3994E+04	-11.90	0.000	1.000	1.000	116.7	0.000	0.000	Strato2_3095_82743_L_0
62 D	5.894	-1.6015E-05	241.2	117.9	241.2	120.6	UL-RL	6.3994E+04	-12.00	0.000	1.000	1.000	117.9	0.000	0.000	Strato2_3095_82743_L_0

```
 +-------------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
 |                                                                                                                               |
 |                                        NewProject.BaseDesignSection_28.A2M2R1_3514                                            |
 |                                   Exe Time :24 July 2019      11:09:28                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S    R E S U L T S    F O R    G R O U P    N O.    2

 0_R                              :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
 C U R R E N T    T I M E    I S      3.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P          STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1     0.000         --          --          --          --          --          REMOVED     --        0.000       0.000       1.000       1.000
0.000       0.000       0.000     not available
   2     0.000         --          --          --          --          --          REMOVED     --       -0.2000      0.000       1.000       1.000
0.000       0.000       0.000     not available
   3     0.000         --          --          --          --          --          REMOVED     --       -0.4000      0.000       1.000       1.000
0.000       0.000       0.000     not available
   4     0.000         --          --          --          --          --          REMOVED     --       -0.6000      0.000       1.000       1.000
0.000       0.000       0.000     not available
   5     0.000         --          --          --          --          --          REMOVED     --       -0.8000      0.000       1.000       1.000
0.000       0.000       0.000     not available
   6     0.000         --          --          --          --          --          REMOVED     --       -1.000       0.000       1.000       1.000
0.000       0.000       0.000     not available
   7     0.000         --          --          --          --          --          REMOVED     --       -1.200       0.000       1.000       1.000
0.000       0.000       0.000     not available
   8     0.000         --          --          --          --          --          REMOVED     --       -1.400       0.000       1.000       1.000
0.000       0.000       0.000     not available
   9     0.000         --          --          --          --          --          REMOVED     --       -1.600       0.000       1.000       1.000
0.000       0.000       0.000     not available
  10     0.000         --          --          --          --          --          REMOVED     --       -1.800       0.000       1.000       1.000
0.000       0.000       0.000     not available
  11     0.000         --          --          --          --          --          REMOVED     --       -2.000       0.000       1.000       1.000
0.000       0.000       0.000     not available
  12     0.000         --          --          --          --          --          REMOVED     --       -2.200       0.000       1.000       1.000
0.000       0.000       0.000     not available
  13     0.000         --          --          --          --          --          REMOVED     --       -2.400       0.000       1.000       1.000
0.000       0.000       0.000     not available
  14     0.000         --          --          --          --          --          REMOVED     --       -2.500       0.000       1.000       1.000
0.000       0.000       0.000     not available
  15     0.000         --          --          --          --          --          REMOVED     --       -2.700       0.000       1.000       1.000
0.000       0.000       0.000     not available
  16     0.000         --          --          --          --          --          REMOVED     --       -2.900       0.000       1.000       1.000
0.000       0.000       0.000     not available
  17 D   1.154       2.8908E-03  1.900       5.772       58.90       32.32       PASSIVE     0.000    -3.100       0.000       1.000       1.000
5.772       0.000       0.000     Strato1_2_8_L_0
  18 D   3.463       2.7253E-03  5.700       17.32       62.70       34.32       PASSIVE     0.000    -3.300       0.000       1.000       1.000
17.32       0.000       0.000     Strato1_2_8_L_0
  19 D   5.772       2.5627E-03  9.500       28.86       66.50       36.32       PASSIVE     0.000    -3.500       0.000       1.000       1.000
28.86       0.000       0.000     Strato1_2_8_L_0
  20 D   8.081       2.4035E-03  13.30       40.41       70.30       40.41       PASSIVE     0.000    -3.700       0.000       1.000       1.000
40.41       0.000       0.000     Strato1_2_8_L_0
  21 D   10.39       2.2480E-03  17.10       51.95       74.10       51.95       PASSIVE     0.000    -3.900       0.000       1.000       1.000
51.95       0.000       0.000     Strato1_2_8_L_0
  22 D   11.11       2.0967E-03  20.90       55.55       77.90       55.55         V-C       6505.    -4.100       0.000       1.000       1.000
55.55       0.000       0.000     Strato1_2_8_L_0
  23 D   11.32       1.9500E-03  24.70       56.60       81.70       56.60         V-C       6505.    -4.300       0.000       1.000       1.000
56.60       0.000       0.000     Strato1_2_8_L_0
  24 D   11.54       1.8083E-03  28.50       57.68       85.50       57.68         V-C       6505.    -4.500       0.000       1.000       1.000
57.68       0.000       0.000     Strato1_2_8_L_0
  25 D   11.76       1.6719E-03  32.30       58.80       89.30       58.80         V-C       6505.    -4.700       0.000       1.000       1.000
58.80       0.000       0.000     Strato1_2_8_L_0
  26 D   11.99       1.5410E-03  36.10       59.95       93.10       59.95         V-C       6505.    -4.900       0.000       1.000       1.000
59.95       0.000       0.000     Strato1_2_8_L_0
  27 D   12.23       1.4158E-03  39.90       61.14       96.90       61.14         V-C       6505.    -5.100       0.000       1.000       1.000
61.14       0.000       0.000     Strato1_2_8_L_0
  28 D   12.47       1.2966E-03  43.70       62.37       100.7       62.37         V-C       6505.    -5.300       0.000       1.000       1.000
62.37       0.000       0.000     Strato1_2_8_L_0
  29 D   12.73       1.1834E-03  47.50       63.63       104.5       63.63         V-C       6505.    -5.500       0.000       1.000       1.000
63.63       0.000       0.000     Strato1_2_8_L_0
  30 D   12.99       1.0765E-03  51.30       64.94       108.3       64.94         V-C       6505.    -5.700       0.000       1.000       1.000
```

```
64.94       0.000       0.000      Strato1_2_8_L_0
  31 D   13.26     9.7578E-04  55.10         66.29        112.1        66.29             V-C   6505.      -5.900       0.000        1.000        1.000
66.29       0.000       0.000      Strato1_2_8_L_0
  32 D   13.53     8.8133E-04  58.90         67.67        115.9        67.67             V-C   6505.      -6.100       0.000        1.000        1.000
67.67       0.000       0.000      Strato1_2_8_L_0
  33 D   13.82     7.9314E-04  62.70         69.10        119.7        69.10             V-C   6505.      -6.300       0.000        1.000        1.000
69.10       0.000       0.000      Strato1_2_8_L_0
  34 D   14.11     7.1115E-04  66.50         70.57        123.5        70.57             V-C   6505.      -6.500       0.000        1.000        1.000
70.57       0.000       0.000      Strato1_2_8_L_0
  35 D   14.41     6.3525E-04  70.30         72.07        127.3        72.07             V-C   6505.      -6.700       0.000        1.000        1.000
72.07       0.000       0.000      Strato1_2_8_L_0
  36 D   14.72     5.6532E-04  74.10         73.61        131.1        73.61             V-C   6505.      -6.900       0.000        1.000        1.000
73.61       0.000       0.000      Strato1_2_8_L_0
  37 D   15.04     5.0119E-04  77.90         75.19        134.9        75.19             V-C   6505.      -7.100       0.000        1.000        1.000
75.19       0.000       0.000      Strato1_2_8_L_0
  38 D   15.36     4.4268E-04  81.70         76.81        138.7        76.81             V-C   6505.      -7.300       0.000        1.000        1.000
76.81       0.000       0.000      Strato1_2_8_L_0
  39 D   15.69     3.8958E-04  85.50         78.46        142.5        78.46             V-C   6505.      -7.500       0.000        1.000        1.000
78.46       0.000       0.000      Strato1_2_8_L_0
  40 D   16.03     3.4166E-04  89.30         80.15        146.3        80.15             V-C   6505.      -7.700       0.000        1.000        1.000
80.15       0.000       0.000      Strato1_2_8_L_0
  41 D   14.39     2.9866E-04  93.20         71.97        150.2        76.51           UL-RL  4.3949E+04  -7.900       0.000        1.000        1.000
71.97       0.000       0.000      Strato2_3095_82743_L_0
  42 D   14.47     2.6034E-04  97.20         72.36        154.2        78.45           UL-RL  4.3949E+04  -8.100       0.000        1.000        1.000
72.36       0.000       0.000      Strato2_3095_82743_L_0
  43 D   14.59     2.2639E-04  101.2         72.93        158.2        80.39           UL-RL  4.3949E+04  -8.300       0.000        1.000        1.000
72.93       0.000       0.000      Strato2_3095_82743_L_0
  44 D   14.74     1.9651E-04  105.2         73.68        162.2        82.33           UL-RL  4.3949E+04  -8.500       0.000        1.000        1.000
73.68       0.000       0.000      Strato2_3095_82743_L_0
  45 D   14.92     1.7037E-04  109.2         74.59        166.2        84.27           UL-RL  4.3949E+04  -8.700       0.000        1.000        1.000
74.59       0.000       0.000      Strato2_3095_82743_L_0
  46 D   15.13     1.4766E-04  113.2         75.65        170.2        86.22           UL-RL  4.3949E+04  -8.900       0.000        1.000        1.000
75.65       0.000       0.000      Strato2_3095_82743_L_0
  47 D   15.37     1.2803E-04  117.2         76.84        174.2        88.17           UL-RL  4.3949E+04  -9.100       0.000        1.000        1.000
76.84       0.000       0.000      Strato2_3095_82743_L_0
  48 D   15.63     1.1115E-04  121.2         78.15        178.2        90.13           UL-RL  4.3949E+04  -9.300       0.000        1.000        1.000
78.15       0.000       0.000      Strato2_3095_82743_L_0
  49 D   15.91     9.6710E-05  125.2         79.56        182.2        92.09           UL-RL  4.3949E+04  -9.500       0.000        1.000        1.000
79.56       0.000       0.000      Strato2_3095_82743_L_0
  50 D   16.21     8.4391E-05  129.2         81.06        186.2        94.05           UL-RL  4.3949E+04  -9.700       0.000        1.000        1.000
81.06       0.000       0.000      Strato2_3095_82743_L_0
  51 D   16.53     7.3898E-05  133.2         82.64        190.2        96.01           UL-RL  4.3949E+04  -9.900       0.000        1.000        1.000
82.64       0.000       0.000      Strato2_3095_82743_L_0
  52 D   16.86     6.4950E-05  137.2         84.29        194.2        97.98           UL-RL  4.3949E+04  -10.10       0.000        1.000        1.000
84.29       0.000       0.000      Strato2_3095_82743_L_0
  53 D   17.20     5.7282E-05  141.2         85.99        198.2        99.95           UL-RL  4.3949E+04  -10.30       0.000        1.000        1.000
85.99       0.000       0.000      Strato2_3095_82743_L_0
  54 D   17.55     5.0655E-05  145.2         87.73        202.2        101.9           UL-RL  4.3949E+04  -10.50       0.000        1.000        1.000
87.73       0.000       0.000      Strato2_3095_82743_L_0
  55 D   17.90     4.4847E-05  149.2         89.51        206.2        103.9           UL-RL  4.3949E+04  -10.70       0.000        1.000        1.000
89.51       0.000       0.000      Strato2_3095_82743_L_0
  56 D   18.26     3.9664E-05  153.2         91.31        210.2        105.9           UL-RL  4.3949E+04  -10.90       0.000        1.000        1.000
91.31       0.000       0.000      Strato2_3095_82743_L_0
  57 D   18.63     3.4934E-05  157.2         93.14        214.2        107.8           UL-RL  4.3949E+04  -11.10       0.000        1.000        1.000
93.14       0.000       0.000      Strato2_3095_82743_L_0
  58 D   18.99     3.0511E-05  161.2         94.97        218.2        109.8           UL-RL  4.3949E+04  -11.30       0.000        1.000        1.000
94.97       0.000       0.000      Strato2_3095_82743_L_0
  59 D   19.36     2.6280E-05  165.2         96.81        222.2        111.8           UL-RL  4.3949E+04  -11.50       0.000        1.000        1.000
96.81       0.000       0.000      Strato2_3095_82743_L_0
  60 D   19.73     2.2148E-05  169.2         98.65        226.2        113.8           UL-RL  4.3949E+04  -11.70       0.000        1.000        1.000
98.65       0.000       0.000      Strato2_3095_82743_L_0
  61 D   15.07     1.8057E-05  173.2         100.5        230.2        115.8           UL-RL  4.3949E+04  -11.90       0.000        1.000        1.000
100.5       0.000       0.000      Strato2_3095_82743_L_0
  62 D   5.071     1.6015E-05  175.2         101.4        232.2        116.7           UL-RL  4.3949E+04  -12.00       0.000        1.000        1.000
101.4       0.000       0.000      Strato2_3095_82743_L_0
```

```
+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                      |
|                                   Exe Time :24 July 2019      11:09:28                                                |
+-----------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P  N O.   3

WallElement_33                    :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
C U R R E N T    T I M E    I S      3.0000

 WALL2D ELEMENT
```

EL	TA	TB	MA	MB
1	0.48750	-0.48750	1.79425E-11	9.75000E-02
2	1.2950	-1.2950	-9.75000E-02	0.35650
3	2.4831	-2.4831	-0.35650	0.85313
4	3.9953	-3.9953	-0.85313	1.6522
5	5.8136	-5.8136	-1.6522	2.8149
6	7.9301	-7.9301	-2.8149	4.4009
7	10.341	-10.341	-4.4009	6.4691
8	13.043	-13.043	-6.4691	9.0776
9	15.970	-15.970	-9.0776	12.272
10	19.192	-19.192	-12.272	16.110
11	22.709	-22.709	-16.110	20.652
12	26.519	-26.519	-20.652	25.956
13	29.594	-29.594	-25.956	28.915
14	32.762	-32.762	-28.915	35.467
15	37.277	-37.277	-35.467	42.923
16	42.083	-42.083	-42.923	51.339
17	46.025	-46.025	-51.339	60.544
18	47.946	-47.946	-60.544	70.134
19	47.848	-47.848	-70.134	79.703
20	45.729	-45.729	-79.703	88.849
21	41.562	-41.562	-88.849	97.161
22	36.963	-36.963	-97.161	104.55
23	32.444	-32.444	-104.55	111.04
24	27.996	-27.996	-111.04	116.64
25	23.613	-23.613	-116.64	121.36
26	19.287	-19.287	-121.36	125.22
27	15.011	-15.011	-125.22	128.22
28	10.756	-10.756	-128.22	130.38
29	6.5363	-6.5363	-130.38	131.68
30	2.3428	-2.3428	-131.68	132.15
31	-1.8322	1.8322	-132.15	131.78
32	-5.9970	5.9970	-131.78	130.59
33	-10.160	10.160	-130.59	128.55
34	-13.841	13.841	-128.55	125.79
35	-17.057	17.057	-125.79	122.37
36	-19.865	19.865	-122.37	118.40
37	-22.276	22.276	-118.40	113.95
38	-24.323	24.323	-113.95	109.08
39	-26.038	26.038	-109.08	103.87
40	-27.452	27.452	-103.87	98.383
41	-30.471	30.471	-98.383	92.289
42	-32.643	32.643	-92.289	85.760
43	-34.081	34.081	-85.760	78.944
44	-34.854	34.854	-78.944	71.973
45	-35.045	35.045	-71.973	64.964
46	-34.728	34.728	-64.964	58.019
47	-33.971	33.971	-58.019	51.225
48	-32.835	32.835	-51.225	44.658
49	-31.374	31.374	-44.658	38.383
50	-29.634	29.634	-38.383	32.456
51	-27.671	27.671	-32.456	26.922
52	-25.503	25.503	-26.922	21.821
53	-23.160	23.160	-21.821	17.189
54	-20.664	20.664	-17.189	13.057
55	-18.033	18.033	-13.057	9.4499
56	-15.282	15.282	-9.4499	6.3935
57	-12.419	12.419	-6.3935	3.9097
58	-9.4655	9.4655	-3.9097	2.0166
59	-6.4117	6.4117	-2.0166	0.73426
60	-3.2598	3.2598	-0.73426	8.22987E-02
61	-0.82291	0.82291	-8.22987E-02	2.35034E-13

```
+-------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*           |
|                                                                                                                   |
|                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                    |
|                                  Exe Time :24 July 2019      11:09:28                                             |
+-------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_778405                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S     3.0000

 POST-TENSION 2D-BOUNDARY ELEMENT
```

```
         EL     FORCE          d0          EDISPL      pl. eps          K      -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000      RMNORM= 0.000
           RINORM=0.1161E+06 RIMNOR=0.7220E+06
           RENORM=0.1736E+05 REMNOR=0.2806E-19 RATIO =0.3866     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 131.8      RMMAX = 132.2
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.1161E+06 RDR   =0.7220E+06
           RATIOT=0.3866      RATIOR= 0.000
           MAX UN=0.6787E-09 IEQ=     21 NODE      11 DOF   1  Y-DISPL.F
           MIN UN=-131.8      IEQ=     27 NODE      14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS      0


ITER     2 RNORM = 0.000      RMNORM= 0.000
           RINORM=0.1161E+06 RIMNOR=0.7220E+06
           RENORM= 87.28      REMNOR=0.5319E-19 RATIO =0.2741E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 131.8      RMMAX = 132.2
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.1161E+06 RDR   =0.7220E+06
           RATIOT=0.2741E-01 RATIOR= 0.000
           MAX UN=0.4803E-09 IEQ=     47 NODE      24 DOF   1  Y-DISPL.F
           MIN UN=-3.165      IEQ=      3 NODE       2 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS      0


ITER     3 RNORM = 0.000      RMNORM= 0.000
           RINORM=0.1161E+06 RIMNOR=0.7220E+06
           RENORM= 3.854      REMNOR=0.4160E-19 RATIO =0.5761E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 131.8      RMMAX = 132.2
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.1161E+06 RDR   =0.7220E+06
           RATIOT=0.5761E-02 RATIOR= 0.000
           MAX UN=0.1606E-08 IEQ=     27 NODE      14 DOF   1  Y-DISPL.F
           MIN UN=-1.610      IEQ=     35 NODE      18 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS      0


ITER     4 RNORM = 0.000      RMNORM= 0.000
           RINORM=0.1161E+06 RIMNOR=0.7220E+06
           RENORM=0.2344E-17 REMNOR=0.1324E-19 RATIO =0.4493E-11 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 131.8      RMMAX = 132.2
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
           RDT   =0.1161E+06 RDR   =0.7220E+06
           RATIOT=0.4493E-11 RATIOR= 0.000
           MAX UN=0.5657E-09 IEQ=     17 NODE       9 DOF   1  Y-DISPL.F
           MIN UN=-.6147E-09 IEQ=      5 NODE       3 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS      0




+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                         |
|                                  Exe Time :24 July 2019      11:09:28                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     4 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    4     ( AT TIME   4.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (
    1   3.2190421E-03  -5.6353557E-04
    2   3.1063388E-03  -5.6347732E-04
    3   2.9936662E-03  -5.6319352E-04
    4   2.8810916E-03  -5.6245686E-04
    5   2.7687299E-03  -5.6102340E-04
    6   2.6567459E-03  -5.5863487E-04
    7   2.5453577E-03  -5.5501940E-04
    8   2.4348390E-03  -5.4989199E-04
    9   2.3255216E-03  -5.4295468E-04
   10   2.2177983E-03  -5.3389877E-04
   11   2.1121246E-03  -5.2240470E-04
   12   2.0090212E-03  -5.0814010E-04
   13   1.9090763E-03  -4.9075998E-04
   14   1.8604908E-03  -4.8080167E-04
```

15	1.7663307E-03	-4.6120199E-04
16	1.6758616E-03	-4.4382797E-04
17	1.5886769E-03	-4.2829350E-04
18	1.5044479E-03	-4.1420414E-04
19	1.4229253E-03	-4.0116396E-04
20	1.3439376E-03	-3.8879349E-04
21	1.2673837E-03	-3.7678518E-04
22	1.1932124E-03	-3.6494509E-04
23	1.1214024E-03	-3.5315468E-04
24	1.0519535E-03	-3.4131962E-04
25	9.8488301E-04	-3.2935723E-04
26	9.2022382E-04	-3.1719611E-04
27	8.5802184E-04	-3.0478061E-04
28	7.9833112E-04	-2.9207659E-04
29	7.4121116E-04	-2.7907317E-04
30	6.8672108E-04	-2.6578141E-04
31	6.3491571E-04	-2.5223289E-04
32	5.8584188E-04	-2.3847865E-04
33	5.3953360E-04	-2.2458791E-04
34	4.9601003E-04	-2.1064743E-04
35	4.5527185E-04	-1.9674869E-04
36	4.1730218E-04	-1.8297556E-04
37	3.8206814E-04	-1.6940474E-04
38	3.4952229E-04	-1.5610622E-04
39	3.1960347E-04	-1.4314277E-04
40	2.9223909E-04	-1.3057080E-04
41	2.6734571E-04	-1.1844044E-04
42	2.4482819E-04	-1.0683091E-04
43	2.2457211E-04	-9.5841489E-05
44	2.0644524E-04	-8.5548891E-05
45	1.9030232E-04	-7.6009816E-05
46	1.7598853E-04	-6.7262453E-05
47	1.6334311E-04	-5.9328543E-05
48	1.5220246E-04	-5.2215254E-05
49	1.4240274E-04	-4.5916724E-05
50	1.3378260E-04	-4.0415790E-05
51	1.2618507E-04	-3.5685186E-05
52	1.1945971E-04	-3.1689204E-05
53	1.1346349E-04	-2.8384321E-05
54	1.0806326E-04	-2.5720298E-05
55	1.0313642E-04	-2.3640469E-05
56	9.8572288E-05	-2.2082421E-05
57	9.4273184E-05	-2.0978437E-05
58	9.0155488E-05	-2.0255836E-05
59	8.6150564E-05	-1.9837524E-05
60	8.2205616E-05	-1.9642138E-05
61	7.8284571E-05	-1.9583818E-05
62	7.6326190E-05	-1.9580865E-05

PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017*

NewProject.BaseDesignSection_28.A2M2R1_3514
Exe Time :24 July 2019 11:09:28

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 62
C U R R E N T T I M E I S 4.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR
Peq	Su_a	Su_p	LAYER									
1 D	2.453	-3.2190E-03	13.00	24.53	13.00	24.53	V-C	7686.	0.000	0.000	1.000	1.000
24.53	0.000	0.000	Strato1_2_8_L_0									
2 D	4.594	-3.1063E-03	10.77	22.97	10.77	22.97	V-C	7686.	-0.2000	0.000	1.000	1.000
22.97	0.000	0.000	Strato1_2_8_L_0									
3 D	4.980	-2.9937E-03	15.84	24.90	15.84	24.90	V-C	7686.	-0.4000	0.000	1.000	1.000
24.90	0.000	0.000	Strato1_2_8_L_0									
4 D	5.294	-2.8811E-03	20.16	26.47	20.16	26.47	V-C	7686.	-0.6000	0.000	1.000	1.000
26.47	0.000	0.000	Strato1_2_8_L_0									
5 D	5.585	-2.7687E-03	24.24	27.93	24.24	27.93	V-C	7686.	-0.8000	0.000	1.000	1.000
27.93	0.000	0.000	Strato1_2_8_L_0									

6 D	5.866	-2.6567E-03	28.22	29.33	28.22	29.33	V-C	7686.	-1.000	0.000	1.000	1.000	29.33
0.000	0.000	Strato1_2_8_L_0											
7 D	6.140	-2.5454E-03	32.14	30.70	32.14	30.70	V-C	7686.	-1.200	0.000	1.000	1.000	30.70
0.000	0.000	Strato1_2_8_L_0											
8 D	6.410	-2.4348E-03	36.03	32.05	36.03	32.05	V-C	7686.	-1.400	0.000	1.000	1.000	32.05
0.000	0.000	Strato1_2_8_L_0											
9 D	6.594	-2.3255E-03	39.02	32.97	39.02	32.97	V-C	7686.	-1.600	0.000	1.000	1.000	32.97
0.000	0.000	Strato1_2_8_L_0											
10 D	6.866	-2.2178E-03	42.97	34.33	42.97	34.33	V-C	7686.	-1.800	0.000	1.000	1.000	34.33
0.000	0.000	Strato1_2_8_L_0											
11 D	7.134	-2.1121E-03	46.89	35.67	46.89	35.67	V-C	7686.	-2.000	0.000	1.000	1.000	35.67
0.000	0.000	Strato1_2_8_L_0											
12 D	7.397	-2.0090E-03	50.79	36.99	50.79	36.99	V-C	7686.	-2.200	0.000	1.000	1.000	36.99
0.000	0.000	Strato1_2_8_L_0											
13 D	5.742	-1.9091E-03	54.67	38.28	54.67	38.28	V-C	7686.	-2.400	0.000	1.000	1.000	38.28
0.000	0.000	Strato1_2_8_L_0											
14 D	5.816	-1.8605E-03	56.32	38.77	56.32	38.77	V-C	7686.	-2.500	0.000	1.000	1.000	38.77
0.000	0.000	Strato1_2_8_L_0											
15 D	8.008	-1.7663E-03	60.21	40.04	60.21	40.04	V-C	7686.	-2.700	0.000	1.000	1.000	40.04
0.000	0.000	Strato1_2_8_L_0											
16 D	8.256	-1.6759E-03	64.08	41.28	64.08	41.28	V-C	7686.	-2.900	0.000	1.000	1.000	41.28
0.000	0.000	Strato1_2_8_L_0											
17 D	8.502	-1.5887E-03	67.94	42.51	67.94	42.51	V-C	7686.	-3.100	0.000	1.000	1.000	42.51
0.000	0.000	Strato1_2_8_L_0											
18 D	8.746	-1.5044E-03	71.80	43.73	71.80	43.73	V-C	7686.	-3.300	0.000	1.000	1.000	43.73
0.000	0.000	Strato1_2_8_L_0											
19 D	8.989	-1.4229E-03	75.65	44.95	75.65	44.95	V-C	7686.	-3.500	0.000	1.000	1.000	44.95
0.000	0.000	Strato1_2_8_L_0											
20 D	9.234	-1.3439E-03	79.50	46.17	79.50	46.17	V-C	7686.	-3.700	0.000	1.000	1.000	46.17
0.000	0.000	Strato1_2_8_L_0											
21 D	9.444	-1.2674E-03	82.96	47.22	82.96	47.22	V-C	7686.	-3.900	0.000	1.000	1.000	47.22
0.000	0.000	Strato1_2_8_L_0											
22 D	9.695	-1.1932E-03	86.82	48.47	86.82	48.47	V-C	7686.	-4.100	0.000	1.000	1.000	48.47
0.000	0.000	Strato1_2_8_L_0											
23 D	9.948	-1.1214E-03	90.67	49.74	90.67	49.74	V-C	7686.	-4.300	0.000	1.000	1.000	49.74
0.000	0.000	Strato1_2_8_L_0											
24 D	10.20	-1.0520E-03	94.51	51.02	94.51	51.02	V-C	7686.	-4.500	0.000	1.000	1.000	51.02
0.000	0.000	Strato1_2_8_L_0											
25 D	10.47	-9.8488E-04	98.36	52.33	98.36	52.33	V-C	7686.	-4.700	0.000	1.000	1.000	52.33
0.000	0.000	Strato1_2_8_L_0											
26 D	10.53	-9.2022E-04	102.2	52.64	102.2	54.16	UL-RL	2.3058E+04	-4.900	0.000	1.000	1.000	52.64
0.000	0.000	Strato1_2_8_L_0											
27 D	10.52	-8.5802E-04	106.0	52.62	106.0	56.20	UL-RL	2.3058E+04	-5.100	0.000	1.000	1.000	52.62
0.000	0.000	Strato1_2_8_L_0											
28 D	10.52	-7.9833E-04	109.6	52.58	109.6	58.08	UL-RL	2.3058E+04	-5.300	0.000	1.000	1.000	52.58
0.000	0.000	Strato1_2_8_L_0											
29 D	10.55	-7.4121E-04	113.4	52.73	113.4	60.12	UL-RL	2.3058E+04	-5.500	0.000	1.000	1.000	52.73
0.000	0.000	Strato1_2_8_L_0											
30 D	10.59	-6.8672E-04	117.3	52.96	117.3	62.15	UL-RL	2.3058E+04	-5.700	0.000	1.000	1.000	52.96
0.000	0.000	Strato1_2_8_L_0											
31 D	10.65	-6.3492E-04	121.1	53.27	121.1	64.18	UL-RL	2.3058E+04	-5.900	0.000	1.000	1.000	53.27
0.000	0.000	Strato1_2_8_L_0											
32 D	10.73	-5.8584E-04	124.9	53.66	124.9	66.21	UL-RL	2.3058E+04	-6.100	0.000	1.000	1.000	53.66
0.000	0.000	Strato1_2_8_L_0											
33 D	10.83	-5.3953E-04	128.8	54.13	128.8	68.24	UL-RL	2.3058E+04	-6.300	0.000	1.000	1.000	54.13
0.000	0.000	Strato1_2_8_L_0											
34 D	11.42	-4.9601E-04	132.6	57.12	132.6	70.27	UL-RL	2.3058E+04	-6.500	0.000	1.000	1.000	57.12
0.000	0.000	Strato1_2_8_L_0											
35 D	12.03	-4.5527E-04	136.4	60.14	136.4	72.30	UL-RL	2.3058E+04	-6.700	0.000	1.000	1.000	60.14
0.000	0.000	Strato1_2_8_L_0											
36 D	12.60	-4.1730E-04	140.0	62.99	140.0	74.22	UL-RL	2.3058E+04	-6.900	0.000	1.000	1.000	62.99
0.000	0.000	Strato1_2_8_L_0											
37 D	13.18	-3.8207E-04	143.9	65.89	143.9	76.25	UL-RL	2.3058E+04	-7.100	0.000	1.000	1.000	65.89
0.000	0.000	Strato1_2_8_L_0											
38 D	13.74	-3.4952E-04	147.7	68.72	147.7	78.27	UL-RL	2.3058E+04	-7.300	0.000	1.000	1.000	68.72
0.000	0.000	Strato1_2_8_L_0											
39 D	14.30	-3.1960E-04	151.5	71.50	151.5	80.30	UL-RL	2.3058E+04	-7.500	0.000	1.000	1.000	71.50
0.000	0.000	Strato1_2_8_L_0											
40 D	14.84	-2.9224E-04	155.3	74.22	155.3	82.33	UL-RL	2.3058E+04	-7.700	0.000	1.000	1.000	74.22
0.000	0.000	Strato1_2_8_L_0											
41 D	11.78	-2.6735E-04	159.3	58.88	159.3	79.63	UL-RL	6.3994E+04	-7.900	0.000	1.000	1.000	58.88
0.000	0.000	Strato2_3095_82743_L_0											
42 D	12.50	-2.4483E-04	163.3	62.49	163.3	81.64	UL-RL	6.3994E+04	-8.100	0.000	1.000	1.000	62.49
0.000	0.000	Strato2_3095_82743_L_0											
43 D	13.17	-2.2457E-04	167.1	65.86	167.1	83.57	UL-RL	6.3994E+04	-8.300	0.000	1.000	1.000	65.86
0.000	0.000	Strato2_3095_82743_L_0											
44 D	13.84	-2.0645E-04	171.2	69.18	171.2	85.58	UL-RL	6.3994E+04	-8.500	0.000	1.000	1.000	69.18
0.000	0.000	Strato2_3095_82743_L_0											
45 D	14.47	-1.9030E-04	175.2	72.36	175.2	87.59	UL-RL	6.3994E+04	-8.700	0.000	1.000	1.000	72.36
0.000	0.000	Strato2_3095_82743_L_0											
46 D	15.08	-1.7599E-04	179.2	75.42	179.2	89.60	UL-RL	6.3994E+04	-8.900	0.000	1.000	1.000	75.42
0.000	0.000	Strato2_3095_82743_L_0											
47 D	15.67	-1.6334E-04	183.2	78.36	183.2	91.61	UL-RL	6.3994E+04	-9.100	0.000	1.000	1.000	78.36
0.000	0.000	Strato2_3095_82743_L_0											
48 D	16.24	-1.5220E-04	187.2	81.20	187.2	93.62	UL-RL	6.3994E+04	-9.300	0.000	1.000	1.000	

```
81.20       0.000       0.000     Strato2_3095_82743_L_0
  49 D   16.79     -1.4240E-04  191.3       83.94       191.3       95.63          UL-RL  6.3994E+04  -9.500       0.000       1.000       1.000
83.94       0.000       0.000     Strato2_3095_82743_L_0
  50 D   17.32     -1.3378E-04  195.3       86.60       195.3       97.64          UL-RL  6.3994E+04  -9.700       0.000       1.000       1.000
86.60       0.000       0.000     Strato2_3095_82743_L_0
  51 D   17.82     -1.2619E-04  199.2       89.11       199.2       99.58          UL-RL  6.3994E+04  -9.900       0.000       1.000       1.000
89.11       0.000       0.000     Strato2_3095_82743_L_0
  52 D   18.33     -1.1946E-04  203.2       91.64       203.2       101.6          UL-RL  6.3994E+04  -10.10       0.000       1.000       1.000
91.64       0.000       0.000     Strato2_3095_82743_L_0
  53 D   18.82     -1.1346E-04  207.2       94.11       207.2       103.6          UL-RL  6.3994E+04  -10.30       0.000       1.000       1.000
94.11       0.000       0.000     Strato2_3095_82743_L_0
  54 D   19.31     -1.0806E-04  211.2       96.54       211.2       105.6          UL-RL  6.3994E+04  -10.50       0.000       1.000       1.000
96.54       0.000       0.000     Strato2_3095_82743_L_0
  55 D   19.79     -1.0314E-04  215.2       98.94       215.2       107.6          UL-RL  6.3994E+04  -10.70       0.000       1.000       1.000
98.94       0.000       0.000     Strato2_3095_82743_L_0
  56 D   20.26     -9.8572E-05  219.3       101.3       219.3       109.6          UL-RL  6.3994E+04  -10.90       0.000       1.000       1.000
101.3       0.000       0.000     Strato2_3095_82743_L_0
  57 D   20.73     -9.4273E-05  223.3       103.7       223.3       111.6          UL-RL  6.3994E+04  -11.10       0.000       1.000       1.000
103.7       0.000       0.000     Strato2_3095_82743_L_0
  58 D   21.18     -9.0155E-05  227.2       105.9       227.2       113.6          UL-RL  6.3994E+04  -11.30       0.000       1.000       1.000
105.9       0.000       0.000     Strato2_3095_82743_L_0
  59 D   21.65     -8.6151E-05  231.2       108.2       231.2       115.6          UL-RL  6.3994E+04  -11.50       0.000       1.000       1.000
108.2       0.000       0.000     Strato2_3095_82743_L_0
  60 D   22.11     -8.2206E-05  235.2       110.6       235.2       117.6          UL-RL  6.3994E+04  -11.70       0.000       1.000       1.000
110.6       0.000       0.000     Strato2_3095_82743_L_0
  61 D   16.93     -7.8285E-05  239.2       112.9       239.2       119.6          UL-RL  6.3994E+04  -11.90       0.000       1.000       1.000
112.9       0.000       0.000     Strato2_3095_82743_L_0
  62 D   5.701     -7.6326E-05  241.2       114.0       241.2       120.6          UL-RL  6.3994E+04  -12.00       0.000       1.000       1.000
114.0       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                  |
 |                                                                                                                               |
 |                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                              |
 |                                   Exe Time :24 July 2019      11:09:28                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S    R E S U L T S    F O R    G R O U P    N O.    2

 0_R                              :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
 C U R R E N T    T I M E    I S      4.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P           STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1     0.000         --          --          --          --          --          REMOVED     --        0.000       0.000       1.000       1.000
0.000       0.000       0.000     not available
   2     0.000         --          --          --          --          --          REMOVED     --       -0.2000      0.000       1.000       1.000
0.000       0.000       0.000     not available
   3     0.000         --          --          --          --          --          REMOVED     --       -0.4000      0.000       1.000       1.000
0.000       0.000       0.000     not available
   4     0.000         --          --          --          --          --          REMOVED     --       -0.6000      0.000       1.000       1.000
0.000       0.000       0.000     not available
   5     0.000         --          --          --          --          --          REMOVED     --       -0.8000      0.000       1.000       1.000
0.000       0.000       0.000     not available
   6     0.000         --          --          --          --          --          REMOVED     --        -1.000      0.000       1.000       1.000
0.000       0.000       0.000     not available
   7     0.000         --          --          --          --          --          REMOVED     --        -1.200      0.000       1.000       1.000
0.000       0.000       0.000     not available
   8     0.000         --          --          --          --          --          REMOVED     --        -1.400      0.000       1.000       1.000
0.000       0.000       0.000     not available
   9     0.000         --          --          --          --          --          REMOVED     --        -1.600      0.000       1.000       1.000
0.000       0.000       0.000     not available
  10     0.000         --          --          --          --          --          REMOVED     --        -1.800      0.000       1.000       1.000
0.000       0.000       0.000     not available
  11     0.000         --          --          --          --          --          REMOVED     --        -2.000      0.000       1.000       1.000
0.000       0.000       0.000     not available
  12     0.000         --          --          --          --          --          REMOVED     --        -2.200      0.000       1.000       1.000
0.000       0.000       0.000     not available
  13     0.000         --          --          --          --          --          REMOVED     --        -2.400      0.000       1.000       1.000
0.000       0.000       0.000     not available
  14     0.000         --          --          --          --          --          REMOVED     --        -2.500      0.000       1.000       1.000
0.000       0.000       0.000     not available
  15     0.000         --          --          --          --          --          REMOVED     --        -2.700      0.000       1.000       1.000
```

0.000	0.000	0.000	not available										
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000	
0.000	0.000	0.000	not available										
17	D	0.1425	1.5887E-03	1.900	0.7125	58.90	32.32	ACTIVE	0.000	-3.100	0.000	1.000	1.000
0.7125	0.000	0.000	Strato1_2_8_L_0										
18	D	0.4275	1.5044E-03	5.700	2.137	62.70	34.32	ACTIVE	0.000	-3.300	0.000	1.000	1.000
2.137	0.000	0.000	Strato1_2_8_L_0										
19	D	1.323	1.4229E-03	9.500	6.617	66.50	36.32	UL-RL	1.9516E+04	-3.500	0.000	1.000	1.000
6.617	0.000	0.000	Strato1_2_8_L_0										
20	D	3.946	1.3439E-03	13.30	19.73	70.30	40.41	UL-RL	1.9516E+04	-3.700	0.000	1.000	1.000
19.73	0.000	0.000	Strato1_2_8_L_0										
21	D	6.563	1.2674E-03	17.10	32.81	74.10	51.95	UL-RL	1.9516E+04	-3.900	0.000	1.000	1.000
32.81	0.000	0.000	Strato1_2_8_L_0										
22	D	7.583	1.1932E-03	20.90	37.92	77.90	55.55	UL-RL	1.9516E+04	-4.100	0.000	1.000	1.000
37.92	0.000	0.000	Strato1_2_8_L_0										
23	D	8.086	1.1214E-03	24.70	40.43	81.70	56.60	UL-RL	1.9516E+04	-4.300	0.000	1.000	1.000
40.43	0.000	0.000	Strato1_2_8_L_0										
24	D	8.584	1.0520E-03	28.50	42.92	85.50	57.68	UL-RL	1.9516E+04	-4.500	0.000	1.000	1.000
42.92	0.000	0.000	Strato1_2_8_L_0										
25	D	9.078	9.8488E-04	32.30	45.39	89.30	58.80	UL-RL	1.9516E+04	-4.700	0.000	1.000	1.000
45.39	0.000	0.000	Strato1_2_8_L_0										
26	D	9.567	9.2022E-04	36.10	47.84	93.10	59.95	UL-RL	1.9516E+04	-4.900	0.000	1.000	1.000
47.84	0.000	0.000	Strato1_2_8_L_0										
27	D	10.05	8.5802E-04	39.90	50.26	96.90	61.14	UL-RL	1.9516E+04	-5.100	0.000	1.000	1.000
50.26	0.000	0.000	Strato1_2_8_L_0										
28	D	10.53	7.9833E-04	43.70	52.64	100.7	62.37	UL-RL	1.9516E+04	-5.300	0.000	1.000	1.000
52.64	0.000	0.000	Strato1_2_8_L_0										
29	D	11.00	7.4121E-04	47.50	55.00	104.5	63.63	UL-RL	1.9516E+04	-5.500	0.000	1.000	1.000
55.00	0.000	0.000	Strato1_2_8_L_0										
30	D	11.47	6.8672E-04	51.30	57.33	108.3	64.94	UL-RL	1.9516E+04	-5.700	0.000	1.000	1.000
57.33	0.000	0.000	Strato1_2_8_L_0										
31	D	11.93	6.3492E-04	55.10	59.63	112.1	66.29	UL-RL	1.9516E+04	-5.900	0.000	1.000	1.000
59.63	0.000	0.000	Strato1_2_8_L_0										
32	D	12.38	5.8584E-04	58.90	61.91	115.9	67.67	UL-RL	1.9516E+04	-6.100	0.000	1.000	1.000
61.91	0.000	0.000	Strato1_2_8_L_0										
33	D	12.83	5.3953E-04	62.70	64.15	119.7	69.10	UL-RL	1.9516E+04	-6.300	0.000	1.000	1.000
64.15	0.000	0.000	Strato1_2_8_L_0										
34	D	13.27	4.9601E-04	66.50	66.37	123.5	70.57	UL-RL	1.9516E+04	-6.500	0.000	1.000	1.000
66.37	0.000	0.000	Strato1_2_8_L_0										
35	D	13.71	4.5527E-04	70.30	68.56	127.3	72.07	UL-RL	1.9516E+04	-6.700	0.000	1.000	1.000
68.56	0.000	0.000	Strato1_2_8_L_0										
36	D	14.15	4.1730E-04	74.10	70.73	131.1	73.61	UL-RL	1.9516E+04	-6.900	0.000	1.000	1.000
70.73	0.000	0.000	Strato1_2_8_L_0										
37	D	14.57	3.8207E-04	77.90	72.87	134.9	75.19	UL-RL	1.9516E+04	-7.100	0.000	1.000	1.000
72.87	0.000	0.000	Strato1_2_8_L_0										
38	D	15.00	3.4952E-04	81.70	74.99	138.7	76.81	UL-RL	1.9516E+04	-7.300	0.000	1.000	1.000
74.99	0.000	0.000	Strato1_2_8_L_0										
39	D	15.42	3.1960E-04	85.50	77.10	142.5	78.46	UL-RL	1.9516E+04	-7.500	0.000	1.000	1.000
77.10	0.000	0.000	Strato1_2_8_L_0										
40	D	15.84	2.9224E-04	89.30	79.18	146.3	80.15	UL-RL	1.9516E+04	-7.700	0.000	1.000	1.000
79.18	0.000	0.000	Strato1_2_8_L_0										
41	D	14.12	2.6735E-04	93.20	70.59	150.2	76.51	UL-RL	4.3949E+04	-7.900	0.000	1.000	1.000
70.59	0.000	0.000	Strato2_3095_82743_L_0										
42	D	14.34	2.4483E-04	97.20	71.68	154.2	78.45	UL-RL	4.3949E+04	-8.100	0.000	1.000	1.000
71.68	0.000	0.000	Strato2_3095_82743_L_0										
43	D	14.57	2.2457E-04	101.2	72.85	158.2	80.39	UL-RL	4.3949E+04	-8.300	0.000	1.000	1.000
72.85	0.000	0.000	Strato2_3095_82743_L_0										
44	D	14.82	2.0645E-04	105.2	74.12	162.2	82.33	UL-RL	4.3949E+04	-8.500	0.000	1.000	1.000
74.12	0.000	0.000	Strato2_3095_82743_L_0										
45	D	15.09	1.9030E-04	109.2	75.47	166.2	84.27	UL-RL	4.3949E+04	-8.700	0.000	1.000	1.000
75.47	0.000	0.000	Strato2_3095_82743_L_0										
46	D	15.38	1.7599E-04	113.2	76.90	170.2	86.22	UL-RL	4.3949E+04	-8.900	0.000	1.000	1.000
76.90	0.000	0.000	Strato2_3095_82743_L_0										
47	D	15.68	1.6334E-04	117.2	78.39	174.2	88.17	UL-RL	4.3949E+04	-9.100	0.000	1.000	1.000
78.39	0.000	0.000	Strato2_3095_82743_L_0										
48	D	15.99	1.5220E-04	121.2	79.95	178.2	90.13	UL-RL	4.3949E+04	-9.300	0.000	1.000	1.000
79.95	0.000	0.000	Strato2_3095_82743_L_0										
49	D	16.31	1.4240E-04	125.2	81.57	182.2	92.09	UL-RL	4.3949E+04	-9.500	0.000	1.000	1.000
81.57	0.000	0.000	Strato2_3095_82743_L_0										
50	D	16.65	1.3378E-04	129.2	83.23	186.2	94.05	UL-RL	4.3949E+04	-9.700	0.000	1.000	1.000
83.23	0.000	0.000	Strato2_3095_82743_L_0										
51	D	16.99	1.2619E-04	133.2	84.94	190.2	96.01	UL-RL	4.3949E+04	-9.900	0.000	1.000	1.000
84.94	0.000	0.000	Strato2_3095_82743_L_0										
52	D	17.34	1.1946E-04	137.2	86.69	194.2	97.98	UL-RL	4.3949E+04	-10.10	0.000	1.000	1.000
86.69	0.000	0.000	Strato2_3095_82743_L_0										
53	D	17.69	1.1346E-04	141.2	88.46	198.2	99.95	UL-RL	4.3949E+04	-10.30	0.000	1.000	1.000
88.46	0.000	0.000	Strato2_3095_82743_L_0										
54	D	18.05	1.0806E-04	145.2	90.26	202.2	101.9	UL-RL	4.3949E+04	-10.50	0.000	1.000	1.000
90.26	0.000	0.000	Strato2_3095_82743_L_0										
55	D	18.41	1.0314E-04	149.2	92.07	206.2	103.9	UL-RL	4.3949E+04	-10.70	0.000	1.000	1.000
92.07	0.000	0.000	Strato2_3095_82743_L_0										
56	D	18.78	9.8572E-05	153.2	93.90	210.2	105.9	UL-RL	4.3949E+04	-10.90	0.000	1.000	1.000
93.90	0.000	0.000	Strato2_3095_82743_L_0										
57	D	19.15	9.4273E-05	157.2	95.74	214.2	107.8	UL-RL	4.3949E+04	-11.10	0.000	1.000	1.000
95.74	0.000	0.000	Strato2_3095_82743_L_0										

```
  58 D   19.52      9.0155E-05   161.2       97.59       218.2       109.8          UL-RL  4.3949E+04  -11.30       0.000       1.000       1.000
97.59       0.000       0.000     Strato2_3095_82743_L_0
  59 D   19.89      8.6151E-05   165.2       99.44       222.2       111.8          UL-RL  4.3949E+04  -11.50       0.000       1.000       1.000
99.44       0.000       0.000     Strato2_3095_82743_L_0
  60 D   20.26      8.2206E-05   169.2       101.3       226.2       113.8          UL-RL  4.3949E+04  -11.70       0.000       1.000       1.000
101.3       0.000       0.000     Strato2_3095_82743_L_0
  61 D   15.47      7.8285E-05   173.2       103.1       230.2       115.8          UL-RL  4.3949E+04  -11.90       0.000       1.000       1.000
103.1       0.000       0.000     Strato2_3095_82743_L_0
  62 D   5.204      7.6326E-05   175.2       104.1       232.2       116.7          UL-RL  4.3949E+04  -12.00       0.000       1.000       1.000
104.1       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                          |
 |                                                                                                                                     |
 |                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                                    |
 |                                   Exe Time :24 July 2019      11:09:28                                                              |
 +-------------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

 WallElement_33                  :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
 C U R R E N T   T I M E   I S      4.0000

  WALL2D ELEMENT

    EL      TA          TB          MA          MB
 ------------------------------------------------------------
     1  2.4535     -2.4535     1.15405E-11 0.49069
     2  7.0476     -7.0476    -0.49069     1.9002
     3  12.028     -12.028     -1.9002     4.3058
     4  17.323     -17.323     -4.3058     7.7703
     5  22.908     -22.908     -7.7703     12.352
     6  28.774     -28.774     -12.352     18.107
     7  34.914     -34.914     -18.107     25.089
     8  41.324     -41.324     -25.089     33.354
     9  47.917     -47.917     -33.354     42.938
    10  54.784     -54.784     -42.938     53.894
    11  61.918     -61.918     -53.894     66.278
    12  69.315     -69.315     -66.278     80.141
    13  75.057     -75.057     -80.141     87.647
    14 -50.879      50.879     -87.647     77.471
    15 -42.871      42.871     -77.471     68.897
    16 -34.615      34.615     -68.897     61.974
    17 -26.256      26.256     -61.974     56.722
    18 -17.938      17.938     -56.722     53.135
    19 -10.272      10.272     -53.135     51.080
    20 -4.9836      4.9836     -51.080     50.084
    21 -2.1020      2.1020     -50.084     49.663
    22 9.34991E-03-9.34991E-03 -49.663     49.665
    23  1.8715     -1.8715     -49.665     50.039
    24  3.4919     -3.4919     -50.039     50.738
    25  4.8790     -4.8790     -50.738     51.714
    26  5.8387     -5.8387     -51.714     52.881
    27  6.3121     -6.3121     -52.881     54.144
    28  6.2998     -6.2998     -54.144     55.404
    29  5.8452     -5.8452     -55.404     56.573
    30  4.9705     -4.9705     -56.573     57.567
    31  3.6979     -3.6979     -57.567     58.306
    32  2.0491     -2.0491     -58.306     58.716
    33 4.57765E-02-4.57765E-02 -58.716     58.725
    34 -1.8038      1.8038     -58.725     58.365
    35 -3.4872      3.4872     -58.365     57.667
    36 -5.0350      5.0350     -57.667     56.660
    37 -6.4317      6.4317     -56.660     55.374
    38 -7.6854      7.6854     -55.374     53.837
    39 -8.8046      8.8046     -53.837     52.076
    40 -9.7974      9.7974     -52.076     50.116
    41 -12.141      12.141     -50.116     47.688
    42 -13.978      13.978     -47.688     44.893
    43 -15.376      15.376     -44.893     41.817
    44 -16.364      16.364     -41.817     38.545
    45 -16.985      16.985     -38.545     35.148
    46 -17.280      17.280     -35.148     31.692
    47 -17.285      17.285     -31.692     28.235
    48 -17.036      17.036     -28.235     24.827
    49 -16.561      16.561     -24.827     21.515
    50 -15.887      15.887     -21.515     18.338
    51 -15.053      15.053     -18.338     15.327
    52 -14.062      14.062     -15.327     12.515
```

```
   53 -12.932      12.932     -12.515      9.9283
   54 -11.676      11.676     -9.9283      7.5932
   55 -10.303      10.303     -7.5932      5.5326
   56 -8.8232      8.8232     -5.5326      3.7679
   57 -7.2417      7.2417     -3.7679      2.3196
   58 -5.5757      5.5757     -2.3196      1.2045
   59 -3.8145      3.8145     -1.2045     0.44157
   60 -1.9591      1.9591    -0.44157     4.97443E-02
   61-0.49739     0.49739    -4.97443E-02-3.78308E-12



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                       |
|                                  Exe Time :24 July 2019      11:09:28                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    4

Tieback_778405                   :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      4.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------
ANCHOR    1   136.40     -1.48737E-03 -1.48737E-03   0.0000       0.0000       0.0000       0.0000     BORN NOW JUST ACTIVATED

ITER     0 RNORM = 0.000      RMNORM= 0.000
           RINORM=0.1045E+06 RIMNOR=0.2466E+06
           RENORM= 700.6     REMNOR=0.1324E-19 RATIO =0.8189E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 131.8     RMMAX = 87.65
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
           RDT   =0.1045E+06 RDR   =0.2466E+06
           RATIOT=0.8189E-01 RATIOR= 0.000
           MAX UN= 9.567     IEQ=    51 NODE     26 DOF   1  Y-DISPL.F
           MIN UN=-.6147E-09 IEQ=     5 NODE      3 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000      RMNORM= 0.000
           RINORM=0.1045E+06 RIMNOR=0.2466E+06
           RENORM= 2.032     REMNOR=0.1939E-19 RATIO =0.4411E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 131.8     RMMAX = 87.65
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
           RDT   =0.1045E+06 RDR   =0.2466E+06
           RATIOT=0.4411E-02 RATIOR= 0.000
           MAX UN=0.7512     IEQ=    63 NODE     32 DOF   1  Y-DISPL.F
           MIN UN=-.1016E-08 IEQ=    13 NODE      7 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000      RMNORM= 0.000
           RINORM=0.1045E+06 RIMNOR=0.2466E+06
           RENORM=0.3106E-02 REMNOR=0.2411E-19 RATIO =0.1724E-03 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 131.8     RMMAX = 87.65
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
           RDT   =0.1045E+06 RDR   =0.2466E+06
           RATIOT=0.1724E-03 RATIOR= 0.000
           MAX UN=0.5573E-01 IEQ=    67 NODE     34 DOF   1  Y-DISPL.F
           MIN UN=-.1818E-08 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000      RMNORM= 0.000
           RINORM=0.1045E+06 RIMNOR=0.2466E+06
           RENORM=0.7112E-17 REMNOR=0.1712E-19 RATIO =0.8251E-11 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 131.8     RMMAX = 87.65
           RTSMAL=0.1000E-02 RMSMAL=0.1000E-03
           RDT   =0.1045E+06 RDR   =0.2466E+06
           RATIOT=0.8251E-11 RATIOR= 0.000
           MAX UN=0.1380E-08 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           MIN UN=-.1624E-08 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------+
```

```
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                     |
|                                     NewProject.BaseDesignSection_28.A2M2R1_3514                                     |
|                                 Exe Time :24 July 2019      11:09:28                                                |
+---------------------------------------------------------------------------------------------------------------------+
New Project
SOLUTION REACHED USING     4 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    5     ( AT TIME   5.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)            (
    1   3.5361836E-03  -4.5766537E-04
    2   3.4446537E-03  -4.5761763E-04
    3   3.3531487E-03  -4.5738773E-04
    4   3.2617228E-03  -4.5679458E-04
    5   3.1704681E-03  -4.5564326E-04
    6   3.0795165E-03  -4.5372729E-04
    7   2.9890426E-03  -4.5082942E-04
    8   2.8992654E-03  -4.4672199E-04
    9   2.8104503E-03  -4.4116721E-04
   10   2.7229114E-03  -4.3391923E-04
   11   2.6370124E-03  -4.2472406E-04
   12   2.5531692E-03  -4.1331751E-04
   13   2.4718511E-03  -3.9942541E-04
   14   2.4323005E-03  -3.9146784E-04
   15   2.3555591E-03  -3.7649876E-04
   16   2.2814902E-03  -3.6469166E-04
   17   2.2094921E-03  -3.5573954E-04
   18   2.1390252E-03  -3.4932580E-04
   19   2.0696143E-03  -3.4512410E-04
   20   2.0008505E-03  -3.4279826E-04
   21   1.9323930E-03  -3.4200196E-04
   22   1.8639715E-03  -3.4237932E-04
   23   1.7953875E-03  -3.4356443E-04
   24   1.7265170E-03  -3.4518003E-04
   25   1.6573127E-03  -3.4683700E-04
   26   1.5878062E-03  -3.4813382E-04
   27   1.5181108E-03  -3.4866085E-04
   28   1.4484184E-03  -3.4804461E-04
   29   1.3789880E-03  -3.4600389E-04
   30   1.3101234E-03  -3.4236510E-04
   31   1.2421530E-03  -3.3706074E-04
   32   1.1754082E-03  -3.3012547E-04
   33   1.1102030E-03  -3.2169122E-04
   34   1.0468189E-03  -3.1194967E-04
   35   9.8549671E-04  -3.0110509E-04
   36   9.2643711E-04  -2.8935619E-04
   37   8.6980217E-04  -2.7688819E-04
   38   8.1571863E-04  -2.6387218E-04
   39   7.6427964E-04  -2.5046507E-04
   40   7.1554909E-04  -2.3681067E-04
   41   6.6956312E-04  -2.2304017E-04
   42   6.2632879E-04  -2.0933323E-04
   43   5.8581134E-04  -1.9590650E-04
   44   5.4793551E-04  -1.8294296E-04
   45   5.1259314E-04  -1.7059471E-04
   46   4.7964842E-04  -1.5898465E-04
   47   4.4894367E-04  -1.4820878E-04
   48   4.2030469E-04  -1.3833832E-04
   49   3.9354491E-04  -1.2942149E-04
   50   3.6847070E-04  -1.2148558E-04
   51   3.4488477E-04  -1.1453834E-04
   52   3.2259066E-04  -1.0856994E-04
   53   3.0139388E-04  -1.0355364E-04
   54   2.8110853E-04  -9.9447363E-05
   55   2.6155808E-04  -9.6193942E-05
   56   2.4257886E-04  -9.3722004E-05
   57   2.2402285E-04  -9.1946516E-05
   58   2.0576037E-04  -9.0769198E-05
   59   1.8768269E-04  -9.0079129E-05
   60   1.6970446E-04  -8.9752921E-05
   61   1.5176633E-04  -8.9654493E-05
   62   1.4280032E-04  -8.9649457E-05
```

```
 +----------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                 |
 |                                                                                                                            |
 |                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                           |
 |                                  Exe Time :24 July 2019      11:09:28                                                      |
 +----------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S    R E S U L T S    F O R    G R O U P    N O.    1

 0_L                              :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
 C U R R E N T    T I M E    I S      5.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P          STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
---------------------------------------------------------------------
   1 D   2.011     -3.5362E-03  13.00       20.11       13.00       24.53          UL-RL  1.3947E+04   0.000       0.000        1.000       1.000
20.11       0.000       0.000     Strato1_2_8_L_0
   2 D   3.650     -3.4447E-03  10.77       18.25       10.77       22.97          UL-RL  1.3947E+04 -0.2000       0.000        1.000       1.000
18.25       0.000       0.000     Strato1_2_8_L_0
   3 D   3.978     -3.3531E-03  15.84       19.89       15.84       24.90          UL-RL  1.3947E+04 -0.4000       0.000        1.000       1.000
19.89       0.000       0.000     Strato1_2_8_L_0
   4 D   4.233     -3.2617E-03  20.16       21.16       20.16       26.47          UL-RL  1.3947E+04 -0.6000       0.000        1.000       1.000
21.16       0.000       0.000     Strato1_2_8_L_0
   5 D   4.465     -3.1705E-03  24.24       22.32       24.24       27.93          UL-RL  1.3947E+04 -0.8000       0.000        1.000       1.000
22.32       0.000       0.000     Strato1_2_8_L_0
   6 D   4.686     -3.0795E-03  28.22       23.43       28.22       29.33          UL-RL  1.3947E+04  -1.000       0.000        1.000       1.000
23.43       0.000       0.000     Strato1_2_8_L_0
   7 D   4.902     -2.9890E-03  32.14       24.51       32.14       30.70          UL-RL  1.3947E+04  -1.200       0.000        1.000       1.000
24.51       0.000       0.000     Strato1_2_8_L_0
   8 D   5.115     -2.8993E-03  36.03       25.57       36.03       32.05          UL-RL  1.3947E+04  -1.400       0.000        1.000       1.000
25.57       0.000       0.000     Strato1_2_8_L_0
   9 D   5.241     -2.8105E-03  39.02       26.20       39.02       32.97          UL-RL  1.3947E+04  -1.600       0.000        1.000       1.000
26.20       0.000       0.000     Strato1_2_8_L_0
  10 D   5.458     -2.7229E-03  42.97       27.29       42.97       34.33          UL-RL  1.3947E+04  -1.800       0.000        1.000       1.000
27.29       0.000       0.000     Strato1_2_8_L_0
  11 D   5.670     -2.6370E-03  46.89       28.35       46.89       35.67          UL-RL  1.3947E+04  -2.000       0.000        1.000       1.000
28.35       0.000       0.000     Strato1_2_8_L_0
  12 D   5.879     -2.5532E-03  50.79       29.40       50.79       36.99          UL-RL  1.3947E+04  -2.200       0.000        1.000       1.000
29.40       0.000       0.000     Strato1_2_8_L_0
  13 D   4.564     -2.4719E-03  54.67       30.43       54.67       38.28          UL-RL  1.3947E+04  -2.400       0.000        1.000       1.000
30.43       0.000       0.000     Strato1_2_8_L_0
  14 D   4.620     -2.4323E-03  56.32       30.80       56.32       38.77          UL-RL  1.3947E+04  -2.500       0.000        1.000       1.000
30.80       0.000       0.000     Strato1_2_8_L_0
  15 D   6.364     -2.3556E-03  60.21       31.82       60.21       40.04          UL-RL  1.3947E+04  -2.700       0.000        1.000       1.000
31.82       0.000       0.000     Strato1_2_8_L_0
  16 D   6.567     -2.2815E-03  64.08       32.83       64.08       41.28          UL-RL  1.3947E+04  -2.900       0.000        1.000       1.000
32.83       0.000       0.000     Strato1_2_8_L_0
  17 D   6.770     -2.2095E-03  67.94       33.85       67.94       42.51          UL-RL  1.3947E+04  -3.100       0.000        1.000       1.000
33.85       0.000       0.000     Strato1_2_8_L_0
  18 D   6.976     -2.1390E-03  71.80       34.88       71.80       43.73          UL-RL  1.3947E+04  -3.300       0.000        1.000       1.000
34.88       0.000       0.000     Strato1_2_8_L_0
  19 D   7.186     -2.0696E-03  75.65       35.93       75.65       44.95          UL-RL  1.3947E+04  -3.500       0.000        1.000       1.000
35.93       0.000       0.000     Strato1_2_8_L_0
  20 D   7.402     -2.0009E-03  79.50       37.01       79.50       46.17          UL-RL  1.3947E+04  -3.700       0.000        1.000       1.000
37.01       0.000       0.000     Strato1_2_8_L_0
  21 D   7.589     -1.9324E-03  82.96       37.95       82.96       47.22          UL-RL  1.3947E+04  -3.900       0.000        1.000       1.000
37.95       0.000       0.000     Strato1_2_8_L_0
  22 D   7.824     -1.8640E-03  86.82       39.12       86.82       48.47          UL-RL  1.3947E+04  -4.100       0.000        1.000       1.000
39.12       0.000       0.000     Strato1_2_8_L_0
  23 D   8.068     -1.7954E-03  90.67       40.34       90.67       49.74          UL-RL  1.3947E+04  -4.300       0.000        1.000       1.000
40.34       0.000       0.000     Strato1_2_8_L_0
  24 D   8.323     -1.7265E-03  94.51       41.62       94.51       51.02          UL-RL  1.3947E+04  -4.500       0.000        1.000       1.000
41.62       0.000       0.000     Strato1_2_8_L_0
  25 D   8.590     -1.6573E-03  98.36       42.95       98.36       52.33          UL-RL  1.3947E+04  -4.700       0.000        1.000       1.000
42.95       0.000       0.000     Strato1_2_8_L_0
  26 D   8.665     -1.5878E-03  102.2       43.33       102.2       54.16          UL-RL  1.3947E+04  -4.900       0.000        1.000       1.000
43.33       0.000       0.000     Strato1_2_8_L_0
  27 D   8.683     -1.5181E-03  106.0       43.42       106.0       56.20          UL-RL  1.3947E+04  -5.100       0.000        1.000       1.000
43.42       0.000       0.000     Strato1_2_8_L_0
  28 D   8.703     -1.4484E-03  109.6       43.52       109.6       58.08          UL-RL  1.3947E+04  -5.300       0.000        1.000       1.000
43.52       0.000       0.000     Strato1_2_8_L_0
  29 D   8.767     -1.3790E-03  113.4       43.84       113.4       60.12          UL-RL  1.3947E+04  -5.500       0.000        1.000       1.000
43.84       0.000       0.000     Strato1_2_8_L_0
  30 D   8.853     -1.3101E-03  117.3       44.27       117.3       62.15          UL-RL  1.3947E+04  -5.700       0.000        1.000       1.000
```

```
44.27       0.000       0.000     Strato1_2_8_L_0
  31 D   9.082     -1.2422E-03  121.1       45.41       121.1       64.18          ACTIVE   0.000      -5.900       0.000       1.000       1.000
45.41       0.000       0.000     Strato1_2_8_L_0
  32 D   9.370     -1.1754E-03  124.9       46.85       124.9       66.21          ACTIVE   0.000      -6.100       0.000       1.000       1.000
46.85       0.000       0.000     Strato1_2_8_L_0
  33 D   9.657     -1.1102E-03  128.8       48.29       128.8       68.24          ACTIVE   0.000      -6.300       0.000       1.000       1.000
48.29       0.000       0.000     Strato1_2_8_L_0
  34 D   9.944     -1.0468E-03  132.6       49.72       132.6       70.27          ACTIVE   0.000      -6.500       0.000       1.000       1.000
49.72       0.000       0.000     Strato1_2_8_L_0
  35 D   10.55     -9.8550E-04  136.4       52.75       136.4       72.30           UL-RL   1.3947E+04 -6.700       0.000       1.000       1.000
52.75       0.000       0.000     Strato1_2_8_L_0
  36 D   11.18     -9.2644E-04  140.0       55.89       140.0       74.22           UL-RL   1.3947E+04 -6.900       0.000       1.000       1.000
55.89       0.000       0.000     Strato1_2_8_L_0
  37 D   11.82     -8.6980E-04  143.9       59.08       143.9       76.25           UL-RL   1.3947E+04 -7.100       0.000       1.000       1.000
59.08       0.000       0.000     Strato1_2_8_L_0
  38 D   12.44     -8.1572E-04  147.7       62.22       147.7       78.27           UL-RL   1.3947E+04 -7.300       0.000       1.000       1.000
62.22       0.000       0.000     Strato1_2_8_L_0
  39 D   13.06     -7.6428E-04  151.5       65.30       151.5       80.30           UL-RL   1.3947E+04 -7.500       0.000       1.000       1.000
65.30       0.000       0.000     Strato1_2_8_L_0
  40 D   13.66     -7.1555E-04  155.3       68.32       155.3       82.33           UL-RL   1.3947E+04 -7.700       0.000       1.000       1.000
68.32       0.000       0.000     Strato1_2_8_L_0
  41 D   8.662     -6.6956E-04  159.3       43.31       159.3       79.63           UL-RL   3.8706E+04 -7.900       0.000       1.000       1.000
43.31       0.000       0.000     Strato2_3095_82743_L_0
  42 D   9.545     -6.2633E-04  163.3       47.72       163.3       81.64           UL-RL   3.8706E+04 -8.100       0.000       1.000       1.000
47.72       0.000       0.000     Strato2_3095_82743_L_0
  43 D   10.38     -5.8581E-04  167.1       51.88       167.1       83.57           UL-RL   3.8706E+04 -8.300       0.000       1.000       1.000
51.88       0.000       0.000     Strato2_3095_82743_L_0
  44 D   11.19     -5.4794E-04  171.2       55.96       171.2       85.58           UL-RL   3.8706E+04 -8.500       0.000       1.000       1.000
55.96       0.000       0.000     Strato2_3095_82743_L_0
  45 D   11.98     -5.1259E-04  175.2       59.89       175.2       87.59           UL-RL   3.8706E+04 -8.700       0.000       1.000       1.000
59.89       0.000       0.000     Strato2_3095_82743_L_0
  46 D   12.73     -4.7965E-04  179.2       63.67       179.2       89.60           UL-RL   3.8706E+04 -8.900       0.000       1.000       1.000
63.67       0.000       0.000     Strato2_3095_82743_L_0
  47 D   13.46     -4.4894E-04  183.2       67.31       183.2       91.61           UL-RL   3.8706E+04 -9.100       0.000       1.000       1.000
67.31       0.000       0.000     Strato2_3095_82743_L_0
  48 D   14.16     -4.2030E-04  187.2       70.82       187.2       93.62           UL-RL   3.8706E+04 -9.300       0.000       1.000       1.000
70.82       0.000       0.000     Strato2_3095_82743_L_0
  49 D   14.84     -3.9354E-04  191.3       74.22       191.3       95.63           UL-RL   3.8706E+04 -9.500       0.000       1.000       1.000
74.22       0.000       0.000     Strato2_3095_82743_L_0
  50 D   15.50     -3.6847E-04  195.3       77.52       195.3       97.64           UL-RL   3.8706E+04 -9.700       0.000       1.000       1.000
77.52       0.000       0.000     Strato2_3095_82743_L_0
  51 D   16.13     -3.4488E-04  199.2       80.65       199.2       99.58           UL-RL   3.8706E+04 -9.900       0.000       1.000       1.000
80.65       0.000       0.000     Strato2_3095_82743_L_0
  52 D   16.76     -3.2259E-04  203.2       83.78       203.2       101.6           UL-RL   3.8706E+04 -10.10       0.000       1.000       1.000
83.78       0.000       0.000     Strato2_3095_82743_L_0
  53 D   17.37     -3.0139E-04  207.2       86.84       207.2       103.6           UL-RL   3.8706E+04 -10.30       0.000       1.000       1.000
86.84       0.000       0.000     Strato2_3095_82743_L_0
  54 D   17.97     -2.8111E-04  211.2       89.84       211.2       105.6           UL-RL   3.8706E+04 -10.50       0.000       1.000       1.000
89.84       0.000       0.000     Strato2_3095_82743_L_0
  55 D   18.56     -2.6156E-04  215.2       92.80       215.2       107.6           UL-RL   3.8706E+04 -10.70       0.000       1.000       1.000
92.80       0.000       0.000     Strato2_3095_82743_L_0
  56 D   19.15     -2.4258E-04  219.3       95.73       219.3       109.6           UL-RL   3.8706E+04 -10.90       0.000       1.000       1.000
95.73       0.000       0.000     Strato2_3095_82743_L_0
  57 D   19.73     -2.2402E-04  223.3       98.63       223.3       111.6           UL-RL   3.8706E+04 -11.10       0.000       1.000       1.000
98.63       0.000       0.000     Strato2_3095_82743_L_0
  58 D   20.29     -2.0576E-04  227.2       101.4       227.2       113.6           UL-RL   3.8706E+04 -11.30       0.000       1.000       1.000
101.4       0.000       0.000     Strato2_3095_82743_L_0
  59 D   20.86     -1.8768E-04  231.2       104.3       231.2       115.6           UL-RL   3.8706E+04 -11.50       0.000       1.000       1.000
104.3       0.000       0.000     Strato2_3095_82743_L_0
  60 D   21.44     -1.6970E-04  235.2       107.2       235.2       117.6           UL-RL   3.8706E+04 -11.70       0.000       1.000       1.000
107.2       0.000       0.000     Strato2_3095_82743_L_0
  61 D   16.51     -1.5177E-04  239.2       110.0       239.2       119.6           UL-RL   3.8706E+04 -11.90       0.000       1.000       1.000
110.0       0.000       0.000     Strato2_3095_82743_L_0
  62 D   5.572     -1.4280E-04  241.2       111.4       241.2       120.6           UL-RL   3.8706E+04 -12.00       0.000       1.000       1.000
111.4       0.000       0.000     Strato2_3095_82743_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                  |
 |                                                                                                                               |
 |                                      NewProject.BaseDesignSection_28.A2M2R1_3514                                              |
 |                                   Exe Time :24 July 2019      11:09:28                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 New Project


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                          :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   62
 C U R R E N T   T I M E   I S      5.0000

  HARDENING 2D SOIL ELEMENT
```

