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## PROGETTO ESECUTIVO

### ITINERARIO NAPOLI - BARI RADDOPPIO TRATTA APICE - ORSARA I LOTTO FUNZIONALE APICE - HIRPINIA

GN08 - GALLERIA NATURALE Rocchetta - USCITA DI EMERGENZA PEDONALE F5 pk 11+075 E  
CUNICOLO PEDONALE pk 12+000  
IMBOCCO

#### ELABORATI GENERALI

Relazione geotecnica e di calcolo delle opere di imbocco

APPALTATORE	DIRETTORE DELLA PROGETTAZIONE	PROGETTISTA
Consorzio HIRPINIA AV Il Direttore Tecnico Ing. Vincenzo Moriello  10/06/2020	Il Responsabile integrazione fra le varie prestazioni specialistiche Ing. G. Cassani	 Ing. G. Cassani

COMMESSA LOTTO FASE ENTE TIPO DOC. OPERA/DISCIPLINA PROGR. REV. SCALA:

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Rev.	Descrizione	Redatto	Data	Verificato	Data	Approvato	Data	Autorizzato Data
A	Emissione per consegna	A. Zimbaldi	21/02/2020	B. Spigarelli	21/02/2020	M. Gatti	21/02/2020	Ing. G. Cassani
B	Revisione per istruttoria	A. Zimbaldi	10/06/2020	B. Spigarelli	10/06/2020	M. Gatti	10/06/2020	
								10/06/2020

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n. Elab.:

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## 1 PREMESSA

Il presente documento è parte integrante del progetto definitivo della galleria Rocchetta, inclusa nel raddoppio ferroviario della tratta compresa tra Apice ed Orsara, sulla linea Caserta – Foggia, itinerario Napoli – Bari.

La galleria Rocchetta risulta ubicata fra le progressive km 10+074 (inizio imbocco lato Bari) e km 16+623 (imbocco lato Napoli) per una lunghezza totale di 1991.85 m (corrispondente alla lunghezza coperta). Il tratto in naturale è compreso fra le progressive km 2+715.60 e km 4+681.85 ed è caratterizzato da una lunghezza di 1966.25 m.

In particolare è oggetto della relazione la descrizione e verifica delle opere civili e delle modalità di esecuzione dell'imbocco della finestra F5 che si innesta nella galleria Rocchetta alla pk 11+075 e ha una lunghezza di 657.5m.

Le opere di stabilizzazione e sostegno degli scavi sono realizzate mediante paratie di pali di grande diametro contrastate attraverso tiranti.

Nel seguito sono illustrate le soluzioni progettuali e le verifiche di dimensionamento delle opere di sostegno provvisionali.

## 2 SCOPO E CONTENUTI DEL DOCUMENTO

Nella presente relazione si affrontano le problematiche progettuali connesse alla realizzazione delle opere di imbocco della finestra F5 della galleria Rocchetta facente parte della linea ferroviaria Napoli-Bari. Per l'inquadramento generale delle opere in sotterraneo si rimanda al documento “Relazione tecnica delle opere in sotterraneo”.

## 3 NORMATIVA DI RIFERIMENTO

### 3.1 LEGGI E NORMATIVE COGENTI

Rif. [1] C.S.LL.PP., Circolare n°617 del 02/02/2009, “Istruzioni per l'applicazione delle “nuove norme tecniche per le costruzioni” di cui al DM 14/01/2008”.

### 3.2 NORMATIVE NON COGENTI E RACCOMANDAZIONI

Rif. [2] UNI EN 14487-1:2006, “Calcestruzzo progettato – parte 1: definizioni, specificazioni e conformità”;

Rif. [3] UNI EN 14487-2:2006, “Calcestruzzo progettato – parte 2: esecuzione”;

Rif. [4] UNI EN 206-1 2006, “Calcestruzzo – parte 1: specificazione, prestazione, produzione e conformità”.

### 3.3 PRESCRIZIONI E SPECIFICHE TECNICHE (RFI, ITF)

Rif. [5] RFI, doc S.O.C.S.3870 “Sagome. Profili minimi degli ostacoli” datato Lug 1990;

Rif. [6] RFI, doc RFIDINICMAGAGN00001B “Manuale Progettazione Gallerie” datato Dic 2003;

Rif. [7] ITALFERR, “Manuale di progettazione” ver.06, datato Gen 2006;

Rif. [8] ITALFERR, Specifica Tecnica PPA.0002403 “Linee guida per la progettazione geotecnica delle gallerie naturali” datato Dicembre 2015.

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## 4 DOCUMENTI DI RIFERIMENTO

### 4.1 DOCUMENTI REFERENZIATI

Sono stati utilizzati come input per il presente documento i seguenti elaborati:

Rif. [9] U.O. Geologia, elaborati di progetto;

Rif. [10] U.O. Geologia, documento n° IF2801EZZRGGE0102001B, " Relazione geomorfologica generale" ;

Rif. [11] U.O. Geotecnica, documento n° IF2801EZZRBOC0201001B, " Relazione di caratterizzazione geotecnica/ geomecanica del Flysch Rosso interagente con le gallerie Grottaminarda e Melito ";

Rif. [12] U.O. Geotecnica, documento n° IF2801EZZRBOC0101001B, " Relazione geotecnica generale ";

Rif. [13] U.O. Geotecnica, documento n° IF2801EZZRBOC0201001B, "Relazione di caratterizzazione geotecnica / geomecanica generale ";

### 4.2 DOCUMENTI CORRELATI

Non sono presenti documenti correlati.

### 4.3 DOCUMENTI SUPERATI

Non sono presenti documenti superati.

## 5 ALLEGATI

Il documento è corredato dai seguenti allegati:

[Risultati delle analisi di verifica delle paratie. Sez. 1 – Allegato 1 - STR];

[Risultati delle analisi di verifica delle paratie. Sez. 1 – Allegato 2 - GEO];

[Risultati delle analisi di verifica delle paratie. Sez. 2 – Allegato 3 - STR];

[Risultati delle analisi di verifica delle paratie. Sez. 2 – Allegato 4 - GEO].

## 6 DOCUMENTI PRODOTTI A SUPPORTO

I contenuti della presente relazione sono utilmente completati e arricchiti dai seguenti elaborati di progetto:

Rif. [14] U.O. Gallerie, documento n.° IF2801EZZLAGA1100001B "Planimetria";

Rif [15] U.O. Gallerie, documento n° IF2801EZZfaGA1100001B "Profilo longitudinale";

Rif [16] U.O. Gallerie, documento n° IF2801EZZPAGA1100001B "Sviluppata paratia e planimetria di tracciamento paratia" ;

Rif [17] UO Gallerie, documento n IF2801EZZWAGA1100001B "Sezioni trasversali";

Rif [18] UO Gallerie, documento n° IF2801EZZWAGA1100002B "Sezioni tipo e particolari";

Rif [19] UO Gallerie, documento n° IF2801EZZF6GN0800001B "Profilo geotecnico/geomecanico – Finestra F5".

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## 7 FASE CONOSCITIVA

Nella fase conoscitiva si acquisiscono gli elementi necessari alla caratterizzazione e modellazione geologica del sito e alla caratterizzazione e modellazione geotecnica del volume significativo del mezzo interessato dall'opera. Nel seguito si riporta un breve inquadramento geologico e la sintesi della caratterizzazione e modellazione geotecnica con specifico riferimento al volume significativo interessato dalle opere di imbocco della finestra pedonale F5 della galleria naturale Rocchetta.

### 7.1 INQUADRAMENTO GEOLOGICO

Lo studio geologico ha individuato in corrispondenza dell'imbocco dell'uscita di emergenza F5 le seguenti unità geologiche:

- ✓ Formazione della Baronia – BNA1 Membro dei conglomerati e delle sabbie di S.Sossio Baronia (Pliocene inf.) rappresentato da una litofacies sabbiosa con arenarie e sabbie da cementate a poco cementate alternate a siltiti e marne.
- ✓ Formazione della Baronia – BNA2 Litofacies pelitica (Pliocene Inf.) rappresentata da argille più o meno siltose e marnose, silt più o meno argillosi e sabbiosi, marne.

La Finestra F5 attraversa planimetricamente un settore geomorfologicamente instabile, caratterizzato dalla presenza di frane attive e fenomeni di soliflusso (tra pk 0+400 e 0+135 circa).

Il colamento si inserisce in un contesto più ampio in cui è stata riconosciuta una dinamica di versante attiva a più grande scala, evidenziata sia da terreno che dall'analisi Lidar e descritta in dettaglio nella Relazione geomorfologica a cui si rimanda [10].

Questo dissesto in particolare è riconoscibile per variazioni di pendenza, scarpate minori ed un aspetto "a dossi" del versante soprattutto nella parte apicale ed in quella basale del versante. A monte si riconosce una scarpata che potrebbe rappresentare il coronamento del dissesto.

I sondaggi SROC2 e RI58, ubicati nei pressi del futuro imbocco e del futuro piazzale, individuano la presenza di materiale con caratteristiche geotecniche mediocri/scadenti a profondità variabili tra 3 e 4,5 m circa.

Poco a valle del piazzale sono state riscontrate lesioni ai muretti lungo la sede stradale.

I dati di interferometria satellitare presenti nel settore centrale, dove anche la morfologia è più regolare, non indicano movimenti significativi; pertanto questa parte di versante è stata cartografata come quiescente.

L'analisi integrata di tutti questi dati permette di classificare il dissesto come un colamento superficiale lento, che interessa spessori variabili tra 2 e 4,5 m circa, in cui non è definibile una superficie netta di scorrimento, e che interessa le prime coltri di alterazione del substrato.

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## ITINERARIO NAPOLI – BARI

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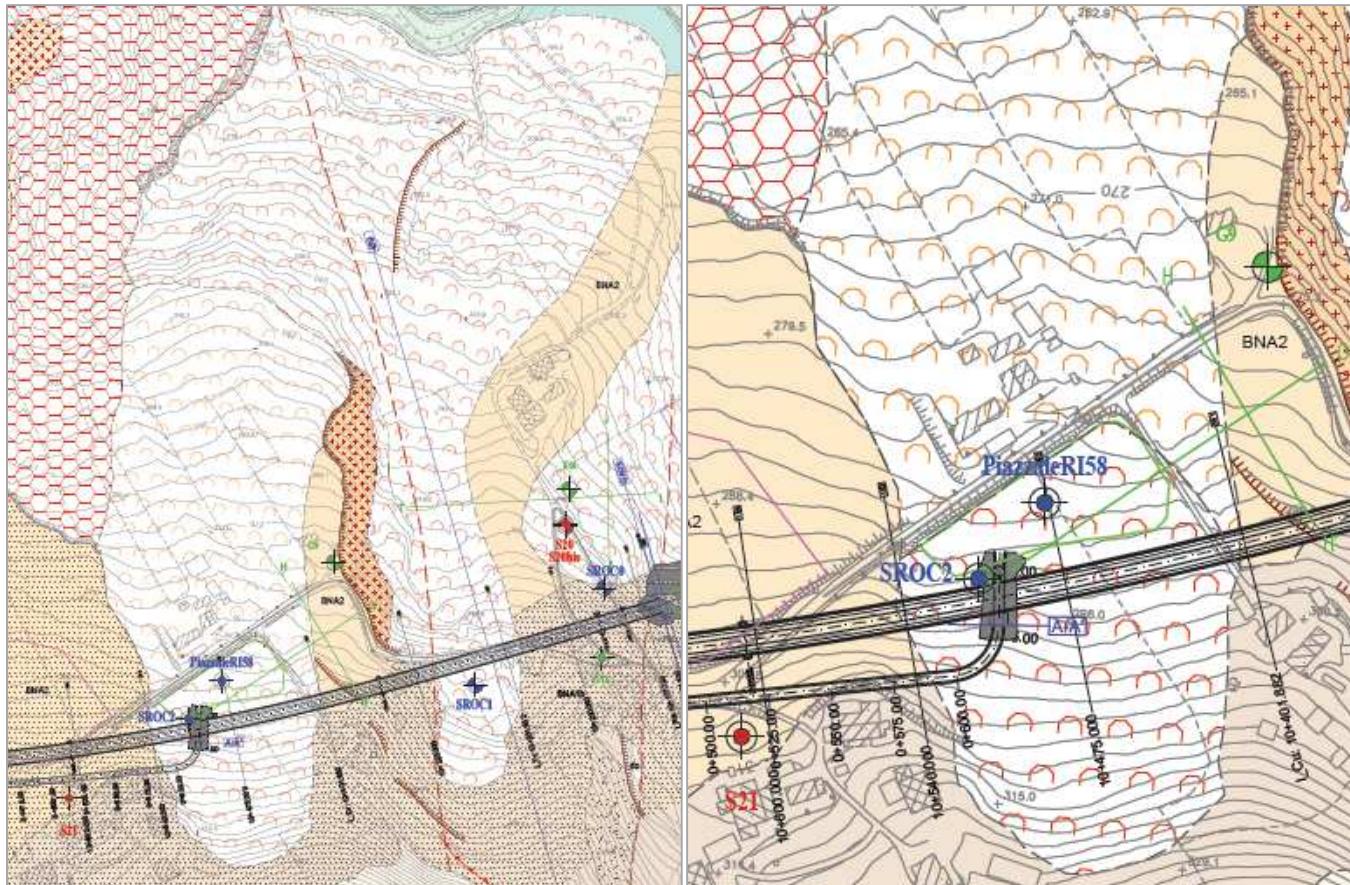


Fig. 1 – Stralcio carta geologica - geomorfologica (sx) – particolare imbocco (dx)



Fig. 2 – Zona di imbocco della Finestra F5

## 7.2 INDAGINI GEOTECNICHE

In corrispondenza dell'imbocco della presente galleria sono stati eseguiti i sondaggi:

- S21 – Campagna Indagini 2015
- SROC2 – Campagna Indagini 2019
- RI58 – Campagna Indagini 2019

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## 7.3 CARATTERIZZAZIONE E MODELLAZIONE GEOTECNICA

I risultati delle indagini geotecniche, in sìto e di laboratorio, hanno permesso di definire il modello geotecnico, rappresentativo delle condizioni stratigrafiche e delle caratteristiche fisico-meccaniche dei terreni/rocce interessati dalle opere di imbocco. Il modello geotecnico complessivo dell'opera in sotterraneo è rappresentato nell'elaborato "Galleria Melito – uscita di emergenza pedonale F5 PK 11+075 - Profilo geotecnico/geomeccanico – Finestra F5".

### 7.3.1 Caratterizzazione geotecnica imbocco

La stratigrafia dell'area in esame, in relazione all'opera in progetto, è caratterizzata dalla presenza della formazione della Baronia.

L'attività di caratterizzazione geotecnica è finalizzata alla definizione dei parametri geotecnici che competono alle differenti unità individuate nello specifico contesto di imbocco in esame.

L'iter logico/operativo adottato nell'attività di caratterizzazione condotta è il seguente:

- Identificazione dei sondaggi eseguiti nell'area in esame;
- Individuazione delle unità/livelli geotecnici discriminati in funzione dell'esame visivo delle cassette stratigrafiche associato alla lettura delle schede stratigrafiche e all'analisi della dimensione prevalente dei grani;
- Elaborazione dei risultati delle prove di laboratorio e delle prove in situ analizzando separatamente tutte le determinazioni provenienti dai campioni prelevati entro la medesima unità. Per dettagli sulla procedura di elaborazione delle prove si rimanda alla "Relazione Geotecnica Generale". Per la determinazione delle proprietà meccaniche la caratterizzazione geotecnica si è avvalsa primariamente dei risultati delle prove di laboratorio, successivamente, laddove questi fossero assenti o si ritenessero necessario integrare le valutazioni con altre prove sono stati presi in considerazione i risultati delle prove in foro SPT (con correlazioni appropriate ai litotipi) e Pocket Penetrometer. Le proprietà di deformabilità vengono determinate sulla base risultati delle prove in foro.
- Caratterizzazione geotecnica dei livelli geotecnici individuati sulla base delle elaborazioni condotte, definendo il set di parametri geotecnici ad uso progettuale:
  - peso di volume naturale ( $\gamma$ );
  - coesione efficace ( $c'$ )
  - angolo di attrito interno di picco ( $\phi$ )
  - moduli elasticci operativi ( $E_{op}$ ), desunti dai moduli elasticci a piccole deformazioni e dalle risultanze dell'interpretazione delle prove in situ e in laboratorio.

#### 7.3.1.1 DESCRIZIONE LITOSTRATIGRAFICA DEI LIVELLI GEOTECNICI

I depositi fransosi sono costituiti da argilla limosa con livelli marnosi color beige riportati sui sondaggi SROC2 e RI58. Sul sondaggio S21, invece, a circa un centinaio di metri verso ovest dall'imbocco e dagli altri sondaggi, si riporta la presenza di arenarie siltose poco cementate nei primi 4 m da superficie. Tali depositi sono caratterizzati da uno stato di addensamento basso con un numero di colpi SPT inferiore a 15 e da valori di resistenza a rottura misurati da Pocket Penetrometer di media inferiori a 200 kPa. I valori di resistenza residui sono stati scelti sulla base delle risultanze della back analysis riportata ai paragrafi successivi e sono in linea con i risultati delle prove di laboratorio fatte in contesti analoghi (versante sul quale si sviluppa l'imbocco galleria Melito lato Napoli, Unità del BNa1b).

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## ITINERARIO NAPOLI – BARI

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Fig. 3 – Livello geotecnico 1 (depositi franosì della formazione geologica del BNA1b) nel sondaggio SROC2 (sx) e RI58 (dx)

Al di sotto dei depositi franosì superficiali, la formazione del BNA2 si presenta come argille di color grigiaastro con livelli marnosi. Le proprietà meccaniche sono state valutate sulla base dei risultati delle prove di laboratorio (prove di taglio diretto, triassiali non drenate consolidate e non consolidate) coadiuvate dal confronto con i parametri dedotti mediante relazioni empiriche dalle prove in foro SPT e PP (Bolton e Road Bridge Specification). In questo orizzonte è stata anche eseguita una prova pressiometrica Menard.



Fig. 4 – Livello geotecnico 2 (formazione geologica del BNA2) nel sondaggio SROC2 (sx) e RI58 (dx)

Con riferimento al sondaggio SROC2, dai 20 metri circa si osserva il passaggio graduale da argille a marne argillose, a struttura scagliosa, fortemente consistenti come testimoniato dai rifiuti delle prove di Pocket. Le prove penetrometriche dinamiche hanno restituito valori di Nspt intorno ad 80. Data la consistenza semilitoide/litoide del materiale è stata eseguita una prova dilatometrica per roccia.



Fig. 5 – Livello geotecnico 3 (formazione geologica del BNA2) nel sondaggio SROC2

Di seguito vengono riportati i grafici che risultano dalle elaborazioni delle prove e delle indagini geotecniche di laboratorio ed in situ distinguendo, per quelle in laboratorio i risultati delle prove relative ai diversi sondaggi eseguiti.

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#### 7.3.1.2 ELABORAZIONE PROVE FISICHE DI LABORATORIO

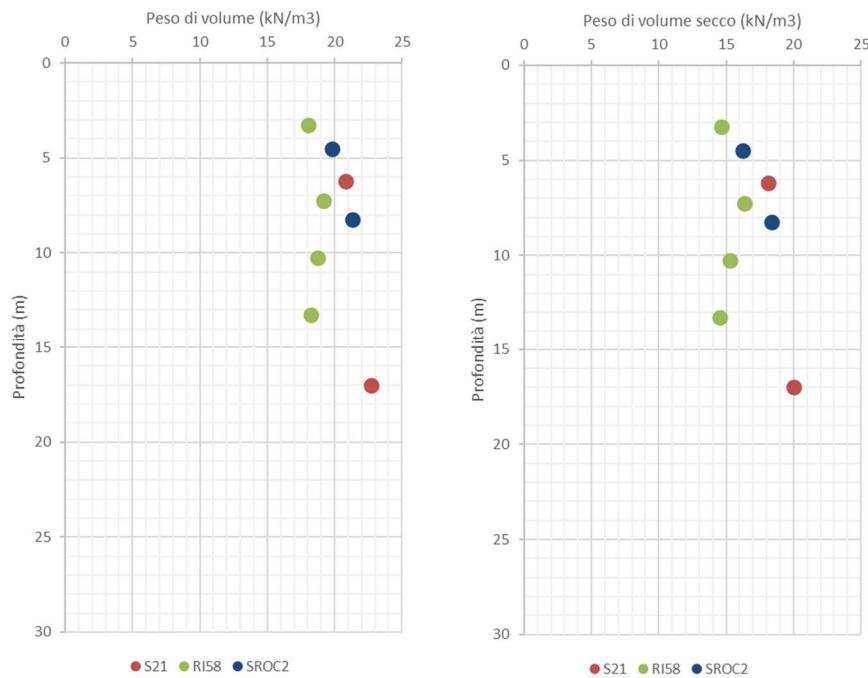


Fig. 6 – Peso di volume e peso di volume secco

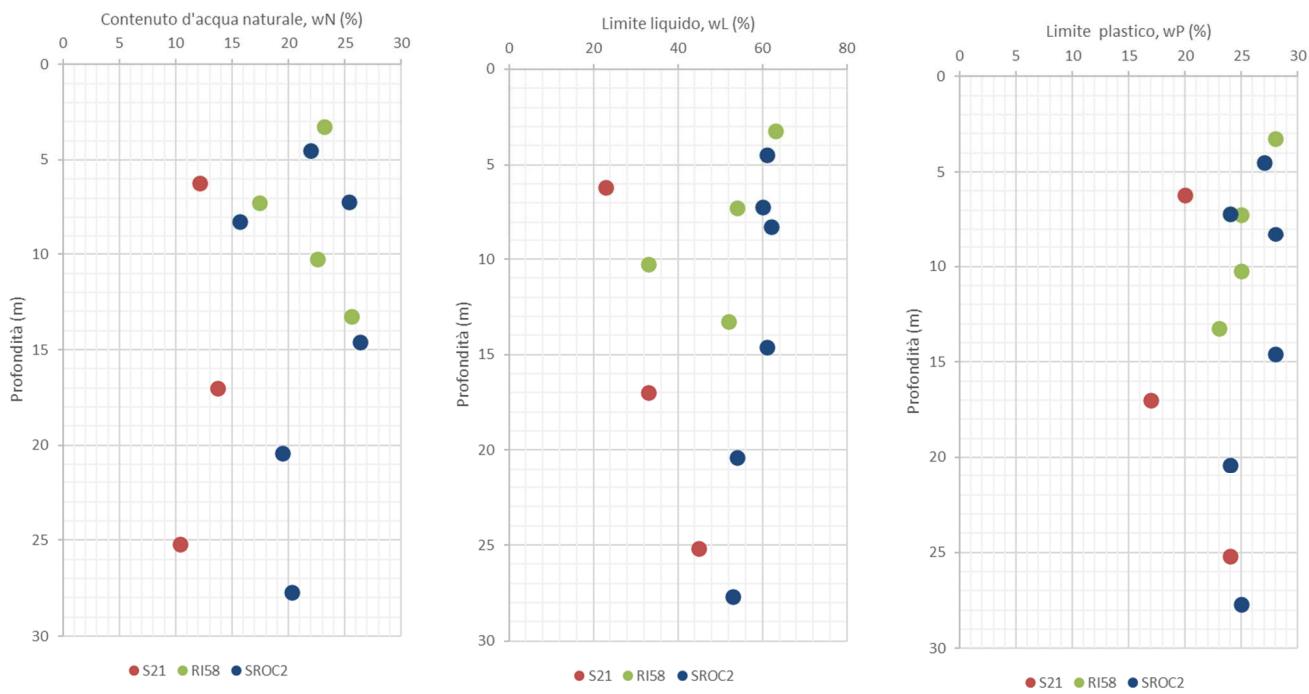


Fig. 7 – Contenuto d'acqua, limite liquido e limite plastico

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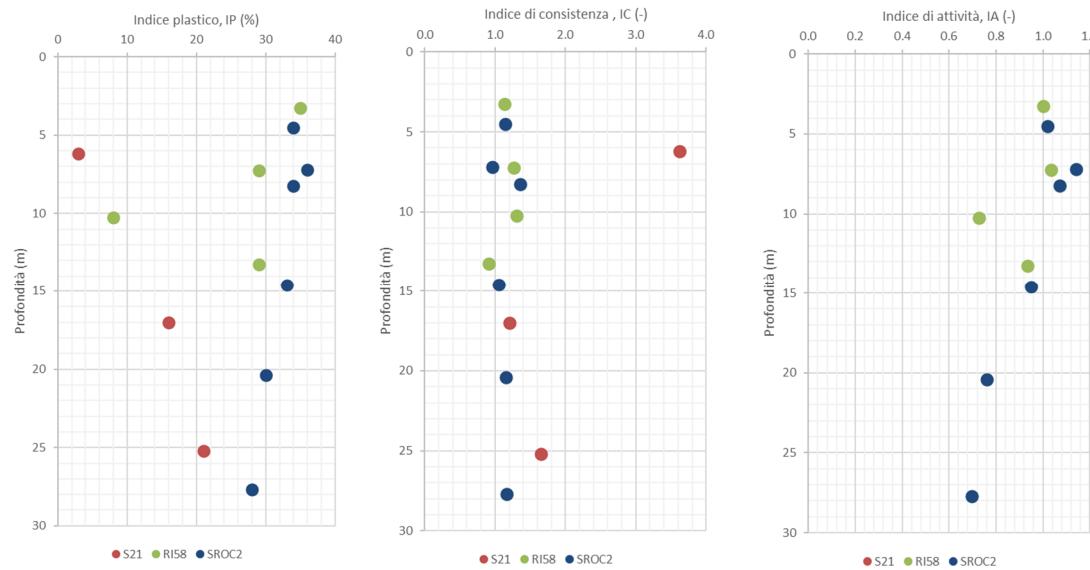


Fig. 8 – Indice plastico, di consistenza e di attività

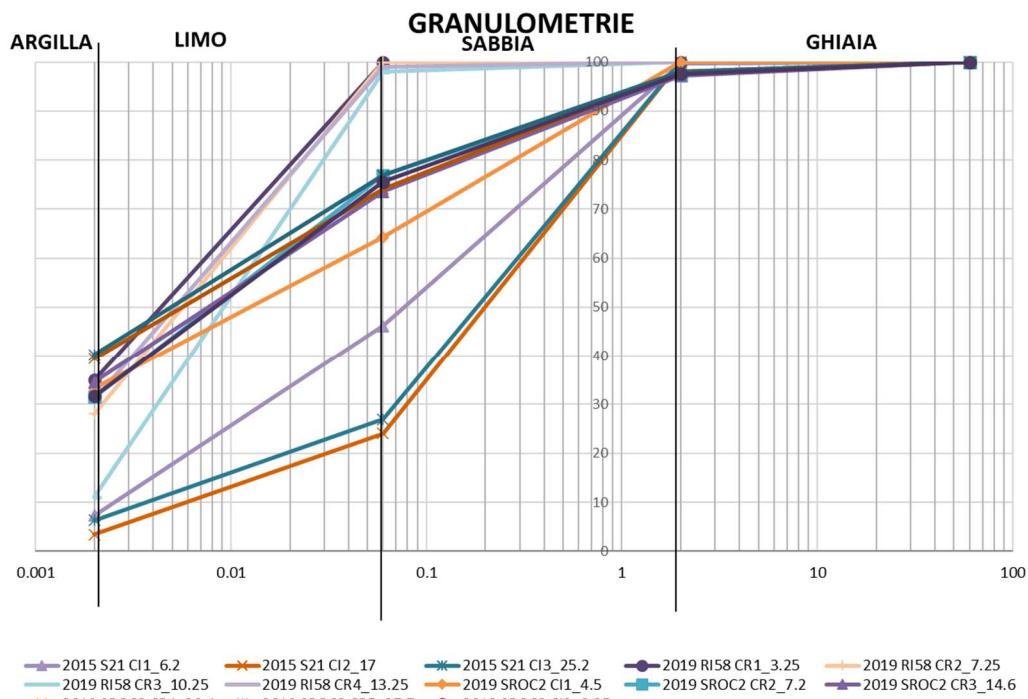


Fig. 9 – Curve Granulometriche

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#### 7.3.1.3 ELABORAZIONE PROPRIETÀ FISICHE DA PROVE IN FORO

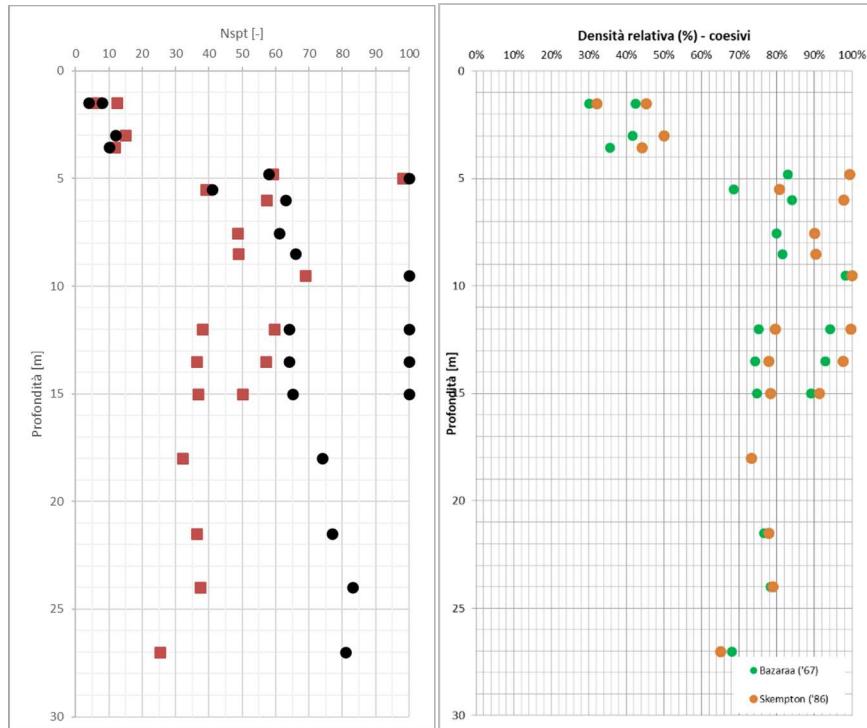


Fig. 10 – Valori Nspt e densità relativa

#### 7.3.1.4 ELABORAZIONE PROPRIETÀ MECCANICHE DA PROVE IN LABORATORIO

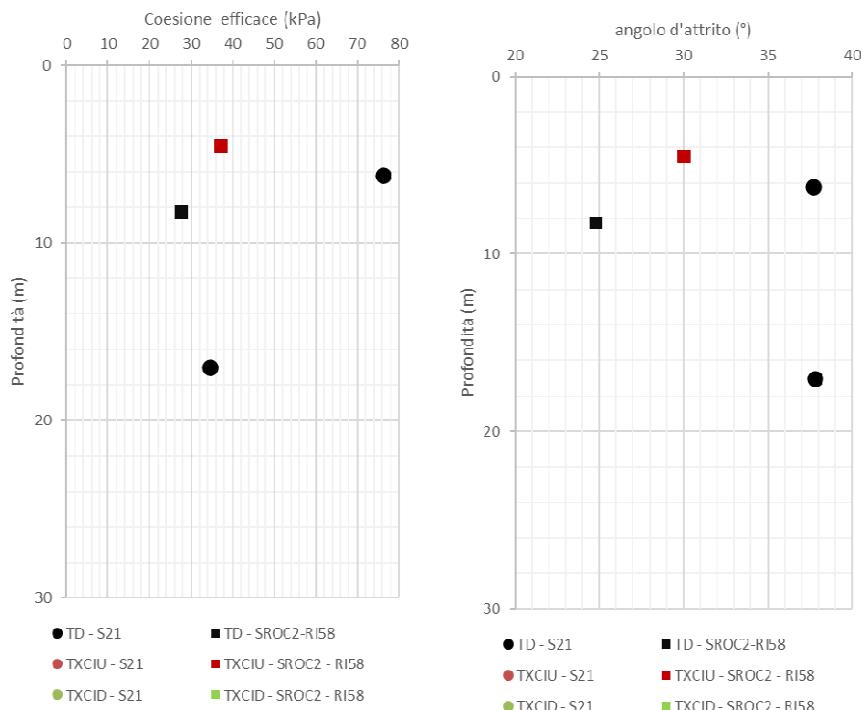


Fig. 11 – Proprietà meccaniche – Coesione e angolo d'attrito

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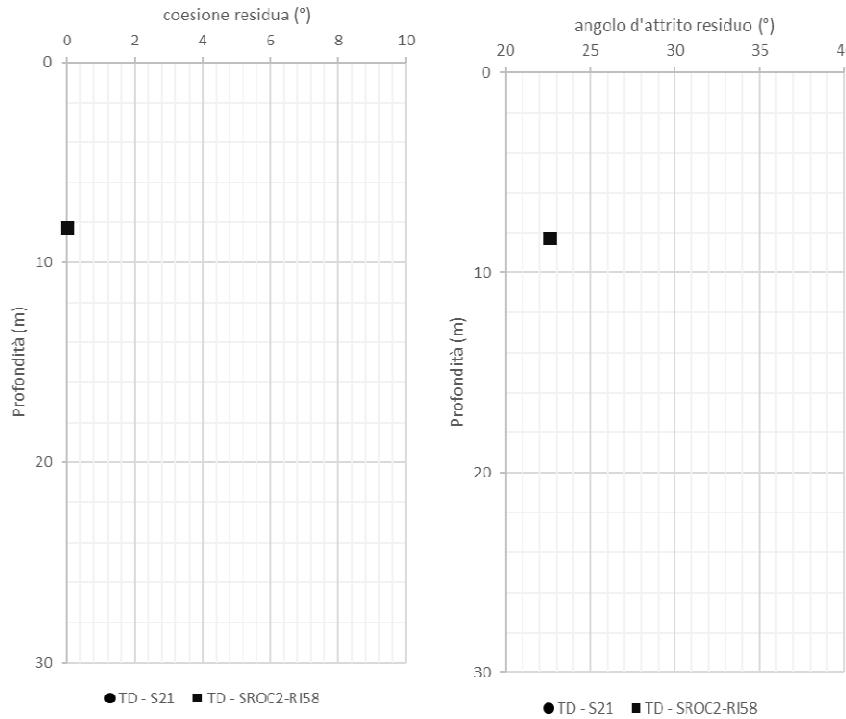


Fig. 12 – Proprietà meccaniche – Coesione e angolo d'attrito residuo

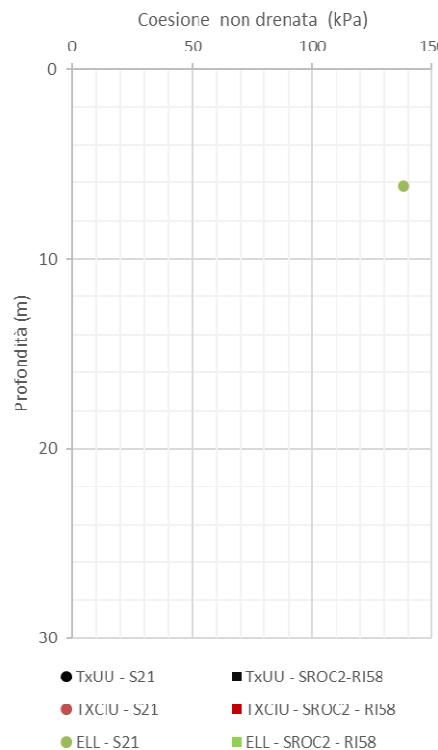


Fig. 13 – Proprietà meccaniche – Coesione non drenata derivante da prove di laboratorio

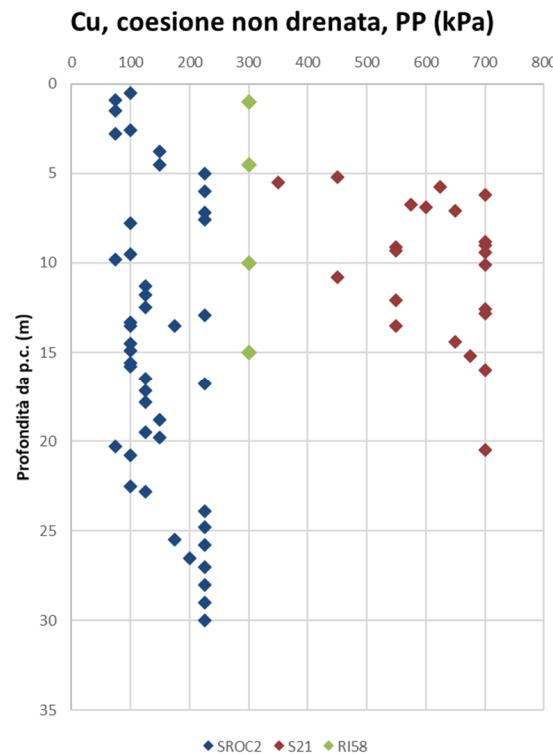
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#### 7.3.1.5 ELABORAZIONE PROPRIETÀ MECCANICHE DA PROVE IN FORO



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#### 7.3.1.6 ELABORAZIONE PROPRIETÀ DI DEFORMABILITÀ DA PROVE IN FORO

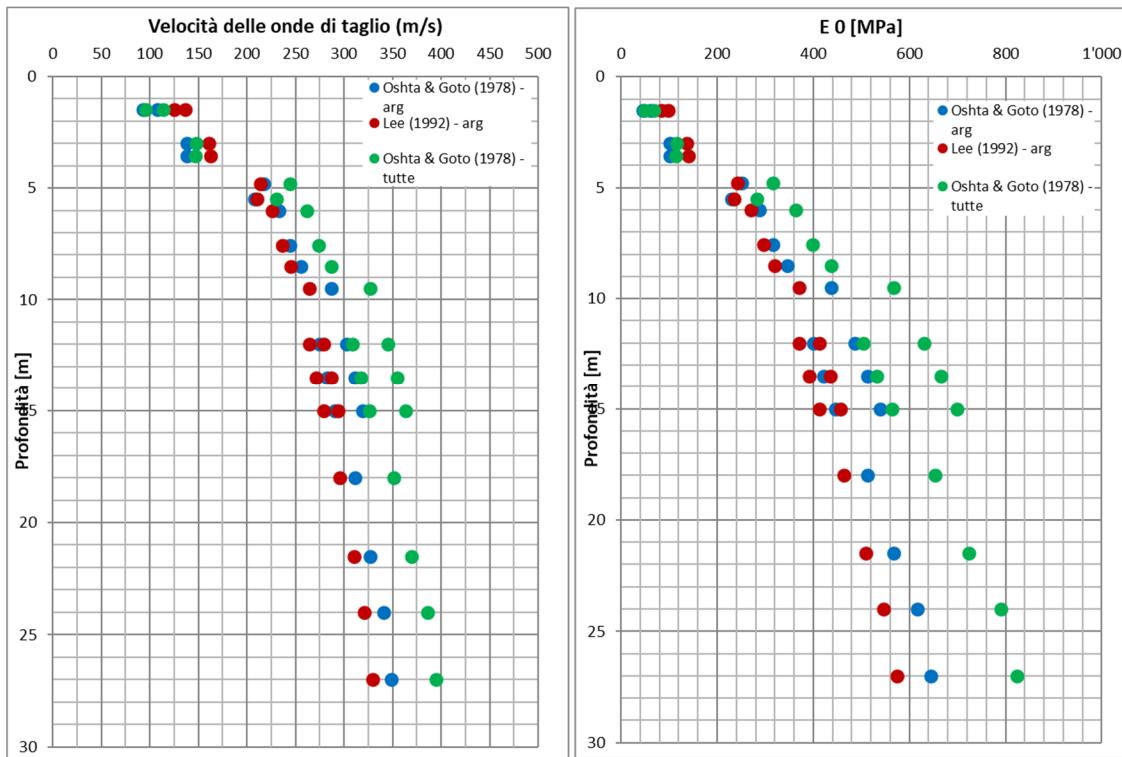


Fig. 16 – Velocità delle onde di taglio e del modulo elastico a piccole deformazioni derivanti dai valori di  $N_{sp}$

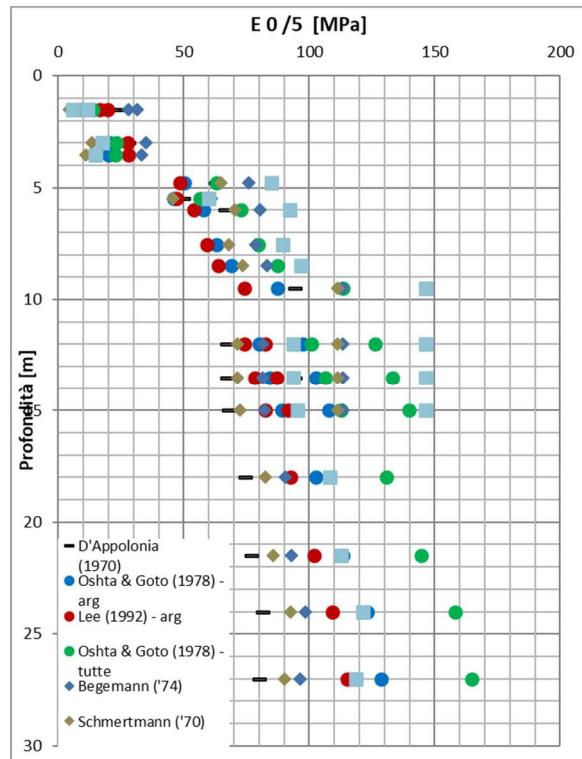


Fig. 17 – Modulo Elastico

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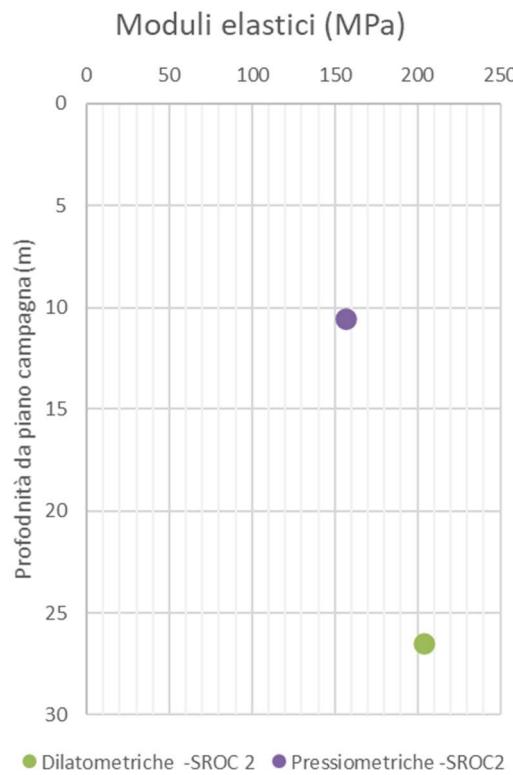


Fig. 18 – Moduli da prove pressiomeriche e dilatometriche

#### 7.3.1.7 CONDUCIBILITÀ IDRAULICA DA PROVE IN FORO

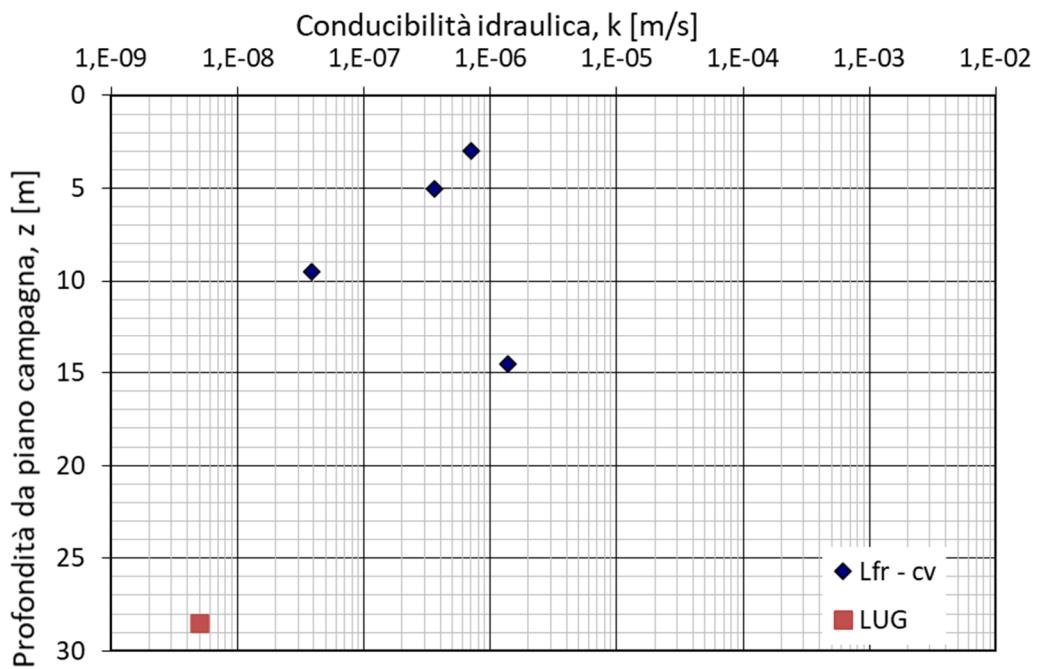


Fig. 19 – Conducibilità idraulica

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### 7.3.1.8 QUADRO DI SINTESI DEI RISULTATI

Le caratteristiche dei materiali sono di seguito riportate:

Litotipo	Profondità		$\gamma$ (kN/m <sup>3</sup> )	$\phi$ (°)	$c'$ (kPa)	$\phi_{res}$ (°)	$c'_{res}$ (kPa)	$E'$ (MPa)
	da	a						
BNA1b_1	0	4.5	20	24-26	7-10	14	4	20
BNA2_2	4.5	20	20	26-28	15-35	-	-	80-150
BNA2_3	20	>20	20	26-28	30-40	-	-	150-210
		Z <sub>w</sub> = profondità media di falda di progetto; $\gamma$ = peso di volume naturale (kN/m <sup>3</sup> ); $\phi'$ = angolo di resistenza al taglio (°); $c'$ = valore della coesione efficace (kPa); $E'$ = modulo di Young (MPa)						

Tabella 1 – Valori di riferimento dei parametri geotecnici nell'area dell'imbocco lato della finestra F5

### 7.3.2 Definizione dei valori caratteristici dei parametri geotecnici utilizzati nelle analisi

I parametri geotecnici caratteristici utilizzati nell'ambito della analisi di simulazione e verifica sono riportati nella tabella seguente

Litotipo	Profondità		$\gamma$ (kN/m <sup>3</sup> )	$\phi$ (°)	$c'$ (kPa)	$E'$ (MPa)
	da	a				
BNA1b_1	0	4	20	14	4	20
BNA2_2	4	6	20	27	25	115
BNA2_3	6	10	20	27	30	180
	Z <sub>w</sub> = profondità media di falda di progetto; $\gamma$ = peso di volume naturale (kN/m <sup>3</sup> ); $\phi'$ = angolo di resistenza al taglio (°); $c'$ = valore della coesione efficace (kPa); $E'$ = modulo di Young (MPa)					

Tabella 2 – Valori caratteristici dei parametri geotecnici utilizzati nelle analisi per l'imbocco della finestra F5

### 7.3.3 Il regime idraulico

E' segnalata la presenza di falda alla profondità di circa 9 m da pc, e si prevede il suo ribasso durante le fasi di scavo attraverso drenaggio.

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## 7.4 CARATTERISTICHE DEL SITO E DEFINIZIONE DELL'AZIONE SISMICA

Le opere in progetto per l'imbocco lato Napoli della galleria Grottaminarda si trovano nel comune di Apice, in un sito con le seguenti coordinate geografiche: geografiche: Latitudine 41° 07' 24.9" N, Longitudine 14° 59' 53.3" E

Alle strutture di sostegno, trattandosi di opere provvisionali, si attribuisce una vita nominale  $V_N$  di 35 anni. Di conseguenza, il periodo di riferimento per la definizione dell'azione sismica,  $V_R$ , si assume pari a 35 anni (DM 14/01/2008). Tuttavia, poiché per le opere di sostegno degli imbocchi è prevista una vita inferiore ai 2 anni, queste non verranno verificate nei confronti del sisma. Per completezza si riportano ugualmente i parametri sismici ricavati.

Con riferimento alla probabilità di superamento dell'azione sismica,  $P_{V_R}$ , attribuita allo stato limite ultimo di salvaguardia della vita (SLV), nel periodo  $V_R$  dell'opera in progetto, si determina il periodo di ritorno  $T_R$  del sisma di progetto. Sulla base delle coordinate geografiche del sito e del tempo di ritorno del sisma di progetto,  $T_R$ , sopra definito, si ricavano i parametri che caratterizzano il sisma di progetto relativo al sito di riferimento, rigido ed orizzontale (Tabella 1 dell'allegato B del DM 14/01/2008):

- $a_g$ : accelerazione orizzontale massima
- $F_0$ : valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale
- $T^*c$ : periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale

Per le opere provvisionali di imbocco il periodo di ritorno si determina con l'espressione:

$$T_R = -\frac{V_R}{\ln(1 - P_{V_R})}$$

Per tenere conto dei fattori locali del sito, l'accelerazione orizzontale massima attesa al sito è valutata con la relazione (DM 14/01/2008):

$$a_{\max} = S_s \cdot S_T \cdot \left( \frac{a_g}{g} \right)$$

dove:

$a_g$  è l'accelerazione orizzontale massima attesa su sito di riferimento rigido

$S_s$  è il fattore di amplificazione stratigrafica del terreno, funzione della categoria del sottosuolo di fondazione e dei parametri sismici  $F_0$  e  $a_g/g$  (Tabella 32V del DM 14/01/2008);

$S_T$  è il fattore di amplificazione che tiene conto delle condizioni topografiche, il cui valore dipende dalla categoria topografica e dall'ubicazione dell'opera (Tabella 32VI del DM 14/01/2008)

I valori delle grandezze necessarie per la definizione dell'azione sismica per le opere d'imbocco sono riassunti nella seguente tabella:

	Imbocco F5
	Strutture di sostegno
Coord geografiche	41°07'24.9"N 14°59'53.3"E
Stato limite	SLV
$T_R$	332
$a_g/g$	0.225
$F_0$	2.29
Categoria sottosuolo	B
$S_s$	1.194

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Categoria topografica	T1
$S_T$	1
$a_{max}/g$	0.269

Tabella 3 – Parametri per la definizione dell’azione sismica di progetto

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## 8 CARATTERISTICHE DEI MATERIALI STRUTTURALI

Si riportano di seguito le principali caratteristiche dei diversi materiali impiegati nelle opere in progetto, con l'indicazione dei valori di resistenza e deformabilità adottati nelle verifiche, nel rispetto delle indicazioni del DM 14/01/2008 e della "Specifica per la progettazione geotecnica delle opere civili ferroviarie" RFI DTC INC CS SP IFS 001 A.

Nelle verifiche di resistenza, a favore di sicurezza, viene sempre considerato un calcestruzzo di classe di resistenza C25/30.

Per la completa e puntuale definizione delle caratteristiche dei materiali previsti per la realizzazione dell'opera si rimanda all'elaborato specifico.

### Strutture di sostegno provvisionali

Calcestruzzo	
Classe di resistenza	C25/30
Resistenza di progetto a compressione a 28 giorni	$f_{cd} = 0.85 f_{ck}/1.5 = 14.17 \text{ MPa}$
Modulo elastico a 28 giorni	$E_{cm} = 22 * (f_{cm}/10)^{0.3} = 31475 \text{ MPa}$

Acciaio per tubi e profilati	
Tipo	S 275 JR
Tensione di snervamento caratteristica	$f_{yk} \geq 275 \text{ MPa}$
Tensione di rottura caratteristica	$f_{tk} \geq 430 \text{ MPa}$
Tensione di snervamento di calcolo	cfr 4.2.4 a 4.2.9 del DM 14/01/08

Acciaio armonico per tiranti	
Tipo	Trefoli da 0,6"
Tensione di rottura caratteristica	$f_{ptk} \geq 1860 \text{ MPa}$
Tensione elastica all'1% di deformazione	$f_{p(1)k} \geq 1670 \text{ MPa}$

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## 9 CRITERI DI VERIFICA DELLE OPERE

Le verifiche sono state condotte in accordo con le prescrizioni e le indicazioni del DM 14/01/2008 e della Circolare n617/09.

### 9.1 OPERE DI SOSTEGNO

#### 9.1.1 Azioni

Le azioni considerate per la verifica delle strutture di sostegno dell'imbocco sono le seguenti:

- **azioni permanenti strutturali:** peso proprio degli elementi strutturali, spinta del terreno a monte e a valle dell'opera
- **azioni variabili:** carico variabile sul piano campagna a monte della struttura di sostegno,  $Q_{1M}$ , ove presente, atto a schematizzare nella fase costruttiva l'eventuale presenza di sovraccarichi di varia natura connessi alla realizzazione delle opere
- **azione sismica:** l'accelerazione orizzontale massima attesa al suolo è definita nel paragrafo 7.4. Come detto in precedenza, poiché per le opere di sostegno provvisionali degli imbocchi è prevista una vita inferiore ai 2 anni, queste non verranno verificate nei confronti del sisma.

Sulla base della definizione dei carichi di cui sopra, in accordo a quanto prescritto dal DM 14/01/2008, si considera la sola combinazione fondamentale per le verifiche di stati limite ultimi e di esercizio in condizioni statiche.

#### 9.1.2 Approcci progettuali e metodi di verifica

Le verifiche delle strutture di sostegno sono state condotte nei riguardi dei seguenti stati limite ultimi (SLU):

- collasso del complesso opera-terreno;
- instabilità globale dell'insieme terreno-opera;
- sfilamento di uno o più ancoraggi;
- raggiungimento della resistenza in uno o più ancoraggi,
- raggiungimento della resistenza degli elementi strutturali

Come prescritto dal DM 14/01/2008 per le strutture di sostegno flessibili, è stato adottato l'Approccio Progettuale 1 con le due combinazioni di coefficienti parziali (tabelle 62I, 62II e 65I del DM 14/01/2008):

- combinazione 1: A1 + M1 + R1
- combinazione 2: A2 + M2 + R1

Il dimensionamento geotecnico dell'opera è stato condotto con la verifica di stati limite ultimi GEO, applicando la Combinazione 2 (A2+M2+R1) Per le verifiche di stati limite ultimi STR l'analisi è stata condotta la combinazione 1 (A1+M1+R1), applicando i coefficienti parziali A1 ( $\gamma = 13$ ) all'effetto delle azioni A tale scopo, nelle analisi, i valori caratteristici dei carichi variabili sfavorevoli sono stati amplificati di un coefficiente pari a  $1.5/1.3 = 1.15$

Il corretto dimensionamento nei confronti degli SLU assicura che gli spostamenti dell'opera siano compatibili con le esigenze di funzionalità della stessa; pertanto, trattandosi di opere provvisionali, in assenza di fabbricati o altre opere da salvaguardare a ridosso delle stesse, non si ritengono necessarie ulteriori valutazioni di verifica nei confronti degli SLE

Per le verifiche di stabilità globale è stato applicato l'Approccio 1- Combinazione 2 (A2+M2+R2 – tabb 62I, 62II e 68I del DM 14/01/2008).

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I coefficienti di spinta attiva sono stati determinati attraverso la relazione di Mononobe (1929) e Okabe (1926).

I coefficienti di spinta passiva sono stati determinati attraverso la relazione di Lancellotta (2007).

L'angolo di attrito terreno/struttura,  $\delta$ , è stato assunto pari a 2/3 della resistenza al taglio del terreno naturale.

Le verifiche sono state condotte mediante l'ausilio del codice di calcolo PARATIE (versione 2017) .

### 9.1.3 Stabilità globale

Le verifiche di sicurezza SLU sono state condotte secondo l'Approccio 1 - Combinazione 2 (A2+M2+R2), in cui A2 sono i coefficienti moltiplicativi delle azioni e M2 e R2 sono i coefficienti riduttivi dei parametri di resistenza dei materiali e della resistenza globale del sistema. Il rapporto tra  $R_d$  ed  $E_d$  dovrà risultare sempre maggiore o uguale a  $\gamma_R = 1.1$  in condizioni statiche per assicurare che la verifica di sicurezza richiesta da normativa sia rispettata.

Per la valutazione della superficie di scorrimento critica (ed in generale di tutte le superfici di scorrimento) è stato utilizzato il metodo di Morgenstern & Price.

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## **10 VERIFICA DELLE OPERE D'IMBOCCO**

## **10.1 OPERE DI SOSTEGNO**

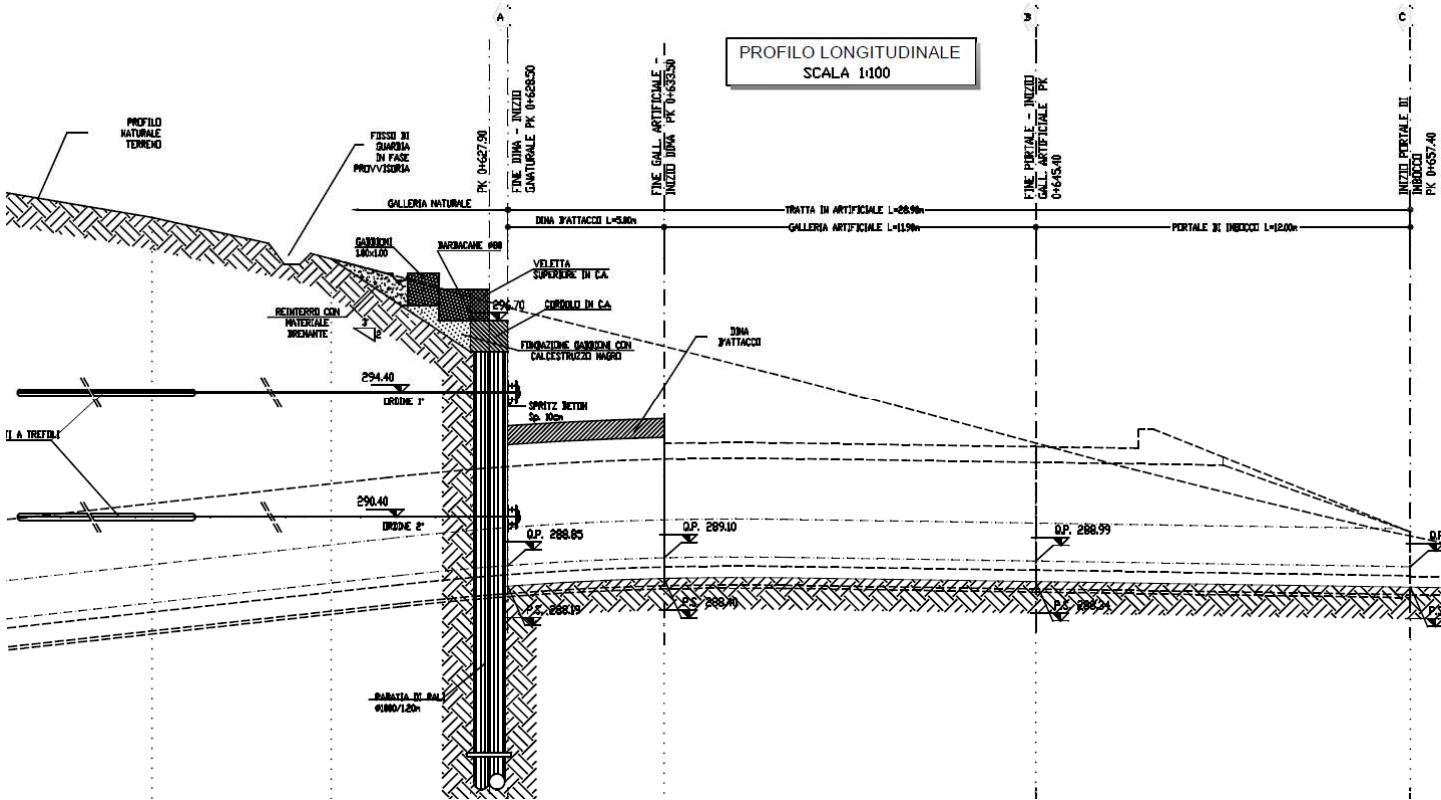
Sono state verificate le seguenti sezioni in relazione all'imbocco della finestra F5:

- sez 1: paratia frontale: sezione longitudinale alla pk 0+627.90;
  - sez 2: paratia laterale: sezione trasversale alla pk 0+632.00;

### **10.1.1 Sezione 1 Longitudinale – pk 0+627.90**

La sezione fa riferimento alla zona di imbocco della galleria ed è sostenuto da due ordini di tirantature.

Sono di seguito descritte le principali caratteristiche della struttura e del modello geotecnico per le analisi di verifica. La geometria della struttura di sostegno e la stratigrafia sono illustrate nel modello di figura seguente.



**Fig. 20 – Sezione 1 - Geometria di riferimento**

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## ITINERARIO NAPOLI – BARI

### RADDOPPIO TRATTA APICE – ORSARA I LOTTO FUNZIONALE APICE – HIRPINIA

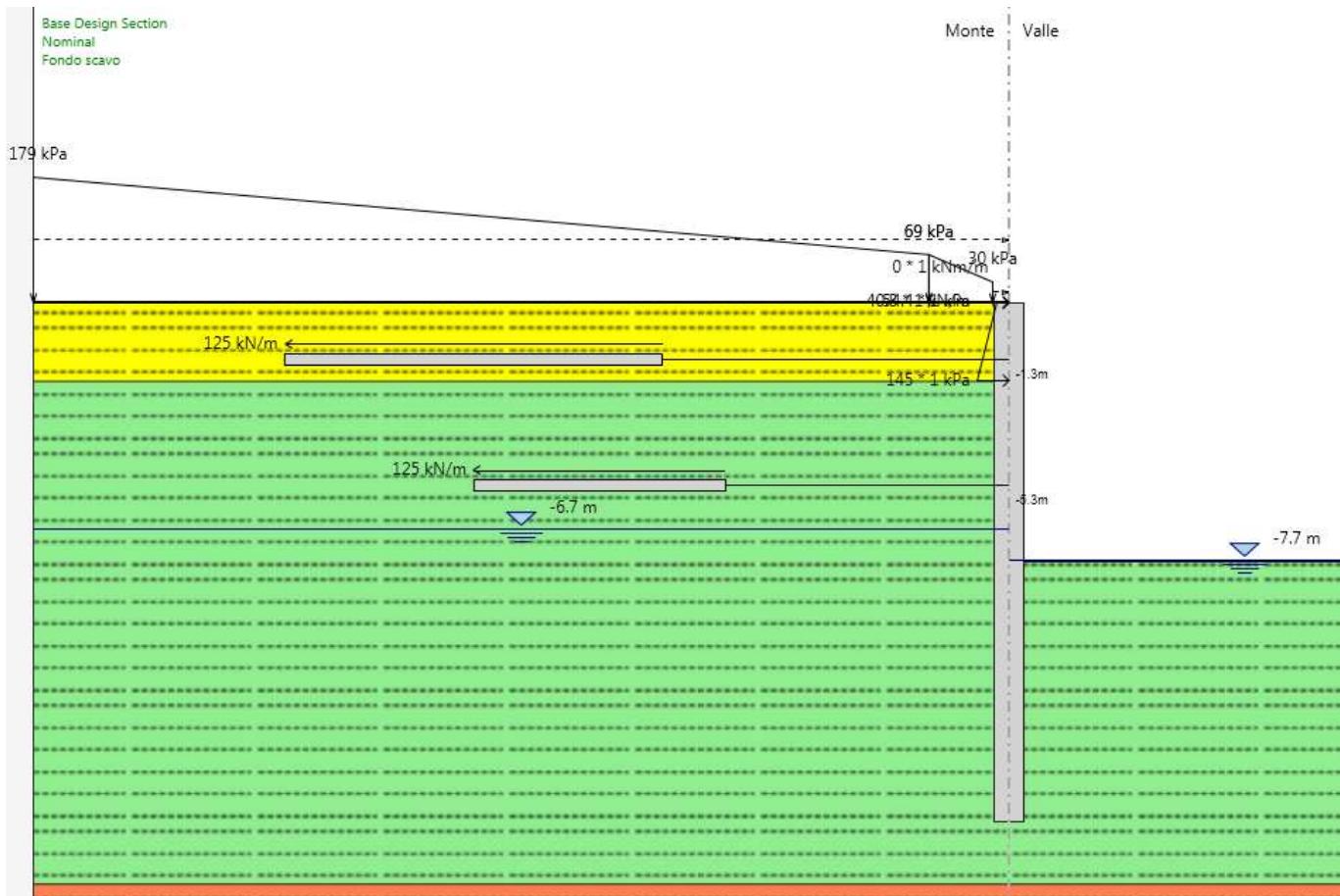


Fig. 21 – Sezione 1 - Modello di calcolo - step finale di calcolo (fase 6)

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La stratigrafia di riferimento presenta la seguente sequenza:

- FRANA da p.c. a 4.0m di profondità;
- BNA2\_2 da 4.0m a 20.0m di profondità;
- BNA2\_3 profondità >20.0m.

Tipologia struttura di sostegno	Paratia in pali $\phi$ 1000mm passo 1.2m
Altezza totale paratia	$H_{tot} = 16.5m$ (1/2cordolo=0.5m+pali L=16m)
Altezza libera paratia	$H = 8.2m$
Ordini di puntoni	-
Ordini di tiranti (n°)	2 ordini
Passo orizzontale tiranti	2.4m
Passo verticale dei tiranti	4m
Inclinazione iniziale del piano campagna a monte	$11.3^{\circ}$ (schematizzato con sovraccarichi dal piano campagna)
Inclinazione iniziale del piano campagna a valle	$0^{\circ}$
Sovraccarichi variabili a monte	-
Sovraccarichi variabili a valle	-

Tabella 4 – Sezione 1 - Caratteristiche geometriche della sezione di calcolo

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Terreno	<i>Gruppo coeff. Parziali</i>	<i>Condizione</i>	<i>γ</i>	<i>c<sub>d</sub></i>	<i>φ'<sub>d</sub></i>	<i>δ</i>	<i>E'</i>	<i>E'<sub>ur</sub></i>	<i>k<sub>o</sub></i>	<i>K<sub>a</sub></i>	<i>K<sub>p</sub></i>
			(kN/m <sup>3</sup> )	(kPa)	(°)	(°)	(Mpa)	(Mpa)	(-)	(-)	(-)
FRANA	M1	SLU	20	4	14.0	9.3	20	32	0.758	0.547	1.899
		-				-			-	-	-
	M2	SLU	20	4	14.0	9.3			0.758	0.547	1.899
		-				-			-	-	-
BNA2_2	M1	SLU	20	25.0	27.0	18	115	184	0.546	0.318	3.843
		-				-			-	-	-
	M2	SLU	20	20.0	22.2	14.8			0.623	0.389	2.907
		-				-			-	-	-
BNA2_3	M1	SLU	20	30.0	27.0	18	180	288	0.546	0.318	3.843
		-				-			-	-	-
	M2	SLU	20	24.0	22.2	14.8			0.623	0.389	2.907
		-				-			-	-	-

$\gamma$  = peso dell'unità di volume

$c'_d$  = coesione efficace (valore di calcolo)

$\varphi'_d$  = angolo di resistenza al taglio (valore di calcolo)

$\delta$  = angolo d'attrito struttura/terreno

$E'$  = modulo di Young

$E'_ur$  = modulo di Young (scarico/ricarico)

$k_o$  = coefficiente di spinta a riposo

$K_a$  = coefficiente di spinta attiva

$K_p$  = coefficiente di resistenza passiva

Tabella 5 – Sezione 1 - Parametri geotecnici di calcolo.

Il livello di falda è atteso a circa 5.4 m da p.c..

L'analisi si è articolata nelle seguenti fasi:

- fase 1: geostatica;
- fase 2: scavo sino a – 2.3m dalla base del cordolo;
- fase 3: attivazione del primo ordine di tiranti
- fase 4: scavo sino a – 6.3m dalla base del cordolo
- fase 5: attivazione del secondo ordine di tiranti;
- fase 6: fondo scavo fino a -7.7m.

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Per dimensionare il carico spingente della frana, è necessario eseguire un backanalysis dello stato di fatto, analizzando la condizione di incipiente collasso su Slope. Sulla base dei risultati delle prove a disposizione, si assegna un angolo d'attito residuo  $\Phi$  pari a  $14^\circ$  e una coesione residua di  $4\text{kPa}$  allo strato in frana.

Si osserva un abbassamento del fattore di sicurezza fino al valore unitario all'innalzarsi della falda dalla quota di progetto, al di sotto dello strato in frana, fino a circa metà strato. Si conclude quindi che in periodi di intense piogge, la frana si può attivare.

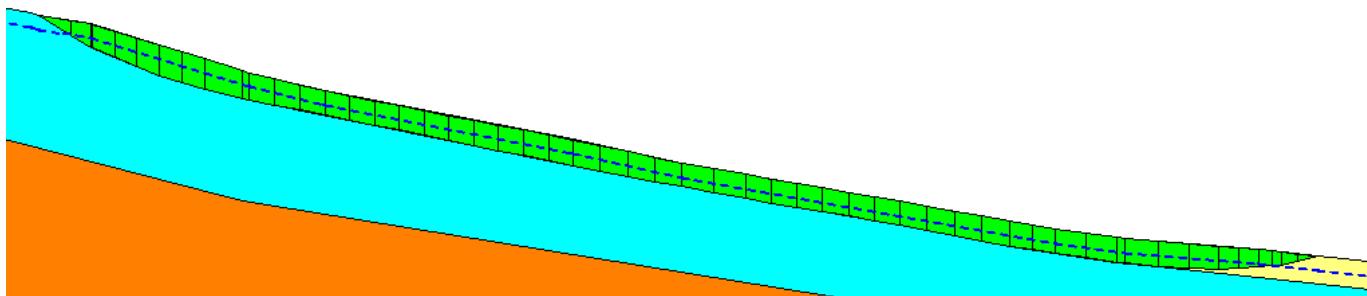


Fig. 22 – Sezione 1 – Back analysis

Viene quindi fatto un secondo modello in cui si riabbassa la falda a livello di progetto, considerando anche che la paratia di imbocco funge da dreno a valle, evitando innalzamenti eccessivi, e si sagoma il pendio, simulando la zona di scavo. In questo modo è possibile trovare la forza stabilizzante necessaria a raggiungere un FS di 1.1: per l'equilibrio, è necessaria una forza di  $290\text{kN/m}$ .

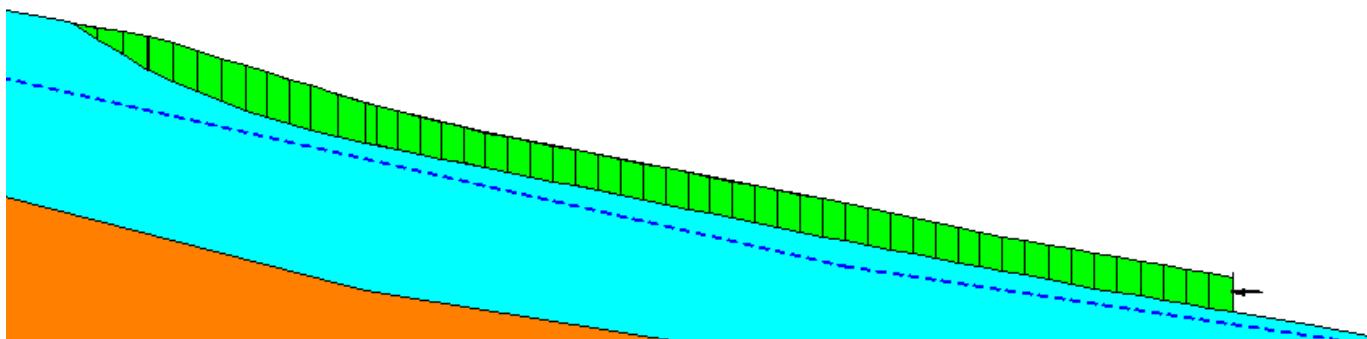


Fig. 23 – Sezione 1 – Valutazione forza stabilizzante

La forza viene applicata alla paratia come carico distribuito triangolare, agente su 4m, con alla base una pressione di  $145\text{kPa}$ . Dato che la testa del palo è a 1.5m di profondità, sormontato poi da una veletta, sui 2,5m di palo il carico è trapezoidale, da  $54.5\text{kPa}$  a  $145\text{kPa}$ , ed in testa alla paratia si aggiunge una forza di taglio pari alla risultante del triangolo superiore alto 1.5m, ossia  $40.8\text{kN/m}$

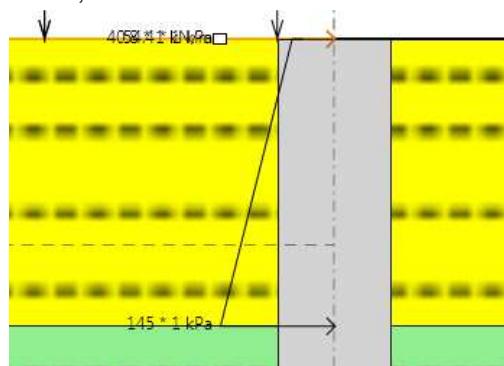


Fig. 24 – Sezione 1 – Applicazione spinta della frana

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### 10.1.1.1 RISULTATI DELLE ANALISI

I risultati delle analisi sono di seguito descritti in sintesi ed illustrati in maggior dettaglio nell'allegato pertinente.

	SLU GEO		SLU STR		SLE
	Statico	Sismico	Statico	Sismico	(statico)
Spostamento massimo (cm)	7.3	-	4.7	-	4.7
Momento massimo (kNm/m)	-	-	1226.8 (-8.1m)	-	943.7 (-8.1m)
Taglio massimo (kN/m)	-	-	377.1 (-1.9m)	-	290.1 (-1.9m)
Spinta passiva mobilitata a valle (%)	67.1	-	46.6	-	46.6

Tabella 6 – Sezione 1- Risultati delle analisi

### Verifica del complesso opera-terreno

Per le verifiche di stabilità globale sono stati utilizzati i parametri abbattuti, in accordo a quanto riportato in precedenza per la condizione GEO.

Dato che le fasi di scavo riguardano un tempo limitato e inferiore ai 2 anni, si verifica la stabilità globale dell'opera solo in fase statica.

I coefficienti di sicurezza ottenuti relativamente alla stabilità globale sono riportati nella tabella seguente

Tipo di verifica	FS
Statica	1.418 > 1.10

Tabella 7 – Sezione 1- Verifica di stabilità globale. Fattore sicurezza minimo

Il coefficiente di sicurezza minimo indicato è stato calcolato con il metodo di Morgenstern–Price.

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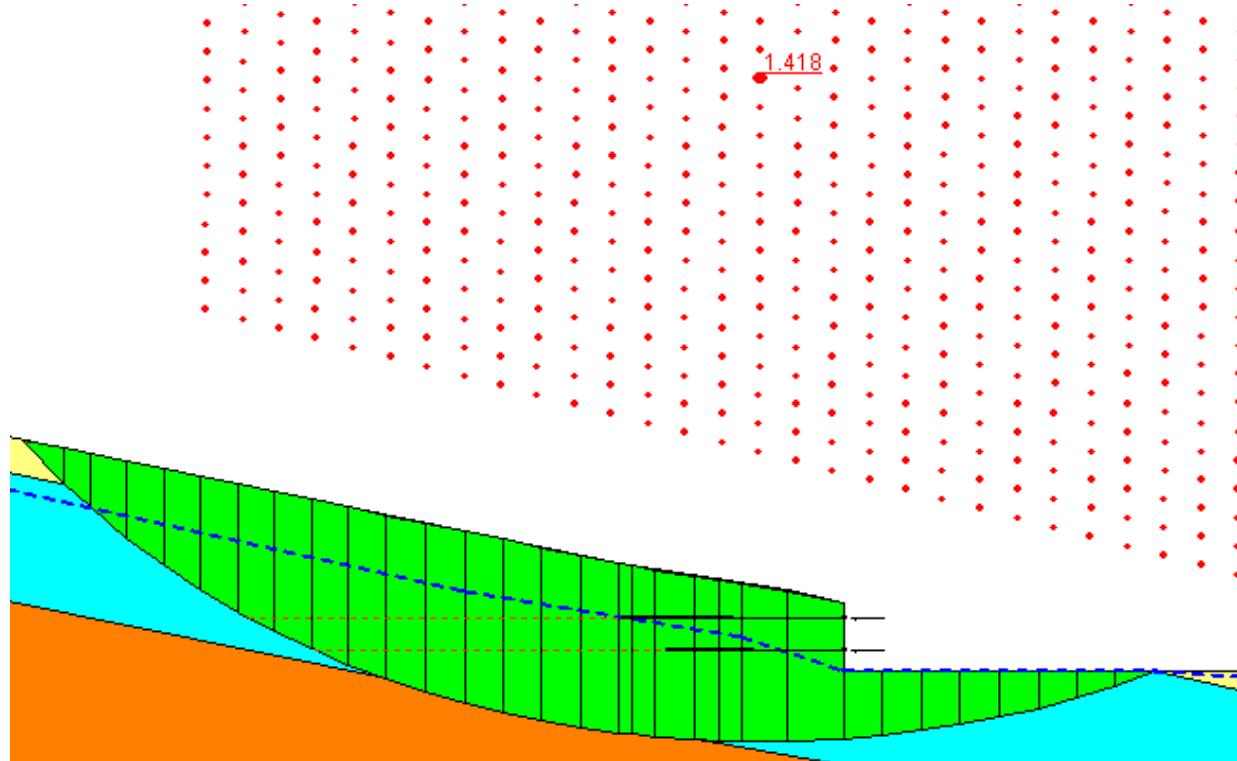


Fig. 25 – Sezione 1 - Risultati verifica di stabilità globale. Superficie critica

#### Verifica della mobilitazione della spinta passiva

Il grafico seguente riporta l'andamento della mobilitazione della spinta passiva per la condizione GEO. Risulta visibile che la resistenza disponibile risulta superiore a quella mobilitata, da cui la verifica della opera.

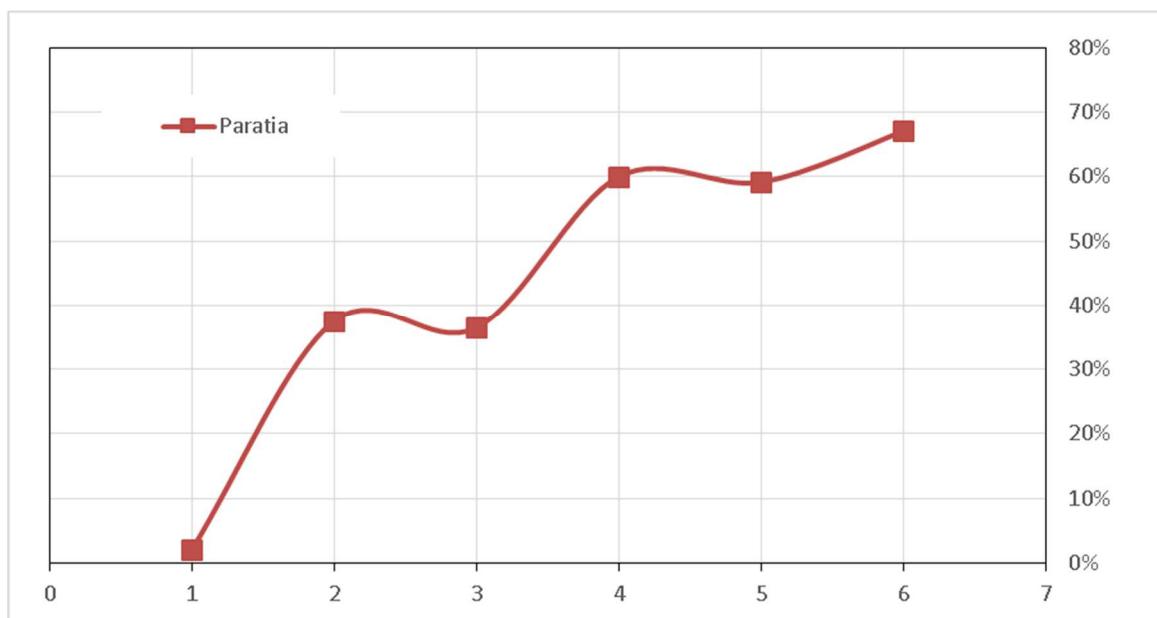


Fig. 26 – Sezione 1 - Risultati mobilitazione spinta passiva per la condizione A2+M2

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### RADDOPPIO TRATTA APICE – ORSARA I LOTTO FUNZIONALE APICE – HIRPINIA

Si evidenzia che la profondità di infissione dell'opera di sostegno garantisce uno spostamento limitato al piede.

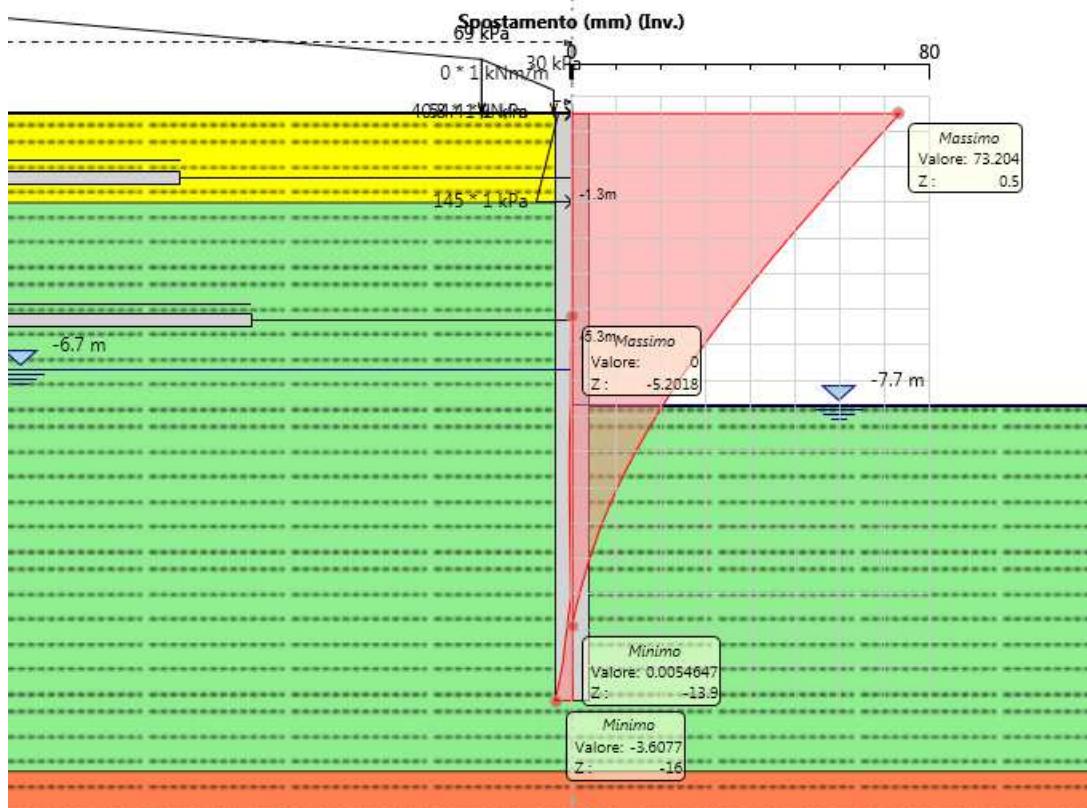


Fig. 27 – Inviluppo della deformata dell'opera (SLU) nei vari step di calcolo

#### Verifica collasso complesso opera- terreno

Per la verifica di collasso del complesso opera-terreno è stato definito un modello di calcolo all'interno del quale sono state imposte delle proprietà geomeccaniche dei terreni ridotte con i coefficienti parziali M2. Nel modello sono state imposte le stesse fasi esecutive riportate precedentemente. La convergenza di tale calcolo indica che la lunghezza assunta per l'opera di sostegno è sufficiente per non innescare un movimento di rotazione intorno al piede.

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### Strutture di supporto: tiranti

Riassunto caratteristiche

Ordine tiranti	Passo [m]	n. trefoli [kN/m]	Inclinazione [°]	Lunghezza libera [m]	Lunghezza ancoraggio [m]	Pretiro [kN]
1	2.4	4	0	11	12	300
2	2.4	4	0	9	9	300

Tabella 8 – Sezione 1 - Caratteristiche tiranti

### Verifica a sfilamento del bulbo di ancoraggio

Ordine tiranti	$\tau_{lim}$ [kPa]	$\alpha$ [-]	D [m]	$l_b$ [m]	$\xi$ [-]	$R_{ak}$ [kN]
1	200	1.2	0.14	11	1.8	704
2	200	1.2	0.14	9	1.8	528

Tabella 9 – Sezione 1 - Resistenza a sfilamento tiranti

dove:

- $\tau_{lim}$  = tensione di aderenza laterale limite fondazione-terreno;
- $\alpha$ = coefficiente di incremento del diametro di perforazione D dei tiranti che tiene conto della metodologia di iniezione e della natura dei terreni interessati;
- D= diametro di perforazione;
- $l_b$  = lunghezza bulbo di ancoraggio;
- $\xi_a$ = coefficiente di indagine.

Combinazione	Ordine tiranti	Passo [m]	$E_k$ [kN/m]	$P_d$ [kN]	$R_{ak}$ [kN]	$R_{ad}$ [kN]	Verifica
STR Statico	1	2.4	181.7	567	704	586	$R_{ad} > P_d$
	2	2.4	129.21	403	528	440	$R_{ad} > P_d$

Tabella 10 – Sezione 1 - Verifica sfilamento tiranti - fase statica

dove:

- $E_k$  =tiro per metro di profondità
- $P_d = E_k$  moltiplicato per l'interasse orizzontale tra i tiranti e il coefficiente amplificativo per le azioni definito da normativa (1.3 statico)
- $R_{ad}$ =resistenza di sfilamento di progetto
- $R_{a,d} = R_{ak} / \gamma_{Ra,p}$
- con  $\gamma_{Ra,p} = 1.2$ .
- $R_{ak}$ =resistenza caratteristica scelta il minore tra i valori derivanti dall'applicazione dei coefficienti di correlazione al valor medio e al valor minimo delle resistenza  $R_{a,c}$  ottenute dal calcolo come indicato di seguito:

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$$R_{ak} = \min \left( \frac{(R_{a,c})_{medio}}{\xi_{a3}}, \frac{(R_{a,c})_{min}}{\xi_{a4}} \right)$$

#### Verifica della resistenza dell'armatura e della gerarchia delle resistenze

Verifica di resistenza dell'armatura	
f <sub>p(1)k</sub> (trefoli)	1670 Mpa
Coefficiente di sicurezza sul materiale	1.15
Area singolo trefolo (mm <sup>2</sup> )	139 mm <sup>2</sup>

Tabella 11 – Sezione 1 - Verifica armatura tiranti. Caratteristiche trefoli

Ordine tiranti	n.ro trefoli	R <sub>pk</sub> [KN]	P <sub>d</sub> [KN]	Verifica	R <sub>ak</sub> [KN]	Verifica
1	4	807	567	R <sub>pk</sub> >P <sub>d</sub>	704	R <sub>pk</sub> >R <sub>ak</sub>
2	4	807	403	R <sub>pk</sub> >P <sub>d</sub>	528	R <sub>pk</sub> >R <sub>ak</sub>

Tabella 12 – Sezione 1 - Verifica armatura tiranti. Condizione statica

La verifica di resistenza dell'armatura è soddisfatta poiché P<sub>d</sub>< R<sub>pk</sub>.

La verifica della gerarchia delle resistenze è soddisfatta poiché la resistenza caratteristica limite di snervamento del tratto libero è maggiore della resistenza a sfilamento della fondazione del tirante R<sub>pk</sub>> R<sub>ak</sub>.

#### Verifiche SLU STR

Nelle verifiche si considerano le sollecitazioni massime sulla struttura secondo le varie analisi.

Nella verifica a presso-flessione si è considerato il peso proprio del palo valutato alla corrispondente quota di verifica.

#### Verifica a presso-flessione

#### GABBIA SUPERIORE

STR STATICÀ - VERIFICA SLU-A1-M1					
Quota da base cordolo (m)	M <sub>sk</sub> (kNm/m)	M <sub>sd</sub> (kNm)	N <sub>sd</sub> (kN)	Armatura	M <sub>RD</sub> (kNm)
-4.0	748.6	748.6*1.2*1.3=1167.9	88	20φ24	1530.0

Tabella 13 – Sezione 1 - Verifica strutturale a pressoflessione. Condizione statica

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### GABBIA INFERIORE

#### STR STATICÀ - VERIFICA SLU-A1-M1

Quota da base cordolo (m)	M <sub>sk</sub> (kNm/m)	M <sub>sd</sub> (kNm)	N <sub>sd</sub> (kN)	Armatura	M <sub>rd</sub> (kNm)
-8.1	943.7	943.7*1.2*1.3=1472.1	169	20φ24	1544.8

Tabella 14 – Sezione 1 - Verifica strutturale a pressoflessione. Condizione statica

La verifica è soddisfatta in quanto M<sub>sd</sub>< M<sub>rd</sub>.

#### Verifica al taglio

L'armatura al taglio sarà costituita una spirale Ø14 passo 200 mm costante.

#### STR STATICÀ - VERIFICA SLU-A1-M1

Quota da base cordolo (m)	T <sub>sk</sub> (kN/m)	T <sub>SLU</sub> (kN)	N <sub>SLU</sub> (kN)	Armatura	V <sub>rd</sub> (kN)
-1.9	290.1	290.1*1.2*1.3=453	47	φ14/20cm	602

Tabella 15 – Sezione 1 - Verifica strutturale a taglio. Condizione statica

La verifica è soddisfatta in quanto V<sub>sd</sub>< V<sub>rd</sub>.

Il valore medio dell'incidenza dell'armatura risulta essere 83 kg/m<sup>3</sup>.

#### Strutture di supporto: travi di ripartizione

Le caratteristiche della sollecitazione sono determinate modellando gli elementi strutturali oggetto di verifica alla stregua di travi continue su più appoggi; la luce delle campate è data dall'interasse dei tiranti ed il carico, uniformemente distribuito, è determinato ripartendo le reazioni offerte dagli ancoraggi, ottenute dal modello di calcolo dell'opera di sostegno. Definito P<sub>d</sub> il massimo tiro di calcolo corrispondente all'i-esimo ordine di tiranti, il suddetto carico è così calcolato: q<sub>sd</sub>=P<sub>d</sub>/i (con i interasse tiranti). Secondo tale modello le massime azioni di calcolo sull'elemento strutturale saranno calcolate, considerando metà del carico su ciascuna trave accoppiata:

$$M_{sd} = \left( \frac{1}{10} q_{sd} l^2 \right) / 2 \quad \text{e} \quad V_{sd} = ( 0.5 q_{sd} l ) / 2$$

Tutte le verifiche sono soddisfatte poiché il momento sollecitante è minore del momento resistente, M<sub>sd</sub>< M<sub>c,Rd</sub>.

Caratteristiche trave ripartizione		
f <sub>yk</sub> trave (MPa)	275	S275
Coefficiente di sicurezza γ <sub>M0</sub>	1.05	-
W <sub>plastico</sub> travi (cm <sup>3</sup> )	481	profilati HEB180(x2)

Tabella 16 – Sezione 1 - Verifica travi ripartizione. Caratteristiche profilati

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Ordine tiranti	P <sub>d</sub> [kN]	i [m]	α [°]	p [kN/m]	M <sub>sd</sub> [kNm]	M <sub>c,Rd</sub> [kNm]	Verifica
1	567	2.4	0	181.7	68.0	126.0	M <sub>c,Rd</sub> >M <sub>sd</sub>
2	403	2.4	0	129.2	48.4	126.0	M <sub>c,Rd</sub> >M <sub>sd</sub>

Tabella 17 – Sezione 1 - Verifica travi ripartizione. Condizione statica

Ordine tiranti	P <sub>d</sub> [kN]	i [m]	α [°]	p [kN/m]	V <sub>sd</sub> [kN]	V <sub>rd</sub> [kN]	Verifica
1	567	2.4	0	181.7	141.7	306.8	V <sub>Rd</sub> >V <sub>sd</sub>
2	403	2.4	0	129.2	100.8	306.8	V <sub>Rd</sub> >V <sub>sd</sub>

Tabella 18 – Sezione 1 - Verifica travi ripartizione. Condizione statica

#### Verifiche HYD

Dato che il piede paratia si innesta in un terreno coesivo, con permeabilità media inferiore a  $10^{-6}$ m/s, non si attiva un meccanismo di filtrazione tra monte e valle e non è quindi necessario eseguire la verifica a sifonamento.

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#### 10.1.2 Sezione 2 Trasversale –pk 0+632

La sezione fa riferimento alla paratia laterale ed è sostenuta attraverso due ordini di tirantature.

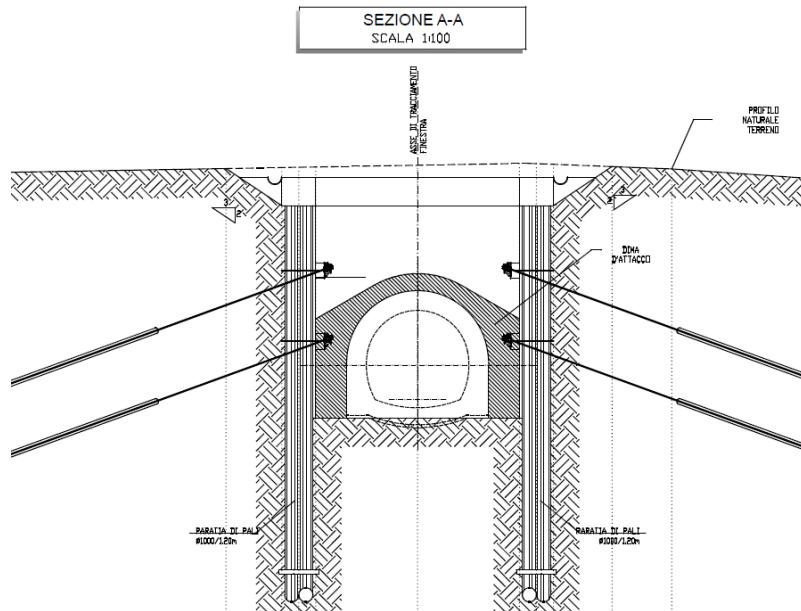


Fig. 28 – Sezione 2 - Geometria di riferimento

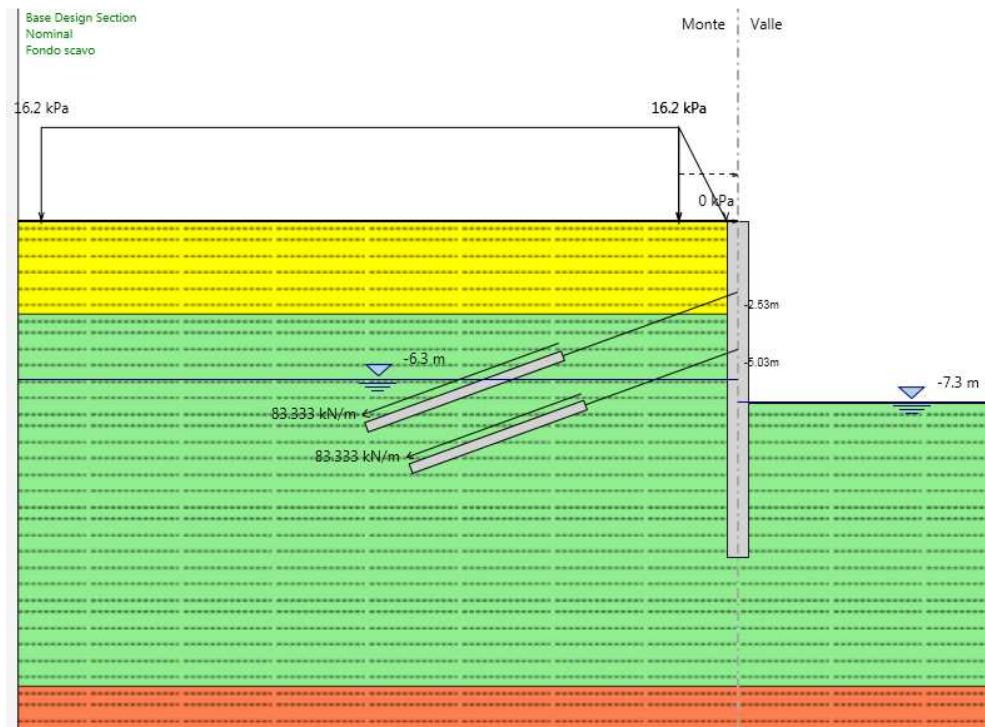


Fig. 29 – Sezione 2 - Modello di calcolo - step finale di calcolo (fase 6)

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La stratigrafia di riferimento presenta la seguente sequenza:

- FRANA da p.c. a 4.0m di profondità;
- BNA2\_2 da 4.0m a 20.0m di profondità;
- BNA2\_3 a profondità >20.0m.

Tipologia struttura di sostegno	Paratia in pali $\phi$ 1000mm passo 1.2m
Altezza totale paratia	$H_{tot} = 14.5m$ (1/2cordolo=0.5m+pali L=14m)
Altezza libera paratia	$H = 7.8m$
Ordini di tiranti (n°)	2 ordini
Passo orizzontale tiranti	2.4m
Passo verticale dei tiranti	2.5m
Inclinazione iniziale del piano campagna a monte	$0^{\circ}$
Inclinazione iniziale del piano campagna a valle	$0^{\circ}$
Sovraccarichi variabili a monte	-
Sovraccarichi variabili a valle	-

Tabella 19 – Sezione 2 - Caratteristiche geometriche della sezione di calcolo

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Terreno	Gruppo coeff. Parziali	Condizione	$\gamma$	$c_d$	$\varphi'_d$	$\delta$	$E'$	$E'_{ur}$	$k_o$	$K_a$	$K_p$
			(kN/m³)	(kPa)	(°)	(°)	(Mpa)	(Mpa)	(-)	(-)	(-)
FRANA	M1	SLU	20	4	14.0	9.3	20	32	0.758	0.547	1.899
		-				-			-	-	-
	M2	SLU		4	14.0	9.3			0.758	0.547	1.899
		-				-			-	-	-
BNA2_2	M1	SLU	20	25.0	27.0	18	115	184	0.546	0.318	3.843
		-				-			-	-	-
	M2	SLU		20.0	22.2	14.8			0.623	0.389	2.907
		-				-			-	-	-
BNA2_3	M1	SLU	20	30.0	27.0	18	180	288	0.546	0.318	3.843
		-				-			-	-	-
	M2	SLU		24.0	22.2	14.8			0.623	0.389	2.907
		-				-					

$\gamma$  = peso dell'unità di volume

$c'_d$  = coesione efficace (valore di calcolo)

$\varphi'_d$  = angolo di resistenza al taglio (valore di calcolo)

$\delta$  = angolo d'attrito struttura/terreno

$E'$  = modulo di Young

$E'_{ur}$  = modulo di Young (scarico/ricarico)

$k_o$  = coefficiente di spinta a riposo

$K_a$  = coefficiente di spinta attiva

$K_p$  = coefficiente di resistenza passiva

Tabella 20 – Sezione 2 - Parametri geotecnici di calcolo.

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Il livello di falda è atteso a circa 5.4 m da p.c..

L'analisi si è articolata nelle seguenti fasi:

- fase 1: geostatica;
- fase 2: scavo sino a – 3.5m dalla base del cordolo;
- fase 3: attivazione del primo ordine di tiranti
- fase 4: scavo sino a – 6.0m dalla base del cordolo
- fase 5: attivazione del secondo ordine di tiranti;
- fase 6: fondo scavo fino a -7.3 m dalla base del cordolo.

#### 10.1.2.1 RISULTATI DELLE ANALISI

I risultati delle analisi sono di seguito descritti in sintesi ed illustrati in maggior dettaglio nell'allegato pertinente.

	SLU GEO		SLU STR		SLE
	Statico	Sismico	Statico	Sismico	(STR statico)
Spostamento massimo (cm)	0.5	-	0.37	-	0.37
Momento massimo (kNm/m)	-	-	197.7 (-4.9m)	-	152.1 (-4.9m)
Taglio massimo (kN/m)	-	-	115.2 (-3.3m)	-	88.6 (-3.3m)
Spinta passiva mobilitata a valle (%)	69.6	-	46.9	-	46.9

Tabella 21 – Sezione 2 - Risultati delle analisi

#### Verifica del complesso opera-terreno

Per le verifiche di stabilità globale sono stati utilizzati i parametri abbattuti, in accordo a quanto riportato in precedenza per la condizione GEO.

Dato che le fasi di scavo riguardano un tempo limitato e inferiore ai 2 anni, si verifica la stabilità globale dell'opera solo in fase statica.

I coefficienti di sicurezza ottenuti relativamente alla stabilità globale sono riportati nella tabella seguente

Tipo di verifica	FS
Statica	2.4 > 1.10

Tabella 22 – Sezione 2 - Risultati verifica di stabilità globale. Fattore sicurezza minimo

Il coefficiente di sicurezza minimo indicato è stato calcolato con il metodo di Morgenstern–Price.

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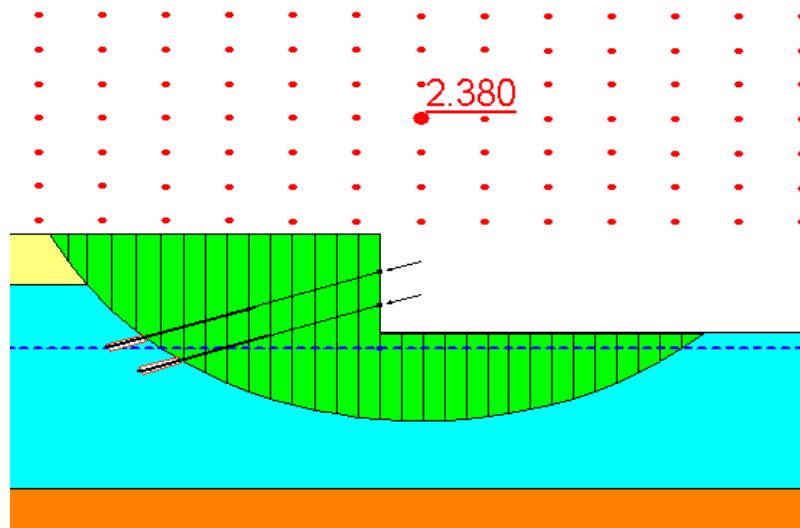


Fig. 30 – Sezione 2 - Risultati verifica di stabilità globale. Superficie critica

#### Verifica della mobilitazione della spinta passiva

Il grafico seguente riporta l'andamento della mobilitazione della spinta passiva per la condizione GEO. Risulta visibile che la resistenza disponibile risulta superiore a quella mobilitata, da cui la verifica della opera.

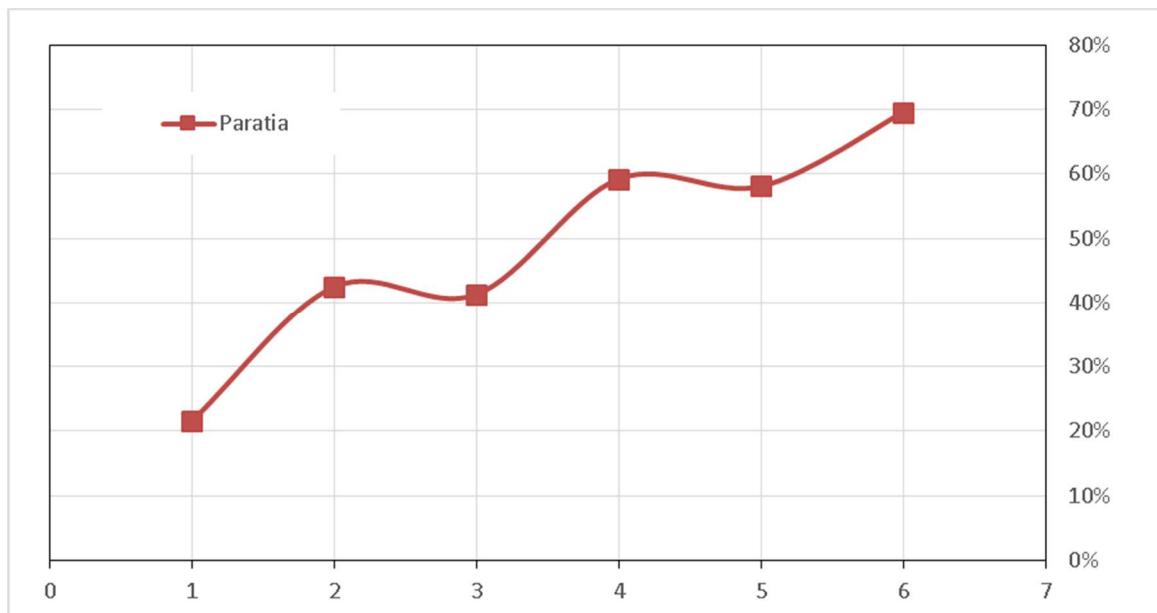


Fig. 31 – Sezione 1 - Risultati mobilitazione spinta passiva per la condizione A2+M2

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Si evidenzia che la profondità di infissione dell'opera di sostegno garantisce uno spostamento limitato al piede.

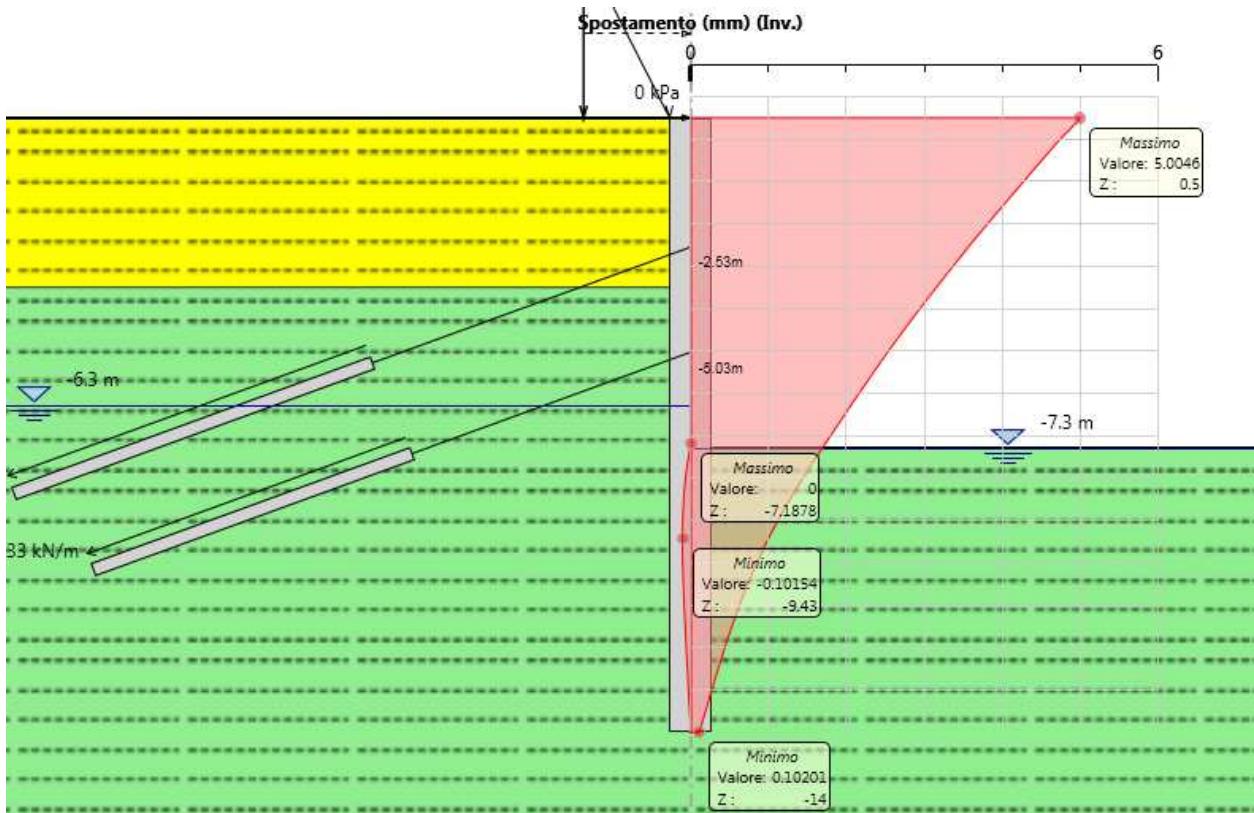


Fig. 32 – Inviluppo della deformata dell'opera (SLU) nei vari step di calcolo

#### Verifica collasso complesso opera- terreno

Per la verifica di collasso del complesso opera-terreno è stato definito un modello di calcolo all'interno del quale sono state imposte delle proprietà geomeccaniche dei terreni ridotte con i coefficienti parziali M2. Nel modello sono state imposte le stesse fasi esecutive riportate precedentemente. La convergenza di tale calcolo indica che la lunghezza assunta per l'opera di sostegno è sufficiente per non innescare un movimento di rotazione intorno al piede.

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### Strutture di supporto: tiranti

Riassunto caratteristiche

Ordine tiranti	Passo [m]	n. trefoli [kN/m]	Inclinazione [°]	Lunghezza libera [m]	Lunghezza ancoraggio [m]	Pretiro [kN]
1	2.4	4	20	8	9	200
2	2.4	4	20	7	8	200

Tabella 23 – Sezione 2 - Caratteristiche tiranti

### Verifica a sfilamento del bulbo di ancoraggio

Ordine tiranti	$\tau_{lim}$ [kPa]	$\alpha$ [-]	D [m]	$l_b$ [m]	$\xi$ [-]	$R_{ak}$ [kN]
1	200	1.2	0.14	9	1.8	528
2	200	1.2	0.14	8	1.8	469

Tabella 24 – Sezione 2 - Resistenza a sfilamento tiranti

dove:

- $\tau_{lim}$  = tensione di aderenza laterale limite fondazione-terreno;
- $\alpha$ = coefficiente di incremento del diametro di perforazione D dei tiranti che tiene conto della metodologia di iniezione e della natura dei terreni interessati;
- D= diametro di perforazione;
- $l_b$  = lunghezza bulbo di ancoraggio;
- $\xi_a$ = coefficiente di indagine.

Combinazione	Ordine tiranti	Passo [m]	$E_k$ [kN/m]	$P_d$ [kN]	$R_{ak}$ [kN]	$R_{ad}$ [kN]	Verifica
STR Statico	1	2.4	87.22	272	528	440	$R_{ad} > P_d$
	2	2.4	84.75	264	469	391	$R_{ad} > P_d$

Tabella 25 – Sezione 2 - Verifica sfilamento tiranti - fase statica

dove:

- $E_k$  = tiro per metro di profondità
- $P_d$  =  $E_k$  moltiplicato per l'interasse orizzontale tra i tiranti e il coefficiente amplificativo per le azioni definito da normativa (1.3 statico)
- $R_{ad}$ =resistenza di sfilamento di progetto
- $R_{a,d} = R_{ak} / \gamma_{Ra,p}$
- con  $\gamma_{Ra,p} = 1.2$ .
- $R_{ak}$ =resistenza caratteristica scelta il minore tra i valori derivanti dall'applicazione dei coefficienti di correlazione al valor medio e al valor minimo delle resistenza  $R_{a,c}$  ottenute dal calcolo come indicato di seguito:

$$R_{ak} = \min \left( \frac{(R_{a,c})_{medio}}{\xi_{a3}}, \frac{(R_{a,c})_{min}}{\xi_{a4}} \right)$$

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### Verifica della resistenza dell'armatura e della gerarchia delle resistenze

Verifica di resistenza dell'armatura	
$f_{p(1)k}$ (trefoli)	1670 Mpa
Coefficiente di sicurezza sul materiale	1.15
Area singolo trefolo (mm <sup>2</sup> )	139 mm <sup>2</sup>

Tabella 26 – Sezione 2 - Verifica armatura tiranti. Caratteristiche trefoli

Ordine tiranti	n.ro trefoli	R <sub>pk</sub> [KN]	P <sub>d</sub> [KN]	Verifica	R <sub>ak</sub> [KN]	Verifica
1	4	807	272	R <sub>pk</sub> >P <sub>d</sub>	528	R <sub>pk</sub> >R <sub>ak</sub>
2	4	807	264	R <sub>pk</sub> >P <sub>d</sub>	469	R <sub>pk</sub> >R <sub>ak</sub>

Tabella 27 – Sezione 2 - Verifica armatura tiranti. Condizione statica

La verifica di resistenza dell'armatura è soddisfatta poiché P<sub>d</sub>< R<sub>pk</sub>.

La verifica della gerarchia delle resistenze è soddisfatta poiché la resistenza caratteristica limite di snervamento del tratto libero è maggiore della resistenza a sfilamento della fondazione del tirante R<sub>pk</sub>> R<sub>ak</sub>.

### Verifiche SLU STR

Nelle verifiche si considerano le sollecitazioni massime sulla struttura secondo le varie analisi.

Nella verifica a presso-flessione si è considerato il peso proprio del palo valutato alla corrispondente quota di verifica.

### Verifica a presso-flessione

#### GABBIA SUPERIORE

STR STATICÀ - VERIFICA SLU-A1-M1					
Quota da base cordolo (m)	M <sub>sk</sub> (kNm/m)	M <sub>sd</sub> (kNm)	N <sub>sd</sub> (kN)	Armatura	M <sub>RD</sub> (kNm)
-4.9	152.1	152.1*1.2*1.3=237.3	107	16φ20	897

Tabella 28 – Sezione 2 Verifica strutturale a pressoflessione. Condizione statica

#### GABBIA INFERIORE

STR STATICÀ - VERIFICA SLU-A1-M1					
Quota da base cordolo (m)	M <sub>sk</sub> (kNm/m)	M <sub>sd</sub> (kNm)	N <sub>sd</sub> (kN)	Armatura	M <sub>RD</sub> (kNm)
-7.2	93.6	93.6*1.2*1.3=146.0	151	16φ20	1114

Tabella 29 – Sezione 2 - Verifica strutturale a pressoflessione. Condizione statica

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La verifica è soddisfatta in quanto  $M_{sd} < M_{rd}$ .

#### Verifica al taglio

L'armatura al taglio sarà costituita una spirale Ø14 passo 200 mm costante.

STR STATICHE - VERIFICA SLU-A1-M1					
Quota da base cordolo (m)	T <sub>sk</sub> (kN/m)	T <sub>SLU</sub> (kN)	N <sub>SLU</sub> (kN)	Armatura	V <sub>RD</sub> (kN)
-3.3	88.6	88.6*1.2*1.3=138	75	Ø14/20cm	602

Tabella 30 – Sezione 2 - Verifica strutturale a taglio. Condizione statica

La verifica è soddisfatta in quanto  $V_{sd} < V_{rd}$ .

Il valore medio dell'incidenza dell'armatura risulta essere 65.0 kg/m<sup>3</sup>.

#### Strutture di supporto: travi di ripartizione

Le caratteristiche della sollecitazione sono determinate modellando gli elementi strutturali oggetto di verifica alla stregua di travi continue su più appoggi; la luce delle campate è data dall'interasse dei tiranti ed il carico, uniformemente distribuito, è determinato ripartendo le reazioni offerte dagli ancoraggi, ottenute dal modello di calcolo dell'opera di sostegno. Definito P<sub>d</sub> il massimo tiro di calcolo corrispondente all'i-esimo ordine di tiranti, il suddetto carico è così calcolato: q<sub>sd</sub>=P<sub>d</sub>/i (con i interasse tiranti). Secondo tale modello le massime azioni di calcolo sull'elemento strutturale saranno calcolate, considerando metà del carico su ciascuna trave accoppiata:

$$M_{sd} = \left( \frac{1}{10} q_{sd} l^2 \right) / 2 \quad \text{e} \quad V_{sd} = ( 0.5 q_{sd} l ) / 2$$

Tutte le verifiche sono soddisfatte poiché il momento sollecitante è minore del momento resistente,  $M_{sd} < M_{c,Rd}$ .

Caratteristiche trave ripartizione		
f <sub>yk</sub> trave (MPa)	275	S275
Coefficiente di sicurezza γ <sub>M0</sub>	1.05	-
W <sub>plastico</sub> travi (cm <sup>3</sup> )	481	profilati HEB180(x2)

Tabella 31 – Sezione 2 – Travi di ripartizione. Caratteristiche profilati

Ordine tiranti	P <sub>d</sub> [kN]	i [m]	α [°]	p [kN/m]	M <sub>sd</sub> [kNm]	M <sub>c,Rd</sub> [kNm]	Verifica
1	272	2.4	20	87.2	32.7	126.0	M <sub>c,Rd</sub> >M <sub>sd</sub>
2	264	2.4	20	84.6	31.7	126.0	M <sub>c,Rd</sub> >M <sub>sd</sub>

Tabella 32 – Sezione 2 - Verifica travi ripartizione. Condizione statica

APPALTATORE: <u>Consorzio</u> <u>Soci</u> HIRPINIA AV      SALINI IMPREGILO S.P.A. ASTALDI S.P.A.	ITINERARIO NAPOLI – BARI RADDOPPIO TRATTA APICE – ORSARA I LOTTO FUNZIONALE APICE – HIRPINIA
PROGETTAZIONE: <u>Mandataria</u> <u>Mandanti</u> ROCKSOIL S.P.A      NET ENGINEERING S.P.A.      ALPINA S.P.A.	
PROGETTO ESECUTIVO Relazione geotecnica e di calcolo delle opere di imbocco	COMMESA      LOTTO IF28      01      CODIFICA E ZZ RB      DOCUMENTO GA1100 001      REV. B      FOGLIO 44 di 44

Ordine tiranti	P <sub>d</sub> [kN]	i [m]	α [°]	p [kN/m]	V <sub>sd</sub> [kN]	V <sub>rd</sub> [kN]	Verifica
1	272	2.4	20	87.2	68.0	306.8	$V_{Rd} > V_{sd}$
2	264	2.4	20	84.6	66.1	306.8	$V_{Rd} > V_{sd}$

Tabella 33 – Sezione 2 - Verifica travi ripartizione. Condizione statica

### Verifiche HYD

Dato che il piede paratia si innesta in un terreno coesivo, con permeabilità media inferiore a  $10^{-6}$ m/s, non si attiva un meccanismo di filtrazione tra monte e valle e non è quindi necessario eseguire la verifica a sifonamento.

# **SEZIONE 1**

## **BACKANALYSIS**

### **1 ANALYSIS SETTINGS**

#### **1.1 SLOPE/W ANALYSIS**

Kind: **SLOPE/W**

Method: **Morgenstern-Price**

Settings

    Apply Phreatic Correction: **No**

    Side Function

        Interslice force function option: **Half-Sine**

    PWP Conditions Source: **Piezometric Line**

    Use Staged Rapid Drawdown: **No**

    SlipSurface

        Direction of movement: **Left to Right**

        Allow Passive Mode: **No**

        Slip Surface Option: **Fully-Specified**

        Critical slip surfaces saved: **1**

        Optimize Critical Slip Surface Location: **No**

        Tension Crack

            Tension Crack Option: **(none)**

    FOS Distribution

        FOS Calculation Option: **Constant**

    Advanced

        Number of Slices: **50**

        Optimization Tolerance: **0.01**

        Minimum Slip Surface Depth: **0.1 m**

        Minimum Slice Width: **0.1 m**

        Optimization Maximum Iterations: **2000**

        Optimization Convergence Tolerance: **1e-007**

        Starting Optimization Points: **8**

        Ending Optimization Points: **16**

        Complete Passes per Insertion: **1**

### **2 MATERIALS**

#### **2.1 FRANA**

Model: **Mohr-Coulomb**

Unit Weight: **20 kN/m<sup>3</sup>**

Cohesion: **4 kPa**

Phi: **14 °**

Phi-B: **0 °**

Pore Water Pressure

    Piezometric Line: **1**

## 2.2 BNA2\_2

Model: Mohr-Coulomb

Unit Weight: 20 kN/m<sup>3</sup>

Cohesion: 25 kPa

Phi: 27 °

Phi-B: 0 °

Pore Water Pressure

Piezometric Line: 1

## 2.3 BNA2\_3

Model: Mohr-Coulomb

Unit Weight: 20 kN/m<sup>3</sup>

Cohesion: 30 kPa

Phi: 27 °

Phi-B: 0 °

Pore Water Pressure

Piezometric Line: 1

## 3 SLIP SURFACE LIMITS

Left Coordinate: (0, 200) m

Right Coordinate: (726.1011, 64) m

## 4 FULLY SPECIFIED SLIP SURFACES

### 4.1 FULLY SPECIFIED SLIP SURFACE 1

	X (m)	Y (m)
	26.0112	193.5736
	32.7779	188.0442
	41.463	183.3046
	47.2729	180.9865
	52.1386	179.507
	94.9535	167.9621
	117.1643	162.376
	137.0949	157.8188
	151.2534	154.2358
	165.0224	151.5058
	170.5071	150.8395
	178.2953	150.3958
	183.4897	150.64

	186.3569	151.052
	188.4824	151.6306
	191.12	152.5223

## 5 PIEZOMETRIC LINES

### 5.1 PIEZOMETRIC LINE 1

#### 5.1.1 Coordinates

	X (m)	Y (m)
	0	197.53
	24.97	191.53
	26.0112	191.1036
	32.6542	189.73
	53.1386	181.43
	62.8539	178.23
	94.9535	169.93
	108.9837	165.93
	157.2482	154.73
	166.1516	153.03
	183.4897	151.13
	191.12	150.0523
	237.9978	143.53
	259.5786	141.53
	275.1487	139.53
	293.9543	135.53
	336.04	131.53
	377.053	125.53
	400.063	123.5188
	420.803	121.53
	454.9787	117.53

	487.2608	113.804
	489.4826	113.53
	497.6597	111.53
	514.1176	105.53
	545.2268	99.53
	563.1138	97.53
	594.1215	89.53
	625.8111	83.53
	642.5792	81.53
	652.9241	79.53
	664.9119	75.53
	678.2028	73.53
	681.1647	71.53
	684.8136	69.53
	690.8834	67.53
	719.1314	65.53
	723.3051	63.53
	724.0507	62.9967
	726.1011	61.53

## 6 REGIONS

	M at eri al	Points	Are a (m <sup>2</sup> )
Reg io n 1	FR AN A	29,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,47,48,49,50,51,52,53,54,55,56,57,58, 59,60,61,62,63,64,65,66,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,30,84,3 1,32,33,34,35,36,37,38,39,40,41,19,20,21,22,23,24,25,26,27,28	351 4.9 293
Reg io	BN A2 -2	1,89,95,97,99,92,67,66,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,30,84,31 ,32,33,34,35,36,37,38,39,40,41,19,20,21,22,23,24,25,26,27,28,29,2	109 89. 281

n 2			
R eg io n 3	BN A2 _3	89,95,97,99,92,93,100,98,96,90	726 1.0 11
R eg io n 4	BN A2 _3	90,96,98,100,93,94,91	724 86. 398

## 7 POINTS

	X (m)	Y (m)
Point 1	0	200
Point 2	24.97	194
Point 3	32.6542	192.2
Point 4	53.1386	183.9
Point 5	62.8539	180.7
Point 6	94.9535	172.4
Point 7	108.9837	168.4
Point 8	157.2482	157.2
Point 9	166.1516	155.5
Point 10	183.4897	153.6
Point 11	191.12	152.5223
Point 12	237.9978	146
Point 13	259.5786	144
Point 14	275.1487	142
Point 15	293.9543	138
Point 16	336.04	134
Point 17	377.053	128
Point 18	400.063	125.9888

Point 19	170.5071	150.8395
Point 20	165.0224	151.5058
Point 21	151.2534	154.2358
Point 22	137.0949	157.8188
Point 23	117.1643	162.376
Point 24	94.9535	167.9621
Point 25	52.1386	179.507
Point 26	47.2729	180.9865
Point 27	41.463	183.3046
Point 28	32.7779	188.0442
Point 29	26.0112	193.5736
Point 30	523.9698	100.2738
Point 31	508.8548	103.5817
Point 32	489.4826	107.8038
Point 33	473.2668	110.8424
Point 34	454.9787	113.274
Point 35	420.803	118.1033
Point 36	377.053	123.2016
Point 37	350.0394	126.3816
Point 38	336.04	128.5802
Point 39	320.0565	131.1742
Point 40	275.1487	137.5544
Point 41	222.0749	143.4386
Point 42	178.2953	150.3958
Point 43	183.4897	150.64
Point 44	186.3569	151.052
Point 45	188.4824	151.6306
Point 46	400.0631	126
Point 47	420.803	124

Point 48	454.9787	120
Point 49	487.2608	116.274
Point 50	489.4826	116
Point 51	497.6597	114
Point 52	514.1176	108
Point 53	545.2268	102
Point 54	563.1138	100
Point 55	594.1215	92
Point 56	625.8111	86
Point 57	642.5792	84
Point 58	652.9241	82
Point 59	664.9119	78
Point 60	678.2028	76
Point 61	681.1647	74
Point 62	684.8136	72
Point 63	690.8834	70
Point 64	719.1314	68
Point 65	723.3051	66
Point 66	724.0507	65.4667
Point 67	726.1011	64
Point 68	723.3706	65.3761
Point 69	713.6774	66.3962
Point 70	703.6584	66.7155
Point 71	695.2557	67.6721
Point 72	690.8834	68.3211
Point 73	678.2028	70.1539
Point 74	664.9119	72.6666
Point 75	660.157	73.6516
Point 76	642.5792	76.9244

Point 77	625.8111	79.8771
Point 78	614.9364	82.0711
Point 79	594.1215	87.0006
Point 80	586.7243	88.8707
Point 81	579.5245	90.2436
Point 82	563.1138	93.2369
Point 83	533.908	98.2685
Point 84	515.0097	102.468
Point 85	508.8548	104.6725
Point 86	501.9765	107.1361
Point 87	497.6597	109.504
Point 88	489.4826	114.6476
Point 89	0	180
Point 90	0	170
Point 91	0	0
Point 92	726.1011	44
Point 93	726.1011	34
Point 94	726.1011	0
Point 95	52.1386	162
Point 96	52.1386	152
Point 97	191.12	132
Point 98	191.12	122
Point 99	497.6597	94
Point 100	497.6597	84
Point 101	311.22741	130.96715
Point 102	0	193
Point 103	181	149.35
Point 104	193	148.9
Point 105	213.1	147.1

Point 106	237.9978	143.6
Point 107	275.1487	139.6
Point 108	293.9543	135.6
Point 109	336.04	131.6
Point 110	377.053	125.6
Point 111	489.4826	113.6
Point 112	514.1176	105.6
Point 113	563.1138	97.6
Point 114	594.1215	89.6
Point 115	642.5792	81.6
Point 116	678.2028	73.6
Point 117	684.8136	69.6
Point 118	690.8834	67.6
Point 119	719.1314	65.6
Point 120	726.1011	61.6
Point 121	94.9535	165

## 8 CRITICAL SLIP SURFACES

	Number	FOS	Center (m)	Radius (m)	Entry (m)	Exit (m)
1	1	1.000	(111.4117, 238.633)	73.882	(26.0112, 193.574)	(191.12, 152.522)

### 8.1 SLICES OF SLIP SURFACE: 1

	Slip Surface	X (m)	Y (m)	PWP (kPa)	Base Normal Stress (kPa)	Frictional Strength (kPa)	Cohesive Strength (kPa)
1	1	28.03455	191.9202	-12.11172	17.678385	4.4077163	4
2	1	31.35605	189.20605	7.7706191	51.755413	10.966641	4
3	1	32.71605	188.09475	15.79122	65.97933	12.513301	4
4	1	34.225415	187.25425	18.036058	74.395251	14.051925	4
5	1	37.12045	185.6744	22.025979	81.153769	14.742214	4
6	1	40.015485	184.09455	26.0159	87.791004	15.402263	4

7	1	42.915475	182.7251	27.922331	94.384264	16.570821	4
8	1	45.820425	181.56605	27.74584	93.581742	16.414734	4
9	1	49.70575	180.24675	25.245484	91.23296	16.452526	4
10	1	52.6386	179.3722	22.168218	86.264877	15.981092	4
11	1	54.757815	178.80075	20.554843	83.143019	15.604985	4
12	1	57.99625	177.9275	18.657762	79.502698	15.170346	4
13	1	61.234685	177.0543	16.760681	75.898154	14.744628	4
14	1	64.45888	176.1849	15.986537	74.477909	14.583537	4
15	1	67.66884	175.3193	16.33545	75.220853	14.68178	4
16	1	70.8788	174.45375	16.684062	75.972821	14.782348	4
17	1	74.08876	173.5882	17.032675	76.733812	14.885165	4
18	1	77.29872	172.72265	17.381287	77.497812	14.988733	4
19	1	80.50868	171.8571	17.7302	78.273843	15.095226	4
20	1	83.71864	170.99155	18.078812	79.055889	15.203293	4
21	1	86.9286	170.126	18.427425	79.846959	15.31361	4
22	1	90.13856	169.26045	18.776037	80.650061	15.426927	4
23	1	93.34852	168.3949	19.12495	81.459179	15.541669	4
24	1	96.707275	167.521	18.721333	81.633319	15.68572	4
25	1	100.21482	166.63885	17.56561	79.634305	15.475464	4
26	1	103.7224	165.7567	16.410163	77.643585	15.267207	4
27	1	107.22995	164.87455	15.25444	75.655631	15.059708	4
28	1	111.02885	163.9191	15.06681	75.527286	15.07449	4
29	1	115.11915	162.89035	15.84686	77.253353	15.310358	4
30	1	118.8252	161.99625	16.181682	79.066881	15.679041	4
31	1	122.14695	161.2367	16.07075	79.034599	15.698651	4
32	1	125.4687	160.47715	15.960111	78.990578	15.71526	4
33	1	128.7905	159.71765	15.84918	78.937753	15.729748	4
34	1	132.11225	158.9581	15.738541	78.87319	15.741236	4
35	1	135.434	158.19855	15.627609	78.799822	15.750602	4

36	1	138.8647	157.37095	15.936922	78.587711	15.620596	4
37	1	142.40435	156.4752	16.665996	80.154316	15.829416	4
38	1	145.944	155.57945	17.395344	81.720921	16.038168	4
39	1	149.4836	154.6837	18.124691	83.287527	16.24692	4
40	1	152.7521	153.93865	17.992649	85.164091	16.747722	4
41	1	155.7495	153.34435	16.999766	83.220213	16.510612	4
42	1	159.19175	152.66185	16.642912	82.49789	16.41949	4
43	1	163.07885	151.89115	16.922515	83.002588	16.475613	4
44	1	165.587	151.4372	16.677773	84.953697	17.0231	4
45	1	168.32935	151.10405	16.547153	84.432625	16.925749	4
46	1	172.45415	150.7286	15.796785	84.38335	17.100551	4
47	1	176.34825	150.50675	13.787511	79.599243	16.408708	4
48	1	179.5939	150.45685	10.78856	75.49415	16.132916	4
49	1	182.1911	150.57895	6.7998195	66.494389	14.883528	4
50	1	184.34955	150.76355	2.4027232	58.824816	14.067608	4
51	1	185.78315	150.96955	- 1.6032254	49.874578	12.435129	4
52	1	187.41965	151.3413	- 7.5157353	38.709487	9.6513591	4
53	1	189.8012	152.07645	- 18.024224	15.515831	3.8685312	4

# SEZIONE 1

## DEFINIZIONE FORZA STABILIZZANTE

### 1 ANALYSIS SETTINGS

#### 1.1 SLOPE/W ANALYSIS

Kind: **SLOPE/W**

Method: **Morgenstern-Price**

Settings

    Apply Phreatic Correction: **No**

    Side Function

        Interslice force function option: **Half-Sine**

        PWP Conditions Source: **Piezometric Line**

        Use Staged Rapid Drawdown: **No**

    SlipSurface

        Direction of movement: **Left to Right**

        Allow Passive Mode: **No**

        Slip Surface Option: **Fully-Specified**

        Critical slip surfaces saved: **1**

        Optimize Critical Slip Surface Location: **No**

    Tension Crack

        Tension Crack Option: **(none)**

    FOS Distribution

        FOS Calculation Option: **Constant**

    Advanced

        Number of Slices: **50**

        Optimization Tolerance: **0.01**

        Minimum Slip Surface Depth: **0.1 m**

        Minimum Slice Width: **0.1 m**

        Optimization Maximum Iterations: **2000**

        Optimization Convergence Tolerance: **1e-007**

        Starting Optimization Points: **8**

        Ending Optimization Points: **16**

        Complete Passes per Insertion: **1**

### 2 MATERIALS

#### 2.1 FRANA

Model: **Mohr-Coulomb**

Unit Weight: **20 kN/m<sup>3</sup>**

Cohesion: **4 kPa**

Phi: **14 °**

Phi-B: **0 °**

## 2.2 BNA2\_2

Model: Mohr-Coulomb  
Unit Weight: 20 kN/m<sup>3</sup>  
Cohesion: 25 kPa  
Phi: 27 °  
Phi-B: 0 °

## 2.3 BNA2\_3

Model: Mohr-Coulomb  
Unit Weight: 20 kN/m<sup>3</sup>  
Cohesion: 30 kPa  
Phi: 27 °  
Phi-B: 0 °

## 3 SLIP SURFACE LIMITS

Left Coordinate: (0, 200) m  
Right Coordinate: (726.1011, 64) m

## 4 FULLY SPECIFIED SLIP SURFACES

### 4.1 FULLY SPECIFIED SLIP SURFACE 1

	X (m)	Y (m)
	26.0112	193.5736
	32.7779	188.0442
	41.463	183.3046
	47.2729	180.9865
	52.1386	179.507
	94.9535	167.9621
	117.1643	162.376
	129.5	159.55
	129.98881	159.62478

## 5 PIEZOMETRIC LINES

### 5.1 PIEZOMETRIC LINE 1

#### 5.1.1 Coordinates

	X (m)	Y (m)

0	193
94.9535	165
178.09244	148.43506
221.96728	142.1976
311.22741	130.96715
488.61004	105.76802
687.0292	66.696592
726.1011	61.6

## 6 POINT LOADS

	Coordinate (m)	Magnitude (kN)	Direction (°)
Point Load 1	(129.5, 161.93019)	290	0

## 7 REGIONS

	Material	Points	Area (m <sup>2</sup> )
Region 1	BNA_2_2	1,50,56,58,60,53,32,31,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,19,49,20,21,22,23,24,25,26,27,28,29,30,8,9,10,11,71,12,13,14,15,16,17,18,2	1098 9.22 7
Region 2	BNA_2_3	50,56,58,60,53,54,61,59,57,51	7261 .011
Region 3	BNA_2_3	51,57,59,61,54,55,52	7248 6.39 8
Region 4	FRA NA	70,72,71,12,13,14,15,16,17,18,3,4,5,6,7	437. 1100 3

## 8 POINTS

	X (m)	Y (m)
Point 1	0	200
Point 2	24.97	194

Point 3	32.6542	192.2
Point 4	53.1386	183.9
Point 5	62.8539	180.7
Point 6	94.9535	172.4
Point 7	108.9837	168.4
Point 8	170.5071	150.8395
Point 9	165.0224	151.5058
Point 10	151.2534	154.2358
Point 11	137.0949	157.8188
Point 12	117.1643	162.376
Point 13	94.9535	167.9621
Point 14	52.1386	179.507
Point 15	47.2729	180.9865
Point 16	41.463	183.3046
Point 17	32.7779	188.0442
Point 18	26.0112	193.5736
Point 19	523.9698	100.2738
Point 20	508.8548	103.5817
Point 21	489.4826	107.8038
Point 22	473.2668	110.8424
Point 23	454.9787	113.274
Point 24	420.803	118.1033
Point 25	377.053	123.2016
Point 26	350.0394	126.3816
Point 27	336.04	128.5802
Point 28	320.0565	131.1742
Point 29	275.1487	137.5544
Point 30	222.0749	143.4386
Point 31	724.0507	65.4667

Point 32	726.1011	64
Point 33	723.3706	65.3761
Point 34	713.6774	66.3962
Point 35	703.6584	66.7155
Point 36	695.2557	67.6721
Point 37	690.8834	68.3211
Point 38	678.2028	70.1539
Point 39	664.9119	72.6666
Point 40	660.157	73.6516
Point 41	642.5792	76.9244
Point 42	625.8111	79.8771
Point 43	614.9364	82.0711
Point 44	594.1215	87.0006
Point 45	586.7243	88.8707
Point 46	579.5245	90.2436
Point 47	563.1138	93.2369
Point 48	533.908	98.2685
Point 49	515.0097	102.468
Point 50	0	180
Point 51	0	170
Point 52	0	0
Point 53	726.1011	44
Point 54	726.1011	34
Point 55	726.1011	0
Point 56	52.1386	162
Point 57	52.1386	152
Point 58	191.12	132
Point 59	191.12	122
Point 60	497.6597	94

Point 61	497.6597	84
Point 62	311.22741	130.96715
Point 63	0	193
Point 64	181	149.35
Point 65	684.8136	69.6
Point 66	690.8834	67.6
Point 67	719.1314	65.6
Point 68	726.1011	61.6
Point 69	94.9535	165
Point 70	129.5	163.65
Point 71	129.5	159.55
Point 72	129.5	161.93019

# **SEZIONE 1**

## **ANALISI DI STABILITÀ GLOBALE – FASE STATICÀ**

### **1 ANALYSIS SETTINGS**

#### **1.1 SLOPE/W ANALYSIS**

Kind: **SLOPE/W**

Method: **Morgenstern-Price**

Settings

    Apply Phreatic Correction: **No**

    Side Function

        Interslice force function option: **Half-Sine**

    PWP Conditions Source: **Piezometric Line**

    Use Staged Rapid Drawdown: **No**

    SlipSurface

        Direction of movement: **Left to Right**

        Allow Passive Mode: **No**

        Slip Surface Option: **Grid and Radius**

        Critical slip surfaces saved: **1**

        Optimize Critical Slip Surface Location: **No**

        Tension Crack

            Tension Crack Option: **(none)**

    FOS Distribution

        FOS Calculation Option: **Constant**

    Advanced

        Number of Slices: **30**

        Optimization Tolerance: **0.01**

        Minimum Slip Surface Depth: **0.1 m**

        Minimum Slice Width: **0.1 m**

        Optimization Maximum Iterations: **2000**

        Optimization Convergence Tolerance: **1e-007**

        Starting Optimization Points: **8**

        Ending Optimization Points: **16**

        Complete Passes per Insertion: **1**

### **2 MATERIALS**

#### **2.1 FRANA**

Model: **Mohr-Coulomb**

Unit Weight: **20 kN/m<sup>3</sup>**

Cohesion: **4 kPa**

Phi: **14 °**

Phi-B: **0 °**

Pore Water Pressure  
Piezometric Line: 1

## 2.2 BNA2\_2

Model: Mohr-Coulomb

Unit Weight: 20 kN/m<sup>3</sup>

Cohesion: 20 kPa

Phi: 22.2 °

Phi-B: 0 °

Pore Water Pressure

Piezometric Line: 1

## 2.3 BNA2\_3

Model: Mohr-Coulomb

Unit Weight: 20 kN/m<sup>3</sup>

Cohesion: 24 kPa

Phi: 22.2 °

Phi-B: 0 °

Pore Water Pressure

Piezometric Line: 1

## 3 SLIP SURFACE GRID

Upper Left: (638.54702, 514.42019) m

Lower Left: (638.13037, 410.16878) m

Lower Right: (739.13814, 375.63248) m

Grid Horizontal Increment: 30

Grid Vertical Increment: 30

Left Projection Angle: 0 °

Right Projection Angle: 0 °

## 4 SLIP SURFACE RADIUS

Upper Left Coordinate: (696.33771, 358.05205) m

Upper Right Coordinate: (696.33771, 358.05205) m

Lower Left Coordinate: (696.33771, 358.05205) m

Lower Right Coordinate: (696.33771, 358.05205) m

Number of Increments: 0

Left Projection: No

Left Projection Angle: 135 °

Right Projection: No

Right Projection Angle: 45 °

UsePoints: 0

## 5 SLIP SURFACE LIMITS

Left Coordinate: (620, 394.8) m

Right Coordinate: (786.35, 366.35) m

## 6 PIEZOMETRIC LINES

### 6.1 PIEZOMETRIC LINE 1

#### 6.1.1 Coordinates

	X (m)	Y (m)
	620	388.4
	661.77	375.85
	687.02877	370.42519
	696.32	366.35
	724.76	366.35
	745.29229	364.4
	786.35	364.4

## 7 REINFORCEMENTS

### 7.1 REINFORCEMENT 1

Type: [Anchor](#)

Outside Point: (696.32, 372.75) m

Inside Point: (676.32, 372.75) m

Slip Surface Intersection: (642.02, 372.75) m

Total Length: 20 m

Reinforcement Direction: 0 °

Applied Load Option: [Variable](#)

F of S Dependent: No

Bond Length: 10 m

Bond Diameter: 0.14 m

Bond Safety Factor: 2.16

Bond Skin Friction: 200 kPa

Bond Resistance: 16.968479 kN/m

Anchor Spacing: 2.4 m

Bar Capacity: 10000 kN

Bar Safety Factor: 1

Bar Load: 4166.6667 kN

Load Distribution: Conc. in 1 slice

Shear Capacity: 0 kN

Shear Safety Factor: 1

Shear Option: Parallel to Slip

Shear Load: 0 kN

Applied Load: 169.68479 kN

Anchor Load Used: 0 kN

Resisting Force Used: 16.968 kN/m

Available Bond Length: 0 m

Required Bond Length: 0 m

Governing Component: Bond

## 7.2 REINFORCEMENT 2

Type: Anchor

Outside Point: (696.32, 368.75) m

Inside Point: (680.32, 368.75) m

Slip Surface Intersection: (648.16, 368.75) m

Total Length: 16 m

Reinforcement Direction: 0 °

Applied Load Option: Variable

F of S Dependent: No

Bond Length: 8 m

Bond Diameter: 0.14 m

Bond Safety Factor: 2.16

Bond Skin Friction: 200 kPa

Bond Resistance: 16.968479 kN/m

Anchor Spacing: 2.4 m

Bar Capacity: 1000 kN

Bar Safety Factor: 1

Bar Load: 416.66667 kN

Load Distribution: Conc. in 1 slice

Shear Capacity: 0 kN

Shear Safety Factor: 1

Shear Option: Parallel to Slip

Shear Load: 0 kN

Applied Load: 135.74783 kN

Anchor Load Used: 0 kN

Resisting Force Used: 16.968 kN/m

Available Bond Length: 0 m

Required Bond Length: 0 m

Governing Component: Bond

## 8 REGIONS

	Material	Points	Area (m²)
Region 1	FRANA	1,33,2,3,4,21,9,8,7,34,6	322.76265
Region 2	FRANA	32,26,27,28,29	169.77
Region 3	BNA2_3	13,14,15,16,17,18	4257.8188
Region 4	BNA2_2	6,34,7,8,9,22,25,32,29,28,16,15,14,13,12	2672.4023

## 9 POINTS

	X (m)	Y (m)
Point 1	620	394.8
Point 2	675.82	379.25

Point 3	691.26	376.02
Point 4	696.32	374.55
Point 5	696.32	358.05
Point 6	620	390.4
Point 7	679.17	374.85
Point 8	684.94	373.4
Point 9	696.32	370.45
Point 10	696.32	363.35
Point 11	677.99	367.44
Point 12	620	388.4
Point 13	620	374.8
Point 14	676.95	359.25
Point 15	732.85	346.35
Point 16	786.35	346.35
Point 17	786.35	330
Point 18	620	330
Point 19	676.32	372.75
Point 20	686.32	372.75
Point 21	696.32	372.75
Point 22	696.32	368.75
Point 23	688.32	368.75
Point 24	680.32	368.75
Point 25	696.32	366.35
Point 26	734.76	366.35
Point 27	786.35	366.35
Point 28	786.35	363.35
Point 29	734.76	363.35
Point 30	734.76	354.13
Point 31	786.35	354.13

Point 32	724.76	366.35
Point 33	661.77	383.25
Point 34	661.77	378.81
Point 35	661.77	375.85

## 10 CRITICAL SLIP SURFACES

	Number	FOS	Center (m)	Radius (m)	Entry (m)	Exit (m)
1	419	1.418	(688.815, 438.076)	80.377	(621.317, 394.436)	(725.089, 366.35)

### 10.1 SLICES OF SLIP SURFACE: 419

	Slip Surface	X (m)	Y (m)	PWP (kPa)	Base Normal Stress (kPa)	Frictional Strength (kPa)	Cohesive Strength (kPa)
1	419	623.2537	391.6978	-41.928556	31.044275	7.7402071	4
2	419	626.32195	387.56015	-10.392081	65.140824	26.583478	20
3	419	629.1476	384.28135	13.437611	105.6343	37.624773	20
4	419	632.53625	380.73905	38.191226	149.9449	45.605828	20
5	419	635.9249	377.59435	59.046551	187.44281	52.397543	20
6	419	639.3135	374.7875	76.589299	219.77961	58.434882	20
7	419	642.70215	372.27495	91.244836	248.14651	64.030389	20
8	419	646.0908	370.0239	103.33684	273.37551	69.391494	20
9	419	649.4794	368.009	113.1108	296.08083	74.668684	20
10	419	652.868	366.21035	120.76611	316.71512	79.965307	20
11	419	656.36425	364.56745	126.57617	335.63768	85.31642	24
12	419	659.9681	363.0789	130.55705	353.92922	91.156496	24
13	419	663.52625	361.8035	134.05381	369.81199	96.211133	24
14	419	667.03875	360.72675	137.2168	383.14155	100.36003	24
15	419	670.55125	359.82245	138.68715	394.10629	104.23462	24
16	419	674.06375	359.0846	138.52492	402.29821	107.64389	24
17	419	676.385	358.6682	137.7212	407.19207	109.96902	24
18	419	678.06	358.4299	136.52669	411.33443	112.14696	24

19	419	680.90555	358.10835	133.68891	416.42501	115.38246	24
20	419	683.79055	357.8647	130.00246	418.72122	117.82395	20
21	419	685.9844	357.7559	126.44547	418.74176	119.28391	20
22	419	689.1444	357.72775	115.42422	415.17174	122.3247	20
23	419	693.79	357.8934	93.815628	398.14736	124.19548	20
24	419	698.0975	358.2571	79.366632	194.66828	47.053733	20
25	419	701.6525	358.7515	74.518487	185.72419	45.382209	20
26	419	705.2075	359.40955	68.065333	171.66277	42.277331	20
27	419	708.7625	360.23545	59.966636	152.49842	37.761523	20
28	419	712.3175	361.23465	50.167206	128.42536	31.93656	20
29	419	715.8725	362.41395	38.601714	99.783339	24.967759	20
30	419	719.4275	363.782	25.184118	67.05136	17.085705	20
31	419	722.9825	365.3495	9.8118889	30.778153	8.556174	20
32	419	724.86315	366.23635	1.018435	10.842481	4.0091191	20
33	419	725.0276	366.31905	0.021343417	2.2446332	0.5543284	4

## **SEZIONE 2**

### **ANALISI DI STABILITÀ GLOBALE – FASE STATICÀ**

## **1 ANALYSIS SETTINGS**

### **1.1 SLOPE/W ANALYSIS**

Kind: **SLOPE/W**

Method: **Morgenstern-Price**

Settings

    Apply Phreatic Correction: **No**

    Side Function

        Interslice force function option: **Half-Sine**

    PWP Conditions Source: **Piezometric Line**

    Use Staged Rapid Drawdown: **No**

SlipSurface

    Direction of movement: **Left to Right**

    Allow Passive Mode: **No**

    Slip Surface Option: **Grid and Radius**

    Critical slip surfaces saved: **1**

    Optimize Critical Slip Surface Location: **No**

    Tension Crack

        Tension Crack Option: **(none)**

FOS Distribution

    FOS Calculation Option: **Constant**

Advanced

    Number of Slices: **30**

    Optimization Tolerance: **0.01**

    Minimum Slip Surface Depth: **0.1 m**

    Minimum Slice Width: **0.1 m**

    Optimization Maximum Iterations: **2000**

    Optimization Convergence Tolerance: **1e-007**

    Starting Optimization Points: **8**

    Ending Optimization Points: **16**

    Complete Passes per Insertion: **1**

## **2 MATERIALS**

### **2.1 FRANA**

Model: **Mohr-Coulomb**

Unit Weight: **20 kN/m<sup>3</sup>**

Cohesion: **4 kPa**

Phi: **14 °**

Phi-B: **0 °**

Pore Water Pressure

    Piezometric Line: **1**

## 2.2 BNA2\_2

Model: Mohr-Coulomb

Unit Weight: 20 kN/m<sup>3</sup>

Cohesion: 20 kPa

Phi: 22.2 °

Phi-B: 0 °

Pore Water Pressure

Piezometric Line: 1

## 2.3 BNA2\_3

Model: Mohr-Coulomb

Unit Weight: 20 kN/m<sup>3</sup>

Cohesion: 24 kPa

Phi: 22.2 °

Phi-B: 0 °

Pore Water Pressure

Piezometric Line: 1

## 3 SLIP SURFACE GRID

Upper Left: (521.183, 626.06362) m

Lower Left: (521.183, 545.60235) m

Lower Right: (633.7969, 545.29563) m

Grid Horizontal Increment: 30

Grid Vertical Increment: 30

Left Projection Angle: 0 °

Right Projection Angle: 0 °

## 4 SLIP SURFACE RADIUS

Upper Left Coordinate: (556.33682, 530.03143) m

Upper Right Coordinate: (556.33682, 530.03143) m

Lower Left Coordinate: (556.33682, 530.03143) m

Lower Right Coordinate: (556.33682, 530.03143) m

Number of Increments: 0

Left Projection: No

Left Projection Angle: 135 °

Right Projection: No

Right Projection Angle: 45 °

UsePoints: 0

## 5 SLIP SURFACE LIMITS

Left Coordinate: (500, 544.55) m

Right Coordinate: (664.34, 536.75) m

## 6 PIEZOMETRIC LINES

### 6.1 PIEZOMETRIC LINE 1

#### 6.1.1 Coordinates

	X (m)	Y (m)
	500	535.55
	556.32	535.55
	664.34	535.55

## 7 REINFORCEMENTS

### 7.1 REINFORCEMENT 1

Type: [Anchor](#)