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR
Peq	Su_a	Su_p	LAYER									
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000
0.000	0.000	0.000	not available									
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000
0.000	0.000	0.000	not available									
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
14	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									
15	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	1.000	1.000
0.000	0.000	0.000	not available									
16	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	1.000	1.000
0.000	0.000	0.000	not available									
17	0.000	--	--	--	--	--	REMOVED	--	-3.100	0.000	1.000	1.000
0.000	0.000	0.000	not available									
18	0.000	--	--	--	--	--	REMOVED	--	-3.300	0.000	1.000	1.000
0.000	0.000	0.000	not available									
19	0.000	--	--	--	--	--	REMOVED	--	-3.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									
20	0.000	--	--	--	--	--	REMOVED	--	-3.700	0.000	1.000	1.000
0.000	0.000	0.000	not available									
21	0.000	--	--	--	--	--	REMOVED	--	-3.900	0.000	1.000	1.000
0.000	0.000	0.000	not available									
22	0.000	--	--	--	--	--	REMOVED	--	-4.100	0.000	1.000	1.000
0.000	0.000	0.000	not available									
23	0.000	--	--	--	--	--	REMOVED	--	-4.300	0.000	1.000	1.000
0.000	0.000	0.000	not available									
24	0.000	--	--	--	--	--	REMOVED	--	-4.500	0.000	1.000	1.000
0.000	0.000	0.000	not available									
25	0.000	--	--	--	--	--	REMOVED	--	-4.700	0.000	1.000	1.000
0.000	0.000	0.000	not available									
26	0.000	--	--	--	--	--	REMOVED	--	-4.900	0.000	1.000	1.000
0.000	0.000	0.000	not available									
27 D	1.616	1.5181E-03	2.660	8.081	96.90	61.14	PASSIVE	0.000	-5.100	0.000	1.000	1.000
8.081	0.000	0.000	Strato1_2_8_L_0									
28 D	3.925	1.4484E-03	6.460	19.63	100.7	62.37	PASSIVE	0.000	-5.300	0.000	1.000	1.000
19.63	0.000	0.000	Strato1_2_8_L_0									
29 D	6.234	1.3790E-03	10.26	31.17	104.5	63.63	PASSIVE	0.000	-5.500	0.000	1.000	1.000
31.17	0.000	0.000	Strato1_2_8_L_0									
30 D	8.543	1.3101E-03	14.06	42.71	108.3	64.94	PASSIVE	0.000	-5.700	0.000	1.000	1.000
42.71	0.000	0.000	Strato1_2_8_L_0									
31 D	10.85	1.2422E-03	17.86	54.26	112.1	66.29	PASSIVE	0.000	-5.900	0.000	1.000	1.000
54.26	0.000	0.000	Strato1_2_8_L_0									
32 D	13.16	1.1754E-03	21.66	65.80	115.9	67.67	PASSIVE	0.000	-6.100	0.000	1.000	1.000
65.80	0.000	0.000	Strato1_2_8_L_0									
33 D	13.94	1.1102E-03	25.46	69.70	119.7	69.70	V-C	3935.	-6.300	0.000	1.000	1.000
69.70	0.000	0.000	Strato1_2_8_L_0									
34 D	14.27	1.0468E-03	29.26	71.33	123.5	71.33	V-C	3935.	-6.500	0.000	1.000	1.000
71.33	0.000	0.000	Strato1_2_8_L_0									
35 D	14.60	9.8550E-04	33.06	72.99	127.3	72.99	V-C	3935.	-6.700	0.000	1.000	1.000
72.99	0.000	0.000	Strato1_2_8_L_0									
36 D	14.93	9.2644E-04	36.86	74.65	131.1	74.65	V-C	3935.	-6.900	0.000	1.000	1.000
74.65	0.000	0.000	Strato1_2_8_L_0									
37 D	15.27	8.6980E-04	40.66	76.34	134.9	76.34	V-C	3935.	-7.100	0.000	1.000	1.000
76.34	0.000	0.000	Strato1_2_8_L_0									
38 D	15.61	8.1572E-04	44.46	78.04	138.7	78.04	V-C	3935.	-7.300	0.000	1.000	1.000
78.04	0.000	0.000	Strato1_2_8_L_0									
39 D	15.95	7.6428E-04	48.26	79.76	142.5	79.76	V-C	3935.	-7.500	0.000	1.000	1.000
79.76	0.000	0.000	Strato1_2_8_L_0									

40 D	16.30	7.1555E-04	52.06	81.49	146.3	81.49	V-C	3935.	-7.700	0.000	1.000	1.000
81.49	0.000	0.000	Strato1_2_8_L_0									
41 D	13.59	6.6956E-04	55.96	67.97	150.2	76.51	UL-RL	2.6582E+04	-7.900	0.000	1.000	1.000
67.97	0.000	0.000	Strato2_3095_82743_L_0									
42 D	13.74	6.2633E-04	59.96	68.68	154.2	78.45	UL-RL	2.6582E+04	-8.100	0.000	1.000	1.000
68.68	0.000	0.000	Strato2_3095_82743_L_0									
43 D	13.90	5.8581E-04	63.96	69.49	158.2	80.39	UL-RL	2.6582E+04	-8.300	0.000	1.000	1.000
69.49	0.000	0.000	Strato2_3095_82743_L_0									
44 D	14.08	5.4794E-04	67.96	70.38	162.2	82.33	UL-RL	2.6582E+04	-8.500	0.000	1.000	1.000
70.38	0.000	0.000	Strato2_3095_82743_L_0									
45 D	14.27	5.1259E-04	71.96	71.36	166.2	84.27	UL-RL	2.6582E+04	-8.700	0.000	1.000	1.000
71.36	0.000	0.000	Strato2_3095_82743_L_0									
46 D	14.48	4.7965E-04	75.96	72.42	170.2	86.22	UL-RL	2.6582E+04	-8.900	0.000	1.000	1.000
72.42	0.000	0.000	Strato2_3095_82743_L_0									
47 D	14.71	4.4894E-04	79.96	73.55	174.2	88.17	UL-RL	2.6582E+04	-9.100	0.000	1.000	1.000
73.55	0.000	0.000	Strato2_3095_82743_L_0									
48 D	14.95	4.2030E-04	83.96	74.76	178.2	90.13	UL-RL	2.6582E+04	-9.300	0.000	1.000	1.000
74.76	0.000	0.000	Strato2_3095_82743_L_0									
49 D	15.21	3.9354E-04	87.96	76.03	182.2	92.09	UL-RL	2.6582E+04	-9.500	0.000	1.000	1.000
76.03	0.000	0.000	Strato2_3095_82743_L_0									
50 D	15.47	3.6847E-04	91.96	77.35	186.2	94.05	UL-RL	2.6582E+04	-9.700	0.000	1.000	1.000
77.35	0.000	0.000	Strato2_3095_82743_L_0									
51 D	15.74	3.4488E-04	95.96	78.72	190.2	96.01	UL-RL	2.6582E+04	-9.900	0.000	1.000	1.000
78.72	0.000	0.000	Strato2_3095_82743_L_0									
52 D	16.03	3.2259E-04	99.96	80.13	194.2	97.98	UL-RL	2.6582E+04	-10.10	0.000	1.000	1.000
80.13	0.000	0.000	Strato2_3095_82743_L_0									
53 D	16.32	3.0139E-04	104.0	81.58	198.2	99.95	UL-RL	2.6582E+04	-10.30	0.000	1.000	1.000
81.58	0.000	0.000	Strato2_3095_82743_L_0									
54 D	16.61	2.8111E-04	108.0	83.06	202.2	101.9	UL-RL	2.6582E+04	-10.50	0.000	1.000	1.000
83.06	0.000	0.000	Strato2_3095_82743_L_0									
55 D	16.91	2.6156E-04	112.0	84.56	206.2	103.9	UL-RL	2.6582E+04	-10.70	0.000	1.000	1.000
84.56	0.000	0.000	Strato2_3095_82743_L_0									
56 D	17.21	2.4258E-04	116.0	86.07	210.2	105.9	UL-RL	2.6582E+04	-10.90	0.000	1.000	1.000
86.07	0.000	0.000	Strato2_3095_82743_L_0									
57 D	17.52	2.2402E-04	120.0	87.59	214.2	107.8	UL-RL	2.6582E+04	-11.10	0.000	1.000	1.000
87.59	0.000	0.000	Strato2_3095_82743_L_0									
58 D	17.82	2.0576E-04	124.0	89.12	218.2	109.8	UL-RL	2.6582E+04	-11.30	0.000	1.000	1.000
89.12	0.000	0.000	Strato2_3095_82743_L_0									
59 D	18.13	1.8768E-04	128.0	90.66	222.2	111.8	UL-RL	2.6582E+04	-11.50	0.000	1.000	1.000
90.66	0.000	0.000	Strato2_3095_82743_L_0									
60 D	18.44	1.6970E-04	132.0	92.19	226.2	113.8	UL-RL	2.6582E+04	-11.70	0.000	1.000	1.000
92.19	0.000	0.000	Strato2_3095_82743_L_0									
61 D	14.06	1.5177E-04	136.0	93.72	230.2	115.8	UL-RL	2.6582E+04	-11.90	0.000	1.000	1.000
93.72	0.000	0.000	Strato2_3095_82743_L_0									
62 D	4.724	1.4280E-04	138.0	94.48	232.2	116.7	UL-RL	2.6582E+04	-12.00	0.000	1.000	1.000
94.48	0.000	0.000	Strato2_3095_82743_L_0									

```
+-----------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*        |
|                                                                                                                 |
|                                    NewProject.BaseDesignSection_28.A2M2R1_3514                                  |
|                                  Exe Time :24 July 2019      11:09:28                                           |
+-----------------------------------------------------------------------------------------------------------------+
New Project


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   61
C U R R E N T   T I M E   I S      5.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-------------------------------------------------------
    1  2.0112     -2.0112    -3.61378E-13 0.40223
    2  5.6616     -5.6616     -0.40223     1.5346
    3  9.6394     -9.6394      -1.5346     3.4624
    4  13.872     -13.872      -3.4624     6.2369
    5  18.337     -18.337      -6.2369     9.9042
    6  23.023     -23.023      -9.9042     14.509
    7  27.926     -27.926      -14.509     20.094
    8  33.041     -33.041      -20.094     26.702
    9  38.282     -38.282      -26.702     34.359
   10  43.739     -43.739      -34.359     43.106
   11  49.409     -49.409      -43.106     52.988
   12  55.289     -55.289      -52.988     64.046
   13  59.853     -59.853      -64.046     70.031
   14 -69.777      69.777      -70.031     56.076
   15 -63.413      63.413      -56.076     43.393
   16 -56.846      56.846      -43.393     32.024
```

17	-50.076	50.076	-32.024	22.009
18	-43.101	43.101	-22.009	13.389
19	-35.915	35.915	-13.389	6.2056
20	-28.513	28.513	-6.2056	0.50287
21	-20.924	20.924	-0.50287	-3.6820
22	-13.101	13.101	3.6820	-6.3021
23	-5.0327	5.0327	6.3021	-7.3086
24	3.2903	-3.2903	7.3086	-6.6505
25	11.880	-11.880	6.6505	-4.2745
26	20.545	-20.545	4.2745	-0.16548
27	27.612	-27.612	0.16548	5.3570
28	32.391	-32.391	-5.3570	11.835
29	34.924	-34.924	-11.835	18.820
30	35.234	-35.234	-18.820	25.867
31	33.465	-33.465	-25.867	32.560
32	29.674	-29.674	-32.560	38.495
33	25.392	-25.392	-38.495	43.573
34	21.070	-21.070	-43.573	47.787
35	17.022	-17.022	-47.787	51.192
36	13.268	-13.268	-51.192	53.845
37	9.8175	-9.8175	-53.845	55.809
38	6.6541	-6.6541	-55.809	57.140
39	3.7627	-3.7627	-57.140	57.892
40	1.1273	-1.1273	-57.892	58.118
41	-3.8044	3.8044	-58.118	57.357
42	-7.9960	7.9960	-57.357	55.757
43	-11.517	11.517	-55.757	53.454
44	-14.401	14.401	-53.454	50.574
45	-16.694	16.694	-50.574	47.235
46	-18.444	18.444	-47.235	43.546
47	-19.692	19.692	-43.546	39.608
48	-20.479	20.479	-39.608	35.512
49	-20.840	20.840	-35.512	31.344
50	-20.806	20.806	-31.344	27.183
51	-20.420	20.420	-27.183	23.099
52	-19.692	19.692	-23.099	19.161
53	-18.641	18.641	-19.161	15.433
54	-17.284	17.284	-15.433	11.976
55	-15.634	15.634	-11.976	8.8490
56	-13.702	13.702	-8.8490	6.1086
57	-11.494	11.494	-6.1086	3.8097
58	-9.0297	9.0297	-3.8097	2.0038
59	-6.2970	6.2970	-2.0038	0.74437
60	-3.2977	3.2977	-0.74437	8.48356E-02
61	-0.84827	0.84827	-8.48356E-02	-1.29441E-12

PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017*

NewProject.BaseDesignSection_28.A2M2R1_3514

Exe Time :24 July 2019 11:09:28

New Project

S T R E S S R E S U L T S F O R G R O U P N O. 4

Tieback_778405 :
ELEMENT TYPE 6 NO.OF ELEMENTS. IN THIS GROUP 1
C U R R E N T T I M E I S 5.0000

POST-TENSION 2D-BOUNDARY ELEMENT

EL	FORCE	d0	EDISPL	pl. eps	K	-ve limit	+ve limit	
ANCHOR 1	138.99	-1.48737E-03	-9.35047E-04	0.0000	4682.3	0.0000	0.0000	ELASTIC ORIGINAL YOUNG MODULUS

PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017*

NewProject.BaseDesignSection_28.A2M2R1_3514

Exe Time :24 July 2019 11:09:28

F I N A L I N C R E M E N T A L A N A L Y S I S

S U M M A R Y

STEP NO. OF ITERATIONS

```
         1          CONVERGENCE :YES                    2
         2          CONVERGENCE :YES                    4
         3          CONVERGENCE :YES                    6
         4          CONVERGENCE :YES                    4
         5          CONVERGENCE :YES                    4


 END OF PROCESS FOR PROBLEM
New Project
NONLINEAR SOLUTION CPU TIME ....    0.05 [sec]
DATABASE  CREATION CPU TIME.....    0.22 [sec]
```

3. SEZIONE 3 – BERLINESE

3.1. Design Assumption : Nominal - File di Paratie - File di input (.d)

```
* PARATIE ANALYSIS FOR DESIGN SECTION:Base Design Section USING ASSUMPTION: Nominal
 * Time:mercoledì 24 luglio 2019 11:42:04
 * 1: Defining general settings
 UNIT  m kN
 TITLE 1468.1 - GA27 - Cepav2
 DELTA 0.2
 option param itemax 100
 option control hinges 0 0.0001 0.001

 * 2: Defining wall(s)
 WALL LeftWall_32 0 -8 0 1

 * 3: Defining surfaces for wall(s)
 SOIL 0_L LeftWall_32 -8 0 1 0
 SOIL 0_R LeftWall_32 -8 0 2 180

 * 4: Defining soil layers
 *
 * Soil Profile (Strato1_3095_78023_L_0)
 *
 LDATA Strato1_3095_78023_L_0 0 LeftWall_32
 ATREST 0.5 0.5 1
 WEIGHT 19 9 10
 PERMEABILITY 1E-05
 RESISTANCE 0 29
 YOUNG 2.5E+04 4E+04
 ENDL
 *
 * Soil Profile (Strato2_84780_84781_L_0)
 *
 LDATA Strato2_84780_84781_L_0 -5.35 LeftWall_32
 ATREST 0.5 0.5 1
 WEIGHT 19 9 10
 PERMEABILITY 1E-05
 RESISTANCE 20 35
 YOUNG 5E+04 1.5E+05
 ENDL

 * 5: Defining structural materials
 * Steel material: 113 Name=S275 E=210000000 kPa
 MATERIAL S275_113 2.1E+08
 * Concrete material: 104 Name=C25/30 E=31475800 kPa
 MATERIAL C2530_104 3.148E+07
 * Rebar material: 78036 Name=S275 E=210000000 kPa
 MATERIAL S275_78036 2.1E+08

 * 6: Defining structural elements
 * 6.1: Beams and combined Wall Elements
 BEAM WallElement_33 LeftWall_32 -8 0 S275_113 0.08153 00 00 0


 * 6.2: Supports
 WIRE Tieback_78031 LeftWall_32 -0.2 S275_78036 0.0003824 0 70 0 0




 * 6.3: Strips
 STRIP LeftWall_32 3 3 2.33 3 0 52.08 30

 * 7: Defining Steps
 STEP Stage0_86326
 CHANGE Strato1_3095_78023_L_0 U-FRICT=29 LeftWall_32
 CHANGE Strato1_3095_78023_L_0 D-FRICT=29 LeftWall_32
 CHANGE Strato1_3095_78023_L_0 U-KA=0.319 LeftWall_32
 CHANGE Strato1_3095_78023_L_0 U-KP=3.606 LeftWall_32
 CHANGE Strato1_3095_78023_L_0 D-KA=0.319 LeftWall_32
 CHANGE Strato1_3095_78023_L_0 D-KP=3.606 LeftWall_32
 CHANGE Strato2_84780_84781_L_0 U-FRICT=35 LeftWall_32
 CHANGE Strato2_84780_84781_L_0 D-FRICT=35 LeftWall_32
 CHANGE Strato2_84780_84781_L_0 U-KA=0.248 LeftWall_32
 CHANGE Strato2_84780_84781_L_0 U-KP=5.02 LeftWall_32
 CHANGE Strato2_84780_84781_L_0 D-KA=0.248 LeftWall_32
 CHANGE Strato2_84780_84781_L_0 D-KP=5.02 LeftWall_32
 CHANGE Strato1_3095_78023_L_0 U-COHE=0 LeftWall_32
 CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
 CHANGE Strato2_84780_84781_L_0 U-COHE=20 LeftWall_32
```

```
CHANGE Strato2_84780_84781_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -17 0 -8 0 0
ENDSTEP

STEP Stage1_31
CHANGE Strato1_3095_78023_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -17 0 -8 0 0
ADD WallElement_33 Tieback_78031
ENDSTEP

STEP Stage2_158
CHANGE Strato1_3095_78023_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -2.75
WATER -17 0 -8 0 0
ENDSTEP
```

3.2. Design Assumption : Nominal - File di Paratie - File di output (.out)

```
+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                     |
|                                                                                                                               |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                           |
|                                  Exe Time :24 July 2019      11:42:04                                                         |
+-------------------------------------------------------------------------------------------------------------------------------+

                  ********************************************************
                  *                                                      *
                  *  PARATIE PLUS Non-Linear Spring Engine               *
                  *                                                      *
                  *          AN ELASTOPLASTIC FINITE ELEMENT PROGRAM     *
                  *          FOR FLEXIBLE EARTH-RETAINING STRUCTURES     *
                  *                                                      *
                  *          Written by Ce.A.S. s.r.l. (ITALY)           *
                  *          with the scientific supervision of          *
                  *          Roberto Nova - full professor SOIL MECHANICS*
                  *          at Politecnico di Milano (ITALY)            *
                  *                                                      *
                  ********************************************************
                  *                                                      *
                  *  RELEASE   2017.1     *Build date:Jul 11, 2017*    *
                  *                                                      *
                  *                                                      *
                  *  Ce.A.S.     S.R.L   CENTRO DI ANALISI STRUTTURALE   *
                  *              VIALE   GIUSTINIANO 10                  *
                  *              20129   M I L A N O  (ITALIA)           *
                  *  TEL.        +39 02 2020221   (+39 035 23 67 19)     *
                  *  FAX         +39 02 29512533  (+39 035 42285 49)     *
                  *  email       bruno.becci@ceas.it                     *
                  *  Web Page    www.ceas.it                             *
                  ********************************************************



 JOB : 1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63
 STARTING
ACCEPTED   <FILE,GENW                                                    >
ACCEPTED   <FILE,PLOTTER,BINARY                                          >
ACCEPTED   <SOLVE TOTAL_STRESS                                           >
ACCEPTED   <PARAM ITEMAX 100                                             >
ACCEPTED   <CONTROL HINGES 0 0.0001 0.001                                >



                  ********************************************************
                  *                                                      *
                  *  WARNING : PORE PRESSURES ARE AUTOMATICALLY COMPUTED  *
                  *    BY THE PROGRAM.                                   *
                  ********************************************************
```

```
PRELIMINARY OPERATIONS CPU TIME     0.00 [sec]


+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*           |
|                                                                                                                   |
|                                   1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                              |
|                                   Exe Time :24 July 2019      11:42:04                                            |
+-------------------------------------------------------------------------------------------------------------------+


INPUT FILE HAS BEEN GENERATED BY WALGEN PROGRAM


1468.1 - GA27 - Cepav2


NO. OF NODAL POINTS (NUMNP) ...................   41
NO. OF COORDINATES  (NCOORD)...................    2
NO. OF NODE DOFS    (NDOF).....................    2
NO. OF EQUATIONS    (NEQ)......................   82
NO. OF CONSTRAINTS CARDS (NVINC)...............    0
NO. OF ELEMENT GROUPS (NEG)....................    4
NO. OF SOLUTION STEPS (NSTE)...................    3
NO. OF ELEMENT SETS ATTACHED TO SLAVE NODES ...    0
NO. OF RECORD FROM WALGEN .....................   68
NO. OF LONG NAMES (LASTNAME) ..................   16
LENGTH UNIT CHOICE ............................    3 (M   )
FORCE  UNIT CHOICE ............................    3 (KN  )
MAX PORE PRESSURE TABLE LENGTH.................    1
NO. OF ELEMENT GROUPS REQUIRING ADD. SLIP DOF .    0


IDOFA (01) =  2  Y-DISPL.F
IDOFA (02) =  4   X-ROT. F

 RELEVANT ITEMS UNITS

 STRESSES                  kPa
 Y-DISPLACEMENTS           m
 ROTATIONS                 RADIANS
 BEAM AND SLAB MOMENTS     kN*m/m
 BEAM SHEAR FORCES         kN/m
 ANCHOR FORCES             kN/m
 AXIAL FORCES IN TRUSSES   kN/m
 AXIAL FORCES SPRINGS      kN/m
 Y-REACTIONS               kN/m
 X-MOMENT REACTIONS        kN*m/m
 ETC.



+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*           |
|                                                                                                                   |
|                                   1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                              |
|                                   Exe Time :24 July 2019      11:42:04                                            |
+-------------------------------------------------------------------------------------------------------------------+
                   P R E P R O C E S S O R     D A T A

                   N O.  O F   C O M M A N D S     68

    1 : UNIT  m kN
    2 : TITLE 1468.1 - GA27 - Cepav2
    3 : DELTA 0.2
    4 : option param itemax 100
    5 : option control hinges 0 0.0001 0.001
    6 : WALL LeftWall_32 0 -8 0 1
    7 : SOIL 0_L LeftWall_32 -8 0 1 0
    8 : SOIL 0_R LeftWall_32 -8 0 2 180
    9 : LDATA Strato1_3095_78023_L_0 0 LeftWall_32
   10 : ATREST 0.5 0.5 1
   11 : WEIGHT 19 9 10
   12 : PERMEABILITY 1E-05
   13 : RESISTANCE 0 29
   14 : YOUNG 2.5E+04 4E+04
   15 : ENDL
   16 : LDATA Strato2_84780_84781_L_0 -5.35 LeftWall_32
   17 : ATREST 0.5 0.5 1
   18 : WEIGHT 19 9 10
   19 : PERMEABILITY 1E-05
   20 : RESISTANCE 20 35
   21 : YOUNG 5E+04 1.5E+05
```

```
   22 : ENDL
   23 : MATERIAL S275_113 2.1E+08
   24 : MATERIAL C2530_104 3.148E+07
   25 : MATERIAL S275_78036 2.1E+08
   26 : BEAM WallElement_33 LeftWall_32 -8 0 S275_113 0.08153 00 00 0
   27 : WIRE Tieback_78031 LeftWall_32 -0.2 S275_78036 0.0003824 0 70 0 0
   28 : STRIP LeftWall_32 3 3 2.33 3 0 52.08 30
   29 : STEP Stage0_86326
   30 : CHANGE Strato1_3095_78023_L_0 U-FRICT=29 LeftWall_32
   31 : CHANGE Strato1_3095_78023_L_0 D-FRICT=29 LeftWall_32
   32 : CHANGE Strato1_3095_78023_L_0 U-KA=0.319 LeftWall_32
   33 : CHANGE Strato1_3095_78023_L_0 U-KP=3.606 LeftWall_32
   34 : CHANGE Strato1_3095_78023_L_0 D-KA=0.319 LeftWall_32
   35 : CHANGE Strato1_3095_78023_L_0 D-KP=3.606 LeftWall_32
   36 : CHANGE Strato2_84780_84781_L_0 U-FRICT=35 LeftWall_32
   37 : CHANGE Strato2_84780_84781_L_0 D-FRICT=35 LeftWall_32
   38 : CHANGE Strato2_84780_84781_L_0 U-KA=0.248 LeftWall_32
   39 : CHANGE Strato2_84780_84781_L_0 U-KP=5.02 LeftWall_32
   40 : CHANGE Strato2_84780_84781_L_0 D-KA=0.248 LeftWall_32
   41 : CHANGE Strato2_84780_84781_L_0 D-KP=5.02 LeftWall_32
   42 : CHANGE Strato1_3095_78023_L_0 U-COHE=0 LeftWall_32
   43 : CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
   44 : CHANGE Strato2_84780_84781_L_0 U-COHE=20 LeftWall_32
   45 : CHANGE Strato2_84780_84781_L_0 D-COHE=20 LeftWall_32
   46 : SETWALL LeftWall_32
   47 : GEOM 0 0
   48 : WATER -17 0 -8 0 0
   49 : ENDSTEP
   50 : STEP Stage1_31
   51 : CHANGE Strato1_3095_78023_L_0 D-FRICT=29 LeftWall_32
   52 : CHANGE Strato2_84780_84781_L_0 D-FRICT=35 LeftWall_32
   53 : CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
   54 : CHANGE Strato2_84780_84781_L_0 D-COHE=20 LeftWall_32
   55 : SETWALL LeftWall_32
   56 : GEOM 0 0
   57 : WATER -17 0 -8 0 0
   58 : ADD WallElement_33 Tieback_78031
   59 : ENDSTEP
   60 : STEP Stage2_158
   61 : CHANGE Strato1_3095_78023_L_0 D-FRICT=29 LeftWall_32
   62 : CHANGE Strato2_84780_84781_L_0 D-FRICT=35 LeftWall_32
   63 : CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
   64 : CHANGE Strato2_84780_84781_L_0 D-COHE=20 LeftWall_32
   65 : SETWALL LeftWall_32
   66 : GEOM 0 -2.75
   67 : WATER -17 0 -8 0 0
   68 : ENDSTEP
```

```
+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                   |
|                                  Exe Time :24 July 2019      11:42:04                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
N O D A L    P O I N T    D A T A
---------------------------------

NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD /

   1  0.0000      0.0000     /    2  0.0000    -0.20000     /    3  0.0000    -0.40000     /    4  0.0000    -0.60000     /
   5  0.0000    -0.80000     /    6  0.0000     -1.0000     /    7  0.0000     -1.2000     /    8  0.0000     -1.4000     /
   9  0.0000     -1.6000     /   10  0.0000     -1.8000     /   11  0.0000     -2.0000     /   12  0.0000     -2.2000     /
  13  0.0000     -2.4000     /   14  0.0000     -2.6000     /   15  0.0000     -2.8000     /   16  0.0000     -3.0000     /
  17  0.0000     -3.2000     /   18  0.0000     -3.4000     /   19  0.0000     -3.6000     /   20  0.0000     -3.8000     /
  21  0.0000     -4.0000     /   22  0.0000     -4.2000     /   23  0.0000     -4.4000     /   24  0.0000     -4.6000     /
  25  0.0000     -4.8000     /   26  0.0000     -5.0000     /   27  0.0000     -5.2000     /   28  0.0000     -5.4000     /
  29  0.0000     -5.6000     /   30  0.0000     -5.8000     /   31  0.0000     -6.0000     /   32  0.0000     -6.2000     /
  33  0.0000     -6.4000     /   34  0.0000     -6.6000     /   35  0.0000     -6.8000     /   36  0.0000     -7.0000     /
  37  0.0000     -7.2000     /   38  0.0000     -7.4000     /   39  0.0000     -7.6000     /   40  0.0000     -7.8000     /
  41  0.0000     -8.0000     /
```

```
+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                   |
|                                  Exe Time :24 July 2019      11:42:04                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  1

0_L                              :
```

```
   5  41   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
.....2D PLASTIC SOIL .....
.....................................

element group behaviour throughout stage analysis

stage   status
------------------
    1   active
    2   active
    3   active

 material set no.    1

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area      .....     .....     .....      flag
-------------------------------------------------------------------

    1    1    1   0.1000      0.000     0.000     0.000     1.000
    2    2    1   0.2000      0.000     0.000     0.000     1.000
    3    3    1   0.2000      0.000     0.000     0.000     1.000
    4    4    1   0.2000      0.000     0.000     0.000     1.000
    5    5    1   0.2000      0.000     0.000     0.000     1.000
    6    6    1   0.2000      0.000     0.000     0.000     1.000
    7    7    1   0.2000      0.000     0.000     0.000     1.000
    8    8    1   0.2000      0.000     0.000     0.000     1.000
    9    9    1   0.2000      0.000     0.000     0.000     1.000
   10   10    1   0.2000      0.000     0.000     0.000     1.000
   11   11    1   0.2000      0.000     0.000     0.000     1.000
   12   12    1   0.2000      0.000     0.000     0.000     1.000
   13   13    1   0.2000      0.000     0.000     0.000     1.000
   14   14    1   0.2000      0.000     0.000     0.000     1.000
   15   15    1   0.2000      0.000     0.000     0.000     1.000
   16   16    1   0.2000      0.000     0.000     0.000     1.000
   17   17    1   0.2000      0.000     0.000     0.000     1.000
   18   18    1   0.2000      0.000     0.000     0.000     1.000
   19   19    1   0.2000      0.000     0.000     0.000     1.000
   20   20    1   0.2000      0.000     0.000     0.000     1.000
   21   21    1   0.2000      0.000     0.000     0.000     1.000
   22   22    1   0.2000      0.000     0.000     0.000     1.000
   23   23    1   0.2000      0.000     0.000     0.000     1.000
   24   24    1   0.2000      0.000     0.000     0.000     1.000
   25   25    1   0.2000      0.000     0.000     0.000     1.000
   26   26    1   0.2000      0.000     0.000     0.000     1.000
   27   27    1   0.2000      0.000     0.000     0.000     1.000
   28   28    2   0.2000      0.000     0.000     0.000     1.000
   29   29    2   0.2000      0.000     0.000     0.000     1.000
   30   30    2   0.2000      0.000     0.000     0.000     1.000
   31   31    2   0.2000      0.000     0.000     0.000     1.000
   32   32    2   0.2000      0.000     0.000     0.000     1.000
   33   33    2   0.2000      0.000     0.000     0.000     1.000
   34   34    2   0.2000      0.000     0.000     0.000     1.000
   35   35    2   0.2000      0.000     0.000     0.000     1.000
   36   36    2   0.2000      0.000     0.000     0.000     1.000
   37   37    2   0.2000      0.000     0.000     0.000     1.000
   38   38    2   0.2000      0.000     0.000     0.000     1.000
   39   39    2   0.2000      0.000     0.000     0.000     1.000
   40   40    2   0.2000      0.000     0.000     0.000     1.000
   41   41    2   0.1000      0.000     0.000     0.000     1.000



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                 |
|                                    Exe Time :24 July 2019      11:42:04                                               |
+-----------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  2

0_R                          :
   5  41   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
```

```
.....................................
.........2D PLASTIC SOIL ..........
.....................................

element group behaviour throughout stage analysis

stage   status
------------------
    1   active
    2   active
    3   active

 material set no.    1

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area      .....     .....     .....      flag
-------------------------------------------------------------------

    1    1    1   0.1000     0.000     0.000     0.000     2.000
    2    2    1   0.2000     0.000     0.000     0.000     2.000
    3    3    1   0.2000     0.000     0.000     0.000     2.000
    4    4    1   0.2000     0.000     0.000     0.000     2.000
    5    5    1   0.2000     0.000     0.000     0.000     2.000
    6    6    1   0.2000     0.000     0.000     0.000     2.000
    7    7    1   0.2000     0.000     0.000     0.000     2.000
    8    8    1   0.2000     0.000     0.000     0.000     2.000
    9    9    1   0.2000     0.000     0.000     0.000     2.000
   10   10    1   0.2000     0.000     0.000     0.000     2.000
   11   11    1   0.2000     0.000     0.000     0.000     2.000
   12   12    1   0.2000     0.000     0.000     0.000     2.000
   13   13    1   0.2000     0.000     0.000     0.000     2.000
   14   14    1   0.2000     0.000     0.000     0.000     2.000
   15   15    1   0.2000     0.000     0.000     0.000     2.000
   16   16    1   0.2000     0.000     0.000     0.000     2.000
   17   17    1   0.2000     0.000     0.000     0.000     2.000
   18   18    1   0.2000     0.000     0.000     0.000     2.000
   19   19    1   0.2000     0.000     0.000     0.000     2.000
   20   20    1   0.2000     0.000     0.000     0.000     2.000
   21   21    1   0.2000     0.000     0.000     0.000     2.000
   22   22    1   0.2000     0.000     0.000     0.000     2.000
   23   23    1   0.2000     0.000     0.000     0.000     2.000
   24   24    1   0.2000     0.000     0.000     0.000     2.000
   25   25    1   0.2000     0.000     0.000     0.000     2.000
   26   26    1   0.2000     0.000     0.000     0.000     2.000
   27   27    1   0.2000     0.000     0.000     0.000     2.000
   28   28    2   0.2000     0.000     0.000     0.000     2.000
   29   29    2   0.2000     0.000     0.000     0.000     2.000
   30   30    2   0.2000     0.000     0.000     0.000     2.000
   31   31    2   0.2000     0.000     0.000     0.000     2.000
   32   32    2   0.2000     0.000     0.000     0.000     2.000
   33   33    2   0.2000     0.000     0.000     0.000     2.000
   34   34    2   0.2000     0.000     0.000     0.000     2.000
   35   35    2   0.2000     0.000     0.000     0.000     2.000
   36   36    2   0.2000     0.000     0.000     0.000     2.000
   37   37    2   0.2000     0.000     0.000     0.000     2.000
   38   38    2   0.2000     0.000     0.000     0.000     2.000
   39   39    2   0.2000     0.000     0.000     0.000     2.000
   40   40    2   0.2000     0.000     0.000     0.000     2.000
   41   41    2   0.1000     0.000     0.000     0.000     2.000



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                    1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                 |
|                                    Exe Time :24 July 2019      11:42:04                                               |
+-----------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  3

WallElement_33                 :
   2  40   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   1   0
.....................................
```

.....2D WALL ELEMENT.....
.....

element group behaviour throughout stage analysis

stage	status
1	inactive
2	active
3	active

material set no. 1

prop(1) young modulus 0.210000E+09
prop(2) modification time 0.00000
prop(3) new young modulus 0.00000
prop(4) poisson ratio 0.00000
prop(5) future 0.182200E-43

no. of step variable items: 1

step	inertia multipier
1	1.000
2	1.000
3	1.000

element data

el	na	nb	mat	erc1	erc2	thick	by-i	by-j
1	1	2	1	0.000	0.000	0.8153E-01	0.000	0.000
2	2	3	1	0.000	0.000	0.8153E-01	0.000	0.000
3	3	4	1	0.000	0.000	0.8153E-01	0.000	0.000
4	4	5	1	0.000	0.000	0.8153E-01	0.000	0.000
5	5	6	1	0.000	0.000	0.8153E-01	0.000	0.000
6	6	7	1	0.000	0.000	0.8153E-01	0.000	0.000
7	7	8	1	0.000	0.000	0.8153E-01	0.000	0.000
8	8	9	1	0.000	0.000	0.8153E-01	0.000	0.000
9	9	10	1	0.000	0.000	0.8153E-01	0.000	0.000
10	10	11	1	0.000	0.000	0.8153E-01	0.000	0.000
11	11	12	1	0.000	0.000	0.8153E-01	0.000	0.000
12	12	13	1	0.000	0.000	0.8153E-01	0.000	0.000
13	13	14	1	0.000	0.000	0.8153E-01	0.000	0.000
14	14	15	1	0.000	0.000	0.8153E-01	0.000	0.000
15	15	16	1	0.000	0.000	0.8153E-01	0.000	0.000
16	16	17	1	0.000	0.000	0.8153E-01	0.000	0.000
17	17	18	1	0.000	0.000	0.8153E-01	0.000	0.000
18	18	19	1	0.000	0.000	0.8153E-01	0.000	0.000
19	19	20	1	0.000	0.000	0.8153E-01	0.000	0.000
20	20	21	1	0.000	0.000	0.8153E-01	0.000	0.000
21	21	22	1	0.000	0.000	0.8153E-01	0.000	0.000
22	22	23	1	0.000	0.000	0.8153E-01	0.000	0.000
23	23	24	1	0.000	0.000	0.8153E-01	0.000	0.000
24	24	25	1	0.000	0.000	0.8153E-01	0.000	0.000
25	25	26	1	0.000	0.000	0.8153E-01	0.000	0.000
26	26	27	1	0.000	0.000	0.8153E-01	0.000	0.000
27	27	28	1	0.000	0.000	0.8153E-01	0.000	0.000
28	28	29	1	0.000	0.000	0.8153E-01	0.000	0.000
29	29	30	1	0.000	0.000	0.8153E-01	0.000	0.000
30	30	31	1	0.000	0.000	0.8153E-01	0.000	0.000
31	31	32	1	0.000	0.000	0.8153E-01	0.000	0.000
32	32	33	1	0.000	0.000	0.8153E-01	0.000	0.000
33	33	34	1	0.000	0.000	0.8153E-01	0.000	0.000
34	34	35	1	0.000	0.000	0.8153E-01	0.000	0.000
35	35	36	1	0.000	0.000	0.8153E-01	0.000	0.000
36	36	37	1	0.000	0.000	0.8153E-01	0.000	0.000
37	37	38	1	0.000	0.000	0.8153E-01	0.000	0.000
38	38	39	1	0.000	0.000	0.8153E-01	0.000	0.000
39	39	40	1	0.000	0.000	0.8153E-01	0.000	0.000
40	40	41	1	0.000	0.000	0.8153E-01	0.000	0.000

PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017*

1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63
Exe Time :24 July 2019 11:42:04

ELEMENT GROUP NO. 4

Tieback_78031 :
6 1 0 1 0 0 0 0 0 0 0 0 0 0 0 1 0 0 2 0

```
.....................................
.........2D POST-TENSION ANCHOR....
.....................................

element group behaviour throughout stage analysis

stage   status
------------------
    1  inactive
    2   active
    3   active

 material set no.    1

 prop( 1) angle          70.0000
 prop( 2) young modulus 0.210000E+09
 prop( 3) modification  time  0.00000
 prop( 4) new young modulus   0.00000

 no. of step variable items:     2
 step   -ve lim     +ve lim
-----------------------------
    1   0.000       0.000
    2   0.000       0.000
    3   0.000       0.000

 element data

   el    n  mat       a/l     pinit    yieldc    yieldt
-------------------------------------------------------

    1    2    1   0.3824E-03 0.000     0.000     0.000



+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                               |
|                                  Exe Time :24 July 2019      11:42:04                                             |
+-------------------------------------------------------------------------------------------------------------------+


NO. OF NODAL LOADS  (NLOAD) ...................    0
NO. OF LOAD CURVES  (NLCUR) ...................    6
MAXIMUM POINTS/LCURVE (NPTM)...................    5



+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                               |
|                                  Exe Time :24 July 2019      11:42:04                                             |
+-------------------------------------------------------------------------------------------------------------------+
L O A D     D A T A


    LOAD FUNCTION NUMBER   =    1
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       1.20000    0.0000E+00
       4.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    2
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       2.20000    0.0000E+00
       4.00000    0.0000E+00
```

```
    LOAD FUNCTION NUMBER   =    3
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       3.20000    0.0000E+00
       4.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    4
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       4.00000    0.1000E+01



    LOAD FUNCTION NUMBER   =    5
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       4.00000    0.1000E+01



    LOAD FUNCTION NUMBER   =    6
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       4.00000    0.1000E+01


NO. OF DISTRIBUTED LOAD CARDS     0




+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                   |
|                                  Exe Time :24 July 2019      11:42:04                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
L O A D     B A L A N C E

STEP     1 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     1 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     2 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     2 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     3 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     3 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000



                     LOAD INPUT SECTION COMPLETED




+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                   |
```

```
|                               Exe Time :24 July 2019      11:42:04                                           |
+------------------------------------------------------------------------------------------------------------+


NO. OF LAYERS ................................    2
NO. OF DATA PER LAYER.........................  100



+------------------------------------------------------------------------------------------------------------+
|                 PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*      |
|                                                                                                            |
|                               1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                            |
|                               Exe Time :24 July 2019      11:42:04                                           |
+------------------------------------------------------------------------------------------------------------+

LAYER DESCRIPTORS FOR STEP NO.    1


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  10.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.31900     WALL NO.       1
ITEM NO.  11<U-KP    >=  3.6060     WALL NO.       1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  25000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  40000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.31900     WALL NO.       1
ITEM NO.  61<D-KP    >=  3.6060     WALL NO.       1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  11.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -5.3500     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.24800     WALL NO.       1
ITEM NO.  11<U-KP    >=  5.0200     WALL NO.       1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.24800     WALL NO.       1
ITEM NO.  61<D-KP    >=  5.0200     WALL NO.       1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    2


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  10.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
```

```
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.31900     WALL NO.        1
ITEM NO.  11<U-KP    >=  3.6060     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  25000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  40000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.31900     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.6060     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  11.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -5.3500     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.24800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.0200     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.24800     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.0200     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    3


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  10.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.31900     WALL NO.        1
ITEM NO.  11<U-KP    >=  3.6060     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  25000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  40000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.31900     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.6060     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  11.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -5.3500     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
```

```
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.24800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.0200     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.24800     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.0200     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)


DEFAULT WATER UNIT WEIGHT =  10.000
AVERAGED ON     6 VALUES




+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                   |
|                                  Exe Time :24 July 2019      11:42:04                                                 |
+-----------------------------------------------------------------------------------------------------------------------+

PHASE DESCRIPTORS


STEP  NO.     1
                                     LEFT WALL    RIGHT WALL
Y                                     0.000       -0.9990E+30
Z-PC                                  0.000         0.000
Z-EXCAVATION                          0.000         0.000
Z-WATER_TABLE                        -17.00       -0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL             0.000         0.000
ZQ                                    0.000         0.000
DZW_OF_THE_WATER_TABLE                0.000         0.000
QS_ON_THE_EXCAVATION_SIDE             0.000         0.000
ZQS                                 -0.9990E+30   -0.9990E+30
ZCUT                                  0.000         0.000
BALANCE LEVEL FOR PORE PRESSURES     -8.000        -8.000
WATER_BEHAVIOUR_FLAG (LINING OPT)     0.000         0.000
PORE_UPDATE_FLAG                      0.000         0.000
PORE_TAB. _FLAG (gt.0= use tabs)      0.000         0.000
lateral thrusts reduction elevatio    0.000         0.000
Downhill reduction factor for effe    0.000         0.000
Downhill reduction factor for pore    0.000         0.000
Uphill reduction factor for effect    0.000         0.000
Uphill reduction factor for pore p    0.000         0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]      0.000         0.000
UPHILL VERTICAL ACCEL.  Kv_uh [g]     0.000         0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]     0.000         0.000
UPHILL BETA ANGLE (SLOPE) [deg]       0.000         0.000
UPHILL DELTA/PHI RATIO                0.000         0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]     0.000         0.000
DOWNHILL DELTA/PHI RATIO              0.000         0.000
DYN.WATER BEHAVIOUR                   0.000         0.000
Excess pore pressure RATIO Ru         0.000         0.000
SEISMIC PRESSURE LOWER VALUE          0.000         0.000
SEISMIC PRESSURE UPPER VALUE          0.000         0.000
SEISMIC PRESSURE LOWER LEVEL          0.000         0.000
SEISMIC PRESSURE UPPER LEVEL          0.000         0.000

================================================================================================================end of step    1


STEP  NO.     2
                                     LEFT WALL    RIGHT WALL
Y                                     0.000       -0.9990E+30
Z-PC                                  0.000         0.000
Z-EXCAVATION                          0.000         0.000
Z-WATER_TABLE                        -17.00       -0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL             0.000         0.000
ZQ                                    0.000         0.000
DZW_OF_THE_WATER_TABLE                0.000         0.000
QS_ON_THE_EXCAVATION_SIDE             0.000         0.000
ZQS                                 -0.9990E+30   -0.9990E+30
```

ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-8.000	-8.000
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 2

STEP NO. 3

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-2.750	0.000
Z-WATER_TABLE	-17.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-8.000	-8.000
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 3

LEFT-HAND WALL

LOWER LEVEL -8.00000
UPPER LEVEL 0.00000

RIGHT-HAND WALL

LOWER LEVEL -8.00000
UPPER LEVEL 0.00000

```
|                                  Exe Time :24 July 2019      11:42:04                                          |
+----------------------------------------------------------------------------------------------------------------+
 I N I T I A L    S T R E S S    T A B L E S

             S E C T I O N

 NUMBER OF DEFINED TABLES             1


INPUT DATA FOR INITIAL STRESS SET NO.    1
PERTAINING SOIL ELEMENTS AT Y-COORD    0.0000

ACTIVATION TIME                              3.0000
END TIME (TIME BEYOND WHICH IT IS REMOVED)   3.0000

TYPE BOUSSINESQ

 HORIZONTAL DISTANCE (DY)           2.33000000000000
 FOUNDATION WIDTH    (B)            3.00000000000000
 ZETA-F..........                  0.000000000000000E+000
 Q-F ............                   52.0800000000000
 BETA ...........                   30.0000000000000
 BEHAVIOUR (0=FREE, 1=REFLECTING)  0.000000000000000E+000


 ELEMENT GROUPS BACKUP AREA CAN STAY IN CORE AT
 POSITION        2279

 NO. OF D.P.W  FOR THIS AREA        4898
 MAX NO. OF D.P.W. AVAILABLE       81920
 ** MAX NO OF ITERATIONS SET TO          100

ITER      0 RNORM = 0.000      RMNORM= 0.000
            RINORM= 6047.      RIMNOR= 0.000
            RENORM= 0.000      REMNOR= 0.000      RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
            RFMAX = 14.82      RMMAX = 0.000
            RTSMAL=0.1000E-03 RMSMAL= 0.000
            RDT    = 6047.     RDR    = 0.000
            RATIOT= 0.000      RATIOR= 0.000
            MAX UN= 0.000      IEQ=    82 NODE     41 DOF    2   X-ROT. F
            MIN UN= 0.000      IEQ=     1 NODE      1 DOF    1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS      0


ITER      1 RNORM = 0.000      RMNORM= 0.000
            RINORM= 6047.      RIMNOR= 0.000
            RENORM= 0.000      REMNOR= 0.000      RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
            RFMAX = 14.82      RMMAX = 0.000
            RTSMAL=0.1000E-03 RMSMAL= 0.000
            RDT    = 6047.     RDR    = 0.000
            RATIOT= 0.000      RATIOR= 0.000
            MAX UN= 0.000      IEQ=    82 NODE     41 DOF    2   X-ROT. F
            MIN UN= 0.000      IEQ=     1 NODE      1 DOF    1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS      0


ITER      2 RNORM = 0.000      RMNORM= 0.000
            RINORM= 6047.      RIMNOR= 0.000
            RENORM= 0.000      REMNOR= 0.000      RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
            RFMAX = 14.82      RMMAX = 0.000
            RTSMAL=0.1000E-03 RMSMAL= 0.000
            RDT    = 6047.     RDR    = 0.000
            RATIOT= 0.000      RATIOR= 0.000
            MAX UN= 0.000      IEQ=    82 NODE     41 DOF    2   X-ROT. F
            MIN UN= 0.000      IEQ=     1 NODE      1 DOF    1  Y-DISPL.F
            NO. OF CONTACT CONSTRAINT VIOLATIONS      0




+----------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*     |
|                                                                                                                |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                            |
|                                  Exe Time :24 July 2019      11:42:04                                          |
+----------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2
SOLUTION REACHED USING     2 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    1    ( AT TIME   1.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
```

(02) (04) (

ALL NODAL POINTS HAVE ZERO DISPLACEMENT COMPONENTS

PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017*

1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63

Exe Time :24 July 2019 11:42:04

1468.1 - GA27 - Cepav2

S T R E S S R E S U L T S F O R G R O U P N O. 1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 41
C U R R E N T T I M E I S 1.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.000	0.000	0.000	0.000	0.000	0.000	V-C	3.9789E+04	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_3095_78023_L_0
2 D	0.3800	0.000	3.800	1.900	3.800	1.900	V-C	3.9789E+04	-0.2000	0.000	1.000	1.000	1.900	0.000	0.000	Strato1_3095_78023_L_0
3 D	0.7600	0.000	7.600	3.800	7.600	3.800	V-C	3.9789E+04	-0.4000	0.000	1.000	1.000	3.800	0.000	0.000	Strato1_3095_78023_L_0
4 D	1.140	0.000	11.40	5.700	11.40	5.700	V-C	3.9789E+04	-0.6000	0.000	1.000	1.000	5.700	0.000	0.000	Strato1_3095_78023_L_0
5 D	1.520	0.000	15.20	7.600	15.20	7.600	V-C	3.9789E+04	-0.8000	0.000	1.000	1.000	7.600	0.000	0.000	Strato1_3095_78023_L_0
6 D	1.900	0.000	19.00	9.500	19.00	9.500	V-C	3.9789E+04	-1.000	0.000	1.000	1.000	9.500	0.000	0.000	Strato1_3095_78023_L_0
7 D	2.280	0.000	22.80	11.40	22.80	11.40	V-C	3.9789E+04	-1.200	0.000	1.000	1.000	11.40	0.000	0.000	Strato1_3095_78023_L_0
8 D	2.660	0.000	26.60	13.30	26.60	13.30	V-C	3.9789E+04	-1.400	0.000	1.000	1.000	13.30	0.000	0.000	Strato1_3095_78023_L_0
9 D	3.040	0.000	30.40	15.20	30.40	15.20	V-C	3.9789E+04	-1.600	0.000	1.000	1.000	15.20	0.000	0.000	Strato1_3095_78023_L_0
10 D	3.420	0.000	34.20	17.10	34.20	17.10	V-C	3.9789E+04	-1.800	0.000	1.000	1.000	17.10	0.000	0.000	Strato1_3095_78023_L_0
11 D	3.800	0.000	38.00	19.00	38.00	19.00	V-C	3.9789E+04	-2.000	0.000	1.000	1.000	19.00	0.000	0.000	Strato1_3095_78023_L_0
12 D	4.180	0.000	41.80	20.90	41.80	20.90	V-C	3.9789E+04	-2.200	0.000	1.000	1.000	20.90	0.000	0.000	Strato1_3095_78023_L_0
13 D	4.560	0.000	45.60	22.80	45.60	22.80	V-C	3.9789E+04	-2.400	0.000	1.000	1.000	22.80	0.000	0.000	Strato1_3095_78023_L_0
14 D	4.940	0.000	49.40	24.70	49.40	24.70	V-C	3.9789E+04	-2.600	0.000	1.000	1.000	24.70	0.000	0.000	Strato1_3095_78023_L_0
15 D	5.320	0.000	53.20	26.60	53.20	26.60	V-C	3.9789E+04	-2.800	0.000	1.000	1.000	26.60	0.000	0.000	Strato1_3095_78023_L_0
16 D	5.700	0.000	57.00	28.50	57.00	28.50	V-C	3.9789E+04	-3.000	0.000	1.000	1.000	28.50	0.000	0.000	Strato1_3095_78023_L_0
17 D	6.080	0.000	60.80	30.40	60.80	30.40	V-C	3.9789E+04	-3.200	0.000	1.000	1.000	30.40	0.000	0.000	Strato1_3095_78023_L_0
18 D	6.460	0.000	64.60	32.30	64.60	32.30	V-C	3.9789E+04	-3.400	0.000	1.000	1.000	32.30	0.000	0.000	Strato1_3095_78023_L_0
19 D	6.840	0.000	68.40	34.20	68.40	34.20	V-C	3.9789E+04	-3.600	0.000	1.000	1.000	34.20	0.000	0.000	Strato1_3095_78023_L_0
20 D	7.220	0.000	72.20	36.10	72.20	36.10	V-C	3.9789E+04	-3.800	0.000	1.000	1.000	36.10	0.000	0.000	Strato1_3095_78023_L_0
21 D	7.600	0.000	76.00	38.00	76.00	38.00	V-C	3.9789E+04	-4.000	0.000	1.000	1.000	38.00	0.000	0.000	Strato1_3095_78023_L_0
22 D	7.980	0.000	79.80	39.90	79.80	39.90	V-C	3.9789E+04	-4.200	0.000	1.000	1.000	39.90	0.000	0.000	Strato1_3095_78023_L_0
23 D	8.360	0.000	83.60	41.80	83.60	41.80	V-C	3.9789E+04	-4.400	0.000	1.000	1.000	41.80	0.000	0.000	Strato1_3095_78023_L_0
24 D	8.740	0.000	87.40	43.70	87.40	43.70	V-C	3.9789E+04	-4.600	0.000	1.000	1.000	43.70	0.000	0.000	Strato1_3095_78023_L_0
25 D	9.120	0.000	91.20	45.60	91.20	45.60	V-C	3.9789E+04	-4.800	0.000	1.000	1.000	45.60	0.000	0.000	Strato1_3095_78023_L_0
26 D	9.500	0.000	95.00	47.50	95.00	47.50	V-C	3.9789E+04	-5.000	0.000	1.000	1.000	47.50	0.000	0.000	Strato1_3095_78023_L_0

EL	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
27 D	9.880	0.000	98.80	49.40	98.80	49.40	V-C	3.9789E+04	-5.200	0.000	1.000	1.000	49.40	0.000	0.000	Strato1_3095_78023_L_0
28 D	10.26	0.000	102.6	51.30	102.6	51.30	V-C	9.0046E+04	-5.400	0.000	1.000	1.000	51.30	0.000	0.000	Strato2_84780_84781_L_0
29 D	10.64	0.000	106.4	53.20	106.4	53.20	V-C	9.0046E+04	-5.600	0.000	1.000	1.000	53.20	0.000	0.000	Strato2_84780_84781_L_0
30 D	11.02	0.000	110.2	55.10	110.2	55.10	V-C	9.0046E+04	-5.800	0.000	1.000	1.000	55.10	0.000	0.000	Strato2_84780_84781_L_0
31 D	11.40	0.000	114.0	57.00	114.0	57.00	V-C	9.0046E+04	-6.000	0.000	1.000	1.000	57.00	0.000	0.000	Strato2_84780_84781_L_0
32 D	11.78	0.000	117.8	58.90	117.8	58.90	V-C	9.0046E+04	-6.200	0.000	1.000	1.000	58.90	0.000	0.000	Strato2_84780_84781_L_0
33 D	12.16	0.000	121.6	60.80	121.6	60.80	V-C	9.0046E+04	-6.400	0.000	1.000	1.000	60.80	0.000	0.000	Strato2_84780_84781_L_0
34 D	12.54	0.000	125.4	62.70	125.4	62.70	V-C	9.0046E+04	-6.600	0.000	1.000	1.000	62.70	0.000	0.000	Strato2_84780_84781_L_0
35 D	12.92	0.000	129.2	64.60	129.2	64.60	V-C	9.0046E+04	-6.800	0.000	1.000	1.000	64.60	0.000	0.000	Strato2_84780_84781_L_0
36 D	13.30	0.000	133.0	66.50	133.0	66.50	V-C	9.0046E+04	-7.000	0.000	1.000	1.000	66.50	0.000	0.000	Strato2_84780_84781_L_0
37 D	13.68	0.000	136.8	68.40	136.8	68.40	V-C	9.0046E+04	-7.200	0.000	1.000	1.000	68.40	0.000	0.000	Strato2_84780_84781_L_0
38 D	14.06	0.000	140.6	70.30	140.6	70.30	V-C	9.0046E+04	-7.400	0.000	1.000	1.000	70.30	0.000	0.000	Strato2_84780_84781_L_0
39 D	14.44	0.000	144.4	72.20	144.4	72.20	V-C	9.0046E+04	-7.600	0.000	1.000	1.000	72.20	0.000	0.000	Strato2_84780_84781_L_0
40 D	14.82	0.000	148.2	74.10	148.2	74.10	V-C	9.0046E+04	-7.800	0.000	1.000	1.000	74.10	0.000	0.000	Strato2_84780_84781_L_0
41 D	7.600	0.000	152.0	76.00	152.0	76.00	V-C	9.0046E+04	-8.000	0.000	1.000	1.000	76.00	0.000	0.000	Strato2_84780_84781_L_0

```
+----------------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                            |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                        |
|                                  Exe Time :24 July 2019      11:42:04                                                      |
+----------------------------------------------------------------------------------------------------------------------------+
```

1468.1 - GA27 - Cepav2

S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

0_R :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 41
C U R R E N T   T I M E   I S   1.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.000	0.000	0.000	0.000	0.000	0.000	V-C	2.7611E+04	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_3095_78023_L_0
2 D	0.3800	0.000	3.800	1.900	3.800	1.900	V-C	2.7611E+04	-0.2000	0.000	1.000	1.000	1.900	0.000	0.000	Strato1_3095_78023_L_0
3 D	0.7600	0.000	7.600	3.800	7.600	3.800	V-C	2.7611E+04	-0.4000	0.000	1.000	1.000	3.800	0.000	0.000	Strato1_3095_78023_L_0
4 D	1.140	0.000	11.40	5.700	11.40	5.700	V-C	2.7611E+04	-0.6000	0.000	1.000	1.000	5.700	0.000	0.000	Strato1_3095_78023_L_0
5 D	1.520	0.000	15.20	7.600	15.20	7.600	V-C	2.7611E+04	-0.8000	0.000	1.000	1.000	7.600	0.000	0.000	Strato1_3095_78023_L_0
6 D	1.900	0.000	19.00	9.500	19.00	9.500	V-C	2.7611E+04	-1.000	0.000	1.000	1.000	9.500	0.000	0.000	Strato1_3095_78023_L_0
7 D	2.280	0.000	22.80	11.40	22.80	11.40	V-C	2.7611E+04	-1.200	0.000	1.000	1.000	11.40	0.000	0.000	Strato1_3095_78023_L_0
8 D	2.660	0.000	26.60	13.30	26.60	13.30	V-C	2.7611E+04	-1.400	0.000	1.000	1.000	13.30	0.000	0.000	Strato1_3095_78023_L_0
9 D	3.040	0.000	30.40	15.20	30.40	15.20	V-C	2.7611E+04	-1.600	0.000	1.000	1.000	15.20	0.000	0.000	Strato1_3095_78023_L_0
10 D	3.420	0.000	34.20	17.10	34.20	17.10	V-C	2.7611E+04	-1.800	0.000	1.000	1.000	17.10	0.000	0.000	Strato1_3095_78023_L_0
11 D	3.800	0.000	38.00	19.00	38.00	19.00	V-C	2.7611E+04	-2.000	0.000	1.000	1.000	19.00	0.000	0.000	Strato1_3095_78023_L_0
12 D	4.180	0.000	41.80	20.90	41.80	20.90	V-C	2.7611E+04	-2.200	0.000	1.000	1.000	20.90	0.000	0.000	Strato1_3095_78023_L_0
13 D	4.560	0.000	45.60	22.80	45.60	22.80	V-C	2.7611E+04	-2.400	0.000	1.000	1.000	22.80	0.000	0.000	Strato1_3095_78023_L_0
14 D	4.940	0.000	49.40	24.70	49.40	24.70	V-C	2.7611E+04	-2.600	0.000	1.000	1.000	24.70	0.000	0.000	Strato1_3095_78023_L_0

```
  15 D   5.320       0.000       53.20       26.60       53.20       26.60              V-C  2.7611E+04  -2.800       0.000       1.000       1.000
26.60       0.000       0.000     Strato1_3095_78023_L_0
  16 D   5.700       0.000       57.00       28.50       57.00       28.50              V-C  2.7611E+04  -3.000       0.000       1.000       1.000
28.50       0.000       0.000     Strato1_3095_78023_L_0
  17 D   6.080       0.000       60.80       30.40       60.80       30.40              V-C  2.7611E+04  -3.200       0.000       1.000       1.000
30.40       0.000       0.000     Strato1_3095_78023_L_0
  18 D   6.460       0.000       64.60       32.30       64.60       32.30              V-C  2.7611E+04  -3.400       0.000       1.000       1.000
32.30       0.000       0.000     Strato1_3095_78023_L_0
  19 D   6.840       0.000       68.40       34.20       68.40       34.20              V-C  2.7611E+04  -3.600       0.000       1.000       1.000
34.20       0.000       0.000     Strato1_3095_78023_L_0
  20 D   7.220       0.000       72.20       36.10       72.20       36.10              V-C  2.7611E+04  -3.800       0.000       1.000       1.000
36.10       0.000       0.000     Strato1_3095_78023_L_0
  21 D   7.600       0.000       76.00       38.00       76.00       38.00              V-C  2.7611E+04  -4.000       0.000       1.000       1.000
38.00       0.000       0.000     Strato1_3095_78023_L_0
  22 D   7.980       0.000       79.80       39.90       79.80       39.90              V-C  2.7611E+04  -4.200       0.000       1.000       1.000
39.90       0.000       0.000     Strato1_3095_78023_L_0
  23 D   8.360       0.000       83.60       41.80       83.60       41.80              V-C  2.7611E+04  -4.400       0.000       1.000       1.000
41.80       0.000       0.000     Strato1_3095_78023_L_0
  24 D   8.740       0.000       87.40       43.70       87.40       43.70              V-C  2.7611E+04  -4.600       0.000       1.000       1.000
43.70       0.000       0.000     Strato1_3095_78023_L_0
  25 D   9.120       0.000       91.20       45.60       91.20       45.60              V-C  2.7611E+04  -4.800       0.000       1.000       1.000
45.60       0.000       0.000     Strato1_3095_78023_L_0
  26 D   9.500       0.000       95.00       47.50       95.00       47.50              V-C  2.7611E+04  -5.000       0.000       1.000       1.000
47.50       0.000       0.000     Strato1_3095_78023_L_0
  27 D   9.880       0.000       98.80       49.40       98.80       49.40              V-C  2.7611E+04  -5.200       0.000       1.000       1.000
49.40       0.000       0.000     Strato1_3095_78023_L_0
  28 D   10.26       0.000       102.6       51.30       102.6       51.30              V-C  4.8803E+04  -5.400       0.000       1.000       1.000
51.30       0.000       0.000     Strato2_84780_84781_L_0
  29 D   10.64       0.000       106.4       53.20       106.4       53.20              V-C  4.8803E+04  -5.600       0.000       1.000       1.000
53.20       0.000       0.000     Strato2_84780_84781_L_0
  30 D   11.02       0.000       110.2       55.10       110.2       55.10              V-C  4.8803E+04  -5.800       0.000       1.000       1.000
55.10       0.000       0.000     Strato2_84780_84781_L_0
  31 D   11.40       0.000       114.0       57.00       114.0       57.00              V-C  4.8803E+04  -6.000       0.000       1.000       1.000
57.00       0.000       0.000     Strato2_84780_84781_L_0
  32 D   11.78       0.000       117.8       58.90       117.8       58.90              V-C  4.8803E+04  -6.200       0.000       1.000       1.000
58.90       0.000       0.000     Strato2_84780_84781_L_0
  33 D   12.16       0.000       121.6       60.80       121.6       60.80              V-C  4.8803E+04  -6.400       0.000       1.000       1.000
60.80       0.000       0.000     Strato2_84780_84781_L_0
  34 D   12.54       0.000       125.4       62.70       125.4       62.70              V-C  4.8803E+04  -6.600       0.000       1.000       1.000
62.70       0.000       0.000     Strato2_84780_84781_L_0
  35 D   12.92       0.000       129.2       64.60       129.2       64.60              V-C  4.8803E+04  -6.800       0.000       1.000       1.000
64.60       0.000       0.000     Strato2_84780_84781_L_0
  36 D   13.30       0.000       133.0       66.50       133.0       66.50              V-C  4.8803E+04  -7.000       0.000       1.000       1.000
66.50       0.000       0.000     Strato2_84780_84781_L_0
  37 D   13.68       0.000       136.8       68.40       136.8       68.40              V-C  4.8803E+04  -7.200       0.000       1.000       1.000
68.40       0.000       0.000     Strato2_84780_84781_L_0
  38 D   14.06       0.000       140.6       70.30       140.6       70.30              V-C  4.8803E+04  -7.400       0.000       1.000       1.000
70.30       0.000       0.000     Strato2_84780_84781_L_0
  39 D   14.44       0.000       144.4       72.20       144.4       72.20              V-C  4.8803E+04  -7.600       0.000       1.000       1.000
72.20       0.000       0.000     Strato2_84780_84781_L_0
  40 D   14.82       0.000       148.2       74.10       148.2       74.10              V-C  4.8803E+04  -7.800       0.000       1.000       1.000
74.10       0.000       0.000     Strato2_84780_84781_L_0
  41 D   7.600       0.000       152.0       76.00       152.0       76.00              V-C  4.8803E+04  -8.000       0.000       1.000       1.000
76.00       0.000       0.000     Strato2_84780_84781_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
 |                                                                                                                               |
 |                                    1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                         |
 |                                    Exe Time :24 July 2019      11:42:04                                                       |
 +-------------------------------------------------------------------------------------------------------------------------------+
 1468.1 - GA27 - Cepav2


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

 WallElement_33                 :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   40
 C U R R E N T   T I M E   I S      1.0000

  WALL2D ELEMENT

    EL      TA          TB          MA          MB
 ---------------------------------------------------

 ***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****
```

```
+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                    1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                         |
|                                    Exe Time :24 July 2019      11:42:04                                                       |
+-------------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    4

Tieback_78031                    :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      1.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM= 6047.     RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 14.82     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 6047.     RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=    82 NODE     41 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     1 RNORM = 0.000     RMNORM= 0.000
           RINORM= 6047.     RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 14.82     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 6047.     RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=    82 NODE     41 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM= 6047.     RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 14.82     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 6047.     RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=    82 NODE     41 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0




+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                    1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                         |
|                                    Exe Time :24 July 2019      11:42:04                                                       |
+-------------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2
SOLUTION REACHED USING     2 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    2     ( AT TIME   2.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)             (


ALL NODAL POINTS HAVE ZERO DISPLACEMENT COMPONENTS
```

```
+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                           |
|                                  Exe Time :24 July 2019      11:42:04                                                         |
+-------------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


 S T R E S S    R E S U L T S    F O R    G R O U P    N O.    1

 0_L                            :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   41
 C U R R E N T    T I M E    I S      2.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P           STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1 D   0.000       0.000       0.000       0.000       0.000       0.000          UL-RL  6.3662E+04   0.000       0.000       1.000       1.000
0.000       0.000       0.000     Strato1_3095_78023_L_0
   2 D  0.3800       0.000       3.800       1.900       3.800       1.900          UL-RL  6.3662E+04 -0.2000       0.000       1.000       1.000
1.900       0.000       0.000     Strato1_3095_78023_L_0
   3 D  0.7600       0.000       7.600       3.800       7.600       3.800          UL-RL  6.3662E+04 -0.4000       0.000       1.000       1.000
3.800       0.000       0.000     Strato1_3095_78023_L_0
   4 D   1.140       0.000       11.40       5.700       11.40       5.700          UL-RL  6.3662E+04 -0.6000       0.000       1.000       1.000
5.700       0.000       0.000     Strato1_3095_78023_L_0
   5 D   1.520       0.000       15.20       7.600       15.20       7.600          UL-RL  6.3662E+04 -0.8000       0.000       1.000       1.000
7.600       0.000       0.000     Strato1_3095_78023_L_0
   6 D   1.900       0.000       19.00       9.500       19.00       9.500          UL-RL  6.3662E+04  -1.000       0.000       1.000       1.000
9.500       0.000       0.000     Strato1_3095_78023_L_0
   7 D   2.280       0.000       22.80       11.40       22.80       11.40          UL-RL  6.3662E+04  -1.200       0.000       1.000       1.000
11.40       0.000       0.000     Strato1_3095_78023_L_0
   8 D   2.660       0.000       26.60       13.30       26.60       13.30          UL-RL  6.3662E+04  -1.400       0.000       1.000       1.000
13.30       0.000       0.000     Strato1_3095_78023_L_0
   9 D   3.040       0.000       30.40       15.20       30.40       15.20          UL-RL  6.3662E+04  -1.600       0.000       1.000       1.000
15.20       0.000       0.000     Strato1_3095_78023_L_0
  10 D   3.420       0.000       34.20       17.10       34.20       17.10          UL-RL  6.3662E+04  -1.800       0.000       1.000       1.000
17.10       0.000       0.000     Strato1_3095_78023_L_0
  11 D   3.800       0.000       38.00       19.00       38.00       19.00          UL-RL  6.3662E+04  -2.000       0.000       1.000       1.000
19.00       0.000       0.000     Strato1_3095_78023_L_0
  12 D   4.180       0.000       41.80       20.90       41.80       20.90          UL-RL  6.3662E+04  -2.200       0.000       1.000       1.000
20.90       0.000       0.000     Strato1_3095_78023_L_0
  13 D   4.560       0.000       45.60       22.80       45.60       22.80          UL-RL  6.3662E+04  -2.400       0.000       1.000       1.000
22.80       0.000       0.000     Strato1_3095_78023_L_0
  14 D   4.940       0.000       49.40       24.70       49.40       24.70          UL-RL  6.3662E+04  -2.600       0.000       1.000       1.000
24.70       0.000       0.000     Strato1_3095_78023_L_0
  15 D   5.320       0.000       53.20       26.60       53.20       26.60          UL-RL  6.3662E+04  -2.800       0.000       1.000       1.000
26.60       0.000       0.000     Strato1_3095_78023_L_0
  16 D   5.700       0.000       57.00       28.50       57.00       28.50          UL-RL  6.3662E+04  -3.000       0.000       1.000       1.000
28.50       0.000       0.000     Strato1_3095_78023_L_0
  17 D   6.080       0.000       60.80       30.40       60.80       30.40          UL-RL  6.3662E+04  -3.200       0.000       1.000       1.000
30.40       0.000       0.000     Strato1_3095_78023_L_0
  18 D   6.460       0.000       64.60       32.30       64.60       32.30          UL-RL  6.3662E+04  -3.400       0.000       1.000       1.000
32.30       0.000       0.000     Strato1_3095_78023_L_0
  19 D   6.840       0.000       68.40       34.20       68.40       34.20          UL-RL  6.3662E+04  -3.600       0.000       1.000       1.000
34.20       0.000       0.000     Strato1_3095_78023_L_0
  20 D   7.220       0.000       72.20       36.10       72.20       36.10          UL-RL  6.3662E+04  -3.800       0.000       1.000       1.000
36.10       0.000       0.000     Strato1_3095_78023_L_0
  21 D   7.600       0.000       76.00       38.00       76.00       38.00          UL-RL  6.3662E+04  -4.000       0.000       1.000       1.000
38.00       0.000       0.000     Strato1_3095_78023_L_0
  22 D   7.980       0.000       79.80       39.90       79.80       39.90          UL-RL  6.3662E+04  -4.200       0.000       1.000       1.000
39.90       0.000       0.000     Strato1_3095_78023_L_0
  23 D   8.360       0.000       83.60       41.80       83.60       41.80          UL-RL  6.3662E+04  -4.400       0.000       1.000       1.000
41.80       0.000       0.000     Strato1_3095_78023_L_0
  24 D   8.740       0.000       87.40       43.70       87.40       43.70          UL-RL  6.3662E+04  -4.600       0.000       1.000       1.000
43.70       0.000       0.000     Strato1_3095_78023_L_0
  25 D   9.120       0.000       91.20       45.60       91.20       45.60          UL-RL  6.3662E+04  -4.800       0.000       1.000       1.000
45.60       0.000       0.000     Strato1_3095_78023_L_0
  26 D   9.500       0.000       95.00       47.50       95.00       47.50          UL-RL  6.3662E+04  -5.000       0.000       1.000       1.000
47.50       0.000       0.000     Strato1_3095_78023_L_0
  27 D   9.880       0.000       98.80       49.40       98.80       49.40          UL-RL  6.3662E+04  -5.200       0.000       1.000       1.000
49.40       0.000       0.000     Strato1_3095_78023_L_0
  28 D   10.26       0.000       102.6       51.30       102.6       51.30          UL-RL  2.7014E+05  -5.400       0.000       1.000       1.000
51.30       0.000       0.000     Strato2_84780_84781_L_0
  29 D   10.64       0.000       106.4       53.20       106.4       53.20          UL-RL  2.7014E+05  -5.600       0.000       1.000       1.000
53.20       0.000       0.000     Strato2_84780_84781_L_0
  30 D   11.02       0.000       110.2       55.10       110.2       55.10          UL-RL  2.7014E+05  -5.800       0.000       1.000       1.000
55.10       0.000       0.000     Strato2_84780_84781_L_0
  31 D   11.40       0.000       114.0       57.00       114.0       57.00          UL-RL  2.7014E+05  -6.000       0.000       1.000       1.000
```

```
57.00       0.000       0.000     Strato2_84780_84781_L_0
  32 D   11.78       0.000       117.8       58.90       117.8       58.90          UL-RL  2.7014E+05  -6.200       0.000       1.000       1.000
58.90       0.000       0.000     Strato2_84780_84781_L_0
  33 D   12.16       0.000       121.6       60.80       121.6       60.80          UL-RL  2.7014E+05  -6.400       0.000       1.000       1.000
60.80       0.000       0.000     Strato2_84780_84781_L_0
  34 D   12.54       0.000       125.4       62.70       125.4       62.70          UL-RL  2.7014E+05  -6.600       0.000       1.000       1.000
62.70       0.000       0.000     Strato2_84780_84781_L_0
  35 D   12.92       0.000       129.2       64.60       129.2       64.60          UL-RL  2.7014E+05  -6.800       0.000       1.000       1.000
64.60       0.000       0.000     Strato2_84780_84781_L_0
  36 D   13.30       0.000       133.0       66.50       133.0       66.50          UL-RL  2.7014E+05  -7.000       0.000       1.000       1.000
66.50       0.000       0.000     Strato2_84780_84781_L_0
  37 D   13.68       0.000       136.8       68.40       136.8       68.40          UL-RL  2.7014E+05  -7.200       0.000       1.000       1.000
68.40       0.000       0.000     Strato2_84780_84781_L_0
  38 D   14.06       0.000       140.6       70.30       140.6       70.30          UL-RL  2.7014E+05  -7.400       0.000       1.000       1.000
70.30       0.000       0.000     Strato2_84780_84781_L_0
  39 D   14.44       0.000       144.4       72.20       144.4       72.20          UL-RL  2.7014E+05  -7.600       0.000       1.000       1.000
72.20       0.000       0.000     Strato2_84780_84781_L_0
  40 D   14.82       0.000       148.2       74.10       148.2       74.10          UL-RL  2.7014E+05  -7.800       0.000       1.000       1.000
74.10       0.000       0.000     Strato2_84780_84781_L_0
  41 D   7.600       0.000       152.0       76.00       152.0       76.00          UL-RL  2.7014E+05  -8.000       0.000       1.000       1.000
76.00       0.000       0.000     Strato2_84780_84781_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
 |                                                                                                                               |
 |                                  1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                           |
 |                                  Exe Time :24 July 2019      11:42:04                                                         |
 +-------------------------------------------------------------------------------------------------------------------------------+
 1468.1 - GA27 - Cepav2


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                              :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   41
 C U R R E N T   T I M E   I S     2.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P          STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p      LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1 D   0.000       0.000       0.000       0.000       0.000       0.000          UL-RL  4.4178E+04   0.000       0.000       1.000       1.000
0.000       0.000       0.000     Strato1_3095_78023_L_0
   2 D  0.3800       0.000       3.800       1.900       3.800       1.900          UL-RL  4.4178E+04 -0.2000       0.000       1.000       1.000
1.900       0.000       0.000     Strato1_3095_78023_L_0
   3 D  0.7600       0.000       7.600       3.800       7.600       3.800          UL-RL  4.4178E+04 -0.4000       0.000       1.000       1.000
3.800       0.000       0.000     Strato1_3095_78023_L_0
   4 D   1.140       0.000       11.40       5.700       11.40       5.700          UL-RL  4.4178E+04 -0.6000       0.000       1.000       1.000
5.700       0.000       0.000     Strato1_3095_78023_L_0
   5 D   1.520       0.000       15.20       7.600       15.20       7.600          UL-RL  4.4178E+04 -0.8000       0.000       1.000       1.000
7.600       0.000       0.000     Strato1_3095_78023_L_0
   6 D   1.900       0.000       19.00       9.500       19.00       9.500          UL-RL  4.4178E+04  -1.000       0.000       1.000       1.000
9.500       0.000       0.000     Strato1_3095_78023_L_0
   7 D   2.280       0.000       22.80       11.40       22.80       11.40          UL-RL  4.4178E+04  -1.200       0.000       1.000       1.000
11.40       0.000       0.000     Strato1_3095_78023_L_0
   8 D   2.660       0.000       26.60       13.30       26.60       13.30          UL-RL  4.4178E+04  -1.400       0.000       1.000       1.000
13.30       0.000       0.000     Strato1_3095_78023_L_0
   9 D   3.040       0.000       30.40       15.20       30.40       15.20          UL-RL  4.4178E+04  -1.600       0.000       1.000       1.000
15.20       0.000       0.000     Strato1_3095_78023_L_0
  10 D   3.420       0.000       34.20       17.10       34.20       17.10          UL-RL  4.4178E+04  -1.800       0.000       1.000       1.000
17.10       0.000       0.000     Strato1_3095_78023_L_0
  11 D   3.800       0.000       38.00       19.00       38.00       19.00          UL-RL  4.4178E+04  -2.000       0.000       1.000       1.000
19.00       0.000       0.000     Strato1_3095_78023_L_0
  12 D   4.180       0.000       41.80       20.90       41.80       20.90          UL-RL  4.4178E+04  -2.200       0.000       1.000       1.000
20.90       0.000       0.000     Strato1_3095_78023_L_0
  13 D   4.560       0.000       45.60       22.80       45.60       22.80          UL-RL  4.4178E+04  -2.400       0.000       1.000       1.000
22.80       0.000       0.000     Strato1_3095_78023_L_0
  14 D   4.940       0.000       49.40       24.70       49.40       24.70          UL-RL  4.4178E+04  -2.600       0.000       1.000       1.000
24.70       0.000       0.000     Strato1_3095_78023_L_0
  15 D   5.320       0.000       53.20       26.60       53.20       26.60          UL-RL  4.4178E+04  -2.800       0.000       1.000       1.000
26.60       0.000       0.000     Strato1_3095_78023_L_0
  16 D   5.700       0.000       57.00       28.50       57.00       28.50          UL-RL  4.4178E+04  -3.000       0.000       1.000       1.000
28.50       0.000       0.000     Strato1_3095_78023_L_0
  17 D   6.080       0.000       60.80       30.40       60.80       30.40          UL-RL  4.4178E+04  -3.200       0.000       1.000       1.000
30.40       0.000       0.000     Strato1_3095_78023_L_0
  18 D   6.460       0.000       64.60       32.30       64.60       32.30          UL-RL  4.4178E+04  -3.400       0.000       1.000       1.000
32.30       0.000       0.000     Strato1_3095_78023_L_0
  19 D   6.840       0.000       68.40       34.20       68.40       34.20          UL-RL  4.4178E+04  -3.600       0.000       1.000       1.000
```

```
34.20       0.000       0.000     Strato1_3095_78023_L_0
  20 D   7.220       0.000       72.20       36.10       72.20       36.10          UL-RL  4.4178E+04  -3.800       0.000       1.000       1.000
36.10       0.000       0.000     Strato1_3095_78023_L_0
  21 D   7.600       0.000       76.00       38.00       76.00       38.00          UL-RL  4.4178E+04  -4.000       0.000       1.000       1.000
38.00       0.000       0.000     Strato1_3095_78023_L_0
  22 D   7.980       0.000       79.80       39.90       79.80       39.90          UL-RL  4.4178E+04  -4.200       0.000       1.000       1.000
39.90       0.000       0.000     Strato1_3095_78023_L_0
  23 D   8.360       0.000       83.60       41.80       83.60       41.80          UL-RL  4.4178E+04  -4.400       0.000       1.000       1.000
41.80       0.000       0.000     Strato1_3095_78023_L_0
  24 D   8.740       0.000       87.40       43.70       87.40       43.70          UL-RL  4.4178E+04  -4.600       0.000       1.000       1.000
43.70       0.000       0.000     Strato1_3095_78023_L_0
  25 D   9.120       0.000       91.20       45.60       91.20       45.60          UL-RL  4.4178E+04  -4.800       0.000       1.000       1.000
45.60       0.000       0.000     Strato1_3095_78023_L_0
  26 D   9.500       0.000       95.00       47.50       95.00       47.50          UL-RL  4.4178E+04  -5.000       0.000       1.000       1.000
47.50       0.000       0.000     Strato1_3095_78023_L_0
  27 D   9.880       0.000       98.80       49.40       98.80       49.40          UL-RL  4.4178E+04  -5.200       0.000       1.000       1.000
49.40       0.000       0.000     Strato1_3095_78023_L_0
  28 D   10.26       0.000       102.6       51.30       102.6       51.30          UL-RL  1.4641E+05  -5.400       0.000       1.000       1.000
51.30       0.000       0.000     Strato2_84780_84781_L_0
  29 D   10.64       0.000       106.4       53.20       106.4       53.20          UL-RL  1.4641E+05  -5.600       0.000       1.000       1.000
53.20       0.000       0.000     Strato2_84780_84781_L_0
  30 D   11.02       0.000       110.2       55.10       110.2       55.10          UL-RL  1.4641E+05  -5.800       0.000       1.000       1.000
55.10       0.000       0.000     Strato2_84780_84781_L_0
  31 D   11.40       0.000       114.0       57.00       114.0       57.00          UL-RL  1.4641E+05  -6.000       0.000       1.000       1.000
57.00       0.000       0.000     Strato2_84780_84781_L_0
  32 D   11.78       0.000       117.8       58.90       117.8       58.90          UL-RL  1.4641E+05  -6.200       0.000       1.000       1.000
58.90       0.000       0.000     Strato2_84780_84781_L_0
  33 D   12.16       0.000       121.6       60.80       121.6       60.80          UL-RL  1.4641E+05  -6.400       0.000       1.000       1.000
60.80       0.000       0.000     Strato2_84780_84781_L_0
  34 D   12.54       0.000       125.4       62.70       125.4       62.70          UL-RL  1.4641E+05  -6.600       0.000       1.000       1.000
62.70       0.000       0.000     Strato2_84780_84781_L_0
  35 D   12.92       0.000       129.2       64.60       129.2       64.60          UL-RL  1.4641E+05  -6.800       0.000       1.000       1.000
64.60       0.000       0.000     Strato2_84780_84781_L_0
  36 D   13.30       0.000       133.0       66.50       133.0       66.50          UL-RL  1.4641E+05  -7.000       0.000       1.000       1.000
66.50       0.000       0.000     Strato2_84780_84781_L_0
  37 D   13.68       0.000       136.8       68.40       136.8       68.40          UL-RL  1.4641E+05  -7.200       0.000       1.000       1.000
68.40       0.000       0.000     Strato2_84780_84781_L_0
  38 D   14.06       0.000       140.6       70.30       140.6       70.30          UL-RL  1.4641E+05  -7.400       0.000       1.000       1.000
70.30       0.000       0.000     Strato2_84780_84781_L_0
  39 D   14.44       0.000       144.4       72.20       144.4       72.20          UL-RL  1.4641E+05  -7.600       0.000       1.000       1.000
72.20       0.000       0.000     Strato2_84780_84781_L_0
  40 D   14.82       0.000       148.2       74.10       148.2       74.10          UL-RL  1.4641E+05  -7.800       0.000       1.000       1.000
74.10       0.000       0.000     Strato2_84780_84781_L_0
  41 D   7.600       0.000       152.0       76.00       152.0       76.00          UL-RL  1.4641E+05  -8.000       0.000       1.000       1.000
76.00       0.000       0.000     Strato2_84780_84781_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
 |                                                                                                                               |
 |                                    1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                         |
 |                                    Exe Time :24 July 2019      11:42:04                                                       |
 +-------------------------------------------------------------------------------------------------------------------------------+
 1468.1 - GA27 - Cepav2


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

 WallElement_33                :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   40
 C U R R E N T   T I M E   I S      2.0000

  WALL2D ELEMENT

    EL      TA          TB          MA          MB
 ------------------------------------------------------
     1  0.0000      0.0000      0.0000      0.0000
     2  0.0000      0.0000      0.0000      0.0000
     3  0.0000      0.0000      0.0000      0.0000
     4  0.0000      0.0000      0.0000      0.0000
     5  0.0000      0.0000      0.0000      0.0000
     6  0.0000      0.0000      0.0000      0.0000
     7  0.0000      0.0000      0.0000      0.0000
     8  0.0000      0.0000      0.0000      0.0000
     9  0.0000      0.0000      0.0000      0.0000
    10  0.0000      0.0000      0.0000      0.0000
    11  0.0000      0.0000      0.0000      0.0000
    12  0.0000      0.0000      0.0000      0.0000
    13  0.0000      0.0000      0.0000      0.0000
    14  0.0000      0.0000      0.0000      0.0000
    15  0.0000      0.0000      0.0000      0.0000
    16  0.0000      0.0000      0.0000      0.0000
    17  0.0000      0.0000      0.0000      0.0000
```

```
   18  0.0000      0.0000      0.0000      0.0000
   19  0.0000      0.0000      0.0000      0.0000
   20  0.0000      0.0000      0.0000      0.0000
   21  0.0000      0.0000      0.0000      0.0000
   22  0.0000      0.0000      0.0000      0.0000
   23  0.0000      0.0000      0.0000      0.0000
   24  0.0000      0.0000      0.0000      0.0000
   25  0.0000      0.0000      0.0000      0.0000
   26  0.0000      0.0000      0.0000      0.0000
   27  0.0000      0.0000      0.0000      0.0000
   28  0.0000      0.0000      0.0000      0.0000
   29  0.0000      0.0000      0.0000      0.0000
   30  0.0000      0.0000      0.0000      0.0000
   31  0.0000      0.0000      0.0000      0.0000
   32  0.0000      0.0000      0.0000      0.0000
   33  0.0000      0.0000      0.0000      0.0000
   34  0.0000      0.0000      0.0000      0.0000
   35  0.0000      0.0000      0.0000      0.0000
   36  0.0000      0.0000      0.0000      0.0000
   37  0.0000      0.0000      0.0000      0.0000
   38  0.0000      0.0000      0.0000      0.0000
   39  0.0000      0.0000      0.0000      0.0000
   40  0.0000      0.0000      0.0000      0.0000

+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                   |
|                                  Exe Time :24 July 2019      11:42:04                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_78031                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S      2.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-----------------------------------------------------------------------------------------------------------
ANCHOR    1   0.0000       0.0000       0.0000       0.0000       80304.       0.0000       0.0000     ELASTIC  ORIGINAL YOUNG MODULUS

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5265.     RIMNOR= 0.000
           RENORM= 712.9     REMNOR= 0.000     RATIO =0.3680     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 15.72     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5265.     RDR   = 0.000
           RATIOT=0.3680     RATIOR= 0.000
           MAX UN= 6.385     IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5265.     RIMNOR= 0.000
           RENORM= 50.97     REMNOR=0.1634E-23 RATIO =0.9839E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 15.72     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5265.     RDR   = 0.000
           RATIOT=0.9839E-01 RATIOR= 0.000
           MAX UN= 2.395     IEQ=    31 NODE     16 DOF   1  Y-DISPL.F
           MIN UN=-.2535E-11 IEQ=    45 NODE     23 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5265.     RIMNOR= 0.000
           RENORM= 10.93     REMNOR=0.8174E-23 RATIO =0.4555E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 15.72     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5265.     RDR   = 0.000
           RATIOT=0.4555E-01 RATIOR= 0.000
           MAX UN= 2.391     IEQ=    33 NODE     17 DOF   1  Y-DISPL.F
           MIN UN=-.2843E-10 IEQ=    21 NODE     11 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5265.     RIMNOR= 0.000
           RENORM=0.1410E-01 REMNOR=0.9516E-24 RATIO =0.1636E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 15.72     RMMAX = 0.000
```

```
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5265.     RDR   = 0.000
           RATIOT=0.1636E-02 RATIOR= 0.000
           MAX UN=0.1187     IEQ=    43 NODE     22 DOF   1  Y-DISPL.F
           MIN UN=-.8715E-11 IEQ=    31 NODE     16 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     5 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5265.     RIMNOR= 0.000
           RENORM=0.3397E-21 REMNOR=0.1208E-23 RATIO =0.2540E-12 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 15.72     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5265.     RDR   = 0.000
           RATIOT=0.2540E-12 RATIOR= 0.000
           MAX UN=0.7439E-11 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           MIN UN=-.8715E-11 IEQ=    29 NODE     15 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                   |
|                                  Exe Time :24 July 2019      11:42:04                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2
SOLUTION REACHED USING     5 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    3     ( AT TIME   3.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (
    1   1.0627918E-03   2.0162031E-03
    2   1.4660324E-03   2.0162031E-03
    3   1.8673711E-03   1.9876734E-03
    4   2.2573664E-03   1.9031135E-03
    5   2.6250534E-03   1.7651077E-03
    6   2.9600897E-03   1.5773041E-03
    7   3.2529709E-03   1.3444381E-03
    8   3.4952506E-03   1.0723570E-03
    9   3.6797647E-03   7.6804128E-04
   10   3.8008819E-03   4.3994786E-04
   11   3.8548421E-03   9.8327648E-05
   12   3.8401071E-03  -2.4488099E-04
   13   3.7576851E-03  -5.7615793E-04
   14   3.6114410E-03  -8.8047836E-04
   15   3.4083884E-03  -1.1413788E-03
   16   3.1588780E-03  -1.3424516E-03
   17   2.8760967E-03  -1.4731690E-03
   18   2.5743092E-03  -1.5333833E-03
   19   2.2668269E-03  -1.5323443E-03
   20   1.9645984E-03  -1.4829019E-03
   21   1.6761086E-03  -1.3968456E-03
   22   1.4075878E-03  -1.2848968E-03
   23   1.1632280E-03  -1.1567752E-03
   24   9.4538052E-04  -1.0211110E-03
   25   7.5482171E-04  -8.8487550E-04
   26   5.9123095E-04  -7.5163054E-04
   27   4.5402537E-04  -6.2055746E-04
   28   3.4316538E-04  -4.8713384E-04
   29   2.5896516E-04  -3.5681035E-04
   30   1.9937365E-04  -2.4250064E-04
   31   1.6051176E-04  -1.4998796E-04
   32   1.3786175E-04  -8.0227512E-05
   33   1.2703737E-04  -3.1219771E-05
   34   1.2422574E-04   5.6650877E-07
   35   1.2638663E-04   1.9192670E-05
   36   1.3128795E-04   2.8595845E-05
   37   1.3743858E-04   3.2203593E-05
   38   1.4396447E-04   3.2738111E-05
   39   1.5045834E-04   3.2140461E-05
   40   1.5682179E-04   3.1559893E-05
   41   1.6310833E-04   3.1368348E-05



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
```

1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63
Exe Time :24 July 2019 11:42:04

1468.1 - GA27 - Cepav2

S T R E S S R E S U L T S F O R G R O U P N O. 1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 41
C U R R E N T T I M E I S 3.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.000	-1.0628E-03	0.000	0.000	0.000	0.000	ACTIVE	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_3095_78023_L_0
2 D	0.2428	-1.4660E-03	3.806	1.214	3.806	1.903	ACTIVE	0.000	-0.2000	0.000	1.000	1.000	1.214	0.000	0.000	Strato1_3095_78023_L_0
3 D	0.4880	-1.8674E-03	7.649	2.440	7.649	3.825	ACTIVE	0.000	-0.4000	0.000	1.000	1.000	2.440	0.000	0.000	Strato1_3095_78023_L_0
4 D	0.7375	-2.2574E-03	11.56	3.687	11.56	5.780	ACTIVE	0.000	-0.6000	0.000	1.000	1.000	3.687	0.000	0.000	Strato1_3095_78023_L_0
5 D	0.9924	-2.6251E-03	15.55	4.962	15.55	7.777	ACTIVE	0.000	-0.8000	0.000	1.000	1.000	4.962	0.000	0.000	Strato1_3095_78023_L_0
6 D	1.253	-2.9601E-03	19.64	6.266	19.64	9.821	ACTIVE	0.000	-1.000	0.000	1.000	1.000	6.266	0.000	0.000	Strato1_3095_78023_L_0
7 D	1.520	-3.2530E-03	23.82	7.598	23.82	11.91	ACTIVE	0.000	-1.200	0.000	1.000	1.000	7.598	0.000	0.000	Strato1_3095_78023_L_0
8 D	1.791	-3.4953E-03	28.07	8.953	28.07	14.03	ACTIVE	0.000	-1.400	0.000	1.000	1.000	8.953	0.000	0.000	Strato1_3095_78023_L_0
9 D	2.220	-3.6798E-03	34.79	11.10	34.79	17.40	ACTIVE	0.000	-1.600	0.000	1.000	1.000	11.10	0.000	0.000	Strato1_3095_78023_L_0
10 D	2.641	-3.8009E-03	41.40	13.21	41.40	20.70	ACTIVE	0.000	-1.800	0.000	1.000	1.000	13.21	0.000	0.000	Strato1_3095_78023_L_0
11 D	3.020	-3.8548E-03	47.33	15.10	47.33	23.67	ACTIVE	0.000	-2.000	0.000	1.000	1.000	15.10	0.000	0.000	Strato1_3095_78023_L_0
12 D	3.391	-3.8401E-03	53.16	16.96	53.16	26.58	ACTIVE	0.000	-2.200	0.000	1.000	1.000	16.96	0.000	0.000	Strato1_3095_78023_L_0
13 D	3.733	-3.7577E-03	58.52	18.67	58.52	29.26	ACTIVE	0.000	-2.400	0.000	1.000	1.000	18.67	0.000	0.000	Strato1_3095_78023_L_0
14 D	4.074	-3.6114E-03	63.85	20.37	63.85	31.93	ACTIVE	0.000	-2.600	0.000	1.000	1.000	20.37	0.000	0.000	Strato1_3095_78023_L_0
15 D	4.392	-3.4084E-03	68.84	21.96	68.84	34.42	ACTIVE	0.000	-2.800	0.000	1.000	1.000	21.96	0.000	0.000	Strato1_3095_78023_L_0
16 D	4.711	-3.1589E-03	73.85	23.56	73.85	36.92	ACTIVE	0.000	-3.000	0.000	1.000	1.000	23.56	0.000	0.000	Strato1_3095_78023_L_0
17 D	4.950	-2.8761E-03	77.59	24.75	77.59	38.79	ACTIVE	0.000	-3.200	0.000	1.000	1.000	24.75	0.000	0.000	Strato1_3095_78023_L_0
18 D	5.154	-2.5743E-03	80.78	25.77	80.78	40.39	ACTIVE	0.000	-3.400	0.000	1.000	1.000	25.77	0.000	0.000	Strato1_3095_78023_L_0
19 D	5.360	-2.2668E-03	84.02	26.80	84.02	42.01	ACTIVE	0.000	-3.600	0.000	1.000	1.000	26.80	0.000	0.000	Strato1_3095_78023_L_0
20 D	5.569	-1.9646E-03	87.29	27.85	87.29	43.64	ACTIVE	0.000	-3.800	0.000	1.000	1.000	27.85	0.000	0.000	Strato1_3095_78023_L_0
21 D	5.780	-1.6761E-03	90.60	28.90	90.60	45.30	ACTIVE	0.000	-4.000	0.000	1.000	1.000	28.90	0.000	0.000	Strato1_3095_78023_L_0
22 D	5.993	-1.4076E-03	93.94	29.97	93.94	46.97	ACTIVE	0.000	-4.200	0.000	1.000	1.000	29.97	0.000	0.000	Strato1_3095_78023_L_0
23 D	6.208	-1.1632E-03	97.30	31.04	97.30	48.65	ACTIVE	0.000	-4.400	0.000	1.000	1.000	31.04	0.000	0.000	Strato1_3095_78023_L_0
24 D	6.568	-9.4538E-04	100.7	32.84	100.7	50.35	UL-RL	1.8520E+04	-4.600	0.000	1.000	1.000	32.84	0.000	0.000	Strato1_3095_78023_L_0
25 D	7.616	-7.5482E-04	104.1	38.08	104.1	52.06	UL-RL	1.8520E+04	-4.800	0.000	1.000	1.000	38.08	0.000	0.000	Strato1_3095_78023_L_0
26 D	8.566	-5.9123E-04	107.6	42.83	107.6	53.78	UL-RL	1.8520E+04	-5.000	0.000	1.000	1.000	42.83	0.000	0.000	Strato1_3095_78023_L_0
27 D	9.420	-4.5403E-04	111.0	47.10	111.0	55.51	UL-RL	1.8520E+04	-5.200	0.000	1.000	1.000	47.10	0.000	0.000	Strato1_3095_78023_L_0
28 D	6.055	-3.4317E-04	114.5	30.28	114.5	57.24	UL-RL	7.8586E+04	-5.400	0.000	1.000	1.000	30.28	0.000	0.000	Strato2_84780_84781_L_0
29 D	7.728	-2.5897E-04	118.0	38.64	118.0	58.99	UL-RL	7.8586E+04	-5.600	0.000	1.000	1.000	38.64	0.000	0.000	Strato2_84780_84781_L_0
30 D	9.016	-1.9937E-04	121.5	45.08	121.5	60.75	UL-RL	7.8586E+04	-5.800	0.000	1.000	1.000	45.08	0.000	0.000	Strato2_84780_84781_L_0
31 D	9.979	-1.6051E-04	125.0	49.89	125.0	62.51	UL-RL	7.8586E+04	-6.000	0.000	1.000	1.000	49.89	0.000	0.000	Strato2_84780_84781_L_0
32 D	10.69	-1.3786E-04	128.6	53.44	128.6	64.28	UL-RL	7.8586E+04	-6.200	0.000	1.000	1.000	53.44	0.000	0.000	Strato2_84780_84781_L_0
33 D	11.21	-1.2704E-04	132.1	56.07	132.1	66.05	UL-RL	7.8586E+04	-6.400	0.000	1.000	1.000				

```
56.07       0.000       0.000     Strato2_84780_84781_L_0
  34 D   11.61     -1.2423E-04   135.7       58.07       135.7       67.83          UL-RL  7.8586E+04  -6.600       0.000       1.000       1.000
58.07       0.000       0.000     Strato2_84780_84781_L_0
  35 D   11.94     -1.2639E-04   139.2       59.68       139.2       69.62          UL-RL  7.8586E+04  -6.800       0.000       1.000       1.000
59.68       0.000       0.000     Strato2_84780_84781_L_0
  36 D   12.22     -1.3129E-04   142.8       61.09       142.8       71.41          UL-RL  7.8586E+04  -7.000       0.000       1.000       1.000
61.09       0.000       0.000     Strato2_84780_84781_L_0
  37 D   12.48     -1.3744E-04   146.4       62.40       146.4       73.20          UL-RL  7.8586E+04  -7.200       0.000       1.000       1.000
62.40       0.000       0.000     Strato2_84780_84781_L_0
  38 D   12.74     -1.4396E-04   150.0       63.69       150.0       75.00          UL-RL  7.8586E+04  -7.400       0.000       1.000       1.000
63.69       0.000       0.000     Strato2_84780_84781_L_0
  39 D   13.00     -1.5046E-04   153.6       64.98       153.6       76.80          UL-RL  7.8586E+04  -7.600       0.000       1.000       1.000
64.98       0.000       0.000     Strato2_84780_84781_L_0
  40 D   13.26     -1.5682E-04   157.2       66.29       157.2       78.61          UL-RL  7.8586E+04  -7.800       0.000       1.000       1.000
66.29       0.000       0.000     Strato2_84780_84781_L_0
  41 D   6.761     -1.6311E-04   160.8       67.61       160.8       80.42          UL-RL  7.8586E+04  -8.000       0.000       1.000       1.000
67.61       0.000       0.000     Strato2_84780_84781_L_0


 +-------------------------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                              |
 |                                                                                                                                           |
 |                                  1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                                       |
 |                                  Exe Time :24 July 2019      11:42:04                                                                     |
 +-------------------------------------------------------------------------------------------------------------------------------------------+
 1468.1 - GA27 - Cepav2


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                              :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   41
 C U R R E N T   T I M E   I S     3.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P          STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------
---------------------------------------------------------------------
    1     0.000         --          --          --          --          --          REMOVED     --        0.000       0.000       1.000       1.000
0.000       0.000       0.000     not available
    2     0.000         --          --          --          --          --          REMOVED     --       -0.2000      0.000       1.000       1.000
0.000       0.000       0.000     not available
    3     0.000         --          --          --          --          --          REMOVED     --       -0.4000      0.000       1.000       1.000
0.000       0.000       0.000     not available
    4     0.000         --          --          --          --          --          REMOVED     --       -0.6000      0.000       1.000       1.000
0.000       0.000       0.000     not available
    5     0.000         --          --          --          --          --          REMOVED     --       -0.8000      0.000       1.000       1.000
0.000       0.000       0.000     not available
    6     0.000         --          --          --          --          --          REMOVED     --       -1.000       0.000       1.000       1.000
0.000       0.000       0.000     not available
    7     0.000         --          --          --          --          --          REMOVED     --       -1.200       0.000       1.000       1.000
0.000       0.000       0.000     not available
    8     0.000         --          --          --          --          --          REMOVED     --       -1.400       0.000       1.000       1.000
0.000       0.000       0.000     not available
    9     0.000         --          --          --          --          --          REMOVED     --       -1.600       0.000       1.000       1.000
0.000       0.000       0.000     not available
   10     0.000         --          --          --          --          --          REMOVED     --       -1.800       0.000       1.000       1.000
0.000       0.000       0.000     not available
   11     0.000         --          --          --          --          --          REMOVED     --       -2.000       0.000       1.000       1.000
0.000       0.000       0.000     not available
   12     0.000         --          --          --          --          --          REMOVED     --       -2.200       0.000       1.000       1.000
0.000       0.000       0.000     not available
   13     0.000         --          --          --          --          --          REMOVED     --       -2.400       0.000       1.000       1.000
0.000       0.000       0.000     not available
   14     0.000         --          --          --          --          --          REMOVED     --       -2.600       0.000       1.000       1.000
0.000       0.000       0.000     not available
   15 D   0.6851     3.4084E-03   0.9500      3.426       53.20       26.60          PASSIVE   0.000     -2.800       0.000       1.000       1.000
3.426       0.000       0.000     Strato1_3095_78023_L_0
   16 D   3.426      3.1589E-03   4.750       17.13       57.00       28.50          PASSIVE   0.000     -3.000       0.000       1.000       1.000
17.13       0.000       0.000     Strato1_3095_78023_L_0
   17 D   6.166      2.8761E-03   8.550       30.83       60.80       30.83          PASSIVE   0.000     -3.200       0.000       1.000       1.000
30.83       0.000       0.000     Strato1_3095_78023_L_0
   18 D   8.323      2.5743E-03   12.35       41.62       64.60       41.62            V-C     8032.     -3.400       0.000       1.000       1.000
41.62       0.000       0.000     Strato1_3095_78023_L_0
   19 D   8.284      2.2668E-03   16.15       41.42       68.40       41.42            V-C     8032.     -3.600       0.000       1.000       1.000
41.42       0.000       0.000     Strato1_3095_78023_L_0
   20 D   8.236      1.9646E-03   19.95       41.18       72.20       41.18            V-C     8032.     -3.800       0.000       1.000       1.000
41.18       0.000       0.000     Strato1_3095_78023_L_0
   21 D   8.198      1.6761E-03   23.75       40.99       76.00       40.99            V-C     8032.     -4.000       0.000       1.000       1.000
```

```
40.99       0.000       0.000     Strato1_3095_78023_L_0
  22 D   8.184      1.4076E-03   27.55       40.92       79.80       40.92            V-C   8032.      -4.200       0.000       1.000       1.000
40.92       0.000       0.000     Strato1_3095_78023_L_0
  23 D   8.109      1.1632E-03   31.35       40.55       83.60       41.80          UL-RL  1.2852E+04  -4.400       0.000       1.000       1.000
40.55       0.000       0.000     Strato1_3095_78023_L_0
  24 D   7.973      9.4538E-04   35.15       39.86       87.40       43.70          UL-RL  1.2852E+04  -4.600       0.000       1.000       1.000
39.86       0.000       0.000     Strato1_3095_78023_L_0
  25 D   7.900      7.5482E-04   38.95       39.50       91.20       45.60          UL-RL  1.2852E+04  -4.800       0.000       1.000       1.000
39.50       0.000       0.000     Strato1_3095_78023_L_0
  26 D   7.892      5.9123E-04   42.75       39.46       95.00       47.50          UL-RL  1.2852E+04  -5.000       0.000       1.000       1.000
39.46       0.000       0.000     Strato1_3095_78023_L_0
  27 D   7.949      4.5403E-04   46.55       39.74       98.80       49.40          UL-RL  1.2852E+04  -5.200       0.000       1.000       1.000
39.74       0.000       0.000     Strato1_3095_78023_L_0
  28 D   10.11      3.4317E-04   50.35       50.55       102.6       51.30          UL-RL  4.2592E+04  -5.400       0.000       1.000       1.000
50.55       0.000       0.000     Strato2_84780_84781_L_0
  29 D   9.796      2.5897E-04   54.15       48.98       106.4       53.20          UL-RL  4.2592E+04  -5.600       0.000       1.000       1.000
48.98       0.000       0.000     Strato2_84780_84781_L_0
  30 D   9.690      1.9937E-04   57.95       48.45       110.2       55.10          UL-RL  4.2592E+04  -5.800       0.000       1.000       1.000
48.45       0.000       0.000     Strato2_84780_84781_L_0
  31 D   9.757      1.6051E-04   61.75       48.79       114.0       57.00          UL-RL  4.2592E+04  -6.000       0.000       1.000       1.000
48.79       0.000       0.000     Strato2_84780_84781_L_0
  32 D   9.962      1.3786E-04   65.55       49.81       117.8       58.90          UL-RL  4.2592E+04  -6.200       0.000       1.000       1.000
49.81       0.000       0.000     Strato2_84780_84781_L_0
  33 D   10.27      1.2704E-04   69.35       51.33       121.6       60.80          UL-RL  4.2592E+04  -6.400       0.000       1.000       1.000
51.33       0.000       0.000     Strato2_84780_84781_L_0
  34 D   10.64      1.2423E-04   73.15       53.18       125.4       62.70          UL-RL  4.2592E+04  -6.600       0.000       1.000       1.000
53.18       0.000       0.000     Strato2_84780_84781_L_0
  35 D   11.05      1.2639E-04   76.95       55.24       129.2       64.60          UL-RL  4.2592E+04  -6.800       0.000       1.000       1.000
55.24       0.000       0.000     Strato2_84780_84781_L_0
  36 D   11.48      1.3129E-04   80.75       57.41       133.0       66.50          UL-RL  4.2592E+04  -7.000       0.000       1.000       1.000
57.41       0.000       0.000     Strato2_84780_84781_L_0
  37 D   11.93      1.3744E-04   84.55       59.63       136.8       68.40          UL-RL  4.2592E+04  -7.200       0.000       1.000       1.000
59.63       0.000       0.000     Strato2_84780_84781_L_0
  38 D   12.37      1.4396E-04   88.35       61.86       140.6       70.30          UL-RL  4.2592E+04  -7.400       0.000       1.000       1.000
61.86       0.000       0.000     Strato2_84780_84781_L_0
  39 D   12.82      1.5046E-04   92.15       64.09       144.4       72.20          UL-RL  4.2592E+04  -7.600       0.000       1.000       1.000
64.09       0.000       0.000     Strato2_84780_84781_L_0
  40 D   13.26      1.5682E-04   95.95       66.30       148.2       74.10          UL-RL  4.2592E+04  -7.800       0.000       1.000       1.000
66.30       0.000       0.000     Strato2_84780_84781_L_0
  41 D   6.851      1.6311E-04   99.75       68.51       152.0       76.00          UL-RL  4.2592E+04  -8.000       0.000       1.000       1.000
68.51       0.000       0.000     Strato2_84780_84781_L_0
```

```
+-------------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                           |
|                                  Exe Time :24 July 2019      11:42:04                                                         |
+-------------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   40
C U R R E N T   T I M E   I S     3.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-----------------------------------------------------
    1-1.29896E-12 1.29896E-12-1.22791E-13 5.21749E-13
    2 -13.529      13.529    -5.70932E-13 -2.7057
    3 -13.041      13.041       2.7057     -5.3139
    4 -12.303      12.303       5.3139     -7.7745
    5 -11.311      11.311       7.7745     -10.037
    6 -10.058      10.058       10.037     -12.048
    7 -8.5381      8.5381       12.048     -13.756
    8 -6.7475      6.7475       13.756     -15.105
    9 -4.5279      4.5279       15.105     -16.011
   10 -1.8865      1.8865       16.011     -16.388
   11  1.1333     -1.1333       16.388     -16.162
   12  4.5247     -4.5247       16.162     -15.257
   13  8.2580     -8.2580       15.257     -13.605
   14  12.332     -12.332       13.605     -11.139
   15  16.038     -16.038       11.139     -7.9310
   16  17.324     -17.324       7.9310     -4.4661
   17  16.108     -16.108       4.4661     -1.2446
   18  12.938     -12.938       1.2446      1.3431
   19  10.015     -10.015      -1.3431      3.3460
   20  7.3480     -7.3480      -3.3460      4.8156
   21  4.9301     -4.9301      -4.8156      5.8016
```

```
   22  2.7390     -2.7390     -5.8016      6.3494
   23 0.83769    -0.83769     -6.3494      6.5169
   24-0.56679     0.56679     -6.5169      6.4036
   25-0.85132     0.85132     -6.4036      6.2333
   26-0.17827     0.17827     -6.2333      6.1977
   27  1.2926     -1.2926     -6.1977      6.4562
   28 -2.7627      2.7627     -6.4562      5.9037
   29 -4.8310      4.8310     -5.9037      4.9374
   30 -5.5051      5.5051     -4.9374      3.8364
   31 -5.2839      5.2839     -3.8364      2.7797
   32 -4.5572      4.5572     -2.7797      1.8682
   33 -3.6092      3.6092     -1.8682      1.1464
   34 -2.6314      2.6314     -1.1464     0.62011
   35 -1.7422      1.7422    -0.62011     0.27168
   36 -1.0060      1.0060    -0.27168     7.04794E-02
   37-0.45133     0.45133    -7.04794E-02-1.97859E-02
   38-8.55458E-02 8.55458E-02 1.97859E-02-3.68951E-02
   39 9.36463E-02-9.36463E-02 3.68951E-02-1.81658E-02
   40 9.08277E-02-9.08277E-02 1.81658E-02 1.48423E-14



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                   1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                    |
|                                   Exe Time :24 July 2019      11:42:04                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_78031                    :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S     3.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-----------------------------------------------------------------------------------------------------------------
ANCHOR    1   40.265       0.0000      5.01413E-04   0.0000       80304.       0.0000       0.0000     ELASTIC  ORIGINAL YOUNG MODULUS



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                   1468.1-GA27-Cepav2.BaseDesignSection_28.Nominal_63                                    |
|                                   Exe Time :24 July 2019      11:42:04                                                  |
+-------------------------------------------------------------------------------------------------------------------------+


     F I N A L   I N C R E M E N T A L   A N A L Y S I S

                   S U M M A R Y

     STEP                                  NO. OF ITERATIONS

        1           CONVERGENCE :YES                       2
        2           CONVERGENCE :YES                       2
        3           CONVERGENCE :YES                       5



 END OF PROCESS FOR PROBLEM
1468.1 - GA27 - Cepav2
NONLINEAR SOLUTION CPU TIME ....    0.03 [sec]
DATABASE  CREATION CPU TIME.....    0.10 [sec]
```