Outside Point: (556.32, 541.55) m

Inside Point: (540.34, 535.63) m

Slip Surface Intersection: (542.46, 536.42) m

Total Length: 17.041326 m

Reinforcement Direction: 20.328 °

Applied Load Option: Variable

F of S Dependent: No

Bond Length: 9 m

Bond Diameter: 0.14 m

Bond Safety Factor: 2.16

Bond Skin Friction: 200 kPa

Bond Resistance: 16.968479 kN/m

Anchor Spacing: 2.4 m

Bar Capacity: 10000 kN

Bar Safety Factor: 1

Bar Load: 4166.6667 kN

Load Distribution: Conc. in 1 slice

Shear Capacity: 0 kN

Shear Safety Factor: 1

Shear Option: Parallel to Slip

Shear Load: 0 kN

Applied Load: 152.71631 kN

Anchor Load Used: 38.439 kN

Resisting Force Used: 16.968 kN/m

Available Bond Length: 2.2653 m

Required Bond Length: 2.2653 m

Governing Component: Bond

### 7.2 REINFORCEMENT 2

Type: [Anchor](#)

Outside Point: (556.32, 538.95) m

Inside Point: (542.22, 533.82) m

Slip Surface Intersection: (544.52, 534.66) m

Total Length: 15.004229 m  
Reinforcement Direction: 19.993 °  
Applied Load Option: Variable  
F of S Dependent: No  
Bond Length: 8 m  
Bond Diameter: 0.14 m  
Bond Safety Factor: 2.16  
Bond Skin Friction: 200 kPa  
Bond Resistance: 16.968479 kN/m  
Anchor Spacing: 2.4 m  
Bar Capacity: 10000 kN  
Bar Safety Factor: 1  
Bar Load: 4166.6667 kN  
Load Distribution: Conc. in 1 slice  
Shear Capacity: 0 kN  
Shear Safety Factor: 1  
Shear Option: Parallel to Slip  
Shear Load: 0 kN  
Applied Load: 135.74783 kN  
Anchor Load Used: 41.596 kN  
Resisting Force Used: 16.968 kN/m  
Available Bond Length: 2.4514 m  
Required Bond Length: 2.4514 m  
Governing Component: Bond

## 8 REGIONS

	Material	Points	Area (m <sup>2</sup> )
Region 1	FRANA	1,2,5,15,4	225.28
Region 2	BNA2_2	4,15,20,6,7,8,12,11,10	2218.964
Region 3	BNA2_3	11,12,13,14	4034.547

## 9 POINTS

	X (m)	Y (m)
Point 1	500	544.55
Point 2	556.32	544.55
Point 3	556.32	530.05
Point 4	500	540.55
Point 5	556.32	541.55
Point 6	556.32	536.75
Point 7	664.34	536.75

Point 8	664.34	535.55
Point 9	556.32	535.55
Point 10	500	535.55
Point 11	500	524.55
Point 12	664.34	524.55
Point 13	664.34	500
Point 14	500	500
Point 15	556.32	540.55
Point 16	548.8	538.71
Point 17	540.34	535.63
Point 18	542.22	533.82
Point 19	549.74	536.55
Point 20	556.32	538.95

## 10 CRITICAL SLIP SURFACES

	Number	FOS	Center (m)	Radius (m)	Entry (m)	Exit (m)
1	104	2.380	(558.721, 553.546)	23.635	(536.865, 544.55)	(575.35, 536.75)

### 10.1 SLICES OF SLIP SURFACE: 104

	Slip Surface	X (m)	Y (m)	PWP (kPa)	Base Normal Stress (kPa)	Frictional Strength (kPa)	Cohesive Strength (kPa)
1	104	537.39335	543.43485	- 77.325571	14.982184	3.735478	4
2	104	538.4507	541.43485	- 57.714612	48.163421	12.00849	4
3	104	539.716	539.54985	- 39.226452	67.344486	27.482776	20
4	104	541.18915	537.73305	- 21.409122	98.705014	40.28077	20
5	104	542.6623	536.2332	- 6.7003401	134.79812	55.010094	20
6	104	544.04495	535.0377	5.023896	160.67735	63.520997	20

7	104	545.33705	534.0812	14.404249	168.69686	62.965647	20
8	104	546.62915	533.25205	22.53605	186.69232	66.990933	20
9	104	547.92125	532.53505	29.567711	203.37954	70.931294	20
10	104	549.21335	531.919	35.609379	219.0082	74.843673	20
11	104	550.5055	531.39535	40.744726	233.73197	78.756635	20
12	104	551.79765	530.9577	45.036439	247.61754	82.671816	20
13	104	553.08975	530.60115	48.533057	260.67042	86.571653	20
14	104	554.38185	530.3219	51.272415	272.825	90.413934	20
15	104	555.67395	530.11715	53.279723	283.96205	94.139715	20
16	104	556.95295	529.9856	54.569945	136.98414	33.632611	20
17	104	558.2189	529.92465	55.167479	142.40845	35.602381	20
18	104	559.48485	529.9317	55.098204	146.39272	37.256604	20
19	104	560.75075	530.00675	54.362882	148.76109	38.523193	20
20	104	562.0167	530.1505	52.952449	149.33942	39.334796	20
21	104	563.28265	530.36425	50.856956	147.94525	39.621	20
22	104	564.54855	530.6499	48.055142	144.40121	39.318102	20
23	104	565.81445	531.01025	44.521317	138.54375	38.369844	20
24	104	567.0804	531.44895	40.219049	130.23388	36.734374	20
25	104	568.34635	531.97075	35.101818	119.38427	34.395032	20
26	104	569.61225	532.58195	29.107478	105.92503	31.348663	20
27	104	570.8782	533.2907	22.156644	89.82405	27.614557	20
28	104	572.14415	534.1077	14.144922	71.091865	23.239617	20
29	104	573.41005	535.0474	4.9290686	49.734858	18.284904	20
30	104	574.6964	536.15	- 5.8840174	24.240641	9.8924224	20



## *Report di Calcolo*

Nome Progetto: New Project

Autore: Ingegnere

Jobname: \\SBS2011\Comm\424.01 - HIRPINIA\Ing\03. LAVORO\07 - GALL\GA - FINESTRE - IMBOCCHI\GA11 Finestra F5\PARATIA-F5\sez1\SEZIONE 1 STR Finestra F5 -LONG\_revC.pplus

Data: 25/06/2020 16:40:23

Design Section: Base Design Section

**Sommario**  
**Contenuto Sommario**

## **Descrizione della Stratigrafia e degli Strati di Terreno**

Tipo : HORIZONTAL

Quota : 0.5 m

OCR : 1

Tipo : HORIZONTAL

Quota : -2 m

OCR : 1

Tipo : HORIZONTAL

Quota : -18 m

OCR : 1

Strato di Terreno	Terreno	$\gamma_{dry}$	$\gamma_{sat}$	$\phi'$	$\phi_{cv}$	$\phi_p$	$c'$	$S_u$	Modulo Elastico Eu	$E_{vc}$	$E_{ur}$	$A_h$	$A_v$	$\exp$	$P_a$	$R_u/R_{vc}$	$R_{vc}$	$K_u$	$K_{vc}$	$K_{ur}$		
		kN/m <sup>3</sup>	kN/m <sup>3</sup>	°	°	°	kPa	kPa		kPa	kPa				kPa		kPa	kPa	kPa	kN/m <sup>3</sup>	kN/m <sup>3</sup>	kN/m <sup>3</sup>
1	FRANA	20	20	14			10000		Constant	20000	32000											
2	BNA2_(2)	20	20	27			25		Constant	115000	184000											
3	BNA(3)	20	20	27			30		Constant	180000	288000											

## **Descrizione Pareti**

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -16 m

Muro di sinistra

Sezione : PALI\_Fi1000/1200

Area equivalente : 0.654498469497874 m

Inerzia equivalente : 0.0409 m<sup>4</sup>/m

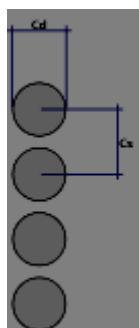
Materiale calcestruzzo : C25/30

Tipo sezione : Tangent

Spaziatura : 1.2 m

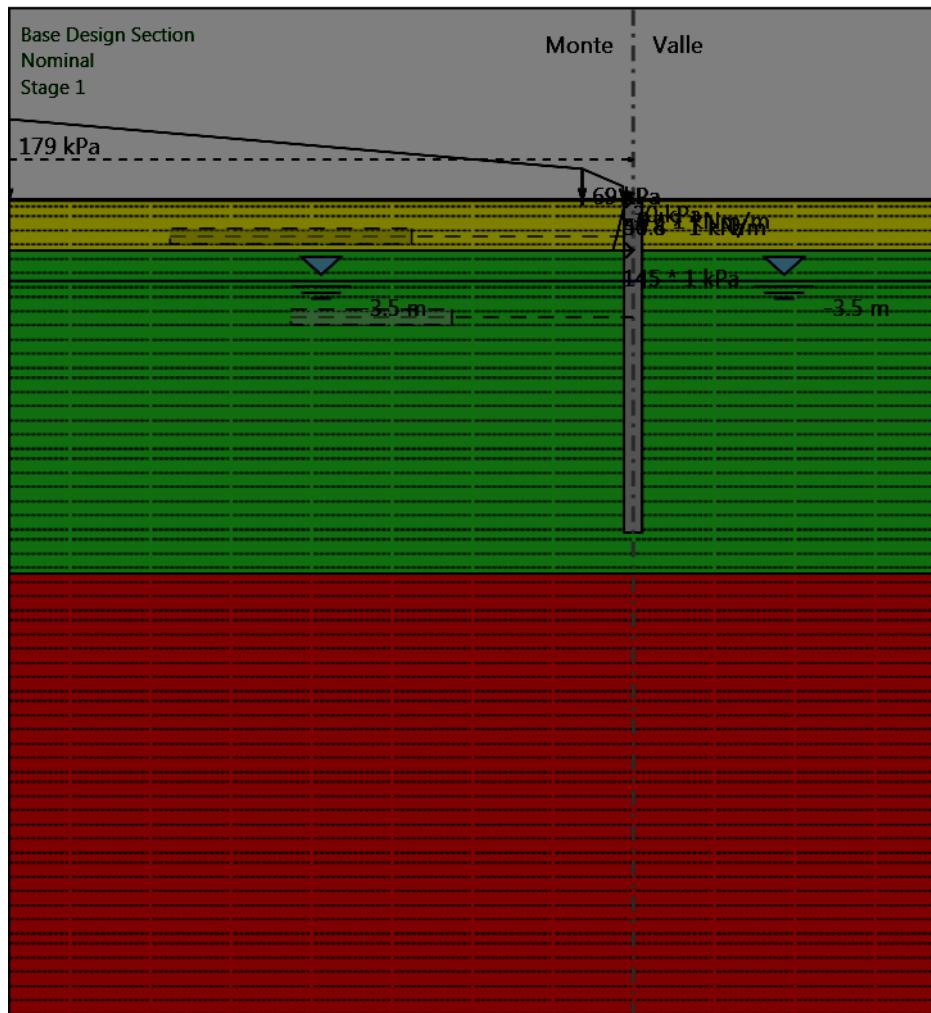
Diametro : 1 m

Efficacia : 1



## Fasi di Calcolo

### Stage 1



Stage 1

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : 0.5 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

0.5 m

## Falda acquifera

Falda di sinistra : -3.5 m

Falda di destra : -3.5 m

## Carichi

Carico puntuale alla paratia : WallLineLoad

Quota : 0.5 m

Px : 40.8 kN/m

Pz : 1 kN/m

: 0 kNm/m

X : 0 m

Carico lineare sulla paratia : WallSurcharge

Quota in alto : 0.5 m

Quota di fondo : -2 m

Pressione in alto : 54.4 kPa

Pressione in fondo : 145 kPa

X : 0 m

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -31 m

Pressione iniziale : 69 kPa

Pressione finale : 179 kPa

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -0.5 m

Pressione iniziale : 69 kPa

Pressione finale : 30 kPa

## Elementi strutturali

Paratia : WallElement

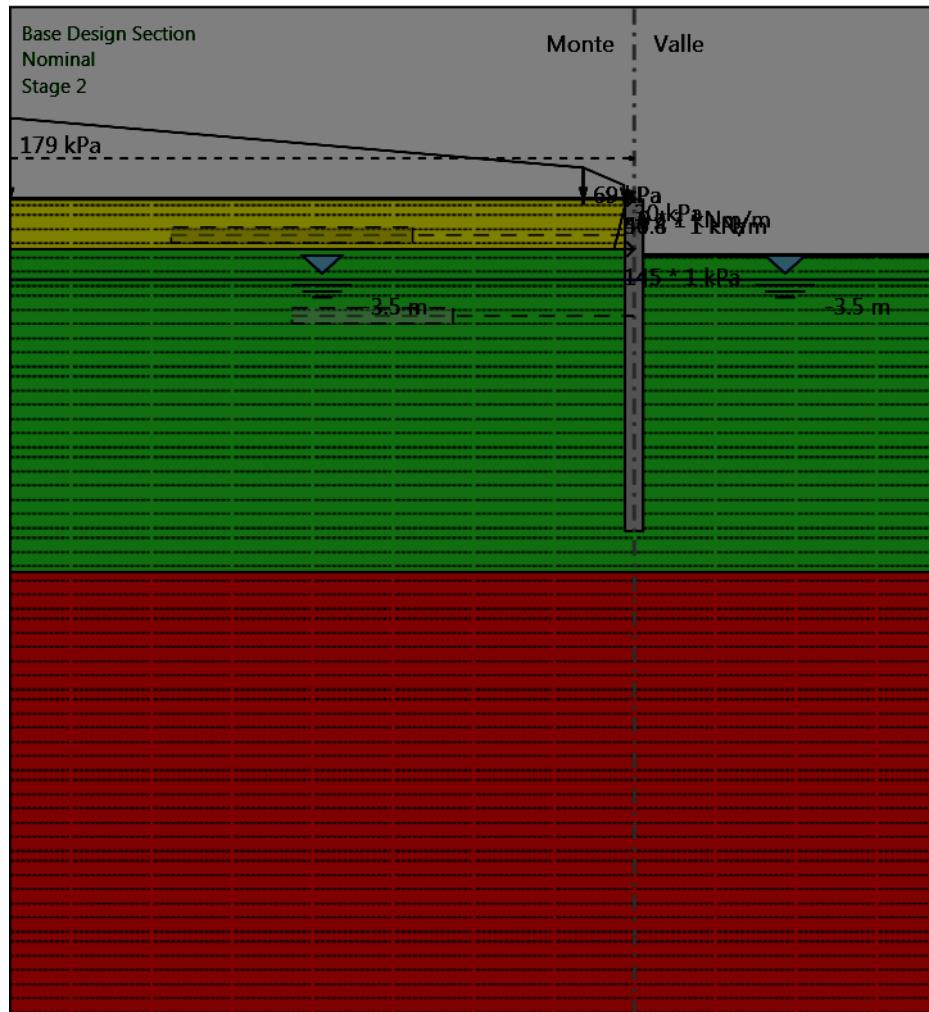
X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -16 m

Sezione : PALI\_Fi1000/1200

## Stage 2



Stage 2

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -2.3 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-2.3 m

## Falda acquifera

Falda di sinistra : -3.5 m

Falda di destra : -3.5 m

## Carichi

Carico puntuale alla paratia : WallLineLoad

Quota : 0.5 m

Px : 40.8 kN/m

Pz : 1 kN/m

: 0 kNm/m

X : 0 m

Carico lineare sulla paratia : WallSurcharge

Quota in alto : 0.5 m

Quota di fondo : -2 m

Pressione in alto : 54.4 kPa

Pressione in fondo : 145 kPa

X : 0 m

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -31 m

Pressione iniziale : 69 kPa

Pressione finale : 179 kPa

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -0.5 m

Pressione iniziale : 69 kPa

Pressione finale : 30 kPa

## Elementi strutturali

Paratia : WallElement

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -16 m

Sezione : PALI\_Fi1000/1200

## Tirante 1



Tirante 1

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -2.3 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-2.3 m

## Falda acquifera

Falda di sinistra : -3.5 m

Falda di destra : -3.5 m

## Carichi

Carico puntuale alla paratia : WallLineLoad

Quota : 0.5 m

Px : 40.8 kN/m

Pz : 1 kN/m

: 0 kNm/m

X : 0 m

Carico lineare sulla paratia : WallSurcharge

Quota in alto : 0.5 m

Quota di fondo : -2 m

Pressione in alto : 54.4 kPa

Pressione in fondo : 145 kPa

X : 0 m

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -31 m

Pressione iniziale : 69 kPa

Pressione finale : 179 kPa

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -0.5 m

Pressione iniziale : 69 kPa

Pressione finale : 30 kPa

## Elementi strutturali

Paratia : WallElement

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -16 m

Sezione : PALI\_Fi1000/1200

Tirante : Tieback

X : 0 m

Z : -1.3 m

Lunghezza bulbo : 12 m

Diametro bulbo : 0.14 m

Lunghezza libera : 11 m

Precarico : 300 kN

Angolo : 0 °

Sezione : Trefoli 4

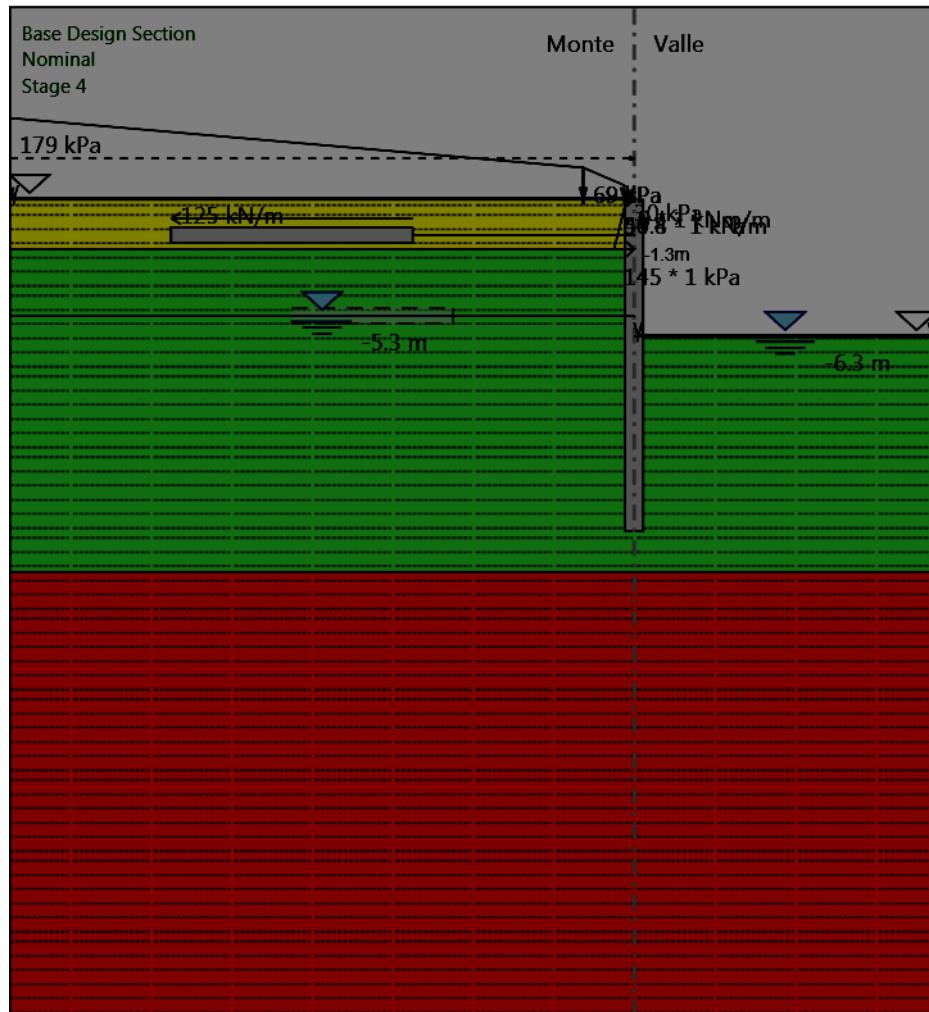
Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m^2

## Stage 4



Stage 4

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -6.3 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-6.3 m

## Falda acquifera

Falda di sinistra : -5.3 m

Falda di destra : -6.3 m

## Carichi

Carico puntuale alla paratia : WallLineLoad

Quota : 0.5 m

Px : 40.8 kN/m

Pz : 1 kN/m

: 0 kNm/m

X : 0 m

Carico lineare sulla paratia : WallSurcharge

Quota in alto : 0.5 m

Quota di fondo : -2 m

Pressione in alto : 54.4 kPa

Pressione in fondo : 145 kPa

X : 0 m

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -31 m

Pressione iniziale : 69 kPa

Pressione finale : 179 kPa

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -0.5 m

Pressione iniziale : 69 kPa

Pressione finale : 30 kPa

## Elementi strutturali

Paratia : WallElement

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -16 m

Sezione : PALI\_Fi1000/1200

Tirante : Tieback

X : 0 m

Z : -1.3 m

Lunghezza bulbo : 12 m

Diametro bulbo : 0.14 m

Lunghezza libera : 11 m

Precarico : 300 kN

Angolo : 0 °

Sezione : Trefoli 4

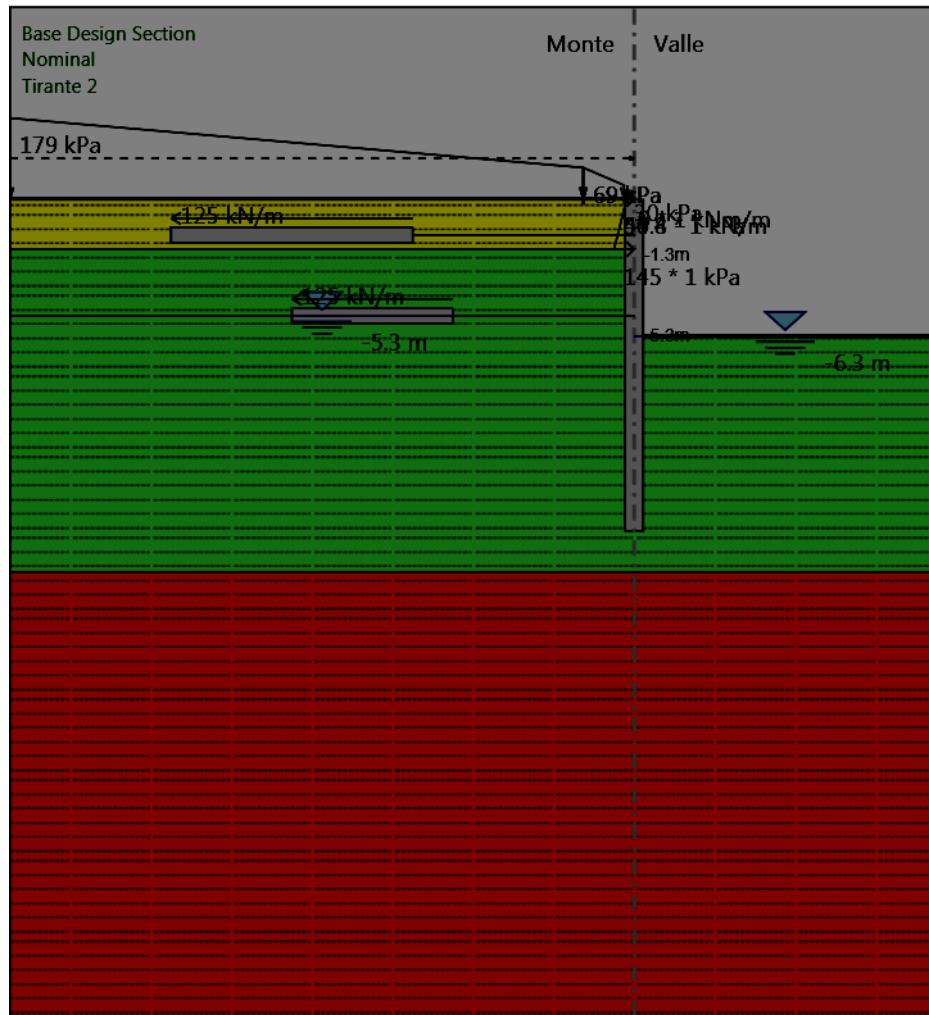
Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m^2

## Tirante 2



Tirante 2

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -6.3 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-6.3 m

## Falda acquifera

Falda di sinistra : -5.3 m

Falda di destra : -6.3 m

## Carichi

Carico puntuale alla paratia : WallLineLoad

Quota : 0.5 m

Px : 40.8 kN/m

Pz : 1 kN/m

: 0 kNm/m

X : 0 m

Carico lineare sulla paratia : WallSurcharge

Quota in alto : 0.5 m

Quota di fondo : -2 m

Pressione in alto : 54.4 kPa

Pressione in fondo : 145 kPa

X : 0 m

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -31 m

Pressione iniziale : 69 kPa

Pressione finale : 179 kPa

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -0.5 m

Pressione iniziale : 69 kPa

Pressione finale : 30 kPa

## Elementi strutturali

Paratia : WallElement

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -16 m

Sezione : PALI\_Fi1000/1200

Tirante : Tieback

X : 0 m

Z : -1.3 m

Lunghezza bulbo : 12 m

Diametro bulbo : 0.14 m

Lunghezza libera : 11 m

Precarico : 300 kN

Angolo : 0 °

Sezione : Trefoli 4

Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m^2

Tirante : Tieback

X : 0 m

Z : -5.3 m

Lunghezza bulbo : 8 m

Diametro bulbo : 0.14 m

Lunghezza libera : 9 m

Precarico : 300 kN

Angolo : 0 °

Sezione : Trefoli 4

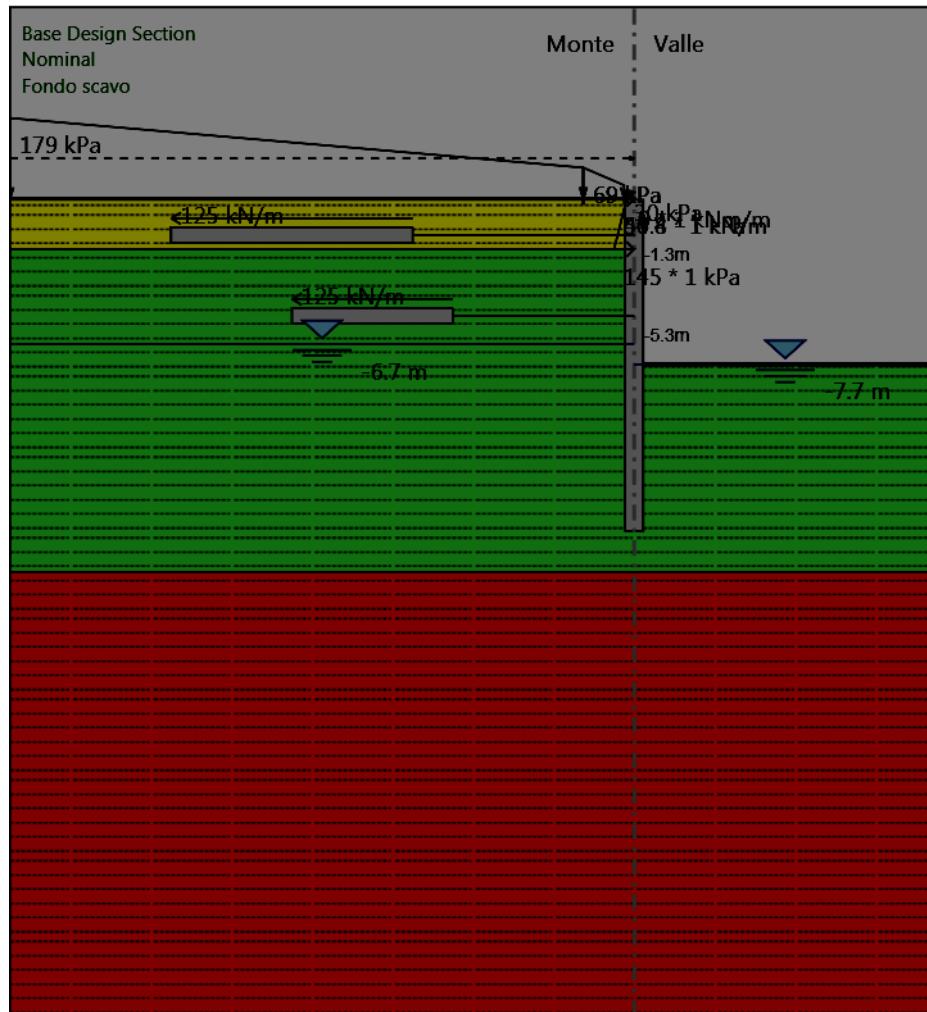
Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m<sup>2</sup>

## Fondo scavo



Fondo scavo

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -7.7 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-7.7 m

## Falda acquifera

Falda di sinistra : -6.7 m

Falda di destra : -7.7 m

## Carichi

Carico puntuale alla paratia : WallLineLoad

Quota : 0.5 m

Px : 40.8 kN/m

Pz : 1 kN/m

: 0 kNm/m

X : 0 m

Carico lineare sulla paratia : WallSurcharge

Quota in alto : 0.5 m

Quota di fondo : -2 m

Pressione in alto : 54.4 kPa

Pressione in fondo : 145 kPa

X : 0 m

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -31 m

Pressione iniziale : 69 kPa

Pressione finale : 179 kPa

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -0.5 m

Pressione iniziale : 69 kPa

Pressione finale : 30 kPa

## Elementi strutturali

Paratia : WallElement

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -16 m

Sezione : PALI\_Fi1000/1200

Tirante : Tieback

X : 0 m

Z : -1.3 m

Lunghezza bulbo : 12 m

Diametro bulbo : 0.14 m

Lunghezza libera : 11 m

Precarico : 300 kN

Angolo : 0 °

Sezione : Trefoli 4

Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m^2

Tirante : Tieback

X : 0 m

Z : -5.3 m

Lunghezza bulbo : 8 m

Diametro bulbo : 0.14 m

Lunghezza libera : 9 m

Precarico : 300 kN

Angolo : 0 °

Sezione : Trefoli 4

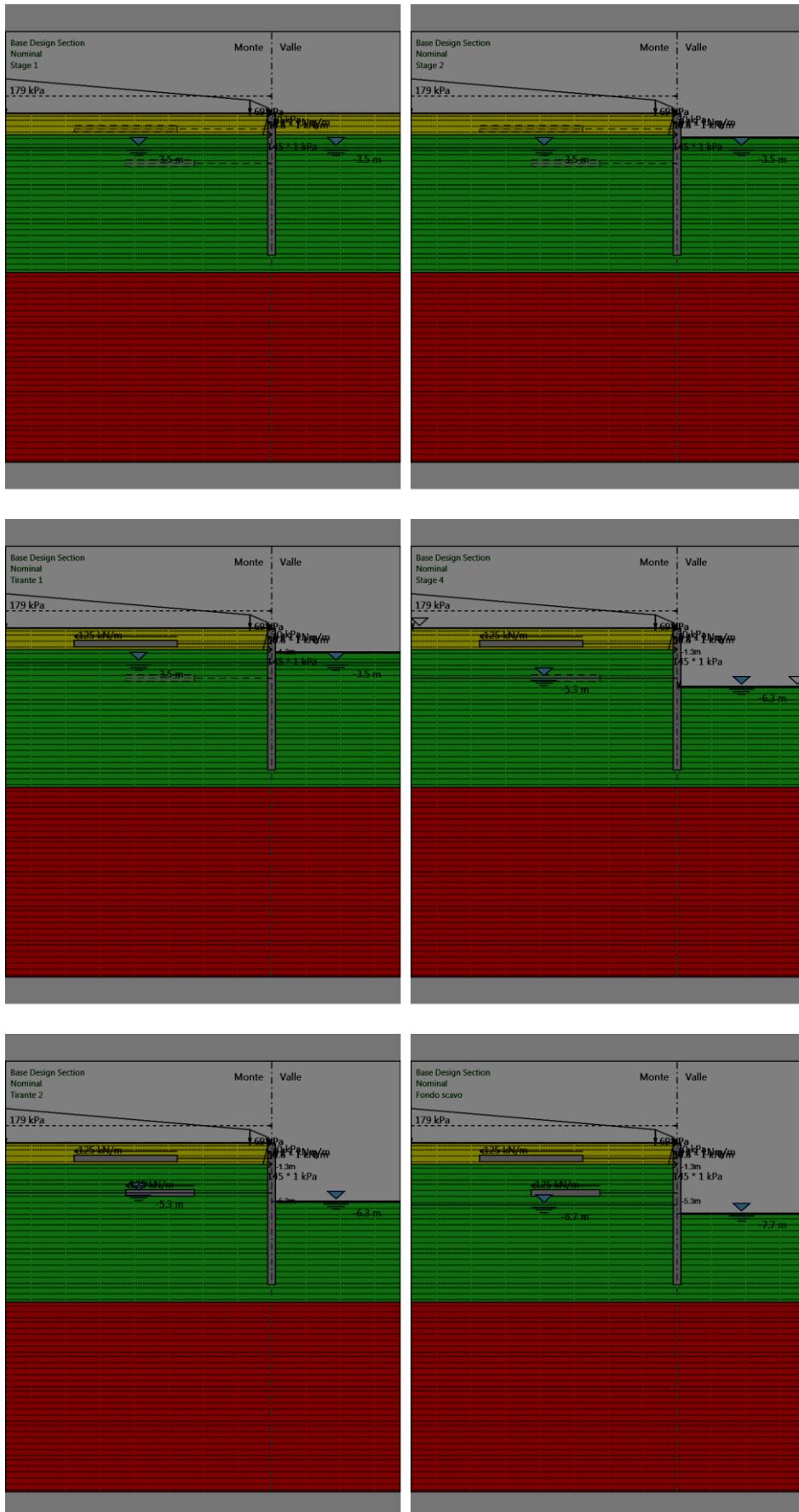
Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m<sup>2</sup>

## Tabella Configurazione Stage (Nominal)



## Grafici dei Risultati

### Design Assumption : Nominal

**Tabella Spostamento Nominal - LEFT Stage: Stage 1**

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Stage 1	0.5	3.47
Stage 1	0.3	3.3
Stage 1	0.1	3.12
Stage 1	-0.1	2.95
Stage 1	-0.3	2.78
Stage 1	-0.5	2.61
Stage 1	-0.7	2.44
Stage 1	-0.9	2.27
Stage 1	-1.1	2.1
Stage 1	-1.3	1.94
Stage 1	-1.5	1.78
Stage 1	-1.7	1.62
Stage 1	-1.9	1.47
Stage 1	-2.1	1.32
Stage 1	-2.3	1.18
Stage 1	-2.5	1.05
Stage 1	-2.7	0.92
Stage 1	-2.9	0.8
Stage 1	-3.1	0.69
Stage 1	-3.3	0.59
Stage 1	-3.5	0.49
Stage 1	-3.7	0.41
Stage 1	-3.9	0.33
Stage 1	-4.1	0.26
Stage 1	-4.3	0.19
Stage 1	-4.5	0.14
Stage 1	-4.7	0.09
Stage 1	-4.9	0.05
Stage 1	-5.1	0.01
Stage 1	-5.3	-0.02
Stage 1	-5.5	-0.04
Stage 1	-5.7	-0.06
Stage 1	-5.9	-0.08
Stage 1	-6.1	-0.09
Stage 1	-6.3	-0.1
Stage 1	-6.5	-0.11
Stage 1	-6.7	-0.11
Stage 1	-6.9	-0.11
Stage 1	-7.1	-0.11
Stage 1	-7.3	-0.11
Stage 1	-7.5	-0.11
Stage 1	-7.7	-0.11
Stage 1	-7.9	-0.1
Stage 1	-8.1	-0.09
Stage 1	-8.3	-0.09
Stage 1	-8.5	-0.08
Stage 1	-8.7	-0.08
Stage 1	-8.9	-0.07
Stage 1	-9.1	-0.06
Stage 1	-9.3	-0.06
Stage 1	-9.5	-0.05
Stage 1	-9.7	-0.05
Stage 1	-9.9	-0.04
Stage 1	-10.1	-0.03
Stage 1	-10.3	-0.03
Stage 1	-10.5	-0.03
Stage 1	-10.7	-0.02
Stage 1	-10.9	-0.02
Stage 1	-11.1	-0.01
Stage 1	-11.3	-0.01
Stage 1	-11.5	-0.01

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Stage 1	-11.7	-0.01
Stage 1	-11.9	0
Stage 1	-12.1	0
Stage 1	-12.3	0
Stage 1	-12.5	0
Stage 1	-12.7	0
Stage 1	-12.9	0
Stage 1	-13.1	0
Stage 1	-13.3	0
Stage 1	-13.5	0
Stage 1	-13.7	0.01
Stage 1	-13.9	0.01
Stage 1	-14.1	0.01
Stage 1	-14.3	0.01
Stage 1	-14.5	0.01
Stage 1	-14.7	0.01
Stage 1	-14.9	0.01
Stage 1	-15.1	0.01
Stage 1	-15.3	0.01
Stage 1	-15.5	0.01
Stage 1	-15.7	0.01
Stage 1	-15.9	0.01
Stage 1	-16	0.01

## Tabella Spostamento Nominal - LEFT Stage: Stage 2

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Stage 2	0.5	14.73
Stage 2	0.3	14.13
Stage 2	0.1	13.53
Stage 2	-0.1	12.94
Stage 2	-0.3	12.34
Stage 2	-0.5	11.75
Stage 2	-0.7	11.15
Stage 2	-0.9	10.57
Stage 2	-1.1	9.98
Stage 2	-1.3	9.4
Stage 2	-1.5	8.83
Stage 2	-1.7	8.26
Stage 2	-1.9	7.71
Stage 2	-2.1	7.16
Stage 2	-2.3	6.63
Stage 2	-2.5	6.11
Stage 2	-2.7	5.6
Stage 2	-2.9	5.12
Stage 2	-3.1	4.65
Stage 2	-3.3	4.21
Stage 2	-3.5	3.78
Stage 2	-3.7	3.38
Stage 2	-3.9	3
Stage 2	-4.1	2.64
Stage 2	-4.3	2.31
Stage 2	-4.5	2
Stage 2	-4.7	1.71
Stage 2	-4.9	1.44
Stage 2	-5.1	1.2
Stage 2	-5.3	0.98
Stage 2	-5.5	0.78
Stage 2	-5.7	0.6
Stage 2	-5.9	0.44
Stage 2	-6.1	0.3
Stage 2	-6.3	0.18
Stage 2	-6.5	0.07
Stage 2	-6.7	-0.02
Stage 2	-6.9	-0.1
Stage 2	-7.1	-0.17
Stage 2	-7.3	-0.23
Stage 2	-7.5	-0.27
Stage 2	-7.7	-0.31
Stage 2	-7.9	-0.33
Stage 2	-8.1	-0.35
Stage 2	-8.3	-0.36
Stage 2	-8.5	-0.37
Stage 2	-8.7	-0.37
Stage 2	-8.9	-0.37
Stage 2	-9.1	-0.36
Stage 2	-9.3	-0.35
Stage 2	-9.5	-0.34
Stage 2	-9.7	-0.33
Stage 2	-9.9	-0.31
Stage 2	-10.1	-0.3
Stage 2	-10.3	-0.28
Stage 2	-10.5	-0.26
Stage 2	-10.7	-0.24
Stage 2	-10.9	-0.22
Stage 2	-11.1	-0.21
Stage 2	-11.3	-0.19
Stage 2	-11.5	-0.17
Stage 2	-11.7	-0.15
Stage 2	-11.9	-0.14
Stage 2	-12.1	-0.12
Stage 2	-12.3	-0.11
Stage 2	-12.5	-0.09
Stage 2	-12.7	-0.08

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Stage 2	-12.9	-0.07
Stage 2	-13.1	-0.06
Stage 2	-13.3	-0.04
Stage 2	-13.5	-0.03
Stage 2	-13.7	-0.02
Stage 2	-13.9	-0.01
Stage 2	-14.1	0
Stage 2	-14.3	0.01
Stage 2	-14.5	0.01
Stage 2	-14.7	0.02
Stage 2	-14.9	0.03
Stage 2	-15.1	0.04
Stage 2	-15.3	0.05
Stage 2	-15.5	0.06
Stage 2	-15.7	0.06
Stage 2	-15.9	0.07
Stage 2	-16	0.08

## Tabella Spostamento Nominal - LEFT Stage: Tirante 1

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Tirante 1	0.5	13.18
Tirante 1	0.3	12.64
Tirante 1	0.1	12.11
Tirante 1	-0.1	11.58
Tirante 1	-0.3	11.05
Tirante 1	-0.5	10.52
Tirante 1	-0.7	10
Tirante 1	-0.9	9.48
Tirante 1	-1.1	8.96
Tirante 1	-1.3	8.45
Tirante 1	-1.5	7.94
Tirante 1	-1.7	7.44
Tirante 1	-1.9	6.96
Tirante 1	-2.1	6.48
Tirante 1	-2.3	6.01
Tirante 1	-2.5	5.55
Tirante 1	-2.7	5.11
Tirante 1	-2.9	4.68
Tirante 1	-3.1	4.27
Tirante 1	-3.3	3.87
Tirante 1	-3.5	3.5
Tirante 1	-3.7	3.14
Tirante 1	-3.9	2.8
Tirante 1	-4.1	2.47
Tirante 1	-4.3	2.17
Tirante 1	-4.5	1.89
Tirante 1	-4.7	1.63
Tirante 1	-4.9	1.39
Tirante 1	-5.1	1.17
Tirante 1	-5.3	0.97
Tirante 1	-5.5	0.78
Tirante 1	-5.7	0.62
Tirante 1	-5.9	0.47
Tirante 1	-6.1	0.33
Tirante 1	-6.3	0.22
Tirante 1	-6.5	0.12
Tirante 1	-6.7	0.03
Tirante 1	-6.9	-0.05
Tirante 1	-7.1	-0.12
Tirante 1	-7.3	-0.17
Tirante 1	-7.5	-0.21
Tirante 1	-7.7	-0.25
Tirante 1	-7.9	-0.28
Tirante 1	-8.1	-0.3
Tirante 1	-8.3	-0.31
Tirante 1	-8.5	-0.32
Tirante 1	-8.7	-0.33
Tirante 1	-8.9	-0.33
Tirante 1	-9.1	-0.32
Tirante 1	-9.3	-0.32
Tirante 1	-9.5	-0.31
Tirante 1	-9.7	-0.3
Tirante 1	-9.9	-0.28
Tirante 1	-10.1	-0.27
Tirante 1	-10.3	-0.26
Tirante 1	-10.5	-0.24
Tirante 1	-10.7	-0.22
Tirante 1	-10.9	-0.21
Tirante 1	-11.1	-0.19
Tirante 1	-11.3	-0.18
Tirante 1	-11.5	-0.16
Tirante 1	-11.7	-0.15
Tirante 1	-11.9	-0.13
Tirante 1	-12.1	-0.12
Tirante 1	-12.3	-0.1
Tirante 1	-12.5	-0.09
Tirante 1	-12.7	-0.08

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Tirante 1	-12.9	-0.07
Tirante 1	-13.1	-0.06
Tirante 1	-13.3	-0.04
Tirante 1	-13.5	-0.03
Tirante 1	-13.7	-0.02
Tirante 1	-13.9	-0.02
Tirante 1	-14.1	-0.01
Tirante 1	-14.3	0
Tirante 1	-14.5	0.01
Tirante 1	-14.7	0.02
Tirante 1	-14.9	0.03
Tirante 1	-15.1	0.03
Tirante 1	-15.3	0.04
Tirante 1	-15.5	0.05
Tirante 1	-15.7	0.06
Tirante 1	-15.9	0.07
Tirante 1	-16	0.07

## Tabella Spostamento Nominal - LEFT Stage: Stage 4

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Stage 4	0.5	46.95
Stage 4	0.3	45.79
Stage 4	0.1	44.63
Stage 4	-0.1	43.47
Stage 4	-0.3	42.31
Stage 4	-0.5	41.15
Stage 4	-0.7	39.99
Stage 4	-0.9	38.84
Stage 4	-1.1	37.69
Stage 4	-1.3	36.55
Stage 4	-1.5	35.41
Stage 4	-1.7	34.28
Stage 4	-1.9	33.15
Stage 4	-2.1	32.04
Stage 4	-2.3	30.93
Stage 4	-2.5	29.83
Stage 4	-2.7	28.74
Stage 4	-2.9	27.65
Stage 4	-3.1	26.58
Stage 4	-3.3	25.53
Stage 4	-3.5	24.48
Stage 4	-3.7	23.45
Stage 4	-3.9	22.43
Stage 4	-4.1	21.42
Stage 4	-4.3	20.43
Stage 4	-4.5	19.45
Stage 4	-4.7	18.49
Stage 4	-4.9	17.55
Stage 4	-5.1	16.63
Stage 4	-5.3	15.72
Stage 4	-5.5	14.84
Stage 4	-5.7	13.97
Stage 4	-5.9	13.13
Stage 4	-6.1	12.31
Stage 4	-6.3	11.51
Stage 4	-6.5	10.74
Stage 4	-6.7	9.99
Stage 4	-6.9	9.26
Stage 4	-7.1	8.57
Stage 4	-7.3	7.9
Stage 4	-7.5	7.26
Stage 4	-7.7	6.65
Stage 4	-7.9	6.07
Stage 4	-8.1	5.51
Stage 4	-8.3	4.99
Stage 4	-8.5	4.5
Stage 4	-8.7	4.03
Stage 4	-8.9	3.59
Stage 4	-9.1	3.18
Stage 4	-9.3	2.8
Stage 4	-9.5	2.45
Stage 4	-9.7	2.12
Stage 4	-9.9	1.82
Stage 4	-10.1	1.54
Stage 4	-10.3	1.28
Stage 4	-10.5	1.05
Stage 4	-10.7	0.83
Stage 4	-10.9	0.64
Stage 4	-11.1	0.47
Stage 4	-11.3	0.31
Stage 4	-11.5	0.17
Stage 4	-11.7	0.04
Stage 4	-11.9	-0.07
Stage 4	-12.1	-0.17
Stage 4	-12.3	-0.26
Stage 4	-12.5	-0.34
Stage 4	-12.7	-0.41

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Stage 4	-12.9	-0.47
Stage 4	-13.1	-0.52
Stage 4	-13.3	-0.57
Stage 4	-13.5	-0.61
Stage 4	-13.7	-0.65
Stage 4	-13.9	-0.68
Stage 4	-14.1	-0.71
Stage 4	-14.3	-0.74
Stage 4	-14.5	-0.76
Stage 4	-14.7	-0.79
Stage 4	-14.9	-0.81
Stage 4	-15.1	-0.83
Stage 4	-15.3	-0.85
Stage 4	-15.5	-0.87
Stage 4	-15.7	-0.88
Stage 4	-15.9	-0.9
Stage 4	-16	-0.91

## Tabella Spostamento Nominal - LEFT Stage: Tirante 2

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Tirante 2	0.5	46.7
Tirante 2	0.3	45.53
Tirante 2	0.1	44.36
Tirante 2	-0.1	43.18
Tirante 2	-0.3	42.01
Tirante 2	-0.5	40.84
Tirante 2	-0.7	39.67
Tirante 2	-0.9	38.51
Tirante 2	-1.1	37.35
Tirante 2	-1.3	36.19
Tirante 2	-1.5	35.04
Tirante 2	-1.7	33.9
Tirante 2	-1.9	32.76
Tirante 2	-2.1	31.63
Tirante 2	-2.3	30.51
Tirante 2	-2.5	29.4
Tirante 2	-2.7	28.3
Tirante 2	-2.9	27.21
Tirante 2	-3.1	26.13
Tirante 2	-3.3	25.06
Tirante 2	-3.5	24
Tirante 2	-3.7	22.96
Tirante 2	-3.9	21.93
Tirante 2	-4.1	20.92
Tirante 2	-4.3	19.93
Tirante 2	-4.5	18.95
Tirante 2	-4.7	17.99
Tirante 2	-4.9	17.05
Tirante 2	-5.1	16.13
Tirante 2	-5.3	15.23
Tirante 2	-5.5	14.35
Tirante 2	-5.7	13.5
Tirante 2	-5.9	12.67
Tirante 2	-6.1	11.87
Tirante 2	-6.3	11.09
Tirante 2	-6.5	10.33
Tirante 2	-6.7	9.6
Tirante 2	-6.9	8.9
Tirante 2	-7.1	8.23
Tirante 2	-7.3	7.58
Tirante 2	-7.5	6.96
Tirante 2	-7.7	6.37
Tirante 2	-7.9	5.81
Tirante 2	-8.1	5.28
Tirante 2	-8.3	4.77
Tirante 2	-8.5	4.3
Tirante 2	-8.7	3.85
Tirante 2	-8.9	3.43
Tirante 2	-9.1	3.04
Tirante 2	-9.3	2.67
Tirante 2	-9.5	2.33
Tirante 2	-9.7	2.02
Tirante 2	-9.9	1.73
Tirante 2	-10.1	1.46
Tirante 2	-10.3	1.22
Tirante 2	-10.5	0.99
Tirante 2	-10.7	0.79
Tirante 2	-10.9	0.6
Tirante 2	-11.1	0.44
Tirante 2	-11.3	0.29
Tirante 2	-11.5	0.15
Tirante 2	-11.7	0.03
Tirante 2	-11.9	-0.07
Tirante 2	-12.1	-0.17
Tirante 2	-12.3	-0.25
Tirante 2	-12.5	-0.33
Tirante 2	-12.7	-0.39

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Tirante 2	-12.9	-0.45
Tirante 2	-13.1	-0.5
Tirante 2	-13.3	-0.55
Tirante 2	-13.5	-0.59
Tirante 2	-13.7	-0.62
Tirante 2	-13.9	-0.65
Tirante 2	-14.1	-0.68
Tirante 2	-14.3	-0.7
Tirante 2	-14.5	-0.73
Tirante 2	-14.7	-0.75
Tirante 2	-14.9	-0.77
Tirante 2	-15.1	-0.79
Tirante 2	-15.3	-0.8
Tirante 2	-15.5	-0.82
Tirante 2	-15.7	-0.84
Tirante 2	-15.9	-0.86
Tirante 2	-16	-0.87

## Tabella Spostamento Nominal - LEFT Stage: Fondo scavo

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Fondo scavo	0.5	46.55
Fondo scavo	0.3	45.44
Fondo scavo	0.1	44.32
Fondo scavo	-0.1	43.21
Fondo scavo	-0.3	42.1
Fondo scavo	-0.5	40.99
Fondo scavo	-0.7	39.88
Fondo scavo	-0.9	38.78
Fondo scavo	-1.1	37.68
Fondo scavo	-1.3	36.59
Fondo scavo	-1.5	35.5
Fondo scavo	-1.7	34.42
Fondo scavo	-1.9	33.34
Fondo scavo	-2.1	32.27
Fondo scavo	-2.3	31.21
Fondo scavo	-2.5	30.16
Fondo scavo	-2.7	29.12
Fondo scavo	-2.9	28.09
Fondo scavo	-3.1	27.07
Fondo scavo	-3.3	26.06
Fondo scavo	-3.5	25.07
Fondo scavo	-3.7	24.08
Fondo scavo	-3.9	23.11
Fondo scavo	-4.1	22.16
Fondo scavo	-4.3	21.22
Fondo scavo	-4.5	20.29
Fondo scavo	-4.7	19.39
Fondo scavo	-4.9	18.5
Fondo scavo	-5.1	17.62
Fondo scavo	-5.3	16.77
Fondo scavo	-5.5	15.94
Fondo scavo	-5.7	15.12
Fondo scavo	-5.9	14.33
Fondo scavo	-6.1	13.56
Fondo scavo	-6.3	12.8
Fondo scavo	-6.5	12.07
Fondo scavo	-6.7	11.36
Fondo scavo	-6.9	10.66
Fondo scavo	-7.1	9.99
Fondo scavo	-7.3	9.34
Fondo scavo	-7.5	8.72
Fondo scavo	-7.7	8.11
Fondo scavo	-7.9	7.53
Fondo scavo	-8.1	6.96
Fondo scavo	-8.3	6.43
Fondo scavo	-8.5	5.91
Fondo scavo	-8.7	5.42
Fondo scavo	-8.9	4.96
Fondo scavo	-9.1	4.51
Fondo scavo	-9.3	4.1
Fondo scavo	-9.5	3.7
Fondo scavo	-9.7	3.33
Fondo scavo	-9.9	2.98
Fondo scavo	-10.1	2.65
Fondo scavo	-10.3	2.35
Fondo scavo	-10.5	2.07
Fondo scavo	-10.7	1.8
Fondo scavo	-10.9	1.56
Fondo scavo	-11.1	1.33
Fondo scavo	-11.3	1.12
Fondo scavo	-11.5	0.93
Fondo scavo	-11.7	0.76
Fondo scavo	-11.9	0.59
Fondo scavo	-12.1	0.45
Fondo scavo	-12.3	0.31
Fondo scavo	-12.5	0.18
Fondo scavo	-12.7	0.07

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Fondo scavo	-12.9	-0.04
Fondo scavo	-13.1	-0.14
Fondo scavo	-13.3	-0.23
Fondo scavo	-13.5	-0.31
Fondo scavo	-13.7	-0.39
Fondo scavo	-13.9	-0.47
Fondo scavo	-14.1	-0.54
Fondo scavo	-14.3	-0.6
Fondo scavo	-14.5	-0.67
Fondo scavo	-14.7	-0.73
Fondo scavo	-14.9	-0.79
Fondo scavo	-15.1	-0.85
Fondo scavo	-15.3	-0.91
Fondo scavo	-15.5	-0.96
Fondo scavo	-15.7	-1.02
Fondo scavo	-15.9	-1.08
Fondo scavo	-16	-1.11

## Inviluppi Spostamento Nominal

### Risultati Paratia

**Tabella Risultati Paratia Nominal - Stage: Stage 1**

Design Assumption: Nominal Risultati Paratia	Muro: LEFT	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1		0.5	0	-41.61
Stage 1		0.3	-8.32	-41.61
Stage 1		0.1	-16.87	-42.73
Stage 1		-0.1	-25.72	-44.25
Stage 1		-0.3	-35.09	-46.87
Stage 1		-0.5	-45.27	-50.9
Stage 1		-0.7	-56.57	-56.47
Stage 1		-0.9	-69.29	-63.59
Stage 1		-1.1	-83.74	-72.25
Stage 1		-1.3	-100.22	-82.42
Stage 1		-1.5	-119.06	-94.22
Stage 1		-1.7	-140.77	-108.52
Stage 1		-1.9	-165.83	-125.3
Stage 1		-2.1	-193.26	-137.15
Stage 1		-2.3	-215.87	-113.04
Stage 1		-2.5	-233.94	-90.35
Stage 1		-2.7	-247.75	-69.07
Stage 1		-2.9	-257.6	-49.24
Stage 1		-3.1	-263.75	-30.75
Stage 1		-3.3	-266.45	-13.5
Stage 1		-3.5	-265.92	2.62
Stage 1		-3.7	-262.38	17.71
Stage 1		-3.9	-256.02	31.82
Stage 1		-4.1	-247.02	44.98
Stage 1		-4.3	-235.96	55.32
Stage 1		-4.5	-223.33	63.13
Stage 1		-4.7	-209.59	68.72
Stage 1		-4.9	-195.12	72.36
Stage 1		-5.1	-180.22	74.47
Stage 1		-5.3	-165.15	75.37
Stage 1		-5.5	-150.13	75.1
Stage 1		-5.7	-135.38	73.76
Stage 1		-5.9	-121.07	71.55
Stage 1		-6.1	-107.34	68.64
Stage 1		-6.3	-94.31	65.17
Stage 1		-6.5	-82.04	61.32
Stage 1		-6.7	-70.59	57.23
Stage 1		-6.9	-59.99	53
Stage 1		-7.1	-50.26	48.7
Stage 1		-7.3	-41.37	44.41
Stage 1		-7.5	-33.34	40.18
Stage 1		-7.7	-26.12	36.07
Stage 1		-7.9	-19.7	32.11
Stage 1		-8.1	-14.03	28.34
Stage 1		-8.3	-9.08	24.77
Stage 1		-8.5	-4.79	21.43
Stage 1		-8.7	-1.13	18.33
Stage 1		-8.9	1.96	15.46
Stage 1		-9.1	4.53	12.84
Stage 1		-9.3	6.62	10.45
Stage 1		-9.5	8.28	8.3
Stage 1		-9.7	9.56	6.38
Stage 1		-9.9	10.49	4.67
Stage 1		-10.1	11.13	3.17
Stage 1		-10.3	11.5	1.87
Stage 1		-10.5	11.65	0.74
Stage 1		-10.7	11.61	-0.21
Stage 1		-10.9	11.4	-1.02
Stage 1		-11.1	11.07	-1.68
Stage 1		-11.3	10.63	-2.21
Stage 1		-11.5	10.1	-2.63

Design Assumption: Nominal Risultati Paratia		Muro: LEFT	
Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-11.7	9.51	-2.95
Stage 1	-11.9	8.87	-3.18
Stage 1	-12.1	8.21	-3.33
Stage 1	-12.3	7.53	-3.41
Stage 1	-12.5	6.84	-3.45
Stage 1	-12.7	6.15	-3.43
Stage 1	-12.9	5.48	-3.36
Stage 1	-13.1	4.83	-3.25
Stage 1	-13.3	4.21	-3.11
Stage 1	-13.5	3.62	-2.94
Stage 1	-13.7	3.07	-2.75
Stage 1	-13.9	2.57	-2.54
Stage 1	-14.1	2.1	-2.32
Stage 1	-14.3	1.68	-2.1
Stage 1	-14.5	1.31	-1.87
Stage 1	-14.7	0.98	-1.63
Stage 1	-14.9	0.7	-1.4
Stage 1	-15.1	0.47	-1.16
Stage 1	-15.3	0.28	-0.93
Stage 1	-15.5	0.14	-0.69
Stage 1	-15.7	0.05	-0.46
Stage 1	-15.9	0.01	-0.23
Stage 1	-16	0	-0.06

## Tabella Risultati Paratia Nominal - Stage: Stage 2

Design Assumption: Nominal Risultati Paratia	Z (m)	Muro: LEFT
Stage		Momento (kN*m/m) Taglio (kN/m)
Stage 2	0.5	0 -46.54
Stage 2	0.3	-9.31 -46.54
Stage 2	0.1	-21.2 -59.48
Stage 2	-0.1	-35.98 -73.86
Stage 2	-0.3	-53.91 -89.69
Stage 2	-0.5	-75.31 -106.97
Stage 2	-0.7	-100.45 -125.71
Stage 2	-0.9	-129.63 -145.89
Stage 2	-1.1	-163.13 -167.52
Stage 2	-1.3	-201.25 -190.6
Stage 2	-1.5	-244.28 -215.13
Stage 2	-1.7	-292.5 -241.11
Stage 2	-1.9	-346.21 -268.54
Stage 2	-2.1	-404.22 -290.05
Stage 2	-2.3	-462.23 -290.05
Stage 2	-2.5	-516.44 -271.07
Stage 2	-2.7	-566.3 -249.3
Stage 2	-2.9	-611.28 -224.87
Stage 2	-3.1	-650.83 -197.79
Stage 2	-3.3	-684.45 -168.07
Stage 2	-3.5	-711.59 -135.71
Stage 2	-3.7	-731.73 -100.72
Stage 2	-3.9	-744.61 -64.39
Stage 2	-4.1	-750.81 -31.01
Stage 2	-4.3	-750.93 -0.56
Stage 2	-4.5	-745.5 27.15
Stage 2	-4.7	-735.02 52.36
Stage 2	-4.9	-719.97 75.28
Stage 2	-5.1	-700.75 96.09
Stage 2	-5.3	-677.74 115.02
Stage 2	-5.5	-651.3 132.25
Stage 2	-5.7	-621.7 147.96
Stage 2	-5.9	-589.3 162
Stage 2	-6.1	-554.89 172.08
Stage 2	-6.3	-519.16 178.65
Stage 2	-6.5	-482.67 182.41
Stage 2	-6.7	-445.92 183.8
Stage 2	-6.9	-409.37 182.72
Stage 2	-7.1	-373.46 179.58
Stage 2	-7.3	-338.52 174.69
Stage 2	-7.5	-304.84 168.38
Stage 2	-7.7	-272.66 160.92
Stage 2	-7.9	-242.13 152.66
Stage 2	-8.1	-213.36 143.85
Stage 2	-8.3	-186.43 134.66
Stage 2	-8.5	-161.37 125.27
Stage 2	-8.7	-138.21 115.79
Stage 2	-8.9	-116.94 106.37
Stage 2	-9.1	-97.52 97.11
Stage 2	-9.3	-79.9 88.09
Stage 2	-9.5	-64.02 79.38
Stage 2	-9.7	-49.82 71.02
Stage 2	-9.9	-37.21 63.05
Stage 2	-10.1	-26.11 55.51
Stage 2	-10.3	-16.42 48.41
Stage 2	-10.5	-8.07 41.78
Stage 2	-10.7	-0.95 35.61
Stage 2	-10.9	5.03 29.9
Stage 2	-11.1	9.96 24.66
Stage 2	-11.3	13.94 19.86
Stage 2	-11.5	17.04 15.51
Stage 2	-11.7	19.35 11.58
Stage 2	-11.9	20.97 8.06
Stage 2	-12.1	21.95 4.93
Stage 2	-12.3	22.38 2.16
Stage 2	-12.5	22.33 -0.25
Stage 2	-12.7	21.87 -2.34

Design Assumption: Nominal Risultati Paratia		Muro: LEFT	
Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-12.9	21.04	-4.12
Stage 2	-13.1	19.92	-5.61
Stage 2	-13.3	18.56	-6.82
Stage 2	-13.5	17	-7.76
Stage 2	-13.7	15.31	-8.46
Stage 2	-13.9	13.53	-8.93
Stage 2	-14.1	11.69	-9.17
Stage 2	-14.3	9.85	-9.23
Stage 2	-14.5	8.04	-9.04
Stage 2	-14.7	6.32	-8.62
Stage 2	-14.9	4.72	-7.98
Stage 2	-15.1	3.29	-7.14
Stage 2	-15.3	2.07	-6.1
Stage 2	-15.5	1.1	-4.86
Stage 2	-15.7	0.41	-3.44
Stage 2	-15.9	0.05	-1.83
Stage 2	-16	0	-0.47

## Tabella Risultati Paratia Nominal - Stage: Tirante 1

Design Assumption: Nominal Risultati Paratia	Z (m)	Muro: LEFT
Stage		Momento (kN*m/m) Taglio (kN/m)
Tirante 1	0.5	0 -47.61
Tirante 1	0.3	-9.52 -47.61
Tirante 1	0.1	-22.22 -63.5
Tirante 1	-0.1	-38.42 -81
Tirante 1	-0.3	-58.38 -99.81
Tirante 1	-0.5	-82.37 -119.92
Tirante 1	-0.7	-110.63 -141.33
Tirante 1	-0.9	-143.44 -164.05
Tirante 1	-1.1	-181.06 -188.07
Tirante 1	-1.3	-223.74 -213.4
Tirante 1	-1.5	-246.74 -115.02
Tirante 1	-1.7	-275.33 -142.95
Tirante 1	-1.9	-309.76 -172.17
Tirante 1	-2.1	-348.83 -195.32
Tirante 1	-2.3	-389.8 -204.87
Tirante 1	-2.5	-430.28 -202.39
Tirante 1	-2.7	-469.44 -195.83
Tirante 1	-2.9	-506.51 -185.33
Tirante 1	-3.1	-540.62 -170.57
Tirante 1	-3.3	-570.95 -151.65
Tirante 1	-3.5	-596.69 -128.66
Tirante 1	-3.7	-617.03 -101.72
Tirante 1	-3.9	-631.47 -72.22
Tirante 1	-4.1	-640.38 -44.54
Tirante 1	-4.3	-644.13 -18.77
Tirante 1	-4.5	-643.09 5.21
Tirante 1	-4.7	-637.59 27.51
Tirante 1	-4.9	-627.94 48.25
Tirante 1	-5.1	-614.43 67.57
Tirante 1	-5.3	-597.31 85.57
Tirante 1	-5.5	-576.84 102.39
Tirante 1	-5.7	-553.22 118.1
Tirante 1	-5.9	-526.72 132.47
Tirante 1	-6.1	-498.1 143.13
Tirante 1	-6.3	-468 150.5
Tirante 1	-6.5	-436.95 155.24
Tirante 1	-6.7	-405.4 157.76
Tirante 1	-6.9	-373.77 158.12
Tirante 1	-7.1	-342.47 156.5
Tirante 1	-7.3	-311.84 153.19
Tirante 1	-7.5	-282.14 148.48
Tirante 1	-7.7	-253.62 142.62
Tirante 1	-7.9	-226.42 135.96
Tirante 1	-8.1	-200.68 128.7
Tirante 1	-8.3	-176.48 121.02
Tirante 1	-8.5	-153.86 113.08
Tirante 1	-8.7	-132.87 104.98
Tirante 1	-8.9	-113.49 96.87
Tirante 1	-9.1	-95.72 88.84
Tirante 1	-9.3	-79.53 80.97
Tirante 1	-9.5	-64.87 73.32
Tirante 1	-9.7	-51.68 65.94
Tirante 1	-9.9	-39.9 58.87
Tirante 1	-10.1	-29.47 52.15
Tirante 1	-10.3	-20.32 45.79
Tirante 1	-10.5	-12.35 39.82
Tirante 1	-10.7	-5.51 34.24
Tirante 1	-10.9	0.3 29.05
Tirante 1	-11.1	5.16 24.26
Tirante 1	-11.3	9.13 19.87
Tirante 1	-11.5	12.3 15.85
Tirante 1	-11.7	14.74 12.21
Tirante 1	-11.9	16.53 8.92
Tirante 1	-12.1	17.72 5.99
Tirante 1	-12.3	18.4 3.38
Tirante 1	-12.5	18.61 1.08
Tirante 1	-12.7	18.43 -0.93

Design Assumption: Nominal Risultati Paratia		Muro: LEFT	
Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Tirante 1	-12.9	17.9	-2.66
Tirante 1	-13.1	17.07	-4.11
Tirante 1	-13.3	16.01	-5.32
Tirante 1	-13.5	14.75	-6.28
Tirante 1	-13.7	13.35	-7.01
Tirante 1	-13.9	11.85	-7.52
Tirante 1	-14.1	10.28	-7.82
Tirante 1	-14.3	8.69	-7.95
Tirante 1	-14.5	7.12	-7.86
Tirante 1	-14.7	5.61	-7.55
Tirante 1	-14.9	4.21	-7.03
Tirante 1	-15.1	2.94	-6.32
Tirante 1	-15.3	1.86	-5.42
Tirante 1	-15.5	0.99	-4.35
Tirante 1	-15.7	0.37	-3.08
Tirante 1	-15.9	0.04	-1.64
Tirante 1	-16	0	-0.43

## Tabella Risultati Paratia Nominal - Stage: Stage 4

Design Assumption: Nominal Risultati Paratia	Z (m)	Muro: LEFT
Stage		Momento (kN*m/m) Taglio (kN/m)
Stage 4	0.5	0 -46.54
Stage 4	0.3	-9.31 -46.54
Stage 4	0.1	-21.2 -59.48
Stage 4	-0.1	-35.98 -73.86
Stage 4	-0.3	-53.91 -89.69
Stage 4	-0.5	-75.31 -106.97
Stage 4	-0.7	-100.45 -125.71
Stage 4	-0.9	-129.63 -145.89
Stage 4	-1.1	-163.13 -167.52
Stage 4	-1.3	-201.25 -190.6
Stage 4	-1.5	-207.95 -33.51
Stage 4	-1.7	-219.85 -59.49
Stage 4	-1.9	-237.24 -86.92
Stage 4	-2.1	-258.92 -108.43
Stage 4	-2.3	-280.61 -108.43
Stage 4	-2.5	-302.29 -108.43
Stage 4	-2.7	-324.01 -108.58
Stage 4	-2.9	-345.8 -108.97
Stage 4	-3.1	-367.72 -109.58
Stage 4	-3.3	-389.81 -110.44
Stage 4	-3.5	-412.12 -111.54
Stage 4	-3.7	-434.69 -112.88
Stage 4	-3.9	-457.59 -114.48
Stage 4	-4.1	-480.85 -116.33
Stage 4	-4.3	-504.54 -118.45
Stage 4	-4.5	-528.71 -120.82
Stage 4	-4.7	-553.4 -123.46
Stage 4	-4.9	-578.67 -126.36
Stage 4	-5.1	-604.58 -129.53
Stage 4	-5.3	-631.17 -132.98
Stage 4	-5.5	-658.51 -136.69
Stage 4	-5.7	-686.7 -140.92
Stage 4	-5.9	-715.83 -145.66
Stage 4	-6.1	-746.01 -150.91
Stage 4	-6.3	-777.35 -156.68
Stage 4	-6.5	-809.94 -162.97
Stage 4	-6.7	-839.6 -148.29
Stage 4	-6.9	-866.06 -132.34
Stage 4	-7.1	-889.09 -115.11
Stage 4	-7.3	-908.41 -96.62
Stage 4	-7.5	-923.78 -76.87
Stage 4	-7.7	-934.95 -55.84
Stage 4	-7.9	-941.66 -33.55
Stage 4	-8.1	-943.66 -10
Stage 4	-8.3	-940.9 13.84
Stage 4	-8.5	-933.66 36.16
Stage 4	-8.7	-922.25 57.08
Stage 4	-8.9	-906.9 76.72
Stage 4	-9.1	-887.87 95.17
Stage 4	-9.3	-865.36 112.54
Stage 4	-9.5	-839.58 128.93
Stage 4	-9.7	-810.69 144.43
Stage 4	-9.9	-778.93 158.81
Stage 4	-10.1	-744.84 170.43
Stage 4	-10.3	-708.94 179.51
Stage 4	-10.5	-671.69 186.28
Stage 4	-10.7	-633.49 190.97
Stage 4	-10.9	-594.74 193.78
Stage 4	-11.1	-555.76 194.88
Stage 4	-11.3	-516.87 194.47
Stage 4	-11.5	-478.33 192.7
Stage 4	-11.7	-440.41 189.59
Stage 4	-11.9	-403.37 185.22
Stage 4	-12.1	-367.37 180
Stage 4	-12.3	-332.56 174.02
Stage 4	-12.5	-299.09 167.38
Stage 4	-12.7	-267.05 160.17

Design Assumption: Nominal Risultati Paratia		Muro: LEFT	
Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-12.9	-236.56	152.47
Stage 4	-13.1	-207.69	144.35
Stage 4	-13.3	-180.52	135.82
Stage 4	-13.5	-155.13	126.96
Stage 4	-13.7	-131.56	117.84
Stage 4	-13.9	-109.86	108.52
Stage 4	-14.1	-90.06	99.01
Stage 4	-14.3	-72.19	89.35
Stage 4	-14.5	-56.27	79.6
Stage 4	-14.7	-42.31	69.79
Stage 4	-14.9	-30.32	59.93
Stage 4	-15.1	-20.32	50.02
Stage 4	-15.3	-12.3	40.08
Stage 4	-15.5	-6.28	30.1
Stage 4	-15.7	-2.26	20.1
Stage 4	-15.9	-0.25	10.06
Stage 4	-16	0	2.52

## Tabella Risultati Paratia Nominal - Stage: Tirante 2

Design Assumption: Nominal Risultati Paratia	Z (m)	Muro: LEFT
Stage		Momento (kN*m/m) Taglio (kN/m)
Tirante 2	0.5	0 -46.65
Tirante 2	0.3	-9.33 -46.65
Tirante 2	0.1	-21.3 -59.82
Tirante 2	-0.1	-36.19 -74.45
Tirante 2	-0.3	-54.29 -90.54
Tirante 2	-0.5	-75.91 -108.09
Tirante 2	-0.7	-101.33 -127.1
Tirante 2	-0.9	-130.85 -147.57
Tirante 2	-1.1	-164.75 -169.51
Tirante 2	-1.3	-203.33 -192.9
Tirante 2	-1.5	-210.7 -36.85
Tirante 2	-1.7	-223.33 -63.16
Tirante 2	-1.9	-241.52 -90.94
Tirante 2	-2.1	-264.08 -112.8
Tirante 2	-2.3	-287.17 -115.48
Tirante 2	-2.5	-310.82 -118.23
Tirante 2	-2.7	-335.06 -121.22
Tirante 2	-2.9	-359.96 -124.5
Tirante 2	-3.1	-385.58 -128.09
Tirante 2	-3.3	-411.98 -131.98
Tirante 2	-3.5	-439.22 -136.19
Tirante 2	-3.7	-467.35 -140.7
Tirante 2	-3.9	-496.46 -145.51
Tirante 2	-4.1	-526.58 -150.63
Tirante 2	-4.3	-557.79 -156.05
Tirante 2	-4.5	-590.14 -161.75
Tirante 2	-4.7	-623.69 -167.74
Tirante 2	-4.9	-658.49 -174
Tirante 2	-5.1	-694.6 -180.53
Tirante 2	-5.3	-732.06 -187.3
Tirante 2	-5.5	-745.92 -69.29
Tirante 2	-5.7	-761.26 -76.74
Tirante 2	-5.9	-778.18 -84.61
Tirante 2	-6.1	-796.77 -92.91
Tirante 2	-6.3	-817.09 -101.61
Tirante 2	-6.5	-839.23 -110.7
Tirante 2	-6.7	-859.52 -101.44
Tirante 2	-6.9	-877.65 -90.67
Tirante 2	-7.1	-893.33 -78.38
Tirante 2	-7.3	-906.24 -64.59
Tirante 2	-7.5	-916.1 -49.27
Tirante 2	-7.7	-922.59 -32.45
Tirante 2	-7.9	-925.41 -14.11
Tirante 2	-8.1	-924.26 5.74
Tirante 2	-8.3	-918.9 26.82
Tirante 2	-8.5	-909.58 46.61
Tirante 2	-8.7	-896.53 65.23
Tirante 2	-8.9	-879.98 82.76
Tirante 2	-9.1	-860.11 99.32
Tirante 2	-9.3	-837.12 114.99
Tirante 2	-9.5	-811.15 129.85
Tirante 2	-9.7	-782.35 144
Tirante 2	-9.9	-750.9 157.2
Tirante 2	-10.1	-717.35 167.78
Tirante 2	-10.3	-682.16 175.96
Tirante 2	-10.5	-645.76 181.98
Tirante 2	-10.7	-608.56 186.03
Tirante 2	-10.9	-570.9 188.3
Tirante 2	-11.1	-533.1 188.98
Tirante 2	-11.3	-495.45 188.24
Tirante 2	-11.5	-458.21 186.23
Tirante 2	-11.7	-421.61 182.95
Tirante 2	-11.9	-385.92 178.49
Tirante 2	-12.1	-351.27 173.25
Tirante 2	-12.3	-317.81 167.3
Tirante 2	-12.5	-285.66 160.75
Tirante 2	-12.7	-254.92 153.67

Design Assumption: Nominal Risultati Paratia		Muro: LEFT	
Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Tirante 2	-12.9	-225.69	146.15
Tirante 2	-13.1	-198.04	138.24
Tirante 2	-13.3	-172.05	129.97
Tirante 2	-13.5	-147.77	121.38
Tirante 2	-13.7	-125.26	112.58
Tirante 2	-13.9	-104.54	103.58
Tirante 2	-14.1	-85.66	94.44
Tirante 2	-14.3	-68.62	85.16
Tirante 2	-14.5	-53.46	75.81
Tirante 2	-14.7	-40.18	66.41
Tirante 2	-14.9	-28.78	56.98
Tirante 2	-15.1	-19.28	47.53
Tirante 2	-15.3	-11.67	38.05
Tirante 2	-15.5	-5.96	28.56
Tirante 2	-15.7	-2.15	19.05
Tirante 2	-15.9	-0.24	9.53
Tirante 2	-16	0	2.38

## Tabella Risultati Paratia Nominal - Stage: Fondo scavo

Design Assumption: Nominal Risultati Paratia	Z (m)	Muro: LEFT	
Stage		Momento (kN*m/m)	Taglio (kN/m)
Fondo scavo	0.5	0	-46.71
Fondo scavo	0.3	-9.34	-46.71
Fondo scavo	0.1	-21.33	-59.95
Fondo scavo	-0.1	-36.25	-74.6
Fondo scavo	-0.3	-54.39	-90.67
Fondo scavo	-0.5	-76.02	-108.15
Fondo scavo	-0.7	-101.43	-127.05
Fondo scavo	-0.9	-130.9	-147.36
Fondo scavo	-1.1	-164.72	-169.09
Fondo scavo	-1.3	-203.16	-192.23
Fondo scavo	-1.5	-210.18	-35.08
Fondo scavo	-1.7	-222.39	-61.05
Fondo scavo	-1.9	-240.08	-88.44
Fondo scavo	-2.1	-262.05	-109.87
Fondo scavo	-2.3	-284.02	-109.87
Fondo scavo	-2.5	-305.99	-109.87
Fondo scavo	-2.7	-327.98	-109.95
Fondo scavo	-2.9	-350.03	-110.25
Fondo scavo	-3.1	-372.19	-110.79
Fondo scavo	-3.3	-394.51	-111.57
Fondo scavo	-3.5	-417.03	-112.6
Fondo scavo	-3.7	-439.8	-113.87
Fondo scavo	-3.9	-462.88	-115.39
Fondo scavo	-4.1	-486.31	-117.17
Fondo scavo	-4.3	-510.15	-119.21
Fondo scavo	-4.5	-534.45	-121.5
Fondo scavo	-4.7	-559.27	-124.07
Fondo scavo	-4.9	-584.65	-126.9
Fondo scavo	-5.1	-610.64	-129.99
Fondo scavo	-5.3	-637.32	-133.36
Fondo scavo	-5.5	-638.88	-7.8
Fondo scavo	-5.7	-641.22	-11.71
Fondo scavo	-5.9	-644.4	-15.9
Fondo scavo	-6.1	-648.47	-20.37
Fondo scavo	-6.3	-653.49	-25.11
Fondo scavo	-6.5	-659.52	-30.13
Fondo scavo	-6.7	-666.61	-35.44
Fondo scavo	-6.9	-674.81	-41.03
Fondo scavo	-7.1	-684.24	-47.13
Fondo scavo	-7.3	-694.99	-53.76
Fondo scavo	-7.5	-707.17	-60.9
Fondo scavo	-7.7	-720.88	-68.56
Fondo scavo	-7.9	-736.23	-76.75
Fondo scavo	-8.1	-749.17	-64.7
Fondo scavo	-8.3	-759.45	-51.4
Fondo scavo	-8.5	-766.82	-36.83
Fondo scavo	-8.7	-771.02	-21.01
Fondo scavo	-8.9	-771.81	-3.93
Fondo scavo	-9.1	-768.93	14.4
Fondo scavo	-9.3	-762.13	33.97
Fondo scavo	-9.5	-751.64	52.47
Fondo scavo	-9.7	-737.64	69.99
Fondo scavo	-9.9	-720.32	86.61
Fondo scavo	-10.1	-699.84	102.41
Fondo scavo	-10.3	-676.34	117.45
Fondo scavo	-10.5	-650.11	131.19
Fondo scavo	-10.7	-621.61	142.46
Fondo scavo	-10.9	-591.32	151.46
Fondo scavo	-11.1	-559.65	158.37
Fondo scavo	-11.3	-526.98	163.37
Fondo scavo	-11.5	-493.65	166.63
Fondo scavo	-11.7	-459.99	168.28
Fondo scavo	-11.9	-426.3	168.49
Fondo scavo	-12.1	-392.77	167.62
Fondo scavo	-12.3	-359.62	165.77
Fondo scavo	-12.5	-327.01	163.02
Fondo scavo	-12.7	-295.14	159.36

Design Assumption: Nominal Risultati Paratia		Muro: LEFT	
Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Fondo scavo	-12.9	-264.19	154.78
Fondo scavo	-13.1	-234.32	149.34
Fondo scavo	-13.3	-205.7	143.1
Fondo scavo	-13.5	-178.48	136.1
Fondo scavo	-13.7	-152.79	128.44
Fondo scavo	-13.9	-128.75	120.19
Fondo scavo	-14.1	-106.48	111.36
Fondo scavo	-14.3	-86.08	102
Fondo scavo	-14.5	-67.65	92.16
Fondo scavo	-14.7	-51.27	81.89
Fondo scavo	-14.9	-37.03	71.19
Fondo scavo	-15.1	-25.01	60.12
Fondo scavo	-15.3	-15.26	48.73
Fondo scavo	-15.5	-7.86	37.03
Fondo scavo	-15.7	-2.86	25.01
Fondo scavo	-15.9	-0.32	12.68
Fondo scavo	-16	0	3.2

## **Inviluppi Risultati Paratia Nominal**

## Risultati Elementi strutturali

Design Assumption: Nominal Sollecitazione Tieback	
Stage	Forza (kN/m)
Tirante 1	125
Stage 4	181.6211
Tirante 2	180.9018
Fondo scavo	181.7015

Design Assumption: Nominal Sollecitazione Tieback	
Stage	Forza (kN/m)
Tirante 2	125
Fondo scavo	129.2056

## Riepilogo spinte

Design Assumption:		Tipo Risultato: Riepilogo spinte		Muro:	LEFT	Lato	LEFT	
Nominal	Stage	Vera effettiva (kN/m)	Pressione neutra (kN/m)	Vera Totale (kN/m)	Min ammissibile (kN/m)	Max ammissibile (kN/m)	Percentuale di resistenza massima	Vera / Attiva
Stage 1		1109.2	781.2	1890.5	338.9	76872.2	1.44%	3.27
Stage 2		1066.4	781.2	1847.6	338.9	76872.2	1.39%	3.15
Tirante 1		1153.9	781.2	1935.1	338.9	76872.2	1.5%	3.4
Stage 4		899.1	544.4	1443.5	433.1	77780.1	1.16%	2.08
Tirante 2		997.7	544.4	1542.1	428	77725.1	1.28%	2.33
Fondo scavo		885.4	407.9	1293.3	479.3	78216.6	1.13%	1.85

Design Assumption: Nominal		Tipo Risultato: Riepilogo spinte		Muro:	LEFT	Lato	RIGHT	
Nominal	Stage	Vera effettiva (kN/m)	Pressione neutra (kN/m)	Vera Totale (kN/m)	Min ammissibile (kN/m)	Max ammissibile (kN/m)	Percentuale di resistenza massima	Vera / Attiva
Stage 1		1399.3	781.2	2180.6	286.6	76216.9	1.84%	4.88
Stage 2		1356.4	781.2	2137.7	85.6	5254.8	25.81%	15.85
Tirante 1		1318.9	781.2	2100.2	85.6	5254.8	25.1%	15.41
Stage 4		1058.4	493.5	1552	2.7	2556.5	41.4%	392
Tirante 2		1032.7	493.5	1526.3	2.3	2521.9	40.95%	449
Fondo scavo		908.3	364	1272.3	0	1947.9	46.63%	+Infinito

## **Allegati**

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

```
* PARATIE ANALYSIS FOR DESIGN SECTION:Base Design Section USING ASSUMPTION: Nominal
* Time:giovedi 25 giugno 2020 16:39:30
* 1: Defining general settings
UNIT m kN
TITLE New Project
DELTA 0.2
option param itemax 40

* 2: Defining wall(s)
WALL LeftWall_29 0 -16 0.5 1

* 3: Defining surfaces for wall(s)
SOIL 0_L LeftWall_29 -16 0.5 1 0
SOIL 0_R LeftWall_29 -16 0.5 2 180

* 4: Defining soil layers
*
* Soil Profile (FRANA_334_8_L_0)
*
LDATA FRANA_334_8_L_0 0.5 LeftWall_29
ATREST 0.758 1 1
WEIGHT 20 10 10
PERMEABILITY 1E-05
RESISTANCE 1E+04 14
YOUNG 2E+04 3.2E+04
ENDL
*
* Soil Profile (BNA2_(2)_335_337_L_0)
*
LDATA BNA2_(2)_335_337_L_0 -2 LeftWall_29
ATREST 0.546 1 1
WEIGHT 20 10 10
PERMEABILITY 1E-05
RESISTANCE 25 27
YOUNG 1.15E+05 1.84E+05
ENDL

* 5: Defining structural materials
* Steel material: 2753 Name=Fe360 E=206000200 kPa
MATERIAL Fe360_2753 2.06E+08
* Concrete material: 101 Name=C25/30 E=31475800 kPa
MATERIAL C2530_101 3.148E+07
* Rebar material: 110 Name=acciaio armonico E=200100000 kPa
MATERIAL acciaioarmonico_110 2.001E+08

* 6: Defining structural elements
* 6.1: Beams
BEAM WallElement_30 LeftWall_29 -16 0.5 C2530_101 0.7888 00 00

* 6.2: Supports
WIRE Tieback_341 LeftWall_29 -1.3 acciaioarmonico_110 1.007E-05 125 0 0 0
WIRE Tieback_342 LeftWall_29 -5.3 acciaioarmonico_110 1.363E-05 125 0 0 0

* 6.3: Strips
STRIP LeftWall_29 1 6 31 28.47 0.5 124 45
STRIP LeftWall_29 1 6 0.5 2.03 0.5 49.5 45

* 7: Defining Steps
STEP Stage1_28
CHANGE FRANA_334_8_L_0 U-FRICT=14 LeftWall_29
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE FRANA_334_8_L_0 U-KA=0.61 LeftWall_29
CHANGE FRANA_334_8_L_0 U-KP=1.85 LeftWall_29
CHANGE FRANA_334_8_L_0 D-KA=0.61 LeftWall_29
CHANGE FRANA_334_8_L_0 D-KP=1.85 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 U-FRICT=27 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 U-KA=0.376 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 U-KP=3.601 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-KA=0.376 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-KP=3.601 LeftWall_29
CHANGE FRANA_334_8_L_0 U-COHE=1E+04 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 U-COHE=25 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 0.5
WATER -3.5 0 -16 0 0
```

```

ADD WallElement_30
DLOAD constant LeftWall_29 -2 145 0.5 54.4
LOAD constant LeftWall_29 0.5 1 40.8
ENDSTEP

STEP Stage2_344
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -2.3
WATER -3.5 0 -16 0 0
ENDSTEP

STEP Tirantel_1139
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -2.3
WATER -3.5 0 -16 0 0
ADD Tieback_341
ENDSTEP

STEP Stage4_1238
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -6.3
SURCHARGE 1 0.5 1 -6.3
WATER -5.3 1 -16 0 0
ENDSTEP

STEP Tirante2_1685
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -6.3
SURCHARGE 0 0 0 0
WATER -5.3 1 -16 0 0
ADD Tieback_342
ENDSTEP

STEP Fondoscavo_2741
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -7.7
WATER -6.7 1 -16 0 0
ENDSTEP

```

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

```

+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:39:30
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* PARATIE PLUS Non-Linear Spring Engine  

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* 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)  

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* RELEASE 2016 *Build date: Sept23, 2015*  

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JOB : NewProject.BaseDesignSection_25.Nominal_60
STARTING
ACCEPTED <FILE,GENW >
ACCEPTED <FILE,PLOTTER,BINARY >
ACCEPTED <SOLVE TOTAL_STRESS >
ACCEPTED <PARAM ITEMAX 40 >

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* WARNING : PORE PRESSURES ARE AUTOMATICALLY COMPUTED  

* BY THE PROGRAM.  

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PRELIMINARY OPERATIONS CPU TIME 0.00 [sec]

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020      16:39:30
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INPUT FILE HAS BEEN GENERATED BY WALGEN PROGRAM

New Project

NO. OF NODAL POINTS (NUMNP) .....	84
NO. OF COORDINATES (NCOORD) .....	2
NO. OF NODE DOFS (NDOF) .....	2
NO. OF EQUATIONS (NEQ) .....	168
NO. OF CONSTRAINTS CARDS (NVINC) .....	0
NO. OF ELEMENT GROUPS (NEG) .....	5
NO. OF SOLUTION STEPS (NSTE) .....	6
NO. OF ELEMENT SETS ATTACHED TO SLAVE NODES ...	0
NO. OF RECORD FROM WALGEN .....	102
NO. OF LONG NAMES (LASTNAME) .....	23
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.	

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|
| NewProject.BaseDesignSection_25.Nominal_60
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+-----+
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 102

1 : UNIT m kN
2 : TITLE New Project
3 : DELTA 0.2
4 : option param itemax 40
5 : WALL LeftWall_29 0 -16 0.5 1
6 : SOIL 0_L LeftWall_29 -16 0.5 1 0
7 : SOIL 0_R LeftWall_29 -16 0.5 2 180
8 : LDATA FRANA_334_8_L_0 0.5 LeftWall_29
9 : ATREST 0.758 1 1
10 : WEIGHT 20 10 10
11 : PERMEABILITY 1E-05
12 : RESISTANCE 1E+04 14
13 : YOUNG 2E+04 3.2E+04
14 : ENDL
15 : LDATA BNA2_(2)_335_337_L_0 -2 LeftWall_29
16 : ATREST 0.546 1 1
17 : WEIGHT 20 10 10
18 : PERMEABILITY 1E-05
19 : RESISTANCE 25 27
20 : YOUNG 1.15E+05 1.84E+05
21 : ENDL
22 : MATERIAL Fe360_2753 2.06E+08
23 : MATERIAL C2530_101 3.148E+07
24 : MATERIAL acciaioarmonico_110 2.001E+08
25 : BEAM WallElement_30 LeftWall_29 -16 0.5 C2530_101 0.7888 00 00
26 : WIRE Tieback_341 LeftWall_29 -1.3 acciaioarmonico_110 1.007E-05 125 0 0 0
27 : WIRE Tieback_342 LeftWall_29 -5.3 acciaioarmonico_110 1.363E-05 125 0 0 0
28 : STRIP LeftWall_29 1 6 31 28.47 0.5 124 45
29 : STRIP LeftWall_29 1 6 0.5 2.03 0.5 49.5 45
30 : STEP Stage1_28
31 : CHANGE FRANA_334_8_L_0 U-FRICT=14 LeftWall_29
32 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
33 : CHANGE FRANA_334_8_L_0 U-KA=0.61 LeftWall_29
34 : CHANGE FRANA_334_8_L_0 U-KP=1.85 LeftWall_29
35 : CHANGE FRANA_334_8_L_0 D-KA=0.61 LeftWall_29
36 : CHANGE FRANA_334_8_L_0 D-KP=1.85 LeftWall_29
37 : CHANGE BNA2_(2)_335_337_L_0 U-FRICT=27 LeftWall_29
38 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
39 : CHANGE BNA2_(2)_335_337_L_0 U-KA=0.376 LeftWall_29
40 : CHANGE BNA2_(2)_335_337_L_0 U-KP=3.601 LeftWall_29
41 : CHANGE BNA2_(2)_335_337_L_0 D-KA=0.376 LeftWall_29
42 : CHANGE BNA2_(2)_335_337_L_0 D-KP=3.601 LeftWall_29
43 : CHANGE FRANA_334_8_L_0 U-COHE=1E+04 LeftWall_29
44 : CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
45 : CHANGE BNA2_(2)_335_337_L_0 U-COHE=25 LeftWall_29
46 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
47 : SETWALL LeftWall_29
48 : GEOM 0.5 0.5
49 : WATER -3.5 0 -16 0 0
50 : ADD WallElement_30
51 : DLOAD constant LeftWall_29 -2 145 0.5 54.4
52 : LOAD constant LeftWall_29 0.5 1 40.8
53 : ENDSTEP
54 : STEP Stage2_344
55 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
56 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
57 : CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
58 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
59 : SETWALL LeftWall_29
60 : GEOM 0.5 -2.3
61 : WATER -3.5 0 -16 0 0
62 : ENDSTEP
63 : STEP Tirante1_1139
64 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
65 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
66 : CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
67 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
68 : SETWALL LeftWall_29
69 : GEOM 0.5 -2.3
70 : WATER -3.5 0 -16 0 0
71 : ADD Tieback_341
72 : ENDSTEP
73 : STEP Stage4_1238
74 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
75 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
76 : CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
77 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
78 : SETWALL LeftWall_29
79 : GEOM 0.5 -6.3

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80 : SURCHARGE 1 0.5 1 -6.3
81 : WATER -5.3 1 -16 0 0
82 : ENDSTEP
83 : STEP Tirante2_1685
84 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
85 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
86 : CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
87 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
88 : SETWALL LeftWall_29
89 : GEOM 0.5 -6.3
90 : SURCHARGE 0 0 0 0
91 : WATER -5.3 1 -16 0 0
92 : ADD Tieback_342
93 : ENDSTEP
94 : STEP Fondoscavo_2741
95 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
96 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
97 : CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
98 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
99 : SETWALL LeftWall_29
100 : GEOM 0.5 -7.7
101 : WATER -6.7 1 -16 0 0
102 : ENDSTEP
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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
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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 / NODE	Y-COORD	Z-COORD /		
1	0.0000	0.50000	/	2 0.0000	0.30000	/	3 0.0000	0.10000	/	4 0.0000	-0.10000	/
5	0.0000	-0.30000	/	6 0.0000	-0.50000	/	7 0.0000	-0.70000	/	8 0.0000	-0.90000	/
9	0.0000	-1.1000	/	10 0.0000	-1.3000	/	11 0.0000	-1.5000	/	12 0.0000	-1.7000	/
13	0.0000	-1.9000	/	14 0.0000	-2.1000	/	15 0.0000	-2.3000	/	16 0.0000	-2.5000	/
17	0.0000	-2.7000	/	18 0.0000	-2.9000	/	19 0.0000	-3.1000	/	20 0.0000	-3.3000	/
21	0.0000	-3.5000	/	22 0.0000	-3.7000	/	23 0.0000	-3.9000	/	24 0.0000	-4.1000	/
25	0.0000	-4.3000	/	26 0.0000	-4.5000	/	27 0.0000	-4.7000	/	28 0.0000	-4.9000	/
29	0.0000	-5.1000	/	30 0.0000	-5.3000	/	31 0.0000	-5.5000	/	32 0.0000	-5.7000	/
33	0.0000	-5.9000	/	34 0.0000	-6.1000	/	35 0.0000	-6.3000	/	36 0.0000	-6.5000	/
37	0.0000	-6.7000	/	38 0.0000	-6.9000	/	39 0.0000	-7.1000	/	40 0.0000	-7.3000	/
41	0.0000	-7.5000	/	42 0.0000	-7.7000	/	43 0.0000	-7.9000	/	44 0.0000	-8.1000	/
45	0.0000	-8.3000	/	46 0.0000	-8.5000	/	47 0.0000	-8.7000	/	48 0.0000	-8.9000	/
49	0.0000	-9.1000	/	50 0.0000	-9.3000	/	51 0.0000	-9.5000	/	52 0.0000	-9.7000	/
53	0.0000	-9.9000	/	54 0.0000	-10.100	/	55 0.0000	-10.300	/	56 0.0000	-10.500	/
57	0.0000	-10.700	/	58 0.0000	-10.900	/	59 0.0000	-11.100	/	60 0.0000	-11.300	/
61	0.0000	-11.500	/	62 0.0000	-11.700	/	63 0.0000	-11.900	/	64 0.0000	-12.100	/
65	0.0000	-12.300	/	66 0.0000	-12.500	/	67 0.0000	-12.700	/	68 0.0000	-12.900	/
69	0.0000	-13.100	/	70 0.0000	-13.300	/	71 0.0000	-13.500	/	72 0.0000	-13.700	/
73	0.0000	-13.900	/	74 0.0000	-14.100	/	75 0.0000	-14.300	/	76 0.0000	-14.500	/
77	0.0000	-14.700	/	78 0.0000	-14.900	/	79 0.0000	-15.100	/	80 0.0000	-15.300	/
81	0.0000	-15.500	/	82 0.0000	-15.700	/	83 0.0000	-15.900	/	84 0.0000	-16.000	/



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	0.2000	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	0.2000	0.000	0.000	0.000	1.000
82	82	2	0.2000	0.000	0.000	0.000	1.000
83	83	2	0.1500	0.000	0.000	0.000	1.000
84	84	2	0.5000E-01	0.000	0.000	0.000	1.000



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	0.2000	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	0.2000	0.000	0.000	0.000	2.000
82	82	2	0.2000	0.000	0.000	0.000	2.000
83	83	2	0.1500	0.000	0.000	0.000	2.000
84	84	2	0.5000E-01	0.000	0.000	0.000	2.000

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:39:30
+-----+
ELEMENT GROUP NO. 3

WallElement_30      :
 2 83 0 1 0 0 0 0 0 0 0 0 0 0 1 0 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
 6 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 .....0.280300E-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
 6 1.000

element data

el na nb mat      erc1      erc2      thick
-----
 1 1 2 1 0.000 0.000 0.7888
 2 2 3 1 0.000 0.000 0.7888
 3 3 4 1 0.000 0.000 0.7888
 4 4 5 1 0.000 0.000 0.7888
 5 5 6 1 0.000 0.000 0.7888
 6 6 7 1 0.000 0.000 0.7888
 7 7 8 1 0.000 0.000 0.7888
 8 8 9 1 0.000 0.000 0.7888
 9 9 10 1 0.000 0.000 0.7888
10 10 11 1 0.000 0.000 0.7888
11 11 12 1 0.000 0.000 0.7888
12 12 13 1 0.000 0.000 0.7888
13 13 14 1 0.000 0.000 0.7888
14 14 15 1 0.000 0.000 0.7888
15 15 16 1 0.000 0.000 0.7888
16 16 17 1 0.000 0.000 0.7888
17 17 18 1 0.000 0.000 0.7888
18 18 19 1 0.000 0.000 0.7888
19 19 20 1 0.000 0.000 0.7888
20 20 21 1 0.000 0.000 0.7888
21 21 22 1 0.000 0.000 0.7888
22 22 23 1 0.000 0.000 0.7888
23 23 24 1 0.000 0.000 0.7888
24 24 25 1 0.000 0.000 0.7888
25 25 26 1 0.000 0.000 0.7888
26 26 27 1 0.000 0.000 0.7888
27 27 28 1 0.000 0.000 0.7888
28 28 29 1 0.000 0.000 0.7888
29 29 30 1 0.000 0.000 0.7888
30 30 31 1 0.000 0.000 0.7888
31 31 32 1 0.000 0.000 0.7888
32 32 33 1 0.000 0.000 0.7888
33 33 34 1 0.000 0.000 0.7888
34 34 35 1 0.000 0.000 0.7888
35 35 36 1 0.000 0.000 0.7888
36 36 37 1 0.000 0.000 0.7888
37 37 38 1 0.000 0.000 0.7888
38 38 39 1 0.000 0.000 0.7888
39 39 40 1 0.000 0.000 0.7888
40 40 41 1 0.000 0.000 0.7888
41 41 42 1 0.000 0.000 0.7888

```

42	42	43	1	0.000	0.000	0.7888
43	43	44	1	0.000	0.000	0.7888
44	44	45	1	0.000	0.000	0.7888
45	45	46	1	0.000	0.000	0.7888
46	46	47	1	0.000	0.000	0.7888
47	47	48	1	0.000	0.000	0.7888
48	48	49	1	0.000	0.000	0.7888
49	49	50	1	0.000	0.000	0.7888
50	50	51	1	0.000	0.000	0.7888
51	51	52	1	0.000	0.000	0.7888
52	52	53	1	0.000	0.000	0.7888
53	53	54	1	0.000	0.000	0.7888
54	54	55	1	0.000	0.000	0.7888
55	55	56	1	0.000	0.000	0.7888
56	56	57	1	0.000	0.000	0.7888
57	57	58	1	0.000	0.000	0.7888
58	58	59	1	0.000	0.000	0.7888
59	59	60	1	0.000	0.000	0.7888
60	60	61	1	0.000	0.000	0.7888
61	61	62	1	0.000	0.000	0.7888
62	62	63	1	0.000	0.000	0.7888
63	63	64	1	0.000	0.000	0.7888
64	64	65	1	0.000	0.000	0.7888
65	65	66	1	0.000	0.000	0.7888
66	66	67	1	0.000	0.000	0.7888
67	67	68	1	0.000	0.000	0.7888
68	68	69	1	0.000	0.000	0.7888
69	69	70	1	0.000	0.000	0.7888
70	70	71	1	0.000	0.000	0.7888
71	71	72	1	0.000	0.000	0.7888
72	72	73	1	0.000	0.000	0.7888
73	73	74	1	0.000	0.000	0.7888
74	74	75	1	0.000	0.000	0.7888
75	75	76	1	0.000	0.000	0.7888
76	76	77	1	0.000	0.000	0.7888
77	77	78	1	0.000	0.000	0.7888
78	78	79	1	0.000	0.000	0.7888
79	79	80	1	0.000	0.000	0.7888
80	80	81	1	0.000	0.000	0.7888
81	81	82	1	0.000	0.000	0.7888
82	82	83	1	0.000	0.000	0.7888
83	83	84	1	0.000	0.000	0.7888

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020      16:39:30
+-----+
ELEMENT GROUP NO. 4

Tieback_341          :
 6  1   0   1   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  active
 4  active
 5  active
 6  active

material set no.     1

prop( 1) angle      0.00000
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
 6  0.000      0.000

element data

el    n    mat      a/l      pinit      yieldc      yielddt
-----
 1  10     1  0.1007E-04 125.0      0.000      0.000

```

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020      16:39:30
+-----+
ELEMENT GROUP NO. 5

Tieback_342          :
 6  1   0   1   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  inactive
 5  active
 6  active

material set no.     1

prop( 1) angle      0.00000
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
 6  0.000      0.000

element data

el    n    mat      a/l      pinit      yieldc      yielddt
-----
 1  30     1  0.1363E-04 125.0      0.000      0.000

```

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+-----+  
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:39:30 |  
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```

NO. OF NODAL LOADS (NLOAD) ..... 1  
NO. OF LOAD CURVES (NLCUR) ..... 12  
MAXIMUM POINTS/LCURVE (NPTM) ..... 5

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:39:30
+-----+
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	
7.00000	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	
7.00000	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	
7.00000	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	
7.00000	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	
7.00000	0.0000E+00	

LOAD FUNCTION NUMBER = 6  
NUMBER OF TIME POINTS = 5

TIME	VALUE	FUNCTION
0.00000	0.0000E+00	
5.80000	0.0000E+00	
6.00000	0.1000E+01	
6.20000	0.0000E+00	
7.00000	0.0000E+00	

LOAD FUNCTION NUMBER = 7

NUMBER OF TIME POINTS = 4

TIME	VALUE	FUNCTION
0.00000	0.0000E+00	
0.80000	0.0000E+00	
1.00000	0.1000E+01	
7.00000	0.1000E+01	

LOAD FUNCTION NUMBER = 8  
NUMBER OF TIME POINTS = 4

TIME	VALUE	FUNCTION
0.00000	0.0000E+00	
1.80000	0.0000E+00	
2.00000	0.1000E+01	
7.00000	0.1000E+01	

LOAD FUNCTION NUMBER = 9  
NUMBER OF TIME POINTS = 4

TIME	VALUE	FUNCTION
0.00000	0.0000E+00	
2.80000	0.0000E+00	
3.00000	0.1000E+01	
7.00000	0.1000E+01	

LOAD FUNCTION NUMBER = 10  
NUMBER OF TIME POINTS = 4

TIME	VALUE	FUNCTION
0.00000	0.0000E+00	
3.80000	0.0000E+00	
4.00000	0.1000E+01	
7.00000	0.1000E+01	

LOAD FUNCTION NUMBER = 11  
NUMBER OF TIME POINTS = 4

TIME	VALUE	FUNCTION
0.00000	0.0000E+00	
4.80000	0.0000E+00	
5.00000	0.1000E+01	
7.00000	0.1000E+01	

LOAD FUNCTION NUMBER = 12  
NUMBER OF TIME POINTS = 4

TIME	VALUE	FUNCTION
0.00000	0.0000E+00	
5.80000	0.0000E+00	
6.00000	0.1000E+01	
7.00000	0.1000E+01	

CONCENTRATED LOADS

NODE	DIRECTION	LOAD CURVE	LOAD CURVE MULTPL
1	1	7	0.4080E+02

PROCESSING DISTRIBUTED LOADS CARD NO. 1  
AT Y-COORD 0.000 Z-COORD -2.000 PRESSURE 145.0  
Z-COORD 0.5000 PRESSURE 54.40  
L.CURVE 7

NO. OF GENERATED NODAL FORCES	13							
NODE	Z-LVL	FORCE / NODE	Z-LVL	FORCE / NODE	Z-LVL	FORCE /		
13	-0.1900E+01	0.2150848E+02 /	12	-0.1700E+01	0.2742977E+02 /	11	-0.1500E+01	0.2598017E+02 /
10	-0.1300E+01	0.2453057E+02 /	9	-0.1100E+01	0.2308097E+02 /	8	-0.9000E+00	0.2163137E+02 /
7	-0.7000E+00	0.2018177E+02 /	6	-0.5000E+00	0.1873217E+02 /	5	-0.3000E+00	0.1728257E+02 /
4	-0.1000E+00	0.1583297E+02 /	3	0.1000E+00	0.1438337E+02 /	2	0.3000E+00	0.1293377E+02 /
1	0.5000E+00	0.5742083E+01 /						

OVERALL APPLIED Y FORCE FOR CURRENT DISTRIBUTED LOAD

249.25

NO. OF DISTRIBUTED LOAD CARDS 1

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+-----+  
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:39:30 |  
+-----+
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L O A D      B A L A N C E

STEP	1	TOTAL APPLIED LOAD IN DIR.	2	Y-DISPL.F	290.05000
STEP	1	TOTAL APPLIED LOAD IN DIR.	4	X-ROT. F	0.0000000
STEP	2	TOTAL APPLIED LOAD IN DIR.	2	Y-DISPL.F	290.05000
STEP	2	TOTAL APPLIED LOAD IN DIR.	4	X-ROT. F	0.0000000
STEP	3	TOTAL APPLIED LOAD IN DIR.	2	Y-DISPL.F	290.05000
STEP	3	TOTAL APPLIED LOAD IN DIR.	4	X-ROT. F	0.0000000
STEP	4	TOTAL APPLIED LOAD IN DIR.	2	Y-DISPL.F	290.05000
STEP	4	TOTAL APPLIED LOAD IN DIR.	4	X-ROT. F	0.0000000
STEP	5	TOTAL APPLIED LOAD IN DIR.	2	Y-DISPL.F	290.05000
STEP	5	TOTAL APPLIED LOAD IN DIR.	4	X-ROT. F	0.0000000
STEP	6	TOTAL APPLIED LOAD IN DIR.	2	Y-DISPL.F	290.05000
STEP	6	TOTAL APPLIED LOAD IN DIR.	4	X-ROT. F	0.0000000

LOAD INPUT SECTION COMPLETED

```
+-----+  
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:39:30 |  
+-----+
```

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

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+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:39:30
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```

LAYER DESCRIPTORS FOR STEP NO. 1

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

```

ITEM NO. 1<NAME >= 16.000 (BOTH WALLS)
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 10000. (BOTH WALLS)
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 10000. (BOTH WALLS)
ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)
ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1
ITEM NO. 61<D-KP >= 1.8500 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 >= 17.000 (BOTH WALLS)
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)
ITEM NO. 3<LEVEL >= -2.0000 (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 >= 25.000 (BOTH WALLS)
ITEM NO. 9<U-FRICT >= 27.000 (BOTH WALLS)
ITEM NO. 10<U-KA >= 0.37600 WALL NO. 1
ITEM NO. 11<U-KP >= 3.6010 WALL NO. 1
ITEM NO. 12<K0-NC >= 0.54600 (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 >= 0.11500E+06 (BOTH WALLS)
ITEM NO. 18<EUR >= 0.18400E+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 >= 25.000 (BOTH WALLS)
ITEM NO. 59<D-FRICT >= 27.000 (BOTH WALLS)
ITEM NO. 60<D-KA >= 0.37600 WALL NO. 1
ITEM NO. 61<D-KP >= 3.6010 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 >= 16.000 (BOTH WALLS)
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 10000. (BOTH WALLS)
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 10000. (BOTH WALLS)  
 ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
 ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
 ITEM NO. 61<D-KP >= 1.8500 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 >= 17.000 (BOTH WALLS)  
 ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
 ITEM NO. 3<LEVEL >= -2.0000 (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 >= 25.000 (BOTH WALLS)  
 ITEM NO. 9<U-FRICT >= 27.000 (BOTH WALLS)  
 ITEM NO. 10<U-KA >= 0.37600 WALL NO. 1  
 ITEM NO. 11<U-KP >= 3.6010 WALL NO. 1  
 ITEM NO. 12<K0-NC >= 0.54600 (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 >= 0.115000E+06 (BOTH WALLS)  
 ITEM NO. 18<EUR >= 0.184000E+06 (BOTH WALLS)  
 ITEM NO. 27<U-PERM >= 0.100000E-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 >= 25.000 (BOTH WALLS)  
 ITEM NO. 59<D-FRICT >= 27.000 (BOTH WALLS)  
 ITEM NO. 60<D-KA >= 0.37600 WALL NO. 1  
 ITEM NO. 61<D-KP >= 3.6010 WALL NO. 1  
 ITEM NO. 77<D-PERM >= 0.100000E-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 >= 16.000 (BOTH WALLS)  
 ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
 ITEM NO. 3<LEVEL >= 0.50000 (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 >= 10000. (BOTH WALLS)  
 ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)  
 ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1  
 ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1  
 ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (BOTH WALLS)  
 ITEM NO. 27<U-PERM >= 0.100000E-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 >= 10000. (BOTH WALLS)  
 ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
 ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
 ITEM NO. 61<D-KP >= 1.8500 WALL NO. 1  
 ITEM NO. 77<D-PERM >= 0.100000E-04 (BOTH WALLS)

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

ITEM NO. 1<NAME >= 17.000 (BOTH WALLS)  
 ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
 ITEM NO. 3<LEVEL >= -2.0000 (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 >= 25.000 (BOTH WALLS)  
 ITEM NO. 9<U-FRICT >= 27.000 (BOTH WALLS)  
 ITEM NO. 10<U-KA >= 0.37600 WALL NO. 1  
 ITEM NO. 11<U-KP >= 3.6010 WALL NO. 1  
 ITEM NO. 12<K0-NC >= 0.54600 (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 >= 0.115000E+06 (BOTH WALLS)  
 ITEM NO. 18<EUR >= 0.184000E+06 (BOTH WALLS)  
 ITEM NO. 27<U-PERM >= 0.100000E-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 >= 25.000 (BOTH WALLS)  
 ITEM NO. 59<D-FRICT >= 27.000 (BOTH WALLS)  
 ITEM NO. 60<D-KA >= 0.37600 WALL NO. 1

ITEM NO. 61<D-KP >= 3.6010 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO. 4

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

ITEM NO. 1<NAME >= 16.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 10000. (BOTH WALLS)  
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1  
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 10000. (BOTH WALLS)  
ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
ITEM NO. 61<D-KP >= 1.8500 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

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

ITEM NO. 1<NAME >= 17.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= -2.0000 (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 >= 25.000 (BOTH WALLS)  
ITEM NO. 9<U-FRICT >= 27.000 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.37600 WALL NO. 1  
ITEM NO. 11<U-KP >= 3.6010 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.54600 (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 >= 0.11500E+06 (BOTH WALLS)  
ITEM NO. 18<EUR >= 0.18400E+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 >= 25.000 (BOTH WALLS)  
ITEM NO. 59<D-FRICT >= 27.000 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.37600 WALL NO. 1  
ITEM NO. 61<D-KP >= 3.6010 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO. 5

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

ITEM NO. 1<NAME >= 16.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 10000. (BOTH WALLS)  
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1  
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 10000. (BOTH WALLS)  
ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
ITEM NO. 61<D-KP >= 1.8500 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

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

ITEM NO. 1<NAME >= 17.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= -2.0000 (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 >= 25.000 (BOTH WALLS)  
ITEM NO. 9<U-FRICT >= 27.000 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.37600 WALL NO. 1  
ITEM NO. 11<U-KP >= 3.6010 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.54600 (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 >= 0.11500E+06 (BOTH WALLS)  
ITEM NO. 18<EUR >= 0.18400E+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 >= 25.000 (BOTH WALLS)  
ITEM NO. 59<D-FRICT >= 27.000 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.37600 WALL NO. 1  
ITEM NO. 61<D-KP >= 3.6010 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO. 6

NON ZERO LAYER DESCRIPTORS FOR LAYER NO. 1 FOR STEP NO. 6

ITEM NO. 1<NAME >= 16.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 10000. (BOTH WALLS)  
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1  
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 10000. (BOTH WALLS)  
ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
ITEM NO. 61<D-KP >= 1.8500 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

NON ZERO LAYER DESCRIPTORS FOR LAYER NO. 2 FOR STEP NO. 6

ITEM NO. 1<NAME >= 17.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= -2.0000 (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 >= 25.000 (BOTH WALLS)  
ITEM NO. 9<U-FRICT >= 27.000 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.37600 WALL NO. 1  
ITEM NO. 11<U-KP >= 3.6010 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.54600 (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 >= 0.11500E+06 (BOTH WALLS)  
ITEM NO. 18<EUR >= 0.18400E+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 >= 25.000 (BOTH WALLS)  
ITEM NO. 59<D-FRICT >= 27.000 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.37600 WALL NO. 1  
ITEM NO. 61<D-KP >= 3.6010 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:39:30
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PHASE DESCRIPTORS

STEP NO.	1	LEFT WALL	RIGHT WALL
Y		0.000	-0.9990E+30
Z-PC		0.5000	0.000
Z-EXCAVATION		0.5000	0.000
Z-WATER_TABLE		-3.500	-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		0.5000	0.000
Z-EXCAVATION		-2.300	0.000
Z-WATER_TABLE		-3.500	-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	0.5000	0.000
Z-EXCAVATION	-2.300	0.000
Z-WATER_TABLE	-3.500	-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		0.5000	0.000
Z-EXCAVATION		-6.300	0.000
Z-WATER_TABLE		-5.300	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL		1.000	0.000
ZQ		0.5000	0.000
DZW_OF_THE_WATER_TABLE		1.000	0.000
QS_ON_THE_EXCAVATION_SIDE		1.000	0.000
ZQS		-6.300	-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		0.5000	0.000
Z-EXCAVATION		-6.300	0.000
Z-WATER_TABLE		-5.300	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL		0.000	0.000
ZQ		0.000	0.000
DZW_OF_THE_WATER_TABLE		1.000	0.000
QS_ON_THE_EXCAVATION_SIDE		0.000	0.000
ZQS		0.000	-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

STEP NO.	6	LEFT WALL	RIGHT WALL
Y		0.000	-0.9990E+30
Z-PC		0.5000	0.000
Z-EXCAVATION		-7.700	0.000
Z-WATER_TABLE		-6.700	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL		0.000	0.000
ZQ		0.000	0.000
DZW_OF_THE_WATER_TABLE		1.000	0.000
QS_ON_THE_EXCAVATION_SIDE		0.000	0.000
ZQS		0.000	-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 6

#### LEFT-HAND WALL

LOWER LEVEL	-16.00000
UPPER LEVEL	0.50000

#### RIGHT-HAND WALL

LOWER LEVEL	-16.00000
UPPER LEVEL	0.50000

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:39:30
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INITIAL STRESS TABLES
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#### 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 1.0000  
END TIME (TIME BEYOND WHICH IT IS REMOVED) 6.0000

TYPE BOUSSINESQ

HORIZONTAL DISTANCE (DY)	31.0000000000000
FOUNDATION WIDTH (B)	28.4700000000000
ZETA-F.....	0.500000000000000
Q-F .....	124.0000000000000
BETA .....	45.0000000000000
BEHAVIOUR (0=FREE, 1=REFLECTING)	0.0000000000000E+000

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

ACTIVATION TIME 1.0000  
END TIME (TIME BEYOND WHICH IT IS REMOVED) 6.0000

TYPE BOUSSINESQ

HORIZONTAL DISTANCE (DY)	0.500000000000000
FOUNDATION WIDTH (B)	2.030000000000000
ZETA-F.....	0.500000000000000
Q-F .....	49.5000000000000
BETA .....	45.0000000000000
BEHAVIOUR (0=FREE, 1=REFLECTING)	0.0000000000000E+000

ELEMENT GROUPS BACKUP AREA CAN STAY IN CORE AT  
POSITION 4321

NO. OF D.P.W. FOR THIS AREA 8033  
MAX NO. OF D.P.W. AVAILABLE 81920  
\*\* MAX NO OF ITERATIONS SET TO 40

ITER 0 RNORM = 7340. RMNORM= 0.000  
RINORM=0.1316E+06 RIMNOR= 0.000  
RENORM= 7340. REMNOR= 0.000 RATIO =0.2362 TOLER =0.1000E-03 NOT CONVERGED  
RFMAX = 49.41 RMMAX = 0.000  
RTSMAL=0.1000E-03 RMSMAL= 0.000  
RDT =0.1316E+06 RDR = 0.000  
RATIO=0.2362 RATOR= 0.000  
MAX UN= 46.54 IEQ= 1 NODE 1 DOF 1 Y-DISPL.F  
MIN UN=-.7105E-14 IEQ= 129 NODE 65 DOF 1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER 2 RNORM = 7340. RMNORM= 0.000  
RINORM=0.1316E+06 RIMNOR= 0.000  
RENORM= 908.8 REMNOR=0.6316E-19 RATIO =0.8310E-01 TOLER =0.1000E-03 NOT CONVERGED  
RFMAX = 49.41 RMMAX = 0.000  
RTSMAL=0.1000E-03 RMSMAL= 0.000  
RDT =0.1316E+06 RDR = 0.000  
RATIO=0.8310E-01 RATOR= 0.000  
MAX UN= 18.25 IEQ= 27 NODE 14 DOF 1 Y-DISPL.F  
MIN UN=-.4228E-01 IEQ= 55 NODE 28 DOF 1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER 3 RNORM = 7340. RMNORM= 0.000  
RINORM=0.1316E+06 RIMNOR= 0.000  
RENORM= 25.06 REMNOR=0.1036E-19 RATIO =0.1380E-01 TOLER =0.1000E-03 NOT CONVERGED  
RFMAX = 49.41 RMMAX = 0.000  
RTSMAL=0.1000E-03 RMSMAL= 0.000  
RDT =0.1316E+06 RDR = 0.000  
RATIO=0.1380E-01 RATOR= 0.000  
MAX UN= 4.212 IEQ= 41 NODE 21 DOF 1 Y-DISPL.F  
MIN UN=-.4158 IEQ= 57 NODE 29 DOF 1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER 4 RNORM = 7340. RMNORM= 0.000

```
RINORM=0.1316E+06 RIMNOR= 0.000
RENORM=0.4359E-04 REMNOR=0.1326E-19 RATIO =0.1820E-04 TOLER =0.1000E-03      CONVERGED !
RFMAX = 49.41      RMMAX = 0.000
RTSMAL=0.1000E-03 RMSMAL= 0.000
RDT   =0.1316E+06 RDR   = 0.000
RATIOI=0.1820E-04 RATIOI= 0.000
MAX UN=0.5345E-09 IEQ=    15 NODE     8 DOF    1 Y-DISPL.F
MIN UN=-.6495E-02 IEQ=    69 NODE    35 DOF    1 Y-DISPL.F
NO. OF CONTACT CONSTRAINT VIOLATIONS      0
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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:39:30
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New Project  
SOLUTION REACHED USING 4 ITERATIONS ON 40

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

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

	Y-DISPL.F (02)	X-ROT. F (04)	(
1	3.4707227E-03	-8.6972170E-04	
2	3.2968215E-03	-8.6907532E-04	
3	3.1231800E-03	-8.6711871E-04	
4	2.9500641E-03	-8.6381090E-04	
5	2.7777500E-03	-8.5908766E-04	
6	2.6065303E-03	-8.5284566E-04	
7	2.4367229E-03	-8.4493575E-04	
8	2.2686803E-03	-8.3516091E-04	
9	2.1027992E-03	-8.2327598E-04	
10	1.9395301E-03	-8.0898838E-04	
11	1.7793868E-03	-7.9195678E-04	
12	1.6229573E-03	-7.7177580E-04	
13	1.4709186E-03	-7.4796270E-04	
14	1.3240440E-03	-7.2007279E-04	
15	1.1831486E-03	-6.8829654E-04	
16	1.0489360E-03	-6.5336097E-04	
17	9.2196928E-04	-6.1594906E-04	
18	8.0267894E-04	-5.7669945E-04	
19	6.9137233E-04	-5.3620739E-04	
20	5.8824181E-04	-4.9502798E-04	
21	4.9337241E-04	-4.5367950E-04	
22	4.0674855E-04	-4.1264652E-04	
23	3.2826207E-04	-3.7238304E-04	
24	2.5771614E-04	-3.3331271E-04	
25	1.9483348E-04	-2.9580024E-04	
26	1.3927337E-04	-2.6012779E-04	
27	9.0645823E-05	-2.2650352E-04	
28	4.8525869E-05	-1.9507068E-04	
29	1.2465664E-05	-1.6591877E-04	
30	-1.7996757E-05	-1.3909419E-04	
31	-4.3327999E-05	-1.1460706E-04	
32	-6.3993734E-05	-9.2432210E-05	
33	-8.0451361E-05	-7.2514529E-05	
34	-9.3144664E-05	-5.4774524E-05	
35	-1.0249967E-04	-3.9113000E-05	
36	-1.0892086E-04	-2.5416471E-05	
37	-1.1278903E-04	-1.3561581E-05	
38	-1.1445965E-04	-3.4189696E-06	
39	-1.1426194E-04	5.1439158E-06	
40	-1.1249849E-04	1.2260612E-05	
41	-1.0944529E-04	1.8063381E-05	
42	-1.0535210E-04	2.2681717E-05	
43	-1.0044321E-04	2.6240949E-05	
44	-9.4918326E-05	2.8861151E-05	
45	-8.8953783E-05	3.0656302E-05	
46	-8.2703684E-05	3.1733705E-05	
47	-7.6301474E-05	3.2193504E-05	
48	-6.9861272E-05	3.2128473E-05	
49	-6.3479388E-05	3.1623894E-05	
50	-5.7235861E-05	3.0757571E-05	
51	-5.1195813E-05	2.9599929E-05	
52	-4.5411093E-05	2.8214238E-05	
53	-3.9921563E-05	2.6656865E-05	
54	-3.4756373E-05	2.4977563E-05	
55	-2.9935652E-05	2.3219973E-05	
56	-2.5471089E-05	2.1421806E-05	
57	-2.1367480E-05	1.9615391E-05	
58	-1.7623839E-05	1.7828146E-05	
59	-1.4233629E-05	1.6082641E-05	
60	-1.1186755E-05	1.4397555E-05	
61	-8.4695902E-06	1.2787720E-05	
62	-6.0658856E-06	1.1264603E-05	
63	-3.9574022E-06	9.8366872E-06	
64	-2.1244741E-06	8.5098197E-06	
65	-5.4649544E-07	7.2876352E-06	
66	7.9768192E-07	6.1719801E-06	
67	1.9294136E-06	5.1630806E-06	
68	2.8699410E-06	4.2595838E-06	
69	3.6400904E-06	3.4587358E-06	
70	4.2600173E-06	2.7566181E-06	
71	4.7489949E-06	2.1483594E-06	
72	5.1252445E-06	1.6283517E-06	
73	5.4058088E-06	1.1904428E-06	
74	5.6064574E-06	8.2807117E-07	

75	5.7416157E-06	5.3437576E-07
76	5.8243148E-06	3.0228611E-07
77	5.8661568E-06	1.2459605E-07
78	5.8772943E-06	-5.9781778E-09
79	5.8664188E-06	-9.6753339E-08
80	5.8407584E-06	-1.5504636E-07
81	5.8060795E-06	-1.8815142E-07
82	5.7666933E-06	-2.0332507E-07
83	5.7254642E-06	-2.0777775E-07
84	5.7046695E-06	-2.0799994E-07

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| Exe Time :25 June 2020 16:39:30
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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 84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.000	-3.4707E-03	0.000	0.000	0.000	0.000	ACTIVE	0.000	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
2 D	0.000	-3.2968E-03	4.557	0.000	4.557	12.22	ACTIVE	0.000	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
3 D	0.000	-3.1232E-03	10.91	0.000	10.91	19.97	ACTIVE	0.000	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
4 D	0.000	-2.9501E-03	17.92	0.000	17.92	24.17	ACTIVE	0.000	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
5 D	0.000	-2.7777E-03	26.34	0.000	26.34	26.78	ACTIVE	0.000	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
6 D	0.000	-2.6065E-03	34.34	0.000	34.34	28.81	ACTIVE	0.000	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
7 D	0.000	-2.4367E-03	41.20	0.000	41.20	30.70	ACTIVE	0.000	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
8 D	0.000	-2.2687E-03	47.35	0.000	47.35	32.62	ACTIVE	0.000	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
9 D	0.000	-2.1028E-03	53.02	0.000	53.02	34.66	ACTIVE	0.000	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
10 D	0.1445	-1.9395E-03	58.37	0.7227	58.37	36.83	UL-RL	1.8617E+04	-1.300	0.000	
1.000	1.000	0.7227	0.000	0.000	FRANA_334_8_L_0						
11 D	1.202	-1.7794E-03	63.22	6.011	63.22	39.14	UL-RL	1.8617E+04	-1.500	0.000	
1.000	1.000	6.011	0.000	0.000	FRANA_334_8_L_0						
12 D	2.271	-1.6230E-03	68.17	11.36	68.17	41.57	UL-RL	1.8617E+04	-1.700	0.000	
1.000	1.000	11.36	0.000	0.000	FRANA_334_8_L_0						
13 D	3.347	-1.4709E-03	72.97	16.74	72.97	44.12	UL-RL	1.8617E+04	-1.900	0.000	
1.000	1.000	16.74	0.000	0.000	FRANA_334_8_L_0						
14 D	0.000	-1.3240E-03	76.88	0.000	76.88	35.75	ACTIVE	0.000	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	BNA2_(2)_335_337_L_0						
15 D	0.000	-1.1831E-03	79.69	0.000	79.69	37.64	ACTIVE	0.000	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	BNA2_(2)_335_337_L_0						
16 D	8.0398E-02	-1.0489E-03	82.61	0.4020	82.61	39.60	ACTIVE	0.000	-2.500	0.000	
1.000	1.000	0.4020	0.000	0.000	BNA2_(2)_335_337_L_0						
17 D	0.3073	-9.2197E-04	85.63	1.536	85.63	41.63	ACTIVE	0.000	-2.700	0.000	
1.000	1.000	1.536	0.000	0.000	BNA2_(2)_335_337_L_0						
18 D	0.5405	-8.0268E-04	88.73	2.702	88.73	43.71	ACTIVE	0.000	-2.900	0.000	
1.000	1.000	2.702	0.000	0.000	BNA2_(2)_335_337_L_0						
19 D	0.7793	-6.9137E-04	91.90	3.896	91.90	45.84	ACTIVE	0.000	-3.100	0.000	
1.000	1.000	3.896	0.000	0.000	BNA2_(2)_335_337_L_0						
20 D	1.023	-5.8824E-04	95.14	5.115	95.14	48.01	ACTIVE	0.000	-3.300	0.000	
1.000	1.000	5.115	0.000	0.000	BNA2_(2)_335_337_L_0						
21 D	1.271	-4.9337E-04	98.44	6.355	98.44	50.21	ACTIVE	0.000	-3.500	0.000	
1.000	1.000	6.355	0.000	0.000	BNA2_(2)_335_337_L_0						
22 D	1.773	-4.0675E-04	99.79	6.863	99.79	51.34	ACTIVE	0.000	-3.700	2.000	
1.000	1.000	6.863	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	2.340	-3.2826E-04	101.2	7.698	101.2	52.50	UL-RL	1.3648E+05	-3.900	4.000	
1.000	1.000	11.70	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	4.900	-2.5772E-04	102.6	18.50	102.6	53.68	UL-RL	1.3648E+05	-4.100	6.000	
1.000	1.000	24.50	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	7.255	-1.9483E-04	104.1	28.28	104.1	54.87	UL-RL	1.3648E+05	-4.300	8.000	
1.000	1.000	36.28	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	9.413	-1.3927E-04	105.6	37.07	105.6	56.07	UL-RL	1.3648E+05	-4.500	10.00	
1.000	1.000	47.07	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	11.38	-9.0646E-05	107.2	44.92	107.2	57.29	UL-RL	1.3648E+05	-4.700	12.00	
1.000	1.000	56.92	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	13.01	-4.8526E-05	108.7	51.05	108.7	59.93	UL-RL	1.3648E+05	-4.900	14.00	
1.000	1.000	65.05	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	14.41	-1.2466E-05	110.3	56.06	110.3	63.07	UL-RL	1.3648E+05	-5.100	16.00	
1.000	1.000	72.06	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	15.70	1.7997E-05	111.9	60.52	111.9	65.87	UL-RL	1.3648E+05	-5.300	18.00	
1.000	1.000	78.52	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	16.90	4.3328E-05	113.6	64.48	113.6	68.36	UL-RL	1.3648E+05	-5.500	20.00	
1.000	1.000	84.48	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	18.00	6.3994E-05	115.3	67.98	115.3	70.56	UL-RL	1.3648E+05	-5.700	22.00	
1.000	1.000	89.98	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	19.01	8.0451E-05	116.9	71.06	116.9	72.52	UL-RL	1.3648E+05	-5.900	24.00	
1.000	1.000	95.06	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	19.95	9.3145E-05	118.6	73.76	118.6	74.25	UL-RL	1.3648E+05	-6.100	26.00
1.000	1.000	99.76	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	20.79	1.0250E-04	120.4	75.97	120.4	76.06	UL-RL	1.3648E+05	-6.300	28.00
1.000	1.000	104.0	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	21.56	1.0892E-04	122.1	77.81	122.1	77.82	UL-RL	1.3648E+05	-6.500	30.00
1.000	1.000	107.8	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	22.28	1.1279E-04	123.8	79.41	123.8	79.41	V-C	8.5301E+04	-6.700	32.00
1.000	1.000	111.4	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	22.96	1.1446E-04	125.6	80.81	125.6	80.81	V-C	8.5301E+04	-6.900	34.00
1.000	1.000	114.8	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	23.61	1.1426E-04	127.4	82.06	127.4	82.06	V-C	8.5301E+04	-7.100	36.00
1.000	1.000	118.1	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	24.23	1.1250E-04	129.1	83.17	129.1	83.17	V-C	8.5301E+04	-7.300	38.00
1.000	1.000	121.2	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	24.83	1.0945E-04	130.9	84.17	130.9	84.17	V-C	8.5301E+04	-7.500	40.00
1.000	1.000	124.2	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	25.42	1.0535E-04	132.8	85.09	132.8	85.09	V-C	8.5301E+04	-7.700	42.00
1.000	1.000	127.1	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	25.99	1.0044E-04	134.6	85.93	134.6	85.93	V-C	8.5301E+04	-7.900	44.00
1.000	1.000	129.9	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	26.54	9.4918E-05	136.4	86.72	136.4	86.72	V-C	8.5301E+04	-8.100	46.00
1.000	1.000	132.7	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	27.09	8.8954E-05	138.2	87.47	138.2	87.47	V-C	8.5301E+04	-8.300	48.00
1.000	1.000	135.5	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	27.64	8.2704E-05	140.1	88.20	140.1	88.20	V-C	8.5301E+04	-8.500	50.00
1.000	1.000	138.2	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	28.18	7.6301E-05	141.9	88.91	141.9	88.91	V-C	8.5301E+04	-8.700	52.00
1.000	1.000	140.9	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	28.72	6.9861E-05	143.8	89.62	143.8	89.62	V-C	8.5301E+04	-8.900	54.00
1.000	1.000	143.6	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	29.27	6.3479E-05	145.7	90.33	145.7	90.33	V-C	8.5301E+04	-9.100	56.00
1.000	1.000	146.3	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	29.81	5.7236E-05	147.5	91.05	147.5	91.05	V-C	8.5301E+04	-9.300	58.00
1.000	1.000	149.0	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	30.36	5.1196E-05	149.4	91.78	149.4	91.78	V-C	8.5301E+04	-9.500	60.00
1.000	1.000	151.8	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	30.91	4.5411E-05	151.3	92.54	151.3	92.54	V-C	8.5301E+04	-9.700	62.00
1.000	1.000	154.5	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	31.46	3.9922E-05	153.2	93.32	153.2	93.32	V-C	8.5301E+04	-9.900	64.00
1.000	1.000	157.3	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	32.02	3.4756E-05	155.1	94.12	155.1	94.12	V-C	8.5301E+04	-10.10	66.00
1.000	1.000	160.1	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	32.59	2.9936E-05	157.0	94.95	157.0	94.95	V-C	8.5301E+04	-10.30	68.00
1.000	1.000	163.0	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	33.16	2.5471E-05	158.9	95.81	158.9	95.81	V-C	8.5301E+04	-10.50	70.00
1.000	1.000	165.8	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	33.74	2.1367E-05	160.8	96.70	160.8	96.70	V-C	8.5301E+04	-10.70	72.00
1.000	1.000	168.7	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	34.32	1.7624E-05	162.7	97.62	162.7	97.62	V-C	8.5301E+04	-10.90	74.00
1.000	1.000	171.6	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	34.91	1.4234E-05	164.7	98.56	164.7	98.56	V-C	8.5301E+04	-11.10	76.00
1.000	1.000	174.6	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	35.51	1.1187E-05	166.6	99.53	166.6	99.53	V-C	8.5301E+04	-11.30	78.00
1.000	1.000	177.5	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	36.11	8.4696E-06	168.5	100.5	168.5	100.5	V-C	8.5301E+04	-11.50	80.00
1.000	1.000	180.5	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	36.71	6.0659E-06	170.5	101.6	170.5	101.6	V-C	8.5301E+04	-11.70	82.00
1.000	1.000	183.6	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	37.32	3.9574E-06	172.4	102.6	172.4	102.6	V-C	8.5301E+04	-11.90	84.00
1.000	1.000	186.6	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	37.93	2.1245E-06	174.4	103.7	174.4	103.7	V-C	8.5301E+04	-12.10	86.00
1.000	1.000	189.7	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	38.55	5.4650E-07	176.3	104.7	176.3	104.7	V-C	8.5301E+04	-12.30	88.00
1.000	1.000	192.7	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	39.16	-7.9768E-07	178.3	105.8	178.3	105.9	UL-RL	1.3648E+05	-12.50	90.00
1.000	1.000	195.8	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	39.77	-1.9294E-06	180.2	106.9	180.2	107.1	UL-RL	1.3648E+05	-12.70	92.00
1.000	1.000	198.9	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	40.39	-2.8699E-06	182.2	107.9	182.2	108.3	UL-RL	1.3648E+05	-12.90	94.00
1.000	1.000	201.9	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	41.01	-3.6401E-06	184.2	109.1	184.2	109.5	UL-RL	1.3648E+05	-13.10	96.00
1.000	1.000	205.1	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	41.63	-4.2600E-06	186.1	110.2	186.1	110.8	UL-RL	1.3648E+05	-13.30	98.00
1.000	1.000	208.2	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	42.26	-4.7490E-06	188.1	111.3	188.1	112.0	UL-RL	1.3648E+05	-13.50	100.0
1.000	1.000	211.3	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	42.89	-5.1252E-06	190.1	112.5	190.1	113.2	UL-RL	1.3648E+05	-13.70	102.0
1.000	1.000	214.5	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	43.52	-5.4058E-06	192.1	113.6	192.1	114.4	UL-RL	1.3648E+05	-13.90	104.0
1.000	1.000	217.6	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	44.16	-5.6065E-06	194.0	114.8	194.0	115.6	UL-RL	1.3648E+05	-14.10	106.0
1.000	1.000	220.8	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	44.79	-5.7416E-06	196.0	116.0	196.0	116.7	UL-RL	1.3648E+05	-14.30	108.0
1.000	1.000	224.0	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	45.43	-5.8243E-06	198.0	117.1	198.0	117.9	UL-RL	1.3648E+05	-14.50	110.0
1.000	1.000	227.1	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	46.07	-5.8662E-06	200.0	118.3	200.0	119.1	UL-RL	1.3648E+05	-14.70	112.0
1.000	1.000	230.3	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	46.70	-5.8773E-06	202.0	119.5	202.0	120.3	UL-RL	1.3648E+05	-14.90	114.0
1.000	1.000	233.5	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	47.34	-5.8664E-06	204.0	120.7	204.0	121.5	UL-RL	1.3648E+05	-15.10	116.0
1.000	1.000	236.7	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	47.98	-5.8408E-06	206.0	121.9	206.0	122.7	UL-RL	1.3648E+05	-15.30	118.0
1.000	1.000	239.9	0.000	0.000	BNA2_(2)_335_337_L_0					
81 D	48.61	-5.8061E-06	208.0	123.1	208.0	123.9	UL-RL	1.3648E+05	-15.50	120.0
1.000	1.000	243.1	0.000	0.000	BNA2_(2)_335_337_L_0					
82 D	49.25	-5.7667E-06	210.0	124.2	210.0	125.0	UL-RL	1.3648E+05	-15.70	122.0
1.000	1.000	246.2	0.000	0.000	BNA2_(2)_335_337_L_0					
83 D	37.41	-5.7255E-06	212.0	125.4	212.0	126.2	UL-RL	1.3648E+05	-15.90	124.0
1.000	1.000	249.4	0.000	0.000	BNA2_(2)_335_337_L_0					
84 D	12.55	-5.7047E-06	213.0	126.0	213.0	126.8	UL-RL	1.3648E+05	-16.00	125.0
1.000	1.000	251.0	0.000	0.000	BNA2_(2)_335_337_L_0					

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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

O\_R  
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	4.930	3.4707E-03	0.000	49.30	0.000	49.30	V-C	1.4205E+04	0.5000	0.000	
1.000	1.000	49.30	0.000	0.000	FRANA_334_8_L_0						
2 D	11.81	3.2968E-03	4.000	59.06	4.000	59.06	V-C	1.4205E+04	0.3000	0.000	
1.000	1.000	59.06	0.000	0.000	FRANA_334_8_L_0						
3 D	12.87	3.1232E-03	8.000	64.33	8.000	64.33	V-C	1.4205E+04	0.1000	0.000	
1.000	1.000	64.33	0.000	0.000	FRANA_334_8_L_0						
4 D	13.22	2.9501E-03	12.00	66.08	12.00	66.08	V-C	1.4205E+04	-0.1000	0.000	
1.000	1.000	66.08	0.000	0.000	FRANA_334_8_L_0						
5 D	13.25	2.7777E-03	16.00	66.24	16.00	66.24	V-C	1.4205E+04	-0.3000	0.000	
1.000	1.000	66.24	0.000	0.000	FRANA_334_8_L_0						
6 D	13.17	2.6065E-03	20.00	65.83	20.00	65.83	V-C	1.4205E+04	-0.5000	0.000	
1.000	1.000	65.83	0.000	0.000	FRANA_334_8_L_0						
7 D	13.06	2.4367E-03	24.00	65.31	24.00	65.31	V-C	1.4205E+04	-0.7000	0.000	
1.000	1.000	65.31	0.000	0.000	FRANA_334_8_L_0						
8 D	12.97	2.2687E-03	28.00	64.85	28.00	64.85	V-C	1.4205E+04	-0.9000	0.000	
1.000	1.000	64.85	0.000	0.000	FRANA_334_8_L_0						
9 D	12.91	2.1028E-03	32.00	64.53	32.00	64.53	V-C	1.4205E+04	-1.100	0.000	
1.000	1.000	64.53	0.000	0.000	FRANA_334_8_L_0						
10 D	12.88	1.9395E-03	36.00	64.38	36.00	64.38	V-C	1.4205E+04	-1.300	0.000	
1.000	1.000	64.38	0.000	0.000	FRANA_334_8_L_0						
11 D	12.88	1.7794E-03	40.00	64.41	40.00	64.41	V-C	1.4205E+04	-1.500	0.000	
1.000	1.000	64.41	0.000	0.000	FRANA_334_8_L_0						
12 D	12.93	1.6230E-03	44.00	64.63	44.00	64.63	V-C	1.4205E+04	-1.700	0.000	
1.000	1.000	64.63	0.000	0.000	FRANA_334_8_L_0						
13 D	13.00	1.4709E-03	48.00	65.02	48.00	65.02	V-C	1.4205E+04	-1.900	0.000	
1.000	1.000	65.02	0.000	0.000	FRANA_334_8_L_0						
14 D	24.11	1.3240E-03	52.00	120.6	52.00	120.6	V-C	6.4066E+04	-2.100	0.000	
1.000	1.000	120.6	0.000	0.000	BNA2_(2)_335_337_L_0						
15 D	22.69	1.1831E-03	56.00	113.4	56.00	113.4	V-C	6.4066E+04	-2.300	0.000	
1.000	1.000	113.4	0.000	0.000	BNA2_(2)_335_337_L_0						
16 D	21.36	1.0489E-03	60.00	106.8	60.00	106.8	V-C	6.4066E+04	-2.500	0.000	
1.000	1.000	106.8	0.000	0.000	BNA2_(2)_335_337_L_0						
17 D	20.14	9.2197E-04	64.00	100.7	64.00	100.7	V-C	6.4066E+04	-2.700	0.000	
1.000	1.000	100.7	0.000	0.000	BNA2_(2)_335_337_L_0						
18 D	19.03	8.0268E-04	68.00	95.14	68.00	95.14	V-C	6.4066E+04	-2.900	0.000	
1.000	1.000	95.14	0.000	0.000	BNA2_(2)_335_337_L_0						
19 D	18.03	6.9137E-04	72.00	90.14	72.00	90.14	V-C	6.4066E+04	-3.100	0.000	
1.000	1.000	90.14	0.000	0.000	BNA2_(2)_335_337_L_0						
20 D	17.14	5.8824E-04	76.00	85.70	76.00	85.70	V-C	6.4066E+04	-3.300	0.000	
1.000	1.000	85.70	0.000	0.000	BNA2_(2)_335_337_L_0						
21 D	16.36	4.9337E-04	80.00	81.82	80.00	81.82	V-C	6.4066E+04	-3.500	0.000	
1.000	1.000	81.82	0.000	0.000	BNA2_(2)_335_337_L_0						
22 D	15.88	4.0675E-04	82.00	77.40	82.00	77.40	V-C	6.4066E+04	-3.700	2.000	
1.000	1.000	79.40	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	15.51	3.2826E-04	84.00	73.53	84.00	73.53	V-C	6.4066E+04	-3.900	4.000	
1.000	1.000	77.53	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	15.24	2.5772E-04	86.00	70.19	86.00	70.19	V-C	6.4066E+04	-4.100	6.000	
1.000	1.000	76.19	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	15.07	1.9498E-04	88.00	67.35	88.00	67.35	V-C	6.4066E+04	-4.300	8.000	
1.000	1.000	75.35	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	15.00	1.3927E-04	90.00	65.00	90.00	65.00	V-C	6.4066E+04	-4.500	10.00	
1.000	1.000	75.00	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	15.02	9.0646E-05	92.00	63.10	92.00	63.10	V-C	6.4066E+04	-4.700	12.00	
1.000	1.000	75.10	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	15.13	4.8526E-05	94.00	61.63	94.00	61.63	V-C	6.4066E+04	-4.900	14.00	
1.000	1.000	75.63	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	15.31	1.2466E-05	96.00	60.55	96.00	60.55	V-C	6.4066E+04	-5.100	16.00	
1.000	1.000	76.55	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	15.43	-1.7997E-05	98.00	59.15	98.00	60.99	UL-RL	1.0250E+05	-5.300	18.00	
1.000	1.000	77.15	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	15.56	-4.3328E-05	100.0	57.80	100.0	62.24	UL-RL	1.0250E+05	-5.500	20.00	
1.000	1.000	77.80	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	15.79	-6.3994E-05	102.0	56.93	102.0	63.49	UL-RL	1.0250E+05	-5.700	22.00	
1.000	1.000	78.93	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	16.10	-8.0451E-05	104.0	56.50	104.0	64.74	UL-RL	1.0250E+05	-5.900	24.00	
1.000	1.000	80.50	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	16.49	-9.3145E-05	106.0	56.45	106.0	66.00	UL-RL	1.0250E+05	-6.100	26.00
1.000	1.000	82.45	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	16.95	-1.0250E-04	108.0	56.75	108.0	67.26	UL-RL	1.0250E+05	-6.300	28.00
1.000	1.000	84.75	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	17.47	-1.0892E-04	110.0	57.36	110.0	68.52	UL-RL	1.0250E+05	-6.500	30.00
1.000	1.000	87.36	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	18.04	-1.1279E-04	112.0	58.22	112.0	69.79	UL-RL	1.0250E+05	-6.700	32.00
1.000	1.000	90.22	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	18.66	-1.1446E-04	114.0	59.32	114.0	71.05	UL-RL	1.0250E+05	-6.900	34.00
1.000	1.000	93.32	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	19.32	-1.1426E-04	116.0	60.60	116.0	72.31	UL-RL	1.0250E+05	-7.100	36.00
1.000	1.000	96.60	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	20.01	-1.1250E-04	118.0	62.04	118.0	73.58	UL-RL	1.0250E+05	-7.300	38.00
1.000	1.000	100.0	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	20.72	-1.0945E-04	120.0	63.62	120.0	74.84	UL-RL	1.0250E+05	-7.500	40.00
1.000	1.000	103.6	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	21.46	-1.0535E-04	122.0	65.30	122.0	76.10	UL-RL	1.0250E+05	-7.700	42.00
1.000	1.000	107.3	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	22.21	-1.0044E-04	124.0	67.07	124.0	77.36	UL-RL	1.0250E+05	-7.900	44.00
1.000	1.000	111.1	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	22.98	-9.4918E-05	126.0	68.90	126.0	78.63	UL-RL	1.0250E+05	-8.100	46.00
1.000	1.000	114.9	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	23.75	-8.8954E-05	128.0	70.77	128.0	79.89	UL-RL	1.0250E+05	-8.300	48.00
1.000	1.000	118.8	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	24.53	-8.2704E-05	130.0	72.67	130.0	81.14	UL-RL	1.0250E+05	-8.500	50.00
1.000	1.000	122.7	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	25.32	-7.6301E-05	132.0	74.58	132.0	82.40	UL-RL	1.0250E+05	-8.700	52.00
1.000	1.000	126.6	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	26.10	-6.9861E-05	134.0	76.50	134.0	83.66	UL-RL	1.0250E+05	-8.900	54.00
1.000	1.000	130.5	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	26.88	-6.3479E-05	136.0	78.41	136.0	84.91	UL-RL	1.0250E+05	-9.100	56.00
1.000	1.000	134.4	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	27.66	-5.7236E-05	138.0	80.30	138.0	86.16	UL-RL	1.0250E+05	-9.300	58.00
1.000	1.000	138.3	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	28.43	-5.1196E-05	140.0	82.17	140.0	87.42	UL-RL	1.0250E+05	-9.500	60.00
1.000	1.000	142.2	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	29.20	-4.5411E-05	142.0	84.01	142.0	88.66	UL-RL	1.0250E+05	-9.700	62.00
1.000	1.000	146.0	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	29.96	-3.9922E-05	144.0	85.82	144.0	89.91	UL-RL	1.0250E+05	-9.900	64.00
1.000	1.000	149.8	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	30.72	-3.4756E-05	146.0	87.59	146.0	91.16	UL-RL	1.0250E+05	-10.10	66.00
1.000	1.000	153.6	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	31.47	-2.9936E-05	148.0	89.33	148.0	92.40	UL-RL	1.0250E+05	-10.30	68.00
1.000	1.000	157.3	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	32.21	-2.5471E-05	150.0	91.03	150.0	93.64	UL-RL	1.0250E+05	-10.50	70.00
1.000	1.000	161.0	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	32.94	-2.1367E-05	152.0	92.69	152.0	94.88	UL-RL	1.0250E+05	-10.70	72.00
1.000	1.000	164.7	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	33.66	-1.7624E-05	154.0	94.31	154.0	96.11	UL-RL	1.0250E+05	-10.90	74.00
1.000	1.000	168.3	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	34.38	-1.4234E-05	156.0	95.89	156.0	97.35	UL-RL	1.0250E+05	-11.10	76.00
1.000	1.000	171.9	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	35.09	-1.1187E-05	158.0	97.43	158.0	98.58	UL-RL	1.0250E+05	-11.30	78.00
1.000	1.000	175.4	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	35.79	-8.4696E-06	160.0	98.94	160.0	99.81	UL-RL	1.0250E+05	-11.50	80.00
1.000	1.000	178.9	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	36.48	-6.0659E-06	162.0	100.4	162.0	101.0	UL-RL	1.0250E+05	-11.70	82.00
1.000	1.000	182.4	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	37.17	-3.9574E-06	164.0	101.9	164.0	102.3	UL-RL	1.0250E+05	-11.90	84.00
1.000	1.000	185.9	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	37.85	-2.1245E-06	166.0	103.2	166.0	103.5	UL-RL	1.0250E+05	-12.10	86.00
1.000	1.000	189.2	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	38.52	-5.4650E-07	168.0	104.6	168.0	104.8	UL-RL	1.0250E+05	-12.30	88.00
1.000	1.000	192.6	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	39.18	7.9768E-07	170.0	105.9	170.0	106.1	UL-RL	1.0250E+05	-12.50	90.00
1.000	1.000	195.9	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	39.84	1.9294E-06	172.0	107.2	172.0	107.3	UL-RL	1.0250E+05	-12.70	92.00
1.000	1.000	199.2	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	40.50	2.8699E-06	174.0	108.5	174.0	108.6	UL-RL	1.0250E+05	-12.90	94.00
1.000	1.000	202.5	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	41.15	3.6401E-06	176.0	109.8	176.0	109.8	UL-RL	1.0250E+05	-13.10	96.00
1.000	1.000	205.8	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	41.81	4.2600E-06	178.0	111.0	178.0	111.0	UL-RL	1.0250E+05	-13.30	98.00
1.000	1.000	209.0	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	42.45	4.7490E-06	180.0	112.3	180.0	112.3	V-C	6.4066E+04	-13.50	100.0
1.000	1.000	212.3	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	43.10	5.1252E-06	182.0	113.5	182.0	113.5	V-C	6.4066E+04	-13.70	102.0
1.000	1.000	215.5	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	43.74	5.4058E-06	184.0	114.7	184.0	114.7	V-C	6.4066E+04	-13.90	104.0
1.000	1.000	218.7	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	44.38	5.6065E-06	186.0	115.9	186.0	115.9	V-C	6.4066E+04	-14.10	106.0
1.000	1.000	221.9	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	45.02	5.7416E-06	188.0	117.1	188.0	117.1	V-C	6.4066E+04	-14.30	108.0
1.000	1.000	225.1	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	45.66	5.8243E-06	190.0	118.3	190.0	118.3	V-C	6.4066E+04	-14.50	110.0
1.000	1.000	228.3	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	46.30	5.8662E-06	192.0	119.5	192.0	119.5	V-C	6.4066E+04	-14.70	112.0
1.000	1.000	231.5	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	46.94	5.8773E-06	194.0	120.7	194.0	120.7	V-C	6.4066E+04	-14.90	114.0
1.000	1.000	234.7	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	47.57	5.8664E-06	196.0	121.9	196.0	121.9	V-C	6.4066E+04	-15.10	116.0
1.000	1.000	237.9	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	48.21	5.8408E-06	198.0	123.1	198.0	123.1	V-C	6.4066E+04	-15.30	118.0
1.000	1.000		241.1	0.000	0.000	BNA2_(2)_335_337_L_0				
81 D	48.85	5.8061E-06	200.0	124.2	200.0	124.2	V-C	6.4066E+04	-15.50	120.0
1.000	1.000		244.2	0.000	0.000	BNA2_(2)_335_337_L_0				
82 D	49.48	5.7667E-06	202.0	125.4	202.0	125.4	V-C	6.4066E+04	-15.70	122.0
1.000	1.000		247.4	0.000	0.000	BNA2_(2)_335_337_L_0				
83 D	37.59	5.7255E-06	204.0	126.6	204.0	126.6	V-C	6.4066E+04	-15.90	124.0
1.000	1.000		250.6	0.000	0.000	BNA2_(2)_335_337_L_0				
84 D	12.61	5.7047E-06	205.0	127.2	205.0	127.2	V-C	6.4066E+04	-16.00	125.0
1.000	1.000		252.2	0.000	0.000	BNA2_(2)_335_337_L_0				