3.3. Design Assumption : SLE (Rara) - File di Paratie - File di input (.d)

```
* PARATIE ANALYSIS FOR DESIGN SECTION:Base Design Section USING ASSUMPTION: SLE (Rara)
 * Time:mercoledì 24 luglio 2019 11:42:05
 * 1: Defining general settings
 UNIT  m kN
 TITLE 1468.1 - GA27 - Cepav2
 DELTA 0.2
 option param itemax 100
 option control hinges 0 0.0001 0.001

 * 2: Defining wall(s)
```

```
WALL LeftWall_32 0 -8 0 1

* 3: Defining surfaces for wall(s)
SOIL 0_L LeftWall_32 -8 0 1 0
SOIL 0_R LeftWall_32 -8 0 2 180

* 4: Defining soil layers
*
* Soil Profile (Strato1_3095_78023_L_0)
*
LDATA Strato1_3095_78023_L_0 0 LeftWall_32
ATREST 0.5 0.5 1
WEIGHT 19 9 10
PERMEABILITY 1E-05
RESISTANCE 0 29
YOUNG 2.5E+04 4E+04
ENDL
*
* Soil Profile (Strato2_84780_84781_L_0)
*
LDATA Strato2_84780_84781_L_0 -5.35 LeftWall_32
ATREST 0.5 0.5 1
WEIGHT 19 9 10
PERMEABILITY 1E-05
RESISTANCE 20 35
YOUNG 5E+04 1.5E+05
ENDL

* 5: Defining structural materials
* Steel material: 113 Name=S275 E=210000000 kPa
MATERIAL S275_113 2.1E+08
* Concrete material: 104 Name=C25/30 E=31475800 kPa
MATERIAL C2530_104 3.148E+07
* Rebar material: 78036 Name=S275 E=210000000 kPa
MATERIAL S275_78036 2.1E+08

* 6: Defining structural elements
* 6.1: Beams and combined Wall Elements
BEAM WallElement_33 LeftWall_32 -8 0 S275_113 0.08153 00 00 0


* 6.2: Supports
WIRE Tieback_78031 LeftWall_32 -0.2 S275_78036 0.0003824 0 70 0 0




* 6.3: Strips
STRIP LeftWall_32 3 3 2.33 3 0 52.08 30

* 7: Defining Steps
STEP Stage0_86326
CHANGE Strato1_3095_78023_L_0 U-FRICT=29 LeftWall_32
CHANGE Strato1_3095_78023_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato1_3095_78023_L_0 U-KA=0.319 LeftWall_32
CHANGE Strato1_3095_78023_L_0 U-KP=3.606 LeftWall_32
CHANGE Strato1_3095_78023_L_0 D-KA=0.319 LeftWall_32
CHANGE Strato1_3095_78023_L_0 D-KP=3.606 LeftWall_32
CHANGE Strato2_84780_84781_L_0 U-FRICT=35 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato2_84780_84781_L_0 U-KA=0.248 LeftWall_32
CHANGE Strato2_84780_84781_L_0 U-KP=5.02 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-KA=0.248 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-KP=5.02 LeftWall_32
CHANGE Strato1_3095_78023_L_0 U-COHE=0 LeftWall_32
CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_84780_84781_L_0 U-COHE=20 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -17 0 -8 0 0
ENDSTEP

STEP Stage1_31
CHANGE Strato1_3095_78023_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -17 0 -8 0 0
ADD WallElement_33 Tieback_78031
ENDSTEP
```

```
STEP Stage2_158
CHANGE Strato1_3095_78023_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -2.75
WATER -17 0 -8 0 0
ENDSTEP
```

3.4. Design Assumption : SLE (Rara) - File di Paratie - File di output (.out)

```
+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                         |
|                                   Exe Time :24 July 2019      11:42:05                                                        |
+-------------------------------------------------------------------------------------------------------------------------------+

                  ***********************************************************
                  *                                                         *
                  *  PARATIE PLUS Non-Linear Spring Engine                  *
                  *                                                         *
                  *          AN ELASTOPLASTIC FINITE ELEMENT PROGRAM        *
                  *          FOR FLEXIBLE EARTH-RETAINING STRUCTURES        *
                  *                                                         *
                  *          Written by Ce.A.S. s.r.l. (ITALY)              *
                  *          with the scientific supervision of             *
                  *          Roberto Nova - full professor SOIL MECHANICS   *
                  *          at Politecnico di Milano (ITALY)               *
                  *                                                         *
                  ***********************************************************
                  *                                                         *
                  *  RELEASE   2017.1     *Build date:Jul 11, 2017*    *    *
                  *                                                         *
                  *                                                         *
                  *  Ce.A.S.     S.R.L   CENTRO DI ANALISI STRUTTURALE      *
                  *              VIALE   GIUSTINIANO 10                     *
                  *              20129   M I L A N O  (ITALIA)              *
                  *  TEL.        +39 02 2020221   (+39 035 23 67 19)        *
                  *  FAX         +39 02 29512533  (+39 035 42285 49)        *
                  *  email       bruno.becci@ceas.it                        *
                  *  Web Page    www.ceas.it                                *
                  ***********************************************************



 JOB : 1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454
 STARTING
ACCEPTED   <FILE,GENW                                                       >
ACCEPTED   <FILE,PLOTTER,BINARY                                             >
ACCEPTED   <SOLVE TOTAL_STRESS                                              >
ACCEPTED   <PARAM ITEMAX 100                                                >
ACCEPTED   <CONTROL HINGES 0 0.0001 0.001                                   >



                  ***********************************************************
                  *                                                         *
                  *  WARNING : PORE PRESSURES ARE AUTOMATICALLY COMPUTED    *
                  *    BY THE PROGRAM.                                      *
                  ***********************************************************

PRELIMINARY OPERATIONS CPU TIME     0.01 [sec]



+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                         |
|                                   Exe Time :24 July 2019      11:42:05                                                        |
+-------------------------------------------------------------------------------------------------------------------------------+


INPUT FILE HAS BEEN GENERATED BY WALGEN PROGRAM


1468.1 - GA27 - Cepav2
```

```
NO. OF NODAL POINTS (NUMNP) ...................   41
NO. OF COORDINATES  (NCOORD)...................    2
NO. OF NODE DOFS    (NDOF).....................    2
NO. OF EQUATIONS    (NEQ)......................   82
NO. OF CONSTRAINTS CARDS (NVINC)...............    0
NO. OF ELEMENT GROUPS (NEG)....................    4
NO. OF SOLUTION STEPS (NSTE)...................    3
NO. OF ELEMENT SETS ATTACHED TO SLAVE NODES ...    0
NO. OF RECORD FROM WALGEN .....................   68
NO. OF LONG NAMES (LASTNAME) ..................   16
LENGTH UNIT CHOICE ............................    3 (M   )
FORCE  UNIT CHOICE ............................    3 (KN  )
MAX PORE PRESSURE TABLE LENGTH.................    1
NO. OF ELEMENT GROUPS REQUIRING ADD. SLIP DOF .    0


IDOFA (01) =  2  Y-DISPL.F
IDOFA (02) =  4   X-ROT. F

 RELEVANT ITEMS UNITS

 STRESSES                  kPa
 Y-DISPLACEMENTS           m
 ROTATIONS                 RADIANS
 BEAM AND SLAB MOMENTS     kN*m/m
 BEAM SHEAR FORCES         kN/m
 ANCHOR FORCES             kN/m
 AXIAL FORCES IN TRUSSES   kN/m
 AXIAL FORCES SPRINGS      kN/m
 Y-REACTIONS               kN/m
 X-MOMENT REACTIONS        kN*m/m
 ETC.



+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                 1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                              |
|                                  Exe Time :24 July 2019      11:42:05                                             |
+-------------------------------------------------------------------------------------------------------------------+
                   P R E P R O C E S S O R     D A T A

                   N O.  O F   C O M M A N D S     68

    1 : UNIT  m kN
    2 : TITLE 1468.1 - GA27 - Cepav2
    3 : DELTA 0.2
    4 : option param itemax 100
    5 : option control hinges 0 0.0001 0.001
    6 : WALL LeftWall_32 0 -8 0 1
    7 : SOIL 0_L LeftWall_32 -8 0 1 0
    8 : SOIL 0_R LeftWall_32 -8 0 2 180
    9 : LDATA Strato1_3095_78023_L_0 0 LeftWall_32
   10 : ATREST 0.5 0.5 1
   11 : WEIGHT 19 9 10
   12 : PERMEABILITY 1E-05
   13 : RESISTANCE 0 29
   14 : YOUNG 2.5E+04 4E+04
   15 : ENDL
   16 : LDATA Strato2_84780_84781_L_0 -5.35 LeftWall_32
   17 : ATREST 0.5 0.5 1
   18 : WEIGHT 19 9 10
   19 : PERMEABILITY 1E-05
   20 : RESISTANCE 20 35
   21 : YOUNG 5E+04 1.5E+05
   22 : ENDL
   23 : MATERIAL S275_113 2.1E+08
   24 : MATERIAL C2530_104 3.148E+07
   25 : MATERIAL S275_78036 2.1E+08
   26 : BEAM WallElement_33 LeftWall_32 -8 0 S275_113 0.08153 00 00 0
   27 : WIRE Tieback_78031 LeftWall_32 -0.2 S275_78036 0.0003824 0 70 0 0
   28 : STRIP LeftWall_32 3 3 2.33 3 0 52.08 30
   29 : STEP Stage0_86326
   30 : CHANGE Strato1_3095_78023_L_0 U-FRICT=29 LeftWall_32
   31 : CHANGE Strato1_3095_78023_L_0 D-FRICT=29 LeftWall_32
   32 : CHANGE Strato1_3095_78023_L_0 U-KA=0.319 LeftWall_32
   33 : CHANGE Strato1_3095_78023_L_0 U-KP=3.606 LeftWall_32
   34 : CHANGE Strato1_3095_78023_L_0 D-KA=0.319 LeftWall_32
   35 : CHANGE Strato1_3095_78023_L_0 D-KP=3.606 LeftWall_32
   36 : CHANGE Strato2_84780_84781_L_0 U-FRICT=35 LeftWall_32
   37 : CHANGE Strato2_84780_84781_L_0 D-FRICT=35 LeftWall_32
```

```
   38 : CHANGE Strato2_84780_84781_L_0 U-KA=0.248 LeftWall_32
   39 : CHANGE Strato2_84780_84781_L_0 U-KP=5.02 LeftWall_32
   40 : CHANGE Strato2_84780_84781_L_0 D-KA=0.248 LeftWall_32
   41 : CHANGE Strato2_84780_84781_L_0 D-KP=5.02 LeftWall_32
   42 : CHANGE Strato1_3095_78023_L_0 U-COHE=0 LeftWall_32
   43 : CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
   44 : CHANGE Strato2_84780_84781_L_0 U-COHE=20 LeftWall_32
   45 : CHANGE Strato2_84780_84781_L_0 D-COHE=20 LeftWall_32
   46 : SETWALL LeftWall_32
   47 : GEOM 0 0
   48 : WATER -17 0 -8 0 0
   49 : ENDSTEP
   50 : STEP Stage1_31
   51 : CHANGE Strato1_3095_78023_L_0 D-FRICT=29 LeftWall_32
   52 : CHANGE Strato2_84780_84781_L_0 D-FRICT=35 LeftWall_32
   53 : CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
   54 : CHANGE Strato2_84780_84781_L_0 D-COHE=20 LeftWall_32
   55 : SETWALL LeftWall_32
   56 : GEOM 0 0
   57 : WATER -17 0 -8 0 0
   58 : ADD WallElement_33 Tieback_78031
   59 : ENDSTEP
   60 : STEP Stage2_158
   61 : CHANGE Strato1_3095_78023_L_0 D-FRICT=29 LeftWall_32
   62 : CHANGE Strato2_84780_84781_L_0 D-FRICT=35 LeftWall_32
   63 : CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
   64 : CHANGE Strato2_84780_84781_L_0 D-COHE=20 LeftWall_32
   65 : SETWALL LeftWall_32
   66 : GEOM 0 -2.75
   67 : WATER -17 0 -8 0 0
   68 : ENDSTEP



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                   |
|                                   Exe Time :24 July 2019      11:42:05                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
N O D A L    P O I N T    D A T A
---------------------------------

NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD /

   1  0.0000      0.0000     /    2  0.0000    -0.20000     /    3  0.0000    -0.40000     /    4  0.0000    -0.60000     /
   5  0.0000    -0.80000     /    6  0.0000     -1.0000     /    7  0.0000     -1.2000     /    8  0.0000     -1.4000     /
   9  0.0000     -1.6000     /   10  0.0000     -1.8000     /   11  0.0000     -2.0000     /   12  0.0000     -2.2000     /
  13  0.0000     -2.4000     /   14  0.0000     -2.6000     /   15  0.0000     -2.8000     /   16  0.0000     -3.0000     /
  17  0.0000     -3.2000     /   18  0.0000     -3.4000     /   19  0.0000     -3.6000     /   20  0.0000     -3.8000     /
  21  0.0000     -4.0000     /   22  0.0000     -4.2000     /   23  0.0000     -4.4000     /   24  0.0000     -4.6000     /
  25  0.0000     -4.8000     /   26  0.0000     -5.0000     /   27  0.0000     -5.2000     /   28  0.0000     -5.4000     /
  29  0.0000     -5.6000     /   30  0.0000     -5.8000     /   31  0.0000     -6.0000     /   32  0.0000     -6.2000     /
  33  0.0000     -6.4000     /   34  0.0000     -6.6000     /   35  0.0000     -6.8000     /   36  0.0000     -7.0000     /
  37  0.0000     -7.2000     /   38  0.0000     -7.4000     /   39  0.0000     -7.6000     /   40  0.0000     -7.8000     /
  41  0.0000     -8.0000     /



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                   |
|                                   Exe Time :24 July 2019      11:42:05                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  1

0_L                             :
   5  41   0   1   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
.........2D PLASTIC SOIL ..........
.....................................

element group behaviour throughout stage analysis

stage   status
------------------
    1   active
    2   active
    3   active

 material set no.    1

 prop( 1) angle              0.00000
```

```
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area      .....     .....     .....      flag
-------------------------------------------------------------------

    1    1    1   0.1000     0.000     0.000     0.000     1.000
    2    2    1   0.2000     0.000     0.000     0.000     1.000
    3    3    1   0.2000     0.000     0.000     0.000     1.000
    4    4    1   0.2000     0.000     0.000     0.000     1.000
    5    5    1   0.2000     0.000     0.000     0.000     1.000
    6    6    1   0.2000     0.000     0.000     0.000     1.000
    7    7    1   0.2000     0.000     0.000     0.000     1.000
    8    8    1   0.2000     0.000     0.000     0.000     1.000
    9    9    1   0.2000     0.000     0.000     0.000     1.000
   10   10    1   0.2000     0.000     0.000     0.000     1.000
   11   11    1   0.2000     0.000     0.000     0.000     1.000
   12   12    1   0.2000     0.000     0.000     0.000     1.000
   13   13    1   0.2000     0.000     0.000     0.000     1.000
   14   14    1   0.2000     0.000     0.000     0.000     1.000
   15   15    1   0.2000     0.000     0.000     0.000     1.000
   16   16    1   0.2000     0.000     0.000     0.000     1.000
   17   17    1   0.2000     0.000     0.000     0.000     1.000
   18   18    1   0.2000     0.000     0.000     0.000     1.000
   19   19    1   0.2000     0.000     0.000     0.000     1.000
   20   20    1   0.2000     0.000     0.000     0.000     1.000
   21   21    1   0.2000     0.000     0.000     0.000     1.000
   22   22    1   0.2000     0.000     0.000     0.000     1.000
   23   23    1   0.2000     0.000     0.000     0.000     1.000
   24   24    1   0.2000     0.000     0.000     0.000     1.000
   25   25    1   0.2000     0.000     0.000     0.000     1.000
   26   26    1   0.2000     0.000     0.000     0.000     1.000
   27   27    1   0.2000     0.000     0.000     0.000     1.000
   28   28    2   0.2000     0.000     0.000     0.000     1.000
   29   29    2   0.2000     0.000     0.000     0.000     1.000
   30   30    2   0.2000     0.000     0.000     0.000     1.000
   31   31    2   0.2000     0.000     0.000     0.000     1.000
   32   32    2   0.2000     0.000     0.000     0.000     1.000
   33   33    2   0.2000     0.000     0.000     0.000     1.000
   34   34    2   0.2000     0.000     0.000     0.000     1.000
   35   35    2   0.2000     0.000     0.000     0.000     1.000
   36   36    2   0.2000     0.000     0.000     0.000     1.000
   37   37    2   0.2000     0.000     0.000     0.000     1.000
   38   38    2   0.2000     0.000     0.000     0.000     1.000
   39   39    2   0.2000     0.000     0.000     0.000     1.000
   40   40    2   0.2000     0.000     0.000     0.000     1.000
   41   41    2   0.1000     0.000     0.000     0.000     1.000



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                 |
|                                   Exe Time :24 July 2019      11:42:05                                                |
+-----------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  2

0_R                          :
   5  41   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
.........2D PLASTIC SOIL ..........
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active

 material set no.    1

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  1.00000
```

material set no. 2

prop(1) angle 180.000
prop(2) layer as foreseen 2.00000

element data

el	n	mat	area	.....	.....	.....	flag
1	1	1	0.1000	0.000	0.000	0.000	2.000
2	2	1	0.2000	0.000	0.000	0.000	2.000
3	3	1	0.2000	0.000	0.000	0.000	2.000
4	4	1	0.2000	0.000	0.000	0.000	2.000
5	5	1	0.2000	0.000	0.000	0.000	2.000
6	6	1	0.2000	0.000	0.000	0.000	2.000
7	7	1	0.2000	0.000	0.000	0.000	2.000
8	8	1	0.2000	0.000	0.000	0.000	2.000
9	9	1	0.2000	0.000	0.000	0.000	2.000
10	10	1	0.2000	0.000	0.000	0.000	2.000
11	11	1	0.2000	0.000	0.000	0.000	2.000
12	12	1	0.2000	0.000	0.000	0.000	2.000
13	13	1	0.2000	0.000	0.000	0.000	2.000
14	14	1	0.2000	0.000	0.000	0.000	2.000
15	15	1	0.2000	0.000	0.000	0.000	2.000
16	16	1	0.2000	0.000	0.000	0.000	2.000
17	17	1	0.2000	0.000	0.000	0.000	2.000
18	18	1	0.2000	0.000	0.000	0.000	2.000
19	19	1	0.2000	0.000	0.000	0.000	2.000
20	20	1	0.2000	0.000	0.000	0.000	2.000
21	21	1	0.2000	0.000	0.000	0.000	2.000
22	22	1	0.2000	0.000	0.000	0.000	2.000
23	23	1	0.2000	0.000	0.000	0.000	2.000
24	24	1	0.2000	0.000	0.000	0.000	2.000
25	25	1	0.2000	0.000	0.000	0.000	2.000
26	26	1	0.2000	0.000	0.000	0.000	2.000
27	27	1	0.2000	0.000	0.000	0.000	2.000
28	28	2	0.2000	0.000	0.000	0.000	2.000
29	29	2	0.2000	0.000	0.000	0.000	2.000
30	30	2	0.2000	0.000	0.000	0.000	2.000
31	31	2	0.2000	0.000	0.000	0.000	2.000
32	32	2	0.2000	0.000	0.000	0.000	2.000
33	33	2	0.2000	0.000	0.000	0.000	2.000
34	34	2	0.2000	0.000	0.000	0.000	2.000
35	35	2	0.2000	0.000	0.000	0.000	2.000
36	36	2	0.2000	0.000	0.000	0.000	2.000
37	37	2	0.2000	0.000	0.000	0.000	2.000
38	38	2	0.2000	0.000	0.000	0.000	2.000
39	39	2	0.2000	0.000	0.000	0.000	2.000
40	40	2	0.2000	0.000	0.000	0.000	2.000
41	41	2	0.1000	0.000	0.000	0.000	2.000

+----------+
| PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017* |
| |
| 1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454 |
| Exe Time :24 July 2019 11:42:05 |
+----------+

ELEMENT GROUP NO. 3

WallElement_33 :
2 40 0 1 0 0 0 0 0 0 0 0 0 0 1 0 0 1 0
.....
.....2D WALL ELEMENT.....
.....

element group behaviour throughout stage analysis

stage	status
1	inactive
2	active
3	active

material set no. 1

prop(1) young modulus 0.210000E+09
prop(2) modification time 0.00000
prop(3) new young modulus 0.00000

```
 prop( 4) poisson ratio       0.00000
 prop( 5) future .............0.182200E-43

 no. of step variable items:     1
 step  inertia multipier
--------------------------
    1   1.000
    2   1.000
    3   1.000

 element data
```

el	na	nb	mat	erc1	erc2	thick	by-i	by-j
1	1	2	1	0.000	0.000	0.8153E-01	0.000	0.000
2	2	3	1	0.000	0.000	0.8153E-01	0.000	0.000
3	3	4	1	0.000	0.000	0.8153E-01	0.000	0.000
4	4	5	1	0.000	0.000	0.8153E-01	0.000	0.000
5	5	6	1	0.000	0.000	0.8153E-01	0.000	0.000
6	6	7	1	0.000	0.000	0.8153E-01	0.000	0.000
7	7	8	1	0.000	0.000	0.8153E-01	0.000	0.000
8	8	9	1	0.000	0.000	0.8153E-01	0.000	0.000
9	9	10	1	0.000	0.000	0.8153E-01	0.000	0.000
10	10	11	1	0.000	0.000	0.8153E-01	0.000	0.000
11	11	12	1	0.000	0.000	0.8153E-01	0.000	0.000
12	12	13	1	0.000	0.000	0.8153E-01	0.000	0.000
13	13	14	1	0.000	0.000	0.8153E-01	0.000	0.000
14	14	15	1	0.000	0.000	0.8153E-01	0.000	0.000
15	15	16	1	0.000	0.000	0.8153E-01	0.000	0.000
16	16	17	1	0.000	0.000	0.8153E-01	0.000	0.000
17	17	18	1	0.000	0.000	0.8153E-01	0.000	0.000
18	18	19	1	0.000	0.000	0.8153E-01	0.000	0.000
19	19	20	1	0.000	0.000	0.8153E-01	0.000	0.000
20	20	21	1	0.000	0.000	0.8153E-01	0.000	0.000
21	21	22	1	0.000	0.000	0.8153E-01	0.000	0.000
22	22	23	1	0.000	0.000	0.8153E-01	0.000	0.000
23	23	24	1	0.000	0.000	0.8153E-01	0.000	0.000
24	24	25	1	0.000	0.000	0.8153E-01	0.000	0.000
25	25	26	1	0.000	0.000	0.8153E-01	0.000	0.000
26	26	27	1	0.000	0.000	0.8153E-01	0.000	0.000
27	27	28	1	0.000	0.000	0.8153E-01	0.000	0.000
28	28	29	1	0.000	0.000	0.8153E-01	0.000	0.000
29	29	30	1	0.000	0.000	0.8153E-01	0.000	0.000
30	30	31	1	0.000	0.000	0.8153E-01	0.000	0.000
31	31	32	1	0.000	0.000	0.8153E-01	0.000	0.000
32	32	33	1	0.000	0.000	0.8153E-01	0.000	0.000
33	33	34	1	0.000	0.000	0.8153E-01	0.000	0.000
34	34	35	1	0.000	0.000	0.8153E-01	0.000	0.000
35	35	36	1	0.000	0.000	0.8153E-01	0.000	0.000
36	36	37	1	0.000	0.000	0.8153E-01	0.000	0.000
37	37	38	1	0.000	0.000	0.8153E-01	0.000	0.000
38	38	39	1	0.000	0.000	0.8153E-01	0.000	0.000
39	39	40	1	0.000	0.000	0.8153E-01	0.000	0.000
40	40	41	1	0.000	0.000	0.8153E-01	0.000	0.000

```
+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                 |
|                                   Exe Time :24 July 2019      11:42:05                                                |
+-----------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  4

Tieback_78031                  :
   6   1   0   1   0   0   0   0   0   0   0   0   0   0   1   0   0   2   0
.....................................
.........2D POST-TENSION ANCHOR....
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1  inactive
    2   active
    3   active

 material set no.    1

 prop( 1) angle          70.0000
 prop( 2) young modulus 0.210000E+09
```

```
 prop( 3) modification  time  0.00000
 prop( 4) new young modulus   0.00000

 no. of step variable items:     2
 step   -ve lim     +ve lim
------------------------------
    1   0.000       0.000
    2   0.000       0.000
    3   0.000       0.000

 element data

   el    n  mat       a/l     pinit    yieldc    yieldt
-----------------------------------------------------

    1    2    1   0.3824E-03 0.000     0.000     0.000



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                   |
|                                   Exe Time :24 July 2019      11:42:05                                                  |
+-------------------------------------------------------------------------------------------------------------------------+


NO. OF NODAL LOADS  (NLOAD) ...................    0
NO. OF LOAD CURVES  (NLCUR) ...................    6
MAXIMUM POINTS/LCURVE (NPTM)...................    5



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                   |
|                                   Exe Time :24 July 2019      11:42:05                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
L O A D     D A T A


    LOAD FUNCTION NUMBER   =    1
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       1.20000    0.0000E+00
       4.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    2
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       2.20000    0.0000E+00
       4.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    3
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       3.20000    0.0000E+00
       4.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    4
    NUMBER OF TIME POINTS  =    4
```

```
    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       4.00000    0.1000E+01



    LOAD FUNCTION NUMBER   =    5
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       4.00000    0.1000E+01



    LOAD FUNCTION NUMBER   =    6
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       4.00000    0.1000E+01


NO. OF DISTRIBUTED LOAD CARDS     0




+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                 1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                  |
|                                  Exe Time :24 July 2019      11:42:05                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
L O A D     B A L A N C E

STEP     1 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     1 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     2 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     2 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     3 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     3 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000


                     LOAD INPUT SECTION COMPLETED




+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                 1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                  |
|                                  Exe Time :24 July 2019      11:42:05                                                 |
+-----------------------------------------------------------------------------------------------------------------------+


NO. OF LAYERS ..............................    2
NO. OF DATA PER LAYER.......................  100



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                 1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                  |
|                                  Exe Time :24 July 2019      11:42:05                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
```

```
LAYER DESCRIPTORS FOR STEP NO.    1


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  10.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.31900     WALL NO.        1
ITEM NO.  11<U-KP    >=  3.6060     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  25000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  40000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.31900     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.6060     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  11.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -5.3500     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.24800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.0200     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.24800     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.0200     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    2


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  10.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.31900     WALL NO.        1
ITEM NO.  11<U-KP    >=  3.6060     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  25000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  40000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.31900     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.6060     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)
```

```
 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  11.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -5.3500     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.24800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.0200     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.24800     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.0200     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    3


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  10.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.31900     WALL NO.        1
ITEM NO.  11<U-KP    >=  3.6060     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  25000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  40000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.31900     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.6060     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  11.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -5.3500     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.24800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.0200     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.24800     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.0200     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)
```

```
DEFAULT WATER UNIT WEIGHT =  10.000
AVERAGED ON      6 VALUES




+----------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1     FULL VERSION  *Build date:Jul 11, 2017*                |
|                                                                                                                            |
|                                   1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                     |
|                                    Exe Time :24 July 2019      11:42:05                                                    |
+----------------------------------------------------------------------------------------------------------------------------+

PHASE DESCRIPTORS


STEP  NO.      1
                                       LEFT WALL    RIGHT WALL
Y                                       0.000       -0.9990E+30
Z-PC                                    0.000         0.000
Z-EXCAVATION                            0.000         0.000
Z-WATER_TABLE                          -17.00       -0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL               0.000         0.000
ZQ                                      0.000         0.000
DZW_OF_THE_WATER_TABLE                  0.000         0.000
QS_ON_THE_EXCAVATION_SIDE               0.000         0.000
ZQS                                   -0.9990E+30   -0.9990E+30
ZCUT                                    0.000         0.000
BALANCE LEVEL FOR PORE PRESSURES       -8.000        -8.000
WATER_BEHAVIOUR_FLAG (LINING OPT)       0.000         0.000
PORE_UPDATE_FLAG                        0.000         0.000
PORE_TAB. _FLAG (gt.0= use tabs)        0.000         0.000
lateral thrusts reduction elevatio      0.000         0.000
Downhill reduction factor for effe      0.000         0.000
Downhill reduction factor for pore      0.000         0.000
Uphill reduction factor for effect      0.000         0.000
Uphill reduction factor for pore p      0.000         0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]        0.000         0.000
UPHILL VERTICAL ACCEL.  Kv_uh [g]       0.000         0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]       0.000         0.000
UPHILL BETA ANGLE (SLOPE) [deg]         0.000         0.000
UPHILL DELTA/PHI RATIO                  0.000         0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]       0.000         0.000
DOWNHILL DELTA/PHI RATIO                0.000         0.000
DYN.WATER BEHAVIOUR                     0.000         0.000
Excess pore pressure RATIO Ru           0.000         0.000
SEISMIC PRESSURE LOWER VALUE            0.000         0.000
SEISMIC PRESSURE UPPER VALUE            0.000         0.000
SEISMIC PRESSURE LOWER LEVEL            0.000         0.000
SEISMIC PRESSURE UPPER LEVEL            0.000         0.000

=========================================================================================================end of step    1


STEP  NO.      2
                                       LEFT WALL    RIGHT WALL
Y                                       0.000       -0.9990E+30
Z-PC                                    0.000         0.000
Z-EXCAVATION                            0.000         0.000
Z-WATER_TABLE                          -17.00       -0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL               0.000         0.000
ZQ                                      0.000         0.000
DZW_OF_THE_WATER_TABLE                  0.000         0.000
QS_ON_THE_EXCAVATION_SIDE               0.000         0.000
ZQS                                   -0.9990E+30   -0.9990E+30
ZCUT                                    0.000         0.000
BALANCE LEVEL FOR PORE PRESSURES       -8.000        -8.000
WATER_BEHAVIOUR_FLAG (LINING OPT)       0.000         0.000
PORE_UPDATE_FLAG                        0.000         0.000
PORE_TAB. _FLAG (gt.0= use tabs)        0.000         0.000
lateral thrusts reduction elevatio      0.000         0.000
Downhill reduction factor for effe      0.000         0.000
Downhill reduction factor for pore      0.000         0.000
Uphill reduction factor for effect      0.000         0.000
Uphill reduction factor for pore p      0.000         0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]        0.000         0.000
UPHILL VERTICAL ACCEL.  Kv_uh [g]       0.000         0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]       0.000         0.000
UPHILL BETA ANGLE (SLOPE) [deg]         0.000         0.000
UPHILL DELTA/PHI RATIO                  0.000         0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]       0.000         0.000
DOWNHILL DELTA/PHI RATIO                0.000         0.000
```

DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 2

STEP NO. 3

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-2.750	0.000
Z-WATER_TABLE	-17.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-8.000	-8.000
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 3

LEFT-HAND WALL

LOWER LEVEL -8.00000
UPPER LEVEL 0.00000

RIGHT-HAND WALL

LOWER LEVEL -8.00000
UPPER LEVEL 0.00000

+----------+
| PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017* |
| |
| 1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454 |
| Exe Time :24 July 2019 11:42:05 |
+----------+

I N I T I A L S T R E S S T A B L E S

S E C T I O N

NUMBER OF DEFINED TABLES 1

INPUT DATA FOR INITIAL STRESS SET NO. 1
PERTAINING SOIL ELEMENTS AT Y-COORD 0.0000

ACTIVATION TIME 3.0000
END TIME (TIME BEYOND WHICH IT IS REMOVED) 3.0000

TYPE BOUSSINESQ

```
 HORIZONTAL DISTANCE (DY)           2.33000000000000
 FOUNDATION WIDTH    (B)            3.00000000000000
 ZETA-F.....                      0.000000000000000E+000
 Q-F .....                         52.0800000000000
 BETA .....                        30.0000000000000
 BEHAVIOUR (0=FREE, 1=REFLECTING)  0.000000000000000E+000


 ELEMENT GROUPS BACKUP AREA CAN STAY IN CORE AT
 POSITION        2279

 NO. OF D.P.W  FOR THIS AREA       4898
 MAX NO. OF D.P.W. AVAILABLE      81920
 ** MAX NO OF ITERATIONS SET TO         100

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM= 6047.     RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 14.82     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 6047.     RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=    82 NODE     41 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     1 RNORM = 0.000     RMNORM= 0.000
           RINORM= 6047.     RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 14.82     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 6047.     RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=    82 NODE     41 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM= 6047.     RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 14.82     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 6047.     RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=    82 NODE     41 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                 |
|                                   Exe Time :24 July 2019      11:42:05                                                |
+-----------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2
SOLUTION REACHED USING     2 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    1     ( AT TIME   1.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (


ALL NODAL POINTS HAVE ZERO DISPLACEMENT COMPONENTS




+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                 |
|                                   Exe Time :24 July 2019      11:42:05                                                |
+-----------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2
```

S T R E S S R E S U L T S F O R G R O U P N O. 1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 41
C U R R E N T T I M E I S 1.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.000	0.000	0.000	0.000	0.000	0.000	V-C	3.9789E+04	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_3095_78023_L_0
2 D	0.3800	0.000	3.800	1.900	3.800	1.900	V-C	3.9789E+04	-0.2000	0.000	1.000	1.000	1.900	0.000	0.000	Strato1_3095_78023_L_0
3 D	0.7600	0.000	7.600	3.800	7.600	3.800	V-C	3.9789E+04	-0.4000	0.000	1.000	1.000	3.800	0.000	0.000	Strato1_3095_78023_L_0
4 D	1.140	0.000	11.40	5.700	11.40	5.700	V-C	3.9789E+04	-0.6000	0.000	1.000	1.000	5.700	0.000	0.000	Strato1_3095_78023_L_0
5 D	1.520	0.000	15.20	7.600	15.20	7.600	V-C	3.9789E+04	-0.8000	0.000	1.000	1.000	7.600	0.000	0.000	Strato1_3095_78023_L_0
6 D	1.900	0.000	19.00	9.500	19.00	9.500	V-C	3.9789E+04	-1.000	0.000	1.000	1.000	9.500	0.000	0.000	Strato1_3095_78023_L_0
7 D	2.280	0.000	22.80	11.40	22.80	11.40	V-C	3.9789E+04	-1.200	0.000	1.000	1.000	11.40	0.000	0.000	Strato1_3095_78023_L_0
8 D	2.660	0.000	26.60	13.30	26.60	13.30	V-C	3.9789E+04	-1.400	0.000	1.000	1.000	13.30	0.000	0.000	Strato1_3095_78023_L_0
9 D	3.040	0.000	30.40	15.20	30.40	15.20	V-C	3.9789E+04	-1.600	0.000	1.000	1.000	15.20	0.000	0.000	Strato1_3095_78023_L_0
10 D	3.420	0.000	34.20	17.10	34.20	17.10	V-C	3.9789E+04	-1.800	0.000	1.000	1.000	17.10	0.000	0.000	Strato1_3095_78023_L_0
11 D	3.800	0.000	38.00	19.00	38.00	19.00	V-C	3.9789E+04	-2.000	0.000	1.000	1.000	19.00	0.000	0.000	Strato1_3095_78023_L_0
12 D	4.180	0.000	41.80	20.90	41.80	20.90	V-C	3.9789E+04	-2.200	0.000	1.000	1.000	20.90	0.000	0.000	Strato1_3095_78023_L_0
13 D	4.560	0.000	45.60	22.80	45.60	22.80	V-C	3.9789E+04	-2.400	0.000	1.000	1.000	22.80	0.000	0.000	Strato1_3095_78023_L_0
14 D	4.940	0.000	49.40	24.70	49.40	24.70	V-C	3.9789E+04	-2.600	0.000	1.000	1.000	24.70	0.000	0.000	Strato1_3095_78023_L_0
15 D	5.320	0.000	53.20	26.60	53.20	26.60	V-C	3.9789E+04	-2.800	0.000	1.000	1.000	26.60	0.000	0.000	Strato1_3095_78023_L_0
16 D	5.700	0.000	57.00	28.50	57.00	28.50	V-C	3.9789E+04	-3.000	0.000	1.000	1.000	28.50	0.000	0.000	Strato1_3095_78023_L_0
17 D	6.080	0.000	60.80	30.40	60.80	30.40	V-C	3.9789E+04	-3.200	0.000	1.000	1.000	30.40	0.000	0.000	Strato1_3095_78023_L_0
18 D	6.460	0.000	64.60	32.30	64.60	32.30	V-C	3.9789E+04	-3.400	0.000	1.000	1.000	32.30	0.000	0.000	Strato1_3095_78023_L_0
19 D	6.840	0.000	68.40	34.20	68.40	34.20	V-C	3.9789E+04	-3.600	0.000	1.000	1.000	34.20	0.000	0.000	Strato1_3095_78023_L_0
20 D	7.220	0.000	72.20	36.10	72.20	36.10	V-C	3.9789E+04	-3.800	0.000	1.000	1.000	36.10	0.000	0.000	Strato1_3095_78023_L_0
21 D	7.600	0.000	76.00	38.00	76.00	38.00	V-C	3.9789E+04	-4.000	0.000	1.000	1.000	38.00	0.000	0.000	Strato1_3095_78023_L_0
22 D	7.980	0.000	79.80	39.90	79.80	39.90	V-C	3.9789E+04	-4.200	0.000	1.000	1.000	39.90	0.000	0.000	Strato1_3095_78023_L_0
23 D	8.360	0.000	83.60	41.80	83.60	41.80	V-C	3.9789E+04	-4.400	0.000	1.000	1.000	41.80	0.000	0.000	Strato1_3095_78023_L_0
24 D	8.740	0.000	87.40	43.70	87.40	43.70	V-C	3.9789E+04	-4.600	0.000	1.000	1.000	43.70	0.000	0.000	Strato1_3095_78023_L_0
25 D	9.120	0.000	91.20	45.60	91.20	45.60	V-C	3.9789E+04	-4.800	0.000	1.000	1.000	45.60	0.000	0.000	Strato1_3095_78023_L_0
26 D	9.500	0.000	95.00	47.50	95.00	47.50	V-C	3.9789E+04	-5.000	0.000	1.000	1.000	47.50	0.000	0.000	Strato1_3095_78023_L_0
27 D	9.880	0.000	98.80	49.40	98.80	49.40	V-C	3.9789E+04	-5.200	0.000	1.000	1.000	49.40	0.000	0.000	Strato1_3095_78023_L_0
28 D	10.26	0.000	102.6	51.30	102.6	51.30	V-C	9.0046E+04	-5.400	0.000	1.000	1.000	51.30	0.000	0.000	Strato2_84780_84781_L_0
29 D	10.64	0.000	106.4	53.20	106.4	53.20	V-C	9.0046E+04	-5.600	0.000	1.000	1.000	53.20	0.000	0.000	Strato2_84780_84781_L_0
30 D	11.02	0.000	110.2	55.10	110.2	55.10	V-C	9.0046E+04	-5.800	0.000	1.000	1.000	55.10	0.000	0.000	Strato2_84780_84781_L_0
31 D	11.40	0.000	114.0	57.00	114.0	57.00	V-C	9.0046E+04	-6.000	0.000	1.000	1.000	57.00	0.000	0.000	Strato2_84780_84781_L_0
32 D	11.78	0.000	117.8	58.90	117.8	58.90	V-C	9.0046E+04	-6.200	0.000	1.000	1.000	58.90	0.000	0.000	Strato2_84780_84781_L_0
33 D	12.16	0.000	121.6	60.80	121.6	60.80	V-C	9.0046E+04	-6.400	0.000	1.000	1.000	60.80	0.000	0.000	Strato2_84780_84781_L_0
34 D	12.54	0.000	125.4	62.70	125.4	62.70	V-C	9.0046E+04	-6.600	0.000	1.000	1.000	62.70	0.000	0.000	Strato2_84780_84781_L_0
35 D	12.92	0.000	129.2	64.60	129.2	64.60	V-C	9.0046E+04	-6.800	0.000	1.000	1.000	64.60	0.000	0.000	Strato2_84780_84781_L_0

```
  36 D  13.30       0.000       133.0       66.50       133.0       66.50               V-C  9.0046E+04  -7.000        0.000         1.000         1.000
66.50       0.000       0.000     Strato2_84780_84781_L_0
  37 D  13.68       0.000       136.8       68.40       136.8       68.40               V-C  9.0046E+04  -7.200        0.000         1.000         1.000
68.40       0.000       0.000     Strato2_84780_84781_L_0
  38 D  14.06       0.000       140.6       70.30       140.6       70.30               V-C  9.0046E+04  -7.400        0.000         1.000         1.000
70.30       0.000       0.000     Strato2_84780_84781_L_0
  39 D  14.44       0.000       144.4       72.20       144.4       72.20               V-C  9.0046E+04  -7.600        0.000         1.000         1.000
72.20       0.000       0.000     Strato2_84780_84781_L_0
  40 D  14.82       0.000       148.2       74.10       148.2       74.10               V-C  9.0046E+04  -7.800        0.000         1.000         1.000
74.10       0.000       0.000     Strato2_84780_84781_L_0
  41 D  7.600       0.000       152.0       76.00       152.0       76.00               V-C  9.0046E+04  -8.000        0.000         1.000         1.000
76.00       0.000       0.000     Strato2_84780_84781_L_0


 +----------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1     FULL VERSION  *Build date:Jul 11, 2017*            |
 |                                                                                                                      |
 |                                  1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                |
 |                                   Exe Time :24 July 2019      11:42:05                                               |
 +----------------------------------------------------------------------------------------------------------------------+
 1468.1 - GA27 - Cepav2


 S T R E S S    R E S U L T S    F O R    G R O U P   N O.    2

 0_R                                :
 ELEMENT TYPE     5 NO.OF ELEMENTS. IN THIS GROUP   41
 C U R R E N T    T I M E    I S      1.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P            STATE   STIFFNESS Z-LEVEL       PORE         E FACTOR      UFACTOR
Peq           Su_a         Su_p       LAYER
 ----------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1 D  0.000       0.000       0.000       0.000       0.000       0.000               V-C  2.7611E+04   0.000        0.000         1.000         1.000
0.000       0.000       0.000     Strato1_3095_78023_L_0
   2 D  0.3800      0.000       3.800       1.900       3.800       1.900               V-C  2.7611E+04 -0.2000        0.000         1.000         1.000
1.900       0.000       0.000     Strato1_3095_78023_L_0
   3 D  0.7600      0.000       7.600       3.800       7.600       3.800               V-C  2.7611E+04 -0.4000        0.000         1.000         1.000
3.800       0.000       0.000     Strato1_3095_78023_L_0
   4 D  1.140       0.000       11.40       5.700       11.40       5.700               V-C  2.7611E+04 -0.6000        0.000         1.000         1.000
5.700       0.000       0.000     Strato1_3095_78023_L_0
   5 D  1.520       0.000       15.20       7.600       15.20       7.600               V-C  2.7611E+04 -0.8000        0.000         1.000         1.000
7.600       0.000       0.000     Strato1_3095_78023_L_0
   6 D  1.900       0.000       19.00       9.500       19.00       9.500               V-C  2.7611E+04  -1.000        0.000         1.000         1.000
9.500       0.000       0.000     Strato1_3095_78023_L_0
   7 D  2.280       0.000       22.80       11.40       22.80       11.40               V-C  2.7611E+04  -1.200        0.000         1.000         1.000
11.40       0.000       0.000     Strato1_3095_78023_L_0
   8 D  2.660       0.000       26.60       13.30       26.60       13.30               V-C  2.7611E+04  -1.400        0.000         1.000         1.000
13.30       0.000       0.000     Strato1_3095_78023_L_0
   9 D  3.040       0.000       30.40       15.20       30.40       15.20               V-C  2.7611E+04  -1.600        0.000         1.000         1.000
15.20       0.000       0.000     Strato1_3095_78023_L_0
  10 D  3.420       0.000       34.20       17.10       34.20       17.10               V-C  2.7611E+04  -1.800        0.000         1.000         1.000
17.10       0.000       0.000     Strato1_3095_78023_L_0
  11 D  3.800       0.000       38.00       19.00       38.00       19.00               V-C  2.7611E+04  -2.000        0.000         1.000         1.000
19.00       0.000       0.000     Strato1_3095_78023_L_0
  12 D  4.180       0.000       41.80       20.90       41.80       20.90               V-C  2.7611E+04  -2.200        0.000         1.000         1.000
20.90       0.000       0.000     Strato1_3095_78023_L_0
  13 D  4.560       0.000       45.60       22.80       45.60       22.80               V-C  2.7611E+04  -2.400        0.000         1.000         1.000
22.80       0.000       0.000     Strato1_3095_78023_L_0
  14 D  4.940       0.000       49.40       24.70       49.40       24.70               V-C  2.7611E+04  -2.600        0.000         1.000         1.000
24.70       0.000       0.000     Strato1_3095_78023_L_0
  15 D  5.320       0.000       53.20       26.60       53.20       26.60               V-C  2.7611E+04  -2.800        0.000         1.000         1.000
26.60       0.000       0.000     Strato1_3095_78023_L_0
  16 D  5.700       0.000       57.00       28.50       57.00       28.50               V-C  2.7611E+04  -3.000        0.000         1.000         1.000
28.50       0.000       0.000     Strato1_3095_78023_L_0
  17 D  6.080       0.000       60.80       30.40       60.80       30.40               V-C  2.7611E+04  -3.200        0.000         1.000         1.000
30.40       0.000       0.000     Strato1_3095_78023_L_0
  18 D  6.460       0.000       64.60       32.30       64.60       32.30               V-C  2.7611E+04  -3.400        0.000         1.000         1.000
32.30       0.000       0.000     Strato1_3095_78023_L_0
  19 D  6.840       0.000       68.40       34.20       68.40       34.20               V-C  2.7611E+04  -3.600        0.000         1.000         1.000
34.20       0.000       0.000     Strato1_3095_78023_L_0
  20 D  7.220       0.000       72.20       36.10       72.20       36.10               V-C  2.7611E+04  -3.800        0.000         1.000         1.000
36.10       0.000       0.000     Strato1_3095_78023_L_0
  21 D  7.600       0.000       76.00       38.00       76.00       38.00               V-C  2.7611E+04  -4.000        0.000         1.000         1.000
38.00       0.000       0.000     Strato1_3095_78023_L_0
  22 D  7.980       0.000       79.80       39.90       79.80       39.90               V-C  2.7611E+04  -4.200        0.000         1.000         1.000
39.90       0.000       0.000     Strato1_3095_78023_L_0
  23 D  8.360       0.000       83.60       41.80       83.60       41.80               V-C  2.7611E+04  -4.400        0.000         1.000         1.000
41.80       0.000       0.000     Strato1_3095_78023_L_0
```

```
  24 D   8.740       0.000       87.40       43.70       87.40       43.70            V-C  2.7611E+04  -4.600       0.000        1.000        1.000
43.70       0.000       0.000    Strato1_3095_78023_L_0
  25 D   9.120       0.000       91.20       45.60       91.20       45.60            V-C  2.7611E+04  -4.800       0.000        1.000        1.000
45.60       0.000       0.000    Strato1_3095_78023_L_0
  26 D   9.500       0.000       95.00       47.50       95.00       47.50            V-C  2.7611E+04  -5.000       0.000        1.000        1.000
47.50       0.000       0.000    Strato1_3095_78023_L_0
  27 D   9.880       0.000       98.80       49.40       98.80       49.40            V-C  2.7611E+04  -5.200       0.000        1.000        1.000
49.40       0.000       0.000    Strato1_3095_78023_L_0
  28 D   10.26       0.000       102.6       51.30       102.6       51.30            V-C  4.8803E+04  -5.400       0.000        1.000        1.000
51.30       0.000       0.000    Strato2_84780_84781_L_0
  29 D   10.64       0.000       106.4       53.20       106.4       53.20            V-C  4.8803E+04  -5.600       0.000        1.000        1.000
53.20       0.000       0.000    Strato2_84780_84781_L_0
  30 D   11.02       0.000       110.2       55.10       110.2       55.10            V-C  4.8803E+04  -5.800       0.000        1.000        1.000
55.10       0.000       0.000    Strato2_84780_84781_L_0
  31 D   11.40       0.000       114.0       57.00       114.0       57.00            V-C  4.8803E+04  -6.000       0.000        1.000        1.000
57.00       0.000       0.000    Strato2_84780_84781_L_0
  32 D   11.78       0.000       117.8       58.90       117.8       58.90            V-C  4.8803E+04  -6.200       0.000        1.000        1.000
58.90       0.000       0.000    Strato2_84780_84781_L_0
  33 D   12.16       0.000       121.6       60.80       121.6       60.80            V-C  4.8803E+04  -6.400       0.000        1.000        1.000
60.80       0.000       0.000    Strato2_84780_84781_L_0
  34 D   12.54       0.000       125.4       62.70       125.4       62.70            V-C  4.8803E+04  -6.600       0.000        1.000        1.000
62.70       0.000       0.000    Strato2_84780_84781_L_0
  35 D   12.92       0.000       129.2       64.60       129.2       64.60            V-C  4.8803E+04  -6.800       0.000        1.000        1.000
64.60       0.000       0.000    Strato2_84780_84781_L_0
  36 D   13.30       0.000       133.0       66.50       133.0       66.50            V-C  4.8803E+04  -7.000       0.000        1.000        1.000
66.50       0.000       0.000    Strato2_84780_84781_L_0
  37 D   13.68       0.000       136.8       68.40       136.8       68.40            V-C  4.8803E+04  -7.200       0.000        1.000        1.000
68.40       0.000       0.000    Strato2_84780_84781_L_0
  38 D   14.06       0.000       140.6       70.30       140.6       70.30            V-C  4.8803E+04  -7.400       0.000        1.000        1.000
70.30       0.000       0.000    Strato2_84780_84781_L_0
  39 D   14.44       0.000       144.4       72.20       144.4       72.20            V-C  4.8803E+04  -7.600       0.000        1.000        1.000
72.20       0.000       0.000    Strato2_84780_84781_L_0
  40 D   14.82       0.000       148.2       74.10       148.2       74.10            V-C  4.8803E+04  -7.800       0.000        1.000        1.000
74.10       0.000       0.000    Strato2_84780_84781_L_0
  41 D   7.600       0.000       152.0       76.00       152.0       76.00            V-C  4.8803E+04  -8.000       0.000        1.000        1.000
76.00       0.000       0.000    Strato2_84780_84781_L_0


+----------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                 |
|                                                                                                                            |
|                                   1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                     |
|                                    Exe Time :24 July 2019      11:42:05                                                    |
+----------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    3

WallElement_33                        :
ELEMENT TYPE     2 NO.OF ELEMENTS. IN THIS GROUP    40
C U R R E N T    T I M E    I S       1.0000

 WALL2D ELEMENT

   EL       TA          TB          MA          MB
-----------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****



+----------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                 |
|                                                                                                                            |
|                                   1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                     |
|                                    Exe Time :24 July 2019      11:42:05                                                    |
+----------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    4

Tieback_78031                         :
ELEMENT TYPE     6 NO.OF ELEMENTS. IN THIS GROUP     1
C U R R E N T    T I M E    I S       1.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL     FORCE          d0          EDISPL     pl. eps          K      -ve limit    +ve limit
------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****
```

```
 ITER     0 RNORM = 0.000     RMNORM= 0.000
             RINORM= 6047.     RIMNOR= 0.000
             RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
             RFMAX = 14.82     RMMAX = 0.000
             RTSMAL=0.1000E-03 RMSMAL= 0.000
             RDT   = 6047.     RDR   = 0.000
             RATIOT= 0.000     RATIOR= 0.000
             MAX UN= 0.000     IEQ=    82 NODE     41 DOF   2   X-ROT. F
             MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
             NO. OF CONTACT CONSTRAINT VIOLATIONS     0


 ITER     1 RNORM = 0.000     RMNORM= 0.000
             RINORM= 6047.     RIMNOR= 0.000
             RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
             RFMAX = 14.82     RMMAX = 0.000
             RTSMAL=0.1000E-03 RMSMAL= 0.000
             RDT   = 6047.     RDR   = 0.000
             RATIOT= 0.000     RATIOR= 0.000
             MAX UN= 0.000     IEQ=    82 NODE     41 DOF   2   X-ROT. F
             MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
             NO. OF CONTACT CONSTRAINT VIOLATIONS     0


 ITER     2 RNORM = 0.000     RMNORM= 0.000
             RINORM= 6047.     RIMNOR= 0.000
             RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
             RFMAX = 14.82     RMMAX = 0.000
             RTSMAL=0.1000E-03 RMSMAL= 0.000
             RDT   = 6047.     RDR   = 0.000
             RATIOT= 0.000     RATIOR= 0.000
             MAX UN= 0.000     IEQ=    82 NODE     41 DOF   2   X-ROT. F
             MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
             NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                   |
|                                                                                                                             |
|                                    1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                     |
|                                     Exe Time :24 July 2019      11:42:05                                                    |
+-----------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2
SOLUTION REACHED USING     2 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    2     ( AT TIME   2.000     )

 PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

           Y-DISPL.F        X-ROT. F
            (02)             (04)            (


 ALL NODAL POINTS HAVE ZERO DISPLACEMENT COMPONENTS




+-----------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                   |
|                                                                                                                             |
|                                    1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                     |
|                                     Exe Time :24 July 2019      11:42:05                                                    |
+-----------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   1

 0_L                            :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   41
 C U R R E N T   T I M E   I S      2.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

   EL *   FORCE      DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P           STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR     UFACTOR
Peq           Su_a         Su_p      LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
```

```
---------------------------------------------------------------------------
   1 D   0.000       0.000       0.000       0.000       0.000       0.000       UL-RL  6.3662E+04   0.000       0.000       1.000       1.000
0.000       0.000       0.000     Strato1_3095_78023_L_0
   2 D  0.3800       0.000       3.800       1.900       3.800       1.900       UL-RL  6.3662E+04  -0.2000      0.000       1.000       1.000
1.900       0.000       0.000     Strato1_3095_78023_L_0
   3 D  0.7600       0.000       7.600       3.800       7.600       3.800       UL-RL  6.3662E+04  -0.4000      0.000       1.000       1.000
3.800       0.000       0.000     Strato1_3095_78023_L_0
   4 D   1.140       0.000       11.40       5.700       11.40       5.700       UL-RL  6.3662E+04  -0.6000      0.000       1.000       1.000
5.700       0.000       0.000     Strato1_3095_78023_L_0
   5 D   1.520       0.000       15.20       7.600       15.20       7.600       UL-RL  6.3662E+04  -0.8000      0.000       1.000       1.000
7.600       0.000       0.000     Strato1_3095_78023_L_0
   6 D   1.900       0.000       19.00       9.500       19.00       9.500       UL-RL  6.3662E+04   -1.000      0.000       1.000       1.000
9.500       0.000       0.000     Strato1_3095_78023_L_0
   7 D   2.280       0.000       22.80       11.40       22.80       11.40       UL-RL  6.3662E+04   -1.200      0.000       1.000       1.000
11.40       0.000       0.000     Strato1_3095_78023_L_0
   8 D   2.660       0.000       26.60       13.30       26.60       13.30       UL-RL  6.3662E+04   -1.400      0.000       1.000       1.000
13.30       0.000       0.000     Strato1_3095_78023_L_0
   9 D   3.040       0.000       30.40       15.20       30.40       15.20       UL-RL  6.3662E+04   -1.600      0.000       1.000       1.000
15.20       0.000       0.000     Strato1_3095_78023_L_0
  10 D   3.420       0.000       34.20       17.10       34.20       17.10       UL-RL  6.3662E+04   -1.800      0.000       1.000       1.000
17.10       0.000       0.000     Strato1_3095_78023_L_0
  11 D   3.800       0.000       38.00       19.00       38.00       19.00       UL-RL  6.3662E+04   -2.000      0.000       1.000       1.000
19.00       0.000       0.000     Strato1_3095_78023_L_0
  12 D   4.180       0.000       41.80       20.90       41.80       20.90       UL-RL  6.3662E+04   -2.200      0.000       1.000       1.000
20.90       0.000       0.000     Strato1_3095_78023_L_0
  13 D   4.560       0.000       45.60       22.80       45.60       22.80       UL-RL  6.3662E+04   -2.400      0.000       1.000       1.000
22.80       0.000       0.000     Strato1_3095_78023_L_0
  14 D   4.940       0.000       49.40       24.70       49.40       24.70       UL-RL  6.3662E+04   -2.600      0.000       1.000       1.000
24.70       0.000       0.000     Strato1_3095_78023_L_0
  15 D   5.320       0.000       53.20       26.60       53.20       26.60       UL-RL  6.3662E+04   -2.800      0.000       1.000       1.000
26.60       0.000       0.000     Strato1_3095_78023_L_0
  16 D   5.700       0.000       57.00       28.50       57.00       28.50       UL-RL  6.3662E+04   -3.000      0.000       1.000       1.000
28.50       0.000       0.000     Strato1_3095_78023_L_0
  17 D   6.080       0.000       60.80       30.40       60.80       30.40       UL-RL  6.3662E+04   -3.200      0.000       1.000       1.000
30.40       0.000       0.000     Strato1_3095_78023_L_0
  18 D   6.460       0.000       64.60       32.30       64.60       32.30       UL-RL  6.3662E+04   -3.400      0.000       1.000       1.000
32.30       0.000       0.000     Strato1_3095_78023_L_0
  19 D   6.840       0.000       68.40       34.20       68.40       34.20       UL-RL  6.3662E+04   -3.600      0.000       1.000       1.000
34.20       0.000       0.000     Strato1_3095_78023_L_0
  20 D   7.220       0.000       72.20       36.10       72.20       36.10       UL-RL  6.3662E+04   -3.800      0.000       1.000       1.000
36.10       0.000       0.000     Strato1_3095_78023_L_0
  21 D   7.600       0.000       76.00       38.00       76.00       38.00       UL-RL  6.3662E+04   -4.000      0.000       1.000       1.000
38.00       0.000       0.000     Strato1_3095_78023_L_0
  22 D   7.980       0.000       79.80       39.90       79.80       39.90       UL-RL  6.3662E+04   -4.200      0.000       1.000       1.000
39.90       0.000       0.000     Strato1_3095_78023_L_0
  23 D   8.360       0.000       83.60       41.80       83.60       41.80       UL-RL  6.3662E+04   -4.400      0.000       1.000       1.000
41.80       0.000       0.000     Strato1_3095_78023_L_0
  24 D   8.740       0.000       87.40       43.70       87.40       43.70       UL-RL  6.3662E+04   -4.600      0.000       1.000       1.000
43.70       0.000       0.000     Strato1_3095_78023_L_0
  25 D   9.120       0.000       91.20       45.60       91.20       45.60       UL-RL  6.3662E+04   -4.800      0.000       1.000       1.000
45.60       0.000       0.000     Strato1_3095_78023_L_0
  26 D   9.500       0.000       95.00       47.50       95.00       47.50       UL-RL  6.3662E+04   -5.000      0.000       1.000       1.000
47.50       0.000       0.000     Strato1_3095_78023_L_0
  27 D   9.880       0.000       98.80       49.40       98.80       49.40       UL-RL  6.3662E+04   -5.200      0.000       1.000       1.000
49.40       0.000       0.000     Strato1_3095_78023_L_0
  28 D   10.26       0.000       102.6       51.30       102.6       51.30       UL-RL  2.7014E+05   -5.400      0.000       1.000       1.000
51.30       0.000       0.000     Strato2_84780_84781_L_0
  29 D   10.64       0.000       106.4       53.20       106.4       53.20       UL-RL  2.7014E+05   -5.600      0.000       1.000       1.000
53.20       0.000       0.000     Strato2_84780_84781_L_0
  30 D   11.02       0.000       110.2       55.10       110.2       55.10       UL-RL  2.7014E+05   -5.800      0.000       1.000       1.000
55.10       0.000       0.000     Strato2_84780_84781_L_0
  31 D   11.40       0.000       114.0       57.00       114.0       57.00       UL-RL  2.7014E+05   -6.000      0.000       1.000       1.000
57.00       0.000       0.000     Strato2_84780_84781_L_0
  32 D   11.78       0.000       117.8       58.90       117.8       58.90       UL-RL  2.7014E+05   -6.200      0.000       1.000       1.000
58.90       0.000       0.000     Strato2_84780_84781_L_0
  33 D   12.16       0.000       121.6       60.80       121.6       60.80       UL-RL  2.7014E+05   -6.400      0.000       1.000       1.000
60.80       0.000       0.000     Strato2_84780_84781_L_0
  34 D   12.54       0.000       125.4       62.70       125.4       62.70       UL-RL  2.7014E+05   -6.600      0.000       1.000       1.000
62.70       0.000       0.000     Strato2_84780_84781_L_0
  35 D   12.92       0.000       129.2       64.60       129.2       64.60       UL-RL  2.7014E+05   -6.800      0.000       1.000       1.000
64.60       0.000       0.000     Strato2_84780_84781_L_0
  36 D   13.30       0.000       133.0       66.50       133.0       66.50       UL-RL  2.7014E+05   -7.000      0.000       1.000       1.000
66.50       0.000       0.000     Strato2_84780_84781_L_0
  37 D   13.68       0.000       136.8       68.40       136.8       68.40       UL-RL  2.7014E+05   -7.200      0.000       1.000       1.000
68.40       0.000       0.000     Strato2_84780_84781_L_0
  38 D   14.06       0.000       140.6       70.30       140.6       70.30       UL-RL  2.7014E+05   -7.400      0.000       1.000       1.000
70.30       0.000       0.000     Strato2_84780_84781_L_0
  39 D   14.44       0.000       144.4       72.20       144.4       72.20       UL-RL  2.7014E+05   -7.600      0.000       1.000       1.000
72.20       0.000       0.000     Strato2_84780_84781_L_0
  40 D   14.82       0.000       148.2       74.10       148.2       74.10       UL-RL  2.7014E+05   -7.800      0.000       1.000       1.000
74.10       0.000       0.000     Strato2_84780_84781_L_0
  41 D   7.600       0.000       152.0       76.00       152.0       76.00       UL-RL  2.7014E+05   -8.000      0.000       1.000       1.000
76.00       0.000       0.000     Strato2_84780_84781_L_0
```

```
+------------------------------------------------------------------------------------------------------------+
|                 PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*     |
|                                                                                                            |
|                                1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                        |
|                                 Exe Time :24 July 2019      11:42:05                                       |
+------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2
```