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 83  
C U R R E N T   T I M E   I S      1.0000

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	41.612	-41.612	1.84741E-13	8.3224
2	42.735	-42.735	-8.3224	16.869
3	44.251	-44.251	-16.869	25.720
4	46.868	-46.868	-25.720	35.093
5	50.904	-50.904	-35.093	45.274
6	56.469	-56.469	-45.274	56.568
7	63.589	-63.589	-56.568	69.285
8	72.250	-72.250	-69.285	83.735
9	82.425	-82.425	-83.735	100.22
10	94.223	-94.223	-100.22	119.06
11	108.52	-108.52	-119.06	140.77
12	125.30	-125.30	-140.77	165.83
13	137.15	-137.15	-165.83	193.26
14	113.04	-113.04	-193.26	215.87
15	90.349	-90.349	-215.87	233.94
16	69.068	-69.068	-233.94	247.75
17	49.236	-49.236	-247.75	257.60
18	30.748	-30.748	-257.60	263.75
19	13.500	-13.500	-263.75	266.45
20	-2.6159	2.6159	-266.45	265.92
21	-17.708	17.708	-265.92	262.38
22	-31.816	31.816	-262.38	256.02
23	-44.982	44.982	-256.02	247.02
24	-55.319	55.319	-247.02	235.96
25	-63.134	63.134	-235.96	223.33
26	-68.720	68.720	-223.33	209.59
27	-72.356	72.356	-209.59	195.12
28	-74.472	74.472	-195.12	180.22
29	-75.371	75.371	-180.22	165.15
30	-75.096	75.096	-165.15	150.13
31	-73.759	73.759	-150.13	135.38
32	-71.549	71.549	-135.38	121.07
33	-68.636	68.636	-121.07	107.34
34	-65.174	65.174	-107.34	94.305
35	-61.324	61.324	-94.305	82.040
36	-57.233	57.233	-82.040	70.594
37	-52.997	52.997	-70.594	59.994
38	-48.697	48.697	-59.994	50.255
39	-44.406	44.406	-50.255	41.374
40	-40.180	40.180	-41.374	33.338
41	-36.069	36.069	-33.338	26.124
42	-32.112	32.112	-26.124	19.702
43	-28.339	28.339	-19.702	14.034
44	-24.774	24.774	-14.034	9.0792
45	-21.433	21.433	-9.0792	4.7926
46	-18.326	18.326	-4.7926	1.1274
47	-15.460	15.460	-1.1274	-1.9647
48	-12.836	12.836	1.9647	-4.5319
49	-10.452	10.452	4.5319	-6.6222
50	-8.3019	8.3019	6.6222	-8.2826
51	-6.3790	6.3790	8.2826	-9.5584
52	-4.6733	4.6733	9.5584	-10.493
53	-3.1738	3.1738	10.493	-11.128
54	-1.8683	1.8683	11.128	-11.501
55	-0.74385	0.74385	11.501	-11.650
56	0.21288	-0.21288	11.650	-11.608
57	1.0155	-1.0155	11.608	-11.405
58	1.6774	-1.6774	11.405	-11.069
59	2.2121	-2.2121	11.069	-10.627
60	2.6323	-2.6323	10.627	-10.100
61	2.9504	-2.9504	10.100	-9.5102
62	3.1782	-3.1782	9.5102	-8.8745
63	3.3269	-3.3269	8.8745	-8.2092
64	3.4122	-3.4122	8.2092	-7.5267
65	3.4457	-3.4457	7.5267	-6.8376
66	3.4268	-3.4268	6.8376	-6.1522
67	3.3586	-3.3586	6.1522	-5.4805
68	3.2495	-3.2495	5.4805	-4.8306
69	3.1064	-3.1064	4.8306	-4.2093
70	2.9359	-2.9359	4.2093	-3.6221

71	2.7454	-2.7454	3.6221	-3.0731
72	2.5398	-2.5398	3.0731	-2.5651
73	2.3230	-2.3230	2.5651	-2.1005
74	2.0981	-2.0981	2.1005	-1.6809
75	1.8678	-1.8678	1.6809	-1.3073
76	1.6342	-1.6342	1.3073	-0.98048
77	1.3989	-1.3989	0.98048	-0.70069
78	1.1632	-1.1632	0.70069	-0.46806
79	0.92789	-0.92789	0.46806	-0.28248
80	0.69362	-0.69362	0.28248	-0.14376
81	0.46074	-0.46074	0.14376	-5.16083E-02
82	0.22944	-0.22944	5.16083E-02	-5.72086E-03
83	5.72029E-02	-5.72029E-02	5.72086E-03	-1.23457E-13

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New Project
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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\_341 :  
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
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\*\*\*\*\* NO ONE ELEMENT ACTIVE AT CURRENT STEP \*\*\*\*\*

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
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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 .   5

Tieback\_342 :  
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 = 7340.    RMNORM= 0.000  
RINORM=0.5152E+06 RIMNOR=0.2222E+07  
RENORM= 2622.    REMNOR=0.1326E-19 RATIO =0.7134E-01 TOLER =0.1000E-03 NOT CONVERGED  
RFMAX = 137.2    RMMAX = 266.4  
RTSMAL=0.1000E-02 RMSMAL=0.1000E-02  
RDT = -0.5152E+06 RDR =-0.2222E+07  
RATIO=0.7134E-01 RATOR= 0.000  
MAX UN= 24.11    IEQ= 27 NODE    14 DOF    1 Y-DISPL.F  
MIN UN=-.6495E-02 IEQ= 69 NODE    35 DOF    1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS    0

ITER    2 RNORM = 7340.    RMNORM= 0.000  
RINORM=0.5152E+06 RIMNOR=0.2222E+07  
RENORM= 1554.    REMNOR=0.6778E-18 RATIO =0.5492E-01 TOLER =0.1000E-03 NOT CONVERGED  
RFMAX = 137.2    RMMAX = 266.4  
RTSMAL=0.1000E-02 RMSMAL=0.1000E-02  
RDT = -0.5152E+06 RDR =-0.2222E+07  
RATIO=0.5492E-01 RATOR= 0.000  
MAX UN= 19.52    IEQ= 31 NODE    16 DOF    1 Y-DISPL.F  
MIN UN=-.4762 IEQ= 71 NODE    36 DOF    1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS    0

ITER    3 RNORM = 7340.    RMNORM= 0.000  
RINORM=0.5152E+06 RIMNOR=0.2222E+07  
RENORM= 271.2    REMNOR=0.2263E-18 RATIO =0.2294E-01 TOLER =0.1000E-03 NOT CONVERGED  
RFMAX = 137.2    RMMAX = 266.4  
RTSMAL=0.1000E-02 RMSMAL=0.1000E-02  
RDT = -0.5152E+06 RDR =-0.2222E+07  
RATIO=0.2294E-01 RATOR= 0.000  
MAX UN= 11.08    IEQ= 55 NODE    28 DOF    1 Y-DISPL.F  
MIN UN=-1.294 IEQ= 69 NODE    35 DOF    1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS    0

ITER    4 RNORM = 7340.    RMNORM= 0.000  
RINORM=0.5152E+06 RIMNOR=0.2222E+07  
RENORM=0.7221E-01 REMNOR=0.1768E-18 RATIO =0.3744E-03 TOLER =0.1000E-03 NOT CONVERGED  
RFMAX = 137.2    RMMAX = 266.4  
RTSMAL=0.1000E-02 RMSMAL=0.1000E-02  
RDT = -0.5152E+06 RDR =-0.2222E+07  
RATIO=0.3744E-03 RATOR= 0.000  
MAX UN=0.1940    IEQ= 43 NODE    22 DOF    1 Y-DISPL.F  
MIN UN=-.1387 IEQ= 83 NODE    42 DOF    1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS    0

ITER    5 RNORM = 7340.    RMNORM= 0.000  
RINORM=0.5152E+06 RIMNOR=0.2222E+07  
RENORM=0.8647E-16 REMNOR=0.1740E-18 RATIO =0.1296E-10 TOLER =0.1000E-03    CONVERGED !  
RFMAX = 137.2    RMMAX = 266.4  
RTSMAL=0.1000E-02 RMSMAL=0.1000E-02  
RDT = -0.5152E+06 RDR =-0.2222E+07  
RATIO=0.1296E-10 RATOR= 0.000  
MAX UN=0.4066E-08 IEQ= 7 NODE    4 DOF    1 Y-DISPL.F  
MIN UN=-.3962E-08 IEQ= 21 NODE    11 DOF    1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS    0

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New Project  
SOLUTION REACHED USING 5 ITERATIONS ON 40

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

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

	Y-DISPL.F	X-ROT. F
	(02)	(04)
1	1.4729297E-02	-2.9907667E-03
2	1.4131192E-02	-2.9900437E-03
3	1.3533389E-02	-2.9876739E-03
4	1.2936261E-02	-2.9832329E-03
5	1.2340266E-02	-2.9762513E-03
6	1.1745964E-02	-2.9662147E-03
7	1.1154021E-02	-2.9525638E-03
8	1.0565219E-02	-2.9346939E-03
9	9.9804678E-03	-2.9119556E-03
10	9.4008081E-03	-2.8836544E-03
11	8.8274262E-03	-2.8490507E-03
12	8.2616603E-03	-2.8073597E-03
13	7.7050101E-03	-2.7577520E-03
14	7.1591380E-03	-2.6994672E-03
15	6.6258239E-03	-2.6321713E-03
16	6.1068505E-03	-2.5561591E-03
17	5.6038992E-03	-2.4720636E-03
18	5.1185161E-03	-2.3806026E-03
19	4.6520958E-03	-2.2825761E-03
20	4.2058645E-03	-2.1788666E-03
21	3.7808638E-03	-2.0704382E-03
22	3.3779322E-03	-1.9583366E-03
23	2.9976981E-03	-1.8436708E-03
24	2.6405644E-03	-1.7275236E-03
25	2.3067232E-03	-1.6108854E-03
26	1.9961827E-03	-1.4946603E-03
27	1.7087767E-03	-1.3796704E-03
28	1.4441823E-03	-1.2666632E-03
29	1.2019351E-03	-1.1563186E-03
30	9.8143647E-04	-1.0492523E-03
31	7.8197696E-04	-9.4602755E-04
32	6.0273527E-04	-8.4715550E-04
33	4.4279377E-04	-7.5309837E-04
34	3.0115062E-04	-6.6423115E-04
35	1.76733885E-04	-5.8081156E-04
36	6.8452088E-05	-5.0300062E-04
37	-2.4840632E-05	-4.3087826E-04
38	-1.0427878E-04	-3.6444932E-04
39	-1.7099525E-04	-3.0364854E-04
40	-2.2610470E-04	-2.4835047E-04
41	-2.7069071E-04	-1.9838147E-04
42	-3.0579830E-04	-1.5352762E-04
43	-3.3242649E-04	-1.1354479E-04
44	-3.5152327E-04	-7.8167837E-05
45	-3.6398200E-04	-4.7117377E-05
46	-3.7063932E-04	-2.0104455E-05
47	-3.7227342E-04	3.1639482E-06
48	-3.6960381E-04	2.2981311E-05
49	-3.6329162E-04	3.9637739E-05
50	-3.5394057E-04	5.3417112E-05
51	-3.4209825E-04	6.4595101E-05
52	-3.2825827E-04	7.3436934E-05
53	-3.1286231E-04	8.0196247E-05
54	-2.9630221E-04	8.5114008E-05
55	-2.7892401E-04	8.8417361E-05
56	-2.6102867E-04	9.0319706E-05
57	-2.4287626E-04	9.1019969E-05
58	-2.2468943E-04	9.0702673E-05
59	-2.0665260E-04	8.9537890E-05
60	-1.8892037E-04	8.7681556E-05
61	-1.7161661E-04	8.5275771E-05
62	-1.5483812E-04	8.2449209E-05
63	-1.3865726E-04	7.9317597E-05
64	-1.2312453E-04	7.5984249E-05
65	-1.0827091E-04	7.2540717E-05
66	-9.4110220E-05	6.9067488E-05
67	-8.0641225E-05	6.5634587E-05
68	-6.7849690E-05	6.2302117E-05
69	-5.5710302E-05	5.9120792E-05
70	-4.4188507E-05	5.6132450E-05
71	-3.3242227E-05	5.3370542E-05
72	-2.2823492E-05	5.0860611E-05
73	-1.2879978E-05	4.8620748E-05
74	-3.3564494E-06	4.6662040E-05

75	5.8038933E-06	4.4989161E-05
76	1.4658130E-05	4.3600011E-05
77	2.3262183E-05	4.2485148E-05
78	3.1669378E-05	4.1628108E-05
79	3.9929079E-05	4.1005858E-05
80	4.8085423E-05	4.0589142E-05
81	5.6176084E-05	4.0342649E-05
82	6.4231080E-05	4.0225119E-05
83	7.2271585E-05	4.0189384E-05
84	7.6290802E-05	4.0187541E-05

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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

O\_L  
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.000	-1.4729E-02	0.000	0.000	0.000	0.000	ACTIVE	0.000	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
2 D	0.000	-1.4131E-02	4.557	0.000	4.557	12.22	ACTIVE	0.000	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
3 D	0.000	-1.3533E-02	10.91	0.000	10.91	19.97	ACTIVE	0.000	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
4 D	0.000	-1.2936E-02	17.92	0.000	17.92	24.17	ACTIVE	0.000	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
5 D	0.000	-1.2340E-02	26.34	0.000	26.34	26.78	ACTIVE	0.000	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
6 D	0.000	-1.1746E-02	34.34	0.000	34.34	28.81	ACTIVE	0.000	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
7 D	0.000	-1.1154E-02	41.20	0.000	41.20	30.70	ACTIVE	0.000	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
8 D	0.000	-1.0565E-02	47.35	0.000	47.35	32.62	ACTIVE	0.000	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
9 D	0.000	-9.9805E-03	53.02	0.000	53.02	34.66	ACTIVE	0.000	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
10 D	0.000	-9.4008E-03	58.37	0.000	58.37	36.83	ACTIVE	0.000	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
11 D	0.000	-8.8274E-03	63.22	0.000	63.22	39.14	ACTIVE	0.000	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
12 D	0.000	-8.2617E-03	68.17	0.000	68.17	41.57	ACTIVE	0.000	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
13 D	0.000	-7.7050E-03	72.97	0.000	72.97	44.12	ACTIVE	0.000	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
14 D	0.000	-7.1591E-03	76.88	0.000	76.88	35.75	ACTIVE	0.000	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	BNA2_(2)_335_337_L_0						
15 D	0.000	-6.6258E-03	79.69	0.000	79.69	37.64	ACTIVE	0.000	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	BNA2_(2)_335_337_L_0						
16 D	8.0398E-02	-6.1069E-03	82.61	0.4020	82.61	39.60	ACTIVE	0.000	-2.500	0.000	
1.000	1.000	0.4020	0.000	0.000	BNA2_(2)_335_337_L_0						
17 D	0.3073	-5.6039E-03	85.63	1.536	85.63	41.63	ACTIVE	0.000	-2.700	0.000	
1.000	1.000	1.536	0.000	0.000	BNA2_(2)_335_337_L_0						
18 D	0.5405	-5.1185E-03	88.73	2.702	88.73	43.71	ACTIVE	0.000	-2.900	0.000	
1.000	1.000	2.702	0.000	0.000	BNA2_(2)_335_337_L_0						
19 D	0.7793	-4.6521E-03	91.90	3.896	91.90	45.84	ACTIVE	0.000	-3.100	0.000	
1.000	1.000	3.896	0.000	0.000	BNA2_(2)_335_337_L_0						
20 D	1.023	-4.2059E-03	95.14	5.115	95.14	48.01	ACTIVE	0.000	-3.300	0.000	
1.000	1.000	5.115	0.000	0.000	BNA2_(2)_335_337_L_0						
21 D	1.271	-3.7809E-03	98.44	6.355	98.44	50.21	ACTIVE	0.000	-3.500	0.000	
1.000	1.000	6.355	0.000	0.000	BNA2_(2)_335_337_L_0						
22 D	1.773	-3.3779E-03	99.79	6.863	99.79	51.34	ACTIVE	0.000	-3.700	2.000	
1.000	1.000	8.863	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	2.278	-2.9977E-03	101.2	7.388	101.2	52.50	ACTIVE	0.000	-3.900	4.000	
1.000	1.000	11.39	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	2.786	-2.6406E-03	102.6	7.929	102.6	53.68	ACTIVE	0.000	-4.100	6.000	
1.000	1.000	13.93	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	3.297	-2.3067E-03	104.1	8.485	104.1	54.87	ACTIVE	0.000	-4.300	8.000	
1.000	1.000	16.48	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	3.811	-1.9962E-03	105.6	9.053	105.6	56.07	ACTIVE	0.000	-4.500	10.00	
1.000	1.000	19.05	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	4.327	-1.7088E-03	107.2	9.633	107.2	57.29	ACTIVE	0.000	-4.700	12.00	
1.000	1.000	21.63	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	4.845	-1.4442E-03	108.7	10.22	108.7	59.93	ACTIVE	0.000	-4.900	14.00	
1.000	1.000	24.22	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	5.365	-1.2019E-03	110.3	10.82	110.3	63.07	ACTIVE	0.000	-5.100	16.00	
1.000	1.000	26.82	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	5.887	-9.8144E-04	111.9	11.43	111.9	65.87	ACTIVE	0.000	-5.300	18.00	
1.000	1.000	29.43	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	6.410	-7.8198E-04	113.6	12.05	113.6	68.36	ACTIVE	0.000	-5.500	20.00	
1.000	1.000	32.05	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	7.272	-6.0274E-04	115.3	14.36	115.3	70.56	UL-RL	8.0427E+04	-5.700	22.00	
1.000	1.000	36.36	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	10.60	-4.4279E-04	116.9	28.98	116.9	72.52	UL-RL	8.0427E+04	-5.900	24.00	
1.000	1.000	52.98	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	13.61	-3.0115E-04	118.6	42.05	118.6	74.25	UL-RL	8.0427E+04	-6.100	26.00
1.000	1.000	68.05	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	16.08	-1.7674E-04	120.4	52.42	120.4	77.88	UL-RL	8.0427E+04	-6.300	28.00
1.000	1.000	80.42	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	18.23	-6.8452E-05	122.1	61.16	122.1	81.79	UL-RL	8.0427E+04	-6.500	30.00
1.000	1.000	91.16	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	20.18	2.4841E-05	123.8	68.89	123.8	85.15	UL-RL	8.0427E+04	-6.700	32.00
1.000	1.000	100.9	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	21.94	1.0428E-04	125.6	75.68	125.6	88.00	UL-RL	8.0427E+04	-6.900	34.00
1.000	1.000	109.7	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	23.52	1.7100E-04	127.4	81.61	127.4	90.42	UL-RL	8.0427E+04	-7.100	36.00
1.000	1.000	117.6	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	24.95	2.2610E-04	129.1	86.75	129.1	92.44	UL-RL	8.0427E+04	-7.300	38.00
1.000	1.000	124.7	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	26.23	2.7069E-04	130.9	91.17	130.9	94.13	UL-RL	8.0427E+04	-7.500	40.00
1.000	1.000	131.2	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	27.30	3.0580E-04	132.8	94.48	132.8	96.30	UL-RL	8.0427E+04	-7.700	42.00
1.000	1.000	136.5	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	28.22	3.3243E-04	134.6	97.11	134.6	98.40	UL-RL	8.0427E+04	-7.900	44.00
1.000	1.000	141.1	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	29.06	3.5152E-04	136.4	99.31	136.4	100.1	UL-RL	8.0427E+04	-8.100	46.00
1.000	1.000	145.3	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	29.83	3.6398E-04	138.2	101.1	138.2	101.6	UL-RL	8.0427E+04	-8.300	48.00
1.000	1.000	149.1	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	30.53	3.7064E-04	140.1	102.7	140.1	102.7	UL-RL	8.0427E+04	-8.500	50.00
1.000	1.000	152.7	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	31.16	3.7227E-04	141.9	103.8	141.9	103.8	V-C	5.0267E+04	-8.700	52.00
1.000	1.000	155.8	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	31.74	3.6960E-04	143.8	104.7	143.8	104.7	V-C	5.0267E+04	-8.900	54.00
1.000	1.000	158.7	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	32.28	3.6329E-04	145.7	105.4	145.7	105.4	V-C	5.0267E+04	-9.100	56.00
1.000	1.000	161.4	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	32.79	3.5394E-04	147.5	106.0	147.5	106.0	V-C	5.0267E+04	-9.300	58.00
1.000	1.000	164.0	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	33.28	3.4210E-04	149.4	106.4	149.4	106.4	V-C	5.0267E+04	-9.500	60.00
1.000	1.000	166.4	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	33.75	3.2826E-04	151.3	106.8	151.3	106.8	V-C	5.0267E+04	-9.700	62.00
1.000	1.000	168.8	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	34.21	3.1286E-04	153.2	107.0	153.2	107.0	V-C	5.0267E+04	-9.900	64.00
1.000	1.000	171.0	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	34.65	2.9630E-04	155.1	107.3	155.1	107.3	V-C	5.0267E+04	-10.10	66.00
1.000	1.000	173.3	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	35.09	2.7892E-04	157.0	107.5	157.0	107.5	V-C	5.0267E+04	-10.30	68.00
1.000	1.000	175.5	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	35.53	2.6103E-04	158.9	107.7	158.9	107.7	V-C	5.0267E+04	-10.50	70.00
1.000	1.000	177.7	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	35.97	2.4288E-04	160.8	107.8	160.8	107.8	V-C	5.0267E+04	-10.70	72.00
1.000	1.000	179.8	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	36.40	2.2469E-04	162.7	108.0	162.7	108.0	V-C	5.0267E+04	-10.90	74.00
1.000	1.000	182.0	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	36.85	2.0665E-04	164.7	108.2	164.7	108.2	V-C	5.0267E+04	-11.10	76.00
1.000	1.000	184.2	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	37.29	1.8892E-04	166.6	108.5	166.6	108.5	V-C	5.0267E+04	-11.30	78.00
1.000	1.000	186.5	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	37.75	1.7162E-04	168.5	108.7	168.5	108.7	V-C	5.0267E+04	-11.50	80.00
1.000	1.000	188.7	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	38.21	1.5484E-04	170.5	109.0	170.5	109.0	V-C	5.0267E+04	-11.70	82.00
1.000	1.000	191.0	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	38.67	1.3866E-04	172.4	109.4	172.4	109.4	V-C	5.0267E+04	-11.90	84.00
1.000	1.000	193.4	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	39.15	1.2312E-04	174.4	109.7	174.4	109.7	V-C	5.0267E+04	-12.10	86.00
1.000	1.000	195.7	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	39.63	1.0827E-04	176.3	110.2	176.3	110.2	V-C	5.0267E+04	-12.30	88.00
1.000	1.000	198.2	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	40.12	9.4110E-05	178.3	110.6	178.3	110.6	V-C	5.0267E+04	-12.50	90.00
1.000	1.000	200.6	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	40.62	8.0641E-05	180.2	111.1	180.2	111.1	V-C	5.0267E+04	-12.70	92.00
1.000	1.000	203.1	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	41.13	6.7850E-05	182.2	111.6	182.2	111.6	V-C	5.0267E+04	-12.90	94.00
1.000	1.000	205.6	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	41.64	5.5710E-05	184.2	112.2	184.2	112.2	V-C	5.0267E+04	-13.10	96.00
1.000	1.000	208.2	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	42.17	4.4189E-05	186.1	112.8	186.1	112.8	V-C	5.0267E+04	-13.30	98.00
1.000	1.000	210.8	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	42.69	3.3242E-05	188.1	113.5	188.1	113.5	V-C	5.0267E+04	-13.50	100.0
1.000	1.000	213.5	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	43.23	2.2823E-05	190.1	114.1	190.1	114.1	V-C	5.0267E+04	-13.70	102.0
1.000	1.000	216.1	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	43.76	1.2880E-05	192.1	114.8	192.1	114.8	V-C	5.0267E+04	-13.90	104.0
1.000	1.000	218.8	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	44.30	3.3564E-06	194.0	115.5	194.0	115.6	UL-RL	8.0427E+04	-14.10	106.0
1.000	1.000	221.5	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	44.79	-5.8039E-06	196.0	116.0	196.0	116.7	UL-RL	8.0427E+04	-14.30	108.0
1.000	1.000	224.0	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	45.29	-1.4658E-05	198.0	116.4	198.0	117.9	UL-RL	8.0427E+04	-14.50	110.0
1.000	1.000	226.4	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	45.79	-2.3262E-05	200.0	116.9	200.0	119.1	UL-RL	8.0427E+04	-14.70	112.0
1.000	1.000	228.9	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	46.29	-3.1669E-05	202.0	117.4	202.0	120.3	UL-RL	8.0427E+04	-14.90	114.0
1.000	1.000	231.4	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	46.79	-3.9929E-05	204.0	118.0	204.0	121.5	UL-RL	8.0427E+04	-15.10	116.0
1.000	1.000	234.0	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	47.30	-4.8085E-05	206.0	118.5	206.0	122.7	UL-RL	8.0427E+04	-15.30	118.0
1.000	1.000	236.5	0.000	0.000	BNA2_(2)_335_337_L_0					
81 D	47.80	-5.6176E-05	208.0	119.0	208.0	123.9	UL-RL	8.0427E+04	-15.50	120.0
1.000	1.000	239.0	0.000	0.000	BNA2_(2)_335_337_L_0					
82 D	48.31	-6.4231E-05	210.0	119.5	210.0	125.0	UL-RL	8.0427E+04	-15.70	122.0
1.000	1.000	241.5	0.000	0.000	BNA2_(2)_335_337_L_0					
83 D	36.61	-7.2272E-05	212.0	120.1	212.0	126.2	UL-RL	8.0427E+04	-15.90	124.0
1.000	1.000	244.1	0.000	0.000	BNA2_(2)_335_337_L_0					
84 D	12.27	-7.6291E-05	213.0	120.3	213.0	126.8	UL-RL	8.0427E+04	-16.00	125.0
1.000	1.000	245.3	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| Exe Time :25 June 2020 16:39:30
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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

O\_R  
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
15 D	18.98	6.6258E-03	0.000	94.88	56.00	113.4	PASSIVE	0.000	-2.300	0.000	
1.000	1.000	94.88	0.000	0.000	BNA2_(2)_335_337_L_0						
16 D	21.86	6.1069E-03	4.000	109.3	60.00	109.3	PASSIVE	0.000	-2.500	0.000	
1.000	1.000	109.3	0.000	0.000	BNA2_(2)_335_337_L_0						
17 D	24.74	5.6039E-03	8.000	123.7	64.00	123.7	PASSIVE	0.000	-2.700	0.000	
1.000	1.000	123.7	0.000	0.000	BNA2_(2)_335_337_L_0						
18 D	27.62	5.1185E-03	12.00	138.1	68.00	138.1	PASSIVE	0.000	-2.900	0.000	
1.000	1.000	138.1	0.000	0.000	BNA2_(2)_335_337_L_0						
19 D	30.50	4.6521E-03	16.00	152.5	72.00	152.5	PASSIVE	0.000	-3.100	0.000	
1.000	1.000	152.5	0.000	0.000	BNA2_(2)_335_337_L_0						
20 D	33.38	4.2059E-03	20.00	166.9	76.00	166.9	PASSIVE	0.000	-3.300	0.000	
1.000	1.000	166.9	0.000	0.000	BNA2_(2)_335_337_L_0						
21 D	36.26	3.7809E-03	24.00	181.3	80.00	181.3	PASSIVE	0.000	-3.500	0.000	
1.000	1.000	181.3	0.000	0.000	BNA2_(2)_335_337_L_0						
22 D	38.10	3.3779E-03	26.00	188.5	82.00	188.5	PASSIVE	0.000	-3.700	2.000	
1.000	1.000	190.5	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	35.66	2.9977E-03	28.00	174.3	84.00	174.3	V-C	3.7753E+04	-3.900	4.000	
1.000	1.000	178.3	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	33.23	2.6406E-03	30.00	160.1	86.00	160.1	V-C	3.7753E+04	-4.100	6.000	
1.000	1.000	166.1	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	31.02	2.3067E-03	32.00	147.1	88.00	147.1	V-C	3.7753E+04	-4.300	8.000	
1.000	1.000	155.1	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	29.02	1.9962E-03	34.00	135.1	90.00	135.1	V-C	3.7753E+04	-4.500	10.00	
1.000	1.000	145.1	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	27.24	1.7088E-03	36.00	124.2	92.00	124.2	V-C	3.7753E+04	-4.700	12.00	
1.000	1.000	136.2	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	25.66	1.4442E-03	38.00	114.3	94.00	114.3	V-C	3.7753E+04	-4.900	14.00	
1.000	1.000	128.3	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	24.29	1.2019E-03	40.00	105.5	96.00	105.5	V-C	3.7753E+04	-5.100	16.00	
1.000	1.000	121.5	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	23.11	9.8144E-04	42.00	97.57	98.00	97.57	V-C	3.7753E+04	-5.300	18.00	
1.000	1.000	115.6	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	22.12	7.8198E-04	44.00	90.62	100.0	90.62	V-C	3.7753E+04	-5.500	20.00	
1.000	1.000	110.6	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	21.31	6.0274E-04	46.00	84.56	102.0	84.56	V-C	3.7753E+04	-5.700	22.00	
1.000	1.000	106.6	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	20.67	4.4279E-04	48.00	79.34	104.0	79.34	V-C	3.7753E+04	-5.900	24.00	
1.000	1.000	103.3	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	20.18	3.0115E-04	50.00	74.92	106.0	74.92	V-C	3.77753E+04	-6.100	26.00
1.000	1.000	100.9	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	19.85	1.7674E-04	52.00	71.24	108.0	71.24	V-C	3.77753E+04	-6.300	28.00
1.000	1.000	99.24	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	19.61	6.8452E-05	54.00	68.07	110.0	68.52	UL-RL	6.0405E+04	-6.500	30.00
1.000	1.000	98.07	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	19.11	-2.4841E-05	56.00	63.54	112.0	69.79	UL-RL	6.0405E+04	-6.700	32.00
1.000	1.000	95.54	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	18.79	-1.0428E-04	58.00	59.93	114.0	71.05	UL-RL	6.0405E+04	-6.900	34.00
1.000	1.000	93.93	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	18.63	-1.7100E-04	60.00	57.17	116.0	72.31	UL-RL	6.0405E+04	-7.100	36.00
1.000	1.000	93.17	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	18.64	-2.2610E-04	62.00	55.18	118.0	73.58	UL-RL	6.0405E+04	-7.300	38.00
1.000	1.000	93.18	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	18.78	-2.7069E-04	64.00	53.88	120.0	74.84	UL-RL	6.0405E+04	-7.500	40.00
1.000	1.000	93.88	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	19.04	-3.0580E-04	66.00	53.19	122.0	76.10	UL-RL	6.0405E+04	-7.700	42.00
1.000	1.000	95.19	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	19.41	-3.3243E-04	68.00	53.06	124.0	77.36	UL-RL	6.0405E+04	-7.900	44.00
1.000	1.000	97.06	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	19.88	-3.5152E-04	70.00	53.40	126.0	78.63	UL-RL	6.0405E+04	-8.100	46.00
1.000	1.000	99.40	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	20.43	-3.6398E-04	72.00	54.15	128.0	79.89	UL-RL	6.0405E+04	-8.300	48.00
1.000	1.000	102.2	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	21.05	-3.7064E-04	74.00	55.27	130.0	81.14	UL-RL	6.0405E+04	-8.500	50.00
1.000	1.000	105.3	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	21.74	-3.7227E-04	76.00	56.70	132.0	82.40	UL-RL	6.0405E+04	-8.700	52.00
1.000	1.000	108.7	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	22.48	-3.6960E-04	78.00	58.39	134.0	83.66	UL-RL	6.0405E+04	-8.900	54.00
1.000	1.000	112.4	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	23.26	-3.6329E-04	80.00	60.29	136.0	84.91	UL-RL	6.0405E+04	-9.100	56.00
1.000	1.000	116.3	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	24.08	-3.5394E-04	82.00	62.38	138.0	86.16	UL-RL	6.0405E+04	-9.300	58.00
1.000	1.000	120.4	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	24.92	-3.4210E-04	84.00	64.60	140.0	87.42	UL-RL	6.0405E+04	-9.500	60.00
1.000	1.000	124.6	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	25.78	-3.2826E-04	86.00	66.92	142.0	88.66	UL-RL	6.0405E+04	-9.700	62.00
1.000	1.000	128.9	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	26.67	-3.1286E-04	88.00	69.33	144.0	89.91	UL-RL	6.0405E+04	-9.900	64.00
1.000	1.000	133.3	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	27.56	-2.9630E-04	90.00	71.79	146.0	91.16	UL-RL	6.0405E+04	-10.10	66.00
1.000	1.000	137.8	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	28.46	-2.7892E-04	92.00	74.29	148.0	92.40	UL-RL	6.0405E+04	-10.30	68.00
1.000	1.000	142.3	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	29.36	-2.6103E-04	94.00	76.80	150.0	93.64	UL-RL	6.0405E+04	-10.50	70.00
1.000	1.000	146.8	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	30.26	-2.4288E-04	96.00	79.31	152.0	94.88	UL-RL	6.0405E+04	-10.70	72.00
1.000	1.000	151.3	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	31.16	-2.2469E-04	98.00	81.80	154.0	96.11	UL-RL	6.0405E+04	-10.90	74.00
1.000	1.000	155.8	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	32.05	-2.0665E-04	100.00	84.26	156.0	97.35	UL-RL	6.0405E+04	-11.10	76.00
1.000	1.000	160.3	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	32.94	-1.8892E-04	102.0	86.69	158.0	98.58	UL-RL	6.0405E+04	-11.30	78.00
1.000	1.000	164.7	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	33.82	-1.7162E-04	104.0	89.08	160.0	99.81	UL-RL	6.0405E+04	-11.50	80.00
1.000	1.000	169.1	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	34.68	-1.5484E-04	106.0	91.42	162.0	101.0	UL-RL	6.0405E+04	-11.70	82.00
1.000	1.000	173.4	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	35.54	-1.3866E-04	108.0	93.71	164.0	102.3	UL-RL	6.0405E+04	-11.90	84.00
1.000	1.000	177.7	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	36.38	-1.2312E-04	110.0	95.92	166.0	103.5	UL-RL	6.0405E+04	-12.10	86.00
1.000	1.000	181.9	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	37.21	-1.0827E-04	112.0	98.07	168.0	104.8	UL-RL	6.0405E+04	-12.30	88.00
1.000	1.000	186.1	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	38.03	-9.4110E-05	114.0	100.2	170.0	106.1	UL-RL	6.0405E+04	-12.50	90.00
1.000	1.000	190.2	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	38.84	-8.0641E-05	116.0	102.2	172.0	107.3	UL-RL	6.0405E+04	-12.70	92.00
1.000	1.000	194.2	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	39.64	-6.7850E-05	118.0	104.2	174.0	108.6	UL-RL	6.0405E+04	-12.90	94.00
1.000	1.000	198.2	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	40.44	-5.5710E-05	120.0	106.2	176.0	109.8	UL-RL	6.0405E+04	-13.10	96.00
1.000	1.000	202.2	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	41.22	-4.4189E-05	122.0	108.1	178.0	111.0	UL-RL	6.0405E+04	-13.30	98.00
1.000	1.000	206.1	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	41.99	-3.3242E-05	124.0	110.0	180.0	112.3	UL-RL	6.0405E+04	-13.50	100.0
1.000	1.000	210.0	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	42.76	-2.2823E-05	126.0	111.8	182.0	113.5	UL-RL	6.0405E+04	-13.70	102.0
1.000	1.000	213.8	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	43.51	-1.2880E-05	128.0	113.6	184.0	114.7	UL-RL	6.0405E+04	-13.90	104.0
1.000	1.000	217.6	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	44.25	-3.3564E-06	130.0	115.2	186.0	116.1	UL-RL	6.0405E+04	-14.10	106.0
1.000	1.000	221.2	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	44.98	5.8039E-06	132.0	116.9	188.0	117.5	UL-RL	6.0405E+04	-14.30	108.0
1.000	1.000	224.9	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	45.71	1.4658E-05	134.0	118.5	190.0	118.8	UL-RL	6.0405E+04	-14.50	110.0
1.000	1.000	228.5	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	46.43	2.3262E-05	136.0	120.1	192.0	120.2	UL-RL	6.0405E+04	-14.70	112.0
1.000	1.000	232.1	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	47.13	3.1669E-05	138.0	121.7	194.0	121.7	UL-RL	6.0405E+04	-14.90	114.0
1.000	1.000	235.7	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	47.83	3.9929E-05	140.0	123.2	196.0	123.2	V-C	3.77753E+04	-15.10	116.0
1.000	1.000	239.2	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	48.53	4.8085E-05	142.0	124.6	198.0	124.6	V-C	3.7753E+04	-15.30	118.0
1.000	1.000		242.6	0.000	0.000	BNA2_(2)_335_337_L_0				
81 D	49.23	5.6176E-05	144.0	126.1	200.0	126.1	V-C	3.7753E+04	-15.50	120.0
1.000	1.000		246.1	0.000	0.000	BNA2_(2)_335_337_L_0				
82 D	49.92	6.4231E-05	146.0	127.6	202.0	127.6	V-C	3.7753E+04	-15.70	122.0
1.000	1.000		249.6	0.000	0.000	BNA2_(2)_335_337_L_0				
83 D	37.96	7.2272E-05	148.0	129.1	204.0	129.1	V-C	3.7753E+04	-15.90	124.0
1.000	1.000		253.1	0.000	0.000	BNA2_(2)_335_337_L_0				
84 D	12.74	7.6291E-05	149.0	129.8	205.0	129.8	V-C	3.7753E+04	-16.00	125.0
1.000	1.000		254.8	0.000	0.000	BNA2_(2)_335_337_L_0				

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:39:30
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New Project

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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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 83  
C U R R E N T   T I M E   I S      2.0000

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	46.542	-46.542	1.22268E-10	9.3084
2	59.476	-59.476	-9.3084	21.204
3	73.859	-73.859	-21.204	35.975
4	89.692	-89.692	-35.975	53.914
5	106.97	-106.97	-53.914	75.309
6	125.71	-125.71	-75.309	100.45
7	145.89	-145.89	-100.45	129.63
8	167.52	-167.52	-129.63	163.13
9	190.60	-190.60	-163.13	201.25
10	215.13	-215.13	-201.25	244.28
11	241.11	-241.11	-244.28	292.50
12	268.54	-268.54	-292.50	346.21
13	290.05	-290.05	-346.21	404.22
14	290.05	-290.05	-404.22	462.23
15	271.07	-271.07	-462.23	516.44
16	249.30	-249.30	-516.44	566.30
17	224.87	-224.87	-566.30	611.28
18	197.79	-197.79	-611.28	650.83
19	168.07	-168.07	-650.83	684.45
20	135.71	-135.71	-684.45	711.59
21	100.72	-100.72	-711.59	731.73
22	64.392	-64.392	-731.73	744.61
23	31.007	-31.007	-744.61	750.81
24	0.56417	-0.56417	-750.81	750.93
25	-27.155	27.155	-750.93	745.50
26	-52.364	52.364	-745.50	735.02
27	-75.275	75.275	-735.02	719.97
28	-96.094	96.094	-719.97	700.75
29	-115.02	115.02	-700.75	677.74
30	-132.25	132.25	-677.74	651.30
31	-147.96	147.96	-651.30	621.70
32	-162.00	162.00	-621.70	589.30
33	-172.08	172.08	-589.30	554.89
34	-178.65	178.65	-554.89	519.16
35	-182.41	182.41	-519.16	482.67
36	-183.80	183.80	-482.67	445.92
37	-182.72	182.72	-445.92	409.37
38	-179.58	179.58	-409.37	373.46
39	-174.69	174.69	-373.46	338.52
40	-168.38	168.38	-338.52	304.84
41	-160.92	160.92	-304.84	272.66
42	-152.66	152.66	-272.66	242.13
43	-143.85	143.85	-242.13	213.36
44	-134.66	134.66	-213.36	186.43
45	-125.27	125.27	-186.43	161.37
46	-115.79	115.79	-161.37	138.21
47	-106.37	106.37	-138.21	116.94
48	-97.115	97.115	-116.94	97.516
49	-88.094	88.094	-97.516	79.897
50	-79.377	79.377	-79.897	64.022
51	-71.015	71.015	-64.022	49.819
52	-63.049	63.049	-49.819	37.209
53	-55.508	55.508	-37.209	26.107
54	-48.414	48.414	-26.107	16.424
55	-41.778	41.778	-16.424	8.0687
56	-35.607	35.607	-8.0687	0.94729
57	-29.902	29.902	-0.94729	-5.0328
58	-24.657	24.657	5.0328	-9.9641
59	-19.863	19.863	9.9641	-13.937
60	-15.509	15.509	13.937	-17.038
61	-11.579	11.579	17.038	-19.354
62	-8.0585	8.0585	19.354	-20.966
63	-4.9284	4.9284	20.966	-21.952
64	-2.1648	2.1648	21.952	-22.385
65	0.25311	-0.25311	22.385	-22.334
66	2.3430	-2.3430	22.334	-21.865
67	4.1223	-4.1223	21.865	-21.041
68	5.6078	-5.6078	21.041	-19.919
69	6.8157	-6.8157	19.919	-18.556
70	7.7611	-7.7611	18.556	-17.004

71	8.4602	-8.4602	17.004	-15.312
72	8.9257	-8.9257	15.312	-13.527
73	9.1740	-9.1740	13.527	-11.692
74	9.2266	-9.2266	11.692	-9.8467
75	9.0387	-9.0387	9.8467	-8.0389
76	8.6188	-8.6188	8.0389	-6.3152
77	7.9788	-7.9788	6.3152	-4.7194
78	7.1359	-7.1359	4.7194	-3.2922
79	6.0955	-6.0955	3.2922	-2.0731
80	4.8628	-4.8628	2.0731	-1.1005
81	3.4394	-3.4394	1.1005	-0.41267
82	1.8262	-1.8262	0.41267	-4.74343E-02
83	0.47430	-0.47430	4.74343E-02	-6.41265E-13

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:39:30 |  
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New Project
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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\_341 :  
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
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\*\*\*\*\* NO ONE ELEMENT ACTIVE AT CURRENT STEP \*\*\*\*\*

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:39:30 |  
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S T R E S S      R E S U L T S      F O R      G R O U P      N O .

Tieback\_342 :  
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 \*\*\*\*\*

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ITER    0 RNORM = 7340.      RMNORM= 0.000
        RINORM=0.2729E+07 RIMNOR=0.2175E+08
        RENORM=0.1562E+05 REMNOR=0.1740E-18 RATIO =0.7567E-01 TOLER =0.1000E-03 NOT CONVERGED
        RFMAX = 290.1      RMMAX = 750.9
        RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
        RDT   =0.2729E+07 RDR   =0.2175E+08
        RATIOT=0.7567E-01 RATIOR= 0.000
        MAX UN=0.4066E-08 IEQ=      7 NODE      4 DOF   1 Y-DISPL.F
        MIN UN=-125.0     IEQ=     19 NODE     10 DOF   1 Y-DISPL.F
        NO. OF CONTACT CONSTRAINT VIOLATIONS 0

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ITER    2 RNORM = 7340.      RMNORM= 0.000
        RINORM=0.2729E+07 RIMNOR=0.2175E+08
        RENORM= 2.753      REMNOR=0.2367E-18 RATIO =0.1004E-02 TOLER =0.1000E-03 NOT CONVERGED
        RFMAX = 290.1      RMMAX = 750.9
        RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
        RDT   =0.2729E+07 RDR   =0.2175E+08
        RATIOT=0.1004E-02 RATIOR= 0.000
        MAX UN=0.1755      IEQ=      71 NODE      36 DOF      1 Y-DISPL.F
        MIN UN=-1.357      IEQ=      27 NODE      14 DOF      1 Y-DISPL.F
        NO. OF CONTACT CONSTRAINT VIOLATIONS      0

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ITER      3 RINORM = 7340.      RMNORM= 0.000
          RINORM=0.2729E+07 RIMNOR=0.2175E+08
          RENORM=0.1808E-03 REMNOR=0.1928E-18 RATIO = 0.8140E-05 TOLER = 0.1000E-03      CONVERGED !
          RFMAX = 290.1      RMMAX = 750.9
          RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
          RDT = 0.2729E+07 RDR = 0.2175E+08
          RATIOI=0.8140E-05 RATIOR= 0.000
          MAX UN=0.1336E-01 IEQ=       61 NODE       31 DOF      1 Y-DISPL.F
          MIN UN=-.5349E-08 IEQ=        5 NODE       3 DOF      1 Y-DISPL.F
          NO. OF CONTACT CONSTRAINT VIOLATIONS 0

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:39:30
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New Project  
SOLUTION REACHED USING 3 ITERATIONS ON 40

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

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

	Y-DISPL.F	X-ROT. F
	(02)	(04)
1	1.3175909E-02	-2.6606350E-03
2	1.2643831E-02	-2.6598955E-03
3	1.2112065E-02	-2.6574301E-03
4	1.1581008E-02	-2.6527202E-03
5	1.1051165E-02	-2.6452016E-03
6	1.0523155E-02	-2.6342699E-03
7	9.9977271E-03	-2.6192801E-03
8	9.4757595E-03	-2.5995465E-03
9	8.9582732E-03	-2.5743430E-03
10	8.4464381E-03	-2.5429033E-03
11	7.9414520E-03	-2.5063620E-03
12	7.4441604E-03	-2.4658135E-03
13	6.9554529E-03	-2.4203700E-03
14	6.4763930E-03	-2.3692181E-03
15	6.0081801E-03	-2.3118497E-03
16	5.5520748E-03	-2.2481552E-03
17	5.1093304E-03	-2.1782749E-03
18	4.6811596E-03	-2.1024738E-03
19	4.2687095E-03	-2.0211444E-03
20	3.8730355E-03	-1.9348097E-03
21	3.4950759E-03	-1.8441208E-03
22	3.1356241E-03	-1.7498526E-03
23	2.7953131E-03	-1.6528829E-03
24	2.4745934E-03	-1.5541001E-03
25	2.1737403E-03	-1.4543334E-03
26	1.8928740E-03	-1.3543561E-03
27	1.6319640E-03	-1.2548870E-03
28	1.3908408E-03	-1.1565946E-03
29	1.1692072E-03	-1.0601019E-03
30	9.6664160E-04	-9.6598717E-04
31	7.8261664E-04	-8.7479259E-04
32	6.1649623E-04	-7.8702304E-04
33	4.6754793E-04	-7.0314583E-04
34	3.3495312E-04	-6.2355008E-04
35	2.1782453E-04	-5.4851507E-04
36	1.1523047E-04	-4.7822928E-04
37	2.6208688E-05	-4.1280543E-04
38	-5.0218820E-05	-3.5228840E-04
39	-1.1503219E-04	-2.9665887E-04
40	-1.6920272E-04	-2.4583961E-04
41	-2.1368043E-04	-1.9970631E-04
42	-2.4938670E-04	-1.5809490E-04
43	-2.7720688E-04	-1.2081087E-04
44	-2.9798513E-04	-8.7637934E-05
45	-3.1252061E-04	-5.8344269E-05
46	-3.2156517E-04	-3.2686883E-05
47	-3.2582118E-04	-1.0416734E-05
48	-3.2594090E-04	8.7178613E-06
49	-3.2252636E-04	2.4967579E-05
50	-3.1612977E-04	3.8579362E-05
51	-3.0725442E-04	4.9794499E-05
52	-2.9635618E-04	5.8846430E-05
53	-2.8384510E-04	6.5959590E-05
54	-2.7008703E-04	7.1348301E-05
55	-2.5540694E-04	7.5215525E-05
56	-2.4008948E-04	7.7752909E-05
57	-2.2438247E-04	7.9139930E-05
58	-2.0849984E-04	7.9543819E-05
59	-1.9262094E-04	7.9119548E-05
60	-1.7689772E-04	7.8009792E-05
61	-1.6145401E-04	7.6345254E-05
62	-1.4638868E-04	7.4244899E-05
63	-1.3177793E-04	7.1816313E-05
64	-1.1767759E-04	6.9156102E-05
65	-1.0412519E-04	6.6350424E-05
66	-9.1142035E-05	6.3475571E-05
67	-7.8735114E-05	6.0598455E-05
68	-6.6898939E-05	5.7777045E-05
69	-5.5617284E-05	5.5060806E-05
70	-4.4864846E-05	5.2491120E-05
71	-3.4608824E-05	5.0101628E-05
72	-2.4810433E-05	4.7918577E-05
73	-1.5426347E-05	4.5961210E-05
74	-6.4100600E-06	4.4242174E-05

75	2.2868543E-06	4.2768119E-05
76	1.0713556E-05	4.1539585E-05
77	1.8918645E-05	4.0550396E-05
78	2.6948815E-05	3.9787714E-05
79	3.4847559E-05	3.9232470E-05
80	4.2653967E-05	3.8859699E-05
81	5.0401556E-05	3.8638689E-05
82	5.8117136E-05	3.8533083E-05
83	6.5819685E-05	3.8500912E-05
84	6.9670051E-05	3.8499251E-05

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:39:30
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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 84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	1.065	-1.3176E-02	0.000	10.65	0.000	10.65	V-C	6857.	0.5000	0.000	
1.000	1.000	10.65	0.000	0.000	FRANA_334_8_L_0						
2 D	2.956	-1.2644E-02	4.557	14.78	4.557	14.78	V-C	6857.	0.3000	0.000	
1.000	1.000	14.78	0.000	0.000	FRANA_334_8_L_0						
3 D	3.119	-1.2112E-02	10.91	15.59	10.91	19.97	UL-RL	1.0971E+04	0.1000	0.000	
1.000	1.000	15.59	0.000	0.000	FRANA_334_8_L_0						
4 D	2.974	-1.1581E-02	17.92	14.87	17.92	24.17	UL-RL	1.0971E+04	-0.1000	0.000	
1.000	1.000	14.87	0.000	0.000	FRANA_334_8_L_0						
5 D	2.829	-1.1051E-02	26.34	14.14	26.34	26.78	UL-RL	1.0971E+04	-0.3000	0.000	
1.000	1.000	14.14	0.000	0.000	FRANA_334_8_L_0						
6 D	2.683	-1.0523E-02	34.34	13.42	34.34	28.81	UL-RL	1.0971E+04	-0.5000	0.000	
1.000	1.000	13.42	0.000	0.000	FRANA_334_8_L_0						
7 D	2.537	-9.9977E-03	41.20	12.69	41.20	30.70	UL-RL	1.0971E+04	-0.7000	0.000	
1.000	1.000	12.69	0.000	0.000	FRANA_334_8_L_0						
8 D	2.390	-9.4758E-03	47.35	11.95	47.35	32.62	UL-RL	1.0971E+04	-0.9000	0.000	
1.000	1.000	11.95	0.000	0.000	FRANA_334_8_L_0						
9 D	2.243	-8.9583E-03	53.02	11.21	53.02	34.66	UL-RL	1.0971E+04	-1.100	0.000	
1.000	1.000	11.21	0.000	0.000	FRANA_334_8_L_0						
10 D	2.094	-8.4464E-03	58.37	10.47	58.37	36.83	UL-RL	1.0971E+04	-1.300	0.000	
1.000	1.000	10.47	0.000	0.000	FRANA_334_8_L_0						
11 D	1.944	-7.9415E-03	63.22	9.720	63.22	39.14	UL-RL	1.0971E+04	-1.500	0.000	
1.000	1.000	9.720	0.000	0.000	FRANA_334_8_L_0						
12 D	1.794	-7.4442E-03	68.17	8.969	68.17	41.57	UL-RL	1.0971E+04	-1.700	0.000	
1.000	1.000	8.969	0.000	0.000	FRANA_334_8_L_0						
13 D	1.645	-6.9555E-03	72.97	8.223	72.97	44.12	UL-RL	1.0971E+04	-1.900	0.000	
1.000	1.000	8.223	0.000	0.000	FRANA_334_8_L_0						
14 D	9.545	-6.4764E-03	76.88	47.73	76.88	47.73	V-C	5.0267E+04	-2.100	0.000	
1.000	1.000	47.73	0.000	0.000	BNA2_(2)_335_337_L_0						
15 D	9.032	-6.0082E-03	79.69	45.16	79.69	45.16	V-C	5.0267E+04	-2.300	0.000	
1.000	1.000	45.16	0.000	0.000	BNA2_(2)_335_337_L_0						
16 D	8.598	-5.5521E-03	82.61	42.99	82.61	42.99	V-C	5.0267E+04	-2.500	0.000	
1.000	1.000	42.99	0.000	0.000	BNA2_(2)_335_337_L_0						
17 D	8.263	-5.1093E-03	85.63	41.31	85.63	41.63	UL-RL	8.0427E+04	-2.700	0.000	
1.000	1.000	41.31	0.000	0.000	BNA2_(2)_335_337_L_0						
18 D	7.576	-4.6812E-03	88.73	37.88	88.73	43.71	UL-RL	8.0427E+04	-2.900	0.000	
1.000	1.000	37.88	0.000	0.000	BNA2_(2)_335_337_L_0						
19 D	6.946	-4.2687E-03	91.90	34.73	91.90	45.84	UL-RL	8.0427E+04	-3.100	0.000	
1.000	1.000	34.73	0.000	0.000	BNA2_(2)_335_337_L_0						
20 D	6.377	-3.8730E-03	95.14	31.88	95.14	48.01	UL-RL	8.0427E+04	-3.300	0.000	
1.000	1.000	31.88	0.000	0.000	BNA2_(2)_335_337_L_0						
21 D	5.868	-3.4951E-03	98.44	29.34	98.44	50.21	UL-RL	8.0427E+04	-3.500	0.000	
1.000	1.000	29.34	0.000	0.000	BNA2_(2)_335_337_L_0						
22 D	5.670	-3.1356E-03	99.79	26.35	99.79	51.34	UL-RL	8.0427E+04	-3.700	2.000	
1.000	1.000	28.35	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	5.533	-2.7953E-03	101.2	23.67	101.2	52.50	UL-RL	8.0427E+04	-3.900	4.000	
1.000	1.000	27.67	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	5.456	-2.4746E-03	102.6	21.28	102.6	53.68	UL-RL	8.0427E+04	-4.100	6.000	
1.000	1.000	27.28	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	5.436	-2.1737E-03	104.1	19.18	104.1	54.87	UL-RL	8.0427E+04	-4.300	8.000	
1.000	1.000	27.18	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	5.472	-1.8929E-03	105.6	17.36	105.6	56.07	UL-RL	8.0427E+04	-4.500	10.00	
1.000	1.000	27.36	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	5.562	-1.6320E-03	107.2	15.81	107.2	57.29	UL-RL	8.0427E+04	-4.700	12.00	
1.000	1.000	27.81	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	5.703	-1.3908E-03	108.7	14.51	108.7	59.93	UL-RL	8.0427E+04	-4.900	14.00	
1.000	1.000	28.51	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	5.891	-1.1692E-03	110.3	13.46	110.3	63.07	UL-RL	8.0427E+04	-5.100	16.00	
1.000	1.000	29.46	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	6.125	-9.6664E-04	111.9	12.62	111.9	65.87	UL-RL	8.0427E+04	-5.300	18.00	
1.000	1.000	30.62	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	6.421	-7.8262E-04	113.6	12.10	113.6	68.36	UL-RL	8.0427E+04	-5.500	20.00	
1.000	1.000	32.10	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	7.050	-6.1650E-04	115.3	13.25	115.3	70.56	UL-RL	8.0427E+04	-5.700	22.00	
1.000	1.000	35.25	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	10.20	-4.6755E-04	116.9	26.99	116.9	72.52	UL-RL	8.0427E+04	-5.900	24.00	
1.000	1.000	50.99	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	13.07	-3.3495E-04	118.6	39.33	118.6	74.25	UL-RL	8.0427E+04	-6.100	26.00
1.000	1.000	65.33	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	15.42	-2.1782E-04	120.4	49.12	120.4	77.88	UL-RL	8.0427E+04	-6.300	28.00
1.000	1.000	77.12	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	17.48	-1.1523E-04	122.1	57.40	122.1	81.79	UL-RL	8.0427E+04	-6.500	30.00
1.000	1.000	87.40	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	19.36	-2.6209E-05	123.8	64.78	123.8	85.15	UL-RL	8.0427E+04	-6.700	32.00
1.000	1.000	96.78	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	21.07	5.0219E-05	125.6	71.33	125.6	88.00	UL-RL	8.0427E+04	-6.900	34.00
1.000	1.000	105.3	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	22.62	1.1503E-04	127.4	77.11	127.4	90.42	UL-RL	8.0427E+04	-7.100	36.00
1.000	1.000	113.1	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	24.03	1.6920E-04	129.1	82.17	129.1	92.44	UL-RL	8.0427E+04	-7.300	38.00
1.000	1.000	120.2	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	25.32	2.1368E-04	130.9	86.58	130.9	94.13	UL-RL	8.0427E+04	-7.500	40.00
1.000	1.000	126.6	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	26.39	2.4939E-04	132.8	89.95	132.8	96.30	UL-RL	8.0427E+04	-7.700	42.00
1.000	1.000	131.9	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	27.33	2.7721E-04	134.6	92.67	134.6	98.40	UL-RL	8.0427E+04	-7.900	44.00
1.000	1.000	136.7	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	28.20	2.9799E-04	136.4	95.01	136.4	100.1	UL-RL	8.0427E+04	-8.100	46.00
1.000	1.000	141.0	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	29.00	3.1252E-04	138.2	97.01	138.2	101.6	UL-RL	8.0427E+04	-8.300	48.00
1.000	1.000	145.0	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	29.74	3.2157E-04	140.1	98.71	140.1	102.7	UL-RL	8.0427E+04	-8.500	50.00
1.000	1.000	148.7	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	30.41	3.2582E-04	141.9	100.1	141.9	103.8	UL-RL	8.0427E+04	-8.700	52.00
1.000	1.000	152.1	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	31.03	3.2594E-04	143.8	101.2	143.8	104.7	UL-RL	8.0427E+04	-8.900	54.00
1.000	1.000	155.2	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	31.62	3.2253E-04	145.7	102.1	145.7	105.4	UL-RL	8.0427E+04	-9.100	56.00
1.000	1.000	158.1	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	32.18	3.1613E-04	147.5	102.9	147.5	106.0	UL-RL	8.0427E+04	-9.300	58.00
1.000	1.000	160.9	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	32.72	3.0725E-04	149.4	103.6	149.4	106.4	UL-RL	8.0427E+04	-9.500	60.00
1.000	1.000	163.6	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	33.24	2.9636E-04	151.3	104.2	151.3	106.8	UL-RL	8.0427E+04	-9.700	62.00
1.000	1.000	166.2	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	33.74	2.8385E-04	153.2	104.7	153.2	107.0	UL-RL	8.0427E+04	-9.900	64.00
1.000	1.000	168.7	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	34.23	2.7009E-04	155.1	105.2	155.1	107.3	UL-RL	8.0427E+04	-10.10	66.00
1.000	1.000	171.2	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	34.72	2.5541E-04	157.0	105.6	157.0	107.5	UL-RL	8.0427E+04	-10.30	68.00
1.000	1.000	173.6	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	35.19	2.4009E-04	158.9	106.0	158.9	107.7	UL-RL	8.0427E+04	-10.50	70.00
1.000	1.000	176.0	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	35.67	2.2438E-04	160.8	106.3	160.8	107.8	UL-RL	8.0427E+04	-10.70	72.00
1.000	1.000	178.3	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	36.14	2.0850E-04	162.7	106.7	162.7	108.0	UL-RL	8.0427E+04	-10.90	74.00
1.000	1.000	180.7	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	36.62	1.9262E-04	164.7	107.1	164.7	108.2	UL-RL	8.0427E+04	-11.10	76.00
1.000	1.000	183.1	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	37.10	1.7690E-04	166.6	107.5	166.6	108.5	UL-RL	8.0427E+04	-11.30	78.00
1.000	1.000	185.5	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	37.58	1.6145E-04	168.5	107.9	168.5	108.7	UL-RL	8.0427E+04	-11.50	80.00
1.000	1.000	187.9	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	38.07	1.4639E-04	170.5	108.3	170.5	109.0	UL-RL	8.0427E+04	-11.70	82.00
1.000	1.000	190.3	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	38.56	1.3178E-04	172.4	108.8	172.4	109.4	UL-RL	8.0427E+04	-11.90	84.00
1.000	1.000	192.8	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	39.06	1.1768E-04	174.4	109.3	174.4	109.7	UL-RL	8.0427E+04	-12.10	86.00
1.000	1.000	195.3	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	39.57	1.0413E-04	176.3	109.8	176.3	110.2	UL-RL	8.0427E+04	-12.30	88.00
1.000	1.000	197.8	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	40.08	9.1142E-05	178.3	110.4	178.3	110.6	UL-RL	8.0427E+04	-12.50	90.00
1.000	1.000	200.4	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	40.59	7.8735E-05	180.2	111.0	180.2	111.1	UL-RL	8.0427E+04	-12.70	92.00
1.000	1.000	203.0	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	41.11	6.6899E-05	182.2	111.6	182.2	111.6	UL-RL	8.0427E+04	-12.90	94.00
1.000	1.000	205.6	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	41.64	5.5617E-05	184.2	112.2	184.2	112.2	UL-RL	8.0427E+04	-13.10	96.00
1.000	1.000	208.2	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	42.17	4.4865E-05	186.1	112.9	186.1	112.9	V-C	5.0267E+04	-13.30	98.00
1.000	1.000	210.9	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	42.71	3.4609E-05	188.1	113.5	188.1	113.5	V-C	5.0267E+04	-13.50	100.0
1.000	1.000	213.5	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	43.25	2.4810E-05	190.1	114.2	190.1	114.2	V-C	5.0267E+04	-13.70	102.0
1.000	1.000	216.2	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	43.79	1.5426E-05	192.1	114.9	192.1	114.9	V-C	5.0267E+04	-13.90	104.0
1.000	1.000	218.9	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	44.34	6.4101E-06	194.0	115.7	194.0	115.7	V-C	5.0267E+04	-14.10	106.0
1.000	1.000	221.7	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	44.85	-2.2869E-06	196.0	116.2	196.0	116.7	UL-RL	8.0427E+04	-14.30	108.0
1.000	1.000	224.2	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	45.35	-1.0714E-05	198.0	116.8	198.0	117.9	UL-RL	8.0427E+04	-14.50	110.0
1.000	1.000	226.8	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	45.86	-1.8919E-05	200.0	117.3	200.0	119.1	UL-RL	8.0427E+04	-14.70	112.0
1.000	1.000	229.3	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	46.36	-2.6949E-05	202.0	117.8	202.0	120.3	UL-RL	8.0427E+04	-14.90	114.0
1.000	1.000	231.8	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	46.87	-3.4848E-05	204.0	118.4	204.0	121.5	UL-RL	8.0427E+04	-15.10	116.0
1.000	1.000	234.4	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	47.38	-4.2654E-05	206.0	118.9	206.0	122.7	UL-RL	8.0427E+04	-15.30	118.0
1.000	1.000	236.9	0.000	0.000	BNA2_(2)_335_337_L_0					
81 D	47.90	-5.0402E-05	208.0	119.5	208.0	123.9	UL-RL	8.0427E+04	-15.50	120.0
1.000	1.000	239.5	0.000	0.000	BNA2_(2)_335_337_L_0					
82 D	48.41	-5.8117E-05	210.0	120.0	210.0	125.0	UL-RL	8.0427E+04	-15.70	122.0
1.000	1.000	242.0	0.000	0.000	BNA2_(2)_335_337_L_0					
83 D	36.69	-6.5820E-05	212.0	120.6	212.0	126.2	UL-RL	8.0427E+04	-15.90	124.0
1.000	1.000	244.6	0.000	0.000	BNA2_(2)_335_337_L_0					
84 D	12.29	-6.9670E-05	213.0	120.9	213.0	126.8	UL-RL	8.0427E+04	-16.00	125.0
1.000	1.000	245.9	0.000	0.000	BNA2_(2)_335_337_L_0					

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| Exe Time :25 June 2020 16:39:30
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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

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ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
15 D	11.51	6.0082E-03	0.000	57.57	56.00	113.4	UL-RL	6.0405E+04	-2.300	0.000	
1.000	1.000	57.57	0.000	0.000	BNA2_(2)_335_337_L_0						
16 D	15.15	5.5521E-03	4.000	75.77	60.00	109.3	UL-RL	6.0405E+04	-2.500	0.000	
1.000	1.000	75.77	0.000	0.000	BNA2_(2)_335_337_L_0						
17 D	18.76	5.1093E-03	8.000	93.82	64.00	123.7	UL-RL	6.0405E+04	-2.700	0.000	
1.000	1.000	93.82	0.000	0.000	BNA2_(2)_335_337_L_0						
18 D	22.34	4.6812E-03	12.00	111.7	68.00	138.1	UL-RL	6.0405E+04	-2.900	0.000	
1.000	1.000	111.7	0.000	0.000	BNA2_(2)_335_337_L_0						
19 D	25.87	4.2687E-03	16.00	129.3	72.00	152.5	UL-RL	6.0405E+04	-3.100	0.000	
1.000	1.000	129.3	0.000	0.000	BNA2_(2)_335_337_L_0						
20 D	29.36	3.8730E-03	20.00	146.8	76.00	166.9	UL-RL	6.0405E+04	-3.300	0.000	
1.000	1.000	146.8	0.000	0.000	BNA2_(2)_335_337_L_0						
21 D	32.81	3.4951E-03	24.00	164.0	80.00	181.3	UL-RL	6.0405E+04	-3.500	0.000	
1.000	1.000	164.0	0.000	0.000	BNA2_(2)_335_337_L_0						
22 D	35.17	3.1356E-03	26.00	173.9	82.00	188.5	UL-RL	6.0405E+04	-3.700	2.000	
1.000	1.000	175.9	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	33.22	2.7953E-03	28.00	162.1	84.00	174.3	UL-RL	6.0405E+04	-3.900	4.000	
1.000	1.000	166.1	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	31.22	2.4746E-03	30.00	150.1	86.00	160.1	UL-RL	6.0405E+04	-4.100	6.000	
1.000	1.000	156.1	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	29.41	2.1737E-03	32.00	139.0	88.00	147.1	UL-RL	6.0405E+04	-4.300	8.000	
1.000	1.000	147.0	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	27.77	1.8929E-03	34.00	128.9	90.00	135.1	UL-RL	6.0405E+04	-4.500	10.00	
1.000	1.000	138.9	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	26.31	1.6320E-03	36.00	119.5	92.00	124.2	UL-RL	6.0405E+04	-4.700	12.00	
1.000	1.000	131.5	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	25.02	1.3908E-03	38.00	111.1	94.00	114.3	UL-RL	6.0405E+04	-4.900	14.00	
1.000	1.000	125.1	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	23.90	1.1692E-03	40.00	103.5	96.00	105.5	UL-RL	6.0405E+04	-5.100	16.00	
1.000	1.000	119.5	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	22.94	9.6664E-04	42.00	96.68	98.00	97.57	UL-RL	6.0405E+04	-5.300	18.00	
1.000	1.000	114.7	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	22.13	7.8262E-04	44.00	90.63	100.0	90.67	UL-RL	6.0405E+04	-5.500	20.00	
1.000	1.000	110.6	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	21.41	6.1650E-04	46.00	85.07	102.0	85.09	UL-RL	6.0405E+04	-5.700	22.00	
1.000	1.000	107.1	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	20.86	4.6755E-04	48.00	80.28	104.0	80.28	UL-RL	6.0405E+04	-5.900	24.00	
1.000	1.000	104.3	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	20.44	3.3495E-04	50.00	76.20	106.0	76.20	V-C	3.7753E+04	-6.100	26.00
1.000	1.000	102.2	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	20.16	2.1782E-04	52.00	72.79	108.0	72.79	V-C	3.7753E+04	-6.300	28.00
1.000	1.000	100.8	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	20.00	1.1523E-04	54.00	70.01	110.0	70.01	V-C	3.7753E+04	-6.500	30.00
1.000	1.000	100.0	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	19.72	2.6209E-05	56.00	66.62	112.0	69.79	UL-RL	6.0405E+04	-6.700	32.00
1.000	1.000	98.62	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	19.44	-5.0219E-05	58.00	63.20	114.0	71.05	UL-RL	6.0405E+04	-6.900	34.00
1.000	1.000	97.20	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	19.31	-1.1503E-04	60.00	60.55	116.0	72.31	UL-RL	6.0405E+04	-7.100	36.00
1.000	1.000	96.55	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	19.32	-1.6920E-04	62.00	58.62	118.0	73.58	UL-RL	6.0405E+04	-7.300	38.00
1.000	1.000	96.62	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	19.46	-2.1368E-04	64.00	57.32	120.0	74.84	UL-RL	6.0405E+04	-7.500	40.00
1.000	1.000	97.32	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	19.72	-2.4939E-04	66.00	56.60	122.0	76.10	UL-RL	6.0405E+04	-7.700	42.00
1.000	1.000	98.60	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	20.08	-2.7721E-04	68.00	56.39	124.0	77.36	UL-RL	6.0405E+04	-7.900	44.00
1.000	1.000	100.4	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	20.53	-2.9799E-04	70.00	56.63	126.0	78.63	UL-RL	6.0405E+04	-8.100	46.00
1.000	1.000	102.6	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	21.05	-3.1252E-04	72.00	57.26	128.0	79.89	UL-RL	6.0405E+04	-8.300	48.00
1.000	1.000	105.3	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	21.65	-3.2157E-04	74.00	58.24	130.0	81.14	UL-RL	6.0405E+04	-8.500	50.00
1.000	1.000	108.2	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	22.30	-3.2582E-04	76.00	59.51	132.0	82.40	UL-RL	6.0405E+04	-8.700	52.00
1.000	1.000	111.5	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	23.01	-3.2594E-04	78.00	61.03	134.0	83.66	UL-RL	6.0405E+04	-8.900	54.00
1.000	1.000	115.0	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	23.75	-3.2253E-04	80.00	62.76	136.0	84.91	UL-RL	6.0405E+04	-9.100	56.00
1.000	1.000	118.8	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	24.53	-3.1613E-04	82.00	64.66	138.0	86.16	UL-RL	6.0405E+04	-9.300	58.00
1.000	1.000	122.7	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	25.34	-3.0725E-04	84.00	66.70	140.0	87.42	UL-RL	6.0405E+04	-9.500	60.00
1.000	1.000	126.7	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	26.17	-2.9636E-04	86.00	68.85	142.0	88.66	UL-RL	6.0405E+04	-9.700	62.00
1.000	1.000	130.9	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	27.02	-2.8385E-04	88.00	71.08	144.0	89.91	UL-RL	6.0405E+04	-9.900	64.00
1.000	1.000	135.1	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	27.88	-2.7009E-04	90.00	73.38	146.0	91.16	UL-RL	6.0405E+04	-10.10	66.00
1.000	1.000	139.4	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	28.74	-2.5541E-04	92.00	75.71	148.0	92.40	UL-RL	6.0405E+04	-10.30	68.00
1.000	1.000	143.7	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	29.61	-2.4009E-04	94.00	78.06	150.0	93.64	UL-RL	6.0405E+04	-10.50	70.00
1.000	1.000	148.1	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	30.48	-2.2438E-04	96.00	80.42	152.0	94.88	UL-RL	6.0405E+04	-10.70	72.00
1.000	1.000	152.4	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	31.36	-2.0850E-04	98.00	82.78	154.0	96.11	UL-RL	6.0405E+04	-10.90	74.00
1.000	1.000	156.8	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	32.22	-1.9262E-04	100.00	85.11	156.0	97.35	UL-RL	6.0405E+04	-11.10	76.00
1.000	1.000	161.1	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	33.08	-1.7690E-04	102.0	87.42	158.0	98.58	UL-RL	6.0405E+04	-11.30	78.00
1.000	1.000	165.4	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	33.94	-1.6145E-04	104.0	89.70	160.0	99.81	UL-RL	6.0405E+04	-11.50	80.00
1.000	1.000	169.7	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	34.79	-1.4639E-04	106.0	91.93	162.0	101.0	UL-RL	6.0405E+04	-11.70	82.00
1.000	1.000	173.9	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	35.63	-1.3178E-04	108.0	94.13	164.0	102.3	UL-RL	6.0405E+04	-11.90	84.00
1.000	1.000	178.1	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	36.45	-1.1768E-04	110.0	96.25	166.0	103.5	UL-RL	6.0405E+04	-12.10	86.00
1.000	1.000	182.3	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	37.26	-1.0413E-04	112.0	98.32	168.0	104.8	UL-RL	6.0405E+04	-12.30	88.00
1.000	1.000	186.3	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	38.07	-9.1142E-05	114.0	100.3	170.0	106.1	UL-RL	6.0405E+04	-12.50	90.00
1.000	1.000	190.3	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	38.87	-7.8735E-05	116.0	102.3	172.0	107.3	UL-RL	6.0405E+04	-12.70	92.00
1.000	1.000	194.3	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	39.66	-6.6899E-05	118.0	104.3	174.0	108.6	UL-RL	6.0405E+04	-12.90	94.00
1.000	1.000	198.3	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	40.44	-5.5617E-05	120.0	106.2	176.0	109.8	UL-RL	6.0405E+04	-13.10	96.00
1.000	1.000	202.2	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	41.21	-4.4865E-05	122.0	108.1	178.0	111.0	UL-RL	6.0405E+04	-13.30	98.00
1.000	1.000	206.1	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	41.98	-3.4609E-05	124.0	109.9	180.0	112.3	UL-RL	6.0405E+04	-13.50	100.0
1.000	1.000	209.9	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	42.74	-2.4810E-05	126.0	111.7	182.0	113.5	UL-RL	6.0405E+04	-13.70	102.0
1.000	1.000	213.7	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	43.48	-1.5426E-05	128.0	113.4	184.0	114.7	UL-RL	6.0405E+04	-13.90	104.0
1.000	1.000	217.4	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	44.21	-6.4101E-06	130.0	115.1	186.0	116.1	UL-RL	6.0405E+04	-14.10	106.0
1.000	1.000	221.1	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	44.94	2.2869E-06	132.0	116.7	188.0	117.5	UL-RL	6.0405E+04	-14.30	108.0
1.000	1.000	224.7	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	45.66	1.0714E-05	134.0	118.3	190.0	118.8	UL-RL	6.0405E+04	-14.50	110.0
1.000	1.000	228.3	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	46.37	1.8919E-05	136.0	119.9	192.0	120.2	UL-RL	6.0405E+04	-14.70	112.0
1.000	1.000	231.9	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	47.07	2.6949E-05	138.0	121.4	194.0	121.7	UL-RL	6.0405E+04	-14.90	114.0
1.000	1.000	235.4	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	47.77	3.4848E-05	140.0	122.9	196.0	123.2	UL-RL	6.0405E+04	-15.10	116.0
1.000	1.000	238.9	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	48.46	4.2654E-05	142.0	124.3	198.0	124.6	UL-RL	6.0405E+04	-15.30	118.0
1.000	1.000		242.3	0.000	0.000	BNA2_(2)_335_337_L_0				
81 D	49.16	5.0402E-05	144.0	125.8	200.0	126.1	UL-RL	6.0405E+04	-15.50	120.0
1.000	1.000		245.8	0.000	0.000	BNA2_(2)_335_337_L_0				
82 D	49.85	5.8117E-05	146.0	127.2	202.0	127.6	UL-RL	6.0405E+04	-15.70	122.0
1.000	1.000		249.2	0.000	0.000	BNA2_(2)_335_337_L_0				
83 D	37.90	6.5820E-05	148.0	128.7	204.0	129.1	UL-RL	6.0405E+04	-15.90	124.0
1.000	1.000		252.7	0.000	0.000	BNA2_(2)_335_337_L_0				
84 D	12.72	6.9670E-05	149.0	129.4	205.0	129.8	UL-RL	6.0405E+04	-16.00	125.0
1.000	1.000		254.4	0.000	0.000	BNA2_(2)_335_337_L_0				

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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New Project

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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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 83  
C U R R E N T   T I M E   I S      3.0000

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	47.607	-47.607	1.48757E-10	9.5214
2	63.497	-63.497	-9.5214	22.221
3	80.999	-80.999	-22.221	38.421
4	99.806	-99.806	-38.421	58.382
5	119.92	-119.92	-58.382	82.366
6	141.33	-141.33	-82.366	110.63
7	164.05	-164.05	-110.63	143.44
8	188.07	-188.07	-143.44	181.06
9	213.40	-213.40	-181.06	223.74
10	115.02	-115.02	-223.74	246.74
11	142.95	-142.95	-246.74	275.33
12	172.17	-172.17	-275.33	309.76
13	195.32	-195.32	-309.76	348.83
14	204.87	-204.87	-348.83	389.80
15	202.39	-202.39	-389.80	430.28
16	195.83	-195.83	-430.28	469.44
17	185.33	-185.33	-469.44	506.51
18	170.57	-170.57	-506.51	540.62
19	151.65	-151.65	-540.62	570.95
20	128.66	-128.66	-570.95	596.69
21	101.72	-101.72	-596.69	617.03
22	72.219	-72.219	-617.03	631.47
23	44.536	-44.536	-631.47	640.38
24	18.767	-18.767	-640.38	644.13
25	-5.2062	5.2062	-644.13	643.09
26	-27.506	27.506	-643.09	637.59
27	-48.253	48.253	-637.59	627.94
28	-67.569	67.569	-627.94	614.43
29	-85.574	85.574	-614.43	597.31
30	-102.39	102.39	-597.31	576.84
31	-118.10	118.10	-576.84	553.22
32	-132.47	132.47	-553.22	526.72
33	-143.13	143.13	-526.72	498.10
34	-150.50	150.50	-498.10	468.00
35	-155.24	155.24	-468.00	436.95
36	-157.76	157.76	-436.95	405.40
37	-158.12	158.12	-405.40	373.77
38	-156.50	156.50	-373.77	342.47
39	-153.19	153.19	-342.47	311.84
40	-148.48	148.48	-311.84	282.14
41	-142.62	142.62	-282.14	253.62
42	-135.96	135.96	-253.62	226.42
43	-128.70	128.70	-226.42	200.68
44	-121.02	121.02	-200.68	176.48
45	-113.08	113.08	-176.48	153.86
46	-104.98	104.98	-153.86	132.87
47	-96.873	96.873	-132.87	113.49
48	-88.844	88.844	-113.49	95.725
49	-80.972	80.972	-95.725	79.531
50	-73.320	73.320	-79.531	64.867
51	-65.939	65.939	-64.867	51.679
52	-58.871	58.871	-51.679	39.905
53	-52.148	52.148	-39.905	29.475
54	-45.792	45.792	-29.475	20.317
55	-39.818	39.818	-20.317	12.353
56	-34.237	34.237	-12.353	5.5053
57	-29.053	29.053	-5.5053	-0.30493
58	-24.264	24.264	0.30493	-5.1577
59	-19.865	19.865	5.1577	-9.1307
60	-15.850	15.850	9.1307	-12.301
61	-12.207	12.207	12.301	-14.742
62	-8.9237	8.9237	14.742	-16.527
63	-5.9874	5.9874	16.527	-17.724
64	-3.3772	3.3772	17.724	-18.400
65	-1.0760	1.0760	18.400	-18.615
66	0.93029	-0.93029	18.615	-18.429
67	2.6559	-2.6559	18.429	-17.898
68	4.1146	-4.1146	17.898	-17.075
69	5.3199	-5.3199	17.075	-16.011
70	6.2803	-6.2803	16.011	-14.755

71	7.0096	-7.0096	14.755	-13.353
72	7.5191	-7.5191	13.353	-11.849
73	7.8237	-7.8237	11.849	-10.284
74	7.9472	-7.9472	10.284	-8.6947
75	7.8584	-7.8584	8.6947	-7.1230
76	7.5496	-7.5496	7.1230	-5.6130
77	7.0320	-7.0320	5.6130	-4.2066
78	6.3221	-6.3221	4.2066	-2.9422
79	5.4248	-5.4248	2.9422	-1.8573
80	4.3450	-4.3450	1.8573	-0.98827
81	3.0842	-3.0842	0.98827	-0.37143
82	1.6433	-1.6433	0.37143	-4.27718E-02
83	0.42768	-0.42768	4.27718E-02	1.77236E-12

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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New Project
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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\_341 :  
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	BORN NOW JUST ACTIVATED
ANCHOR	1	125.00	-9.54370E-04	-9.54370E-04	0.0000	0.0000	0.0000	

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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| NewProject.BaseDesignSection_25.Nominal_60 |  
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New Project
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## New Project

STRESS RESULTS FOR GROUP NO. 5

Tieback\_342 :  
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 = 7340.      RMNORM= 0.000
        RINORM=0.1906E+07 RIMNOR=0.1653E+08
        RENORM=0.1329E+05 REMNOR=0.1928E-18 RATIO =0.8349E-01 TOLER =0.1000E-03 NOT CONVERGED
        RFMAX = 213.4      RMMAX = 644.1
        RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
        RDT   =0.1906E+07 RDR   =0.1653E+08
        RATIOT=0.8349E-01 RATIOR= 0.000
        MAX UN= 35.10      IEQ= 43 NODE     22 DOF   1 Y-DISPL.F
        MIN UN=-.2102E-09 IEQ= 8 NODE      4 DOF   2 X-ROT. F
        NO. OF CONTACT CONSTRAINT VIOLATIONS 0

```

```

ITER      2 RNORM = 7340.      RMNORM= 0.000
          RINORM=0.1906E+07 RIMNOR=0.1653E+08
          RENORM= 3177.      REMNOR=0.9392E-18 RATIO =0.4082E-01 TOLER =0.1000E-03 NOT CONVERGED
          RFMAX = 213.4      RMMAX = 643.1
          RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
          RDT   =0.1906E+07 RDR   =0.1653E+08
          RATIOT=0.4082E-01 RATIOR= 0.000
          MAX UN= 13.95      IEQ= 49 NODE      25 DOF    1 Y-DISPL.F
          MIN UN=-.6108E-08 IEQ= 3 NODE       2 DOF    1 Y-DISPL.F
          NO. OF CONTACT CONSTRAINT VIOLATIONS 0

```

```

ITER      3 RNORM = 7340.      RMNORM= 0.000
          RINORM=0.1906E+07 RIMNOR=0.1653E+08
          RENORM= 2015.      REMNOR=0.3323E-17 RATIO =0.3251E-01 TOLER =0.1000E-03 NOT CONVERGED
          RFMAX = 213.4      RMMAX = 644.1
          RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
          RDT   =0.1906E+07 RDR   =0.1653E+08
          RATIOT=0.3251E-01 RATIOR= 0.000
          MAX UN= 25.70      IEQ=    73 NODE      37 DOF      1 Y-DISPL.F
          MIN UN=-.3626      IEQ=   135 NODE      68 DOF      1 Y-DISPL.F
          NO. OF CONTACT CONSTRAINT VIOLATIONS      0

```

```

ITER    4 RNORM = 7340.      RMNORM= 0.000
        RINORM=0.1906E+07 RIMNOR=0.1653E+08
        RENORM= 489.0      REMNOR=0.1712E-16 RATIO =0.1602E-01 TOLER =0.1000E-03 NOT CONVERGED
        RFMAX = 213.4      RMMAX = 644.1
        RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
        RDT   = 0.1906E+07 RDR   =0.1653E+08
        RATIOT=0.1602E-01 RATIOR= 0.000
        MAX UN= 13.74      IEQ= 89 NODE= 45 DOF= 1 Y-DISPL.F
        MIN UN=-.6633E-02 IEQ= 123 NODE= 62 DOF= 1 Y-DISPL.F
        NO. OF CONTACT CONSTRAINT VIOLATIONS= 0

```

```

ITER      5 RNORM = 7340.      RMNORM= 0.000
          RINORM=0.1906E+07 RIMNOR=0.1653E+08
          RENORM= 6.948      REMNOR=0.7954E-17 RATIO =0.1909E-02 TOLER =0.1000E-03 NOT CONVERGED
          RFMAX = 213.4      RMAXM = 644.1
          RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
          RDT   =0.1906E+07 RDR   =0.1653E+08
          RATIOT=0.1909E-02 RATIOR= 0.000
          MAX UN= 1.756      IEQ=     85 NODE      43 DOF    1 Y-DISPL.F
          MIN UN=-.4493      IEQ=    123 NODE      62 DOF    1 Y-DISPL.F
          NO. OF CONTACT CONSTRAINT VIOLATIONS = 0

```

```

ITER    6 RNORM =  7340.      RMNORM= 0.0000
        RINORM=0.1906E+07 RIMNOR=0.1653E+08
        RENORM=0.2060E-14 REMNORM=0.3734E-17 RATIO =0.3288E-10 TOLER =0.1000E-03   CONVERGED !
        RFRMX = 213.4      RMMAX = 644.1
        RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
        RDT_ = 0.1906E+07 RDR_ = 0.1653E+08
        RATTN=0.3288E-10 RATTOR= 0.000

```

```
MAX UN=0.1591E-07 IEQ=    23 NODE    12 DOF    1 Y-DISPL.F
MIN UN=-.1472E-07 IEQ=    21 NODE    11 DOF    1 Y-DISPL.F
NO. OF CONTACT CONSTRAINT VIOLATIONS      0
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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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New Project  
SOLUTION REACHED USING 6 ITERATIONS ON 40

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

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

	Y-DISPL.F	X-ROT. F
	(02)	(04)
1	4.6952330E-02	-5.8117095E-03
2	4.5790036E-02	-5.8109866E-03
3	4.4628045E-02	-5.8086167E-03
4	4.3466728E-02	-5.8041757E-03
5	4.2306544E-02	-5.7971941E-03
6	4.1148053E-02	-5.7871576E-03
7	3.9991922E-02	-5.7735066E-03
8	3.8838932E-02	-5.7556368E-03
9	3.7689992E-02	-5.7328985E-03
10	3.6546144E-02	-5.7045973E-03
11	3.5408385E-02	-5.6728148E-03
12	3.4277114E-02	-5.6395876E-03
13	3.3152702E-02	-5.6040861E-03
14	3.2035682E-02	-5.5655501E-03
15	3.0926706E-02	-5.5236455E-03
16	2.9826448E-02	-5.4783723E-03
17	2.8735582E-02	-5.4297281E-03
18	2.7654782E-02	-5.3777045E-03
19	2.6584726E-02	-5.3222860E-03
20	2.5526096E-02	-5.2634497E-03
21	2.4479576E-02	-5.2011654E-03
22	2.3445857E-02	-5.1353948E-03
23	2.2425649E-02	-5.0660927E-03
24	2.1419664E-02	-4.9932056E-03
25	2.0428615E-02	-4.9166711E-03
26	1.9453243E-02	-4.8364199E-03
27	1.8494300E-02	-4.7523743E-03
28	1.7552552E-02	-4.6644480E-03
29	1.6628790E-02	-4.5725472E-03
30	1.5723805E-02	-4.4765676E-03
31	1.4838438E-02	-4.3763996E-03
32	1.3973533E-02	-4.2719192E-03
33	1.3129967E-02	-4.1629872E-03
34	1.2308649E-02	-4.0494490E-03
35	1.1510510E-02	-3.9311321E-03
36	1.0736527E-02	-3.8078498E-03
37	9.9876924E-03	-3.6797326E-03
38	9.2649250E-03	-3.5472563E-03
39	8.5690495E-03	-3.4109368E-03
40	7.9007731E-03	-3.2713276E-03
41	7.2606982E-03	-3.1290234E-03
42	6.6493011E-03	-2.9846577E-03
43	6.0669277E-03	-2.8389033E-03
44	5.5137849E-03	-2.6924723E-03
45	4.9899373E-03	-2.5461017E-03
46	4.4952951E-03	-2.4005070E-03
47	4.0296379E-03	-2.2563607E-03
48	3.5926123E-03	-2.1142929E-03
49	3.1837428E-03	-1.9748951E-03
50	2.8024410E-03	-1.8387245E-03
51	2.4480049E-03	-1.7063041E-03
52	2.1196363E-03	-1.5781299E-03
53	1.8164389E-03	-1.4546662E-03
54	1.5374235E-03	-1.3363145E-03
55	1.2815449E-03	-1.2234010E-03
56	1.0476843E-03	-1.1161695E-03
57	8.3468642E-04	-1.0147982E-03
58	6.4137578E-04	-9.1940807E-04
59	4.6653085E-04	-8.3005032E-04
60	3.0895244E-04	-7.4674069E-04
61	1.6743362E-04	-6.6944533E-04
62	4.0778423E-05	-5.9808833E-04
63	-7.2189851E-05	-5.3255346E-04
64	-1.7262117E-04	-4.7269176E-04
65	-2.6163317E-04	-4.1832925E-04
66	-3.4030642E-04	-3.6926997E-04
67	-4.0968037E-04	-3.2529884E-04
68	-4.7074973E-04	-2.8618424E-04
69	-5.2446144E-04	-2.5168031E-04
70	-5.7171199E-04	-2.2152843E-04
71	-6.1334494E-04	-1.9545849E-04
72	-6.5014889E-04	-1.7319119E-04
73	-6.8285583E-04	-1.5444006E-04
74	-7.1213982E-04	-1.3891258E-04

75	-7.3861593E-04	-1.2631110E-04
76	-7.6283923E-04	-1.1633416E-04
77	-7.8530430E-04	-1.0867786E-04
78	-8.0644471E-04	-1.0303655E-04
79	-8.2663278E-04	-9.9103104E-05
80	-8.4617925E-04	-9.6569197E-05
81	-8.6533313E-04	-9.5125428E-05
82	-8.8428141E-04	-9.4461440E-05
83	-9.0314894E-04	-9.4265975E-05
84	-9.1257583E-04	-9.4256192E-05

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:39:30
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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 84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.000	-4.6952E-02	1.000	0.000	1.000	11.41	ACTIVE	0.000	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
2 D	0.000	-4.5790E-02	5.557	0.000	5.557	15.54	ACTIVE	0.000	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
3 D	0.000	-4.4628E-02	11.91	0.000	11.91	19.97	ACTIVE	0.000	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
4 D	0.000	-4.3467E-02	18.92	0.000	18.92	24.17	ACTIVE	0.000	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
5 D	0.000	-4.2307E-02	27.34	0.000	27.34	26.78	ACTIVE	0.000	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
6 D	0.000	-4.1148E-02	35.34	0.000	35.34	28.81	ACTIVE	0.000	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
7 D	0.000	-3.9992E-02	42.20	0.000	42.20	30.70	ACTIVE	0.000	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
8 D	0.000	-3.8839E-02	48.35	0.000	48.35	32.62	ACTIVE	0.000	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
9 D	0.000	-3.7690E-02	54.02	0.000	54.02	34.66	ACTIVE	0.000	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
10 D	0.000	-3.6546E-02	59.37	0.000	59.37	36.83	ACTIVE	0.000	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
11 D	0.000	-3.5408E-02	64.22	0.000	64.22	39.14	ACTIVE	0.000	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
12 D	0.000	-3.4277E-02	69.17	0.000	69.17	41.57	ACTIVE	0.000	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
13 D	0.000	-3.3153E-02	73.97	0.000	73.97	44.12	ACTIVE	0.000	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
14 D	0.000	-3.2036E-02	77.88	0.000	77.88	48.27	ACTIVE	0.000	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	BNA2_(2)_335_337_L_0						
15 D	0.000	-3.0927E-02	80.69	0.000	80.69	45.71	ACTIVE	0.000	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	BNA2_(2)_335_337_L_0						
16 D	0.1556	-2.9826E-02	83.61	0.7780	83.61	43.54	ACTIVE	0.000	-2.500	0.000	
1.000	1.000	0.7780	0.000	0.000	BNA2_(2)_335_337_L_0						
17 D	0.3825	-2.8736E-02	86.63	1.912	86.63	41.86	ACTIVE	0.000	-2.700	0.000	
1.000	1.000	1.912	0.000	0.000	BNA2_(2)_335_337_L_0						
18 D	0.6157	-2.7655E-02	89.73	3.078	89.73	43.71	ACTIVE	0.000	-2.900	0.000	
1.000	1.000	3.078	0.000	0.000	BNA2_(2)_335_337_L_0						
19 D	0.8545	-2.6585E-02	92.90	4.272	92.90	45.84	ACTIVE	0.000	-3.100	0.000	
1.000	1.000	4.272	0.000	0.000	BNA2_(2)_335_337_L_0						
20 D	1.098	-2.5526E-02	96.14	5.491	96.14	48.01	ACTIVE	0.000	-3.300	0.000	
1.000	1.000	5.491	0.000	0.000	BNA2_(2)_335_337_L_0						
21 D	1.346	-2.4480E-02	99.44	6.731	99.44	50.21	ACTIVE	0.000	-3.500	0.000	
1.000	1.000	6.731	0.000	0.000	BNA2_(2)_335_337_L_0						
22 D	1.598	-2.3446E-02	102.8	7.991	102.8	51.34	ACTIVE	0.000	-3.700	0.000	
1.000	1.000	7.991	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	1.854	-2.2426E-02	106.2	9.268	106.2	52.50	ACTIVE	0.000	-3.900	0.000	
1.000	1.000	9.268	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	2.112	-2.1420E-02	109.6	10.56	109.6	53.68	ACTIVE	0.000	-4.100	0.000	
1.000	1.000	10.56	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	2.374	-2.0429E-02	113.1	11.87	113.1	54.87	ACTIVE	0.000	-4.300	0.000	
1.000	1.000	11.87	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	2.638	-1.9453E-02	116.6	13.19	116.6	56.07	ACTIVE	0.000	-4.500	0.000	
1.000	1.000	13.19	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	2.904	-1.8494E-02	120.2	14.52	120.2	57.29	ACTIVE	0.000	-4.700	0.000	
1.000	1.000	14.52	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	3.173	-1.7553E-02	123.7	15.86	123.7	59.93	ACTIVE	0.000	-4.900	0.000	
1.000	1.000	15.86	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	3.443	-1.6629E-02	127.3	17.22	127.3	63.07	ACTIVE	0.000	-5.100	0.000	
1.000	1.000	17.22	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	3.715	-1.5724E-02	130.9	18.58	130.9	65.87	ACTIVE	0.000	-5.300	0.000	
1.000	1.000	18.58	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	4.227	-1.4838E-02	132.7	19.23	132.7	68.36	ACTIVE	0.000	-5.500	1.902	
1.000	1.000	21.13	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	4.740	-1.3974E-02	134.5	19.89	134.5	70.56	ACTIVE	0.000	-5.700	3.804	
1.000	1.000	23.70	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	5.254	-1.3130E-02	136.2	20.56	136.2	72.52	ACTIVE	0.000	-5.900	5.706	
1.000	1.000	26.27	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	5.770	-1.2309E-02	138.0	21.24	138.0	74.25	ACTIVE	0.000	-6.100	7.608
1.000	1.000	28.85	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	6.286	-1.1511E-02	139.8	21.92	139.8	77.88	ACTIVE	0.000	-6.300	9.510
1.000	1.000	31.43	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	6.804	-1.0737E-02	141.7	22.61	141.7	81.79	ACTIVE	0.000	-6.500	11.41
1.000	1.000	34.02	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	7.323	-9.9877E-03	143.5	23.30	143.5	85.15	ACTIVE	0.000	-6.700	13.31
1.000	1.000	36.62	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	7.844	-9.2649E-03	145.4	24.00	145.4	88.00	ACTIVE	0.000	-6.900	15.22
1.000	1.000	39.22	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	8.365	-8.5690E-03	147.2	24.71	147.2	90.42	ACTIVE	0.000	-7.100	17.12
1.000	1.000	41.82	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	8.887	-7.9008E-03	149.1	25.41	149.1	93.08	ACTIVE	0.000	-7.300	19.02
1.000	1.000	44.43	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	9.409	-7.2607E-03	151.0	26.13	151.0	97.55	ACTIVE	0.000	-7.500	20.92
1.000	1.000	47.05	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	9.933	-6.6493E-03	152.9	26.84	152.9	101.0	ACTIVE	0.000	-7.700	22.82
1.000	1.000	49.67	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	10.46	-6.0669E-03	154.8	27.56	154.8	103.7	ACTIVE	0.000	-7.900	24.73
1.000	1.000	52.29	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	10.98	-5.5138E-03	156.8	28.28	156.8	106.1	ACTIVE	0.000	-8.100	26.63
1.000	1.000	54.91	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	11.51	-4.9899E-03	158.7	29.01	158.7	108.2	ACTIVE	0.000	-8.300	28.53
1.000	1.000	57.54	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	12.03	-4.4953E-03	160.6	29.74	160.6	109.9	ACTIVE	0.000	-8.500	30.43
1.000	1.000	60.17	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	12.56	-4.0296E-03	162.6	30.47	162.6	111.3	ACTIVE	0.000	-8.700	32.33
1.000	1.000	62.81	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	13.09	-3.5926E-03	164.5	31.21	164.5	112.5	ACTIVE	0.000	-8.900	34.24
1.000	1.000	65.45	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	13.62	-3.1837E-03	166.5	31.95	166.5	113.5	ACTIVE	0.000	-9.100	36.14
1.000	1.000	68.09	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	14.15	-2.8024E-03	168.5	32.69	168.5	114.4	ACTIVE	0.000	-9.300	38.04
1.000	1.000	70.73	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	14.68	-2.4480E-03	170.5	33.43	170.5	115.1	ACTIVE	0.000	-9.500	39.94
1.000	1.000	73.38	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	15.51	-2.1196E-03	172.4	35.73	172.4	115.7	UL-RL	3.3117E+04	-9.700	41.84
1.000	1.000	77.57	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	18.10	-1.8164E-03	174.4	46.75	174.4	116.3	UL-RL	3.3117E+04	-9.900	43.75
1.000	1.000	90.50	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	20.52	-1.5374E-03	176.4	56.96	176.4	116.8	UL-RL	3.3117E+04	-10.10	45.65
1.000	1.000	102.6	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	22.79	-1.2815E-03	178.4	66.39	178.4	117.3	UL-RL	3.3117E+04	-10.30	47.55
1.000	1.000	113.9	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	24.91	-1.0477E-03	180.4	75.09	180.4	117.7	UL-RL	3.3117E+04	-10.50	49.45
1.000	1.000	124.5	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	26.89	-8.3469E-04	182.5	83.09	182.5	118.2	UL-RL	3.3117E+04	-10.70	51.35
1.000	1.000	134.4	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	28.74	-6.4138E-04	184.5	90.45	184.5	118.6	UL-RL	3.3117E+04	-10.90	53.25
1.000	1.000	143.7	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	30.47	-4.6653E-04	186.5	97.20	186.5	119.0	UL-RL	3.3117E+04	-11.10	55.16
1.000	1.000	152.4	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	32.09	-3.0895E-04	188.5	103.4	188.5	119.5	UL-RL	3.3117E+04	-11.30	57.06
1.000	1.000	160.4	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	33.60	-1.6743E-04	190.6	109.1	190.6	119.9	UL-RL	3.3117E+04	-11.50	58.96
1.000	1.000	168.0	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	35.01	-4.0778E-05	192.6	114.2	192.6	120.5	UL-RL	3.3117E+04	-11.70	60.86
1.000	1.000	175.1	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	36.09	7.2190E-05	194.6	117.7	194.6	123.1	UL-RL	3.3117E+04	-11.90	62.76
1.000	1.000	180.5	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	37.12	1.7262E-04	196.7	121.0	196.7	125.4	UL-RL	3.3117E+04	-12.10	64.67
1.000	1.000	185.6	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	38.11	2.6163E-04	198.7	124.0	198.7	127.6	UL-RL	3.3117E+04	-12.30	66.57
1.000	1.000	190.5	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	39.05	3.4031E-04	200.8	126.8	200.8	129.6	UL-RL	3.3117E+04	-12.50	68.47
1.000	1.000	195.2	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	39.95	4.0968E-04	202.9	129.4	202.9	131.5	UL-RL	3.3117E+04	-12.70	70.37
1.000	1.000	199.7	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	40.82	4.7075E-04	204.9	131.8	204.9	133.2	UL-RL	3.3117E+04	-12.90	72.27
1.000	1.000	204.1	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	41.66	5.2446E-04	207.0	134.1	207.0	134.8	UL-RL	3.3117E+04	-13.10	74.18
1.000	1.000	208.3	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	42.47	5.7171E-04	209.0	136.3	209.0	136.3	UL-RL	3.3117E+04	-13.30	76.08
1.000	1.000	212.3	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	43.21	6.1334E-04	211.1	138.1	211.1	138.1	V-C	2.0698E+04	-13.50	77.98
1.000	1.000	216.1	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	43.93	6.5015E-04	213.2	139.8	213.2	139.8	V-C	2.0698E+04	-13.70	79.88
1.000	1.000	219.7	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	44.64	6.8286E-04	215.3	141.4	215.3	141.4	V-C	2.0698E+04	-13.90	81.78
1.000	1.000	223.2	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	45.34	7.1214E-04	217.3	143.0	217.3	143.0	V-C	2.0698E+04	-14.10	83.69
1.000	1.000	226.7	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	45.99	7.3862E-04	219.4	144.4	219.4	144.4	V-C	2.0698E+04	-14.30	85.59
1.000	1.000	229.9	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	46.62	7.6284E-04	221.5	145.6	221.5	145.6	V-C	2.0698E+04	-14.50	87.49
1.000	1.000	233.1	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	47.24	7.8530E-04	223.6	146.8	223.6	146.8	V-C	2.0698E+04	-14.70	89.39
1.000	1.000	236.2	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	47.86	8.0644E-04	225.7	148.0	225.7	148.0	V-C	2.0698E+04	-14.90	91.29
1.000	1.000	239.3	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	48.48	8.2663E-04	227.8	149.2	227.8	149.2	V-C	2.0698E+04	-15.10	93.20
1.000	1.000	242.4	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	49.09	8.4618E-04	229.9	150.4	229.9	150.4	V-C	2.0698E+04	-15.30	95.10
1.000	1.000		245.5	0.000	0.000	BNA2_(2)_335_337_L_0				
81 D	49.71	8.6533E-04	232.0	151.5	232.0	151.5	V-C	2.0698E+04	-15.50	97.00
1.000	1.000		248.5	0.000	0.000	BNA2_(2)_335_337_L_0				
82 D	50.32	8.8428E-04	234.1	152.7	234.1	152.7	V-C	2.0698E+04	-15.70	98.90
1.000	1.000		251.6	0.000	0.000	BNA2_(2)_335_337_L_0				
83 D	38.20	9.0315E-04	236.2	153.9	236.2	153.9	V-C	2.0698E+04	-15.90	100.8
1.000	1.000		254.7	0.000	0.000	BNA2_(2)_335_337_L_0				
84 D	12.81	9.1258E-04	237.2	154.4	237.2	154.4	V-C	2.0698E+04	-16.00	101.8
1.000	1.000		256.2	0.000	0.000	BNA2_(2)_335_337_L_0				

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:39:30
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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

O\_R  
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
15	0.000	--	--	--	--	--	REMOVED	--	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
16	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
17	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
18	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
19	0.000	--	--	--	--	--	REMOVED	--	-3.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
20	0.000	--	--	--	--	--	REMOVED	--	-3.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
21	0.000	--	--	--	--	--	REMOVED	--	-3.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
22	0.000	--	--	--	--	--	REMOVED	--	-3.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
23	0.000	--	--	--	--	--	REMOVED	--	-3.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
24	0.000	--	--	--	--	--	REMOVED	--	-4.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
25	0.000	--	--	--	--	--	REMOVED	--	-4.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
26	0.000	--	--	--	--	--	REMOVED	--	-4.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
27	0.000	--	--	--	--	--	REMOVED	--	-4.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
28	0.000	--	--	--	--	--	REMOVED	--	-4.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
29	0.000	--	--	--	--	--	REMOVED	--	-5.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
30	0.000	--	--	--	--	--	REMOVED	--	-5.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
31	0.000	--	--	--	--	--	REMOVED	--	-5.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
32	0.000	--	--	--	--	--	REMOVED	--	-5.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
33	0.000	--	--	--	--	--	REMOVED	--	-5.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					

34	0.000	--	--	--	--	--	REMOVED	--	-6.100	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
35	0.000	--	--	--	--	--	REMOVED	--	-6.300	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
36 D	21.49	1.0737E-02	2.902	105.3	110.0	105.3	PASSIVE	0.000	-6.500	2.098
1.000	1.000	107.4	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	23.28	9.9877E-03	4.804	112.2	112.0	112.2	PASSIVE	0.000	-6.700	4.196
1.000	1.000	116.4	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	25.06	9.2649E-03	6.706	119.0	114.0	119.0	PASSIVE	0.000	-6.900	6.294
1.000	1.000	125.3	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	26.85	8.5690E-03	8.608	125.9	116.0	125.9	PASSIVE	0.000	-7.100	8.392
1.000	1.000	134.3	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	28.64	7.9008E-03	10.51	132.7	118.0	132.7	PASSIVE	0.000	-7.300	10.49
1.000	1.000	143.2	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	30.43	7.2607E-03	12.41	139.6	120.0	139.6	PASSIVE	0.000	-7.500	12.59
1.000	1.000	152.2	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	32.22	6.6493E-03	14.31	146.4	122.0	146.4	PASSIVE	0.000	-7.700	14.69
1.000	1.000	161.1	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	34.01	6.0669E-03	16.22	153.3	124.0	153.3	PASSIVE	0.000	-7.900	16.78
1.000	1.000	170.1	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	34.82	5.5138E-03	18.12	155.2	126.0	155.2	V-C	1.5545E+04	-8.100	18.88
1.000	1.000	174.1	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	33.83	4.9899E-03	20.02	148.2	128.0	148.2	V-C	1.5545E+04	-8.300	20.98
1.000	1.000	169.2	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	32.96	4.4953E-03	21.92	141.7	130.0	141.7	V-C	1.5545E+04	-8.500	23.08
1.000	1.000	164.8	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	32.20	4.0296E-03	23.82	135.8	132.0	135.8	V-C	1.5545E+04	-8.700	25.18
1.000	1.000	161.0	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	31.54	3.5926E-03	25.73	130.4	134.0	130.4	V-C	1.5545E+04	-8.900	27.27
1.000	1.000	157.7	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	30.99	3.1837E-03	27.63	125.6	136.0	125.6	V-C	1.5545E+04	-9.100	29.37
1.000	1.000	154.9	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	30.53	2.8024E-03	29.53	121.2	138.0	121.2	V-C	1.5545E+04	-9.300	31.47
1.000	1.000	152.7	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	30.17	2.4480E-03	31.43	117.3	140.0	117.3	V-C	1.5545E+04	-9.500	33.57
1.000	1.000	150.9	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	29.90	2.1196E-03	33.33	113.8	142.0	113.8	V-C	1.5545E+04	-9.700	35.67
1.000	1.000	149.5	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	29.71	1.8164E-03	35.24	110.8	144.0	110.8	V-C	1.5545E+04	-9.900	37.76
1.000	1.000	148.6	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	29.60	1.5374E-03	37.14	108.1	146.0	108.1	V-C	1.5545E+04	-10.10	39.86
1.000	1.000	148.0	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	29.56	1.2815E-03	39.04	105.9	148.0	105.9	V-C	1.5545E+04	-10.30	41.96
1.000	1.000	147.8	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	29.60	1.0477E-03	40.94	103.9	150.0	103.9	V-C	1.5545E+04	-10.50	44.06
1.000	1.000	148.0	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	29.69	8.3469E-04	42.84	102.3	152.0	102.3	V-C	1.5545E+04	-10.70	46.16
1.000	1.000	148.5	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	29.85	6.4138E-04	44.75	101.0	154.0	101.0	V-C	1.5545E+04	-10.90	48.25
1.000	1.000	149.2	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	30.06	4.6653E-04	46.65	99.95	156.0	99.95	V-C	1.5545E+04	-11.10	50.35
1.000	1.000	150.3	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	30.32	3.0895E-04	48.55	99.16	158.0	99.16	V-C	1.5545E+04	-11.30	52.45
1.000	1.000	151.6	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	30.49	1.6743E-04	50.45	97.88	160.0	99.81	UL-RL	2.4873E+04	-11.50	54.55
1.000	1.000	152.4	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	30.65	4.0778E-05	52.35	96.59	162.0	101.0	UL-RL	2.4873E+04	-11.70	56.65
1.000	1.000	153.2	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	30.87	-7.2190E-05	54.25	95.61	164.0	102.3	UL-RL	2.4873E+04	-11.90	58.74
1.000	1.000	154.4	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	31.15	-1.7262E-04	56.16	94.89	166.0	103.5	UL-RL	2.4873E+04	-12.10	60.84
1.000	1.000	155.7	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	31.47	-2.6163E-04	58.06	94.40	168.0	104.8	UL-RL	2.4873E+04	-12.30	62.94
1.000	1.000	157.3	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	31.84	-3.4031E-04	59.96	94.15	170.0	106.1	UL-RL	2.4873E+04	-12.50	65.04
1.000	1.000	159.2	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	32.25	-4.0968E-04	61.86	94.10	172.0	107.3	UL-RL	2.4873E+04	-12.70	67.14
1.000	1.000	161.2	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	32.69	-4.7075E-04	63.76	94.23	174.0	108.6	UL-RL	2.4873E+04	-12.90	69.24
1.000	1.000	163.5	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	33.14	-5.2446E-04	65.67	94.35	176.0	110.1	UL-RL	2.4873E+04	-13.10	71.33
1.000	1.000	165.7	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	33.60	-5.7171E-04	67.57	94.59	178.0	111.6	UL-RL	2.4873E+04	-13.30	73.43
1.000	1.000	168.0	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	34.10	-6.1334E-04	69.47	94.95	180.0	113.2	UL-RL	2.4873E+04	-13.50	75.53
1.000	1.000	170.5	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	34.61	-6.5015E-04	71.37	95.42	182.0	114.7	UL-RL	2.4873E+04	-13.70	77.63
1.000	1.000	173.0	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	35.14	-6.8286E-04	73.27	95.97	184.0	116.2	UL-RL	2.4873E+04	-13.90	79.73
1.000	1.000	175.7	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	35.68	-7.1214E-04	75.18	96.59	186.0	117.6	UL-RL	2.4873E+04	-14.10	81.82
1.000	1.000	178.4	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	36.24	-7.3862E-04	77.08	97.28	188.0	119.1	UL-RL	2.4873E+04	-14.30	83.92
1.000	1.000	181.2	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	36.80	-7.6284E-04	78.98	98.00	190.0	120.6	UL-RL	2.4873E+04	-14.50	86.02
1.000	1.000	184.0	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	37.38	-7.8530E-04	80.88	98.77	192.0	122.0	UL-RL	2.4873E+04	-14.70	88.12
1.000	1.000	186.9	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	37.95	-8.0644E-04	82.78	99.56	194.0	123.5	UL-RL	2.4873E+04	-14.90	90.22
1.000	1.000	189.8	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	38.54	-8.2663E-04	84.69	100.4	196.0	124.9	UL-RL	2.4873E+04	-15.10	92.31
1.000	1.000	192.7	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	39.12	-8.4618E-04	86.59	101.2	198.0	126.4	UL-RL	2.4873E+04	-15.30	94.41
1.000	1.000	195.6	0.000	0.000	BNA2_(2)_335_337_L_0					
81 D	39.70	-8.6533E-04	88.49	102.0	200.0	127.8	UL-RL	2.4873E+04	-15.50	96.51
1.000	1.000	198.5	0.000	0.000	BNA2_(2)_335_337_L_0					
82 D	40.29	-8.8428E-04	90.39	102.8	202.0	129.2	UL-RL	2.4873E+04	-15.70	98.61
1.000	1.000	201.4	0.000	0.000	BNA2_(2)_335_337_L_0					
83 D	30.65	-9.0315E-04	92.29	103.7	204.0	130.7	UL-RL	2.4873E+04	-15.90	100.7
1.000	1.000	204.4	0.000	0.000	BNA2_(2)_335_337_L_0					
84 D	10.29	-9.1258E-04	93.25	104.1	205.0	131.4	UL-RL	2.4873E+04	-16.00	101.8
1.000	1.000	205.8	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:39:30 |  
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New Project
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## 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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 83  
C U R R E N T T I M E I S 4.0000

## WALL2D ELEMENT

EL	TA	TB	MA	MB
1	46.542	-46.542	3.10306E-10	9.3084
2	59.476	-59.476	-9.3084	21.204
3	73.859	-73.859	-21.204	35.975
4	89.692	-89.692	-35.975	53.914
5	106.97	-106.97	-53.914	75.309
6	125.71	-125.71	-75.309	100.45
7	145.89	-145.89	-100.45	129.63
8	167.52	-167.52	-129.63	163.13
9	190.60	-190.60	-163.13	201.25
10	33.510	-33.510	-201.25	207.95
11	59.491	-59.491	-207.95	219.85
12	86.920	-86.920	-219.85	237.24
13	108.43	-108.43	-237.24	258.92
14	108.43	-108.43	-258.92	280.61
15	108.43	-108.43	-280.61	302.29
16	108.58	-108.58	-302.29	324.01
17	108.97	-108.97	-324.01	345.80
18	109.58	-109.58	-345.80	367.72
19	110.44	-110.44	-367.72	389.81
20	111.54	-111.54	-389.81	412.12
21	112.88	-112.88	-412.12	434.69
22	114.48	-114.48	-434.69	457.59
23	116.33	-116.33	-457.59	480.85
24	118.45	-118.45	-480.85	504.54
25	120.82	-120.82	-504.54	528.71
26	123.46	-123.46	-528.71	553.40
27	126.36	-126.36	-553.40	578.67
28	129.53	-129.53	-578.67	604.58
29	132.98	-132.98	-604.58	631.17
30	136.69	-136.69	-631.17	658.51
31	140.92	-140.92	-658.51	686.70
32	145.66	-145.66	-686.70	715.83
33	150.91	-150.91	-715.83	746.01
34	156.68	-156.68	-746.01	777.35
35	162.97	-162.97	-777.35	809.94
36	148.29	-148.29	-809.94	839.60
37	132.34	-132.34	-839.60	866.06
38	115.11	-115.11	-866.06	889.09
39	96.625	-96.625	-889.09	908.41
40	76.868	-76.868	-908.41	923.78
41	55.844	-55.844	-923.78	934.95
42	33.555	-33.555	-934.95	941.66
43	10.001	-10.001	-941.66	943.66
44	-13.838	13.838	-943.66	940.90
45	-36.161	36.161	-940.90	933.66
46	-57.083	57.083	-933.66	922.25
47	-76.717	76.717	-922.25	906.90
48	-95.169	95.169	-906.90	887.87
49	-112.54	112.54	-887.87	865.36
50	-128.93	128.93	-865.36	839.58
51	-144.43	144.43	-839.58	810.69
52	-158.81	158.81	-810.69	778.93
53	-170.43	170.43	-778.93	744.84
54	-179.51	179.51	-744.84	708.94
55	-186.28	186.28	-708.94	671.69
56	-190.97	190.97	-671.69	633.49
57	-193.78	193.78	-633.49	594.74
58	-194.88	194.88	-594.74	555.76
59	-194.47	194.47	-555.76	516.87
60	-192.70	192.70	-516.87	478.33
61	-189.59	189.59	-478.33	440.41
62	-185.22	185.22	-440.41	403.37
63	-180.00	180.00	-403.37	367.37
64	-174.02	174.02	-367.37	332.56
65	-167.38	167.38	-332.56	299.09
66	-160.17	160.17	-299.09	267.05
67	-152.47	152.47	-267.05	236.56
68	-144.35	144.35	-236.56	207.69
69	-135.82	135.82	-207.69	180.52
70	-126.96	126.96	-180.52	155.13

71	-117.84	117.84	-155.13	131.56
72	-108.52	108.52	-131.56	109.86
73	-99.011	99.011	-109.86	90.059
74	-89.354	89.354	-90.059	72.188
75	-79.603	79.603	-72.188	56.267
76	-69.790	69.790	-56.267	42.309
77	-59.926	59.926	-42.309	30.324
78	-50.020	50.020	-30.324	20.320
79	-40.077	40.077	-20.320	12.305
80	-30.102	30.102	-12.305	6.2842
81	-20.097	20.097	-6.2842	2.2648
82	-10.064	10.064	-2.2648	0.25189
83	-2.5187	2.5187	-0.25189	4.64295E-12

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:39:30 |  
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New Project
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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\_341 :  
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	181.62	-9.54370E-04	2.71453E-02	0.0000	2015.0	0.0000	0.0000    ELASTIC    ORIGINAL YOUNG MODU-
LUS								

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:39:30 |  
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Q N R H C B E D F G I II S F E O C Q H R R

Tieback\_342 :  
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

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

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ITER      0 RNORM = 7340.      RMNORM= 0.000
          RINORM=0.2722E+07 RIMNOR=0.4904E+08
          RENORM=0.11563E+05 REMNOR=0.3734E-17 RATIO =0.7577E-01 TOLER =0.1000E-03 NOT CONVERGED
          RFMAX = 194.9      RMMAX = 943.7
          RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
          RDT    =0.2722E+07 RDR   =0.4904E+08
          RATIOT=0.7577E-01 RATIOR= 0.000
          MAX UN=0.7202      IEQ= 73 NODE      37 DOF     1 Y-DISPL.F
          MIN UN=-125.0      IEQ= 59 NODE      30 DOF     1 Y-DISPL.F
          NO. OF CONTACT CONSTRAINT VIOLATIONS 0

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ITER    2 RNORM = 7340.      RMNORM= 0.000
        RINORM=0.2722E+07 RIMNOR=0.4904E+08
        RENORM=0.1194E-14 REMNOR=0.4433E-17 RATIO =0.2094E-10 TOLER =0.1000E-03      CONVERGED !
        RFMAX = 194.9      RMMAX = 943.7
        RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
        RDT   =0.2722E+07 RDR   =0.4904E+08
        RATIOT=0.2094E-10 RATOR= 0.000
        MAX UN=0.1007E-07 IEQ=      3 NODE      2 DOF     1 Y-DISPL.F
        MIN UN=-.1230E-07 IEQ=     19 NODE     10 DOF     1 Y-DISPL.F
        NO. OF CONTACT CONSTRAINT VIOLATIONS 0

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:39:30
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New Project  
SOLUTION REACHED USING 2 ITERATIONS ON 40

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

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

	Y-DISPL.F	X-ROT. F
	(02)	(04)
1	4.6704795E-02	-5.8727440E-03
2	4.5530295E-02	-5.8720193E-03
3	4.4356098E-02	-5.8696406E-03
4	4.3182578E-02	-5.8651762E-03
5	4.2010198E-02	-5.8581488E-03
6	4.0839524E-02	-5.8480359E-03
7	3.9671228E-02	-5.8342695E-03
8	3.8506101E-02	-5.8162364E-03
9	3.7345061E-02	-5.7932779E-03
10	3.6189165E-02	-5.7646899E-03
11	3.5039423E-02	-5.7325330E-03
12	3.3896255E-02	-5.6988226E-03
13	3.2760054E-02	-5.6627184E-03
14	3.1631379E-02	-5.6234493E-03
15	3.0510911E-02	-5.5806343E-03
16	2.9399367E-02	-5.5341889E-03
17	2.8297483E-02	-5.4840239E-03
18	2.7206012E-02	-5.4300420E-03
19	2.6125728E-02	-5.3721365E-03
20	2.5057427E-02	-5.3101911E-03
21	2.4001929E-02	-5.2440800E-03
22	2.2960076E-02	-5.1736675E-03
23	2.1932753E-02	-5.0988095E-03
24	2.0920864E-02	-5.0193518E-03
25	1.9925335E-02	-4.9351298E-03
26	1.8947141E-02	-4.8459713E-03
27	1.7987288E-02	-4.7516945E-03
28	1.7046817E-02	-4.6521090E-03
29	1.6126816E-02	-4.5470169E-03
30	1.5228392E-02	-4.4362100E-03
31	1.4352593E-02	-4.3214179E-03
32	1.3499976E-02	-4.2043575E-03
33	1.2671017E-02	-4.0847907E-03
34	1.1866247E-02	-3.9624670E-03
35	1.1086236E-02	-3.8371212E-03
36	1.0331619E-02	-3.7084774E-03
37	9.6030646E-03	-3.5765383E-03
38	8.9012023E-03	-3.4416152E-03
39	8.2265969E-03	-3.3040667E-03
40	7.5797271E-03	-3.1642967E-03
41	6.9609961E-03	-3.0227580E-03
42	6.3707086E-03	-2.8799499E-03
43	5.8090644E-03	-2.7364186E-03
44	5.2761498E-03	-2.5927573E-03
45	4.7719302E-03	-2.4496024E-03
46	4.2962354E-03	-2.3075874E-03
47	3.8487794E-03	-2.1673097E-03
48	3.4291583E-03	-2.0293308E-03
49	3.0368586E-03	-1.8941802E-03
50	2.6712660E-03	-1.7623593E-03
51	2.3316632E-03	-1.6343410E-03
52	2.0172460E-03	-1.5105767E-03
53	1.7271206E-03	-1.3914912E-03
54	1.4603078E-03	-1.2774517E-03
55	1.2157784E-03	-1.1687540E-03
56	9.9243554E-04	-1.0656165E-03
57	7.8915066E-04	-9.6819550E-04
58	6.0477846E-04	-8.7659358E-04
59	4.3813220E-04	-7.9084757E-04
60	2.8804878E-04	-7.1096132E-04
61	1.5335987E-04	-6.3689207E-04
62	3.2909634E-05	-5.6855764E-04
63	-7.4437489E-05	-5.0583782E-04
64	-1.6978975E-04	-4.4858185E-04
65	-2.5422289E-04	-3.9661584E-04
66	-3.2877581E-04	-3.4974568E-04
67	-3.9444678E-04	-3.0775970E-04
68	-4.5219018E-04	-2.7043110E-04
69	-5.0291373E-04	-2.3752012E-04
70	-5.4747598E-04	-2.0877535E-04
71	-5.8668416E-04	-1.8393495E-04
72	-6.2129224E-04	-1.6272876E-04
73	-6.5199951E-04	-1.4488032E-04
74	-6.7944943E-04	-1.3010789E-04

75	-7.0422865E-04	-1.1812526E-04
76	-7.2686623E-04	-1.0864303E-04
77	-7.4783315E-04	-1.0137000E-04
78	-7.6754202E-04	-9.6013749E-05
79	-7.8634687E-04	-9.2280908E-05
80	-8.0454300E-04	-8.9877415E-05
81	-8.2236682E-04	-8.8508631E-05
82	-8.3999576E-04	-8.7879440E-05
83	-8.5754820E-04	-8.7694303E-05
84	-8.6631789E-04	-8.7685041E-05

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
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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 84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.1118	-4.6705E-02	0.000	1.118	1.000	11.41	UL-RL	4517.	0.5000	0.000	
1.000	1.000	1.118	0.000	0.000	FRANA_334_8_L_0						
2 D	0.2347	-4.5530E-02	4.557	1.173	5.557	15.54	UL-RL	4517.	0.3000	0.000	
1.000	1.000	1.173	0.000	0.000	FRANA_334_8_L_0						
3 D	0.2457	-4.4356E-02	10.91	1.229	11.91	19.97	UL-RL	4517.	0.1000	0.000	
1.000	1.000	1.229	0.000	0.000	FRANA_334_8_L_0						
4 D	0.2567	-4.3183E-02	17.92	1.284	18.92	24.17	UL-RL	4517.	-0.1000	0.000	
1.000	1.000	1.284	0.000	0.000	FRANA_334_8_L_0						
5 D	0.2677	-4.2010E-02	26.34	1.339	27.34	26.78	UL-RL	4517.	-0.3000	0.000	
1.000	1.000	1.339	0.000	0.000	FRANA_334_8_L_0						
6 D	0.2788	-4.0840E-02	34.34	1.394	35.34	28.81	UL-RL	4517.	-0.5000	0.000	
1.000	1.000	1.394	0.000	0.000	FRANA_334_8_L_0						
7 D	0.2897	-3.9671E-02	41.20	1.449	42.20	30.70	UL-RL	4517.	-0.7000	0.000	
1.000	1.000	1.449	0.000	0.000	FRANA_334_8_L_0						
8 D	0.3007	-3.8506E-02	47.35	1.504	48.35	32.62	UL-RL	4517.	-0.9000	0.000	
1.000	1.000	1.504	0.000	0.000	FRANA_334_8_L_0						
9 D	0.3116	-3.7345E-02	53.02	1.558	54.02	34.66	UL-RL	4517.	-1.100	0.000	
1.000	1.000	1.558	0.000	0.000	FRANA_334_8_L_0						
10 D	0.3225	-3.6189E-02	58.37	1.613	59.37	36.83	UL-RL	4517.	-1.300	0.000	
1.000	1.000	1.613	0.000	0.000	FRANA_334_8_L_0						
11 D	0.3334	-3.5039E-02	63.22	1.667	64.22	39.14	UL-RL	4517.	-1.500	0.000	
1.000	1.000	1.667	0.000	0.000	FRANA_334_8_L_0						
12 D	0.3441	-3.3896E-02	68.17	1.721	69.17	41.57	UL-RL	4517.	-1.700	0.000	
1.000	1.000	1.721	0.000	0.000	FRANA_334_8_L_0						
13 D	0.3548	-3.2760E-02	72.97	1.774	73.97	44.12	UL-RL	4517.	-1.900	0.000	
1.000	1.000	1.774	0.000	0.000	FRANA_334_8_L_0						
14 D	2.678	-3.1631E-02	76.88	13.39	77.88	48.27	UL-RL	3.3117E+04	-2.100	0.000	
1.000	1.000	13.39	0.000	0.000	BNA2_(2)_335_337_L_0						
15 D	2.754	-3.0511E-02	79.69	13.77	80.69	45.71	UL-RL	3.3117E+04	-2.300	0.000	
1.000	1.000	13.77	0.000	0.000	BNA2_(2)_335_337_L_0						
16 D	2.984	-2.9399E-02	82.61	14.92	83.61	43.54	UL-RL	3.3117E+04	-2.500	0.000	
1.000	1.000	14.92	0.000	0.000	BNA2_(2)_335_337_L_0						
17 D	3.284	-2.8297E-02	85.63	16.42	86.63	41.86	UL-RL	3.3117E+04	-2.700	0.000	
1.000	1.000	16.42	0.000	0.000	BNA2_(2)_335_337_L_0						
18 D	3.588	-2.7206E-02	88.73	17.94	89.73	43.71	UL-RL	3.3117E+04	-2.900	0.000	
1.000	1.000	17.94	0.000	0.000	BNA2_(2)_335_337_L_0						
19 D	3.895	-2.6126E-02	91.90	19.47	92.90	45.84	UL-RL	3.3117E+04	-3.100	0.000	
1.000	1.000	19.47	0.000	0.000	BNA2_(2)_335_337_L_0						
20 D	4.202	-2.5057E-02	95.14	21.01	96.14	48.01	UL-RL	3.3117E+04	-3.300	0.000	
1.000	1.000	21.01	0.000	0.000	BNA2_(2)_335_337_L_0						
21 D	4.510	-2.4002E-02	98.44	22.55	99.44	50.21	UL-RL	3.3117E+04	-3.500	0.000	
1.000	1.000	22.55	0.000	0.000	BNA2_(2)_335_337_L_0						
22 D	4.816	-2.2960E-02	101.8	24.08	102.8	51.34	UL-RL	3.3117E+04	-3.700	0.000	
1.000	1.000	24.08	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	5.118	-2.1933E-02	105.2	25.59	106.2	52.50	UL-RL	3.3117E+04	-3.900	0.000	
1.000	1.000	25.59	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	5.416	-2.0921E-02	108.6	27.08	109.6	53.68	UL-RL	3.3117E+04	-4.100	0.000	
1.000	1.000	27.08	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	5.707	-1.9925E-02	112.1	28.54	113.1	54.87	UL-RL	3.3117E+04	-4.300	0.000	
1.000	1.000	28.54	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	5.990	-1.8947E-02	115.6	29.95	116.6	56.07	UL-RL	3.3117E+04	-4.500	0.000	
1.000	1.000	29.95	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	6.262	-1.7987E-02	119.2	31.31	120.2	57.29	UL-RL	3.3117E+04	-4.700	0.000	
1.000	1.000	31.31	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	6.522	-1.7047E-02	122.7	32.61	123.7	59.93	UL-RL	3.3117E+04	-4.900	0.000	
1.000	1.000	32.61	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	6.768	-1.6127E-02	126.3	33.84	127.3	63.07	UL-RL	3.3117E+04	-5.100	0.000	
1.000	1.000	33.84	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	6.997	-1.5228E-02	129.9	34.98	130.9	65.87	UL-RL	3.3117E+04	-5.300	0.000	
1.000	1.000	34.98	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	7.445	-1.4353E-02	131.7	35.32	132.7	68.36	UL-RL	3.3117E+04	-5.500	1.902	
1.000	1.000	37.22	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	7.876	-1.3500E-02	133.5	35.58	134.5	70.56	UL-RL	3.3117E+04	-5.700	3.804	
1.000	1.000	39.38	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	8.294	-1.2671E-02	135.2	35.76	136.2	72.52	UL-RL	3.3117E+04	-5.900	5.706	
1.000	1.000	41.47	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	8.700	-1.1866E-02	137.0	35.89	138.0	74.25	UL-RL	3.3117E+04	-6.100	7.608
1.000	1.000	43.50	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	9.097	-1.1086E-02	138.8	35.97	139.8	77.88	UL-RL	3.3117E+04	-6.300	9.510
1.000	1.000	45.48	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	9.486	-1.0332E-02	140.7	36.02	141.7	81.79	UL-RL	3.3117E+04	-6.500	11.41
1.000	1.000	47.43	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	9.871	-9.6031E-03	142.5	36.04	143.5	85.15	UL-RL	3.3117E+04	-6.700	13.31
1.000	1.000	49.36	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	10.25	-8.9012E-03	144.4	36.05	145.4	88.00	UL-RL	3.3117E+04	-6.900	15.22
1.000	1.000	51.26	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	10.63	-8.2266E-03	146.2	36.05	147.2	90.42	UL-RL	3.3117E+04	-7.100	17.12
1.000	1.000	53.16	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	11.01	-7.5797E-03	148.1	36.05	149.1	93.08	UL-RL	3.3117E+04	-7.300	19.02
1.000	1.000	55.07	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	11.39	-6.9610E-03	150.0	36.05	151.0	97.55	UL-RL	3.3117E+04	-7.500	20.92
1.000	1.000	56.97	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	11.78	-6.3707E-03	151.9	36.07	152.9	101.0	UL-RL	3.3117E+04	-7.700	22.82
1.000	1.000	58.89	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	12.17	-5.8091E-03	153.8	36.10	154.8	103.7	UL-RL	3.3117E+04	-7.900	24.73
1.000	1.000	60.83	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	12.56	-5.2761E-03	155.8	36.15	156.8	106.1	UL-RL	3.3117E+04	-8.100	26.63
1.000	1.000	62.78	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	12.95	-4.7719E-03	157.7	36.23	158.7	108.2	UL-RL	3.3117E+04	-8.300	28.53
1.000	1.000	64.76	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	13.35	-4.2962E-03	159.6	36.33	160.6	109.9	UL-RL	3.3117E+04	-8.500	30.43
1.000	1.000	66.77	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	13.76	-3.8488E-03	161.6	36.46	162.6	111.3	UL-RL	3.3117E+04	-8.700	32.33
1.000	1.000	68.80	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	14.17	-3.4292E-03	163.5	36.62	164.5	112.5	UL-RL	3.3117E+04	-8.900	34.24
1.000	1.000	70.86	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	14.59	-3.0369E-03	165.5	36.81	166.5	113.5	UL-RL	3.3117E+04	-9.100	36.14
1.000	1.000	72.95	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	15.01	-2.6713E-03	167.5	37.03	168.5	114.4	UL-RL	3.3117E+04	-9.300	38.04
1.000	1.000	75.07	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	15.45	-2.3317E-03	169.5	37.29	170.5	115.1	UL-RL	3.3117E+04	-9.500	39.94
1.000	1.000	77.23	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	16.19	-2.0172E-03	171.4	39.12	172.4	115.7	UL-RL	3.3117E+04	-9.700	41.84
1.000	1.000	80.97	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	18.69	-1.7271E-03	173.4	49.71	174.4	116.3	UL-RL	3.3117E+04	-9.900	43.75
1.000	1.000	93.46	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	21.03	-1.4603E-03	175.4	59.51	176.4	116.8	UL-RL	3.3117E+04	-10.10	45.65
1.000	1.000	105.2	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	23.22	-1.2158E-03	177.4	68.57	178.4	117.3	UL-RL	3.3117E+04	-10.30	47.55
1.000	1.000	116.1	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	25.27	-9.9244E-04	179.4	76.92	180.4	117.7	UL-RL	3.3117E+04	-10.50	49.45
1.000	1.000	126.4	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	27.19	-7.8915E-04	181.5	84.60	182.5	118.2	UL-RL	3.3117E+04	-10.70	51.35
1.000	1.000	136.0	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	28.98	-6.0478E-04	183.5	91.66	184.5	118.6	UL-RL	3.3117E+04	-10.90	53.25
1.000	1.000	144.9	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	30.66	-4.3813E-04	185.5	98.14	186.5	119.0	UL-RL	3.3117E+04	-11.10	55.16
1.000	1.000	153.3	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	32.23	-2.8805E-04	187.5	104.1	188.5	119.5	UL-RL	3.3117E+04	-11.30	57.06
1.000	1.000	161.1	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	33.70	-1.5336E-04	189.6	109.5	190.6	119.9	UL-RL	3.3117E+04	-11.50	58.96
1.000	1.000	168.5	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	35.07	-3.2910E-05	191.6	114.5	192.6	120.5	UL-RL	3.3117E+04	-11.70	60.86
1.000	1.000	175.3	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	36.11	7.4437E-05	193.6	117.8	194.6	123.1	UL-RL	3.3117E+04	-11.90	62.76
1.000	1.000	180.5	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	37.10	1.6979E-04	195.7	120.9	196.7	125.4	UL-RL	3.3117E+04	-12.10	64.67
1.000	1.000	185.5	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	38.06	2.5422E-04	197.7	123.7	198.7	127.6	UL-RL	3.3117E+04	-12.30	66.57
1.000	1.000	190.3	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	38.97	3.2878E-04	199.8	126.4	200.8	129.6	UL-RL	3.3117E+04	-12.50	68.47
1.000	1.000	194.9	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	39.85	3.9445E-04	201.9	128.9	202.9	131.5	UL-RL	3.3117E+04	-12.70	70.37
1.000	1.000	199.2	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	40.70	4.5219E-04	203.9	131.2	204.9	133.2	UL-RL	3.3117E+04	-12.90	72.27
1.000	1.000	203.5	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	41.52	5.0291E-04	206.0	133.4	207.0	134.8	UL-RL	3.3117E+04	-13.10	74.18
1.000	1.000	207.6	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	42.31	5.4748E-04	208.0	135.5	209.0	136.3	UL-RL	3.3117E+04	-13.30	76.08
1.000	1.000	211.5	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	43.04	5.8668E-04	210.1	137.2	211.1	138.1	UL-RL	3.3117E+04	-13.50	77.98
1.000	1.000	215.2	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	43.74	6.2129E-04	212.2	138.8	213.2	139.8	UL-RL	3.3117E+04	-13.70	79.88
1.000	1.000	218.7	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	44.44	6.5200E-04	214.3	140.4	215.3	141.4	UL-RL	3.3117E+04	-13.90	81.78
1.000	1.000	222.2	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	45.12	6.7945E-04	216.3	141.9	217.3	143.0	UL-RL	3.3117E+04	-14.10	83.69
1.000	1.000	225.6	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	45.76	7.0423E-04	218.4	143.2	219.4	144.4	UL-RL	3.3117E+04	-14.30	85.59
1.000	1.000	228.8	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	46.38	7.2687E-04	220.5	144.4	221.5	145.6	UL-RL	3.3117E+04	-14.50	87.49
1.000	1.000	231.9	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	46.99	7.4783E-04	222.6	145.6	223.6	146.8	UL-RL	3.3117E+04	-14.70	89.39
1.000	1.000	235.0	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	47.60	7.6754E-04	224.7	146.7	225.7	148.0	UL-RL	3.3117E+04	-14.90	91.29
1.000	1.000	238.0	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	48.21	7.8635E-04	226.8	147.9	227.8	149.2	UL-RL	3.3117E+04	-15.10	93.20
1.000	1.000	241.1	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	48.82	8.0454E-04	228.9	149.0	229.9	150.4	UL-RL	3.3117E+04	-15.30	95.10
1.000	1.000		244.1	0.000	0.000	BNA2_(2)_335_337_L_0				
81 D	49.42	8.2237E-04	231.0	150.1	232.0	151.5	UL-RL	3.3117E+04	-15.50	97.00
1.000	1.000		247.1	0.000	0.000	BNA2_(2)_335_337_L_0				
82 D	50.03	8.4000E-04	233.1	151.2	234.1	152.7	UL-RL	3.3117E+04	-15.70	98.90
1.000	1.000		250.1	0.000	0.000	BNA2_(2)_335_337_L_0				
83 D	37.97	8.5755E-04	235.2	152.3	236.2	153.9	UL-RL	3.3117E+04	-15.90	100.8
1.000	1.000		253.2	0.000	0.000	BNA2_(2)_335_337_L_0				
84 D	12.73	8.6632E-04	236.2	152.9	237.2	154.4	UL-RL	3.3117E+04	-16.00	101.8
1.000	1.000		254.7	0.000	0.000	BNA2_(2)_335_337_L_0				

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| Exe Time :25 June 2020 16:39:30
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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

O\_R  
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
15	0.000	--	--	--	--	--	REMOVED	--	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
16	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
17	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
18	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
19	0.000	--	--	--	--	--	REMOVED	--	-3.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
20	0.000	--	--	--	--	--	REMOVED	--	-3.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
21	0.000	--	--	--	--	--	REMOVED	--	-3.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
22	0.000	--	--	--	--	--	REMOVED	--	-3.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
23	0.000	--	--	--	--	--	REMOVED	--	-3.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
24	0.000	--	--	--	--	--	REMOVED	--	-4.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
25	0.000	--	--	--	--	--	REMOVED	--	-4.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
26	0.000	--	--	--	--	--	REMOVED	--	-4.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
27	0.000	--	--	--	--	--	REMOVED	--	-4.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
28	0.000	--	--	--	--	--	REMOVED	--	-4.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
29	0.000	--	--	--	--	--	REMOVED	--	-5.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
30	0.000	--	--	--	--	--	REMOVED	--	-5.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
31	0.000	--	--	--	--	--	REMOVED	--	-5.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
32	0.000	--	--	--	--	--	REMOVED	--	-5.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
33	0.000	--	--	--	--	--	REMOVED	--	-5.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					

34	0.000	--	--	--	--	--	REMOVED	--	-6.100	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
35	0.000	--	--	--	--	--	REMOVED	--	-6.300	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
36 D	18.75	1.0332E-02	1.902	91.66	110.0	105.3	UL-RL	2.4873E+04	-6.500	2.098
1.000	1.000	93.76	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	20.64	9.6031E-03	3.804	99.01	112.0	112.2	UL-RL	2.4873E+04	-6.700	4.196
1.000	1.000	103.2	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	22.54	8.9012E-03	5.706	106.4	114.0	119.0	UL-RL	2.4873E+04	-6.900	6.294
1.000	1.000	112.7	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	24.43	8.2266E-03	7.608	113.8	116.0	125.9	UL-RL	2.4873E+04	-7.100	8.392
1.000	1.000	122.2	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	26.33	7.5797E-03	9.510	121.1	118.0	132.7	UL-RL	2.4873E+04	-7.300	10.49
1.000	1.000	131.6	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	28.22	6.9610E-03	11.41	128.5	120.0	139.6	UL-RL	2.4873E+04	-7.500	12.59
1.000	1.000	141.1	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	30.12	6.3707E-03	13.31	135.9	122.0	146.4	UL-RL	2.4873E+04	-7.700	14.69
1.000	1.000	150.6	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	32.01	5.8091E-03	15.22	143.3	124.0	153.3	UL-RL	2.4873E+04	-7.900	16.78
1.000	1.000	160.0	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	33.64	5.2761E-03	17.12	149.3	126.0	155.2	UL-RL	2.4873E+04	-8.100	18.88
1.000	1.000	168.2	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	32.75	4.7719E-03	19.02	142.8	128.0	148.2	UL-RL	2.4873E+04	-8.300	20.98
1.000	1.000	163.7	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	31.97	4.2962E-03	20.92	136.8	130.0	141.7	UL-RL	2.4873E+04	-8.500	23.08
1.000	1.000	159.8	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	31.30	3.8488E-03	22.82	131.3	132.0	135.8	UL-RL	2.4873E+04	-8.700	25.18
1.000	1.000	156.5	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	30.73	3.4292E-03	24.73	126.4	134.0	130.4	UL-RL	2.4873E+04	-8.900	27.27
1.000	1.000	153.6	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	30.26	3.0369E-03	26.63	121.9	136.0	125.6	UL-RL	2.4873E+04	-9.100	29.37
1.000	1.000	151.3	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	29.88	2.6713E-03	28.53	117.9	138.0	121.2	UL-RL	2.4873E+04	-9.300	31.47
1.000	1.000	149.4	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	29.59	2.3317E-03	30.43	114.4	140.0	117.3	UL-RL	2.4873E+04	-9.500	33.57
1.000	1.000	148.0	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	29.39	2.0172E-03	32.33	111.3	142.0	113.8	UL-RL	2.4873E+04	-9.700	35.67
1.000	1.000	147.0	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	29.27	1.7271E-03	34.24	108.6	144.0	110.8	UL-RL	2.4873E+04	-9.900	37.76
1.000	1.000	146.3	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	29.22	1.4603E-03	36.14	106.2	146.0	108.1	UL-RL	2.4873E+04	-10.10	39.86
1.000	1.000	146.1	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	29.24	1.2158E-03	38.04	104.2	148.0	105.9	UL-RL	2.4873E+04	-10.30	41.96
1.000	1.000	146.2	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	29.32	9.9244E-04	39.94	102.5	150.0	103.9	UL-RL	2.4873E+04	-10.50	44.06
1.000	1.000	146.6	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	29.47	7.8915E-04	41.84	101.2	152.0	102.3	UL-RL	2.4873E+04	-10.70	46.16
1.000	1.000	147.3	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	29.67	6.0478E-04	43.75	100.1	154.0	101.0	UL-RL	2.4873E+04	-10.90	48.25
1.000	1.000	148.3	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	29.92	4.3813E-04	45.65	99.24	156.0	99.95	UL-RL	2.4873E+04	-11.10	50.35
1.000	1.000	149.6	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	30.22	2.8805E-04	47.55	98.64	158.0	99.16	UL-RL	2.4873E+04	-11.30	52.45
1.000	1.000	151.1	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	30.42	1.5336E-04	49.45	97.53	160.0	99.81	UL-RL	2.4873E+04	-11.50	54.55
1.000	1.000	152.1	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	30.61	3.2910E-05	51.35	96.39	162.0	101.0	UL-RL	2.4873E+04	-11.70	56.65
1.000	1.000	153.0	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	30.86	-7.4437E-05	53.25	95.56	164.0	102.3	UL-RL	2.4873E+04	-11.90	58.74
1.000	1.000	154.3	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	31.16	-1.6979E-04	55.16	94.96	166.0	103.5	UL-RL	2.4873E+04	-12.10	60.84
1.000	1.000	155.8	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	31.51	-2.5422E-04	57.06	94.59	168.0	104.8	UL-RL	2.4873E+04	-12.30	62.94
1.000	1.000	157.5	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	31.89	-3.2878E-04	58.96	94.44	170.0	106.1	UL-RL	2.4873E+04	-12.50	65.04
1.000	1.000	159.5	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	32.32	-3.9445E-04	60.86	94.48	172.0	107.3	UL-RL	2.4873E+04	-12.70	67.14
1.000	1.000	161.6	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	32.79	-4.5219E-04	62.76	94.70	174.0	108.6	UL-RL	2.4873E+04	-12.90	69.24
1.000	1.000	163.9	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	33.24	-5.0291E-04	64.67	94.88	176.0	110.1	UL-RL	2.4873E+04	-13.10	71.33
1.000	1.000	166.2	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	33.72	-5.4748E-04	66.57	95.19	178.0	111.6	UL-RL	2.4873E+04	-13.30	73.43
1.000	1.000	168.6	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	34.23	-5.8668E-04	68.47	95.62	180.0	113.2	UL-RL	2.4873E+04	-13.50	75.53
1.000	1.000	171.1	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	34.75	-6.2129E-04	70.37	96.14	182.0	114.7	UL-RL	2.4873E+04	-13.70	77.63
1.000	1.000	173.8	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	35.29	-6.5200E-04	72.27	96.74	184.0	116.2	UL-RL	2.4873E+04	-13.90	79.73
1.000	1.000	176.5	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	35.85	-6.7945E-04	74.18	97.41	186.0	117.6	UL-RL	2.4873E+04	-14.10	81.82
1.000	1.000	179.2	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	36.41	-7.0423E-04	76.08	98.13	188.0	119.1	UL-RL	2.4873E+04	-14.30	83.92
1.000	1.000	182.1	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	36.98	-7.2687E-04	77.98	98.90	190.0	120.6	UL-RL	2.4873E+04	-14.50	86.02
1.000	1.000	184.9	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	37.56	-7.4783E-04	79.88	99.70	192.0	122.0	UL-RL	2.4873E+04	-14.70	88.12
1.000	1.000	187.8	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	38.15	-7.6754E-04	81.78	100.5	194.0	123.5	UL-RL	2.4873E+04	-14.90	90.22
1.000	1.000	190.7	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	38.74	-7.8635E-04	83.69	101.4	196.0	124.9	UL-RL	2.4873E+04	-15.10	92.31
1.000	1.000	193.7	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	39.33	-8.0454E-04	85.59	102.2	198.0	126.4	UL-RL	2.4873E+04	-15.30	94.41
1.000	1.000	196.6	0.000	0.000	BNA2_(2)_335_337_L_0					
81 D	39.92	-8.2237E-04	87.49	103.1	200.0	127.8	UL-RL	2.4873E+04	-15.50	96.51
1.000	1.000	199.6	0.000	0.000	BNA2_(2)_335_337_L_0					
82 D	40.51	-8.4000E-04	89.39	103.9	202.0	129.2	UL-RL	2.4873E+04	-15.70	98.61
1.000	1.000	202.5	0.000	0.000	BNA2_(2)_335_337_L_0					
83 D	30.82	-8.5755E-04	91.29	104.8	204.0	130.7	UL-RL	2.4873E+04	-15.90	100.7
1.000	1.000	205.5	0.000	0.000	BNA2_(2)_335_337_L_0					
84 D	10.35	-8.6632E-04	92.25	105.2	205.0	131.4	UL-RL	2.4873E+04	-16.00	101.8
1.000	1.000	207.0	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 83  
C U R R E N T   T I M E   I S        5.0000