S T R E S S   R E S U L T S   F O R   G R O U P N O. 2

0_R :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 41
C U R R E N T   T I M E   I S   2.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.000	0.000	0.000	0.000	0.000	0.000	UL-RL	4.4178E+04	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_3095_78023_L_0
2 D	0.3800	0.000	3.800	1.900	3.800	1.900	UL-RL	4.4178E+04	-0.2000	0.000	1.000	1.000	1.900	0.000	0.000	Strato1_3095_78023_L_0
3 D	0.7600	0.000	7.600	3.800	7.600	3.800	UL-RL	4.4178E+04	-0.4000	0.000	1.000	1.000	3.800	0.000	0.000	Strato1_3095_78023_L_0
4 D	1.140	0.000	11.40	5.700	11.40	5.700	UL-RL	4.4178E+04	-0.6000	0.000	1.000	1.000	5.700	0.000	0.000	Strato1_3095_78023_L_0
5 D	1.520	0.000	15.20	7.600	15.20	7.600	UL-RL	4.4178E+04	-0.8000	0.000	1.000	1.000	7.600	0.000	0.000	Strato1_3095_78023_L_0
6 D	1.900	0.000	19.00	9.500	19.00	9.500	UL-RL	4.4178E+04	-1.000	0.000	1.000	1.000	9.500	0.000	0.000	Strato1_3095_78023_L_0
7 D	2.280	0.000	22.80	11.40	22.80	11.40	UL-RL	4.4178E+04	-1.200	0.000	1.000	1.000	11.40	0.000	0.000	Strato1_3095_78023_L_0
8 D	2.660	0.000	26.60	13.30	26.60	13.30	UL-RL	4.4178E+04	-1.400	0.000	1.000	1.000	13.30	0.000	0.000	Strato1_3095_78023_L_0
9 D	3.040	0.000	30.40	15.20	30.40	15.20	UL-RL	4.4178E+04	-1.600	0.000	1.000	1.000	15.20	0.000	0.000	Strato1_3095_78023_L_0
10 D	3.420	0.000	34.20	17.10	34.20	17.10	UL-RL	4.4178E+04	-1.800	0.000	1.000	1.000	17.10	0.000	0.000	Strato1_3095_78023_L_0
11 D	3.800	0.000	38.00	19.00	38.00	19.00	UL-RL	4.4178E+04	-2.000	0.000	1.000	1.000	19.00	0.000	0.000	Strato1_3095_78023_L_0
12 D	4.180	0.000	41.80	20.90	41.80	20.90	UL-RL	4.4178E+04	-2.200	0.000	1.000	1.000	20.90	0.000	0.000	Strato1_3095_78023_L_0
13 D	4.560	0.000	45.60	22.80	45.60	22.80	UL-RL	4.4178E+04	-2.400	0.000	1.000	1.000	22.80	0.000	0.000	Strato1_3095_78023_L_0
14 D	4.940	0.000	49.40	24.70	49.40	24.70	UL-RL	4.4178E+04	-2.600	0.000	1.000	1.000	24.70	0.000	0.000	Strato1_3095_78023_L_0
15 D	5.320	0.000	53.20	26.60	53.20	26.60	UL-RL	4.4178E+04	-2.800	0.000	1.000	1.000	26.60	0.000	0.000	Strato1_3095_78023_L_0
16 D	5.700	0.000	57.00	28.50	57.00	28.50	UL-RL	4.4178E+04	-3.000	0.000	1.000	1.000	28.50	0.000	0.000	Strato1_3095_78023_L_0
17 D	6.080	0.000	60.80	30.40	60.80	30.40	UL-RL	4.4178E+04	-3.200	0.000	1.000	1.000	30.40	0.000	0.000	Strato1_3095_78023_L_0
18 D	6.460	0.000	64.60	32.30	64.60	32.30	UL-RL	4.4178E+04	-3.400	0.000	1.000	1.000	32.30	0.000	0.000	Strato1_3095_78023_L_0
19 D	6.840	0.000	68.40	34.20	68.40	34.20	UL-RL	4.4178E+04	-3.600	0.000	1.000	1.000	34.20	0.000	0.000	Strato1_3095_78023_L_0
20 D	7.220	0.000	72.20	36.10	72.20	36.10	UL-RL	4.4178E+04	-3.800	0.000	1.000	1.000	36.10	0.000	0.000	Strato1_3095_78023_L_0
21 D	7.600	0.000	76.00	38.00	76.00	38.00	UL-RL	4.4178E+04	-4.000	0.000	1.000	1.000	38.00	0.000	0.000	Strato1_3095_78023_L_0
22 D	7.980	0.000	79.80	39.90	79.80	39.90	UL-RL	4.4178E+04	-4.200	0.000	1.000	1.000	39.90	0.000	0.000	Strato1_3095_78023_L_0
23 D	8.360	0.000	83.60	41.80	83.60	41.80	UL-RL	4.4178E+04	-4.400	0.000	1.000	1.000	41.80	0.000	0.000	Strato1_3095_78023_L_0
24 D	8.740	0.000	87.40	43.70	87.40	43.70	UL-RL	4.4178E+04	-4.600	0.000	1.000	1.000	43.70	0.000	0.000	Strato1_3095_78023_L_0
25 D	9.120	0.000	91.20	45.60	91.20	45.60	UL-RL	4.4178E+04	-4.800	0.000	1.000	1.000	45.60	0.000	0.000	Strato1_3095_78023_L_0
26 D	9.500	0.000	95.00	47.50	95.00	47.50	UL-RL	4.4178E+04	-5.000	0.000	1.000	1.000	47.50	0.000	0.000	Strato1_3095_78023_L_0
27 D	9.880	0.000	98.80	49.40	98.80	49.40	UL-RL	4.4178E+04	-5.200	0.000	1.000	1.000	49.40	0.000	0.000	Strato1_3095_78023_L_0
28 D	10.26	0.000	102.6	51.30	102.6	51.30	UL-RL	1.4641E+05	-5.400	0.000	1.000	1.000	51.30	0.000	0.000	Strato2_84780_84781_L_0
29 D	10.64	0.000	106.4	53.20	106.4	53.20	UL-RL	1.4641E+05	-5.600	0.000	1.000	1.000	53.20	0.000	0.000	Strato2_84780_84781_L_0
30 D	11.02	0.000	110.2	55.10	110.2	55.10	UL-RL	1.4641E+05	-5.800	0.000	1.000	1.000	55.10	0.000	0.000	Strato2_84780_84781_L_0
31 D	11.40	0.000	114.0	57.00	114.0	57.00	UL-RL	1.4641E+05	-6.000	0.000	1.000	1.000				

```
57.00       0.000       0.000     Strato2_84780_84781_L_0
  32 D   11.78       0.000       117.8       58.90       117.8       58.90          UL-RL  1.4641E+05  -6.200       0.000       1.000       1.000
58.90       0.000       0.000     Strato2_84780_84781_L_0
  33 D   12.16       0.000       121.6       60.80       121.6       60.80          UL-RL  1.4641E+05  -6.400       0.000       1.000       1.000
60.80       0.000       0.000     Strato2_84780_84781_L_0
  34 D   12.54       0.000       125.4       62.70       125.4       62.70          UL-RL  1.4641E+05  -6.600       0.000       1.000       1.000
62.70       0.000       0.000     Strato2_84780_84781_L_0
  35 D   12.92       0.000       129.2       64.60       129.2       64.60          UL-RL  1.4641E+05  -6.800       0.000       1.000       1.000
64.60       0.000       0.000     Strato2_84780_84781_L_0
  36 D   13.30       0.000       133.0       66.50       133.0       66.50          UL-RL  1.4641E+05  -7.000       0.000       1.000       1.000
66.50       0.000       0.000     Strato2_84780_84781_L_0
  37 D   13.68       0.000       136.8       68.40       136.8       68.40          UL-RL  1.4641E+05  -7.200       0.000       1.000       1.000
68.40       0.000       0.000     Strato2_84780_84781_L_0
  38 D   14.06       0.000       140.6       70.30       140.6       70.30          UL-RL  1.4641E+05  -7.400       0.000       1.000       1.000
70.30       0.000       0.000     Strato2_84780_84781_L_0
  39 D   14.44       0.000       144.4       72.20       144.4       72.20          UL-RL  1.4641E+05  -7.600       0.000       1.000       1.000
72.20       0.000       0.000     Strato2_84780_84781_L_0
  40 D   14.82       0.000       148.2       74.10       148.2       74.10          UL-RL  1.4641E+05  -7.800       0.000       1.000       1.000
74.10       0.000       0.000     Strato2_84780_84781_L_0
  41 D   7.600       0.000       152.0       76.00       152.0       76.00          UL-RL  1.4641E+05  -8.000       0.000       1.000       1.000
76.00       0.000       0.000     Strato2_84780_84781_L_0
```

```
+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                     |
|                                                                                                                               |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                         |
|                                   Exe Time :24 July 2019      11:42:05                                                        |
+-------------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   40
C U R R E N T   T I M E   I S     2.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-----------------------------------------------------
    1  0.0000      0.0000      0.0000      0.0000
    2  0.0000      0.0000      0.0000      0.0000
    3  0.0000      0.0000      0.0000      0.0000
    4  0.0000      0.0000      0.0000      0.0000
    5  0.0000      0.0000      0.0000      0.0000
    6  0.0000      0.0000      0.0000      0.0000
    7  0.0000      0.0000      0.0000      0.0000
    8  0.0000      0.0000      0.0000      0.0000
    9  0.0000      0.0000      0.0000      0.0000
   10  0.0000      0.0000      0.0000      0.0000
   11  0.0000      0.0000      0.0000      0.0000
   12  0.0000      0.0000      0.0000      0.0000
   13  0.0000      0.0000      0.0000      0.0000
   14  0.0000      0.0000      0.0000      0.0000
   15  0.0000      0.0000      0.0000      0.0000
   16  0.0000      0.0000      0.0000      0.0000
   17  0.0000      0.0000      0.0000      0.0000
   18  0.0000      0.0000      0.0000      0.0000
   19  0.0000      0.0000      0.0000      0.0000
   20  0.0000      0.0000      0.0000      0.0000
   21  0.0000      0.0000      0.0000      0.0000
   22  0.0000      0.0000      0.0000      0.0000
   23  0.0000      0.0000      0.0000      0.0000
   24  0.0000      0.0000      0.0000      0.0000
   25  0.0000      0.0000      0.0000      0.0000
   26  0.0000      0.0000      0.0000      0.0000
   27  0.0000      0.0000      0.0000      0.0000
   28  0.0000      0.0000      0.0000      0.0000
   29  0.0000      0.0000      0.0000      0.0000
   30  0.0000      0.0000      0.0000      0.0000
   31  0.0000      0.0000      0.0000      0.0000
   32  0.0000      0.0000      0.0000      0.0000
   33  0.0000      0.0000      0.0000      0.0000
   34  0.0000      0.0000      0.0000      0.0000
   35  0.0000      0.0000      0.0000      0.0000
   36  0.0000      0.0000      0.0000      0.0000
   37  0.0000      0.0000      0.0000      0.0000
   38  0.0000      0.0000      0.0000      0.0000
   39  0.0000      0.0000      0.0000      0.0000
   40  0.0000      0.0000      0.0000      0.0000
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                 1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                    |
|                                  Exe Time :24 July 2019      11:42:05                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    4

Tieback_78031                    :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      2.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-----------------------------------------------------------------------------------------------------------------------
ANCHOR    1   0.0000       0.0000       0.0000       0.0000       80304.       0.0000       0.0000     ELASTIC  ORIGINAL YOUNG MODULUS

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5265.     RIMNOR= 0.000
           RENORM= 712.9     REMNOR= 0.000     RATIO =0.3680     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 15.72     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5265.     RDR   = 0.000
           RATIOT=0.3680     RATIOR= 0.000
           MAX UN= 6.385     IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5265.     RIMNOR= 0.000
           RENORM= 50.97     REMNOR=0.1634E-23 RATIO =0.9839E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 15.72     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5265.     RDR   = 0.000
           RATIOT=0.9839E-01 RATIOR= 0.000
           MAX UN= 2.395     IEQ=    31 NODE     16 DOF   1  Y-DISPL.F
           MIN UN=-.2535E-11 IEQ=    45 NODE     23 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5265.     RIMNOR= 0.000
           RENORM= 10.93     REMNOR=0.8174E-23 RATIO =0.4555E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 15.72     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5265.     RDR   = 0.000
           RATIOT=0.4555E-01 RATIOR= 0.000
           MAX UN= 2.391     IEQ=    33 NODE     17 DOF   1  Y-DISPL.F
           MIN UN=-.2843E-10 IEQ=    21 NODE     11 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5265.     RIMNOR= 0.000
           RENORM=0.1410E-01 REMNOR=0.9516E-24 RATIO =0.1636E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 15.72     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5265.     RDR   = 0.000
           RATIOT=0.1636E-02 RATIOR= 0.000
           MAX UN=0.1187     IEQ=    43 NODE     22 DOF   1  Y-DISPL.F
           MIN UN=-.8715E-11 IEQ=    31 NODE     16 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     5 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5265.     RIMNOR= 0.000
           RENORM=0.3397E-21 REMNOR=0.1208E-23 RATIO =0.2540E-12 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 15.72     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5265.     RDR   = 0.000
           RATIOT=0.2540E-12 RATIOR= 0.000
           MAX UN=0.7439E-11 IEQ=    27 NODE     14 DOF   1  Y-DISPL.F
           MIN UN=-.8715E-11 IEQ=    29 NODE     15 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                 1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                    |
|                                  Exe Time :24 July 2019      11:42:05                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2
SOLUTION REACHED USING     5 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P   3     ( AT TIME   3.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)           (
    1   1.0627918E-03   2.0162031E-03
    2   1.4660324E-03   2.0162031E-03
    3   1.8673711E-03   1.9876734E-03
    4   2.2573664E-03   1.9031135E-03
    5   2.6250534E-03   1.7651077E-03
    6   2.9600897E-03   1.5773041E-03
    7   3.2529709E-03   1.3444381E-03
    8   3.4952506E-03   1.0723570E-03
    9   3.6797647E-03   7.6804128E-04
   10   3.8008819E-03   4.3994786E-04
   11   3.8548421E-03   9.8327648E-05
   12   3.8401071E-03  -2.4488099E-04
   13   3.7576851E-03  -5.7615793E-04
   14   3.6114410E-03  -8.8047836E-04
   15   3.4083884E-03  -1.1413788E-03
   16   3.1588780E-03  -1.3424516E-03
   17   2.8760967E-03  -1.4731690E-03
   18   2.5743092E-03  -1.5333833E-03
   19   2.2668269E-03  -1.5323443E-03
   20   1.9645984E-03  -1.4829019E-03
   21   1.6761086E-03  -1.3968456E-03
   22   1.4075878E-03  -1.2848968E-03
   23   1.1632280E-03  -1.1567752E-03
   24   9.4538052E-04  -1.0211110E-03
   25   7.5482171E-04  -8.8487550E-04
   26   5.9123095E-04  -7.5163054E-04
   27   4.5402537E-04  -6.2055746E-04
   28   3.4316538E-04  -4.8713384E-04
   29   2.5896516E-04  -3.5681035E-04
   30   1.9937365E-04  -2.4250064E-04
   31   1.6051176E-04  -1.4998796E-04
   32   1.3786175E-04  -8.0227512E-05
   33   1.2703737E-04  -3.1219771E-05
   34   1.2422574E-04   5.6650877E-07
   35   1.2638663E-04   1.9192670E-05
   36   1.3128795E-04   2.8595845E-05
   37   1.3743858E-04   3.2203593E-05
   38   1.4396447E-04   3.2738111E-05
   39   1.5045834E-04   3.2140461E-05
   40   1.5682179E-04   3.1559893E-05
   41   1.6310833E-04   3.1368348E-05



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                 1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                    |
|                                  Exe Time :24 July 2019      11:42:05                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   1

0_L                           :
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   41
C U R R E N T   T I M E   I S      3.0000

 HARDENING 2D SOIL ELEMENT

 ****** TOTAL STRESS FORMULATION *****

 EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P          STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
------------------------------------------------------------------
   1 D   0.000     -1.0628E-03   0.000       0.000       0.000       0.000          ACTIVE   0.000       0.000       0.000       1.000       1.000
```

0.000	0.000	0.000	Strato1_3095_78023_L_0											
2 D	0.2428	-1.4660E-03	3.806	1.214	3.806	1.903	ACTIVE	0.000	-0.2000	0.000	1.000	1.000		
1.214	0.000	0.000	Strato1_3095_78023_L_0											
3 D	0.4880	-1.8674E-03	7.649	2.440	7.649	3.825	ACTIVE	0.000	-0.4000	0.000	1.000	1.000		
2.440	0.000	0.000	Strato1_3095_78023_L_0											
4 D	0.7375	-2.2574E-03	11.56	3.687	11.56	5.780	ACTIVE	0.000	-0.6000	0.000	1.000	1.000		
3.687	0.000	0.000	Strato1_3095_78023_L_0											
5 D	0.9924	-2.6251E-03	15.55	4.962	15.55	7.777	ACTIVE	0.000	-0.8000	0.000	1.000	1.000		
4.962	0.000	0.000	Strato1_3095_78023_L_0											
6 D	1.253	-2.9601E-03	19.64	6.266	19.64	9.821	ACTIVE	0.000	-1.000	0.000	1.000	1.000		
6.266	0.000	0.000	Strato1_3095_78023_L_0											
7 D	1.520	-3.2530E-03	23.82	7.598	23.82	11.91	ACTIVE	0.000	-1.200	0.000	1.000	1.000		
7.598	0.000	0.000	Strato1_3095_78023_L_0											
8 D	1.791	-3.4953E-03	28.07	8.953	28.07	14.03	ACTIVE	0.000	-1.400	0.000	1.000	1.000		
8.953	0.000	0.000	Strato1_3095_78023_L_0											
9 D	2.220	-3.6798E-03	34.79	11.10	34.79	17.40	ACTIVE	0.000	-1.600	0.000	1.000	1.000		
11.10	0.000	0.000	Strato1_3095_78023_L_0											
10 D	2.641	-3.8009E-03	41.40	13.21	41.40	20.70	ACTIVE	0.000	-1.800	0.000	1.000	1.000		
13.21	0.000	0.000	Strato1_3095_78023_L_0											
11 D	3.020	-3.8548E-03	47.33	15.10	47.33	23.67	ACTIVE	0.000	-2.000	0.000	1.000	1.000		
15.10	0.000	0.000	Strato1_3095_78023_L_0											
12 D	3.391	-3.8401E-03	53.16	16.96	53.16	26.58	ACTIVE	0.000	-2.200	0.000	1.000	1.000		
16.96	0.000	0.000	Strato1_3095_78023_L_0											
13 D	3.733	-3.7577E-03	58.52	18.67	58.52	29.26	ACTIVE	0.000	-2.400	0.000	1.000	1.000		
18.67	0.000	0.000	Strato1_3095_78023_L_0											
14 D	4.074	-3.6114E-03	63.85	20.37	63.85	31.93	ACTIVE	0.000	-2.600	0.000	1.000	1.000		
20.37	0.000	0.000	Strato1_3095_78023_L_0											
15 D	4.392	-3.4084E-03	68.84	21.96	68.84	34.42	ACTIVE	0.000	-2.800	0.000	1.000	1.000		
21.96	0.000	0.000	Strato1_3095_78023_L_0											
16 D	4.711	-3.1589E-03	73.85	23.56	73.85	36.92	ACTIVE	0.000	-3.000	0.000	1.000	1.000		
23.56	0.000	0.000	Strato1_3095_78023_L_0											
17 D	4.950	-2.8761E-03	77.59	24.75	77.59	38.79	ACTIVE	0.000	-3.200	0.000	1.000	1.000		
24.75	0.000	0.000	Strato1_3095_78023_L_0											
18 D	5.154	-2.5743E-03	80.78	25.77	80.78	40.39	ACTIVE	0.000	-3.400	0.000	1.000	1.000		
25.77	0.000	0.000	Strato1_3095_78023_L_0											
19 D	5.360	-2.2668E-03	84.02	26.80	84.02	42.01	ACTIVE	0.000	-3.600	0.000	1.000	1.000		
26.80	0.000	0.000	Strato1_3095_78023_L_0											
20 D	5.569	-1.9646E-03	87.29	27.85	87.29	43.64	ACTIVE	0.000	-3.800	0.000	1.000	1.000		
27.85	0.000	0.000	Strato1_3095_78023_L_0											
21 D	5.780	-1.6761E-03	90.60	28.90	90.60	45.30	ACTIVE	0.000	-4.000	0.000	1.000	1.000		
28.90	0.000	0.000	Strato1_3095_78023_L_0											
22 D	5.993	-1.4076E-03	93.94	29.97	93.94	46.97	ACTIVE	0.000	-4.200	0.000	1.000	1.000		
29.97	0.000	0.000	Strato1_3095_78023_L_0											
23 D	6.208	-1.1632E-03	97.30	31.04	97.30	48.65	ACTIVE	0.000	-4.400	0.000	1.000	1.000		
31.04	0.000	0.000	Strato1_3095_78023_L_0											
24 D	6.568	-9.4538E-04	100.7	32.84	100.7	50.35	UL-RL	1.8520E+04	-4.600	0.000	1.000	1.000		
32.84	0.000	0.000	Strato1_3095_78023_L_0											
25 D	7.616	-7.5482E-04	104.1	38.08	104.1	52.06	UL-RL	1.8520E+04	-4.800	0.000	1.000	1.000		
38.08	0.000	0.000	Strato1_3095_78023_L_0											
26 D	8.566	-5.9123E-04	107.6	42.83	107.6	53.78	UL-RL	1.8520E+04	-5.000	0.000	1.000	1.000		
42.83	0.000	0.000	Strato1_3095_78023_L_0											
27 D	9.420	-4.5403E-04	111.0	47.10	111.0	55.51	UL-RL	1.8520E+04	-5.200	0.000	1.000	1.000		
47.10	0.000	0.000	Strato1_3095_78023_L_0											
28 D	6.055	-3.4317E-04	114.5	30.28	114.5	57.24	UL-RL	7.8586E+04	-5.400	0.000	1.000	1.000		
30.28	0.000	0.000	Strato2_84780_84781_L_0											
29 D	7.728	-2.5897E-04	118.0	38.64	118.0	58.99	UL-RL	7.8586E+04	-5.600	0.000	1.000	1.000		
38.64	0.000	0.000	Strato2_84780_84781_L_0											
30 D	9.016	-1.9937E-04	121.5	45.08	121.5	60.75	UL-RL	7.8586E+04	-5.800	0.000	1.000	1.000		
45.08	0.000	0.000	Strato2_84780_84781_L_0											
31 D	9.979	-1.6051E-04	125.0	49.89	125.0	62.51	UL-RL	7.8586E+04	-6.000	0.000	1.000	1.000		
49.89	0.000	0.000	Strato2_84780_84781_L_0											
32 D	10.69	-1.3786E-04	128.6	53.44	128.6	64.28	UL-RL	7.8586E+04	-6.200	0.000	1.000	1.000		
53.44	0.000	0.000	Strato2_84780_84781_L_0											
33 D	11.21	-1.2704E-04	132.1	56.07	132.1	66.05	UL-RL	7.8586E+04	-6.400	0.000	1.000	1.000		
56.07	0.000	0.000	Strato2_84780_84781_L_0											
34 D	11.61	-1.2423E-04	135.7	58.07	135.7	67.83	UL-RL	7.8586E+04	-6.600	0.000	1.000	1.000		
58.07	0.000	0.000	Strato2_84780_84781_L_0											
35 D	11.94	-1.2639E-04	139.2	59.68	139.2	69.62	UL-RL	7.8586E+04	-6.800	0.000	1.000	1.000		
59.68	0.000	0.000	Strato2_84780_84781_L_0											
36 D	12.22	-1.3129E-04	142.8	61.09	142.8	71.41	UL-RL	7.8586E+04	-7.000	0.000	1.000	1.000		
61.09	0.000	0.000	Strato2_84780_84781_L_0											
37 D	12.48	-1.3744E-04	146.4	62.40	146.4	73.20	UL-RL	7.8586E+04	-7.200	0.000	1.000	1.000		
62.40	0.000	0.000	Strato2_84780_84781_L_0											
38 D	12.74	-1.4396E-04	150.0	63.69	150.0	75.00	UL-RL	7.8586E+04	-7.400	0.000	1.000	1.000		
63.69	0.000	0.000	Strato2_84780_84781_L_0											
39 D	13.00	-1.5046E-04	153.6	64.98	153.6	76.80	UL-RL	7.8586E+04	-7.600	0.000	1.000	1.000		
64.98	0.000	0.000	Strato2_84780_84781_L_0											
40 D	13.26	-1.5682E-04	157.2	66.29	157.2	78.61	UL-RL	7.8586E+04	-7.800	0.000	1.000	1.000		
66.29	0.000	0.000	Strato2_84780_84781_L_0											
41 D	6.761	-1.6311E-04	160.8	67.61	160.8	80.42	UL-RL	7.8586E+04	-8.000	0.000	1.000	1.000		
67.61	0.000	0.000	Strato2_84780_84781_L_0											

```
+--------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*  |
|                                                                                                        |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                  |
|                                   Exe Time :24 July 2019      11:42:05                                  |
+--------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2
```

S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

0_R :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 41
C U R R E N T   T I M E   I S   3.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000	0.000	0.000	0.000	not available
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000	0.000	0.000	0.000	not available
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000	0.000	0.000	0.000	not available
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000	0.000	0.000	0.000	not available
6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000	0.000	0.000	0.000	not available
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000	0.000	0.000	0.000	not available
9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000	0.000	0.000	0.000	not available
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000	0.000	0.000	0.000	not available
11	0.000	--	--	--	--	--	REMOVED	--	-2.000	0.000	1.000	1.000	0.000	0.000	0.000	not available
12	0.000	--	--	--	--	--	REMOVED	--	-2.200	0.000	1.000	1.000	0.000	0.000	0.000	not available
13	0.000	--	--	--	--	--	REMOVED	--	-2.400	0.000	1.000	1.000	0.000	0.000	0.000	not available
14	0.000	--	--	--	--	--	REMOVED	--	-2.600	0.000	1.000	1.000	0.000	0.000	0.000	not available
15 D	0.6851	3.4084E-03	0.9500	3.426	53.20	26.60	PASSIVE	0.000	-2.800	0.000	1.000	1.000	3.426	0.000	0.000	Strato1_3095_78023_L_0
16 D	3.426	3.1589E-03	4.750	17.13	57.00	28.50	PASSIVE	0.000	-3.000	0.000	1.000	1.000	17.13	0.000	0.000	Strato1_3095_78023_L_0
17 D	6.166	2.8761E-03	8.550	30.83	60.80	30.83	PASSIVE	0.000	-3.200	0.000	1.000	1.000	30.83	0.000	0.000	Strato1_3095_78023_L_0
18 D	8.323	2.5743E-03	12.35	41.62	64.60	41.62	V-C	8032.	-3.400	0.000	1.000	1.000	41.62	0.000	0.000	Strato1_3095_78023_L_0
19 D	8.284	2.2668E-03	16.15	41.42	68.40	41.42	V-C	8032.	-3.600	0.000	1.000	1.000	41.42	0.000	0.000	Strato1_3095_78023_L_0
20 D	8.236	1.9646E-03	19.95	41.18	72.20	41.18	V-C	8032.	-3.800	0.000	1.000	1.000	41.18	0.000	0.000	Strato1_3095_78023_L_0
21 D	8.198	1.6761E-03	23.75	40.99	76.00	40.99	V-C	8032.	-4.000	0.000	1.000	1.000	40.99	0.000	0.000	Strato1_3095_78023_L_0
22 D	8.184	1.4076E-03	27.55	40.92	79.80	40.92	V-C	8032.	-4.200	0.000	1.000	1.000	40.92	0.000	0.000	Strato1_3095_78023_L_0
23 D	8.109	1.1632E-03	31.35	40.55	83.60	41.80	UL-RL	1.2852E+04	-4.400	0.000	1.000	1.000	40.55	0.000	0.000	Strato1_3095_78023_L_0
24 D	7.973	9.4538E-04	35.15	39.86	87.40	43.70	UL-RL	1.2852E+04	-4.600	0.000	1.000	1.000	39.86	0.000	0.000	Strato1_3095_78023_L_0
25 D	7.900	7.5482E-04	38.95	39.50	91.20	45.60	UL-RL	1.2852E+04	-4.800	0.000	1.000	1.000	39.50	0.000	0.000	Strato1_3095_78023_L_0
26 D	7.892	5.9123E-04	42.75	39.46	95.00	47.50	UL-RL	1.2852E+04	-5.000	0.000	1.000	1.000	39.46	0.000	0.000	Strato1_3095_78023_L_0
27 D	7.949	4.5403E-04	46.55	39.74	98.80	49.40	UL-RL	1.2852E+04	-5.200	0.000	1.000	1.000	39.74	0.000	0.000	Strato1_3095_78023_L_0
28 D	10.11	3.4317E-04	50.35	50.55	102.6	51.30	UL-RL	4.2592E+04	-5.400	0.000	1.000	1.000	50.55	0.000	0.000	Strato2_84780_84781_L_0
29 D	9.796	2.5897E-04	54.15	48.98	106.4	53.20	UL-RL	4.2592E+04	-5.600	0.000	1.000	1.000	48.98	0.000	0.000	Strato2_84780_84781_L_0
30 D	9.690	1.9937E-04	57.95	48.45	110.2	55.10	UL-RL	4.2592E+04	-5.800	0.000	1.000	1.000	48.45	0.000	0.000	Strato2_84780_84781_L_0
31 D	9.757	1.6051E-04	61.75	48.79	114.0	57.00	UL-RL	4.2592E+04	-6.000	0.000	1.000	1.000				

```
48.79       0.000       0.000     Strato2_84780_84781_L_0
  32 D   9.962      1.3786E-04   65.55       49.81       117.8       58.90          UL-RL  4.2592E+04  -6.200       0.000       1.000       1.000
49.81       0.000       0.000     Strato2_84780_84781_L_0
  33 D   10.27      1.2704E-04   69.35       51.33       121.6       60.80          UL-RL  4.2592E+04  -6.400       0.000       1.000       1.000
51.33       0.000       0.000     Strato2_84780_84781_L_0
  34 D   10.64      1.2423E-04   73.15       53.18       125.4       62.70          UL-RL  4.2592E+04  -6.600       0.000       1.000       1.000
53.18       0.000       0.000     Strato2_84780_84781_L_0
  35 D   11.05      1.2639E-04   76.95       55.24       129.2       64.60          UL-RL  4.2592E+04  -6.800       0.000       1.000       1.000
55.24       0.000       0.000     Strato2_84780_84781_L_0
  36 D   11.48      1.3129E-04   80.75       57.41       133.0       66.50          UL-RL  4.2592E+04  -7.000       0.000       1.000       1.000
57.41       0.000       0.000     Strato2_84780_84781_L_0
  37 D   11.93      1.3744E-04   84.55       59.63       136.8       68.40          UL-RL  4.2592E+04  -7.200       0.000       1.000       1.000
59.63       0.000       0.000     Strato2_84780_84781_L_0
  38 D   12.37      1.4396E-04   88.35       61.86       140.6       70.30          UL-RL  4.2592E+04  -7.400       0.000       1.000       1.000
61.86       0.000       0.000     Strato2_84780_84781_L_0
  39 D   12.82      1.5046E-04   92.15       64.09       144.4       72.20          UL-RL  4.2592E+04  -7.600       0.000       1.000       1.000
64.09       0.000       0.000     Strato2_84780_84781_L_0
  40 D   13.26      1.5682E-04   95.95       66.30       148.2       74.10          UL-RL  4.2592E+04  -7.800       0.000       1.000       1.000
66.30       0.000       0.000     Strato2_84780_84781_L_0
  41 D   6.851      1.6311E-04   99.75       68.51       152.0       76.00          UL-RL  4.2592E+04  -8.000       0.000       1.000       1.000
68.51       0.000       0.000     Strato2_84780_84781_L_0
```

```
+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                      |
|                                                                                                                               |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                         |
|                                   Exe Time :24 July 2019      11:42:05                                                        |
+-------------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   40
C U R R E N T   T I M E   I S     3.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-----------------------------------------------------
    1-1.29896E-12 1.29896E-12-1.22791E-13 5.21749E-13
    2 -13.529      13.529    -5.70932E-13 -2.7057
    3 -13.041      13.041      2.7057     -5.3139
    4 -12.303      12.303      5.3139     -7.7745
    5 -11.311      11.311      7.7745     -10.037
    6 -10.058      10.058      10.037     -12.048
    7 -8.5381      8.5381      12.048     -13.756
    8 -6.7475      6.7475      13.756     -15.105
    9 -4.5279      4.5279      15.105     -16.011
   10 -1.8865      1.8865      16.011     -16.388
   11  1.1333     -1.1333      16.388     -16.162
   12  4.5247     -4.5247      16.162     -15.257
   13  8.2580     -8.2580      15.257     -13.605
   14  12.332     -12.332      13.605     -11.139
   15  16.038     -16.038      11.139     -7.9310
   16  17.324     -17.324      7.9310     -4.4661
   17  16.108     -16.108      4.4661     -1.2446
   18  12.938     -12.938      1.2446      1.3431
   19  10.015     -10.015     -1.3431      3.3460
   20  7.3480     -7.3480     -3.3460      4.8156
   21  4.9301     -4.9301     -4.8156      5.8016
   22  2.7390     -2.7390     -5.8016      6.3494
   23 0.83769    -0.83769     -6.3494      6.5169
   24-0.56679     0.56679     -6.5169      6.4036
   25-0.85132     0.85132     -6.4036      6.2333
   26-0.17827     0.17827     -6.2333      6.1977
   27  1.2926     -1.2926     -6.1977      6.4562
   28 -2.7627      2.7627     -6.4562      5.9037
   29 -4.8310      4.8310     -5.9037      4.9374
   30 -5.5051      5.5051     -4.9374      3.8364
   31 -5.2839      5.2839     -3.8364      2.7797
   32 -4.5572      4.5572     -2.7797      1.8682
   33 -3.6092      3.6092     -1.8682      1.1464
   34 -2.6314      2.6314     -1.1464     0.62011
   35 -1.7422      1.7422    -0.62011     0.27168
   36 -1.0060      1.0060    -0.27168     7.04794E-02
   37-0.45133     0.45133    -7.04794E-02-1.97859E-02
   38-8.55458E-02 8.55458E-02 1.97859E-02-3.68951E-02
   39 9.36463E-02-9.36463E-02 3.68951E-02-1.81658E-02
   40 9.08277E-02-9.08277E-02 1.81658E-02 1.48423E-14
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                     |
|                                 Exe Time :24 July 2019      11:42:05                                                    |
+-------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    4

Tieback_78031                    :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      3.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------------------
ANCHOR    1   40.265       0.0000      5.01413E-04   0.0000       80304.       0.0000       0.0000     ELASTIC  ORIGINAL YOUNG MODULUS



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                1468.1-GA27-Cepav2.BaseDesignSection_28.SLERara_3454                                     |
|                                 Exe Time :24 July 2019      11:42:05                                                    |
+-------------------------------------------------------------------------------------------------------------------------+


     F I N A L    I N C R E M E N T A L    A N A L Y S I S

                    S U M M A R Y

     STEP                                  NO. OF ITERATIONS

        1           CONVERGENCE :YES                        2
        2           CONVERGENCE :YES                        2
        3           CONVERGENCE :YES                        5



 END OF PROCESS FOR PROBLEM
1468.1 - GA27 - Cepav2
NONLINEAR SOLUTION CPU TIME ....    0.03 [sec]
DATABASE  CREATION CPU TIME.....    0.10 [sec]
```

3.5. Design Assumption : A1+M1+R1 - File di Paratie - File di input (.d)

```
* PARATIE ANALYSIS FOR DESIGN SECTION:Base Design Section USING ASSUMPTION: A1+M1+R1
 * Time:mercoledì 24 luglio 2019 11:42:05
 * 1: Defining general settings
 UNIT  m kN
 TITLE 1468.1 - GA27 - Cepav2
 DELTA 0.2
 option param itemax 100
 option control hinges 0 0.0001 0.001

 * 2: Defining wall(s)
 WALL LeftWall_32 0 -8 0 1

 * 3: Defining surfaces for wall(s)
 SOIL 0_L LeftWall_32 -8 0 1 0
 SOIL 0_R LeftWall_32 -8 0 2 180

 * 4: Defining soil layers
 *
 * Soil Profile (Strato1_3095_78023_L_0)
 *
 LDATA Strato1_3095_78023_L_0 0 LeftWall_32
 ATREST 0.5 0.5 1
 WEIGHT 19 9 10
 PERMEABILITY 1E-05
 RESISTANCE 0 29
 YOUNG 2.5E+04 4E+04
 ENDL
 *
 * Soil Profile (Strato2_84780_84781_L_0)
 *
 LDATA Strato2_84780_84781_L_0 -5.35 LeftWall_32
 ATREST 0.5 0.5 1
```

```
WEIGHT 19 9 10
PERMEABILITY 1E-05
RESISTANCE 20 35
YOUNG 5E+04 1.5E+05
ENDL

* 5: Defining structural materials
* Steel material: 113 Name=S275 E=210000000 kPa
MATERIAL S275_113 2.1E+08
* Concrete material: 104 Name=C25/30 E=31475800 kPa
MATERIAL C2530_104 3.148E+07
* Rebar material: 78036 Name=S275 E=210000000 kPa
MATERIAL S275_78036 2.1E+08

* 6: Defining structural elements
* 6.1: Beams and combined Wall Elements
BEAM WallElement_33 LeftWall_32 -8 0 S275_113 0.08153 00 00 0


* 6.2: Supports
WIRE Tieback_78031 LeftWall_32 -0.2 S275_78036 0.0003824 0 70 0 0




* 6.3: Strips
STRIP LeftWall_32 3 3 2.33 3 0 60.09 30

* 7: Defining Steps
STEP Stage0_86326
CHANGE Strato1_3095_78023_L_0 U-FRICT=29 LeftWall_32
CHANGE Strato1_3095_78023_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato1_3095_78023_L_0 U-KA=0.319 LeftWall_32
CHANGE Strato1_3095_78023_L_0 U-KP=3.606 LeftWall_32
CHANGE Strato1_3095_78023_L_0 D-KA=0.319 LeftWall_32
CHANGE Strato1_3095_78023_L_0 D-KP=3.606 LeftWall_32
CHANGE Strato2_84780_84781_L_0 U-FRICT=35 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato2_84780_84781_L_0 U-KA=0.248 LeftWall_32
CHANGE Strato2_84780_84781_L_0 U-KP=5.02 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-KA=0.248 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-KP=5.02 LeftWall_32
CHANGE Strato1_3095_78023_L_0 U-COHE=0 LeftWall_32
CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_84780_84781_L_0 U-COHE=20 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -17 0 -8 0 0
ENDSTEP

STEP Stage1_31
CHANGE Strato1_3095_78023_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -17 0 -8 0 0
ADD WallElement_33 Tieback_78031
ENDSTEP

STEP Stage2_158
CHANGE Strato1_3095_78023_L_0 D-FRICT=29 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-FRICT=35 LeftWall_32
CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-COHE=20 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -2.75
WATER -17 0 -8 0 0
ENDSTEP
```

3.6. Design Assumption : A1+M1+R1 - File di Paratie - File di output (.out)

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
|                                                                                                                         |
|                                    1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                  |
|                                     Exe Time :24 July 2019      11:42:05                                                |
```

```
+-----------------------------------------------------------------------------------------------------------------------+

                  **********************************************************
                  *                                                        *
                  *  PARATIE PLUS Non-Linear Spring Engine                 *
                  *                                                        *
                  *         AN ELASTOPLASTIC FINITE ELEMENT PROGRAM        *
                  *         FOR FLEXIBLE EARTH-RETAINING STRUCTURES        *
                  *                                                        *
                  *         Written by Ce.A.S. s.r.l. (ITALY)              *
                  *         with the scientific supervision of             *
                  *         Roberto Nova - full professor SOIL MECHANICS   *
                  *         at Politecnico di Milano (ITALY)               *
                  *                                                        *
                  **********************************************************
                  *                                                        *
                  *  RELEASE   2017.1     *Build date:Jul 11, 2017*    *
                  *                                                        *
                  *                                                        *
                  *  Ce.A.S.     S.R.L   CENTRO DI ANALISI STRUTTURALE     *
                  *              VIALE   GIUSTINIANO 10                    *
                  *              20129   M I L A N O  (ITALIA)             *
                  *  TEL.        +39 02 2020221   (+39 035 23 67 19)       *
                  *  FAX         +39 02 29512533  (+39 035 42285 49)       *
                  *  email       bruno.becci@ceas.it                       *
                  *  Web Page    www.ceas.it                               *
                  **********************************************************



 JOB : 1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484
 STARTING
ACCEPTED   <FILE,GENW                                                                  >
ACCEPTED   <FILE,PLOTTER,BINARY                                                        >
ACCEPTED   <SOLVE TOTAL_STRESS                                                         >
ACCEPTED   <PARAM ITEMAX 100                                                           >
ACCEPTED   <CONTROL HINGES 0 0.0001 0.001                                              >



                  **********************************************************
                  *                                                        *
                  *  WARNING : PORE PRESSURES ARE AUTOMATICALLY COMPUTED   *
                  *    BY THE PROGRAM.                                     *
                  **********************************************************

PRELIMINARY OPERATIONS CPU TIME     0.01 [sec]



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*            |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                  |
|                                   Exe Time :24 July 2019      11:42:05                                                 |
+-----------------------------------------------------------------------------------------------------------------------+


INPUT FILE HAS BEEN GENERATED BY WALGEN PROGRAM


1468.1 - GA27 - Cepav2


NO. OF NODAL POINTS (NUMNP) ..................   41
NO. OF COORDINATES  (NCOORD)..................    2
NO. OF NODE DOFS    (NDOF)....................    2
NO. OF EQUATIONS    (NEQ).....................   82
NO. OF CONSTRAINTS CARDS (NVINC)..............    0
NO. OF ELEMENT GROUPS (NEG)...................    4
NO. OF SOLUTION STEPS (NSTE)..................    3
NO. OF ELEMENT SETS ATTACHED TO SLAVE NODES ...    0
NO. OF RECORD FROM WALGEN ....................   68
NO. OF LONG NAMES (LASTNAME) .................   16
LENGTH UNIT CHOICE ...........................    3 (M   )
FORCE  UNIT CHOICE ...........................    3 (KN  )
MAX PORE PRESSURE TABLE LENGTH................    1
NO. OF ELEMENT GROUPS REQUIRING ADD. SLIP DOF .    0


IDOFA (01) =  2  Y-DISPL.F
IDOFA (02) =  4   X-ROT. F
```

```
 RELEVANT ITEMS UNITS

 STRESSES                  kPa
 Y-DISPLACEMENTS           m
 ROTATIONS                 RADIANS
 BEAM AND SLAB MOMENTS     kN*m/m
 BEAM SHEAR FORCES         kN/m
 ANCHOR FORCES             kN/m
 AXIAL FORCES IN TRUSSES   kN/m
 AXIAL FORCES SPRINGS      kN/m
 Y-REACTIONS               kN/m
 X-MOMENT REACTIONS        kN*m/m
 ETC.



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                  |
|                                   Exe Time :24 July 2019      11:42:05                                                |
+-----------------------------------------------------------------------------------------------------------------------+
                   P R E P R O C E S S O R     D A T A

                   N O.  O F   C O M M A N D S     68

    1 : UNIT  m kN
    2 : TITLE 1468.1 - GA27 - Cepav2
    3 : DELTA 0.2
    4 : option param itemax 100
    5 : option control hinges 0 0.0001 0.001
    6 : WALL LeftWall_32 0 -8 0 1
    7 : SOIL 0_L LeftWall_32 -8 0 1 0
    8 : SOIL 0_R LeftWall_32 -8 0 2 180
    9 : LDATA Strato1_3095_78023_L_0 0 LeftWall_32
   10 : ATREST 0.5 0.5 1
   11 : WEIGHT 19 9 10
   12 : PERMEABILITY 1E-05
   13 : RESISTANCE 0 29
   14 : YOUNG 2.5E+04 4E+04
   15 : ENDL
   16 : LDATA Strato2_84780_84781_L_0 -5.35 LeftWall_32
   17 : ATREST 0.5 0.5 1
   18 : WEIGHT 19 9 10
   19 : PERMEABILITY 1E-05
   20 : RESISTANCE 20 35
   21 : YOUNG 5E+04 1.5E+05
   22 : ENDL
   23 : MATERIAL S275_113 2.1E+08
   24 : MATERIAL C2530_104 3.148E+07
   25 : MATERIAL S275_78036 2.1E+08
   26 : BEAM WallElement_33 LeftWall_32 -8 0 S275_113 0.08153 00 00 0
   27 : WIRE Tieback_78031 LeftWall_32 -0.2 S275_78036 0.0003824 0 70 0 0
   28 : STRIP LeftWall_32 3 3 2.33 3 0 60.09 30
   29 : STEP Stage0_86326
   30 : CHANGE Strato1_3095_78023_L_0 U-FRICT=29 LeftWall_32
   31 : CHANGE Strato1_3095_78023_L_0 D-FRICT=29 LeftWall_32
   32 : CHANGE Strato1_3095_78023_L_0 U-KA=0.319 LeftWall_32
   33 : CHANGE Strato1_3095_78023_L_0 U-KP=3.606 LeftWall_32
   34 : CHANGE Strato1_3095_78023_L_0 D-KA=0.319 LeftWall_32
   35 : CHANGE Strato1_3095_78023_L_0 D-KP=3.606 LeftWall_32
   36 : CHANGE Strato2_84780_84781_L_0 U-FRICT=35 LeftWall_32
   37 : CHANGE Strato2_84780_84781_L_0 D-FRICT=35 LeftWall_32
   38 : CHANGE Strato2_84780_84781_L_0 U-KA=0.248 LeftWall_32
   39 : CHANGE Strato2_84780_84781_L_0 U-KP=5.02 LeftWall_32
   40 : CHANGE Strato2_84780_84781_L_0 D-KA=0.248 LeftWall_32
   41 : CHANGE Strato2_84780_84781_L_0 D-KP=5.02 LeftWall_32
   42 : CHANGE Strato1_3095_78023_L_0 U-COHE=0 LeftWall_32
   43 : CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
   44 : CHANGE Strato2_84780_84781_L_0 U-COHE=20 LeftWall_32
   45 : CHANGE Strato2_84780_84781_L_0 D-COHE=20 LeftWall_32
   46 : SETWALL LeftWall_32
   47 : GEOM 0 0
   48 : WATER -17 0 -8 0 0
   49 : ENDSTEP
   50 : STEP Stage1_31
   51 : CHANGE Strato1_3095_78023_L_0 D-FRICT=29 LeftWall_32
   52 : CHANGE Strato2_84780_84781_L_0 D-FRICT=35 LeftWall_32
   53 : CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
   54 : CHANGE Strato2_84780_84781_L_0 D-COHE=20 LeftWall_32
   55 : SETWALL LeftWall_32
   56 : GEOM 0 0
   57 : WATER -17 0 -8 0 0
   58 : ADD WallElement_33 Tieback_78031
```

```
   59 : ENDSTEP
   60 : STEP Stage2_158
   61 : CHANGE Strato1_3095_78023_L_0 D-FRICT=29 LeftWall_32
   62 : CHANGE Strato2_84780_84781_L_0 D-FRICT=35 LeftWall_32
   63 : CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
   64 : CHANGE Strato2_84780_84781_L_0 D-COHE=20 LeftWall_32
   65 : SETWALL LeftWall_32
   66 : GEOM 0 -2.75
   67 : WATER -17 0 -8 0 0
   68 : ENDSTEP



+---------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                     |
|                                1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                  |
|                                 Exe Time :24 July 2019      11:42:05                                                |
+---------------------------------------------------------------------------------------------------------------------+
N O D A L    P O I N T    D A T A
--------------------------------

NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD /

   1  0.0000      0.0000     /    2  0.0000    -0.20000     /    3  0.0000    -0.40000     /    4  0.0000    -0.60000     /
   5  0.0000    -0.80000     /    6  0.0000     -1.0000     /    7  0.0000     -1.2000     /    8  0.0000     -1.4000     /
   9  0.0000     -1.6000     /   10  0.0000     -1.8000     /   11  0.0000     -2.0000     /   12  0.0000     -2.2000     /
  13  0.0000     -2.4000     /   14  0.0000     -2.6000     /   15  0.0000     -2.8000     /   16  0.0000     -3.0000     /
  17  0.0000     -3.2000     /   18  0.0000     -3.4000     /   19  0.0000     -3.6000     /   20  0.0000     -3.8000     /
  21  0.0000     -4.0000     /   22  0.0000     -4.2000     /   23  0.0000     -4.4000     /   24  0.0000     -4.6000     /
  25  0.0000     -4.8000     /   26  0.0000     -5.0000     /   27  0.0000     -5.2000     /   28  0.0000     -5.4000     /
  29  0.0000     -5.6000     /   30  0.0000     -5.8000     /   31  0.0000     -6.0000     /   32  0.0000     -6.2000     /
  33  0.0000     -6.4000     /   34  0.0000     -6.6000     /   35  0.0000     -6.8000     /   36  0.0000     -7.0000     /
  37  0.0000     -7.2000     /   38  0.0000     -7.4000     /   39  0.0000     -7.6000     /   40  0.0000     -7.8000     /
  41  0.0000     -8.0000     /



+---------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                     |
|                                1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                  |
|                                 Exe Time :24 July 2019      11:42:05                                                |
+---------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  1

0_L                             :
   5  41   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
.....2D PLASTIC SOIL .....
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active

 material set no.    1

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area      .....     .....     .....      flag
-----------------------------------------------------------------

    1    1    1   0.1000      0.000     0.000     0.000     1.000
    2    2    1   0.2000      0.000     0.000     0.000     1.000
    3    3    1   0.2000      0.000     0.000     0.000     1.000
    4    4    1   0.2000      0.000     0.000     0.000     1.000
    5    5    1   0.2000      0.000     0.000     0.000     1.000
    6    6    1   0.2000      0.000     0.000     0.000     1.000
    7    7    1   0.2000      0.000     0.000     0.000     1.000
```

8	8	1	0.2000	0.000	0.000	0.000	1.000
9	9	1	0.2000	0.000	0.000	0.000	1.000
10	10	1	0.2000	0.000	0.000	0.000	1.000
11	11	1	0.2000	0.000	0.000	0.000	1.000
12	12	1	0.2000	0.000	0.000	0.000	1.000
13	13	1	0.2000	0.000	0.000	0.000	1.000
14	14	1	0.2000	0.000	0.000	0.000	1.000
15	15	1	0.2000	0.000	0.000	0.000	1.000
16	16	1	0.2000	0.000	0.000	0.000	1.000
17	17	1	0.2000	0.000	0.000	0.000	1.000
18	18	1	0.2000	0.000	0.000	0.000	1.000
19	19	1	0.2000	0.000	0.000	0.000	1.000
20	20	1	0.2000	0.000	0.000	0.000	1.000
21	21	1	0.2000	0.000	0.000	0.000	1.000
22	22	1	0.2000	0.000	0.000	0.000	1.000
23	23	1	0.2000	0.000	0.000	0.000	1.000
24	24	1	0.2000	0.000	0.000	0.000	1.000
25	25	1	0.2000	0.000	0.000	0.000	1.000
26	26	1	0.2000	0.000	0.000	0.000	1.000
27	27	1	0.2000	0.000	0.000	0.000	1.000
28	28	2	0.2000	0.000	0.000	0.000	1.000
29	29	2	0.2000	0.000	0.000	0.000	1.000
30	30	2	0.2000	0.000	0.000	0.000	1.000
31	31	2	0.2000	0.000	0.000	0.000	1.000
32	32	2	0.2000	0.000	0.000	0.000	1.000
33	33	2	0.2000	0.000	0.000	0.000	1.000
34	34	2	0.2000	0.000	0.000	0.000	1.000
35	35	2	0.2000	0.000	0.000	0.000	1.000
36	36	2	0.2000	0.000	0.000	0.000	1.000
37	37	2	0.2000	0.000	0.000	0.000	1.000
38	38	2	0.2000	0.000	0.000	0.000	1.000
39	39	2	0.2000	0.000	0.000	0.000	1.000
40	40	2	0.2000	0.000	0.000	0.000	1.000
41	41	2	0.1000	0.000	0.000	0.000	1.000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                    |
|                                   Exe Time :24 July 2019      11:42:05                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  2

0_R                              :
   5  41   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
..........2D PLASTIC SOIL ..........
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active

 material set no.    1

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area      .....     .....     .....      flag
-----------------------------------------------------------------
```

1	1	1	0.1000	0.000	0.000	0.000	2.000
2	2	1	0.2000	0.000	0.000	0.000	2.000
3	3	1	0.2000	0.000	0.000	0.000	2.000
4	4	1	0.2000	0.000	0.000	0.000	2.000
5	5	1	0.2000	0.000	0.000	0.000	2.000
6	6	1	0.2000	0.000	0.000	0.000	2.000
7	7	1	0.2000	0.000	0.000	0.000	2.000
8	8	1	0.2000	0.000	0.000	0.000	2.000

9	9	1	0.2000	0.000	0.000	0.000	2.000
10	10	1	0.2000	0.000	0.000	0.000	2.000
11	11	1	0.2000	0.000	0.000	0.000	2.000
12	12	1	0.2000	0.000	0.000	0.000	2.000
13	13	1	0.2000	0.000	0.000	0.000	2.000
14	14	1	0.2000	0.000	0.000	0.000	2.000
15	15	1	0.2000	0.000	0.000	0.000	2.000
16	16	1	0.2000	0.000	0.000	0.000	2.000
17	17	1	0.2000	0.000	0.000	0.000	2.000
18	18	1	0.2000	0.000	0.000	0.000	2.000
19	19	1	0.2000	0.000	0.000	0.000	2.000
20	20	1	0.2000	0.000	0.000	0.000	2.000
21	21	1	0.2000	0.000	0.000	0.000	2.000
22	22	1	0.2000	0.000	0.000	0.000	2.000
23	23	1	0.2000	0.000	0.000	0.000	2.000
24	24	1	0.2000	0.000	0.000	0.000	2.000
25	25	1	0.2000	0.000	0.000	0.000	2.000
26	26	1	0.2000	0.000	0.000	0.000	2.000
27	27	1	0.2000	0.000	0.000	0.000	2.000
28	28	2	0.2000	0.000	0.000	0.000	2.000
29	29	2	0.2000	0.000	0.000	0.000	2.000
30	30	2	0.2000	0.000	0.000	0.000	2.000
31	31	2	0.2000	0.000	0.000	0.000	2.000
32	32	2	0.2000	0.000	0.000	0.000	2.000
33	33	2	0.2000	0.000	0.000	0.000	2.000
34	34	2	0.2000	0.000	0.000	0.000	2.000
35	35	2	0.2000	0.000	0.000	0.000	2.000
36	36	2	0.2000	0.000	0.000	0.000	2.000
37	37	2	0.2000	0.000	0.000	0.000	2.000
38	38	2	0.2000	0.000	0.000	0.000	2.000
39	39	2	0.2000	0.000	0.000	0.000	2.000
40	40	2	0.2000	0.000	0.000	0.000	2.000
41	41	2	0.1000	0.000	0.000	0.000	2.000

```
+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                     |
|                                                                                                                               |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                          |
|                                   Exe Time :24 July 2019      11:42:05                                                        |
+-------------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  3

WallElement_33                  :
   2  40   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   1   0
.....................................
..........2D WALL ELEMENT...........
.....................................

element group behaviour throughout stage analysis

stage   status
------------------
    1  inactive
    2   active
    3   active

 material set no.    1

 prop( 1) young modulus      0.210000E+09
 prop( 2) modification  time  0.00000
 prop( 3) new young modulus   0.00000
 prop( 4) poisson ratio       0.00000
 prop( 5) future ............0.182200E-43

 no. of step variable items:     1
 step  inertia multipier
-------------------------
    1   1.000
    2   1.000
    3   1.000

 element data
```

el	na	nb	mat	erc1	erc2	thick	by-i	by-j
1	1	2	1	0.000	0.000	0.8153E-01	0.000	0.000
2	2	3	1	0.000	0.000	0.8153E-01	0.000	0.000
3	3	4	1	0.000	0.000	0.8153E-01	0.000	0.000
4	4	5	1	0.000	0.000	0.8153E-01	0.000	0.000
5	5	6	1	0.000	0.000	0.8153E-01	0.000	0.000
6	6	7	1	0.000	0.000	0.8153E-01	0.000	0.000
7	7	8	1	0.000	0.000	0.8153E-01	0.000	0.000
8	8	9	1	0.000	0.000	0.8153E-01	0.000	0.000
9	9	10	1	0.000	0.000	0.8153E-01	0.000	0.000