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	46.654	-46.654	6.19876E-10	9.3308
2	59.822	-59.822	-9.3308	21.295
3	74.451	-74.451	-21.295	36.186
4	90.541	-90.541	-36.186	54.294
5	108.09	-108.09	-54.294	75.912
6	127.10	-127.10	-75.912	101.33
7	147.57	-147.57	-101.33	130.85
8	169.51	-169.51	-130.85	164.75
9	192.90	-192.90	-164.75	203.33
10	36.850	-36.850	-203.33	210.70
11	63.163	-63.163	-210.70	223.33
12	90.937	-90.937	-223.33	241.52
13	112.80	-112.80	-241.52	264.08
14	115.48	-115.48	-264.08	287.17
15	118.23	-118.23	-287.17	310.82
16	121.22	-121.22	-310.82	335.06
17	124.50	-124.50	-335.06	359.96
18	128.09	-128.09	-359.96	385.58
19	131.98	-131.98	-385.58	411.98
20	136.19	-136.19	-411.98	439.22
21	140.70	-140.70	-439.22	467.35
22	145.51	-145.51	-467.35	496.46
23	150.63	-150.63	-496.46	526.58
24	156.05	-156.05	-526.58	557.79
25	161.75	-161.75	-557.79	590.14
26	167.74	-167.74	-590.14	623.69
27	174.00	-174.00	-623.69	658.49
28	180.53	-180.53	-658.49	694.60
29	187.30	-187.30	-694.60	732.06
30	69.292	-69.292	-732.06	745.91
31	76.736	-76.736	-745.91	761.26
32	84.613	-84.613	-761.26	778.18
33	92.906	-92.906	-778.18	796.77
34	101.61	-101.61	-796.77	817.09
35	110.70	-110.70	-817.09	839.23
36	101.44	-101.44	-839.23	859.52
37	90.667	-90.667	-859.52	877.65
38	78.384	-78.384	-877.65	893.33
39	64.587	-64.587	-893.33	906.24
40	49.273	-49.273	-906.24	916.10
41	32.446	-32.446	-916.10	922.59
42	14.108	-14.108	-922.59	925.41
43	-5.7353	5.7353	-925.41	924.26
44	-26.818	26.818	-924.26	918.90
45	-46.612	46.612	-918.90	909.57
46	-65.226	65.226	-909.57	896.53
47	-82.762	82.762	-896.53	879.98
48	-99.318	99.318	-879.98	860.11
49	-114.99	114.99	-860.11	837.12
50	-129.85	129.85	-837.12	811.15
51	-144.00	144.00	-811.15	782.35
52	-157.20	157.20	-782.35	750.90
53	-167.78	167.78	-750.90	717.35
54	-175.96	175.96	-717.35	682.16
55	-181.98	181.98	-682.16	645.76
56	-186.03	186.03	-645.76	608.56
57	-188.30	188.30	-608.56	570.90
58	-188.98	188.98	-570.90	533.10
59	-188.24	188.24	-533.10	495.45
60	-186.23	186.23	-495.45	458.21
61	-182.95	182.95	-458.21	421.61
62	-178.49	178.49	-421.61	385.92
63	-173.25	173.25	-385.92	351.27
64	-167.30	167.30	-351.27	317.81
65	-160.75	160.75	-317.81	285.66
66	-153.67	153.67	-285.66	254.92
67	-146.15	146.15	-254.92	225.69
68	-138.24	138.24	-225.69	198.04
69	-129.97	129.97	-198.04	172.05
70	-121.38	121.38	-172.05	147.77

71	-112.58	112.58	-147.77	125.26
72	-103.58	103.58	-125.26	104.54
73	-94.437	94.437	-104.54	85.655
74	-85.159	85.159	-85.655	68.624
75	-75.808	75.808	-68.624	53.462
76	-66.412	66.412	-53.462	40.180
77	-56.982	56.982	-40.180	28.783
78	-47.527	47.527	-28.783	19.278
79	-38.051	38.051	-19.278	11.668
80	-28.559	28.559	-11.668	5.9558
81	-19.053	19.053	-5.9558	2.1452
82	-9.5335	9.5335	-2.1452	0.23848
83	-2.3846	2.3846	-0.23848	4.80713E-11

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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New Project
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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\_341 :  
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	180.90	-9.54370E-04	2.67884E-02	0.0000	2015.0	0.0000	0.0000    ELASTIC    ORIGINAL YOUNG MODU-
LUS								

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
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| Exe Time :25 June 2020 16:39:30
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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 .   5

Tieback\_342 :  
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	125.00	-4.95414E-04	-4.95414E-04	0.0000	0.0000	0.0000	0.0000	BORN NOW JUST ACTIVATED	
ITER	0	RNORM = 7340.	RMNORM= 0.000	RINORM=0.2659E+07	RIMNOR=0.5004E+08	RENORM= 4198.	REMNR=0.4433E-17	RATIO =0.3973E-01	TOLER =0.1000E-03	NOT CONVERGED
		RFMAX = 192.9	RMMAX = 925.4	RTSMAL=0.1000E-02	RMSMAL=0.1000E-02	RDT =0.2659E+07	RDR =0.5004E+08	RATIO=0.3973E-01	RATIO= 0.000	
		MAX UN= 28.79	IEQ= 83 NODE	42 DOF	1 Y-DISPL.F	MIN UN=-.9727	IEQ= 69 NODE	35 DOF	1 Y-DISPL.F	
		NO. OF CONTACT CONSTRAINT VIOLATIONS	0							
ITER	2	RNORM = 7340.	RMNORM= 0.000	RINORM=0.2659E+07	RIMNOR=0.5004E+08	RENORM= 172.7	REMNR=0.6146E-17	RATIO =0.8058E-02	TOLER =0.1000E-03	NOT CONVERGED
		RFMAX = 192.9	RMMAX = 925.4	RTSMAL=0.1000E-02	RMSMAL=0.1000E-02	RDT =0.2659E+07	RDR =0.5004E+08	RATIO=0.8058E-02	RATIO= 0.000	
		MAX UN= 4.440	IEQ= 95 NODE	48 DOF	1 Y-DISPL.F	MIN UN=-.1686E-07	IEQ= 25 NODE	13 DOF	1 Y-DISPL.F	
		NO. OF CONTACT CONSTRAINT VIOLATIONS	0							
ITER	3	RNORM = 7340.	RMNORM= 0.000	RINORM=0.2659E+07	RIMNOR=0.5004E+08	RENORM= 17.82	REMNR=0.2670E-17	RATIO =0.2589E-02	TOLER =0.1000E-03	NOT CONVERGED
		RFMAX = 192.9	RMMAX = 925.4	RTSMAL=0.1000E-02	RMSMAL=0.1000E-02	RDT =0.2659E+07	RDR =0.5004E+08	RATIO=0.2589E-02	RATIO= 0.000	
		MAX UN= 2.319	IEQ= 51 NODE	26 DOF	1 Y-DISPL.F	MIN UN=-.2103	IEQ= 161 NODE	81 DOF	1 Y-DISPL.F	
		NO. OF CONTACT CONSTRAINT VIOLATIONS	0							
ITER	4	RNORM = 7340.	RMNORM= 0.000	RINORM=0.2659E+07	RIMNOR=0.5004E+08	RENORM= 1.590	REMNR=0.9044E-17	RATIO =0.7734E-03	TOLER =0.1000E-03	NOT CONVERGED
		RFMAX = 192.9	RMMAX = 925.4	RTSMAL=0.1000E-02	RMSMAL=0.1000E-02	RDT =0.2659E+07	RDR =0.5004E+08	RATIO=0.7734E-03	RATIO= 0.000	
		MAX UN=0.9397	IEQ= 33 NODE	17 DOF	1 Y-DISPL.F	MIN UN=-.2946E-01	IEQ= 155 NODE	78 DOF	1 Y-DISPL.F	
		NO. OF CONTACT CONSTRAINT VIOLATIONS	0							
ITER	5	RNORM = 7340.	RMNORM= 0.000	RINORM=0.2659E+07	RIMNOR=0.5004E+08	RENORM=0.8531E-02	REMNR=0.7089E-17	RATIO =0.5664E-04	TOLER =0.1000E-03	CONVERGED !
		RFMAX = 192.9	RMMAX = 925.4	RTSMAL=0.1000E-02	RMSMAL=0.1000E-02	RDT =0.2659E+07	RDR =0.5004E+08	RATIO=0.5664E-04	RATIO= 0.000	
		MAX UN=0.8009E-01	IEQ= 25 NODE	13 DOF	1 Y-DISPL.F	MIN UN=-.1293E-07	IEQ= 19 NODE	10 DOF	1 Y-DISPL.F	
		NO. OF CONTACT CONSTRAINT VIOLATIONS	0							

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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New Project
SOLUTION REACHED USING      5 ITERATIONS ON    40

P R I N T   O U T   F O R   T I M E   S T E P   6   ( A T T I M E   6.000   )

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

      Y-DISPL. F      X-ROT. F
      (02)          (04)      (
1  4.6551027E-02 -5.5668538E-03
2  4.5437704E-02 -5.5661282E-03
3  4.4324686E-02 -5.5637457E-03
4  4.3212346E-02 -5.5592732E-03
5  4.2101148E-02 -5.5522334E-03
6  4.0991658E-02 -5.5421052E-03
7  3.9884549E-02 -5.5283234E-03
8  3.8780613E-02 -5.5102790E-03
9  3.7680765E-02 -5.4873191E-03
10 3.6586059E-02 -5.4587466E-03
11 3.5497502E-02 -5.4266431E-03
12 3.4415502E-02 -5.3930463E-03
13 3.3340439E-02 -5.3571274E-03
14 3.2272856E-02 -5.3181281E-03
15 3.1213415E-02 -5.2757156E-03
16 3.0162797E-02 -5.2298898E-03
17 2.9121687E-02 -5.1806496E-03
18 2.8090766E-02 -5.1279888E-03
19 2.7070720E-02 -5.0718944E-03
20 2.6062238E-02 -5.0123458E-03
21 2.5066014E-02 -4.9493150E-03
22 2.4082742E-02 -4.8827661E-03
23 2.3113140E-02 -4.8126563E-03
24 2.2157925E-02 -4.7389344E-03
25 2.1217816E-02 -4.6615403E-03
26 2.0293558E-02 -4.5804072E-03
27 1.9385907E-02 -4.4954594E-03
28 1.8495634E-02 -4.4066132E-03
29 1.7623532E-02 -4.3137772E-03
30 1.6770396E-02 -4.2168493E-03
31 1.5936934E-02 -4.1177292E-03
32 1.5123325E-02 -4.0183061E-03
33 1.4329640E-02 -3.9184542E-03
34 1.3555984E-02 -3.8180394E-03
35 1.2802476E-02 -3.7169178E-03
36 1.2069274E-02 -3.6149379E-03
37 1.1356568E-02 -3.5119395E-03
38 1.0664578E-02 -3.4077533E-03
39 9.9935617E-03 -3.3021981E-03
40 9.3438065E-03 -3.1950754E-03
41 8.7156503E-03 -3.0861715E-03
42 8.1094720E-03 -2.9752567E-03
43 7.5256981E-03 -2.8620845E-03
44 6.9647846E-03 -2.7467151E-03
45 6.4271349E-03 -2.6295428E-03
46 5.9130616E-03 -2.5109995E-03
47 5.4227950E-03 -2.3915576E-03
48 4.9564644E-03 -2.2717284E-03
49 4.5140928E-03 -2.1520617E-03
50 4.0955917E-03 -2.0331469E-03
51 3.7007467E-03 -1.9155743E-03
52 3.3292351E-03 -1.7999041E-03
53 2.9806229E-03 -1.6866664E-03
54 2.6543665E-03 -1.5763629E-03
55 2.3498433E-03 -1.4694769E-03
56 2.0663183E-03 -1.3664532E-03
57 1.8029787E-03 -1.2676803E-03
58 1.5589535E-03 -1.1734776E-03
59 1.3332795E-03 -1.0840829E-03
60 1.1249871E-03 -9.9968612E-04
61 9.3306326E-04 -9.2041542E-04
62 7.5647415E-04 -8.4634711E-04
63 5.9417566E-04 -7.7751015E-04
64 4.4512201E-04 -7.1389435E-04
65 3.0827266E-04 -6.5545745E-04
66 1.8259853E-04 -6.0212795E-04
67 6.7087633E-05 -5.5380622E-04
68 -3.9249264E-05 -5.1036417E-04
69 -1.3737297E-04 -4.7164620E-04
70 -2.2821059E-04 -4.3747088E-04
71 -3.1265045E-04 -4.0763245E-04
72 -3.9153752E-04 -3.8190333E-04
73 -4.6566926E-04 -3.6003640E-04
74 -5.3579187E-04 -3.4176628E-04

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75 -6.0259672E-04 -3.2681042E-04
76 -6.6671710E-04 -3.1487059E-04
77 -7.2872520E-04 -3.0563438E-04
78 -7.8912938E-04 -2.9877597E-04
79 -8.4837157E-04 -2.9395725E-04
80 -9.0682500E-04 -2.9082940E-04
81 -9.6479213E-04 -2.8903368E-04
82 -1.0225027E-03 -2.8820160E-04
83 -1.0801118E-03 -2.8795495E-04
84 -1.1089094E-03 -2.8794253E-04
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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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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 84  
C U R R E N T   T I M E   I S      6.0000

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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.1694	-4.6551E-02	0.000	1.694	1.000	11.41	UL-RL	3746.	0.5000	0.000	
1.000	1.000	1.694	0.000	0.000	FRANA_334_8_L_0						
2 D	0.3040	-4.5438E-02	4.557	1.520	5.557	15.54	UL-RL	3746.	0.3000	0.000	
1.000	1.000	1.520	0.000	0.000	FRANA_334_8_L_0						
3 D	0.2692	-4.4325E-02	10.91	1.346	11.91	19.97	UL-RL	3746.	0.1000	0.000	
1.000	1.000	1.346	0.000	0.000	FRANA_334_8_L_0						
4 D	0.2344	-4.3212E-02	17.92	1.172	18.92	24.17	UL-RL	3746.	-0.1000	0.000	
1.000	1.000	1.172	0.000	0.000	FRANA_334_8_L_0						
5 D	0.1996	-4.2101E-02	26.34	0.9980	27.34	26.78	UL-RL	3746.	-0.3000	0.000	
1.000	1.000	0.9980	0.000	0.000	FRANA_334_8_L_0						
6 D	0.1648	-4.0992E-02	34.34	0.8238	35.34	28.81	UL-RL	3746.	-0.5000	0.000	
1.000	1.000	0.8238	0.000	0.000	FRANA_334_8_L_0						
7 D	0.1299	-3.9885E-02	41.20	0.6496	42.20	30.70	UL-RL	3746.	-0.7000	0.000	
1.000	1.000	0.6496	0.000	0.000	FRANA_334_8_L_0						
8 D	9.5035E-02	-3.8781E-02	47.35	0.4752	48.35	32.62	UL-RL	3746.	-0.9000	0.000	
1.000	1.000	0.4752	0.000	0.000	FRANA_334_8_L_0						
9 D	6.0120E-02	-3.7681E-02	53.02	0.3006	54.02	34.66	UL-RL	3746.	-1.100	0.000	
1.000	1.000	0.3006	0.000	0.000	FRANA_334_8_L_0						
10 D	2.5159E-02	-3.6568E-02	58.37	0.1258	59.37	36.83	UL-RL	3746.	-1.300	0.000	
1.000	1.000	0.1258	0.000	0.000	FRANA_334_8_L_0						
11 D	0.000	-3.5498E-02	63.22	0.000	64.22	39.14	ACTIVE	0.000	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
12 D	0.000	-3.4416E-02	68.17	0.000	69.17	41.57	ACTIVE	0.000	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
13 D	0.000	-3.3340E-02	72.97	0.000	73.97	44.12	ACTIVE	0.000	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
14 D	0.000	-3.2273E-02	76.88	0.000	77.88	48.27	ACTIVE	0.000	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	BNA2_(2)_335_337_L_0						
15 D	0.000	-3.1213E-02	79.69	0.000	80.69	45.71	ACTIVE	0.000	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	BNA2_(2)_335_337_L_0						
16 D	8.0398E-02	-3.0163E-02	82.61	0.4020	83.61	43.54	ACTIVE	0.000	-2.500	0.000	
1.000	1.000	0.4020	0.000	0.000	BNA2_(2)_335_337_L_0						
17 D	0.3073	-2.9122E-02	85.63	1.536	86.63	41.86	ACTIVE	0.000	-2.700	0.000	
1.000	1.000	1.536	0.000	0.000	BNA2_(2)_335_337_L_0						
18 D	0.5405	-2.8091E-02	88.73	2.702	89.73	43.71	ACTIVE	0.000	-2.900	0.000	
1.000	1.000	2.702	0.000	0.000	BNA2_(2)_335_337_L_0						
19 D	0.7793	-2.7071E-02	91.90	3.896	92.90	45.84	ACTIVE	0.000	-3.100	0.000	
1.000	1.000	3.896	0.000	0.000	BNA2_(2)_335_337_L_0						
20 D	1.023	-2.6062E-02	95.14	5.115	96.14	48.01	ACTIVE	0.000	-3.300	0.000	
1.000	1.000	5.115	0.000	0.000	BNA2_(2)_335_337_L_0						
21 D	1.271	-2.5066E-02	98.44	6.355	99.44	50.21	ACTIVE	0.000	-3.500	0.000	
1.000	1.000	6.355	0.000	0.000	BNA2_(2)_335_337_L_0						
22 D	1.523	-2.4083E-02	101.8	7.615	102.8	51.34	ACTIVE	0.000	-3.700	0.000	
1.000	1.000	7.615	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	1.778	-2.3113E-02	105.2	8.892	106.2	52.50	ACTIVE	0.000	-3.900	0.000	
1.000	1.000	8.892	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	2.037	-2.2158E-02	108.6	10.19	109.6	53.68	ACTIVE	0.000	-4.100	0.000	
1.000	1.000	10.19	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	2.299	-2.1218E-02	112.1	11.49	113.1	54.87	ACTIVE	0.000	-4.300	0.000	
1.000	1.000	11.49	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	2.563	-2.0294E-02	115.6	12.81	116.6	56.07	ACTIVE	0.000	-4.500	0.000	
1.000	1.000	12.81	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	2.829	-1.9386E-02	119.2	14.14	120.2	57.29	ACTIVE	0.000	-4.700	0.000	
1.000	1.000	14.14	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	3.097	-1.8496E-02	122.7	15.49	123.7	59.93	ACTIVE	0.000	-4.900	0.000	
1.000	1.000	15.49	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	3.368	-1.7624E-02	126.3	16.84	127.3	63.07	ACTIVE	0.000	-5.100	0.000	
1.000	1.000	16.84	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	3.640	-1.6770E-02	129.9	18.20	130.9	65.87	ACTIVE	0.000	-5.300	0.000	
1.000	1.000	18.20	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	3.914	-1.5937E-02	133.6	19.57	133.6	68.36	ACTIVE	0.000	-5.500	0.000	
1.000	1.000	19.57	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	4.190	-1.5123E-02	137.3	20.95	137.3	70.56	ACTIVE	0.000	-5.700	0.000	
1.000	1.000	20.95	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	4.467	-1.4330E-02	140.9	22.33	140.9	72.52	ACTIVE	0.000	-5.900	0.000	
1.000	1.000	22.33	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	4.745	-1.3556E-02	144.6	23.72	144.6	74.25	ACTIVE	0.000	-6.100	0.000
1.000	1.000	23.72	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	5.024	-1.2802E-02	148.4	25.12	0.000	0.000	ACTIVE	0.000	-6.300	0.000
1.000	1.000	25.12	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	5.305	-1.2069E-02	152.1	26.52	152.1	81.79	ACTIVE	0.000	-6.500	0.000
1.000	1.000	26.52	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	5.587	-1.1357E-02	155.8	27.93	155.8	85.15	ACTIVE	0.000	-6.700	0.000
1.000	1.000	27.93	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	6.105	-1.0665E-02	157.7	28.64	157.7	88.00	ACTIVE	0.000	-6.900	1.886
1.000	1.000	30.52	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	6.624	-9.9936E-03	159.6	29.35	159.6	90.42	ACTIVE	0.000	-7.100	3.773
1.000	1.000	33.12	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	7.144	-9.3438E-03	161.5	30.06	161.5	93.08	ACTIVE	0.000	-7.300	5.659
1.000	1.000	35.72	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	7.665	-8.7157E-03	163.4	30.78	163.4	97.55	ACTIVE	0.000	-7.500	7.545
1.000	1.000	38.32	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	8.187	-8.1095E-03	165.3	31.50	165.3	101.0	ACTIVE	0.000	-7.700	9.432
1.000	1.000	40.93	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	8.709	-7.5257E-03	167.2	32.23	167.2	103.7	ACTIVE	0.000	-7.900	11.32
1.000	1.000	43.54	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	9.232	-6.9648E-03	169.2	32.96	169.2	106.1	ACTIVE	0.000	-8.100	13.20
1.000	1.000	46.16	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	9.756	-6.4271E-03	171.1	33.69	171.1	108.2	ACTIVE	0.000	-8.300	15.09
1.000	1.000	48.78	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	10.28	-5.9131E-03	173.1	34.42	173.1	109.9	ACTIVE	0.000	-8.500	16.98
1.000	1.000	51.40	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	10.81	-5.4228E-03	175.1	35.16	175.1	111.3	ACTIVE	0.000	-8.700	18.86
1.000	1.000	54.03	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	11.33	-4.9565E-03	177.0	35.91	177.0	112.5	ACTIVE	0.000	-8.900	20.75
1.000	1.000	56.66	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	11.86	-4.5141E-03	179.0	36.65	179.0	113.5	ACTIVE	0.000	-9.100	22.64
1.000	1.000	59.29	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	12.38	-4.0956E-03	181.0	37.40	181.0	114.4	ACTIVE	0.000	-9.300	24.52
1.000	1.000	61.92	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	12.91	-3.7007E-03	183.0	38.15	183.0	115.1	ACTIVE	0.000	-9.500	26.41
1.000	1.000	64.56	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	13.44	-3.3292E-03	185.0	38.90	185.0	115.7	ACTIVE	0.000	-9.700	28.30
1.000	1.000	67.19	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	13.97	-2.9806E-03	187.0	39.65	187.0	116.3	ACTIVE	0.000	-9.900	30.18
1.000	1.000	69.84	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	14.50	-2.6544E-03	189.0	40.41	189.0	116.8	ACTIVE	0.000	-10.10	32.07
1.000	1.000	72.48	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	15.65	-2.3498E-03	191.0	44.30	191.0	117.3	UL-RL	2.7463E+04	-10.30	33.95
1.000	1.000	78.25	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	18.03	-2.0663E-03	193.1	54.31	193.1	117.7	UL-RL	2.7463E+04	-10.50	35.84
1.000	1.000	90.15	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	20.28	-1.8030E-03	195.1	63.65	195.1	118.2	UL-RL	2.7463E+04	-10.70	37.73
1.000	1.000	101.4	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	22.39	-1.5590E-03	197.1	72.36	197.1	118.6	UL-RL	2.7463E+04	-10.90	39.61
1.000	1.000	112.0	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	24.39	-1.3333E-03	199.2	80.47	199.2	119.0	UL-RL	2.7463E+04	-11.10	41.50
1.000	1.000	122.0	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	26.28	-1.1250E-03	201.2	88.02	201.2	119.5	UL-RL	2.7463E+04	-11.30	43.39
1.000	1.000	131.4	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	28.06	-9.3306E-04	203.3	95.03	203.3	119.9	UL-RL	2.7463E+04	-11.50	45.27
1.000	1.000	140.3	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	29.74	-7.5647E-04	205.3	101.5	205.3	121.4	UL-RL	2.7463E+04	-11.70	47.16
1.000	1.000	148.7	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	31.08	-5.9418E-04	207.4	106.4	207.4	124.7	UL-RL	2.7463E+04	-11.90	49.05
1.000	1.000	155.4	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	32.37	-4.4512E-04	209.4	110.9	209.4	127.8	UL-RL	2.7463E+04	-12.10	50.93
1.000	1.000	161.9	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	33.61	-3.0827E-04	211.5	115.2	211.5	130.7	UL-RL	2.7463E+04	-12.30	52.82
1.000	1.000	168.0	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	34.80	-1.8260E-04	213.6	119.3	213.6	133.4	UL-RL	2.7463E+04	-12.50	54.70
1.000	1.000	174.0	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	35.95	-6.7088E-05	215.6	123.2	215.6	135.8	UL-RL	2.7463E+04	-12.70	56.59
1.000	1.000	179.8	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	37.07	3.9249E-05	217.7	126.9	217.7	138.2	UL-RL	2.7463E+04	-12.90	58.48
1.000	1.000	185.3	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	38.15	1.3737E-04	219.8	130.4	219.8	140.4	UL-RL	2.7463E+04	-13.10	60.36
1.000	1.000	190.7	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	39.19	2.2821E-04	221.9	133.7	221.9	142.5	UL-RL	2.7463E+04	-13.30	62.25
1.000	1.000	196.0	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	40.16	3.1265E-04	224.0	136.7	224.0	144.2	UL-RL	2.7463E+04	-13.50	64.14
1.000	1.000	200.8	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	41.11	3.9154E-04	226.1	139.5	226.1	145.9	UL-RL	2.7463E+04	-13.70	66.02
1.000	1.000	205.6	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	42.05	4.6567E-04	228.1	142.3	228.1	147.4	UL-RL	2.7463E+04	-13.90	67.91
1.000	1.000	210.2	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	42.96	5.3579E-04	230.2	145.0	230.2	149.0	UL-RL	2.7463E+04	-14.10	69.80
1.000	1.000	214.8	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	43.83	6.0260E-04	232.3	147.5	232.3	150.3	UL-RL	2.7463E+04	-14.30	71.68
1.000	1.000	219.2	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	44.68	6.6672E-04	234.4	149.8	234.4	151.5	UL-RL	2.7463E+04	-14.50	73.57
1.000	1.000	223.4	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	45.51	7.2873E-04	236.5	152.1	236.5	152.6	UL-RL	2.7463E+04	-14.70	75.45
1.000	1.000	227.6	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	46.30	7.8913E-04	238.7	154.2	238.7	154.2	V-C	1.7164E+04	-14.90	77.34
1.000	1.000	231.5	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	47.05	8.4837E-04	240.8	156.0	240.8	156.0	V-C	1.7164E+04	-15.10	79.23
1.000	1.000	235.2	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	47.79	9.0682E-04	242.9	157.8	242.9	157.8	V-C	1.7164E+04	-15.30	81.11
1.000	1.000		238.9	0.000	0.000	BNA2_(2)_335_337_L_0				
81 D	48.53	9.6479E-04	245.0	159.7	245.0	159.7	V-C	1.7164E+04	-15.50	83.00
1.000	1.000		242.7	0.000	0.000	BNA2_(2)_335_337_L_0				
82 D	49.27	1.0225E-03	247.1	161.5	247.1	161.5	V-C	1.7164E+04	-15.70	84.89
1.000	1.000		246.4	0.000	0.000	BNA2_(2)_335_337_L_0				
83 D	37.51	1.0801E-03	249.2	163.3	249.2	163.3	V-C	1.7164E+04	-15.90	86.77
1.000	1.000		250.1	0.000	0.000	BNA2_(2)_335_337_L_0				
84 D	12.60	1.1089E-03	250.3	164.2	250.3	164.2	V-C	1.7164E+04	-16.00	87.72
1.000	1.000		251.9	0.000	0.000	BNA2_(2)_335_337_L_0				

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:39:30
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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

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ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    84  
C U R R E N T    T I M E    I S    6.0000

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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
15	0.000	--	--	--	--	--	REMOVED	--	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
16	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
17	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
18	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
19	0.000	--	--	--	--	--	REMOVED	--	-3.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
20	0.000	--	--	--	--	--	REMOVED	--	-3.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
21	0.000	--	--	--	--	--	REMOVED	--	-3.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
22	0.000	--	--	--	--	--	REMOVED	--	-3.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
23	0.000	--	--	--	--	--	REMOVED	--	-3.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
24	0.000	--	--	--	--	--	REMOVED	--	-4.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
25	0.000	--	--	--	--	--	REMOVED	--	-4.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
26	0.000	--	--	--	--	--	REMOVED	--	-4.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
27	0.000	--	--	--	--	--	REMOVED	--	-4.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
28	0.000	--	--	--	--	--	REMOVED	--	-4.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
29	0.000	--	--	--	--	--	REMOVED	--	-5.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
30	0.000	--	--	--	--	--	REMOVED	--	-5.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
31	0.000	--	--	--	--	--	REMOVED	--	-5.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
32	0.000	--	--	--	--	--	REMOVED	--	-5.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
33	0.000	--	--	--	--	--	REMOVED	--	-5.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					

34	0.000	--	--	--	--	--	REMOVED	--	-6.100	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
35	0.000	--	--	--	--	--	REMOVED	--	-6.300	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
36	0.000	--	--	--	--	--	REMOVED	--	-6.500	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
37	0.000	--	--	--	--	--	REMOVED	--	-6.700	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
38	0.000	--	--	--	--	--	REMOVED	--	-6.900	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
39	0.000	--	--	--	--	--	REMOVED	--	-7.100	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
40	0.000	--	--	--	--	--	REMOVED	--	-7.300	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
41	0.000	--	--	--	--	--	REMOVED	--	-7.500	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
42	0.000	--	--	--	--	--	REMOVED	--	-7.700	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
43 D	20.76	7.5257E-03	1.886	101.7	124.0	153.3	PASSIVE	0.000	-7.900	2.114
1.000	1.000	103.8	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	22.54	6.9648E-03	3.773	108.5	126.0	155.2	PASSIVE	0.000	-8.100	4.227
1.000	1.000	112.7	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	24.32	6.4271E-03	5.659	115.3	128.0	148.2	PASSIVE	0.000	-8.300	6.341
1.000	1.000	121.6	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	26.10	5.9131E-03	7.545	122.1	130.0	141.7	PASSIVE	0.000	-8.500	8.455
1.000	1.000	130.5	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	27.88	5.4228E-03	9.432	128.8	132.0	135.8	PASSIVE	0.000	-8.700	10.57
1.000	1.000	139.4	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	29.66	4.9565E-03	11.32	135.6	134.0	135.6	PASSIVE	0.000	-8.900	12.68
1.000	1.000	148.3	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	31.43	4.5141E-03	13.20	142.3	136.0	142.3	V-C	1.2891E+04	-9.100	14.80
1.000	1.000	157.1	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	30.89	4.0956E-03	15.09	137.5	138.0	137.5	V-C	1.2891E+04	-9.300	16.91
1.000	1.000	154.4	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	30.43	3.7007E-03	16.98	133.1	140.0	133.1	V-C	1.2891E+04	-9.500	19.02
1.000	1.000	152.2	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	30.06	3.3292E-03	18.86	129.2	142.0	129.2	V-C	1.2891E+04	-9.700	21.14
1.000	1.000	150.3	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	29.76	2.9806E-03	20.75	125.6	144.0	125.6	V-C	1.2891E+04	-9.900	23.25
1.000	1.000	148.8	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	29.54	2.6544E-03	22.64	122.3	146.0	122.3	V-C	1.2891E+04	-10.10	25.36
1.000	1.000	147.7	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	29.39	2.3498E-03	24.52	119.5	148.0	119.5	V-C	1.2891E+04	-10.30	27.48
1.000	1.000	146.9	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	29.30	2.0663E-03	26.41	116.9	150.0	116.9	V-C	1.2891E+04	-10.50	29.59
1.000	1.000	146.5	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	29.27	1.8030E-03	28.30	114.7	152.0	114.7	V-C	1.2891E+04	-10.70	31.70
1.000	1.000	146.4	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	29.31	1.5590E-03	30.18	112.7	154.0	112.7	V-C	1.2891E+04	-10.90	33.82
1.000	1.000	146.5	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	29.40	1.3333E-03	32.07	111.0	156.0	111.0	V-C	1.2891E+04	-11.10	35.93
1.000	1.000	147.0	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	29.53	1.1250E-03	33.95	109.6	158.0	109.6	V-C	1.2891E+04	-11.30	38.05
1.000	1.000	147.7	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	29.72	9.3306E-04	35.84	108.4	160.0	108.4	V-C	1.2891E+04	-11.50	40.16
1.000	1.000	148.6	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	29.95	7.5647E-04	37.73	107.5	162.0	107.5	V-C	1.2891E+04	-11.70	42.27
1.000	1.000	149.7	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	30.21	5.9418E-04	39.61	106.7	164.0	106.7	V-C	1.2891E+04	-11.90	44.39
1.000	1.000	151.1	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	30.52	4.4512E-04	41.50	106.1	166.0	106.1	V-C	1.2891E+04	-12.10	46.50
1.000	1.000	152.6	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	30.86	3.0827E-04	43.39	105.7	168.0	105.7	V-C	1.2891E+04	-12.30	48.61
1.000	1.000	154.3	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	31.14	1.8260E-04	45.27	105.0	170.0	106.1	UL-RL	2.0626E+04	-12.50	50.73
1.000	1.000	155.7	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	31.37	6.7088E-05	47.16	104.0	172.0	107.3	UL-RL	2.0626E+04	-12.70	52.84
1.000	1.000	156.8	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	31.63	-3.9249E-05	49.05	103.2	174.0	108.6	UL-RL	2.0626E+04	-12.90	54.95
1.000	1.000	158.2	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	31.90	-1.3737E-04	50.93	102.4	176.0	110.1	UL-RL	2.0626E+04	-13.10	57.07
1.000	1.000	159.5	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	32.19	-2.2821E-04	52.82	101.8	178.0	111.6	UL-RL	2.0626E+04	-13.30	59.18
1.000	1.000	161.0	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	32.51	-3.1265E-04	54.70	101.3	180.0	113.2	UL-RL	2.0626E+04	-13.50	61.30
1.000	1.000	162.6	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	32.86	-3.9154E-04	56.59	100.9	182.0	114.7	UL-RL	2.0626E+04	-13.70	63.41
1.000	1.000	164.3	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	33.22	-4.6567E-04	58.48	100.6	184.0	116.2	UL-RL	2.0626E+04	-13.90	65.52
1.000	1.000	166.1	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	33.60	-5.3579E-04	60.36	100.4	186.0	117.6	UL-RL	2.0626E+04	-14.10	67.64
1.000	1.000	168.0	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	34.00	-6.0260E-04	62.25	100.2	188.0	119.1	UL-RL	2.0626E+04	-14.30	69.75
1.000	1.000	170.0	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	34.40	-6.6672E-04	64.14	100.1	190.0	120.6	UL-RL	2.0626E+04	-14.50	71.86
1.000	1.000	172.0	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	34.81	-7.2873E-04	66.02	100.1	192.0	122.0	UL-RL	2.0626E+04	-14.70	73.98
1.000	1.000	174.1	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	35.23	-7.8913E-04	67.91	100.1	194.0	123.5	UL-RL	2.0626E+04	-14.90	76.09
1.000	1.000	176.2	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	35.66	-8.4837E-04	69.80	100.1	196.0	124.9	UL-RL	2.0626E+04	-15.10	78.20
1.000	1.000	178.3	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	36.08	-9.0682E-04	71.68	100.1	198.0	126.4	UL-RL	2.0626E+04	-15.30	80.32
1.000	1.000	180.4	0.000	0.000	BNA2_(2)_335_337_L_0					
81 D	36.51	-9.6479E-04	73.57	100.1	200.0	127.8	UL-RL	2.0626E+04	-15.50	82.43
1.000	1.000	182.6	0.000	0.000	BNA2_(2)_335_337_L_0					
82 D	36.94	-1.0225E-03	75.45	100.2	202.0	129.2	UL-RL	2.0626E+04	-15.70	84.55
1.000	1.000	184.7	0.000	0.000	BNA2_(2)_335_337_L_0					
83 D	28.03	-1.0801E-03	77.34	100.2	204.0	130.7	UL-RL	2.0626E+04	-15.90	86.66
1.000	1.000	186.9	0.000	0.000	BNA2_(2)_335_337_L_0					
84 D	9.396	-1.1089E-03	78.28	100.2	205.0	131.4	UL-RL	2.0626E+04	-16.00	87.72
1.000	1.000	187.9	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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| Exe Time :25 June 2020 16:39:30 |  
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New Project
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## 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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 83  
C U R R E N T T I M E I S 6.0000

## WALL2D ELEMENT

EL	TA	TB	MA	MB
1	46.712	-46.712	3.66283E-10	9.3423
2	59.949	-59.949	-9.3423	21.332
3	74.602	-74.602	-21.332	36.253
4	90.669	-90.669	-36.253	54.386
5	108.15	-108.15	-54.386	76.017
6	127.05	-127.05	-76.017	101.43
7	147.36	-147.36	-101.43	130.90
8	169.09	-169.09	-130.90	164.72
9	192.23	-192.23	-164.72	203.16
10	35.082	-35.082	-203.16	210.18
11	61.052	-61.052	-210.18	222.39
12	88.437	-88.437	-222.39	240.08
13	109.87	-109.87	-240.08	262.05
14	109.87	-109.87	-262.05	284.02
15	109.87	-109.87	-284.02	305.99
16	109.95	-109.95	-305.99	327.98
17	110.25	-110.25	-327.98	350.03
18	110.79	-110.79	-350.03	372.19
19	111.57	-111.57	-372.19	394.51
20	112.60	-112.60	-394.51	417.03
21	113.87	-113.87	-417.03	439.80
22	115.39	-115.39	-439.80	462.88
23	117.17	-117.17	-462.88	486.31
24	119.21	-119.21	-486.31	510.15
25	121.50	-121.50	-510.15	534.45
26	124.07	-124.07	-534.45	559.27
27	126.90	-126.90	-559.27	584.65
28	129.99	-129.99	-584.65	610.64
29	133.36	-133.36	-610.64	637.32
30	7.7951	-7.7951	-637.32	638.88
31	11.709	-11.709	-638.88	641.22
32	15.899	-15.899	-641.22	644.40
33	20.365	-20.365	-644.40	648.47
34	25.110	-25.110	-648.47	653.49
35	30.135	-30.135	-653.49	659.52
36	35.440	-35.440	-659.52	666.61
37	41.026	-41.026	-666.61	674.81
38	47.131	-47.131	-674.81	684.24
39	53.755	-53.755	-684.24	694.99
40	60.899	-60.899	-694.99	707.17
41	68.564	-68.564	-707.17	720.88
42	76.751	-76.751	-720.88	736.23
43	64.702	-64.702	-736.23	749.17
44	51.395	-51.395	-749.17	759.45
45	36.831	-36.831	-759.45	766.82
46	21.010	-21.010	-766.82	771.02
47	3.9326	-3.9326	-771.02	771.81
48	-14.400	14.400	-771.81	768.93
49	-33.968	33.968	-768.93	762.13
50	-52.471	52.471	-762.13	751.64
51	-69.993	69.993	-751.64	737.64
52	-86.613	86.613	-737.64	720.32
53	-102.41	102.41	-720.32	699.84
54	-117.45	117.45	-699.84	676.34
55	-131.19	131.19	-676.34	650.11
56	-142.46	142.46	-650.11	621.61
57	-151.46	151.46	-621.61	591.32
58	-158.37	158.37	-591.32	559.65
59	-163.37	163.37	-559.65	526.98
60	-166.63	166.63	-526.98	493.65
61	-168.28	168.28	-493.65	459.99
62	-168.49	168.49	-459.99	426.30
63	-167.62	167.62	-426.30	392.77
64	-165.77	165.77	-392.77	359.62
65	-163.02	163.02	-359.62	327.01
66	-159.36	159.36	-327.01	295.14
67	-154.77	154.77	-295.14	264.19
68	-149.34	149.34	-264.19	234.32
69	-143.10	143.10	-234.32	205.70
70	-136.10	136.10	-205.70	178.48

71	-128.44	128.44	-178.48	152.79
72	-120.19	120.19	-152.79	128.75
73	-111.36	111.36	-128.75	106.48
74	-102.00	102.00	-106.48	86.080
75	-92.162	92.162	-86.080	67.648
76	-81.886	81.886	-67.648	51.270
77	-71.187	71.187	-51.270	37.033
78	-60.120	60.120	-37.033	25.009
79	-48.731	48.731	-25.009	15.263
80	-37.026	37.026	-15.263	7.8574
81	-25.009	25.009	-7.8574	2.8557
82	-12.679	12.679	-2.8557	0.31992
83	-3.1989	3.1989	-0.31992	-8.00471E-12

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:39:30 |  
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New Project
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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\_341 :  
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1  
C U R R E N T    T I M E    I S    6.0000

POST-TENSION 2D-BOUNDARY ELEMENT

	EL	FORCE	d0	EDISPL	pl. eps	K	-ve limit	+ve limit	
ANCHOR	1	181.70	-9.54370E-04	2.71853E-02	0.0000	2015.0	0.0000	0.0000	ELASTIC ORIGINAL YOUNG MODU-
LUS									

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:39:30 |  
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New Project
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S T R E S S    R E S U L T S    F O R    G R O U P    N O .    5

Tieback\_342 :  
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1  
C U R R E N T    T I M E    I S    6.0000

POST-TENSION 2D-BOUNDARY ELEMENT

EL	FORCE	d0	EDISPL	pl. eps	K	-ve limit	+ve limit	
ANCHOR	1	129.21	-4.95414E-04	1.04659E-03	0.0000	2727.4	0.0000	0.0000    ELASTIC    ORIGINAL YOUNG MODU-
LUS								

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:39:30 |  
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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	CONVERGENCE :YES
3	CONVERGENCE :YES
4	CONVERGENCE :YES
5	CONVERGENCE :YES
6	CONVERGENCE :YES

END OF PROCESS FOR PROBLEM

New Project

NONLINEAR SOLUTION CPU TIME .... 0.07 [sec]  
DATABASE CREATION CPU TIME..... 0.19 [sec]



## ***Report di Calcolo***

Nome Progetto: New Project

Autore: Ingegnere

Jobname: \\SBS2011\Comm\424.01 - HIRPINIA\Ing\03. LAVORO\07 - GALL\GA - FINESTRE - IMBOCCHI\GA11 Finestra F5\PARATIA-F5\sez1\SEZIONE 1 GEO Finestra F5 -LONG\_revC.pplus

Data: 25/06/2020 16:44:48

Design Section: Base Design Section

**Sommario**  
**Contenuto Sommario**

## **Descrizione della Stratigrafia e degli Strati di Terreno**

Tipo : HORIZONTAL

Quota : 0.5 m

OCR : 1

Tipo : HORIZONTAL

Quota : -2 m

OCR : 1

Tipo : HORIZONTAL

Quota : -18 m

OCR : 1

Strato di Terreno	Terreno	$\gamma_{dry}$ kN/m <sup>3</sup>	$\gamma_{sat}$ kN/m <sup>3</sup>	$\phi'$ °	$\phi_{cv}$ °	$\phi_p$ °	c' kPa	Su kPa	Modulo Elastico Eu kPa	Evc kPa	Eur kPa	Ah kPa	Avexp kPa	Pa Rur/Rvc kPa	Rvc kPa	Ku kPa	Kvc kN/m <sup>3</sup>	Kur kN/m <sup>3</sup>
1	FRANA	20	20	14			10000		Constant	20000	32000							
2	BNA2_(2)	20	20	22.2			20		Constant	115000	184000							
3	BNA(3)	20	20	22.2			24		Constant	180000	288000							

## **Descrizione Pareti**

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -16 m

Muro di sinistra

Sezione : PALI\_Fi1000/1200

Area equivalente : 0.654498469497874 m

Inerzia equivalente : 0.0409 m<sup>4</sup>/m

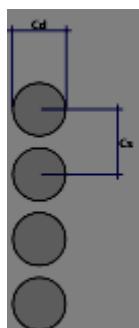
Materiale calcestruzzo : C25/30

Tipo sezione : Tangent

Spaziatura : 1.2 m

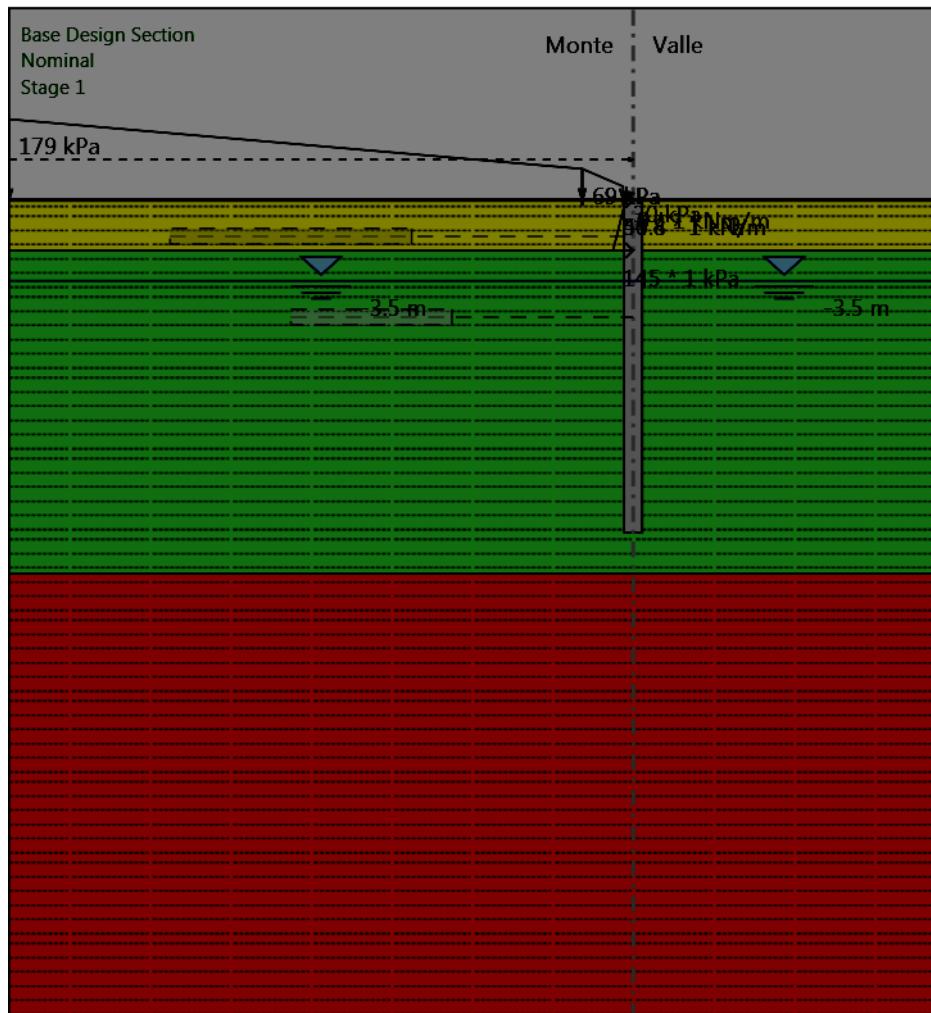
Diametro : 1 m

Efficacia : 1



## Fasi di Calcolo

### Stage 1



Stage 1

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : 0.5 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

0.5 m

## Falda acquifera

Falda di sinistra : -3.5 m

Falda di destra : -3.5 m

## Carichi

Carico puntuale alla paratia : WallLineLoad

Quota : 0.5 m

Px : 40.8 kN/m

Pz : 1 kN/m

: 0 kNm/m

X : 0 m

Carico lineare sulla paratia : WallSurcharge

Quota in alto : 0.5 m

Quota di fondo : -2 m

Pressione in alto : 54.4 kPa

Pressione in fondo : 145 kPa

X : 0 m

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -31 m

Pressione iniziale : 69 kPa

Pressione finale : 179 kPa

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -0.5 m

Pressione iniziale : 69 kPa

Pressione finale : 30 kPa

## Elementi strutturali

Paratia : WallElement

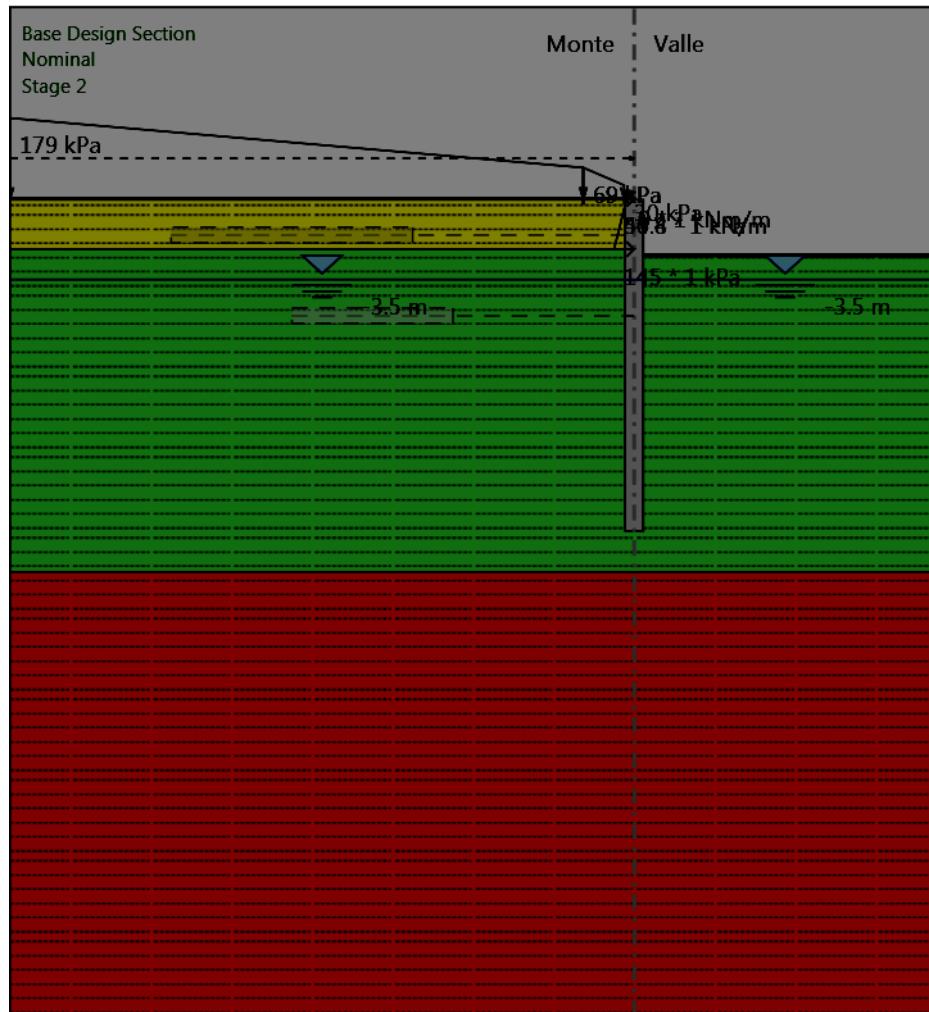
X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -16 m

Sezione : PALI\_Fi1000/1200

## Stage 2



Stage 2

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -2.3 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-2.3 m

## Falda acquifera

Falda di sinistra : -3.5 m

Falda di destra : -3.5 m

## Carichi

Carico puntuale alla paratia : WallLineLoad

Quota : 0.5 m

Px : 40.8 kN/m

Pz : 1 kN/m

: 0 kNm/m

X : 0 m

Carico lineare sulla paratia : WallSurcharge

Quota in alto : 0.5 m

Quota di fondo : -2 m

Pressione in alto : 54.4 kPa

Pressione in fondo : 145 kPa

X : 0 m

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -31 m

Pressione iniziale : 69 kPa

Pressione finale : 179 kPa

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -0.5 m

Pressione iniziale : 69 kPa

Pressione finale : 30 kPa

## Elementi strutturali

Paratia : WallElement

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -16 m

Sezione : PALI\_Fi1000/1200

## Tirante 1



Tirante 1

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -2.3 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-2.3 m

## Falda acquifera

Falda di sinistra : -3.5 m

Falda di destra : -3.5 m

## Carichi

Carico puntuale alla paratia : WallLineLoad

Quota : 0.5 m

Px : 40.8 kN/m

Pz : 1 kN/m

: 0 kNm/m

X : 0 m

Carico lineare sulla paratia : WallSurcharge

Quota in alto : 0.5 m

Quota di fondo : -2 m

Pressione in alto : 54.4 kPa

Pressione in fondo : 145 kPa

X : 0 m

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -31 m

Pressione iniziale : 69 kPa

Pressione finale : 179 kPa

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -0.5 m

Pressione iniziale : 69 kPa

Pressione finale : 30 kPa

## Elementi strutturali

Paratia : WallElement

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -16 m

Sezione : PALI\_Fi1000/1200

Tirante : Tieback

X : 0 m

Z : -1.3 m

Lunghezza bulbo : 12 m

Diametro bulbo : 0.14 m

Lunghezza libera : 11 m

Precarico : 300 kN

Angolo : 0 °

Sezione : Trefoli 4

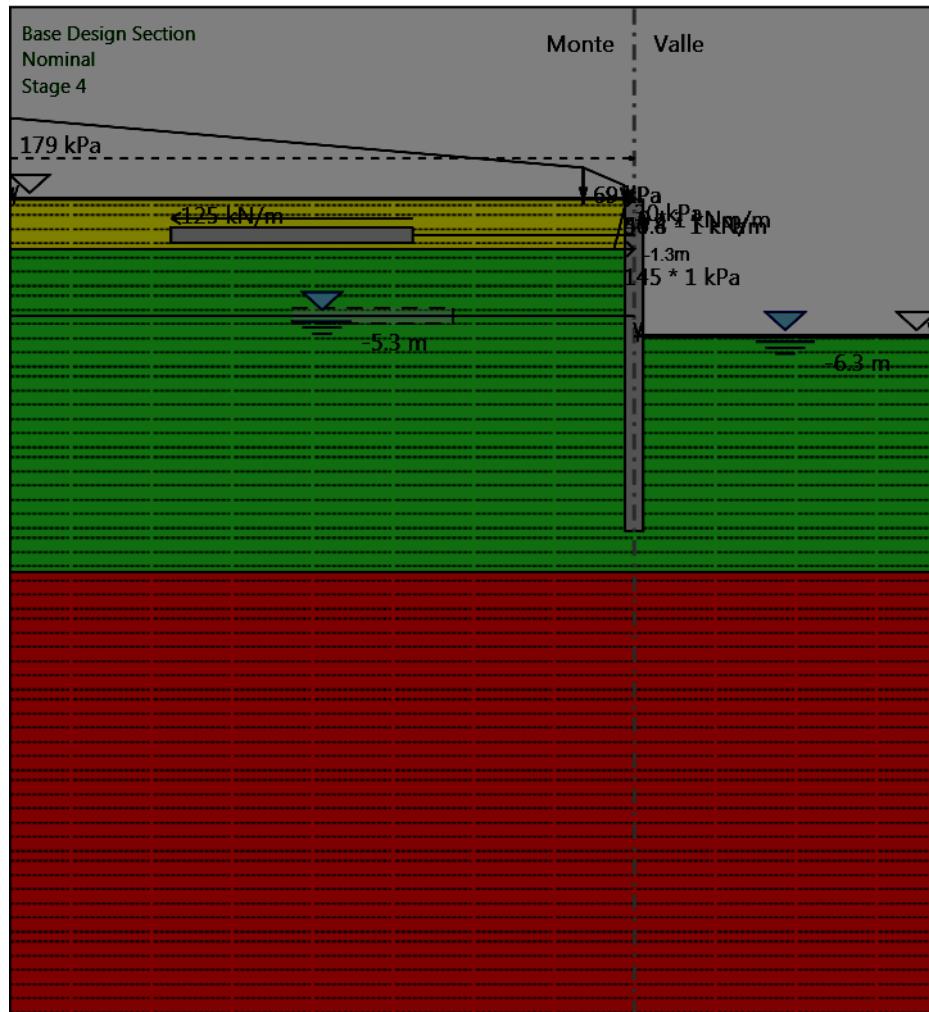
Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m^2

## Stage 4



Stage 4

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -6.3 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-6.3 m

## Falda acquifera

Falda di sinistra : -5.3 m

Falda di destra : -6.3 m

## Carichi

Carico puntuale alla paratia : WallLineLoad

Quota : 0.5 m

Px : 40.8 kN/m

Pz : 1 kN/m

: 0 kNm/m

X : 0 m

Carico lineare sulla paratia : WallSurcharge

Quota in alto : 0.5 m

Quota di fondo : -2 m

Pressione in alto : 54.4 kPa

Pressione in fondo : 145 kPa

X : 0 m

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -31 m

Pressione iniziale : 69 kPa

Pressione finale : 179 kPa

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -0.5 m

Pressione iniziale : 69 kPa

Pressione finale : 30 kPa

## Elementi strutturali

Paratia : WallElement

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -16 m

Sezione : PALI\_Fi1000/1200

Tirante : Tieback

X : 0 m

Z : -1.3 m

Lunghezza bulbo : 12 m

Diametro bulbo : 0.14 m

Lunghezza libera : 11 m

Precarico : 300 kN

Angolo : 0 °

Sezione : Trefoli 4

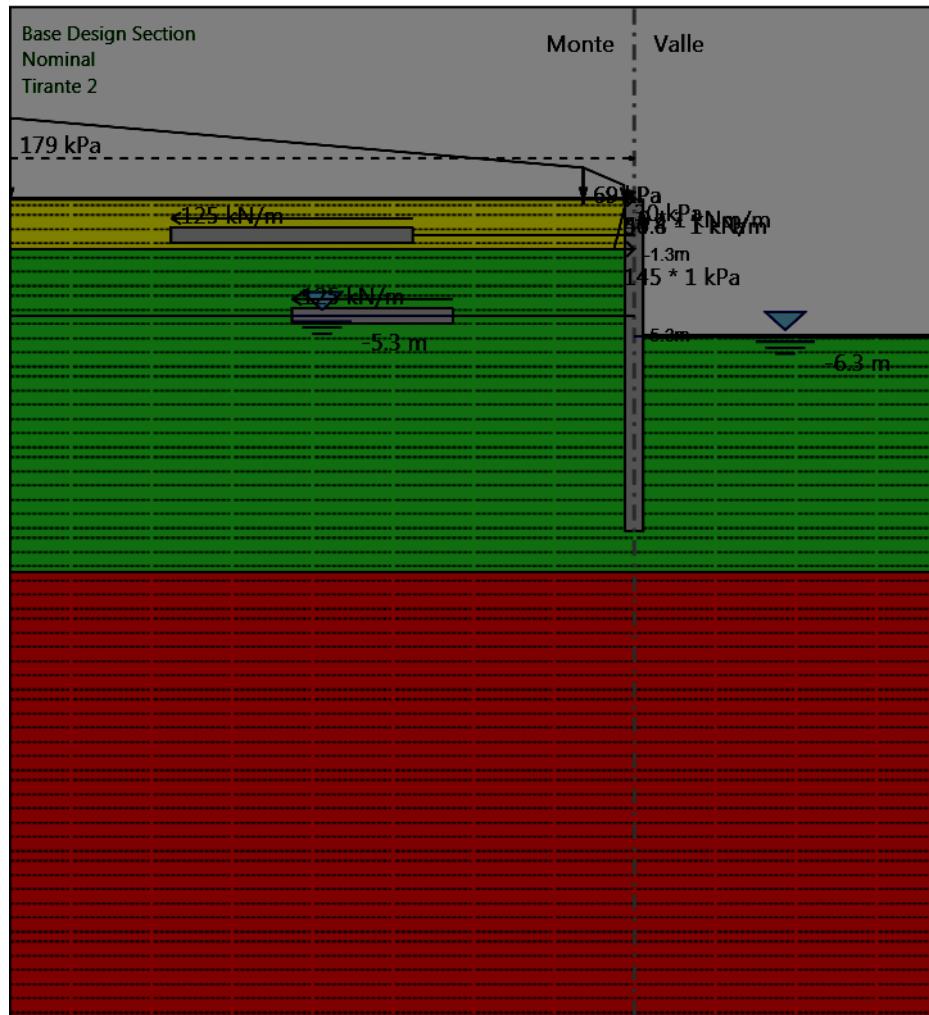
Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m^2

## Tirante 2



Tirante 2

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -6.3 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-6.3 m

## Falda acquifera

Falda di sinistra : -5.3 m

Falda di destra : -6.3 m

## Carichi

Carico puntuale alla paratia : WallLineLoad

Quota : 0.5 m

Px : 40.8 kN/m

Pz : 1 kN/m

: 0 kNm/m

X : 0 m

Carico lineare sulla paratia : WallSurcharge

Quota in alto : 0.5 m

Quota di fondo : -2 m

Pressione in alto : 54.4 kPa

Pressione in fondo : 145 kPa

X : 0 m

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -31 m

Pressione iniziale : 69 kPa

Pressione finale : 179 kPa

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -0.5 m

Pressione iniziale : 69 kPa

Pressione finale : 30 kPa

## Elementi strutturali

Paratia : WallElement

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -16 m

Sezione : PALI\_Fi1000/1200

Tirante : Tieback

X : 0 m

Z : -1.3 m

Lunghezza bulbo : 12 m

Diametro bulbo : 0.14 m

Lunghezza libera : 11 m

Precarico : 300 kN

Angolo : 0 °

Sezione : Trefoli 4

Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m^2

Tirante : Tieback

X : 0 m

Z : -5.3 m

Lunghezza bulbo : 8 m

Diametro bulbo : 0.14 m

Lunghezza libera : 9 m

Precarico : 300 kN

Angolo : 0 °

Sezione : Trefoli 4

Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m<sup>2</sup>

## Fondo scavo



Fondo scavo

Scavo

Muro di sinistra

Lato monte :  $0.5 \text{ m}$

Lato valle :  $-7.7 \text{ m}$

Linea di scavo di sinistra (Orizzontale)

$0.5 \text{ m}$

Linea di scavo di destra (Orizzontale)

$-7.7 \text{ m}$

## Falda acquifera

Falda di sinistra : -6.7 m

Falda di destra : -7.7 m

## Carichi

Carico puntuale alla paratia : WallLineLoad

Quota : 0.5 m

Px : 40.8 kN/m

Pz : 1 kN/m

: 0 kNm/m

X : 0 m

Carico lineare sulla paratia : WallSurcharge

Quota in alto : 0.5 m

Quota di fondo : -2 m

Pressione in alto : 54.4 kPa

Pressione in fondo : 145 kPa

X : 0 m

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -31 m

Pressione iniziale : 69 kPa

Pressione finale : 179 kPa

Carico lineare in superficie : SurfaceSurcharge

X iniziale : -2.53 m

X finale : -0.5 m

Pressione iniziale : 69 kPa

Pressione finale : 30 kPa

## Elementi strutturali

Paratia : WallElement

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -16 m

Sezione : PALI\_Fi1000/1200

Tirante : Tieback

X : 0 m

Z : -1.3 m

Lunghezza bulbo : 12 m

Diametro bulbo : 0.14 m

Lunghezza libera : 11 m

Precarico : 300 kN

Angolo : 0 °

Sezione : Trefoli 4

Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m^2

Tirante : Tieback

X : 0 m

Z : -5.3 m

Lunghezza bulbo : 8 m

Diametro bulbo : 0.14 m

Lunghezza libera : 9 m

Precarico : 300 kN

Angolo : 0 °

Sezione : Trefoli 4

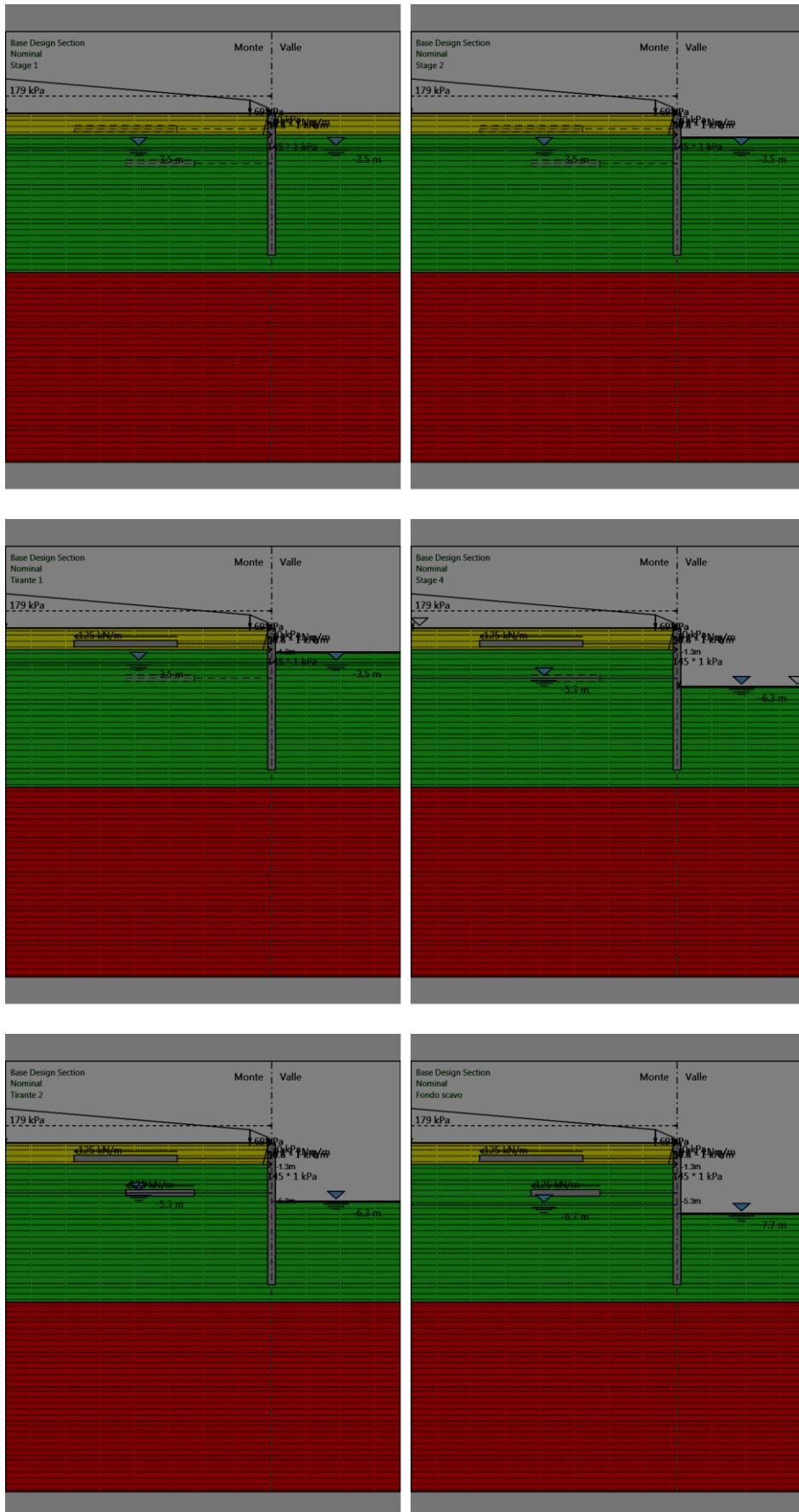
Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m<sup>2</sup>

## Tabella Configurazione Stage (Nominal)



## Grafici dei Risultati

### Design Assumption : Nominal

**Tabella Spostamento Nominal - LEFT Stage: Stage 1**

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Stage 1	0.5	3.46
Stage 1	0.3	3.29
Stage 1	0.1	3.12
Stage 1	-0.1	2.94
Stage 1	-0.3	2.77
Stage 1	-0.5	2.6
Stage 1	-0.7	2.43
Stage 1	-0.9	2.27
Stage 1	-1.1	2.1
Stage 1	-1.3	1.94
Stage 1	-1.5	1.78
Stage 1	-1.7	1.62
Stage 1	-1.9	1.47
Stage 1	-2.1	1.32
Stage 1	-2.3	1.18
Stage 1	-2.5	1.05
Stage 1	-2.7	0.92
Stage 1	-2.9	0.8
Stage 1	-3.1	0.69
Stage 1	-3.3	0.59
Stage 1	-3.5	0.5
Stage 1	-3.7	0.41
Stage 1	-3.9	0.33
Stage 1	-4.1	0.26
Stage 1	-4.3	0.2
Stage 1	-4.5	0.14
Stage 1	-4.7	0.09
Stage 1	-4.9	0.05
Stage 1	-5.1	0.02
Stage 1	-5.3	-0.01
Stage 1	-5.5	-0.04
Stage 1	-5.7	-0.06
Stage 1	-5.9	-0.08
Stage 1	-6.1	-0.09
Stage 1	-6.3	-0.1
Stage 1	-6.5	-0.11
Stage 1	-6.7	-0.11
Stage 1	-6.9	-0.11
Stage 1	-7.1	-0.11
Stage 1	-7.3	-0.11
Stage 1	-7.5	-0.11
Stage 1	-7.7	-0.1
Stage 1	-7.9	-0.1
Stage 1	-8.1	-0.09
Stage 1	-8.3	-0.09
Stage 1	-8.5	-0.08
Stage 1	-8.7	-0.08
Stage 1	-8.9	-0.07
Stage 1	-9.1	-0.06
Stage 1	-9.3	-0.06
Stage 1	-9.5	-0.05
Stage 1	-9.7	-0.04
Stage 1	-9.9	-0.04
Stage 1	-10.1	-0.03
Stage 1	-10.3	-0.03
Stage 1	-10.5	-0.03
Stage 1	-10.7	-0.02
Stage 1	-10.9	-0.02
Stage 1	-11.1	-0.01
Stage 1	-11.3	-0.01
Stage 1	-11.5	-0.01

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Stage 1	-11.7	-0.01
Stage 1	-11.9	0
Stage 1	-12.1	0
Stage 1	-12.3	0
Stage 1	-12.5	0
Stage 1	-12.7	0
Stage 1	-12.9	0
Stage 1	-13.1	0
Stage 1	-13.3	0
Stage 1	-13.5	0
Stage 1	-13.7	0.01
Stage 1	-13.9	0.01
Stage 1	-14.1	0.01
Stage 1	-14.3	0.01
Stage 1	-14.5	0.01
Stage 1	-14.7	0.01
Stage 1	-14.9	0.01
Stage 1	-15.1	0.01
Stage 1	-15.3	0.01
Stage 1	-15.5	0.01
Stage 1	-15.7	0.01
Stage 1	-15.9	0.01
Stage 1	-16	0.01

## Tabella Spostamento Nominal - LEFT Stage: Stage 2

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Stage 2	0.5	20.63
Stage 2	0.3	19.86
Stage 2	0.1	19.1
Stage 2	-0.1	18.34
Stage 2	-0.3	17.57
Stage 2	-0.5	16.81
Stage 2	-0.7	16.06
Stage 2	-0.9	15.3
Stage 2	-1.1	14.55
Stage 2	-1.3	13.81
Stage 2	-1.5	13.07
Stage 2	-1.7	12.34
Stage 2	-1.9	11.61
Stage 2	-2.1	10.9
Stage 2	-2.3	10.2
Stage 2	-2.5	9.52
Stage 2	-2.7	8.85
Stage 2	-2.9	8.2
Stage 2	-3.1	7.57
Stage 2	-3.3	6.96
Stage 2	-3.5	6.37
Stage 2	-3.7	5.81
Stage 2	-3.9	5.26
Stage 2	-4.1	4.75
Stage 2	-4.3	4.26
Stage 2	-4.5	3.8
Stage 2	-4.7	3.36
Stage 2	-4.9	2.95
Stage 2	-5.1	2.57
Stage 2	-5.3	2.22
Stage 2	-5.5	1.89
Stage 2	-5.7	1.59
Stage 2	-5.9	1.31
Stage 2	-6.1	1.06
Stage 2	-6.3	0.84
Stage 2	-6.5	0.64
Stage 2	-6.7	0.46
Stage 2	-6.9	0.3
Stage 2	-7.1	0.16
Stage 2	-7.3	0.03
Stage 2	-7.5	-0.07
Stage 2	-7.7	-0.16
Stage 2	-7.9	-0.23
Stage 2	-8.1	-0.29
Stage 2	-8.3	-0.34
Stage 2	-8.5	-0.38
Stage 2	-8.7	-0.41
Stage 2	-8.9	-0.43
Stage 2	-9.1	-0.44
Stage 2	-9.3	-0.45
Stage 2	-9.5	-0.45
Stage 2	-9.7	-0.44
Stage 2	-9.9	-0.44
Stage 2	-10.1	-0.42
Stage 2	-10.3	-0.41
Stage 2	-10.5	-0.39
Stage 2	-10.7	-0.37
Stage 2	-10.9	-0.35
Stage 2	-11.1	-0.33
Stage 2	-11.3	-0.31
Stage 2	-11.5	-0.29
Stage 2	-11.7	-0.27
Stage 2	-11.9	-0.24
Stage 2	-12.1	-0.22
Stage 2	-12.3	-0.2
Stage 2	-12.5	-0.18
Stage 2	-12.7	-0.16

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Stage 2	-12.9	-0.14
Stage 2	-13.1	-0.12
Stage 2	-13.3	-0.1
Stage 2	-13.5	-0.08
Stage 2	-13.7	-0.07
Stage 2	-13.9	-0.05
Stage 2	-14.1	-0.03
Stage 2	-14.3	-0.02
Stage 2	-14.5	0
Stage 2	-14.7	0.01
Stage 2	-14.9	0.03
Stage 2	-15.1	0.04
Stage 2	-15.3	0.06
Stage 2	-15.5	0.07
Stage 2	-15.7	0.09
Stage 2	-15.9	0.1
Stage 2	-16	0.11

## Tabella Spostamento Nominal - LEFT Stage: Tirante 1

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Tirante 1	0.5	19.05
Tirante 1	0.3	18.36
Tirante 1	0.1	17.66
Tirante 1	-0.1	16.97
Tirante 1	-0.3	16.27
Tirante 1	-0.5	15.58
Tirante 1	-0.7	14.89
Tirante 1	-0.9	14.2
Tirante 1	-1.1	13.52
Tirante 1	-1.3	12.84
Tirante 1	-1.5	12.17
Tirante 1	-1.7	11.51
Tirante 1	-1.9	10.86
Tirante 1	-2.1	10.21
Tirante 1	-2.3	9.58
Tirante 1	-2.5	8.96
Tirante 1	-2.7	8.35
Tirante 1	-2.9	7.76
Tirante 1	-3.1	7.18
Tirante 1	-3.3	6.62
Tirante 1	-3.5	6.08
Tirante 1	-3.7	5.56
Tirante 1	-3.9	5.06
Tirante 1	-4.1	4.58
Tirante 1	-4.3	4.13
Tirante 1	-4.5	3.69
Tirante 1	-4.7	3.29
Tirante 1	-4.9	2.9
Tirante 1	-5.1	2.54
Tirante 1	-5.3	2.21
Tirante 1	-5.5	1.89
Tirante 1	-5.7	1.61
Tirante 1	-5.9	1.34
Tirante 1	-6.1	1.1
Tirante 1	-6.3	0.88
Tirante 1	-6.5	0.69
Tirante 1	-6.7	0.51
Tirante 1	-6.9	0.36
Tirante 1	-7.1	0.22
Tirante 1	-7.3	0.1
Tirante 1	-7.5	-0.01
Tirante 1	-7.7	-0.1
Tirante 1	-7.9	-0.17
Tirante 1	-8.1	-0.24
Tirante 1	-8.3	-0.29
Tirante 1	-8.5	-0.33
Tirante 1	-8.7	-0.36
Tirante 1	-8.9	-0.38
Tirante 1	-9.1	-0.4
Tirante 1	-9.3	-0.41
Tirante 1	-9.5	-0.41
Tirante 1	-9.7	-0.41
Tirante 1	-9.9	-0.41
Tirante 1	-10.1	-0.4
Tirante 1	-10.3	-0.38
Tirante 1	-10.5	-0.37
Tirante 1	-10.7	-0.35
Tirante 1	-10.9	-0.34
Tirante 1	-11.1	-0.32
Tirante 1	-11.3	-0.3
Tirante 1	-11.5	-0.28
Tirante 1	-11.7	-0.26
Tirante 1	-11.9	-0.24
Tirante 1	-12.1	-0.22
Tirante 1	-12.3	-0.2
Tirante 1	-12.5	-0.18
Tirante 1	-12.7	-0.16

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Tirante 1	-12.9	-0.14
Tirante 1	-13.1	-0.12
Tirante 1	-13.3	-0.1
Tirante 1	-13.5	-0.08
Tirante 1	-13.7	-0.07
Tirante 1	-13.9	-0.05
Tirante 1	-14.1	-0.04
Tirante 1	-14.3	-0.02
Tirante 1	-14.5	-0.01
Tirante 1	-14.7	0.01
Tirante 1	-14.9	0.02
Tirante 1	-15.1	0.04
Tirante 1	-15.3	0.05
Tirante 1	-15.5	0.07
Tirante 1	-15.7	0.08
Tirante 1	-15.9	0.1
Tirante 1	-16	0.1

## Tabella Spostamento Nominal - LEFT Stage: Stage 4

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Stage 4	0.5	70.68
Stage 4	0.3	69.18
Stage 4	0.1	67.67
Stage 4	-0.1	66.16
Stage 4	-0.3	64.66
Stage 4	-0.5	63.15
Stage 4	-0.7	61.65
Stage 4	-0.9	60.15
Stage 4	-1.1	58.66
Stage 4	-1.3	57.17
Stage 4	-1.5	55.69
Stage 4	-1.7	54.21
Stage 4	-1.9	52.74
Stage 4	-2.1	51.28
Stage 4	-2.3	49.82
Stage 4	-2.5	48.37
Stage 4	-2.7	46.93
Stage 4	-2.9	45.5
Stage 4	-3.1	44.08
Stage 4	-3.3	42.66
Stage 4	-3.5	41.26
Stage 4	-3.7	39.87
Stage 4	-3.9	38.49
Stage 4	-4.1	37.12
Stage 4	-4.3	35.77
Stage 4	-4.5	34.42
Stage 4	-4.7	33.1
Stage 4	-4.9	31.78
Stage 4	-5.1	30.49
Stage 4	-5.3	29.21
Stage 4	-5.5	27.94
Stage 4	-5.7	26.7
Stage 4	-5.9	25.47
Stage 4	-6.1	24.27
Stage 4	-6.3	23.08
Stage 4	-6.5	21.92
Stage 4	-6.7	20.78
Stage 4	-6.9	19.67
Stage 4	-7.1	18.58
Stage 4	-7.3	17.52
Stage 4	-7.5	16.49
Stage 4	-7.7	15.48
Stage 4	-7.9	14.5
Stage 4	-8.1	13.56
Stage 4	-8.3	12.64
Stage 4	-8.5	11.76
Stage 4	-8.7	10.9
Stage 4	-8.9	10.08
Stage 4	-9.1	9.3
Stage 4	-9.3	8.54
Stage 4	-9.5	7.82
Stage 4	-9.7	7.13
Stage 4	-9.9	6.48
Stage 4	-10.1	5.85
Stage 4	-10.3	5.26
Stage 4	-10.5	4.71
Stage 4	-10.7	4.18
Stage 4	-10.9	3.68
Stage 4	-11.1	3.22
Stage 4	-11.3	2.78
Stage 4	-11.5	2.36
Stage 4	-11.7	1.98
Stage 4	-11.9	1.62
Stage 4	-12.1	1.28
Stage 4	-12.3	0.96
Stage 4	-12.5	0.67
Stage 4	-12.7	0.39

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Stage 4	-12.9	0.13
Stage 4	-13.1	-0.12
Stage 4	-13.3	-0.35
Stage 4	-13.5	-0.57
Stage 4	-13.7	-0.78
Stage 4	-13.9	-0.98
Stage 4	-14.1	-1.17
Stage 4	-14.3	-1.35
Stage 4	-14.5	-1.53
Stage 4	-14.7	-1.71
Stage 4	-14.9	-1.88
Stage 4	-15.1	-2.05
Stage 4	-15.3	-2.22
Stage 4	-15.5	-2.38
Stage 4	-15.7	-2.55
Stage 4	-15.9	-2.72
Stage 4	-16	-2.8

## Tabella Spostamento Nominal - LEFT Stage: Tirante 2

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Tirante 2	0.5	70.38
Tirante 2	0.3	68.87
Tirante 2	0.1	67.35
Tirante 2	-0.1	65.83
Tirante 2	-0.3	64.31
Tirante 2	-0.5	62.8
Tirante 2	-0.7	61.28
Tirante 2	-0.9	59.77
Tirante 2	-1.1	58.27
Tirante 2	-1.3	56.77
Tirante 2	-1.5	55.27
Tirante 2	-1.7	53.79
Tirante 2	-1.9	52.3
Tirante 2	-2.1	50.83
Tirante 2	-2.3	49.36
Tirante 2	-2.5	47.9
Tirante 2	-2.7	46.45
Tirante 2	-2.9	45.01
Tirante 2	-3.1	43.58
Tirante 2	-3.3	42.16
Tirante 2	-3.5	40.75
Tirante 2	-3.7	39.35
Tirante 2	-3.9	37.96
Tirante 2	-4.1	36.59
Tirante 2	-4.3	35.23
Tirante 2	-4.5	33.89
Tirante 2	-4.7	32.56
Tirante 2	-4.9	31.25
Tirante 2	-5.1	29.96
Tirante 2	-5.3	28.69
Tirante 2	-5.5	27.44
Tirante 2	-5.7	26.21
Tirante 2	-5.9	25
Tirante 2	-6.1	23.81
Tirante 2	-6.3	22.65
Tirante 2	-6.5	21.51
Tirante 2	-6.7	20.39
Tirante 2	-6.9	19.3
Tirante 2	-7.1	18.24
Tirante 2	-7.3	17.2
Tirante 2	-7.5	16.19
Tirante 2	-7.7	15.2
Tirante 2	-7.9	14.25
Tirante 2	-8.1	13.32
Tirante 2	-8.3	12.43
Tirante 2	-8.5	11.57
Tirante 2	-8.7	10.73
Tirante 2	-8.9	9.93
Tirante 2	-9.1	9.16
Tirante 2	-9.3	8.42
Tirante 2	-9.5	7.72
Tirante 2	-9.7	7.04
Tirante 2	-9.9	6.4
Tirante 2	-10.1	5.79
Tirante 2	-10.3	5.21
Tirante 2	-10.5	4.66
Tirante 2	-10.7	4.15
Tirante 2	-10.9	3.66
Tirante 2	-11.1	3.2
Tirante 2	-11.3	2.77
Tirante 2	-11.5	2.36
Tirante 2	-11.7	1.98
Tirante 2	-11.9	1.63
Tirante 2	-12.1	1.29
Tirante 2	-12.3	0.98
Tirante 2	-12.5	0.69
Tirante 2	-12.7	0.41

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Tirante 2	-12.9	0.16
Tirante 2	-13.1	-0.09
Tirante 2	-13.3	-0.32
Tirante 2	-13.5	-0.53
Tirante 2	-13.7	-0.74
Tirante 2	-13.9	-0.94
Tirante 2	-14.1	-1.13
Tirante 2	-14.3	-1.31
Tirante 2	-14.5	-1.49
Tirante 2	-14.7	-1.67
Tirante 2	-14.9	-1.84
Tirante 2	-15.1	-2.01
Tirante 2	-15.3	-2.17
Tirante 2	-15.5	-2.34
Tirante 2	-15.7	-2.51
Tirante 2	-15.9	-2.67
Tirante 2	-16	-2.76

## Tabella Spostamento Nominal - LEFT Stage: Fondo scavo

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Fondo scavo	0.5	73.2
Fondo scavo	0.3	71.76
Fondo scavo	0.1	70.32
Fondo scavo	-0.1	68.88
Fondo scavo	-0.3	67.44
Fondo scavo	-0.5	66.01
Fondo scavo	-0.7	64.57
Fondo scavo	-0.9	63.14
Fondo scavo	-1.1	61.71
Fondo scavo	-1.3	60.29
Fondo scavo	-1.5	58.88
Fondo scavo	-1.7	57.47
Fondo scavo	-1.9	56.06
Fondo scavo	-2.1	54.67
Fondo scavo	-2.3	53.28
Fondo scavo	-2.5	51.89
Fondo scavo	-2.7	50.52
Fondo scavo	-2.9	49.15
Fondo scavo	-3.1	47.8
Fondo scavo	-3.3	46.45
Fondo scavo	-3.5	45.11
Fondo scavo	-3.7	43.78
Fondo scavo	-3.9	42.47
Fondo scavo	-4.1	41.16
Fondo scavo	-4.3	39.87
Fondo scavo	-4.5	38.59
Fondo scavo	-4.7	37.33
Fondo scavo	-4.9	36.07
Fondo scavo	-5.1	34.84
Fondo scavo	-5.3	33.62
Fondo scavo	-5.5	32.41
Fondo scavo	-5.7	31.22
Fondo scavo	-5.9	30.05
Fondo scavo	-6.1	28.9
Fondo scavo	-6.3	27.76
Fondo scavo	-6.5	26.63
Fondo scavo	-6.7	25.53
Fondo scavo	-6.9	24.44
Fondo scavo	-7.1	23.37
Fondo scavo	-7.3	22.32
Fondo scavo	-7.5	21.29
Fondo scavo	-7.7	20.27
Fondo scavo	-7.9	19.28
Fondo scavo	-8.1	18.3
Fondo scavo	-8.3	17.35
Fondo scavo	-8.5	16.42
Fondo scavo	-8.7	15.51
Fondo scavo	-8.9	14.62
Fondo scavo	-9.1	13.75
Fondo scavo	-9.3	12.91
Fondo scavo	-9.5	12.09
Fondo scavo	-9.7	11.3
Fondo scavo	-9.9	10.53
Fondo scavo	-10.1	9.78
Fondo scavo	-10.3	9.06
Fondo scavo	-10.5	8.37
Fondo scavo	-10.7	7.7
Fondo scavo	-10.9	7.05
Fondo scavo	-11.1	6.43
Fondo scavo	-11.3	5.83
Fondo scavo	-11.5	5.26
Fondo scavo	-11.7	4.71
Fondo scavo	-11.9	4.18
Fondo scavo	-12.1	3.67
Fondo scavo	-12.3	3.18
Fondo scavo	-12.5	2.72
Fondo scavo	-12.7	2.27

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Fondo scavo	-12.9	1.84
Fondo scavo	-13.1	1.43
Fondo scavo	-13.3	1.03
Fondo scavo	-13.5	0.64
Fondo scavo	-13.7	0.26
Fondo scavo	-13.9	-0.1
Fondo scavo	-14.1	-0.45
Fondo scavo	-14.3	-0.8
Fondo scavo	-14.5	-1.14
Fondo scavo	-14.7	-1.48
Fondo scavo	-14.9	-1.81
Fondo scavo	-15.1	-2.14
Fondo scavo	-15.3	-2.47
Fondo scavo	-15.5	-2.79
Fondo scavo	-15.7	-3.12
Fondo scavo	-15.9	-3.45
Fondo scavo	-16	-3.61

## **Inviluppi Spostamento Nominal**

## Riepilogo spinte

Design Assumption:		Tipo Risultato: Riepilogo spinte		Muro:	LEFT	Lato	LEFT	
Nominal	Stage	Vera effettiva (kN/m)	Pressione neutra (kN/m)	Vera Totale (kN/m)	Min ammissibile (kN/m)	Max ammissibile (kN/m)	Percentuale di resistenza massima	Vera / Attiva
Stage 1		1261.7	781.2	2043	546.3	74788	1.69%	2.31
Stage 2		1194	781.2	1975.2	546.3	74788	1.6%	2.19
Tirante 1		1277.6	781.2	2058.9	546.3	74788	1.71%	2.34
Stage 4		1017.3	544.4	1561.7	659.7	75488.5	1.35%	1.54
Tirante 2		1110.1	544.4	1654.5	653.4	75445.1	1.47%	1.7
Fondo scavo		996	407.9	1403.9	715.1	75823.8	1.31%	1.39

Design Assumption: Nominal		Tipo Risultato: Riepilogo spinte		Muro:	LEFT	Lato	RIGHT	
Nominal	Stage	Vera effettiva (kN/m)	Pressione neutra (kN/m)	Vera Totale (kN/m)	Min ammissibile (kN/m)	Max ammissibile (kN/m)	Percentuale di resistenza massima	Vera / Attiva
Stage 1		1551.8	781.2	2333	473.7	74267.4	2.09%	3.28
Stage 2		1484.1	781.2	2265.3	181.1	3958.7	37.49%	8.19
Tirante 1		1442.7	781.2	2223.9	181.1	3958.7	36.44%	7.97
Stage 4		1143.9	493.5	1637.4	27.1	1907.2	59.98%	42.21
Tirante 2		1112.4	493.5	1605.9	25.5	1880.6	59.15%	43.62
Fondo scavo		970.9	364	1334.9	8.5	1447.5	67.07%	114.22

## **Allegati**

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

```
* PARATIE ANALYSIS FOR DESIGN SECTION:Base Design Section USING ASSUMPTION: Nominal
* Time:giovedi 25 giugno 2020 16:43:56
* 1: Defining general settings
UNIT m kN
TITLE New Project
DELTA 0.2
option param itemax 40

* 2: Defining wall(s)
WALL LeftWall_29 0 -16 0.5 1

* 3: Defining surfaces for wall(s)
SOIL 0_L LeftWall_29 -16 0.5 1 0
SOIL 0_R LeftWall_29 -16 0.5 2 180

* 4: Defining soil layers
*
* Soil Profile (FRANA_334_8_L_0)
*
LDATA FRANA_334_8_L_0 0.5 LeftWall_29
ATREST 0.758 1 1
WEIGHT 20 10 10
PERMEABILITY 1E-05
RESISTANCE 1E+04 14
YOUNG 2E+04 3.2E+04
ENDL
*
* Soil Profile (BNA2_(2)_335_337_L_0)
*
LDATA BNA2_(2)_335_337_L_0 -2 LeftWall_29
ATREST 0.623 1 1
WEIGHT 20 10 10
PERMEABILITY 1E-05
RESISTANCE 20 22.2
YOUNG 1.15E+05 1.84E+05
ENDL

* 5: Defining structural materials
* Steel material: 2753 Name=Fe360 E=206000200 kPa
MATERIAL Fe360_2753 2.06E+08
* Concrete material: 101 Name=C25/30 E=31475800 kPa
MATERIAL C2530_101 3.148E+07
* Rebar material: 110 Name=acciaio armonico E=200100000 kPa
MATERIAL acciaioarmonico_110 2.001E+08

* 6: Defining structural elements
* 6.1: Beams
BEAM WallElement_30 LeftWall_29 -16 0.5 C2530_101 0.7888 00 00

* 6.2: Supports
WIRE Tieback_341 LeftWall_29 -1.3 acciaioarmonico_110 1.007E-05 125 0 0 0
WIRE Tieback_342 LeftWall_29 -5.3 acciaioarmonico_110 1.363E-05 125 0 0 0

* 6.3: Strips
STRIP LeftWall_29 1 6 31 28.47 0.5 124 45
STRIP LeftWall_29 1 6 0.5 2.03 0.5 49.5 45

* 7: Defining Steps
STEP Stage1_28
CHANGE FRANA_334_8_L_0 U-FRICT=14 LeftWall_29
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE FRANA_334_8_L_0 U-KA=0.61 LeftWall_29
CHANGE FRANA_334_8_L_0 U-KP=1.85 LeftWall_29
CHANGE FRANA_334_8_L_0 D-KA=0.61 LeftWall_29
CHANGE FRANA_334_8_L_0 D-KP=1.85 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 U-FRICT=22.2 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 U-KA=0.452 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 U-KP=2.774 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-KA=0.452 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-KP=2.774 LeftWall_29
CHANGE FRANA_334_8_L_0 U-COHE=1E+04 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 U-COHE=20 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 0.5
WATER -3.5 0 -16 0 0
```

```

ADD WallElement_30
DLOAD constant LeftWall_29 -2 145 0.5 54.4
LOAD constant LeftWall_29 0.5 1 40.8
ENDSTEP

STEP Stage2_344
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -2.3
WATER -3.5 0 -16 0 0
ENDSTEP

STEP Tirantel_1139
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -2.3
WATER -3.5 0 -16 0 0
ADD Tieback_341
ENDSTEP

STEP Stage4_1238
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -6.3
SURCHARGE 1 0.5 1 -6.3
WATER -5.3 1 -16 0 0
ENDSTEP

STEP Tirante2_1685
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -6.3
SURCHARGE 0 0 0 0
WATER -5.3 1 -16 0 0
ADD Tieback_342
ENDSTEP

STEP Fondoscavo_2741
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -7.7
WATER -6.7 1 -16 0 0
ENDSTEP

```

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

```

+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:43:57
+-----+

```

```

*****  

*  

* 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 2016 *Build date: Sept23, 2015*  

*  

*  

* Ce.A.S. S.R.L CENTRO DI ANALISI STRUTTURALE  

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* Web Page www.ceas.it  

*****  


```

```

JOB : NewProject.BaseDesignSection_25.Nominal_60
STARTING
ACCEPTED <FILE,GENW >
ACCEPTED <FILE,PLOTTER,BINARY >
ACCEPTED <SOLVE TOTAL_STRESS >
ACCEPTED <PARAM ITEMAX 40 >

```

```

*****  

*  

* WARNING : PORE PRESSURES ARE AUTOMATICALLY COMPUTED  

* BY THE PROGRAM.  

*****  


```

```

PRELIMINARY OPERATIONS CPU TIME 0.01 [sec]

```

```

+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:43:57
+-----+

```

INPUT FILE HAS BEEN GENERATED BY WALGEN PROGRAM

New Project

NO. OF NODAL POINTS (NUMNP) .....	84
NO. OF COORDINATES (NCOORD) .....	2
NO. OF NODE DOFS (NDOF) .....	2
NO. OF EQUATIONS (NEQ) .....	168
NO. OF CONSTRAINTS CARDS (NVINC) .....	0
NO. OF ELEMENT GROUPS (NEG) .....	5
NO. OF SOLUTION STEPS (NSTE) .....	6
NO. OF ELEMENT SETS ATTACHED TO SLAVE NODES ...	0
NO. OF RECORD FROM WALGEN .....	102
NO. OF LONG NAMES (LASTNAME) .....	23
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.	

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+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:43:57
+-----+
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 102

1 : UNIT m kN
2 : TITLE New Project
3 : DELTA 0.2
4 : option param itemax 40
5 : WALL LeftWall_29 0 -16 0.5 1
6 : SOIL 0_L LeftWall_29 -16 0.5 1 0
7 : SOIL 0_R LeftWall_29 -16 0.5 2 180
8 : LDATA FRANA_334_8_L_0 0.5 LeftWall_29
9 : ATREST 0.758 1 1
10 : WEIGHT 20 10 10
11 : PERMEABILITY 1E-05
12 : RESISTANCE 1E+04 14
13 : YOUNG 2E+04 3.2E+04
14 : ENDL
15 : LDATA BNA2_(2)_335_337_L_0 -2 LeftWall_29
16 : ATREST 0.623 1 1
17 : WEIGHT 20 10 10
18 : PERMEABILITY 1E-05
19 : RESISTANCE 20 22.2
20 : YOUNG 1.15E+05 1.84E+05
21 : ENDL
22 : MATERIAL Fe360_2753 2.06E+08
23 : MATERIAL C2530_101 3.148E+07
24 : MATERIAL acciaioarmonico_110 2.001E+08
25 : BEAM WallElement_30 LeftWall_29 -16 0.5 C2530_101 0.7888 00 00
26 : WIRE Tieback_341 LeftWall_29 -1.3 acciaioarmonico_110 1.007E-05 125 0 0 0
27 : WIRE Tieback_342 LeftWall_29 -5.3 acciaioarmonico_110 1.363E-05 125 0 0 0
28 : STRIP LeftWall_29 1 6 31 28.47 0.5 124 45
29 : STRIP LeftWall_29 1 6 0.5 2.03 0.5 49.5 45
30 : STEP Stage1_28
31 : CHANGE FRANA_334_8_L_0 U-FRICT=14 LeftWall_29
32 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
33 : CHANGE FRANA_334_8_L_0 U-KA=0.61 LeftWall_29
34 : CHANGE FRANA_334_8_L_0 U-KP=1.85 LeftWall_29
35 : CHANGE FRANA_334_8_L_0 D-KA=0.61 LeftWall_29
36 : CHANGE FRANA_334_8_L_0 D-KP=1.85 LeftWall_29
37 : CHANGE BNA2_(2)_335_337_L_0 U-FRICT=22.2 LeftWall_29
38 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
39 : CHANGE BNA2_(2)_335_337_L_0 U-KA=0.452 LeftWall_29
40 : CHANGE BNA2_(2)_335_337_L_0 U-KP=2.774 LeftWall_29
41 : CHANGE BNA2_(2)_335_337_L_0 D-KA=0.452 LeftWall_29
42 : CHANGE BNA2_(2)_335_337_L_0 D-KP=2.774 LeftWall_29
43 : CHANGE FRANA_334_8_L_0 U-COHE=1E+04 LeftWall_29
44 : CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
45 : CHANGE BNA2_(2)_335_337_L_0 U-COHE=20 LeftWall_29
46 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
47 : SETWALL LeftWall_29
48 : GEOM 0.5 0.5
49 : WATER -3.5 0 -16 0 0
50 : ADD WallElement_30
51 : DLOAD constant LeftWall_29 -2 145 0.5 54.4
52 : LOAD constant LeftWall_29 0.5 1 40.8
53 : ENDSTEP
54 : STEP Stage2_344
55 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
56 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
57 : CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
58 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
59 : SETWALL LeftWall_29
60 : GEOM 0.5 -2.3
61 : WATER -3.5 0 -16 0 0
62 : ENDSTEP
63 : STEP Tirante1_1139
64 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
65 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
66 : CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
67 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
68 : SETWALL LeftWall_29
69 : GEOM 0.5 -2.3
70 : WATER -3.5 0 -16 0 0
71 : ADD Tieback_341
72 : ENDSTEP
73 : STEP Stage4_1238
74 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
75 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
76 : CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
77 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
78 : SETWALL LeftWall_29
79 : GEOM 0.5 -6.3

```

```
80 : SURCHARGE 1 0.5 1 -6.3
81 : WATER -5.3 1 -16 0 0
82 : ENDSTEP
83 : STEP Tirante2_1685
84 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
85 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
86 : CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
87 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
88 : SETWALL LeftWall_29
89 : GEOM 0.5 -6.3
90 : SURCHARGE 0 0 0 0
91 : WATER -5.3 1 -16 0 0
92 : ADD Tieback_342
93 : ENDSTEP
94 : STEP Fondoscavo_2741
95 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
96 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
97 : CHANGE FRANA_334_8_L_0 D-COHE=1E+04 LeftWall_29
98 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
99 : SETWALL LeftWall_29
100 : GEOM 0.5 -7.7
101 : WATER -6.7 1 -16 0 0
102 : ENDSTEP
```

```

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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 / NODE	Y-COORD	Z-COORD /
1	0.0000	0.50000	/ 2	0.0000 0.30000	/ 3	0.0000 0.10000	/ 4	0.0000 -0.10000		/
5	0.0000	-0.30000	/ 6	0.0000 -0.50000	/ 7	0.0000 -0.70000	/ 8	0.0000 -0.90000		/
9	0.0000	-1.1000	/ 10	0.0000 -1.3000	/ 11	0.0000 -1.5000	/ 12	0.0000 -1.7000		/
13	0.0000	-1.9000	/ 14	0.0000 -2.1000	/ 15	0.0000 -2.3000	/ 16	0.0000 -2.5000		/
17	0.0000	-2.7000	/ 18	0.0000 -2.9000	/ 19	0.0000 -3.1000	/ 20	0.0000 -3.3000		/
21	0.0000	-3.5000	/ 22	0.0000 -3.7000	/ 23	0.0000 -3.9000	/ 24	0.0000 -4.1000		/
25	0.0000	-4.3000	/ 26	0.0000 -4.5000	/ 27	0.0000 -4.7000	/ 28	0.0000 -4.9000		/
29	0.0000	-5.1000	/ 30	0.0000 -5.3000	/ 31	0.0000 -5.5000	/ 32	0.0000 -5.7000		/
33	0.0000	-5.9000	/ 34	0.0000 -6.1000	/ 35	0.0000 -6.3000	/ 36	0.0000 -6.5000		/
37	0.0000	-6.7000	/ 38	0.0000 -6.9000	/ 39	0.0000 -7.1000	/ 40	0.0000 -7.3000		/
41	0.0000	-7.5000	/ 42	0.0000 -7.7000	/ 43	0.0000 -7.9000	/ 44	0.0000 -8.1000		/
45	0.0000	-8.3000	/ 46	0.0000 -8.5000	/ 47	0.0000 -8.7000	/ 48	0.0000 -8.9000		/
49	0.0000	-9.1000	/ 50	0.0000 -9.3000	/ 51	0.0000 -9.5000	/ 52	0.0000 -9.7000		/
53	0.0000	-9.9000	/ 54	0.0000 -10.100	/ 55	0.0000 -10.300	/ 56	0.0000 -10.500		/
57	0.0000	-10.700	/ 58	0.0000 -10.900	/ 59	0.0000 -11.100	/ 60	0.0000 -11.300		/
61	0.0000	-11.500	/ 62	0.0000 -11.700	/ 63	0.0000 -11.900	/ 64	0.0000 -12.100		/
65	0.0000	-12.300	/ 66	0.0000 -12.500	/ 67	0.0000 -12.700	/ 68	0.0000 -12.900		/
69	0.0000	-13.100	/ 70	0.0000 -13.300	/ 71	0.0000 -13.500	/ 72	0.0000 -13.700		/
73	0.0000	-13.900	/ 74	0.0000 -14.100	/ 75	0.0000 -14.300	/ 76	0.0000 -14.500		/
77	0.0000	-14.700	/ 78	0.0000 -14.900	/ 79	0.0000 -15.100	/ 80	0.0000 -15.300		/
81	0.0000	-15.500	/ 82	0.0000 -15.700	/ 83	0.0000 -15.900	/ 84	0.0000 -16.000		/



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	0.2000	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	0.2000	0.000	0.000	0.000	1.000
82	82	2	0.2000	0.000	0.000	0.000	1.000
83	83	2	0.1500	0.000	0.000	0.000	1.000
84	84	2	0.5000E-01	0.000	0.000	0.000	1.000



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	0.2000	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	0.2000	0.000	0.000	0.000	2.000
82	82	2	0.2000	0.000	0.000	0.000	2.000
83	83	2	0.1500	0.000	0.000	0.000	2.000
84	84	2	0.5000E-01	0.000	0.000	0.000	2.000

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
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+-----+
ELEMENT GROUP NO. 3

WallElement_30      :
 2 83 0 1 0 0 0 0 0 0 0 0 0 0 1 0 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
 6 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 .....0.280300E-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
 6 1.000

element data

el na nb mat      erc1      erc2      thick
-----
 1 1 2 1 0.000 0.000 0.7888
 2 2 3 1 0.000 0.000 0.7888
 3 3 4 1 0.000 0.000 0.7888
 4 4 5 1 0.000 0.000 0.7888
 5 5 6 1 0.000 0.000 0.7888
 6 6 7 1 0.000 0.000 0.7888
 7 7 8 1 0.000 0.000 0.7888
 8 8 9 1 0.000 0.000 0.7888
 9 9 10 1 0.000 0.000 0.7888
10 10 11 1 0.000 0.000 0.7888
11 11 12 1 0.000 0.000 0.7888
12 12 13 1 0.000 0.000 0.7888
13 13 14 1 0.000 0.000 0.7888
14 14 15 1 0.000 0.000 0.7888
15 15 16 1 0.000 0.000 0.7888
16 16 17 1 0.000 0.000 0.7888
17 17 18 1 0.000 0.000 0.7888
18 18 19 1 0.000 0.000 0.7888
19 19 20 1 0.000 0.000 0.7888
20 20 21 1 0.000 0.000 0.7888
21 21 22 1 0.000 0.000 0.7888
22 22 23 1 0.000 0.000 0.7888
23 23 24 1 0.000 0.000 0.7888
24 24 25 1 0.000 0.000 0.7888
25 25 26 1 0.000 0.000 0.7888
26 26 27 1 0.000 0.000 0.7888
27 27 28 1 0.000 0.000 0.7888
28 28 29 1 0.000 0.000 0.7888
29 29 30 1 0.000 0.000 0.7888
30 30 31 1 0.000 0.000 0.7888
31 31 32 1 0.000 0.000 0.7888
32 32 33 1 0.000 0.000 0.7888
33 33 34 1 0.000 0.000 0.7888
34 34 35 1 0.000 0.000 0.7888
35 35 36 1 0.000 0.000 0.7888
36 36 37 1 0.000 0.000 0.7888
37 37 38 1 0.000 0.000 0.7888
38 38 39 1 0.000 0.000 0.7888
39 39 40 1 0.000 0.000 0.7888
40 40 41 1 0.000 0.000 0.7888
41 41 42 1 0.000 0.000 0.7888

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42	42	43	1	0.000	0.000	0.7888
43	43	44	1	0.000	0.000	0.7888
44	44	45	1	0.000	0.000	0.7888
45	45	46	1	0.000	0.000	0.7888
46	46	47	1	0.000	0.000	0.7888
47	47	48	1	0.000	0.000	0.7888
48	48	49	1	0.000	0.000	0.7888
49	49	50	1	0.000	0.000	0.7888
50	50	51	1	0.000	0.000	0.7888
51	51	52	1	0.000	0.000	0.7888
52	52	53	1	0.000	0.000	0.7888
53	53	54	1	0.000	0.000	0.7888
54	54	55	1	0.000	0.000	0.7888
55	55	56	1	0.000	0.000	0.7888
56	56	57	1	0.000	0.000	0.7888
57	57	58	1	0.000	0.000	0.7888
58	58	59	1	0.000	0.000	0.7888
59	59	60	1	0.000	0.000	0.7888
60	60	61	1	0.000	0.000	0.7888
61	61	62	1	0.000	0.000	0.7888
62	62	63	1	0.000	0.000	0.7888
63	63	64	1	0.000	0.000	0.7888
64	64	65	1	0.000	0.000	0.7888
65	65	66	1	0.000	0.000	0.7888
66	66	67	1	0.000	0.000	0.7888
67	67	68	1	0.000	0.000	0.7888
68	68	69	1	0.000	0.000	0.7888
69	69	70	1	0.000	0.000	0.7888
70	70	71	1	0.000	0.000	0.7888
71	71	72	1	0.000	0.000	0.7888
72	72	73	1	0.000	0.000	0.7888
73	73	74	1	0.000	0.000	0.7888
74	74	75	1	0.000	0.000	0.7888
75	75	76	1	0.000	0.000	0.7888
76	76	77	1	0.000	0.000	0.7888
77	77	78	1	0.000	0.000	0.7888
78	78	79	1	0.000	0.000	0.7888
79	79	80	1	0.000	0.000	0.7888
80	80	81	1	0.000	0.000	0.7888
81	81	82	1	0.000	0.000	0.7888
82	82	83	1	0.000	0.000	0.7888
83	83	84	1	0.000	0.000	0.7888

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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ELEMENT GROUP NO. 4

Tieback_341          :
 6  1   0   1   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  active
 4  active
 5  active
 6  active

material set no.     1

prop( 1) angle      0.00000
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
 6  0.000      0.000

element data

el    n    mat      a/l      pinit      yieldc      yielddt
-----
 1  10     1  0.1007E-04 125.0      0.000      0.000

```

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| |
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+-----+
ELEMENT GROUP NO. 5

Tieback_342          :
 6  1   0   1   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  inactive
 5  active
 6  active

material set no.     1

prop( 1) angle      0.00000
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
 6  0.000      0.000

element data

el    n    mat      a/l      pinit      yieldc      yielddt
-----
 1  30     1  0.1363E-04 125.0      0.000      0.000

```

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+-----+  
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:43:57 |  
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NO. OF NODAL LOADS (NLOAD) ..... 1  
NO. OF LOAD CURVES (NLCUR) ..... 12  
MAXIMUM POINTS/LCURVE (NPTM) ..... 5

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:43:57
+-----+
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	
7.00000	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	
7.00000	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	
7.00000	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	
7.00000	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	
7.00000	0.0000E+00	

LOAD FUNCTION NUMBER = 6  
NUMBER OF TIME POINTS = 5

TIME	VALUE	FUNCTION
0.00000	0.0000E+00	
5.80000	0.0000E+00	
6.00000	0.1000E+01	
6.20000	0.0000E+00	
7.00000	0.0000E+00	

LOAD FUNCTION NUMBER = 7

NUMBER OF TIME POINTS = 4

TIME	VALUE	FUNCTION
0.00000	0.0000E+00	
0.80000	0.0000E+00	
1.00000	0.1000E+01	
7.00000	0.1000E+01	

LOAD FUNCTION NUMBER = 8  
NUMBER OF TIME POINTS = 4

TIME	VALUE	FUNCTION
0.00000	0.0000E+00	
1.80000	0.0000E+00	
2.00000	0.1000E+01	
7.00000	0.1000E+01	

LOAD FUNCTION NUMBER = 9  
NUMBER OF TIME POINTS = 4

TIME	VALUE	FUNCTION
0.00000	0.0000E+00	
2.80000	0.0000E+00	
3.00000	0.1000E+01	
7.00000	0.1000E+01	

LOAD FUNCTION NUMBER = 10  
NUMBER OF TIME POINTS = 4

TIME	VALUE	FUNCTION
0.00000	0.0000E+00	
3.80000	0.0000E+00	
4.00000	0.1000E+01	
7.00000	0.1000E+01	

LOAD FUNCTION NUMBER = 11  
NUMBER OF TIME POINTS = 4

TIME	VALUE	FUNCTION
0.00000	0.0000E+00	
4.80000	0.0000E+00	
5.00000	0.1000E+01	
7.00000	0.1000E+01	

LOAD FUNCTION NUMBER = 12  
NUMBER OF TIME POINTS = 4

TIME	VALUE	FUNCTION
0.00000	0.0000E+00	
5.80000	0.0000E+00	
6.00000	0.1000E+01	
7.00000	0.1000E+01	

CONCENTRATED LOADS

NODE	DIRECTION	LOAD CURVE	LOAD CURVE MULTPL
1	1	7	0.4080E+02

PROCESSING DISTRIBUTED LOADS CARD NO. 1  
AT Y-COORD 0.000 Z-COORD -2.000 PRESSURE 145.0  
Z-COORD 0.5000 PRESSURE 54.40  
L.CURVE 7

NO. OF GENERATED NODAL FORCES	13							
NODE	Z-LVL	FORCE / NODE	Z-LVL	FORCE / NODE	Z-LVL	FORCE /		
13	-0.1900E+01	0.2150848E+02 /	12	-0.1700E+01	0.2742977E+02 /	11	-0.1500E+01	0.2598017E+02 /
10	-0.1300E+01	0.2453057E+02 /	9	-0.1100E+01	0.2308097E+02 /	8	-0.9000E+00	0.2163137E+02 /
7	-0.7000E+00	0.2018177E+02 /	6	-0.5000E+00	0.1873217E+02 /	5	-0.3000E+00	0.1728257E+02 /
4	-0.1000E+00	0.1583297E+02 /	3	0.1000E+00	0.1438337E+02 /	2	0.3000E+00	0.1293377E+02 /
1	0.5000E+00	0.5742083E+01 /						

OVERALL APPLIED Y FORCE FOR CURRENT DISTRIBUTED LOAD

249.25

NO. OF DISTRIBUTED LOAD CARDS 1

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+-----+  
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:43:57 |  
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L O A D      B A L A N C E

STEP	1	TOTAL APPLIED LOAD IN DIR.	2	Y-DISPL.F	290.05000
STEP	1	TOTAL APPLIED LOAD IN DIR.	4	X-ROT. F	0.0000000
STEP	2	TOTAL APPLIED LOAD IN DIR.	2	Y-DISPL.F	290.05000
STEP	2	TOTAL APPLIED LOAD IN DIR.	4	X-ROT. F	0.0000000
STEP	3	TOTAL APPLIED LOAD IN DIR.	2	Y-DISPL.F	290.05000
STEP	3	TOTAL APPLIED LOAD IN DIR.	4	X-ROT. F	0.0000000
STEP	4	TOTAL APPLIED LOAD IN DIR.	2	Y-DISPL.F	290.05000
STEP	4	TOTAL APPLIED LOAD IN DIR.	4	X-ROT. F	0.0000000
STEP	5	TOTAL APPLIED LOAD IN DIR.	2	Y-DISPL.F	290.05000
STEP	5	TOTAL APPLIED LOAD IN DIR.	4	X-ROT. F	0.0000000
STEP	6	TOTAL APPLIED LOAD IN DIR.	2	Y-DISPL.F	290.05000
STEP	6	TOTAL APPLIED LOAD IN DIR.	4	X-ROT. F	0.0000000

LOAD INPUT SECTION COMPLETED

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+-----+
|          PARATIE PLUS 2014 NLS ENGINE RELEASE  2016  FULL VERSION *Build date: Sept23, 2015*
|
|          NewProject.BaseDesignSection_25.Nominal_60
|          Exe Time :25 June 2020      16:43:57
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NO. OF LAYERS ..... 2  
NO. OF DATA PER LAYER..... 100

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+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:43:57
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```

LAYER DESCRIPTORS FOR STEP NO. 1

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

```

ITEM NO. 1<NAME >= 16.000 (BOTH WALLS)
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 10000. (BOTH WALLS)
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 10000. (BOTH WALLS)
ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)
ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1
ITEM NO. 61<D-KP >= 1.8500 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 >= 17.000 (BOTH WALLS)
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)
ITEM NO. 3<LEVEL >= -2.0000 (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 >= 22.200 (BOTH WALLS)
ITEM NO. 10<U-KA >= 0.45200 WALL NO. 1
ITEM NO. 11<U-KP >= 2.7740 WALL NO. 1
ITEM NO. 12<K0-NC >= 0.62300 (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 >= 0.115000E+06 (BOTH WALLS)
ITEM NO. 18<EUR >= 0.184000E+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 >= 22.200 (BOTH WALLS)
ITEM NO. 60<D-KA >= 0.45200 WALL NO. 1
ITEM NO. 61<D-KP >= 2.7740 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 >= 16.000 (BOTH WALLS)
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 10000. (BOTH WALLS)
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 10000. (BOTH WALLS)  
 ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
 ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
 ITEM NO. 61<D-KP >= 1.8500 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 >= 17.000 (BOTH WALLS)  
 ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
 ITEM NO. 3<LEVEL >= -2.0000 (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 >= 22.200 (BOTH WALLS)  
 ITEM NO. 10<U-KA >= 0.45200 WALL NO. 1  
 ITEM NO. 11<U-KP >= 2.7740 WALL NO. 1  
 ITEM NO. 12<K0-NC >= 0.62300 (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 >= 0.115000E+06 (BOTH WALLS)  
 ITEM NO. 18<EUR >= 0.184000E+06 (BOTH WALLS)  
 ITEM NO. 27<U-PERM >= 0.100000E-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 >= 22.200 (BOTH WALLS)  
 ITEM NO. 60<D-KA >= 0.45200 WALL NO. 1  
 ITEM NO. 61<D-KP >= 2.7740 WALL NO. 1  
 ITEM NO. 77<D-PERM >= 0.100000E-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 >= 16.000 (BOTH WALLS)  
 ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
 ITEM NO. 3<LEVEL >= 0.50000 (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 >= 10000. (BOTH WALLS)  
 ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)  
 ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1  
 ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1  
 ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (BOTH WALLS)  
 ITEM NO. 27<U-PERM >= 0.100000E-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 >= 10000. (BOTH WALLS)  
 ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
 ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
 ITEM NO. 61<D-KP >= 1.8500 WALL NO. 1  
 ITEM NO. 77<D-PERM >= 0.100000E-04 (BOTH WALLS)

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

ITEM NO. 1<NAME >= 17.000 (BOTH WALLS)  
 ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
 ITEM NO. 3<LEVEL >= -2.0000 (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 >= 22.200 (BOTH WALLS)  
 ITEM NO. 10<U-KA >= 0.45200 WALL NO. 1  
 ITEM NO. 11<U-KP >= 2.7740 WALL NO. 1  
 ITEM NO. 12<K0-NC >= 0.62300 (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 >= 0.115000E+06 (BOTH WALLS)  
 ITEM NO. 18<EUR >= 0.184000E+06 (BOTH WALLS)  
 ITEM NO. 27<U-PERM >= 0.100000E-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 >= 22.200 (BOTH WALLS)  
 ITEM NO. 60<D-KA >= 0.45200 WALL NO. 1

ITEM NO. 61<D-KP >= 2.7740 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO. 4

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

ITEM NO. 1<NAME >= 16.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 10000. (BOTH WALLS)  
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1  
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 10000. (BOTH WALLS)  
ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
ITEM NO. 61<D-KP >= 1.8500 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

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

ITEM NO. 1<NAME >= 17.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= -2.0000 (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 >= 22.200 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.45200 WALL NO. 1  
ITEM NO. 11<U-KP >= 2.7740 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.62300 (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 >= 0.11500E+06 (BOTH WALLS)  
ITEM NO. 18<EUR >= 0.18400E+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 >= 22.200 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.45200 WALL NO. 1  
ITEM NO. 61<D-KP >= 2.7740 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO. 5

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

ITEM NO. 1<NAME >= 16.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 10000. (BOTH WALLS)  
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1  
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 10000. (BOTH WALLS)  
ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
ITEM NO. 61<D-KP >= 1.8500 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

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

ITEM NO. 1<NAME >= 17.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= -2.0000 (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 >= 22.200 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.45200 WALL NO. 1  
ITEM NO. 11<U-KP >= 2.7740 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.62300 (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 >= 0.11500E+06 (BOTH WALLS)  
ITEM NO. 18<EUR >= 0.18400E+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 >= 22.200 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.45200 WALL NO. 1  
ITEM NO. 61<D-KP >= 2.7740 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO. 6

NON ZERO LAYER DESCRIPTORS FOR LAYER NO. 1 FOR STEP NO. 6

ITEM NO. 1<NAME >= 16.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 10000. (BOTH WALLS)  
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1  
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 10000. (BOTH WALLS)  
ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
ITEM NO. 61<D-KP >= 1.8500 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

NON ZERO LAYER DESCRIPTORS FOR LAYER NO. 2 FOR STEP NO. 6

ITEM NO. 1<NAME >= 17.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= -2.0000 (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 >= 22.200 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.45200 WALL NO. 1  
ITEM NO. 11<U-KP >= 2.7740 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.62300 (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 >= 0.11500E+06 (BOTH WALLS)  
ITEM NO. 18<EUR >= 0.18400E+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 >= 22.200 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.45200 WALL NO. 1  
ITEM NO. 61<D-KP >= 2.7740 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:43:57
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PHASE DESCRIPTORS

STEP NO.	1	LEFT WALL	RIGHT WALL
Y		0.000	-0.9990E+30
Z-PC		0.5000	0.000
Z-EXCAVATION		0.5000	0.000
Z-WATER_TABLE		-3.500	-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		0.5000	0.000
Z-EXCAVATION		-2.300	0.000
Z-WATER_TABLE		-3.500	-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	0.5000	0.000
Z-EXCAVATION	-2.300	0.000
Z-WATER_TABLE	-3.500	-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	0.5000	0.000
Z-EXCAVATION	-6.300	0.000
Z-WATER_TABLE	-5.300	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	1.000	0.000
ZQ	0.5000	0.000
DZW_OF_THE_WATER_TABLE	1.000	0.000
QS_ON_THE_EXCAVATION_SIDE	1.000	0.000
ZQS	-6.300	-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	0.5000	0.000
Z-EXCAVATION	-6.300	0.000
Z-WATER_TABLE	-5.300	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	1.000	0.000
QS_ON_THE_EXCAVATION_SIDE	0.000	0.000
ZQS	0.000	-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

STEP NO.	6	LEFT WALL	RIGHT WALL
Y		0.000	-0.9990E+30
Z-PC		0.5000	0.000
Z-EXCAVATION		-7.700	0.000
Z-WATER_TABLE		-6.700	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL		0.000	0.000
ZQ		0.000	0.000
DZW_OF_THE_WATER_TABLE		1.000	0.000
QS_ON_THE_EXCAVATION_SIDE		0.000	0.000
ZQS		0.000	-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 6

#### LEFT-HAND WALL

LOWER LEVEL	-16.00000
UPPER LEVEL	0.50000

#### RIGHT-HAND WALL

LOWER LEVEL	-16.00000
UPPER LEVEL	0.50000

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:43:57
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INITIAL STRESS TABLES
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#### 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 1.0000  
END TIME (TIME BEYOND WHICH IT IS REMOVED) 6.0000

TYPE BOUSSINESQ

HORIZONTAL DISTANCE (DY)	31.0000000000000
FOUNDATION WIDTH (B)	28.4700000000000
ZETA-F.....	0.500000000000000
Q-F .....	124.0000000000000
BETA .....	45.0000000000000
BEHAVIOUR (0=FREE, 1=REFLECTING)	0.000000000000E+000

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

ACTIVATION TIME 1.0000  
END TIME (TIME BEYOND WHICH IT IS REMOVED) 6.0000

TYPE BOUSSINESQ

HORIZONTAL DISTANCE (DY)	0.500000000000000
FOUNDATION WIDTH (B)	2.030000000000000
ZETA-F.....	0.500000000000000
Q-F .....	49.5000000000000
BETA .....	45.0000000000000
BEHAVIOUR (0=FREE, 1=REFLECTING)	0.000000000000E+000

ELEMENT GROUPS BACKUP AREA CAN STAY IN CORE AT  
POSITION 4321

NO. OF D.P.W. FOR THIS AREA 8033  
MAX NO. OF D.P.W. AVAILABLE 81920  
\*\* MAX NO OF ITERATIONS SET TO 40

ITER 0 RNORM = 7340. RMNORM= 0.000  
RINORM=0.1505E+06 RIMNOR= 0.000  
RENORM= 7340. REMNOR= 0.000 RATIO =0.2208 TOLER =0.1000E-03 NOT CONVERGED  
RFMAX = 52.52 RMMAX = 0.000  
RTSMAL=0.1000E-03 RMSMAL= 0.000  
RDT =0.1505E+06 RDR = 0.000  
RATIO=0.2208 RATOR= 0.000  
MAX UN= 46.54 IEQ= 1 NODE 1 DOF 1 Y-DISPL.F  
MIN UN=-.7105E-14 IEQ= 129 NODE 65 DOF 1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER 2 RNORM = 7340. RMNORM= 0.000  
RINORM=0.1505E+06 RIMNOR= 0.000  
RENORM= 841.1 REMNOR=0.3416E-19 RATIO =0.7476E-01 TOLER =0.1000E-03 NOT CONVERGED  
RFMAX = 52.52 RMMAX = 0.000  
RTSMAL=0.1000E-03 RMSMAL= 0.000  
RDT =0.1505E+06 RDR = 0.000  
RATIO=0.7476E-01 RATOR= 0.000  
MAX UN= 17.07 IEQ= 27 NODE 14 DOF 1 Y-DISPL.F  
MIN UN=-.1077E-01 IEQ= 55 NODE 28 DOF 1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER 3 RNORM = 7340. RMNORM= 0.000  
RINORM=0.1505E+06 RIMNOR= 0.000  
RENORM= 24.58 REMNOR=0.1891E-19 RATIO =0.1278E-01 TOLER =0.1000E-03 NOT CONVERGED  
RFMAX = 52.52 RMMAX = 0.000  
RTSMAL=0.1000E-03 RMSMAL= 0.000  
RDT =0.1505E+06 RDR = 0.000  
RATIO=0.1278E-01 RATOR= 0.000  
MAX UN= 4.129 IEQ= 41 NODE 21 DOF 1 Y-DISPL.F  
MIN UN=-.3326 IEQ= 57 NODE 29 DOF 1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER 4 RNORM = 7340. RMNORM= 0.000

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RINORM=0.1505E+06 RIMNOR= 0.000
RENORM=0.4038E-01 REMNOR=0.1956E-19 RATIO =0.5180E-03 TOLER =0.1000E-03 NOT CONVERGED
RFMAX = 52.52      RMMAX = 0.000
RTSMAL=0.1000E-03 RMSMAL= 0.000
RDT   =0.1505E+06 RDR   = 0.000
RATIOI=0.5180E-03 RATIOI= 0.000
MAX UN=0.2007     IEQ=    45 NODE    23 DOF    1 Y-DISPL.F
MIN UN=-.9075E-02 IEQ=    69 NODE    35 DOF    1 Y-DISPL.F
NO. OF CONTACT CONSTRAINT VIOLATIONS      0

ITER      5 RNORM = 7340.      RMNORM= 0.000
RINORM=0.1505E+06 RIMNOR= 0.000
RENORM=0.1099E-05 REMNOR=0.9146E-20 RATIO =0.2702E-05 TOLER =0.1000E-03           CONVERGED !
RFMAX = 52.52      RMMAX = 0.000
RTSMAL=0.1000E-03 RMSMAL= 0.000
RDT   =0.1505E+06 RDR   = 0.000
RATIOI=0.2702E-05 RATIOI= 0.000
MAX UN=0.3268E-04 IEQ=   141 NODE    71 DOF    1 Y-DISPL.F
MIN UN=-.6717E-03 IEQ=    73 NODE    37 DOF    1 Y-DISPL.F
NO. OF CONTACT CONSTRAINT VIOLATIONS      0

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:43:57
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New Project  
SOLUTION REACHED USING 5 ITERATIONS ON 40

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

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

	Y-DISPL.F (02)	X-ROT. F (04)	(
1	3.4644236E-03	-8.6768523E-04	
2	3.2909297E-03	-8.6703870E-04	
3	3.1176955E-03	-8.6508142E-04	
4	2.9449873E-03	-8.6177189E-04	
5	2.7730812E-03	-8.5704543E-04	
6	2.6022705E-03	-8.5079827E-04	
7	2.4328733E-03	-8.4288087E-04	
8	2.2652426E-03	-8.3309585E-04	
9	2.0997758E-03	-8.2119773E-04	
10	1.9369240E-03	-8.0689365E-04	
11	1.7772015E-03	-7.8984188E-04	
12	1.6211974E-03	-7.6963653E-04	
13	1.4695894E-03	-7.4579449E-04	
14	1.3231518E-03	-7.1787074E-04	
15	1.1826996E-03	-6.8606889E-04	
16	1.0489329E-03	-6.5113691E-04	
17	9.2240727E-04	-6.1376877E-04	
18	8.0354490E-04	-5.7460762E-04	
19	6.9264404E-04	-5.3424914E-04	
20	5.8988829E-04	-4.9324505E-04	
21	4.9535498E-04	-4.5210668E-04	
22	4.0902252E-04	-4.1130839E-04	
23	3.3077912E-04	-3.7129095E-04	
24	2.6042718E-04	-3.3246299E-04	
25	1.9769139E-04	-2.9517851E-04	
26	1.4223439E-04	-2.5971484E-04	
27	9.3670355E-05	-2.2627760E-04	
28	5.1578740E-05	-1.9500951E-04	
29	1.5516133E-05	-1.6600030E-04	
30	-1.4975062E-05	-1.3929689E-04	
31	-4.0357271E-05	-1.1491086E-04	
32	-6.1092351E-05	-9.2819008E-05	
33	-7.7634275E-05	-7.2968169E-05	
34	-9.0423786E-05	-5.5280755E-05	
35	-9.9884250E-05	-3.9659435E-05	
36	-1.0641786E-04	-2.5992589E-05	
37	-1.1040347E-04	-1.4158552E-05	
38	-1.1219493E-04	-4.0292830E-06	
39	-1.1212007E-04	4.5267066E-06	
40	-1.1048029E-04	1.1642046E-05	
41	-1.0755053E-04	1.7448219E-05	
42	-1.0357969E-04	2.2074055E-05	
43	-9.8791283E-05	2.5644307E-05	
44	-9.3384369E-05	2.8278553E-05	
45	-8.7534722E-05	3.0090337E-05	
46	-8.1395966E-05	3.1186580E-05	
47	-7.5101139E-05	3.1667088E-05	
48	-6.8764015E-05	3.1624333E-05	
49	-6.2480623E-05	3.1143321E-05	
50	-5.6330764E-05	3.0301608E-05	
51	-5.0379378E-05	2.9169388E-05	
52	-4.4678172E-05	2.7809717E-05	
53	-3.9266910E-05	2.6278763E-05	
54	-3.4174681E-05	2.4626095E-05	
55	-2.9421586E-05	2.2895172E-05	
56	-2.5019326E-05	2.1123541E-05	
57	-2.0972739E-05	1.9343369E-05	
58	-1.7280912E-05	1.7581920E-05	
59	-1.3937415E-05	1.5861622E-05	
60	-1.0932284E-05	1.4201008E-05	
61	-8.2520530E-06	1.2614775E-05	
62	-5.8806596E-06	1.1114257E-05	
63	-3.8000789E-06	9.7078064E-06	
64	-1.9908846E-06	8.4011421E-06	
65	-4.3273541E-07	7.1977783E-06	
66	8.9522965E-07	6.0994591E-06	
67	2.0140607E-06	5.1063277E-06	
68	2.9446796E-06	4.2169801E-06	
69	3.7075877E-06	3.4286569E-06	
70	4.3226182E-06	2.7374711E-06	
71	4.8087312E-06	2.1386108E-06	
72	5.1838494E-06	1.6265535E-06	
73	5.4647365E-06	1.1952543E-06	
74	5.6669056E-06	8.3827158E-07	

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75 5.8045506E-06 5.4887144E-07
76 5.8904970E-06 3.2011442E-07
77 5.9361676E-06 1.4492583E-07
78 5.9515616E-06 1.6151322E-08
79 5.9452430E-06 -7.3400369E-08
80 5.9243366E-06 -1.3092600E-07
81 5.8945290E-06 -1.6360587E-07
82 5.8600739E-06 -1.7858959E-07
83 5.8237989E-06 -1.8298789E-07
84 5.8054836E-06 -1.8320743E-07
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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| Exe Time :25 June 2020 16:43:57
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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

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ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.000	-3.4644E-03	0.000	0.000	0.000	0.000	ACTIVE	0.000	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
2 D	0.000	-3.2909E-03	4.557	0.000	4.557	12.22	ACTIVE	0.000	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
3 D	0.000	-3.1177E-03	10.91	0.000	10.91	19.97	ACTIVE	0.000	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
4 D	0.000	-2.9450E-03	17.92	0.000	17.92	24.17	ACTIVE	0.000	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
5 D	0.000	-2.7731E-03	26.34	0.000	26.34	26.78	ACTIVE	0.000	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
6 D	0.000	-2.6023E-03	34.34	0.000	34.34	28.81	ACTIVE	0.000	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
7 D	0.000	-2.4329E-03	41.20	0.000	41.20	30.70	ACTIVE	0.000	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
8 D	0.000	-2.2652E-03	47.35	0.000	47.35	32.62	ACTIVE	0.000	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
9 D	0.000	-2.0998E-03	53.02	0.000	53.02	34.66	ACTIVE	0.000	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
10 D	0.1542	-1.9369E-03	58.37	0.7712	58.37	36.83	UL-RL	1.8617E+04	-1.300	0.000	
1.000	1.000	0.7712	0.000	0.000	FRANA_334_8_L_0						
11 D	1.210	-1.7772E-03	63.22	6.051	63.22	39.14	UL-RL	1.8617E+04	-1.500	0.000	
1.000	1.000	6.051	0.000	0.000	FRANA_334_8_L_0						
12 D	2.278	-1.6212E-03	68.17	11.39	68.17	41.57	UL-RL	1.8617E+04	-1.700	0.000	
1.000	1.000	11.39	0.000	0.000	FRANA_334_8_L_0						
13 D	3.352	-1.4696E-03	72.97	16.76	72.97	44.12	UL-RL	1.8617E+04	-1.900	0.000	
1.000	1.000	16.76	0.000	0.000	FRANA_334_8_L_0						
14 D	1.572	-1.3232E-03	76.88	7.859	76.88	39.75	ACTIVE	0.000	-2.100	0.000	
1.000	1.000	7.859	0.000	0.000	BNA2_(2)_335_337_L_0						
15 D	1.826	-1.1827E-03	79.69	9.128	79.69	41.95	ACTIVE	0.000	-2.300	0.000	
1.000	1.000	9.128	0.000	0.000	BNA2_(2)_335_337_L_0						
16 D	2.089	-1.0489E-03	82.61	10.45	82.61	44.22	ACTIVE	0.000	-2.500	0.000	
1.000	1.000	10.45	0.000	0.000	BNA2_(2)_335_337_L_0						
17 D	2.362	-9.2241E-04	85.63	11.81	85.63	46.56	ACTIVE	0.000	-2.700	0.000	
1.000	1.000	11.81	0.000	0.000	BNA2_(2)_335_337_L_0						
18 D	2.643	-8.0354E-04	88.73	13.21	88.73	48.95	ACTIVE	0.000	-2.900	0.000	
1.000	1.000	13.21	0.000	0.000	BNA2_(2)_335_337_L_0						
19 D	2.930	-6.9264E-04	91.90	14.65	91.90	51.39	ACTIVE	0.000	-3.100	0.000	
1.000	1.000	14.65	0.000	0.000	BNA2_(2)_335_337_L_0						
20 D	3.223	-5.8989E-04	95.14	16.11	95.14	53.86	ACTIVE	0.000	-3.300	0.000	
1.000	1.000	16.11	0.000	0.000	BNA2_(2)_335_337_L_0						
21 D	3.521	-4.9535E-04	98.44	17.60	98.44	56.37	ACTIVE	0.000	-3.500	0.000	
1.000	1.000	17.60	0.000	0.000	BNA2_(2)_335_337_L_0						
22 D	4.043	-4.0902E-04	99.79	18.21	99.79	57.66	ACTIVE	0.000	-3.700	2.000	
1.000	1.000	20.21	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	4.569	-3.3078E-04	101.2	18.85	101.2	58.97	ACTIVE	0.000	-3.900	4.000	
1.000	1.000	22.85	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	6.777	-2.6043E-04	102.6	27.88	102.6	60.30	UL-RL	1.2446E+05	-4.100	6.000	
1.000	1.000	33.88	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	9.008	-1.9769E-04	104.1	37.04	104.1	61.64	UL-RL	1.2446E+05	-4.300	8.000	
1.000	1.000	45.04	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	11.06	-1.4223E-04	105.6	45.30	105.6	63.00	UL-RL	1.2446E+05	-4.500	10.00	
1.000	1.000	55.30	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	12.94	-9.3670E-05	107.2	52.72	107.2	64.37	UL-RL	1.2446E+05	-4.700	12.00	
1.000	1.000	64.72	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	14.56	-5.1579E-05	108.7	58.78	108.7	66.68	UL-RL	1.2446E+05	-4.900	14.00	
1.000	1.000	72.78	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	15.92	-1.5516E-05	110.3	63.59	110.3	69.85	UL-RL	1.2446E+05	-5.100	16.00	
1.000	1.000	79.59	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	17.18	1.4975E-05	111.9	67.91	111.9	72.69	UL-RL	1.2446E+05	-5.300	18.00	
1.000	1.000	85.91	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	18.35	4.0357E-05	113.6	71.77	113.6	75.26	UL-RL	1.2446E+05	-5.500	20.00	
1.000	1.000	91.77	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	19.44	6.1092E-05	115.3	75.22	115.3	77.56	UL-RL	1.2446E+05	-5.700	22.00	
1.000	1.000	97.22	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	20.46	7.7634E-05	116.9	78.29	116.9	79.63	UL-RL	1.2446E+05	-5.900	24.00	
1.000	1.000	102.3	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	21.40	9.0424E-05	118.6	81.01	118.6	81.51	UL-RL	1.2446E+05	-6.100	26.00
1.000	1.000	107.0	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	22.26	9.9884E-05	120.4	83.30	120.4	83.43	UL-RL	1.2446E+05	-6.300	28.00
1.000	1.000	111.3	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	23.05	1.0642E-04	122.1	85.25	122.1	85.31	UL-RL	1.2446E+05	-6.500	30.00
1.000	1.000	115.2	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	23.80	1.1040E-04	123.8	86.99	123.8	87.00	UL-RL	1.2446E+05	-6.700	32.00
1.000	1.000	119.0	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	24.51	1.1219E-04	125.6	88.55	125.6	88.56	UL-RL	1.2446E+05	-6.900	34.00
1.000	1.000	122.6	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	25.19	1.1212E-04	127.4	89.96	127.4	89.97	UL-RL	1.2446E+05	-7.100	36.00
1.000	1.000	126.0	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	25.85	1.1048E-04	129.1	91.25	129.1	91.26	UL-RL	1.2446E+05	-7.300	38.00
1.000	1.000	129.3	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	26.49	1.0755E-04	130.9	92.44	130.9	92.45	UL-RL	1.2446E+05	-7.500	40.00
1.000	1.000	132.4	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	27.11	1.0358E-04	132.8	93.55	132.8	93.55	UL-RL	1.2446E+05	-7.700	42.00
1.000	1.000	135.6	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	27.72	9.8791E-05	134.6	94.60	134.6	94.60	UL-RL	1.2446E+05	-7.900	44.00
1.000	1.000	138.6	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	28.32	9.3384E-05	136.4	95.59	136.4	95.59	UL-RL	1.2446E+05	-8.100	46.00
1.000	1.000	141.6	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	28.91	8.7535E-05	138.2	96.55	138.2	96.55	V-C	7.7790E+04	-8.300	48.00
1.000	1.000	144.6	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	29.50	8.1396E-05	140.1	97.49	140.1	97.49	V-C	7.7790E+04	-8.500	50.00
1.000	1.000	147.5	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	30.08	7.5101E-05	141.9	98.41	141.9	98.41	V-C	7.7790E+04	-8.700	52.00
1.000	1.000	150.4	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	30.66	6.8764E-05	143.8	99.32	143.8	99.32	V-C	7.7790E+04	-8.900	54.00
1.000	1.000	153.3	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	31.25	6.2481E-05	145.7	100.2	145.7	100.2	V-C	7.7790E+04	-9.100	56.00
1.000	1.000	156.2	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	31.83	5.6331E-05	147.5	101.2	147.5	101.2	V-C	7.7790E+04	-9.300	58.00
1.000	1.000	159.2	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	32.42	5.0379E-05	149.4	102.1	149.4	102.1	V-C	7.7790E+04	-9.500	60.00
1.000	1.000	162.1	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	33.01	4.4678E-05	151.3	103.1	151.3	103.1	V-C	7.7790E+04	-9.700	62.00
1.000	1.000	165.1	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	33.61	3.9267E-05	153.2	104.1	153.2	104.1	V-C	7.7790E+04	-9.900	64.00
1.000	1.000	168.1	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	34.21	3.4175E-05	155.1	105.1	155.1	105.1	V-C	7.7790E+04	-10.10	66.00
1.000	1.000	171.1	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	34.82	2.9422E-05	157.0	106.1	157.0	106.1	V-C	7.7790E+04	-10.30	68.00
1.000	1.000	174.1	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	35.43	2.5019E-05	158.9	107.1	158.9	107.1	V-C	7.7790E+04	-10.50	70.00
1.000	1.000	177.1	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	36.04	2.0973E-05	160.8	108.2	160.8	108.2	V-C	7.7790E+04	-10.70	72.00
1.000	1.000	180.2	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	36.66	1.7281E-05	162.7	109.3	162.7	109.3	V-C	7.7790E+04	-10.90	74.00
1.000	1.000	183.3	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	37.29	1.3937E-05	164.7	110.4	164.7	110.4	V-C	7.7790E+04	-11.10	76.00
1.000	1.000	186.4	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	37.92	1.0932E-05	166.6	111.6	166.6	111.6	V-C	7.7790E+04	-11.30	78.00
1.000	1.000	189.6	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	38.55	8.2521E-06	168.5	112.8	168.5	112.8	V-C	7.7790E+04	-11.50	80.00
1.000	1.000	192.8	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	39.19	5.8807E-06	170.5	114.0	170.5	114.0	V-C	7.7790E+04	-11.70	82.00
1.000	1.000	196.0	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	39.84	3.8001E-06	172.4	115.2	172.4	115.2	V-C	7.7790E+04	-11.90	84.00
1.000	1.000	199.2	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	40.48	1.9909E-06	174.4	116.4	174.4	116.4	V-C	7.7790E+04	-12.10	86.00
1.000	1.000	202.4	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	41.13	4.3274E-07	176.3	117.7	176.3	117.7	V-C	7.7790E+04	-12.30	88.00
1.000	1.000	205.7	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	41.78	-8.9523E-07	178.3	118.9	178.3	119.0	UL-RL	1.2446E+05	-12.50	90.00
1.000	1.000	208.9	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	42.42	-2.0141E-06	180.2	120.1	180.2	120.4	UL-RL	1.2446E+05	-12.70	92.00
1.000	1.000	212.1	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	43.07	-2.9447E-06	182.2	121.4	182.2	121.7	UL-RL	1.2446E+05	-12.90	94.00
1.000	1.000	215.4	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	43.73	-3.7076E-06	184.2	122.6	184.2	123.1	UL-RL	1.2446E+05	-13.10	96.00
1.000	1.000	218.6	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	44.38	-4.3226E-06	186.1	123.9	186.1	124.5	UL-RL	1.2446E+05	-13.30	98.00
1.000	1.000	221.9	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	45.04	-4.8087E-06	188.1	125.2	188.1	125.8	UL-RL	1.2446E+05	-13.50	100.0
1.000	1.000	225.2	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	45.71	-5.1838E-06	190.1	126.5	190.1	127.2	UL-RL	1.2446E+05	-13.70	102.0
1.000	1.000	228.5	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	46.37	-5.4647E-06	192.1	127.8	192.1	128.5	UL-RL	1.2446E+05	-13.90	104.0
1.000	1.000	231.8	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	47.03	-5.6669E-06	194.0	129.2	194.0	129.9	UL-RL	1.2446E+05	-14.10	106.0
1.000	1.000	235.2	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	47.70	-5.8046E-06	196.0	130.5	196.0	131.2	UL-RL	1.2446E+05	-14.30	108.0
1.000	1.000	238.5	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	48.37	-5.8905E-06	198.0	131.8	198.0	132.6	UL-RL	1.2446E+05	-14.50	110.0
1.000	1.000	241.8	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	49.03	-5.9362E-06	200.0	133.2	200.0	133.9	UL-RL	1.2446E+05	-14.70	112.0
1.000	1.000	245.2	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	49.70	-5.9516E-06	202.0	134.5	202.0	135.3	UL-RL	1.2446E+05	-14.90	114.0
1.000	1.000	248.5	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	50.37	-5.9452E-06	204.0	135.8	204.0	136.6	UL-RL	1.2446E+05	-15.10	116.0
1.000	1.000	251.8	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	51.04	-5.9243E-06	206.0	137.2	206.0	137.9	UL-RL	1.2446E+05	-15.30	118.0
1.000	1.000		255.2	0.000	0.000	BNA2_(2)_335_337_L_0				
81 D	51.70	-5.8945E-06	208.0	138.5	208.0	139.3	UL-RL	1.2446E+05	-15.50	120.0
1.000	1.000		258.5	0.000	0.000	BNA2_(2)_335_337_L_0				
82 D	52.37	-5.8601E-06	210.0	139.9	210.0	140.6	UL-RL	1.2446E+05	-15.70	122.0
1.000	1.000		261.9	0.000	0.000	BNA2_(2)_335_337_L_0				
83 D	39.78	-5.8238E-06	212.0	141.2	212.0	141.9	UL-RL	1.2446E+05	-15.90	124.0
1.000	1.000		265.2	0.000	0.000	BNA2_(2)_335_337_L_0				
84 D	13.34	-5.8055E-06	213.0	141.9	213.0	142.6	UL-RL	1.2446E+05	-16.00	125.0
1.000	1.000		266.9	0.000	0.000	BNA2_(2)_335_337_L_0				

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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

O\_R  
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	4.921	3.4644E-03	0.000	49.21	0.000	49.21	V-C	1.4205E+04	0.5000	0.000	
1.000	1.000	49.21	0.000	0.000	FRANA_334_8_L_0						
2 D	11.79	3.2909E-03	4.000	58.97	4.000	58.97	V-C	1.4205E+04	0.3000	0.000	
1.000	1.000	58.97	0.000	0.000	FRANA_334_8_L_0						
3 D	12.85	3.1177E-03	8.000	64.26	8.000	64.26	V-C	1.4205E+04	0.1000	0.000	
1.000	1.000	64.26	0.000	0.000	FRANA_334_8_L_0						
4 D	13.20	2.9450E-03	12.00	66.01	12.00	66.01	V-C	1.4205E+04	-0.1000	0.000	
1.000	1.000	66.01	0.000	0.000	FRANA_334_8_L_0						
5 D	13.23	2.7731E-03	16.00	66.17	16.00	66.17	V-C	1.4205E+04	-0.3000	0.000	
1.000	1.000	66.17	0.000	0.000	FRANA_334_8_L_0						
6 D	13.15	2.6023E-03	20.00	65.77	20.00	65.77	V-C	1.4205E+04	-0.5000	0.000	
1.000	1.000	65.77	0.000	0.000	FRANA_334_8_L_0						
7 D	13.05	2.4329E-03	24.00	65.26	24.00	65.26	V-C	1.4205E+04	-0.7000	0.000	
1.000	1.000	65.26	0.000	0.000	FRANA_334_8_L_0						
8 D	12.96	2.2652E-03	28.00	64.80	28.00	64.80	V-C	1.4205E+04	-0.9000	0.000	
1.000	1.000	64.80	0.000	0.000	FRANA_334_8_L_0						
9 D	12.90	2.0998E-03	32.00	64.49	32.00	64.49	V-C	1.4205E+04	-1.100	0.000	
1.000	1.000	64.49	0.000	0.000	FRANA_334_8_L_0						
10 D	12.87	1.9369E-03	36.00	64.35	36.00	64.35	V-C	1.4205E+04	-1.300	0.000	
1.000	1.000	64.35	0.000	0.000	FRANA_334_8_L_0						
11 D	12.88	1.7772E-03	40.00	64.38	40.00	64.38	V-C	1.4205E+04	-1.500	0.000	
1.000	1.000	64.38	0.000	0.000	FRANA_334_8_L_0						
12 D	12.92	1.6212E-03	44.00	64.60	44.00	64.60	V-C	1.4205E+04	-1.700	0.000	
1.000	1.000	64.60	0.000	0.000	FRANA_334_8_L_0						
13 D	13.00	1.4696E-03	48.00	65.00	48.00	65.00	V-C	1.4205E+04	-1.900	0.000	
1.000	1.000	65.00	0.000	0.000	FRANA_334_8_L_0						
14 D	26.54	1.3232E-03	52.00	132.7	52.00	132.7	V-C	7.0252E+04	-2.100	0.000	
1.000	1.000	132.7	0.000	0.000	BNA2_(2)_335_337_L_0						
15 D	25.01	1.1827E-03	56.00	125.0	56.00	125.0	V-C	7.0252E+04	-2.300	0.000	
1.000	1.000	125.0	0.000	0.000	BNA2_(2)_335_337_L_0						
16 D	23.58	1.0489E-03	60.00	117.9	60.00	117.9	V-C	7.0252E+04	-2.500	0.000	
1.000	1.000	117.9	0.000	0.000	BNA2_(2)_335_337_L_0						
17 D	22.27	9.2241E-04	64.00	111.4	64.00	111.4	V-C	7.0252E+04	-2.700	0.000	
1.000	1.000	111.4	0.000	0.000	BNA2_(2)_335_337_L_0						
18 D	21.08	8.0354E-04	68.00	105.4	68.00	105.4	V-C	7.0252E+04	-2.900	0.000	
1.000	1.000	105.4	0.000	0.000	BNA2_(2)_335_337_L_0						
19 D	20.01	6.9264E-04	72.00	100.0	72.00	100.0	V-C	7.0252E+04	-3.100	0.000	
1.000	1.000	100.0	0.000	0.000	BNA2_(2)_335_337_L_0						
20 D	19.06	5.8989E-04	76.00	95.30	76.00	95.30	V-C	7.0252E+04	-3.300	0.000	
1.000	1.000	95.30	0.000	0.000	BNA2_(2)_335_337_L_0						
21 D	18.23	4.9535E-04	80.00	91.17	80.00	91.17	V-C	7.0252E+04	-3.500	0.000	
1.000	1.000	91.17	0.000	0.000	BNA2_(2)_335_337_L_0						
22 D	17.68	4.0902E-04	82.00	86.39	82.00	86.39	V-C	7.0252E+04	-3.700	2.000	
1.000	1.000	88.39	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	17.24	3.3078E-04	84.00	82.21	84.00	82.21	V-C	7.0252E+04	-3.900	4.000	
1.000	1.000	86.21	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	16.92	2.6043E-04	86.00	78.59	86.00	78.59	V-C	7.0252E+04	-4.100	6.000	
1.000	1.000	84.59	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	16.71	1.9769E-04	88.00	75.53	88.00	75.53	V-C	7.0252E+04	-4.300	8.000	
1.000	1.000	83.53	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	16.60	1.4223E-04	90.00	73.00	90.00	73.00	V-C	7.0252E+04	-4.500	10.00	
1.000	1.000	83.00	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	16.59	9.3670E-05	92.00	70.96	92.00	70.96	V-C	7.0252E+04	-4.700	12.00	
1.000	1.000	82.96	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	16.68	5.1579E-05	94.00	69.38	94.00	69.38	V-C	7.0252E+04	-4.900	14.00	
1.000	1.000	83.38	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	16.85	1.5516E-05	96.00	68.23	96.00	68.23	V-C	7.0252E+04	-5.100	16.00	
1.000	1.000	84.23	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	16.97	-1.4975E-05	98.00	66.86	98.00	68.54	UL-RL	1.1240E+05	-5.300	18.00	
1.000	1.000	84.86	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	17.08	-4.0357E-05	100.0	65.40	100.0	69.94	UL-RL	1.1240E+05	-5.500	20.00	
1.000	1.000	85.40	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	17.30	-6.1092E-05	102.0	64.48	102.0	71.34	UL-RL	1.1240E+05	-5.700	22.00	
1.000	1.000	86.48	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	17.61	-7.7634E-05	104.0	64.03	104.0	72.75	UL-RL	1.1240E+05	-5.900	24.00	
1.000	1.000	88.03	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	18.00	-9.0424E-05	106.0	64.00	106.0	74.16	UL-RL	1.1240E+05	-6.100	26.00
1.000	1.000	90.00	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	18.47	-9.9884E-05	108.0	64.35	108.0	75.58	UL-RL	1.1240E+05	-6.300	28.00
1.000	1.000	92.35	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	19.01	-1.0642E-04	110.0	65.03	110.0	76.99	UL-RL	1.1240E+05	-6.500	30.00
1.000	1.000	95.03	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	19.60	-1.1040E-04	112.0	66.00	112.0	78.41	UL-RL	1.1240E+05	-6.700	32.00
1.000	1.000	98.00	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	20.24	-1.1219E-04	114.0	67.22	114.0	79.83	UL-RL	1.1240E+05	-6.900	34.00
1.000	1.000	101.2	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	20.93	-1.1212E-04	116.0	68.64	116.0	81.24	UL-RL	1.1240E+05	-7.100	36.00
1.000	1.000	104.6	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	21.65	-1.1048E-04	118.0	70.24	118.0	82.66	UL-RL	1.1240E+05	-7.300	38.00
1.000	1.000	108.2	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	22.40	-1.0755E-04	120.0	71.99	120.0	84.08	UL-RL	1.1240E+05	-7.500	40.00
1.000	1.000	112.0	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	23.17	-1.0358E-04	122.0	73.85	122.0	85.50	UL-RL	1.1240E+05	-7.700	42.00
1.000	1.000	115.9	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	23.96	-9.8791E-05	124.0	75.81	124.0	86.91	UL-RL	1.1240E+05	-7.900	44.00
1.000	1.000	119.8	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	24.77	-9.3384E-05	126.0	77.83	126.0	88.33	UL-RL	1.1240E+05	-8.100	46.00
1.000	1.000	123.8	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	25.58	-8.7535E-05	128.0	79.90	128.0	89.74	UL-RL	1.1240E+05	-8.300	48.00
1.000	1.000	127.9	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	26.40	-8.1396E-05	130.0	82.01	130.0	91.15	UL-RL	1.1240E+05	-8.500	50.00
1.000	1.000	132.0	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	27.22	-7.5101E-05	132.0	84.12	132.0	92.57	UL-RL	1.1240E+05	-8.700	52.00
1.000	1.000	136.1	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	28.05	-6.8764E-05	134.0	86.25	134.0	93.98	UL-RL	1.1240E+05	-8.900	54.00
1.000	1.000	140.2	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	28.87	-6.2481E-05	136.0	88.36	136.0	95.38	UL-RL	1.1240E+05	-9.100	56.00
1.000	1.000	144.4	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	29.69	-5.6331E-05	138.0	90.46	138.0	96.79	UL-RL	1.1240E+05	-9.300	58.00
1.000	1.000	148.5	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	30.51	-5.0379E-05	140.0	92.53	140.0	98.20	UL-RL	1.1240E+05	-9.500	60.00
1.000	1.000	152.5	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	31.32	-4.4678E-05	142.0	94.58	142.0	99.60	UL-RL	1.1240E+05	-9.700	62.00
1.000	1.000	156.6	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	32.12	-3.9267E-05	144.0	96.59	144.0	101.0	UL-RL	1.1240E+05	-9.900	64.00
1.000	1.000	160.6	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	32.91	-3.4175E-05	146.0	98.56	146.0	102.4	UL-RL	1.1240E+05	-10.10	66.00
1.000	1.000	164.6	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	33.70	-2.9422E-05	148.0	100.5	148.0	103.8	UL-RL	1.1240E+05	-10.30	68.00
1.000	1.000	168.5	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	34.48	-2.5019E-05	150.0	102.4	150.0	105.2	UL-RL	1.1240E+05	-10.50	70.00
1.000	1.000	172.4	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	35.24	-2.0973E-05	152.0	104.2	152.0	106.6	UL-RL	1.1240E+05	-10.70	72.00
1.000	1.000	176.2	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	36.01	-1.7281E-05	154.0	106.0	154.0	108.0	UL-RL	1.1240E+05	-10.90	74.00
1.000	1.000	180.0	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	36.76	-1.3937E-05	156.0	107.8	156.0	109.4	UL-RL	1.1240E+05	-11.10	76.00
1.000	1.000	183.8	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	37.50	-1.0932E-05	158.0	109.5	158.0	110.7	UL-RL	1.1240E+05	-11.30	78.00
1.000	1.000	187.5	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	38.24	-8.2521E-06	160.0	111.2	160.0	112.1	UL-RL	1.1240E+05	-11.50	80.00
1.000	1.000	191.2	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	38.97	-5.8807E-06	162.0	112.8	162.0	113.5	UL-RL	1.1240E+05	-11.70	82.00
1.000	1.000	194.8	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	39.69	-3.8001E-06	164.0	114.5	164.0	114.9	UL-RL	1.1240E+05	-11.90	84.00
1.000	1.000	198.5	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	40.40	-1.9909E-06	166.0	116.0	166.0	116.3	UL-RL	1.1240E+05	-12.10	86.00
1.000	1.000	202.0	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	41.10	-4.3274E-07	168.0	117.5	168.0	117.8	UL-RL	1.1240E+05	-12.30	88.00
1.000	1.000	205.5	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	41.80	8.9523E-07	170.0	119.0	170.0	119.2	UL-RL	1.1240E+05	-12.50	90.00
1.000	1.000	209.0	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	42.49	2.0141E-06	172.0	120.5	172.0	120.6	UL-RL	1.1240E+05	-12.70	92.00
1.000	1.000	212.5	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	43.18	2.9447E-06	174.0	121.9	174.0	122.0	UL-RL	1.1240E+05	-12.90	94.00
1.000	1.000	215.9	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	43.87	3.7076E-06	176.0	123.3	176.0	123.4	UL-RL	1.1240E+05	-13.10	96.00
1.000	1.000	219.3	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	44.55	4.3226E-06	178.0	124.8	178.0	124.8	UL-RL	1.1240E+05	-13.30	98.00
1.000	1.000	222.8	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	45.23	4.8087E-06	180.0	126.2	180.0	126.2	UL-RL	1.1240E+05	-13.50	100.0
1.000	1.000	226.2	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	45.91	5.1838E-06	182.0	127.5	182.0	127.5	UL-RL	1.1240E+05	-13.70	102.0
1.000	1.000	229.5	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	46.58	5.4647E-06	184.0	128.9	184.0	128.9	UL-RL	1.1240E+05	-13.90	104.0
1.000	1.000	232.9	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	47.25	5.6669E-06	186.0	130.3	186.0	130.3	UL-RL	1.1240E+05	-14.10	106.0
1.000	1.000	236.3	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	47.93	5.8046E-06	188.0	131.6	188.0	131.6	UL-RL	1.1240E+05	-14.30	108.0
1.000	1.000	239.6	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	48.60	5.8905E-06	190.0	133.0	190.0	133.0	V-C	7.0252E+04	-14.50	110.0
1.000	1.000	243.0	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	49.27	5.9362E-06	192.0	134.3	192.0	134.3	V-C	7.0252E+04	-14.70	112.0
1.000	1.000	246.3	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	49.93	5.9516E-06	194.0	135.7	194.0	135.7	V-C	7.0252E+04	-14.90	114.0
1.000	1.000	249.7	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	50.60	5.9452E-06	196.0	137.0	196.0	137.0	V-C	7.0252E+04	-15.10	116.0
1.000	1.000	253.0	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	51.27	5.9243E-06	198.0	138.3	198.0	138.3	V-C	7.0252E+04	-15.30	118.0
1.000	1.000		256.3	0.000	0.000	BNA2_(2)_335_337_L_0				
81 D	51.93	5.8945E-06	200.0	139.7	200.0	139.7	V-C	7.0252E+04	-15.50	120.0
1.000	1.000		259.7	0.000	0.000	BNA2_(2)_335_337_L_0				
82 D	52.60	5.8601E-06	202.0	141.0	202.0	141.0	V-C	7.0252E+04	-15.70	122.0
1.000	1.000		263.0	0.000	0.000	BNA2_(2)_335_337_L_0				
83 D	39.95	5.8238E-06	204.0	142.3	204.0	142.3	V-C	7.0252E+04	-15.90	124.0
1.000	1.000		266.3	0.000	0.000	BNA2_(2)_335_337_L_0				
84 D	13.40	5.8055E-06	205.0	143.0	205.0	143.0	V-C	7.0252E+04	-16.00	125.0
1.000	1.000		268.0	0.000	0.000	BNA2_(2)_335_337_L_0				

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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## 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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 83  
C U R R E N T T I M E I S 1.0000

## WALL2D ELEMENT

EL	TA	TB	MA	MB
1	41.621	-41.621	3.81846E-11	8.3242
2	42.760	-42.760	-8.3242	16.876
3	44.292	-44.292	-16.876	25.735
4	46.924	-46.924	-25.735	35.119
5	50.973	-50.973	-35.119	45.314
6	56.550	-56.550	-45.314	56.624
7	63.681	-63.681	-56.624	69.360
8	72.352	-72.352	-69.360	83.831
9	82.535	-82.535	-83.831	100.34
10	94.350	-94.350	-100.34	119.21
11	108.66	-108.66	-119.21	140.94
12	125.45	-125.45	-140.94	166.03
13	137.31	-137.31	-166.03	193.49
14	112.34	-112.34	-193.49	215.96
15	89.162	-89.162	-215.96	233.79
16	67.669	-67.669	-233.79	247.33
17	47.759	-47.759	-247.33	256.88
18	29.321	-29.321	-256.88	262.74
19	12.241	-12.241	-262.74	265.19
20	-3.5968	3.5968	-265.19	264.47
21	-18.310	18.310	-264.47	260.81
22	-31.945	31.945	-260.81	254.42
23	-44.617	44.617	-254.42	245.50
24	-54.759	54.759	-245.50	234.55
25	-62.457	62.457	-234.55	222.06
26	-67.997	67.997	-222.06	208.46
27	-71.644	71.644	-208.46	194.13
28	-73.764	73.764	-194.13	179.37
29	-74.693	74.693	-179.37	164.44
30	-74.482	74.482	-164.44	149.54
31	-73.208	73.208	-149.54	134.90
32	-71.060	71.060	-134.90	120.69
33	-68.208	68.208	-120.69	107.04
34	-64.805	64.805	-107.04	94.083
35	-61.016	61.016	-94.083	81.880
36	-56.973	56.973	-81.880	70.486
37	-52.773	52.773	-70.486	59.931
38	-48.506	48.506	-59.931	50.230
39	-44.241	44.241	-50.230	41.382
40	-40.038	40.038	-41.382	33.374
41	-35.947	35.947	-33.374	26.185
42	-32.007	32.007	-26.185	19.783
43	-28.249	28.249	-19.783	14.133
44	-24.697	24.697	-14.133	9.1939
45	-21.367	21.367	-9.1939	4.9204
46	-18.271	18.271	-4.9204	1.2662
47	-15.414	15.414	-1.2662	-1.8167
48	-12.799	12.799	1.8167	-4.3764
49	-10.422	10.422	4.3764	-6.4608
50	-8.2794	8.2794	6.4608	-8.1167
51	-6.3630	6.3630	8.1167	-9.3893
52	-4.6635	4.6635	9.3893	-10.322
53	-3.1699	3.1699	10.322	-10.956
54	-1.8699	1.8699	10.956	-11.330
55	0.75074	0.75074	11.330	-11.480
56	0.20095	-0.20095	11.480	-11.440
57	0.99873	-0.99873	11.440	-11.240
58	1.6561	-1.6561	11.240	-10.909
59	2.1862	-2.1862	10.909	-10.472
60	2.6021	-2.6021	10.472	-9.9513
61	2.9160	-2.9160	9.9513	-9.3681
62	3.1397	-3.1397	9.3681	-8.7402
63	3.2842	-3.2842	8.7402	-8.0834
64	3.3659	-3.3659	8.0834	-7.4102
65	3.3965	-3.3965	7.4102	-6.7309
66	3.3751	-3.3751	6.7309	-6.0559
67	3.3061	-3.3061	6.0559	-5.3947
68	3.1974	-3.1974	5.3947	-4.7552
69	3.0559	-3.0559	4.7552	-4.1440
70	2.9976	-2.9976	4.1440	-3.5665

71	2.7004	-2.7004	3.5665	-3.0264
72	2.4985	-2.4985	3.0264	-2.5267
73	2.2857	-2.2857	2.5267	-2.0695
74	2.0650	-2.0650	2.0695	-1.6565
75	1.8390	-1.8390	1.6565	-1.2888
76	1.6096	-1.6096	1.2888	-0.96684
77	1.3784	-1.3784	0.96684	-0.69116
78	1.1466	-1.1466	0.69116	-0.46184
79	0.91509	-0.91509	0.46184	-0.27882
80	0.68438	-0.68438	0.27882	-0.14194
81	0.45483	-0.45483	0.14194	-5.09764E-02
82	0.22662	-0.22662	5.09764E-02	-5.65266E-03
83	5.65209E-02	-5.65209E-02	5.65266E-03	-4.65628E-13

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New Project
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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\_341 :  
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
----	-------	----	--------	---------	---	-----------	-----------

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

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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New Project
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## New Project

STRESS RESULTS FOR GROUP NO. 5

Tieback\_342 :  
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 = 7340.      RMNORM= 0.000
        RINORM=0.5299E+06 RIMNOR=0.2206E+07
        RENORM= 2950.      REMNOR=0.9146E-20 RATIO =0.7461E-01 TOLER =0.1000E-03 NOT CONVERGED
        RFMAX = 137.3     RMMAX = 265.2
        RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
        RDT = 0.5299E+06 RDR =0.2206E+07
        RATIOT=0.7461E-01 RATIOR= 0.000
        MAX UN= 26.54     IEQ= 27 NODE      14 DOF   1 Y-DISPL.F
        MIN UN=-.6717E-03 IEQ= 73 NODE      37 DOF   1 Y-DISPL.F
        NO. OF CONTACT CONSTRAINT VIOLATIONS 0

```

```

ITER    2 RNORM = 7340.      RMNORM= 0.000
        RINORM=0.5299E+06 RIMNOR=0.2206E+07
        RENORM= 2107.     REMNOR=0.3228E-18 RATIO =0.6306E-01 TOLER =0.1000E-03 NOT CONVERGED
        RFMAX = 137.3    RMMAX = 265.2
        RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
        RDT = 0.5299E+06 RDR =0.2206E+07
        RATIOT=0.6306E-01 RATIOR= 0.000
        MAX UN= 20.89    IEQ= 47 NODE      24 DOF     1 Y-DISPL.F
        MIN UN=-.6588   IEQ= 75 NODE      38 DOF     1 Y-DISPL.F
        NO. OF CONTACT CONSTRAINT VIOLATIONS 0

```

```

ITER    3 RNORM = 7340.      RMNORM= 0.000
        RINORM=0.5299E+06 RIMNOR=0.2206E+07
        RENORM= 748.1      REMNOR=0.4318E-18 RATIO =0.3757E-01 TOLER =0.1000E-03 NOT CONVERGED
        RFMAX = 137.3      RMMAX = 265.2
        RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
        RDT = 0.5299E+06 RDR =0.2206E+07
        RATIOT=0.3757E-01 RATORI= 0.000
        MAX UN= 14.94      IEQ= 47 NODE 24 DOF 1 Y-DISPL.F
        MIN UN=-1.479     IEQ= 73 NODE 37 DOF 1 Y-DISPL.F
        NO. OF CONTACT CONSTRAINT VIOLATIONS 0

```

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ITER    4 RNORM = 7340.      RMNORM= 0.000
        RINORM=0.5299E+06 RIMNOR=0.2206E+07
        RENORM= 39.68      REMNOR=0.6519E-18 RATIO =0.8654E-02 TOLER =0.1000E-03 NOT CONVERGED
        RFMAX = 137.3     RMMAX = 265.2
        RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
        RDT    =0.5299E+06 RDR   =0.2206E+07
        RATIOT=0.8654E-02 RATOR= 0.000
        MAX UN= 5.246     IEQ=    67 NODE      34 DOF    1 Y-DISPL.F
        MIN UN=-.3565    IEQ=    87 NODE      44 DOF    1 Y-DISPL.F
        NO. OF CONTACT CONSTRAINT VIOLATIONS 0

```

```

ITER      5 RNORM = 7340.      RMNORM= 0.000
          RINORM=0.5299E+06 RIMNOR=0.2206E+07
          RENORM=0.1077E-02 REMNOR=0.8779E-18 RATIO = 0.4509E-04 TOLER = 0.1000E-03      CONVERGED !
          RFMAX = 137.3      RMMAX = 265.2
          RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
          RDT   = 0.5299E+06 RDR   = 0.2206E+07
          RATIOT=0.4509E-04 RATIOR= 0.000
          MAX UN=0.4088E-02 IEQ=    159 NODE      80 DOF     1 Y-DISPL.F
          MIN UN=-.2614E-01 IEQ=     97 NODE      49 DOF     1 Y-DISPL.F
          NO. OF CONTACT CONSTRAINT VIOLATIONS  0

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New Project  
SOLUTION REACHED USING 5 ITERATIONS ON 40

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

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

	Y-DISPL.F (02)	X-ROT. F (04)	(
1	2.0625688E-02	-3.8184405E-03	
2	1.9862048E-02	-3.8177176E-03	
3	1.9098710E-02	-3.8153477E-03	
4	1.8336047E-02	-3.8109067E-03	
5	1.7574517E-02	-3.8039251E-03	
6	1.6814680E-02	-3.7938886E-03	
7	1.6057203E-02	-3.7802376E-03	
8	1.5302866E-02	-3.7623678E-03	
9	1.4552580E-02	-3.7396295E-03	
10	1.3807386E-02	-3.7113283E-03	
11	1.3068469E-02	-3.6767245E-03	
12	1.2337168E-02	-3.6350336E-03	
13	1.1614983E-02	-3.5854258E-03	
14	1.0903576E-02	-3.5271411E-03	
15	1.0204729E-02	-3.4598208E-03	
16	9.5202401E-03	-3.3836192E-03	
17	8.8518477E-03	-3.2989238E-03	
18	8.2012069E-03	-3.2061830E-03	
19	7.5698770E-03	-3.1059052E-03	
20	6.9593094E-03	-2.9986592E-03	
21	6.3708360E-03	-2.8850736E-03	
22	5.8056539E-03	-2.7658362E-03	
23	5.2648264E-03	-2.6416818E-03	
24	4.7492606E-03	-2.5133746E-03	
25	4.2597031E-03	-2.3817080E-03	
26	3.7967463E-03	-2.2475078E-03	
27	3.3608119E-03	-2.1116292E-03	
28	2.9521475E-03	-1.9749578E-03	
29	2.5708224E-03	-1.8384099E-03	
30	2.2167133E-03	-1.7029180E-03	
31	1.8895234E-03	-1.5693765E-03	
32	1.5887792E-03	-1.4385884E-03	
33	1.3138563E-03	-1.3112767E-03	
34	1.0639946E-03	-1.1880915E-03	
35	8.3830706E-04	-1.0696152E-03	
36	6.3579964E-04	-9.5637267E-04	
37	4.5537804E-04	-8.4882941E-04	
38	2.9586295E-04	-7.4736001E-04	
39	1.5601234E-04	-6.5222626E-04	
40	3.4540072E-05	-5.635882E-04	
41	-6.9861057E-05	-4.8151944E-04	
42	-1.5850456E-04	-4.0600286E-04	
43	-2.3269278E-04	-3.3694493E-04	
44	-2.9370239E-04	-2.7418497E-04	
45	-3.4277219E-04	-2.1750984E-04	
46	-3.8109480E-04	-1.6666553E-04	
47	-4.0980818E-04	-1.2136800E-04	
48	-4.2999127E-04	-8.1309560E-05	
49	-4.4265966E-04	-4.6165910E-05	
50	-4.4876295E-04	-1.5602380E-05	
51	-4.4918328E-04	1.0720559E-05	
52	-4.4473487E-04	3.3141303E-05	
53	-4.3616462E-04	5.1994182E-05	
54	-4.2415298E-04	6.7606574E-05	
55	-4.0931667E-04	8.0295239E-05	
56	-3.9220940E-04	9.0366166E-05	
57	-3.7332524E-04	9.8111656E-05	
58	-3.5310229E-04	1.0380919E-04	
59	-3.3192158E-04	1.0772156E-04	
60	-3.1011629E-04	1.1009454E-04	
61	-2.8797108E-04	1.1115771E-04	
62	-2.6572633E-04	1.1112398E-04	
63	-2.4358153E-04	1.1018959E-04	
64	-2.2169856E-04	1.0853421E-04	
65	-2.0020501E-04	1.0632136E-04	
66	-1.7919733E-04	1.0369884E-04	
67	-1.5874395E-04	1.0079920E-04	
68	-1.3888828E-04	9.7740123E-05	
69	-1.1965164E-04	9.4624943E-05	
70	-1.0103608E-04	9.1543075E-05	
71	-8.3027124E-05	8.8570509E-05	
72	-6.5596387E-05	8.5770317E-05	
73	-4.8704130E-05	8.3193135E-05	
74	-3.2301692E-05	8.0877572E-05	

75	-1.6333842E-05	7.8850890E-05
76	-7.4096257E-07	7.7129805E-05
77	1.4538874E-05	7.5720640E-05
78	2.9567744E-05	7.4618241E-05
79	4.4405475E-05	7.3805400E-05
80	5.9107303E-05	7.3253541E-05
81	7.3721651E-05	7.2923076E-05
82	8.8287941E-05	7.2763717E-05
83	1.0283450E-04	7.2714790E-05
84	1.1010654E-04	7.2712247E-05

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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 84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.000	-2.0626E-02	0.000	0.000	0.000	0.000	ACTIVE	0.000	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
2 D	0.000	-1.9862E-02	4.557	0.000	4.557	12.22	ACTIVE	0.000	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
3 D	0.000	-1.9099E-02	10.91	0.000	10.91	19.97	ACTIVE	0.000	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
4 D	0.000	-1.8336E-02	17.92	0.000	17.92	24.17	ACTIVE	0.000	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
5 D	0.000	-1.7575E-02	26.34	0.000	26.34	26.78	ACTIVE	0.000	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
6 D	0.000	-1.6815E-02	34.34	0.000	34.34	28.81	ACTIVE	0.000	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
7 D	0.000	-1.6057E-02	41.20	0.000	41.20	30.70	ACTIVE	0.000	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
8 D	0.000	-1.5303E-02	47.35	0.000	47.35	32.62	ACTIVE	0.000	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
9 D	0.000	-1.4553E-02	53.02	0.000	53.02	34.66	ACTIVE	0.000	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
10 D	0.000	-1.3807E-02	58.37	0.000	58.37	36.83	ACTIVE	0.000	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
11 D	0.000	-1.3068E-02	63.22	0.000	63.22	39.14	ACTIVE	0.000	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
12 D	0.000	-1.2337E-02	68.17	0.000	68.17	41.57	ACTIVE	0.000	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
13 D	0.000	-1.1615E-02	72.97	0.000	72.97	44.12	ACTIVE	0.000	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
14 D	1.572	-1.0904E-02	76.88	7.859	76.88	39.75	ACTIVE	0.000	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	BNA2_(2)_335_337_L_0						
15 D	1.826	-1.0205E-02	79.69	9.128	79.69	41.95	ACTIVE	0.000	-2.300	0.000	
1.000	1.000	9.128	0.000	0.000	BNA2_(2)_335_337_L_0						
16 D	2.089	-9.5202E-03	82.61	10.45	82.61	44.22	ACTIVE	0.000	-2.500	0.000	
1.000	1.000	10.45	0.000	0.000	BNA2_(2)_335_337_L_0						
17 D	2.362	-8.8518E-03	85.63	11.81	85.63	46.56	ACTIVE	0.000	-2.700	0.000	
1.000	1.000	11.81	0.000	0.000	BNA2_(2)_335_337_L_0						
18 D	2.643	-8.2012E-03	88.73	13.21	88.73	48.95	ACTIVE	0.000	-2.900	0.000	
1.000	1.000	13.21	0.000	0.000	BNA2_(2)_335_337_L_0						
19 D	2.930	-7.5699E-03	91.90	14.65	91.90	51.39	ACTIVE	0.000	-3.100	0.000	
1.000	1.000	14.65	0.000	0.000	BNA2_(2)_335_337_L_0						
20 D	3.223	-6.9593E-03	95.14	16.11	95.14	53.86	ACTIVE	0.000	-3.300	0.000	
1.000	1.000	16.11	0.000	0.000	BNA2_(2)_335_337_L_0						
21 D	3.521	-6.3708E-03	98.44	17.60	98.44	56.37	ACTIVE	0.000	-3.500	0.000	
1.000	1.000	17.60	0.000	0.000	BNA2_(2)_335_337_L_0						
22 D	4.043	-5.8057E-03	99.79	18.21	99.79	57.66	ACTIVE	0.000	-3.700	2.000	
1.000	1.000	20.21	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	4.569	-5.2648E-03	101.2	18.85	101.2	58.97	ACTIVE	0.000	-3.900	4.000	
1.000	1.000	22.85	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	5.099	-4.7493E-03	102.6	20.85	102.6	60.30	ACTIVE	0.000	-4.100	6.000	
1.000	1.000	25.50	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	5.633	-4.2597E-03	104.1	20.16	104.1	61.64	ACTIVE	0.000	-4.300	8.000	
1.000	1.000	28.16	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	6.169	-3.7967E-03	105.6	20.85	105.6	63.00	ACTIVE	0.000	-4.500	10.00	
1.000	1.000	30.85	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	6.709	-3.3608E-03	107.2	21.54	107.2	64.37	ACTIVE	0.000	-4.700	12.00	
1.000	1.000	33.54	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	7.251	-2.9521E-03	108.7	22.25	108.7	66.68	ACTIVE	0.000	-4.900	14.00	
1.000	1.000	36.25	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	7.795	-2.5708E-03	110.3	22.98	110.3	69.85	ACTIVE	0.000	-5.100	16.00	
1.000	1.000	38.98	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	8.342	-2.2167E-03	111.9	23.71	111.9	72.69	ACTIVE	0.000	-5.300	18.00	
1.000	1.000	41.71	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	8.890	-1.8895E-03	113.6	24.45	113.6	75.26	ACTIVE	0.000	-5.500	20.00	
1.000	1.000	44.45	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	9.441	-1.5888E-03	115.3	25.20	115.3	77.56	ACTIVE	0.000	-5.700	22.00	
1.000	1.000	47.20	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	9.993	-1.3139E-03	116.9	25.96	116.9	79.63	ACTIVE	0.000	-5.900	24.00	
1.000	1.000	49.96	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	10.55	-1.0640E-03	118.6	26.73	118.6	81.51	ACTIVE	0.000	-6.100	26.00
1.000	1.000	52.73	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	11.10	-8.3831E-04	120.4	27.51	120.4	83.43	ACTIVE	0.000	-6.300	28.00
1.000	1.000	55.51	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	12.06	-6.3580E-04	122.1	30.29	122.1	86.17	UL-RL	7.3345E+04	-6.500	30.00
1.000	1.000	60.29	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	15.09	-4.5538E-04	123.8	43.46	123.8	90.39	UL-RL	7.3345E+04	-6.700	32.00
1.000	1.000	75.46	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	17.87	-2.9586E-04	125.6	55.33	125.6	94.05	UL-RL	7.3345E+04	-6.900	34.00
1.000	1.000	89.33	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	20.39	-1.5601E-04	127.4	65.96	127.4	97.20	UL-RL	7.3345E+04	-7.100	36.00
1.000	1.000	102.0	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	22.69	-3.4540E-05	129.1	75.43	129.1	99.91	UL-RL	7.3345E+04	-7.300	38.00
1.000	1.000	113.4	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	24.76	6.9861E-05	130.9	83.81	130.9	102.2	UL-RL	7.3345E+04	-7.500	40.00
1.000	1.000	123.8	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	26.64	1.5850E-04	132.8	91.20	132.8	104.2	UL-RL	7.3345E+04	-7.700	42.00
1.000	1.000	133.2	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	28.33	2.3269E-04	134.6	97.66	134.6	105.9	UL-RL	7.3345E+04	-7.900	44.00
1.000	1.000	141.7	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	29.71	2.9370E-04	136.4	102.5	136.4	108.5	UL-RL	7.3345E+04	-8.100	46.00
1.000	1.000	148.5	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	30.92	3.4277E-04	138.2	106.6	138.2	111.0	UL-RL	7.3345E+04	-8.300	48.00
1.000	1.000	154.6	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	32.02	3.8109E-04	140.1	110.1	140.1	113.1	UL-RL	7.3345E+04	-8.500	50.00
1.000	1.000	160.1	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	33.01	4.0981E-04	141.9	113.1	141.9	114.9	UL-RL	7.3345E+04	-8.700	52.00
1.000	1.000	165.1	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	33.92	4.2999E-04	143.8	115.6	143.8	116.4	UL-RL	7.3345E+04	-8.900	54.00
1.000	1.000	169.6	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	34.71	4.4266E-04	145.7	117.5	145.7	117.9	UL-RL	7.3345E+04	-9.100	56.00
1.000	1.000	173.5	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	35.42	4.4876E-04	147.5	119.1	147.5	119.3	UL-RL	7.3345E+04	-9.300	58.00
1.000	1.000	177.1	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	36.07	4.4918E-04	149.4	120.4	149.4	120.5	UL-RL	7.3345E+04	-9.500	60.00
1.000	1.000	180.4	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	36.68	4.4473E-04	151.3	121.4	151.3	121.4	UL-RL	7.3345E+04	-9.700	62.00
1.000	1.000	183.4	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	37.25	4.3616E-04	153.2	122.2	153.2	122.2	V-C	4.5841E+04	-9.900	64.00
1.000	1.000	186.2	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	37.79	4.2415E-04	155.1	122.9	155.1	122.9	V-C	4.5841E+04	-10.10	66.00
1.000	1.000	188.9	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	38.30	4.0932E-04	157.0	123.5	157.0	123.5	V-C	4.5841E+04	-10.30	68.00
1.000	1.000	191.5	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	38.79	3.9221E-04	158.9	124.0	158.9	124.0	V-C	4.5841E+04	-10.50	70.00
1.000	1.000	194.0	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	39.27	3.7333E-04	160.8	124.4	160.8	124.4	V-C	4.5841E+04	-10.70	72.00
1.000	1.000	196.4	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	39.74	3.5310E-04	162.7	124.7	162.7	124.7	V-C	4.5841E+04	-10.90	74.00
1.000	1.000	198.7	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	40.20	3.3192E-04	164.7	125.0	164.7	125.0	V-C	4.5841E+04	-11.10	76.00
1.000	1.000	201.0	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	40.66	3.1012E-04	166.6	125.3	166.6	125.3	V-C	4.5841E+04	-11.30	78.00
1.000	1.000	203.3	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	41.12	2.8797E-04	168.5	125.6	168.5	125.6	V-C	4.5841E+04	-11.50	80.00
1.000	1.000	205.6	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	41.58	2.6573E-04	170.5	125.9	170.5	125.9	V-C	4.5841E+04	-11.70	82.00
1.000	1.000	207.9	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	42.03	2.4358E-04	172.4	126.2	172.4	126.2	V-C	4.5841E+04	-11.90	84.00
1.000	1.000	210.2	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	42.50	2.2170E-04	174.4	126.5	174.4	126.5	V-C	4.5841E+04	-12.10	86.00
1.000	1.000	212.5	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	42.96	2.0021E-04	176.3	126.8	176.3	126.8	V-C	4.5841E+04	-12.30	88.00
1.000	1.000	214.8	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	43.44	1.7920E-04	178.3	127.2	178.3	127.2	V-C	4.5841E+04	-12.50	90.00
1.000	1.000	217.2	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	43.92	1.5874E-04	180.2	127.6	180.2	127.6	V-C	4.5841E+04	-12.70	92.00
1.000	1.000	219.6	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	44.40	1.3889E-04	182.2	128.0	182.2	128.0	V-C	4.5841E+04	-12.90	94.00
1.000	1.000	222.0	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	44.89	1.1965E-04	184.2	128.5	184.2	128.5	V-C	4.5841E+04	-13.10	96.00
1.000	1.000	224.5	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	45.39	1.0104E-04	186.1	129.0	186.1	129.0	V-C	4.5841E+04	-13.30	98.00
1.000	1.000	227.0	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	45.89	8.3027E-05	188.1	129.5	188.1	129.5	V-C	4.5841E+04	-13.50	100.0
1.000	1.000	229.5	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	46.40	6.5596E-05	190.1	130.0	190.1	130.0	V-C	4.5841E+04	-13.70	102.0
1.000	1.000	232.0	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	46.92	4.8704E-05	192.1	130.6	192.1	130.6	V-C	4.5841E+04	-13.90	104.0
1.000	1.000	234.6	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	47.44	3.2302E-05	194.0	131.2	194.0	131.2	V-C	4.5841E+04	-14.10	106.0
1.000	1.000	237.2	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	47.96	1.6334E-05	196.0	131.8	196.0	131.8	V-C	4.5841E+04	-14.30	108.0
1.000	1.000	239.8	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	48.46	7.4096E-07	198.0	132.3	198.0	132.6	UL-RL	7.3345E+04	-14.50	110.0
1.000	1.000	242.3	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	48.91	-1.4539E-05	200.0	132.5	200.0	133.9	UL-RL	7.3345E+04	-14.70	112.0
1.000	1.000	244.5	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	49.36	-2.9568E-05	202.0	132.8	202.0	135.3	UL-RL	7.3345E+04	-14.90	114.0
1.000	1.000	246.8	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	49.81	-4.4405E-05	204.0	133.0	204.0	136.6	UL-RL	7.3345E+04	-15.10	116.0
1.000	1.000	249.0	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	50.26	-5.9107E-05	206.0	133.3	206.0	137.9	UL-RL	7.3345E+04	-15.30	118.0
1.000	1.000	251.3	0.000	0.000	BNA2_(2)_335_337_L_0					
81 D	50.71	-7.3722E-05	208.0	133.5	208.0	139.3	UL-RL	7.3345E+04	-15.50	120.0
1.000	1.000	253.5	0.000	0.000	BNA2_(2)_335_337_L_0					
82 D	51.16	-8.8288E-05	210.0	133.8	210.0	140.6	UL-RL	7.3345E+04	-15.70	122.0
1.000	1.000	255.8	0.000	0.000	BNA2_(2)_335_337_L_0					
83 D	38.71	-1.0283E-04	212.0	134.1	212.0	141.9	UL-RL	7.3345E+04	-15.90	124.0
1.000	1.000	258.1	0.000	0.000	BNA2_(2)_335_337_L_0					
84 D	12.96	-1.1011E-04	213.0	134.2	213.0	142.6	UL-RL	7.3345E+04	-16.00	125.0
1.000	1.000	259.2	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| Exe Time :25 June 2020 16:43:57
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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

O\_R :  
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
15 D	13.32	1.0205E-02	0.000	66.62	56.00	125.0	PASSIVE	0.000	-2.300	0.000	
1.000	1.000	66.62	0.000	0.000	BNA2_(2)_335_337_L_0						
16 D	15.54	9.5202E-03	4.000	77.72	60.00	117.9	PASSIVE	0.000	-2.500	0.000	
1.000	1.000	77.72	0.000	0.000	BNA2_(2)_335_337_L_0						
17 D	17.76	8.8518E-03	8.000	88.81	64.00	111.4	PASSIVE	0.000	-2.700	0.000	
1.000	1.000	88.81	0.000	0.000	BNA2_(2)_335_337_L_0						
18 D	19.98	8.2012E-03	12.00	99.91	68.00	105.4	PASSIVE	0.000	-2.900	0.000	
1.000	1.000	99.91	0.000	0.000	BNA2_(2)_335_337_L_0						
19 D	22.20	7.5699E-03	16.00	111.0	72.00	111.0	PASSIVE	0.000	-3.100	0.000	
1.000	1.000	111.0	0.000	0.000	BNA2_(2)_335_337_L_0						
20 D	24.42	6.9593E-03	20.00	122.1	76.00	122.1	PASSIVE	0.000	-3.300	0.000	
1.000	1.000	122.1	0.000	0.000	BNA2_(2)_335_337_L_0						
21 D	26.64	6.3708E-03	24.00	133.2	80.00	133.2	PASSIVE	0.000	-3.500	0.000	
1.000	1.000	133.2	0.000	0.000	BNA2_(2)_335_337_L_0						
22 D	28.15	5.8057E-03	26.00	138.7	82.00	138.7	PASSIVE	0.000	-3.700	2.000	
1.000	1.000	140.7	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	29.66	5.2648E-03	28.00	144.3	84.00	144.3	PASSIVE	0.000	-3.900	4.000	
1.000	1.000	148.3	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	31.17	4.7493E-03	30.00	149.8	86.00	149.8	PASSIVE	0.000	-4.100	6.000	
1.000	1.000	155.8	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	32.68	4.2597E-03	32.00	155.4	88.00	155.4	PASSIVE	0.000	-4.300	8.000	
1.000	1.000	163.4	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	34.19	3.7967E-03	34.00	160.9	90.00	160.9	PASSIVE	0.000	-4.500	10.00	
1.000	1.000	170.9	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	35.70	3.3608E-03	36.00	166.5	92.00	166.5	PASSIVE	0.000	-4.700	12.00	
1.000	1.000	178.5	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	37.21	2.9521E-03	38.00	172.0	94.00	172.0	PASSIVE	0.000	-4.900	14.00	
1.000	1.000	186.0	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	38.00	2.5708E-03	40.00	174.0	96.00	174.0	V-C	4.1398E+04	-5.100	16.00	
1.000	1.000	190.0	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	35.57	2.2167E-03	42.00	159.9	98.00	159.9	V-C	4.1398E+04	-5.300	18.00	
1.000	1.000	177.9	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	33.40	1.8895E-03	44.00	147.0	100.0	147.0	V-C	4.1398E+04	-5.500	20.00	
1.000	1.000	167.0	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	31.47	1.5888E-03	46.00	135.4	102.0	135.4	V-C	4.1398E+04	-5.700	22.00	
1.000	1.000	157.4	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	29.78	1.3139E-03	48.00	124.9	104.0	124.9	V-C	4.1398E+04	-5.900	24.00	
1.000	1.000	148.9	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	28.32	1.0640E-03	50.00	115.6	106.0	115.6	V-C	4.1398E+04	-6.100	26.00
1.000	1.000	141.6	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	27.08	8.3831E-04	52.00	107.4	108.0	107.4	V-C	4.1398E+04	-6.300	28.00
1.000	1.000	135.4	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	26.05	6.3580E-04	54.00	100.2	110.0	100.2	V-C	4.1398E+04	-6.500	30.00
1.000	1.000	130.2	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	25.22	4.5538E-04	56.00	94.08	112.0	94.08	V-C	4.1398E+04	-6.700	32.00
1.000	1.000	126.1	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	24.57	2.9586E-04	58.00	88.84	114.0	88.84	V-C	4.1398E+04	-6.900	34.00
1.000	1.000	122.8	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	24.09	1.5601E-04	60.00	84.47	116.0	84.47	V-C	4.1398E+04	-7.100	36.00
1.000	1.000	120.5	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	23.57	3.4540E-05	62.00	79.85	118.0	82.66	UL-RL	6.6237E+04	-7.300	38.00
1.000	1.000	117.8	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	22.90	-6.9861E-05	64.00	74.49	120.0	84.08	UL-RL	6.6237E+04	-7.500	40.00
1.000	1.000	114.5	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	22.44	-1.5850E-04	66.00	70.21	122.0	85.50	UL-RL	6.6237E+04	-7.700	42.00
1.000	1.000	112.2	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	22.19	-2.3269E-04	68.00	66.94	124.0	86.91	UL-RL	6.6237E+04	-7.900	44.00
1.000	1.000	110.9	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	22.11	-2.9370E-04	70.00	64.56	126.0	88.33	UL-RL	6.6237E+04	-8.100	46.00
1.000	1.000	110.6	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	22.20	-3.4277E-04	72.00	63.00	128.0	89.74	UL-RL	6.6237E+04	-8.300	48.00
1.000	1.000	111.0	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	22.43	-3.8109E-04	74.00	62.15	130.0	91.15	UL-RL	6.6237E+04	-8.500	50.00
1.000	1.000	112.2	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	22.79	-4.0981E-04	76.00	61.95	132.0	92.57	UL-RL	6.6237E+04	-8.700	52.00
1.000	1.000	114.0	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	23.26	-4.2999E-04	78.00	62.32	134.0	93.98	UL-RL	6.6237E+04	-8.900	54.00
1.000	1.000	116.3	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	23.84	-4.4266E-04	80.00	63.18	136.0	95.38	UL-RL	6.6237E+04	-9.100	56.00
1.000	1.000	119.2	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	24.49	-4.4876E-04	82.00	64.47	138.0	96.79	UL-RL	6.6237E+04	-9.300	58.00
1.000	1.000	122.5	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	25.22	-4.4918E-04	84.00	66.12	140.0	98.20	UL-RL	6.6237E+04	-9.500	60.00
1.000	1.000	126.1	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	26.02	-4.4473E-04	86.00	68.08	142.0	99.60	UL-RL	6.6237E+04	-9.700	62.00
1.000	1.000	130.1	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	26.86	-4.3616E-04	88.00	70.30	144.0	101.0	UL-RL	6.6237E+04	-9.900	64.00
1.000	1.000	134.3	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	27.75	-4.2415E-04	90.00	72.73	146.0	102.4	UL-RL	6.6237E+04	-10.10	66.00
1.000	1.000	138.7	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	28.66	-4.0932E-04	92.00	75.32	148.0	103.8	UL-RL	6.6237E+04	-10.30	68.00
1.000	1.000	143.3	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	29.61	-3.9221E-04	94.00	78.05	150.0	105.2	UL-RL	6.6237E+04	-10.50	70.00
1.000	1.000	148.1	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	30.58	-3.7333E-04	96.00	80.88	152.0	106.6	UL-RL	6.6237E+04	-10.70	72.00
1.000	1.000	152.9	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	31.56	-3.5310E-04	98.00	83.78	154.0	108.0	UL-RL	6.6237E+04	-10.90	74.00
1.000	1.000	157.8	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	32.55	-3.3192E-04	100.00	86.73	156.0	109.4	UL-RL	6.6237E+04	-11.10	76.00
1.000	1.000	162.7	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	33.54	-3.1012E-04	102.0	89.70	158.0	110.7	UL-RL	6.6237E+04	-11.30	78.00
1.000	1.000	167.7	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	34.53	-2.8797E-04	104.0	92.67	160.0	112.1	UL-RL	6.6237E+04	-11.50	80.00
1.000	1.000	172.7	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	35.53	-2.6573E-04	106.0	95.63	162.0	113.5	UL-RL	6.6237E+04	-11.70	82.00
1.000	1.000	177.6	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	36.52	-2.4358E-04	108.0	98.58	164.0	114.9	UL-RL	6.6237E+04	-11.90	84.00
1.000	1.000	182.6	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	37.49	-2.2170E-04	110.0	101.5	166.0	116.3	UL-RL	6.6237E+04	-12.10	86.00
1.000	1.000	187.5	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	38.46	-2.0021E-04	112.0	104.3	168.0	117.8	UL-RL	6.6237E+04	-12.30	88.00
1.000	1.000	192.3	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	39.41	-1.7920E-04	114.0	107.1	170.0	119.2	UL-RL	6.6237E+04	-12.50	90.00
1.000	1.000	197.1	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	40.36	-1.5874E-04	116.0	109.8	172.0	120.6	UL-RL	6.6237E+04	-12.70	92.00
1.000	1.000	201.8	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	41.30	-1.3889E-04	118.0	112.5	174.0	122.0	UL-RL	6.6237E+04	-12.90	94.00
1.000	1.000	206.5	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	42.24	-1.1965E-04	120.0	115.2	176.0	123.4	UL-RL	6.6237E+04	-13.10	96.00
1.000	1.000	211.2	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	43.16	-1.0104E-04	122.0	117.8	178.0	124.8	UL-RL	6.6237E+04	-13.30	98.00
1.000	1.000	215.8	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	44.07	-8.3027E-05	124.0	120.3	180.0	126.2	UL-RL	6.6237E+04	-13.50	100.0
1.000	1.000	220.3	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	44.97	-6.5596E-05	126.0	122.8	182.0	127.5	UL-RL	6.6237E+04	-13.70	102.0
1.000	1.000	224.8	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	45.86	-4.8704E-05	128.0	125.3	184.0	128.9	UL-RL	6.6237E+04	-13.90	104.0
1.000	1.000	229.3	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	46.73	-3.2302E-05	130.0	127.7	186.0	130.4	UL-RL	6.6237E+04	-14.10	106.0
1.000	1.000	233.7	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	47.58	-1.6334E-05	132.0	129.9	188.0	132.0	UL-RL	6.6237E+04	-14.30	108.0
1.000	1.000	237.9	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	48.43	-7.4096E-07	134.0	132.2	190.0	133.6	UL-RL	6.6237E+04	-14.50	110.0
1.000	1.000	242.2	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	49.27	1.4539E-05	136.0	134.4	192.0	135.2	UL-RL	6.6237E+04	-14.70	112.0
1.000	1.000	246.4	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	50.10	2.9568E-05	138.0	136.5	194.0	136.9	UL-RL	6.6237E+04	-14.90	114.0
1.000	1.000	250.5	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	50.90	4.4405E-05	140.0	138.5	196.0	138.7	UL-RL	6.6237E+04	-15.10	116.0
1.000	1.000	254.5	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	51.70	5.9107E-05	142.0	140.5	198.0	140.6	UL-RL	6.6237E+04	-15.30	118.0
1.000	1.000		258.5	0.000	0.000	BNA2_(2)_335_337_L_0				
81 D	52.49	7.3722E-05	144.0	142.5	200.0	142.5	UL-RL	6.6237E+04	-15.50	120.0
1.000	1.000		262.5	0.000	0.000	BNA2_(2)_335_337_L_0				
82 D	53.28	8.8288E-05	146.0	144.4	202.0	144.4	UL-RL	6.6237E+04	-15.70	122.0
1.000	1.000		266.4	0.000	0.000	BNA2_(2)_335_337_L_0				
83 D	40.55	1.0283E-04	148.0	146.3	204.0	146.3	V-C	4.1398E+04	-15.90	124.0
1.000	1.000		270.3	0.000	0.000	BNA2_(2)_335_337_L_0				
84 D	13.62	1.1011E-04	149.0	147.3	205.0	147.3	V-C	4.1398E+04	-16.00	125.0
1.000	1.000		272.3	0.000	0.000	BNA2_(2)_335_337_L_0				

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:43:57
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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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 83  
C U R R E N T   T I M E   I S      2.0000

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	46.542	-46.542	8.04761E-11	9.3084
2	59.476	-59.476	-9.3084	21.204
3	73.859	-73.859	-21.204	35.975
4	89.692	-89.692	-35.975	53.914
5	106.97	-106.97	-53.914	75.309
6	125.71	-125.71	-75.309	100.45
7	145.89	-145.89	-100.45	129.63
8	167.52	-167.52	-129.63	163.13
9	190.60	-190.60	-163.13	201.25
10	215.13	-215.13	-201.25	244.28
11	241.11	-241.11	-244.28	292.50
12	268.54	-268.54	-292.50	346.21
13	290.05	-290.05	-346.21	404.22
14	291.62	-291.62	-404.22	462.54
15	280.12	-280.12	-462.54	518.57
16	266.67	-266.67	-518.57	571.90
17	251.27	-251.27	-571.90	622.16
18	233.93	-233.93	-622.16	668.94
19	214.66	-214.66	-668.94	711.87
20	193.46	-193.46	-711.87	750.56
21	170.34	-170.34	-750.56	784.63
22	146.24	-146.24	-784.63	813.88
23	121.15	-121.15	-813.88	838.11
24	95.077	-95.077	-838.11	857.12
25	68.032	-68.032	-857.12	870.73
26	40.013	-40.013	-870.73	878.73
27	11.025	-11.025	-878.73	880.94
28	-18.931	18.931	-880.94	877.15
29	-49.140	49.140	-877.15	867.32
30	-76.373	76.373	-867.32	852.05
31	-100.88	100.88	-852.05	831.87
32	-122.91	122.91	-831.87	807.29
33	-142.70	142.70	-807.29	778.75
34	-160.48	160.48	-778.75	746.66
35	-176.45	176.45	-746.66	711.37
36	-190.44	190.44	-711.37	673.28
37	-200.57	200.57	-673.28	633.16
38	-207.27	207.27	-633.16	591.71
39	-210.97	210.97	-591.71	549.52
40	-211.85	211.85	-549.52	507.14
41	-209.99	209.99	-507.14	465.15
42	-205.79	205.79	-465.15	423.99
43	-199.65	199.65	-423.99	384.06
44	-192.05	192.05	-384.06	345.65
45	-183.33	183.33	-345.65	308.98
46	-173.75	173.75	-308.98	274.23
47	-163.52	163.52	-274.23	241.53
48	-152.87	152.87	-241.53	210.95
49	-141.97	141.97	-210.95	182.56
50	-131.03	131.03	-182.56	156.35
51	-120.18	120.18	-156.35	132.32
52	-109.51	109.51	-132.32	110.42
53	-99.119	99.119	-110.42	90.592
54	-89.077	89.077	-90.592	72.777
55	-79.442	79.442	-72.777	56.888
56	-70.260	70.260	-56.888	42.836
57	-61.564	61.564	-42.836	30.524
58	-53.379	53.379	-30.524	19.848
59	-45.721	45.721	-19.848	10.704
60	-38.599	38.599	-10.704	2.9844
61	-32.015	32.015	-2.9844	-3.4186
62	-25.967	25.967	3.4186	-8.6119
63	-20.447	20.447	8.6119	-12.701
64	-15.441	15.441	12.701	-15.790
65	-10.932	10.932	15.790	-17.976
66	-6.9083	6.9083	17.976	-19.358
67	-3.3550	3.3550	19.358	-20.029
68	-0.25690	0.25690	20.029	-20.080
69	2.4013	-2.4013	20.080	-19.600
70	4.6351	-4.6351	19.600	-18.673

71	6.4617	-6.4617	18.673	-17.380
72	7.8948	-7.8948	17.380	-15.801
73	8.9472	-8.9472	15.801	-14.012
74	9.6498	-9.6498	14.012	-12.082
75	10.023	-10.023	12.082	-10.077
76	10.057	-10.057	10.077	-8.0660
77	9.6914	-9.6914	8.0660	-6.1277
78	8.9492	-8.9492	6.1277	-4.3378
79	7.8518	-7.8518	4.3378	-2.7675
80	6.4006	-6.4006	2.7675	-1.4873
81	4.6145	-4.6145	1.4873	-0.56444
82	2.4947	-2.4947	0.56444	-6.54978E-02
83	0.65491	-0.65491	6.54978E-02	-1.21880E-12

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:43:57 |  
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New Project
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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\_341 :  
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
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\*\*\*\*\* NO ONE ELEMENT ACTIVE AT CURRENT STEP \*\*\*\*\*



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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:43:57
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New Project  
SOLUTION REACHED USING 3 ITERATIONS ON 40

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

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

	Y-DISPL. F (02)	X-ROT. F (04)	(
1	1.9054845E-02	-3.4848763E-03	
2	1.8357919E-02	-3.4841366E-03	
3	1.7661306E-02	-3.4816703E-03	
4	1.6965401E-02	-3.4769578E-03	
5	1.6270710E-02	-3.4694340E-03	
6	1.5577855E-02	-3.4584933E-03	
7	1.4887584E-02	-3.4434897E-03	
8	1.4200776E-02	-3.4237368E-03	
9	1.3518454E-02	-3.3985075E-03	
10	1.2841789E-02	-3.3670345E-03	
11	1.2171981E-02	-3.3304518E-03	
12	1.1509876E-02	-3.2898530E-03	
13	1.0856367E-02	-3.2443497E-03	
14	1.0212518E-02	-3.1931276E-03	
15	9.5795316E-03	-3.1356669E-03	
16	8.9586827E-03	-3.0717301E-03	
17	8.3512782E-03	-3.0012141E-03	
18	7.7586357E-03	-2.9241175E-03	
19	7.1820631E-03	-2.8405421E-03	
20	6.6228369E-03	-2.7506965E-03	
21	6.0821815E-03	-2.6548953E-03	
22	5.5612454E-03	-2.5535552E-03	
23	5.0610925E-03	-2.4471798E-03	
24	4.5826736E-03	-2.3363389E-03	
25	4.1268149E-03	-2.2216655E-03	
26	3.6942165E-03	-2.1038553E-03	
27	3.2854316E-03	-1.9836617E-03	
28	2.9008569E-03	-1.8618929E-03	
29	2.5407238E-03	-1.7394103E-03	
30	2.2050807E-03	-1.6171113E-03	
31	1.8938070E-03	-1.4958721E-03	
32	1.6066080E-03	-1.3764911E-03	
33	1.3430382E-03	-1.2596942E-03	
34	1.1025154E-03	-1.1461377E-03	
35	8.8432898E-04	-1.0364125E-03	
36	6.8765932E-04	-9.3105436E-04	
37	5.1158380E-04	-8.3054771E-04	
38	3.5508964E-04	-7.3529999E-04	
39	2.1709369E-04	-6.4561411E-04	
40	9.6460331E-05	-5.6169370E-04	
41	-7.9760715E-06	-4.8365756E-04	
42	-9.7397443E-05	-4.1154267E-04	
43	-1.7298516E-04	-3.4530816E-04	
44	-2.3590552E-04	-2.8484579E-04	
45	-2.8729723E-04	-2.2999333E-04	
46	-3.2826292E-04	-1.8054593E-04	
47	-3.5986013E-04	-1.3626649E-04	
48	-3.8309651E-04	-9.6891911E-05	
49	-3.9892506E-04	-6.2139874E-05	
50	-4.0824092E-04	-3.1715420E-05	
51	-4.1187953E-04	-5.3162264E-06	
52	-4.1061548E-04	1.7361952E-05	
53	-4.0516260E-04	3.6622307E-05	
54	-3.9617428E-04	5.2763962E-05	
55	-3.8424535E-04	6.6078078E-05	
56	-3.6991268E-04	7.6847648E-05	
57	-3.5365781E-04	8.5344432E-05	
58	-3.3591005E-04	9.1827674E-05	
59	-3.1704540E-04	9.6544262E-05	
60	-2.9739466E-04	9.9726019E-05	
61	-2.7724280E-04	1.0159057E-04	
62	-2.5683273E-04	1.0234065E-04	
63	-2.3636833E-04	1.0216397E-04	
64	-2.1601741E-04	1.0123325E-04	
65	-1.9591477E-04	9.9706396E-05	
66	-1.7616503E-04	9.7726890E-05	
67	-1.5684557E-04	9.5424098E-05	
68	-1.3800924E-04	9.2913584E-05	
69	-1.1968717E-04	9.0297464E-05	
70	-1.0189136E-04	8.7664786E-05	
71	-8.4617276E-05	8.5091851E-05	
72	-6.7846376E-05	8.2642583E-05	
73	-5.1548533E-05	8.0368954E-05	
74	-3.5684393E-05	7.8311347E-05	

75	-2.0207631E-05	7.6499193E-05
76	-5.0670691E-06	7.4951734E-05
77	9.7913401E-06	7.3678437E-05
78	2.4422496E-05	7.2678000E-05
79	3.8879869E-05	7.1937504E-05
80	5.3213231E-05	7.1433001E-05
81	6.7466498E-05	7.1129918E-05
82	8.1675632E-05	7.0983340E-05
83	9.5866598E-05	7.0938229E-05
84	1.0296097E-04	7.0935879E-05

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| Exe Time :25 June 2020 16:43:57
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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

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ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	1.077	-1.9055E-02	0.000	10.77	0.000	10.77	V-C	6857.	0.5000	0.000	
1.000	1.000	10.77	0.000	0.000	FRANA_334_8_L_0						
2 D	2.979	-1.8358E-02	4.557	14.90	4.557	14.90	V-C	6857.	0.3000	0.000	
1.000	1.000	14.90	0.000	0.000	FRANA_334_8_L_0						
3 D	3.154	-1.7661E-02	10.91	15.77	10.91	19.97	UL-RL	1.0971E+04	0.1000	0.000	
1.000	1.000	15.77	0.000	0.000	FRANA_334_8_L_0						
4 D	3.007	-1.6965E-02	17.92	15.04	17.92	24.17	UL-RL	1.0971E+04	-0.1000	0.000	
1.000	1.000	15.04	0.000	0.000	FRANA_334_8_L_0						
5 D	2.861	-1.6271E-02	26.34	14.30	26.34	26.78	UL-RL	1.0971E+04	-0.3000	0.000	
1.000	1.000	14.30	0.000	0.000	FRANA_334_8_L_0						
6 D	2.714	-1.5578E-02	34.34	13.57	34.34	28.81	UL-RL	1.0971E+04	-0.5000	0.000	
1.000	1.000	13.57	0.000	0.000	FRANA_334_8_L_0						
7 D	2.566	-1.4888E-02	41.20	12.83	41.20	30.70	UL-RL	1.0971E+04	-0.7000	0.000	
1.000	1.000	12.83	0.000	0.000	FRANA_334_8_L_0						
8 D	2.418	-1.4201E-02	47.35	12.09	47.35	32.62	UL-RL	1.0971E+04	-0.9000	0.000	
1.000	1.000	12.09	0.000	0.000	FRANA_334_8_L_0						
9 D	2.269	-1.3518E-02	53.02	11.35	53.02	34.66	UL-RL	1.0971E+04	-1.100	0.000	
1.000	1.000	11.35	0.000	0.000	FRANA_334_8_L_0						
10 D	2.119	-1.2842E-02	58.37	10.59	58.37	36.83	UL-RL	1.0971E+04	-1.300	0.000	
1.000	1.000	10.59	0.000	0.000	FRANA_334_8_L_0						
11 D	1.967	-1.2172E-02	63.22	9.835	63.22	39.14	UL-RL	1.0971E+04	-1.500	0.000	
1.000	1.000	9.835	0.000	0.000	FRANA_334_8_L_0						
12 D	1.815	-1.1510E-02	68.17	9.076	68.17	41.57	UL-RL	1.0971E+04	-1.700	0.000	
1.000	1.000	9.076	0.000	0.000	FRANA_334_8_L_0						
13 D	1.665	-1.0856E-02	72.97	8.323	72.97	44.12	UL-RL	1.0971E+04	-1.900	0.000	
1.000	1.000	8.323	0.000	0.000	FRANA_334_8_L_0						
14 D	10.30	-1.0213E-02	76.88	51.50	76.88	51.50	V-C	4.5841E+04	-2.100	0.000	
1.000	1.000	51.50	0.000	0.000	BNA2_(2)_335_337_L_0						
15 D	10.02	-9.5795E-03	79.69	50.10	79.69	50.10	V-C	4.5841E+04	-2.300	0.000	
1.000	1.000	50.10	0.000	0.000	BNA2_(2)_335_337_L_0						
16 D	9.771	-8.9587E-03	82.61	48.86	82.61	48.86	V-C	4.5841E+04	-2.500	0.000	
1.000	1.000	48.86	0.000	0.000	BNA2_(2)_335_337_L_0						
17 D	9.558	-8.3513E-03	85.63	47.79	85.63	47.79	V-C	4.5841E+04	-2.700	0.000	
1.000	1.000	47.79	0.000	0.000	BNA2_(2)_335_337_L_0						
18 D	9.135	-7.7586E-03	88.73	45.67	88.73	48.95	UL-RL	7.3345E+04	-2.900	0.000	
1.000	1.000	45.67	0.000	0.000	BNA2_(2)_335_337_L_0						
19 D	8.618	-7.1821E-03	91.90	43.09	91.90	51.39	UL-RL	7.3345E+04	-3.100	0.000	
1.000	1.000	43.09	0.000	0.000	BNA2_(2)_335_337_L_0						
20 D	8.158	-6.6228E-03	95.14	40.79	95.14	53.86	UL-RL	7.3345E+04	-3.300	0.000	
1.000	1.000	40.79	0.000	0.000	BNA2_(2)_335_337_L_0						
21 D	7.755	-6.0822E-03	98.44	38.78	98.44	56.37	UL-RL	7.3345E+04	-3.500	0.000	
1.000	1.000	38.78	0.000	0.000	BNA2_(2)_335_337_L_0						
22 D	7.628	-5.5612E-03	99.79	36.14	99.79	57.66	UL-RL	7.3345E+04	-3.700	2.000	
1.000	1.000	38.14	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	7.558	-5.0611E-03	101.2	33.79	101.2	58.97	UL-RL	7.3345E+04	-3.900	4.000	
1.000	1.000	37.79	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	7.543	-4.5827E-03	102.6	31.71	102.6	60.30	UL-RL	7.3345E+04	-4.100	6.000	
1.000	1.000	37.71	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	7.582	-4.1268E-03	104.1	29.91	104.1	61.64	UL-RL	7.3345E+04	-4.300	8.000	
1.000	1.000	37.91	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	7.673	-3.6942E-03	105.6	28.37	105.6	63.00	UL-RL	7.3345E+04	-4.500	10.00	
1.000	1.000	38.37	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	7.814	-3.2854E-03	107.2	27.07	107.2	64.37	UL-RL	7.3345E+04	-4.700	12.00	
1.000	1.000	39.07	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	8.003	-2.9009E-03	108.7	26.02	108.7	66.68	UL-RL	7.3345E+04	-4.900	14.00	
1.000	1.000	40.02	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	8.237	-2.5407E-03	110.3	25.18	110.3	69.85	UL-RL	7.3345E+04	-5.100	16.00	
1.000	1.000	41.18	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	8.512	-2.2051E-03	111.9	24.56	111.9	72.69	UL-RL	7.3345E+04	-5.300	18.00	
1.000	1.000	42.56	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	8.894	-1.8938E-03	113.6	24.47	113.6	75.26	UL-RL	7.3345E+04	-5.500	20.00	
1.000	1.000	44.47	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	9.441	-1.6066E-03	115.3	25.20	115.3	77.56	ACTIVE	0.000	-5.700	22.00	
1.000	1.000	47.20	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	9.993	-1.3430E-03	116.9	25.96	116.9	79.63	ACTIVE	0.000	-5.900	24.00	
1.000	1.000	49.96	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	10.55	-1.1025E-03	118.6	26.73	118.6	81.51	ACTIVE	0.000	-6.100	26.00
1.000	1.000	52.73	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	11.10	-8.8433E-04	120.4	27.51	120.4	83.43	ACTIVE	0.000	-6.300	28.00
1.000	1.000	55.51	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	11.66	-6.8766E-04	122.1	28.29	122.1	86.17	ACTIVE	0.000	-6.500	30.00
1.000	1.000	58.29	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	14.27	-5.1158E-04	123.8	39.34	123.8	90.39	UL-RL	7.3345E+04	-6.700	32.00
1.000	1.000	71.34	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	17.00	-3.5509E-04	125.6	50.98	125.6	94.05	UL-RL	7.3345E+04	-6.900	34.00
1.000	1.000	84.98	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	19.50	-2.1709E-04	127.4	61.48	127.4	97.20	UL-RL	7.3345E+04	-7.100	36.00
1.000	1.000	97.48	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	21.78	-9.6460E-05	129.1	70.88	129.1	99.91	UL-RL	7.3345E+04	-7.300	38.00
1.000	1.000	108.9	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	23.86	7.9761E-06	130.9	79.28	130.9	102.2	UL-RL	7.3345E+04	-7.500	40.00
1.000	1.000	119.3	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	25.74	9.7397E-05	132.8	86.72	132.8	104.2	UL-RL	7.3345E+04	-7.700	42.00
1.000	1.000	128.7	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	27.46	1.7299E-04	134.6	93.28	134.6	105.9	UL-RL	7.3345E+04	-7.900	44.00
1.000	1.000	137.3	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	28.86	2.3591E-04	136.4	98.30	136.4	108.5	UL-RL	7.3345E+04	-8.100	46.00
1.000	1.000	144.3	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	30.10	2.8730E-04	138.2	102.5	138.2	111.0	UL-RL	7.3345E+04	-8.300	48.00
1.000	1.000	150.5	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	31.24	3.2826E-04	140.1	106.2	140.1	113.1	UL-RL	7.3345E+04	-8.500	50.00
1.000	1.000	156.2	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	32.28	3.5986E-04	141.9	109.4	141.9	114.9	UL-RL	7.3345E+04	-8.700	52.00
1.000	1.000	161.4	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	33.23	3.8310E-04	143.8	112.2	143.8	116.4	UL-RL	7.3345E+04	-8.900	54.00
1.000	1.000	166.2	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	34.07	3.9893E-04	145.7	114.3	145.7	117.9	UL-RL	7.3345E+04	-9.100	56.00
1.000	1.000	170.3	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	34.82	4.0824E-04	147.5	116.1	147.5	119.3	UL-RL	7.3345E+04	-9.300	58.00
1.000	1.000	174.1	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	35.52	4.1188E-04	149.4	117.6	149.4	120.5	UL-RL	7.3345E+04	-9.500	60.00
1.000	1.000	177.6	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	36.18	4.1062E-04	151.3	118.9	151.3	121.4	UL-RL	7.3345E+04	-9.700	62.00
1.000	1.000	180.9	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	36.79	4.0516E-04	153.2	120.0	153.2	122.2	UL-RL	7.3345E+04	-9.900	64.00
1.000	1.000	184.0	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	37.38	3.9617E-04	155.1	120.9	155.1	122.9	UL-RL	7.3345E+04	-10.10	66.00
1.000	1.000	186.9	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	37.93	3.8425E-04	157.0	121.7	157.0	123.5	UL-RL	7.3345E+04	-10.30	68.00
1.000	1.000	189.7	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	38.47	3.6991E-04	158.9	122.3	158.9	124.0	UL-RL	7.3345E+04	-10.50	70.00
1.000	1.000	192.3	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	38.98	3.5366E-04	160.8	122.9	160.8	124.4	UL-RL	7.3345E+04	-10.70	72.00
1.000	1.000	194.9	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	39.49	3.3591E-04	162.7	123.4	162.7	124.7	UL-RL	7.3345E+04	-10.90	74.00
1.000	1.000	197.4	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	39.99	3.1705E-04	164.7	123.9	164.7	125.0	UL-RL	7.3345E+04	-11.10	76.00
1.000	1.000	199.9	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	40.48	2.9739E-04	166.6	124.4	166.6	125.3	UL-RL	7.3345E+04	-11.30	78.00
1.000	1.000	202.4	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	40.96	2.7724E-04	168.5	124.8	168.5	125.6	UL-RL	7.3345E+04	-11.50	80.00
1.000	1.000	204.8	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	41.44	2.5683E-04	170.5	125.2	170.5	125.9	UL-RL	7.3345E+04	-11.70	82.00
1.000	1.000	207.2	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	41.93	2.3637E-04	172.4	125.6	172.4	126.2	UL-RL	7.3345E+04	-11.90	84.00
1.000	1.000	209.6	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	42.41	2.1602E-04	174.4	126.1	174.4	126.5	UL-RL	7.3345E+04	-12.10	86.00
1.000	1.000	212.1	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	42.90	1.9591E-04	176.3	126.5	176.3	126.8	UL-RL	7.3345E+04	-12.30	88.00
1.000	1.000	214.5	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	43.39	1.7617E-04	178.3	127.0	178.3	127.2	UL-RL	7.3345E+04	-12.50	90.00
1.000	1.000	217.0	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	43.89	1.5685E-04	180.2	127.4	180.2	127.6	UL-RL	7.3345E+04	-12.70	92.00
1.000	1.000	219.4	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	44.39	1.3801E-04	182.2	127.9	182.2	128.0	UL-RL	7.3345E+04	-12.90	94.00
1.000	1.000	221.9	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	44.89	1.1969E-04	184.2	128.5	184.2	128.5	UL-RL	7.3345E+04	-13.10	96.00
1.000	1.000	224.5	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	45.40	1.0189E-04	186.1	129.0	186.1	129.0	V-C	4.5841E+04	-13.30	98.00
1.000	1.000	227.0	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	45.91	8.4617E-05	188.1	129.5	188.1	129.5	V-C	4.5841E+04	-13.50	100.0
1.000	1.000	229.5	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	46.42	6.7846E-05	190.1	130.1	190.1	130.1	V-C	4.5841E+04	-13.70	102.0
1.000	1.000	232.1	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	46.94	5.1549E-05	192.1	130.7	192.1	130.7	V-C	4.5841E+04	-13.90	104.0
1.000	1.000	234.7	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	47.47	3.5684E-05	194.0	131.3	194.0	131.3	V-C	4.5841E+04	-14.10	106.0
1.000	1.000	237.3	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	47.99	2.0208E-05	196.0	132.0	196.0	132.0	V-C	4.5841E+04	-14.30	108.0
1.000	1.000	240.0	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	48.52	5.0671E-06	198.0	132.6	198.0	132.6	V-C	4.5841E+04	-14.50	110.0
1.000	1.000	242.6	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	48.98	-9.7913E-06	200.0	132.9	200.0	133.9	UL-RL	7.3345E+04	-14.70	112.0
1.000	1.000	244.9	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	49.43	-2.4422E-05	202.0	133.2	202.0	135.3	UL-RL	7.3345E+04	-14.90	114.0
1.000	1.000	247.2	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	49.89	-3.8880E-05	204.0	133.4	204.0	136.6	UL-RL	7.3345E+04	-15.10	116.0
1.000	1.000	249.4	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	50.34	-5.3213E-05	206.0	133.7	206.0	137.9	UL-RL	7.3345E+04	-15.30	118.0
1.000	1.000		251.7	0.000	0.000	BNA2_(2)_335_337_L_0				
81 D	50.80	-6.7466E-05	208.0	134.0	208.0	139.3	UL-RL	7.3345E+04	-15.50	120.0
1.000	1.000		254.0	0.000	0.000	BNA2_(2)_335_337_L_0				
82 D	51.26	-8.1676E-05	210.0	134.3	210.0	140.6	UL-RL	7.3345E+04	-15.70	122.0
1.000	1.000		256.3	0.000	0.000	BNA2_(2)_335_337_L_0				
83 D	38.79	-9.5867E-05	212.0	134.6	212.0	141.9	UL-RL	7.3345E+04	-15.90	124.0
1.000	1.000		258.6	0.000	0.000	BNA2_(2)_335_337_L_0				
84 D	12.99	-1.0296E-04	213.0	134.7	213.0	142.6	UL-RL	7.3345E+04	-16.00	125.0
1.000	1.000		259.7	0.000	0.000	BNA2_(2)_335_337_L_0				

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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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

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ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	not available						
15 D	5.042	9.5795E-03	0.000	25.21	56.00	125.0	UL-RL	6.6237E+04	-2.300	0.000	
1.000	1.000	25.21	0.000	0.000	BNA2_(2)_335_337_L_0						
16 D	8.104	8.9587E-03	4.000	40.52	60.00	117.9	UL-RL	6.6237E+04	-2.500	0.000	
1.000	1.000	40.52	0.000	0.000	BNA2_(2)_335_337_L_0						
17 D	11.13	8.3513E-03	8.000	55.66	64.00	111.4	UL-RL	6.6237E+04	-2.700	0.000	
1.000	1.000	55.66	0.000	0.000	BNA2_(2)_335_337_L_0						
18 D	14.12	7.7586E-03	12.00	70.59	68.00	105.4	UL-RL	6.6237E+04	-2.900	0.000	
1.000	1.000	70.59	0.000	0.000	BNA2_(2)_335_337_L_0						
19 D	17.06	7.1821E-03	16.00	85.32	72.00	111.0	UL-RL	6.6237E+04	-3.100	0.000	
1.000	1.000	85.32	0.000	0.000	BNA2_(2)_335_337_L_0						
20 D	19.96	6.6228E-03	20.00	99.81	76.00	122.1	UL-RL	6.6237E+04	-3.300	0.000	
1.000	1.000	99.81	0.000	0.000	BNA2_(2)_335_337_L_0						
21 D	22.82	6.0822E-03	24.00	114.1	80.00	133.2	UL-RL	6.6237E+04	-3.500	0.000	
1.000	1.000	114.1	0.000	0.000	BNA2_(2)_335_337_L_0						
22 D	24.91	5.5612E-03	26.00	122.6	82.00	138.7	UL-RL	6.6237E+04	-3.700	2.000	
1.000	1.000	124.6	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	26.96	5.0611E-03	28.00	130.8	84.00	144.3	UL-RL	6.6237E+04	-3.900	4.000	
1.000	1.000	134.8	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	28.96	4.5827E-03	30.00	138.8	86.00	149.8	UL-RL	6.6237E+04	-4.100	6.000	
1.000	1.000	144.8	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	30.92	4.1268E-03	32.00	146.6	88.00	155.4	UL-RL	6.6237E+04	-4.300	8.000	
1.000	1.000	154.6	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	32.83	3.6942E-03	34.00	154.1	90.00	160.9	UL-RL	6.6237E+04	-4.500	10.00	
1.000	1.000	164.1	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	34.70	3.2854E-03	36.00	161.5	92.00	166.5	UL-RL	6.6237E+04	-4.700	12.00	
1.000	1.000	173.5	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	36.53	2.9009E-03	38.00	168.6	94.00	172.0	UL-RL	6.6237E+04	-4.900	14.00	
1.000	1.000	182.6	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	37.61	2.5407E-03	40.00	172.0	96.00	174.0	UL-RL	6.6237E+04	-5.100	16.00	
1.000	1.000	188.0	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	35.42	2.2051E-03	42.00	159.1	98.00	159.9	UL-RL	6.6237E+04	-5.300	18.00	
1.000	1.000	177.1	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	33.43	1.8938E-03	44.00	147.2	100.0	147.2	UL-RL	6.6237E+04	-5.500	20.00	
1.000	1.000	167.2	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	31.62	1.6066E-03	46.00	136.1	102.0	136.1	V-C	4.1398E+04	-5.700	22.00	
1.000	1.000	158.1	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	30.02	1.3430E-03	48.00	126.1	104.0	126.1	V-C	4.1398E+04	-5.900	24.00	
1.000	1.000	150.1	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	28.64	1.1025E-03	50.00	117.2	106.0	117.2	V-C	4.1398E+04	-6.100	26.00
1.000	1.000	143.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-6.300	28.00
35 D	27.46	8.8433E-04	52.00	109.3	108.0	109.3	V-C	4.1398E+04	-6.500	30.00
1.000	1.000	137.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-6.700	32.00
36 D	26.48	6.8766E-04	54.00	102.4	110.0	102.4	V-C	4.1398E+04	-6.900	34.00
1.000	1.000	132.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-7.100	36.00
37 D	25.68	5.1158E-04	56.00	96.40	112.0	96.40	V-C	4.1398E+04	-7.300	38.00
1.000	1.000	128.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-7.500	40.00
38 D	25.06	3.5509E-04	58.00	91.29	114.0	91.29	V-C	4.1398E+04	-7.700	42.00
1.000	1.000	125.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-7.900	44.00
39 D	24.60	2.1709E-04	60.00	87.00	116.0	87.00	V-C	4.1398E+04	-8.100	46.00
1.000	1.000	123.0	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-8.300	48.00
40 D	24.29	9.6460E-05	62.00	83.47	118.0	83.47	V-C	4.1398E+04	-8.500	50.00
1.000	1.000	121.5	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-8.700	52.00
41 D	23.72	-7.9761E-06	64.00	78.59	120.0	84.08	UL-RL	6.6237E+04	-7.500	40.00
1.000	1.000	118.6	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-8.900	54.00
42 D	23.25	-9.7397E-05	66.00	74.26	122.0	85.50	UL-RL	6.6237E+04	-7.700	42.00
1.000	1.000	116.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-9.100	56.00
43 D	22.98	-1.7299E-04	68.00	70.89	124.0	86.91	UL-RL	6.6237E+04	-7.900	44.00
1.000	1.000	114.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-9.300	58.00
44 D	22.88	-2.3591E-04	70.00	68.39	126.0	88.33	UL-RL	6.6237E+04	-8.100	46.00
1.000	1.000	114.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-8.500	50.00
45 D	22.93	-2.8730E-04	72.00	66.67	128.0	89.74	UL-RL	6.6237E+04	-8.300	48.00
1.000	1.000	114.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-8.700	52.00
46 D	23.13	-3.2826E-04	74.00	65.65	130.0	91.15	UL-RL	6.6237E+04	-8.500	50.00
1.000	1.000	115.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-9.100	56.00
47 D	23.45	-3.5986E-04	76.00	65.26	132.0	92.57	UL-RL	6.6237E+04	-8.700	52.00
1.000	1.000	117.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-9.500	60.00
48 D	23.89	-3.8310E-04	78.00	65.43	134.0	93.98	UL-RL	6.6237E+04	-8.900	54.00
1.000	1.000	119.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-9.900	64.00
49 D	24.42	-3.9893E-04	80.00	66.08	136.0	95.38	UL-RL	6.6237E+04	-9.100	56.00
1.000	1.000	122.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-10.300	68.00
50 D	25.03	-4.0824E-04	82.00	67.15	138.0	96.79	UL-RL	6.6237E+04	-9.300	58.00
1.000	1.000	125.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-10.500	66.00
51 D	25.72	-4.1188E-04	84.00	68.59	140.0	98.20	UL-RL	6.6237E+04	-9.500	60.00
1.000	1.000	128.6	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-10.700	62.00
52 D	26.47	-4.1062E-04	86.00	70.34	142.0	99.60	UL-RL	6.6237E+04	-9.700	62.00
1.000	1.000	132.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-10.900	64.00
53 D	27.27	-4.0516E-04	88.00	72.35	144.0	101.0	UL-RL	6.6237E+04	-9.900	64.00
1.000	1.000	136.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-11.100	76.00
54 D	28.12	-3.9617E-04	90.00	74.58	146.0	102.4	UL-RL	6.6237E+04	-10.10	66.00
1.000	1.000	140.6	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-11.300	78.00
55 D	29.00	-3.8425E-04	92.00	76.98	148.0	103.8	UL-RL	6.6237E+04	-10.30	68.00
1.000	1.000	145.0	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-10.50	70.00
56 D	29.91	-3.6991E-04	94.00	79.53	150.0	105.2	UL-RL	6.6237E+04	-10.50	70.00
1.000	1.000	149.5	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-11.700	82.00
57 D	30.84	-3.5366E-04	96.00	82.19	152.0	106.6	UL-RL	6.6237E+04	-10.70	72.00
1.000	1.000	154.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-11.900	84.00
58 D	31.78	-3.3591E-04	98.00	84.92	154.0	108.0	UL-RL	6.6237E+04	-10.90	74.00
1.000	1.000	158.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-12.10	86.00
59 D	32.74	-3.1705E-04	100.00	87.71	156.0	109.4	UL-RL	6.6237E+04	-11.10	76.00
1.000	1.000	163.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-12.30	88.00
60 D	33.71	-2.9739E-04	102.0	90.54	158.0	110.7	UL-RL	6.6237E+04	-11.30	78.00
1.000	1.000	168.5	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-12.50	90.00
61 D	34.68	-2.7724E-04	104.0	93.38	160.0	112.1	UL-RL	6.6237E+04	-11.50	80.00
1.000	1.000	173.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-12.70	82.00
62 D	35.64	-2.5683E-04	106.0	96.22	162.0	113.5	UL-RL	6.6237E+04	-11.70	82.00
1.000	1.000	178.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-12.90	94.00
63 D	36.61	-2.3637E-04	108.0	99.05	164.0	114.9	UL-RL	6.6237E+04	-11.90	84.00
1.000	1.000	183.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-13.10	96.00
64 D	37.57	-2.1602E-04	110.0	101.8	166.0	116.3	UL-RL	6.6237E+04	-12.10	86.00
1.000	1.000	187.8	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-13.30	98.00
65 D	38.51	-1.9591E-04	112.0	104.6	168.0	117.8	UL-RL	6.6237E+04	-12.30	88.00
1.000	1.000	192.6	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-13.50	100.0
66 D	39.45	-1.7617E-04	114.0	107.3	170.0	119.2	UL-RL	6.6237E+04	-12.50	90.00
1.000	1.000	197.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-13.70	102.0
67 D	40.39	-1.5685E-04	116.0	109.9	172.0	120.6	UL-RL	6.6237E+04	-12.70	92.00
1.000	1.000	201.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-13.90	104.0
68 D	41.32	-1.3801E-04	118.0	112.6	174.0	122.0	UL-RL	6.6237E+04	-12.90	94.00
1.000	1.000	206.6	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-14.10	106.0
69 D	42.23	-1.1969E-04	120.0	115.2	176.0	123.4	UL-RL	6.6237E+04	-13.10	96.00
1.000	1.000	211.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-14.30	108.0
70 D	43.15	-1.0189E-04	122.0	117.7	178.0	124.8	UL-RL	6.6237E+04	-13.30	98.00
1.000	1.000	215.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-14.50	110.0
71 D	44.05	-8.4617E-05	124.0	120.2	180.0	126.2	UL-RL	6.6237E+04	-13.50	100.0
1.000	1.000	220.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-14.70	112.0
72 D	44.94	-6.7846E-05	126.0	122.7	182.0	127.5	UL-RL	6.6237E+04	-13.70	102.0
1.000	1.000	224.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-14.90	114.0
73 D	45.83	-5.1549E-05	128.0	125.1	184.0	128.9	UL-RL	6.6237E+04	-13.90	104.0
1.000	1.000	229.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-15.10	116.0
74 D	46.69	-3.5684E-05	130.0	127.4	186.0	130.4	UL-RL	6.6237E+04	-14.10	106.0
1.000	1.000	233.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-15.30	108.0
75 D	47.53	-2.0208E-05	132.0	129.7	188.0	132.0	UL-RL	6.6237E+04	-14.30	108.0
1.000	1.000	237.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-15.50	110.0
76 D	48.37	-5.0671E-06	134.0	131.9	190.0	133.6	UL-RL	6.6237E+04	-14.50	112.0
1.000	1.000	241.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-15.70	114.0
77 D	49.21	9.7913E-06	136.0	134.1	192.0	135.2	UL-RL	6.6237E+04	-14.70	116.0
1.000	1.000	246.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-15.90	118.0
78 D	50.03	2.4422E-05	138.0	136.1	194.0	136.9	UL-RL	6.6237E+04	-14.90	120.0
1.000	1.000	250.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	4.1398E+04	-16.10	122.0
79 D	50.83	3.8880E-05	140.0	138.1	196.0	138.7	UL-RL	6.6237		

80 D	51.63	5.3213E-05	142.0	140.1	198.0	140.6	UL-RL	6.6237E+04	-15.30	118.0
1.000	1.000		258.1	0.000	0.000	BNA2_(2)_335_337_L_0				
81 D	52.41	6.7466E-05	144.0	142.1	200.0	142.5	UL-RL	6.6237E+04	-15.50	120.0
1.000	1.000		262.1	0.000	0.000	BNA2_(2)_335_337_L_0				
82 D	53.19	8.1676E-05	146.0	144.0	202.0	144.4	UL-RL	6.6237E+04	-15.70	122.0
1.000	1.000		266.0	0.000	0.000	BNA2_(2)_335_337_L_0				
83 D	40.48	9.5867E-05	148.0	145.9	204.0	146.3	UL-RL	6.6237E+04	-15.90	124.0
1.000	1.000		269.9	0.000	0.000	BNA2_(2)_335_337_L_0				
84 D	13.59	1.0296E-04	149.0	146.8	205.0	147.3	UL-RL	6.6237E+04	-16.00	125.0
1.000	1.000		271.8	0.000	0.000	BNA2_(2)_335_337_L_0				

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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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 83  
C U R R E N T   T I M E   I S        3.0000

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	47.619	-47.619	-1.97772E-10	9.5238
2	63.532	-63.532	-9.5238	22.230
3	81.070	-81.070	-22.230	38.444
4	99.910	-99.910	-38.444	58.426
5	120.05	-120.05	-58.426	82.437
6	141.50	-141.50	-82.437	110.74
7	164.25	-164.25	-110.74	143.59
8	188.30	-188.30	-143.59	181.25
9	213.65	-213.65	-181.25	223.98
10	215.30	-215.30	-223.98	247.03
11	214.24	-214.24	-247.03	275.68
12	212.49	-212.49	-275.68	310.18
13	215.66	-215.66	-310.18	349.31
14	205.96	-205.96	-349.31	390.51
15	210.94	-210.94	-390.51	432.69
16	212.61	-212.61	-432.69	475.21
17	211.03	-211.03	-475.21	517.42
18	206.05	-206.05	-517.42	558.63
19	197.60	-197.60	-558.63	598.15
20	185.80	-185.80	-598.15	635.31
21	170.74	-170.74	-635.31	669.46
22	153.45	-153.45	-669.46	700.15
23	134.05	-134.05	-700.15	726.96
24	112.63	-112.63	-726.96	749.49
25	89.298	-89.298	-749.49	767.34
26	64.142	-64.142	-767.34	780.17
27	37.258	-37.258	-780.17	787.62
28	8.7340	-8.7340	-787.62	789.37
29	-20.634	20.634	-789.37	785.24
30	-47.543	47.543	-785.24	775.74
31	-72.088	72.088	-775.74	761.32
32	-94.266	94.266	-761.32	742.47
33	-114.30	114.30	-742.47	719.61
34	-132.39	132.39	-719.61	693.13
35	-148.75	148.75	-693.13	663.38
36	-163.57	163.57	-663.38	630.67
37	-174.98	174.98	-630.67	595.67
38	-183.04	183.04	-595.67	559.06
39	-188.15	188.15	-559.06	521.43
40	-190.66	190.66	-521.43	483.30
41	-190.52	190.52	-483.30	445.19
42	-188.03	188.03	-445.19	407.59
43	-183.55	183.55	-407.59	370.88
44	-177.57	177.57	-370.88	335.36
45	-170.40	170.40	-335.36	301.28
46	-162.29	162.29	-301.28	268.82
47	-153.46	153.46	-268.82	238.13
48	-144.12	144.12	-238.13	209.31
49	-134.47	134.47	-209.31	182.42
50	-124.67	124.67	-182.42	157.48
51	-114.87	114.87	-157.48	134.51
52	-105.16	105.16	-134.51	113.47
53	-95.632	95.632	-113.47	94.348
54	-86.371	86.371	-94.348	77.074
55	-77.436	77.436	-77.074	61.587
56	-68.876	68.876	-61.587	47.811
57	-60.730	60.730	-47.811	35.666
58	-53.025	53.025	-35.666	25.061
59	-45.782	45.782	-25.061	15.905
60	-39.015	39.015	-15.905	8.1017
61	-32.730	32.730	-8.1017	1.5557
62	-26.930	26.930	-1.5557	-3.8304
63	-21.612	21.612	3.8304	-8.1528
64	-16.764	16.764	8.1528	-11.506
65	-12.376	12.376	11.506	-13.981
66	-8.4364	8.4364	13.981	-15.668
67	-4.9360	4.9360	15.668	-16.655
68	-1.8625	1.8625	16.655	-17.028
69	0.79655	-0.79655	17.028	-16.868
70	3.0495	-3.0495	16.868	-16.259

71	4.9117	-4.9117	16.259	-15.276
72	6.3952	-6.3952	15.276	-13.997
73	7.5114	-7.5114	13.997	-12.495
74	8.2898	-8.2898	12.495	-10.837
75	8.7502	-8.7502	10.837	-9.0869
76	8.8993	-8.8993	9.0869	-7.3071
77	8.6663	-8.6663	7.3071	-5.5738
78	8.0677	-8.0677	5.5738	-3.9602
79	7.1246	-7.1246	3.9602	-2.5353
80	5.8420	-5.8420	2.5353	-1.3669
81	4.2331	-4.2331	1.3669	-0.52030
82	2.2989	-2.2989	0.52030	-6.05103E-02
83	0.60504	-0.60504	6.05103E-02	-1.47149E-12

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New Project
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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\_341 :  
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	BORN NOW JUST ACTIVATED
ANCHOR	1	125.00	-9.65596E-04	-9.65596E-04	0.0000	0.0000	0.0000	

```
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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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| NewProject.BaseDesignSection_25.Nominal_60 |  
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New Project
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## New Project

STRESS RESULTS FOR GROUP NO. 5

Tieback\_342 :  
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 = 7340.      RMNORM= 0.000
        RINORM=0.2582E+07 RIMNOR=0.2642E+08
        RENORM=0.1569E+05 REMNOR=0.4892E-18 RATIO =0.7796E-01 TOLER =0.1000E-03 NOT CONVERGED
        RFMAX = 213.6      RMMAX = 789.4
        RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
        RDT = 0.2582E+07 RDR = 0.2642E+08
        RATIOT=0.7796E-01 RATIOR= 0.000
        MAX UN= 36.52      IEQ= 57 NODE      29 DOF     1 Y-DISPL.F
        MIN UN=-.3170E-09 IEQ= 8 NODE       4 DOF     2 X-ROT. F
        NO. OF CONTACT CONSTRAINT VIOLATIONS 0

```

```

ITER      2 RNORM = 7340.      RMNORM= 0.000
          RINORM=0.2582E+07 RIMNOR=0.2642E+08
          RENORM= 4075.      REMNOR=0.1234E-17 RATIO =0.3973E-01 TOLER =0.1000E-03 NOT CONVERGED
          RFMAX = 213.6      RMMAX = 789.4
          RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
          RDT = 0.2582E+07 RDR = 0.2642E+08
          RATIOT=0.3973E-01 RATIOR= 0.000
          MAX UN= 14.74      IEQ= 53 NODE      27 DOF      1 Y-DISPL.F
          MIN UN=-.1303E-01 IEQ= 167 NODE      84 DOF      1 Y-DISPL.F
          NO. OF CONTACT CONSTRAINT VIOLATIONS 0

```

```

ITER      3 RNORM = 7340.      RMNORM= 0.000
          RINORM=0.2582E+07 RIMNOR=0.2642E+08
          RENORM = 3529.      REMNOR=0.7409E-17 RATIO =0.3697E-01 TOLER =0.1000E-03 NOT CONVERGED
          RFMAX = 213.6       RMMAX = 789.4
          RMSMAL=0.1000E-02 RMSMAL=0.1000E-02
          RDT =0.2582E+07 RDR =0.2642E+08
          RATIOT=0.3697E-01 RATIOR= 0.000
          MAX UN= 30.26      IEQ= 83 NODE      42 DOF   1 Y-DISPL.F
          MIN UN=-.6278     IEQ= 143 NODE      72 DOF   1 Y-DISPL.F
          NO. OF CONTACT CONSTRAINT VIOLATIONS 0

```

```

ITER    4 RNORM = 7340.      RMNORM= 0.000
        RINORM=0.2582E+07 RIMNOR=0.2642E+08
        RENORM= 1961.      REMNOR=0.2358E-16 RATIO =0.2756E-01 TOLER =0.1000E-03 NOT CONVERGED
        RFMAX = 213.6     RMMAX = 789.4
        RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
        RDT = 0.2582E+07 RDR = 0.2642E+08
        RATIOT=0.2756E-01 RATIOR= 0.000
        MAX UN= 26.52     IEQ= 99 NODE 50 DOF 1 Y-DISPL.F
        MIN UN=-.2087E-07 IEQ= 15 NODE 8 DOF 1 Y-DISPL.F
        NO. OF CONTACT CONSTRAINT VIOLATIONS 0

```

```

ITER      5 RNORM = 7340.      RMNORM= 0.000
          RINORM=0.2582E+07 RIMNOR=0.2642E+08
          RENORM= 166.4      REMNOR=0.2680E-16 RATIO =0.8029E-02 TOLER =0.1000E-03 NOT CONVERGED
          RFMAX = 213.6      RMMAX = 789.4
          RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
          RDT = 0.2582E+07 RDR = 0.2642E+08
          RATIOT=0.8029E-02 RATIOR= 0.000
          MAX UN= 8.755      IEQ= 113 NODE      57 DOF   1 Y-DISPL.F
          MIN UN=-1.227      IEQ= 133 NODE      67 DOF   1 Y-DISPL.F
          NO. OF CONTACT CONSTRAINT VIOLATIONS 0

```

```

ITER      6 RNORM = 7340.      RMNORM= 0.000
          RINORM=0.2582E+07 RIMNOR=0.2642E+08
          REMNOR=0.1093      RATIO =0.2058E-03 TOLER =0.1000E-03 NOT CONVERGED
          RFMAX = 213.6      RMMAX = 789.4
          RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
          RDTR =0.2582E+07 RDR =0.2642E+08
          RATTOP=0.2058E-03 RATTOPB= 0.000

```

```
MAX UN=0.3164     IEQ=    133 NODE      67 DOF    1 Y-DISPL.F
MIN UN=-.4897E-01 IEQ=    147 NODE      74 DOF    1 Y-DISPL.F
NO. OF CONTACT CONSTRAINT VIOLATIONS      0

ITER      7 RNORM = 7340.      RMNORM= 0.000
          RINORM=0.2582E+07 RIMNOR=0.2642E+08
          RENORM=0.5423E-05 REMNOR=0.1346E-16 RATIO =0.1449E-05 TOLER =0.1000E-03      CONVERGED !
          RFMAX = 213.6      RMMAX = 789.4
          RTSMAL=0.1000E-02 RMSMAL=0.1000E-02
          RDT   =0.2582E+07 RDR   =0.2642E+08
          RATIOT=0.1449E-05 RATIOR= 0.000
MAX UN=0.2069E-07 IEQ=      3 NODE      2 DOF    1 Y-DISPL.F
MIN UN=-.1610E-02 IEQ=    151 NODE      76 DOF    1 Y-DISPL.F
NO. OF CONTACT CONSTRAINT VIOLATIONS      0
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New Project  
SOLUTION REACHED USING 7 ITERATIONS ON 40

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

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

	Y-DISPL. F (02)	X-ROT. F (04)	(
1	7.0684560E-02	-7.5385304E-03	
2	6.9176902E-02	-7.5378074E-03	
3	6.7669546E-02	-7.5354376E-03	
4	6.6162865E-02	-7.5309966E-03	
5	6.4657317E-02	-7.5240150E-03	
6	6.3153462E-02	-7.5139784E-03	
7	6.1651967E-02	-7.5003275E-03	
8	6.0153613E-02	-7.4824576E-03	
9	5.8659308E-02	-7.4597193E-03	
10	5.7170096E-02	-7.4314181E-03	
11	5.5686939E-02	-7.4001436E-03	
12	5.4210067E-02	-7.3684403E-03	
13	5.2739647E-02	-7.3354786E-03	
14	5.1276010E-02	-7.3004984E-03	
15	4.9819606E-02	-7.2631397E-03	
16	4.8370916E-02	-7.2233469E-03	
17	4.6930434E-02	-7.1810563E-03	
18	4.5498665E-02	-7.1361962E-03	
19	4.4076132E-02	-7.0886858E-03	
20	4.2663374E-02	-7.0384358E-03	
21	4.1260947E-02	-6.9853479E-03	
22	3.9869424E-02	-6.9293142E-03	
23	3.8489419E-02	-6.8702183E-03	
24	3.7121556E-02	-6.8079340E-03	
25	3.5766473E-02	-6.7423246E-03	
26	3.4424857E-02	-6.6732448E-03	
27	3.3097417E-02	-6.6005391E-03	
28	3.1784895E-02	-6.5240421E-03	
29	3.0488071E-02	-6.4435787E-03	
30	2.9207740E-02	-6.3589624E-03	
31	2.7944770E-02	-6.2699988E-03	
32	2.6700044E-02	-6.1764784E-03	
33	2.5474497E-02	-6.0781754E-03	
34	2.4269115E-02	-5.9748479E-03	
35	2.3084916E-02	-5.8662354E-03	
36	2.1922992E-02	-5.7520622E-03	
37	2.0784466E-02	-5.6322734E-03	
38	1.9670444E-02	-5.5070589E-03	
39	1.8581995E-02	-5.3766378E-03	
40	1.7520125E-02	-5.2412560E-03	
41	1.6485805E-02	-5.1011903E-03	
42	1.5479941E-02	-4.9567453E-03	
43	1.4503376E-02	-4.8082544E-03	
44	1.3556885E-02	-4.6560796E-03	
45	1.2641169E-02	-4.5006123E-03	
46	1.1756836E-02	-4.3422703E-03	
47	1.0904422E-02	-4.1815019E-03	
48	1.0084365E-02	-4.0187836E-03	
49	9.2970052E-03	-3.8546201E-03	
50	8.5425817E-03	-3.6895457E-03	
51	7.8212141E-03	-3.5241203E-03	
52	7.1329176E-03	-3.3589352E-03	
53	6.4775828E-03	-3.1946089E-03	
54	5.8549615E-03	-3.0317854E-03	
55	5.2647104E-03	-2.8711465E-03	
56	4.7063105E-03	-2.7133931E-03	
57	4.1791130E-03	-2.5592431E-03	
58	3.6823509E-03	-2.4093984E-03	
59	3.2150495E-03	-2.2644912E-03	
60	2.7761845E-03	-2.1251331E-03	
61	2.3645888E-03	-1.9918878E-03	
62	1.9789867E-03	-1.8652814E-03	
63	1.6180032E-03	-1.7457702E-03	
64	1.2801820E-03	-1.6337091E-03	
65	9.6400564E-04	-1.5293567E-03	
66	6.6791412E-04	-1.4328818E-03	
67	3.9032209E-04	-1.3443694E-03	
68	1.2963468E-04	-1.2638323E-03	
69	-1.1573908E-04	-1.1912191E-03	
70	-3.4737334E-04	-1.1264117E-03	
71	-5.6681176E-04	-1.0692243E-03	
72	-7.7555443E-04	-1.0194073E-03	
73	-9.7504532E-04	-9.7664996E-04	
74	-1.1666605E-03	-9.4058332E-04	

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75 -1.3516964E-03 -9.1078280E-04
76 -1.5313596E-03 -8.8677276E-04
77 -1.7067566E-03 -8.6802978E-04
78 -1.8788848E-03 -8.5398585E-04
79 -2.0486236E-03 -8.4403068E-04
80 -2.2167262E-03 -8.3751247E-04
81 -2.3838115E-03 -8.3373843E-04
82 -2.5503556E-03 -8.3197506E-04
83 -2.7166840E-03 -8.3144841E-04
84 -2.7998353E-03 -8.3142169E-04
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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 84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.000	-7.0685E-02	1.000	0.000	1.000	11.53	ACTIVE	0.000	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
2 D	0.000	-6.9177E-02	5.557	0.000	5.557	15.66	ACTIVE	0.000	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
3 D	0.000	-6.7670E-02	11.91	0.000	11.91	19.97	ACTIVE	0.000	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
4 D	0.000	-6.6163E-02	18.92	0.000	18.92	24.17	ACTIVE	0.000	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
5 D	0.000	-6.4657E-02	27.34	0.000	27.34	26.78	ACTIVE	0.000	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
6 D	0.000	-6.3153E-02	35.34	0.000	35.34	28.81	ACTIVE	0.000	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
7 D	0.000	-6.1652E-02	42.20	0.000	42.20	30.70	ACTIVE	0.000	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
8 D	0.000	-6.0154E-02	48.35	0.000	48.35	32.62	ACTIVE	0.000	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
9 D	0.000	-5.8659E-02	54.02	0.000	54.02	34.66	ACTIVE	0.000	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
10 D	0.000	-5.7170E-02	59.37	0.000	59.37	36.83	ACTIVE	0.000	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
11 D	0.000	-5.5687E-02	64.22	0.000	64.22	39.14	ACTIVE	0.000	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
12 D	0.000	-5.4210E-02	69.17	0.000	69.17	41.57	ACTIVE	0.000	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
13 D	0.000	-5.2740E-02	73.97	0.000	73.97	44.12	ACTIVE	0.000	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
14 D	1.662	-5.1276E-02	77.88	8.311	77.88	52.12	ACTIVE	0.000	-2.100	0.000	
1.000	1.000	8.311	0.000	0.000	BNA2_(2)_335_337_L_0						
15 D	1.916	-4.9820E-02	80.69	9.580	80.69	50.72	ACTIVE	0.000	-2.300	0.000	
1.000	1.000	9.580	0.000	0.000	BNA2_(2)_335_337_L_0						
16 D	2.180	-4.8371E-02	83.61	10.90	83.61	49.48	ACTIVE	0.000	-2.500	0.000	
1.000	1.000	10.90	0.000	0.000	BNA2_(2)_335_337_L_0						
17 D	2.453	-4.6930E-02	86.63	12.26	86.63	48.41	ACTIVE	0.000	-2.700	0.000	
1.000	1.000	12.26	0.000	0.000	BNA2_(2)_335_337_L_0						
18 D	2.733	-4.5499E-02	89.73	13.66	89.73	48.95	ACTIVE	0.000	-2.900	0.000	
1.000	1.000	13.66	0.000	0.000	BNA2_(2)_335_337_L_0						
19 D	3.020	-4.4076E-02	92.90	15.10	92.90	51.39	ACTIVE	0.000	-3.100	0.000	
1.000	1.000	15.10	0.000	0.000	BNA2_(2)_335_337_L_0						
20 D	3.313	-4.2663E-02	96.14	16.56	96.14	53.86	ACTIVE	0.000	-3.300	0.000	
1.000	1.000	16.56	0.000	0.000	BNA2_(2)_335_337_L_0						
21 D	3.611	-4.1261E-02	99.44	18.06	99.44	56.37	ACTIVE	0.000	-3.500	0.000	
1.000	1.000	18.06	0.000	0.000	BNA2_(2)_335_337_L_0						
22 D	3.914	-3.9869E-02	102.8	19.57	102.8	57.66	ACTIVE	0.000	-3.700	0.000	
1.000	1.000	19.57	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	4.221	-3.8489E-02	106.2	21.11	106.2	58.97	ACTIVE	0.000	-3.900	0.000	
1.000	1.000	21.11	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	4.532	-3.7122E-02	109.6	22.66	109.6	60.30	ACTIVE	0.000	-4.100	0.000	
1.000	1.000	22.66	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	4.846	-3.5766E-02	113.1	24.23	113.1	61.64	ACTIVE	0.000	-4.300	0.000	
1.000	1.000	24.23	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	5.164	-3.4425E-02	116.6	25.82	116.6	63.00	ACTIVE	0.000	-4.500	0.000	
1.000	1.000	25.82	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	5.484	-3.3097E-02	120.2	27.42	120.2	64.37	ACTIVE	0.000	-4.700	0.000	
1.000	1.000	27.42	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	5.807	-3.1785E-02	123.7	29.03	123.7	66.68	ACTIVE	0.000	-4.900	0.000	
1.000	1.000	29.03	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	6.132	-3.0488E-02	127.3	30.66	127.3	69.85	ACTIVE	0.000	-5.100	0.000	
1.000	1.000	30.66	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	6.459	-2.9208E-02	130.9	32.30	130.9	72.69	ACTIVE	0.000	-5.300	0.000	
1.000	1.000	32.30	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	6.997	-2.7945E-02	132.7	33.08	132.7	75.26	ACTIVE	0.000	-5.500	1.902	
1.000	1.000	34.98	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	7.537	-2.6700E-02	134.5	33.88	134.5	77.56	ACTIVE	0.000	-5.700	3.804	
1.000	1.000	37.68	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	8.078	-2.5474E-02	136.2	34.68	136.2	79.63	ACTIVE	0.000	-5.900	5.706	
1.000	1.000	40.39	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	8.621	-2.4269E-02	138.0	35.50	138.0	81.51	ACTIVE	0.000	-6.100	7.608
1.000	1.000	43.10	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	9.165	-2.3085E-02	139.8	36.32	139.8	83.43	ACTIVE	0.000	-6.300	9.510
1.000	1.000	45.83	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	9.711	-2.1923E-02	141.7	37.14	141.7	86.17	ACTIVE	0.000	-6.500	11.41
1.000	1.000	48.56	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	10.26	-2.0784E-02	143.5	37.98	143.5	90.39	ACTIVE	0.000	-6.700	13.31
1.000	1.000	51.29	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	10.81	-1.9670E-02	145.4	38.82	145.4	94.05	ACTIVE	0.000	-6.900	15.22
1.000	1.000	54.03	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	11.36	-1.8582E-02	147.2	39.66	147.2	97.20	ACTIVE	0.000	-7.100	17.12
1.000	1.000	56.78	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	11.91	-1.7520E-02	149.1	40.51	149.1	99.91	ACTIVE	0.000	-7.300	19.02
1.000	1.000	59.53	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	12.46	-1.6486E-02	151.0	41.37	151.0	102.2	ACTIVE	0.000	-7.500	20.92
1.000	1.000	62.29	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	13.01	-1.5480E-02	152.9	42.23	152.9	104.2	ACTIVE	0.000	-7.700	22.82
1.000	1.000	65.05	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	13.56	-1.4503E-02	154.8	43.10	154.8	105.9	ACTIVE	0.000	-7.900	24.73
1.000	1.000	67.82	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	14.12	-1.3557E-02	156.8	43.97	156.8	111.0	ACTIVE	0.000	-8.100	26.63
1.000	1.000	70.59	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	14.67	-1.2641E-02	158.7	44.84	158.7	115.3	ACTIVE	0.000	-8.300	28.53
1.000	1.000	73.37	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	15.23	-1.1757E-02	160.6	45.72	160.6	119.0	ACTIVE	0.000	-8.500	30.43
1.000	1.000	76.15	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	15.79	-1.0904E-02	162.6	46.60	162.6	122.3	ACTIVE	0.000	-8.700	32.33
1.000	1.000	78.93	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	16.34	-1.0084E-02	164.5	47.48	164.5	125.1	ACTIVE	0.000	-8.900	34.24
1.000	1.000	81.72	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	16.90	-9.2970E-03	166.5	48.37	166.5	127.3	ACTIVE	0.000	-9.100	36.14
1.000	1.000	84.51	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	17.46	-8.5426E-03	168.5	49.26	168.5	129.2	ACTIVE	0.000	-9.300	38.04
1.000	1.000	87.30	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	18.02	-7.8212E-03	170.5	50.16	170.5	130.7	ACTIVE	0.000	-9.500	39.94
1.000	1.000	90.10	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	18.58	-7.1329E-03	172.4	51.05	172.4	132.1	ACTIVE	0.000	-9.700	41.84
1.000	1.000	92.90	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	19.14	-6.4776E-03	174.4	51.95	174.4	133.2	ACTIVE	0.000	-9.900	43.75
1.000	1.000	95.70	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	19.70	-5.8550E-03	176.4	52.86	176.4	134.2	ACTIVE	0.000	-10.10	45.65
1.000	1.000	98.50	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	20.26	-5.2647E-03	178.4	53.76	178.4	135.0	ACTIVE	0.000	-10.30	47.55
1.000	1.000	101.3	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	20.82	-4.7063E-03	180.4	54.67	180.4	135.8	ACTIVE	0.000	-10.50	49.45
1.000	1.000	104.1	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	21.39	-4.1791E-03	182.5	55.58	182.5	136.4	ACTIVE	0.000	-10.70	51.35
1.000	1.000	106.9	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	21.95	-3.6824E-03	184.5	56.49	184.5	137.0	ACTIVE	0.000	-10.90	53.25
1.000	1.000	109.7	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	22.51	-3.2150E-03	186.5	57.41	186.5	137.5	ACTIVE	0.000	-11.10	55.16
1.000	1.000	112.6	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	23.08	-2.7762E-03	188.5	58.32	188.5	138.0	ACTIVE	0.000	-11.30	57.06
1.000	1.000	115.4	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	23.64	-2.3646E-03	190.6	59.24	190.6	138.5	ACTIVE	0.000	-11.50	58.96
1.000	1.000	118.2	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	24.27	-1.9790E-03	192.6	71.49	192.6	139.0	UL-RL	3.0201E+04	-11.70	60.86
1.000	1.000	132.4	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	29.25	-1.6180E-03	194.6	83.49	194.6	139.5	UL-RL	3.0201E+04	-11.90	62.76
1.000	1.000	146.3	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	31.89	-1.2802E-03	196.7	94.80	196.7	140.0	UL-RL	3.0201E+04	-12.10	64.67
1.000	1.000	159.5	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	34.40	-9.6401E-04	198.7	105.5	198.7	140.5	UL-RL	3.0201E+04	-12.30	66.57
1.000	1.000	172.0	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	36.80	-6.6791E-04	200.8	115.5	200.8	141.0	UL-RL	3.0201E+04	-12.50	68.47
1.000	1.000	184.0	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	38.70	-3.9032E-04	202.9	123.1	202.9	144.7	UL-RL	3.0201E+04	-12.70	70.37
1.000	1.000	193.5	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	40.50	-1.2963E-04	204.9	130.2	204.9	148.4	UL-RL	3.0201E+04	-12.90	72.27
1.000	1.000	202.5	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	42.25	1.1574E-04	207.0	137.1	207.0	151.9	UL-RL	3.0201E+04	-13.10	74.18
1.000	1.000	211.2	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	43.93	3.4737E-04	209.0	143.6	209.0	155.1	UL-RL	3.0201E+04	-13.30	76.08
1.000	1.000	219.6	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	45.56	5.6681E-04	211.1	149.8	211.1	158.2	UL-RL	3.0201E+04	-13.50	77.98
1.000	1.000	227.8	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	47.15	7.7555E-04	213.2	155.9	213.2	161.2	UL-RL	3.0201E+04	-13.70	79.88
1.000	1.000	235.8	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	48.71	9.7505E-04	215.3	161.8	215.3	164.0	UL-RL	3.0201E+04	-13.90	81.78
1.000	1.000	243.5	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	50.13	1.1667E-03	217.3	166.9	217.3	167.6	UL-RL	3.0201E+04	-14.10	83.69
1.000	1.000	250.6	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	51.45	1.3517E-03	219.4	171.7	219.4	171.7	UL-RL	3.0201E+04	-14.30	85.59
1.000	1.000	257.2	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	52.71	1.5314E-03	221.5	176.1	221.5	176.1	UL-RL	3.0201E+04	-14.50	87.49
1.000	1.000	263.6	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	53.88	1.7068E-03	223.6	180.0	223.6	180.0	UL-RL	3.0201E+04	-14.70	89.39
1.000	1.000	269.4	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	55.03	1.8789E-03	225.7	183.8	225.7	183.9	UL-RL	3.0201E+04	-14.90	91.29
1.000	1.000	275.1	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	56.17	2.0486E-03	227.8	187.7	227.8	187.7	UL-RL	3.0201E+04	-15.10	93.20
1.000	1.000	280.9	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	57.31	2.2167E-03	229.9	191.5	229.9	191.5	UL-RL	3.0201E+04	-15.30	95.10
1.000	1.000		286.6	0.000	0.000	BNA2_(2)_335_337_L_0				
81 D	58.45	2.3838E-03	232.0	195.2	232.0	195.2	V-C	1.8876E+04	-15.50	97.00
1.000	1.000		292.2	0.000	0.000	BNA2_(2)_335_337_L_0				
82 D	59.58	2.5504E-03	234.1	199.0	234.1	199.0	V-C	1.8876E+04	-15.70	98.90
1.000	1.000		297.9	0.000	0.000	BNA2_(2)_335_337_L_0				
83 D	45.53	2.7167E-03	236.2	202.7	236.2	202.7	V-C	1.8876E+04	-15.90	100.8
1.000	1.000		303.6	0.000	0.000	BNA2_(2)_335_337_L_0				
84 D	15.32	2.7998E-03	237.2	204.6	237.2	204.6	V-C	1.8876E+04	-16.00	101.8
1.000	1.000		306.4	0.000	0.000	BNA2_(2)_335_337_L_0				

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| Exe Time :25 June 2020 16:43:57
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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

O\_R  
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
15	0.000	--	--	--	--	--	REMOVED	--	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
16	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
17	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
18	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
19	0.000	--	--	--	--	--	REMOVED	--	-3.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
20	0.000	--	--	--	--	--	REMOVED	--	-3.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
21	0.000	--	--	--	--	--	REMOVED	--	-3.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
22	0.000	--	--	--	--	--	REMOVED	--	-3.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
23	0.000	--	--	--	--	--	REMOVED	--	-3.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
24	0.000	--	--	--	--	--	REMOVED	--	-4.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
25	0.000	--	--	--	--	--	REMOVED	--	-4.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
26	0.000	--	--	--	--	--	REMOVED	--	-4.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
27	0.000	--	--	--	--	--	REMOVED	--	-4.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
28	0.000	--	--	--	--	--	REMOVED	--	-4.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
29	0.000	--	--	--	--	--	REMOVED	--	-5.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
30	0.000	--	--	--	--	--	REMOVED	--	-5.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
31	0.000	--	--	--	--	--	REMOVED	--	-5.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
32	0.000	--	--	--	--	--	REMOVED	--	-5.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
33	0.000	--	--	--	--	--	REMOVED	--	-5.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					

34	0.000	--	--	--	--	--	REMOVED	--	-6.100	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
35	0.000	--	--	--	--	--	REMOVED	--	-6.300	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
36 D	15.35	2.1923E-02	2.902	74.67	110.0	102.4	PASSIVE	0.000	-6.500	2.098
1.000	1.000	76.77	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	16.83	2.0784E-02	4.804	79.95	112.0	96.40	PASSIVE	0.000	-6.700	4.196
1.000	1.000	84.14	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	18.30	1.9670E-02	6.706	85.22	114.0	91.29	PASSIVE	0.000	-6.900	6.294
1.000	1.000	91.52	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	19.78	1.8582E-02	8.608	90.50	116.0	90.50	PASSIVE	0.000	-7.100	8.392
1.000	1.000	98.89	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	21.25	1.7520E-02	10.51	95.78	118.0	95.78	PASSIVE	0.000	-7.300	10.49
1.000	1.000	106.3	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	22.73	1.6486E-02	12.41	101.1	120.0	101.1	PASSIVE	0.000	-7.500	12.59
1.000	1.000	113.6	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	24.20	1.5480E-02	14.31	106.3	122.0	106.3	PASSIVE	0.000	-7.700	14.69
1.000	1.000	121.0	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	25.68	1.4503E-02	16.22	111.6	124.0	111.6	PASSIVE	0.000	-7.900	16.78
1.000	1.000	128.4	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	27.15	1.3557E-02	18.12	116.9	126.0	116.9	PASSIVE	0.000	-8.100	18.88
1.000	1.000	135.8	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	28.63	1.2641E-02	20.02	122.2	128.0	122.2	PASSIVE	0.000	-8.300	20.98
1.000	1.000	143.1	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	30.10	1.1757E-02	21.92	127.4	130.0	127.4	PASSIVE	0.000	-8.500	23.08
1.000	1.000	150.5	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	31.58	1.0904E-02	23.82	132.7	132.0	132.7	PASSIVE	0.000	-8.700	25.18
1.000	1.000	157.9	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	33.05	1.0084E-02	25.73	138.0	134.0	138.0	PASSIVE	0.000	-8.900	27.27
1.000	1.000	165.3	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	34.53	9.2970E-03	27.63	143.3	136.0	143.3	PASSIVE	0.000	-9.100	29.37
1.000	1.000	172.6	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	36.00	8.5426E-03	29.53	148.5	138.0	148.5	PASSIVE	0.000	-9.300	31.47
1.000	1.000	180.0	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	37.48	7.8212E-03	31.43	153.8	140.0	153.8	PASSIVE	0.000	-9.500	33.57
1.000	1.000	187.4	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	38.95	7.1329E-03	33.33	159.1	142.0	159.1	PASSIVE	0.000	-9.700	35.67
1.000	1.000	194.8	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	40.43	6.4776E-03	35.24	164.4	144.0	164.4	PASSIVE	0.000	-9.900	37.76
1.000	1.000	202.1	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	41.90	5.8550E-03	37.14	169.6	146.0	169.6	PASSIVE	0.000	-10.10	39.86
1.000	1.000	209.5	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	43.38	5.2647E-03	39.04	174.9	148.0	174.9	PASSIVE	0.000	-10.30	41.96
1.000	1.000	216.9	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	43.95	4.7063E-03	40.94	175.7	150.0	175.7	V-C	1.7046E+04	-10.50	44.06
1.000	1.000	219.7	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	42.95	4.1791E-03	42.84	168.6	152.0	168.6	V-C	1.7046E+04	-10.70	46.16
1.000	1.000	214.8	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	42.06	3.6824E-03	44.75	162.1	154.0	162.1	V-C	1.7046E+04	-10.90	48.25
1.000	1.000	210.3	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	41.28	3.2150E-03	46.65	156.0	156.0	156.0	V-C	1.7046E+04	-11.10	50.35
1.000	1.000	206.4	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	40.59	2.7762E-03	48.55	150.5	158.0	150.5	V-C	1.7046E+04	-11.30	52.45
1.000	1.000	203.0	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	40.00	2.3646E-03	50.45	145.4	160.0	145.4	V-C	1.7046E+04	-11.50	54.55
1.000	1.000	200.0	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	39.49	1.9790E-03	52.35	140.8	162.0	140.8	V-C	1.7046E+04	-11.70	56.65
1.000	1.000	197.5	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	39.07	1.6180E-03	54.25	136.6	164.0	136.6	V-C	1.7046E+04	-11.90	58.74
1.000	1.000	195.3	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	38.72	1.2802E-03	56.16	132.8	166.0	132.8	V-C	1.7046E+04	-12.10	60.84
1.000	1.000	193.6	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	38.44	9.6401E-04	58.06	129.3	168.0	129.3	V-C	1.7046E+04	-12.30	62.94
1.000	1.000	192.2	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	38.23	6.6791E-04	59.96	126.1	170.0	126.1	V-C	1.7046E+04	-12.50	65.04
1.000	1.000	191.2	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	38.08	3.9032E-04	61.86	123.3	172.0	123.3	V-C	1.7046E+04	-12.70	67.14
1.000	1.000	190.4	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	37.82	1.2963E-04	63.76	119.9	174.0	122.0	UL-RL	2.7274E+04	-12.90	69.24
1.000	1.000	189.1	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	37.32	-1.1574E-04	65.67	115.3	176.0	123.4	UL-RL	2.7274E+04	-13.10	71.33
1.000	1.000	186.6	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	36.89	-3.4737E-04	67.57	111.0	178.0	124.8	UL-RL	2.7274E+04	-13.30	73.43
1.000	1.000	184.5	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	36.52	-5.6681E-04	69.47	107.1	180.0	126.2	UL-RL	2.7274E+04	-13.50	75.53
1.000	1.000	182.6	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	36.21	-7.7555E-04	71.37	103.4	182.0	127.5	UL-RL	2.7274E+04	-13.70	77.63
1.000	1.000	181.0	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	35.90	-9.7505E-04	73.27	99.76	184.0	129.2	UL-RL	2.7274E+04	-13.90	79.73
1.000	1.000	179.5	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	35.61	-1.1667E-03	75.18	96.21	186.0	131.1	UL-RL	2.7274E+04	-14.10	81.82
1.000	1.000	178.0	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	35.35	-1.3517E-03	77.08	92.82	188.0	132.9	UL-RL	2.7274E+04	-14.30	83.92
1.000	1.000	176.7	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	35.12	-1.5314E-03	78.98	89.57	190.0	134.8	UL-RL	2.7274E+04	-14.50	86.02
1.000	1.000	175.6	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	34.91	-1.7068E-03	80.88	86.42	192.0	136.6	UL-RL	2.7274E+04	-14.70	88.12
1.000	1.000	174.5	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	34.71	-1.8789E-03	82.78	83.35	194.0	138.4	UL-RL	2.7274E+04	-14.90	90.22
1.000	1.000	173.6	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	34.53	-2.0486E-03	84.69	80.33	196.0	140.2	UL-RL	2.7274E+04	-15.10	92.31
1.000	1.000	172.6	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	34.35	-2.2167E-03	86.59	77.36	198.0	142.0	UL-RL	2.7274E+04	-15.30	94.41
1.000	1.000	171.8	0.000	0.000	BNA2_(2)_335_337_L_0					
81 D	34.18	-2.3838E-03	88.49	74.41	200.0	143.8	UL-RL	2.7274E+04	-15.50	96.51
1.000	1.000	170.9	0.000	0.000	BNA2_(2)_335_337_L_0					
82 D	34.02	-2.5504E-03	90.39	71.47	202.0	145.6	UL-RL	2.7274E+04	-15.70	98.61
1.000	1.000	170.1	0.000	0.000	BNA2_(2)_335_337_L_0					
83 D	25.39	-2.7167E-03	92.29	68.53	204.0	147.4	UL-RL	2.7274E+04	-15.90	100.7
1.000	1.000	169.2	0.000	0.000	BNA2_(2)_335_337_L_0					
84 D	8.441	-2.7998E-03	93.25	67.06	205.0	148.3	UL-RL	2.7274E+04	-16.00	101.8
1.000	1.000	168.8	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| Exe Time :25 June 2020 16:43:57
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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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 83  
C U R R E N T    T I M E    I S    4.0000

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	46.542	-46.542	2.20611E-10	9.3084
2	59.476	-59.476	-9.3084	21.204
3	73.859	-73.859	-21.204	35.975
4	89.692	-89.692	-35.975	53.914
5	106.97	-106.97	-53.914	75.309
6	125.71	-125.71	-75.309	100.45
7	145.89	-145.89	-100.45	129.63
8	167.52	-167.52	-129.63	163.13
9	190.60	-190.60	-163.13	201.25
10	0.80974	-0.80974	-201.25	201.41
11	26.790	-26.790	-201.41	206.77
12	54.220	-54.220	-206.77	217.62
13	75.728	-75.728	-217.62	232.76
14	77.390	-77.390	-232.76	248.24
15	79.306	-79.306	-248.24	264.10
16	81.486	-81.486	-264.10	280.40
17	83.939	-83.939	-280.40	297.19
18	86.672	-86.672	-297.19	314.52
19	89.692	-89.692	-314.52	332.46
20	93.005	-93.005	-332.46	351.06
21	96.616	-96.616	-351.06	370.38
22	100.53	-100.53	-370.38	390.49
23	104.75	-104.75	-390.49	411.44
24	109.28	-109.28	-411.44	433.30
25	114.13	-114.13	-433.30	456.12
26	119.29	-119.29	-456.12	479.98
27	124.78	-124.78	-479.98	504.94
28	130.58	-130.58	-504.94	531.05
29	136.72	-136.72	-531.05	558.40
30	143.17	-143.17	-558.40	587.03
31	150.17	-150.17	-587.03	617.06
32	157.71	-157.71	-617.06	648.61
33	165.79	-165.79	-648.61	681.76
34	174.41	-174.41	-681.76	716.64
35	183.57	-183.57	-716.64	753.36
36	177.93	-177.93	-753.36	788.95
37	171.36	-171.36	-788.95	823.22
38	163.86	-163.86	-823.22	855.99
39	155.44	-155.44	-855.99	887.08
40	146.09	-146.09	-887.08	916.30
41	135.83	-135.83	-916.30	943.46
42	124.63	-124.63	-943.46	968.39
43	112.52	-112.52	-968.39	990.89
44	99.487	-99.487	-990.89	1010.8
45	85.533	-85.533	-1010.8	1027.9
46	70.661	-70.661	-1027.9	1042.0
47	54.870	-54.870	-1042.0	1053.0
48	38.162	-38.162	-1053.0	1060.6
49	20.538	-20.538	-1060.6	1064.7
50	1.9969	-1.9969	-1064.7	1065.1
51	-17.460	17.460	-1065.1	1061.7
52	-37.831	37.831	-1061.7	1054.1
53	-59.117	59.117	-1054.1	1042.3
54	-81.317	81.317	-1042.3	1026.0
55	-104.43	104.43	-1026.0	1005.1
56	-127.55	127.55	-1005.1	979.60
57	-149.12	149.12	-979.60	949.78
58	-169.23	169.23	-949.78	915.93
59	-188.00	188.00	-915.93	878.33
60	-205.51	205.51	-878.33	837.23
61	-221.87	221.87	-837.23	792.85
62	-234.89	234.89	-792.85	745.88
63	-244.71	244.71	-745.88	696.93
64	-251.54	251.54	-696.93	646.63
65	-255.58	255.58	-646.63	595.51
66	-257.02	257.02	-595.51	544.11
67	-256.40	256.40	-544.11	492.83
68	-253.72	253.72	-492.83	442.08
69	-248.79	248.79	-442.08	392.33
70	-241.76	241.76	-392.33	343.97

71	-232.71	232.71	-343.97	297.43
72	-221.77	221.77	-297.43	253.08
73	-208.95	208.95	-253.08	211.29
74	-194.43	194.43	-211.29	172.40
75	-178.33	178.33	-172.40	136.73
76	-160.74	160.74	-136.73	104.59
77	-141.77	141.77	-104.59	76.232
78	-121.45	121.45	-76.232	51.942
79	-99.807	99.807	-51.942	31.981
80	-76.851	76.851	-31.981	16.611
81	-52.589	52.589	-16.611	6.0930
82	-27.025	27.025	-6.0930	0.68788
83	-6.8782	6.8782	-0.68788	1.70453E-11

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| Exe Time :25 June 2020 16:43:57
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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\_341 :  
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1  
CURRENT TIME    I S    4.0000

POST-TENSION 2D-BOUNDARY ELEMENT

	EL	FORCE	d0	EDISPL	pl. eps	K	-ve limit	+ve limit	
ANCHOR	1	214.32	-9.65596E-04	4.33627E-02	0.0000	2015.0	0.0000	0.0000	ELASTIC ORIGINAL YOUNG MODULUS

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+-----+  
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
|  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:43:57 |  
+-----+  
New Project
```