10	10	11	1	0.000	0.000	0.8153E-01	0.000	0.000
11	11	12	1	0.000	0.000	0.8153E-01	0.000	0.000
12	12	13	1	0.000	0.000	0.8153E-01	0.000	0.000
13	13	14	1	0.000	0.000	0.8153E-01	0.000	0.000
14	14	15	1	0.000	0.000	0.8153E-01	0.000	0.000
15	15	16	1	0.000	0.000	0.8153E-01	0.000	0.000
16	16	17	1	0.000	0.000	0.8153E-01	0.000	0.000
17	17	18	1	0.000	0.000	0.8153E-01	0.000	0.000
18	18	19	1	0.000	0.000	0.8153E-01	0.000	0.000
19	19	20	1	0.000	0.000	0.8153E-01	0.000	0.000
20	20	21	1	0.000	0.000	0.8153E-01	0.000	0.000
21	21	22	1	0.000	0.000	0.8153E-01	0.000	0.000
22	22	23	1	0.000	0.000	0.8153E-01	0.000	0.000
23	23	24	1	0.000	0.000	0.8153E-01	0.000	0.000
24	24	25	1	0.000	0.000	0.8153E-01	0.000	0.000
25	25	26	1	0.000	0.000	0.8153E-01	0.000	0.000
26	26	27	1	0.000	0.000	0.8153E-01	0.000	0.000
27	27	28	1	0.000	0.000	0.8153E-01	0.000	0.000
28	28	29	1	0.000	0.000	0.8153E-01	0.000	0.000
29	29	30	1	0.000	0.000	0.8153E-01	0.000	0.000
30	30	31	1	0.000	0.000	0.8153E-01	0.000	0.000
31	31	32	1	0.000	0.000	0.8153E-01	0.000	0.000
32	32	33	1	0.000	0.000	0.8153E-01	0.000	0.000
33	33	34	1	0.000	0.000	0.8153E-01	0.000	0.000
34	34	35	1	0.000	0.000	0.8153E-01	0.000	0.000
35	35	36	1	0.000	0.000	0.8153E-01	0.000	0.000
36	36	37	1	0.000	0.000	0.8153E-01	0.000	0.000
37	37	38	1	0.000	0.000	0.8153E-01	0.000	0.000
38	38	39	1	0.000	0.000	0.8153E-01	0.000	0.000
39	39	40	1	0.000	0.000	0.8153E-01	0.000	0.000
40	40	41	1	0.000	0.000	0.8153E-01	0.000	0.000

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                    |
|                                   Exe Time :24 July 2019      11:42:05                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  4

Tieback_78031                  :
   6   1   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   2   0
.....................................
.........2D POST-TENSION ANCHOR....
.....................................

element group behaviour throughout stage analysis

stage   status
------------------
    1  inactive
    2   active
    3   active

 material set no.    1

 prop( 1) angle          70.0000
 prop( 2) young modulus 0.210000E+09
 prop( 3) modification  time  0.00000
 prop( 4) new young modulus   0.00000

 no. of step variable items:     2
 step   -ve lim     +ve lim
------------------------------
    1   0.000       0.000
    2   0.000       0.000
    3   0.000       0.000

 element data

   el    n  mat       a/l     pinit    yieldc    yieldt
-----------------------------------------------------------

    1    2    1   0.3824E-03 0.000     0.000     0.000



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                    |
|                                   Exe Time :24 July 2019      11:42:05                                                  |
```

```
+-------------------------------------------------------------------------------------------------------------------------------+


NO. OF NODAL LOADS  (NLOAD) ...................    0
NO. OF LOAD CURVES  (NLCUR) ...................    6
MAXIMUM POINTS/LCURVE (NPTM)...................    5



+-------------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                     |
|                                                                                                                               |
|                                1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                            |
|                                 Exe Time :24 July 2019      11:42:05                                                          |
+-------------------------------------------------------------------------------------------------------------------------------+
L O A D     D A T A


    LOAD FUNCTION NUMBER   =    1
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       1.20000    0.0000E+00
       4.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    2
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       2.20000    0.0000E+00
       4.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    3
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       3.20000    0.0000E+00
       4.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    4
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       4.00000    0.1000E+01



    LOAD FUNCTION NUMBER   =    5
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       4.00000    0.1000E+01



    LOAD FUNCTION NUMBER   =    6
    NUMBER OF TIME POINTS  =    4
```

```
    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       4.00000    0.1000E+01


NO. OF DISTRIBUTED LOAD CARDS     0


+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*           |
|                                                                                                                   |
|                                 1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                               |
|                                  Exe Time :24 July 2019      11:42:05                                             |
+-------------------------------------------------------------------------------------------------------------------+
L O A D     B A L A N C E

STEP     1 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     1 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     2 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     2 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     3 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     3 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000


                     LOAD INPUT SECTION COMPLETED




+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*           |
|                                                                                                                   |
|                                 1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                               |
|                                  Exe Time :24 July 2019      11:42:05                                             |
+-------------------------------------------------------------------------------------------------------------------+


NO. OF LAYERS ................................    2
NO. OF DATA PER LAYER.........................  100



+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*           |
|                                                                                                                   |
|                                 1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                               |
|                                  Exe Time :24 July 2019      11:42:05                                             |
+-------------------------------------------------------------------------------------------------------------------+

LAYER DESCRIPTORS FOR STEP NO.    1


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  10.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.31900     WALL NO.        1
ITEM NO.  11<U-KP    >=  3.6060     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  25000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  40000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.31900     WALL NO.        1
```

```
ITEM NO.  61<D-KP    >=  3.6060     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  11.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -5.3500     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.24800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.0200     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.24800     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.0200     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    2


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  10.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.31900     WALL NO.        1
ITEM NO.  11<U-KP    >=  3.6060     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  25000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  40000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.31900     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.6060     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  11.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -5.3500     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.24800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.0200     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.24800     WALL NO.        1
```

```
ITEM NO.  61<D-KP    >=  5.0200     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    3


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  10.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.31900     WALL NO.        1
ITEM NO.  11<U-KP    >=  3.6060     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  25000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  40000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  29.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.31900     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.6060     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  11.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -5.3500     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  10<U-KA    >= 0.24800     WALL NO.        1
ITEM NO.  11<U-KP    >=  5.0200     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  20.000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  35.000     (BOTH WALLS)
ITEM NO.  60<D-KA    >= 0.24800     WALL NO.        1
ITEM NO.  61<D-KP    >=  5.0200     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)


DEFAULT WATER UNIT WEIGHT =  10.000
AVERAGED ON     6 VALUES




+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                  |
|                                   Exe Time :24 July 2019      11:42:05                                                |
+-----------------------------------------------------------------------------------------------------------------------+

PHASE DESCRIPTORS


STEP  NO.     1
                                      LEFT WALL    RIGHT WALL
Y                                      0.000       -0.9990E+30
Z-PC                                   0.000         0.000
Z-EXCAVATION                           0.000         0.000
Z-WATER_TABLE                         -17.00       -0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL              0.000         0.000
```

ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-8.000	-8.000
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 1

STEP NO. 2

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	0.000	0.000
Z-WATER_TABLE	-17.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-8.000	-8.000
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 2

STEP NO. 3

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-2.750	0.000
Z-WATER_TABLE	-17.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-8.000	-8.000
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000

```
lateral thrusts reduction elevatio      0.000         0.000
Downhill reduction factor for effe      0.000         0.000
Downhill reduction factor for pore      0.000         0.000
Uphill reduction factor for effect      0.000         0.000
Uphill reduction factor for pore p      0.000         0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]        0.000         0.000
UPHILL VERTICAL ACCEL.  Kv_uh [g]       0.000         0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]       0.000         0.000
UPHILL BETA ANGLE (SLOPE) [deg]         0.000         0.000
UPHILL DELTA/PHI RATIO                  0.000         0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]       0.000         0.000
DOWNHILL DELTA/PHI RATIO                0.000         0.000
DYN.WATER BEHAVIOUR                     0.000         0.000
Excess pore pressure RATIO Ru           0.000         0.000
SEISMIC PRESSURE LOWER VALUE            0.000         0.000
SEISMIC PRESSURE UPPER VALUE            0.000         0.000
SEISMIC PRESSURE LOWER LEVEL            0.000         0.000
SEISMIC PRESSURE UPPER LEVEL            0.000         0.000

================================================================================================================end of step    3


 LEFT-HAND WALL

 LOWER  LEVEL          -8.00000
 UPPER  LEVEL           0.00000

 RIGHT-HAND WALL

 LOWER  LEVEL          -8.00000
 UPPER  LEVEL           0.00000




+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                       |
|                                 1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                   |
|                                  Exe Time :24 July 2019      11:42:05                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
 I N I T I A L    S T R E S S    T A B L E S

            S E C T I O N

 NUMBER OF DEFINED TABLES             1


INPUT DATA FOR INITIAL STRESS SET NO.    1
PERTAINING SOIL ELEMENTS AT Y-COORD    0.0000

ACTIVATION TIME                              3.0000
END TIME (TIME BEYOND WHICH IT IS REMOVED)   3.0000

TYPE BOUSSINESQ

 HORIZONTAL DISTANCE (DY)           2.33000000000000
 FOUNDATION WIDTH    (B)            3.00000000000000
 ZETA-F.....                       0.000000000000000E+000
 Q-F .............                  60.0900000000000
 BETA ............                  30.0000000000000
 BEHAVIOUR (0=FREE, 1=REFLECTING)  0.000000000000000E+000


 ELEMENT GROUPS BACKUP AREA CAN STAY IN CORE AT
 POSITION        2279

 NO. OF D.P.W  FOR THIS AREA       4898
 MAX NO. OF D.P.W. AVAILABLE      81920
 ** MAX NO OF ITERATIONS SET TO         100

ITER     0 RNORM = 0.000      RMNORM= 0.000
           RINORM= 6047.      RIMNOR= 0.000
           RENORM= 0.000      REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 14.82      RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT    = 6047.     RDR    = 0.000
           RATIOT= 0.000      RATIOR= 0.000
           MAX UN= 0.000      IEQ=     82 NODE     41 DOF   2   X-ROT. F
           MIN UN= 0.000      IEQ=      1 NODE      1 DOF   1   Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS      0
```

```
ITER     1 RNORM = 0.000      RMNORM= 0.000
           RINORM= 6047.      RIMNOR= 0.000
           RENORM= 0.000      REMNOR= 0.000      RATIO = 0.000      TOLER =0.1000E-03      CONVERGED !
           RFMAX = 14.82      RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 6047.      RDR   = 0.000
           RATIOT= 0.000      RATIOR= 0.000
           MAX UN= 0.000      IEQ=     82 NODE     41 DOF    2   X-ROT. F
           MIN UN= 0.000      IEQ=      1 NODE      1 DOF    1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS      0


ITER     2 RNORM = 0.000      RMNORM= 0.000
           RINORM= 6047.      RIMNOR= 0.000
           RENORM= 0.000      REMNOR= 0.000      RATIO = 0.000      TOLER =0.1000E-03      CONVERGED !
           RFMAX = 14.82      RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 6047.      RDR   = 0.000
           RATIOT= 0.000      RATIOR= 0.000
           MAX UN= 0.000      IEQ=     82 NODE     41 DOF    2   X-ROT. F
           MIN UN= 0.000      IEQ=      1 NODE      1 DOF    1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS      0



+----------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*   |
|                                                                                                          |
|                                1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                         |
|                                 Exe Time :24 July 2019      11:42:05                                      |
+----------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2
SOLUTION REACHED USING      2 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    1     ( AT TIME   1.000      )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F         X-ROT. F
           (02)             (04)             (


ALL NODAL POINTS HAVE ZERO DISPLACEMENT COMPONENTS




+----------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*   |
|                                                                                                          |
|                                1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                         |
|                                 Exe Time :24 July 2019      11:42:05                                      |
+----------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S   R E S U L T S   F O R   G R O U P  N O.   1

0_L                               :
ELEMENT TYPE     5 NO.OF ELEMENTS. IN THIS GROUP   41
C U R R E N T   T I M E   I S      1.0000

 HARDENING 2D SOIL ELEMENT

 ****** TOTAL STRESS FORMULATION *****

 EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P      MAX-H-P          STATE   STIFFNESS Z-LEVEL      PORE        E FACTOR     UFACTOR
Peq            Su_a         Su_p      LAYER
 ----------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1 D   0.000       0.000       0.000       0.000       0.000       0.000            V-C  3.9789E+04   0.000       0.000        1.000        1.000
0.000        0.000        0.000     Strato1_3095_78023_L_0
   2 D  0.3800       0.000       3.800       1.900       3.800       1.900            V-C  3.9789E+04 -0.2000      0.000        1.000        1.000
1.900        0.000        0.000     Strato1_3095_78023_L_0
   3 D  0.7600       0.000       7.600       3.800       7.600       3.800            V-C  3.9789E+04 -0.4000      0.000        1.000        1.000
3.800        0.000        0.000     Strato1_3095_78023_L_0
   4 D   1.140       0.000       11.40       5.700       11.40       5.700            V-C  3.9789E+04 -0.6000      0.000        1.000        1.000
5.700        0.000        0.000     Strato1_3095_78023_L_0
   5 D   1.520       0.000       15.20       7.600       15.20       7.600            V-C  3.9789E+04 -0.8000      0.000        1.000        1.000
7.600        0.000        0.000     Strato1_3095_78023_L_0
   6 D   1.900       0.000       19.00       9.500       19.00       9.500            V-C  3.9789E+04  -1.000      0.000        1.000        1.000
```

```
9.500       0.000       0.000      Strato1_3095_78023_L_0
   7 D   2.280       0.000      22.80       11.40       22.80       11.40              V-C  3.9789E+04  -1.200       0.000       1.000       1.000
11.40       0.000       0.000      Strato1_3095_78023_L_0
   8 D   2.660       0.000      26.60       13.30       26.60       13.30              V-C  3.9789E+04  -1.400       0.000       1.000       1.000
13.30       0.000       0.000      Strato1_3095_78023_L_0
   9 D   3.040       0.000      30.40       15.20       30.40       15.20              V-C  3.9789E+04  -1.600       0.000       1.000       1.000
15.20       0.000       0.000      Strato1_3095_78023_L_0
  10 D   3.420       0.000      34.20       17.10       34.20       17.10              V-C  3.9789E+04  -1.800       0.000       1.000       1.000
17.10       0.000       0.000      Strato1_3095_78023_L_0
  11 D   3.800       0.000      38.00       19.00       38.00       19.00              V-C  3.9789E+04  -2.000       0.000       1.000       1.000
19.00       0.000       0.000      Strato1_3095_78023_L_0
  12 D   4.180       0.000      41.80       20.90       41.80       20.90              V-C  3.9789E+04  -2.200       0.000       1.000       1.000
20.90       0.000       0.000      Strato1_3095_78023_L_0
  13 D   4.560       0.000      45.60       22.80       45.60       22.80              V-C  3.9789E+04  -2.400       0.000       1.000       1.000
22.80       0.000       0.000      Strato1_3095_78023_L_0
  14 D   4.940       0.000      49.40       24.70       49.40       24.70              V-C  3.9789E+04  -2.600       0.000       1.000       1.000
24.70       0.000       0.000      Strato1_3095_78023_L_0
  15 D   5.320       0.000      53.20       26.60       53.20       26.60              V-C  3.9789E+04  -2.800       0.000       1.000       1.000
26.60       0.000       0.000      Strato1_3095_78023_L_0
  16 D   5.700       0.000      57.00       28.50       57.00       28.50              V-C  3.9789E+04  -3.000       0.000       1.000       1.000
28.50       0.000       0.000      Strato1_3095_78023_L_0
  17 D   6.080       0.000      60.80       30.40       60.80       30.40              V-C  3.9789E+04  -3.200       0.000       1.000       1.000
30.40       0.000       0.000      Strato1_3095_78023_L_0
  18 D   6.460       0.000      64.60       32.30       64.60       32.30              V-C  3.9789E+04  -3.400       0.000       1.000       1.000
32.30       0.000       0.000      Strato1_3095_78023_L_0
  19 D   6.840       0.000      68.40       34.20       68.40       34.20              V-C  3.9789E+04  -3.600       0.000       1.000       1.000
34.20       0.000       0.000      Strato1_3095_78023_L_0
  20 D   7.220       0.000      72.20       36.10       72.20       36.10              V-C  3.9789E+04  -3.800       0.000       1.000       1.000
36.10       0.000       0.000      Strato1_3095_78023_L_0
  21 D   7.600       0.000      76.00       38.00       76.00       38.00              V-C  3.9789E+04  -4.000       0.000       1.000       1.000
38.00       0.000       0.000      Strato1_3095_78023_L_0
  22 D   7.980       0.000      79.80       39.90       79.80       39.90              V-C  3.9789E+04  -4.200       0.000       1.000       1.000
39.90       0.000       0.000      Strato1_3095_78023_L_0
  23 D   8.360       0.000      83.60       41.80       83.60       41.80              V-C  3.9789E+04  -4.400       0.000       1.000       1.000
41.80       0.000       0.000      Strato1_3095_78023_L_0
  24 D   8.740       0.000      87.40       43.70       87.40       43.70              V-C  3.9789E+04  -4.600       0.000       1.000       1.000
43.70       0.000       0.000      Strato1_3095_78023_L_0
  25 D   9.120       0.000      91.20       45.60       91.20       45.60              V-C  3.9789E+04  -4.800       0.000       1.000       1.000
45.60       0.000       0.000      Strato1_3095_78023_L_0
  26 D   9.500       0.000      95.00       47.50       95.00       47.50              V-C  3.9789E+04  -5.000       0.000       1.000       1.000
47.50       0.000       0.000      Strato1_3095_78023_L_0
  27 D   9.880       0.000      98.80       49.40       98.80       49.40              V-C  3.9789E+04  -5.200       0.000       1.000       1.000
49.40       0.000       0.000      Strato1_3095_78023_L_0
  28 D   10.26       0.000      102.6       51.30       102.6       51.30              V-C  9.0046E+04  -5.400       0.000       1.000       1.000
51.30       0.000       0.000      Strato2_84780_84781_L_0
  29 D   10.64       0.000      106.4       53.20       106.4       53.20              V-C  9.0046E+04  -5.600       0.000       1.000       1.000
53.20       0.000       0.000      Strato2_84780_84781_L_0
  30 D   11.02       0.000      110.2       55.10       110.2       55.10              V-C  9.0046E+04  -5.800       0.000       1.000       1.000
55.10       0.000       0.000      Strato2_84780_84781_L_0
  31 D   11.40       0.000      114.0       57.00       114.0       57.00              V-C  9.0046E+04  -6.000       0.000       1.000       1.000
57.00       0.000       0.000      Strato2_84780_84781_L_0
  32 D   11.78       0.000      117.8       58.90       117.8       58.90              V-C  9.0046E+04  -6.200       0.000       1.000       1.000
58.90       0.000       0.000      Strato2_84780_84781_L_0
  33 D   12.16       0.000      121.6       60.80       121.6       60.80              V-C  9.0046E+04  -6.400       0.000       1.000       1.000
60.80       0.000       0.000      Strato2_84780_84781_L_0
  34 D   12.54       0.000      125.4       62.70       125.4       62.70              V-C  9.0046E+04  -6.600       0.000       1.000       1.000
62.70       0.000       0.000      Strato2_84780_84781_L_0
  35 D   12.92       0.000      129.2       64.60       129.2       64.60              V-C  9.0046E+04  -6.800       0.000       1.000       1.000
64.60       0.000       0.000      Strato2_84780_84781_L_0
  36 D   13.30       0.000      133.0       66.50       133.0       66.50              V-C  9.0046E+04  -7.000       0.000       1.000       1.000
66.50       0.000       0.000      Strato2_84780_84781_L_0
  37 D   13.68       0.000      136.8       68.40       136.8       68.40              V-C  9.0046E+04  -7.200       0.000       1.000       1.000
68.40       0.000       0.000      Strato2_84780_84781_L_0
  38 D   14.06       0.000      140.6       70.30       140.6       70.30              V-C  9.0046E+04  -7.400       0.000       1.000       1.000
70.30       0.000       0.000      Strato2_84780_84781_L_0
  39 D   14.44       0.000      144.4       72.20       144.4       72.20              V-C  9.0046E+04  -7.600       0.000       1.000       1.000
72.20       0.000       0.000      Strato2_84780_84781_L_0
  40 D   14.82       0.000      148.2       74.10       148.2       74.10              V-C  9.0046E+04  -7.800       0.000       1.000       1.000
74.10       0.000       0.000      Strato2_84780_84781_L_0
  41 D   7.600       0.000      152.0       76.00       152.0       76.00              V-C  9.0046E+04  -8.000       0.000       1.000       1.000
76.00       0.000       0.000      Strato2_84780_84781_L_0
```

```
+----------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*  |
|                                                                                                          |
|                                   1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                    |
|                                    Exe Time :24 July 2019      11:42:05                                  |
+----------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    2
```

0_R :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 41
C U R R E N T T I M E I S 1.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.000	0.000	0.000	0.000	0.000	0.000	V-C	2.7611E+04	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_3095_78023_L_0
2 D	0.3800	0.000	3.800	1.900	3.800	1.900	V-C	2.7611E+04	-0.2000	0.000	1.000	1.000	1.900	0.000	0.000	Strato1_3095_78023_L_0
3 D	0.7600	0.000	7.600	3.800	7.600	3.800	V-C	2.7611E+04	-0.4000	0.000	1.000	1.000	3.800	0.000	0.000	Strato1_3095_78023_L_0
4 D	1.140	0.000	11.40	5.700	11.40	5.700	V-C	2.7611E+04	-0.6000	0.000	1.000	1.000	5.700	0.000	0.000	Strato1_3095_78023_L_0
5 D	1.520	0.000	15.20	7.600	15.20	7.600	V-C	2.7611E+04	-0.8000	0.000	1.000	1.000	7.600	0.000	0.000	Strato1_3095_78023_L_0
6 D	1.900	0.000	19.00	9.500	19.00	9.500	V-C	2.7611E+04	-1.000	0.000	1.000	1.000	9.500	0.000	0.000	Strato1_3095_78023_L_0
7 D	2.280	0.000	22.80	11.40	22.80	11.40	V-C	2.7611E+04	-1.200	0.000	1.000	1.000	11.40	0.000	0.000	Strato1_3095_78023_L_0
8 D	2.660	0.000	26.60	13.30	26.60	13.30	V-C	2.7611E+04	-1.400	0.000	1.000	1.000	13.30	0.000	0.000	Strato1_3095_78023_L_0
9 D	3.040	0.000	30.40	15.20	30.40	15.20	V-C	2.7611E+04	-1.600	0.000	1.000	1.000	15.20	0.000	0.000	Strato1_3095_78023_L_0
10 D	3.420	0.000	34.20	17.10	34.20	17.10	V-C	2.7611E+04	-1.800	0.000	1.000	1.000	17.10	0.000	0.000	Strato1_3095_78023_L_0
11 D	3.800	0.000	38.00	19.00	38.00	19.00	V-C	2.7611E+04	-2.000	0.000	1.000	1.000	19.00	0.000	0.000	Strato1_3095_78023_L_0
12 D	4.180	0.000	41.80	20.90	41.80	20.90	V-C	2.7611E+04	-2.200	0.000	1.000	1.000	20.90	0.000	0.000	Strato1_3095_78023_L_0
13 D	4.560	0.000	45.60	22.80	45.60	22.80	V-C	2.7611E+04	-2.400	0.000	1.000	1.000	22.80	0.000	0.000	Strato1_3095_78023_L_0
14 D	4.940	0.000	49.40	24.70	49.40	24.70	V-C	2.7611E+04	-2.600	0.000	1.000	1.000	24.70	0.000	0.000	Strato1_3095_78023_L_0
15 D	5.320	0.000	53.20	26.60	53.20	26.60	V-C	2.7611E+04	-2.800	0.000	1.000	1.000	26.60	0.000	0.000	Strato1_3095_78023_L_0
16 D	5.700	0.000	57.00	28.50	57.00	28.50	V-C	2.7611E+04	-3.000	0.000	1.000	1.000	28.50	0.000	0.000	Strato1_3095_78023_L_0
17 D	6.080	0.000	60.80	30.40	60.80	30.40	V-C	2.7611E+04	-3.200	0.000	1.000	1.000	30.40	0.000	0.000	Strato1_3095_78023_L_0
18 D	6.460	0.000	64.60	32.30	64.60	32.30	V-C	2.7611E+04	-3.400	0.000	1.000	1.000	32.30	0.000	0.000	Strato1_3095_78023_L_0
19 D	6.840	0.000	68.40	34.20	68.40	34.20	V-C	2.7611E+04	-3.600	0.000	1.000	1.000	34.20	0.000	0.000	Strato1_3095_78023_L_0
20 D	7.220	0.000	72.20	36.10	72.20	36.10	V-C	2.7611E+04	-3.800	0.000	1.000	1.000	36.10	0.000	0.000	Strato1_3095_78023_L_0
21 D	7.600	0.000	76.00	38.00	76.00	38.00	V-C	2.7611E+04	-4.000	0.000	1.000	1.000	38.00	0.000	0.000	Strato1_3095_78023_L_0
22 D	7.980	0.000	79.80	39.90	79.80	39.90	V-C	2.7611E+04	-4.200	0.000	1.000	1.000	39.90	0.000	0.000	Strato1_3095_78023_L_0
23 D	8.360	0.000	83.60	41.80	83.60	41.80	V-C	2.7611E+04	-4.400	0.000	1.000	1.000	41.80	0.000	0.000	Strato1_3095_78023_L_0
24 D	8.740	0.000	87.40	43.70	87.40	43.70	V-C	2.7611E+04	-4.600	0.000	1.000	1.000	43.70	0.000	0.000	Strato1_3095_78023_L_0
25 D	9.120	0.000	91.20	45.60	91.20	45.60	V-C	2.7611E+04	-4.800	0.000	1.000	1.000	45.60	0.000	0.000	Strato1_3095_78023_L_0
26 D	9.500	0.000	95.00	47.50	95.00	47.50	V-C	2.7611E+04	-5.000	0.000	1.000	1.000	47.50	0.000	0.000	Strato1_3095_78023_L_0
27 D	9.880	0.000	98.80	49.40	98.80	49.40	V-C	2.7611E+04	-5.200	0.000	1.000	1.000	49.40	0.000	0.000	Strato1_3095_78023_L_0
28 D	10.26	0.000	102.6	51.30	102.6	51.30	V-C	4.8803E+04	-5.400	0.000	1.000	1.000	51.30	0.000	0.000	Strato2_84780_84781_L_0
29 D	10.64	0.000	106.4	53.20	106.4	53.20	V-C	4.8803E+04	-5.600	0.000	1.000	1.000	53.20	0.000	0.000	Strato2_84780_84781_L_0
30 D	11.02	0.000	110.2	55.10	110.2	55.10	V-C	4.8803E+04	-5.800	0.000	1.000	1.000	55.10	0.000	0.000	Strato2_84780_84781_L_0
31 D	11.40	0.000	114.0	57.00	114.0	57.00	V-C	4.8803E+04	-6.000	0.000	1.000	1.000	57.00	0.000	0.000	Strato2_84780_84781_L_0
32 D	11.78	0.000	117.8	58.90	117.8	58.90	V-C	4.8803E+04	-6.200	0.000	1.000	1.000	58.90	0.000	0.000	Strato2_84780_84781_L_0
33 D	12.16	0.000	121.6	60.80	121.6	60.80	V-C	4.8803E+04	-6.400	0.000	1.000	1.000	60.80	0.000	0.000	Strato2_84780_84781_L_0
34 D	12.54	0.000	125.4	62.70	125.4	62.70	V-C	4.8803E+04	-6.600	0.000	1.000	1.000	62.70	0.000	0.000	Strato2_84780_84781_L_0
35 D	12.92	0.000	129.2	64.60	129.2	64.60	V-C	4.8803E+04	-6.800	0.000	1.000	1.000	64.60	0.000	0.000	Strato2_84780_84781_L_0
36 D	13.30	0.000	133.0	66.50	133.0	66.50	V-C	4.8803E+04	-7.000	0.000	1.000	1.000	66.50	0.000	0.000	Strato2_84780_84781_L_0

```
  37 D   13.68       0.000       136.8       68.40       136.8       68.40            V-C  4.8803E+04  -7.200       0.000       1.000       1.000
68.40       0.000       0.000     Strato2_84780_84781_L_0
  38 D   14.06       0.000       140.6       70.30       140.6       70.30            V-C  4.8803E+04  -7.400       0.000       1.000       1.000
70.30       0.000       0.000     Strato2_84780_84781_L_0
  39 D   14.44       0.000       144.4       72.20       144.4       72.20            V-C  4.8803E+04  -7.600       0.000       1.000       1.000
72.20       0.000       0.000     Strato2_84780_84781_L_0
  40 D   14.82       0.000       148.2       74.10       148.2       74.10            V-C  4.8803E+04  -7.800       0.000       1.000       1.000
74.10       0.000       0.000     Strato2_84780_84781_L_0
  41 D   7.600       0.000       152.0       76.00       152.0       76.00            V-C  4.8803E+04  -8.000       0.000       1.000       1.000
76.00       0.000       0.000     Strato2_84780_84781_L_0


+-------------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                          |
|                                   Exe Time :24 July 2019      11:42:05                                                        |
+-------------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

WallElement_33                 :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   40
C U R R E N T   T I M E   I S      1.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-----------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****



+-------------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                          |
|                                   Exe Time :24 July 2019      11:42:05                                                        |
+-------------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_78031                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S      1.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM= 6047.     RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 14.82     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 6047.     RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=     82 NODE     41 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=      1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     1 RNORM = 0.000     RMNORM= 0.000
           RINORM= 6047.     RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 14.82     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 6047.     RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=     82 NODE     41 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=      1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
```

```
           RINORM= 6047.      RIMNOR= 0.000
           RENORM= 0.000      REMNOR= 0.000      RATIO = 0.000      TOLER =0.1000E-03      CONVERGED !
           RFMAX = 14.82      RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT    = 6047.     RDR    = 0.000
           RATIOT= 0.000      RATIOR= 0.000
           MAX UN= 0.000      IEQ=     82 NODE     41 DOF   2   X-ROT. F
           MIN UN= 0.000      IEQ=      1 NODE      1 DOF   1   Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS      0



 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                     |
 |                                                                                                                               |
 |                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                          |
 |                                   Exe Time :24 July 2019      11:42:05                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 1468.1 - GA27 - Cepav2
 SOLUTION REACHED USING     2 ITERATIONS ON  100

 P R I N T   O U T   F O R   T I M E   S T E P    2     ( AT TIME   2.000     )

 PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

           Y-DISPL.F        X-ROT. F
            (02)             (04)            (


 ALL NODAL POINTS HAVE ZERO DISPLACEMENT COMPONENTS



 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                     |
 |                                                                                                                               |
 |                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                          |
 |                                   Exe Time :24 July 2019      11:42:05                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 1468.1 - GA27 - Cepav2


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   1

 0_L                              :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   41
 C U R R E N T   T I M E   I S      2.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P           STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1 D   0.000       0.000       0.000       0.000       0.000       0.000           UL-RL  6.3662E+04   0.000       0.000       1.000       1.000
0.000       0.000       0.000     Strato1_3095_78023_L_0
   2 D  0.3800       0.000       3.800       1.900       3.800       1.900           UL-RL  6.3662E+04 -0.2000       0.000       1.000       1.000
1.900       0.000       0.000     Strato1_3095_78023_L_0
   3 D  0.7600       0.000       7.600       3.800       7.600       3.800           UL-RL  6.3662E+04 -0.4000       0.000       1.000       1.000
3.800       0.000       0.000     Strato1_3095_78023_L_0
   4 D   1.140       0.000       11.40       5.700       11.40       5.700           UL-RL  6.3662E+04 -0.6000       0.000       1.000       1.000
5.700       0.000       0.000     Strato1_3095_78023_L_0
   5 D   1.520       0.000       15.20       7.600       15.20       7.600           UL-RL  6.3662E+04 -0.8000       0.000       1.000       1.000
7.600       0.000       0.000     Strato1_3095_78023_L_0
   6 D   1.900       0.000       19.00       9.500       19.00       9.500           UL-RL  6.3662E+04  -1.000       0.000       1.000       1.000
9.500       0.000       0.000     Strato1_3095_78023_L_0
   7 D   2.280       0.000       22.80       11.40       22.80       11.40           UL-RL  6.3662E+04  -1.200       0.000       1.000       1.000
11.40       0.000       0.000     Strato1_3095_78023_L_0
   8 D   2.660       0.000       26.60       13.30       26.60       13.30           UL-RL  6.3662E+04  -1.400       0.000       1.000       1.000
13.30       0.000       0.000     Strato1_3095_78023_L_0
   9 D   3.040       0.000       30.40       15.20       30.40       15.20           UL-RL  6.3662E+04  -1.600       0.000       1.000       1.000
15.20       0.000       0.000     Strato1_3095_78023_L_0
  10 D   3.420       0.000       34.20       17.10       34.20       17.10           UL-RL  6.3662E+04  -1.800       0.000       1.000       1.000
17.10       0.000       0.000     Strato1_3095_78023_L_0
  11 D   3.800       0.000       38.00       19.00       38.00       19.00           UL-RL  6.3662E+04  -2.000       0.000       1.000       1.000
19.00       0.000       0.000     Strato1_3095_78023_L_0
  12 D   4.180       0.000       41.80       20.90       41.80       20.90           UL-RL  6.3662E+04  -2.200       0.000       1.000       1.000
20.90       0.000       0.000     Strato1_3095_78023_L_0
  13 D   4.560       0.000       45.60       22.80       45.60       22.80           UL-RL  6.3662E+04  -2.400       0.000       1.000       1.000
22.80       0.000       0.000     Strato1_3095_78023_L_0
  14 D   4.940       0.000       49.40       24.70       49.40       24.70           UL-RL  6.3662E+04  -2.600       0.000       1.000       1.000
```

```
24.70       0.000       0.000     Strato1_3095_78023_L_0
  15 D   5.320       0.000       53.20       26.60       53.20       26.60           UL-RL  6.3662E+04  -2.800       0.000       1.000       1.000
26.60       0.000       0.000     Strato1_3095_78023_L_0
  16 D   5.700       0.000       57.00       28.50       57.00       28.50           UL-RL  6.3662E+04  -3.000       0.000       1.000       1.000
28.50       0.000       0.000     Strato1_3095_78023_L_0
  17 D   6.080       0.000       60.80       30.40       60.80       30.40           UL-RL  6.3662E+04  -3.200       0.000       1.000       1.000
30.40       0.000       0.000     Strato1_3095_78023_L_0
  18 D   6.460       0.000       64.60       32.30       64.60       32.30           UL-RL  6.3662E+04  -3.400       0.000       1.000       1.000
32.30       0.000       0.000     Strato1_3095_78023_L_0
  19 D   6.840       0.000       68.40       34.20       68.40       34.20           UL-RL  6.3662E+04  -3.600       0.000       1.000       1.000
34.20       0.000       0.000     Strato1_3095_78023_L_0
  20 D   7.220       0.000       72.20       36.10       72.20       36.10           UL-RL  6.3662E+04  -3.800       0.000       1.000       1.000
36.10       0.000       0.000     Strato1_3095_78023_L_0
  21 D   7.600       0.000       76.00       38.00       76.00       38.00           UL-RL  6.3662E+04  -4.000       0.000       1.000       1.000
38.00       0.000       0.000     Strato1_3095_78023_L_0
  22 D   7.980       0.000       79.80       39.90       79.80       39.90           UL-RL  6.3662E+04  -4.200       0.000       1.000       1.000
39.90       0.000       0.000     Strato1_3095_78023_L_0
  23 D   8.360       0.000       83.60       41.80       83.60       41.80           UL-RL  6.3662E+04  -4.400       0.000       1.000       1.000
41.80       0.000       0.000     Strato1_3095_78023_L_0
  24 D   8.740       0.000       87.40       43.70       87.40       43.70           UL-RL  6.3662E+04  -4.600       0.000       1.000       1.000
43.70       0.000       0.000     Strato1_3095_78023_L_0
  25 D   9.120       0.000       91.20       45.60       91.20       45.60           UL-RL  6.3662E+04  -4.800       0.000       1.000       1.000
45.60       0.000       0.000     Strato1_3095_78023_L_0
  26 D   9.500       0.000       95.00       47.50       95.00       47.50           UL-RL  6.3662E+04  -5.000       0.000       1.000       1.000
47.50       0.000       0.000     Strato1_3095_78023_L_0
  27 D   9.880       0.000       98.80       49.40       98.80       49.40           UL-RL  6.3662E+04  -5.200       0.000       1.000       1.000
49.40       0.000       0.000     Strato1_3095_78023_L_0
  28 D   10.26       0.000       102.6       51.30       102.6       51.30           UL-RL  2.7014E+05  -5.400       0.000       1.000       1.000
51.30       0.000       0.000     Strato2_84780_84781_L_0
  29 D   10.64       0.000       106.4       53.20       106.4       53.20           UL-RL  2.7014E+05  -5.600       0.000       1.000       1.000
53.20       0.000       0.000     Strato2_84780_84781_L_0
  30 D   11.02       0.000       110.2       55.10       110.2       55.10           UL-RL  2.7014E+05  -5.800       0.000       1.000       1.000
55.10       0.000       0.000     Strato2_84780_84781_L_0
  31 D   11.40       0.000       114.0       57.00       114.0       57.00           UL-RL  2.7014E+05  -6.000       0.000       1.000       1.000
57.00       0.000       0.000     Strato2_84780_84781_L_0
  32 D   11.78       0.000       117.8       58.90       117.8       58.90           UL-RL  2.7014E+05  -6.200       0.000       1.000       1.000
58.90       0.000       0.000     Strato2_84780_84781_L_0
  33 D   12.16       0.000       121.6       60.80       121.6       60.80           UL-RL  2.7014E+05  -6.400       0.000       1.000       1.000
60.80       0.000       0.000     Strato2_84780_84781_L_0
  34 D   12.54       0.000       125.4       62.70       125.4       62.70           UL-RL  2.7014E+05  -6.600       0.000       1.000       1.000
62.70       0.000       0.000     Strato2_84780_84781_L_0
  35 D   12.92       0.000       129.2       64.60       129.2       64.60           UL-RL  2.7014E+05  -6.800       0.000       1.000       1.000
64.60       0.000       0.000     Strato2_84780_84781_L_0
  36 D   13.30       0.000       133.0       66.50       133.0       66.50           UL-RL  2.7014E+05  -7.000       0.000       1.000       1.000
66.50       0.000       0.000     Strato2_84780_84781_L_0
  37 D   13.68       0.000       136.8       68.40       136.8       68.40           UL-RL  2.7014E+05  -7.200       0.000       1.000       1.000
68.40       0.000       0.000     Strato2_84780_84781_L_0
  38 D   14.06       0.000       140.6       70.30       140.6       70.30           UL-RL  2.7014E+05  -7.400       0.000       1.000       1.000
70.30       0.000       0.000     Strato2_84780_84781_L_0
  39 D   14.44       0.000       144.4       72.20       144.4       72.20           UL-RL  2.7014E+05  -7.600       0.000       1.000       1.000
72.20       0.000       0.000     Strato2_84780_84781_L_0
  40 D   14.82       0.000       148.2       74.10       148.2       74.10           UL-RL  2.7014E+05  -7.800       0.000       1.000       1.000
74.10       0.000       0.000     Strato2_84780_84781_L_0
  41 D   7.600       0.000       152.0       76.00       152.0       76.00           UL-RL  2.7014E+05  -8.000       0.000       1.000       1.000
76.00       0.000       0.000     Strato2_84780_84781_L_0

 +-------------------------------------------------------------------------------------------------------------------------------+
 |                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
 |                                                                                                                               |
 |                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                          |
 |                                   Exe Time :24 July 2019      11:42:05                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 1468.1 - GA27 - Cepav2


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                              :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   41
 C U R R E N T   T I M E   I S      2.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE      DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P           STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq           Su_a        Su_p     LAYER
 ---------------------------------------------------------------------------------------------------------------------------------------------------------------
---------------------------------------------------------------------
   1 D   0.000       0.000       0.000       0.000       0.000       0.000           UL-RL  4.4178E+04   0.000       0.000       1.000       1.000
0.000       0.000       0.000     Strato1_3095_78023_L_0
   2 D  0.3800       0.000       3.800       1.900       3.800       1.900           UL-RL  4.4178E+04 -0.2000       0.000       1.000       1.000
1.900       0.000       0.000     Strato1_3095_78023_L_0
   3 D  0.7600       0.000       7.600       3.800       7.600       3.800           UL-RL  4.4178E+04 -0.4000       0.000       1.000       1.000
3.800       0.000       0.000     Strato1_3095_78023_L_0
```

```
  4 D  1.140       0.000       11.40       5.700       11.40       5.700           UL-RL  4.4178E+04 -0.6000       0.000        1.000        1.000
5.700      0.000       0.000     Strato1_3095_78023_L_0
  5 D  1.520       0.000       15.20       7.600       15.20       7.600           UL-RL  4.4178E+04 -0.8000       0.000        1.000        1.000
7.600      0.000       0.000     Strato1_3095_78023_L_0
  6 D  1.900       0.000       19.00       9.500       19.00       9.500           UL-RL  4.4178E+04  -1.000       0.000        1.000        1.000
9.500      0.000       0.000     Strato1_3095_78023_L_0
  7 D  2.280       0.000       22.80       11.40       22.80       11.40           UL-RL  4.4178E+04  -1.200       0.000        1.000        1.000
11.40      0.000       0.000     Strato1_3095_78023_L_0
  8 D  2.660       0.000       26.60       13.30       26.60       13.30           UL-RL  4.4178E+04  -1.400       0.000        1.000        1.000
13.30      0.000       0.000     Strato1_3095_78023_L_0
  9 D  3.040       0.000       30.40       15.20       30.40       15.20           UL-RL  4.4178E+04  -1.600       0.000        1.000        1.000
15.20      0.000       0.000     Strato1_3095_78023_L_0
 10 D  3.420       0.000       34.20       17.10       34.20       17.10           UL-RL  4.4178E+04  -1.800       0.000        1.000        1.000
17.10      0.000       0.000     Strato1_3095_78023_L_0
 11 D  3.800       0.000       38.00       19.00       38.00       19.00           UL-RL  4.4178E+04  -2.000       0.000        1.000        1.000
19.00      0.000       0.000     Strato1_3095_78023_L_0
 12 D  4.180       0.000       41.80       20.90       41.80       20.90           UL-RL  4.4178E+04  -2.200       0.000        1.000        1.000
20.90      0.000       0.000     Strato1_3095_78023_L_0
 13 D  4.560       0.000       45.60       22.80       45.60       22.80           UL-RL  4.4178E+04  -2.400       0.000        1.000        1.000
22.80      0.000       0.000     Strato1_3095_78023_L_0
 14 D  4.940       0.000       49.40       24.70       49.40       24.70           UL-RL  4.4178E+04  -2.600       0.000        1.000        1.000
24.70      0.000       0.000     Strato1_3095_78023_L_0
 15 D  5.320       0.000       53.20       26.60       53.20       26.60           UL-RL  4.4178E+04  -2.800       0.000        1.000        1.000
26.60      0.000       0.000     Strato1_3095_78023_L_0
 16 D  5.700       0.000       57.00       28.50       57.00       28.50           UL-RL  4.4178E+04  -3.000       0.000        1.000        1.000
28.50      0.000       0.000     Strato1_3095_78023_L_0
 17 D  6.080       0.000       60.80       30.40       60.80       30.40           UL-RL  4.4178E+04  -3.200       0.000        1.000        1.000
30.40      0.000       0.000     Strato1_3095_78023_L_0
 18 D  6.460       0.000       64.60       32.30       64.60       32.30           UL-RL  4.4178E+04  -3.400       0.000        1.000        1.000
32.30      0.000       0.000     Strato1_3095_78023_L_0
 19 D  6.840       0.000       68.40       34.20       68.40       34.20           UL-RL  4.4178E+04  -3.600       0.000        1.000        1.000
34.20      0.000       0.000     Strato1_3095_78023_L_0
 20 D  7.220       0.000       72.20       36.10       72.20       36.10           UL-RL  4.4178E+04  -3.800       0.000        1.000        1.000
36.10      0.000       0.000     Strato1_3095_78023_L_0
 21 D  7.600       0.000       76.00       38.00       76.00       38.00           UL-RL  4.4178E+04  -4.000       0.000        1.000        1.000
38.00      0.000       0.000     Strato1_3095_78023_L_0
 22 D  7.980       0.000       79.80       39.90       79.80       39.90           UL-RL  4.4178E+04  -4.200       0.000        1.000        1.000
39.90      0.000       0.000     Strato1_3095_78023_L_0
 23 D  8.360       0.000       83.60       41.80       83.60       41.80           UL-RL  4.4178E+04  -4.400       0.000        1.000        1.000
41.80      0.000       0.000     Strato1_3095_78023_L_0
 24 D  8.740       0.000       87.40       43.70       87.40       43.70           UL-RL  4.4178E+04  -4.600       0.000        1.000        1.000
43.70      0.000       0.000     Strato1_3095_78023_L_0
 25 D  9.120       0.000       91.20       45.60       91.20       45.60           UL-RL  4.4178E+04  -4.800       0.000        1.000        1.000
45.60      0.000       0.000     Strato1_3095_78023_L_0
 26 D  9.500       0.000       95.00       47.50       95.00       47.50           UL-RL  4.4178E+04  -5.000       0.000        1.000        1.000
47.50      0.000       0.000     Strato1_3095_78023_L_0
 27 D  9.880       0.000       98.80       49.40       98.80       49.40           UL-RL  4.4178E+04  -5.200       0.000        1.000        1.000
49.40      0.000       0.000     Strato1_3095_78023_L_0
 28 D  10.26       0.000       102.6       51.30       102.6       51.30           UL-RL  1.4641E+05  -5.400       0.000        1.000        1.000
51.30      0.000       0.000     Strato2_84780_84781_L_0
 29 D  10.64       0.000       106.4       53.20       106.4       53.20           UL-RL  1.4641E+05  -5.600       0.000        1.000        1.000
53.20      0.000       0.000     Strato2_84780_84781_L_0
 30 D  11.02       0.000       110.2       55.10       110.2       55.10           UL-RL  1.4641E+05  -5.800       0.000        1.000        1.000
55.10      0.000       0.000     Strato2_84780_84781_L_0
 31 D  11.40       0.000       114.0       57.00       114.0       57.00           UL-RL  1.4641E+05  -6.000       0.000        1.000        1.000
57.00      0.000       0.000     Strato2_84780_84781_L_0
 32 D  11.78       0.000       117.8       58.90       117.8       58.90           UL-RL  1.4641E+05  -6.200       0.000        1.000        1.000
58.90      0.000       0.000     Strato2_84780_84781_L_0
 33 D  12.16       0.000       121.6       60.80       121.6       60.80           UL-RL  1.4641E+05  -6.400       0.000        1.000        1.000
60.80      0.000       0.000     Strato2_84780_84781_L_0
 34 D  12.54       0.000       125.4       62.70       125.4       62.70           UL-RL  1.4641E+05  -6.600       0.000        1.000        1.000
62.70      0.000       0.000     Strato2_84780_84781_L_0
 35 D  12.92       0.000       129.2       64.60       129.2       64.60           UL-RL  1.4641E+05  -6.800       0.000        1.000        1.000
64.60      0.000       0.000     Strato2_84780_84781_L_0
 36 D  13.30       0.000       133.0       66.50       133.0       66.50           UL-RL  1.4641E+05  -7.000       0.000        1.000        1.000
66.50      0.000       0.000     Strato2_84780_84781_L_0
 37 D  13.68       0.000       136.8       68.40       136.8       68.40           UL-RL  1.4641E+05  -7.200       0.000        1.000        1.000
68.40      0.000       0.000     Strato2_84780_84781_L_0
 38 D  14.06       0.000       140.6       70.30       140.6       70.30           UL-RL  1.4641E+05  -7.400       0.000        1.000        1.000
70.30      0.000       0.000     Strato2_84780_84781_L_0
 39 D  14.44       0.000       144.4       72.20       144.4       72.20           UL-RL  1.4641E+05  -7.600       0.000        1.000        1.000
72.20      0.000       0.000     Strato2_84780_84781_L_0
 40 D  14.82       0.000       148.2       74.10       148.2       74.10           UL-RL  1.4641E+05  -7.800       0.000        1.000        1.000
74.10      0.000       0.000     Strato2_84780_84781_L_0
 41 D  7.600       0.000       152.0       76.00       152.0       76.00           UL-RL  1.4641E+05  -8.000       0.000        1.000        1.000
76.00      0.000       0.000     Strato2_84780_84781_L_0
```

```
S T R E S S   R E S U L T S   F O R   G R O U P  N O.   3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   40
C U R R E N T   T I M E   I S     2.0000

 WALL2D ELEMENT

   EL      TA           TB           MA           MB
-----------------------------------------------------
    1  0.0000       0.0000       0.0000       0.0000
    2  0.0000       0.0000       0.0000       0.0000
    3  0.0000       0.0000       0.0000       0.0000
    4  0.0000       0.0000       0.0000       0.0000
    5  0.0000       0.0000       0.0000       0.0000
    6  0.0000       0.0000       0.0000       0.0000
    7  0.0000       0.0000       0.0000       0.0000
    8  0.0000       0.0000       0.0000       0.0000
    9  0.0000       0.0000       0.0000       0.0000
   10  0.0000       0.0000       0.0000       0.0000
   11  0.0000       0.0000       0.0000       0.0000
   12  0.0000       0.0000       0.0000       0.0000
   13  0.0000       0.0000       0.0000       0.0000
   14  0.0000       0.0000       0.0000       0.0000
   15  0.0000       0.0000       0.0000       0.0000
   16  0.0000       0.0000       0.0000       0.0000
   17  0.0000       0.0000       0.0000       0.0000
   18  0.0000       0.0000       0.0000       0.0000
   19  0.0000       0.0000       0.0000       0.0000
   20  0.0000       0.0000       0.0000       0.0000
   21  0.0000       0.0000       0.0000       0.0000
   22  0.0000       0.0000       0.0000       0.0000
   23  0.0000       0.0000       0.0000       0.0000
   24  0.0000       0.0000       0.0000       0.0000
   25  0.0000       0.0000       0.0000       0.0000
   26  0.0000       0.0000       0.0000       0.0000
   27  0.0000       0.0000       0.0000       0.0000
   28  0.0000       0.0000       0.0000       0.0000
   29  0.0000       0.0000       0.0000       0.0000
   30  0.0000       0.0000       0.0000       0.0000
   31  0.0000       0.0000       0.0000       0.0000
   32  0.0000       0.0000       0.0000       0.0000
   33  0.0000       0.0000       0.0000       0.0000
   34  0.0000       0.0000       0.0000       0.0000
   35  0.0000       0.0000       0.0000       0.0000
   36  0.0000       0.0000       0.0000       0.0000
   37  0.0000       0.0000       0.0000       0.0000
   38  0.0000       0.0000       0.0000       0.0000
   39  0.0000       0.0000       0.0000       0.0000
   40  0.0000       0.0000       0.0000       0.0000

+--------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                |
|                                                                                                                          |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                     |
|                                   Exe Time :24 July 2019      11:42:05                                                   |
+--------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S   R E S U L T S   F O R   G R O U P  N O.   4

Tieback_78031                   :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S     2.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE         d0          EDISPL      pl. eps          K      -ve limit   +ve limit
----------------------------------------------------------------------------------------------------------
ANCHOR    1   0.0000       0.0000       0.0000       0.0000       80304.       0.0000       0.0000     ELASTIC  ORIGINAL YOUNG MODULUS

ITER      0 RNORM = 0.000      RMNORM= 0.000
           RINORM= 5385.      RIMNOR= 0.000
           RENORM= 770.2      REMNOR= 0.000     RATIO =0.3782     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 15.86      RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5385.      RDR   = 0.000
           RATIOT=0.3782      RATIOR= 0.000
           MAX UN= 6.607      IEQ=     27 NODE      14 DOF    1  Y-DISPL.F
           MIN UN= 0.000      IEQ=      1 NODE       1 DOF    1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS      0
```

```
ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5385.     RIMNOR= 0.000
           RENORM= 54.96     REMNOR=0.1216E-23 RATIO =0.1010     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 15.86     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5385.     RDR   = 0.000
           RATIOT=0.1010     RATIOR= 0.000
           MAX UN= 2.567     IEQ=    31 NODE     16 DOF   1  Y-DISPL.F
           MIN UN=-.5130E-11 IEQ=    41 NODE     21 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5385.     RIMNOR= 0.000
           RENORM= 13.53     REMNOR=0.4957E-23 RATIO =0.5012E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 15.86     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5385.     RDR   = 0.000
           RATIOT=0.5012E-01 RATIOR= 0.000
           MAX UN= 2.647     IEQ=    33 NODE     17 DOF   1  Y-DISPL.F
           MIN UN=-.1434E-10 IEQ=    17 NODE      9 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5385.     RIMNOR= 0.000
           RENORM=0.4041E-01 REMNOR=0.2742E-23 RATIO =0.2739E-02 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 15.86     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5385.     RDR   = 0.000
           RATIOT=0.2739E-02 RATIOR= 0.000
           MAX UN=0.2010     IEQ=    43 NODE     22 DOF   1  Y-DISPL.F
           MIN UN=-.1178E-10 IEQ=    17 NODE      9 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     5 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5385.     RIMNOR= 0.000
           RENORM=0.2893E-04 REMNOR=0.2380E-23 RATIO =0.7330E-04 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 15.86     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5385.     RDR   = 0.000
           RATIOT=0.7330E-04 RATIOR= 0.000
           MAX UN=0.5379E-02 IEQ=    47 NODE     24 DOF   1  Y-DISPL.F
           MIN UN=-.9699E-11 IEQ=    25 NODE     13 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0

+-------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                    |
|                                   Exe Time :24 July 2019      11:42:05                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2
SOLUTION REACHED USING     5 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    3     ( AT TIME   3.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
            (02)             (04)          (
    1   1.0870357E-03   2.1125363E-03
    2   1.5095430E-03   2.1125363E-03
    3   1.9300908E-03   2.0831448E-03
    4   2.3389507E-03   1.9960005E-03
    5   2.7248134E-03   1.8536920E-03
    6   3.0769938E-03   1.6598780E-03
    7   3.3856480E-03   1.4193147E-03
    8   3.6419952E-03   1.1378837E-03
    9   3.8385457E-03   8.2261680E-04
   10   3.9693580E-03   4.8209208E-04
   11   4.0303981E-03   1.2680034E-04
   12   4.0199124E-03  -2.3097794E-04
   13   3.9387710E-03  -5.7729451E-04
   14   3.7907939E-03  -8.9662227E-04
   15   3.5830567E-03  -1.1719315E-03
   16   3.3260912E-03  -1.3861918E-03
   17   3.0333951E-03  -1.5282034E-03
   18   2.7196813E-03  -1.5971223E-03
   19   2.3988150E-03  -1.6020089E-03
   20   2.0822711E-03  -1.5559947E-03
   21   1.7790120E-03  -1.4710796E-03
   22   1.4957105E-03  -1.3581180E-03
   23   1.2369831E-03  -1.2268822E-03
```

24	1.0055924E-03	-1.0861245E-03
25	8.0267117E-04	-9.4329791E-04
26	6.2813512E-04	-8.0254370E-04
27	4.8155112E-04	-6.6333864E-04
28	3.6299536E-04	-5.2120942E-04
29	2.7286102E-04	-3.8217523E-04
30	2.0899570E-04	-2.6008457E-04
31	1.6728140E-04	-1.6118075E-04
32	1.4290642E-04	-8.6533259E-05
33	1.3119126E-04	-3.4040358E-05
34	1.2806333E-04	4.8318984E-08
35	1.3027205E-04	2.0059036E-05
36	1.3542845E-04	3.0192370E-05
37	1.4193454E-04	3.4109318E-05
38	1.4885176E-04	3.4720416E-05
39	1.5574085E-04	3.4103589E-05
40	1.6249354E-04	3.3491997E-05
41	1.6916499E-04	3.3289161E-05

PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017*

1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484
Exe Time :24 July 2019 11:42:05

1468.1 - GA27 - Cepav2

S T R E S S R E S U L T S F O R G R O U P N O. 1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 41
C U R R E N T T I M E I S 3.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.000	-1.0870E-03	0.000	0.000	0.000	0.000	ACTIVE	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_3095_78023_L_0
2 D	0.2429	-1.5095E-03	3.807	1.215	3.807	1.904	ACTIVE	0.000	-0.2000	0.000	1.000	1.000	1.215	0.000	0.000	Strato1_3095_78023_L_0
3 D	0.4885	-1.9301E-03	7.657	2.443	7.657	3.828	ACTIVE	0.000	-0.4000	0.000	1.000	1.000	2.443	0.000	0.000	Strato1_3095_78023_L_0
4 D	0.7390	-2.3390E-03	11.58	3.695	11.58	5.792	ACTIVE	0.000	-0.6000	0.000	1.000	1.000	3.695	0.000	0.000	Strato1_3095_78023_L_0
5 D	0.9959	-2.7248E-03	15.61	4.979	15.61	7.805	ACTIVE	0.000	-0.8000	0.000	1.000	1.000	4.979	0.000	0.000	Strato1_3095_78023_L_0
6 D	1.259	-3.0770E-03	19.74	6.297	19.74	9.871	ACTIVE	0.000	-1.000	0.000	1.000	1.000	6.297	0.000	0.000	Strato1_3095_78023_L_0
7 D	1.530	-3.3856E-03	23.97	7.648	23.97	11.99	ACTIVE	0.000	-1.200	0.000	1.000	1.000	7.648	0.000	0.000	Strato1_3095_78023_L_0
8 D	1.805	-3.6420E-03	28.29	9.025	28.29	14.15	ACTIVE	0.000	-1.400	0.000	1.000	1.000	9.025	0.000	0.000	Strato1_3095_78023_L_0
9 D	2.263	-3.8385E-03	35.47	11.31	35.47	17.73	ACTIVE	0.000	-1.600	0.000	1.000	1.000	11.31	0.000	0.000	Strato1_3095_78023_L_0
10 D	2.712	-3.9694E-03	42.51	13.56	42.51	21.25	ACTIVE	0.000	-1.800	0.000	1.000	1.000	13.56	0.000	0.000	Strato1_3095_78023_L_0
11 D	3.111	-4.0304E-03	48.77	15.56	48.77	24.38	ACTIVE	0.000	-2.000	0.000	1.000	1.000	15.56	0.000	0.000	Strato1_3095_78023_L_0
12 D	3.503	-4.0199E-03	54.90	17.51	54.90	27.45	ACTIVE	0.000	-2.200	0.000	1.000	1.000	17.51	0.000	0.000	Strato1_3095_78023_L_0
13 D	3.860	-3.9388E-03	60.50	19.30	60.50	30.25	ACTIVE	0.000	-2.400	0.000	1.000	1.000	19.30	0.000	0.000	Strato1_3095_78023_L_0
14 D	4.215	-3.7908E-03	66.07	21.08	66.07	33.04	ACTIVE	0.000	-2.600	0.000	1.000	1.000	21.08	0.000	0.000	Strato1_3095_78023_L_0
15 D	4.545	-3.5831E-03	71.24	22.73	71.24	35.62	ACTIVE	0.000	-2.800	0.000	1.000	1.000	22.73	0.000	0.000	Strato1_3095_78023_L_0
16 D	4.877	-3.3261E-03	76.44	24.38	76.44	38.22	ACTIVE	0.000	-3.000	0.000	1.000	1.000	24.38	0.000	0.000	Strato1_3095_78023_L_0
17 D	5.115	-3.0334E-03	80.17	25.57	80.17	40.08	ACTIVE	0.000	-3.200	0.000	1.000	1.000	25.57	0.000	0.000	Strato1_3095_78023_L_0
18 D	5.313	-2.7197E-03	83.27	26.56	83.27	41.63	ACTIVE	0.000	-3.400	0.000	1.000	1.000	26.56	0.000	0.000	Strato1_3095_78023_L_0
19 D	5.513	-2.3988E-03	86.42	27.57	86.42	43.21	ACTIVE	0.000	-3.600	0.000	1.000	1.000	27.57	0.000	0.000	Strato1_3095_78023_L_0
20 D	5.717	-2.0823E-03	89.61	28.59	89.61	44.80	ACTIVE	0.000	-3.800	0.000	1.000	1.000	28.59	0.000	0.000	Strato1_3095_78023_L_0

21 D	5.923	-1.7790E-03	92.84	29.62	92.84	46.42	ACTIVE	0.000	-4.000	0.000	1.000	1.000
29.62	0.000	0.000	Strato1_3095_78023_L_0									
22 D	6.132	-1.4957E-03	96.11	30.66	96.11	48.06	ACTIVE	0.000	-4.200	0.000	1.000	1.000
30.66	0.000	0.000	Strato1_3095_78023_L_0									
23 D	6.343	-1.2370E-03	99.41	31.71	99.41	49.71	ACTIVE	0.000	-4.400	0.000	1.000	1.000
31.71	0.000	0.000	Strato1_3095_78023_L_0									
24 D	6.555	-1.0056E-03	102.7	32.78	102.7	51.37	ACTIVE	0.000	-4.600	0.000	1.000	1.000
32.78	0.000	0.000	Strato1_3095_78023_L_0									
25 D	7.637	-8.0267E-04	106.1	38.19	106.1	53.05	UL-RL	1.8520E+04	-4.800	0.000	1.000	1.000
38.19	0.000	0.000	Strato1_3095_78023_L_0									
26 D	8.622	-6.2814E-04	109.5	43.11	109.5	54.74	UL-RL	1.8520E+04	-5.000	0.000	1.000	1.000
43.11	0.000	0.000	Strato1_3095_78023_L_0									
27 D	9.505	-4.8155E-04	112.9	47.53	112.9	56.45	UL-RL	1.8520E+04	-5.200	0.000	1.000	1.000
47.53	0.000	0.000	Strato1_3095_78023_L_0									
28 D	5.927	-3.6300E-04	116.3	29.63	116.3	58.16	UL-RL	7.8586E+04	-5.400	0.000	1.000	1.000
29.63	0.000	0.000	Strato2_84780_84781_L_0									
29 D	7.688	-2.7286E-04	119.8	38.44	119.8	59.88	UL-RL	7.8586E+04	-5.600	0.000	1.000	1.000
38.44	0.000	0.000	Strato2_84780_84781_L_0									
30 D	9.038	-2.0900E-04	123.2	45.19	123.2	61.61	UL-RL	7.8586E+04	-5.800	0.000	1.000	1.000
45.19	0.000	0.000	Strato2_84780_84781_L_0									
31 D	10.04	-1.6728E-04	126.7	50.21	126.7	63.35	UL-RL	7.8586E+04	-6.000	0.000	1.000	1.000
50.21	0.000	0.000	Strato2_84780_84781_L_0									
32 D	10.77	-1.4291E-04	130.2	53.87	130.2	65.10	UL-RL	7.8586E+04	-6.200	0.000	1.000	1.000
53.87	0.000	0.000	Strato2_84780_84781_L_0									
33 D	11.31	-1.3119E-04	133.7	56.55	133.7	66.86	UL-RL	7.8586E+04	-6.400	0.000	1.000	1.000
56.55	0.000	0.000	Strato2_84780_84781_L_0									
34 D	11.71	-1.2806E-04	137.2	58.56	137.2	68.62	UL-RL	7.8586E+04	-6.600	0.000	1.000	1.000
58.56	0.000	0.000	Strato2_84780_84781_L_0									
35 D	12.03	-1.3027E-04	140.8	60.15	140.8	70.39	UL-RL	7.8586E+04	-6.800	0.000	1.000	1.000
60.15	0.000	0.000	Strato2_84780_84781_L_0									
36 D	12.30	-1.3543E-04	144.3	61.52	144.3	72.16	UL-RL	7.8586E+04	-7.000	0.000	1.000	1.000
61.52	0.000	0.000	Strato2_84780_84781_L_0									
37 D	12.56	-1.4193E-04	147.9	62.79	147.9	73.94	UL-RL	7.8586E+04	-7.200	0.000	1.000	1.000
62.79	0.000	0.000	Strato2_84780_84781_L_0									
38 D	12.81	-1.4885E-04	151.4	64.03	151.4	75.72	UL-RL	7.8586E+04	-7.400	0.000	1.000	1.000
64.03	0.000	0.000	Strato2_84780_84781_L_0									
39 D	13.05	-1.5574E-04	155.0	65.27	155.0	77.51	UL-RL	7.8586E+04	-7.600	0.000	1.000	1.000
65.27	0.000	0.000	Strato2_84780_84781_L_0									
40 D	13.31	-1.6249E-04	158.6	66.54	158.6	79.31	UL-RL	7.8586E+04	-7.800	0.000	1.000	1.000
66.54	0.000	0.000	Strato2_84780_84781_L_0									
41 D	6.781	-1.6916E-04	162.2	67.81	162.2	81.10	UL-RL	7.8586E+04	-8.000	0.000	1.000	1.000
67.81	0.000	0.000	Strato2_84780_84781_L_0									