## 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 .      5

Tieback\_342 :  
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

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

```

ITER    0 RNORM = 7340.      RMNORM= 0.000
        RINORM=0.3681E+07 RIMNOR=0.6592E+08
        RENORM=0.1563E+05 REMNOR=0.1346E-16 RATIO =0.6517E-01 TOLER =0.1000E-03 NOT CONVERGED
        RFMAX = 257.0      RMMAX = 1065.
        RTSMAL=0.1000E-02 RMSMAL=0.1000E-01
        RDT    =0.3681E+07 RDR   =0.6592E+08
        RATIOT=0.6517E-01 RATIOR= 0.000
        MAX UN=0.5548     IEQ= 71 NODE      36 DOF   1 Y-DISPL.F
        MIN UN=-125.0     IEQ= 59 NODE      30 DOF   1 Y-DISPL.F
        NO. OF CONTACT CONSTRAINT VIOLATIONS 0

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ITER      2 RNORM = 7340.      RMNORM= 0.000
          RINORM=0.3681E+07 RIMNOR=0.6592E+08
          RENORM=0.4376E-02 REMNOR=0.1414E-16 RATIO =0.3448E-04 TOLER =0.1000E-03      CONVERGED !
          RFMAX = 257.0      RMMAX = 1065.
          RTSMAL=0.1000E-02 RMSMAL=0.1000E-01
          RDT   =0.3681E+07 RDR   =0.6592E+08
          RATIOT=0.3448E-04 RATOR= 0.000
          MAX UN=0.4336E-01 IEQ=    131 NODE      66 DOF     1 Y-DISPL.F
          MIN UN=-0.4004E-07 IEQ=      3 NODE      2 DOF     1 Y-DISPL.F
          NO. OF CONTACT CONSTRAINT VIOLATIONS      0

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:43:57
+-----+
New Project
SOLUTION REACHED USING      2 ITERATIONS ON    40

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

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

      Y-DISPL. F      X-ROT. F
      (02)          (04)      (
1   7.0384084E-02  -7.5953920E-03
2   6.8865054E-02  -7.5946669E-03
3   6.7346328E-02  -7.5922863E-03
4   6.5828279E-02  -7.5878171E-03
5   6.4311372E-02  -7.5807806E-03
6   6.2796173E-02  -7.5706528E-03
7   6.1283355E-02  -7.5568644E-03
8   5.9773712E-02  -7.5388008E-03
9   5.8268164E-02  -7.5158020E-03
10  5.6767767E-02  -7.4871625E-03
11  5.5273504E-02  -7.4554483E-03
12  5.3785625E-02  -7.4231799E-03
13  5.2304325E-02  -7.3895159E-03
14  5.0829963E-02  -7.3536841E-03
15  4.9363023E-02  -7.3152765E-03
16  4.7904034E-02  -7.2741530E-03
17  4.6453553E-02  -7.2301632E-03
18  4.5012170E-02  -7.1831466E-03
19  4.3580508E-02  -7.1329323E-03
20  4.2159223E-02  -7.0793387E-03
21  4.0749010E-02  -7.0221738E-03
22  3.9350598E-02  -6.9612342E-03
23  3.7964775E-02  -6.8963070E-03
24  3.6592363E-02  -6.8271679E-03
25  3.5234212E-02  -6.7535815E-03
26  3.3891243E-02  -6.6753028E-03
27  3.2564420E-02  -6.5920763E-03
28  3.1254760E-02  -6.5036364E-03
29  2.9963338E-02  -6.4097087E-03
30  2.8691261E-02  -6.3100071E-03
31  2.7439604E-02  -6.2061816E-03
32  2.6208955E-02  -6.0998685E-03
33  2.4999843E-02  -5.9907486E-03
34  2.3812870E-02  -5.8784893E-03
35  2.2648686E-02  -5.7627427E-03
36  2.1508030E-02  -5.6431494E-03
37  2.0391695E-02  -5.5195309E-03
38  1.9300484E-02  -5.3919156E-03
39  1.8235196E-02  -5.2603692E-03
40  1.7196597E-02  -5.1249924E-03
41  1.6185445E-02  -4.9859250E-03
42  1.5202461E-02  -4.8433430E-03
43  1.4248328E-02  -4.6974593E-03
44  1.3323681E-02  -4.5485238E-03
45  1.2429107E-02  -4.3968233E-03
46  1.1565119E-02  -4.2426788E-03
47  1.0732175E-02  -4.0864495E-03
48  9.9306520E-03  -3.9285294E-03
49  9.1608470E-03  -3.7693480E-03
50  8.4229695E-03  -3.6093704E-03
51  7.7171225E-03  -3.4490938E-03
52  7.0433164E-03  -3.2890521E-03
53  6.4014482E-03  -3.1298122E-03
54  5.7912861E-03  -2.9719711E-03
55  5.2125115E-03  -2.8161686E-03
56  4.6646386E-03  -2.6630673E-03
57  4.1470583E-03  -2.5133601E-03
58  3.6590466E-03  -2.3677353E-03
59  3.1996751E-03  -2.2268157E-03
60  2.7679663E-03  -2.0912059E-03
61  2.3628015E-03  -1.9614652E-03
62  1.9829540E-03  -1.8381180E-03
63  1.6270976E-03  -1.7216211E-03
64  1.2938250E-03  -1.6123315E-03
65  9.8166698E-04  -1.5105120E-03
66  6.8911059E-04  -1.4163370E-03
67  4.1461644E-04  -1.3299848E-03
68  1.5663415E-04  -1.2512163E-03
69  -8.6384306E-05  -1.1802477E-03
70  -3.1597199E-04  -1.1168848E-03
71  -5.3363358E-04  -1.0609524E-03
72  -7.4083242E-04  -1.0122123E-03
73  -9.3897810E-04  -9.7036624E-04
74  -1.1294147E-03  -9.3505769E-04

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75 -1.3134096E-03 -9.0587521E-04
76 -1.4921424E-03 -8.8235663E-04
77 -1.6666959E-03 -8.6399241E-04
78 -1.8380461E-03 -8.5022873E-04
79 -2.0070543E-03 -8.4046979E-04
80 -2.1744585E-03 -8.3407852E-04
81 -2.3408651E-03 -8.3037710E-04
82 -2.5067408E-03 -8.2864728E-04
83 -2.6724049E-03 -8.2813054E-04
84 -2.7552244E-03 -8.2810432E-04
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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:43:57
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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

O\_L  
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.1357	-7.0384E-02	0.000	1.357	1.000	11.53	UL-RL	4517.	0.5000	0.000	
1.000	1.000	1.357	0.000	0.000	FRANA_334_8_L_0						
2 D	0.2818	-6.8865E-02	4.557	1.409	5.557	15.66	UL-RL	4517.	0.3000	0.000	
1.000	1.000	1.409	0.000	0.000	FRANA_334_8_L_0						
3 D	0.2920	-6.7346E-02	10.91	1.460	11.91	19.97	UL-RL	4517.	0.1000	0.000	
1.000	1.000	1.460	0.000	0.000	FRANA_334_8_L_0						
4 D	0.3023	-6.5828E-02	17.92	1.511	18.92	24.17	UL-RL	4517.	-0.1000	0.000	
1.000	1.000	1.511	0.000	0.000	FRANA_334_8_L_0						
5 D	0.3126	-6.4311E-02	26.34	1.563	27.34	26.78	UL-RL	4517.	-0.3000	0.000	
1.000	1.000	1.563	0.000	0.000	FRANA_334_8_L_0						
6 D	0.3228	-6.2796E-02	34.34	1.614	35.34	28.81	UL-RL	4517.	-0.5000	0.000	
1.000	1.000	1.614	0.000	0.000	FRANA_334_8_L_0						
7 D	0.3330	-6.1283E-02	41.20	1.665	42.20	30.70	UL-RL	4517.	-0.7000	0.000	
1.000	1.000	1.665	0.000	0.000	FRANA_334_8_L_0						
8 D	0.3432	-5.9774E-02	47.35	1.716	48.35	32.62	UL-RL	4517.	-0.9000	0.000	
1.000	1.000	1.716	0.000	0.000	FRANA_334_8_L_0						
9 D	0.3534	-5.8268E-02	53.02	1.767	54.02	34.66	UL-RL	4517.	-1.100	0.000	
1.000	1.000	1.767	0.000	0.000	FRANA_334_8_L_0						
10 D	0.3635	-5.6768E-02	58.37	1.817	59.37	36.83	UL-RL	4517.	-1.300	0.000	
1.000	1.000	1.817	0.000	0.000	FRANA_334_8_L_0						
11 D	0.3735	-5.5274E-02	63.22	1.868	64.22	39.14	UL-RL	4517.	-1.500	0.000	
1.000	1.000	1.868	0.000	0.000	FRANA_334_8_L_0						
12 D	0.3835	-5.3786E-02	68.17	1.917	69.17	41.57	UL-RL	4517.	-1.700	0.000	
1.000	1.000	1.917	0.000	0.000	FRANA_334_8_L_0						
13 D	0.3933	-5.2304E-02	72.97	1.967	73.97	44.12	UL-RL	4517.	-1.900	0.000	
1.000	1.000	1.967	0.000	0.000	FRANA_334_8_L_0						
14 D	4.356	-5.0830E-02	76.88	21.78	77.88	52.12	UL-RL	3.0201E+04	-2.100	0.000	
1.000	1.000	21.78	0.000	0.000	BNA2_(2)_335_337_L_0						
15 D	4.674	-4.9363E-02	79.69	23.37	80.69	50.72	UL-RL	3.0201E+04	-2.300	0.000	
1.000	1.000	23.37	0.000	0.000	BNA2_(2)_335_337_L_0						
16 D	5.000	-4.7904E-02	82.61	25.00	83.61	49.48	UL-RL	3.0201E+04	-2.500	0.000	
1.000	1.000	25.00	0.000	0.000	BNA2_(2)_335_337_L_0						
17 D	5.333	-4.6454E-02	85.63	26.67	86.63	48.41	UL-RL	3.0201E+04	-2.700	0.000	
1.000	1.000	26.67	0.000	0.000	BNA2_(2)_335_337_L_0						
18 D	5.671	-4.5012E-02	88.73	28.36	89.73	48.95	UL-RL	3.0201E+04	-2.900	0.000	
1.000	1.000	28.36	0.000	0.000	BNA2_(2)_335_337_L_0						
19 D	6.014	-4.3581E-02	91.90	30.07	92.90	51.39	UL-RL	3.0201E+04	-3.100	0.000	
1.000	1.000	30.07	0.000	0.000	BNA2_(2)_335_337_L_0						
20 D	6.358	-4.2159E-02	95.14	31.79	96.14	53.86	UL-RL	3.0201E+04	-3.300	0.000	
1.000	1.000	31.79	0.000	0.000	BNA2_(2)_335_337_L_0						
21 D	6.703	-4.0749E-02	98.44	33.52	99.44	56.37	UL-RL	3.0201E+04	-3.500	0.000	
1.000	1.000	33.52	0.000	0.000	BNA2_(2)_335_337_L_0						
22 D	7.048	-3.9351E-02	101.8	35.24	102.8	57.66	UL-RL	3.0201E+04	-3.700	0.000	
1.000	1.000	35.24	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	7.390	-3.7965E-02	105.2	36.95	106.2	58.97	UL-RL	3.0201E+04	-3.900	0.000	
1.000	1.000	36.95	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	7.728	-3.6592E-02	108.6	38.64	109.6	60.30	UL-RL	3.0201E+04	-4.100	0.000	
1.000	1.000	38.64	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	8.061	-3.5234E-02	112.1	40.31	113.1	61.64	UL-RL	3.0201E+04	-4.300	0.000	
1.000	1.000	40.31	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	8.387	-3.3891E-02	115.6	41.93	116.6	63.00	UL-RL	3.0201E+04	-4.500	0.000	
1.000	1.000	41.93	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	8.703	-3.2564E-02	119.2	43.52	120.2	64.37	UL-RL	3.0201E+04	-4.700	0.000	
1.000	1.000	43.52	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	9.009	-3.1255E-02	122.7	45.04	123.7	66.68	UL-RL	3.0201E+04	-4.900	0.000	
1.000	1.000	45.04	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	9.301	-2.9963E-02	126.3	46.51	127.3	69.85	UL-RL	3.0201E+04	-5.100	0.000	
1.000	1.000	46.51	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	9.579	-2.8691E-02	129.9	47.89	130.9	72.69	UL-RL	3.0201E+04	-5.300	0.000	
1.000	1.000	47.89	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	10.05	-2.7440E-02	131.7	48.34	132.7	75.26	UL-RL	3.0201E+04	-5.500	1.902	
1.000	1.000	50.24	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	10.50	-2.6209E-02	133.5	48.71	134.5	77.56	UL-RL	3.0201E+04	-5.700	3.804	
1.000	1.000	52.51	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	10.94	-2.5000E-02	135.2	49.02	136.2	79.63	UL-RL	3.0201E+04	-5.900	5.706	
1.000	1.000	54.72	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	11.38	-2.3813E-02	137.0	49.28	138.0	81.51	UL-RL	3.0201E+04	-6.100	7.608
1.000	1.000	56.88	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	11.80	-2.2649E-02	138.8	49.49	139.8	83.43	UL-RL	3.0201E+04	-6.300	9.510
1.000	1.000	59.00	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	12.22	-2.1508E-02	140.7	49.68	141.7	86.17	UL-RL	3.0201E+04	-6.500	11.41
1.000	1.000	61.09	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	12.63	-2.0392E-02	142.5	49.84	143.5	90.39	UL-RL	3.0201E+04	-6.700	13.31
1.000	1.000	63.15	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	13.04	-1.9300E-02	144.4	49.99	145.4	94.05	UL-RL	3.0201E+04	-6.900	15.22
1.000	1.000	65.21	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	13.45	-1.8235E-02	146.2	50.14	147.2	97.20	UL-RL	3.0201E+04	-7.100	17.12
1.000	1.000	67.25	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	13.86	-1.7197E-02	148.1	50.29	149.1	99.91	UL-RL	3.0201E+04	-7.300	19.02
1.000	1.000	69.30	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	14.27	-1.6185E-02	150.0	50.44	151.0	102.2	UL-RL	3.0201E+04	-7.500	20.92
1.000	1.000	71.36	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	14.69	-1.5202E-02	151.9	50.61	152.9	104.2	UL-RL	3.0201E+04	-7.700	22.82
1.000	1.000	73.43	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	15.10	-1.4248E-02	153.8	50.80	154.8	105.9	UL-RL	3.0201E+04	-7.900	24.73
1.000	1.000	75.52	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	15.53	-1.3324E-02	155.8	51.01	156.8	111.0	UL-RL	3.0201E+04	-8.100	26.63
1.000	1.000	77.64	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	15.95	-1.2429E-02	157.7	51.24	158.7	115.3	UL-RL	3.0201E+04	-8.300	28.53
1.000	1.000	79.77	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	16.39	-1.1565E-02	159.6	51.51	160.6	119.0	UL-RL	3.0201E+04	-8.500	30.43
1.000	1.000	81.94	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	16.83	-1.0732E-02	161.6	51.80	162.6	122.3	UL-RL	3.0201E+04	-8.700	32.33
1.000	1.000	84.13	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	17.27	-9.9307E-03	163.5	52.13	164.5	125.1	UL-RL	3.0201E+04	-8.900	34.24
1.000	1.000	86.36	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	17.72	-9.1608E-03	165.5	52.48	166.5	127.3	UL-RL	3.0201E+04	-9.100	36.14
1.000	1.000	88.62	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	18.18	-8.4230E-03	167.5	52.88	168.5	129.2	UL-RL	3.0201E+04	-9.300	38.04
1.000	1.000	90.91	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	18.65	-7.7171E-03	169.5	53.30	170.5	130.7	UL-RL	3.0201E+04	-9.500	39.94
1.000	1.000	93.24	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	19.12	-7.0433E-03	171.4	53.76	172.4	132.1	UL-RL	3.0201E+04	-9.700	41.84
1.000	1.000	95.60	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	19.60	-6.4014E-03	173.4	54.25	174.4	133.2	UL-RL	3.0201E+04	-9.900	43.75
1.000	1.000	98.00	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	20.09	-5.7913E-03	175.4	54.78	176.4	134.2	UL-RL	3.0201E+04	-10.10	45.65
1.000	1.000	100.4	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	20.58	-5.2125E-03	177.4	55.34	178.4	135.0	UL-RL	3.0201E+04	-10.30	47.55
1.000	1.000	102.9	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	21.08	-4.6646E-03	179.4	55.93	180.4	135.8	UL-RL	3.0201E+04	-10.50	49.45
1.000	1.000	105.4	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	21.58	-4.1471E-03	181.5	56.55	182.5	136.4	UL-RL	3.0201E+04	-10.70	51.35
1.000	1.000	107.9	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	22.09	-3.6590E-03	183.5	57.20	184.5	137.0	UL-RL	3.0201E+04	-10.90	53.25
1.000	1.000	110.5	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	22.61	-3.1997E-03	185.5	57.87	186.5	137.5	UL-RL	3.0201E+04	-11.10	55.16
1.000	1.000	113.0	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	23.13	-2.7680E-03	187.5	58.57	188.5	138.0	UL-RL	3.0201E+04	-11.30	57.06
1.000	1.000	115.6	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	23.65	-2.3628E-03	189.6	59.30	190.6	138.5	UL-RL	3.0201E+04	-11.50	58.96
1.000	1.000	118.3	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	24.45	-1.9830E-03	191.6	71.37	192.6	139.0	UL-RL	3.0201E+04	-11.70	60.86
1.000	1.000	132.2	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	29.20	-1.6271E-03	193.6	83.22	194.6	139.5	UL-RL	3.0201E+04	-11.90	62.76
1.000	1.000	146.0	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	31.81	-1.2938E-03	195.7	94.39	196.7	140.0	UL-RL	3.0201E+04	-12.10	64.67
1.000	1.000	159.1	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	34.30	-9.8167E-04	197.7	104.9	198.7	140.5	UL-RL	3.0201E+04	-12.30	66.57
1.000	1.000	171.5	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	36.67	-6.8911E-04	199.8	114.9	200.8	141.0	UL-RL	3.0201E+04	-12.50	68.47
1.000	1.000	183.3	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	38.55	-4.1462E-04	201.9	122.4	202.9	144.7	UL-RL	3.0201E+04	-12.70	70.37
1.000	1.000	192.8	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	40.34	-1.5663E-04	203.9	129.4	204.9	148.4	UL-RL	3.0201E+04	-12.90	72.27
1.000	1.000	201.7	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	42.07	8.6384E-05	206.0	136.2	207.0	151.9	UL-RL	3.0201E+04	-13.10	74.18
1.000	1.000	210.3	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	43.74	3.1597E-04	208.0	142.6	209.0	155.1	UL-RL	3.0201E+04	-13.30	76.08
1.000	1.000	218.7	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	45.36	5.3363E-04	210.1	148.8	211.1	158.2	UL-RL	3.0201E+04	-13.50	77.98
1.000	1.000	226.8	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	46.94	7.4083E-04	212.2	154.8	213.2	161.2	UL-RL	3.0201E+04	-13.70	79.88
1.000	1.000	234.7	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	48.49	9.3898E-04	214.3	160.7	215.3	164.0	UL-RL	3.0201E+04	-13.90	81.78
1.000	1.000	242.5	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	49.90	1.1294E-03	216.3	165.8	217.3	167.6	UL-RL	3.0201E+04	-14.10	83.69
1.000	1.000	249.5	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	51.22	1.3134E-03	218.4	170.5	219.4	171.7	UL-RL	3.0201E+04	-14.30	85.59
1.000	1.000	256.1	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	52.47	1.4921E-03	220.5	174.9	221.5	176.1	UL-RL	3.0201E+04	-14.50	87.49
1.000	1.000	262.4	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	53.63	1.6667E-03	222.6	178.8	223.6	180.0	UL-RL	3.0201E+04	-14.70	89.39
1.000	1.000	268.2	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	54.78	1.8380E-03	224.7	182.6	225.7	183.9	UL-RL	3.0201E+04	-14.90	91.29
1.000	1.000	273.9	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	55.92	2.0071E-03	226.8	186.4	227.8	187.7	UL-RL	3.0201E+04	-15.10	93.20
1.000	1.000	279.6	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	57.06	2.1745E-03	228.9	190.2	229.9	191.5	UL-RL	3.0201E+04	-15.30	95.10
1.000	1.000		285.3	0.000	0.000	BNA2_(2)_335_337_L_0				
81 D	58.19	2.3409E-03	231.0	193.9	232.0	195.2	UL-RL	3.0201E+04	-15.50	97.00
1.000	1.000		290.9	0.000	0.000	BNA2_(2)_335_337_L_0				
82 D	59.32	2.5067E-03	233.1	197.7	234.1	199.0	UL-RL	3.0201E+04	-15.70	98.90
1.000	1.000		296.6	0.000	0.000	BNA2_(2)_335_337_L_0				
83 D	45.33	2.6724E-03	235.2	201.4	236.2	202.7	UL-RL	3.0201E+04	-15.90	100.8
1.000	1.000		302.2	0.000	0.000	BNA2_(2)_335_337_L_0				
84 D	15.25	2.7552E-03	236.2	203.3	237.2	204.6	UL-RL	3.0201E+04	-16.00	101.8
1.000	1.000		305.0	0.000	0.000	BNA2_(2)_335_337_L_0				

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| Exe Time :25 June 2020 16:43:57
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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

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ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    84  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
15	0.000	--	--	--	--	--	REMOVED	--	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
16	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
17	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
18	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
19	0.000	--	--	--	--	--	REMOVED	--	-3.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
20	0.000	--	--	--	--	--	REMOVED	--	-3.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
21	0.000	--	--	--	--	--	REMOVED	--	-3.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
22	0.000	--	--	--	--	--	REMOVED	--	-3.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
23	0.000	--	--	--	--	--	REMOVED	--	-3.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
24	0.000	--	--	--	--	--	REMOVED	--	-4.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
25	0.000	--	--	--	--	--	REMOVED	--	-4.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
26	0.000	--	--	--	--	--	REMOVED	--	-4.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
27	0.000	--	--	--	--	--	REMOVED	--	-4.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
28	0.000	--	--	--	--	--	REMOVED	--	-4.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
29	0.000	--	--	--	--	--	REMOVED	--	-5.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
30	0.000	--	--	--	--	--	REMOVED	--	-5.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
31	0.000	--	--	--	--	--	REMOVED	--	-5.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
32	0.000	--	--	--	--	--	REMOVED	--	-5.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
33	0.000	--	--	--	--	--	REMOVED	--	-5.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					

34	0.000	--	--	--	--	--	REMOVED	--	-6.100	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
35	0.000	--	--	--	--	--	REMOVED	--	-6.300	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
36 D	12.54	2.1508E-02	1.902	60.58	110.0	102.4	UL-RL	2.7274E+04	-6.500	2.098
1.000	1.000	62.68	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	14.13	2.0392E-02	3.804	66.46	112.0	96.40	UL-RL	2.7274E+04	-6.700	4.196
1.000	1.000	70.66	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	15.73	1.9300E-02	5.706	72.36	114.0	91.29	UL-RL	2.7274E+04	-6.900	6.294
1.000	1.000	78.65	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	17.33	1.8235E-02	7.608	78.27	116.0	90.50	UL-RL	2.7274E+04	-7.100	8.392
1.000	1.000	86.66	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	18.93	1.7197E-02	9.510	84.18	118.0	95.78	UL-RL	2.7274E+04	-7.300	10.49
1.000	1.000	94.67	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	20.53	1.6185E-02	11.41	90.09	120.0	101.1	UL-RL	2.7274E+04	-7.500	12.59
1.000	1.000	102.7	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	22.13	1.5202E-02	13.31	95.99	122.0	106.3	UL-RL	2.7274E+04	-7.700	14.69
1.000	1.000	110.7	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	23.73	1.4248E-02	15.22	101.9	124.0	111.6	UL-RL	2.7274E+04	-7.900	16.78
1.000	1.000	118.7	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	25.33	1.3324E-02	17.12	107.7	126.0	116.9	UL-RL	2.7274E+04	-8.100	18.88
1.000	1.000	126.6	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	26.92	1.2429E-02	19.02	113.6	128.0	122.2	UL-RL	2.7274E+04	-8.300	20.98
1.000	1.000	134.6	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	28.50	1.1565E-02	20.92	119.4	130.0	127.4	UL-RL	2.7274E+04	-8.500	23.08
1.000	1.000	142.5	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	30.08	1.0732E-02	22.82	125.2	132.0	132.7	UL-RL	2.7274E+04	-8.700	25.18
1.000	1.000	150.4	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	31.66	9.9307E-03	24.73	131.0	134.0	138.0	UL-RL	2.7274E+04	-8.900	27.27
1.000	1.000	158.3	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	33.23	9.1608E-03	26.63	136.8	136.0	143.3	UL-RL	2.7274E+04	-9.100	29.37
1.000	1.000	166.1	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	34.79	8.4230E-03	28.53	142.5	138.0	148.5	UL-RL	2.7274E+04	-9.300	31.47
1.000	1.000	174.0	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	36.35	7.7171E-03	30.43	148.2	140.0	153.8	UL-RL	2.7274E+04	-9.500	33.57
1.000	1.000	181.8	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	37.91	7.0433E-03	32.33	153.9	142.0	159.1	UL-RL	2.7274E+04	-9.700	35.67
1.000	1.000	189.5	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	39.46	6.4014E-03	34.24	159.5	144.0	164.4	UL-RL	2.7274E+04	-9.900	37.76
1.000	1.000	197.3	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	41.00	5.7913E-03	36.14	165.1	146.0	169.6	UL-RL	2.7274E+04	-10.10	39.86
1.000	1.000	205.0	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	42.54	5.2125E-03	38.04	170.7	148.0	174.9	UL-RL	2.7274E+04	-10.30	41.96
1.000	1.000	212.7	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	43.72	4.6646E-03	39.94	174.5	150.0	175.7	UL-RL	2.7274E+04	-10.50	44.06
1.000	1.000	218.6	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	42.78	4.1471E-03	41.84	167.7	152.0	168.6	UL-RL	2.7274E+04	-10.70	46.16
1.000	1.000	213.9	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	41.94	3.6590E-03	43.75	161.4	154.0	162.1	UL-RL	2.7274E+04	-10.90	48.25
1.000	1.000	209.7	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	41.19	3.1997E-03	45.65	155.6	156.0	156.0	UL-RL	2.7274E+04	-11.10	50.35
1.000	1.000	206.0	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	40.55	2.7680E-03	47.55	150.3	158.0	150.5	UL-RL	2.7274E+04	-11.30	52.45
1.000	1.000	202.7	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	39.99	2.3628E-03	49.45	145.4	160.0	145.4	UL-RL	2.7274E+04	-11.50	54.55
1.000	1.000	199.9	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	39.51	1.9830E-03	51.35	140.9	162.0	140.9	V-C	1.7046E+04	-11.70	56.65
1.000	1.000	197.5	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	39.10	1.6271E-03	53.25	136.8	164.0	136.8	V-C	1.7046E+04	-11.90	58.74
1.000	1.000	195.5	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	38.77	1.2938E-03	55.16	133.0	166.0	133.0	V-C	1.7046E+04	-12.10	60.84
1.000	1.000	193.8	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	38.50	9.8167E-04	57.06	129.6	168.0	129.6	V-C	1.7046E+04	-12.30	62.94
1.000	1.000	192.5	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	38.31	6.8911E-04	58.96	126.5	170.0	126.5	V-C	1.7046E+04	-12.50	65.04
1.000	1.000	191.5	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	38.16	4.1462E-04	60.86	123.7	172.0	123.7	V-C	1.7046E+04	-12.70	67.14
1.000	1.000	190.8	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	37.97	1.5663E-04	62.76	120.6	174.0	122.0	UL-RL	2.7274E+04	-12.90	69.24
1.000	1.000	189.8	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	37.48	-8.6384E-05	64.67	116.1	176.0	123.4	UL-RL	2.7274E+04	-13.10	71.33
1.000	1.000	187.4	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	37.06	-3.1597E-04	66.57	111.9	178.0	124.8	UL-RL	2.7274E+04	-13.30	73.43
1.000	1.000	185.3	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	36.70	-5.3363E-04	68.47	108.0	180.0	126.2	UL-RL	2.7274E+04	-13.50	75.53
1.000	1.000	183.5	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	36.39	-7.4083E-04	70.37	104.3	182.0	127.5	UL-RL	2.7274E+04	-13.70	77.63
1.000	1.000	182.0	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	36.09	-9.3898E-04	72.27	100.7	184.0	129.2	UL-RL	2.7274E+04	-13.90	79.73
1.000	1.000	180.5	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	35.81	-1.1294E-03	74.18	97.22	186.0	131.1	UL-RL	2.7274E+04	-14.10	81.82
1.000	1.000	179.0	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	35.56	-1.3134E-03	76.08	93.86	188.0	132.9	UL-RL	2.7274E+04	-14.30	83.92
1.000	1.000	177.8	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	35.33	-1.4921E-03	77.98	90.64	190.0	134.8	UL-RL	2.7274E+04	-14.50	86.02
1.000	1.000	176.7	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	35.13	-1.6667E-03	79.88	87.51	192.0	136.6	UL-RL	2.7274E+04	-14.70	88.12
1.000	1.000	175.6	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	34.93	-1.8380E-03	81.78	84.46	194.0	138.4	UL-RL	2.7274E+04	-14.90	90.22
1.000	1.000	174.7	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	34.76	-2.0071E-03	83.69	81.47	196.0	140.2	UL-RL	2.7274E+04	-15.10	92.31
1.000	1.000	173.8	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	34.58	-2.1745E-03	85.59	78.51	198.0	142.0	UL-RL	2.7274E+04	-15.30	94.41
1.000	1.000	172.9	0.000	0.000	BNA2_(2)_335_337_L_0					
81 D	34.42	-2.3409E-03	87.49	75.58	200.0	143.8	UL-RL	2.7274E+04	-15.50	96.51
1.000	1.000	172.1	0.000	0.000	BNA2_(2)_335_337_L_0					
82 D	34.25	-2.5067E-03	89.39	72.66	202.0	145.6	UL-RL	2.7274E+04	-15.70	98.61
1.000	1.000	171.3	0.000	0.000	BNA2_(2)_335_337_L_0					
83 D	25.57	-2.6724E-03	91.29	69.74	204.0	147.4	UL-RL	2.7274E+04	-15.90	100.7
1.000	1.000	170.4	0.000	0.000	BNA2_(2)_335_337_L_0					
84 D	8.502	-2.7552E-03	92.25	68.28	205.0	148.3	UL-RL	2.7274E+04	-16.00	101.8
1.000	1.000	170.0	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 83  
C U R R E N T   T I M E   I S        5.0000

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	46.678	-46.678	-2.59109E-09	9.3356
2	59.893	-59.893	-9.3356	21.314
3	74.569	-74.569	-21.314	36.228
4	90.704	-90.704	-36.228	54.369
5	108.30	-108.30	-54.369	76.029
6	127.35	-127.35	-76.029	101.50
7	147.87	-147.87	-101.50	131.07
8	169.84	-169.84	-131.07	165.04
9	193.28	-193.28	-165.04	203.70
10	4.6608	-4.6608	-203.70	204.63
11	31.014	-31.014	-204.63	210.83
12	58.828	-58.828	-210.83	222.60
13	80.730	-80.730	-222.60	238.74
14	85.086	-85.086	-238.74	255.76
15	89.760	-89.760	-255.76	273.71
16	94.759	-94.759	-273.71	292.66
17	100.09	-100.09	-292.66	312.68
18	105.76	-105.76	-312.68	333.84
19	111.78	-111.78	-333.84	356.19
20	118.14	-118.14	-356.19	379.82
21	124.84	-124.84	-379.82	404.79
22	131.89	-131.89	-404.79	431.16
23	139.28	-139.28	-431.16	459.02
24	147.01	-147.01	-459.02	488.42
25	155.07	-155.07	-488.42	519.43
26	163.45	-163.45	-519.43	552.12
27	172.16	-172.16	-552.12	586.56
28	181.17	-181.17	-586.56	622.79
29	190.47	-190.47	-622.79	660.88
30	75.046	-75.046	-660.88	675.89
31	85.094	-85.094	-675.89	692.91
32	95.597	-95.597	-692.91	712.03
33	106.54	-106.54	-712.03	733.34
34	117.92	-117.92	-733.34	756.92
35	129.72	-129.72	-756.92	782.87
36	129.40	-129.40	-782.87	808.75
37	127.90	-127.90	-808.75	834.33
38	125.21	-125.21	-834.33	859.37
39	121.33	-121.33	-859.37	883.64
40	116.26	-116.26	-883.64	906.89
41	110.00	-110.00	-906.89	928.89
42	102.55	-102.55	-928.89	949.40
43	93.922	-93.922	-949.40	968.18
44	84.124	-84.124	-968.18	985.00
45	73.163	-73.163	-985.00	999.64
46	61.049	-61.049	-999.64	1011.8
47	47.794	-47.794	-1011.8	1021.4
48	33.407	-33.407	-1021.4	1028.1
49	17.903	-17.903	-1028.1	1031.7
50	1.2914	-1.2914	-1031.7	1031.9
51	-16.414	16.414	-1031.9	1028.6
52	-35.200	35.200	-1028.6	1021.6
53	-55.056	55.056	-1021.6	1010.6
54	-75.969	75.969	-1010.6	995.40
55	-97.927	97.927	-995.40	975.81
56	-120.57	120.57	-975.81	951.70
57	-141.77	141.77	-951.70	923.35
58	-161.62	161.62	-923.35	891.02
59	-180.20	180.20	-891.02	854.98
60	-197.63	197.63	-854.98	815.46
61	-213.96	213.96	-815.46	772.66
62	-227.03	227.03	-772.66	727.26
63	-236.95	236.95	-727.26	679.87
64	-243.94	243.94	-679.87	631.08
65	-248.18	248.18	-631.08	581.44
66	-249.86	249.86	-581.44	531.47
67	-249.47	249.47	-531.47	481.58
68	-247.10	247.10	-481.58	432.16
69	-242.51	242.51	-432.16	383.65
70	-235.84	235.84	-383.65	336.49

71	-227.18	227.18	-336.49	291.05
72	-216.63	216.63	-291.05	247.73
73	-204.23	204.23	-247.73	206.88
74	-190.14	190.14	-206.88	168.85
75	-174.48	174.48	-168.85	133.96
76	-157.34	157.34	-133.96	102.49
77	-138.83	138.83	-102.49	74.722
78	-118.98	118.98	-74.722	50.926
79	-97.816	97.816	-50.926	31.363
80	-75.346	75.346	-31.363	16.294
81	-51.577	51.577	-16.294	5.9782
82	-26.515	26.515	-5.9782	0.67506
83	-6.7500	6.7500	-0.67506	3.01120E-10

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New Project
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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\_341 :  
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	213.51	-9.65596E-04	4.29604E-02	0.0000	2015.0	0.0000	0.0000	ELASTIC ORIGINAL YOUNG MODULUS

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
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| Exe Time :25 June 2020 16:43:57
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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 .   5

Tieback\_342 :  
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	125.00	-5.16479E-04	-5.16479E-04	0.0000	0.0000	0.0000	0.0000	BORN NOW JUST ACTIVATED	
ITER	0	RNORM = 7340.	RMNORM= 0.000	RINORM=0.3446E+07	RIMNOR=0.6578E+08	RENORM= 3042.	REMNR=0.1414E-16	RATIO =0.2971E-01	TOLER =0.1000E-03	NOT CONVERGED
		RFMAX = 249.9	RMMAX = 1032.	RTSMAL=0.1000E-02	RMSMAL=0.1000E-01	RDT =0.3446E+07	RDR =0.6578E+08	RATIO=0.2971E-01	RATIO= 0.000	
		MAX UN= 21.00	IEQ= 83 NODE	42 DOF	1 Y-DISPL.F	MIN UN=-.8416	IEQ= 69 NODE	35 DOF	1 Y-DISPL.F	
		NO. OF CONTACT CONSTRAINT VIOLATIONS	0							
ITER	2	RNORM = 7340.	RMNORM= 0.000	RINORM=0.3446E+07	RIMNOR=0.6578E+08	RENORM= 490.1	REMNR=0.1351E-16	RATIO =0.1193E-01	TOLER =0.1000E-03	NOT CONVERGED
		RFMAX = 249.9	RMMAX = 1032.	RTSMAL=0.1000E-02	RMSMAL=0.1000E-01	RDT =0.3446E+07	RDR =0.6578E+08	RATIO=0.1193E-01	RATIO= 0.000	
		MAX UN= 5.649	IEQ= 119 NODE	60 DOF	1 Y-DISPL.F	MIN UN=-.2835E-07	IEQ= 3 NODE	2 DOF	1 Y-DISPL.F	
		NO. OF CONTACT CONSTRAINT VIOLATIONS	0							
ITER	3	RNORM = 7340.	RMNORM= 0.000	RINORM=0.3446E+07	RIMNOR=0.6578E+08	RENORM= 145.0	REMNR=0.1916E-16	RATIO =0.6488E-02	TOLER =0.1000E-03	NOT CONVERGED
		RFMAX = 249.9	RMMAX = 1032.	RTSMAL=0.1000E-02	RMSMAL=0.1000E-01	RDT =0.3446E+07	RDR =0.6578E+08	RATIO=0.6488E-02	RATIO= 0.000	
		MAX UN= 5.532	IEQ= 51 NODE	26 DOF	1 Y-DISPL.F	MIN UN=-.3312	IEQ= 161 NODE	81 DOF	1 Y-DISPL.F	
		NO. OF CONTACT CONSTRAINT VIOLATIONS	0							
ITER	4	RNORM = 7340.	RMNORM= 0.000	RINORM=0.3446E+07	RIMNOR=0.6578E+08	RENORM= 46.75	REMNR=0.1155E-16	RATIO =0.3683E-02	TOLER =0.1000E-03	NOT CONVERGED
		RFMAX = 249.9	RMMAX = 1032.	RTSMAL=0.1000E-02	RMSMAL=0.1000E-01	RDT =0.3446E+07	RDR =0.6578E+08	RATIO=0.3683E-02	RATIO= 0.000	
		MAX UN= 4.992	IEQ= 29 NODE	15 DOF	1 Y-DISPL.F	MIN UN=-.3825E-01	IEQ= 157 NODE	79 DOF	1 Y-DISPL.F	
		NO. OF CONTACT CONSTRAINT VIOLATIONS	0							
ITER	5	RNORM = 7340.	RMNORM= 0.000	RINORM=0.3446E+07	RIMNOR=0.6578E+08	RENORM= 3.507	REMNR=0.1095E-16	RATIO =0.1009E-02	TOLER =0.1000E-03	NOT CONVERGED
		RFMAX = 249.9	RMMAX = 1032.	RTSMAL=0.1000E-02	RMSMAL=0.1000E-01	RDT =0.3446E+07	RDR =0.6578E+08	RATIO=0.1009E-02	RATIO= 0.000	
		MAX UN= 1.020	IEQ= 9 NODE	5 DOF	1 Y-DISPL.F	MIN UN=-.1930E-07	IEQ= 13 NODE	7 DOF	1 Y-DISPL.F	
		NO. OF CONTACT CONSTRAINT VIOLATIONS	0							
ITER	6	RNORM = 7340.	RMNORM= 0.000	RINORM=0.3446E+07	RIMNOR=0.6578E+08	RENORM=0.3035E-14	REMNR=0.1859E-16	RATIO =0.2968E-10	TOLER =0.1000E-03	CONVERGED !
		RFMAX = 249.9	RMMAX = 1032.	RTSMAL=0.1000E-02	RMSMAL=0.1000E-01	RDT =0.3446E+07	RDR =0.6578E+08	RATIO=0.2968E-10	RATIO= 0.000	
		MAX UN=0.1816E-07	IEQ= 61 NODE	31 DOF	1 Y-DISPL.F					

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MIN UN=-.1675E-07 IEQ=      53 NODE     27 DOF     1 Y-DISPL.F
NO. OF CONTACT CONSTRAINT VIOLATIONS      0
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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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New Project  
SOLUTION REACHED USING 6 ITERATIONS ON 40

P R I N T   O U T   F O R   T I M E   S T E P   6     ( A T T I M E   6.000      )

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

	Y-DISPL. F (02)	X-ROT. F (04)	(
1	7.3203529E-02	-7.2036347E-03	
2	7.1762850E-02	-7.2029117E-03	
3	7.0322474E-02	-7.2005419E-03	
4	6.8882771E-02	-7.1961009E-03	
5	6.7444203E-02	-7.1891193E-03	
6	6.6007327E-02	-7.1790828E-03	
7	6.4572811E-02	-7.1654318E-03	
8	6.3141436E-02	-7.1475619E-03	
9	6.1714110E-02	-7.1248237E-03	
10	6.0291877E-02	-7.0965224E-03	
11	5.8875693E-02	-7.0653456E-03	
12	5.7465755E-02	-7.0339355E-03	
13	5.6062190E-02	-7.0014624E-03	
14	5.4665291E-02	-6.9671662E-03	
15	5.3275469E-02	-6.9306883E-03	
16	5.1893165E-02	-6.8919759E-03	
17	5.0518832E-02	-6.8509683E-03	
18	4.9152935E-02	-6.8075963E-03	
19	4.7795956E-02	-6.7617822E-03	
20	4.6448391E-02	-6.7134393E-03	
21	4.5110755E-02	-6.6624722E-03	
22	4.3783577E-02	-6.6087757E-03	
23	4.2467428E-02	-6.5522365E-03	
24	4.1162887E-02	-6.4927308E-03	
25	3.9870549E-02	-6.4301251E-03	
26	3.8591053E-02	-6.3642766E-03	
27	3.7325064E-02	-6.2950328E-03	
28	3.6073277E-02	-6.2222309E-03	
29	3.4836427E-02	-6.1456989E-03	
30	3.3615259E-02	-6.0652530E-03	
31	3.2410450E-02	-5.9828517E-03	
32	3.1222118E-02	-5.9004422E-03	
33	3.0050288E-02	-5.8178111E-03	
34	2.8895029E-02	-5.7347354E-03	
35	2.7756445E-02	-5.6509802E-03	
36	2.6634699E-02	-5.5663016E-03	
37	2.5530002E-02	-5.4804449E-03	
38	2.4442617E-02	-5.3931448E-03	
39	2.3372865E-02	-5.3041226E-03	
40	2.2321108E-02	-5.2130814E-03	
41	2.1287788E-02	-5.1197086E-03	
42	2.0273402E-02	-5.0236740E-03	
43	1.9278519E-02	-4.9246303E-03	
44	1.8303760E-02	-4.8224430E-03	
45	1.7349749E-02	-4.7172134E-03	
46	1.6417073E-02	-4.6090700E-03	
47	1.5506305E-02	-4.4981710E-03	
48	1.4617976E-02	-4.3847025E-03	
49	1.3752581E-02	-4.2688793E-03	
50	1.2910569E-02	-4.1509449E-03	
51	1.2092330E-02	-4.0311694E-03	
52	1.1298204E-02	-3.9098532E-03	
53	1.0528469E-02	-3.7873241E-03	
54	9.7833171E-03	-3.6639361E-03	
55	9.0629111E-03	-3.5400785E-03	
56	8.3672897E-03	-3.4161618E-03	
57	7.6964209E-03	-3.2926271E-03	
58	7.0502138E-03	-3.1699497E-03	
59	6.4283841E-03	-3.0486150E-03	
60	5.8306428E-03	-2.9291548E-03	
61	5.2565602E-03	-2.8121231E-03	
62	4.7055929E-03	-2.6981020E-03	
63	4.1770781E-03	-2.5877017E-03	
64	3.6702290E-03	-2.4815491E-03	
65	3.1841347E-03	-2.3802523E-03	
66	2.7177667E-03	-2.2843773E-03	
67	2.2699878E-03	-2.1944428E-03	
68	1.8395642E-03	-2.1108882E-03	
69	1.4251847E-03	-2.0340505E-03	
70	1.0254804E-03	-1.9641678E-03	
71	6.3904432E-04	-1.9013838E-03	
72	2.6445014E-04	-1.8457503E-03	
73	-9.9729966E-05	-1.7972294E-03	
74	-4.5490680E-04	-1.7556861E-03	

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75 -8.0245363E-04 -1.7208811E-03
76 -1.1436859E-03 -1.6924762E-03
77 -1.4798418E-03 -1.6700374E-03
78 -1.8120636E-03 -1.6530390E-03
79 -2.1413791E-03 -1.6408652E-03
80 -2.4686846E-03 -1.6328159E-03
81 -2.7947284E-03 -1.6281111E-03
82 -3.1200948E-03 -1.6258928E-03
83 -3.4451889E-03 -1.6252249E-03
84 -3.6077254E-03 -1.6251908E-03
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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 84  
C U R R E N T   T I M E   I S      6.0000

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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.000	-7.3204E-02	0.000	0.000	1.000	11.53	ACTIVE	0.000	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
2 D	0.000	-7.1763E-02	4.557	0.000	5.557	15.66	ACTIVE	0.000	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
3 D	0.000	-7.0322E-02	10.91	0.000	11.91	19.97	ACTIVE	0.000	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
4 D	0.000	-6.8883E-02	17.92	0.000	18.92	24.17	ACTIVE	0.000	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
5 D	0.000	-6.7444E-02	26.34	0.000	27.34	26.78	ACTIVE	0.000	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
6 D	0.000	-6.6007E-02	34.34	0.000	35.34	28.81	ACTIVE	0.000	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
7 D	0.000	-6.4573E-02	41.20	0.000	42.20	30.70	ACTIVE	0.000	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
8 D	0.000	-6.3141E-02	47.35	0.000	48.35	32.62	ACTIVE	0.000	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
9 D	0.000	-6.1714E-02	53.02	0.000	54.02	34.66	ACTIVE	0.000	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
10 D	0.000	-6.0292E-02	58.37	0.000	59.37	36.83	ACTIVE	0.000	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
11 D	0.000	-5.8876E-02	63.22	0.000	64.22	39.14	ACTIVE	0.000	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
12 D	0.000	-5.7466E-02	68.17	0.000	69.17	41.57	ACTIVE	0.000	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
13 D	0.000	-5.6062E-02	72.97	0.000	73.97	44.12	ACTIVE	0.000	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
14 D	1.572	-5.4665E-02	76.88	7.859	77.88	52.12	ACTIVE	0.000	-2.100	0.000	
1.000	1.000	7.859	0.000	0.000	BNA2_(2)_335_337_L_0						
15 D	1.826	-5.3275E-02	79.69	9.128	80.69	50.72	ACTIVE	0.000	-2.300	0.000	
1.000	1.000	9.128	0.000	0.000	BNA2_(2)_335_337_L_0						
16 D	2.089	-5.1893E-02	82.61	10.45	83.61	49.48	ACTIVE	0.000	-2.500	0.000	
1.000	1.000	10.45	0.000	0.000	BNA2_(2)_335_337_L_0						
17 D	2.362	-5.0519E-02	85.63	11.81	86.63	48.41	ACTIVE	0.000	-2.700	0.000	
1.000	1.000	11.81	0.000	0.000	BNA2_(2)_335_337_L_0						
18 D	2.643	-4.9153E-02	88.73	13.21	89.73	48.95	ACTIVE	0.000	-2.900	0.000	
1.000	1.000	13.21	0.000	0.000	BNA2_(2)_335_337_L_0						
19 D	2.930	-4.7796E-02	91.90	14.65	92.90	51.39	ACTIVE	0.000	-3.100	0.000	
1.000	1.000	14.65	0.000	0.000	BNA2_(2)_335_337_L_0						
20 D	3.223	-4.6448E-02	95.14	16.11	96.14	53.86	ACTIVE	0.000	-3.300	0.000	
1.000	1.000	16.11	0.000	0.000	BNA2_(2)_335_337_L_0						
21 D	3.521	-4.5111E-02	98.44	17.60	99.44	56.37	ACTIVE	0.000	-3.500	0.000	
1.000	1.000	17.60	0.000	0.000	BNA2_(2)_335_337_L_0						
22 D	3.824	-4.3784E-02	101.8	19.12	102.8	57.66	ACTIVE	0.000	-3.700	0.000	
1.000	1.000	19.12	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	4.131	-4.2467E-02	105.2	20.65	106.2	58.97	ACTIVE	0.000	-3.900	0.000	
1.000	1.000	20.65	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	4.442	-4.1163E-02	108.6	22.21	109.6	60.30	ACTIVE	0.000	-4.100	0.000	
1.000	1.000	22.21	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	4.756	-3.9871E-02	112.1	23.78	113.1	61.64	ACTIVE	0.000	-4.300	0.000	
1.000	1.000	23.78	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	5.073	-3.8591E-02	115.6	25.37	116.6	63.00	ACTIVE	0.000	-4.500	0.000	
1.000	1.000	25.37	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	5.394	-3.7325E-02	119.2	26.97	120.2	64.37	ACTIVE	0.000	-4.700	0.000	
1.000	1.000	26.97	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	5.716	-3.6073E-02	122.7	28.58	123.7	66.68	ACTIVE	0.000	-4.900	0.000	
1.000	1.000	28.58	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	6.041	-3.4836E-02	126.3	30.21	127.3	69.85	ACTIVE	0.000	-5.100	0.000	
1.000	1.000	30.21	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	6.369	-3.3615E-02	129.9	31.84	130.9	72.69	ACTIVE	0.000	-5.300	0.000	
1.000	1.000	31.84	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	6.698	-3.2410E-02	133.6	33.49	133.6	75.26	ACTIVE	0.000	-5.500	0.000	
1.000	1.000	33.49	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	7.029	-3.1222E-02	137.3	35.15	137.3	77.56	ACTIVE	0.000	-5.700	0.000	
1.000	1.000	35.15	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	7.362	-3.0050E-02	140.9	36.81	140.9	79.63	ACTIVE	0.000	-5.900	0.000	
1.000	1.000	36.81	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	7.697	-2.8895E-02	144.6	38.48	144.6	81.51	ACTIVE	0.000	-6.100	0.000
1.000	1.000	38.48	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	8.033	-2.7756E-02	148.4	40.16	148.4	83.43	ACTIVE	0.000	-6.300	0.000
1.000	1.000	40.16	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	8.370	-2.6635E-02	152.1	41.85	152.1	86.17	ACTIVE	0.000	-6.500	0.000
1.000	1.000	41.85	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	8.709	-2.5530E-02	155.8	43.54	155.8	90.39	ACTIVE	0.000	-6.700	0.000
1.000	1.000	43.54	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	9.255	-2.4443E-02	157.7	44.39	157.7	94.05	ACTIVE	0.000	-6.900	1.886
1.000	1.000	46.28	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	9.803	-2.3373E-02	159.6	45.24	159.6	97.20	ACTIVE	0.000	-7.100	3.773
1.000	1.000	49.02	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	10.35	-2.2321E-02	161.5	46.10	161.5	99.91	ACTIVE	0.000	-7.300	5.659
1.000	1.000	51.76	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	10.90	-2.1288E-02	163.4	46.96	163.4	102.2	ACTIVE	0.000	-7.500	7.545
1.000	1.000	54.51	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	11.45	-2.0273E-02	165.3	47.83	165.3	104.2	ACTIVE	0.000	-7.700	9.432
1.000	1.000	57.26	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	12.00	-1.9279E-02	167.2	48.70	167.2	105.9	ACTIVE	0.000	-7.900	11.32
1.000	1.000	60.02	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	12.56	-1.8304E-02	169.2	49.58	169.2	111.0	ACTIVE	0.000	-8.100	13.20
1.000	1.000	62.79	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	13.11	-1.7350E-02	171.1	50.46	171.1	115.3	ACTIVE	0.000	-8.300	15.09
1.000	1.000	65.55	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	13.66	-1.6417E-02	173.1	51.35	173.1	119.0	ACTIVE	0.000	-8.500	16.98
1.000	1.000	68.32	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	14.22	-1.5506E-02	175.1	52.23	175.1	122.3	ACTIVE	0.000	-8.700	18.86
1.000	1.000	71.10	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	14.78	-1.4618E-02	177.0	53.13	177.0	125.1	ACTIVE	0.000	-8.900	20.75
1.000	1.000	73.88	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	15.33	-1.3753E-02	179.0	54.02	179.0	127.3	ACTIVE	0.000	-9.100	22.64
1.000	1.000	76.66	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	15.89	-1.2911E-02	181.0	54.92	181.0	129.2	ACTIVE	0.000	-9.300	24.52
1.000	1.000	79.44	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	16.45	-1.2092E-02	183.0	55.82	183.0	130.7	ACTIVE	0.000	-9.500	26.41
1.000	1.000	82.23	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	17.00	-1.1298E-02	185.0	56.73	185.0	132.1	ACTIVE	0.000	-9.700	28.30
1.000	1.000	85.02	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	17.56	-1.0528E-02	187.0	57.63	187.0	133.2	ACTIVE	0.000	-9.900	30.18
1.000	1.000	87.81	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	18.12	-9.7833E-03	189.0	58.54	189.0	134.2	ACTIVE	0.000	-10.10	32.07
1.000	1.000	90.61	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	18.68	-9.0629E-03	191.0	59.46	191.0	135.0	ACTIVE	0.000	-10.30	33.95
1.000	1.000	93.41	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	19.24	-8.3673E-03	193.1	60.37	193.1	135.8	ACTIVE	0.000	-10.50	35.84
1.000	1.000	96.21	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	19.80	-7.6964E-03	195.1	61.29	195.1	136.4	ACTIVE	0.000	-10.70	37.73
1.000	1.000	99.01	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	20.36	-7.0502E-03	197.1	62.21	197.1	137.0	ACTIVE	0.000	-10.90	39.61
1.000	1.000	101.8	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	20.93	-6.4284E-03	199.2	63.13	199.2	137.5	ACTIVE	0.000	-11.10	41.50
1.000	1.000	104.6	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	21.49	-5.8306E-03	201.2	64.05	201.2	138.0	ACTIVE	0.000	-11.30	43.39
1.000	1.000	107.4	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	22.05	-5.2566E-03	203.3	64.98	203.3	138.5	ACTIVE	0.000	-11.50	45.27
1.000	1.000	110.3	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	22.61	-4.7056E-03	205.3	65.91	205.3	139.0	ACTIVE	0.000	-11.70	47.16
1.000	1.000	113.1	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	23.18	-4.1771E-03	207.4	66.84	207.4	139.5	ACTIVE	0.000	-11.90	49.05
1.000	1.000	115.9	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	23.74	-3.6702E-03	209.4	67.77	209.4	140.0	ACTIVE	0.000	-12.10	50.93
1.000	1.000	118.7	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	24.30	-3.1841E-03	211.5	68.70	211.5	140.5	ACTIVE	0.000	-12.30	52.82
1.000	1.000	121.5	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	25.34	-2.7178E-03	213.6	72.02	213.6	141.0	UL-RL	2.5045E+04	-12.50	54.70
1.000	1.000	126.7	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	28.10	-2.2700E-03	215.6	83.89	215.6	144.7	UL-RL	2.5045E+04	-12.70	56.59
1.000	1.000	140.5	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	30.75	-1.8396E-03	217.7	95.26	217.7	148.4	UL-RL	2.5045E+04	-12.90	58.48
1.000	1.000	153.7	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	33.33	-1.4252E-03	219.8	106.3	219.8	151.9	UL-RL	2.5045E+04	-13.10	60.36
1.000	1.000	166.7	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	35.85	-1.0255E-03	221.9	117.0	221.9	155.1	UL-RL	2.5045E+04	-13.30	62.25
1.000	1.000	179.3	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	38.32	-6.3904E-04	224.0	127.5	224.0	158.2	UL-RL	2.5045E+04	-13.50	64.14
1.000	1.000	191.6	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	40.74	-2.6445E-04	226.1	137.7	226.1	162.9	UL-RL	2.5045E+04	-13.70	66.02
1.000	1.000	203.7	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	43.12	9.9730E-05	228.1	147.7	228.1	168.7	UL-RL	2.5045E+04	-13.90	67.91
1.000	1.000	215.6	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	45.35	4.5491E-04	230.2	157.0	230.2	173.9	UL-RL	2.5045E+04	-14.10	69.80
1.000	1.000	226.8	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	47.48	8.0245E-04	232.3	165.7	232.3	178.5	UL-RL	2.5045E+04	-14.30	71.68
1.000	1.000	237.4	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	49.55	1.1437E-03	234.4	174.2	234.4	182.9	UL-RL	2.5045E+04	-14.50	73.57
1.000	1.000	247.8	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	51.52	1.4798E-03	236.5	182.2	236.5	186.8	UL-RL	2.5045E+04	-14.70	75.45
1.000	1.000	257.6	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	53.47	1.8121E-03	238.7	190.0	238.7	190.7	UL-RL	2.5045E+04	-14.90	77.34
1.000	1.000	267.4	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	55.16	2.1414E-03	240.8	196.6	240.8	196.6	V-C	1.5653E+04	-15.10	79.23
1.000	1.000	275.8	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	56.80	2.4687E-03	242.9	202.9	242.9	202.9	V-C	1.5653E+04	-15.30	81.11
1.000	1.000		284.0	0.000	0.000	BNA2_(2)_335_337_L_0				
81 D	58.43	2.7947E-03	245.0	209.1	245.0	209.1	V-C	1.5653E+04	-15.50	83.00
1.000	1.000		292.1	0.000	0.000	BNA2_(2)_335_337_L_0				
82 D	60.05	3.1201E-03	247.1	215.4	247.1	215.4	V-C	1.5653E+04	-15.70	84.89
1.000	1.000		300.3	0.000	0.000	BNA2_(2)_335_337_L_0				
83 D	46.26	3.4452E-03	249.2	221.6	249.2	221.6	V-C	1.5653E+04	-15.90	86.77
1.000	1.000		308.4	0.000	0.000	BNA2_(2)_335_337_L_0				
84 D	15.62	3.6077E-03	250.3	224.7	250.3	224.7	V-C	1.5653E+04	-16.00	87.72
1.000	1.000		312.5	0.000	0.000	BNA2_(2)_335_337_L_0				

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| Exe Time :25 June 2020 16:43:57
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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

O\_R  
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    84  
C U R R E N T    T I M E    I S    6.0000

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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
15	0.000	--	--	--	--	--	REMOVED	--	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
16	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
17	0.000	--	--	--	--	--	REMOVED	--	-2.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
18	0.000	--	--	--	--	--	REMOVED	--	-2.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
19	0.000	--	--	--	--	--	REMOVED	--	-3.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
20	0.000	--	--	--	--	--	REMOVED	--	-3.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
21	0.000	--	--	--	--	--	REMOVED	--	-3.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
22	0.000	--	--	--	--	--	REMOVED	--	-3.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
23	0.000	--	--	--	--	--	REMOVED	--	-3.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
24	0.000	--	--	--	--	--	REMOVED	--	-4.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
25	0.000	--	--	--	--	--	REMOVED	--	-4.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
26	0.000	--	--	--	--	--	REMOVED	--	-4.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
27	0.000	--	--	--	--	--	REMOVED	--	-4.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
28	0.000	--	--	--	--	--	REMOVED	--	-4.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
29	0.000	--	--	--	--	--	REMOVED	--	-5.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
30	0.000	--	--	--	--	--	REMOVED	--	-5.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
31	0.000	--	--	--	--	--	REMOVED	--	-5.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
32	0.000	--	--	--	--	--	REMOVED	--	-5.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
33	0.000	--	--	--	--	--	REMOVED	--	-5.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					

34	0.000	--	--	--	--	--	REMOVED	--	-6.100	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
35	0.000	--	--	--	--	--	REMOVED	--	-6.300	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
36	0.000	--	--	--	--	--	REMOVED	--	-6.500	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
37	0.000	--	--	--	--	--	REMOVED	--	-6.700	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
38	0.000	--	--	--	--	--	REMOVED	--	-6.900	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
39	0.000	--	--	--	--	--	REMOVED	--	-7.100	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
40	0.000	--	--	--	--	--	REMOVED	--	-7.300	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
41	0.000	--	--	--	--	--	REMOVED	--	-7.500	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
42	0.000	--	--	--	--	--	REMOVED	--	-7.700	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
43 D	14.79	1.9279E-02	1.886	71.85	124.0	111.6	PASSIVE	0.000	-7.900	2.114
1.000	1.000	73.97	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	16.26	1.8304E-02	3.773	77.09	126.0	116.9	PASSIVE	0.000	-8.100	4.227
1.000	1.000	81.31	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	17.73	1.7350E-02	5.659	82.32	128.0	122.2	PASSIVE	0.000	-8.300	6.341
1.000	1.000	88.66	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	19.20	1.6417E-02	7.545	87.55	130.0	127.4	PASSIVE	0.000	-8.500	8.455
1.000	1.000	96.01	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	20.67	1.5506E-02	9.432	92.79	132.0	132.7	PASSIVE	0.000	-8.700	10.57
1.000	1.000	103.4	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	22.14	1.4618E-02	11.32	98.02	134.0	138.0	PASSIVE	0.000	-8.900	12.68
1.000	1.000	110.7	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	23.61	1.3753E-02	13.20	103.3	136.0	143.3	PASSIVE	0.000	-9.100	14.80
1.000	1.000	118.0	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	25.08	1.2911E-02	15.09	108.5	138.0	148.5	PASSIVE	0.000	-9.300	16.91
1.000	1.000	125.4	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	26.55	1.2092E-02	16.98	113.7	140.0	153.8	PASSIVE	0.000	-9.500	19.02
1.000	1.000	132.7	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	28.02	1.1298E-02	18.86	118.9	142.0	159.1	PASSIVE	0.000	-9.700	21.14
1.000	1.000	140.1	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	29.49	1.0528E-02	20.75	124.2	144.0	164.4	PASSIVE	0.000	-9.900	23.25
1.000	1.000	147.4	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	30.96	9.7833E-03	22.64	129.4	146.0	169.6	PASSIVE	0.000	-10.10	25.36
1.000	1.000	154.8	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	32.42	9.0629E-03	24.52	134.6	148.0	174.9	PASSIVE	0.000	-10.30	27.48
1.000	1.000	162.1	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	33.89	8.3673E-03	26.41	139.9	150.0	175.7	PASSIVE	0.000	-10.50	29.59
1.000	1.000	169.5	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	35.36	7.6964E-03	28.30	145.1	152.0	168.6	PASSIVE	0.000	-10.70	31.70
1.000	1.000	176.8	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	36.83	7.0502E-03	30.18	150.3	154.0	162.1	PASSIVE	0.000	-10.90	33.82
1.000	1.000	184.2	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	38.30	6.4284E-03	32.07	155.6	156.0	156.0	PASSIVE	0.000	-11.10	35.93
1.000	1.000	191.5	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	39.77	5.8306E-03	33.95	160.8	158.0	160.8	PASSIVE	0.000	-11.30	38.05
1.000	1.000	198.9	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	41.24	5.2566E-03	35.84	166.0	160.0	166.0	PASSIVE	0.000	-11.50	40.16
1.000	1.000	206.2	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	42.71	4.7056E-03	37.73	171.3	162.0	171.3	PASSIVE	0.000	-11.70	42.27
1.000	1.000	213.5	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	43.44	4.1771E-03	39.61	172.8	164.0	172.8	V-C	1.4136E+04	-11.90	44.39
1.000	1.000	217.2	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	42.62	3.6702E-03	41.50	166.6	166.0	166.6	V-C	1.4136E+04	-12.10	46.50
1.000	1.000	213.1	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	41.87	3.1841E-03	43.39	160.7	168.0	160.7	V-C	1.4136E+04	-12.30	48.61
1.000	1.000	209.3	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	41.18	2.7178E-03	45.27	155.2	170.0	155.2	V-C	1.4136E+04	-12.50	50.73
1.000	1.000	205.9	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	40.55	2.2700E-03	47.16	149.9	172.0	149.9	V-C	1.4136E+04	-12.70	52.84
1.000	1.000	202.7	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	39.98	1.8396E-03	49.05	144.9	174.0	144.9	V-C	1.4136E+04	-12.90	54.95
1.000	1.000	199.9	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	39.45	1.4252E-03	50.93	140.2	176.0	140.2	V-C	1.4136E+04	-13.10	57.07
1.000	1.000	197.3	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	38.97	1.0255E-03	52.82	135.7	178.0	135.7	V-C	1.4136E+04	-13.30	59.18
1.000	1.000	194.9	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	38.53	6.3904E-04	54.70	131.4	180.0	131.4	V-C	1.4136E+04	-13.50	61.30
1.000	1.000	192.7	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	38.10	2.6445E-04	56.59	127.1	182.0	127.5	UL-RL	2.2618E+04	-13.70	63.41
1.000	1.000	190.5	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	37.05	-9.9730E-05	58.48	119.7	184.0	129.2	UL-RL	2.2618E+04	-13.90	65.52
1.000	1.000	185.2	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	36.02	-4.5491E-04	60.36	112.5	186.0	131.1	UL-RL	2.2618E+04	-14.10	67.64
1.000	1.000	180.1	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	35.03	-8.0245E-04	62.25	105.4	188.0	132.9	UL-RL	2.2618E+04	-14.30	69.75
1.000	1.000	175.2	0.000	0.000	BNA2_(2)_335_337_L_0					
76 D	34.08	-1.1437E-03	64.14	98.52	190.0	134.8	UL-RL	2.2618E+04	-14.50	71.86
1.000	1.000	170.4	0.000	0.000	BNA2_(2)_335_337_L_0					
77 D	33.14	-1.4798E-03	66.02	91.73	192.0	136.6	UL-RL	2.2618E+04	-14.70	73.98
1.000	1.000	165.7	0.000	0.000	BNA2_(2)_335_337_L_0					
78 D	32.23	-1.8121E-03	67.91	85.05	194.0	138.4	UL-RL	2.2618E+04	-14.90	76.09
1.000	1.000	161.1	0.000	0.000	BNA2_(2)_335_337_L_0					
79 D	31.33	-2.1414E-03	69.80	78.43	196.0	140.2	UL-RL	2.2618E+04	-15.10	78.20
1.000	1.000	156.6	0.000	0.000	BNA2_(2)_335_337_L_0					

80 D	30.44	-2.4687E-03	71.68	71.86	198.0	142.0	UL-RL	2.2618E+04	-15.30	80.32
1.000	1.000	152.2	0.000	0.000	BNA2_(2)_335_337_L_0					
81 D	29.55	-2.7947E-03	73.57	65.31	200.0	143.8	UL-RL	2.2618E+04	-15.50	82.43
1.000	1.000	147.7	0.000	0.000	BNA2_(2)_335_337_L_0					
82 D	28.67	-3.1201E-03	75.45	58.79	202.0	145.6	UL-RL	2.2618E+04	-15.70	84.55
1.000	1.000	143.3	0.000	0.000	BNA2_(2)_335_337_L_0					
83 D	20.84	-3.4452E-03	77.34	52.26	204.0	147.4	UL-RL	2.2618E+04	-15.90	86.66
1.000	1.000	138.9	0.000	0.000	BNA2_(2)_335_337_L_0					
84 D	6.836	-3.6077E-03	78.28	49.00	205.0	148.3	UL-RL	2.2618E+04	-16.00	87.72
1.000	1.000	136.7	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:43:57
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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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 83  
C U R R E N T   T I M E   I S        6.0000

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	46.542	-46.542	-1.80931E-10	9.3084
2	59.476	-59.476	-9.3084	21.204
3	73.859	-73.859	-21.204	35.975
4	89.692	-89.692	-35.975	53.914
5	106.97	-106.97	-53.914	75.309
6	125.71	-125.71	-75.309	100.45
7	145.89	-145.89	-100.45	129.63
8	167.52	-167.52	-129.63	163.13
9	190.60	-190.60	-163.13	201.25
10	-5.4807	5.4807	-201.25	200.16
11	20.499	-20.499	-200.16	204.26
12	47.929	-47.929	-204.26	213.84
13	69.438	-69.438	-213.84	227.73
14	71.009	-71.009	-227.73	241.93
15	72.835	-72.835	-241.93	256.50
16	74.924	-74.924	-256.50	271.48
17	77.287	-77.287	-271.48	286.94
18	79.929	-79.929	-286.94	302.93
19	82.859	-82.859	-302.93	319.50
20	86.081	-86.081	-319.50	336.71
21	89.602	-89.602	-336.71	354.63
22	93.426	-93.426	-354.63	373.32
23	97.557	-97.557	-373.32	392.83
24	102.00	-102.00	-392.83	413.23
25	106.75	-106.75	-413.23	434.58
26	111.83	-111.83	-434.58	456.95
27	117.22	-117.22	-456.95	480.39
28	122.94	-122.94	-480.39	504.98
29	128.98	-128.98	-504.98	530.77
30	-3.0819	3.0819	-530.77	530.16
31	3.6163	-3.6163	-530.16	530.88
32	10.646	-10.646	-530.88	533.01
33	18.008	-18.008	-533.01	536.61
34	25.705	-25.705	-536.61	541.75
35	33.737	-33.737	-541.75	548.50
36	42.107	-42.107	-548.50	556.92
37	50.816	-50.816	-556.92	567.09
38	60.072	-60.072	-567.09	579.10
39	69.875	-69.875	-579.10	593.07
40	80.227	-80.227	-593.07	609.12
41	91.129	-91.129	-609.12	627.35
42	102.58	-102.58	-627.35	647.86
43	99.793	-99.793	-647.86	667.82
44	96.087	-96.087	-667.82	687.04
45	91.466	-91.466	-687.04	705.33
46	85.929	-85.929	-705.33	722.52
47	79.478	-79.478	-722.52	738.41
48	72.113	-72.113	-738.41	752.84
49	63.836	-63.836	-752.84	765.60
50	54.646	-54.646	-765.60	776.53
51	44.544	-44.544	-776.53	785.44
52	33.531	-33.531	-785.44	792.15
53	21.608	-21.608	-792.15	796.47
54	8.7746	-8.7746	-796.47	798.22
55	-4.9683	4.9683	-798.22	797.23
56	-19.620	19.620	-797.23	793.31
57	-35.181	35.181	-793.31	786.27
58	-51.649	51.649	-786.27	775.94
59	-69.026	69.026	-775.94	762.13
60	-87.309	87.309	-762.13	744.67
61	-106.50	106.50	-744.67	723.37
62	-126.60	126.60	-723.37	698.05
63	-146.86	146.86	-698.05	668.68
64	-165.74	165.74	-668.68	635.54
65	-183.30	183.30	-635.54	598.88
66	-199.13	199.13	-598.88	559.05
67	-211.58	211.58	-559.05	516.73
68	-220.81	220.81	-516.73	472.57
69	-226.93	226.93	-472.57	427.18
70	-230.05	230.05	-427.18	381.17

71	-230.27	230.27	-381.17	335.12
72	-227.62	227.62	-335.12	289.60
73	-221.56	221.56	-289.60	245.28
74	-212.23	212.23	-245.28	202.84
75	-199.78	199.78	-202.84	162.88
76	-184.30	184.30	-162.88	126.02
77	-165.92	165.92	-126.02	92.837
78	-144.67	144.67	-92.837	63.902
79	-120.84	120.84	-63.902	39.735
80	-94.475	94.475	-39.735	20.840
81	-65.597	65.597	-20.840	7.7207
82	-34.209	34.209	-7.7207	0.87883
83	-8.7874	8.7874	-0.87883	5.51019E-11

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:43:57 |  
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New Project
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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\_341 :  
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1  
C U R R E N T    T I M E    I S    6.0000

POST-TENSION 2D-BOUNDARY ELEMENT

	EL	FORCE	d0	EDISPL	pl. eps	K	-ve limit	+ve limit	
ANCHOR	1	220.61	-9.65596E-04	4.64845E-02	0.0000	2015.0	0.0000	0.0000	ELASTIC ORIGINAL YOUNG MODULUS

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:43:57 |  
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New Project
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S T R E S S    R E S U L T S    F O R    G R O U P    N O .    5

Tieback\_342 :  
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1  
C U R R E N T    T I M E    I S    6.0000

POST-TENSION 2D-BOUNDARY ELEMENT

EL	FORCE	d0	EDISPL	pl. eps	K	-ve limit	+ve limit	
ANCHOR	1	138.43	-5.16479E-04	4.40752E-03	0.0000	2727.4	0.0000	0.0000    ELASTIC    ORIGINAL YOUNG MODU-
LUS								

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:43:57 |  
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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	CONVERGENCE :YES
3	CONVERGENCE :YES
4	CONVERGENCE :YES
5	CONVERGENCE :YES
6	CONVERGENCE :YES

END OF PROCESS FOR PROBLEM

New Project

NONLINEAR SOLUTION CPU TIME .... 0.09 [sec]  
DATABASE CREATION CPU TIME..... 0.19 [sec]



## *Report di Calcolo*

Nome Progetto: New Project

Autore: Ingegnere

Jobname: \\SBS2011\Comm\424.01 - HIRPINIA\Ing\03. LAVORO\07 - GALL\GA - FINESTRE - IMBOCCHI\GA11 Finestra F5\PARATIA-F5\sez2\SEZIONE 2 STR Finestra F5\_revC.pplus

Data: 25/06/2020 16:22:08

Design Section: Base Design Section

**Sommario**  
**Contenuto Sommario**

## **Descrizione della Stratigrafia e degli Strati di Terreno**

Tipo : HORIZONTAL

Quota : 0.5 m

OCR : 1

Tipo : HORIZONTAL

Quota : -3.5 m

OCR : 1

Tipo : HORIZONTAL

Quota : -19.5 m

OCR : 1

Strato di Terreno	Terreno	$\gamma_{dry}$ kN/m <sup>3</sup>	$\gamma_{sat}$ kN/m <sup>3</sup>	$\phi'$	$\phi_c$	$\phi_p$	c' kPa	Su kPa	Modulo Elastico Eu kPa	Evc kPa	Eur kPa	Ah kPa	Avexp kPa	Pa kPa	Rur/Rvc kN/m <sup>3</sup>	Rvc kN/m <sup>3</sup>	Ku kPa	Kvc kN/m <sup>3</sup>	Kur kN/m <sup>3</sup>
1	FRANA	20	20	14			4		Constant	20000	32000								
2	BNA2_(2)	20	20	27			25		Constant	115000	184000								
3	BNA(3)	20	20	27			30		Constant	180000	288000								

## **Descrizione Pareti**

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -14 m

Muro di sinistra

Sezione : PALI\_Fi1000/1200

Area equivalente : 0.654498469497874 m

Inerzia equivalente : 0.0409 m<sup>4</sup>/m

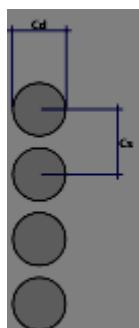
Materiale calcestruzzo : C25/30

Tipo sezione : Tangent

Spaziatura : 1.2 m

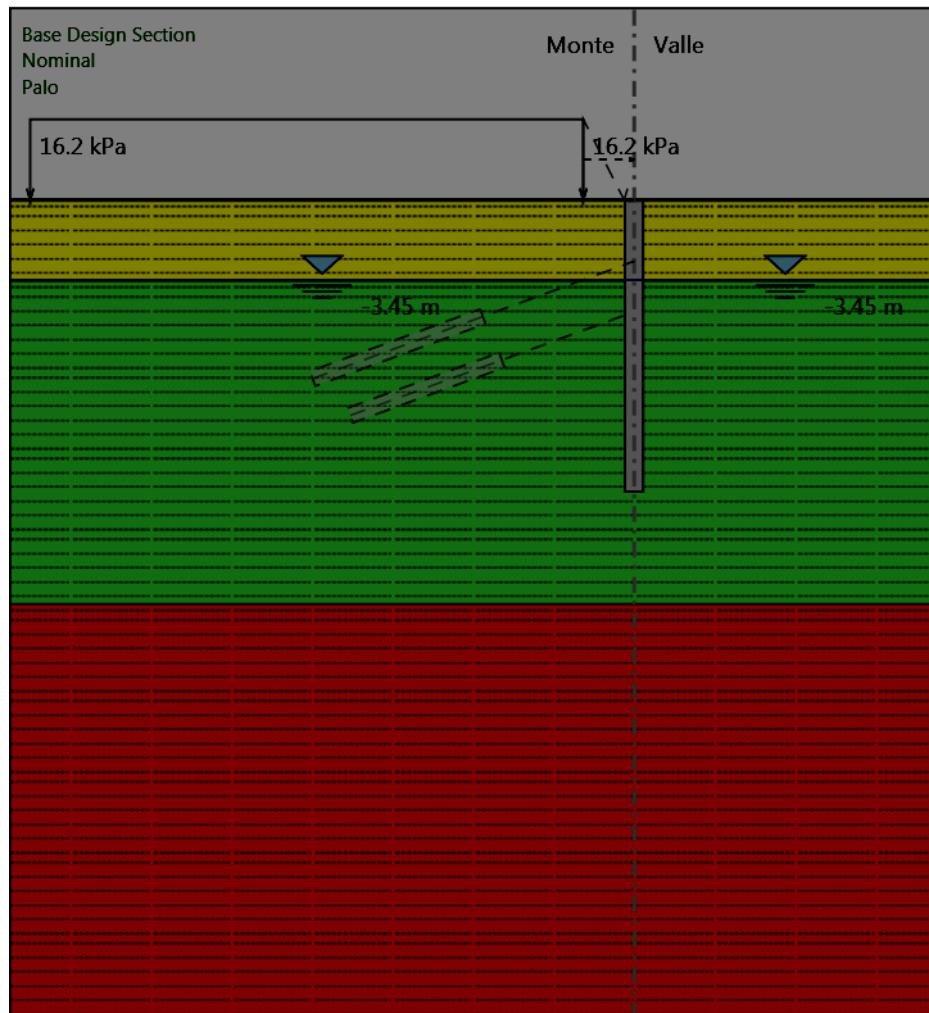
Diametro : 1 m

Efficacia : 1



## Fasi di Calcolo

### Palo



Palo

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : 0.5 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

0.5 m

Falda acquifera

Falda di sinistra : -3.45 m

Falda di destra : -3.45 m

Elementi strutturali

Paratia : WallElement

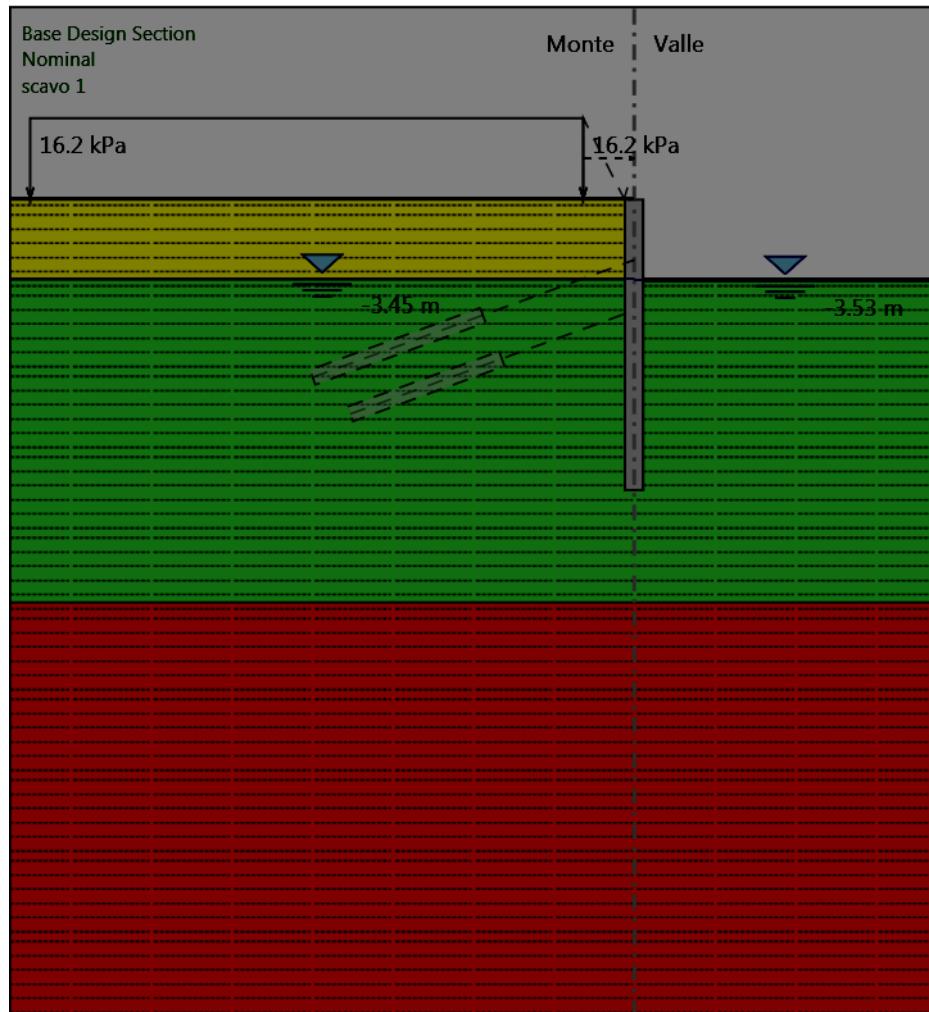
X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -14 m

Sezione : PALI\_Fi1000/1200

## scavo 1



scavo 1

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -3.53 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-3.53 m

Falda acquifera

Falda di sinistra : -3.45 m

Falda di destra : -3.53 m

Elementi strutturali

Paratia : WallElement

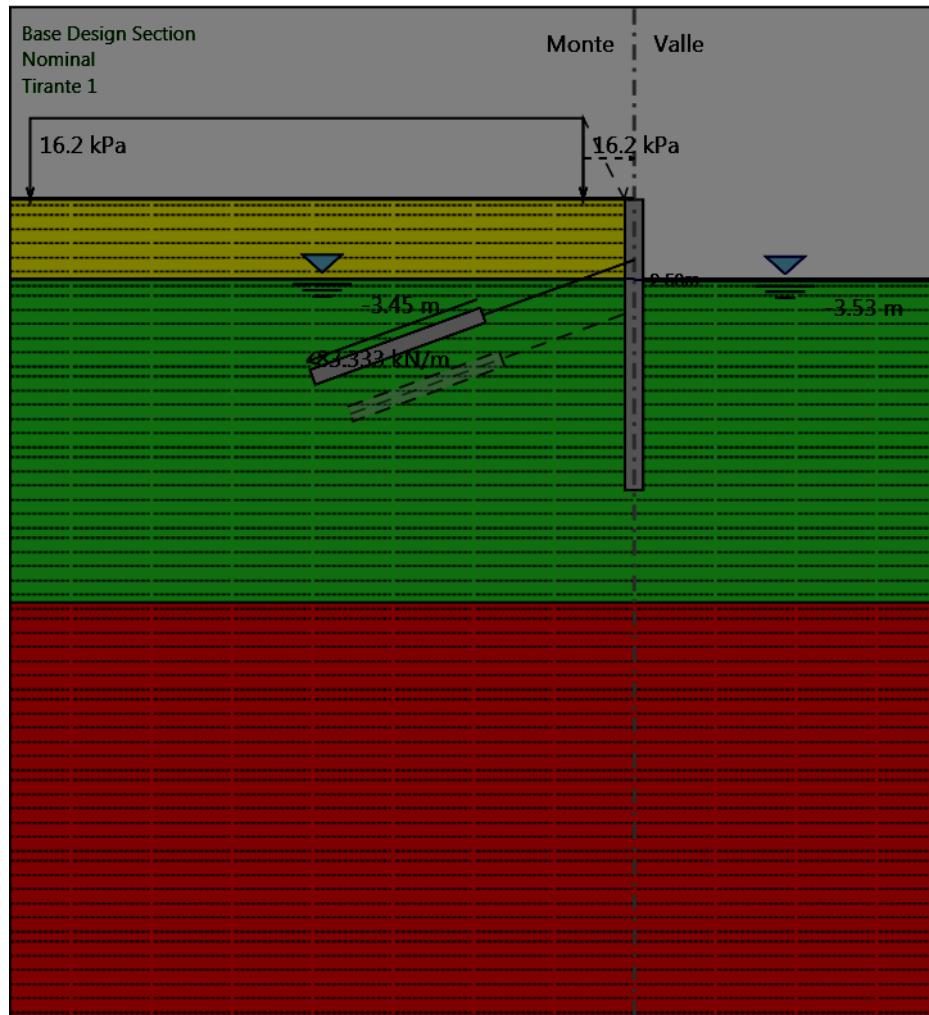
X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -14 m

Sezione : PALI\_Fi1000/1200

## Tirante 1



Tirante 1

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -3.53 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-3.53 m

## Falda acquifera

Falda di sinistra : -3.45 m

Falda di destra : -3.53 m

## Elementi strutturali

Paratia : WallElement

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -14 m

Sezione : PALI\_Fi1000/1200

Tirante : Tieback

X : 0 m

Z : -2.53 m

Lunghezza bulbo : 9 m

Diametro bulbo : 0.14 m

Lunghezza libera : 8 m

Precarico : 200 kN

Angolo : 20 °

Sezione : Trefoli 4

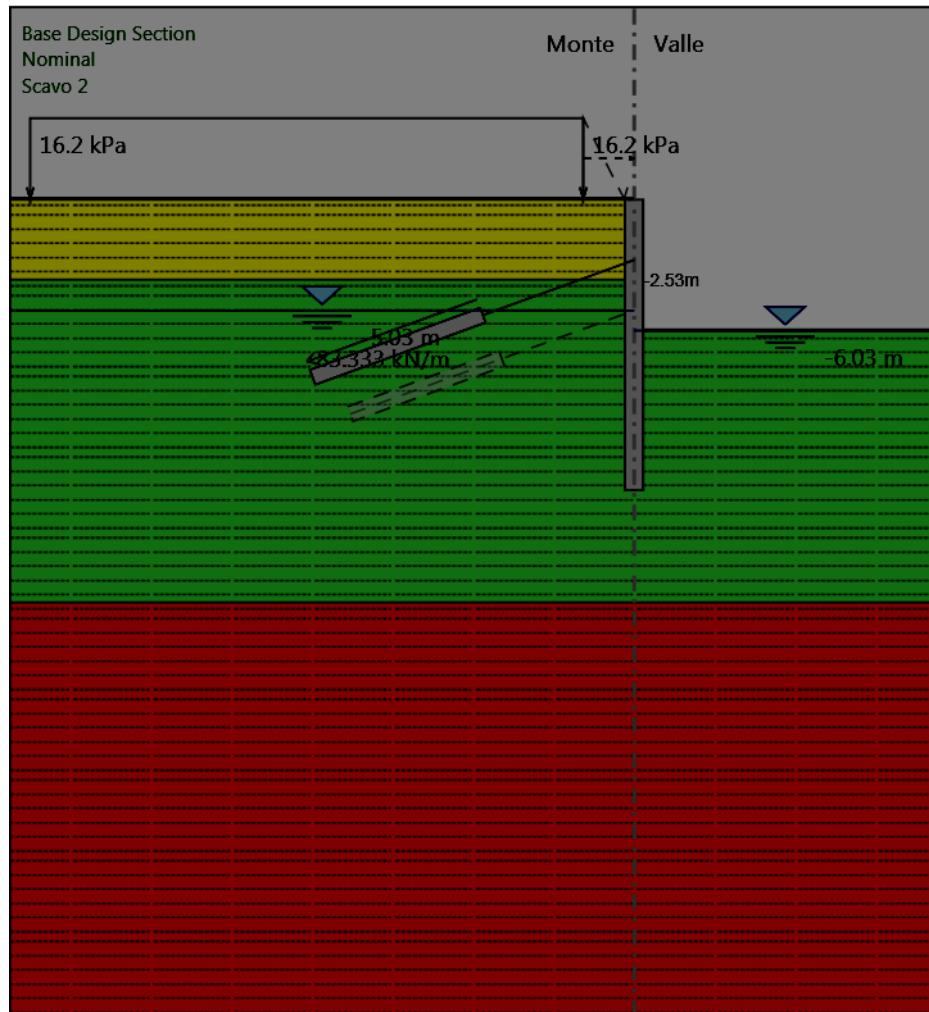
Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m<sup>2</sup>

## Scavo 2



Scavo 2

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -6.03 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-6.03 m

Falda acquifera

Falda di sinistra : -5.03 m

Falda di destra : -6.03 m

Elementi strutturali

Paratia : WallElement

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -14 m

Sezione : PALI\_Fi1000/1200

Tirante : Tieback

X : 0 m

Z : -2.53 m

Lunghezza bulbo : 9 m

Diametro bulbo : 0.14 m

Lunghezza libera : 8 m

Precarico : 200 kN

Angolo : 20 °

Sezione : Trefoli 4

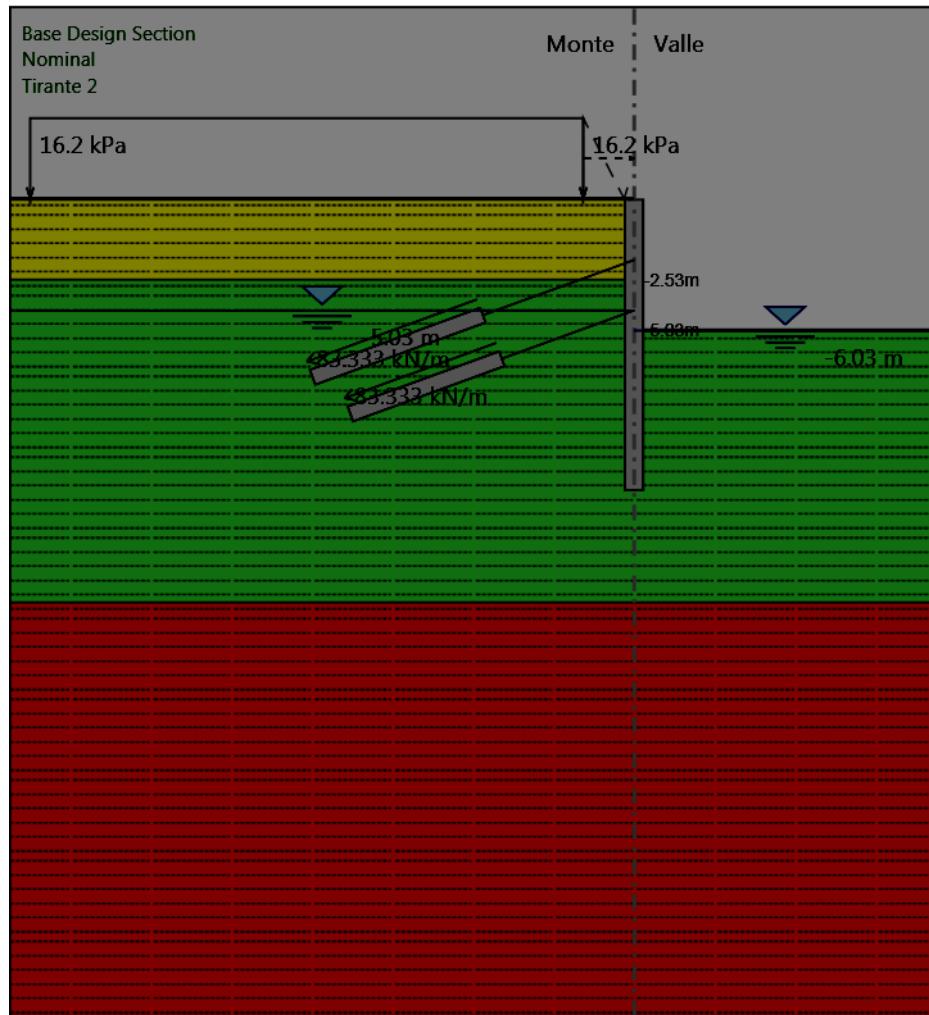
Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m<sup>2</sup>

## Tirante 2



Tirante 2

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -6.03 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-6.03 m

Falda acquifera

Falda di sinistra : -5.03 m

Falda di destra : -6.03 m

Elementi strutturali

Paratia : WallElement

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -14 m

Sezione : PALI\_Fi1000/1200

Tirante : Tieback

X : 0 m

Z : -2.53 m

Lunghezza bulbo : 9 m

Diametro bulbo : 0.14 m

Lunghezza libera : 8 m

Precarico : 200 kN

Angolo : 20 °

Sezione : Trefoli 4

Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m<sup>2</sup>

Tirante : Tieback

X : 0 m

Z : -5.03 m

Lunghezza bulbo : 8 m

Diametro bulbo : 0.14 m

Lunghezza libera : 7 m

Precarico : 200 kN

Angolo : 20 °

Sezione : Trefoli 4

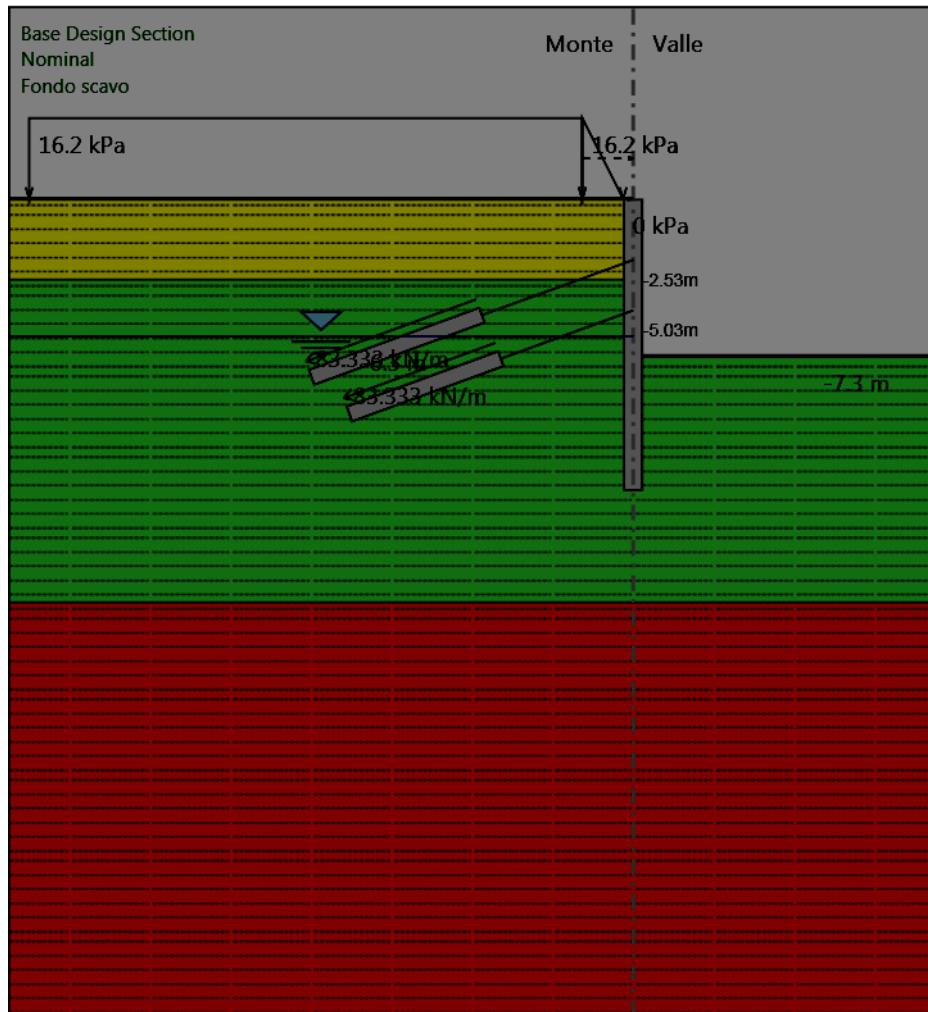
Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m<sup>2</sup>

## Fondo scavo



Fondo scavo

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -7.3 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-7.3 m

Falda acquifera

Falda di sinistra : -6.3 m

Falda di destra : -7.3 m

Elementi strutturali

Paratia : WallElement

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -14 m

Sezione : PALI\_Fi1000/1200

Tirante : Tieback

X : 0 m

Z : -2.53 m

Lunghezza bulbo : 9 m

Diametro bulbo : 0.14 m

Lunghezza libera : 8 m

Precarico : 200 kN

Angolo : 20 °

Sezione : Trefoli 4

Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m^2

Tirante : Tieback

X : 0 m

Z : -5.03 m

Lunghezza bulbo : 8 m

Diametro bulbo : 0.14 m

Lunghezza libera : 7 m

Precarico : 200 kN

Angolo : 20 °

Sezione : Trefoli 4

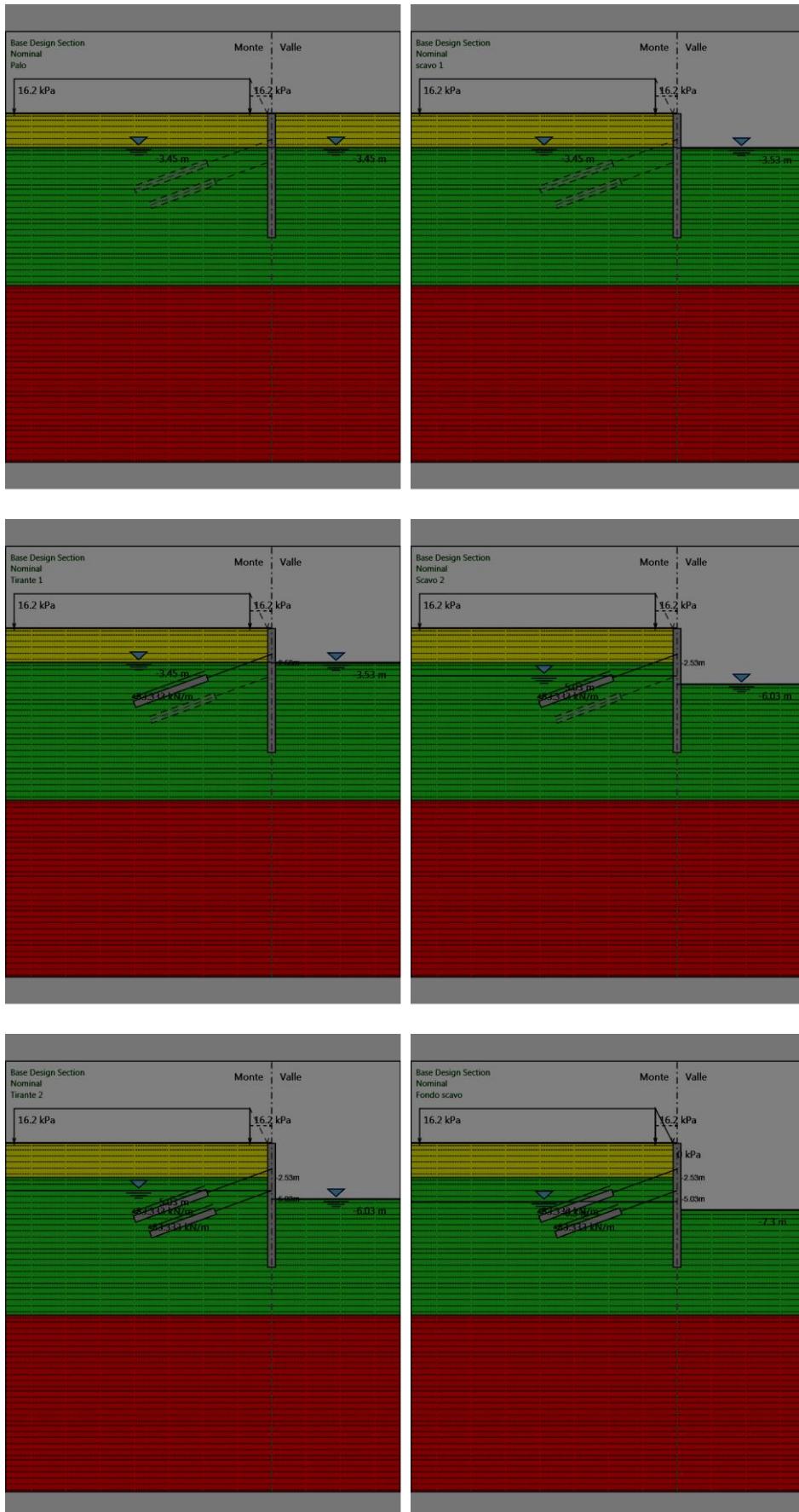
Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m^2

## Tabella Configurazione Stage (Nominal)



## Grafici dei Risultati

### Design Assumption : Nominal

Tabella Spostamento Nominal - LEFT Stage: Palo

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Palo	0.5	0
Palo	0.3	0
Palo	0.1	0
Palo	-0.1	0
Palo	-0.3	0
Palo	-0.5	0
Palo	-0.7	0
Palo	-0.9	0
Palo	-1.1	0
Palo	-1.3	0
Palo	-1.5	0
Palo	-1.7	0
Palo	-1.9	0
Palo	-2.1	0
Palo	-2.3	0
Palo	-2.5	0
Palo	-2.53	0
Palo	-2.73	0
Palo	-2.93	0
Palo	-3.13	0
Palo	-3.33	0
Palo	-3.53	0
Palo	-3.73	0
Palo	-3.93	0
Palo	-4.13	0
Palo	-4.33	0
Palo	-4.53	0
Palo	-4.73	0
Palo	-4.93	0
Palo	-5.03	0
Palo	-5.23	0
Palo	-5.43	0
Palo	-5.63	0
Palo	-5.83	0
Palo	-6.03	0
Palo	-6.23	0
Palo	-6.43	0
Palo	-6.63	0
Palo	-6.83	0
Palo	-7.03	0
Palo	-7.23	0
Palo	-7.43	0
Palo	-7.63	0
Palo	-7.83	0
Palo	-8.03	0
Palo	-8.23	0
Palo	-8.43	0
Palo	-8.63	0
Palo	-8.83	0
Palo	-9.03	0
Palo	-9.23	0
Palo	-9.43	0
Palo	-9.63	0
Palo	-9.83	0
Palo	-10.03	0
Palo	-10.23	0
Palo	-10.43	0
Palo	-10.63	0
Palo	-10.83	0
Palo	-11.03	0
Palo	-11.23	0

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Palo	-11.43	0
Palo	-11.63	0
Palo	-11.83	0
Palo	-12.03	0
Palo	-12.23	0
Palo	-12.43	0
Palo	-12.63	0
Palo	-12.83	0
Palo	-13.03	0
Palo	-13.23	0
Palo	-13.43	0
Palo	-13.63	0
Palo	-13.83	0
Palo	-14	0

## Tabella Spostamento Nominal - LEFT Stage: scavo 1

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
scavo 1	0.5	3.21
scavo 1	0.3	3.1
scavo 1	0.1	2.99
scavo 1	-0.1	2.88
scavo 1	-0.3	2.77
scavo 1	-0.5	2.66
scavo 1	-0.7	2.55
scavo 1	-0.9	2.44
scavo 1	-1.1	2.33
scavo 1	-1.3	2.22
scavo 1	-1.5	2.11
scavo 1	-1.7	2
scavo 1	-1.9	1.89
scavo 1	-2.1	1.78
scavo 1	-2.3	1.68
scavo 1	-2.5	1.57
scavo 1	-2.53	1.55
scavo 1	-2.73	1.45
scavo 1	-2.93	1.34
scavo 1	-3.13	1.24
scavo 1	-3.33	1.14
scavo 1	-3.53	1.04
scavo 1	-3.73	0.95
scavo 1	-3.93	0.86
scavo 1	-4.13	0.77
scavo 1	-4.33	0.69
scavo 1	-4.53	0.61
scavo 1	-4.73	0.54
scavo 1	-4.93	0.47
scavo 1	-5.03	0.43
scavo 1	-5.23	0.37
scavo 1	-5.43	0.32
scavo 1	-5.63	0.26
scavo 1	-5.83	0.22
scavo 1	-6.03	0.17
scavo 1	-6.23	0.13
scavo 1	-6.43	0.1
scavo 1	-6.63	0.06
scavo 1	-6.83	0.04
scavo 1	-7.03	0.01
scavo 1	-7.23	-0.01
scavo 1	-7.43	-0.03
scavo 1	-7.63	-0.04
scavo 1	-7.83	-0.06
scavo 1	-8.03	-0.07
scavo 1	-8.23	-0.08
scavo 1	-8.43	-0.09
scavo 1	-8.63	-0.09
scavo 1	-8.83	-0.1
scavo 1	-9.03	-0.1
scavo 1	-9.23	-0.1
scavo 1	-9.43	-0.1
scavo 1	-9.63	-0.1
scavo 1	-9.83	-0.1
scavo 1	-10.03	-0.09
scavo 1	-10.23	-0.09
scavo 1	-10.43	-0.09
scavo 1	-10.63	-0.08
scavo 1	-10.83	-0.08
scavo 1	-11.03	-0.08
scavo 1	-11.23	-0.07
scavo 1	-11.43	-0.07
scavo 1	-11.63	-0.06
scavo 1	-11.83	-0.05
scavo 1	-12.03	-0.05
scavo 1	-12.23	-0.04
scavo 1	-12.43	-0.04

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
scavo 1	-12.63	-0.03
scavo 1	-12.83	-0.03
scavo 1	-13.03	-0.02
scavo 1	-13.23	-0.01
scavo 1	-13.43	-0.01
scavo 1	-13.63	0
scavo 1	-13.83	0
scavo 1	-14	0.01

## Tabella Spostamento Nominal - LEFT Stage: Tirante 1

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Tirante 1	0.5	2.06
Tirante 1	0.3	1.98
Tirante 1	0.1	1.9
Tirante 1	-0.1	1.82
Tirante 1	-0.3	1.75
Tirante 1	-0.5	1.67
Tirante 1	-0.7	1.59
Tirante 1	-0.9	1.52
Tirante 1	-1.1	1.44
Tirante 1	-1.3	1.36
Tirante 1	-1.5	1.29
Tirante 1	-1.7	1.21
Tirante 1	-1.9	1.14
Tirante 1	-2.1	1.07
Tirante 1	-2.3	0.99
Tirante 1	-2.5	0.92
Tirante 1	-2.53	0.91
Tirante 1	-2.73	0.85
Tirante 1	-2.93	0.78
Tirante 1	-3.13	0.72
Tirante 1	-3.33	0.65
Tirante 1	-3.53	0.6
Tirante 1	-3.73	0.54
Tirante 1	-3.93	0.48
Tirante 1	-4.13	0.43
Tirante 1	-4.33	0.38
Tirante 1	-4.53	0.34
Tirante 1	-4.73	0.3
Tirante 1	-4.93	0.26
Tirante 1	-5.03	0.24
Tirante 1	-5.23	0.2
Tirante 1	-5.43	0.17
Tirante 1	-5.63	0.14
Tirante 1	-5.83	0.11
Tirante 1	-6.03	0.09
Tirante 1	-6.23	0.07
Tirante 1	-6.43	0.05
Tirante 1	-6.63	0.03
Tirante 1	-6.83	0.01
Tirante 1	-7.03	0
Tirante 1	-7.23	-0.01
Tirante 1	-7.43	-0.03
Tirante 1	-7.63	-0.03
Tirante 1	-7.83	-0.04
Tirante 1	-8.03	-0.05
Tirante 1	-8.23	-0.05
Tirante 1	-8.43	-0.06
Tirante 1	-8.63	-0.06
Tirante 1	-8.83	-0.06
Tirante 1	-9.03	-0.06
Tirante 1	-9.23	-0.06
Tirante 1	-9.43	-0.06
Tirante 1	-9.63	-0.06
Tirante 1	-9.83	-0.06
Tirante 1	-10.03	-0.06
Tirante 1	-10.23	-0.06
Tirante 1	-10.43	-0.06
Tirante 1	-10.63	-0.05
Tirante 1	-10.83	-0.05
Tirante 1	-11.03	-0.05
Tirante 1	-11.23	-0.04
Tirante 1	-11.43	-0.04
Tirante 1	-11.63	-0.04
Tirante 1	-11.83	-0.03
Tirante 1	-12.03	-0.03
Tirante 1	-12.23	-0.03
Tirante 1	-12.43	-0.02

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Tirante 1	-12.63	-0.02
Tirante 1	-12.83	-0.02
Tirante 1	-13.03	-0.01
Tirante 1	-13.23	-0.01
Tirante 1	-13.43	-0.01
Tirante 1	-13.63	0
Tirante 1	-13.83	0
Tirante 1	-14	0

## Tabella Spostamento Nominal - LEFT Stage: Scavo 2

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Scavo 2	0.5	3.68
Scavo 2	0.3	3.59
Scavo 2	0.1	3.51
Scavo 2	-0.1	3.43
Scavo 2	-0.3	3.35
Scavo 2	-0.5	3.26
Scavo 2	-0.7	3.18
Scavo 2	-0.9	3.1
Scavo 2	-1.1	3.02
Scavo 2	-1.3	2.93
Scavo 2	-1.5	2.85
Scavo 2	-1.7	2.77
Scavo 2	-1.9	2.69
Scavo 2	-2.1	2.6
Scavo 2	-2.3	2.52
Scavo 2	-2.5	2.44
Scavo 2	-2.53	2.43
Scavo 2	-2.73	2.35
Scavo 2	-2.93	2.27
Scavo 2	-3.13	2.2
Scavo 2	-3.33	2.12
Scavo 2	-3.53	2.04
Scavo 2	-3.73	1.97
Scavo 2	-3.93	1.89
Scavo 2	-4.13	1.82
Scavo 2	-4.33	1.75
Scavo 2	-4.53	1.67
Scavo 2	-4.73	1.6
Scavo 2	-4.93	1.53
Scavo 2	-5.03	1.49
Scavo 2	-5.23	1.42
Scavo 2	-5.43	1.35
Scavo 2	-5.63	1.28
Scavo 2	-5.83	1.22
Scavo 2	-6.03	1.15
Scavo 2	-6.23	1.09
Scavo 2	-6.43	1.02
Scavo 2	-6.63	0.96
Scavo 2	-6.83	0.91
Scavo 2	-7.03	0.85
Scavo 2	-7.23	0.8
Scavo 2	-7.43	0.75
Scavo 2	-7.63	0.7
Scavo 2	-7.83	0.65
Scavo 2	-8.03	0.61
Scavo 2	-8.23	0.57
Scavo 2	-8.43	0.53
Scavo 2	-8.63	0.49
Scavo 2	-8.83	0.46
Scavo 2	-9.03	0.43
Scavo 2	-9.23	0.4
Scavo 2	-9.43	0.37
Scavo 2	-9.63	0.35
Scavo 2	-9.83	0.32
Scavo 2	-10.03	0.3
Scavo 2	-10.23	0.28
Scavo 2	-10.43	0.26
Scavo 2	-10.63	0.25
Scavo 2	-10.83	0.23
Scavo 2	-11.03	0.22
Scavo 2	-11.23	0.2
Scavo 2	-11.43	0.19
Scavo 2	-11.63	0.18
Scavo 2	-11.83	0.16
Scavo 2	-12.03	0.15
Scavo 2	-12.23	0.14
Scavo 2	-12.43	0.13

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Scavo 2	-12.63	0.12
Scavo 2	-12.83	0.11
Scavo 2	-13.03	0.1
Scavo 2	-13.23	0.09
Scavo 2	-13.43	0.08
Scavo 2	-13.63	0.07
Scavo 2	-13.83	0.06
Scavo 2	-14	0.06

## Tabella Spostamento Nominal - LEFT Stage: Tirante 2

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Tirante 2	0.5	3.2
Tirante 2	0.3	3.12
Tirante 2	0.1	3.04
Tirante 2	-0.1	2.95
Tirante 2	-0.3	2.87
Tirante 2	-0.5	2.79
Tirante 2	-0.7	2.71
Tirante 2	-0.9	2.62
Tirante 2	-1.1	2.54
Tirante 2	-1.3	2.46
Tirante 2	-1.5	2.38
Tirante 2	-1.7	2.3
Tirante 2	-1.9	2.22
Tirante 2	-2.1	2.14
Tirante 2	-2.3	2.06
Tirante 2	-2.5	1.98
Tirante 2	-2.53	1.97
Tirante 2	-2.73	1.89
Tirante 2	-2.93	1.81
Tirante 2	-3.13	1.74
Tirante 2	-3.33	1.67
Tirante 2	-3.53	1.59
Tirante 2	-3.73	1.52
Tirante 2	-3.93	1.45
Tirante 2	-4.13	1.38
Tirante 2	-4.33	1.32
Tirante 2	-4.53	1.25
Tirante 2	-4.73	1.19
Tirante 2	-4.93	1.13
Tirante 2	-5.03	1.1
Tirante 2	-5.23	1.04
Tirante 2	-5.43	0.98
Tirante 2	-5.63	0.93
Tirante 2	-5.83	0.88
Tirante 2	-6.03	0.83
Tirante 2	-6.23	0.78
Tirante 2	-6.43	0.74
Tirante 2	-6.63	0.7
Tirante 2	-6.83	0.66
Tirante 2	-7.03	0.62
Tirante 2	-7.23	0.58
Tirante 2	-7.43	0.55
Tirante 2	-7.63	0.52
Tirante 2	-7.83	0.49
Tirante 2	-8.03	0.46
Tirante 2	-8.23	0.43
Tirante 2	-8.43	0.41
Tirante 2	-8.63	0.39
Tirante 2	-8.83	0.36
Tirante 2	-9.03	0.35
Tirante 2	-9.23	0.33
Tirante 2	-9.43	0.31
Tirante 2	-9.63	0.3
Tirante 2	-9.83	0.28
Tirante 2	-10.03	0.27
Tirante 2	-10.23	0.26
Tirante 2	-10.43	0.25
Tirante 2	-10.63	0.24
Tirante 2	-10.83	0.23
Tirante 2	-11.03	0.22
Tirante 2	-11.23	0.21
Tirante 2	-11.43	0.2
Tirante 2	-11.63	0.2
Tirante 2	-11.83	0.19
Tirante 2	-12.03	0.18
Tirante 2	-12.23	0.18
Tirante 2	-12.43	0.17

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Tirante 2	-12.63	0.17
Tirante 2	-12.83	0.16
Tirante 2	-13.03	0.16
Tirante 2	-13.23	0.15
Tirante 2	-13.43	0.14
Tirante 2	-13.63	0.14
Tirante 2	-13.83	0.13
Tirante 2	-14	0.13

## Tabella Spostamento Nominal - LEFT Stage: Fondo scavo

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Fondo scavo	0.5	3.5
Fondo scavo	0.3	3.42
Fondo scavo	0.1	3.35
Fondo scavo	-0.1	3.27
Fondo scavo	-0.3	3.2
Fondo scavo	-0.5	3.12
Fondo scavo	-0.7	3.04
Fondo scavo	-0.9	2.97
Fondo scavo	-1.1	2.89
Fondo scavo	-1.3	2.82
Fondo scavo	-1.5	2.74
Fondo scavo	-1.7	2.67
Fondo scavo	-1.9	2.6
Fondo scavo	-2.1	2.52
Fondo scavo	-2.3	2.45
Fondo scavo	-2.5	2.38
Fondo scavo	-2.53	2.37
Fondo scavo	-2.73	2.3
Fondo scavo	-2.93	2.23
Fondo scavo	-3.13	2.16
Fondo scavo	-3.33	2.09
Fondo scavo	-3.53	2.03
Fondo scavo	-3.73	1.97
Fondo scavo	-3.93	1.9
Fondo scavo	-4.13	1.84
Fondo scavo	-4.33	1.78
Fondo scavo	-4.53	1.72
Fondo scavo	-4.73	1.67
Fondo scavo	-4.93	1.61
Fondo scavo	-5.03	1.59
Fondo scavo	-5.23	1.53
Fondo scavo	-5.43	1.48
Fondo scavo	-5.63	1.44
Fondo scavo	-5.83	1.39
Fondo scavo	-6.03	1.34
Fondo scavo	-6.23	1.3
Fondo scavo	-6.43	1.25
Fondo scavo	-6.63	1.21
Fondo scavo	-6.83	1.17
Fondo scavo	-7.03	1.12
Fondo scavo	-7.23	1.08
Fondo scavo	-7.43	1.04
Fondo scavo	-7.63	1
Fondo scavo	-7.83	0.96
Fondo scavo	-8.03	0.92
Fondo scavo	-8.23	0.88
Fondo scavo	-8.43	0.84
Fondo scavo	-8.63	0.81
Fondo scavo	-8.83	0.77
Fondo scavo	-9.03	0.74
Fondo scavo	-9.23	0.71
Fondo scavo	-9.43	0.68
Fondo scavo	-9.63	0.65
Fondo scavo	-9.83	0.62
Fondo scavo	-10.03	0.59
Fondo scavo	-10.23	0.57
Fondo scavo	-10.43	0.54
Fondo scavo	-10.63	0.52
Fondo scavo	-10.83	0.49
Fondo scavo	-11.03	0.47
Fondo scavo	-11.23	0.45
Fondo scavo	-11.43	0.43
Fondo scavo	-11.63	0.41
Fondo scavo	-11.83	0.39
Fondo scavo	-12.03	0.38
Fondo scavo	-12.23	0.36
Fondo scavo	-12.43	0.34

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Fondo scavo	-12.63	0.32
Fondo scavo	-12.83	0.3
Fondo scavo	-13.03	0.29
Fondo scavo	-13.23	0.27
Fondo scavo	-13.43	0.25
Fondo scavo	-13.63	0.24
Fondo scavo	-13.83	0.22
Fondo scavo	-14	0.21

## Inviluppi Spostamento Nominal

Tabella Inviluppi Spostamento Nominal Left Wall

Risultato	Inviluppi	Spostamento
Left Wall Muro	Left Wall	
0.5	0	3.678
0.3	0	3.595
0.1	0	3.512
-0.1	0	3.429
-0.3	0	3.346
-0.5	0	3.263
-0.7	0	3.181
-0.9	0	3.098
-1.1	0	3.015
-1.3	0	2.932
-1.5	0	2.85
-1.7	0	2.768
-1.9	0	2.686
-2.1	0	2.604
-2.3	0	2.523
-2.5	0	2.443
-2.53	0	2.431
-2.73	0	2.353
-2.93	0	2.275
-3.13	0	2.197
-3.33	0	2.12
-3.53	0	2.044
-3.73	0	1.969
-3.93	0	1.903
-4.13	0	1.841
-4.33	0	1.781
-4.53	0	1.723
-4.73	0	1.667
-4.93	0	1.612
-5.03	0	1.585
-5.23	0	1.534
-5.43	0	1.484
-5.63	0	1.436
-5.83	0	1.389
-6.03	0	1.343
-6.23	0	1.298
-6.43	0	1.253
-6.63	0	1.209
-6.83	0	1.166
-7.03	-0.003	1.122
-7.23	-0.015	1.08
-7.43	-0.029	1.038
-7.63	-0.045	0.996
-7.83	-0.058	0.956
-8.03	-0.07	0.916
-8.23	-0.079	0.878
-8.43	-0.086	0.841
-8.63	-0.092	0.805
-8.83	-0.096	0.771
-9.03	-0.098	0.738
-9.23	-0.099	0.706
-9.43	-0.1	0.675
-9.63	-0.099	0.646
-9.83	-0.097	0.618
-10.03	-0.095	0.591
-10.23	-0.092	0.566
-10.43	-0.088	0.541
-10.63	-0.084	0.517
-10.83	-0.08	0.495
-11.03	-0.075	0.473
-11.23	-0.07	0.452
-11.43	-0.065	0.432
-11.63	-0.06	0.413
-11.83	-0.054	0.394

Risultato	Inviluppi	Spostamento
Left Wall	Muro	Left Wall
-12.03	-0.049	0.375
-12.23	-0.043	0.357
-12.43	-0.037	0.339
-12.63	-0.032	0.322
-12.83	-0.026	0.305
-13.03	-0.02	0.288
-13.23	-0.015	0.271
-13.43	-0.009	0.254
-13.63	-0.003	0.237
-13.83	0	0.22
-14	0	0.206

## Risultati Paratia

**Tabella Risultati Paratia Nominal - Stage: Palo**

Design Assumption: Nominal Risultati Paratia	Muro: LEFT		
Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Palo	0.5	0	0
Palo	0.3	0	0
Palo	0.1	0	0
Palo	-0.1	0	0
Palo	-0.3	0	0
Palo	-0.5	0	0
Palo	-0.7	0	0
Palo	-0.9	0	0
Palo	-1.1	0	0
Palo	-1.3	0	0
Palo	-1.5	0	0
Palo	-1.7	0	0
Palo	-1.9	0	0
Palo	-2.1	0	0
Palo	-2.3	0	0
Palo	-2.5	0	0
Palo	-2.53	0	0
Palo	-2.73	0	0
Palo	-2.93	0	0
Palo	-3.13	0	0
Palo	-3.33	0	0
Palo	-3.53	0	0
Palo	-3.73	0	0
Palo	-3.93	0	0
Palo	-4.13	0	0
Palo	-4.33	0	0
Palo	-4.53	0	0
Palo	-4.73	0	0
Palo	-4.93	0	0
Palo	-5.03	0	0
Palo	-5.23	0	0
Palo	-5.43	0	0
Palo	-5.63	0	0
Palo	-5.83	0	0
Palo	-6.03	0	0
Palo	-6.23	0	0
Palo	-6.43	0	0
Palo	-6.63	0	0
Palo	-6.83	0	0
Palo	-7.03	0	0
Palo	-7.23	0	0
Palo	-7.43	0	0
Palo	-7.63	0	0
Palo	-7.83	0	0
Palo	-8.03	0	0
Palo	-8.23	0	0
Palo	-8.43	0	0
Palo	-8.63	0	0
Palo	-8.83	0	0
Palo	-9.03	0	0
Palo	-9.23	0	0
Palo	-9.43	0	0
Palo	-9.63	0	0
Palo	-9.83	0	0
Palo	-10.03	0	0
Palo	-10.23	0	0
Palo	-10.43	0	0
Palo	-10.63	0	0
Palo	-10.83	0	0
Palo	-11.03	0	0
Palo	-11.23	0	0
Palo	-11.43	0	0
Palo	-11.63	0	0
Palo	-11.83	0	0

Design Assumption: Nominal Risultati Paratia		Muro: LEFT	
Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Palo	-12.03	0	0
Palo	-12.23	0	0
Palo	-12.43	0	0
Palo	-12.63	0	0
Palo	-12.83	0	0
Palo	-13.03	0	0
Palo	-13.23	0	0
Palo	-13.43	0	0
Palo	-13.63	0	0
Palo	-13.83	0	0
Palo	-14	0	0

## Tabella Risultati Paratia Nominal - Stage: scavo 1

Design Assumption: Nominal Risultati Paratia	Z (m)	Muro: LEFT
Stage		Momento (kN*m/m) Taglio (kN/m)
scavo 1	0.5	0 0
scavo 1	0.3	0 0
scavo 1	0.3	0 0
scavo 1	0.1	0 0
scavo 1	0.1	0 0
scavo 1	-0.1	0 0
scavo 1	-0.1	0 0
scavo 1	-0.3	-0.04 -0.22
scavo 1	-0.5	-0.23 -0.93
scavo 1	-0.7	-0.66 -2.15
scavo 1	-0.9	-1.43 -3.86
scavo 1	-1.1	-2.65 -6.08
scavo 1	-1.3	-4.41 -8.8
scavo 1	-1.5	-6.81 -12.04
scavo 1	-1.7	-10 -15.94
scavo 1	-1.9	-14.13 -20.66
scavo 1	-2.1	-19.37 -26.18
scavo 1	-2.3	-25.87 -32.51
scavo 1	-2.5	-33.8 -39.63
scavo 1	-2.53	-35.12 -44.17
scavo 1	-2.73	-44.88 -48.79
scavo 1	-2.93	-56.4 -57.59
scavo 1	-3.13	-69.83 -67.16
scavo 1	-3.33	-85.33 -77.51
scavo 1	-3.53	-103.05 -88.61
scavo 1	-3.73	-117.75 -73.5
scavo 1	-3.93	-129.52 -58.84
scavo 1	-4.13	-138.51 -44.92
scavo 1	-4.33	-144.99 -32.43
scavo 1	-4.53	-149.25 -21.29
scavo 1	-4.73	-151.54 -11.43
scavo 1	-4.93	-152.09 -2.78
scavo 1	-5.03	-151.8 2.87
scavo 1	-5.23	-150.18 8.11
scavo 1	-5.43	-147.36 14.1
scavo 1	-5.63	-143.53 19.15
scavo 1	-5.83	-138.87 23.34
scavo 1	-6.03	-133.52 26.74
scavo 1	-6.23	-127.63 29.43
scavo 1	-6.43	-121.34 31.47
scavo 1	-6.63	-114.75 32.93
scavo 1	-6.83	-107.98 33.85
scavo 1	-7.03	-101.12 34.31
scavo 1	-7.23	-94.25 34.35
scavo 1	-7.43	-87.44 34.06
scavo 1	-7.63	-80.74 33.5
scavo 1	-7.83	-74.2 32.7
scavo 1	-8.03	-67.86 31.69
scavo 1	-8.23	-61.76 30.5
scavo 1	-8.43	-55.92 29.18
scavo 1	-8.63	-50.37 27.75
scavo 1	-8.83	-45.13 26.24
scavo 1	-9.03	-40.19 24.67
scavo 1	-9.23	-35.58 23.06
scavo 1	-9.43	-31.3 21.43
scavo 1	-9.63	-27.34 19.8
scavo 1	-9.83	-23.7 18.19
scavo 1	-10.03	-20.38 16.6
scavo 1	-10.23	-17.37 15.06
scavo 1	-10.43	-14.65 13.56
scavo 1	-10.63	-12.23 12.12
scavo 1	-10.83	-10.08 10.74
scavo 1	-11.03	-8.2 9.43
scavo 1	-11.23	-6.56 8.2
scavo 1	-11.43	-5.15 7.04
scavo 1	-11.63	-3.95 5.97
scavo 1	-11.83	-2.96 4.98

Design Assumption: Nominal Risultati Paratia		Muro: LEFT	
Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
scavo 1	-12.03	-2.14	4.08
scavo 1	-12.23	-1.49	3.26
scavo 1	-12.43	-0.98	2.54
scavo 1	-12.63	-0.6	1.9
scavo 1	-12.83	-0.33	1.35
scavo 1	-13.03	-0.16	0.89
scavo 1	-13.23	-0.05	0.52
scavo 1	-13.43	0	0.25
scavo 1	-13.63	0.01	0.06
scavo 1	-13.83	0.01	-0.03
scavo 1	-14	0	-0.03

## Tabella Risultati Paratia Nominal - Stage: Tirante 1

Design Assumption: Nominal Risultati Paratia	Muro: LEFT		
Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Tirante 1	0.5	0	-0.55
Tirante 1	0.3	-0.11	-0.55
Tirante 1	0.1	-0.49	-1.89
Tirante 1	-0.1	-1.19	-3.49
Tirante 1	-0.3	-2.25	-5.32
Tirante 1	-0.5	-3.77	-7.58
Tirante 1	-0.7	-5.83	-10.3
Tirante 1	-0.9	-8.52	-13.47
Tirante 1	-1.1	-11.94	-17.09
Tirante 1	-1.3	-16.17	-21.17
Tirante 1	-1.5	-21.31	-25.71
Tirante 1	-1.7	-27.49	-30.86
Tirante 1	-1.9	-34.84	-36.78
Tirante 1	-2.1	-43.54	-43.46
Tirante 1	-2.3	-53.71	-50.88
Tirante 1	-2.5	-65.52	-59.04
Tirante 1	-2.53	-67.44	-64.15
Tirante 1	-2.73	-65.65	8.98
Tirante 1	-2.93	-65.79	-0.73
Tirante 1	-3.13	-68.03	-11.17
Tirante 1	-3.33	-72.49	-22.31
Tirante 1	-3.53	-79.32	-34.16
Tirante 1	-3.73	-84.88	-27.78
Tirante 1	-3.93	-89.1	-21.12
Tirante 1	-4.13	-92	-14.48
Tirante 1	-4.33	-93.71	-8.58
Tirante 1	-4.53	-94.38	-3.37
Tirante 1	-4.73	-94.14	1.2
Tirante 1	-4.93	-93.11	5.17
Tirante 1	-5.03	-92.34	7.73
Tirante 1	-5.23	-90.32	10.08
Tirante 1	-5.43	-87.77	12.73
Tirante 1	-5.63	-84.79	14.92
Tirante 1	-5.83	-81.45	16.68
Tirante 1	-6.03	-77.84	18.07
Tirante 1	-6.23	-74.02	19.11
Tirante 1	-6.43	-70.05	19.84
Tirante 1	-6.63	-65.99	20.29
Tirante 1	-6.83	-61.9	20.48
Tirante 1	-7.03	-57.81	20.44
Tirante 1	-7.23	-53.77	20.2
Tirante 1	-7.43	-49.8	19.85
Tirante 1	-7.63	-45.93	19.36
Tirante 1	-7.83	-42.17	18.77
Tirante 1	-8.03	-38.56	18.08
Tirante 1	-8.23	-35.09	17.33
Tirante 1	-8.43	-31.79	16.52
Tirante 1	-8.63	-28.65	15.67
Tirante 1	-8.83	-25.7	14.79
Tirante 1	-9.03	-22.92	13.88
Tirante 1	-9.23	-20.33	12.97
Tirante 1	-9.43	-17.92	12.05
Tirante 1	-9.63	-15.69	11.14
Tirante 1	-9.83	-13.64	10.24
Tirante 1	-10.03	-11.77	9.36
Tirante 1	-10.23	-10.07	8.5
Tirante 1	-10.43	-8.54	7.67
Tirante 1	-10.63	-7.16	6.87
Tirante 1	-10.83	-5.94	6.11
Tirante 1	-11.03	-4.86	5.39
Tirante 1	-11.23	-3.92	4.7
Tirante 1	-11.43	-3.11	4.06
Tirante 1	-11.63	-2.42	3.47
Tirante 1	-11.83	-1.83	2.91
Tirante 1	-12.03	-1.35	2.41
Tirante 1	-12.23	-0.96	1.95
Tirante 1	-12.43	-0.66	1.54

Design Assumption: Nominal Risultati Paratia		Muro: LEFT	
Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Tirante 1	-12.63	-0.42	1.17
Tirante 1	-12.83	-0.25	0.86
Tirante 1	-13.03	-0.13	0.59
Tirante 1	-13.23	-0.06	0.37
Tirante 1	-13.43	-0.02	0.2
Tirante 1	-13.63	0	0.08
Tirante 1	-13.83	0	0.01
Tirante 1	-14	0	-0.01

## Tabella Risultati Paratia Nominal - Stage: Scavo 2

Design Assumption: Nominal Risultati Paratia	Z (m)	Muro: LEFT
Stage		Momento (kN*m/m) Taglio (kN/m)
Scavo 2	0.5	0 0
Scavo 2	0.3	0 0
Scavo 2	0.3	0 0
Scavo 2	0.1	0 0
Scavo 2	0.1	0 0
Scavo 2	-0.1	-0.02 -0.08
Scavo 2	-0.3	-0.1 -0.4
Scavo 2	-0.5	-0.33 -1.16
Scavo 2	-0.7	-0.8 -2.38
Scavo 2	-0.9	-1.62 -4.09
Scavo 2	-1.1	-2.88 -6.31
Scavo 2	-1.3	-4.69 -9.04
Scavo 2	-1.5	-7.15 -12.27
Scavo 2	-1.7	-10.35 -16.01
Scavo 2	-1.9	-14.44 -20.47
Scavo 2	-2.1	-19.58 -25.69
Scavo 2	-2.3	-25.91 -31.66
Scavo 2	-2.5	-33.59 -38.38
Scavo 2	-2.53	-34.87 -42.67
Scavo 2	-2.73	-27.88 34.94
Scavo 2	-2.93	-22.55 26.64
Scavo 2	-3.13	-19.03 17.61
Scavo 2	-3.33	-17.46 7.86
Scavo 2	-3.53	-17.98 -2.61
Scavo 2	-3.73	-18.54 -2.81
Scavo 2	-3.93	-19.21 -3.33
Scavo 2	-4.13	-20.04 -4.16
Scavo 2	-4.33	-21.1 -5.31
Scavo 2	-4.53	-22.46 -6.79
Scavo 2	-4.73	-24.18 -8.59
Scavo 2	-4.93	-26.32 -10.69
Scavo 2	-5.03	-27.57 -12.51
Scavo 2	-5.23	-30.46 -14.43
Scavo 2	-5.43	-33.98 -17.63
Scavo 2	-5.63	-38.39 -22.05
Scavo 2	-5.83	-43.93 -27.66
Scavo 2	-6.03	-50.82 -34.46
Scavo 2	-6.23	-59.3 -42.41
Scavo 2	-6.43	-66.22 -34.62
Scavo 2	-6.63	-71.74 -27.56
Scavo 2	-6.83	-75.97 -21.19
Scavo 2	-7.03	-79.07 -15.47
Scavo 2	-7.23	-81.14 -10.36
Scavo 2	-7.43	-82.29 -5.78
Scavo 2	-7.63	-82.63 -1.69
Scavo 2	-7.83	-82.24 1.96
Scavo 2	-8.03	-81.2 5.19
Scavo 2	-8.23	-79.6 8.02
Scavo 2	-8.43	-77.5 10.48
Scavo 2	-8.63	-74.98 12.59
Scavo 2	-8.83	-72.11 14.39
Scavo 2	-9.03	-68.93 15.88
Scavo 2	-9.23	-65.51 17.09
Scavo 2	-9.43	-61.91 18.04
Scavo 2	-9.63	-58.15 18.76
Scavo 2	-9.83	-54.3 19.25
Scavo 2	-10.03	-50.39 19.55
Scavo 2	-10.23	-46.46 19.66
Scavo 2	-10.43	-42.54 19.6
Scavo 2	-10.63	-38.66 19.39
Scavo 2	-10.83	-34.86 19.03
Scavo 2	-11.03	-31.15 18.54
Scavo 2	-11.23	-27.56 17.94
Scavo 2	-11.43	-24.12 17.22
Scavo 2	-11.63	-20.83 16.41
Scavo 2	-11.83	-17.73 15.5
Scavo 2	-12.03	-14.83 14.5

Design Assumption: Nominal Risultati Paratia		Muro: LEFT	
Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Scavo 2	-12.23	-12.15	13.43
Scavo 2	-12.43	-9.69	12.27
Scavo 2	-12.63	-7.48	11.05
Scavo 2	-12.83	-5.53	9.75
Scavo 2	-13.03	-3.85	8.39
Scavo 2	-13.23	-2.46	6.97
Scavo 2	-13.43	-1.37	5.47
Scavo 2	-13.63	-0.58	3.92
Scavo 2	-13.83	-0.12	2.29
Scavo 2	-14	0	0.73

## Tabella Risultati Paratia Nominal - Stage: Tirante 2

Design Assumption: Nominal Risultati Paratia	Muro: LEFT		
Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Tirante 2	0.5	0	-0.22
Tirante 2	0.3	-0.04	-0.22
Tirante 2	0.1	-0.18	-0.67
Tirante 2	-0.1	-0.42	-1.2
Tirante 2	-0.3	-0.81	-1.97
Tirante 2	-0.5	-1.45	-3.18
Tirante 2	-0.7	-2.42	-4.84
Tirante 2	-0.9	-3.82	-7
Tirante 2	-1.1	-5.75	-9.67
Tirante 2	-1.3	-8.32	-12.84
Tirante 2	-1.5	-11.62	-16.52
Tirante 2	-1.7	-15.77	-20.71
Tirante 2	-1.9	-20.89	-25.61
Tirante 2	-2.1	-27.14	-31.27
Tirante 2	-2.3	-34.68	-37.68
Tirante 2	-2.5	-43.65	-44.84
Tirante 2	-2.53	-45.13	-49.38
Tirante 2	-2.73	-39.76	26.85
Tirante 2	-2.93	-36.13	18.11
Tirante 2	-3.13	-34.4	8.65
Tirante 2	-3.33	-34.71	-1.53
Tirante 2	-3.53	-37.19	-12.42
Tirante 2	-3.73	-40.34	-15.73
Tirante 2	-3.93	-44.21	-19.34
Tirante 2	-4.13	-48.85	-23.2
Tirante 2	-4.33	-54.32	-27.35
Tirante 2	-4.53	-60.68	-31.79
Tirante 2	-4.73	-67.97	-36.49
Tirante 2	-4.93	-76.26	-41.42
Tirante 2	-5.03	-80.79	-45.31
Tirante 2	-5.23	-74.98	29.03
Tirante 2	-5.43	-70.35	23.19
Tirante 2	-5.63	-67.1	16.24
Tirante 2	-5.83	-65.46	8.2
Tirante 2	-6.03	-65.64	-0.92
Tirante 2	-6.23	-67.86	-11.07
Tirante 2	-6.43	-69.24	-6.93
Tirante 2	-6.63	-69.9	-3.3
Tirante 2	-6.83	-69.93	-0.15
Tirante 2	-7.03	-69.42	2.57
Tirante 2	-7.23	-68.44	4.88
Tirante 2	-7.43	-67.06	6.88
Tirante 2	-7.63	-65.35	8.58
Tirante 2	-7.83	-63.34	10.04
Tirante 2	-8.03	-61.08	11.28
Tirante 2	-8.23	-58.63	12.3
Tirante 2	-8.43	-56	13.12
Tirante 2	-8.63	-53.25	13.77
Tirante 2	-8.83	-50.4	14.25
Tirante 2	-9.03	-47.48	14.59
Tirante 2	-9.23	-44.52	14.79
Tirante 2	-9.43	-41.54	14.87
Tirante 2	-9.63	-38.58	14.84
Tirante 2	-9.83	-35.63	14.71
Tirante 2	-10.03	-32.74	14.49
Tirante 2	-10.23	-29.9	14.2
Tirante 2	-10.43	-27.13	13.83
Tirante 2	-10.63	-24.45	13.4
Tirante 2	-10.83	-21.87	12.92
Tirante 2	-11.03	-19.39	12.39
Tirante 2	-11.23	-17.02	11.82
Tirante 2	-11.43	-14.79	11.19
Tirante 2	-11.63	-12.68	10.53
Tirante 2	-11.83	-10.72	9.82
Tirante 2	-12.03	-8.9	9.08
Tirante 2	-12.23	-7.24	8.31
Tirante 2	-12.43	-5.73	7.52

Design Assumption: Nominal Risultati Paratia		Muro: LEFT	
Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Tirante 2	-12.63	-4.39	6.69
Tirante 2	-12.83	-3.22	5.85
Tirante 2	-13.03	-2.23	4.98
Tirante 2	-13.23	-1.41	4.09
Tirante 2	-13.43	-0.78	3.17
Tirante 2	-13.63	-0.33	2.24
Tirante 2	-13.83	-0.07	1.3
Tirante 2	-14	0	0.41

## Tabella Risultati Paratia Nominal - Stage: Fondo scavo

Design Assumption: Nominal Risultati Paratia	Z (m)	Muro: LEFT
Stage		Momento (kN*m/m) Taglio (kN/m)
Fondo scavo	0.5	0 -0.1
Fondo scavo	0.3	-0.02 -0.1
Fondo scavo	0.1	-0.08 -0.3
Fondo scavo	-0.1	-0.21 -0.64
Fondo scavo	-0.3	-0.47 -1.28
Fondo scavo	-0.5	-0.96 -2.48
Fondo scavo	-0.7	-1.81 -4.22
Fondo scavo	-0.9	-3.11 -6.52
Fondo scavo	-1.1	-4.98 -9.37
Fondo scavo	-1.3	-7.54 -12.76
Fondo scavo	-1.5	-10.87 -16.69
Fondo scavo	-1.7	-15.1 -21.15
Fondo scavo	-1.9	-20.37 -26.33
Fondo scavo	-2.1	-26.83 -32.29
Fondo scavo	-2.3	-34.63 -38.99
Fondo scavo	-2.5	-43.91 -46.41
Fondo scavo	-2.53	-45.44 -51.07
Fondo scavo	-2.73	-40.24 26
Fondo scavo	-2.93	-36.82 17.08
Fondo scavo	-3.13	-35.33 7.46
Fondo scavo	-3.33	-35.9 -2.85
Fondo scavo	-3.53	-38.67 -13.86
Fondo scavo	-3.73	-41.63 -14.78
Fondo scavo	-3.93	-44.82 -15.95
Fondo scavo	-4.13	-48.28 -17.32
Fondo scavo	-4.33	-52.07 -18.93
Fondo scavo	-4.53	-56.22 -20.77
Fondo scavo	-4.73	-60.79 -22.82
Fondo scavo	-4.93	-65.81 -25.1
Fondo scavo	-5.03	-68.51 -27.05
Fondo scavo	-5.23	-58.41 50.52
Fondo scavo	-5.43	-48.92 47.46
Fondo scavo	-5.63	-40.17 43.71
Fondo scavo	-5.83	-32.36 39.07
Fondo scavo	-6.03	-25.65 33.57
Fondo scavo	-6.23	-20.2 27.22
Fondo scavo	-6.43	-16.19 20.04
Fondo scavo	-6.63	-13.81 11.94
Fondo scavo	-6.83	-13.23 2.86
Fondo scavo	-7.03	-14.67 -7.17
Fondo scavo	-7.23	-18.29 -18.13
Fondo scavo	-7.43	-24.29 -29.98
Fondo scavo	-7.63	-29.31 -25.09
Fondo scavo	-7.83	-33.42 -20.56
Fondo scavo	-8.03	-36.69 -16.37
Fondo scavo	-8.23	-39.2 -12.52
Fondo scavo	-8.43	-41 -9
Fondo scavo	-8.63	-42.16 -5.8
Fondo scavo	-8.83	-42.74 -2.9
Fondo scavo	-9.03	-42.8 -0.29
Fondo scavo	-9.23	-42.39 2.04
Fondo scavo	-9.43	-41.57 4.1
Fondo scavo	-9.63	-40.39 5.91
Fondo scavo	-9.83	-38.89 7.47
Fondo scavo	-10.03	-37.13 8.81
Fondo scavo	-10.23	-35.15 9.93
Fondo scavo	-10.43	-32.98 10.84
Fondo scavo	-10.63	-30.66 11.56
Fondo scavo	-10.83	-28.25 12.09
Fondo scavo	-11.03	-25.76 12.45
Fondo scavo	-11.23	-23.23 12.63
Fondo scavo	-11.43	-20.7 12.66
Fondo scavo	-11.63	-18.19 12.53
Fondo scavo	-11.83	-15.74 12.26
Fondo scavo	-12.03	-13.37 11.84
Fondo scavo	-12.23	-11.12 11.28
Fondo scavo	-12.43	-9 10.6

Design Assumption: Nominal Risultati Paratia		Muro: LEFT	
Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Fondo scavo	-12.63	-7.04	9.78
Fondo scavo	-12.83	-5.27	8.84
Fondo scavo	-13.03	-3.72	7.77
Fondo scavo	-13.23	-2.4	6.58
Fondo scavo	-13.43	-1.35	5.27
Fondo scavo	-13.63	-0.58	3.83
Fondo scavo	-13.83	-0.13	2.28
Fondo scavo	-14	0	0.74

## Inviluppi Risultati Paratia Nominal

Tabella Inviluppi Momento Nominal WallElement

Risultato	Inviluppi	Momento
WallElement	Muro Left Wall	
0.5	0	0
0.3	0.109	0
0.1	0.488	0
-0.1	1.187	0
-0.3	2.25	0
-0.5	3.767	0
-0.7	5.827	0
-0.9	8.52	0
-1.1	11.939	0
-1.3	16.173	0
-1.5	21.315	0
-1.7	27.487	0
-1.9	34.844	0
-2.1	43.536	0
-2.3	53.711	0
-2.5	65.518	0
-2.53	67.443	0
-2.73	65.646	0
-2.93	65.792	0
-3.13	69.83	0
-3.33	85.332	0
-3.53	103.055	0
-3.73	117.754	0
-3.93	129.522	0
-4.13	138.506	0
-4.33	144.992	0
-4.53	149.25	0
-4.73	151.536	0
-4.93	152.092	0
-5.03	151.805	0
-5.23	150.182	0
-5.43	147.363	0
-5.63	143.534	0
-5.83	138.866	0
-6.03	133.518	0
-6.23	127.633	0
-6.43	121.339	0
-6.63	114.753	0
-6.83	107.982	0
-7.03	101.12	0
-7.23	94.251	0
-7.43	87.438	0
-7.63	82.632	0
-7.83	82.24	0
-8.03	81.203	0
-8.23	79.6	0
-8.43	77.504	0
-8.63	74.985	0
-8.83	72.108	0
-9.03	68.932	0
-9.23	65.514	0
-9.43	61.906	0
-9.63	58.154	0
-9.83	54.303	0
-10.03	50.393	0
-10.23	46.461	0
-10.43	42.541	0
-10.63	38.664	0
-10.83	34.857	0
-11.03	31.149	0
-11.23	27.561	0
-11.43	24.116	0
-11.63	20.834	0
-11.83	17.734	0

Risultato	Inviluppi	Momento
WallElement	Muro	Left Wall
-12.03	14.834	0
-12.23	12.148	0
-12.43	9.693	0
-12.63	7.483	0
-12.83	5.532	0
-13.03	3.854	0
-13.23	2.461	0
-13.43	1.366	0
-13.63	0.583	0.012
-13.83	0.126	0.006
-14	0	0

## Tabella Inviluppi Taglio Nominal WallElement

Risultato	Inviluppi	Taglio
WallElement Muro Left Wall		
0.5	0	0
0.3	0.109	0
0.1	0.488	0
-0.1	1.187	0
-0.3	2.25	0
-0.5	3.767	0
-0.7	5.827	0
-0.9	8.52	0
-1.1	11.939	0
-1.3	16.173	0
-1.5	21.315	0
-1.7	27.487	0
-1.9	34.844	0
-2.1	43.536	0
-2.3	53.711	0
-2.5	65.518	0
-2.53	67.443	0
-2.73	65.646	0
-2.93	65.792	0
-3.13	69.83	0
-3.33	85.332	0
-3.53	103.055	0
-3.73	117.754	0
-3.93	129.522	0
-4.13	138.506	0
-4.33	144.992	0
-4.53	149.25	0
-4.73	151.536	0
-4.93	152.092	0
-5.03	151.805	0
-5.23	150.182	0
-5.43	147.363	0
-5.63	143.534	0
-5.83	138.866	0
-6.03	133.518	0
-6.23	127.633	0
-6.43	121.339	0
-6.63	114.753	0
-6.83	107.982	0
-7.03	101.12	0
-7.23	94.251	0
-7.43	87.438	0
-7.63	82.632	0
-7.83	82.24	0
-8.03	81.203	0
-8.23	79.6	0
-8.43	77.504	0
-8.63	74.985	0
-8.83	72.108	0
-9.03	68.932	0
-9.23	65.514	0
-9.43	61.906	0
-9.63	58.154	0
-9.83	54.303	0
-10.03	50.393	0
-10.23	46.461	0
-10.43	42.541	0
-10.63	38.664	0
-10.83	34.857	0
-11.03	31.149	0
-11.23	27.561	0
-11.43	24.116	0
-11.63	20.834	0
-11.83	17.734	0
-12.03	14.834	0
-12.23	12.148	0
-12.43	9.693	0

Risultato	Inviluppi	Taglio
WallElement Muro Left Wall		
-12.63	7.483	0
-12.83	5.532	0
-13.03	3.854	0
-13.23	2.461	0
-13.43	1.366	0
-13.63	0.583	0.012
-13.83	0.126	0.006
-14	0	0

## Risultati Elementi strutturali

Design Assumption: Nominal Sollecitazione Tieback	
Stage	Forza (kN/m)
Tirante 1	83.33
Scavo 2	87.22012
Tirante 2	86.0266
Fondo scavo	87.05571

Design Assumption: Nominal Sollecitazione Tieback	
Stage	Forza (kN/m)
Tirante 2	83.33
Fondo scavo	84.74547

## Riepilogo spinte

Design Assumption: Tipo Risultato: Riepi-		Muro:	LEFT	Lato	LEFT		
Nominal	logo spinte						
Stage	Vera effettiva (kN/m)	Pressione neutra (kN/m)	Vera Totale (kN/m)	Min ammissibile (kN/m)	Max ammissibile (kN/m)	Percentuale di resi- stenza massima	Vera / Attiva
Palo	947.7	556.6	1504.2	300.8	6615.6	14.33%	3.15
scavo 1	832.5	554.4	1386.9	301.6	6623.2	12.57%	2.76
Tirante 1	887.4	554.4	1441.8	301.6	6623.2	13.4%	2.94
Scavo 2	748.7	378.6	1127.3	367.8	7256.6	10.32%	2.04
Tirante 2	811.9	378.6	1190.4	367.8	7256.6	11.19%	2.21
Fondo scavo	763	275.9	1038.9	419.8	7711	9.89%	1.82

Design Assumption: Tipo Risultato: Riepi-		Muro:	LEFT	Lato	RIGHT		
Nominal	logo spinte						
Stage	Vera effettiva (kN/m)	Pressione neutra (kN/m)	Vera Totale (kN/m)	Min ammissibile (kN/m)	Max ammissibile (kN/m)	Percentuale di resi- stenza massima	Vera / At- tiva
Palo	947.7	556.6	1504.2	270.6	6342.3	14.94%	3.5
scavo 1	836.7	550.2	1386.9	9.8	2969.1	28.18%	85.38
Tirante 1	813.3	550.2	1363.5	9.8	2969.1	27.39%	82.99
Scavo 2	709	336.4	1045.3	0	1822.9	38.89%	+Infinito
Tirante 2	694.9	336.4	1031.3	0	1822.9	38.12%	+Infinito
Fondo scavo	637.3	240.1	877.4	0	1385.1	46.01%	+Infinito

## **Allegati**

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

```
* PARATIE ANALYSIS FOR DESIGN SECTION:Base Design Section USING ASSUMPTION: Nominal
* Time:giovedi 25 giugno 2020 16:17:06
* 1: Defining general settings
UNIT m kN
TITLE New Project
DELTA 0.2
option param itemax 40

* 2: Defining wall(s)
WALL LeftWall_29 0 -14 0.5 1

* 3: Defining surfaces for wall(s)
SOIL 0_L LeftWall_29 -14 0.5 1 0
SOIL 0_R LeftWall_29 -14 0.5 2 180

* 4: Defining soil layers
*
* Soil Profile (FRANA_334_8_L_0)
*
LDATA FRANA_334_8_L_0 0.5 LeftWall_29
ATREST 0.758 1 1
WEIGHT 20 10 10
PERMEABILITY 1E-05
RESISTANCE 4 14
YOUNG 2E+04 3.2E+04
ENDL
*
* Soil Profile (BNA2_(2)_335_337_L_0)
*
LDATA BNA2_(2)_335_337_L_0 -3.5 LeftWall_29
ATREST 0.546 1 1
WEIGHT 20 10 10
PERMEABILITY 1E-05
RESISTANCE 25 27
YOUNG 1.15E+05 1.84E+05
ENDL

* 5: Defining structural materials
* Steel material: 2753 Name=Fe360 E=206000200 kPa
MATERIAL Fe360_2753 2.06E+08
* Concrete material: 101 Name=C25/30 E=31475800 kPa
MATERIAL C2530_101 3.148E+07
* Rebar material: 110 Name=acciaio armonico E=200100000 kPa
MATERIAL acciaioarmonico_110 2.001E+08

* 6: Defining structural elements
* 6.1: Beams
BEAM WallElement_30 LeftWall_29 -14 0.5 C2530_101 0.7888 00 00

* 6.2: Supports
WIRE Tieback_341 LeftWall_29 -2.53 acciaioarmonico_110 1.363E-05 83.33 20 0 0
WIRE Tieback_342 LeftWall_29 -5.03 acciaioarmonico_110 1.544E-05 83.33 20 0 0

* 6.3: Strips
STRIP LeftWall_29 1 6 2.53 27.47 0.5 16.2 45
STRIP LeftWall_29 6 6 0.5 2.03 0.5 8.1 45

* 7: Defining Steps
STEP Palo_28
CHANGE FRANA_334_8_L_0 U-FRICT=14 LeftWall_29
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE FRANA_334_8_L_0 U-KA=0.61 LeftWall_29
CHANGE FRANA_334_8_L_0 U-KP=1.85 LeftWall_29
CHANGE FRANA_334_8_L_0 D-KA=0.61 LeftWall_29
CHANGE FRANA_334_8_L_0 D-KP=1.85 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 U-FRICT=27 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 U-KA=0.376 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 U-KP=3.601 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-KA=0.376 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-KP=3.601 LeftWall_29
CHANGE FRANA_334_8_L_0 U-COHE=4 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 U-COHE=25 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 0.5
WATER -3.45 0 -14 0 0
```

```

ADD WallElement_30
ENDSTEP

STEP scavol_344
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -3.53
WATER -3.45 0.08 -14 0 0
ENDSTEP

STEP Tirantel_1139
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -3.53
WATER -3.45 0.08 -14 0 0
ADD Tieback_341
ENDSTEP

STEP Scavo2_1238
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -6.03
WATER -5.03 1 -14 0 0
ENDSTEP

STEP Tirante2_1685
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -6.03
WATER -5.03 1 -14 0 0
ADD Tieback_342
ENDSTEP

STEP Fondoscavo_2741
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -7.3
WATER -6.3 1 -14 0 0
ENDSTEP

```

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

```

+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:17:07
+-----+

```

```

*****  

*  

* 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 2016 *Build date: Sept23, 2015*  

*  

*  

* Ce.A.S. S.R.L CENTRO DI ANALISI STRUTTURALE  

* VIALE GIUSTINIANO 10  

* 20129 MILANO (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_25.Nominal_60
STARTING
ACCEPTED <FILE,GENW >
ACCEPTED <FILE,PLOTTER,BINARY >
ACCEPTED <SOLVE TOTAL_STRESS >
ACCEPTED <PARAM ITEMAX 40 >

```

```

*****  

*  

* WARNING : PORE PRESSURES ARE AUTOMATICALLY COMPUTED  

* BY THE PROGRAM.  

*****  


```

```

PRELIMINARY OPERATIONS CPU TIME 0.00 [sec]

```

```

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
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+-----+

```

INPUT FILE HAS BEEN GENERATED BY WALGEN PROGRAM

New Project

NO. OF NODAL POINTS (NUMNP) .....	75
NO. OF COORDINATES (NCOORD) .....	2
NO. OF NODE DOFS (NDOF) .....	2
NO. OF EQUATIONS (NEQ) .....	150
NO. OF CONSTRAINTS CARDS (NVINC) .....	0
NO. OF ELEMENT GROUPS (NEG) .....	5
NO. OF SOLUTION STEPS (NSTE) .....	6
NO. OF ELEMENT SETS ATTACHED TO SLAVE NODES ...	0
NO. OF RECORD FROM WALGEN .....	98
NO. OF LONG NAMES (LASTNAME) .....	23
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.	