```
 +-------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
 |                                                                                                                         |
 |                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                    |
 |                                   Exe Time :24 July 2019      11:42:05                                                  |
 +-------------------------------------------------------------------------------------------------------------------------+
 1468.1 - GA27 - Cepav2


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                              :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   41
 C U R R E N T   T I M E   I S      3.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****
```

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR
Peq	Su_a	Su_p	LAYER									
1	0.000	--	--	--	--	--	REMOVED	--	0.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
2	0.000	--	--	--	--	--	REMOVED	--	-0.2000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
3	0.000	--	--	--	--	--	REMOVED	--	-0.4000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
4	0.000	--	--	--	--	--	REMOVED	--	-0.6000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
5	0.000	--	--	--	--	--	REMOVED	--	-0.8000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
6	0.000	--	--	--	--	--	REMOVED	--	-1.000	0.000	1.000	1.000
0.000	0.000	0.000	not available									
7	0.000	--	--	--	--	--	REMOVED	--	-1.200	0.000	1.000	1.000
0.000	0.000	0.000	not available									
8	0.000	--	--	--	--	--	REMOVED	--	-1.400	0.000	1.000	1.000
0.000	0.000	0.000	not available									
9	0.000	--	--	--	--	--	REMOVED	--	-1.600	0.000	1.000	1.000
0.000	0.000	0.000	not available									
10	0.000	--	--	--	--	--	REMOVED	--	-1.800	0.000	1.000	1.000

```
0.000       0.000       0.000     not available
  11     0.000         --          --          --          --          --          REMOVED     --        -2.000      0.000       1.000       1.000
0.000       0.000       0.000     not available
  12     0.000         --          --          --          --          --          REMOVED     --        -2.200      0.000       1.000       1.000
0.000       0.000       0.000     not available
  13     0.000         --          --          --          --          --          REMOVED     --        -2.400      0.000       1.000       1.000
0.000       0.000       0.000     not available
  14     0.000         --          --          --          --          --          REMOVED     --        -2.600      0.000       1.000       1.000
0.000       0.000       0.000     not available
  15 D  0.6851      3.5831E-03  0.9500      3.426       53.20       26.60       PASSIVE   0.000     -2.800      0.000       1.000       1.000
3.426       0.000       0.000     Strato1_3095_78023_L_0
  16 D  3.426       3.3261E-03  4.750       17.13       57.00       28.50       PASSIVE   0.000     -3.000      0.000       1.000       1.000
17.13       0.000       0.000     Strato1_3095_78023_L_0
  17 D  6.166       3.0334E-03  8.550       30.83       60.80       30.83       PASSIVE   0.000     -3.200      0.000       1.000       1.000
30.83       0.000       0.000     Strato1_3095_78023_L_0
  18 D  8.557       2.7197E-03  12.35       42.78       64.60       42.78         V-C     8032.     -3.400      0.000       1.000       1.000
42.78       0.000       0.000     Strato1_3095_78023_L_0
  19 D  8.496       2.3988E-03  16.15       42.48       68.40       42.48         V-C     8032.     -3.600      0.000       1.000       1.000
42.48       0.000       0.000     Strato1_3095_78023_L_0
  20 D  8.425       2.0823E-03  19.95       42.12       72.20       42.12         V-C     8032.     -3.800      0.000       1.000       1.000
42.12       0.000       0.000     Strato1_3095_78023_L_0
  21 D  8.363       1.7790E-03  23.75       41.82       76.00       41.82         V-C     8032.     -4.000      0.000       1.000       1.000
41.82       0.000       0.000     Strato1_3095_78023_L_0
  22 D  8.326       1.4957E-03  27.55       41.63       79.80       41.63         V-C     8032.     -4.200      0.000       1.000       1.000
41.63       0.000       0.000     Strato1_3095_78023_L_0
  23 D  8.299       1.2370E-03  31.35       41.49       83.60       41.80        UL-RL  1.2852E+04  -4.400      0.000       1.000       1.000
41.49       0.000       0.000     Strato1_3095_78023_L_0
  24 D  8.127       1.0056E-03  35.15       40.64       87.40       43.70        UL-RL  1.2852E+04  -4.600      0.000       1.000       1.000
40.64       0.000       0.000     Strato1_3095_78023_L_0
  25 D  8.023       8.0267E-04  38.95       40.12       91.20       45.60        UL-RL  1.2852E+04  -4.800      0.000       1.000       1.000
40.12       0.000       0.000     Strato1_3095_78023_L_0
  26 D  7.987       6.2814E-04  42.75       39.94       95.00       47.50        UL-RL  1.2852E+04  -5.000      0.000       1.000       1.000
39.94       0.000       0.000     Strato1_3095_78023_L_0
  27 D  8.019       4.8155E-04  46.55       40.10       98.80       49.40        UL-RL  1.2852E+04  -5.200      0.000       1.000       1.000
40.10       0.000       0.000     Strato1_3095_78023_L_0
  28 D  10.27       3.6300E-04  50.35       51.33       102.6       51.33         V-C     1.4197E+04  -5.400      0.000       1.000       1.000
51.33       0.000       0.000     Strato2_84780_84781_L_0
  29 D  9.915       2.7286E-04  54.15       49.57       106.4       53.20        UL-RL  4.2592E+04  -5.600      0.000       1.000       1.000
49.57       0.000       0.000     Strato2_84780_84781_L_0
  30 D  9.772       2.0900E-04  57.95       48.86       110.2       55.10        UL-RL  4.2592E+04  -5.800      0.000       1.000       1.000
48.86       0.000       0.000     Strato2_84780_84781_L_0
  31 D  9.815       1.6728E-04  61.75       49.08       114.0       57.00        UL-RL  4.2592E+04  -6.000      0.000       1.000       1.000
49.08       0.000       0.000     Strato2_84780_84781_L_0
  32 D  10.00       1.4291E-04  65.55       50.02       117.8       58.90        UL-RL  4.2592E+04  -6.200      0.000       1.000       1.000
50.02       0.000       0.000     Strato2_84780_84781_L_0
  33 D  10.30       1.3119E-04  69.35       51.50       121.6       60.80        UL-RL  4.2592E+04  -6.400      0.000       1.000       1.000
51.50       0.000       0.000     Strato2_84780_84781_L_0
  34 D  10.67       1.2806E-04  73.15       53.34       125.4       62.70        UL-RL  4.2592E+04  -6.600      0.000       1.000       1.000
53.34       0.000       0.000     Strato2_84780_84781_L_0
  35 D  11.08       1.3027E-04  76.95       55.40       129.2       64.60        UL-RL  4.2592E+04  -6.800      0.000       1.000       1.000
55.40       0.000       0.000     Strato2_84780_84781_L_0
  36 D  11.52       1.3543E-04  80.75       57.58       133.0       66.50        UL-RL  4.2592E+04  -7.000      0.000       1.000       1.000
57.58       0.000       0.000     Strato2_84780_84781_L_0
  37 D  11.96       1.4193E-04  84.55       59.82       136.8       68.40        UL-RL  4.2592E+04  -7.200      0.000       1.000       1.000
59.82       0.000       0.000     Strato2_84780_84781_L_0
  38 D  12.41       1.4885E-04  88.35       62.07       140.6       70.30        UL-RL  4.2592E+04  -7.400      0.000       1.000       1.000
62.07       0.000       0.000     Strato2_84780_84781_L_0
  39 D  12.86       1.5574E-04  92.15       64.31       144.4       72.20        UL-RL  4.2592E+04  -7.600      0.000       1.000       1.000
64.31       0.000       0.000     Strato2_84780_84781_L_0
  40 D  13.31       1.6249E-04  95.95       66.54       148.2       74.10        UL-RL  4.2592E+04  -7.800      0.000       1.000       1.000
66.54       0.000       0.000     Strato2_84780_84781_L_0
  41 D  6.877       1.6916E-04  99.75       68.77       152.0       76.00        UL-RL  4.2592E+04  -8.000      0.000       1.000       1.000
68.77       0.000       0.000     Strato2_84780_84781_L_0

 +-------------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                     |
 |                                                                                                                               |
 |                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                          |
 |                                   Exe Time :24 July 2019      11:42:05                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 1468.1 - GA27 - Cepav2


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

 WallElement_33                  :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   40
 C U R R E N T   T I M E   I S      3.0000

  WALL2D ELEMENT

    EL      TA          TB          MA          MB
 -------------------------------------------------------
     1 4.64517E-13-4.64517E-13 5.12923E-14 4.86278E-13
     2 -13.937      13.937    -5.36571E-13 -2.7875
```

3	-13.449	13.449	2.7875	-5.4773
4	-12.710	12.710	5.4773	-8.0192
5	-11.714	11.714	8.0192	-10.362
6	-10.454	10.454	10.362	-12.453
7	-8.9250	8.9250	12.453	-14.238
8	-7.1200	7.1200	14.238	-15.662
9	-4.8573	4.8573	15.662	-16.633
10	-2.1452	2.1452	16.633	-17.062
11	0.96612	-0.96612	17.062	-16.869
12	4.4690	-4.4690	16.869	-15.975
13	8.3290	-8.3290	15.975	-14.310
14	12.545	-12.545	14.310	-11.801
15	16.405	-16.405	11.801	-8.5197
16	17.856	-17.856	8.5197	-4.9486
17	16.804	-16.804	4.9486	-1.5877
18	13.560	-13.560	1.5877	1.1243
19	10.577	-10.577	-1.1243	3.2397
20	7.8697	-7.8697	-3.2397	4.8136
21	5.4298	-5.4298	-4.8136	5.8996
22	3.2358	-3.2358	-5.8996	6.5468
23	1.2794	-1.2794	-6.5468	6.8027
24	-0.29832	0.29832	-6.8027	6.7430
25	-0.68443	0.68443	-6.7430	6.6061
26	-4.98455E-02	4.98455E-02	-6.6061	6.5961
27	1.4361	-1.4361	-6.5961	6.8834
28	-2.9038	2.9038	-6.8834	6.3026
29	-5.1308	5.1308	-6.3026	5.2764
30	-5.8644	5.8644	-5.2764	4.1036
31	-5.6378	5.6378	-4.1036	2.9760
32	-4.8681	4.8681	-2.9760	2.0024
33	-3.8592	3.8592	-2.0024	1.2306
34	-2.8166	2.8166	-1.2306	0.66725
35	-1.8673	1.8673	-0.66725	0.29379
36	-1.0805	1.0805	-0.29379	7.76895E-02
37	-0.48711	0.48711	-7.76895E-02	-1.97331E-02
38	-9.51676E-02	9.51676E-02	1.97331E-02	-3.87666E-02
39	9.76500E-02	-9.76500E-02	3.87666E-02	-1.92366E-02
40	9.61817E-02	-9.61817E-02	1.92366E-02	-1.05888E-14

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                 1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                     |
|                                  Exe Time :24 July 2019      11:42:05                                                   |
+-------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_78031                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S      3.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL     FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-----------------------------------------------------------------------------------------------------------------------
ANCHOR    1   41.460       0.0000      5.16294E-04   0.0000       80304.       0.0000       0.0000     ELASTIC  ORIGINAL YOUNG MODULUS

+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                 1468.1-GA27-Cepav2.BaseDesignSection_28.A1M1R1_3484                                     |
|                                  Exe Time :24 July 2019      11:42:05                                                   |
+-------------------------------------------------------------------------------------------------------------------------+


     F I N A L   I N C R E M E N T A L   A N A L Y S I S

                  S U M M A R Y

     STEP                                NO. OF ITERATIONS

        1          CONVERGENCE :YES                      2
        2          CONVERGENCE :YES                      2
        3          CONVERGENCE :YES                      5


 END OF PROCESS FOR PROBLEM
1468.1 - GA27 - Cepav2
```

```
NONLINEAR SOLUTION CPU TIME ....    0.02 [sec]
DATABASE  CREATION CPU TIME.....    0.11 [sec]
```

3.7. Design Assumption : A2+M2+R1 - File di Paratie - File di input (.d)

```
* PARATIE ANALYSIS FOR DESIGN SECTION:Base Design Section USING ASSUMPTION: A2+M2+R1
 * Time:mercoledì 24 luglio 2019 11:42:05
 * 1: Defining general settings
 UNIT  m kN
 TITLE 1468.1 - GA27 - Cepav2
 DELTA 0.2
 option param itemax 100
 option control hinges 0 0.0001 0.001

 * 2: Defining wall(s)
 WALL LeftWall_32 0 -8 0 1

 * 3: Defining surfaces for wall(s)
 SOIL 0_L LeftWall_32 -8 0 1 0
 SOIL 0_R LeftWall_32 -8 0 2 180

 * 4: Defining soil layers
 *
 * Soil Profile (Strato1_3095_78023_L_0)
 *
 LDATA Strato1_3095_78023_L_0 0 LeftWall_32
 ATREST 0.5 0.5 1
 WEIGHT 19 9 10
 PERMEABILITY 1E-05
 RESISTANCE 0 29
 YOUNG 2.5E+04 4E+04
 ENDL
 *
 * Soil Profile (Strato2_84780_84781_L_0)
 *
 LDATA Strato2_84780_84781_L_0 -5.35 LeftWall_32
 ATREST 0.5 0.5 1
 WEIGHT 19 9 10
 PERMEABILITY 1E-05
 RESISTANCE 20 35
 YOUNG 5E+04 1.5E+05
 ENDL

 * 5: Defining structural materials
 * Steel material: 113 Name=S275 E=210000000 kPa
 MATERIAL S275_113 2.1E+08
 * Concrete material: 104 Name=C25/30 E=31475800 kPa
 MATERIAL C2530_104 3.148E+07
 * Rebar material: 78036 Name=S275 E=210000000 kPa
 MATERIAL S275_78036 2.1E+08

 * 6: Defining structural elements
 * 6.1: Beams and combined Wall Elements
 BEAM WallElement_33 LeftWall_32 -8 0 S275_113 0.08153 00 00 0


 * 6.2: Supports
 WIRE Tieback_78031 LeftWall_32 -0.2 S275_78036 0.0003824 0 70 0 0




 * 6.3: Strips
 STRIP LeftWall_32 3 3 2.33 3 0 67.7 30

 * 7: Defining Steps
 STEP Stage0_86326
 CHANGE Strato1_3095_78023_L_0 U-FRICT=23.91 LeftWall_32
 CHANGE Strato1_3095_78023_L_0 D-FRICT=23.91 LeftWall_32
 CHANGE Strato1_3095_78023_L_0 U-KA=0.392 LeftWall_32
 CHANGE Strato1_3095_78023_L_0 U-KP=2.792 LeftWall_32
 CHANGE Strato1_3095_78023_L_0 D-KA=0.392 LeftWall_32
 CHANGE Strato1_3095_78023_L_0 D-KP=2.792 LeftWall_32
 CHANGE Strato2_84780_84781_L_0 U-FRICT=29.26 LeftWall_32
 CHANGE Strato2_84780_84781_L_0 D-FRICT=29.26 LeftWall_32
 CHANGE Strato2_84780_84781_L_0 U-KA=0.316 LeftWall_32
 CHANGE Strato2_84780_84781_L_0 U-KP=3.655 LeftWall_32
 CHANGE Strato2_84780_84781_L_0 D-KA=0.316 LeftWall_32
 CHANGE Strato2_84780_84781_L_0 D-KP=3.655 LeftWall_32
 CHANGE Strato1_3095_78023_L_0 U-COHE=0 LeftWall_32
 CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
```

```
CHANGE Strato2_84780_84781_L_0 U-COHE=16 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-COHE=16 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -17 0 -8 0 0
ENDSTEP

STEP Stage1_31
CHANGE Strato1_3095_78023_L_0 D-FRICT=23.91 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-FRICT=29.26 LeftWall_32
CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-COHE=16 LeftWall_32
SETWALL LeftWall_32
GEOM 0 0
WATER -17 0 -8 0 0
ADD WallElement_33 Tieback_78031
ENDSTEP

STEP Stage2_158
CHANGE Strato1_3095_78023_L_0 D-FRICT=23.91 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-FRICT=29.26 LeftWall_32
CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
CHANGE Strato2_84780_84781_L_0 D-COHE=16 LeftWall_32
SETWALL LeftWall_32
GEOM 0 -2.75
WATER -17 0 -8 0 0
ENDSTEP
```

3.8. Design Assumption : A2+M2+R1 - File di Paratie - File di output (.out)

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                    |
|                                   Exe Time :24 July 2019      11:42:06                                                  |
+-------------------------------------------------------------------------------------------------------------------------+

                  ***********************************************************
                  *                                                         *
                  *  PARATIE PLUS Non-Linear Spring Engine                  *
                  *                                                         *
                  *          AN ELASTOPLASTIC FINITE ELEMENT PROGRAM        *
                  *          FOR FLEXIBLE EARTH-RETAINING STRUCTURES        *
                  *                                                         *
                  *          Written by Ce.A.S. s.r.l. (ITALY)              *
                  *          with the scientific supervision of             *
                  *          Roberto Nova - full professor SOIL MECHANICS   *
                  *          at Politecnico di Milano (ITALY)               *
                  *                                                         *
                  ***********************************************************
                  *                                                         *
                  *  RELEASE   2017.1     *Build date:Jul 11, 2017*    *
                  *                                                         *
                  *                                                         *
                  *  Ce.A.S.     S.R.L   CENTRO DI ANALISI STRUTTURALE      *
                  *              VIALE   GIUSTINIANO 10                     *
                  *              20129   M I L A N O  (ITALIA)              *
                  *  TEL.        +39 02 2020221   (+39 035 23 67 19)        *
                  *  FAX         +39 02 29512533  (+39 035 42285 49)        *
                  *  email       bruno.becci@ceas.it                        *
                  *  Web Page    www.ceas.it                                *
                  ***********************************************************



 JOB : 1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514
 STARTING
ACCEPTED   <FILE,GENW                                                       >
ACCEPTED   <FILE,PLOTTER,BINARY                                             >
ACCEPTED   <SOLVE TOTAL_STRESS                                              >
ACCEPTED   <PARAM ITEMAX 100                                                >
ACCEPTED   <CONTROL HINGES 0 0.0001 0.001                                   >



                  ***********************************************************
                  *                                                         *
                  *  WARNING : PORE PRESSURES ARE AUTOMATICALLY COMPUTED    *
                  *    BY THE PROGRAM.                                      *
                  ***********************************************************
```

```
PRELIMINARY OPERATIONS CPU TIME     0.01 [sec]


+-------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*           |
|                                                                                                                   |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                              |
|                                   Exe Time :24 July 2019      11:42:06                                            |
+-------------------------------------------------------------------------------------------------------------------+


INPUT FILE HAS BEEN GENERATED BY WALGEN PROGRAM


1468.1 - GA27 - Cepav2


NO. OF NODAL POINTS (NUMNP) ..................   41
NO. OF COORDINATES  (NCOORD)..................    2
NO. OF NODE DOFS    (NDOF)....................    2
NO. OF EQUATIONS    (NEQ).....................   82
NO. OF CONSTRAINTS CARDS (NVINC)..............    0
NO. OF ELEMENT GROUPS (NEG)...................    4
NO. OF SOLUTION STEPS (NSTE)..................    3
NO. OF ELEMENT SETS ATTACHED TO SLAVE NODES ...    0
NO. OF RECORD FROM WALGEN ....................   68
NO. OF LONG NAMES (LASTNAME) .................   16
LENGTH UNIT CHOICE ...........................    3 (M   )
FORCE  UNIT CHOICE ...........................    3 (KN  )
MAX PORE PRESSURE TABLE LENGTH................    1
NO. OF ELEMENT GROUPS REQUIRING ADD. SLIP DOF .    0


IDOFA (01) =  2  Y-DISPL.F
IDOFA (02) =  4   X-ROT. F

 RELEVANT ITEMS UNITS

 STRESSES                  kPa
 Y-DISPLACEMENTS           m
 ROTATIONS                 RADIANS
 BEAM AND SLAB MOMENTS     kN*m/m
 BEAM SHEAR FORCES         kN/m
 ANCHOR FORCES             kN/m
 AXIAL FORCES IN TRUSSES   kN/m
 AXIAL FORCES SPRINGS      kN/m
 Y-REACTIONS               kN/m
 X-MOMENT REACTIONS        kN*m/m
 ETC.



+-------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*           |
|                                                                                                                   |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                              |
|                                   Exe Time :24 July 2019      11:42:06                                            |
+-------------------------------------------------------------------------------------------------------------------+
                    P R E P R O C E S S O R     D A T A

                    N O.  O F   C O M M A N D S     68

    1 : UNIT  m kN
    2 : TITLE 1468.1 - GA27 - Cepav2
    3 : DELTA 0.2
    4 : option param itemax 100
    5 : option control hinges 0 0.0001 0.001
    6 : WALL LeftWall_32 0 -8 0 1
    7 : SOIL 0_L LeftWall_32 -8 0 1 0
    8 : SOIL 0_R LeftWall_32 -8 0 2 180
    9 : LDATA Strato1_3095_78023_L_0 0 LeftWall_32
   10 : ATREST 0.5 0.5 1
   11 : WEIGHT 19 9 10
   12 : PERMEABILITY 1E-05
   13 : RESISTANCE 0 29
   14 : YOUNG 2.5E+04 4E+04
   15 : ENDL
   16 : LDATA Strato2_84780_84781_L_0 -5.35 LeftWall_32
   17 : ATREST 0.5 0.5 1
   18 : WEIGHT 19 9 10
   19 : PERMEABILITY 1E-05
   20 : RESISTANCE 20 35
```

```
   21 : YOUNG 5E+04 1.5E+05
   22 : ENDL
   23 : MATERIAL S275_113 2.1E+08
   24 : MATERIAL C2530_104 3.148E+07
   25 : MATERIAL S275_78036 2.1E+08
   26 : BEAM WallElement_33 LeftWall_32 -8 0 S275_113 0.08153 00 00 0
   27 : WIRE Tieback_78031 LeftWall_32 -0.2 S275_78036 0.0003824 0 70 0 0
   28 : STRIP LeftWall_32 3 3 2.33 3 0 67.7 30
   29 : STEP Stage0_86326
   30 : CHANGE Strato1_3095_78023_L_0 U-FRICT=23.91 LeftWall_32
   31 : CHANGE Strato1_3095_78023_L_0 D-FRICT=23.91 LeftWall_32
   32 : CHANGE Strato1_3095_78023_L_0 U-KA=0.392 LeftWall_32
   33 : CHANGE Strato1_3095_78023_L_0 U-KP=2.792 LeftWall_32
   34 : CHANGE Strato1_3095_78023_L_0 D-KA=0.392 LeftWall_32
   35 : CHANGE Strato1_3095_78023_L_0 D-KP=2.792 LeftWall_32
   36 : CHANGE Strato2_84780_84781_L_0 U-FRICT=29.26 LeftWall_32
   37 : CHANGE Strato2_84780_84781_L_0 D-FRICT=29.26 LeftWall_32
   38 : CHANGE Strato2_84780_84781_L_0 U-KA=0.316 LeftWall_32
   39 : CHANGE Strato2_84780_84781_L_0 U-KP=3.655 LeftWall_32
   40 : CHANGE Strato2_84780_84781_L_0 D-KA=0.316 LeftWall_32
   41 : CHANGE Strato2_84780_84781_L_0 D-KP=3.655 LeftWall_32
   42 : CHANGE Strato1_3095_78023_L_0 U-COHE=0 LeftWall_32
   43 : CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
   44 : CHANGE Strato2_84780_84781_L_0 U-COHE=16 LeftWall_32
   45 : CHANGE Strato2_84780_84781_L_0 D-COHE=16 LeftWall_32
   46 : SETWALL LeftWall_32
   47 : GEOM 0 0
   48 : WATER -17 0 -8 0 0
   49 : ENDSTEP
   50 : STEP Stage1_31
   51 : CHANGE Strato1_3095_78023_L_0 D-FRICT=23.91 LeftWall_32
   52 : CHANGE Strato2_84780_84781_L_0 D-FRICT=29.26 LeftWall_32
   53 : CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
   54 : CHANGE Strato2_84780_84781_L_0 D-COHE=16 LeftWall_32
   55 : SETWALL LeftWall_32
   56 : GEOM 0 0
   57 : WATER -17 0 -8 0 0
   58 : ADD WallElement_33 Tieback_78031
   59 : ENDSTEP
   60 : STEP Stage2_158
   61 : CHANGE Strato1_3095_78023_L_0 D-FRICT=23.91 LeftWall_32
   62 : CHANGE Strato2_84780_84781_L_0 D-FRICT=29.26 LeftWall_32
   63 : CHANGE Strato1_3095_78023_L_0 D-COHE=0 LeftWall_32
   64 : CHANGE Strato2_84780_84781_L_0 D-COHE=16 LeftWall_32
   65 : SETWALL LeftWall_32
   66 : GEOM 0 -2.75
   67 : WATER -17 0 -8 0 0
   68 : ENDSTEP



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                  |
|                                   Exe Time :24 July 2019      11:42:06                                                |
+-----------------------------------------------------------------------------------------------------------------------+
N O D A L    P O I N T    D A T A
---------------------------------

NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD / NODE     Y-COORD     Z-COORD /

   1  0.0000      0.0000     /    2  0.0000    -0.20000     /    3  0.0000    -0.40000     /    4  0.0000    -0.60000     /
   5  0.0000    -0.80000     /    6  0.0000     -1.0000     /    7  0.0000     -1.2000     /    8  0.0000     -1.4000     /
   9  0.0000     -1.6000     /   10  0.0000     -1.8000     /   11  0.0000     -2.0000     /   12  0.0000     -2.2000     /
  13  0.0000     -2.4000     /   14  0.0000     -2.6000     /   15  0.0000     -2.8000     /   16  0.0000     -3.0000     /
  17  0.0000     -3.2000     /   18  0.0000     -3.4000     /   19  0.0000     -3.6000     /   20  0.0000     -3.8000     /
  21  0.0000     -4.0000     /   22  0.0000     -4.2000     /   23  0.0000     -4.4000     /   24  0.0000     -4.6000     /
  25  0.0000     -4.8000     /   26  0.0000     -5.0000     /   27  0.0000     -5.2000     /   28  0.0000     -5.4000     /
  29  0.0000     -5.6000     /   30  0.0000     -5.8000     /   31  0.0000     -6.0000     /   32  0.0000     -6.2000     /
  33  0.0000     -6.4000     /   34  0.0000     -6.6000     /   35  0.0000     -6.8000     /   36  0.0000     -7.0000     /
  37  0.0000     -7.2000     /   38  0.0000     -7.4000     /   39  0.0000     -7.6000     /   40  0.0000     -7.8000     /
  41  0.0000     -8.0000     /



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                  |
|                                   Exe Time :24 July 2019      11:42:06                                                |
+-----------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  1
```

```
0_L                              :
   5  41   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
.....2D PLASTIC SOIL .....
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1   active
    2   active
    3   active

 material set no.    1

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              0.00000
 prop( 2) layer as foreseen  2.00000


 element data

   el     n  mat      area      .....     .....     .....      flag
-------------------------------------------------------------------

    1     1    1   0.1000      0.000     0.000     0.000     1.000
    2     2    1   0.2000      0.000     0.000     0.000     1.000
    3     3    1   0.2000      0.000     0.000     0.000     1.000
    4     4    1   0.2000      0.000     0.000     0.000     1.000
    5     5    1   0.2000      0.000     0.000     0.000     1.000
    6     6    1   0.2000      0.000     0.000     0.000     1.000
    7     7    1   0.2000      0.000     0.000     0.000     1.000
    8     8    1   0.2000      0.000     0.000     0.000     1.000
    9     9    1   0.2000      0.000     0.000     0.000     1.000
   10    10    1   0.2000      0.000     0.000     0.000     1.000
   11    11    1   0.2000      0.000     0.000     0.000     1.000
   12    12    1   0.2000      0.000     0.000     0.000     1.000
   13    13    1   0.2000      0.000     0.000     0.000     1.000
   14    14    1   0.2000      0.000     0.000     0.000     1.000
   15    15    1   0.2000      0.000     0.000     0.000     1.000
   16    16    1   0.2000      0.000     0.000     0.000     1.000
   17    17    1   0.2000      0.000     0.000     0.000     1.000
   18    18    1   0.2000      0.000     0.000     0.000     1.000
   19    19    1   0.2000      0.000     0.000     0.000     1.000
   20    20    1   0.2000      0.000     0.000     0.000     1.000
   21    21    1   0.2000      0.000     0.000     0.000     1.000
   22    22    1   0.2000      0.000     0.000     0.000     1.000
   23    23    1   0.2000      0.000     0.000     0.000     1.000
   24    24    1   0.2000      0.000     0.000     0.000     1.000
   25    25    1   0.2000      0.000     0.000     0.000     1.000
   26    26    1   0.2000      0.000     0.000     0.000     1.000
   27    27    1   0.2000      0.000     0.000     0.000     1.000
   28    28    2   0.2000      0.000     0.000     0.000     1.000
   29    29    2   0.2000      0.000     0.000     0.000     1.000
   30    30    2   0.2000      0.000     0.000     0.000     1.000
   31    31    2   0.2000      0.000     0.000     0.000     1.000
   32    32    2   0.2000      0.000     0.000     0.000     1.000
   33    33    2   0.2000      0.000     0.000     0.000     1.000
   34    34    2   0.2000      0.000     0.000     0.000     1.000
   35    35    2   0.2000      0.000     0.000     0.000     1.000
   36    36    2   0.2000      0.000     0.000     0.000     1.000
   37    37    2   0.2000      0.000     0.000     0.000     1.000
   38    38    2   0.2000      0.000     0.000     0.000     1.000
   39    39    2   0.2000      0.000     0.000     0.000     1.000
   40    40    2   0.2000      0.000     0.000     0.000     1.000
   41    41    2   0.1000      0.000     0.000     0.000     1.000



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                  |
|                                   Exe Time :24 July 2019      11:42:06                                                |
+-----------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  2

0_R                              :
```

```
   5  41   0   1   0   0   0   0   0   0   0   0   0   0   0   2   0   0   0   0
.....................................
.....2D PLASTIC SOIL .....
.....................................

element group behaviour throughout stage analysis

stage   status
------------------
    1   active
    2   active
    3   active

 material set no.    1

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  1.00000


 material set no.    2

 prop( 1) angle              180.000
 prop( 2) layer as foreseen  2.00000


 element data

   el    n  mat      area      .....     .....     .....      flag
-------------------------------------------------------------------

    1    1    1   0.1000      0.000     0.000     0.000     2.000
    2    2    1   0.2000      0.000     0.000     0.000     2.000
    3    3    1   0.2000      0.000     0.000     0.000     2.000
    4    4    1   0.2000      0.000     0.000     0.000     2.000
    5    5    1   0.2000      0.000     0.000     0.000     2.000
    6    6    1   0.2000      0.000     0.000     0.000     2.000
    7    7    1   0.2000      0.000     0.000     0.000     2.000
    8    8    1   0.2000      0.000     0.000     0.000     2.000
    9    9    1   0.2000      0.000     0.000     0.000     2.000
   10   10    1   0.2000      0.000     0.000     0.000     2.000
   11   11    1   0.2000      0.000     0.000     0.000     2.000
   12   12    1   0.2000      0.000     0.000     0.000     2.000
   13   13    1   0.2000      0.000     0.000     0.000     2.000
   14   14    1   0.2000      0.000     0.000     0.000     2.000
   15   15    1   0.2000      0.000     0.000     0.000     2.000
   16   16    1   0.2000      0.000     0.000     0.000     2.000
   17   17    1   0.2000      0.000     0.000     0.000     2.000
   18   18    1   0.2000      0.000     0.000     0.000     2.000
   19   19    1   0.2000      0.000     0.000     0.000     2.000
   20   20    1   0.2000      0.000     0.000     0.000     2.000
   21   21    1   0.2000      0.000     0.000     0.000     2.000
   22   22    1   0.2000      0.000     0.000     0.000     2.000
   23   23    1   0.2000      0.000     0.000     0.000     2.000
   24   24    1   0.2000      0.000     0.000     0.000     2.000
   25   25    1   0.2000      0.000     0.000     0.000     2.000
   26   26    1   0.2000      0.000     0.000     0.000     2.000
   27   27    1   0.2000      0.000     0.000     0.000     2.000
   28   28    2   0.2000      0.000     0.000     0.000     2.000
   29   29    2   0.2000      0.000     0.000     0.000     2.000
   30   30    2   0.2000      0.000     0.000     0.000     2.000
   31   31    2   0.2000      0.000     0.000     0.000     2.000
   32   32    2   0.2000      0.000     0.000     0.000     2.000
   33   33    2   0.2000      0.000     0.000     0.000     2.000
   34   34    2   0.2000      0.000     0.000     0.000     2.000
   35   35    2   0.2000      0.000     0.000     0.000     2.000
   36   36    2   0.2000      0.000     0.000     0.000     2.000
   37   37    2   0.2000      0.000     0.000     0.000     2.000
   38   38    2   0.2000      0.000     0.000     0.000     2.000
   39   39    2   0.2000      0.000     0.000     0.000     2.000
   40   40    2   0.2000      0.000     0.000     0.000     2.000
   41   41    2   0.1000      0.000     0.000     0.000     2.000



+-----------------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                  |
|                                   Exe Time :24 July 2019      11:42:06                                                |
+-----------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  3

WallElement_33                 :
   2  40   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   1   0
```

```
.....................................
.........2D WALL ELEMENT...........
.....................................

element group behaviour throughout stage analysis

stage   status
-------------------
    1  inactive
    2   active
    3   active

 material set no.    1

 prop( 1) young modulus       0.210000E+09
 prop( 2) modification  time  0.00000
 prop( 3) new young modulus   0.00000
 prop( 4) poisson ratio       0.00000
 prop( 5) future .............0.182200E-43

 no. of step variable items:     1
 step  inertia multipier
---------------------------
    1   1.000
    2   1.000
    3   1.000

 element data

   el   na   nb  mat      erc1      erc2     thick      by-i      by-j
-------------------------------------------------------------------

    1    1    2    1    0.000     0.000    0.8153E-01 0.000     0.000
    2    2    3    1    0.000     0.000    0.8153E-01 0.000     0.000
    3    3    4    1    0.000     0.000    0.8153E-01 0.000     0.000
    4    4    5    1    0.000     0.000    0.8153E-01 0.000     0.000
    5    5    6    1    0.000     0.000    0.8153E-01 0.000     0.000
    6    6    7    1    0.000     0.000    0.8153E-01 0.000     0.000
    7    7    8    1    0.000     0.000    0.8153E-01 0.000     0.000
    8    8    9    1    0.000     0.000    0.8153E-01 0.000     0.000
    9    9   10    1    0.000     0.000    0.8153E-01 0.000     0.000
   10   10   11    1    0.000     0.000    0.8153E-01 0.000     0.000
   11   11   12    1    0.000     0.000    0.8153E-01 0.000     0.000
   12   12   13    1    0.000     0.000    0.8153E-01 0.000     0.000
   13   13   14    1    0.000     0.000    0.8153E-01 0.000     0.000
   14   14   15    1    0.000     0.000    0.8153E-01 0.000     0.000
   15   15   16    1    0.000     0.000    0.8153E-01 0.000     0.000
   16   16   17    1    0.000     0.000    0.8153E-01 0.000     0.000
   17   17   18    1    0.000     0.000    0.8153E-01 0.000     0.000
   18   18   19    1    0.000     0.000    0.8153E-01 0.000     0.000
   19   19   20    1    0.000     0.000    0.8153E-01 0.000     0.000
   20   20   21    1    0.000     0.000    0.8153E-01 0.000     0.000
   21   21   22    1    0.000     0.000    0.8153E-01 0.000     0.000
   22   22   23    1    0.000     0.000    0.8153E-01 0.000     0.000
   23   23   24    1    0.000     0.000    0.8153E-01 0.000     0.000
   24   24   25    1    0.000     0.000    0.8153E-01 0.000     0.000
   25   25   26    1    0.000     0.000    0.8153E-01 0.000     0.000
   26   26   27    1    0.000     0.000    0.8153E-01 0.000     0.000
   27   27   28    1    0.000     0.000    0.8153E-01 0.000     0.000
   28   28   29    1    0.000     0.000    0.8153E-01 0.000     0.000
   29   29   30    1    0.000     0.000    0.8153E-01 0.000     0.000
   30   30   31    1    0.000     0.000    0.8153E-01 0.000     0.000
   31   31   32    1    0.000     0.000    0.8153E-01 0.000     0.000
   32   32   33    1    0.000     0.000    0.8153E-01 0.000     0.000
   33   33   34    1    0.000     0.000    0.8153E-01 0.000     0.000
   34   34   35    1    0.000     0.000    0.8153E-01 0.000     0.000
   35   35   36    1    0.000     0.000    0.8153E-01 0.000     0.000
   36   36   37    1    0.000     0.000    0.8153E-01 0.000     0.000
   37   37   38    1    0.000     0.000    0.8153E-01 0.000     0.000
   38   38   39    1    0.000     0.000    0.8153E-01 0.000     0.000
   39   39   40    1    0.000     0.000    0.8153E-01 0.000     0.000
   40   40   41    1    0.000     0.000    0.8153E-01 0.000     0.000



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                  |
|                                   Exe Time :24 July 2019      11:42:06                                                |
+-----------------------------------------------------------------------------------------------------------------------+
 ELEMENT GROUP NO.  4

Tieback_78031                  :
```

```
   6   1   0   1   0   0   0   0   0   0   0   0   0   0   0   1   0   0   2   0
.....................................
.........2D POST-TENSION ANCHOR....
.....................................

element group behaviour throughout stage analysis

stage   status
------------------
    1  inactive
    2   active
    3   active

 material set no.    1

 prop( 1) angle          70.0000
 prop( 2) young modulus 0.210000E+09
 prop( 3) modification  time  0.00000
 prop( 4) new young modulus   0.00000

 no. of step variable items:     2
 step   -ve lim     +ve lim
-----------------------------
    1   0.000       0.000
    2   0.000       0.000
    3   0.000       0.000

 element data

   el    n  mat       a/l     pinit    yieldc    yieldt
-------------------------------------------------------

    1    2    1   0.3824E-03 0.000     0.000     0.000



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                    |
|                                   Exe Time :24 July 2019      11:42:06                                                  |
+-------------------------------------------------------------------------------------------------------------------------+


NO. OF NODAL LOADS  (NLOAD) ...................    0
NO. OF LOAD CURVES  (NLCUR) ...................    6
MAXIMUM POINTS/LCURVE (NPTM)...................    5



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                    |
|                                   Exe Time :24 July 2019      11:42:06                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
L O A D     D A T A


    LOAD FUNCTION NUMBER   =    1
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       1.20000    0.0000E+00
       4.00000    0.0000E+00



    LOAD FUNCTION NUMBER   =    2
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       2.20000    0.0000E+00
       4.00000    0.0000E+00
```

```
    LOAD FUNCTION NUMBER   =    3
    NUMBER OF TIME POINTS  =    5

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       3.20000    0.0000E+00
       4.00000    0.0000E+00


    LOAD FUNCTION NUMBER   =    4
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       0.80000    0.0000E+00
       1.00000    0.1000E+01
       4.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =    5
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       1.80000    0.0000E+00
       2.00000    0.1000E+01
       4.00000    0.1000E+01


    LOAD FUNCTION NUMBER   =    6
    NUMBER OF TIME POINTS  =    4

    TIME VALUE      FUNCTION

       0.00000    0.0000E+00
       2.80000    0.0000E+00
       3.00000    0.1000E+01
       4.00000    0.1000E+01


NO. OF DISTRIBUTED LOAD CARDS     0




+-----------------------------------------------------------------------------------------------------------------+
|                  PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                 |
|                                1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                              |
|                                 Exe Time :24 July 2019      11:42:06                                            |
+-----------------------------------------------------------------------------------------------------------------+
L O A D     B A L A N C E

STEP     1 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     1 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     2 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     2 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000

STEP     3 TOTAL APPLIED LOAD IN DIR.  2  Y-DISPL.F       0.0000000
STEP     3 TOTAL APPLIED LOAD IN DIR.  4   X-ROT. F       0.0000000


                     LOAD INPUT SECTION COMPLETED
```

```
+-------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                    1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                  |
|                                     Exe Time :24 July 2019      11:42:06                                                |
+-------------------------------------------------------------------------------------------------------------------------+


NO. OF LAYERS .................................    2
NO. OF DATA PER LAYER.........................  100



+-------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                    1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                  |
|                                     Exe Time :24 July 2019      11:42:06                                                |
+-------------------------------------------------------------------------------------------------------------------------+

LAYER DESCRIPTORS FOR STEP NO.    1


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  10.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  23.910     WALL NO.        1
ITEM NO.   9<U-FRICT >=  29.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.39200     WALL NO.        1
ITEM NO.  11<U-KP    >=  2.7920     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  25000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  40000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  23.910     WALL NO.        1
ITEM NO.  59<D-FRICT >=  29.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.39200     WALL NO.        1
ITEM NO.  61<D-KP    >=  2.7920     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    1

ITEM NO.   1<NAME    >=  11.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -5.3500     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  16.000     WALL NO.        1
ITEM NO.   8<U-COHE  >=  20.000     WALL NO.        2
ITEM NO.   9<U-FRICT >=  29.260     WALL NO.        1
ITEM NO.   9<U-FRICT >=  35.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.31600     WALL NO.        1
ITEM NO.  11<U-KP    >=  3.6550     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  16.000     WALL NO.        1
ITEM NO.  58<D-COHE  >=  20.000     WALL NO.        2
ITEM NO.  59<D-FRICT >=  29.260     WALL NO.        1
ITEM NO.  59<D-FRICT >=  35.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.31600     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.6550     WALL NO.        1
```

```
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    2


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  10.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  23.910     WALL NO.        1
ITEM NO.   9<U-FRICT >=  29.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.39200     WALL NO.        1
ITEM NO.  11<U-KP    >=  2.7920     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  25000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  40000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  23.910     WALL NO.        1
ITEM NO.  59<D-FRICT >=  29.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.39200     WALL NO.        1
ITEM NO.  61<D-KP    >=  2.7920     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    2

ITEM NO.   1<NAME    >=  11.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -5.3500     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  16.000     WALL NO.        1
ITEM NO.   8<U-COHE  >=  20.000     WALL NO.        2
ITEM NO.   9<U-FRICT >=  29.260     WALL NO.        1
ITEM NO.   9<U-FRICT >=  35.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.31600     WALL NO.        1
ITEM NO.  11<U-KP    >=  3.6550     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  16.000     WALL NO.        1
ITEM NO.  58<D-COHE  >=  20.000     WALL NO.        2
ITEM NO.  59<D-FRICT >=  29.260     WALL NO.        1
ITEM NO.  59<D-FRICT >=  35.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.31600     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.6550     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO.    3


 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    1 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  10.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >=  0.0000     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   9<U-FRICT >=  23.910     WALL NO.        1
ITEM NO.   9<U-FRICT >=  29.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.39200     WALL NO.        1
ITEM NO.  11<U-KP    >=  2.7920     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
```

```
ITEM NO.  17<EVC     >=  25000.     (BOTH WALLS)
ITEM NO.  18<EUR     >=  40000.     (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  59<D-FRICT >=  23.910     WALL NO.        1
ITEM NO.  59<D-FRICT >=  29.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.39200     WALL NO.        1
ITEM NO.  61<D-KP    >=  2.7920     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)

 NON ZERO LAYER DESCRIPTORS FOR LAYER NO.    2 FOR STEP NO.    3

ITEM NO.   1<NAME    >=  11.000     (BOTH WALLS)
ITEM NO.   2<NATURE  >=  1.0000     (BOTH WALLS)
ITEM NO.   3<LEVEL   >= -5.3500     (BOTH WALLS)
ITEM NO.   4<WALL    >=  1.0000     (BOTH WALLS)
ITEM NO.   5<GAMMAD  >=  19.000     (BOTH WALLS)
ITEM NO.   6<GAMMAB  >=  9.0000     (BOTH WALLS)
ITEM NO.   7<GAMMAW  >=  10.000     (BOTH WALLS)
ITEM NO.   8<U-COHE  >=  16.000     WALL NO.        1
ITEM NO.   8<U-COHE  >=  20.000     WALL NO.        2
ITEM NO.   9<U-FRICT >=  29.260     WALL NO.        1
ITEM NO.   9<U-FRICT >=  35.000     WALL NO.        2
ITEM NO.  10<U-KA    >= 0.31600     WALL NO.        1
ITEM NO.  11<U-KP    >=  3.6550     WALL NO.        1
ITEM NO.  12<K0-NC   >= 0.50000     (BOTH WALLS)
ITEM NO.  13<NEXP    >= 0.50000     (BOTH WALLS)
ITEM NO.  14<OCR     >=  1.0000     (BOTH WALLS)
ITEM NO.  16<MODEL   >=  1.0000     (BOTH WALLS)
ITEM NO.  17<EVC     >=  50000.     (BOTH WALLS)
ITEM NO.  18<EUR     >= 0.15000E+06 (BOTH WALLS)
ITEM NO.  27<U-PERM  >= 0.10000E-04 (BOTH WALLS)
ITEM NO.  52<D-NATURE>=  1.0000     (BOTH WALLS)
ITEM NO.  53<D-LEVEL >=  0.0000     (BOTH WALLS)
ITEM NO.  58<D-COHE  >=  16.000     WALL NO.        1
ITEM NO.  58<D-COHE  >=  20.000     WALL NO.        2
ITEM NO.  59<D-FRICT >=  29.260     WALL NO.        1
ITEM NO.  59<D-FRICT >=  35.000     WALL NO.        2
ITEM NO.  60<D-KA    >= 0.31600     WALL NO.        1
ITEM NO.  61<D-KP    >=  3.6550     WALL NO.        1
ITEM NO.  77<D-PERM  >= 0.10000E-04 (BOTH WALLS)


DEFAULT WATER UNIT WEIGHT =  10.000
AVERAGED ON     6 VALUES



+-----------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*             |
|                                                                                                                       |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                  |
|                                   Exe Time :24 July 2019      11:42:06                                                |
+-----------------------------------------------------------------------------------------------------------------------+

PHASE DESCRIPTORS


STEP  NO.     1
                                      LEFT WALL    RIGHT WALL
Y                                      0.000       -0.9990E+30
Z-PC                                   0.000         0.000
Z-EXCAVATION                           0.000         0.000
Z-WATER_TABLE                         -17.00        -0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL              0.000         0.000
ZQ                                     0.000         0.000
DZW_OF_THE_WATER_TABLE                 0.000         0.000
QS_ON_THE_EXCAVATION_SIDE              0.000         0.000
ZQS                                   -0.9990E+30   -0.9990E+30
ZCUT                                   0.000         0.000
BALANCE LEVEL FOR PORE PRESSURES      -8.000        -8.000
WATER_BEHAVIOUR_FLAG (LINING OPT)      0.000         0.000
PORE_UPDATE_FLAG                       0.000         0.000
PORE_TAB. _FLAG (gt.0= use tabs)       0.000         0.000
lateral thrusts reduction elevatio     0.000         0.000
Downhill reduction factor for effe     0.000         0.000
Downhill reduction factor for pore     0.000         0.000
Uphill reduction factor for effect     0.000         0.000
Uphill reduction factor for pore p     0.000         0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]       0.000         0.000
UPHILL VERTICAL ACCEL.  Kv_uh [g]      0.000         0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]      0.000         0.000
```

UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 1

STEP NO. 2

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	0.000	0.000
Z-WATER_TABLE	-17.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-8.000	-8.000
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000
SEISMIC PRESSURE UPPER LEVEL	0.000	0.000

==========end of step 2

STEP NO. 3

	LEFT WALL	RIGHT WALL
Y	0.000	-0.9990E+30
Z-PC	0.000	0.000
Z-EXCAVATION	-2.750	0.000
Z-WATER_TABLE	-17.00	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	-0.9990E+30	-0.9990E+30
ZCUT	0.000	0.000
BALANCE LEVEL FOR PORE PRESSURES	-8.000	-8.000
WATER_BEHAVIOUR_FLAG (LINING OPT)	0.000	0.000
PORE_UPDATE_FLAG	0.000	0.000
PORE_TAB. _FLAG (gt.0= use tabs)	0.000	0.000
lateral thrusts reduction elevatio	0.000	0.000
Downhill reduction factor for effe	0.000	0.000
Downhill reduction factor for pore	0.000	0.000
Uphill reduction factor for effect	0.000	0.000
Uphill reduction factor for pore p	0.000	0.000
SEISMIC HORIZONTAL ACCEL. Kh [g]	0.000	0.000
UPHILL VERTICAL ACCEL. Kv_uh [g]	0.000	0.000
DOWNHILL VERTICAL ACCEL.Kv_dh [g]	0.000	0.000
UPHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
UPHILL DELTA/PHI RATIO	0.000	0.000
DOWNHILL BETA ANGLE (SLOPE) [deg]	0.000	0.000
DOWNHILL DELTA/PHI RATIO	0.000	0.000
DYN.WATER BEHAVIOUR	0.000	0.000
Excess pore pressure RATIO Ru	0.000	0.000
SEISMIC PRESSURE LOWER VALUE	0.000	0.000
SEISMIC PRESSURE UPPER VALUE	0.000	0.000
SEISMIC PRESSURE LOWER LEVEL	0.000	0.000

```
SEISMIC PRESSURE UPPER LEVEL            0.000         0.000

================================================================================================================end of step    3


 LEFT-HAND WALL

 LOWER  LEVEL          -8.00000
 UPPER  LEVEL           0.00000

 RIGHT-HAND WALL

 LOWER  LEVEL          -8.00000
 UPPER  LEVEL           0.00000




+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                      |
|                                 Exe Time :24 July 2019      11:42:06                                                    |
+-------------------------------------------------------------------------------------------------------------------------+
 I N I T I A L   S T R E S S   T A B L E S

            S E C T I O N

 NUMBER OF DEFINED TABLES             1


INPUT DATA FOR INITIAL STRESS SET NO.    1
PERTAINING SOIL ELEMENTS AT Y-COORD    0.0000

ACTIVATION TIME                              3.0000
END TIME (TIME BEYOND WHICH IT IS REMOVED)   3.0000

TYPE BOUSSINESQ

 HORIZONTAL DISTANCE (DY)           2.33000000000000
 FOUNDATION WIDTH    (B)            3.00000000000000
 ZETA-F.....                       0.000000000000000E+000
 Q-F .....                          67.7000000000000
 BETA .....                         30.0000000000000
 BEHAVIOUR (0=FREE, 1=REFLECTING)  0.000000000000000E+000


 ELEMENT GROUPS BACKUP AREA CAN STAY IN CORE AT
 POSITION        2279

 NO. OF D.P.W  FOR THIS AREA       4898
 MAX NO. OF D.P.W. AVAILABLE      81920
 ** MAX NO OF ITERATIONS SET TO         100

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM= 6047.     RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 14.82     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 6047.     RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=    82 NODE     41 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     1 RNORM = 0.000     RMNORM= 0.000
           RINORM= 6047.     RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 14.82     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 6047.     RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=    82 NODE     41 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM= 6047.     RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 14.82     RMMAX = 0.000
```

```
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 6047.     RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=    82 NODE     41 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1   Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



 +-------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
 |                                                                                                                         |
 |                                 1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                     |
 |                                  Exe Time :24 July 2019      11:42:06                                                   |
 +-------------------------------------------------------------------------------------------------------------------------+
 1468.1 - GA27 - Cepav2
 SOLUTION REACHED USING     2 ITERATIONS ON  100

 P R I N T   O U T   F O R   T I M E   S T E P    1     ( AT TIME   1.000     )

 PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

           Y-DISPL.F        X-ROT. F
            (02)            (04)            (


 ALL NODAL POINTS HAVE ZERO DISPLACEMENT COMPONENTS




 +-------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
 |                                                                                                                         |
 |                                 1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                     |
 |                                  Exe Time :24 July 2019      11:42:06                                                   |
 +-------------------------------------------------------------------------------------------------------------------------+
 1468.1 - GA27 - Cepav2


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.    1

 0_L                             :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   41
 C U R R E N T   T I M E   I S      1.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE      DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P           STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq           Su_a         Su_p      LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1 D   0.000       0.000       0.000       0.000       0.000       0.000            V-C  3.6029E+04   0.000       0.000       1.000       1.000
0.000       0.000       0.000     Strato1_3095_78023_L_0
   2 D  0.3800       0.000       3.800       1.900       3.800       1.900            V-C  3.6029E+04 -0.2000       0.000       1.000       1.000
1.900       0.000       0.000     Strato1_3095_78023_L_0
   3 D  0.7600       0.000       7.600       3.800       7.600       3.800            V-C  3.6029E+04 -0.4000       0.000       1.000       1.000
3.800       0.000       0.000     Strato1_3095_78023_L_0
   4 D   1.140       0.000       11.40       5.700       11.40       5.700            V-C  3.6029E+04 -0.6000       0.000       1.000       1.000
5.700       0.000       0.000     Strato1_3095_78023_L_0
   5 D   1.520       0.000       15.20       7.600       15.20       7.600            V-C  3.6029E+04 -0.8000       0.000       1.000       1.000
7.600       0.000       0.000     Strato1_3095_78023_L_0
   6 D   1.900       0.000       19.00       9.500       19.00       9.500            V-C  3.6029E+04  -1.000       0.000       1.000       1.000
9.500       0.000       0.000     Strato1_3095_78023_L_0
   7 D   2.280       0.000       22.80       11.40       22.80       11.40            V-C  3.6029E+04  -1.200       0.000       1.000       1.000
11.40       0.000       0.000     Strato1_3095_78023_L_0
   8 D   2.660       0.000       26.60       13.30       26.60       13.30            V-C  3.6029E+04  -1.400       0.000       1.000       1.000
13.30       0.000       0.000     Strato1_3095_78023_L_0
   9 D   3.040       0.000       30.40       15.20       30.40       15.20            V-C  3.6029E+04  -1.600       0.000       1.000       1.000
15.20       0.000       0.000     Strato1_3095_78023_L_0
  10 D   3.420       0.000       34.20       17.10       34.20       17.10            V-C  3.6029E+04  -1.800       0.000       1.000       1.000
17.10       0.000       0.000     Strato1_3095_78023_L_0
  11 D   3.800       0.000       38.00       19.00       38.00       19.00            V-C  3.6029E+04  -2.000       0.000       1.000       1.000
19.00       0.000       0.000     Strato1_3095_78023_L_0
  12 D   4.180       0.000       41.80       20.90       41.80       20.90            V-C  3.6029E+04  -2.200       0.000       1.000       1.000
20.90       0.000       0.000     Strato1_3095_78023_L_0
  13 D   4.560       0.000       45.60       22.80       45.60       22.80            V-C  3.6029E+04  -2.400       0.000       1.000       1.000
22.80       0.000       0.000     Strato1_3095_78023_L_0
  14 D   4.940       0.000       49.40       24.70       49.40       24.70            V-C  3.6029E+04  -2.600       0.000       1.000       1.000
24.70       0.000       0.000     Strato1_3095_78023_L_0
```

15 D	5.320	0.000	53.20	26.60	53.20	26.60	V-C	3.6029E+04	-2.800	0.000	1.000	1.000	26.60	0.000	0.000	Strato1_3095_78023_L_0
16 D	5.700	0.000	57.00	28.50	57.00	28.50	V-C	3.6029E+04	-3.000	0.000	1.000	1.000	28.50	0.000	0.000	Strato1_3095_78023_L_0
17 D	6.080	0.000	60.80	30.40	60.80	30.40	V-C	3.6029E+04	-3.200	0.000	1.000	1.000	30.40	0.000	0.000	Strato1_3095_78023_L_0
18 D	6.460	0.000	64.60	32.30	64.60	32.30	V-C	3.6029E+04	-3.400	0.000	1.000	1.000	32.30	0.000	0.000	Strato1_3095_78023_L_0
19 D	6.840	0.000	68.40	34.20	68.40	34.20	V-C	3.6029E+04	-3.600	0.000	1.000	1.000	34.20	0.000	0.000	Strato1_3095_78023_L_0
20 D	7.220	0.000	72.20	36.10	72.20	36.10	V-C	3.6029E+04	-3.800	0.000	1.000	1.000	36.10	0.000	0.000	Strato1_3095_78023_L_0
21 D	7.600	0.000	76.00	38.00	76.00	38.00	V-C	3.6029E+04	-4.000	0.000	1.000	1.000	38.00	0.000	0.000	Strato1_3095_78023_L_0
22 D	7.980	0.000	79.80	39.90	79.80	39.90	V-C	3.6029E+04	-4.200	0.000	1.000	1.000	39.90	0.000	0.000	Strato1_3095_78023_L_0
23 D	8.360	0.000	83.60	41.80	83.60	41.80	V-C	3.6029E+04	-4.400	0.000	1.000	1.000	41.80	0.000	0.000	Strato1_3095_78023_L_0
24 D	8.740	0.000	87.40	43.70	87.40	43.70	V-C	3.6029E+04	-4.600	0.000	1.000	1.000	43.70	0.000	0.000	Strato1_3095_78023_L_0
25 D	9.120	0.000	91.20	45.60	91.20	45.60	V-C	3.6029E+04	-4.800	0.000	1.000	1.000	45.60	0.000	0.000	Strato1_3095_78023_L_0
26 D	9.500	0.000	95.00	47.50	95.00	47.50	V-C	3.6029E+04	-5.000	0.000	1.000	1.000	47.50	0.000	0.000	Strato1_3095_78023_L_0
27 D	9.880	0.000	98.80	49.40	98.80	49.40	V-C	3.6029E+04	-5.200	0.000	1.000	1.000	49.40	0.000	0.000	Strato1_3095_78023_L_0
28 D	10.26	0.000	102.6	51.30	102.6	51.30	V-C	7.9992E+04	-5.400	0.000	1.000	1.000	51.30	0.000	0.000	Strato2_84780_84781_L_0
29 D	10.64	0.000	106.4	53.20	106.4	53.20	V-C	7.9992E+04	-5.600	0.000	1.000	1.000	53.20	0.000	0.000	Strato2_84780_84781_L_0
30 D	11.02	0.000	110.2	55.10	110.2	55.10	V-C	7.9992E+04	-5.800	0.000	1.000	1.000	55.10	0.000	0.000	Strato2_84780_84781_L_0
31 D	11.40	0.000	114.0	57.00	114.0	57.00	V-C	7.9992E+04	-6.000	0.000	1.000	1.000	57.00	0.000	0.000	Strato2_84780_84781_L_0
32 D	11.78	0.000	117.8	58.90	117.8	58.90	V-C	7.9992E+04	-6.200	0.000	1.000	1.000	58.90	0.000	0.000	Strato2_84780_84781_L_0
33 D	12.16	0.000	121.6	60.80	121.6	60.80	V-C	7.9992E+04	-6.400	0.000	1.000	1.000	60.80	0.000	0.000	Strato2_84780_84781_L_0
34 D	12.54	0.000	125.4	62.70	125.4	62.70	V-C	7.9992E+04	-6.600	0.000	1.000	1.000	62.70	0.000	0.000	Strato2_84780_84781_L_0
35 D	12.92	0.000	129.2	64.60	129.2	64.60	V-C	7.9992E+04	-6.800	0.000	1.000	1.000	64.60	0.000	0.000	Strato2_84780_84781_L_0
36 D	13.30	0.000	133.0	66.50	133.0	66.50	V-C	7.9992E+04	-7.000	0.000	1.000	1.000	66.50	0.000	0.000	Strato2_84780_84781_L_0
37 D	13.68	0.000	136.8	68.40	136.8	68.40	V-C	7.9992E+04	-7.200	0.000	1.000	1.000	68.40	0.000	0.000	Strato2_84780_84781_L_0
38 D	14.06	0.000	140.6	70.30	140.6	70.30	V-C	7.9992E+04	-7.400	0.000	1.000	1.000	70.30	0.000	0.000	Strato2_84780_84781_L_0
39 D	14.44	0.000	144.4	72.20	144.4	72.20	V-C	7.9992E+04	-7.600	0.000	1.000	1.000	72.20	0.000	0.000	Strato2_84780_84781_L_0
40 D	14.82	0.000	148.2	74.10	148.2	74.10	V-C	7.9992E+04	-7.800	0.000	1.000	1.000	74.10	0.000	0.000	Strato2_84780_84781_L_0
41 D	7.600	0.000	152.0	76.00	152.0	76.00	V-C	7.9992E+04	-8.000	0.000	1.000	1.000	76.00	0.000	0.000	Strato2_84780_84781_L_0