```

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+-----+
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 98

1 : UNIT m kN
2 : TITLE New Project
3 : DELTA 0.2
4 : option param itemax 40
5 : WALL LeftWall_29 0 -14 0.5 1
6 : SOIL 0_L LeftWall_29 -14 0.5 1 0
7 : SOIL 0_R LeftWall_29 -14 0.5 2 180
8 : LDATA FRANA_334_8_L_0 0.5 LeftWall_29
9 : ATREST 0.758 1 1
10 : WEIGHT 20 10 10
11 : PERMEABILITY 1E-05
12 : RESISTANCE 4 14
13 : YOUNG 2E+04 3.2E+04
14 : ENDL
15 : LDATA BNA2_(2)_335_337_L_0 -3.5 LeftWall_29
16 : ATREST 0.546 1 1
17 : WEIGHT 20 10 10
18 : PERMEABILITY 1E-05
19 : RESISTANCE 25 27
20 : YOUNG 1.15E+05 1.84E+05
21 : ENDL
22 : MATERIAL Fe360_2753 2.06E+08
23 : MATERIAL C2530_101 3.148E+07
24 : MATERIAL acciaioarmonico_110 2.001E+08
25 : BEAM WallElement_30 LeftWall_29 -14 0.5 C2530_101 0.7888 00 00
26 : WIRE Tieback_341 LeftWall_29 -2.53 acciaioarmonico_110 1.363E-05 83.33 20 0 0
27 : WIRE Tieback_342 LeftWall_29 -5.03 acciaioarmonico_110 1.544E-05 83.33 20 0 0
28 : STRIP LeftWall_29 1 6 2.53 27.47 0.5 16.2 45
29 : STRIP LeftWall_29 6 6 0.5 2.03 0.5 8.1 45
30 : STEP Palo_28
31 : CHANGE FRANA_334_8_L_0 U-FRICT=14 LeftWall_29
32 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
33 : CHANGE FRANA_334_8_L_0 U-KA=0.61 LeftWall_29
34 : CHANGE FRANA_334_8_L_0 U-KP=1.85 LeftWall_29
35 : CHANGE FRANA_334_8_L_0 D-KA=0.61 LeftWall_29
36 : CHANGE FRANA_334_8_L_0 D-KP=1.85 LeftWall_29
37 : CHANGE BNA2_(2)_335_337_L_0 U-FRICT=27 LeftWall_29
38 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
39 : CHANGE BNA2_(2)_335_337_L_0 U-KA=0.376 LeftWall_29
40 : CHANGE BNA2_(2)_335_337_L_0 U-KP=3.601 LeftWall_29
41 : CHANGE BNA2_(2)_335_337_L_0 D-KA=0.376 LeftWall_29
42 : CHANGE BNA2_(2)_335_337_L_0 D-KP=3.601 LeftWall_29
43 : CHANGE FRANA_334_8_L_0 U-COHE=4 LeftWall_29
44 : CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
45 : CHANGE BNA2_(2)_335_337_L_0 U-COHE=25 LeftWall_29
46 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
47 : SETWALL LeftWall_29
48 : GEOM 0.5 0.5
49 : WATER -3.45 0 -14 0 0
50 : ADD WallElement_30
51 : ENDSTEP
52 : STEP scavol_344
53 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
54 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
55 : CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
56 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
57 : SETWALL LeftWall_29
58 : GEOM 0.5 -3.53
59 : WATER -3.45 0.08 -14 0 0
60 : ENDSTEP
61 : STEP Tirante1_1139
62 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
63 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
64 : CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
65 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
66 : SETWALL LeftWall_29
67 : GEOM 0.5 -3.53
68 : WATER -3.45 0.08 -14 0 0
69 : ADD Tieback_341
70 : ENDSTEP
71 : STEP Scav02_1238
72 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
73 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
74 : CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
75 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
76 : SETWALL LeftWall_29
77 : GEOM 0.5 -6.03
78 : WATER -5.03 1 -14 0 0
79 : ENDSTEP

```

```
80 : STEP Tirante2_1685
81 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
82 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
83 : CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
84 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
85 : SETWALL LeftWall_29
86 : GEOM 0.5 -6.03
87 : WATER -5.03 1 -14 0 0
88 : ADD Tieback_342
89 : ENDSTEP
90 : STEP Fondoscavo_2741
91 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
92 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=27 LeftWall_29
93 : CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
94 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=25 LeftWall_29
95 : SETWALL LeftWall_29
96 : GEOM 0.5 -7.3
97 : WATER -6.3 1 -14 0 0
98 : ENDSTEP
```

```

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
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+-----+

```

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 / NODE	Y-COORD	Z-COORD /		
1	0.0000	0.50000	/	2 0.0000	0.30000	/	3 0.0000	0.10000	/	4 0.0000	-0.10000	/
5	0.0000	-0.30000	/	6 0.0000	-0.50000	/	7 0.0000	-0.70000	/	8 0.0000	-0.90000	/
9	0.0000	-1.1000	/	10 0.0000	-1.3000	/	11 0.0000	-1.5000	/	12 0.0000	-1.7000	/
13	0.0000	-1.9000	/	14 0.0000	-2.1000	/	15 0.0000	-2.3000	/	16 0.0000	-2.5000	/
17	0.0000	-2.5300	/	18 0.0000	-2.7300	/	19 0.0000	-2.9300	/	20 0.0000	-3.1300	/
21	0.0000	-3.3300	/	22 0.0000	-3.5300	/	23 0.0000	-3.7300	/	24 0.0000	-3.9300	/
25	0.0000	-4.1300	/	26 0.0000	-4.3300	/	27 0.0000	-4.5300	/	28 0.0000	-4.7300	/
29	0.0000	-4.9300	/	30 0.0000	-5.0300	/	31 0.0000	-5.2300	/	32 0.0000	-5.4300	/
33	0.0000	-5.6300	/	34 0.0000	-5.8300	/	35 0.0000	-6.0300	/	36 0.0000	-6.2300	/
37	0.0000	-6.4300	/	38 0.0000	-6.6300	/	39 0.0000	-6.8300	/	40 0.0000	-7.0300	/
41	0.0000	-7.2300	/	42 0.0000	-7.4300	/	43 0.0000	-7.6300	/	44 0.0000	-7.8300	/
45	0.0000	-8.0300	/	46 0.0000	-8.2300	/	47 0.0000	-8.4300	/	48 0.0000	-8.6300	/
49	0.0000	-8.8300	/	50 0.0000	-9.0300	/	51 0.0000	-9.2300	/	52 0.0000	-9.4300	/
53	0.0000	-9.6300	/	54 0.0000	-9.8300	/	55 0.0000	-10.030	/	56 0.0000	-10.230	/
57	0.0000	-10.430	/	58 0.0000	-10.630	/	59 0.0000	-10.830	/	60 0.0000	-11.030	/
61	0.0000	-11.230	/	62 0.0000	-11.430	/	63 0.0000	-11.630	/	64 0.0000	-11.830	/
65	0.0000	-12.030	/	66 0.0000	-12.230	/	67 0.0000	-12.430	/	68 0.0000	-12.630	/
69	0.0000	-12.830	/	70 0.0000	-13.030	/	71 0.0000	-13.230	/	72 0.0000	-13.430	/
73	0.0000	-13.630	/	74 0.0000	-13.830	/	75 0.0000	-14.000	/			



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	0.2000	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	0.1850	0.000	0.000	0.000	1.000
75	75	2	0.8500E-01	0.000	0.000	0.000	1.000



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	0.2000	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	0.1850	0.000	0.000	0.000	2.000
75	75	2	0.8500E-01	0.000	0.000	0.000	2.000

```

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+-----+
ELEMENT GROUP NO. 3

WallElement_30      :
 2 74 0 1 0 0 0 0 0 0 0 0 0 0 1 0 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
 6 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 .....0.280300E-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
 6 1.000

element data

el na nb mat      erc1      erc2      thick
-----
 1 1 2 1 0.000 0.000 0.7888
 2 2 3 1 0.000 0.000 0.7888
 3 3 4 1 0.000 0.000 0.7888
 4 4 5 1 0.000 0.000 0.7888
 5 5 6 1 0.000 0.000 0.7888
 6 6 7 1 0.000 0.000 0.7888
 7 7 8 1 0.000 0.000 0.7888
 8 8 9 1 0.000 0.000 0.7888
 9 9 10 1 0.000 0.000 0.7888
10 10 11 1 0.000 0.000 0.7888
11 11 12 1 0.000 0.000 0.7888
12 12 13 1 0.000 0.000 0.7888
13 13 14 1 0.000 0.000 0.7888
14 14 15 1 0.000 0.000 0.7888
15 15 16 1 0.000 0.000 0.7888
16 16 17 1 0.000 0.000 0.7888
17 17 18 1 0.000 0.000 0.7888
18 18 19 1 0.000 0.000 0.7888
19 19 20 1 0.000 0.000 0.7888
20 20 21 1 0.000 0.000 0.7888
21 21 22 1 0.000 0.000 0.7888
22 22 23 1 0.000 0.000 0.7888
23 23 24 1 0.000 0.000 0.7888
24 24 25 1 0.000 0.000 0.7888
25 25 26 1 0.000 0.000 0.7888
26 26 27 1 0.000 0.000 0.7888
27 27 28 1 0.000 0.000 0.7888
28 28 29 1 0.000 0.000 0.7888
29 29 30 1 0.000 0.000 0.7888
30 30 31 1 0.000 0.000 0.7888
31 31 32 1 0.000 0.000 0.7888
32 32 33 1 0.000 0.000 0.7888
33 33 34 1 0.000 0.000 0.7888
34 34 35 1 0.000 0.000 0.7888
35 35 36 1 0.000 0.000 0.7888
36 36 37 1 0.000 0.000 0.7888
37 37 38 1 0.000 0.000 0.7888
38 38 39 1 0.000 0.000 0.7888
39 39 40 1 0.000 0.000 0.7888
40 40 41 1 0.000 0.000 0.7888
41 41 42 1 0.000 0.000 0.7888

```

42	42	43	1	0.000	0.000	0.7888
43	43	44	1	0.000	0.000	0.7888
44	44	45	1	0.000	0.000	0.7888
45	45	46	1	0.000	0.000	0.7888
46	46	47	1	0.000	0.000	0.7888
47	47	48	1	0.000	0.000	0.7888
48	48	49	1	0.000	0.000	0.7888
49	49	50	1	0.000	0.000	0.7888
50	50	51	1	0.000	0.000	0.7888
51	51	52	1	0.000	0.000	0.7888
52	52	53	1	0.000	0.000	0.7888
53	53	54	1	0.000	0.000	0.7888
54	54	55	1	0.000	0.000	0.7888
55	55	56	1	0.000	0.000	0.7888
56	56	57	1	0.000	0.000	0.7888
57	57	58	1	0.000	0.000	0.7888
58	58	59	1	0.000	0.000	0.7888
59	59	60	1	0.000	0.000	0.7888
60	60	61	1	0.000	0.000	0.7888
61	61	62	1	0.000	0.000	0.7888
62	62	63	1	0.000	0.000	0.7888
63	63	64	1	0.000	0.000	0.7888
64	64	65	1	0.000	0.000	0.7888
65	65	66	1	0.000	0.000	0.7888
66	66	67	1	0.000	0.000	0.7888
67	67	68	1	0.000	0.000	0.7888
68	68	69	1	0.000	0.000	0.7888
69	69	70	1	0.000	0.000	0.7888
70	70	71	1	0.000	0.000	0.7888
71	71	72	1	0.000	0.000	0.7888
72	72	73	1	0.000	0.000	0.7888
73	73	74	1	0.000	0.000	0.7888
74	74	75	1	0.000	0.000	0.7888

```

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:17:07
+-----+
ELEMENT GROUP NO. 4

Tieback_341      :
 6  1  0  1  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  active
 4  active
 5  active
 6  active

material set no.    1

prop( 1) angle      20.0000
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
 6  0.000      0.000

element data

el  n  mat      a/l      pinit      yieldc      yielddt
-----
 1  17    1  0.1363E-04 83.33      0.000      0.000

```

```

+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:17:07
+-----+
ELEMENT GROUP NO. 5

Tieback_342      :
 6  1  0  1  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  inactive
 5  active
 6  active

material set no.    1

prop( 1) angle      20.0000
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
 6  0.000      0.000

element data

el  n  mat      a/l      pinit      yieldc      yielddt
-----
 1  30     1  0.1544E-04 83.33      0.000      0.000

```

```
+-----+  
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:17:07 |  
+-----+
```

NO. OF NODAL LOADS (NLOAD) ..... 0  
NO. OF LOAD CURVES (NLCUR) ..... 12  
MAXIMUM POINTS/LCURVE (NPTM) ..... 5

```

+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:17:07
+-----+
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	
7.00000	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	
7.00000	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	
7.00000	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	
7.00000	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	
7.00000	0.0000E+00	

LOAD FUNCTION NUMBER = 6  
NUMBER OF TIME POINTS = 5

TIME	VALUE	FUNCTION
0.00000	0.0000E+00	
5.80000	0.0000E+00	
6.00000	0.1000E+01	
6.20000	0.0000E+00	
7.00000	0.0000E+00	

LOAD FUNCTION NUMBER = 7

NUMBER OF TIME POINTS = 4

TIME VALUE FUNCTION

0.00000	0.0000E+00
0.80000	0.0000E+00
1.00000	0.1000E+01
7.00000	0.1000E+01

LOAD FUNCTION NUMBER = 8  
NUMBER OF TIME POINTS = 4

TIME VALUE FUNCTION

0.00000	0.0000E+00
1.80000	0.0000E+00
2.00000	0.1000E+01
7.00000	0.1000E+01

LOAD FUNCTION NUMBER = 9  
NUMBER OF TIME POINTS = 4

TIME VALUE FUNCTION

0.00000	0.0000E+00
2.80000	0.0000E+00
3.00000	0.1000E+01
7.00000	0.1000E+01

LOAD FUNCTION NUMBER = 10  
NUMBER OF TIME POINTS = 4

TIME VALUE FUNCTION

0.00000	0.0000E+00
3.80000	0.0000E+00
4.00000	0.1000E+01
7.00000	0.1000E+01

LOAD FUNCTION NUMBER = 11  
NUMBER OF TIME POINTS = 4

TIME VALUE FUNCTION

0.00000	0.0000E+00
4.80000	0.0000E+00
5.00000	0.1000E+01
7.00000	0.1000E+01

LOAD FUNCTION NUMBER = 12  
NUMBER OF TIME POINTS = 4

TIME VALUE FUNCTION

0.00000	0.0000E+00
5.80000	0.0000E+00
6.00000	0.1000E+01
7.00000	0.1000E+01

NO. OF DISTRIBUTED LOAD CARDS 0

```
+-----+  
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:17:07 |  
+-----+
```

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
STEP	6	TOTAL APPLIED LOAD IN DIR.	2	Y-DISPL.F	0.0000000
STEP	6	TOTAL APPLIED LOAD IN DIR.	4	X-ROT. F	0.0000000

LOAD INPUT SECTION COMPLETED

```
+-----+
|          PARATIE PLUS 2014 NLS ENGINE RELEASE  2016  FULL VERSION *Build date: Sept23, 2015*
|
|          NewProject.BaseDesignSection_25.Nominal_60
|          Exe Time :25 June 2020      16:17:07
+-----+
```

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

```

+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:17:07
+-----+

```

LAYER DESCRIPTORS FOR STEP NO. 1

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

```

ITEM NO. 1<NAME >= 16.000 (BOTH WALLS)
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 4.0000 (BOTH WALLS)
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 4.0000 (BOTH WALLS)
ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)
ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1
ITEM NO. 61<D-KP >= 1.8500 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 >= 17.000 (BOTH WALLS)
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)
ITEM NO. 3<LEVEL >= -3.5000 (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 >= 25.000 (BOTH WALLS)
ITEM NO. 9<U-FRICT >= 27.000 (BOTH WALLS)
ITEM NO. 10<U-KA >= 0.37600 WALL NO. 1
ITEM NO. 11<U-KP >= 3.6010 WALL NO. 1
ITEM NO. 12<K0-NC >= 0.54600 (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 >= 0.11500E+06 (BOTH WALLS)
ITEM NO. 18<EUR >= 0.18400E+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 >= 25.000 (BOTH WALLS)
ITEM NO. 59<D-FRICT >= 27.000 (BOTH WALLS)
ITEM NO. 60<D-KA >= 0.37600 WALL NO. 1
ITEM NO. 61<D-KP >= 3.6010 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 >= 16.000 (BOTH WALLS)
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 4.0000 (BOTH WALLS)
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 4.0000 (BOTH WALLS)  
 ITEM NO. 59<D-FRICT >= 14.0000 (BOTH WALLS)  
 ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
 ITEM NO. 61<D-KP >= 1.8500 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 >= 17.000 (BOTH WALLS)  
 ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
 ITEM NO. 3<LEVEL >= -3.5000 (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 >= 25.000 (BOTH WALLS)  
 ITEM NO. 9<U-FRICT >= 27.000 (BOTH WALLS)  
 ITEM NO. 10<U-KA >= 0.37600 WALL NO. 1  
 ITEM NO. 11<U-KP >= 3.6010 WALL NO. 1  
 ITEM NO. 12<K0-NC >= 0.54600 (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 >= 0.115000E+06 (BOTH WALLS)  
 ITEM NO. 18<EUR >= 0.184000E+06 (BOTH WALLS)  
 ITEM NO. 27<U-PERM >= 0.100000E-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 >= 25.000 (BOTH WALLS)  
 ITEM NO. 59<D-FRICT >= 27.000 (BOTH WALLS)  
 ITEM NO. 60<D-KA >= 0.37600 WALL NO. 1  
 ITEM NO. 61<D-KP >= 3.6010 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 >= 16.000 (BOTH WALLS)  
 ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
 ITEM NO. 3<LEVEL >= 0.50000 (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 >= 4.0000 (BOTH WALLS)  
 ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)  
 ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1  
 ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1  
 ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (BOTH WALLS)  
 ITEM NO. 27<U-PERM >= 0.100000E-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 >= 4.0000 (BOTH WALLS)  
 ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
 ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
 ITEM NO. 61<D-KP >= 1.8500 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 >= 17.000 (BOTH WALLS)  
 ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
 ITEM NO. 3<LEVEL >= -3.5000 (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 >= 25.000 (BOTH WALLS)  
 ITEM NO. 9<U-FRICT >= 27.000 (BOTH WALLS)  
 ITEM NO. 10<U-KA >= 0.37600 WALL NO. 1  
 ITEM NO. 11<U-KP >= 3.6010 WALL NO. 1  
 ITEM NO. 12<K0-NC >= 0.54600 (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 >= 0.115000E+06 (BOTH WALLS)  
 ITEM NO. 18<EUR >= 0.184000E+06 (BOTH WALLS)  
 ITEM NO. 27<U-PERM >= 0.100000E-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 >= 25.000 (BOTH WALLS)  
 ITEM NO. 59<D-FRICT >= 27.000 (BOTH WALLS)  
 ITEM NO. 60<D-KA >= 0.37600 WALL NO. 1

ITEM NO. 61<D-KP >= 3.6010 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO. 4

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

ITEM NO. 1<NAME >= 16.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 4.0000 (BOTH WALLS)  
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1  
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 4.0000 (BOTH WALLS)  
ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
ITEM NO. 61<D-KP >= 1.8500 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

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

ITEM NO. 1<NAME >= 17.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= -3.5000 (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 >= 25.000 (BOTH WALLS)  
ITEM NO. 9<U-FRICT >= 27.000 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.37600 WALL NO. 1  
ITEM NO. 11<U-KP >= 3.6010 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.54600 (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 >= 0.11500E+06 (BOTH WALLS)  
ITEM NO. 18<EUR >= 0.18400E+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 >= 25.000 (BOTH WALLS)  
ITEM NO. 59<D-FRICT >= 27.000 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.37600 WALL NO. 1  
ITEM NO. 61<D-KP >= 3.6010 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO. 5

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

ITEM NO. 1<NAME >= 16.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 4.0000 (BOTH WALLS)  
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1  
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 4.0000 (BOTH WALLS)  
ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
ITEM NO. 61<D-KP >= 1.8500 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

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

ITEM NO. 1<NAME >= 17.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= -3.5000 (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 >= 25.000 (BOTH WALLS)  
ITEM NO. 9<U-FRICT >= 27.000 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.37600 WALL NO. 1  
ITEM NO. 11<U-KP >= 3.6010 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.54600 (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 >= 0.11500E+06 (BOTH WALLS)  
ITEM NO. 18<EUR >= 0.18400E+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 >= 25.000 (BOTH WALLS)  
ITEM NO. 59<D-FRICT >= 27.000 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.37600 WALL NO. 1  
ITEM NO. 61<D-KP >= 3.6010 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO. 6

NON ZERO LAYER DESCRIPTORS FOR LAYER NO. 1 FOR STEP NO. 6

ITEM NO. 1<NAME >= 16.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 4.0000 (BOTH WALLS)  
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1  
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 4.0000 (BOTH WALLS)  
ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
ITEM NO. 61<D-KP >= 1.8500 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

NON ZERO LAYER DESCRIPTORS FOR LAYER NO. 2 FOR STEP NO. 6

ITEM NO. 1<NAME >= 17.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= -3.5000 (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 >= 25.000 (BOTH WALLS)  
ITEM NO. 9<U-FRICT >= 27.000 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.37600 WALL NO. 1  
ITEM NO. 11<U-KP >= 3.6010 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.54600 (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 >= 0.11500E+06 (BOTH WALLS)  
ITEM NO. 18<EUR >= 0.18400E+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 >= 25.000 (BOTH WALLS)  
ITEM NO. 59<D-FRICT >= 27.000 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.37600 WALL NO. 1  
ITEM NO. 61<D-KP >= 3.6010 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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PHASE DESCRIPTORS

STEP NO.	1	LEFT WALL	RIGHT WALL
Y		0.000	-0.9990E+30
Z-PC		0.5000	0.000
Z-EXCAVATION		0.5000	0.000
Z-WATER_TABLE		-3.450	-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		-14.00	-14.00
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		0.5000	0.000
Z-EXCAVATION		-3.530	0.000
Z-WATER_TABLE		-3.450	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL		0.000	0.000
ZQ		0.000	0.000
DZW_OF_THE_WATER_TABLE		0.8000E-01	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		-14.00	-14.00
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	0.5000	0.000
Z-EXCAVATION	-3.530	0.000
Z-WATER_TABLE	-3.450	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.8000E-01	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	-14.00	-14.00
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	0.5000	0.000
Z-EXCAVATION	-6.030	0.000
Z-WATER_TABLE	-5.030	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	1.000	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	-14.00	-14.00
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	0.5000	0.000
Z-EXCAVATION	-6.030	0.000
Z-WATER_TABLE	-5.030	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	1.000	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	-14.00	-14.00
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

STEP NO.	6	LEFT WALL	RIGHT WALL
Y		0.000	-0.9990E+30
Z-PC		0.5000	0.000
Z-EXCAVATION		-7.300	0.000
Z-WATER_TABLE		-6.300	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL		0.000	0.000
ZQ		0.000	0.000
DZW_OF_THE_WATER_TABLE		1.000	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		-14.00	-14.00
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 6

#### LEFT-HAND WALL

LOWER LEVEL	-14.00000
UPPER LEVEL	0.50000

#### RIGHT-HAND WALL

LOWER LEVEL	-14.00000
UPPER LEVEL	0.50000

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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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                                1.0000  
END TIME (TIME BEYOND WHICH IT IS REMOVED)    6.0000

TYPE BOUSSINESQ

HORIZONTAL DISTANCE (DY)	2.530000000000000
FOUNDATION WIDTH (B)	27.4700000000000
ZETA-F.....	0.500000000000000
Q-F .....	16.2000000000000
BETA .....	45.0000000000000
BEHAVIOUR (0=FREE, 1=REFLECTING)	0.0000000000000E+000

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

ACTIVATION TIME                                6.0000  
END TIME (TIME BEYOND WHICH IT IS REMOVED)    6.0000

TYPE BOUSSINESQ

HORIZONTAL DISTANCE (DY)	0.500000000000000
FOUNDATION WIDTH (B)	2.0300000000000
ZETA-F.....	0.500000000000000
Q-F .....	8.1000000000000
BETA .....	45.0000000000000
BEHAVIOUR (0=FREE, 1=REFLECTING)	0.0000000000000E+000

ELEMENT GROUPS BACKUP AREA CAN STAY IN CORE AT  
POSITION                                        4204

NO. OF D.P.W FOR THIS AREA                7191  
MAX NO. OF D.P.W. AVAILABLE                81920  
\*\* MAX NO OF ITERATIONS SET TO            40

ITER    0 RNORM = 0.000      RMNORM= 0.000  
RINORM=0.8114E+05 RIMNOR= 0.000  
RENORM=0.1136E-27 REMNOR= 0.000      RATIO =0.3742E-16 TOLER =0.1000E-03      CONVERGED !  
RFMAX = 40.87      RMMAX = 0.000  
RTSMAL=0.1000E-03 RMSMAL= 0.000  
RDT =0.8114E+05 RDR = 0.000  
RATIO=0.3742E-16 RATOR= 0.000  
MAX UN=0.7105E-14 IEQ= 111 NODE        56 DOF    1 Y-DISPL.F  
MIN UN=-.7105E-14 IEQ= 139 NODE        70 DOF    1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS    0

ITER    1 RNORM = 0.000      RMNORM= 0.000  
RINORM=0.8114E+05 RIMNOR= 0.000  
RENORM=0.4734E-29 REMNOR=0.6220E-53 RATIO =0.7638E-17 TOLER =0.1000E-03      CONVERGED !  
RFMAX = 40.87      RMMAX = 0.000  
RTSMAL=0.1000E-03 RMSMAL= 0.000  
RDT =0.8114E+05 RDR = 0.000  
RATIO=0.7638E-17 RATOR= 0.000  
MAX UN=0.3557E-15 IEQ= 97 NODE        49 DOF    1 Y-DISPL.F  
MIN UN=-.6690E-15 IEQ= 147 NODE        74 DOF    1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS    0

ITER    2 RNORM = 0.000      RMNORM= 0.000  
RINORM=0.8114E+05 RIMNOR= 0.000  
RENORM=0.3392E-29 REMNOR=0.1817E-52 RATIO =0.6466E-17 TOLER =0.1000E-03      CONVERGED !  
RFMAX = 40.87      RMMAX = 0.000  
RTSMAL=0.1000E-03 RMSMAL= 0.000  
RDT =0.8114E+05 RDR = 0.000  
RATIO=0.6466E-17 RATOR= 0.000  
MAX UN=0.3037E-15 IEQ= 89 NODE        45 DOF    1 Y-DISPL.F  
MIN UN=-.5314E-15 IEQ= 147 NODE        74 DOF    1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS    0

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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New Project

SOLUTION REACHED USING 2 ITERATIONS ON 40

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

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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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 75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.000	9.2327E-21	0.000	0.000	0.000	0.000	V-C	1.3241E+04	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
2 D	0.7550	8.7314E-21	4.002	3.775	4.002	3.775	V-C	1.3241E+04	0.3000	0.000	
1.000	1.000	3.775	0.000	0.000	FRANA_334_8_L_0						
3 D	1.506	8.2300E-21	8.013	7.530	8.013	7.530	V-C	1.3241E+04	0.1000	0.000	
1.000	1.000	7.530	0.000	0.000	FRANA_334_8_L_0						
4 D	2.250	7.7281E-21	12.04	11.25	12.04	11.25	V-C	1.3241E+04	-0.1000	0.000	
1.000	1.000	11.25	0.000	0.000	FRANA_334_8_L_0						
5 D	2.983	7.2254E-21	16.10	14.91	16.10	14.91	V-C	1.3241E+04	-0.3000	0.000	
1.000	1.000	14.91	0.000	0.000	FRANA_334_8_L_0						
6 D	3.704	6.7211E-21	20.18	18.52	20.18	18.52	V-C	1.3241E+04	-0.5000	0.000	
1.000	1.000	18.52	0.000	0.000	FRANA_334_8_L_0						
7 D	4.412	6.2145E-21	24.29	22.06	24.29	22.06	V-C	1.3241E+04	-0.7000	0.000	
1.000	1.000	22.06	0.000	0.000	FRANA_334_8_L_0						
8 D	5.107	5.7046E-21	28.42	25.53	28.42	25.53	V-C	1.3241E+04	-0.9000	0.000	
1.000	1.000	25.53	0.000	0.000	FRANA_334_8_L_0						
9 D	5.789	5.1904E-21	32.58	28.94	32.58	28.94	V-C	1.3241E+04	-1.100	0.000	
1.000	1.000	28.94	0.000	0.000	FRANA_334_8_L_0						
10 D	6.459	4.6706E-21	36.75	32.30	36.75	32.30	V-C	1.3241E+04	-1.300	0.000	
1.000	1.000	32.30	0.000	0.000	FRANA_334_8_L_0						
11 D	7.119	4.1440E-21	40.94	35.59	40.94	35.59	V-C	1.3241E+04	-1.500	0.000	
1.000	1.000	35.59	0.000	0.000	FRANA_334_8_L_0						
12 D	7.769	3.6093E-21	45.14	38.84	45.14	38.84	V-C	1.3241E+04	-1.700	0.000	
1.000	1.000	38.84	0.000	0.000	FRANA_334_8_L_0						
13 D	8.410	3.0648E-21	49.34	42.05	49.34	42.05	V-C	1.3241E+04	-1.900	0.000	
1.000	1.000	42.05	0.000	0.000	FRANA_334_8_L_0						
14 D	9.045	2.5092E-21	53.54	45.22	53.54	45.22	V-C	1.3241E+04	-2.100	0.000	
1.000	1.000	45.22	0.000	0.000	FRANA_334_8_L_0						
15 D	9.673	1.9409E-21	57.74	48.37	57.74	48.37	V-C	1.3241E+04	-2.300	0.000	
1.000	1.000	48.37	0.000	0.000	FRANA_334_8_L_0						
16 D	5.921	1.3582E-21	61.94	51.48	61.94	51.48	V-C	1.3241E+04	-2.500	0.000	
1.000	1.000	51.48	0.000	0.000	FRANA_334_8_L_0						
17 D	5.974	1.2694E-21	62.57	51.95	62.57	51.95	V-C	1.3241E+04	-2.530	0.000	
1.000	1.000	51.95	0.000	0.000	FRANA_334_8_L_0						
18 D	11.01	6.6810E-22	66.77	55.04	66.77	55.04	V-C	1.3241E+04	-2.730	0.000	
1.000	1.000	55.04	0.000	0.000	FRANA_334_8_L_0						
19 D	11.62	4.8858E-23	71.28	58.12	71.28	58.12	V-C	1.3241E+04	-2.930	0.000	
1.000	1.000	58.12	0.000	0.000	FRANA_334_8_L_0						
20 D	12.24	-5.8997E-22	75.80	61.18	75.80	61.18	V-C	1.3241E+04	-3.130	0.000	
1.000	1.000	61.18	0.000	0.000	FRANA_334_8_L_0						
21 D	12.84	-1.2500E-21	79.71	64.22	79.71	64.22	V-C	1.3241E+04	-3.330	0.000	
1.000	1.000	64.22	0.000	0.000	FRANA_334_8_L_0						
22 D	10.11	-1.9330E-21	83.36	49.73	83.36	49.73	V-C	9.7067E+04	-3.530	0.8000	
1.000	1.000	50.53	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	10.72	-2.6402E-21	85.78	50.82	85.78	50.82	V-C	9.7067E+04	-3.730	2.800	
1.000	1.000	53.62	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	11.34	-3.3731E-21	87.68	51.90	87.68	51.90	V-C	9.7067E+04	-3.930	4.800	
1.000	1.000	56.70	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	11.95	-4.1324E-21	90.06	52.97	90.06	52.97	V-C	9.7067E+04	-4.130	6.800	
1.000	1.000	59.77	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	12.57	-4.9183E-21	92.42	54.04	92.42	54.04	V-C	9.7067E+04	-4.330	8.800	
1.000	1.000	62.84	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	13.18	-5.7306E-21	94.74	55.10	94.74	55.10	V-C	9.7067E+04	-4.530	10.80	
1.000	1.000	65.90	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	13.79	-6.5683E-21	96.64	56.16	96.64	56.16	V-C	9.7067E+04	-4.730	12.80	
1.000	1.000	68.96	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	10.80	-7.4297E-21	98.94	57.21	98.94	57.21	V-C	9.7067E+04	-4.930	14.80	
1.000	1.000	72.01	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	11.03	-7.8685E-21	99.88	57.74	99.88	57.74	V-C	9.7067E+04	-5.030	15.80	
1.000	1.000	73.54	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	15.32	-8.7602E-21	102.2	58.79	102.2	58.79	V-C	9.7067E+04	-5.230	17.80	
1.000	1.000	76.59	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	15.93	-9.6672E-21	104.4	59.84	104.4	59.84	V-C	9.7067E+04	-5.430	19.80	
1.000	1.000	79.64	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	16.54	-1.0584E-20	106.7	60.89	106.7	60.89	V-C	9.7067E+04	-5.630	21.80	
1.000	1.000	82.69	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	17.15	-1.1505E-20	108.6	61.93	108.6	61.93	V-C	9.7067E+04	-5.830	23.80
1.000	1.000	85.73	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-6.030	25.80
35 D	17.76	-1.2423E-20	110.8	62.98	110.8	62.98	V-C	9.7067E+04	-6.230	27.80
1.000	1.000	88.78	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-6.430	29.80
36 D	18.36	-1.3328E-20	113.0	64.02	113.0	64.02	V-C	9.7067E+04	-6.630	31.80
1.000	1.000	91.82	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-6.830	33.80
37 D	18.97	-1.4209E-20	115.2	65.06	115.2	65.06	V-C	9.7067E+04	-7.030	35.80
1.000	1.000	94.86	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-7.230	37.80
38 D	19.58	-1.5057E-20	117.1	66.10	117.1	66.10	V-C	9.7067E+04	-7.430	39.80
1.000	1.000	97.90	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-7.630	41.80
39 D	20.19	-1.5856E-20	119.3	67.14	119.3	67.14	V-C	9.7067E+04	-7.830	43.80
1.000	1.000	100.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-8.030	45.80
40 D	20.80	-1.6592E-20	121.5	68.18	121.5	68.18	V-C	9.7067E+04	-8.230	47.80
1.000	1.000	104.0	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-8.430	49.80
41 D	21.40	-1.7248E-20	123.4	69.22	123.4	69.22	V-C	9.7067E+04	-8.630	51.80
1.000	1.000	107.0	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-8.830	53.80
42 D	22.01	-1.7810E-20	125.6	70.26	125.6	70.26	V-C	9.7067E+04	-9.030	55.80
1.000	1.000	110.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-9.230	57.80
43 D	22.62	-1.8275E-20	127.7	71.30	127.7	71.30	V-C	9.7067E+04	-9.430	59.80
1.000	1.000	113.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-9.630	61.80
44 D	23.23	-1.8644E-20	129.9	72.34	129.9	72.34	V-C	9.7067E+04	-9.830	63.80
1.000	1.000	116.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-10.030	65.80
45 D	23.83	-1.8914E-20	131.8	73.37	131.8	73.37	V-C	9.7067E+04	-10.230	67.80
1.000	1.000	119.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-10.430	69.80
46 D	24.44	-1.9083E-20	133.9	74.41	133.9	74.41	V-C	9.7067E+04	-10.630	71.80
1.000	1.000	122.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-10.830	73.80
47 D	25.05	-1.9144E-20	136.1	75.45	136.1	75.45	V-C	9.7067E+04	-11.030	75.80
1.000	1.000	125.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-11.230	77.80
48 D	25.66	-1.9090E-20	138.2	76.49	138.2	76.49	V-C	9.7067E+04	-11.430	79.80
1.000	1.000	128.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-11.630	81.80
49 D	26.27	-1.8911E-20	140.1	77.53	140.1	77.53	V-C	9.7067E+04	-11.830	83.80
1.000	1.000	131.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-12.030	85.80
50 D	26.87	-1.8596E-20	142.3	78.57	142.3	78.57	V-C	9.7067E+04	-12.230	87.80
1.000	1.000	134.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-12.430	89.80
51 D	27.48	-1.8133E-20	144.4	79.61	144.4	79.61	V-C	9.7067E+04	-12.630	91.80
1.000	1.000	137.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-12.830	93.80
52 D	28.09	-1.7507E-20	146.3	80.65	146.3	80.65	V-C	9.7067E+04	-13.030	95.80
1.000	1.000	140.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-13.230	97.80
53 D	28.70	-1.6700E-20	148.4	81.68	148.4	81.68	V-C	9.7067E+04	-13.430	99.80
1.000	1.000	143.5	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-13.630	101.80
54 D	29.30	-1.5696E-20	150.5	82.72	150.5	82.72	V-C	9.7067E+04	-13.830	103.80
1.000	1.000	146.5	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-14.030	105.80
55 D	29.91	-1.4475E-20	152.7	83.76	152.7	83.76	V-C	9.7067E+04	-14.230	107.80
1.000	1.000	149.6	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-14.430	109.80
56 D	30.52	-1.3017E-20	154.6	84.80	154.6	84.80	V-C	9.7067E+04	-14.630	111.80
1.000	1.000	152.6	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-14.830	113.80
57 D	31.13	-1.1306E-20	156.7	85.84	156.7	85.84	V-C	9.7067E+04	-15.030	115.80
1.000	1.000	155.6	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-15.230	117.80
58 D	31.74	-9.3570E-21	158.8	86.89	158.8	86.89	V-C	9.7067E+04	-15.430	119.80
1.000	1.000	158.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-15.630	121.80
59 D	32.35	-7.1902E-21	160.9	87.93	160.9	87.93	V-C	9.7067E+04	-15.830	123.80
1.000	1.000	161.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-16.030	125.80
60 D	32.95	-4.8255E-21	162.8	88.97	162.8	88.97	V-C	9.7067E+04	-16.230	127.80
1.000	1.000	164.8	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-16.430	129.80
61 D	33.56	-2.2819E-21	164.9	90.01	164.9	90.01	V-C	9.7067E+04	-16.630	131.80
1.000	1.000	167.8	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-16.830	133.80
62 D	34.17	4.2152E-22	167.0	91.05	167.0	91.05	V-C	9.7067E+04	-17.030	135.80
1.000	1.000	170.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-17.230	137.80
63 D	34.78	3.2658E-21	168.9	92.09	168.9	92.09	V-C	9.7067E+04	-17.430	139.80
1.000	1.000	173.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-17.630	141.80
64 D	35.39	6.2317E-21	171.0	93.14	171.0	93.14	V-C	9.7067E+04	-17.830	143.80
1.000	1.000	176.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-18.030	145.80
65 D	36.00	9.2997E-21	173.1	94.18	173.1	94.18	V-C	9.7067E+04	-18.230	147.80
1.000	1.000	180.0	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-18.430	149.80
66 D	36.60	1.2449E-20	175.2	95.22	175.2	95.22	V-C	9.7067E+04	-18.630	151.80
1.000	1.000	183.0	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-18.830	153.80
67 D	37.21	1.5660E-20	177.1	96.27	177.1	96.27	V-C	9.7067E+04	-19.030	155.80
1.000	1.000	186.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-19.230	157.80
68 D	37.82	1.8908E-20	179.2	97.31	179.2	97.31	V-C	9.7067E+04	-19.430	159.80
1.000	1.000	189.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-19.630	161.80
69 D	38.43	2.2170E-20	181.3	98.36	181.3	98.36	V-C	9.7067E+04	-19.830	163.80
1.000	1.000	192.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-20.030	165.80
70 D	39.04	2.5420E-20	183.4	99.40	183.4	99.40	V-C	9.7067E+04	-20.230	167.80
1.000	1.000	195.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-20.430	169.80
71 D	39.65	2.8637E-20	185.3	100.4	185.3	100.4	V-C	9.7067E+04	-20.630	171.80
1.000	1.000	198.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-20.830	173.80
72 D	40.26	3.1828E-20	187.3	101.5	187.3	101.5	V-C	9.7067E+04	-21.030	175.80
1.000	1.000	201.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-21.230	177.80
73 D	40.87	3.5005E-20	189.4	102.5	189.4	102.5	V-C	9.7067E+04	-21.430	179.80
1.000	1.000	204.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-21.630	181.80
74 D	38.37	3.8174E-20	191.3	103.6	191.3	103.6	V-C	9.7067E+04	-21.830	183.80
1.000	1.000	207.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-22.030	185.80
75 D	17.85	4.0867E-20	193.1	104.5	193.1	104.5	V-C	9.7067E+04	-22.230	187.80
1.000	1.000	210.0	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	9.7067E+04	-22.430	189.80

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| Exe Time :25 June 2020 16:17:07
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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

O\_R  
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.000	-9.2327E-21	0.000	0.000	0.000	0.000	V-C	1.6165E+04	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
2 D	0.7550	-8.7314E-21	4.000	3.775	4.000	3.775	V-C	1.6165E+04	0.3000	0.000	
1.000	1.000	3.775	0.000	0.000	FRANA_334_8_L_0						
3 D	1.506	-8.2300E-21	8.000	7.530	8.000	7.530	V-C	1.6165E+04	0.1000	0.000	
1.000	1.000	7.530	0.000	0.000	FRANA_334_8_L_0						
4 D	2.250	-7.7281E-21	12.00	11.25	12.00	11.25	V-C	1.6165E+04	-0.1000	0.000	
1.000	1.000	11.25	0.000	0.000	FRANA_334_8_L_0						
5 D	2.983	-7.2254E-21	16.00	14.91	16.00	14.91	V-C	1.6165E+04	-0.3000	0.000	
1.000	1.000	14.91	0.000	0.000	FRANA_334_8_L_0						
6 D	3.704	-6.7211E-21	20.00	18.52	20.00	18.52	V-C	1.6165E+04	-0.5000	0.000	
1.000	1.000	18.52	0.000	0.000	FRANA_334_8_L_0						
7 D	4.412	-6.2145E-21	24.00	22.06	24.00	22.06	V-C	1.6165E+04	-0.7000	0.000	
1.000	1.000	22.06	0.000	0.000	FRANA_334_8_L_0						
8 D	5.107	-5.7046E-21	28.00	25.53	28.00	25.53	V-C	1.6165E+04	-0.9000	0.000	
1.000	1.000	25.53	0.000	0.000	FRANA_334_8_L_0						
9 D	5.789	-5.1904E-21	32.00	28.94	32.00	28.94	V-C	1.6165E+04	-1.100	0.000	
1.000	1.000	28.94	0.000	0.000	FRANA_334_8_L_0						
10 D	6.459	-4.6706E-21	36.00	32.30	36.00	32.30	V-C	1.6165E+04	-1.300	0.000	
1.000	1.000	32.30	0.000	0.000	FRANA_334_8_L_0						
11 D	7.119	-4.1440E-21	40.00	35.59	40.00	35.59	V-C	1.6165E+04	-1.500	0.000	
1.000	1.000	35.59	0.000	0.000	FRANA_334_8_L_0						
12 D	7.769	-3.6093E-21	44.00	38.84	44.00	38.84	V-C	1.6165E+04	-1.700	0.000	
1.000	1.000	38.84	0.000	0.000	FRANA_334_8_L_0						
13 D	8.410	-3.0648E-21	48.00	42.05	48.00	42.05	V-C	1.6165E+04	-1.900	0.000	
1.000	1.000	42.05	0.000	0.000	FRANA_334_8_L_0						
14 D	9.045	-2.5092E-21	52.00	45.22	52.00	45.22	V-C	1.6165E+04	-2.100	0.000	
1.000	1.000	45.22	0.000	0.000	FRANA_334_8_L_0						
15 D	9.673	-1.9409E-21	56.00	48.37	56.00	48.37	V-C	1.6165E+04	-2.300	0.000	
1.000	1.000	48.37	0.000	0.000	FRANA_334_8_L_0						
16 D	5.921	-1.3582E-21	60.00	51.48	60.00	51.48	V-C	1.6165E+04	-2.500	0.000	
1.000	1.000	51.48	0.000	0.000	FRANA_334_8_L_0						
17 D	5.974	-1.2694E-21	60.60	51.95	60.60	51.95	V-C	1.6165E+04	-2.530	0.000	
1.000	1.000	51.95	0.000	0.000	FRANA_334_8_L_0						
18 D	11.01	-6.6810E-22	64.60	55.04	64.60	55.04	V-C	1.6165E+04	-2.730	0.000	
1.000	1.000	55.04	0.000	0.000	FRANA_334_8_L_0						
19 D	11.62	-4.8858E-23	68.60	58.12	68.60	58.12	V-C	1.6165E+04	-2.930	0.000	
1.000	1.000	58.12	0.000	0.000	FRANA_334_8_L_0						
20 D	12.24	5.8997E-22	72.60	61.18	72.60	61.18	V-C	1.6165E+04	-3.130	0.000	
1.000	1.000	61.18	0.000	0.000	FRANA_334_8_L_0						
21 D	12.84	1.2500E-21	76.60	64.22	76.60	64.22	V-C	1.6165E+04	-3.330	0.000	
1.000	1.000	64.22	0.000	0.000	FRANA_334_8_L_0						
22 D	10.11	1.9330E-21	79.80	49.73	79.80	49.73	V-C	7.2902E+04	-3.530	0.8000	
1.000	1.000	50.53	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	10.72	2.6402E-21	81.80	50.82	81.80	50.82	V-C	7.2902E+04	-3.730	2.800	
1.000	1.000	53.62	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	11.34	3.3731E-21	83.80	51.90	83.80	51.90	V-C	7.2902E+04	-3.930	4.800	
1.000	1.000	56.70	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	11.95	4.1324E-21	85.80	52.97	85.80	52.97	V-C	7.2902E+04	-4.130	6.800	
1.000	1.000	59.77	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	12.57	4.9183E-21	87.80	54.04	87.80	54.04	V-C	7.2902E+04	-4.330	8.800	
1.000	1.000	62.84	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	13.18	5.7306E-21	89.80	55.10	89.80	55.10	V-C	7.2902E+04	-4.530	10.80	
1.000	1.000	65.90	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	13.79	6.5683E-21	91.80	56.16	91.80	56.16	V-C	7.2902E+04	-4.730	12.80	
1.000	1.000	68.96	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	10.80	7.4297E-21	93.80	57.21	93.80	57.21	V-C	7.2902E+04	-4.930	14.80	
1.000	1.000	72.01	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	11.03	7.8685E-21	94.80	57.74	94.80	57.74	V-C	7.2902E+04	-5.030	15.80	
1.000	1.000	73.54	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	15.32	8.7602E-21	96.80	58.79	96.80	58.79	V-C	7.2902E+04	-5.230	17.80	
1.000	1.000	76.59	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	15.93	9.6672E-21	98.80	59.84	98.80	59.84	V-C	7.2902E+04	-5.430	19.80	
1.000	1.000	79.64	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	16.54	1.0584E-20	100.8	60.89	100.8	60.89	V-C	7.2902E+04	-5.630	21.80	
1.000	1.000	82.69	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	17.15	1.1505E-20	102.8	61.93	102.8	61.93	V-C	7.2902E+04	-5.830	23.80
1.000	1.000	85.73	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-6.030	25.80
35 D	17.76	1.2423E-20	104.8	62.98	104.8	62.98	V-C	7.2902E+04	-6.230	27.80
1.000	1.000	88.78	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-6.430	29.80
36 D	18.36	1.3328E-20	106.8	64.02	106.8	64.02	V-C	7.2902E+04	-6.630	31.80
1.000	1.000	91.82	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-6.830	33.80
37 D	18.97	1.4209E-20	108.8	65.06	108.8	65.06	V-C	7.2902E+04	-7.030	35.80
1.000	1.000	94.86	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-7.230	37.80
38 D	19.58	1.5057E-20	110.8	66.10	110.8	66.10	V-C	7.2902E+04	-7.430	39.80
1.000	1.000	97.90	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-7.630	41.80
39 D	20.19	1.5856E-20	112.8	67.14	112.8	67.14	V-C	7.2902E+04	-7.830	43.80
1.000	1.000	100.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-8.030	45.80
40 D	20.80	1.6592E-20	114.8	68.18	114.8	68.18	V-C	7.2902E+04	-8.230	47.80
1.000	1.000	104.0	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-8.430	49.80
41 D	21.40	1.7248E-20	116.8	69.22	116.8	69.22	V-C	7.2902E+04	-8.630	51.80
1.000	1.000	107.0	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-8.830	53.80
42 D	22.01	1.7810E-20	118.8	70.26	118.8	70.26	V-C	7.2902E+04	-9.030	55.80
1.000	1.000	110.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-9.230	57.80
43 D	22.62	1.8275E-20	120.8	71.30	120.8	71.30	V-C	7.2902E+04	-9.430	59.80
1.000	1.000	113.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-9.630	61.80
44 D	23.23	1.8644E-20	122.8	72.34	122.8	72.34	V-C	7.2902E+04	-9.830	63.80
1.000	1.000	116.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-10.030	65.80
45 D	23.83	1.8914E-20	124.8	73.37	124.8	73.37	V-C	7.2902E+04	-10.230	67.80
1.000	1.000	119.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-10.430	69.80
46 D	24.44	1.9083E-20	126.8	74.41	126.8	74.41	V-C	7.2902E+04	-10.630	71.80
1.000	1.000	122.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-10.830	73.80
47 D	25.05	1.9144E-20	128.8	75.45	128.8	75.45	V-C	7.2902E+04	-11.030	75.80
1.000	1.000	125.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-11.230	77.80
48 D	25.66	1.9090E-20	130.8	76.49	130.8	76.49	V-C	7.2902E+04	-11.430	79.80
1.000	1.000	128.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-11.630	81.80
49 D	26.27	1.8911E-20	132.8	77.53	132.8	77.53	V-C	7.2902E+04	-11.830	83.80
1.000	1.000	131.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-12.030	85.80
50 D	26.87	1.8596E-20	134.8	78.57	134.8	78.57	V-C	7.2902E+04	-12.230	87.80
1.000	1.000	134.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-12.430	89.80
51 D	27.48	1.8133E-20	136.8	79.61	136.8	79.61	V-C	7.2902E+04	-12.630	91.80
1.000	1.000	137.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-12.830	93.80
52 D	28.09	1.7507E-20	138.8	80.65	138.8	80.65	V-C	7.2902E+04	-13.030	95.80
1.000	1.000	140.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-13.230	97.80
53 D	28.70	1.6700E-20	140.8	81.68	140.8	81.68	V-C	7.2902E+04	-13.430	99.80
1.000	1.000	143.5	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-13.630	101.80
54 D	29.30	1.5696E-20	142.8	82.72	142.8	82.72	V-C	7.2902E+04	-13.830	103.80
1.000	1.000	146.5	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-14.030	105.80
55 D	29.91	1.4475E-20	144.8	83.76	144.8	83.76	V-C	7.2902E+04	-14.230	107.80
1.000	1.000	149.6	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-14.430	109.80
56 D	30.52	1.3017E-20	146.8	84.80	146.8	84.80	V-C	7.2902E+04	-14.630	111.80
1.000	1.000	152.6	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-14.830	113.80
57 D	31.13	1.1306E-20	148.8	85.84	148.8	85.84	V-C	7.2902E+04	-15.030	115.80
1.000	1.000	155.6	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-15.230	117.80
58 D	31.74	9.3570E-21	150.8	86.89	150.8	86.89	V-C	7.2902E+04	-15.430	119.80
1.000	1.000	158.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-15.630	121.80
59 D	32.35	7.1902E-21	152.8	87.93	152.8	87.93	V-C	7.2902E+04	-15.830	123.80
1.000	1.000	161.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-16.030	125.80
60 D	32.95	4.8255E-21	154.8	88.97	154.8	88.97	V-C	7.2902E+04	-16.230	127.80
1.000	1.000	164.8	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-16.430	129.80
61 D	33.56	2.2819E-21	156.8	90.01	156.8	90.01	V-C	7.2902E+04	-16.630	131.80
1.000	1.000	167.8	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-16.830	133.80
62 D	34.17	-4.2152E-22	158.8	91.05	158.8	91.05	V-C	7.2902E+04	-17.030	135.80
1.000	1.000	170.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-17.230	137.80
63 D	34.78	-3.2658E-21	160.8	92.09	160.8	92.09	V-C	7.2902E+04	-17.430	139.80
1.000	1.000	173.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-17.630	141.80
64 D	35.39	-6.2317E-21	162.8	93.14	162.8	93.14	V-C	7.2902E+04	-17.830	143.80
1.000	1.000	176.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-18.030	145.80
65 D	36.00	-9.2997E-21	164.8	94.18	164.8	94.18	V-C	7.2902E+04	-18.230	147.80
1.000	1.000	180.0	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-18.430	149.80
66 D	36.60	-1.2449E-20	166.8	95.22	166.8	95.22	V-C	7.2902E+04	-18.630	151.80
1.000	1.000	183.0	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-18.830	153.80
67 D	37.21	-1.5660E-20	168.8	96.27	168.8	96.27	V-C	7.2902E+04	-19.030	155.80
1.000	1.000	186.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-19.230	157.80
68 D	37.82	-1.8908E-20	170.8	97.31	170.8	97.31	V-C	7.2902E+04	-19.430	159.80
1.000	1.000	189.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-19.630	161.80
69 D	38.43	-2.2170E-20	172.8	98.36	172.8	98.36	V-C	7.2902E+04	-19.830	163.80
1.000	1.000	192.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-20.030	165.80
70 D	39.04	-2.5420E-20	174.8	99.40	174.8	99.40	V-C	7.2902E+04	-20.230	167.80
1.000	1.000	195.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-20.430	169.80
71 D	39.65	-2.8637E-20	176.8	100.4	176.8	100.4	V-C	7.2902E+04	-20.630	171.80
1.000	1.000	198.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-20.830	173.80
72 D	40.26	-3.1828E-20	178.8	101.5	178.8	101.5	V-C	7.2902E+04	-21.030	175.80
1.000	1.000	201.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-21.230	177.80
73 D	40.87	-3.5005E-20	180.8	102.5	180.8	102.5	V-C	7.2902E+04	-21.430	179.80
1.000	1.000	204.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-21.630	181.80
74 D	38.37	-3.8174E-20	182.8	103.6	182.8	103.6	V-C	7.2902E+04	-21.830	183.80
1.000	1.000	207.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-22.030	185.80
75 D	17.85	-4.0867E-20	184.5	104.5	184.5	104.5	V-C	7.2902E+04	-22.230	187.80
1.000	1.000	210.0	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.2902E+04	-22.430	189.80

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| Exe Time :25 June 2020 16:17:07
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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\_30 :  
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP    74  
C U R R E N T    T I M E    I S    1.0000

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	1.64866E-17	-1.64866E-17	2.14570E-28	3.29732E-18
2	4.74501E-17	-4.74501E-17	-3.29732E-18	1.27873E-17
3	7.64037E-17	-7.64037E-17	-1.27873E-17	2.80681E-17
4	1.03346E-16	-1.03346E-16	-2.80681E-17	4.87374E-17
5	1.28277E-16	-1.28277E-16	-4.87374E-17	7.43927E-17
6	1.51191E-16	-1.51191E-16	-7.43927E-17	1.04631E-16
7	1.72085E-16	-1.72085E-16	-1.04631E-16	1.39048E-16
8	1.90953E-16	-1.90953E-16	-1.39048E-16	1.77238E-16
9	2.07785E-16	-2.07785E-16	-1.77238E-16	2.18795E-16
10	2.22573E-16	-2.22573E-16	-2.18795E-16	2.63310E-16
11	2.35302E-16	-2.35302E-16	-2.63310E-16	3.10371E-16
12	2.45960E-16	-2.45960E-16	-3.10371E-16	3.59562E-16
13	2.54527E-16	-2.54527E-16	-3.59562E-16	4.10468E-16
14	2.60985E-16	-2.60985E-16	-4.10468E-16	4.62665E-16
15	2.65312E-16	-2.65312E-16	-4.62665E-16	5.15727E-16
16	2.66560E-16	-2.66560E-16	-5.15727E-16	5.23724E-16
17	2.67622E-16	-2.67622E-16	-5.23724E-16	5.77248E-16
18	2.67283E-16	-2.67283E-16	-5.77248E-16	6.30705E-16
19	2.64730E-16	-2.64730E-16	-6.30705E-16	6.83651E-16
20	2.59933E-16	-2.59933E-16	-6.83651E-16	7.35637E-16
21	2.52860E-16	-2.52860E-16	-7.35637E-16	7.86210E-16
22	1.98631E-16	-1.98631E-16	-7.86210E-16	8.25936E-16
23	1.30857E-16	-1.30857E-16	-8.25936E-16	8.52107E-16
24	4.93433E-17	-4.93433E-17	-8.52107E-16	8.61976E-16
25-4	4.60921E-17	-4.60921E-17	-8.61976E-16	8.52757E-16
26-1	1.55610E-16	-1.55610E-16	-8.52757E-16	8.21635E-16
27-2	2.79336E-16	-2.79336E-16	-8.21635E-16	7.65768E-16
28-4	4.17356E-16	-4.17356E-16	-7.65768E-16	6.82297E-16
29-5	3.16111E-16	-3.16111E-16	-6.82297E-16	6.29136E-16
30-6	6.51229E-16	-6.51229E-16	-6.29136E-16	4.98890E-16
31-8	2.4956E-16	-2.4956E-16	-4.98890E-16	3.33898E-16
32-1	0.01276E-15	-0.01276E-15	-3.33898E-16	1.31346E-16
33-1	2.12439E-15	-2.12439E-15	-1.31346E-16	1.11532E-16
34-1	4.42950E-15	-4.42950E-15	-1.11532E-16	1.97432E-16
35-1	1.65762E-15	-1.65762E-15	-3.97432E-16	7.28955E-16
36-1	1.89815E-15	-1.89815E-15	-7.28955E-16	1.08595E-15
37-2	2.15040E-15	-2.15040E-15	-1.08595E-15	1.53866E-15
38-2	2.41351E-15	-2.41351E-15	-1.53866E-15	2.02136E-15
39-2	2.68649E-15	-2.68649E-15	-2.02136E-15	2.55866E-15
40-2	2.96823E-15	-2.96823E-15	-2.55866E-15	3.15231E-15
41	2.95260E-16	-2.95260E-16	-3.15231E-15	3.09326E-15
42-3	3.80725E-20	-3.80725E-20	-3.09326E-15	-3.09326E-15
43-2	2.99861E-16	-2.99861E-16	-3.09326E-15	-3.15324E-15
44-6	0.02520E-16	-0.02520E-16	-3.15324E-15	-3.27374E-15
45-9	0.06195E-16	-0.06195E-16	-3.27374E-15	-3.45498E-15
46-1	2.0894E-15	-2.0894E-15	-3.45498E-15	-3.69677E-15
47-1	1.50868E-15	-1.50868E-15	-3.69677E-15	-3.99850E-15
48-1	1.80325E-15	-1.80325E-15	-3.99850E-15	-4.35915E-15
49-2	0.09037E-15	-0.09037E-15	-4.35915E-15	-4.77723E-15
50-2	2.36767E-15	-2.36767E-15	-4.77723E-15	-5.25076E-15
51-2	2.63272E-15	-2.63272E-15	-5.25076E-15	-5.77730E-15
52-2	2.88303E-15	-2.88303E-15	-5.77730E-15	-6.35391E-15
53-3	3.11607E-15	-3.11607E-15	-6.35391E-15	-6.97712E-15
54-3	3.32929E-15	-3.32929E-15	-6.97712E-15	-7.64299E-15
55-3	3.52015E-15	-3.52015E-15	-7.64299E-15	-8.34702E-15
56	3.41929E-15	-3.41929E-15	-8.34702E-15	-7.66316E-15
57	3.28065E-15	-3.28065E-15	-7.66316E-15	-7.00703E-15
58	3.17174E-15	-3.17174E-15	-7.00703E-15	-6.37268E-15
59	3.09487E-15	-3.09487E-15	-6.37268E-15	-5.75374E-15
60	3.05221E-15	-3.05221E-15	-5.75374E-15	-5.14330E-15
61	3.04583E-15	-3.04583E-15	-5.14330E-15	-4.53413E-15
62	3.07760E-15	-3.07760E-15	-4.53413E-15	-3.91861E-15
63	3.14926E-15	-3.14926E-15	-3.91861E-15	-3.28876E-15
64	3.26237E-15	-3.26237E-15	-3.28876E-15	-2.63629E-15
65	3.41829E-15	-3.41829E-15	-2.63629E-15	-1.95263E-15
66	3.61822E-15	-3.61822E-15	-1.95263E-15	-1.22899E-15
67	3.86315E-15	-3.86315E-15	-1.22899E-15	-4.56357E-16
68	4.15390E-15	-4.15390E-15	-4.56357E-16	-3.74423E-16
69	4.49113E-15	-4.49113E-15	-3.74423E-16	-1.27265E-15
70-2	2.23011E-15	-2.23011E-15	-1.27265E-15	-8.26627E-16

71-1.79859E-15 1.79859E-15-8.26627E-16 4.66908E-16  
72-1.31954E-15 1.31954E-15-4.66908E-16 2.03001E-16  
73-7.92798E-16 7.92798E-16-2.03001E-16 4.44416E-17  
74-2.61406E-16 2.61406E-16-4.44416E-17-1.81754E-27

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:17:07 |  
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New Project
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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\_341 :  
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
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\*\*\*\*\* NO ONE ELEMENT ACTIVE AT CURRENT STEP \*\*\*\*\*

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
|  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:17:07 |  
+-----+  
New Project
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## New Project

STRESS RESULTS FOR GROUP NO. 5

Tieback\_342 :  
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=0.7963E+05 RIMNOR=0.1410E-26
        RENORM= 1151.      REMNOR=0.1817E-52 RATIO =0.1202      TOLER =0.1000E-03 NOT CONVERGED
        RFMAX = 40.83     RMMAX =0.8347E-14
        RTSMAL=0.1000E-03 RMSMAL=0.1000E-19
        RDT = 0.7963E+05 RDR =0.1000E-19
        RATIOT=0.1202      RATIOR= 0.000
        MAX UN= 12.84      IEQ= 41 NODE      21 DOF      1 Y-DISPL.F
        MIN UN=-.1649E-16 IEQ= 1 NODE      1 DOF      1 Y-DISPL.F
        NO. OF CONTACT CONSTRAINT VIOLATIONS 0

```

```

ITER    2 RNORM = 0.000      RMNORM= 0.000
        RINORM=0.7963E+05 RIMNOR=0.1410E-26
        RENORM= 19.58      REMNOR=0.3139E-17 RATIO =0.1568E-01 TOLER =0.1000E-03 NOT CONVERGED
        RFMAX = 40.83      RMMAX =0.8347E-14
        RTSMAL=0.1000E-03 RMSMAL=0.1000E-19
        RDT  =0.7963E+05 RDR   =0.1000E-19
        RATIOT=0.1568E-01 RATIOR= 0.000
        MAX UN= 3.105      IEQ=      3 NODE      2 DOF      1 Y-DISPL.F
        MIN UN=-.4698E-04 IEQ=     147 NODE      74 DOF      1 Y-DISPL.F
        NO. OF CONTACT CONSTRAINT VIOLATIONS      0

```

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ITER    3 RNORM = 0.000      RMNORM= 0.000
RINORM=0.7963E+05 RIMNOR=0.1410E-26
RENORM=0.6058      REMNOR=0.9898E-19 RATIO =0.2758E-02 TOLER =0.1000E-03 NOT CONVERGED
RFMAX = 40.83      RMMAX =0.8347E-14
RTSMAL=0.1000E-03 RMSMAL=0.1000E-19
RDT  =0.7963E+05 RDR  =0.1000E-19
RATIOT=0.2758E-02 RATIOR= 0.000
MAX UN=0.6244      IEQ= 45 NODE     23 DOF   1 Y-DISPL.F
MIN UN=-.6929E-02 IEQ= 145 NODE    73 DOF   1 Y-DISPL.F
NO. OF CONTACT CONSTRAINT VIOLATIONS 0

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ITER    4 RNORM = 0.000      RMNORM= 0.000
        RINORM=0.7963E+05 RIMNOR=0.1410E-26
        RENORM=0.1323E-05 REMNOR=0.1216E-17 RATIO =0.4076E-05 TOLER =0.1000E-03      CONVERGED !
        RFMAX = 40.83      RMMAX = 0.8347E-14
        RTSMAL=0.1000E-03 RMSMAL=0.1000E-19
        RDT = 0.7963E+05 RDR = 0.1000E-19
        RATIOT=0.4076E-05 RATIOR= 0.000
        MAX UN=0.4790E-03 IEQ= 147 NODE      74 DOF      1 Y-DISPL.F
        MIN UN=-.1032E-02 IEQ= 81 NODE      41 DOF      1 Y-DISPL.F
        NO. OF CONTACT CONSTRAINT VIOLATIONS 0

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:17:07
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New Project
SOLUTION REACHED USING 4 ITERATIONS ON 40

P R I N T   O U T   F O R   T I M E   S T E P   2   ( A T T I M E   2 . 0 0 0   )

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

      Y-DISPL. F      X-ROT. F
      (02)          (04)      (
1  3.2056250E-03 -5.4821872E-04
2  3.0959813E-03 -5.4821872E-04
3  2.9863375E-03 -5.4821872E-04
4  2.8766938E-03 -5.4821872E-04
5  2.7670503E-03 -5.4821531E-04
6  2.6574089E-03 -5.4819399E-04
7  2.5477759E-03 -5.4812482E-04
8  2.4381652E-03 -5.4796237E-04
9  2.3286012E-03 -5.4764558E-04
10 2.2191223E-03 -5.4709766E-04
11 2.1097837E-03 -5.4622606E-04
12 2.0006609E-03 -5.4491991E-04
13 1.8918537E-03 -5.4304531E-04
14 1.7834913E-03 -5.4044311E-04
15 1.6757372E-03 -5.3692922E-04
16 1.5687943E-03 -5.3229479E-04
17 1.5528374E-03 -5.3149185E-04
18 1.4471351E-03 -5.2527817E-04
19 1.3428363E-03 -5.1741211E-04
20 1.2402995E-03 -5.0760818E-04
21 1.1399428E-03 -4.9555694E-04
22 1.0422487E-03 -4.8092518E-04
23 9.4774065E-04 -4.6377522E-04
24 8.5687570E-04 -4.4456961E-04
25 7.7002026E-04 -4.2375223E-04
26 6.8745491E-04 -4.0173332E-04
27 6.0938256E-04 -3.7887994E-04
28 5.3593682E-04 -3.5551825E-04
29 4.6719031E-04 -3.3193597E-04
30 4.3458666E-04 -3.2013422E-04
31 3.7290951E-04 -2.9667929E-04
32 3.1589194E-04 -2.7356937E-04
33 2.6344733E-04 -2.5097585E-04
34 2.1545784E-04 -2.2904233E-04
35 1.7177879E-04 -2.0788657E-04
36 1.3224504E-04 -1.8760331E-04
37 9.6674403E-05 -1.6826604E-04
38 6.4871936E-05 -1.4992914E-04
39 3.6633719E-05 -1.3262973E-04
40 1.1749605E-05 -1.1638906E-04
41 -9.9929998E-06 -1.0121484E-04
42 -2.8807172E-05 -8.7103261E-05
43 -4.4904275E-05 -7.4041241E-05
44 -5.8492226E-05 -6.2007579E-05
45 -6.9773982E-05 -5.0974059E-05
46 -7.8946253E-05 -4.0906588E-05
47 -8.6198395E-05 -3.1766303E-05
48 -9.1711692E-05 -2.3510350E-05
49 -9.5658444E-05 -1.6093032E-05
50 -9.8201618E-05 -9.4664144E-06
51 -9.9494429E-05 -3.5810818E-06
52 -9.9680120E-05 1.6132058E-06
53 -9.8891841E-05 6.1670489E-06
54 -9.7252643E-05 1.0130755E-05
55 -9.4875515E-05 1.3554076E-05
56 -9.1863758E-05 1.6485531E-05
57 -8.8310935E-05 1.8972499E-05
58 -8.4301347E-05 2.1060644E-05
59 -7.9910346E-05 2.2793757E-05
60 -7.5204974E-05 2.4213489E-05
61 -7.0243435E-05 2.5359455E-05
62 -6.5076975E-05 2.6268671E-05
63 -5.9749443E-05 2.6975745E-05
64 -5.4298018E-05 2.7512707E-05
65 -4.8753742E-05 2.7908944E-05
66 -4.3142043E-05 2.8191149E-05
67 -3.7483287E-05 2.8383279E-05
68 -3.1793323E-05 2.8506532E-05
69 -2.6084038E-05 2.8579324E-05
70 -2.0363916E-05 2.8617280E-05
71 -1.4638594E-05 2.8633226E-05
72 -8.9114246E-06 2.8637186E-05
73 -3.1840389E-06 2.8636352E-05
74 2.5430833E-06 2.8635022E-05

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75 7.4112812E-06 2.8634650E-05

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:17:07
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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 75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.000	-3.2056E-03	0.000	0.000	0.000	0.000	ACTIVE	0.000	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
2 D	0.000	-3.0960E-03	4.002	0.000	4.002	3.775	ACTIVE	0.000	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
3 D	0.000	-2.9863E-03	8.013	0.000	8.013	7.530	ACTIVE	0.000	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
4 D	0.2196	-2.8767E-03	12.04	1.098	12.04	11.25	ACTIVE	0.000	-0.1000	0.000	
1.000	1.000	1.098	0.000	0.000	FRANA_334_8_L_0						
5 D	0.7142	-2.7671E-03	16.10	3.571	16.10	14.91	ACTIVE	0.000	-0.3000	0.000	
1.000	1.000	3.571	0.000	0.000	FRANA_334_8_L_0						
6 D	1.212	-2.6574E-03	20.18	6.060	20.18	18.52	ACTIVE	0.000	-0.5000	0.000	
1.000	1.000	6.060	0.000	0.000	FRANA_334_8_L_0						
7 D	1.713	-2.5478E-03	24.29	8.567	24.29	22.06	ACTIVE	0.000	-0.7000	0.000	
1.000	1.000	8.567	0.000	0.000	FRANA_334_8_L_0						
8 D	2.218	-2.4382E-03	28.42	11.09	28.42	25.53	ACTIVE	0.000	-0.9000	0.000	
1.000	1.000	11.09	0.000	0.000	FRANA_334_8_L_0						
9 D	2.725	-2.3286E-03	32.58	13.62	32.58	28.94	ACTIVE	0.000	-1.100	0.000	
1.000	1.000	13.62	0.000	0.000	FRANA_334_8_L_0						
10 D	3.234	-2.2191E-03	36.75	16.17	36.75	32.30	ACTIVE	0.000	-1.300	0.000	
1.000	1.000	16.17	0.000	0.000	FRANA_334_8_L_0						
11 D	3.902	-2.1098E-03	40.94	19.51	40.94	35.59	UL-RL	7622.	-1.500	0.000	
1.000	1.000	19.51	0.000	0.000	FRANA_334_8_L_0						
12 D	4.719	-2.0007E-03	45.14	23.59	45.14	38.84	UL-RL	7622.	-1.700	0.000	
1.000	1.000	23.59	0.000	0.000	FRANA_334_8_L_0						
13 D	5.526	-1.8919E-03	49.34	27.63	49.34	42.05	UL-RL	7622.	-1.900	0.000	
1.000	1.000	27.63	0.000	0.000	FRANA_334_8_L_0						
14 D	6.326	-1.7835E-03	53.54	31.63	53.54	45.22	UL-RL	7622.	-2.100	0.000	
1.000	1.000	31.63	0.000	0.000	FRANA_334_8_L_0						
15 D	7.119	-1.6757E-03	57.74	35.59	57.74	48.37	UL-RL	7622.	-2.300	0.000	
1.000	1.000	35.59	0.000	0.000	FRANA_334_8_L_0						
16 D	4.545	-1.5688E-03	61.94	39.53	61.94	51.48	UL-RL	7622.	-2.500	0.000	
1.000	1.000	39.53	0.000	0.000	FRANA_334_8_L_0						
17 D	4.613	-1.5528E-03	62.57	40.11	62.57	51.95	UL-RL	7622.	-2.530	0.000	
1.000	1.000	40.11	0.000	0.000	FRANA_334_8_L_0						
18 D	8.802	-1.4471E-03	66.77	44.01	66.77	55.04	UL-RL	7622.	-2.730	0.000	
1.000	1.000	44.01	0.000	0.000	FRANA_334_8_L_0						
19 D	9.576	-1.3428E-03	71.28	47.88	71.28	58.12	UL-RL	7622.	-2.930	0.000	
1.000	1.000	47.88	0.000	0.000	FRANA_334_8_L_0						
20 D	10.34	-1.2403E-03	75.80	51.72	75.80	61.18	UL-RL	7622.	-3.130	0.000	
1.000	1.000	51.72	0.000	0.000	FRANA_334_8_L_0						
21 D	11.11	-1.1399E-03	79.71	55.53	79.71	64.22	UL-RL	7622.	-3.330	0.000	
1.000	1.000	55.53	0.000	0.000	FRANA_334_8_L_0						
22 D	0.2967	-1.0422E-03	83.37	0.6865	83.37	49.73	ACTIVE	0.000	-3.530	0.7970	
1.000	1.000	1.483	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	0.8777	-9.4774E-04	85.79	1.599	85.79	50.83	ACTIVE	0.000	-3.730	2.789	
1.000	1.000	4.388	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	1.762	-8.5688E-04	87.70	4.026	87.70	51.91	UL-RL	5.5880E+04	-3.930	4.782	
1.000	1.000	8.808	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	3.346	-7.7002E-04	90.09	9.956	90.09	52.99	UL-RL	5.5880E+04	-4.130	6.774	
1.000	1.000	16.73	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	4.882	-6.8745E-04	92.45	15.64	92.45	54.06	UL-RL	5.5880E+04	-4.330	8.767	
1.000	1.000	24.41	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	6.366	-6.0938E-04	94.78	21.07	94.78	55.12	UL-RL	5.5880E+04	-4.530	10.76	
1.000	1.000	31.83	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	7.798	-5.3594E-04	96.68	26.24	96.68	56.19	UL-RL	5.5880E+04	-4.730	12.75	
1.000	1.000	38.99	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	6.882	-4.6719E-04	98.99	31.14	98.99	57.24	UL-RL	5.5880E+04	-4.930	14.74	
1.000	1.000	45.88	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	7.384	-4.3459E-04	99.94	33.49	99.94	57.77	UL-RL	5.5880E+04	-5.030	15.74	
1.000	1.000	49.23	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	11.14	-3.7291E-04	102.2	37.99	102.2	58.83	UL-RL	5.5880E+04	-5.230	17.73	
1.000	1.000	55.72	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	12.39	-3.1589E-04	104.5	42.23	104.5	59.88	UL-RL	5.5880E+04	-5.430	19.72	
1.000	1.000	61.95	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	13.59	-2.6345E-04	106.8	46.21	106.8	60.93	UL-RL	5.5880E+04	-5.630	21.72	
1.000	1.000	67.93	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	14.73	-2.1546E-04	108.7	49.94	108.7	61.98	UL-RL	5.5880E+04	-5.830	23.71
1.000	1.000	73.65	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	15.83	-1.7178E-04	110.9	53.43	110.9	63.03	UL-RL	5.5880E+04	-6.030	25.70
1.000	1.000	79.13	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	16.88	-1.3225E-04	113.1	56.69	113.1	64.08	UL-RL	5.5880E+04	-6.230	27.69
1.000	1.000	84.38	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	17.88	-9.6674E-05	115.3	59.72	115.3	65.12	UL-RL	5.5880E+04	-6.430	29.69
1.000	1.000	89.41	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	18.84	-6.4872E-05	117.2	62.54	117.2	66.17	UL-RL	5.5880E+04	-6.630	31.68
1.000	1.000	94.22	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	19.77	-3.6634E-05	119.4	65.16	119.4	67.21	UL-RL	5.5880E+04	-6.830	33.67
1.000	1.000	98.84	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	20.65	-1.1750E-05	121.6	67.60	121.6	68.25	UL-RL	5.5880E+04	-7.030	35.66
1.000	1.000	103.3	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	21.46	9.9930E-06	123.5	69.64	123.5	69.66	UL-RL	5.5880E+04	-7.230	37.66
1.000	1.000	107.3	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	22.20	2.8807E-05	125.7	71.35	125.7	71.35	UL-RL	5.5880E+04	-7.430	39.65
1.000	1.000	111.0	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	22.92	4.4904E-05	127.9	72.95	127.9	72.95	V-C	3.4925E+04	-7.630	41.64
1.000	1.000	114.6	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	23.62	5.8492E-05	130.1	74.47	130.1	74.47	V-C	3.4925E+04	-7.830	43.63
1.000	1.000	118.1	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	24.31	6.9774E-05	132.0	75.91	132.0	75.91	V-C	3.4925E+04	-8.030	45.63
1.000	1.000	121.5	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	24.98	7.8946E-05	134.1	77.27	134.1	77.27	V-C	3.4925E+04	-8.230	47.62
1.000	1.000	124.9	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	25.64	8.6198E-05	136.3	78.57	136.3	78.57	V-C	3.4925E+04	-8.430	49.61
1.000	1.000	128.2	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	26.28	9.1712E-05	138.4	79.80	138.4	79.80	V-C	3.4925E+04	-8.630	51.60
1.000	1.000	131.4	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	26.92	9.5658E-05	140.3	80.98	140.3	80.98	V-C	3.4925E+04	-8.830	53.60
1.000	1.000	134.6	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	27.54	9.8202E-05	142.5	82.11	142.5	82.11	V-C	3.4925E+04	-9.030	55.59
1.000	1.000	137.7	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	28.16	9.9494E-05	144.6	83.20	144.6	83.20	V-C	3.4925E+04	-9.230	57.58
1.000	1.000	140.8	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	28.76	9.9680E-05	146.5	84.25	146.5	84.25	V-C	3.4925E+04	-9.430	59.57
1.000	1.000	143.8	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	29.37	9.8892E-05	148.7	85.27	148.7	85.27	V-C	3.4925E+04	-9.630	61.56
1.000	1.000	146.8	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	29.96	9.7253E-05	150.8	86.25	150.8	86.25	V-C	3.4925E+04	-9.830	63.56
1.000	1.000	149.8	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	30.55	9.4876E-05	152.9	87.21	152.9	87.21	V-C	3.4925E+04	-10.03	65.55
1.000	1.000	152.8	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	31.14	9.1864E-05	154.8	88.15	154.8	88.15	V-C	3.4925E+04	-10.23	67.54
1.000	1.000	155.7	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	31.72	8.8311E-05	156.9	89.07	156.9	89.07	V-C	3.4925E+04	-10.43	69.53
1.000	1.000	158.6	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	32.30	8.4301E-05	159.1	89.98	159.1	89.98	V-C	3.4925E+04	-10.63	71.53
1.000	1.000	161.5	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	32.88	7.9910E-05	161.2	90.87	161.2	90.87	V-C	3.4925E+04	-10.83	73.52
1.000	1.000	164.4	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	33.45	7.5205E-05	163.1	91.75	163.1	91.75	V-C	3.4925E+04	-11.03	75.51
1.000	1.000	167.3	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	34.03	7.0243E-05	165.2	92.62	165.2	92.62	V-C	3.4925E+04	-11.23	77.50
1.000	1.000	170.1	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	34.60	6.5077E-05	167.3	93.49	167.3	93.49	V-C	3.4925E+04	-11.43	79.50
1.000	1.000	173.0	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	35.17	5.9749E-05	169.2	94.35	169.2	94.35	V-C	3.4925E+04	-11.63	81.49
1.000	1.000	175.8	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	35.74	5.4298E-05	171.3	95.21	171.3	95.21	V-C	3.4925E+04	-11.83	83.48
1.000	1.000	178.7	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	36.31	4.8754E-05	173.4	96.06	173.4	96.06	V-C	3.4925E+04	-12.03	85.47
1.000	1.000	181.5	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	36.88	4.3142E-05	175.5	96.91	175.5	96.91	V-C	3.4925E+04	-12.23	87.47
1.000	1.000	184.4	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	37.44	3.7483E-05	177.4	97.76	177.4	97.76	V-C	3.4925E+04	-12.43	89.46
1.000	1.000	187.2	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	38.01	3.1793E-05	179.5	98.61	179.5	98.61	V-C	3.4925E+04	-12.63	91.45
1.000	1.000	190.1	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	38.58	2.6084E-05	181.6	99.46	181.6	99.46	V-C	3.4925E+04	-12.83	93.44
1.000	1.000	192.9	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	39.15	2.0364E-05	183.7	100.3	183.7	100.3	V-C	3.4925E+04	-13.03	95.44
1.000	1.000	195.7	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	39.72	1.4639E-05	185.6	101.2	185.6	101.2	V-C	3.4925E+04	-13.23	97.43
1.000	1.000	198.6	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	40.28	8.9114E-06	187.7	102.0	187.7	102.0	UL-RL	5.5880E+04	-13.43	99.42
1.000	1.000	201.4	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	40.85	3.1840E-06	189.8	102.8	189.8	102.9	UL-RL	5.5880E+04	-13.63	101.4
1.000	1.000	204.2	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	38.31	-2.5431E-06	191.7	103.7	191.7	103.8	UL-RL	5.5880E+04	-13.83	103.4
1.000	1.000	207.1	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	17.80	-7.4113E-06	193.5	104.3	193.5	104.7	UL-RL	5.5880E+04	-14.00	105.1
1.000	1.000	209.4	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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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

O\_R  
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
15	0.000	--	--	--	--	--	REMOVED	--	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
16	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
17	0.000	--	--	--	--	--	REMOVED	--	-2.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
18	0.000	--	--	--	--	--	REMOVED	--	-2.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
19	0.000	--	--	--	--	--	REMOVED	--	-2.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
20	0.000	--	--	--	--	--	REMOVED	--	-3.130	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
21	0.000	--	--	--	--	--	REMOVED	--	-3.330	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
22	D 15.41	1.0422E-03	0.000	77.07	79.80	77.07	V-C	2.6230E+04	-3.530	0.000	
1.000	1.000	77.07	0.000	0.000	BNA2_(2)_335_337_L_0						
23	D 15.54	9.4774E-04	1.992	75.68	81.80	75.68	V-C	2.6230E+04	-3.730	2.008	
1.000	1.000	77.69	0.000	0.000	BNA2_(2)_335_337_L_0						
24	D 15.68	8.5688E-04	3.985	74.37	83.80	74.37	V-C	2.6230E+04	-3.930	4.015	
1.000	1.000	78.39	0.000	0.000	BNA2_(2)_335_337_L_0						
25	D 15.84	7.7002E-04	5.977	73.17	85.80	73.17	V-C	2.6230E+04	-4.130	6.023	
1.000	1.000	79.19	0.000	0.000	BNA2_(2)_335_337_L_0						
26	D 16.02	6.8745E-04	7.970	72.07	87.80	72.07	V-C	2.6230E+04	-4.330	8.030	
1.000	1.000	80.10	0.000	0.000	BNA2_(2)_335_337_L_0						
27	D 16.22	6.0938E-04	9.962	71.08	89.80	71.08	V-C	2.6230E+04	-4.530	10.04	
1.000	1.000	81.12	0.000	0.000	BNA2_(2)_335_337_L_0						
28	D 16.45	5.3594E-04	11.95	70.22	91.80	70.22	V-C	2.6230E+04	-4.730	12.05	
1.000	1.000	82.26	0.000	0.000	BNA2_(2)_335_337_L_0						
29	D 12.53	4.6719E-04	13.95	69.47	93.80	69.47	V-C	2.6230E+04	-4.930	14.05	
1.000	1.000	83.52	0.000	0.000	BNA2_(2)_335_337_L_0						
30	D 12.63	4.3459E-04	14.94	69.14	94.80	69.14	V-C	2.6230E+04	-5.030	15.06	
1.000	1.000	84.20	0.000	0.000	BNA2_(2)_335_337_L_0						
31	D 17.13	3.7291E-04	16.94	68.57	96.80	68.57	V-C	2.6230E+04	-5.230	17.06	
1.000	1.000	85.64	0.000	0.000	BNA2_(2)_335_337_L_0						
32	D 17.44	3.1589E-04	18.93	68.13	98.80	68.13	V-C	2.6230E+04	-5.430	19.07	
1.000	1.000	87.20	0.000	0.000	BNA2_(2)_335_337_L_0						
33	D 17.78	2.6345E-04	20.92	67.80	100.8	67.80	V-C	2.6230E+04	-5.630	21.08	
1.000	1.000	88.88	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	18.13	2.1546E-04	22.91	67.58	102.8	67.58	V-C	2.6230E+04	-5.830	23.09
1.000	1.000	90.67	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	18.52	1.7178E-04	24.90	67.48	104.8	67.48	V-C	2.6230E+04	-6.030	25.10
1.000	1.000	92.58	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	18.92	1.3225E-04	26.90	67.49	106.8	67.49	V-C	2.6230E+04	-6.230	27.10
1.000	1.000	94.59	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	19.34	9.6674E-05	28.89	67.59	108.8	67.61	UL-RL	4.1968E+04	-6.430	29.11
1.000	1.000	96.70	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	19.77	6.4872E-05	30.88	67.73	110.8	67.92	UL-RL	4.1968E+04	-6.630	31.12
1.000	1.000	98.85	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	20.22	3.6634E-05	32.87	67.98	112.8	68.31	UL-RL	4.1968E+04	-6.830	33.13
1.000	1.000	101.1	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	20.69	1.1750E-05	34.87	68.32	114.8	68.77	UL-RL	4.1968E+04	-7.030	35.13
1.000	1.000	103.5	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	21.18	-9.9930E-06	36.86	68.75	116.8	69.31	UL-RL	4.1968E+04	-7.230	37.14
1.000	1.000	105.9	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	21.64	-2.8807E-05	38.85	69.05	118.8	70.26	UL-RL	4.1968E+04	-7.430	39.15
1.000	1.000	108.2	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	22.11	-4.4904E-05	40.84	69.41	120.8	71.30	UL-RL	4.1968E+04	-7.630	41.16
1.000	1.000	110.6	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	22.61	-5.8492E-05	42.84	69.88	122.8	72.34	UL-RL	4.1968E+04	-7.830	43.16
1.000	1.000	113.0	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	23.12	-6.9774E-05	44.83	70.45	124.8	73.37	UL-RL	4.1968E+04	-8.030	45.17
1.000	1.000	115.6	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	23.66	-7.8946E-05	46.82	71.10	126.8	74.41	UL-RL	4.1968E+04	-8.230	47.18
1.000	1.000	118.3	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	24.20	-8.6198E-05	48.81	71.83	128.8	75.45	UL-RL	4.1968E+04	-8.430	49.19
1.000	1.000	121.0	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	24.77	-9.1712E-05	50.81	72.64	130.8	76.49	UL-RL	4.1968E+04	-8.630	51.19
1.000	1.000	123.8	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	25.34	-9.5658E-05	52.80	73.51	132.8	77.53	UL-RL	4.1968E+04	-8.830	53.20
1.000	1.000	126.7	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	25.93	-9.8202E-05	54.79	74.45	134.8	78.57	UL-RL	4.1968E+04	-9.030	55.21
1.000	1.000	129.7	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	26.53	-9.9494E-05	56.78	75.43	136.8	79.61	UL-RL	4.1968E+04	-9.230	57.22
1.000	1.000	132.6	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	27.14	-9.9680E-05	58.78	76.46	138.8	80.65	UL-RL	4.1968E+04	-9.430	59.22
1.000	1.000	135.7	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	27.75	-9.8892E-05	60.77	77.53	140.8	81.68	UL-RL	4.1968E+04	-9.630	61.23
1.000	1.000	138.8	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	28.38	-9.7253E-05	62.76	78.64	142.8	82.72	UL-RL	4.1968E+04	-9.830	63.24
1.000	1.000	141.9	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	29.01	-9.4876E-05	64.75	79.78	144.8	83.76	UL-RL	4.1968E+04	-10.03	65.25
1.000	1.000	145.0	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	29.64	-9.1864E-05	66.75	80.95	146.8	84.80	UL-RL	4.1968E+04	-10.23	67.25
1.000	1.000	148.2	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	30.28	-8.8311E-05	68.74	82.14	148.8	85.84	UL-RL	4.1968E+04	-10.43	69.26
1.000	1.000	151.4	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	30.92	-8.4301E-05	70.73	83.35	150.8	86.89	UL-RL	4.1968E+04	-10.63	71.27
1.000	1.000	154.6	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	31.57	-7.9910E-05	72.72	84.57	152.8	87.93	UL-RL	4.1968E+04	-10.83	73.28
1.000	1.000	157.9	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	32.22	-7.5205E-05	74.71	85.81	154.8	88.97	UL-RL	4.1968E+04	-11.03	75.29
1.000	1.000	161.1	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	32.87	-7.0243E-05	76.71	87.06	156.8	90.01	UL-RL	4.1968E+04	-11.23	77.29
1.000	1.000	164.4	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	33.52	-6.5077E-05	78.70	88.32	158.8	91.05	UL-RL	4.1968E+04	-11.43	79.30
1.000	1.000	167.6	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	34.18	-5.9749E-05	80.69	89.59	160.8	92.09	UL-RL	4.1968E+04	-11.63	81.31
1.000	1.000	170.9	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	34.83	-5.4298E-05	82.68	90.86	162.8	93.14	UL-RL	4.1968E+04	-11.83	83.32
1.000	1.000	174.2	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	35.49	-4.8754E-05	84.68	92.13	164.8	94.18	UL-RL	4.1968E+04	-12.03	85.32
1.000	1.000	177.5	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	36.15	-4.3142E-05	86.67	93.41	166.8	95.22	UL-RL	4.1968E+04	-12.23	87.33
1.000	1.000	180.7	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	36.81	-3.7483E-05	88.66	94.69	168.8	96.27	UL-RL	4.1968E+04	-12.43	89.34
1.000	1.000	184.0	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	37.46	-3.1793E-05	90.65	95.98	170.8	97.31	UL-RL	4.1968E+04	-12.63	91.35
1.000	1.000	187.3	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	38.12	-2.6084E-05	92.65	97.26	172.8	98.36	UL-RL	4.1968E+04	-12.83	93.35
1.000	1.000	190.6	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	38.78	-2.0364E-05	94.64	98.55	174.8	99.40	UL-RL	4.1968E+04	-13.03	95.36
1.000	1.000	193.9	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	39.44	-1.4639E-05	96.63	99.83	176.8	100.4	UL-RL	4.1968E+04	-13.23	97.37
1.000	1.000	197.2	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	40.10	-8.9114E-06	98.62	101.1	178.8	101.5	UL-RL	4.1968E+04	-13.43	99.38
1.000	1.000	200.5	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	40.76	-3.1840E-06	100.6	102.4	180.8	102.5	UL-RL	4.1968E+04	-13.63	101.4
1.000	1.000	203.8	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	38.30	2.5431E-06	102.6	103.7	182.8	103.7	UL-RL	4.1968E+04	-13.83	103.4
1.000	1.000	207.0	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	17.83	7.4113E-06	104.3	104.7	184.5	104.7	UL-RL	4.1968E+04	-14.00	105.1
1.000	1.000	209.8	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:17:07
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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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 74  
C U R R E N T   T I M E   I S      2.0000

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	-5.21368E-10	5.21368E-10	-5.21254E-11	-1.50635E-10
2	4.59295E-11	-4.59295E-11	1.04706E-10	-1.30740E-10
3	5.76392E-10	-5.76392E-10	1.94433E-10	-1.24089E-10
4	0.21959	-0.21959	1.34335E-10	4.39189E-02
5	0.93377	-0.93377	-4.39189E-02	0.23067
6	2.1459	-2.1459	-0.23067	0.65984
7	3.8592	-3.8592	-0.65984	1.4317
8	6.0770	-6.0770	-1.4317	2.6471
9	8.8019	-8.8019	-2.6471	4.4075
10	12.036	-12.036	-4.4075	6.8147
11	15.938	-15.938	-6.8147	10.002
12	20.657	-20.657	-10.002	14.134
13	26.183	-26.183	-14.134	19.370
14	32.509	-32.509	-19.370	25.872
15	39.627	-39.627	-25.872	33.797
16	44.173	-44.173	-33.797	35.123
17	48.786	-48.786	-35.123	44.880
18	57.588	-57.588	-44.880	56.397
19	67.164	-67.164	-56.397	69.830
20	77.508	-77.508	-69.830	85.332
21	88.615	-88.615	-85.332	103.05
22	73.497	-73.497	-103.05	117.75
23	58.838	-58.838	-117.75	129.52
24	44.921	-44.921	-129.52	138.51
25	32.429	-32.429	-138.51	144.99
26	21.291	-21.291	-144.99	149.25
27	11.432	-11.432	-149.25	151.54
28	2.7772	-2.7772	-151.54	152.09
29	-2.8688	2.8688	-152.09	151.80
30	-8.1141	8.1141	-151.80	150.18
31	-14.097	14.097	-150.18	147.36
32	-19.146	19.146	-147.36	143.53
33	-23.336	23.336	-143.53	138.87
34	-26.740	26.740	-138.87	133.52
35	-29.429	29.429	-133.52	127.63
36	-31.471	31.471	-127.63	121.34
37	-32.929	32.929	-121.34	114.75
38	-33.855	33.855	-114.75	107.98
39	-34.308	34.308	-107.98	101.12
40	-34.346	34.346	-101.12	94.251
41	-34.063	34.063	-94.251	87.438
42	-33.503	33.503	-87.438	80.738
43	-32.698	32.698	-80.738	74.198
44	-31.687	31.687	-74.198	67.861
45	-30.504	30.504	-67.861	61.760
46	-29.182	29.182	-61.760	55.924
47	-27.751	27.751	-55.924	50.373
48	-26.237	26.237	-50.373	45.126
49	-24.665	24.665	-45.126	40.193
50	-23.056	23.056	-40.193	35.582
51	-21.429	21.429	-35.582	31.296
52	-19.802	19.802	-31.296	27.336
53	-18.189	18.189	-27.336	23.698
54	-16.603	16.603	-23.698	20.377
55	-15.056	15.056	-20.377	17.366
56	-13.558	13.558	-17.366	14.654
57	-12.117	12.117	-14.654	12.231
58	-10.739	10.739	-12.231	10.083
59	-9.4311	9.4311	-10.083	8.1971
60	-8.1979	8.1979	-8.1971	6.5575
61	-7.0431	7.0431	-6.5575	5.1489
62	-5.9700	5.9700	-5.1489	3.9549
63	-4.9811	4.9811	-3.9549	2.9586
64	-4.0782	4.0782	-2.9586	2.1430
65	-3.2628	3.2628	-2.1430	1.4904
66	-2.5359	2.5359	-1.4904	0.98327
67	-1.8982	1.8982	-0.98327	0.60363
68	-1.3503	1.3503	-0.60363	0.33358
69	-0.89232	0.89232	-0.33358	0.15511
70	-0.52457	0.52457	-0.15511	5.01989E-02

71-0.24708 0.24708 -5.01989E-02 7.82390E-04  
72-6.14647E-02 6.14647E-02-7.82390E-04-1.15105E-02  
73 2.94234E-02-2.94234E-02 1.15105E-02-5.62586E-03  
74 3.30913E-02-3.30913E-02 5.62586E-03 6.48370E-14

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:17:07 |  
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New Project
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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\_341 :  
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
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\*\*\*\*\* NO ONE ELEMENT ACTIVE AT CURRENT STEP \*\*\*\*\*



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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:17:07
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New Project  
SOLUTION REACHED USING 3 ITERATIONS ON 40

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

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

	Y-DISPL.F	X-ROT. F
	(02)	(04)
1	2.0567173E-03	-3.8648521E-04
2	1.9794209E-03	-3.8647670E-04
3	1.9021292E-03	-3.8643027E-04
4	1.8248543E-03	-3.8630017E-04
5	1.7476182E-03	-3.8603325E-04
6	1.6704544E-03	-3.8556597E-04
7	1.5934104E-03	-3.8482088E-04
8	1.5165506E-03	-3.8370657E-04
9	1.4399594E-03	-3.8211755E-04
10	1.3637433E-03	-3.7993418E-04
11	1.2880343E-03	-3.7702258E-04
12	1.2129928E-03	-3.7323219E-04
13	1.1388114E-03	-3.6839099E-04
14	1.0657195E-03	-3.6230335E-04
15	9.9398779E-04	-3.5475033E-04
16	9.2393319E-04	-3.4548995E-04
17	9.1359162E-04	-3.4394092E-04
18	8.4584177E-04	-3.3360413E-04
19	7.8014142E-04	-3.2339550E-04
20	7.1649589E-04	-3.1300199E-04
21	6.5497530E-04	-3.0208843E-04
22	5.9571899E-04	-2.9029773E-04
23	5.3892034E-04	-2.7754496E-04
24	4.8475165E-04	-2.6403266E-04
25	4.3334415E-04	-2.4996732E-04
26	3.8478860E-04	-2.3554370E-04
27	3.3913904E-04	-2.2093452E-04
28	2.9641703E-04	-2.0629179E-04
29	2.5661591E-04	-1.9174819E-04
30	2.3780149E-04	-1.8454646E-04
31	2.0231608E-04	-1.7035983E-04
32	1.6963393E-04	-1.5652758E-04
33	1.3967642E-04	-1.4312476E-04
34	1.1235143E-04	-1.3021287E-04
35	8.7555429E-05	-1.1784075E-04
36	6.5176629E-05	-1.0604619E-04
37	4.5096616E-05	-9.4856672E-05
38	2.7192404E-05	-8.4290505E-05
39	1.1338272E-05	-7.4357639E-05
40	-2.5929365E-06	-6.5060256E-05
41	-1.4727916E-05	-5.6394154E-05
42	-2.5192074E-05	-4.8350199E-05
43	-3.4108598E-05	-4.0915272E-05
44	-4.1597664E-05	-3.4072558E-05
45	-4.7775782E-05	-2.7802256E-05
46	-5.2755243E-05	-2.2082099E-05
47	-5.6643664E-05	-1.6887853E-05
48	-5.9543700E-05	-1.2193649E-05
49	-6.1552662E-05	-7.9725337E-06
50	-6.2762400E-05	-4.1967186E-06
51	-6.3259152E-05	-8.3792852E-07
52	-6.3123477E-05	2.1322982E-06
53	-6.2430240E-05	4.7424116E-06
54	-6.1248645E-05	7.0205348E-06
55	-5.9642279E-05	8.9943625E-06
56	-5.7669361E-05	1.0690819E-05
57	-5.5382693E-05	1.2136145E-05
58	-5.2829961E-05	1.3355600E-05
59	-5.0053897E-05	1.4373398E-05
60	-4.7092659E-05	1.5212574E-05
61	-4.3979460E-05	1.5895062E-05
62	-4.0743712E-05	1.6441382E-05
63	-3.7410704E-05	1.6870758E-05
64	-3.4002016E-05	1.7201034E-05
65	-3.0535801E-05	1.7448638E-05
66	-2.7027073E-05	1.7628552E-05
67	-2.3487992E-05	1.7754298E-05
68	-1.9928162E-05	1.7837920E-05
69	-1.6354928E-05	1.7889973E-05
70	-1.2773674E-05	1.7919518E-05
71	-9.1881179E-06	1.7934116E-05
72	-5.6006198E-06	1.7939825E-05
73	-2.0124782E-06	1.7941178E-05
74	1.5757562E-06	1.7941104E-05

75 4.6259109E-06 1.7940995E-05

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:17:07
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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 75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.5473	-2.0567E-03	0.000	5.473	0.000	5.473	V-C	4764.	0.5000	0.000	
1.000	1.000	5.473	0.000	0.000	FRANA_334_8_L_0						
2 D	1.347	-1.9794E-03	4.002	6.735	4.002	6.735	V-C	4764.	0.3000	0.000	
1.000	1.000	6.735	0.000	0.000	FRANA_334_8_L_0						
3 D	1.598	-1.9021E-03	8.013	7.989	8.013	7.989	V-C	4764.	0.1000	0.000	
1.000	1.000	7.989	0.000	0.000	FRANA_334_8_L_0						
4 D	1.823	-1.8249E-03	12.04	9.116	12.04	11.25	UL-RL	7622.	-0.1000	0.000	
1.000	1.000	9.116	0.000	0.000	FRANA_334_8_L_0						
5 D	2.268	-1.7476E-03	16.10	11.34	16.10	14.91	UL-RL	7622.	-0.3000	0.000	
1.000	1.000	11.34	0.000	0.000	FRANA_334_8_L_0						
6 D	2.717	-1.6705E-03	20.18	13.58	20.18	18.52	UL-RL	7622.	-0.5000	0.000	
1.000	1.000	13.58	0.000	0.000	FRANA_334_8_L_0						
7 D	3.168	-1.5934E-03	24.29	15.84	24.29	22.06	UL-RL	7622.	-0.7000	0.000	
1.000	1.000	15.84	0.000	0.000	FRANA_334_8_L_0						
8 D	3.623	-1.5166E-03	28.42	18.11	28.42	25.53	UL-RL	7622.	-0.9000	0.000	
1.000	1.000	18.11	0.000	0.000	FRANA_334_8_L_0						
9 D	4.080	-1.4400E-03	32.58	20.40	32.58	28.94	UL-RL	7622.	-1.100	0.000	
1.000	1.000	20.40	0.000	0.000	FRANA_334_8_L_0						
10 D	4.538	-1.3637E-03	36.75	22.69	36.75	32.30	UL-RL	7622.	-1.300	0.000	
1.000	1.000	22.69	0.000	0.000	FRANA_334_8_L_0						
11 D	5.155	-1.2880E-03	40.94	25.77	40.94	35.59	UL-RL	7622.	-1.500	0.000	
1.000	1.000	25.77	0.000	0.000	FRANA_334_8_L_0						
12 D	5.919	-1.2130E-03	45.14	29.60	45.14	38.84	UL-RL	7622.	-1.700	0.000	
1.000	1.000	29.60	0.000	0.000	FRANA_334_8_L_0						
13 D	6.674	-1.1388E-03	49.34	33.37	49.34	42.05	UL-RL	7622.	-1.900	0.000	
1.000	1.000	33.37	0.000	0.000	FRANA_334_8_L_0						
14 D	7.420	-1.0657E-03	53.54	37.10	53.54	45.22	UL-RL	7622.	-2.100	0.000	
1.000	1.000	37.10	0.000	0.000	FRANA_334_8_L_0						
15 D	8.158	-9.9399E-04	57.74	40.79	57.74	48.37	UL-RL	7622.	-2.300	0.000	
1.000	1.000	40.79	0.000	0.000	FRANA_334_8_L_0						
16 D	5.111	-9.2393E-04	61.94	44.44	61.94	51.48	UL-RL	7622.	-2.500	0.000	
1.000	1.000	44.44	0.000	0.000	FRANA_334_8_L_0						
17 D	5.173	-9.1359E-04	62.57	44.99	62.57	51.95	UL-RL	7622.	-2.530	0.000	
1.000	1.000	44.99	0.000	0.000	FRANA_334_8_L_0						
18 D	9.719	-8.4584E-04	66.77	48.59	66.77	55.04	UL-RL	7622.	-2.730	0.000	
1.000	1.000	48.59	0.000	0.000	FRANA_334_8_L_0						
19 D	10.43	-7.8014E-04	71.28	52.17	71.28	58.12	UL-RL	7622.	-2.930	0.000	
1.000	1.000	52.17	0.000	0.000	FRANA_334_8_L_0						
20 D	11.14	-7.1650E-04	75.80	55.71	75.80	61.18	UL-RL	7622.	-3.130	0.000	
1.000	1.000	55.71	0.000	0.000	FRANA_334_8_L_0						
21 D	11.85	-6.5498E-04	79.71	59.23	79.71	64.22	UL-RL	7622.	-3.330	0.000	
1.000	1.000	59.23	0.000	0.000	FRANA_334_8_L_0						
22 D	5.287	-5.9572E-04	83.37	25.64	83.37	49.73	UL-RL	5.5880E+04	-3.530	0.7970	
1.000	1.000	26.44	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	5.447	-5.3892E-04	85.79	24.44	85.79	50.83	UL-RL	5.5880E+04	-3.730	2.789	
1.000	1.000	27.23	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	5.920	-4.8475E-04	87.70	24.82	87.70	51.91	UL-RL	5.5880E+04	-3.930	4.782	
1.000	1.000	29.60	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	7.109	-4.3334E-04	90.09	28.77	90.09	52.99	UL-RL	5.5880E+04	-4.130	6.774	
1.000	1.000	35.54	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	8.264	-3.8479E-04	92.45	32.55	92.45	54.06	UL-RL	5.5880E+04	-4.330	8.767	
1.000	1.000	41.32	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	9.386	-3.3914E-04	94.78	36.17	94.78	55.12	UL-RL	5.5880E+04	-4.530	10.76	
1.000	1.000	46.93	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	10.47	-2.9642E-04	96.68	39.62	96.68	56.19	UL-RL	5.5880E+04	-4.730	12.75	
1.000	1.000	52.37	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	8.647	-2.5662E-04	98.99	42.90	98.99	57.24	UL-RL	5.5880E+04	-4.930	14.74	
1.000	1.000	57.65	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	9.034	-2.3780E-04	99.94	44.48	99.94	57.77	UL-RL	5.5880E+04	-5.030	15.74	
1.000	1.000	60.22	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	13.05	-2.0232E-04	102.2	47.52	102.2	58.83	UL-RL	5.5880E+04	-5.230	17.73	
1.000	1.000	65.25	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	14.03	-1.6963E-04	104.5	50.40	104.5	59.88	UL-RL	5.5880E+04	-5.430	19.72	
1.000	1.000	70.13	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	14.97	-1.3968E-04	106.8	53.13	106.8	60.93	UL-RL	5.5880E+04	-5.630	21.72	
1.000	1.000	74.84	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	15.88	-1.1235E-04	108.7	55.70	108.7	61.98	UL-RL	5.5880E+04	-5.830	23.71
1.000	1.000	79.41	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	16.77	-8.7555E-05	110.9	58.14	110.9	63.03	UL-RL	5.5880E+04	-6.030	25.70
1.000	1.000	83.84	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	17.63	-6.5177E-05	113.1	60.43	113.1	64.08	UL-RL	5.5880E+04	-6.230	27.69
1.000	1.000	88.13	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	18.46	-4.5097E-05	115.3	62.60	115.3	65.12	UL-RL	5.5880E+04	-6.430	29.69
1.000	1.000	92.29	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	19.27	-2.7192E-05	117.2	64.65	117.2	66.17	UL-RL	5.5880E+04	-6.630	31.68
1.000	1.000	96.33	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	20.05	-1.1338E-05	119.4	66.58	119.4	67.21	UL-RL	5.5880E+04	-6.830	33.67
1.000	1.000	100.2	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	20.80	2.5929E-06	121.6	68.34	121.6	68.36	UL-RL	5.5880E+04	-7.030	35.66
1.000	1.000	104.0	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	21.49	1.4728E-05	123.5	69.80	123.5	69.83	UL-RL	5.5880E+04	-7.230	37.66
1.000	1.000	107.5	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	22.16	2.5192E-05	125.7	71.15	125.7	71.35	UL-RL	5.5880E+04	-7.430	39.65
1.000	1.000	110.8	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	22.80	3.4109E-05	127.9	72.35	127.9	72.95	UL-RL	5.5880E+04	-7.630	41.64
1.000	1.000	114.0	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	23.43	4.1598E-05	130.1	73.53	130.1	74.47	UL-RL	5.5880E+04	-7.830	43.63
1.000	1.000	117.2	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	24.06	4.7776E-05	132.0	74.68	132.0	75.91	UL-RL	5.5880E+04	-8.030	45.63
1.000	1.000	120.3	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	24.68	5.2755E-05	134.1	75.81	134.1	77.27	UL-RL	5.5880E+04	-8.230	47.62
1.000	1.000	123.4	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	25.30	5.6644E-05	136.3	76.91	136.3	78.57	UL-RL	5.5880E+04	-8.430	49.61
1.000	1.000	126.5	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	25.92	5.9544E-05	138.4	78.00	138.4	79.80	UL-RL	5.5880E+04	-8.630	51.60
1.000	1.000	129.6	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	26.53	6.1553E-05	140.3	79.08	140.3	80.98	UL-RL	5.5880E+04	-8.830	53.60
1.000	1.000	132.7	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	27.14	6.2762E-05	142.5	80.13	142.5	82.11	UL-RL	5.5880E+04	-9.030	55.59
1.000	1.000	135.7	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	27.75	6.3259E-05	144.6	81.18	144.6	83.20	UL-RL	5.5880E+04	-9.230	57.58
1.000	1.000	138.8	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	28.36	6.3123E-05	146.5	82.21	146.5	84.25	UL-RL	5.5880E+04	-9.430	59.57
1.000	1.000	141.8	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	28.96	6.2430E-05	148.7	83.23	148.7	85.27	UL-RL	5.5880E+04	-9.630	61.56
1.000	1.000	144.8	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	29.56	6.1249E-05	150.8	84.24	150.8	86.25	UL-RL	5.5880E+04	-9.830	63.56
1.000	1.000	147.8	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	30.16	5.9642E-05	152.9	85.25	152.9	87.21	UL-RL	5.5880E+04	-10.03	65.55
1.000	1.000	150.8	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	30.76	5.7669E-05	154.8	86.24	154.8	88.15	UL-RL	5.5880E+04	-10.23	67.54
1.000	1.000	153.8	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	31.35	5.5383E-05	156.9	87.23	156.9	89.07	UL-RL	5.5880E+04	-10.43	69.53
1.000	1.000	156.8	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	31.95	5.2830E-05	159.1	88.22	159.1	89.98	UL-RL	5.5880E+04	-10.63	71.53
1.000	1.000	159.7	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	32.54	5.0054E-05	161.2	89.20	161.2	90.87	UL-RL	5.5880E+04	-10.83	73.52
1.000	1.000	162.7	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	33.14	4.7093E-05	163.1	90.18	163.1	91.75	UL-RL	5.5880E+04	-11.03	75.51
1.000	1.000	165.7	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	33.73	4.3979E-05	165.2	91.16	165.2	92.62	UL-RL	5.5880E+04	-11.23	77.50
1.000	1.000	168.7	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	34.33	4.0744E-05	167.3	92.13	167.3	93.49	UL-RL	5.5880E+04	-11.43	79.50
1.000	1.000	171.6	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	34.92	3.7411E-05	169.2	93.10	169.2	94.35	UL-RL	5.5880E+04	-11.63	81.49
1.000	1.000	174.6	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	35.51	3.4002E-05	171.3	94.07	171.3	95.21	UL-RL	5.5880E+04	-11.83	83.48
1.000	1.000	177.6	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	36.10	3.0536E-05	173.4	95.04	173.4	96.06	UL-RL	5.5880E+04	-12.03	85.47
1.000	1.000	180.5	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	36.70	2.7027E-05	175.5	96.01	175.5	96.91	UL-RL	5.5880E+04	-12.23	87.47
1.000	1.000	183.5	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	37.29	2.3488E-05	177.4	96.98	177.4	97.76	UL-RL	5.5880E+04	-12.43	89.46
1.000	1.000	186.4	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	37.88	1.9928E-05	179.5	97.95	179.5	98.61	UL-RL	5.5880E+04	-12.63	91.45
1.000	1.000	189.4	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	38.47	1.6355E-05	181.6	98.92	181.6	99.46	UL-RL	5.5880E+04	-12.83	93.44
1.000	1.000	192.4	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	39.06	1.2774E-05	183.7	99.89	183.7	100.3	UL-RL	5.5880E+04	-13.03	95.44
1.000	1.000	195.3	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	39.66	9.1881E-06	185.6	100.9	185.6	101.2	UL-RL	5.5880E+04	-13.23	97.43
1.000	1.000	198.3	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	40.25	5.6006E-06	187.7	101.8	187.7	102.0	UL-RL	5.5880E+04	-13.43	99.42
1.000	1.000	201.2	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	40.84	2.0125E-06	189.8	102.8	189.8	102.9	UL-RL	5.5880E+04	-13.63	101.4
1.000	1.000	204.2	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	38.32	-1.5758E-06	191.7	103.7	191.7	103.8	UL-RL	5.5880E+04	-13.83	103.4
1.000	1.000	207.1	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	17.81	-4.6259E-06	193.5	104.4	193.5	104.7	UL-RL	5.5880E+04	-14.00	105.1
1.000	1.000	209.5	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| Exe Time :25 June 2020 16:17:07
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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

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ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
15	0.000	--	--	--	--	--	REMOVED	--	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
16	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
17	0.000	--	--	--	--	--	REMOVED	--	-2.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
18	0.000	--	--	--	--	--	REMOVED	--	-2.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
19	0.000	--	--	--	--	--	REMOVED	--	-2.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
20	0.000	--	--	--	--	--	REMOVED	--	-3.130	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
21	0.000	--	--	--	--	--	REMOVED	--	-3.330	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
22	D 11.67	5.9572E-04	0.000	58.33	79.80	77.07	UL-RL	4.1968E+04	-3.530	0.000	
1.000	1.000	58.33	0.000	0.000	BNA2_(2)_335_337_L_0						
23	D 12.11	5.3892E-04	1.992	58.52	81.80	75.68	UL-RL	4.1968E+04	-3.730	2.008	
1.000	1.000	60.53	0.000	0.000	BNA2_(2)_335_337_L_0						
24	D 12.55	4.8475E-04	3.985	58.76	83.80	74.37	UL-RL	4.1968E+04	-3.930	4.015	
1.000	1.000	62.77	0.000	0.000	BNA2_(2)_335_337_L_0						
25	D 13.01	4.3334E-04	5.977	59.04	85.80	73.17	UL-RL	4.1968E+04	-4.130	6.023	
1.000	1.000	65.06	0.000	0.000	BNA2_(2)_335_337_L_0						
26	D 13.48	3.8479E-04	7.970	59.37	87.80	72.07	UL-RL	4.1968E+04	-4.330	8.030	
1.000	1.000	67.40	0.000	0.000	BNA2_(2)_335_337_L_0						
27	D 13.96	3.3914E-04	9.962	59.74	89.80	71.08	UL-RL	4.1968E+04	-4.530	10.04	
1.000	1.000	69.78	0.000	0.000	BNA2_(2)_335_337_L_0						
28	D 14.44	2.9642E-04	11.95	60.16	91.80	70.22	UL-RL	4.1968E+04	-4.730	12.05	
1.000	1.000	72.21	0.000	0.000	BNA2_(2)_335_337_L_0						
29	D 11.20	2.5662E-04	13.95	60.63	93.80	69.47	UL-RL	4.1968E+04	-4.930	14.05	
1.000	1.000	74.68	0.000	0.000	BNA2_(2)_335_337_L_0						
30	D 11.39	2.3780E-04	14.94	60.88	94.80	69.14	UL-RL	4.1968E+04	-5.030	15.06	
1.000	1.000	75.94	0.000	0.000	BNA2_(2)_335_337_L_0						
31	D 15.70	2.0232E-04	16.94	61.41	96.80	68.57	UL-RL	4.1968E+04	-5.230	17.06	
1.000	1.000	78.48	0.000	0.000	BNA2_(2)_335_337_L_0						
32	D 16.21	1.6963E-04	18.93	61.99	98.80	68.13	UL-RL	4.1968E+04	-5.430	19.07	
1.000	1.000	81.06	0.000	0.000	BNA2_(2)_335_337_L_0						
33	D 16.74	1.3968E-04	20.92	62.60	100.8	67.80	UL-RL	4.1968E+04	-5.630	21.08	
1.000	1.000	83.68	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	17.27	1.1235E-04	22.91	63.26	102.8	67.58	UL-RL	4.1968E+04	-5.830	23.09
1.000	1.000	86.34	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	17.81	8.7555E-05	24.90	63.95	104.8	67.48	UL-RL	4.1968E+04	-6.030	25.10
1.000	1.000	89.04	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	18.35	6.5177E-05	26.90	64.67	106.8	67.49	UL-RL	4.1968E+04	-6.230	27.10
1.000	1.000	91.77	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	18.91	4.5097E-05	28.89	65.42	108.8	67.61	UL-RL	4.1968E+04	-6.430	29.11
1.000	1.000	94.53	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	19.45	2.7192E-05	30.88	66.15	110.8	67.92	UL-RL	4.1968E+04	-6.630	31.12
1.000	1.000	97.27	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	20.01	1.1338E-05	32.87	66.91	112.8	68.31	UL-RL	4.1968E+04	-6.830	33.13
1.000	1.000	100.0	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	20.57	-2.5929E-06	34.87	67.72	114.8	68.77	UL-RL	4.1968E+04	-7.030	35.13
1.000	1.000	102.8	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	21.14	-1.4728E-05	36.86	68.55	116.8	69.31	UL-RL	4.1968E+04	-7.230	37.14
1.000	1.000	105.7	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	21.67	-2.5192E-05	38.85	69.20	118.8	70.26	UL-RL	4.1968E+04	-7.430	39.15
1.000	1.000	108.3	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	22.20	-3.4109E-05	40.84	69.87	120.8	71.30	UL-RL	4.1968E+04	-7.630	41.16
1.000	1.000	111.0	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	22.75	-4.1598E-05	42.84	70.59	122.8	72.34	UL-RL	4.1968E+04	-7.830	43.16
1.000	1.000	113.8	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	23.31	-4.7776E-05	44.83	71.37	124.8	73.37	UL-RL	4.1968E+04	-8.030	45.17
1.000	1.000	116.5	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	23.88	-5.2755E-05	46.82	72.20	126.8	74.41	UL-RL	4.1968E+04	-8.230	47.18
1.000	1.000	119.4	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	24.45	-5.6644E-05	48.81	73.07	128.8	75.45	UL-RL	4.1968E+04	-8.430	49.19
1.000	1.000	122.3	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	25.04	-5.9544E-05	50.81	73.99	130.8	76.49	UL-RL	4.1968E+04	-8.630	51.19
1.000	1.000	125.2	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	25.63	-6.1553E-05	52.80	74.95	132.8	77.53	UL-RL	4.1968E+04	-8.830	53.20
1.000	1.000	128.1	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	26.23	-6.2762E-05	54.79	75.93	134.8	78.57	UL-RL	4.1968E+04	-9.030	55.21
1.000	1.000	131.1	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	26.83	-6.3259E-05	56.78	76.95	136.8	79.61	UL-RL	4.1968E+04	-9.230	57.22
1.000	1.000	134.2	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	27.44	-6.3123E-05	58.78	78.00	138.8	80.65	UL-RL	4.1968E+04	-9.430	59.22
1.000	1.000	137.2	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	28.06	-6.2430E-05	60.77	79.06	140.8	81.68	UL-RL	4.1968E+04	-9.630	61.23
1.000	1.000	140.3	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	28.68	-6.1249E-05	62.76	80.15	142.8	82.72	UL-RL	4.1968E+04	-9.830	63.24
1.000	1.000	143.4	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	29.30	-5.9642E-05	64.75	81.26	144.8	83.76	UL-RL	4.1968E+04	-10.03	65.25
1.000	1.000	146.5	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	29.93	-5.7669E-05	66.75	82.38	146.8	84.80	UL-RL	4.1968E+04	-10.23	67.25
1.000	1.000	149.6	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	30.56	-5.5383E-05	68.74	83.52	148.8	85.84	UL-RL	4.1968E+04	-10.43	69.26
1.000	1.000	152.8	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	31.19	-5.2830E-05	70.73	84.67	150.8	86.89	UL-RL	4.1968E+04	-10.63	71.27
1.000	1.000	155.9	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	31.82	-5.0054E-05	72.72	85.83	152.8	87.93	UL-RL	4.1968E+04	-10.83	73.28
1.000	1.000	159.1	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	32.46	-4.7093E-05	74.71	86.99	154.8	88.97	UL-RL	4.1968E+04	-11.03	75.29
1.000	1.000	162.3	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	33.09	-4.3979E-05	76.71	88.16	156.8	90.01	UL-RL	4.1968E+04	-11.23	77.29
1.000	1.000	165.5	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	33.73	-4.0744E-05	78.70	89.34	158.8	91.05	UL-RL	4.1968E+04	-11.43	79.30
1.000	1.000	168.6	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	34.37	-3.7411E-05	80.69	90.52	160.8	92.09	UL-RL	4.1968E+04	-11.63	81.31
1.000	1.000	171.8	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	35.01	-3.4002E-05	82.68	91.71	162.8	93.14	UL-RL	4.1968E+04	-11.83	83.32
1.000	1.000	175.0	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	35.64	-3.0536E-05	84.68	92.90	164.8	94.18	UL-RL	4.1968E+04	-12.03	85.32
1.000	1.000	178.2	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	36.28	-2.7027E-05	86.67	94.09	166.8	95.22	UL-RL	4.1968E+04	-12.23	87.33
1.000	1.000	181.4	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	36.92	-2.3488E-05	88.66	95.28	168.8	96.27	UL-RL	4.1968E+04	-12.43	89.34
1.000	1.000	184.6	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	37.56	-1.9928E-05	90.65	96.48	170.8	97.31	UL-RL	4.1968E+04	-12.63	91.35
1.000	1.000	187.8	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	38.20	-1.6355E-05	92.65	97.67	172.8	98.36	UL-RL	4.1968E+04	-12.83	93.35
1.000	1.000	191.0	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	38.85	-1.2774E-05	94.64	98.87	174.8	99.40	UL-RL	4.1968E+04	-13.03	95.36
1.000	1.000	194.2	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	39.49	-9.1881E-06	96.63	100.1	176.8	100.4	UL-RL	4.1968E+04	-13.23	97.37
1.000	1.000	197.4	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	40.13	-5.6006E-06	98.62	101.3	178.8	101.5	UL-RL	4.1968E+04	-13.43	99.38
1.000	1.000	200.6	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	40.77	-2.0125E-06	100.6	102.5	180.8	102.5	UL-RL	4.1968E+04	-13.63	101.4
1.000	1.000	203.8	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	38.30	1.5758E-06	102.6	103.6	182.8	103.7	UL-RL	4.1968E+04	-13.83	103.4
1.000	1.000	207.0	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	17.82	4.6259E-06	104.3	104.6	184.5	104.7	UL-RL	4.1968E+04	-14.00	105.1
1.000	1.000	209.7	0.000	0.000	BNA2_(2)_335_337_L_0					

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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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 74  
C U R R E N T    T I M E    I S    3.0000

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	0.54735	-0.54735	-1.78844E-11	0.10947
2	1.8944	-1.8944	-0.10947	0.48834
3	3.4922	-3.4922	-0.48834	1.1868
4	5.3153	-5.3153	-1.1868	2.2498
5	7.5836	-7.5836	-2.2498	3.7666
6	10.300	-10.300	-3.7666	5.8266
7	13.469	-13.469	-5.8266	8.5203
8	17.091	-17.091	-8.5203	11.939
9	21.171	-21.171	-11.939	16.173
10	25.709	-25.709	-16.173	21.315
11	30.864	-30.864	-21.315	27.487
12	36.783	-36.783	-27.487	34.844
13	43.457	-43.457	-34.844	43.536
14	50.878	-50.878	-43.536	53.711
15	59.036	-59.036	-53.711	65.518
16	64.146	-64.146	-65.518	67.443
17	-8.9848	8.9848	-67.443	65.646
18	0.73412	-0.73412	-65.646	65.792
19	11.168	-11.168	-65.792	68.026
20	22.311	-22.311	-68.026	72.488
21	34.157	-34.157	-72.488	79.320
22	27.777	-27.777	-79.320	84.875
23	21.118	-21.118	-84.875	89.099
24	14.484	-14.484	-89.099	91.995
25	8.5806	-8.5806	-91.995	93.712
26	3.3651	-3.3651	-93.712	94.385
27	-1.2049	1.2049	-94.385	94.144
28	-5.1723	5.1723	-94.144	93.109
29	-7.7277	7.7277	-93.109	92.336
30	-10.085	10.085	-92.336	90.319
31	-12.729	12.729	-90.319	87.774
32	-14.916	14.916	-87.774	84.790
33	-16.684	16.684	-84.790	81.454
34	-18.070	18.070	-81.454	77.840
35	-19.110	19.110	-77.840	74.018
36	-19.840	19.840	-74.018	70.050
37	-20.289	20.289	-70.050	65.992
38	-20.477	20.477	-65.992	61.896
39	-20.436	20.436	-61.896	57.809
40	-20.204	20.204	-57.809	53.769
41	-19.848	19.848	-53.769	49.799
42	-19.359	19.359	-49.799	45.927
43	-18.765	18.765	-45.927	42.174
44	-18.084	18.084	-42.174	38.557
45	-17.332	17.332	-38.557	35.091
46	-16.523	16.523	-35.091	31.786
47	-15.670	15.670	-31.786	28.652
48	-14.786	14.786	-28.652	25.695
49	-13.881	13.881	-25.695	22.919
50	-12.965	12.965	-22.919	20.326
51	-12.048	12.048	-20.326	17.916
52	-11.136	11.136	-17.916	15.689
53	-10.236	10.236	-15.689	13.642
54	-9.3553	9.3553	-13.642	11.771
55	-8.4980	8.4980	-11.771	10.071
56	-7.6688	7.6688	-10.071	8.5375
57	-6.8718	6.8718	-8.5375	7.1632
58	-6.1101	6.1101	-7.1632	5.9412
59	-5.3865	5.3865	-5.9412	4.8639
60	-4.7034	4.7034	-4.8639	3.9232
61	-4.0626	4.0626	-3.9232	3.1107
62	-3.4657	3.4657	-3.1107	2.4176
63	-2.9139	2.9139	-2.4176	1.8348
64	-2.4082	2.4082	-1.8348	1.3531
65	-1.9493	1.9493	-1.3531	0.96328
66	-1.5378	1.5378	-0.96328	0.65572
67	-1.1740	1.1740	-0.65572	0.42092
68	-0.85826	0.85826	-0.42092	0.24927
69	-0.59072	0.59072	-0.24927	0.13113
70	-0.37151	0.37151	-0.13113	5.68253E-02

71-0.20068 0.20068 -5.68253E-02 1.66892E-02  
72-7.98538E-02 7.98538E-02-1.66892E-02 7.18458E-04  
73-1.18927E-02 1.18927E-02-7.18458E-04-1.66009E-03  
74 9.76465E-03-9.76465E-03 1.66009E-03 5.19584E-14

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:17:07 |  
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New Project
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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\_341 :  
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	BORN NOW JUST ACTIVATED
ANCHOR	1	83.330	-6.00695E-04	-6.00695E-04	0.0000	0.0000	0.0000	

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
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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 .   5

Tieback\_342 :  
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
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\*\*\*\*\* NO ONE ELEMENT ACTIVE AT CURRENT STEP \*\*\*\*\*

ITER   0 RNORM = 0.000 RMNORM= 0.000  
RINORM=0.1214E+06 RIMNOR=0.3660E+06  
RENORM= 2795. REMNOR=0.1181E-18 RATIO =0.1518 TOLER =0.1000E-03 NOT CONVERGED  
RFMAX = 78.30 RMMAX = 94.38  
RTSMAL=0.1000E-03 RMSMAL=0.1000E-03  
RDT = -0.1214E+06 RDR =-0.3660E+06  
RATIO=0.1518 RATOR= 0.000  
MAX UN= 16.33 IEQ= 69 NODE 35 DOF 1 Y-DISPL.F  
MIN UN=-.1729E-07 IEQ= 31 NODE 16 DOF 1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER   2 RNORM = 0.000 RMNORM= 0.000  
RINORM=0.1214E+06 RIMNOR=0.3660E+06  
RENORM= 63.02 REMNOR=0.2296E-17 RATIO =0.2279E-01 TOLER =0.1000E-03 NOT CONVERGED  
RFMAX = 78.30 RMMAX = 94.38  
RTSMAL=0.1000E-03 RMSMAL=0.1000E-03  
RDT = -0.1214E+06 RDR =-0.3660E+06  
RATIO=0.2279E-01 RATOR= 0.000  
MAX UN= 3.395 IEQ= 45 NODE 23 DOF 1 Y-DISPL.F  
MIN UN=-.3685E-07 IEQ= 31 NODE 16 DOF 1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER   3 RNORM = 0.000 RMNORM= 0.000  
RINORM=0.1214E+06 RIMNOR=0.3660E+06  
RENORM=0.6244 REMNOR=0.4018E-18 RATIO =0.2268E-02 TOLER =0.1000E-03 NOT CONVERGED  
RFMAX = 78.30 RMMAX = 94.38  
RTSMAL=0.1000E-03 RMSMAL=0.1000E-03  
RDT = -0.1214E+06 RDR =-0.3660E+06  
RATIO=0.2268E-02 RATOR= 0.000  
MAX UN=0.6634 IEQ= 57 NODE 29 DOF 1 Y-DISPL.F  
MIN UN=-.2170E-07 IEQ= 33 NODE 17 DOF 1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER   4 RNORM = 0.000 RMNORM= 0.000  
RINORM=0.1214E+06 RIMNOR=0.3660E+06  
RENORM=0.1411E-02 REMNOR=0.3460E-17 RATIO =0.1078E-03 TOLER =0.1000E-03 NOT CONVERGED  
RFMAX = 78.30 RMMAX = 94.38  
RTSMAL=0.1000E-03 RMSMAL=0.1000E-03  
RDT = -0.1214E+06 RDR =-0.3660E+06  
RATIO=0.1078E-03 RATOR= 0.000  
MAX UN=0.3644E-01 IEQ= 13 NODE 7 DOF 1 Y-DISPL.F  
MIN UN=-.9108E-07 IEQ= 33 NODE 17 DOF 1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER   5 RNORM = 0.000 RMNORM= 0.000  
RINORM=0.1214E+06 RIMNOR=0.3660E+06  
RENORM=0.9990E-13 REMNOR=0.2175E-16 RATIO =0.9073E-09 TOLER =0.1000E-03 CONVERGED !  
RFMAX = 78.30 RMMAX = 94.38  
RTSMAL=0.1000E-03 RMSMAL=0.1000E-03  
RDT = -0.1214E+06 RDR =-0.3660E+06  
RATIO=0.9073E-09 RATOR= 0.000  
MAX UN=0.2233E-06 IEQ= 33 NODE 17 DOF 1 Y-DISPL.F  
MIN UN=-.2237E-06 IEQ= 31 NODE 16 DOF 1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS 0

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
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New Project  
SOLUTION REACHED USING 5 ITERATIONS ON 40

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

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

	Y-DISPL.F	X-ROT. F
	(02)	(04)
1	3.6775194E-03	-4.1411442E-04
2	3.5946966E-03	-4.1411442E-04
3	3.5118737E-03	-4.1411442E-04
4	3.4290509E-03	-4.1411313E-04
5	3.3462289E-03	-4.1410437E-04
6	3.2634107E-03	-4.1407141E-04
7	3.1806040E-03	-4.1398344E-04
8	3.0978241E-03	-4.1379494E-04
9	3.0150968E-03	-4.1344483E-04
10	2.9324620E-03	-4.1285635E-04
11	2.8499763E-03	-4.1193693E-04
12	2.7677165E-03	-4.1057815E-04
13	2.6857829E-03	-4.0865261E-04
14	2.6043033E-03	-4.0601003E-04
15	2.5234382E-03	-4.0247655E-04
16	2.4433852E-03	-3.9785504E-04
17	2.4314615E-03	-3.9705747E-04
18	2.3525554E-03	-3.9218361E-04
19	2.2745242E-03	-3.8826623E-04
20	2.1972031E-03	-3.8503613E-04
21	2.1204834E-03	-3.8220164E-04
22	2.0443170E-03	-3.7944872E-04
23	1.9687095E-03	-3.7661171E-04
24	1.8936787E-03	-3.7367932E-04
25	1.8192456E-03	-3.7063054E-04
26	1.7454363E-03	-3.6743469E-04
27	1.6722842E-03	-3.6405089E-04
28	1.5998319E-03	-3.6042811E-04
29	1.5281333E-03	-3.5650575E-04
30	1.4925862E-03	-3.5441292E-04
31	1.4221469E-03	-3.4990594E-04
32	1.3526570E-03	-3.4490086E-04
33	1.2842276E-03	-3.3927939E-04
34	1.2169971E-03	-3.3288575E-04
35	1.1511380E-03	-3.2552711E-04
36	1.0868659E-03	-3.1697444E-04
37	1.0244280E-03	-3.0722516E-04
38	9.6404019E-04	-2.9650996E-04
39	9.0587475E-04	-2.8503762E-04
40	8.5006340E-04	-2.7299581E-04
41	7.9670317E-04	-2.6055282E-04
42	7.4585898E-04	-2.4785918E-04
43	6.9756723E-04	-2.3504955E-04
44	6.5183888E-04	-2.2224413E-04
45	6.0866218E-04	-2.0954968E-04
46	5.6800533E-04	-1.9706032E-04
47	5.2981908E-04	-1.8485836E-04
48	4.9403829E-04	-1.7301477E-04
49	4.6058523E-04	-1.6159029E-04
50	4.2937083E-04	-1.5063591E-04
51	4.0029673E-04	-1.4019362E-04
52	3.7325713E-04	-1.3029709E-04
53	3.4813992E-04	-1.2097217E-04
54	3.2482890E-04	-1.1223773E-04
55	3.0320423E-04	-1.0410592E-04
56	2.8314548E-04	-9.6583366E-05
57	2.6453022E-04	-8.9670692E-05
58	2.4723683E-04	-8.3363651E-05
59	2.3114498E-04	-7.7653378E-05
60	2.1613729E-04	-7.2527025E-05
61	2.0209716E-04	-6.7967122E-05
62	1.8891403E-04	-6.3953431E-05
63	1.7648096E-04	-6.0462180E-05
64	1.6469611E-04	-5.7466582E-05
65	1.5346326E-04	-5.4937057E-05
66	1.4269236E-04	-5.2841422E-05
67	1.3230007E-04	-5.1145043E-05
68	1.2221019E-04	-4.9810977E-05
69	1.1235414E-04	-4.8800072E-05
70	1.0267137E-04	-4.8071056E-05
71	9.3109809E-05	-4.7580600E-05
72	8.3626247E-05	-4.7283364E-05
73	7.4186741E-05	-4.7131971E-05
74	6.4767030E-05	-4.7077008E-05

75 5.6764400E-05 -4.7068784E-05

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| Exe Time :25 June 2020 16:17:07
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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 75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.000	-3.6775E-03	0.000	0.000	0.000	5.473	ACTIVE	0.000	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
2 D	0.000	-3.5947E-03	4.002	0.000	4.002	6.735	ACTIVE	0.000	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
3 D	8.3310E-02	-3.5119E-03	8.013	0.4166	8.013	7.989	UL-RL	4704.	0.1000	0.000	
1.000	1.000	0.4166	0.000	0.000	FRANA_334_8_L_0						
4 D	0.3138	-3.4291E-03	12.04	1.569	12.04	11.25	UL-RL	4704.	-0.1000	0.000	
1.000	1.000	1.569	0.000	0.000	FRANA_334_8_L_0						
5 D	0.7643	-3.3462E-03	16.10	3.821	16.10	14.91	UL-RL	4704.	-0.3000	0.000	
1.000	1.000	3.821	0.000	0.000	FRANA_334_8_L_0						
6 D	1.218	-3.2634E-03	20.18	6.090	20.18	18.52	UL-RL	4704.	-0.5000	0.000	
1.000	1.000	6.090	0.000	0.000	FRANA_334_8_L_0						
7 D	1.713	-3.1806E-03	24.29	8.567	24.29	22.06	ACTIVE	0.000	-0.7000	0.000	
1.000	1.000	8.567	0.000	0.000	FRANA_334_8_L_0						
8 D	2.218	-3.0978E-03	28.42	11.09	28.42	25.53	ACTIVE	0.000	-0.9000	0.000	
1.000	1.000	11.09	0.000	0.000	FRANA_334_8_L_0						
9 D	2.725	-3.0151E-03	32.58	13.62	32.58	28.94	ACTIVE	0.000	-1.100	0.000	
1.000	1.000	13.62	0.000	0.000	FRANA_334_8_L_0						
10 D	3.234	-2.9325E-03	36.75	16.17	36.75	32.30	ACTIVE	0.000	-1.300	0.000	
1.000	1.000	16.17	0.000	0.000	FRANA_334_8_L_0						
11 D	3.745	-2.8500E-03	40.94	18.73	40.94	35.59	ACTIVE	0.000	-1.500	0.000	
1.000	1.000	18.73	0.000	0.000	FRANA_334_8_L_0						
12 D	4.457	-2.7677E-03	45.14	22.28	45.14	38.84	UL-RL	4704.	-1.700	0.000	
1.000	1.000	22.28	0.000	0.000	FRANA_334_8_L_0						
13 D	5.219	-2.6858E-03	49.34	26.09	49.34	42.05	UL-RL	4704.	-1.900	0.000	
1.000	1.000	26.09	0.000	0.000	FRANA_334_8_L_0						
14 D	5.973	-2.6043E-03	53.54	29.86	53.54	45.22	UL-RL	4704.	-2.100	0.000	
1.000	1.000	29.86	0.000	0.000	FRANA_334_8_L_0						
15 D	6.719	-2.5234E-03	57.74	33.60	57.74	48.37	UL-RL	4704.	-2.300	0.000	
1.000	1.000	33.60	0.000	0.000	FRANA_334_8_L_0						
16 D	4.289	-2.4434E-03	61.94	37.29	61.94	51.48	UL-RL	4704.	-2.500	0.000	
1.000	1.000	37.29	0.000	0.000	FRANA_334_8_L_0						
17 D	4.352	-2.4315E-03	62.57	37.85	62.57	51.95	UL-RL	4704.	-2.530	0.000	
1.000	1.000	37.85	0.000	0.000	FRANA_334_8_L_0						
18 D	8.301	-2.3526E-03	66.77	41.51	66.77	55.04	UL-RL	4704.	-2.730	0.000	
1.000	1.000	41.51	0.000	0.000	FRANA_334_8_L_0						
19 D	9.028	-2.2745E-03	71.28	45.14	71.28	58.12	UL-RL	4704.	-2.930	0.000	
1.000	1.000	45.14	0.000	0.000	FRANA_334_8_L_0						
20 D	9.750	-2.1972E-03	75.80	48.75	75.80	61.18	UL-RL	4704.	-3.130	0.000	
1.000	1.000	48.75	0.000	0.000	FRANA_334_8_L_0						
21 D	10.47	-2.1205E-03	79.71	52.33	79.71	64.22	UL-RL	4704.	-3.330	0.000	
1.000	1.000	52.33	0.000	0.000	FRANA_334_8_L_0						
22 D	0.1972	-2.0443E-03	84.16	0.9862	84.16	49.73	ACTIVE	0.000	-3.530	0.000	
1.000	1.000	0.9862	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	0.5296	-1.9687E-03	88.58	2.648	88.58	50.83	ACTIVE	0.000	-3.730	0.000	
1.000	1.000	2.648	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	0.8229	-1.8937E-03	92.48	4.114	92.48	51.91	ACTIVE	0.000	-3.930	0.000	
1.000	1.000	4.114	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	1.152	-1.8192E-03	96.86	5.762	96.86	52.99	ACTIVE	0.000	-4.130	0.000	
1.000	1.000	5.762	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	1.480	-1.7454E-03	101.2	7.398	101.2	54.06	ACTIVE	0.000	-4.330	0.000	
1.000	1.000	7.398	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	1.805	-1.6723E-03	105.5	9.025	105.5	55.12	ACTIVE	0.000	-4.530	0.000	
1.000	1.000	9.025	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	2.098	-1.5998E-03	109.4	10.49	109.4	56.19	ACTIVE	0.000	-4.730	0.000	
1.000	1.000	10.49	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	1.816	-1.5281E-03	113.7	12.11	113.7	57.24	ACTIVE	0.000	-4.930	0.000	
1.000	1.000	12.11	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	1.926	-1.4926E-03	115.7	12.84	115.7	57.77	ACTIVE	0.000	-5.030	0.000	
1.000	1.000	12.84	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	3.198	-1.4221E-03	118.1	14.11	118.1	58.83	UL-RL	3.4486E+04	-5.230	1.882	
1.000	1.000	15.99	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	4.416	-1.3527E-03	120.5	18.32	120.5	59.88	UL-RL	3.4486E+04	-5.430	3.764	
1.000	1.000	22.08	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	5.615	-1.2842E-03	122.8	22.43	122.8	61.90	UL-RL	3.4486E+04	-5.630	5.646	
1.000	1.000	28.08	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	6.794	-1.2170E-03	124.8	26.44	124.8	64.54	UL-RL	3.4486E+04	-5.830	7.528	
1.000	1.000	33.97	0.000	0.000	BNA2_(2)_335_337_L_0	127.2	67.03	UL-RL	3.4486E+04	-6.030	9.410
35 D	7.952	-1.1511E-03	127.2	30.35	BNA2_(2)_335_337_L_0	129.5	69.39	UL-RL	3.4486E+04	-6.230	11.29
1.000	1.000	39.76	0.000	0.000	BNA2_(2)_335_337_L_0	131.8	71.62	UL-RL	3.4486E+04	-6.430	13.17
36 D	9.089	-1.0869E-03	129.5	34.15	BNA2_(2)_335_337_L_0	133.9	73.72	UL-RL	3.4486E+04	-6.630	15.06
1.000	1.000	45.45	0.000	0.000	BNA2_(2)_335_337_L_0	136.2	75.71	UL-RL	3.4486E+04	-6.830	16.94
37 D	10.20	-1.0244E-03	131.8	37.84	BNA2_(2)_335_337_L_0	138.5	77.53	UL-RL	3.4486E+04	-7.030	18.82
1.000	1.000	51.02	0.000	0.000	BNA2_(2)_335_337_L_0	140.5	79.06	UL-RL	3.4486E+04	-7.230	20.70
38 D	11.29	-9.6404E-04	133.9	41.41	BNA2_(2)_335_337_L_0	142.8	80.46	UL-RL	3.4486E+04	-7.430	22.58
1.000	1.000	56.47	0.000	0.000	BNA2_(2)_335_337_L_0	145.1	81.73	UL-RL	3.4486E+04	-7.630	24.47
41 D	14.36	-7.9670E-04	140.5	51.08	BNA2_(2)_335_337_L_0	147.3	82.96	UL-RL	3.4486E+04	-7.830	26.35
1.000	1.000	71.78	0.000	0.000	BNA2_(2)_335_337_L_0	149.4	84.18	UL-RL	3.4486E+04	-8.030	28.23
42 D	15.29	-7.4586E-04	142.8	53.87	BNA2_(2)_335_337_L_0	151.6	85.37	UL-RL	3.4486E+04	-8.230	30.11
1.000	1.000	76.46	0.000	0.000	BNA2_(2)_335_337_L_0	153.9	86.53	UL-RL	3.4486E+04	-8.430	31.99
43 D	16.19	-6.9757E-04	145.1	56.49	BNA2_(2)_335_337_L_0	156.2	87.68	UL-RL	3.4486E+04	-8.630	33.87
1.000	1.000	80.96	0.000	0.000	BNA2_(2)_335_337_L_0	158.2	88.82	UL-RL	3.4486E+04	-8.830	35.76
44 D	17.08	-6.5184E-04	147.3	59.05	BNA2_(2)_335_337_L_0	160.4	89.93	UL-RL	3.4486E+04	-9.030	37.64
1.000	1.000	85.40	0.000	0.000	BNA2_(2)_335_337_L_0	162.7	91.04	UL-RL	3.4486E+04	-9.230	39.52
45 D	17.95	-6.0866E-04	149.4	61.54	BNA2_(2)_335_337_L_0	164.7	92.13	UL-RL	3.4486E+04	-9.430	41.40
1.000	1.000	89.77	0.000	0.000	BNA2_(2)_335_337_L_0	166.9	93.21	UL-RL	3.4486E+04	-9.630	43.28
46 D	18.81	-5.6801E-04	151.6	63.96	BNA2_(2)_335_337_L_0	169.2	94.28	UL-RL	3.4486E+04	-9.830	45.17
1.000	1.000	94.07	0.000	0.000	BNA2_(2)_335_337_L_0	171.4	95.35	UL-RL	3.4486E+04	-10.03	47.05
47 D	19.66	-5.2982E-04	153.9	66.31	BNA2_(2)_335_337_L_0	173.4	96.40	UL-RL	3.4486E+04	-10.23	48.93
1.000	1.000	98.30	0.000	0.000	BNA2_(2)_335_337_L_0	175.7	97.46	UL-RL	3.4486E+04	-10.43	50.81
48 D	20.49	-4.9404E-04	156.2	68.59	BNA2_(2)_335_337_L_0	180.1	99.54	UL-RL	3.4486E+04	-10.63	52.69
1.000	1.000	102.5	0.000	0.000	BNA2_(2)_335_337_L_0	184.4	100.6	UL-RL	3.4486E+04	-11.03	54.46
49 D	21.31	-4.6059E-04	158.2	70.81	BNA2_(2)_335_337_L_0	186.6	102.7	UL-RL	3.4486E+04	-11.23	56.22
1.000	1.000	106.6	0.000	0.000	BNA2_(2)_335_337_L_0	190.8	104.7	UL-RL	3.4486E+04	-11.43	58.09
50 D	22.12	-4.2937E-04	160.4	72.96	BNA2_(2)_335_337_L_0	193.0	105.7	UL-RL	3.4486E+04	-11.63	60.96
1.000	1.000	110.6	0.000	0.000	BNA2_(2)_335_337_L_0	197.3	107.8	UL-RL	3.4486E+04	-12.03	62.83
51 D	22.91	-4.0030E-04	162.7	75.05	BNA2_(2)_335_337_L_0	201.7	109.9	UL-RL	3.4486E+04	-12.23	64.60
1.000	1.000	114.6	0.000	0.000	BNA2_(2)_335_337_L_0	205.9	111.9	UL-RL	3.4486E+04	-12.43	66.47
52 D	23.70	-3.7326E-04	164.7	77.08	BNA2_(2)_335_337_L_0	208.1	113.0	UL-RL	3.4486E+04	-12.63	68.34
1.000	1.000	118.5	0.000	0.000	BNA2_(2)_335_337_L_0	212.3	115.0	UL-RL	3.4486E+04	-12.83	70.21
53 D	24.47	-3.4814E-04	166.9	79.05	BNA2_(2)_335_337_L_0	216.6	117.0	UL-RL	3.4486E+04	-13.03	72.08
1.000	1.000	122.3	0.000	0.000	BNA2_(2)_335_337_L_0	220.9	118.9	UL-RL	3.4486E+04	-13.23	73.95
54 D	25.23	-3.2483E-04	169.2	80.97	BNA2_(2)_335_337_L_0	225.2	120.7	UL-RL	3.4486E+04	-13.43	75.82
1.000	1.000	126.1	0.000	0.000	BNA2_(2)_335_337_L_0	229.4	122.7	UL-RL	3.4486E+04	-13.63	77.69
55 D	25.98	-3.0320E-04	171.4	82.83	BNA2_(2)_335_337_L_0	233.7	124.6	UL-RL	3.4486E+04	-13.83	79.56
1.000	1.000	129.9	0.000	0.000	BNA2_(2)_335_337_L_0	238.0	126.5	UL-RL	3.4486E+04	-14.03	81.43
56 D	26.72	-2.8315E-04	173.4	84.65	BNA2_(2)_335_337_L_0	242.3	128.4	UL-RL	3.4486E+04	-14.23	83.30
1.000	1.000	133.6	0.000	0.000	BNA2_(2)_335_337_L_0	246.6	130.3	UL-RL	3.4486E+04	-14.43	85.17
57 D	27.45	-2.6453E-04	175.7	86.42	BNA2_(2)_335_337_L_0	250.9	132.2	UL-RL	3.4486E+04	-14.63	86.04
1.000	1.000	137.2	0.000	0.000	BNA2_(2)_335_337_L_0	255.2	134.1	UL-RL	3.4486E+04	-14.83	87.91
58 D	28.17	-2.4724E-04	177.9	88.15	BNA2_(2)_335_337_L_0	259.5	136.0	UL-RL	3.4486E+04	-15.03	89.78
1.000	1.000	140.8	0.000	0.000	BNA2_(2)_335_337_L_0	263.8	137.9	UL-RL	3.4486E+04	-15.23	91.65
59 D	28.88	-2.3114E-04	180.1	89.85	BNA2_(2)_335_337_L_0	268.1	139.8	UL-RL	3.4486E+04	-15.43	93.52
1.000	1.000	144.4	0.000	0.000	BNA2_(2)_335_337_L_0	272.4	141.7	UL-RL	3.4486E+04	-15.63	95.39
60 D	29.59	-2.1614E-04	182.1	91.51	BNA2_(2)_335_337_L_0	276.7	143.6	UL-RL	3.4486E+04	-15.83	97.26
1.000	1.000	148.0	0.000	0.000	BNA2_(2)_335_337_L_0	281.0	145.5	UL-RL	3.4486E+04	-16.03	99.13
61 D	30.29	-2.0210E-04	184.4	93.13	BNA2_(2)_335_337_L_0	285.3	147.4	UL-RL	3.4486E+04	-16.23	100.00
1.000	1.000	151.5	0.000	0.000	BNA2_(2)_335_337_L_0	289.6	149.3	UL-RL	3.4486E+04	-16.43	101.87
62 D	30.99	-1.8891E-04	186.6	94.73	BNA2_(2)_335_337_L_0	293.9	151.2	UL-RL	3.4486E+04	-16.63	103.74
1.000	1.000	155.0	0.000	0.000	BNA2_(2)_335_337_L_0	298.2	153.1	UL-RL	3.4486E+04	-16.83	105.61
63 D	31.68	-1.7648E-04	188.6	96.31	BNA2_(2)_335_337_L_0	302.5	155.0	UL-RL	3.4486E+04	-17.03	107.48
1.000	1.000	158.4	0.000	0.000	BNA2_(2)_335_337_L_0	306.8	156.9	UL-RL	3.4486E+04	-17.23	109.35
64 D	32.37	-1.6470E-04	190.8	97.86	BNA2_(2)_335_337_L_0	311.1	158.8	UL-RL	3.4486E+04	-17.43	111.22
1.000	1.000	161.9	0.000	0.000	BNA2_(2)_335_337_L_0	315.4	160.7	UL-RL	3.4486E+04	-17.63	113.09
65 D	33.05	-1.5344E-04	193.0	99.40	BNA2_(2)_335_337_L_0	319.7	162.6	UL-RL	3.4486E+04	-17.83	114.96
1.000	1.000	165.3	0.000	0.000	BNA2_(2)_335_337_L_0	324.0	164.5	UL-RL	3.4486E+04	-18.03	116.83
66 D	33.73	-1.4269E-04	195.2	100.9	BNA2_(2)_335_337_L_0	328.3	166.4	UL-RL	3.4486E+04	-18.23	118.70
1.000	1.000	168.7	0.000	0.000	BNA2_(2)_335_337_L_0	332.6	168.3	UL-RL	3.4486E+04	-18.43	120.57
67 D	34.41	-1.3230E-04	197.3	102.4	BNA2_(2)_335_337_L_0	336.9	170.2	UL-RL	3.4486E+04	-18.63	122.44
1.000	1.000	172.1	0.000	0.000	BNA2_(2)_335_337_L_0	341.2	172.1	UL-RL	3.4486E+04	-18.83	124.31
68 D	35.09	-1.2221E-04	199.5	103.9	BNA2_(2)_335_337_L_0	345.5	173.9	UL-RL	3.4486E+04	-19.03	126.18
1.000	1.000	175.4	0.000	0.000	BNA2_(2)_335_337_L_0	349.8	175.8	UL-RL	3.4486E+04	-19.23	128.05
69 D	35.76	-1.1235E-04	201.7	105.4	BNA2_(2)_335_337_L_0	354.1	177.7	UL-RL	3.4486E+04	-19.43	131.92
1.000	1.000	178.8	0.000	0.000	BNA2_(2)_335_337_L_0	358.4	179.6	UL-RL	3.4486E+04	-19.63	133.79
70 D	36.44	-1.0267E-04	203.9	106.9	BNA2_(2)_335_337_L_0	362.7	181.5	UL-RL	3.4486E+04	-19.83	135.66
1.000	1.000	182.2	0.000	0.000	BNA2_(2)_335_337_L_0	367.0	183.4	UL-RL	3.4486E+04	-20.03	137.53
71 D	37.11	-9.3110E-05	205.9	108.4	BNA2_(2)_335_337_L_0	371.3	185.3	UL-RL	3.4486E+04	-20.23	139.40
1.000	1.000	185.6	0.000	0.000	BNA2_(2)_335_337_L_0	375.6	187.2	UL-RL	3.4486E+04	-20.43	141.27
72 D	37.78	-8.3626E-05	208.1	109.9	BNA2_(2)_335_337_L_0	379.9	189.1	UL-RL	3.4486E+04	-20.63	143.14
1.000	1.000	188.9	0.000	0.000	BNA2_(2)_335_337_L_0	384.2	191.0	UL-RL	3.4486E+04	-20.83	144.01
73 D	38.45	-7.4187E-05	210.3	111.3	BNA2_(2)_335_337_L_0	388.5	192.9	UL-RL	3.4486E+04	-21.03	145.88
1.000	1.000	192.2	0.000	0.000	BNA2_(2)_335_337_L_0	392.8	194.8	UL-RL	3.4486E+04	-21.23	147.75
74 D	36.18	-6.4767E-05	212.3	112.8	BNA2_(2)_335_337_L_0	397.1	196.7	UL-RL	3.4486E+04	-21.43	149.62
1.000	1.000	195.6	0.000	0.000	BNA2_(2)_335_337_L_0	401.4	198.6	UL-RL	3.4486E+04	-21.63	151.49
75 D	16.86	-5.6764									

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:17:07
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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

O\_R  
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
15	0.000	--	--	--	--	--	REMOVED	--	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
16	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
17	0.000	--	--	--	--	--	REMOVED	--	-2.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
18	0.000	--	--	--	--	--	REMOVED	--	-2.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
19	0.000	--	--	--	--	--	REMOVED	--	-2.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
20	0.000	--	--	--	--	--	REMOVED	--	-3.130	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
21	0.000	--	--	--	--	--	REMOVED	--	-3.330	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
22	0.000	--	--	--	--	--	REMOVED	--	-3.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
23	0.000	--	--	--	--	--	REMOVED	--	-3.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
24	0.000	--	--	--	--	--	REMOVED	--	-3.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
25	0.000	--	--	--	--	--	REMOVED	--	-4.130	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
26	0.000	--	--	--	--	--	REMOVED	--	-4.330	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
27	0.000	--	--	--	--	--	REMOVED	--	-4.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
28	0.000	--	--	--	--	--	REMOVED	--	-4.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
29	0.000	--	--	--	--	--	REMOVED	--	-4.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
30	0.000	--	--	--	--	--	REMOVED	--	-5.030	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
31	0.000	--	--	--	--	--	REMOVED	--	-5.230	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
32	0.000	--	--	--	--	--	REMOVED	--	-5.430	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
33	0.000	--	--	--	--	--	REMOVED	--	-5.630	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					

34	0.000	--	--	--	--	--	REMOVED	--	-5.830	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
35	0.000	--	--	--	--	--	REMOVED	--	-6.030	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
36 D	16.88	1.0869E-03	1.882	82.27	106.8	82.27	V-C	1.6188E+04	-6.230	2.118
1.000	1.000	84.38	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	17.27	1.0244E-03	3.764	82.10	108.8	82.10	V-C	1.6188E+04	-6.430	4.236
1.000	1.000	86.33	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	17.67	9.6404E-04	5.646	81.98	110.8	81.98	V-C	1.6188E+04	-6.630	6.354
1.000	1.000	88.33	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	18.08	9.0587E-04	7.528	81.92	112.8	81.92	V-C	1.6188E+04	-6.830	8.472
1.000	1.000	90.39	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	18.50	8.5006E-04	9.410	81.92	114.8	81.92	V-C	1.6188E+04	-7.030	10.59
1.000	1.000	92.51	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	18.94	7.9670E-04	11.29	81.97	116.8	81.97	V-C	1.6188E+04	-7.230	12.71
1.000	1.000	94.68	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	19.38	7.4586E-04	13.17	82.08	118.8	82.08	V-C	1.6188E+04	-7.430	14.83
1.000	1.000	96.91	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	19.84	6.9757E-04	15.06	82.25	120.8	82.25	V-C	1.6188E+04	-7.630	16.94
1.000	1.000	99.19	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	20.31	6.5184E-04	16.94	82.47	122.8	82.47	V-C	1.6188E+04	-7.830	19.06
1.000	1.000	101.5	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	20.79	6.0866E-04	18.82	82.75	124.8	82.75	V-C	1.6188E+04	-8.030	21.18
1.000	1.000	103.9	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	21.28	5.6801E-04	20.70	83.08	126.8	83.08	V-C	1.6188E+04	-8.230	23.30
1.000	1.000	106.4	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	21.78	5.2982E-04	22.58	83.46	128.8	83.46	V-C	1.6188E+04	-8.430	25.42
1.000	1.000	108.9	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	22.28	4.9404E-04	24.47	83.89	130.8	83.89	V-C	1.6188E+04	-8.630	27.53
1.000	1.000	111.4	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	22.80	4.6059E-04	26.35	84.37	132.8	84.37	V-C	1.6188E+04	-8.830	29.65
1.000	1.000	114.0	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	23.33	4.2937E-04	28.23	84.89	134.8	84.89	V-C	1.6188E+04	-9.030	31.77
1.000	1.000	116.7	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	23.87	4.0030E-04	30.11	85.45	136.8	85.45	V-C	1.6188E+04	-9.230	33.89
1.000	1.000	119.3	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	24.41	3.7326E-04	31.99	86.05	138.8	86.05	V-C	1.6188E+04	-9.430	36.01
1.000	1.000	122.1	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	24.96	3.4814E-04	33.87	86.69	140.8	86.69	V-C	1.6188E+04	-9.630	38.13
1.000	1.000	124.8	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	25.52	3.2483E-04	35.76	87.37	142.8	87.37	V-C	1.6188E+04	-9.830	40.24
1.000	1.000	127.6	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	26.09	3.0320E-04	37.64	88.07	144.8	88.07	UL-RL	2.5901E+04	-10.03	42.36
1.000	1.000	130.4	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	26.66	2.8315E-04	39.52	88.81	146.8	88.81	UL-RL	2.5901E+04	-10.23	44.48
1.000	1.000	133.3	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	27.23	2.6453E-04	41.40	89.57	148.8	89.58	UL-RL	2.5901E+04	-10.43	46.60
1.000	1.000	136.2	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	27.81	2.4724E-04	43.28	90.35	150.8	90.37	UL-RL	2.5901E+04	-10.63	48.72
1.000	1.000	139.1	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	28.40	2.3114E-04	45.17	91.16	152.8	91.18	UL-RL	2.5901E+04	-10.83	50.83
1.000	1.000	142.0	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	28.99	2.1614E-04	47.05	91.99	154.8	92.01	UL-RL	2.5901E+04	-11.03	52.95
1.000	1.000	144.9	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	29.58	2.0210E-04	48.93	92.83	156.8	92.85	UL-RL	2.5901E+04	-11.23	55.07
1.000	1.000	147.9	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	30.18	1.8891E-04	50.81	93.69	158.8	93.72	UL-RL	2.5901E+04	-11.43	57.19
1.000	1.000	150.9	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	30.77	1.7648E-04	52.69	94.56	160.8	94.59	UL-RL	2.5901E+04	-11.63	59.31
1.000	1.000	153.9	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	31.37	1.6470E-04	54.58	95.45	162.8	95.48	UL-RL	2.5901E+04	-11.83	61.42
1.000	1.000	156.9	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	31.98	1.5344E-04	56.46	96.35	164.8	96.38	UL-RL	2.5901E+04	-12.03	63.54
1.000	1.000	159.9	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	32.58	1.4269E-04	58.34	97.25	166.8	97.28	UL-RL	2.5901E+04	-12.23	65.66
1.000	1.000	162.9	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	33.19	1.3230E-04	60.22	98.16	168.8	98.19	UL-RL	2.5901E+04	-12.43	67.78
1.000	1.000	165.9	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	33.79	1.2221E-04	62.10	99.08	170.8	99.11	UL-RL	2.5901E+04	-12.63	69.90
1.000	1.000	169.0	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	34.40	1.1235E-04	63.99	100.0	172.8	100.0	UL-RL	2.5901E+04	-12.83	72.01
1.000	1.000	172.0	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	35.01	1.0267E-04	65.87	100.9	174.8	101.0	UL-RL	2.5901E+04	-13.03	74.13
1.000	1.000	175.1	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	35.62	9.3110E-05	67.75	101.8	176.8	101.9	UL-RL	2.5901E+04	-13.23	76.25
1.000	1.000	178.1	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	36.22	8.3626E-05	69.63	102.7	178.8	102.9	UL-RL	2.5901E+04	-13.43	78.37
1.000	1.000	181.1	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	36.83	7.4187E-05	71.51	103.7	180.8	103.8	UL-RL	2.5901E+04	-13.63	80.49
1.000	1.000	184.1	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	34.62	6.4767E-05	73.40	104.6	182.8	104.8	UL-RL	2.5901E+04	-13.83	82.60
1.000	1.000	187.2	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	16.13	5.6764E-05	75.00	105.3	184.5	105.6	UL-RL	2.5901E+04	-14.00	84.40
1.000	1.000	189.7	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:17:07 |  
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## 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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 74  
C U R R E N T T I M E I S 4.0000

## WALL2D ELEMENT

EL	TA	TB	MA	MB
1	7.88347E-10	-7.88347E-10	7.91234E-11	-1.05166E-10
2	-4.87631E-10	4.87631E-10	1.35040E-10	-3.16714E-10
3	8.33104E-02	-8.33104E-02	2.44168E-10	1.66621E-02
4	0.39713	-0.39713	-1.66621E-02	9.6080E-02
5	1.1614	-1.1614	-9.6080E-02	0.32836
6	2.3793	-2.3793	-0.32836	0.80423
7	4.0927	-4.0927	-0.80423	1.6228
8	6.3105	-6.3105	-1.6228	2.8849
9	9.0353	-9.0353	-2.8849	4.6919
10	12.269	-12.269	-4.6919	7.1458
11	16.014	-16.014	-7.1458	10.349
12	20.471	-20.471	-10.349	14.443
13	25.690	-25.690	-14.443	19.581
14	31.662	-31.662	-19.581	25.913
15	38.381	-38.381	-25.913	33.590
16	42.670	-42.670	-33.590	34.870
17	-34.938	34.938	-34.870	27.882
18	-26.636	26.636	-27.882	22.555
19	-17.609	17.609	-22.555	19.033
20	-7.8589	7.8589	-19.033	17.461
21	2.6080	-2.6080	-17.461	17.983
22	2.8053	-2.8053	-17.983	18.544
23	3.3349	-3.3349	-18.544	19.211
24	4.1578	-4.1578	-19.211	20.043
25	5.3101	-5.3101	-20.043	21.105
26	6.7897	-6.7897	-21.105	22.463
27	8.5947	-8.5947	-22.463	24.181
28	10.692	-10.692	-24.181	26.320
29	12.508	-12.508	-26.320	27.571
30	14.434	-14.434	-27.571	30.458
31	17.632	-17.632	-30.458	33.984
32	22.048	-22.048	-33.984	38.394
33	27.663	-27.663	-38.394	43.926
34	34.458	-34.458	-43.926	50.818
35	42.410	-42.410	-50.818	59.300
36	34.622	-34.622	-59.300	66.224
37	27.559	-27.559	-66.224	71.736
38	21.187	-21.187	-71.736	75.973
39	15.469	-15.469	-75.973	79.067
40	10.358	-10.358	-79.067	81.139
41	5.7782	-5.7782	-81.139	82.294
42	1.6880	-1.6880	-82.294	82.632
43	-1.9584	1.9584	-82.632	82.240
44	-5.1855	5.1855	-82.240	81.203
45	-8.0179	8.0179	-81.203	79.600
46	-10.480	10.480	-79.600	77.504
47	-12.595	12.595	-77.504	74.985
48	-14.386	14.386	-74.985	72.108
49	-15.877	15.877	-72.108	68.932
50	-17.089	17.089	-68.932	65.514
51	-18.043	18.043	-65.514	61.906
52	-18.758	18.758	-61.906	58.154
53	-19.255	19.255	-58.154	54.303
54	-19.550	19.550	-54.303	50.393
55	-19.660	19.660	-50.393	46.461
56	-19.601	19.601	-46.461	42.541
57	-19.387	19.387	-42.541	38.664
58	-19.031	19.031	-38.664	34.857
59	-18.544	18.544	-34.857	31.149
60	-17.939	17.939	-31.149	27.561
61	-17.224	17.224	-27.561	24.116
62	-16.408	16.408	-24.116	20.834
63	-15.500	15.500	-20.834	17.734
64	-14.504	14.504	-17.734	14.834
65	-13.428	13.428	-14.834	12.148
66	-12.275	12.275	-12.148	9.6931
67	-11.049	11.049	-9.6931	7.4832
68	-9.7545	9.7545	-7.4832	5.5324
69	-8.3924	8.3924	-5.5324	3.8539
70	-6.9651	6.9651	-3.8539	2.4609