```
 +-------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
 |                                                                                                                         |
 |                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                    |
 |                                   Exe Time :24 July 2019      11:42:06                                                  |
 +-------------------------------------------------------------------------------------------------------------------------+
 1468.1 - GA27 - Cepav2


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                          :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   41
 C U R R E N T   T I M E   I S      1.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****
```

EL	*	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D		0.000	0.000	0.000	0.000	0.000	0.000	V-C	3.0493E+04	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_3095_78023_L_0
2 D		0.3800	0.000	3.800	1.900	3.800	1.900	V-C	3.0493E+04	-0.2000	0.000	1.000	1.000	1.900	0.000	0.000	Strato1_3095_78023_L_0

```
   3 D  0.7600       0.000       7.600       3.800       7.600       3.800       V-C  3.0493E+04 -0.4000       0.000       1.000       1.000
3.800       0.000       0.000     Strato1_3095_78023_L_0
   4 D   1.140       0.000       11.40       5.700       11.40       5.700       V-C  3.0493E+04 -0.6000       0.000       1.000       1.000
5.700       0.000       0.000     Strato1_3095_78023_L_0
   5 D   1.520       0.000       15.20       7.600       15.20       7.600       V-C  3.0493E+04 -0.8000       0.000       1.000       1.000
7.600       0.000       0.000     Strato1_3095_78023_L_0
   6 D   1.900       0.000       19.00       9.500       19.00       9.500       V-C  3.0493E+04  -1.000       0.000       1.000       1.000
9.500       0.000       0.000     Strato1_3095_78023_L_0
   7 D   2.280       0.000       22.80       11.40       22.80       11.40       V-C  3.0493E+04  -1.200       0.000       1.000       1.000
11.40       0.000       0.000     Strato1_3095_78023_L_0
   8 D   2.660       0.000       26.60       13.30       26.60       13.30       V-C  3.0493E+04  -1.400       0.000       1.000       1.000
13.30       0.000       0.000     Strato1_3095_78023_L_0
   9 D   3.040       0.000       30.40       15.20       30.40       15.20       V-C  3.0493E+04  -1.600       0.000       1.000       1.000
15.20       0.000       0.000     Strato1_3095_78023_L_0
  10 D   3.420       0.000       34.20       17.10       34.20       17.10       V-C  3.0493E+04  -1.800       0.000       1.000       1.000
17.10       0.000       0.000     Strato1_3095_78023_L_0
  11 D   3.800       0.000       38.00       19.00       38.00       19.00       V-C  3.0493E+04  -2.000       0.000       1.000       1.000
19.00       0.000       0.000     Strato1_3095_78023_L_0
  12 D   4.180       0.000       41.80       20.90       41.80       20.90       V-C  3.0493E+04  -2.200       0.000       1.000       1.000
20.90       0.000       0.000     Strato1_3095_78023_L_0
  13 D   4.560       0.000       45.60       22.80       45.60       22.80       V-C  3.0493E+04  -2.400       0.000       1.000       1.000
22.80       0.000       0.000     Strato1_3095_78023_L_0
  14 D   4.940       0.000       49.40       24.70       49.40       24.70       V-C  3.0493E+04  -2.600       0.000       1.000       1.000
24.70       0.000       0.000     Strato1_3095_78023_L_0
  15 D   5.320       0.000       53.20       26.60       53.20       26.60       V-C  3.0493E+04  -2.800       0.000       1.000       1.000
26.60       0.000       0.000     Strato1_3095_78023_L_0
  16 D   5.700       0.000       57.00       28.50       57.00       28.50       V-C  3.0493E+04  -3.000       0.000       1.000       1.000
28.50       0.000       0.000     Strato1_3095_78023_L_0
  17 D   6.080       0.000       60.80       30.40       60.80       30.40       V-C  3.0493E+04  -3.200       0.000       1.000       1.000
30.40       0.000       0.000     Strato1_3095_78023_L_0
  18 D   6.460       0.000       64.60       32.30       64.60       32.30       V-C  3.0493E+04  -3.400       0.000       1.000       1.000
32.30       0.000       0.000     Strato1_3095_78023_L_0
  19 D   6.840       0.000       68.40       34.20       68.40       34.20       V-C  3.0493E+04  -3.600       0.000       1.000       1.000
34.20       0.000       0.000     Strato1_3095_78023_L_0
  20 D   7.220       0.000       72.20       36.10       72.20       36.10       V-C  3.0493E+04  -3.800       0.000       1.000       1.000
36.10       0.000       0.000     Strato1_3095_78023_L_0
  21 D   7.600       0.000       76.00       38.00       76.00       38.00       V-C  3.0493E+04  -4.000       0.000       1.000       1.000
38.00       0.000       0.000     Strato1_3095_78023_L_0
  22 D   7.980       0.000       79.80       39.90       79.80       39.90       V-C  3.0493E+04  -4.200       0.000       1.000       1.000
39.90       0.000       0.000     Strato1_3095_78023_L_0
  23 D   8.360       0.000       83.60       41.80       83.60       41.80       V-C  3.0493E+04  -4.400       0.000       1.000       1.000
41.80       0.000       0.000     Strato1_3095_78023_L_0
  24 D   8.740       0.000       87.40       43.70       87.40       43.70       V-C  3.0493E+04  -4.600       0.000       1.000       1.000
43.70       0.000       0.000     Strato1_3095_78023_L_0
  25 D   9.120       0.000       91.20       45.60       91.20       45.60       V-C  3.0493E+04  -4.800       0.000       1.000       1.000
45.60       0.000       0.000     Strato1_3095_78023_L_0
  26 D   9.500       0.000       95.00       47.50       95.00       47.50       V-C  3.0493E+04  -5.000       0.000       1.000       1.000
47.50       0.000       0.000     Strato1_3095_78023_L_0
  27 D   9.880       0.000       98.80       49.40       98.80       49.40       V-C  3.0493E+04  -5.200       0.000       1.000       1.000
49.40       0.000       0.000     Strato1_3095_78023_L_0
  28 D   10.26       0.000       102.6       51.30       102.6       51.30       V-C  5.4937E+04  -5.400       0.000       1.000       1.000
51.30       0.000       0.000     Strato2_84780_84781_L_0
  29 D   10.64       0.000       106.4       53.20       106.4       53.20       V-C  5.4937E+04  -5.600       0.000       1.000       1.000
53.20       0.000       0.000     Strato2_84780_84781_L_0
  30 D   11.02       0.000       110.2       55.10       110.2       55.10       V-C  5.4937E+04  -5.800       0.000       1.000       1.000
55.10       0.000       0.000     Strato2_84780_84781_L_0
  31 D   11.40       0.000       114.0       57.00       114.0       57.00       V-C  5.4937E+04  -6.000       0.000       1.000       1.000
57.00       0.000       0.000     Strato2_84780_84781_L_0
  32 D   11.78       0.000       117.8       58.90       117.8       58.90       V-C  5.4937E+04  -6.200       0.000       1.000       1.000
58.90       0.000       0.000     Strato2_84780_84781_L_0
  33 D   12.16       0.000       121.6       60.80       121.6       60.80       V-C  5.4937E+04  -6.400       0.000       1.000       1.000
60.80       0.000       0.000     Strato2_84780_84781_L_0
  34 D   12.54       0.000       125.4       62.70       125.4       62.70       V-C  5.4937E+04  -6.600       0.000       1.000       1.000
62.70       0.000       0.000     Strato2_84780_84781_L_0
  35 D   12.92       0.000       129.2       64.60       129.2       64.60       V-C  5.4937E+04  -6.800       0.000       1.000       1.000
64.60       0.000       0.000     Strato2_84780_84781_L_0
  36 D   13.30       0.000       133.0       66.50       133.0       66.50       V-C  5.4937E+04  -7.000       0.000       1.000       1.000
66.50       0.000       0.000     Strato2_84780_84781_L_0
  37 D   13.68       0.000       136.8       68.40       136.8       68.40       V-C  5.4937E+04  -7.200       0.000       1.000       1.000
68.40       0.000       0.000     Strato2_84780_84781_L_0
  38 D   14.06       0.000       140.6       70.30       140.6       70.30       V-C  5.4937E+04  -7.400       0.000       1.000       1.000
70.30       0.000       0.000     Strato2_84780_84781_L_0
  39 D   14.44       0.000       144.4       72.20       144.4       72.20       V-C  5.4937E+04  -7.600       0.000       1.000       1.000
72.20       0.000       0.000     Strato2_84780_84781_L_0
  40 D   14.82       0.000       148.2       74.10       148.2       74.10       V-C  5.4937E+04  -7.800       0.000       1.000       1.000
74.10       0.000       0.000     Strato2_84780_84781_L_0
  41 D   7.600       0.000       152.0       76.00       152.0       76.00       V-C  5.4937E+04  -8.000       0.000       1.000       1.000
76.00       0.000       0.000     Strato2_84780_84781_L_0
```

```
|                                1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                 |
|                                 Exe Time :24 July 2019      11:42:06                                               |
+-------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    3

WallElement_33                  :
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   40
C U R R E N T    T I M E    I S      1.0000

 WALL2D ELEMENT

   EL      TA          TB          MA          MB
-----------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****



+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*           |
|                                                                                                                   |
|                                1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                 |
|                                 Exe Time :24 July 2019      11:42:06                                               |
+-------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S    R E S U L T S    F O R    G R O U P   N O.    4

Tieback_78031                   :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T    T I M E    I S      1.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------

***** NO ONE ELEMENT ACTIVE AT CURRENT STEP *****

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM= 6047.     RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 14.82     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 6047.     RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=    82 NODE     41 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     1 RNORM = 0.000     RMNORM= 0.000
           RINORM= 6047.     RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 14.82     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 6047.     RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=    82 NODE     41 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM= 6047.     RIMNOR= 0.000
           RENORM= 0.000     REMNOR= 0.000     RATIO = 0.000     TOLER =0.1000E-03      CONVERGED !
           RFMAX = 14.82     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 6047.     RDR   = 0.000
           RATIOT= 0.000     RATIOR= 0.000
           MAX UN= 0.000     IEQ=    82 NODE     41 DOF   2   X-ROT. F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*           |
|                                                                                                                   |
```

```
|                                1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                 |
|                                 Exe Time :24 July 2019      11:42:06                                               |
+-------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2
SOLUTION REACHED USING     2 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P   2     ( AT TIME   2.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (


ALL NODAL POINTS HAVE ZERO DISPLACEMENT COMPONENTS




+-------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*          |
|                                                                                                                   |
|                                1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                 |
|                                 Exe Time :24 July 2019      11:42:06                                               |
+-------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   1

 0_L                              :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   41
 C U R R E N T   T I M E   I S     2.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P          STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------
------------------------------------------------------------------------
   1 D   0.000       0.000       0.000       0.000       0.000       0.000          UL-RL  5.7646E+04   0.000       0.000        1.000       1.000
0.000       0.000       0.000     Strato1_3095_78023_L_0
   2 D  0.3800       0.000       3.800       1.900       3.800       1.900          UL-RL  5.7646E+04 -0.2000       0.000        1.000       1.000
1.900       0.000       0.000     Strato1_3095_78023_L_0
   3 D  0.7600       0.000       7.600       3.800       7.600       3.800          UL-RL  5.7646E+04 -0.4000       0.000        1.000       1.000
3.800       0.000       0.000     Strato1_3095_78023_L_0
   4 D   1.140       0.000       11.40       5.700       11.40       5.700          UL-RL  5.7646E+04 -0.6000       0.000        1.000       1.000
5.700       0.000       0.000     Strato1_3095_78023_L_0
   5 D   1.520       0.000       15.20       7.600       15.20       7.600          UL-RL  5.7646E+04 -0.8000       0.000        1.000       1.000
7.600       0.000       0.000     Strato1_3095_78023_L_0
   6 D   1.900       0.000       19.00       9.500       19.00       9.500          UL-RL  5.7646E+04  -1.000       0.000        1.000       1.000
9.500       0.000       0.000     Strato1_3095_78023_L_0
   7 D   2.280       0.000       22.80       11.40       22.80       11.40          UL-RL  5.7646E+04  -1.200       0.000        1.000       1.000
11.40       0.000       0.000     Strato1_3095_78023_L_0
   8 D   2.660       0.000       26.60       13.30       26.60       13.30          UL-RL  5.7646E+04  -1.400       0.000        1.000       1.000
13.30       0.000       0.000     Strato1_3095_78023_L_0
   9 D   3.040       0.000       30.40       15.20       30.40       15.20          UL-RL  5.7646E+04  -1.600       0.000        1.000       1.000
15.20       0.000       0.000     Strato1_3095_78023_L_0
  10 D   3.420       0.000       34.20       17.10       34.20       17.10          UL-RL  5.7646E+04  -1.800       0.000        1.000       1.000
17.10       0.000       0.000     Strato1_3095_78023_L_0
  11 D   3.800       0.000       38.00       19.00       38.00       19.00          UL-RL  5.7646E+04  -2.000       0.000        1.000       1.000
19.00       0.000       0.000     Strato1_3095_78023_L_0
  12 D   4.180       0.000       41.80       20.90       41.80       20.90          UL-RL  5.7646E+04  -2.200       0.000        1.000       1.000
20.90       0.000       0.000     Strato1_3095_78023_L_0
  13 D   4.560       0.000       45.60       22.80       45.60       22.80          UL-RL  5.7646E+04  -2.400       0.000        1.000       1.000
22.80       0.000       0.000     Strato1_3095_78023_L_0
  14 D   4.940       0.000       49.40       24.70       49.40       24.70          UL-RL  5.7646E+04  -2.600       0.000        1.000       1.000
24.70       0.000       0.000     Strato1_3095_78023_L_0
  15 D   5.320       0.000       53.20       26.60       53.20       26.60          UL-RL  5.7646E+04  -2.800       0.000        1.000       1.000
26.60       0.000       0.000     Strato1_3095_78023_L_0
  16 D   5.700       0.000       57.00       28.50       57.00       28.50          UL-RL  5.7646E+04  -3.000       0.000        1.000       1.000
28.50       0.000       0.000     Strato1_3095_78023_L_0
  17 D   6.080       0.000       60.80       30.40       60.80       30.40          UL-RL  5.7646E+04  -3.200       0.000        1.000       1.000
30.40       0.000       0.000     Strato1_3095_78023_L_0
  18 D   6.460       0.000       64.60       32.30       64.60       32.30          UL-RL  5.7646E+04  -3.400       0.000        1.000       1.000
32.30       0.000       0.000     Strato1_3095_78023_L_0
  19 D   6.840       0.000       68.40       34.20       68.40       34.20          UL-RL  5.7646E+04  -3.600       0.000        1.000       1.000
34.20       0.000       0.000     Strato1_3095_78023_L_0
  20 D   7.220       0.000       72.20       36.10       72.20       36.10          UL-RL  5.7646E+04  -3.800       0.000        1.000       1.000
36.10       0.000       0.000     Strato1_3095_78023_L_0
  21 D   7.600       0.000       76.00       38.00       76.00       38.00          UL-RL  5.7646E+04  -4.000       0.000        1.000       1.000
```

```
38.00       0.000       0.000     Strato1_3095_78023_L_0
  22 D   7.980       0.000       79.80       39.90       79.80       39.90          UL-RL  5.7646E+04  -4.200       0.000        1.000        1.000
39.90       0.000       0.000     Strato1_3095_78023_L_0
  23 D   8.360       0.000       83.60       41.80       83.60       41.80          UL-RL  5.7646E+04  -4.400       0.000        1.000        1.000
41.80       0.000       0.000     Strato1_3095_78023_L_0
  24 D   8.740       0.000       87.40       43.70       87.40       43.70          UL-RL  5.7646E+04  -4.600       0.000        1.000        1.000
43.70       0.000       0.000     Strato1_3095_78023_L_0
  25 D   9.120       0.000       91.20       45.60       91.20       45.60          UL-RL  5.7646E+04  -4.800       0.000        1.000        1.000
45.60       0.000       0.000     Strato1_3095_78023_L_0
  26 D   9.500       0.000       95.00       47.50       95.00       47.50          UL-RL  5.7646E+04  -5.000       0.000        1.000        1.000
47.50       0.000       0.000     Strato1_3095_78023_L_0
  27 D   9.880       0.000       98.80       49.40       98.80       49.40          UL-RL  5.7646E+04  -5.200       0.000        1.000        1.000
49.40       0.000       0.000     Strato1_3095_78023_L_0
  28 D   10.26       0.000       102.6       51.30       102.6       51.30          UL-RL  2.3998E+05  -5.400       0.000        1.000        1.000
51.30       0.000       0.000     Strato2_84780_84781_L_0
  29 D   10.64       0.000       106.4       53.20       106.4       53.20          UL-RL  2.3998E+05  -5.600       0.000        1.000        1.000
53.20       0.000       0.000     Strato2_84780_84781_L_0
  30 D   11.02       0.000       110.2       55.10       110.2       55.10          UL-RL  2.3998E+05  -5.800       0.000        1.000        1.000
55.10       0.000       0.000     Strato2_84780_84781_L_0
  31 D   11.40       0.000       114.0       57.00       114.0       57.00          UL-RL  2.3998E+05  -6.000       0.000        1.000        1.000
57.00       0.000       0.000     Strato2_84780_84781_L_0
  32 D   11.78       0.000       117.8       58.90       117.8       58.90          UL-RL  2.3998E+05  -6.200       0.000        1.000        1.000
58.90       0.000       0.000     Strato2_84780_84781_L_0
  33 D   12.16       0.000       121.6       60.80       121.6       60.80          UL-RL  2.3998E+05  -6.400       0.000        1.000        1.000
60.80       0.000       0.000     Strato2_84780_84781_L_0
  34 D   12.54       0.000       125.4       62.70       125.4       62.70          UL-RL  2.3998E+05  -6.600       0.000        1.000        1.000
62.70       0.000       0.000     Strato2_84780_84781_L_0
  35 D   12.92       0.000       129.2       64.60       129.2       64.60          UL-RL  2.3998E+05  -6.800       0.000        1.000        1.000
64.60       0.000       0.000     Strato2_84780_84781_L_0
  36 D   13.30       0.000       133.0       66.50       133.0       66.50          UL-RL  2.3998E+05  -7.000       0.000        1.000        1.000
66.50       0.000       0.000     Strato2_84780_84781_L_0
  37 D   13.68       0.000       136.8       68.40       136.8       68.40          UL-RL  2.3998E+05  -7.200       0.000        1.000        1.000
68.40       0.000       0.000     Strato2_84780_84781_L_0
  38 D   14.06       0.000       140.6       70.30       140.6       70.30          UL-RL  2.3998E+05  -7.400       0.000        1.000        1.000
70.30       0.000       0.000     Strato2_84780_84781_L_0
  39 D   14.44       0.000       144.4       72.20       144.4       72.20          UL-RL  2.3998E+05  -7.600       0.000        1.000        1.000
72.20       0.000       0.000     Strato2_84780_84781_L_0
  40 D   14.82       0.000       148.2       74.10       148.2       74.10          UL-RL  2.3998E+05  -7.800       0.000        1.000        1.000
74.10       0.000       0.000     Strato2_84780_84781_L_0
  41 D   7.600       0.000       152.0       76.00       152.0       76.00          UL-RL  2.3998E+05  -8.000       0.000        1.000        1.000
76.00       0.000       0.000     Strato2_84780_84781_L_0


 +------------------------------------------------------------------------------------------------------------------------+
 |                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*               |
 |                                                                                                                        |
 |                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                   |
 |                                   Exe Time :24 July 2019      11:42:06                                                 |
 +------------------------------------------------------------------------------------------------------------------------+
 1468.1 - GA27 - Cepav2


 S T R E S S    R E S U L T S    F O R    G R O U P   N O.    2

 0_R                                :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   41
 C U R R E N T    T I M E    I S       2.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE      DISPL-Y  VERTICAL-P  HORIZON.-P      MAX-V-P      MAX-H-P            STATE   STIFFNESS Z-LEVEL       PORE        E FACTOR     UFACTOR
Peq           Su_a         Su_p      LAYER
-------------------------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------
   1 D   0.000       0.000       0.000       0.000       0.000       0.000          UL-RL  4.8789E+04   0.000       0.000        1.000        1.000
0.000       0.000       0.000     Strato1_3095_78023_L_0
   2 D  0.3800       0.000       3.800       1.900       3.800       1.900          UL-RL  4.8789E+04 -0.2000       0.000        1.000        1.000
1.900       0.000       0.000     Strato1_3095_78023_L_0
   3 D  0.7600       0.000       7.600       3.800       7.600       3.800          UL-RL  4.8789E+04 -0.4000       0.000        1.000        1.000
3.800       0.000       0.000     Strato1_3095_78023_L_0
   4 D   1.140       0.000       11.40       5.700       11.40       5.700          UL-RL  4.8789E+04 -0.6000       0.000        1.000        1.000
5.700       0.000       0.000     Strato1_3095_78023_L_0
   5 D   1.520       0.000       15.20       7.600       15.20       7.600          UL-RL  4.8789E+04 -0.8000       0.000        1.000        1.000
7.600       0.000       0.000     Strato1_3095_78023_L_0
   6 D   1.900       0.000       19.00       9.500       19.00       9.500          UL-RL  4.8789E+04  -1.000       0.000        1.000        1.000
9.500       0.000       0.000     Strato1_3095_78023_L_0
   7 D   2.280       0.000       22.80       11.40       22.80       11.40          UL-RL  4.8789E+04  -1.200       0.000        1.000        1.000
11.40       0.000       0.000     Strato1_3095_78023_L_0
   8 D   2.660       0.000       26.60       13.30       26.60       13.30          UL-RL  4.8789E+04  -1.400       0.000        1.000        1.000
13.30       0.000       0.000     Strato1_3095_78023_L_0
   9 D   3.040       0.000       30.40       15.20       30.40       15.20          UL-RL  4.8789E+04  -1.600       0.000        1.000        1.000
```

```
15.20       0.000       0.000     Strato1_3095_78023_L_0
  10 D   3.420       0.000       34.20       17.10       34.20       17.10          UL-RL  4.8789E+04  -1.800       0.000       1.000       1.000
17.10       0.000       0.000     Strato1_3095_78023_L_0
  11 D   3.800       0.000       38.00       19.00       38.00       19.00          UL-RL  4.8789E+04  -2.000       0.000       1.000       1.000
19.00       0.000       0.000     Strato1_3095_78023_L_0
  12 D   4.180       0.000       41.80       20.90       41.80       20.90          UL-RL  4.8789E+04  -2.200       0.000       1.000       1.000
20.90       0.000       0.000     Strato1_3095_78023_L_0
  13 D   4.560       0.000       45.60       22.80       45.60       22.80          UL-RL  4.8789E+04  -2.400       0.000       1.000       1.000
22.80       0.000       0.000     Strato1_3095_78023_L_0
  14 D   4.940       0.000       49.40       24.70       49.40       24.70          UL-RL  4.8789E+04  -2.600       0.000       1.000       1.000
24.70       0.000       0.000     Strato1_3095_78023_L_0
  15 D   5.320       0.000       53.20       26.60       53.20       26.60          UL-RL  4.8789E+04  -2.800       0.000       1.000       1.000
26.60       0.000       0.000     Strato1_3095_78023_L_0
  16 D   5.700       0.000       57.00       28.50       57.00       28.50          UL-RL  4.8789E+04  -3.000       0.000       1.000       1.000
28.50       0.000       0.000     Strato1_3095_78023_L_0
  17 D   6.080       0.000       60.80       30.40       60.80       30.40          UL-RL  4.8789E+04  -3.200       0.000       1.000       1.000
30.40       0.000       0.000     Strato1_3095_78023_L_0
  18 D   6.460       0.000       64.60       32.30       64.60       32.30          UL-RL  4.8789E+04  -3.400       0.000       1.000       1.000
32.30       0.000       0.000     Strato1_3095_78023_L_0
  19 D   6.840       0.000       68.40       34.20       68.40       34.20          UL-RL  4.8789E+04  -3.600       0.000       1.000       1.000
34.20       0.000       0.000     Strato1_3095_78023_L_0
  20 D   7.220       0.000       72.20       36.10       72.20       36.10          UL-RL  4.8789E+04  -3.800       0.000       1.000       1.000
36.10       0.000       0.000     Strato1_3095_78023_L_0
  21 D   7.600       0.000       76.00       38.00       76.00       38.00          UL-RL  4.8789E+04  -4.000       0.000       1.000       1.000
38.00       0.000       0.000     Strato1_3095_78023_L_0
  22 D   7.980       0.000       79.80       39.90       79.80       39.90          UL-RL  4.8789E+04  -4.200       0.000       1.000       1.000
39.90       0.000       0.000     Strato1_3095_78023_L_0
  23 D   8.360       0.000       83.60       41.80       83.60       41.80          UL-RL  4.8789E+04  -4.400       0.000       1.000       1.000
41.80       0.000       0.000     Strato1_3095_78023_L_0
  24 D   8.740       0.000       87.40       43.70       87.40       43.70          UL-RL  4.8789E+04  -4.600       0.000       1.000       1.000
43.70       0.000       0.000     Strato1_3095_78023_L_0
  25 D   9.120       0.000       91.20       45.60       91.20       45.60          UL-RL  4.8789E+04  -4.800       0.000       1.000       1.000
45.60       0.000       0.000     Strato1_3095_78023_L_0
  26 D   9.500       0.000       95.00       47.50       95.00       47.50          UL-RL  4.8789E+04  -5.000       0.000       1.000       1.000
47.50       0.000       0.000     Strato1_3095_78023_L_0
  27 D   9.880       0.000       98.80       49.40       98.80       49.40          UL-RL  4.8789E+04  -5.200       0.000       1.000       1.000
49.40       0.000       0.000     Strato1_3095_78023_L_0
  28 D   10.26       0.000       102.6       51.30       102.6       51.30          UL-RL  1.6481E+05  -5.400       0.000       1.000       1.000
51.30       0.000       0.000     Strato2_84780_84781_L_0
  29 D   10.64       0.000       106.4       53.20       106.4       53.20          UL-RL  1.6481E+05  -5.600       0.000       1.000       1.000
53.20       0.000       0.000     Strato2_84780_84781_L_0
  30 D   11.02       0.000       110.2       55.10       110.2       55.10          UL-RL  1.6481E+05  -5.800       0.000       1.000       1.000
55.10       0.000       0.000     Strato2_84780_84781_L_0
  31 D   11.40       0.000       114.0       57.00       114.0       57.00          UL-RL  1.6481E+05  -6.000       0.000       1.000       1.000
57.00       0.000       0.000     Strato2_84780_84781_L_0
  32 D   11.78       0.000       117.8       58.90       117.8       58.90          UL-RL  1.6481E+05  -6.200       0.000       1.000       1.000
58.90       0.000       0.000     Strato2_84780_84781_L_0
  33 D   12.16       0.000       121.6       60.80       121.6       60.80          UL-RL  1.6481E+05  -6.400       0.000       1.000       1.000
60.80       0.000       0.000     Strato2_84780_84781_L_0
  34 D   12.54       0.000       125.4       62.70       125.4       62.70          UL-RL  1.6481E+05  -6.600       0.000       1.000       1.000
62.70       0.000       0.000     Strato2_84780_84781_L_0
  35 D   12.92       0.000       129.2       64.60       129.2       64.60          UL-RL  1.6481E+05  -6.800       0.000       1.000       1.000
64.60       0.000       0.000     Strato2_84780_84781_L_0
  36 D   13.30       0.000       133.0       66.50       133.0       66.50          UL-RL  1.6481E+05  -7.000       0.000       1.000       1.000
66.50       0.000       0.000     Strato2_84780_84781_L_0
  37 D   13.68       0.000       136.8       68.40       136.8       68.40          UL-RL  1.6481E+05  -7.200       0.000       1.000       1.000
68.40       0.000       0.000     Strato2_84780_84781_L_0
  38 D   14.06       0.000       140.6       70.30       140.6       70.30          UL-RL  1.6481E+05  -7.400       0.000       1.000       1.000
70.30       0.000       0.000     Strato2_84780_84781_L_0
  39 D   14.44       0.000       144.4       72.20       144.4       72.20          UL-RL  1.6481E+05  -7.600       0.000       1.000       1.000
72.20       0.000       0.000     Strato2_84780_84781_L_0
  40 D   14.82       0.000       148.2       74.10       148.2       74.10          UL-RL  1.6481E+05  -7.800       0.000       1.000       1.000
74.10       0.000       0.000     Strato2_84780_84781_L_0
  41 D   7.600       0.000       152.0       76.00       152.0       76.00          UL-RL  1.6481E+05  -8.000       0.000       1.000       1.000
76.00       0.000       0.000     Strato2_84780_84781_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
 |                                                                                                                               |
 |                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                          |
 |                                   Exe Time :24 July 2019      11:42:06                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 1468.1 - GA27 - Cepav2


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

 WallElement_33                :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   40
 C U R R E N T   T I M E   I S      2.0000

  WALL2D ELEMENT
```

EL	TA	TB	MA	MB
1	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000
9	0.0000	0.0000	0.0000	0.0000
10	0.0000	0.0000	0.0000	0.0000
11	0.0000	0.0000	0.0000	0.0000
12	0.0000	0.0000	0.0000	0.0000
13	0.0000	0.0000	0.0000	0.0000
14	0.0000	0.0000	0.0000	0.0000
15	0.0000	0.0000	0.0000	0.0000
16	0.0000	0.0000	0.0000	0.0000
17	0.0000	0.0000	0.0000	0.0000
18	0.0000	0.0000	0.0000	0.0000
19	0.0000	0.0000	0.0000	0.0000
20	0.0000	0.0000	0.0000	0.0000
21	0.0000	0.0000	0.0000	0.0000
22	0.0000	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0000
24	0.0000	0.0000	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000
26	0.0000	0.0000	0.0000	0.0000
27	0.0000	0.0000	0.0000	0.0000
28	0.0000	0.0000	0.0000	0.0000
29	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000
31	0.0000	0.0000	0.0000	0.0000
32	0.0000	0.0000	0.0000	0.0000
33	0.0000	0.0000	0.0000	0.0000
34	0.0000	0.0000	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000
36	0.0000	0.0000	0.0000	0.0000
37	0.0000	0.0000	0.0000	0.0000
38	0.0000	0.0000	0.0000	0.0000
39	0.0000	0.0000	0.0000	0.0000
40	0.0000	0.0000	0.0000	0.0000

```
+-------------------------------------------------------------------------------------------------------------------------------+
|                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
|                                                                                                                               |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                          |
|                                   Exe Time :24 July 2019      11:42:06                                                        |
+-------------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_78031                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S     2.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-------------------------------------------------------------------------------------------------------
ANCHOR    1   0.0000       0.0000       0.0000       0.0000       80304.       0.0000       0.0000     ELASTIC  ORIGINAL YOUNG MODULUS

ITER     0 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5501.     RIMNOR= 0.000
           RENORM= 828.8     REMNOR= 0.000     RATIO =0.3881     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 15.99     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5501.     RDR   = 0.000
           RATIOT=0.3881     RATIOR= 0.000
           MAX UN= 6.823     IEQ=    29 NODE     15 DOF   1  Y-DISPL.F
           MIN UN= 0.000     IEQ=     1 NODE      1 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     2 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5501.     RIMNOR= 0.000
           RENORM= 121.1     REMNOR=0.2246E-23 RATIO =0.1484     TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 15.99     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
```

```
           RDT   = 5501.     RDR   = 0.000
           RATIOT=0.1484     RATIOR= 0.000
           MAX UN= 4.916     IEQ=    31 NODE     16 DOF   1  Y-DISPL.F
           MIN UN=-.1623E-11 IEQ=    57 NODE     29 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     3 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5501.     RIMNOR= 0.000
           RENORM= 54.13     REMNOR=0.1148E-22 RATIO =0.9919E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 15.99     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5501.     RDR   = 0.000
           RATIOT=0.9919E-01 RATIOR= 0.000
           MAX UN= 6.101     IEQ=    35 NODE     18 DOF   1  Y-DISPL.F
           MIN UN=-.4199E-10 IEQ=    17 NODE      9 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     4 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5501.     RIMNOR= 0.000
           RENORM= 1.014     REMNOR=0.8950E-23 RATIO =0.1358E-01 TOLER =0.1000E-03  NOT CONVERGED
           RFMAX = 15.99     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5501.     RDR   = 0.000
           RATIOT=0.1358E-01 RATIOR= 0.000
           MAX UN=0.6887     IEQ=    39 NODE     20 DOF   1  Y-DISPL.F
           MIN UN=-.1419E-10 IEQ=    33 NODE     17 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0


ITER     5 RNORM = 0.000     RMNORM= 0.000
           RINORM= 5501.     RIMNOR= 0.000
           RENORM=0.2459E-20 REMNOR=0.2294E-23 RATIO =0.6686E-12 TOLER =0.1000E-03      CONVERGED !
           RFMAX = 15.99     RMMAX = 0.000
           RTSMAL=0.1000E-03 RMSMAL= 0.000
           RDT   = 5501.     RDR   = 0.000
           RATIOT=0.6686E-12 RATIOR= 0.000
           MAX UN=0.1723E-10 IEQ=    33 NODE     17 DOF   1  Y-DISPL.F
           MIN UN=-.1988E-10 IEQ=    35 NODE     18 DOF   1  Y-DISPL.F
           NO. OF CONTACT CONSTRAINT VIOLATIONS     0



+-----------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                       |
|                                 1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                   |
|                                  Exe Time :24 July 2019      11:42:06                                                 |
+-----------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2
SOLUTION REACHED USING     5 ITERATIONS ON  100

P R I N T   O U T   F O R   T I M E   S T E P    3     ( AT TIME   3.000     )

PRINT OUT OF ACTIVE COMPONENTS (FIXED NODES ARE NOT PRINTED OUT)

          Y-DISPL.F        X-ROT. F
           (02)             (04)            (
    1   1.4566270E-03   3.5002350E-03
    2   2.1566740E-03   3.5002350E-03
    3   2.8539148E-03   3.4581413E-03
    4   3.5344025E-03   3.3331275E-03
    5   4.1818501E-03   3.1283795E-03
    6   4.7807393E-03   2.8484057E-03
    7   5.3165886E-03   2.4990749E-03
    8   5.7762299E-03   2.0876545E-03
    9   6.1480912E-03   1.6228457E-03
   10   6.4225211E-03   1.1153309E-03
   11   6.5922546E-03   5.7828178E-04
   12   6.6528975E-03   2.7188410E-05
   13   6.6033697E-03  -5.2030919E-04
   14   6.4463247E-03  -1.0445443E-03
   15   6.1885420E-03  -1.5239290E-03
   16   5.8412305E-03  -1.9361520E-03
   17   5.4197890E-03  -2.2627256E-03
   18   4.9425846E-03  -2.4926039E-03
   19   4.4294074E-03  -2.6225820E-03
   20   3.8998960E-03  -2.6573981E-03
   21   3.3719506E-03  -2.6097183E-03
   22   2.8603887E-03  -2.4963776E-03
   23   2.3767447E-03  -2.3328599E-03
   24   1.9297603E-03  -2.1316094E-03
```

25	1.5259756E-03	-1.9022389E-03
26	1.1702692E-03	-1.6518000E-03
27	8.6634092E-04	-1.3851028E-03
28	6.1715283E-04	-1.1045584E-03
29	4.2437279E-04	-8.2618541E-04
30	2.8483215E-04	-5.7551001E-04
31	1.9134222E-04	-3.6723304E-04
32	1.3479256E-04	-2.0615554E-04
33	1.0589561E-04	-8.9848637E-05
34	9.6299032E-05	-1.1852832E-05
35	9.9145333E-05	3.6005851E-05
36	1.0924704E-04	6.2049529E-05
37	1.2301088E-04	7.3780267E-05
38	1.3821483E-04	7.7347327E-05
39	1.5370898E-04	7.7301928E-05
40	1.6908647E-04	7.6519441E-05
41	1.8434771E-04	7.6197932E-05

PARATIEPLUS(TM) NLS ENGINE RELEASE 2017.1 FULL VERSION *Build date:Jul 11, 2017*

1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514
Exe Time :24 July 2019 11:42:06

1468.1 - GA27 - Cepav2

S T R E S S R E S U L T S F O R G R O U P N O. 1

0_L :
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 41
C U R R E N T T I M E I S 3.0000

HARDENING 2D SOIL ELEMENT

****** TOTAL STRESS FORMULATION *****

EL *	FORCE	DISPL-Y	VERTICAL-P	HORIZON.-P	MAX-V-P	MAX-H-P	STATE	STIFFNESS	Z-LEVEL	PORE	E FACTOR	UFACTOR	Peq	Su_a	Su_p	LAYER
1 D	0.000	-1.4566E-03	0.000	0.000	0.000	0.000	ACTIVE	0.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000	Strato1_3095_78023_L_0
2 D	0.2986	-2.1567E-03	3.808	1.493	3.808	1.904	ACTIVE	0.000	-0.2000	0.000	1.000	1.000	1.493	0.000	0.000	Strato1_3095_78023_L_0
3 D	0.6009	-2.8539E-03	7.664	3.004	7.664	3.832	ACTIVE	0.000	-0.4000	0.000	1.000	1.000	3.004	0.000	0.000	Strato1_3095_78023_L_0
4 D	0.9100	-3.5344E-03	11.61	4.550	11.61	5.803	ACTIVE	0.000	-0.6000	0.000	1.000	1.000	4.550	0.000	0.000	Strato1_3095_78023_L_0
5 D	1.228	-4.1819E-03	15.66	6.139	15.66	7.831	ACTIVE	0.000	-0.8000	0.000	1.000	1.000	6.139	0.000	0.000	Strato1_3095_78023_L_0
6 D	1.555	-4.7807E-03	19.84	7.775	19.84	9.918	ACTIVE	0.000	-1.000	0.000	1.000	1.000	7.775	0.000	0.000	Strato1_3095_78023_L_0
7 D	1.891	-5.3166E-03	24.12	9.456	24.12	12.06	ACTIVE	0.000	-1.200	0.000	1.000	1.000	9.456	0.000	0.000	Strato1_3095_78023_L_0
8 D	2.235	-5.7762E-03	28.51	11.17	28.51	14.25	ACTIVE	0.000	-1.400	0.000	1.000	1.000	11.17	0.000	0.000	Strato1_3095_78023_L_0
9 D	2.831	-6.1481E-03	36.11	14.15	36.11	18.05	ACTIVE	0.000	-1.600	0.000	1.000	1.000	14.15	0.000	0.000	Strato1_3095_78023_L_0
10 D	3.415	-6.4225E-03	43.56	17.08	43.56	21.78	ACTIVE	0.000	-1.800	0.000	1.000	1.000	17.08	0.000	0.000	Strato1_3095_78023_L_0
11 D	3.930	-6.5923E-03	50.13	19.65	50.13	25.07	ACTIVE	0.000	-2.000	0.000	1.000	1.000	19.65	0.000	0.000	Strato1_3095_78023_L_0
12 D	4.435	-6.6529E-03	56.56	22.17	56.56	28.28	ACTIVE	0.000	-2.200	0.000	1.000	1.000	22.17	0.000	0.000	Strato1_3095_78023_L_0
13 D	4.891	-6.6034E-03	62.39	24.46	62.39	31.19	ACTIVE	0.000	-2.400	0.000	1.000	1.000	24.46	0.000	0.000	Strato1_3095_78023_L_0
14 D	5.346	-6.4463E-03	68.18	26.73	68.18	34.09	ACTIVE	0.000	-2.600	0.000	1.000	1.000	26.73	0.000	0.000	Strato1_3095_78023_L_0
15 D	5.765	-6.1885E-03	73.53	28.82	73.53	36.76	ACTIVE	0.000	-2.800	0.000	1.000	1.000	28.82	0.000	0.000	Strato1_3095_78023_L_0
16 D	6.186	-5.8412E-03	78.90	30.93	78.90	39.45	ACTIVE	0.000	-3.000	0.000	1.000	1.000	30.93	0.000	0.000	Strato1_3095_78023_L_0
17 D	6.478	-5.4198E-03	82.62	32.39	82.62	41.31	ACTIVE	0.000	-3.200	0.000	1.000	1.000	32.39	0.000	0.000	Strato1_3095_78023_L_0
18 D	6.714	-4.9426E-03	85.63	33.57	85.63	42.82	ACTIVE	0.000	-3.400	0.000	1.000	1.000	33.57	0.000	0.000	Strato1_3095_78023_L_0
19 D	6.954	-4.4294E-03	88.70	34.77	88.70	44.35	ACTIVE	0.000	-3.600	0.000	1.000	1.000	34.77	0.000	0.000	Strato1_3095_78023_L_0
20 D	7.198	-3.8999E-03	91.81	35.99	91.81	45.91	ACTIVE	0.000	-3.800	0.000	1.000	1.000	35.99	0.000	0.000	Strato1_3095_78023_L_0
21 D	7.446	-3.3720E-03	94.98	37.23	94.98	47.49	ACTIVE	0.000	-4.000	0.000	1.000	1.000				

```
37.23       0.000       0.000     Strato1_3095_78023_L_0
  22 D   7.697     -2.8604E-03   98.18       38.49       98.18       49.09          ACTIVE   0.000      -4.200       0.000       1.000       1.000
38.49       0.000       0.000     Strato1_3095_78023_L_0
  23 D   7.951     -2.3767E-03   101.4       39.75       101.4       50.71          ACTIVE   0.000      -4.400       0.000       1.000       1.000
39.75       0.000       0.000     Strato1_3095_78023_L_0
  24 D   8.207     -1.9298E-03   104.7       41.04       104.7       52.34          ACTIVE   0.000      -4.600       0.000       1.000       1.000
41.04       0.000       0.000     Strato1_3095_78023_L_0
  25 D   8.466     -1.5260E-03   108.0       42.33       108.0       53.99          ACTIVE   0.000      -4.800       0.000       1.000       1.000
42.33       0.000       0.000     Strato1_3095_78023_L_0
  26 D   8.727     -1.1703E-03   111.3       43.64       111.3       55.66          ACTIVE   0.000      -5.000       0.000       1.000       1.000
43.64       0.000       0.000     Strato1_3095_78023_L_0
  27 D   8.991     -8.6634E-04   114.7       44.95       114.7       57.34          ACTIVE   0.000      -5.200       0.000       1.000       1.000
44.95       0.000       0.000     Strato1_3095_78023_L_0
  28 D   3.863     -6.1715E-04   118.1       19.32       118.1       59.03          ACTIVE   0.000      -5.400       0.000       1.000       1.000
19.32       0.000       0.000     Strato2_84780_84781_L_0
  29 D   6.220     -4.2437E-04   121.5       31.10       121.5       60.73           UL-RL   6.9812E+04 -5.600       0.000       1.000       1.000
31.10       0.000       0.000     Strato2_84780_84781_L_0
  30 D   8.511     -2.8483E-04   124.9       42.55       124.9       62.44           UL-RL   6.9812E+04 -5.800       0.000       1.000       1.000
42.55       0.000       0.000     Strato2_84780_84781_L_0
  31 D   10.16     -1.9134E-04   128.3       50.80       128.3       64.16           UL-RL   6.9812E+04 -6.000       0.000       1.000       1.000
50.80       0.000       0.000     Strato2_84780_84781_L_0
  32 D   11.30     -1.3479E-04   131.8       56.48       131.8       65.89           UL-RL   6.9812E+04 -6.200       0.000       1.000       1.000
56.48       0.000       0.000     Strato2_84780_84781_L_0
  33 D   12.05     -1.0590E-04   135.2       60.23       135.2       67.62           UL-RL   6.9812E+04 -6.400       0.000       1.000       1.000
60.23       0.000       0.000     Strato2_84780_84781_L_0
  34 D   12.53     -9.6299E-05   138.7       62.65       138.7       69.37           UL-RL   6.9812E+04 -6.600       0.000       1.000       1.000
62.65       0.000       0.000     Strato2_84780_84781_L_0
  35 D   12.84     -9.9145E-05   142.2       64.20       142.2       71.12           UL-RL   6.9812E+04 -6.800       0.000       1.000       1.000
64.20       0.000       0.000     Strato2_84780_84781_L_0
  36 D   13.05     -1.0925E-04   145.8       65.25       145.8       72.88           UL-RL   6.9812E+04 -7.000       0.000       1.000       1.000
65.25       0.000       0.000     Strato2_84780_84781_L_0
  37 D   13.21     -1.2301E-04   149.3       66.05       149.3       74.64           UL-RL   6.9812E+04 -7.200       0.000       1.000       1.000
66.05       0.000       0.000     Strato2_84780_84781_L_0
  38 D   13.35     -1.3821E-04   152.8       66.76       152.8       76.41           UL-RL   6.9812E+04 -7.400       0.000       1.000       1.000
66.76       0.000       0.000     Strato2_84780_84781_L_0
  39 D   13.49     -1.5371E-04   156.4       67.46       156.4       78.19           UL-RL   6.9812E+04 -7.600       0.000       1.000       1.000
67.46       0.000       0.000     Strato2_84780_84781_L_0
  40 D   13.63     -1.6909E-04   159.9       68.16       159.9       79.97           UL-RL   6.9812E+04 -7.800       0.000       1.000       1.000
68.16       0.000       0.000     Strato2_84780_84781_L_0
  41 D   6.888     -1.8435E-04   163.5       68.88       163.5       81.75           UL-RL   6.9812E+04 -8.000       0.000       1.000       1.000
68.88       0.000       0.000     Strato2_84780_84781_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                  |
 |                                                                                                                               |
 |                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                          |
 |                                   Exe Time :24 July 2019      11:42:06                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 1468.1 - GA27 - Cepav2


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   2

 0_R                          :
 ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP   41
 C U R R E N T   T I M E   I S      3.0000

  HARDENING 2D SOIL ELEMENT

  ****** TOTAL STRESS FORMULATION *****

  EL *   FORCE     DISPL-Y  VERTICAL-P  HORIZON.-P     MAX-V-P     MAX-H-P          STATE   STIFFNESS Z-LEVEL      PORE       E FACTOR    UFACTOR
Peq          Su_a        Su_p     LAYER
 ------------------------------------------------------------------------------------------------------------------------------------------------
-----------------------------------------------------------------
   1     0.000         --          --          --          --          --          REMOVED     --        0.000       0.000       1.000       1.000
0.000       0.000       0.000     not available
   2     0.000         --          --          --          --          --          REMOVED     --       -0.2000      0.000       1.000       1.000
0.000       0.000       0.000     not available
   3     0.000         --          --          --          --          --          REMOVED     --       -0.4000      0.000       1.000       1.000
0.000       0.000       0.000     not available
   4     0.000         --          --          --          --          --          REMOVED     --       -0.6000      0.000       1.000       1.000
0.000       0.000       0.000     not available
   5     0.000         --          --          --          --          --          REMOVED     --       -0.8000      0.000       1.000       1.000
0.000       0.000       0.000     not available
   6     0.000         --          --          --          --          --          REMOVED     --       -1.000       0.000       1.000       1.000
0.000       0.000       0.000     not available
   7     0.000         --          --          --          --          --          REMOVED     --       -1.200       0.000       1.000       1.000
0.000       0.000       0.000     not available
   8     0.000         --          --          --          --          --          REMOVED     --       -1.400       0.000       1.000       1.000
0.000       0.000       0.000     not available
   9     0.000         --          --          --          --          --          REMOVED     --       -1.600       0.000       1.000       1.000
```

```
0.000       0.000       0.000     not available
  10     0.000         --          --          --          --          --          REMOVED     --        -1.800      0.000       1.000       1.000
0.000       0.000       0.000     not available
  11     0.000         --          --          --          --          --          REMOVED     --        -2.000      0.000       1.000       1.000
0.000       0.000       0.000     not available
  12     0.000         --          --          --          --          --          REMOVED     --        -2.200      0.000       1.000       1.000
0.000       0.000       0.000     not available
  13     0.000         --          --          --          --          --          REMOVED     --        -2.400      0.000       1.000       1.000
0.000       0.000       0.000     not available
  14     0.000         --          --          --          --          --          REMOVED     --        -2.600      0.000       1.000       1.000
0.000       0.000       0.000     not available
  15 D  0.5305      6.1885E-03  0.9500      2.652       53.20       26.60       PASSIVE   0.000     -2.800      0.000       1.000       1.000
2.652       0.000       0.000     Strato1_3095_78023_L_0
  16 D  2.652       5.8412E-03  4.750       13.26       57.00       28.50       PASSIVE   0.000     -3.000      0.000       1.000       1.000
13.26       0.000       0.000     Strato1_3095_78023_L_0
  17 D  4.774       5.4198E-03  8.550       23.87       60.80       30.40       PASSIVE   0.000     -3.200      0.000       1.000       1.000
23.87       0.000       0.000     Strato1_3095_78023_L_0
  18 D  6.896       4.9426E-03  12.35       34.48       64.60       34.48       PASSIVE   0.000     -3.400      0.000       1.000       1.000
34.48       0.000       0.000     Strato1_3095_78023_L_0
  19 D  9.018       4.4294E-03  16.15       45.09       68.40       45.09       PASSIVE   0.000     -3.600      0.000       1.000       1.000
45.09       0.000       0.000     Strato1_3095_78023_L_0
  20 D  11.14       3.8999E-03  19.95       55.70       72.20       55.70       PASSIVE   0.000     -3.800      0.000       1.000       1.000
55.70       0.000       0.000     Strato1_3095_78023_L_0
  21 D  11.49       3.3720E-03  23.75       57.44       76.00       57.44         V-C     8871.     -4.000      0.000       1.000       1.000
57.44       0.000       0.000     Strato1_3095_78023_L_0
  22 D  11.00       2.8604E-03  27.55       54.99       79.80       54.99         V-C     8871.     -4.200      0.000       1.000       1.000
54.99       0.000       0.000     Strato1_3095_78023_L_0
  23 D  10.55       2.3767E-03  31.35       52.76       83.60       52.76         V-C     8871.     -4.400      0.000       1.000       1.000
52.76       0.000       0.000     Strato1_3095_78023_L_0
  24 D  10.17       1.9298E-03  35.15       50.83       87.40       50.83         V-C     8871.     -4.600      0.000       1.000       1.000
50.83       0.000       0.000     Strato1_3095_78023_L_0
  25 D  9.852       1.5260E-03  38.95       49.26       91.20       49.26         V-C     8871.     -4.800      0.000       1.000       1.000
49.26       0.000       0.000     Strato1_3095_78023_L_0
  26 D  9.622       1.1703E-03  42.75       48.11       95.00       48.11         V-C     8871.     -5.000      0.000       1.000       1.000
48.11       0.000       0.000     Strato1_3095_78023_L_0
  27 D  9.241       8.6634E-04  46.55       46.20       98.80       49.40       UL-RL   1.4193E+04  -5.200      0.000       1.000       1.000
46.20       0.000       0.000     Strato1_3095_78023_L_0
  28 D  11.21       6.1715E-04  50.35       56.04       102.6       56.04         V-C     1.5982E+04  -5.400      0.000       1.000       1.000
56.04       0.000       0.000     Strato2_84780_84781_L_0
  29 D  10.98       4.2437E-04  54.15       54.90       106.4       54.90         V-C     1.5982E+04  -5.600      0.000       1.000       1.000
54.90       0.000       0.000     Strato2_84780_84781_L_0
  30 D  10.72       2.8483E-04  57.95       53.61       110.2       55.10       UL-RL   4.7945E+04  -5.800      0.000       1.000       1.000
53.61       0.000       0.000     Strato2_84780_84781_L_0
  31 D  10.22       1.9134E-04  61.75       51.12       114.0       57.00       UL-RL   4.7945E+04  -6.000      0.000       1.000       1.000
51.12       0.000       0.000     Strato2_84780_84781_L_0
  32 D  10.08       1.3479E-04  65.55       50.40       117.8       58.90       UL-RL   4.7945E+04  -6.200      0.000       1.000       1.000
50.40       0.000       0.000     Strato2_84780_84781_L_0
  33 D  10.20       1.0590E-04  69.35       50.99       121.6       60.80       UL-RL   4.7945E+04  -6.400      0.000       1.000       1.000
50.99       0.000       0.000     Strato2_84780_84781_L_0
  34 D  10.50       9.6299E-05  73.15       52.50       125.4       62.70       UL-RL   4.7945E+04  -6.600      0.000       1.000       1.000
52.50       0.000       0.000     Strato2_84780_84781_L_0
  35 D  10.92       9.9145E-05  76.95       54.61       129.2       64.60       UL-RL   4.7945E+04  -6.800      0.000       1.000       1.000
54.61       0.000       0.000     Strato2_84780_84781_L_0
  36 D  11.41       1.0925E-04  80.75       57.05       133.0       66.50       UL-RL   4.7945E+04  -7.000      0.000       1.000       1.000
57.05       0.000       0.000     Strato2_84780_84781_L_0
  37 D  11.93       1.2301E-04  84.55       59.67       136.8       68.40       UL-RL   4.7945E+04  -7.200      0.000       1.000       1.000
59.67       0.000       0.000     Strato2_84780_84781_L_0
  38 D  12.47       1.3821E-04  88.35       62.35       140.6       70.30       UL-RL   4.7945E+04  -7.400      0.000       1.000       1.000
62.35       0.000       0.000     Strato2_84780_84781_L_0
  39 D  13.01       1.5371E-04  92.15       65.05       144.4       72.20       UL-RL   4.7945E+04  -7.600      0.000       1.000       1.000
65.05       0.000       0.000     Strato2_84780_84781_L_0
  40 D  13.55       1.6909E-04  95.95       67.73       148.2       74.10       UL-RL   4.7945E+04  -7.800      0.000       1.000       1.000
67.73       0.000       0.000     Strato2_84780_84781_L_0
  41 D  7.041       1.8435E-04  99.75       70.41       152.0       76.00       UL-RL   4.7945E+04  -8.000      0.000       1.000       1.000
70.41       0.000       0.000     Strato2_84780_84781_L_0


 +-------------------------------------------------------------------------------------------------------------------------------+
 |                    PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*                    |
 |                                                                                                                               |
 |                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                          |
 |                                   Exe Time :24 July 2019      11:42:06                                                        |
 +-------------------------------------------------------------------------------------------------------------------------------+
 1468.1 - GA27 - Cepav2


 S T R E S S   R E S U L T S   F O R   G R O U P   N O.   3

 WallElement_33                :
 ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP   40
 C U R R E N T   T I M E   I S      3.0000

  WALL2D ELEMENT
```

EL	TA	TB	MA	MB
1	-6.82121E-13	6.82121E-13	-8.61533E-14	3.71259E-13
2	-19.961	19.961	-2.69118E-13	-3.9922
3	-19.360	19.360	3.9922	-7.8641
4	-18.450	18.450	7.8641	-11.554
5	-17.222	17.222	11.554	-14.999
6	-15.667	15.667	14.999	-18.132
7	-13.776	13.776	18.132	-20.887
8	-11.541	11.541	20.887	-23.195
9	-8.7102	8.7102	23.195	-24.937
10	-5.2950	5.2950	24.937	-25.996
11	-1.3647	1.3647	25.996	-26.269
12	3.0699	-3.0699	26.269	-25.655
13	7.9612	-7.9612	25.655	-24.063
14	13.307	-13.307	24.063	-21.402
15	18.541	-18.541	21.402	-17.693
16	22.074	-22.074	17.693	-13.279
17	23.778	-23.778	13.279	-8.5230
18	23.595	-23.595	8.5230	-3.8041
19	21.531	-21.531	3.8041	0.50210
20	17.589	-17.589	-0.50210	4.0199
21	13.547	-13.547	-4.0199	6.7293
22	10.247	-10.247	-6.7293	8.7787
23	7.6462	-7.6462	-8.7787	10.308
24	5.6883	-5.6883	-10.308	11.446
25	4.3023	-4.3023	-11.446	12.306
26	3.4080	-3.4080	-12.306	12.988
27	3.1577	-3.1577	-12.988	13.619
28	-4.1873	4.1873	-13.619	12.782
29	-8.9468	8.9468	-12.782	10.992
30	-11.158	11.158	-10.992	8.7606
31	-11.223	11.223	-8.7606	6.5160
32	-10.007	10.007	-6.5160	4.5145
33	-8.1596	8.1596	-4.5145	2.8826
34	-6.1314	6.1314	-2.8826	1.6563
35	-4.2133	4.2133	-1.6563	0.81366
36	-2.5739	2.5739	-0.81366	0.29889
37	-1.2974	1.2974	-0.29889	3.94137E-02
38	-0.41567	0.41567	-3.94137E-02	-4.37194E-02
39	6.61399E-02	-6.61399E-02	4.37194E-02	-3.04914E-02
40	0.15245	-0.15245	3.04914E-02	2.33147E-15

```
+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                    |
|                                   Exe Time :24 July 2019      11:42:06                                                  |
+-------------------------------------------------------------------------------------------------------------------------+
1468.1 - GA27 - Cepav2


S T R E S S   R E S U L T S   F O R   G R O U P   N O.   4

Tieback_78031                  :
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1
C U R R E N T   T I M E   I S     3.0000

 POST-TENSION 2D-BOUNDARY ELEMENT

         EL    FORCE          d0          EDISPL     pl. eps          K     -ve limit   +ve limit
-----------------------------------------------------------------------------------------------------------
ANCHOR    1   59.234       0.0000      7.37626E-04   0.0000       80304.       0.0000       0.0000     ELASTIC  ORIGINAL YOUNG MODULUS



+-------------------------------------------------------------------------------------------------------------------------+
|                   PARATIEPLUS(TM)   NLS ENGINE RELEASE  2017.1    FULL VERSION  *Build date:Jul 11, 2017*              |
|                                                                                                                         |
|                                  1468.1-GA27-Cepav2.BaseDesignSection_28.A2M2R1_3514                                    |
|                                   Exe Time :24 July 2019      11:42:06                                                  |
+-------------------------------------------------------------------------------------------------------------------------+


    F I N A L   I N C R E M E N T A L   A N A L Y S I S

                S U M M A R Y

    STEP                                NO. OF ITERATIONS

       1          CONVERGENCE :YES                     2
```

```
         2           CONVERGENCE :YES                    2
         3           CONVERGENCE :YES                    5


 END OF PROCESS FOR PROBLEM
1468.1 - GA27 - Cepav2
NONLINEAR SOLUTION CPU TIME ....    0.02 [sec]
DATABASE  CREATION CPU TIME.....    0.10 [sec]
```