71	-5.4736	5.4736	-2.4609	1.3661
72	-3.9152	3.9152	-1.3661	0.58309
73	-2.2926	2.2926	-0.58309	0.12457
74	-0.73271	0.73271	-0.12457	9.17377E-13

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:17:07
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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\_341 :  
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1  
CURRENT TIME    IS    4.0000

POST-TENSION 2D-BOUNDARY ELEMENT

	EL	FORCE	d0	EDISPL	pl. eps	K	-ve limit	+ve limit	
ANCHOR	1	87.220	-6.00695E-04	8.25637E-04	0.0000	2727.4	0.0000	0.0000	ELASTIC ORIGINAL YOUNG MODULUS

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:17:07 |  
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New Project
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## 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 .      5

Tieback\_342 :  
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

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

```

ITER      0 RNORM = 0.000      RMNORM= 0.000
          RINORM=0.1159E+06 RIMNOR=0.2642E+06
          RENORM= 6132.      REMNOR=0.2175E-16 RATIO =0.2300      TOLER =0.1000E-03 NOT CONVERGED
          RFMAX = 81.96     RMMAX = 82.63
          RTSMAL=0.1000E-03 RMSMAL=0.1000E-03
          RDT =0.1159E+06 RDR =0.2642E+06
          RATIOT=0.2300     RATIOR= 0.000
          MAX UN=0.2233E-06 IEQ= 33 NODE      17 DOF   1 Y-DISPL.F
          MIN UN=-78.30     IEQ= 59 NODE      30 DOF   1 Y-DISPL.F
NO. OF CONTACT CONSTRAINT VIOLATIONS      0

```

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ITER    2 RNORM = 0.000      RMNORM= 0.000
        RINORM=0.1159E+06 RIMNOR=0.2642E+06
        RENORM=0.7007E-01 REMNOR=0.1115E-17 RATIO =0.7774E-03 TOLER =0.1000E-03 NOT CONVERGED
        RFMAX = 81.96      RMMAX = 82.63
        RTSMAL=0.1000E-03 RMSMAL=0.1000E-03
        RDT = 0.1159E+06 RDR = 0.2642E+06
        RATIOT=0.7774E-03 RATIOR= 0.000
        MAX UN=0.9873E-01 IEQ= 145 NODE 73 DOF 1 Y-DISPL.F
        MIN UN=-1.4286E-08 IEQ= 31 NODE 16 DOF 1 Y-DISPL.F
        NO. OF CONTACT CONSTRAINT VIOLATIONS 0

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ITER      3 RNORMAL = 0.000      RMNORM= 0.000
          RINORM=0.1159E+06 RIMNOR=0.2642E+06
          RENORM=0.1403E-04 REMNOR=0.7407E-17 RATIO =0.1100E-04 TOLER =0.1000E-03      CONVERGED !
          RFMAX = 81.96      RMMAX = 82.63
          RTSMAL=0.1000E-03 RMSMAL=0.1000E-03
          RDT   =0.1159E+06 RDR   =0.2642E+06
          RATIOT=0.1100E-04 RATIOR= 0.000
          MAX UN=0.3746E-02 IEQ= 119 NODE      60 DOF    1 Y-DISPL.F
          MIN UN=-0.1314E-06 IEQ= 31 NODE      16 DOF    1 Y-DISPL.F
          NO. OF CONTACT CONSTRAINT VIOLATIONS      0

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:17:07
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New Project
SOLUTION REACHED USING      3 ITERATIONS ON    40

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

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

      Y-DISPL. F          X-ROT. F
      (02)           (04)       (
1   3.2003160E-03 -4.1234210E-04
2   3.1178478E-03 -4.1233861E-04
3   3.0353815E-03 -4.1232118E-04
4   2.9529213E-03 -4.1227458E-04
5   2.8704750E-03 -4.1217872E-04
6   2.7880552E-03 -4.1200294E-04
7   2.7056821E-03 -4.1170254E-04
8   2.6233864E-03 -4.1121812E-04
9   2.5412121E-03 -4.1047471E-04
10  2.4592198E-03 -4.0938170E-04
11  2.3774898E-03 -4.0783267E-04
12  2.2961253E-03 -4.0570539E-04
13  2.2152556E-03 -4.0285865E-04
14  2.1350407E-03 -3.9912841E-04
15  2.0556757E-03 -3.9432707E-04
16  1.9773954E-03 -3.8824381E-04
17  1.9657635E-03 -3.8720957E-04
18  1.8889948E-03 -3.8061670E-04
19  1.8134703E-03 -3.7472229E-04
20  1.7390781E-03 -3.6924366E-04
21  1.6657654E-03 -3.6387567E-04
22  1.5935423E-03 -3.5829096E-04
23  1.5224782E-03 -3.5226892E-04
24  1.4526711E-03 -3.4570216E-04
25  1.3842414E-03 -3.3847462E-04
26  1.3173336E-03 -3.3046174E-04
27  1.2521179E-03 -3.2153019E-04
28  1.1887922E-03 -3.1153804E-04
29  1.1275837E-03 -3.0033568E-04
30  1.0978518E-03 -2.9423673E-04
31  1.0402294E-03 -2.8213793E-04
32  9.8494259E-04 -2.7085031E-04
33  9.3184844E-04 -2.6017527E-04
34  8.8084742E-04 -2.4987991E-04
35  8.3188920E-04 -2.3969757E-04
36  7.8498081E-04 -2.2932902E-04
37  7.4017623E-04 -2.1868087E-04
38  6.9751905E-04 -2.0787383E-04
39  6.5703046E-04 -1.9701333E-04
40  6.1871142E-04 -1.8619039E-04
41  5.8254659E-04 -1.7548318E-04
42  5.4850597E-04 -1.6495867E-04
43  5.1654711E-04 -1.5467432E-04
44  4.8661695E-04 -1.4467932E-04
45  4.5865331E-04 -1.3501549E-04
46  4.3258634E-04 -1.2571782E-04
47  4.0833997E-04 -1.1681503E-04
48  3.8583260E-04 -1.0832994E-04
49  3.6497897E-04 -1.0028019E-04
50  3.4569066E-04 -9.2678521E-05
51  3.2787713E-04 -8.5533285E-05
52  3.1144670E-04 -7.8848868E-05
53  2.9630690E-04 -7.2625954E-05
54  2.8236572E-04 -6.6862087E-05
55  2.6953158E-04 -6.1551774E-05
56  2.5771503E-04 -5.6687243E-05
57  2.4682766E-04 -5.2258093E-05
58  2.3678359E-04 -4.8251982E-05
59  2.2749960E-04 -4.4654764E-05
60  2.1889589E-04 -4.1450856E-05
61  2.1089464E-04 -3.8622811E-05
62  2.0342293E-04 -3.6152222E-05
63  1.9641126E-04 -3.4019046E-05
64  1.8979424E-04 -3.2201982E-05
65  1.8351088E-04 -3.0678609E-05
66  1.7750478E-04 -2.9425498E-05
67  1.7172429E-04 -2.8418304E-05
68  1.6612274E-04 -2.7631849E-05
69  1.6065856E-04 -2.7040186E-05
70  1.5529546E-04 -2.6616644E-05
71  1.5000252E-04 -2.6333871E-05
72  1.4475439E-04 -2.6163857E-05
73  1.3953137E-04 -2.6077981E-05
74  1.3431954E-04 -2.6047086E-05

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75 1.2989179E-04 -2.6042516E-05

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
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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 75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.2245	-3.2003E-03	0.000	2.245	0.000	5.473	UL-RL	4704.	0.5000	0.000	
1.000	1.000	2.245	0.000	0.000	FRANA_334_8_L_0						
2 D	0.4486	-3.1178E-03	4.002	2.243	4.002	6.735	UL-RL	4704.	0.3000	0.000	
1.000	1.000	2.243	0.000	0.000	FRANA_334_8_L_0						
3 D	0.5316	-3.0354E-03	8.013	2.658	8.013	7.989	UL-RL	4704.	0.1000	0.000	
1.000	1.000	2.658	0.000	0.000	FRANA_334_8_L_0						
4 D	0.7618	-2.9529E-03	12.04	3.809	12.04	11.25	UL-RL	4704.	-0.1000	0.000	
1.000	1.000	3.809	0.000	0.000	FRANA_334_8_L_0						
5 D	1.212	-2.8705E-03	16.10	6.059	16.10	14.91	UL-RL	4704.	-0.3000	0.000	
1.000	1.000	6.059	0.000	0.000	FRANA_334_8_L_0						
6 D	1.665	-2.7881E-03	20.18	8.326	20.18	18.52	UL-RL	4704.	-0.5000	0.000	
1.000	1.000	8.326	0.000	0.000	FRANA_334_8_L_0						
7 D	2.160	-2.7057E-03	24.29	10.80	24.29	22.06	UL-RL	4704.	-0.7000	0.000	
1.000	1.000	10.80	0.000	0.000	FRANA_334_8_L_0						
8 D	2.664	-2.6234E-03	28.42	13.32	28.42	25.53	UL-RL	4704.	-0.9000	0.000	
1.000	1.000	13.32	0.000	0.000	FRANA_334_8_L_0						
9 D	3.171	-2.5412E-03	32.58	15.85	32.58	28.94	UL-RL	4704.	-1.100	0.000	
1.000	1.000	15.85	0.000	0.000	FRANA_334_8_L_0						
10 D	3.679	-2.4592E-03	36.75	18.40	36.75	32.30	UL-RL	4704.	-1.300	0.000	
1.000	1.000	18.40	0.000	0.000	FRANA_334_8_L_0						
11 D	4.190	-2.3775E-03	40.94	20.95	40.94	35.59	UL-RL	4704.	-1.500	0.000	
1.000	1.000	20.95	0.000	0.000	FRANA_334_8_L_0						
12 D	4.900	-2.2961E-03	45.14	24.50	45.14	38.84	UL-RL	4704.	-1.700	0.000	
1.000	1.000	24.50	0.000	0.000	FRANA_334_8_L_0						
13 D	5.661	-2.2153E-03	49.34	28.31	49.34	42.05	UL-RL	4704.	-1.900	0.000	
1.000	1.000	28.31	0.000	0.000	FRANA_334_8_L_0						
14 D	6.414	-2.1350E-03	53.54	32.07	53.54	45.22	UL-RL	4704.	-2.100	0.000	
1.000	1.000	32.07	0.000	0.000	FRANA_334_8_L_0						
15 D	7.159	-2.0557E-03	57.74	35.80	57.74	48.37	UL-RL	4704.	-2.300	0.000	
1.000	1.000	35.80	0.000	0.000	FRANA_334_8_L_0						
16 D	4.541	-1.9774E-03	61.94	39.49	61.94	51.48	UL-RL	4704.	-2.500	0.000	
1.000	1.000	39.49	0.000	0.000	FRANA_334_8_L_0						
17 D	4.604	-1.9658E-03	62.57	40.04	62.57	51.95	UL-RL	4704.	-2.530	0.000	
1.000	1.000	40.04	0.000	0.000	FRANA_334_8_L_0						
18 D	8.737	-1.8890E-03	66.77	43.69	66.77	55.04	UL-RL	4704.	-2.730	0.000	
1.000	1.000	43.69	0.000	0.000	FRANA_334_8_L_0						
19 D	9.462	-1.8135E-03	71.28	47.31	71.28	58.12	UL-RL	4704.	-2.930	0.000	
1.000	1.000	47.31	0.000	0.000	FRANA_334_8_L_0						
20 D	10.18	-1.7391E-03	75.80	50.90	75.80	61.18	UL-RL	4704.	-3.130	0.000	
1.000	1.000	50.90	0.000	0.000	FRANA_334_8_L_0						
21 D	10.89	-1.6658E-03	79.71	54.47	79.71	64.22	UL-RL	4704.	-3.330	0.000	
1.000	1.000	54.47	0.000	0.000	FRANA_334_8_L_0						
22 D	3.306	-1.5935E-03	84.16	16.53	84.16	49.73	UL-RL	3.4486E+04	-3.530	0.000	
1.000	1.000	16.53	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	3.607	-1.5225E-03	88.58	18.04	88.58	50.83	UL-RL	3.4486E+04	-3.730	0.000	
1.000	1.000	18.04	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	3.865	-1.4527E-03	92.48	19.32	92.48	51.91	UL-RL	3.4486E+04	-3.930	0.000	
1.000	1.000	19.32	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	4.153	-1.3842E-03	96.86	20.76	96.86	52.99	UL-RL	3.4486E+04	-4.130	0.000	
1.000	1.000	20.76	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	4.432	-1.3173E-03	101.2	22.16	101.2	54.06	UL-RL	3.4486E+04	-4.330	0.000	
1.000	1.000	22.16	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	4.703	-1.2521E-03	105.5	23.51	105.5	55.12	UL-RL	3.4486E+04	-4.530	0.000	
1.000	1.000	23.51	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	4.933	-1.1888E-03	109.4	24.66	109.4	56.19	UL-RL	3.4486E+04	-4.730	0.000	
1.000	1.000	24.66	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	3.888	-1.1276E-03	113.7	25.92	113.7	57.24	UL-RL	3.4486E+04	-4.930	0.000	
1.000	1.000	25.92	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	3.968	-1.0979E-03	115.7	26.45	115.7	57.77	UL-RL	3.4486E+04	-5.030	0.000	
1.000	1.000	26.45	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	5.832	-1.0402E-03	118.1	27.28	118.1	58.83	UL-RL	3.4486E+04	-5.230	1.882	
1.000	1.000	29.16	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	6.953	-9.8494E-04	120.5	31.00	120.5	59.88	UL-RL	3.4486E+04	-5.430	3.764	
1.000	1.000	34.76	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	8.046	-9.3185E-04	122.8	34.58	122.8	61.90	UL-RL	3.4486E+04	-5.630	5.646	
1.000	1.000	40.23	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	9.113	-8.8085E-04	124.8	38.04	124.8	64.54	UL-RL	3.4486E+04	-5.830	7.528
1.000	1.000	45.56	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	10.15	-8.3189E-04	127.2	41.36	127.2	67.03	UL-RL	3.4486E+04	-6.030	9.410
1.000	1.000	50.77	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	11.17	-7.8498E-04	129.5	44.57	129.5	69.39	UL-RL	3.4486E+04	-6.230	11.29
1.000	1.000	55.86	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	12.16	-7.4018E-04	131.8	47.65	131.8	71.62	UL-RL	3.4486E+04	-6.430	13.17
1.000	1.000	60.82	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	13.13	-6.9752E-04	133.9	50.61	133.9	73.72	UL-RL	3.4486E+04	-6.630	15.06
1.000	1.000	65.66	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	14.08	-6.5703E-04	136.2	53.45	136.2	75.71	UL-RL	3.4486E+04	-6.830	16.94
1.000	1.000	70.38	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	14.99	-6.1871E-04	138.5	56.11	138.5	77.53	UL-RL	3.4486E+04	-7.030	18.82
1.000	1.000	74.93	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	15.83	-5.8255E-04	140.5	58.46	140.5	79.06	UL-RL	3.4486E+04	-7.230	20.70
1.000	1.000	79.16	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	16.65	-5.4851E-04	142.8	60.68	142.8	80.46	UL-RL	3.4486E+04	-7.430	22.58
1.000	1.000	83.26	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	17.44	-5.1655E-04	145.1	62.74	145.1	81.73	UL-RL	3.4486E+04	-7.630	24.47
1.000	1.000	87.20	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	18.22	-4.8662E-04	147.3	64.75	147.3	82.96	UL-RL	3.4486E+04	-7.830	26.35
1.000	1.000	91.10	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	18.99	-4.5865E-04	149.4	66.71	149.4	84.18	UL-RL	3.4486E+04	-8.030	28.23
1.000	1.000	94.94	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	19.75	-4.3259E-04	151.6	68.63	151.6	85.37	UL-RL	3.4486E+04	-8.230	30.11
1.000	1.000	98.74	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	20.50	-4.0834E-04	153.9	70.50	153.9	86.53	UL-RL	3.4486E+04	-8.430	31.99
1.000	1.000	102.5	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	21.24	-3.8583E-04	156.2	72.32	156.2	87.68	UL-RL	3.4486E+04	-8.630	33.87
1.000	1.000	106.2	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	21.97	-3.6498E-04	158.2	74.11	158.2	88.82	UL-RL	3.4486E+04	-8.830	35.76
1.000	1.000	109.9	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	22.70	-3.4569E-04	160.4	75.85	160.4	89.93	UL-RL	3.4486E+04	-9.030	37.64
1.000	1.000	113.5	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	23.41	-3.2788E-04	162.7	77.55	162.7	91.04	UL-RL	3.4486E+04	-9.230	39.52
1.000	1.000	117.1	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	24.12	-3.1145E-04	164.7	79.21	164.7	92.13	UL-RL	3.4486E+04	-9.430	41.40
1.000	1.000	120.6	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	24.82	-2.9631E-04	166.9	80.84	166.9	93.21	UL-RL	3.4486E+04	-9.630	43.28
1.000	1.000	124.1	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	25.52	-2.8237E-04	169.2	82.43	169.2	94.28	UL-RL	3.4486E+04	-9.830	45.17
1.000	1.000	127.6	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	26.21	-2.6953E-04	171.4	84.00	171.4	95.35	UL-RL	3.4486E+04	-10.03	47.05
1.000	1.000	131.0	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	26.89	-2.5772E-04	173.4	85.53	173.4	96.40	UL-RL	3.4486E+04	-10.23	48.93
1.000	1.000	134.5	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	27.57	-2.4683E-04	175.7	87.03	175.7	97.46	UL-RL	3.4486E+04	-10.43	50.81
1.000	1.000	137.8	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	28.24	-2.3678E-04	177.9	88.51	177.9	98.50	UL-RL	3.4486E+04	-10.63	52.69
1.000	1.000	141.2	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	28.91	-2.2750E-04	180.1	89.97	180.1	99.54	UL-RL	3.4486E+04	-10.83	54.58
1.000	1.000	144.5	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	29.57	-2.1890E-04	182.1	91.41	182.1	100.6	UL-RL	3.4486E+04	-11.03	56.46
1.000	1.000	147.9	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	30.23	-2.1089E-04	184.4	92.83	184.4	101.6	UL-RL	3.4486E+04	-11.23	58.34
1.000	1.000	151.2	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	30.89	-2.0342E-04	186.6	94.23	186.6	102.7	UL-RL	3.4486E+04	-11.43	60.22
1.000	1.000	154.5	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	31.55	-1.9641E-04	188.6	95.62	188.6	103.7	UL-RL	3.4486E+04	-11.63	62.10
1.000	1.000	157.7	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	32.20	-1.8979E-04	190.8	97.00	190.8	104.7	UL-RL	3.4486E+04	-11.83	63.99
1.000	1.000	161.0	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	32.85	-1.8351E-04	193.0	98.37	193.0	105.7	UL-RL	3.4486E+04	-12.03	65.87
1.000	1.000	164.2	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	33.49	-1.7750E-04	195.2	99.72	195.2	106.8	UL-RL	3.4486E+04	-12.23	67.75
1.000	1.000	167.5	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	34.14	-1.7172E-04	197.3	101.1	197.3	107.8	UL-RL	3.4486E+04	-12.43	69.63
1.000	1.000	170.7	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	34.79	-1.6612E-04	199.5	102.4	199.5	108.8	UL-RL	3.4486E+04	-12.63	71.51
1.000	1.000	173.9	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	35.43	-1.6066E-04	201.7	103.8	201.7	109.9	UL-RL	3.4486E+04	-12.83	73.40
1.000	1.000	177.2	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	36.08	-1.5530E-04	203.9	105.1	203.9	110.9	UL-RL	3.4486E+04	-13.03	75.28
1.000	1.000	180.4	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	36.72	-1.5000E-04	205.9	106.4	205.9	111.9	UL-RL	3.4486E+04	-13.23	77.16
1.000	1.000	183.6	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	37.36	-1.4475E-04	208.1	107.8	208.1	112.9	UL-RL	3.4486E+04	-13.43	79.04
1.000	1.000	186.8	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	38.00	-1.3953E-04	210.3	109.1	210.3	114.0	UL-RL	3.4486E+04	-13.63	80.92
1.000	1.000	190.0	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	35.74	-1.3432E-04	212.3	110.4	212.3	115.0	UL-RL	3.4486E+04	-13.83	82.81
1.000	1.000	193.2	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	16.64	-1.2989E-04	214.2	111.4	214.2	115.7	UL-RL	3.4486E+04	-14.00	84.40
1.000	1.000	195.8	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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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

O\_R  
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
15	0.000	--	--	--	--	--	REMOVED	--	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
16	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
17	0.000	--	--	--	--	--	REMOVED	--	-2.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
18	0.000	--	--	--	--	--	REMOVED	--	-2.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
19	0.000	--	--	--	--	--	REMOVED	--	-2.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
20	0.000	--	--	--	--	--	REMOVED	--	-3.130	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
21	0.000	--	--	--	--	--	REMOVED	--	-3.330	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
22	0.000	--	--	--	--	--	REMOVED	--	-3.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
23	0.000	--	--	--	--	--	REMOVED	--	-3.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
24	0.000	--	--	--	--	--	REMOVED	--	-3.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
25	0.000	--	--	--	--	--	REMOVED	--	-4.130	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
26	0.000	--	--	--	--	--	REMOVED	--	-4.330	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
27	0.000	--	--	--	--	--	REMOVED	--	-4.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
28	0.000	--	--	--	--	--	REMOVED	--	-4.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
29	0.000	--	--	--	--	--	REMOVED	--	-4.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
30	0.000	--	--	--	--	--	REMOVED	--	-5.030	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
31	0.000	--	--	--	--	--	REMOVED	--	-5.230	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
32	0.000	--	--	--	--	--	REMOVED	--	-5.430	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
33	0.000	--	--	--	--	--	REMOVED	--	-5.630	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					

34	0.000	--	--	--	--	--	REMOVED	--	-5.830	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
35	0.000	--	--	--	--	--	REMOVED	--	-6.030	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
36 D	15.31	7.8498E-04	1.882	74.45	106.8	82.27	UL-RL	2.5901E+04	-6.230	2.118
1.000	1.000	76.57	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	15.79	7.4018E-04	3.764	74.73	108.8	82.10	UL-RL	2.5901E+04	-6.430	4.236
1.000	1.000	78.97	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	16.29	6.9752E-04	5.646	75.08	110.8	81.98	UL-RL	2.5901E+04	-6.630	6.354
1.000	1.000	81.43	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	16.79	6.5703E-04	7.528	75.47	112.8	81.92	UL-RL	2.5901E+04	-6.830	8.472
1.000	1.000	83.95	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	17.30	6.1871E-04	9.410	75.92	114.8	81.92	UL-RL	2.5901E+04	-7.030	10.59
1.000	1.000	86.51	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	17.83	5.8255E-04	11.29	76.42	116.8	81.97	UL-RL	2.5901E+04	-7.230	12.71
1.000	1.000	89.13	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	18.36	5.4851E-04	13.17	76.97	118.8	82.08	UL-RL	2.5901E+04	-7.430	14.83
1.000	1.000	91.79	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	18.90	5.1655E-04	15.06	77.56	120.8	82.25	UL-RL	2.5901E+04	-7.630	16.94
1.000	1.000	94.50	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	19.45	4.8662E-04	16.94	78.19	122.8	82.47	UL-RL	2.5901E+04	-7.830	19.06
1.000	1.000	97.25	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	20.01	4.5865E-04	18.82	78.86	124.8	82.75	UL-RL	2.5901E+04	-8.030	21.18
1.000	1.000	100.0	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	20.57	4.3259E-04	20.70	79.57	126.8	83.08	UL-RL	2.5901E+04	-8.230	23.30
1.000	1.000	102.9	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	21.15	4.0834E-04	22.58	80.31	128.8	83.46	UL-RL	2.5901E+04	-8.430	25.42
1.000	1.000	105.7	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	21.72	3.8583E-04	24.47	81.09	130.8	83.89	UL-RL	2.5901E+04	-8.630	27.53
1.000	1.000	108.6	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	22.31	3.6498E-04	26.35	81.89	132.8	84.37	UL-RL	2.5901E+04	-8.830	29.65
1.000	1.000	111.5	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	22.90	3.4569E-04	28.23	82.72	134.8	84.89	UL-RL	2.5901E+04	-9.030	31.77
1.000	1.000	114.5	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	23.49	3.2788E-04	30.11	83.58	136.8	85.45	UL-RL	2.5901E+04	-9.230	33.89
1.000	1.000	117.5	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	24.09	3.1145E-04	31.99	84.45	138.8	86.05	UL-RL	2.5901E+04	-9.430	36.01
1.000	1.000	120.5	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	24.70	2.9631E-04	33.87	85.35	140.8	86.69	UL-RL	2.5901E+04	-9.630	38.13
1.000	1.000	123.5	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	25.30	2.8237E-04	35.76	86.27	142.8	87.37	UL-RL	2.5901E+04	-9.830	40.24
1.000	1.000	126.5	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	25.91	2.6953E-04	37.64	87.20	144.8	88.07	UL-RL	2.5901E+04	-10.03	42.36
1.000	1.000	129.6	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	26.53	2.5772E-04	39.52	88.15	146.8	88.81	UL-RL	2.5901E+04	-10.23	44.48
1.000	1.000	132.6	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	27.14	2.4683E-04	41.40	89.11	148.8	89.58	UL-RL	2.5901E+04	-10.43	46.60
1.000	1.000	135.7	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	27.76	2.3678E-04	43.28	90.08	150.8	90.37	UL-RL	2.5901E+04	-10.63	48.72
1.000	1.000	138.8	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	28.38	2.2750E-04	45.17	91.06	152.8	91.18	UL-RL	2.5901E+04	-10.83	50.83
1.000	1.000	141.9	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	29.00	2.1890E-04	47.05	92.04	154.8	92.04	V-C	1.6188E+04	-11.03	52.95
1.000	1.000	145.0	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	29.61	2.1089E-04	48.93	92.98	156.8	92.98	V-C	1.6188E+04	-11.23	55.07
1.000	1.000	148.1	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	30.22	2.0342E-04	50.81	93.94	158.8	93.94	V-C	1.6188E+04	-11.43	57.19
1.000	1.000	151.1	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	30.84	1.9641E-04	52.69	94.90	160.8	94.90	V-C	1.6188E+04	-11.63	59.31
1.000	1.000	154.2	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	31.46	1.8979E-04	54.58	95.87	162.8	95.87	V-C	1.6188E+04	-11.83	61.42
1.000	1.000	157.3	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	32.08	1.8351E-04	56.46	96.84	164.8	96.84	V-C	1.6188E+04	-12.03	63.54
1.000	1.000	160.4	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	32.70	1.7750E-04	58.34	97.83	166.8	97.83	V-C	1.6188E+04	-12.23	65.66
1.000	1.000	163.5	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	33.32	1.7172E-04	60.22	98.81	168.8	98.81	V-C	1.6188E+04	-12.43	67.78
1.000	1.000	166.6	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	33.94	1.6612E-04	62.10	99.80	170.8	99.80	V-C	1.6188E+04	-12.63	69.90
1.000	1.000	169.7	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	34.56	1.6066E-04	63.99	100.8	172.8	100.8	V-C	1.6188E+04	-12.83	72.01
1.000	1.000	172.8	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	35.18	1.5530E-04	65.87	101.8	174.8	101.8	V-C	1.6188E+04	-13.03	74.13
1.000	1.000	175.9	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	35.81	1.5000E-04	67.75	102.8	176.8	102.8	V-C	1.6188E+04	-13.23	76.25
1.000	1.000	179.0	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	36.43	1.4475E-04	69.63	103.8	178.8	103.8	V-C	1.6188E+04	-13.43	78.37
1.000	1.000	182.1	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	37.05	1.3953E-04	71.51	104.8	180.8	104.8	V-C	1.6188E+04	-13.63	80.49
1.000	1.000	185.3	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	34.85	1.3432E-04	73.40	105.8	182.8	105.8	V-C	1.6188E+04	-13.83	82.60
1.000	1.000	188.4	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	16.24	1.2989E-04	75.00	106.6	184.5	106.6	V-C	1.6188E+04	-14.00	84.40
1.000	1.000	191.0	0.000	0.000	BNA2_(2)_335_337_L_0					

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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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 74  
C U R R E N T   T I M E   I S        5.0000

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	0.22449	-0.22449	-2.82204E-11	4.48975E-02
2	0.67313	-0.67313	-4.48975E-02	0.17952
3	1.2047	-1.2047	-0.17952	0.42047
4	1.9665	-1.9665	-0.42047	0.81378
5	3.1784	-3.1784	-0.81378	1.4495
6	4.8436	-4.8436	-1.4495	2.4182
7	7.0038	-7.0038	-2.4182	3.8189
8	9.6679	-9.6679	-3.8189	5.7525
9	12.839	-12.839	-5.7525	8.3202
10	16.518	-16.518	-8.3202	11.624
11	20.708	-20.708	-11.624	15.765
12	25.608	-25.608	-15.765	20.887
13	31.269	-31.269	-20.887	27.141
14	37.683	-37.683	-27.141	34.677
15	44.842	-44.842	-34.677	43.646
16	49.383	-49.383	-43.646	45.127
17	-26.851	26.851	-45.127	39.757
18	-18.114	18.114	-39.757	36.134
19	-8.6520	8.6520	-36.134	34.404
20	1.5287	-1.5287	-34.404	34.710
21	12.423	-12.423	-34.710	37.195
22	15.730	-15.730	-37.195	40.340
23	19.337	-19.337	-40.340	44.208
24	23.202	-23.202	-44.208	48.848
25	27.354	-27.354	-48.848	54.319
26	31.787	-31.787	-54.319	60.676
27	36.490	-36.490	-60.676	67.974
28	41.422	-41.422	-67.974	76.259
29	45.310	-45.310	-76.259	80.790
30	-29.027	29.027	-80.790	74.985
31	-23.194	23.194	-74.985	70.346
32	-16.242	16.242	-70.346	67.097
33	-8.1962	8.1962	-67.097	65.458
34	0.91641	-0.91641	-65.458	65.641
35	11.071	-11.071	-65.641	67.856
36	6.9292	-6.9292	-67.856	69.241
37	3.2993	-3.2993	-69.241	69.901
38	0.14561	-0.14561	-69.901	69.930
39	-2.5668	2.5668	-69.930	69.417
40	-4.8839	4.8839	-69.417	68.440
41	-6.8770	6.8770	-68.440	67.065
42	-8.5837	8.5837	-67.065	65.348
43	-10.044	10.044	-65.348	63.339
44	-11.276	11.276	-63.339	61.084
45	-12.296	12.296	-61.084	58.625
46	-13.122	13.122	-58.625	56.001
47	-13.770	13.770	-56.001	53.247
48	-14.255	14.255	-53.247	50.396
49	-14.591	14.591	-50.396	47.477
50	-14.792	14.792	-47.477	44.519
51	-14.871	14.871	-44.519	41.545
52	-14.841	14.841	-41.545	38.577
53	-14.711	14.711	-38.577	35.634
54	-14.493	14.493	-35.634	32.736
55	-14.197	14.197	-32.736	29.896
56	-13.831	13.831	-29.896	27.130
57	-13.403	13.403	-27.130	24.449
58	-12.920	12.920	-24.449	21.865
59	-12.390	12.390	-21.865	19.388
60	-11.818	11.818	-19.388	17.024
61	-11.194	11.194	-17.024	14.785
62	-10.527	10.527	-14.785	12.680
63	-9.8227	9.8227	-12.680	10.715
64	-9.0839	9.0839	-10.715	8.8985
65	-8.3144	8.3144	-8.8985	7.2356
66	-7.5168	7.5168	-7.2356	5.7322
67	-6.6935	6.6935	-5.7322	4.3935
68	-5.8463	5.8463	-4.3935	3.2243
69	-4.9766	4.9766	-3.2243	2.2289
70	-4.0855	4.0855	-2.2289	1.4118

71	-3.1735	3.1735	-1.4118	0.77713
72	-2.2429	2.2429	-0.77713	0.32855
73	-1.2966	1.2966	-0.32855	6.92247E-02
74	-0.40718	0.40718	-6.92247E-02	-4.25548E-13

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New Project
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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\_341 :  
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	86.027	-6.00695E-04	3.88024E-04	0.0000	2727.4	0.0000	0.0000	ELASTIC ORIGINAL YOUNG MODU-
LUS									

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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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 .   5

Tieback\_342 :  
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	83.330	-3.70929E-04	-3.70929E-04	0.0000	0.0000	0.0000	0.0000	BORN NOW JUST ACTIVATED	
ITER	0	RNORM = 0.000	RMNORM= 0.000	RINORM=0.1103E+06	RIMNOR=0.2754E+06	RENORM= 1574.	REMNR=0.7407E-17	RATIO =0.1195	TOLER =0.1000E-03	NOT CONVERGED
		RFMAX = 80.84	RMMAX = 80.79	RTSMAL=0.1000E-03	RMSMAL=0.1000E-03	RDT =0.1103E+06	RDR =0.2754E+06	RATIO=0.1195	RATIO= 0.000	
		MAX UN= 16.93	IEQ= 81 NODE	41 DOF	1 Y-DISPL.F	MIN UN=-.6303	IEQ= 69 NODE	35 DOF	1 Y-DISPL.F	
		NO. OF CONTACT CONSTRAINT VIOLATIONS	0							
ITER	2	RNORM = 0.000	RMNORM= 0.000	RINORM=0.1103E+06	RIMNOR=0.2754E+06	RENORM= 4.508	REMNR=0.1855E-17	RATIO =0.6393E-02	TOLER =0.1000E-03	NOT CONVERGED
		RFMAX = 80.84	RMMAX = 80.79	RTSMAL=0.1000E-03	RMSMAL=0.1000E-03	RDT =0.1103E+06	RDR =0.2754E+06	RATIO=0.6393E-02	RATIO= 0.000	
		MAX UN=0.5227	IEQ= 95 NODE	48 DOF	1 Y-DISPL.F	MIN UN=-.6743E-07	IEQ= 33 NODE	17 DOF	1 Y-DISPL.F	
		NO. OF CONTACT CONSTRAINT VIOLATIONS	0							
ITER	3	RNORM = 0.000	RMNORM= 0.000	RINORM=0.1103E+06	RIMNOR=0.2754E+06	RENORM=0.2264E-02	REMNR=0.4039E-17	RATIO =0.1433E-03	TOLER =0.1000E-03	NOT CONVERGED
		RFMAX = 80.84	RMMAX = 80.79	RTSMAL=0.1000E-03	RMSMAL=0.1000E-03	RDT =0.1103E+06	RDR =0.2754E+06	RATIO=0.1433E-03	RATIO= 0.000	
		MAX UN=0.4758E-01	IEQ= 55 NODE	28 DOF	1 Y-DISPL.F	MIN UN=-.9513E-07	IEQ= 31 NODE	16 DOF	1 Y-DISPL.F	
		NO. OF CONTACT CONSTRAINT VIOLATIONS	0							
ITER	4	RNORM = 0.000	RMNORM= 0.000	RINORM=0.1103E+06	RIMNOR=0.2754E+06	RENORM=0.7221E-07	REMNR=0.4563E-17	RATIO =0.8091E-06	TOLER =0.1000E-03	CONVERGED !
		RFMAX = 80.84	RMMAX = 80.79	RTSMAL=0.1000E-03	RMSMAL=0.1000E-03	RDT =0.1103E+06	RDR =0.2754E+06	RATIO=0.8091E-06	RATIO= 0.000	
		MAX UN=0.1079E-03	IEQ= 145 NODE	73 DOF	1 Y-DISPL.F	MIN UN=-.9906E-07	IEQ= 33 NODE	17 DOF	1 Y-DISPL.F	
		NO. OF CONTACT CONSTRAINT VIOLATIONS	0							

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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New Project  
SOLUTION REACHED USING 4 ITERATIONS ON 40

P R I N T   O U T   F O R   T I M E   S T E P   6     ( A T T I M E   6.000      )

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

	Y-DISPL. F (02)	X-ROT. F (04)	(
1	3.4967669E-03	-3.7720957E-04	
2	3.4213251E-03	-3.7720803E-04	
3	3.3458841E-03	-3.7720023E-04	
4	3.2704460E-03	-3.7717770E-04	
5	3.1950150E-03	-3.7712519E-04	
6	3.1195998E-03	-3.7701425E-04	
7	3.0442163E-03	-3.7679930E-04	
8	2.9688912E-03	-3.7641758E-04	
9	2.8936657E-03	-3.7578907E-04	
10	2.8185985E-03	-3.7481678E-04	
11	2.7437695E-03	-3.7338695E-04	
12	2.6692829E-03	-3.7136932E-04	
13	2.5952709E-03	-3.6861417E-04	
14	2.5218980E-03	-3.6494844E-04	
15	2.4493654E-03	-3.6017544E-04	
16	2.3779162E-03	-3.5407589E-04	
17	2.3673095E-03	-3.5303497E-04	
18	2.2973814E-03	-3.4638050E-04	
19	2.2287126E-03	-3.4039528E-04	
20	2.1611979E-03	-3.3479125E-04	
21	2.0947914E-03	-3.2925879E-04	
22	2.0295116E-03	-3.2346678E-04	
23	1.9654343E-03	-3.1722996E-04	
24	1.9026515E-03	-3.1051577E-04	
25	1.8412625E-03	-3.0328467E-04	
26	1.7813752E-03	-2.9549036E-04	
27	1.7231074E-03	-2.8707936E-04	
28	1.6665886E-03	-2.7799129E-04	
29	1.6119608E-03	-2.6815883E-04	
30	1.5854037E-03	-2.6294251E-04	
31	1.5338272E-03	-2.5308466E-04	
32	1.4840684E-03	-2.4474892E-04	
33	1.4358332E-03	-2.3782945E-04	
34	1.3888511E-03	-2.3219593E-04	
35	1.3428798E-03	-2.2769078E-04	
36	1.2977119E-03	-2.2412992E-04	
37	1.2531789E-03	-2.2130319E-04	
38	1.2091575E-03	-2.1897317E-04	
39	1.1655745E-03	-2.1687302E-04	
40	1.1224129E-03	-2.1470596E-04	
41	1.0797184E-03	-2.1214586E-04	
42	1.0376044E-03	-2.0883842E-04	
43	9.9624002E-04	-2.0467560E-04	
44	9.5578144E-04	-1.9980377E-04	
45	9.1635675E-04	-1.9435835E-04	
46	8.7806802E-04	-1.8846414E-04	
47	8.4099357E-04	-1.8223560E-04	
48	8.0518930E-04	-1.7577709E-04	
49	7.7069174E-04	-1.6918344E-04	
50	7.3751923E-04	-1.6254019E-04	
51	7.0567386E-04	-1.5592402E-04	
52	6.7514342E-04	-1.4940315E-04	
53	6.4590240E-04	-1.4303765E-04	
54	6.1791451E-04	-1.3687996E-04	
55	5.9113303E-04	-1.3097509E-04	
56	5.6550452E-04	-1.2536145E-04	
57	5.4096694E-04	-1.2007050E-04	
58	5.1745311E-04	-1.1512757E-04	
59	4.9489141E-04	-1.1055206E-04	
60	4.7320794E-04	-1.0635793E-04	
61	4.5232338E-04	-1.0255315E-04	
62	4.3216049E-04	-9.9141245E-05	
63	4.1264079E-04	-9.6120621E-05	
64	3.9368657E-04	-9.3485021E-05	
65	3.7522183E-04	-9.1223697E-05	
66	3.5717315E-04	-8.9321571E-05	
67	3.3947054E-04	-8.7759372E-05	
68	3.2204829E-04	-8.6513751E-05	
69	3.0484576E-04	-8.5557375E-05	
70	2.8780814E-04	-8.4859002E-05	
71	2.7088730E-04	-8.4383538E-05	
72	2.5404246E-04	-8.4092081E-05	
73	2.3724104E-04	-8.3941971E-05	
74	2.2045934E-04	-8.3886878E-05	

75 2.0619868E-04 -8.3878540E-05

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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

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ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 75  
C U R R E N T   T I M E   I S        6.0000

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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	9.8880E-02	-3.4968E-03	0.000	0.9888	0.000	5.473	UL-RL	4237.	0.5000	0.000	
1.000	1.000	0.9888	0.000	0.000	FRANA_334_8_L_0						
2 D	0.2053	-3.4213E-03	4.093	1.026	4.093	6.735	UL-RL	4237.	0.3000	0.000	
1.000	1.000	1.026	0.000	0.000	FRANA_334_8_L_0						
3 D	0.3406	-3.3459E-03	8.489	1.703	8.489	7.989	UL-RL	4237.	0.1000	0.000	
1.000	1.000	1.703	0.000	0.000	FRANA_334_8_L_0						
4 D	0.6396	-3.2704E-03	13.01	3.198	13.01	11.25	UL-RL	4237.	-0.1000	0.000	
1.000	1.000	3.198	0.000	0.000	FRANA_334_8_L_0						
5 D	1.193	-3.1950E-03	17.79	5.967	17.79	14.91	UL-RL	4237.	-0.3000	0.000	
1.000	1.000	5.967	0.000	0.000	FRANA_334_8_L_0						
6 D	1.740	-3.1196E-03	22.52	8.700	22.52	18.52	UL-RL	4237.	-0.5000	0.000	
1.000	1.000	8.700	0.000	0.000	FRANA_334_8_L_0						
7 D	2.300	-3.0442E-03	27.10	11.50	27.10	22.06	UL-RL	4237.	-0.7000	0.000	
1.000	1.000	11.50	0.000	0.000	FRANA_334_8_L_0						
8 D	2.851	-2.9689E-03	31.59	14.26	31.59	25.53	UL-RL	4237.	-0.9000	0.000	
1.000	1.000	14.26	0.000	0.000	FRANA_334_8_L_0						
9 D	3.394	-2.8937E-03	36.02	16.97	36.02	28.94	UL-RL	4237.	-1.100	0.000	
1.000	1.000	16.97	0.000	0.000	FRANA_334_8_L_0						
10 D	3.930	-2.8186E-03	40.41	19.65	40.41	32.30	UL-RL	4237.	-1.300	0.000	
1.000	1.000	19.65	0.000	0.000	FRANA_334_8_L_0						
11 D	4.455	-2.7438E-03	44.74	22.28	44.74	35.59	UL-RL	4237.	-1.500	0.000	
1.000	1.000	22.28	0.000	0.000	FRANA_334_8_L_0						
12 D	5.183	-2.6693E-03	49.09	25.92	49.09	38.84	UL-RL	4237.	-1.700	0.000	
1.000	1.000	25.92	0.000	0.000	FRANA_334_8_L_0						
13 D	5.959	-2.5953E-03	53.42	29.79	53.42	42.05	UL-RL	4237.	-1.900	0.000	
1.000	1.000	29.79	0.000	0.000	FRANA_334_8_L_0						
14 D	6.703	-2.5219E-03	57.61	33.52	57.61	45.22	UL-RL	4237.	-2.100	0.000	
1.000	1.000	33.52	0.000	0.000	FRANA_334_8_L_0						
15 D	7.413	-2.4494E-03	61.62	37.06	61.62	48.37	UL-RL	4237.	-2.300	0.000	
1.000	1.000	37.06	0.000	0.000	FRANA_334_8_L_0						
16 D	4.668	-2.3779E-03	65.64	40.59	65.64	51.48	UL-RL	4237.	-2.500	0.000	
1.000	1.000	40.59	0.000	0.000	FRANA_334_8_L_0						
17 D	4.729	-2.3673E-03	66.24	41.12	66.24	51.95	UL-RL	4237.	-2.530	0.000	
1.000	1.000	41.12	0.000	0.000	FRANA_334_8_L_0						
18 D	8.924	-2.2974E-03	70.28	44.62	70.28	55.04	UL-RL	4237.	-2.730	0.000	
1.000	1.000	44.62	0.000	0.000	FRANA_334_8_L_0						
19 D	9.620	-2.2287E-03	74.65	48.10	74.65	58.12	UL-RL	4237.	-2.930	0.000	
1.000	1.000	48.10	0.000	0.000	FRANA_334_8_L_0						
20 D	10.31	-2.1612E-03	79.03	51.56	79.03	61.18	UL-RL	4237.	-3.130	0.000	
1.000	1.000	51.56	0.000	0.000	FRANA_334_8_L_0						
21 D	11.00	-2.0948E-03	82.81	55.01	82.81	64.22	UL-RL	4237.	-3.330	0.000	
1.000	1.000	55.01	0.000	0.000	FRANA_334_8_L_0						
22 D	0.9249	-2.0295E-03	87.16	4.624	87.16	49.73	UL-RL	3.1061E+04	-3.530	0.000	
1.000	1.000	4.624	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	1.171	-1.9654E-03	91.47	5.854	91.47	50.83	UL-RL	3.1061E+04	-3.730	0.000	
1.000	1.000	5.854	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	1.374	-1.9027E-03	95.27	6.869	95.27	51.91	UL-RL	3.1061E+04	-3.930	0.000	
1.000	1.000	6.869	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	1.608	-1.8413E-03	99.56	8.040	99.56	52.99	UL-RL	3.1061E+04	-4.130	0.000	
1.000	1.000	8.040	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	1.835	-1.7814E-03	103.8	9.173	103.8	54.06	UL-RL	3.1061E+04	-4.330	0.000	
1.000	1.000	9.173	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	2.053	-1.7231E-03	108.1	10.27	108.1	55.12	UL-RL	3.1061E+04	-4.530	0.000	
1.000	1.000	10.27	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	2.282	-1.6666E-03	111.9	11.41	111.9	56.19	ACTIVE	0.000	-4.730	0.000	
1.000	1.000	11.41	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	1.950	-1.6120E-03	116.1	13.00	116.1	57.24	ACTIVE	0.000	-4.930	0.000	
1.000	1.000	13.00	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	2.058	-1.5854E-03	118.0	13.72	118.0	57.77	ACTIVE	0.000	-5.030	0.000	
1.000	1.000	13.72	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	3.061	-1.5338E-03	122.2	15.30	122.2	58.83	ACTIVE	0.000	-5.230	0.000	
1.000	1.000	15.30	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	3.752	-1.4841E-03	126.4	18.76	126.4	59.88	UL-RL	3.1061E+04	-5.430	0.000	
1.000	1.000	18.76	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	4.638	-1.4358E-03	130.6	23.19	130.6	61.90	UL-RL	3.1061E+04	-5.630	0.000	
1.000	1.000	23.19	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	5.503	-1.3889E-03	134.5	27.52	134.5	64.54	UL-RL	3.1061E+04	-5.830	0.000
1.000	1.000	27.52	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	6.350	-1.3429E-03	138.6	31.75	138.6	67.03	UL-RL	3.1061E+04	-6.030	0.000
1.000	1.000	31.75	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	7.180	-1.2977E-03	142.8	35.90	142.8	69.39	UL-RL	3.1061E+04	-6.230	0.000
1.000	1.000	35.90	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	8.104	-1.2532E-03	145.8	39.31	145.8	71.62	UL-RL	3.1061E+04	-6.430	1.210
1.000	1.000	40.52	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	9.074	-1.2092E-03	147.8	42.30	147.8	73.72	UL-RL	3.1061E+04	-6.630	3.071
1.000	1.000	45.37	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	10.03	-1.1656E-03	150.0	45.22	150.0	75.71	UL-RL	3.1061E+04	-6.830	4.932
1.000	1.000	50.16	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	10.96	-1.1224E-03	152.3	48.02	152.3	77.53	UL-RL	3.1061E+04	-7.030	6.793
1.000	1.000	54.82	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	11.85	-1.0797E-03	154.3	50.57	154.3	79.06	UL-RL	3.1061E+04	-7.230	8.654
1.000	1.000	59.23	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	12.71	-1.0376E-03	156.6	53.03	156.6	80.46	UL-RL	3.1061E+04	-7.430	10.52
1.000	1.000	63.54	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	13.55	-9.9624E-04	158.9	55.37	158.9	81.73	UL-RL	3.1061E+04	-7.630	12.38
1.000	1.000	67.75	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	14.39	-9.5578E-04	161.1	57.70	161.1	82.96	UL-RL	3.1061E+04	-7.830	14.24
1.000	1.000	71.94	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	15.22	-9.1636E-04	163.1	60.01	163.1	84.18	UL-RL	3.1061E+04	-8.030	16.10
1.000	1.000	76.11	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	16.05	-8.7807E-04	165.4	62.30	165.4	85.37	UL-RL	3.1061E+04	-8.230	17.96
1.000	1.000	80.26	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	16.88	-8.4099E-04	167.6	64.57	167.6	86.53	UL-RL	3.1061E+04	-8.430	19.82
1.000	1.000	84.39	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	17.70	-8.0519E-04	169.9	66.80	169.9	87.68	UL-RL	3.1061E+04	-8.630	21.68
1.000	1.000	88.48	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	18.51	-7.7069E-04	171.9	69.00	171.9	88.82	UL-RL	3.1061E+04	-8.830	23.54
1.000	1.000	92.55	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	19.31	-7.3752E-04	174.2	71.17	174.2	89.93	UL-RL	3.1061E+04	-9.030	25.40
1.000	1.000	96.57	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	20.11	-7.0567E-04	176.4	73.30	176.4	91.04	UL-RL	3.1061E+04	-9.230	27.27
1.000	1.000	100.6	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	20.91	-6.7514E-04	178.4	75.40	178.4	92.13	UL-RL	3.1061E+04	-9.430	29.13
1.000	1.000	104.5	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	21.69	-6.4590E-04	180.7	77.47	180.7	93.21	UL-RL	3.1061E+04	-9.630	30.99
1.000	1.000	108.5	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	22.47	-6.1791E-04	182.9	79.49	182.9	94.28	UL-RL	3.1061E+04	-9.830	32.85
1.000	1.000	112.3	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	23.24	-5.9113E-04	185.1	81.49	185.1	95.35	UL-RL	3.1061E+04	-10.03	34.71
1.000	1.000	116.2	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	24.00	-5.6550E-04	187.1	83.45	187.1	96.40	UL-RL	3.1061E+04	-10.23	36.57
1.000	1.000	120.0	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	24.76	-5.4097E-04	189.4	85.38	189.4	97.46	UL-RL	3.1061E+04	-10.43	38.43
1.000	1.000	123.8	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	25.51	-5.1745E-04	191.6	87.28	191.6	98.50	UL-RL	3.1061E+04	-10.63	40.29
1.000	1.000	127.6	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	26.26	-4.9489E-04	193.8	89.15	193.8	99.54	UL-RL	3.1061E+04	-10.83	42.15
1.000	1.000	131.3	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	27.00	-4.7321E-04	195.8	90.99	195.8	100.6	UL-RL	3.1061E+04	-11.03	44.02
1.000	1.000	135.0	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	27.74	-4.5232E-04	198.1	92.81	198.1	101.6	UL-RL	3.1061E+04	-11.23	45.88
1.000	1.000	138.7	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	28.47	-4.3216E-04	200.3	94.61	200.3	102.7	UL-RL	3.1061E+04	-11.43	47.74
1.000	1.000	142.4	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	29.20	-4.1264E-04	202.3	96.39	202.3	103.7	UL-RL	3.1061E+04	-11.63	49.60
1.000	1.000	146.0	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	29.92	-3.9369E-04	204.5	98.15	204.5	104.7	UL-RL	3.1061E+04	-11.83	51.46
1.000	1.000	149.6	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	30.64	-3.7522E-04	206.7	99.90	206.7	105.9	UL-RL	3.1061E+04	-12.03	53.32
1.000	1.000	153.2	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	31.36	-3.5717E-04	209.0	101.6	209.0	107.2	UL-RL	3.1061E+04	-12.23	55.18
1.000	1.000	156.8	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	32.08	-3.3947E-04	211.0	103.4	211.0	108.6	UL-RL	3.1061E+04	-12.43	57.04
1.000	1.000	160.4	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	32.80	-3.2205E-04	213.2	105.1	213.2	109.9	UL-RL	3.1061E+04	-12.63	58.90
1.000	1.000	164.0	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	33.51	-3.0485E-04	215.4	106.8	215.4	111.3	UL-RL	3.1061E+04	-12.83	60.77
1.000	1.000	167.5	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	34.22	-2.8781E-04	217.6	108.5	217.6	112.6	UL-RL	3.1061E+04	-13.03	62.63
1.000	1.000	171.1	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	34.93	-2.7089E-04	219.7	110.2	219.7	113.9	UL-RL	3.1061E+04	-13.23	64.49
1.000	1.000	174.7	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	35.65	-2.5404E-04	221.9	111.9	221.9	115.3	UL-RL	3.1061E+04	-13.43	66.35
1.000	1.000	178.2	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	36.35	-2.3724E-04	224.1	113.6	224.1	116.6	UL-RL	3.1061E+04	-13.63	68.21
1.000	1.000	181.8	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	34.28	-2.2046E-04	226.1	115.2	226.1	117.9	UL-RL	3.1061E+04	-13.83	70.07
1.000	1.000	185.3	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	16.00	-2.0620E-04	228.0	116.6	228.0	118.9	UL-RL	3.1061E+04	-14.00	71.65
1.000	1.000	188.2	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:17:07
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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

O\_R  
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    75  
C U R R E N T    T I M E    I S    6.0000

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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
15	0.000	--	--	--	--	--	REMOVED	--	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
16	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
17	0.000	--	--	--	--	--	REMOVED	--	-2.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
18	0.000	--	--	--	--	--	REMOVED	--	-2.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
19	0.000	--	--	--	--	--	REMOVED	--	-2.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
20	0.000	--	--	--	--	--	REMOVED	--	-3.130	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
21	0.000	--	--	--	--	--	REMOVED	--	-3.330	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
22	0.000	--	--	--	--	--	REMOVED	--	-3.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
23	0.000	--	--	--	--	--	REMOVED	--	-3.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
24	0.000	--	--	--	--	--	REMOVED	--	-3.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
25	0.000	--	--	--	--	--	REMOVED	--	-4.130	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
26	0.000	--	--	--	--	--	REMOVED	--	-4.330	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
27	0.000	--	--	--	--	--	REMOVED	--	-4.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
28	0.000	--	--	--	--	--	REMOVED	--	-4.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
29	0.000	--	--	--	--	--	REMOVED	--	-4.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
30	0.000	--	--	--	--	--	REMOVED	--	-5.030	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
31	0.000	--	--	--	--	--	REMOVED	--	-5.230	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
32	0.000	--	--	--	--	--	REMOVED	--	-5.430	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
33	0.000	--	--	--	--	--	REMOVED	--	-5.630	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					

34	0.000	--	--	--	--	--	REMOVED	--	-5.830	0.000
1.000	1.000	0.000	0.000	0.000	not available					
35	0.000	--	--	--	--	--	REMOVED	--	-6.030	0.000
1.000	1.000	0.000	0.000	0.000	not available					
36	0.000	--	--	--	--	--	REMOVED	--	-6.230	0.000
1.000	1.000	0.000	0.000	0.000	not available					
37	0.000	--	--	--	--	--	REMOVED	--	-6.430	0.000
1.000	1.000	0.000	0.000	0.000	not available					
38	0.000	--	--	--	--	--	REMOVED	--	-6.630	0.000
1.000	1.000	0.000	0.000	0.000	not available					
39	0.000	--	--	--	--	--	REMOVED	--	-6.830	0.000
1.000	1.000	0.000	0.000	0.000	not available					
40	0.000	--	--	--	--	--	REMOVED	--	-7.030	0.000
1.000	1.000	0.000	0.000	0.000	not available					
41	0.000	--	--	--	--	--	REMOVED	--	-7.230	0.000
1.000	1.000	0.000	0.000	0.000	not available					
42 D	17.60	1.0376E-03	1.210	86.60	118.8 86.60	V-C	1.5777E+04	-7.430	1.390	
1.000	1.000	87.99	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	18.08	9.9624E-04	3.071	86.89	120.8 86.89	V-C	1.5777E+04	-7.630	3.529	
1.000	1.000	90.41	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	18.57	9.5578E-04	4.932	87.20	122.8 87.20	V-C	1.5777E+04	-7.830	5.668	
1.000	1.000	92.87	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	19.07	9.1636E-04	6.793	87.54	124.8 87.54	V-C	1.5777E+04	-8.030	7.807	
1.000	1.000	95.35	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	19.57	8.7807E-04	8.654	87.91	126.8 87.91	V-C	1.5777E+04	-8.230	9.946	
1.000	1.000	97.86	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	20.08	8.4099E-04	10.52	88.32	128.8 88.32	V-C	1.5777E+04	-8.430	12.08	
1.000	1.000	100.4	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	20.60	8.0519E-04	12.38	88.75	130.8 88.75	V-C	1.5777E+04	-8.630	14.22	
1.000	1.000	103.0	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	21.12	7.7069E-04	14.24	89.22	132.8 89.22	V-C	1.5777E+04	-8.830	16.36	
1.000	1.000	105.6	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	21.64	7.3752E-04	16.10	89.72	134.8 89.72	V-C	1.5777E+04	-9.030	18.50	
1.000	1.000	108.2	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	22.18	7.0567E-04	17.96	90.24	136.8 90.24	V-C	1.5777E+04	-9.230	20.64	
1.000	1.000	110.9	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	22.71	6.7514E-04	19.82	90.79	138.8 90.79	V-C	1.5777E+04	-9.430	22.78	
1.000	1.000	113.6	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	23.26	6.4590E-04	21.68	91.37	140.8 91.37	V-C	1.5777E+04	-9.630	24.92	
1.000	1.000	116.3	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	23.81	6.1791E-04	23.54	91.97	142.8 91.97	V-C	1.5777E+04	-9.830	27.06	
1.000	1.000	119.0	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	24.36	5.9113E-04	25.40	92.60	144.8 92.60	V-C	1.5777E+04	-10.03	29.20	
1.000	1.000	121.8	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	24.92	5.6550E-04	27.27	93.25	146.8 93.25	V-C	1.5777E+04	-10.23	31.33	
1.000	1.000	124.6	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	25.48	5.4097E-04	29.13	93.92	148.8 93.92	V-C	1.5777E+04	-10.43	33.47	
1.000	1.000	127.4	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	26.05	5.1745E-04	30.99	94.62	150.8 94.62	V-C	1.5777E+04	-10.63	35.61	
1.000	1.000	130.2	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	26.62	4.9489E-04	32.85	95.33	152.8 95.33	V-C	1.5777E+04	-10.83	37.75	
1.000	1.000	133.1	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	27.19	4.7321E-04	34.71	96.05	154.8 96.05	V-C	1.5777E+04	-11.03	39.89	
1.000	1.000	135.9	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	27.76	4.5232E-04	36.57	96.79	156.8 96.79	UL-RL	2.5244E+04	-11.23	42.03	
1.000	1.000	138.8	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	28.34	4.3216E-04	38.43	97.54	158.8 97.54	UL-RL	2.5244E+04	-11.43	44.17	
1.000	1.000	141.7	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	28.92	4.1264E-04	40.29	98.31	160.8 98.31	UL-RL	2.5244E+04	-11.63	46.31	
1.000	1.000	144.6	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	29.51	3.9369E-04	42.15	99.08	162.8 99.08	UL-RL	2.5244E+04	-11.83	48.45	
1.000	1.000	147.5	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	30.09	3.7522E-04	44.02	99.87	164.8 99.87	UL-RL	2.5244E+04	-12.03	50.58	
1.000	1.000	150.5	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	30.68	3.5717E-04	45.88	100.7	166.8 100.7	UL-RL	2.5244E+04	-12.23	52.72	
1.000	1.000	153.4	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	31.26	3.3947E-04	47.74	101.5	168.8 101.5	UL-RL	2.5244E+04	-12.43	54.86	
1.000	1.000	156.3	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	31.85	3.2205E-04	49.60	102.3	170.8 102.3	UL-RL	2.5244E+04	-12.63	57.00	
1.000	1.000	159.3	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	32.44	3.0485E-04	51.46	103.1	172.8 103.1	UL-RL	2.5244E+04	-12.83	59.14	
1.000	1.000	162.2	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	33.03	2.8781E-04	53.32	103.9	174.8 103.9	UL-RL	2.5244E+04	-13.03	61.28	
1.000	1.000	165.2	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	33.62	2.7089E-04	55.18	104.7	176.8 104.7	UL-RL	2.5244E+04	-13.23	63.42	
1.000	1.000	168.1	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	34.21	2.5404E-04	57.04	105.5	178.8 105.5	UL-RL	2.5244E+04	-13.43	65.56	
1.000	1.000	171.1	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	34.80	2.3724E-04	58.90	106.3	180.8 106.3	UL-RL	2.5244E+04	-13.63	67.70	
1.000	1.000	174.0	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	32.74	2.2046E-04	60.77	107.1	182.8 107.1	UL-RL	2.5244E+04	-13.83	69.83	
1.000	1.000	177.0	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	15.26	2.0620E-04	62.35	107.8	184.5 107.8	UL-RL	2.5244E+04	-14.00	71.65	
1.000	1.000	179.5	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
|  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:17:07 |  
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```

## 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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 74  
C U R R E N T T I M E I S 6.0000

## WALL2D ELEMENT

EL	TA	TB	MA	MB
1	9.88796E-02	-9.88796E-02	9.34591E-12	1.97759E-02
2	0.30417	-0.30417	-1.97759E-02	8.06097E-02
3	0.64473	-0.64473	-8.06097E-02	0.20956
4	1.2844	-1.2844	-0.20956	0.46643
5	2.4778	-2.4778	-0.46643	0.96200
6	4.2179	-4.2179	-0.96200	1.8056
7	6.5178	-6.5178	-1.8056	3.1091
8	9.3691	-9.3691	-3.1091	4.9830
9	12.763	-12.763	-4.9830	7.5535
10	16.692	-16.692	-7.5355	10.874
11	21.147	-21.147	-10.874	15.103
12	26.331	-26.331	-15.103	20.370
13	32.289	-32.289	-20.370	26.827
14	38.993	-38.993	-26.827	34.626
15	46.405	-46.405	-34.626	43.907
16	51.073	-51.073	-43.907	45.439
17	-26.004	26.004	-45.439	40.238
18	-17.080	17.080	-40.238	36.822
19	-7.4599	7.4599	-36.822	35.331
20	2.8529	-2.8529	-35.331	35.901
21	13.855	-13.855	-35.901	38.672
22	14.780	-14.780	-38.672	41.628
23	15.951	-15.951	-41.628	44.818
24	17.325	-17.325	-44.818	48.283
25	18.933	-18.933	-48.283	52.070
26	20.767	-20.767	-52.070	56.223
27	22.820	-22.820	-56.223	60.787
28	25.103	-25.103	-60.787	65.808
29	27.053	-27.053	-65.808	68.513
30	-50.524	50.524	-68.513	58.408
31	-47.463	47.463	-58.408	48.916
32	-43.711	43.711	-48.916	40.174
33	-39.073	39.073	-40.174	32.359
34	-33.570	33.570	-32.359	25.645
35	-27.220	27.220	-25.645	20.201
36	-20.040	20.040	-20.201	16.193
37	-11.936	11.936	-16.193	13.806
38	-2.8619	2.8619	-13.806	13.234
39	7.1692	-7.1692	-13.234	14.668
40	18.133	-18.133	-14.668	18.294
41	29.978	-29.978	-18.294	24.290
42	25.088	-25.088	-24.290	29.307
43	20.555	-20.555	-29.307	33.418
44	16.370	-16.370	-33.418	36.692
45	12.522	-12.522	-36.692	39.197
46	9.0028	-9.0028	-39.197	40.997
47	5.7994	-5.7994	-40.997	42.157
48	2.9002	-2.9002	-42.157	42.737
49	0.29274	-0.29274	-42.737	42.796
50	-2.0357	2.0357	-42.796	42.389
51	-4.0977	4.0977	-42.389	41.569
52	-5.9059	5.9059	-41.569	40.388
53	-7.4727	7.4727	-40.388	38.893
54	-8.8102	8.8102	-38.893	37.131
55	-9.9301	9.9301	-37.131	35.145
56	-10.843	10.843	-35.145	32.977
57	-11.561	11.561	-32.977	30.665
58	-12.092	12.092	-30.665	28.246
59	-12.447	12.447	-28.246	25.757
60	-12.633	12.633	-25.757	23.230
61	-12.659	12.659	-23.230	20.699
62	-12.531	12.531	-20.699	18.193
63	-12.256	12.256	-18.193	15.741
64	-11.839	11.839	-15.741	13.374
65	-11.285	11.285	-13.374	11.117
66	-10.598	10.598	-11.117	8.9970
67	-9.7818	9.7818	-8.9970	7.0406
68	-8.8386	8.8386	-7.0406	5.2729
69	-7.7706	7.7706	-5.2729	3.7188
70	-6.5794	6.5794	-3.7188	2.4029

71	-5.2662	5.2662	-2.4029	1.3497
72	-3.8332	3.8332	-1.3497	0.58303
73	-2.2837	2.2837	-0.58303	0.12630
74	-0.74289	0.74289	-0.12630	3.19189E-13

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:17:07 |  
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New Project
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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\_341 :  
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1  
C U R R E N T    T I M E    I S    6.0000

POST-TENSION 2D-BOUNDARY ELEMENT

	EL	FORCE	d0	EDISPL	pl. eps	K	-ve limit	+ve limit	
ANCHOR	1	87.056	-6.00695E-04	7.65353E-04	0.0000	2727.4	0.0000	0.0000	ELASTIC ORIGINAL YOUNG MODU-
LUS									

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+-----+  
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 16:17:07 |  
+-----+  
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 .    5

Tieback\_342 :  
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1  
C U R R E N T    T I M E    I S    6.0000

POST-TENSION 2D-BOUNDARY ELEMENT

	EL	FORCE	d0	EDISPL	pl. eps	K	-ve limit	+ve limit	
ANCHOR	1	84.745	-3.70929E-04	8.72199E-05	0.0000	3089.5	0.0000	0.0000	ELASTIC ORIGINAL YOUNG MODULUS

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+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 16:17:07
+-----+
```

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	CONVERGENCE :YES
3	CONVERGENCE :YES
4	CONVERGENCE :YES
5	CONVERGENCE :YES
6	CONVERGENCE :YES

END OF PROCESS FOR PROBLEM

New Project

NONLINEAR SOLUTION CPU TIME .... 0.05 [sec]  
DATABASE CREATION CPU TIME..... 0.17 [sec]



## ***Report di Calcolo***

Nome Progetto: New Project

Autore: Ingegnere

Jobname: \\SBS2011\Comm\424.01 - HIRPINIA\Ing\03. LAVORO\07 - GALL\GA - FINESTRE - IMBOCCHI\GA11 Finestra F5\PARATIA-F5\sez2\SEZIONE 2 GEO Finestra F5\_revC.pplus

Data: 25/06/2020 15:55:57

Design Section: Base Design Section

**Sommario**  
**Contenuto Sommario**

## **Descrizione della Stratigrafia e degli Strati di Terreno**

Tipo : HORIZONTAL

Quota : 0.5 m

OCR : 1

Tipo : HORIZONTAL

Quota : -3.5 m

OCR : 1

Tipo : HORIZONTAL

Quota : -19.5 m

OCR : 1

Strato di Terreno	Terreno	$\gamma_{dry}$ kN/m <sup>3</sup>	$\gamma_{sat}$ kN/m <sup>3</sup>	$\phi'$ °	$\phi_{cv}$ °	$\phi_p$ °	c' kPa	Su kPa	Modulo Elastico Eu kPa	Evc kPa	Eur kPa	Ah kPa	Av kPa	exp Rur/Rvc	Rvc kPa	Ku kPa	Kvc kN/m <sup>3</sup>	Kur kN/m <sup>3</sup>
1	FRANA	20	20	14		4		Constant	20000	32000								
2	BNA2_(2)	20	20	22.2		20		Constant	115000	184000								
3	BNA(3)	20	20	22.2		24		Constant	180000	288000								

## **Descrizione Pareti**

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -14 m

Muro di sinistra

Sezione : PALI\_Fi1000/1200

Area equivalente : 0.654498469497874 m

Inerzia equivalente : 0.0409 m<sup>4</sup>/m

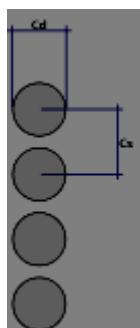
Materiale calcestruzzo : C25/30

Tipo sezione : Tangent

Spaziatura : 1.2 m

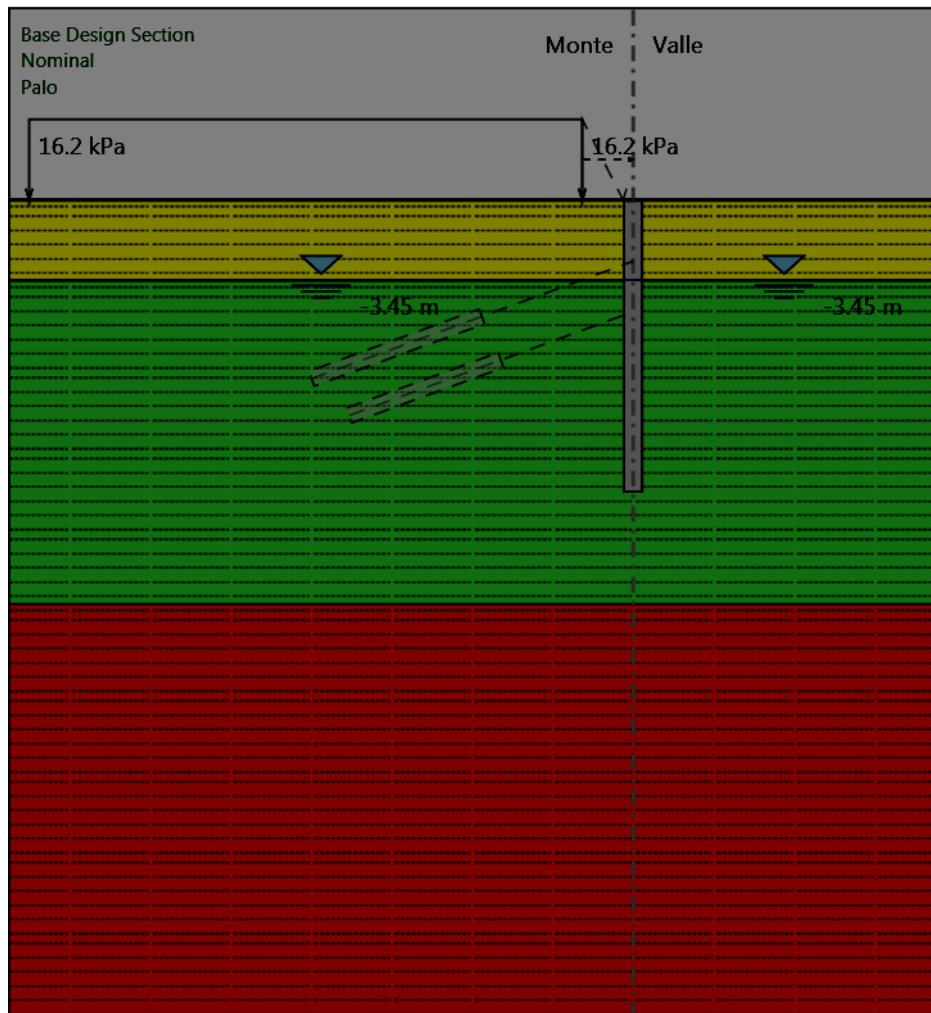
Diametro : 1 m

Efficacia : 1



## Fasi di Calcolo

### Palo



Palo

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : 0.5 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

0.5 m

Falda acquifera

Falda di sinistra : -3.45 m

Falda di destra : -3.45 m

Elementi strutturali

Paratia : WallElement

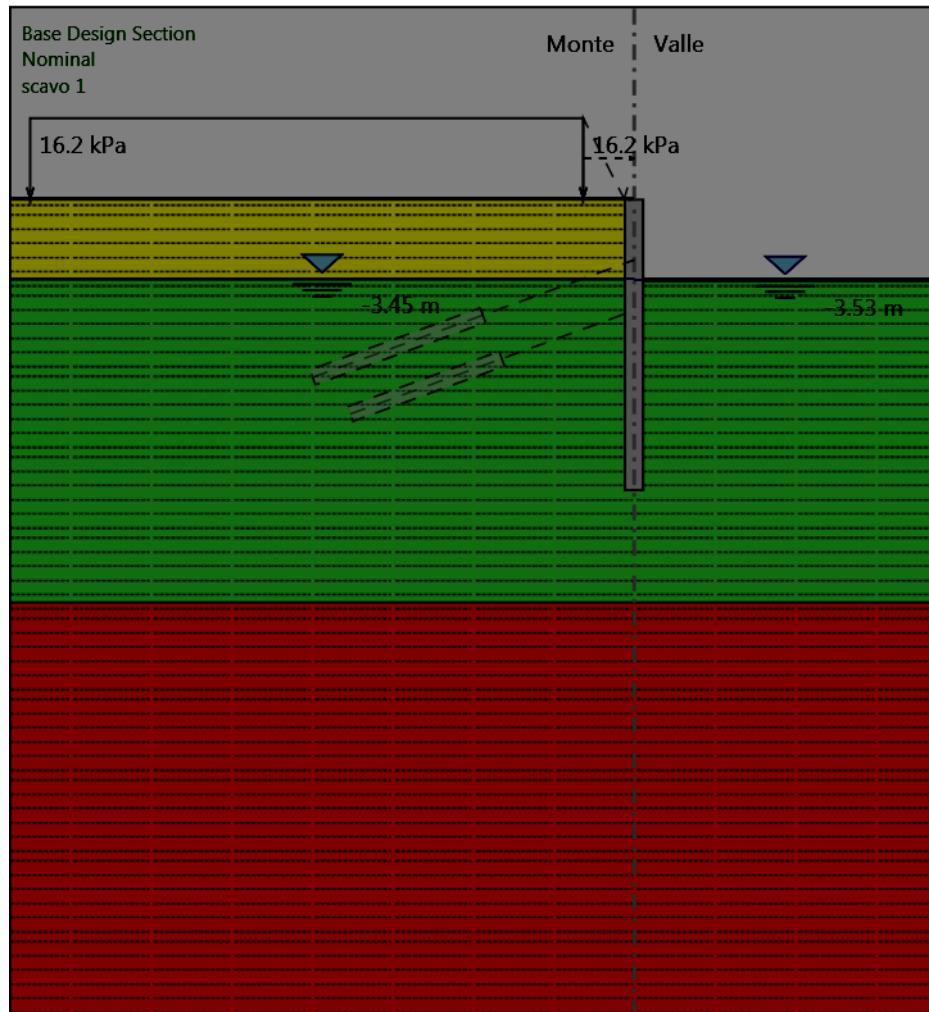
X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -14 m

Sezione : PALI\_Fi1000/1200

## scavo 1



scavo 1

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -3.53 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-3.53 m

Falda acquifera

Falda di sinistra : -3.45 m

Falda di destra : -3.53 m

Elementi strutturali

Paratia : WallElement

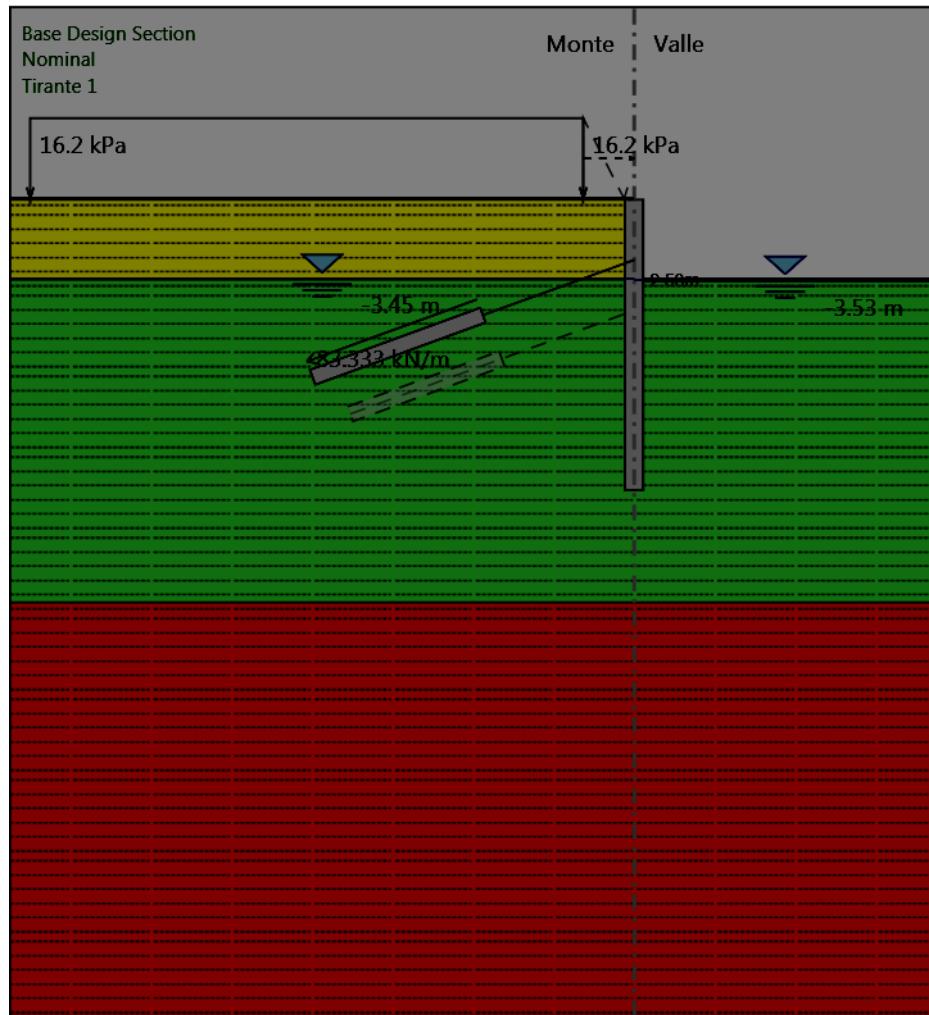
X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -14 m

Sezione : PALI\_Fi1000/1200

## Tirante 1



Tirante 1

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -3.53 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-3.53 m

Falda acquifera

Falda di sinistra : -3.45 m

Falda di destra : -3.53 m

Elementi strutturali

Paratia : WallElement

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -14 m

Sezione : PALI\_Fi1000/1200

Tirante : Tieback

X : 0 m

Z : -2.53 m

Lunghezza bulbo : 9 m

Diametro bulbo : 0.14 m

Lunghezza libera : 8 m

Precarico : 200 kN

Angolo : 20 °

Sezione : Trefoli 4

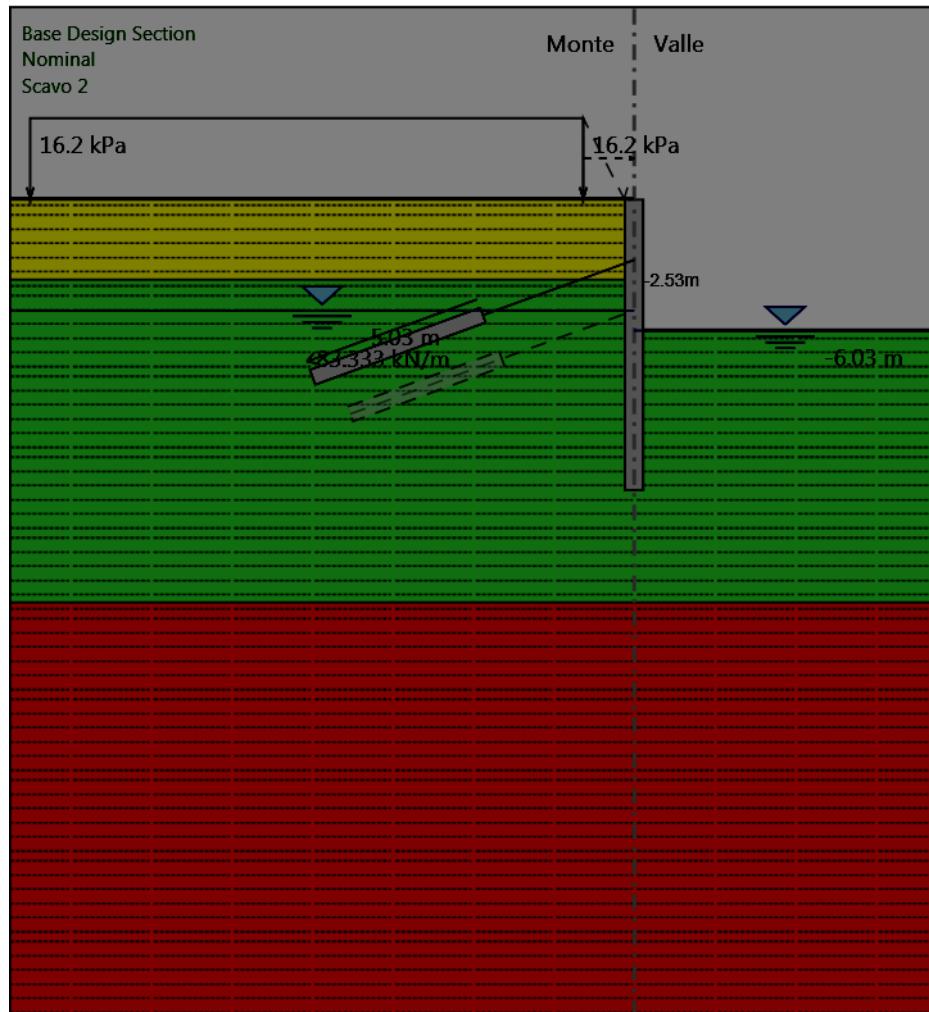
Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m<sup>2</sup>

## Scavo 2



Scavo 2

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -6.03 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-6.03 m

Falda acquifera

Falda di sinistra : -5.03 m

Falda di destra : -6.03 m

Elementi strutturali

Paratia : WallElement

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -14 m

Sezione : PALI\_Fi1000/1200

Tirante : Tieback

X : 0 m

Z : -2.53 m

Lunghezza bulbo : 9 m

Diametro bulbo : 0.14 m

Lunghezza libera : 8 m

Precarico : 200 kN

Angolo : 20 °

Sezione : Trefoli 4

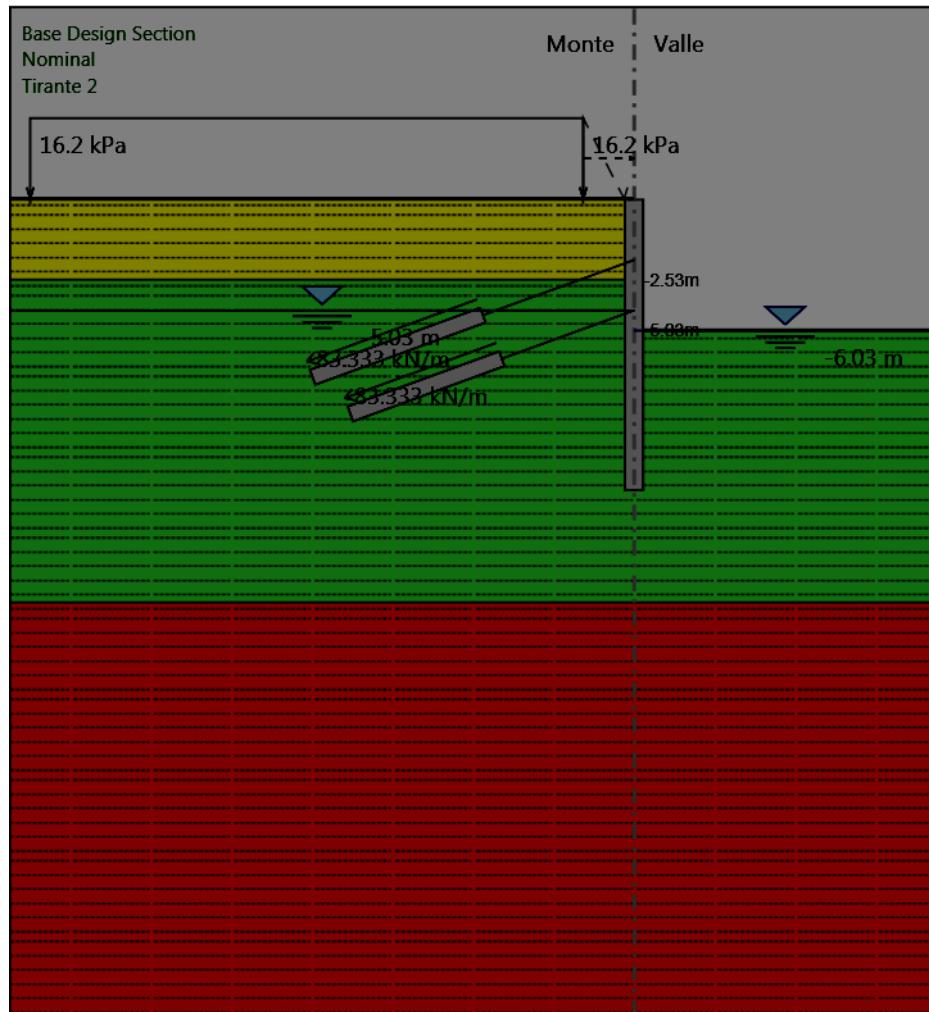
Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m<sup>2</sup>

## Tirante 2



Tirante 2

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -6.03 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-6.03 m

Falda acquifera

Falda di sinistra : -5.03 m

Falda di destra : -6.03 m

Elementi strutturali

Paratia : WallElement

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -14 m

Sezione : PALI\_Fi1000/1200

Tirante : Tieback

X : 0 m

Z : -2.53 m

Lunghezza bulbo : 9 m

Diametro bulbo : 0.14 m

Lunghezza libera : 8 m

Precarico : 200 kN

Angolo : 20 °

Sezione : Trefoli 4

Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m<sup>2</sup>

Tirante : Tieback

X : 0 m

Z : -5.03 m

Lunghezza bulbo : 8 m

Diametro bulbo : 0.14 m

Lunghezza libera : 7 m

Precarico : 200 kN

Angolo : 20 °

Sezione : Trefoli 4

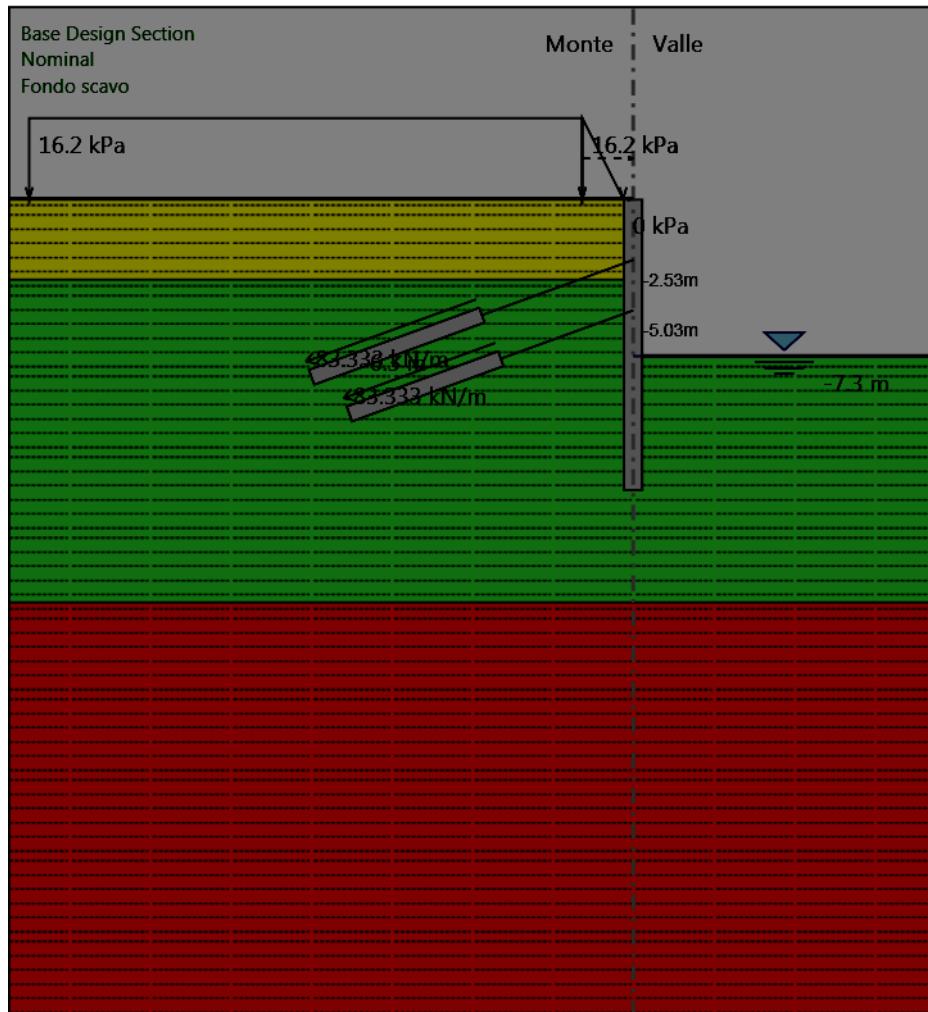
Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m<sup>2</sup>

## Fondo scavo



Fondo scavo

Scavo

Muro di sinistra

Lato monte : 0.5 m

Lato valle : -7.3 m

Linea di scavo di sinistra (Orizzontale)

0.5 m

Linea di scavo di destra (Orizzontale)

-7.3 m

Falda acquifera

Falda di sinistra : -6.3 m

Falda di destra : -7.3 m

Elementi strutturali

Paratia : WallElement

X : 0 m

Quota in alto : 0.5 m

Quota di fondo : -14 m

Sezione : PALI\_Fi1000/1200

Tirante : Tieback

X : 0 m

Z : -2.53 m

Lunghezza bulbo : 9 m

Diametro bulbo : 0.14 m

Lunghezza libera : 8 m

Precarico : 200 kN

Angolo : 20 °

Sezione : Trefoli 4

Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m<sup>2</sup>

Tirante : Tieback

X : 0 m

Z : -5.03 m

Lunghezza bulbo : 8 m

Diametro bulbo : 0.14 m

Lunghezza libera : 7 m

Precarico : 200 kN

Angolo : 20 °

Sezione : Trefoli 4

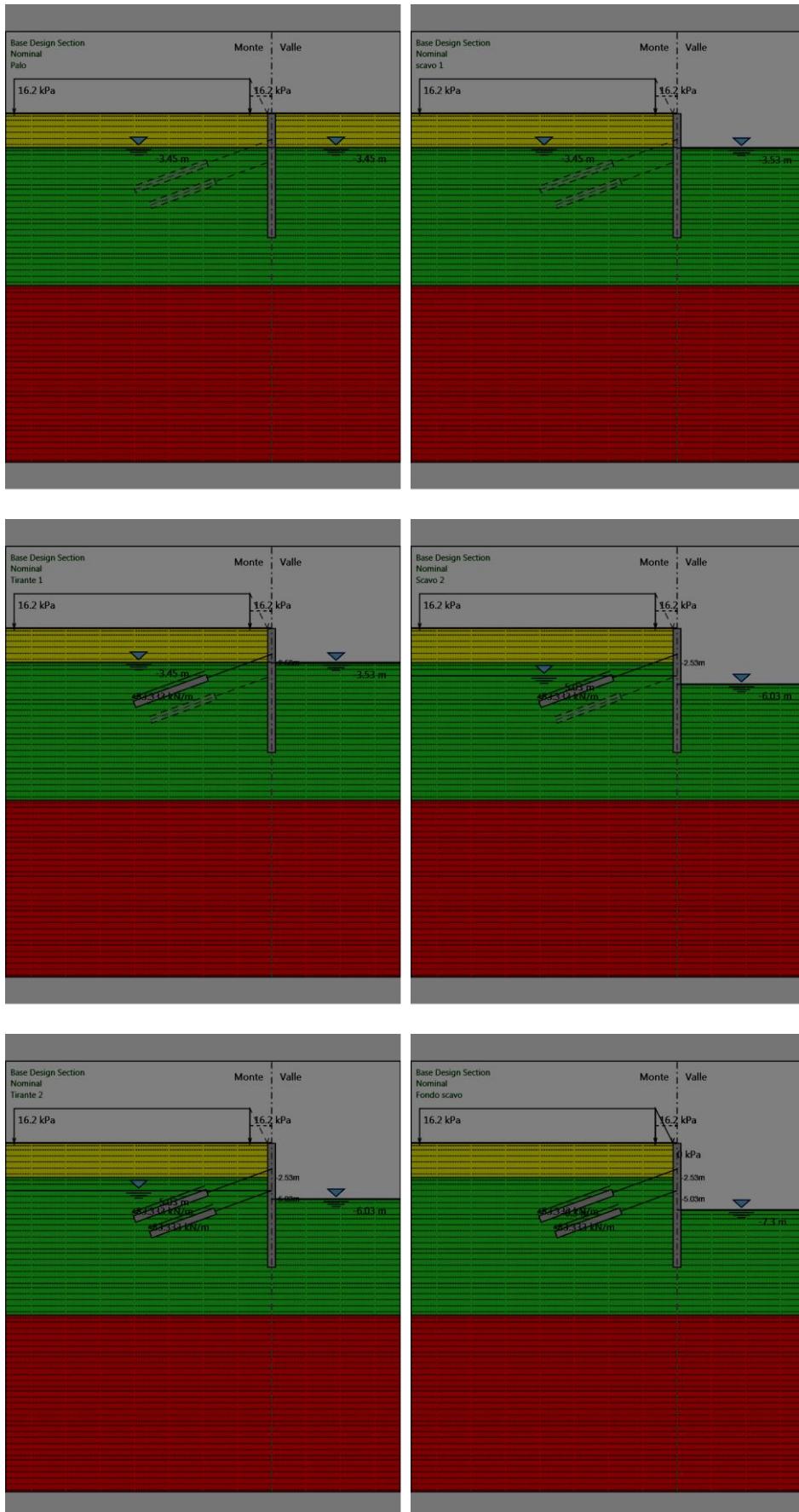
Tipo di barre : Barre trefoli

Numero di barre : 4

Diametro : 0.01331 m

Area : 0.000556 m<sup>2</sup>

## Tabella Configurazione Stage (Nominal)



## Grafici dei Risultati

### Design Assumption : Nominal

Tabella Spostamento Nominal - LEFT Stage: Palo

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Palo	0.5	0
Palo	0.3	0
Palo	0.1	0
Palo	-0.1	0
Palo	-0.3	0
Palo	-0.5	0
Palo	-0.7	0
Palo	-0.9	0
Palo	-1.1	0
Palo	-1.3	0
Palo	-1.5	0
Palo	-1.7	0
Palo	-1.9	0
Palo	-2.1	0
Palo	-2.3	0
Palo	-2.5	0
Palo	-2.53	0
Palo	-2.73	0
Palo	-2.93	0
Palo	-3.13	0
Palo	-3.33	0
Palo	-3.53	0
Palo	-3.73	0
Palo	-3.93	0
Palo	-4.13	0
Palo	-4.33	0
Palo	-4.53	0
Palo	-4.73	0
Palo	-4.93	0
Palo	-5.03	0
Palo	-5.23	0
Palo	-5.43	0
Palo	-5.63	0
Palo	-5.83	0
Palo	-6.03	0
Palo	-6.23	0
Palo	-6.43	0
Palo	-6.63	0
Palo	-6.83	0
Palo	-7.03	0
Palo	-7.23	0
Palo	-7.43	0
Palo	-7.63	0
Palo	-7.83	0
Palo	-8.03	0
Palo	-8.23	0
Palo	-8.43	0
Palo	-8.63	0
Palo	-8.83	0
Palo	-9.03	0
Palo	-9.23	0
Palo	-9.43	0
Palo	-9.63	0
Palo	-9.83	0
Palo	-10.03	0
Palo	-10.23	0
Palo	-10.43	0
Palo	-10.63	0
Palo	-10.83	0
Palo	-11.03	0
Palo	-11.23	0

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Palo	-11.43	0
Palo	-11.63	0
Palo	-11.83	0
Palo	-12.03	0
Palo	-12.23	0
Palo	-12.43	0
Palo	-12.63	0
Palo	-12.83	0
Palo	-13.03	0
Palo	-13.23	0
Palo	-13.43	0
Palo	-13.63	0
Palo	-13.83	0
Palo	-14	0

## Tabella Spostamento Nominal - LEFT Stage: scavo 1

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
scavo 1	0.5	3.38
scavo 1	0.3	3.27
scavo 1	0.1	3.15
scavo 1	-0.1	3.04
scavo 1	-0.3	2.92
scavo 1	-0.5	2.81
scavo 1	-0.7	2.7
scavo 1	-0.9	2.58
scavo 1	-1.1	2.47
scavo 1	-1.3	2.35
scavo 1	-1.5	2.24
scavo 1	-1.7	2.13
scavo 1	-1.9	2.01
scavo 1	-2.1	1.9
scavo 1	-2.3	1.79
scavo 1	-2.5	1.68
scavo 1	-2.53	1.66
scavo 1	-2.73	1.55
scavo 1	-2.93	1.44
scavo 1	-3.13	1.33
scavo 1	-3.33	1.23
scavo 1	-3.53	1.13
scavo 1	-3.73	1.03
scavo 1	-3.93	0.93
scavo 1	-4.13	0.84
scavo 1	-4.33	0.75
scavo 1	-4.53	0.67
scavo 1	-4.73	0.59
scavo 1	-4.93	0.52
scavo 1	-5.03	0.48
scavo 1	-5.23	0.42
scavo 1	-5.43	0.36
scavo 1	-5.63	0.3
scavo 1	-5.83	0.25
scavo 1	-6.03	0.2
scavo 1	-6.23	0.16
scavo 1	-6.43	0.12
scavo 1	-6.63	0.08
scavo 1	-6.83	0.05
scavo 1	-7.03	0.03
scavo 1	-7.23	0
scavo 1	-7.43	-0.02
scavo 1	-7.63	-0.04
scavo 1	-7.83	-0.05
scavo 1	-8.03	-0.06
scavo 1	-8.23	-0.08
scavo 1	-8.43	-0.08
scavo 1	-8.63	-0.09
scavo 1	-8.83	-0.1
scavo 1	-9.03	-0.1
scavo 1	-9.23	-0.1
scavo 1	-9.43	-0.1
scavo 1	-9.63	-0.1
scavo 1	-9.83	-0.1
scavo 1	-10.03	-0.1
scavo 1	-10.23	-0.1
scavo 1	-10.43	-0.09
scavo 1	-10.63	-0.09
scavo 1	-10.83	-0.08
scavo 1	-11.03	-0.08
scavo 1	-11.23	-0.07
scavo 1	-11.43	-0.07
scavo 1	-11.63	-0.06
scavo 1	-11.83	-0.06
scavo 1	-12.03	-0.05
scavo 1	-12.23	-0.05
scavo 1	-12.43	-0.04

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
scavo 1	-12.63	-0.03
scavo 1	-12.83	-0.03
scavo 1	-13.03	-0.02
scavo 1	-13.23	-0.02
scavo 1	-13.43	-0.01
scavo 1	-13.63	-0.01
scavo 1	-13.83	0
scavo 1	-14	0.01

## Tabella Spostamento Nominal - LEFT Stage: Tirante 1

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Tirante 1	0.5	2.23
Tirante 1	0.3	2.15
Tirante 1	0.1	2.07
Tirante 1	-0.1	1.98
Tirante 1	-0.3	1.9
Tirante 1	-0.5	1.82
Tirante 1	-0.7	1.74
Tirante 1	-0.9	1.66
Tirante 1	-1.1	1.58
Tirante 1	-1.3	1.5
Tirante 1	-1.5	1.42
Tirante 1	-1.7	1.34
Tirante 1	-1.9	1.26
Tirante 1	-2.1	1.18
Tirante 1	-2.3	1.1
Tirante 1	-2.5	1.03
Tirante 1	-2.53	1.02
Tirante 1	-2.73	0.95
Tirante 1	-2.93	0.88
Tirante 1	-3.13	0.81
Tirante 1	-3.33	0.74
Tirante 1	-3.53	0.68
Tirante 1	-3.73	0.62
Tirante 1	-3.93	0.56
Tirante 1	-4.13	0.5
Tirante 1	-4.33	0.45
Tirante 1	-4.53	0.4
Tirante 1	-4.73	0.35
Tirante 1	-4.93	0.31
Tirante 1	-5.03	0.29
Tirante 1	-5.23	0.25
Tirante 1	-5.43	0.21
Tirante 1	-5.63	0.17
Tirante 1	-5.83	0.14
Tirante 1	-6.03	0.12
Tirante 1	-6.23	0.09
Tirante 1	-6.43	0.07
Tirante 1	-6.63	0.05
Tirante 1	-6.83	0.03
Tirante 1	-7.03	0.01
Tirante 1	-7.23	0
Tirante 1	-7.43	-0.02
Tirante 1	-7.63	-0.03
Tirante 1	-7.83	-0.04
Tirante 1	-8.03	-0.04
Tirante 1	-8.23	-0.05
Tirante 1	-8.43	-0.05
Tirante 1	-8.63	-0.06
Tirante 1	-8.83	-0.06
Tirante 1	-9.03	-0.06
Tirante 1	-9.23	-0.06
Tirante 1	-9.43	-0.06
Tirante 1	-9.63	-0.06
Tirante 1	-9.83	-0.06
Tirante 1	-10.03	-0.06
Tirante 1	-10.23	-0.06
Tirante 1	-10.43	-0.06
Tirante 1	-10.63	-0.06
Tirante 1	-10.83	-0.05
Tirante 1	-11.03	-0.05
Tirante 1	-11.23	-0.05
Tirante 1	-11.43	-0.04
Tirante 1	-11.63	-0.04
Tirante 1	-11.83	-0.04
Tirante 1	-12.03	-0.03
Tirante 1	-12.23	-0.03
Tirante 1	-12.43	-0.03

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Tirante 1	-12.63	-0.02
Tirante 1	-12.83	-0.02
Tirante 1	-13.03	-0.02
Tirante 1	-13.23	-0.01
Tirante 1	-13.43	-0.01
Tirante 1	-13.63	0
Tirante 1	-13.83	0
Tirante 1	-14	0

## Tabella Spostamento Nominal - LEFT Stage: Scavo 2

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Scavo 2	0.5	5
Scavo 2	0.3	4.9
Scavo 2	0.1	4.79
Scavo 2	-0.1	4.68
Scavo 2	-0.3	4.58
Scavo 2	-0.5	4.47
Scavo 2	-0.7	4.36
Scavo 2	-0.9	4.26
Scavo 2	-1.1	4.15
Scavo 2	-1.3	4.04
Scavo 2	-1.5	3.94
Scavo 2	-1.7	3.83
Scavo 2	-1.9	3.73
Scavo 2	-2.1	3.62
Scavo 2	-2.3	3.52
Scavo 2	-2.5	3.41
Scavo 2	-2.53	3.4
Scavo 2	-2.73	3.29
Scavo 2	-2.93	3.19
Scavo 2	-3.13	3.09
Scavo 2	-3.33	2.99
Scavo 2	-3.53	2.89
Scavo 2	-3.73	2.79
Scavo 2	-3.93	2.69
Scavo 2	-4.13	2.59
Scavo 2	-4.33	2.49
Scavo 2	-4.53	2.39
Scavo 2	-4.73	2.29
Scavo 2	-4.93	2.19
Scavo 2	-5.03	2.14
Scavo 2	-5.23	2.04
Scavo 2	-5.43	1.94
Scavo 2	-5.63	1.85
Scavo 2	-5.83	1.75
Scavo 2	-6.03	1.66
Scavo 2	-6.23	1.57
Scavo 2	-6.43	1.48
Scavo 2	-6.63	1.39
Scavo 2	-6.83	1.3
Scavo 2	-7.03	1.22
Scavo 2	-7.23	1.14
Scavo 2	-7.43	1.07
Scavo 2	-7.63	1
Scavo 2	-7.83	0.93
Scavo 2	-8.03	0.86
Scavo 2	-8.23	0.8
Scavo 2	-8.43	0.74
Scavo 2	-8.63	0.69
Scavo 2	-8.83	0.64
Scavo 2	-9.03	0.59
Scavo 2	-9.23	0.54
Scavo 2	-9.43	0.5
Scavo 2	-9.63	0.46
Scavo 2	-9.83	0.42
Scavo 2	-10.03	0.39
Scavo 2	-10.23	0.36
Scavo 2	-10.43	0.33
Scavo 2	-10.63	0.3
Scavo 2	-10.83	0.28
Scavo 2	-11.03	0.25
Scavo 2	-11.23	0.23
Scavo 2	-11.43	0.21
Scavo 2	-11.63	0.19
Scavo 2	-11.83	0.17
Scavo 2	-12.03	0.15
Scavo 2	-12.23	0.13
Scavo 2	-12.43	0.12

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Scavo 2	-12.63	0.1
Scavo 2	-12.83	0.08
Scavo 2	-13.03	0.07
Scavo 2	-13.23	0.05
Scavo 2	-13.43	0.04
Scavo 2	-13.63	0.02
Scavo 2	-13.83	0.01
Scavo 2	-14	-0.01

## Tabella Spostamento Nominal - LEFT Stage: Tirante 2

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Tirante 2	0.5	4.5
Tirante 2	0.3	4.39
Tirante 2	0.1	4.29
Tirante 2	-0.1	4.18
Tirante 2	-0.3	4.08
Tirante 2	-0.5	3.97
Tirante 2	-0.7	3.86
Tirante 2	-0.9	3.76
Tirante 2	-1.1	3.65
Tirante 2	-1.3	3.55
Tirante 2	-1.5	3.44
Tirante 2	-1.7	3.33
Tirante 2	-1.9	3.23
Tirante 2	-2.1	3.13
Tirante 2	-2.3	3.02
Tirante 2	-2.5	2.92
Tirante 2	-2.53	2.91
Tirante 2	-2.73	2.81
Tirante 2	-2.93	2.71
Tirante 2	-3.13	2.61
Tirante 2	-3.33	2.51
Tirante 2	-3.53	2.41
Tirante 2	-3.73	2.32
Tirante 2	-3.93	2.22
Tirante 2	-4.13	2.13
Tirante 2	-4.33	2.04
Tirante 2	-4.53	1.95
Tirante 2	-4.73	1.86
Tirante 2	-4.93	1.77
Tirante 2	-5.03	1.73
Tirante 2	-5.23	1.64
Tirante 2	-5.43	1.56
Tirante 2	-5.63	1.48
Tirante 2	-5.83	1.4
Tirante 2	-6.03	1.33
Tirante 2	-6.23	1.25
Tirante 2	-6.43	1.18
Tirante 2	-6.63	1.11
Tirante 2	-6.83	1.04
Tirante 2	-7.03	0.98
Tirante 2	-7.23	0.92
Tirante 2	-7.43	0.86
Tirante 2	-7.63	0.81
Tirante 2	-7.83	0.75
Tirante 2	-8.03	0.7
Tirante 2	-8.23	0.66
Tirante 2	-8.43	0.61
Tirante 2	-8.63	0.57
Tirante 2	-8.83	0.54
Tirante 2	-9.03	0.5
Tirante 2	-9.23	0.47
Tirante 2	-9.43	0.43
Tirante 2	-9.63	0.41
Tirante 2	-9.83	0.38
Tirante 2	-10.03	0.35
Tirante 2	-10.23	0.33
Tirante 2	-10.43	0.31
Tirante 2	-10.63	0.29
Tirante 2	-10.83	0.27
Tirante 2	-11.03	0.25
Tirante 2	-11.23	0.24
Tirante 2	-11.43	0.22
Tirante 2	-11.63	0.21
Tirante 2	-11.83	0.19
Tirante 2	-12.03	0.18
Tirante 2	-12.23	0.17
Tirante 2	-12.43	0.15

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Tirante 2	-12.63	0.14
Tirante 2	-12.83	0.13
Tirante 2	-13.03	0.12
Tirante 2	-13.23	0.11
Tirante 2	-13.43	0.1
Tirante 2	-13.63	0.09
Tirante 2	-13.83	0.07
Tirante 2	-14	0.06

## Tabella Spostamento Nominal - LEFT Stage: Fondo scavo

Design Assumption: Nominal	Tipo Risultato: Spostamento	Muro: LEFT
Stage	Z (m)	Spostamento (mm)
Fondo scavo	0.5	4.97
Fondo scavo	0.3	4.87
Fondo scavo	0.1	4.78
Fondo scavo	-0.1	4.69
Fondo scavo	-0.3	4.59
Fondo scavo	-0.5	4.5
Fondo scavo	-0.7	4.41
Fondo scavo	-0.9	4.31
Fondo scavo	-1.1	4.22
Fondo scavo	-1.3	4.13
Fondo scavo	-1.5	4.04
Fondo scavo	-1.7	3.94
Fondo scavo	-1.9	3.85
Fondo scavo	-2.1	3.76
Fondo scavo	-2.3	3.67
Fondo scavo	-2.5	3.58
Fondo scavo	-2.53	3.56
Fondo scavo	-2.73	3.48
Fondo scavo	-2.93	3.39
Fondo scavo	-3.13	3.3
Fondo scavo	-3.33	3.22
Fondo scavo	-3.53	3.13
Fondo scavo	-3.73	3.05
Fondo scavo	-3.93	2.96
Fondo scavo	-4.13	2.88
Fondo scavo	-4.33	2.8
Fondo scavo	-4.53	2.72
Fondo scavo	-4.73	2.64
Fondo scavo	-4.93	2.56
Fondo scavo	-5.03	2.52
Fondo scavo	-5.23	2.44
Fondo scavo	-5.43	2.36
Fondo scavo	-5.63	2.29
Fondo scavo	-5.83	2.22
Fondo scavo	-6.03	2.14
Fondo scavo	-6.23	2.07
Fondo scavo	-6.43	1.99
Fondo scavo	-6.63	1.92
Fondo scavo	-6.83	1.85
Fondo scavo	-7.03	1.77
Fondo scavo	-7.23	1.7
Fondo scavo	-7.43	1.63
Fondo scavo	-7.63	1.56
Fondo scavo	-7.83	1.49
Fondo scavo	-8.03	1.42
Fondo scavo	-8.23	1.35
Fondo scavo	-8.43	1.29
Fondo scavo	-8.63	1.22
Fondo scavo	-8.83	1.16
Fondo scavo	-9.03	1.1
Fondo scavo	-9.23	1.04
Fondo scavo	-9.43	0.99
Fondo scavo	-9.63	0.93
Fondo scavo	-9.83	0.88
Fondo scavo	-10.03	0.83
Fondo scavo	-10.23	0.78
Fondo scavo	-10.43	0.74
Fondo scavo	-10.63	0.69
Fondo scavo	-10.83	0.65
Fondo scavo	-11.03	0.61
Fondo scavo	-11.23	0.57
Fondo scavo	-11.43	0.53
Fondo scavo	-11.63	0.5
Fondo scavo	-11.83	0.46
Fondo scavo	-12.03	0.42
Fondo scavo	-12.23	0.39
Fondo scavo	-12.43	0.36

<b>Design Assumption: Nominal</b>	<b>Tipo Risultato: Spostamento</b>	<b>Muro: LEFT</b>
<b>Stage</b>	<b>Z (m)</b>	<b>Spostamento (mm)</b>
Fondo scavo	-12.63	0.32
Fondo scavo	-12.83	0.29
Fondo scavo	-13.03	0.26
Fondo scavo	-13.23	0.23
Fondo scavo	-13.43	0.19
Fondo scavo	-13.63	0.16
Fondo scavo	-13.83	0.13
Fondo scavo	-14	0.1

## Inviluppi Spostamento Nominal

Tabella Inviluppi Spostamento Nominal Left Wall

Risultato	Inviluppi	Spostamento
Left Wall Muro	Left Wall	
0.5	0	5.005
0.3	0	4.898
0.1	0	4.791
-0.1	0	4.688
-0.3	0	4.595
-0.5	0	4.501
-0.7	0	4.408
-0.9	0	4.315
-1.1	0	4.221
-1.3	0	4.128
-1.5	0	4.035
-1.7	0	3.943
-1.9	0	3.851
-2.1	0	3.759
-2.3	0	3.668
-2.5	0	3.578
-2.53	0	3.565
-2.73	0	3.476
-2.93	0	3.388
-3.13	0	3.302
-3.33	0	3.216
-3.53	0	3.131
-3.73	0	3.046
-3.93	0	2.963
-4.13	0	2.88
-4.33	0	2.797
-4.53	0	2.716
-4.73	0	2.636
-4.93	0	2.557
-5.03	0	2.518
-5.23	0	2.441
-5.43	0	2.365
-5.63	0	2.29
-5.83	0	2.215
-6.03	0	2.141
-6.23	0	2.067
-6.43	0	1.994
-6.63	0	1.921
-6.83	0	1.848
-7.03	0	1.775
-7.23	-0.003	1.702
-7.43	-0.019	1.631
-7.63	-0.037	1.559
-7.83	-0.052	1.489
-8.03	-0.065	1.421
-8.23	-0.075	1.353
-8.43	-0.084	1.288
-8.63	-0.091	1.224
-8.83	-0.095	1.162
-9.03	-0.099	1.102
-9.23	-0.101	1.044
-9.43	-0.102	0.988
-9.63	-0.101	0.934
-9.83	-0.1	0.882
-10.03	-0.098	0.832
-10.23	-0.095	0.785
-10.43	-0.092	0.739
-10.63	-0.088	0.694
-10.83	-0.084	0.652
-11.03	-0.079	0.611
-11.23	-0.074	0.571
-11.43	-0.069	0.533
-11.63	-0.063	0.496
-11.83	-0.058	0.46

Risultato	Inviluppi	Spostamento
Left Wall	Muro	Left Wall
-12.03	-0.052	0.425
-12.23	-0.047	0.39
-12.43	-0.041	0.357
-12.63	-0.035	0.323
-12.83	-0.029	0.29
-13.03	-0.023	0.258
-13.23	-0.017	0.226
-13.43	-0.011	0.193
-13.63	-0.006	0.161
-13.83	0	0.129
-14	-0.006	0.102

## Riepilogo spinte

Design Assumption:		Tipo Risultato: Riepi-		Muro:	LEFT	Lato	LEFT	
Nominal	Stage	Logo spinte						
		Vera effettiva (kN/m)	Pressione neutra (kN/m)	Vera Totale (kN/m)	Min ammissibile (kN/m)	Max ammissibile (kN/m)	Percentuale di resistenza massima	Vera / Attiva
Palo	1054.8	556.6	1611.4	452	5105.2	20.66%	2.33	
scavo 1	937.8	554.4	1492.2	453	5111	18.35%	2.07	
Tirante 1	990.3	554.4	1544.7	453	5111	19.38%	2.19	
Scavo 2	843.4	378.6	1221.9	532.5	5599	15.06%	1.58	
Tirante 2	904.9	378.6	1283.5	532.5	5599	16.16%	1.7	
Fondo scavo	841.8	275.9	1117.7	593.6	5953.8	14.14%	1.42	

Design Assump-		Tipo Risultato: Riepi-		Muro:	LEFT	Lato	RIGHT	
Nominal	Stage	Logo spinte						
		Vera effettiva (kN/m)	Pressione neutra (kN/m)	Vera Totale (kN/m)	Min ammissibile (kN/m)	Max ammissibile (kN/m)	Percentuale di resistenza massima	Vera / At-
Palo	1054.8	556.6	1611.4	416	4892.8	21.56%	2.54	
scavo 1	942	550.2	1492.2	45.6	2218.8	42.46%	20.66	
Tirante 1	916.2	550.2	1466.4	45.6	2218.8	41.29%	20.09	
Scavo 2	801.5	336.4	1137.8	5.8	1353.3	59.23%	138.19	
Tirante 2	786	336.4	1122.3	5.8	1353.3	58.08%	135.52	
Fondo scavo	712.7	240.1	952.8	0.2	1023.9	69.61%	3563.5	

## **Allegati**

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

```
* PARATIE ANALYSIS FOR DESIGN SECTION:Base Design Section USING ASSUMPTION: Nominal
* Time:giovedi 25 giugno 2020 15:33:37
* 1: Defining general settings
UNIT m kN
TITLE New Project
DELTA 0.2
option param itemax 40

* 2: Defining wall(s)
WALL LeftWall_29 0 -14 0.5 1

* 3: Defining surfaces for wall(s)
SOIL 0_L LeftWall_29 -14 0.5 1 0
SOIL 0_R LeftWall_29 -14 0.5 2 180

* 4: Defining soil layers
*
* Soil Profile (FRANA_334_8_L_0)
*
LDATA FRANA_334_8_L_0 0.5 LeftWall_29
ATREST 0.758 1 1
WEIGHT 20 10 10
PERMEABILITY 1E-05
RESISTANCE 4 14
YOUNG 2E+04 3.2E+04
ENDL
*
* Soil Profile (BNA2_(2)_335_337_L_0)
*
LDATA BNA2_(2)_335_337_L_0 -3.5 LeftWall_29
ATREST 0.623 1 1
WEIGHT 20 10 10
PERMEABILITY 1E-05
RESISTANCE 20 22.2
YOUNG 1.15E+05 1.84E+05
ENDL

* 5: Defining structural materials
* Steel material: 2753 Name=Fe360 E=206000200 kPa
MATERIAL Fe360_2753 2.06E+08
* Concrete material: 101 Name=C25/30 E=31475800 kPa
MATERIAL C2530_101 3.148E+07
* Rebar material: 110 Name=acciaio armonico E=200100000 kPa
MATERIAL acciaioarmonico_110 2.001E+08

* 6: Defining structural elements
* 6.1: Beams
BEAM WallElement_30 LeftWall_29 -14 0.5 C2530_101 0.7888 00 00

* 6.2: Supports
WIRE Tieback_341 LeftWall_29 -2.53 acciaioarmonico_110 1.363E-05 83.33 20 0 0
WIRE Tieback_342 LeftWall_29 -5.03 acciaioarmonico_110 1.544E-05 83.33 20 0 0

* 6.3: Strips
STRIP LeftWall_29 1 6 2.53 27.47 0.5 16.2 45
STRIP LeftWall_29 6 6 0.5 2.03 0.5 8.1 45

* 7: Defining Steps
STEP Palo_28
CHANGE FRANA_334_8_L_0 U-FRICT=14 LeftWall_29
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE FRANA_334_8_L_0 U-KA=0.61 LeftWall_29
CHANGE FRANA_334_8_L_0 U-KP=1.85 LeftWall_29
CHANGE FRANA_334_8_L_0 D-KA=0.61 LeftWall_29
CHANGE FRANA_334_8_L_0 D-KP=1.85 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 U-FRICT=22.2 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 U-KA=0.452 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 U-KP=2.774 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-KA=0.452 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-KP=2.774 LeftWall_29
CHANGE FRANA_334_8_L_0 U-COHE=4 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 U-COHE=20 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 0.5
WATER -3.45 0 -14 0 0
```

```

ADD WallElement_30
ENDSTEP

STEP scavol_344
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -3.53
WATER -3.45 0.08 -14 0 0
ENDSTEP

STEP Tirantel_1139
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -3.53
WATER -3.45 0.08 -14 0 0
ADD Tieback_341
ENDSTEP

STEP Scavo2_1238
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -6.03
WATER -5.03 1 -14 0 0
ENDSTEP

STEP Tirante2_1685
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -6.03
WATER -5.03 1 -14 0 0
ADD Tieback_342
ENDSTEP

STEP Fondoscavo_2741
CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
SETWALL LeftWall_29
GEOM 0.5 -7.3
WATER -6.3 1 -14 0 0
ENDSTEP

```

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

```

+-----+
|          PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
|          NewProject.BaseDesignSection_25.Nominal_60
|          Exe Time :25 June 2020      15:33:37
+-----+
*****
*          *
*  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 2016 *Build date: Sept23, 2015*
*          *
*          *
*          Ce.A.S.     S.R.L. CENTRO DI ANALISI STRUTTURALE
*          VIALE GIUSTINIANO 10
*          20129 MILANO (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_25.Nominal_60  
STARTING  
ACCEPTED <FILE,GENW >  
ACCEPTED <FILE,PLOTTER,BINARY >  
ACCEPTED <SOLVE TOTAL_STRESS >  
ACCEPTED <PARAM ITEMAX 40 >
```

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

```
PRELIMINARY OPERATIONS CPU TIME      0.01 [sec]
```

```

+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020      15:33:37
+-----+

```

INPUT FILE HAS BEEN GENERATED BY WALGEN PROGRAM

New Project

NO. OF NODAL POINTS (NUMNP) .....	75
NO. OF COORDINATES (NCOORD) .....	2
NO. OF NODE DOFS (NDOF) .....	2
NO. OF EQUATIONS (NEQ) .....	150
NO. OF CONSTRAINTS CARDS (NVINC) .....	0
NO. OF ELEMENT GROUPS (NEG) .....	5
NO. OF SOLUTION STEPS (NSTE) .....	6
NO. OF ELEMENT SETS ATTACHED TO SLAVE NODES ...	0
NO. OF RECORD FROM WALGEN .....	98
NO. OF LONG NAMES (LASTNAME) .....	23
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.	

```

+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 15:33:37
+-----+
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 98

1 : UNIT m kN
2 : TITLE New Project
3 : DELTA 0.2
4 : option param itemax 40
5 : WALL LeftWall_29 0 -14 0.5 1
6 : SOIL 0_L LeftWall_29 -14 0.5 1 0
7 : SOIL 0_R LeftWall_29 -14 0.5 2 180
8 : LDATA FRANA_334_8_L_0 0.5 LeftWall_29
9 : ATREST 0.758 1 1
10 : WEIGHT 20 10 10
11 : PERMEABILITY 1E-05
12 : RESISTANCE 4 14
13 : YOUNG 2E+04 3.2E+04
14 : ENDL
15 : LDATA BNA2_(2)_335_337_L_0 -3.5 LeftWall_29
16 : ATREST 0.623 1 1
17 : WEIGHT 20 10 10
18 : PERMEABILITY 1E-05
19 : RESISTANCE 20 22.2
20 : YOUNG 1.15E+05 1.84E+05
21 : ENDL
22 : MATERIAL Fe360_2753 2.06E+08
23 : MATERIAL C2530_101 3.148E+07
24 : MATERIAL acciaioarmonico_110 2.001E+08
25 : BEAM WallElement_30 LeftWall_29 -14 0.5 C2530_101 0.7888 00 00
26 : WIRE Tieback_341 LeftWall_29 -2.53 acciaioarmonico_110 1.363E-05 83.33 20 0 0
27 : WIRE Tieback_342 LeftWall_29 -5.03 acciaioarmonico_110 1.544E-05 83.33 20 0 0
28 : STRIP LeftWall_29 1 6 2.53 27.47 0.5 16.2 45
29 : STRIP LeftWall_29 6 6 0.5 2.03 0.5 8.1 45
30 : STEP Palo_28
31 : CHANGE FRANA_334_8_L_0 U-FRICT=14 LeftWall_29
32 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
33 : CHANGE FRANA_334_8_L_0 U-KA=0.61 LeftWall_29
34 : CHANGE FRANA_334_8_L_0 U-KP=1.85 LeftWall_29
35 : CHANGE FRANA_334_8_L_0 D-KA=0.61 LeftWall_29
36 : CHANGE FRANA_334_8_L_0 D-KP=1.85 LeftWall_29
37 : CHANGE BNA2_(2)_335_337_L_0 U-FRICT=22.2 LeftWall_29
38 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
39 : CHANGE BNA2_(2)_335_337_L_0 U-KA=0.452 LeftWall_29
40 : CHANGE BNA2_(2)_335_337_L_0 U-KP=2.774 LeftWall_29
41 : CHANGE BNA2_(2)_335_337_L_0 D-KA=0.452 LeftWall_29
42 : CHANGE BNA2_(2)_335_337_L_0 D-KP=2.774 LeftWall_29
43 : CHANGE FRANA_334_8_L_0 U-COHE=4 LeftWall_29
44 : CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
45 : CHANGE BNA2_(2)_335_337_L_0 U-COHE=20 LeftWall_29
46 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
47 : SETWALL LeftWall_29
48 : GEOM 0.5 0.5
49 : WATER -3.45 0 -14 0 0
50 : ADD WallElement_30
51 : ENDSTEP
52 : STEP scavol_344
53 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
54 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
55 : CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
56 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
57 : SETWALL LeftWall_29
58 : GEOM 0.5 -3.53
59 : WATER -3.45 0.08 -14 0 0
60 : ENDSTEP
61 : STEP Tirante1_1139
62 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
63 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
64 : CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
65 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
66 : SETWALL LeftWall_29
67 : GEOM 0.5 -3.53
68 : WATER -3.45 0.08 -14 0 0
69 : ADD Tieback_341
70 : ENDSTEP
71 : STEP Scav02_1238
72 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
73 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
74 : CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
75 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
76 : SETWALL LeftWall_29
77 : GEOM 0.5 -6.03
78 : WATER -5.03 1 -14 0 0
79 : ENDSTEP

```

```
80 : STEP Tirante2_1685
81 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
82 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
83 : CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
84 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
85 : SETWALL LeftWall_29
86 : GEOM 0.5 -6.03
87 : WATER -5.03 1 -14 0 0
88 : ADD Tieback_342
89 : ENDSTEP
90 : STEP Fondoscavo_2741
91 : CHANGE FRANA_334_8_L_0 D-FRICT=14 LeftWall_29
92 : CHANGE BNA2_(2)_335_337_L_0 D-FRICT=22.2 LeftWall_29
93 : CHANGE FRANA_334_8_L_0 D-COHE=4 LeftWall_29
94 : CHANGE BNA2_(2)_335_337_L_0 D-COHE=20 LeftWall_29
95 : SETWALL LeftWall_29
96 : GEOM 0.5 -7.3
97 : WATER -6.3 1 -14 0 0
98 : ENDSTEP
```

```

+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020      15:33:37
+-----+

```

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 / NODE	Y-COORD	Z-COORD /		
1	0.0000	0.50000	/	2 0.0000	0.30000	/	3 0.0000	0.10000	/	4 0.0000	-0.10000	/
5	0.0000	-0.30000	/	6 0.0000	-0.50000	/	7 0.0000	-0.70000	/	8 0.0000	-0.90000	/
9	0.0000	-1.1000	/	10 0.0000	-1.3000	/	11 0.0000	-1.5000	/	12 0.0000	-1.7000	/
13	0.0000	-1.9000	/	14 0.0000	-2.1000	/	15 0.0000	-2.3000	/	16 0.0000	-2.5000	/
17	0.0000	-2.5300	/	18 0.0000	-2.7300	/	19 0.0000	-2.9300	/	20 0.0000	-3.1300	/
21	0.0000	-3.3300	/	22 0.0000	-3.5300	/	23 0.0000	-3.7300	/	24 0.0000	-3.9300	/
25	0.0000	-4.1300	/	26 0.0000	-4.3300	/	27 0.0000	-4.5300	/	28 0.0000	-4.7300	/
29	0.0000	-4.9300	/	30 0.0000	-5.0300	/	31 0.0000	-5.2300	/	32 0.0000	-5.4300	/
33	0.0000	-5.6300	/	34 0.0000	-5.8300	/	35 0.0000	-6.0300	/	36 0.0000	-6.2300	/
37	0.0000	-6.4300	/	38 0.0000	-6.6300	/	39 0.0000	-6.8300	/	40 0.0000	-7.0300	/
41	0.0000	-7.2300	/	42 0.0000	-7.4300	/	43 0.0000	-7.6300	/	44 0.0000	-7.8300	/
45	0.0000	-8.0300	/	46 0.0000	-8.2300	/	47 0.0000	-8.4300	/	48 0.0000	-8.6300	/
49	0.0000	-8.8300	/	50 0.0000	-9.0300	/	51 0.0000	-9.2300	/	52 0.0000	-9.4300	/
53	0.0000	-9.6300	/	54 0.0000	-9.8300	/	55 0.0000	-10.030	/	56 0.0000	-10.230	/
57	0.0000	-10.430	/	58 0.0000	-10.630	/	59 0.0000	-10.830	/	60 0.0000	-11.030	/
61	0.0000	-11.230	/	62 0.0000	-11.430	/	63 0.0000	-11.630	/	64 0.0000	-11.830	/
65	0.0000	-12.030	/	66 0.0000	-12.230	/	67 0.0000	-12.430	/	68 0.0000	-12.630	/
69	0.0000	-12.830	/	70 0.0000	-13.030	/	71 0.0000	-13.230	/	72 0.0000	-13.430	/
73	0.0000	-13.630	/	74 0.0000	-13.830	/	75 0.0000	-14.000	/			



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	0.2000	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	0.1850	0.000	0.000	0.000	1.000
75	75	2	0.8500E-01	0.000	0.000	0.000	1.000



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	0.2000	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	0.1850	0.000	0.000	0.000	2.000
75	75	2	0.8500E-01	0.000	0.000	0.000	2.000



42	42	43	1	0.000	0.000	0.7888
43	43	44	1	0.000	0.000	0.7888
44	44	45	1	0.000	0.000	0.7888
45	45	46	1	0.000	0.000	0.7888
46	46	47	1	0.000	0.000	0.7888
47	47	48	1	0.000	0.000	0.7888
48	48	49	1	0.000	0.000	0.7888
49	49	50	1	0.000	0.000	0.7888
50	50	51	1	0.000	0.000	0.7888
51	51	52	1	0.000	0.000	0.7888
52	52	53	1	0.000	0.000	0.7888
53	53	54	1	0.000	0.000	0.7888
54	54	55	1	0.000	0.000	0.7888
55	55	56	1	0.000	0.000	0.7888
56	56	57	1	0.000	0.000	0.7888
57	57	58	1	0.000	0.000	0.7888
58	58	59	1	0.000	0.000	0.7888
59	59	60	1	0.000	0.000	0.7888
60	60	61	1	0.000	0.000	0.7888
61	61	62	1	0.000	0.000	0.7888
62	62	63	1	0.000	0.000	0.7888
63	63	64	1	0.000	0.000	0.7888
64	64	65	1	0.000	0.000	0.7888
65	65	66	1	0.000	0.000	0.7888
66	66	67	1	0.000	0.000	0.7888
67	67	68	1	0.000	0.000	0.7888
68	68	69	1	0.000	0.000	0.7888
69	69	70	1	0.000	0.000	0.7888
70	70	71	1	0.000	0.000	0.7888
71	71	72	1	0.000	0.000	0.7888
72	72	73	1	0.000	0.000	0.7888
73	73	74	1	0.000	0.000	0.7888
74	74	75	1	0.000	0.000	0.7888

```

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020      15:33:37
+-----+
ELEMENT GROUP NO. 4

Tieback_341          :
 6  1   0   1   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  active
 4  active
 5  active
 6  active

material set no.     1

prop( 1) angle      20.0000
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
 6  0.000      0.000

element data

el    n    mat      a/l      pinit      yieldc      yielddt
-----
 1  17    1  0.1363E-04 83.33      0.000      0.000

```

```

+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020      15:33:37
+-----+
ELEMENT GROUP NO. 5

Tieback_342          :
 6  1   0   1   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  inactive
 5  active
 6  active

material set no.     1

prop( 1) angle      20.0000
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
 6  0.000      0.000

element data

el    n    mat      a/l      pinit      yieldc      yielddt
-----
 1  30     1  0.1544E-04 83.33      0.000      0.000

```

```
+-----+  
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 15:33:37 |  
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```

NO. OF NODAL LOADS (NLOAD) ..... 0  
NO. OF LOAD CURVES (NLCUR) ..... 12  
MAXIMUM POINTS/LCURVE (NPTM)..... 5

```

+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020      15:33:37
+-----+
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	
7.00000	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	
7.00000	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	
7.00000	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	
7.00000	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	
7.00000	0.0000E+00	

LOAD FUNCTION NUMBER = 6  
NUMBER OF TIME POINTS = 5

TIME	VALUE	FUNCTION
0.00000	0.0000E+00	
5.80000	0.0000E+00	
6.00000	0.1000E+01	
6.20000	0.0000E+00	
7.00000	0.0000E+00	

LOAD FUNCTION NUMBER = 7

NUMBER OF TIME POINTS = 4

TIME VALUE FUNCTION

0.00000	0.0000E+00
0.80000	0.0000E+00
1.00000	0.1000E+01
7.00000	0.1000E+01

LOAD FUNCTION NUMBER = 8  
NUMBER OF TIME POINTS = 4

TIME VALUE FUNCTION

0.00000	0.0000E+00
1.80000	0.0000E+00
2.00000	0.1000E+01
7.00000	0.1000E+01

LOAD FUNCTION NUMBER = 9  
NUMBER OF TIME POINTS = 4

TIME VALUE FUNCTION

0.00000	0.0000E+00
2.80000	0.0000E+00
3.00000	0.1000E+01
7.00000	0.1000E+01

LOAD FUNCTION NUMBER = 10  
NUMBER OF TIME POINTS = 4

TIME VALUE FUNCTION

0.00000	0.0000E+00
3.80000	0.0000E+00
4.00000	0.1000E+01
7.00000	0.1000E+01

LOAD FUNCTION NUMBER = 11  
NUMBER OF TIME POINTS = 4

TIME VALUE FUNCTION

0.00000	0.0000E+00
4.80000	0.0000E+00
5.00000	0.1000E+01
7.00000	0.1000E+01

LOAD FUNCTION NUMBER = 12  
NUMBER OF TIME POINTS = 4

TIME VALUE FUNCTION

0.00000	0.0000E+00
5.80000	0.0000E+00
6.00000	0.1000E+01
7.00000	0.1000E+01

NO. OF DISTRIBUTED LOAD CARDS 0

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+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020      15:33:37
+-----+
```

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
STEP	6	TOTAL APPLIED LOAD IN DIR.	2	Y-DISPL.F	0.0000000
STEP	6	TOTAL APPLIED LOAD IN DIR.	4	X-ROT. F	0.0000000

LOAD INPUT SECTION COMPLETED

```
+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| | NewProject.BaseDesignSection_25.Nominal_60
| | Exe Time :25 June 2020 15:33:37
+-----+
```

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

```

+-----+
| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 15:33:37
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```

LAYER DESCRIPTORS FOR STEP NO. 1

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

```

ITEM NO. 1<NAME >= 16.000 (BOTH WALLS)
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 4.0000 (BOTH WALLS)
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 4.0000 (BOTH WALLS)
ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)
ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1
ITEM NO. 61<D-KP >= 1.8500 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 >= 17.000 (BOTH WALLS)
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)
ITEM NO. 3<LEVEL >= -3.5000 (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 >= 22.200 (BOTH WALLS)
ITEM NO. 10<U-KA >= 0.45200 WALL NO. 1
ITEM NO. 11<U-KP >= 2.7740 WALL NO. 1
ITEM NO. 12<K0-NC >= 0.62300 (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 >= 0.115000E+06 (BOTH WALLS)
ITEM NO. 18<EUR >= 0.184000E+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 >= 22.200 (BOTH WALLS)
ITEM NO. 60<D-KA >= 0.45200 WALL NO. 1
ITEM NO. 61<D-KP >= 2.7740 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 >= 16.000 (BOTH WALLS)
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 4.0000 (BOTH WALLS)
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 4.0000 (BOTH WALLS)  
 ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
 ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
 ITEM NO. 61<D-KP >= 1.8500 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 >= 17.000 (BOTH WALLS)  
 ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
 ITEM NO. 3<LEVEL >= -3.5000 (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 >= 22.200 (BOTH WALLS)  
 ITEM NO. 10<U-KA >= 0.45200 WALL NO. 1  
 ITEM NO. 11<U-KP >= 2.7740 WALL NO. 1  
 ITEM NO. 12<K0-NC >= 0.62300 (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 >= 0.115000E+06 (BOTH WALLS)  
 ITEM NO. 18<EUR >= 0.184000E+06 (BOTH WALLS)  
 ITEM NO. 27<U-PERM >= 0.100000E-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 >= 22.200 (BOTH WALLS)  
 ITEM NO. 60<D-KA >= 0.45200 WALL NO. 1  
 ITEM NO. 61<D-KP >= 2.7740 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 >= 16.000 (BOTH WALLS)  
 ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
 ITEM NO. 3<LEVEL >= 0.50000 (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 >= 4.0000 (BOTH WALLS)  
 ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)  
 ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1  
 ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1  
 ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (BOTH WALLS)  
 ITEM NO. 27<U-PERM >= 0.100000E-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 >= 4.0000 (BOTH WALLS)  
 ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
 ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
 ITEM NO. 61<D-KP >= 1.8500 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 >= 17.000 (BOTH WALLS)  
 ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
 ITEM NO. 3<LEVEL >= -3.5000 (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 >= 22.200 (BOTH WALLS)  
 ITEM NO. 10<U-KA >= 0.45200 WALL NO. 1  
 ITEM NO. 11<U-KP >= 2.7740 WALL NO. 1  
 ITEM NO. 12<K0-NC >= 0.62300 (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 >= 0.115000E+06 (BOTH WALLS)  
 ITEM NO. 18<EUR >= 0.184000E+06 (BOTH WALLS)  
 ITEM NO. 27<U-PERM >= 0.100000E-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 >= 22.200 (BOTH WALLS)  
 ITEM NO. 60<D-KA >= 0.45200 WALL NO. 1

ITEM NO. 61<D-KP >= 2.7740 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO. 4

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

ITEM NO. 1<NAME >= 16.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 4.0000 (BOTH WALLS)  
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1  
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 4.0000 (BOTH WALLS)  
ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
ITEM NO. 61<D-KP >= 1.8500 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

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

ITEM NO. 1<NAME >= 17.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= -3.5000 (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 >= 22.200 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.45200 WALL NO. 1  
ITEM NO. 11<U-KP >= 2.7740 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.62300 (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 >= 0.11500E+06 (BOTH WALLS)  
ITEM NO. 18<EUR >= 0.18400E+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 >= 22.200 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.45200 WALL NO. 1  
ITEM NO. 61<D-KP >= 2.7740 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO. 5

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

ITEM NO. 1<NAME >= 16.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 4.0000 (BOTH WALLS)  
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1  
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 4.0000 (BOTH WALLS)  
ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
ITEM NO. 61<D-KP >= 1.8500 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

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

ITEM NO. 1<NAME >= 17.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= -3.5000 (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 >= 22.200 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.45200 WALL NO. 1  
ITEM NO. 11<U-KP >= 2.7740 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.62300 (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 >= 0.11500E+06 (BOTH WALLS)  
ITEM NO. 18<EUR >= 0.18400E+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 >= 22.200 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.45200 WALL NO. 1  
ITEM NO. 61<D-KP >= 2.7740 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

LAYER DESCRIPTORS FOR STEP NO. 6

NON ZERO LAYER DESCRIPTORS FOR LAYER NO. 1 FOR STEP NO. 6

ITEM NO. 1<NAME >= 16.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= 0.50000 (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 >= 4.0000 (BOTH WALLS)  
ITEM NO. 9<U-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.61000 WALL NO. 1  
ITEM NO. 11<U-KP >= 1.8500 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.75800 (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 >= 32000. (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 >= 4.0000 (BOTH WALLS)  
ITEM NO. 59<D-FRICT >= 14.000 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.61000 WALL NO. 1  
ITEM NO. 61<D-KP >= 1.8500 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

NON ZERO LAYER DESCRIPTORS FOR LAYER NO. 2 FOR STEP NO. 6

ITEM NO. 1<NAME >= 17.000 (BOTH WALLS)  
ITEM NO. 2<NATURE >= 1.0000 (BOTH WALLS)  
ITEM NO. 3<LEVEL >= -3.5000 (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 >= 22.200 (BOTH WALLS)  
ITEM NO. 10<U-KA >= 0.45200 WALL NO. 1  
ITEM NO. 11<U-KP >= 2.7740 WALL NO. 1  
ITEM NO. 12<K0-NC >= 0.62300 (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 >= 0.11500E+06 (BOTH WALLS)  
ITEM NO. 18<EUR >= 0.18400E+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 >= 22.200 (BOTH WALLS)  
ITEM NO. 60<D-KA >= 0.45200 WALL NO. 1  
ITEM NO. 61<D-KP >= 2.7740 WALL NO. 1  
ITEM NO. 77<D-PERM >= 0.10000E-04 (BOTH WALLS)

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
|
| Exe Time :25 June 2020 15:33:37
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PHASE DESCRIPTORS

STEP NO.	1	LEFT WALL	RIGHT WALL
Y		0.000	-0.9990E+30
Z-PC		0.5000	0.000
Z-EXCAVATION		0.5000	0.000
Z-WATER_TABLE		-3.450	-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		-14.00	-14.00
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		0.5000	0.000
Z-EXCAVATION		-3.530	0.000
Z-WATER_TABLE		-3.450	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL		0.000	0.000
ZQ		0.000	0.000
DZW_OF_THE_WATER_TABLE		0.8000E-01	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		-14.00	-14.00
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	0.5000	0.000
Z-EXCAVATION	-3.530	0.000
Z-WATER_TABLE	-3.450	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	0.8000E-01	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	-14.00	-14.00
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	0.5000	0.000
Z-EXCAVATION	-6.030	0.000
Z-WATER_TABLE	-5.030	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	1.000	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	-14.00	-14.00
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	0.5000	0.000
Z-EXCAVATION	-6.030	0.000
Z-WATER_TABLE	-5.030	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL	0.000	0.000
ZQ	0.000	0.000
DZW_OF_THE_WATER_TABLE	1.000	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	-14.00	-14.00
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

STEP NO.	6	LEFT WALL	RIGHT WALL
Y		0.000	-0.9990E+30
Z-PC		0.5000	0.000
Z-EXCAVATION		-7.300	0.000
Z-WATER_TABLE		-6.300	-0.9990E+30
Q_AT_THE_FREE_FIELD_LEVEL		0.000	0.000
ZQ		0.000	0.000
DZW_OF_THE_WATER_TABLE		1.000	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		-14.00	-14.00
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 6

#### LEFT-HAND WALL

LOWER LEVEL	-14.00000
UPPER LEVEL	0.50000

#### RIGHT-HAND WALL

LOWER LEVEL	-14.00000
UPPER LEVEL	0.50000

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020      15:33:37
+-----+
INITIAL STRESS TABLES
```

#### 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 1.0000  
END TIME (TIME BEYOND WHICH IT IS REMOVED) 6.0000

TYPE BOUSSINESQ

HORIZONTAL DISTANCE (DY)	2.53000000000000
FOUNDATION WIDTH (B)	27.470000000000
ZETA-F.....	0.50000000000000
Q-F .....	16.200000000000
BETA .....	45.000000000000
BEHAVIOUR (0=FREE, 1=REFLECTING)	0.000000000000E+000

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

ACTIVATION TIME 6.0000  
END TIME (TIME BEYOND WHICH IT IS REMOVED) 6.0000

TYPE BOUSSINESQ

HORIZONTAL DISTANCE (DY)	0.50000000000000
FOUNDATION WIDTH (B)	2.03000000000000
ZETA-F.....	0.50000000000000
Q-F .....	8.10000000000000
BETA .....	45.000000000000
BEHAVIOUR (0=FREE, 1=REFLECTING)	0.000000000000E+000

ELEMENT GROUPS BACKUP AREA CAN STAY IN CORE AT  
POSITION 4204

NO. OF D.P.W FOR THIS AREA 7191  
MAX NO. OF D.P.W. AVAILABLE 81920  
\*\* MAX NO OF ITERATIONS SET TO 40

ITER 0 RNORM = 0.000 RMNORM= 0.000  
RINORM=0.9344E+05 RIMNOR= 0.000  
RENORM=0.2303E-27 REMNOR= 0.000      RATIO =0.4965E-16 TOLER =0.1000E-03      CONVERGED !  
RFMAX = 43.65 RMMAX = 0.000  
RTSMAL=0.1000E-03 RMSMAL= 0.000  
RDT =0.9344E+05 RDR = 0.000  
RATIO=0.4965E-16 RATOR= 0.000  
MAX UN=0.7105E-14 IEQ= 141 NODE 71 DOF 1 Y-DISPL.F  
MIN UN=-.7105E-14 IEQ= 139 NODE 70 DOF 1 Y-DISPL.F  
NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER 1 RNORM = 0.000 RMNORM= 0.000  
RINORM=0.9344E+05 RIMNOR= 0.000  
RENORM=0.7282E-29 REMNOR=0.2933E-52 RATIO =0.8828E-17 TOLER =0.1000E-03      CONVERGED !  
RFMAX = 43.65 RMMAX = 0.000  
RTSMAL=0.1000E-03 RMSMAL= 0.000  
RDT =0.9344E+05 RDR = 0.000  
RATIO=0.8828E-17 RATOR= 0.000  
MAX UN=0.6974E-15 IEQ= 145 NODE 73 DOF 1 Y-DISPL.F  
MIN UN=-.1079E-26 IEQ= 116 NODE 58 DOF 2 X-ROT. F  
NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER 2 RNORM = 0.000 RMNORM= 0.000  
RINORM=0.9344E+05 RIMNOR= 0.000  
RENORM=0.7158E-29 REMNOR=0.3397E-52 RATIO =0.8753E-17 TOLER =0.1000E-03      CONVERGED !  
RFMAX = 43.65 RMMAX = 0.000  
RTSMAL=0.1000E-03 RMSMAL= 0.000  
RDT =0.9344E+05 RDR = 0.000  
RATIO=0.8753E-17 RATOR= 0.000  
MAX UN=0.7032E-15 IEQ= 145 NODE 73 DOF 1 Y-DISPL.F  
MIN UN=-.2474E-26 IEQ= 150 NODE 75 DOF 2 X-ROT. F  
NO. OF CONTACT CONSTRAINT VIOLATIONS 0

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 15:33:37 |  
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New Project  
SOLUTION REACHED USING 2 ITERATIONS ON 40

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

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 15:33:37
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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 75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.000	-1.9159E-21	0.000	0.000	0.000	0.000	V-C	1.3241E+04	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
2 D	0.7550	-1.9987E-21	4.002	3.775	4.002	3.775	V-C	1.3241E+04	0.3000	0.000	
1.000	1.000	3.775	0.000	0.000	FRANA_334_8_L_0						
3 D	1.506	-2.0814E-21	8.013	7.530	8.013	7.530	V-C	1.3241E+04	0.1000	0.000	
1.000	1.000	7.530	0.000	0.000	FRANA_334_8_L_0						
4 D	2.250	-2.1642E-21	12.04	11.25	12.04	11.25	V-C	1.3241E+04	-0.1000	0.000	
1.000	1.000	11.25	0.000	0.000	FRANA_334_8_L_0						
5 D	2.983	-2.2467E-21	16.10	14.91	16.10	14.91	V-C	1.3241E+04	-0.3000	0.000	
1.000	1.000	14.91	0.000	0.000	FRANA_334_8_L_0						
6 D	3.704	-2.3291E-21	20.18	18.52	20.18	18.52	V-C	1.3241E+04	-0.5000	0.000	
1.000	1.000	18.52	0.000	0.000	FRANA_334_8_L_0						
7 D	4.412	-2.4111E-21	24.29	22.06	24.29	22.06	V-C	1.3241E+04	-0.7000	0.000	
1.000	1.000	22.06	0.000	0.000	FRANA_334_8_L_0						
8 D	5.107	-2.4926E-21	28.42	25.53	28.42	25.53	V-C	1.3241E+04	-0.9000	0.000	
1.000	1.000	25.53	0.000	0.000	FRANA_334_8_L_0						
9 D	5.789	-2.5733E-21	32.58	28.94	32.58	28.94	V-C	1.3241E+04	-1.100	0.000	
1.000	1.000	28.94	0.000	0.000	FRANA_334_8_L_0						
10 D	6.459	-2.6532E-21	36.75	32.30	36.75	32.30	V-C	1.3241E+04	-1.300	0.000	
1.000	1.000	32.30	0.000	0.000	FRANA_334_8_L_0						
11 D	7.119	-2.7318E-21	40.94	35.59	40.94	35.59	V-C	1.3241E+04	-1.500	0.000	
1.000	1.000	35.59	0.000	0.000	FRANA_334_8_L_0						
12 D	7.769	-2.8090E-21	45.14	38.84	45.14	38.84	V-C	1.3241E+04	-1.700	0.000	
1.000	1.000	38.84	0.000	0.000	FRANA_334_8_L_0						
13 D	8.410	-2.8844E-21	49.34	42.05	49.34	42.05	V-C	1.3241E+04	-1.900	0.000	
1.000	1.000	42.05	0.000	0.000	FRANA_334_8_L_0						
14 D	9.045	-2.9576E-21	53.54	45.22	53.54	45.22	V-C	1.3241E+04	-2.100	0.000	
1.000	1.000	45.22	0.000	0.000	FRANA_334_8_L_0						
15 D	9.673	-3.0283E-21	57.74	48.37	57.74	48.37	V-C	1.3241E+04	-2.300	0.000	
1.000	1.000	48.37	0.000	0.000	FRANA_334_8_L_0						
16 D	5.921	-3.0960E-21	61.94	51.48	61.94	51.48	V-C	1.3241E+04	-2.500	0.000	
1.000	1.000	51.48	0.000	0.000	FRANA_334_8_L_0						
17 D	5.974	-3.1059E-21	62.57	51.95	62.57	51.95	V-C	1.3241E+04	-2.530	0.000	
1.000	1.000	51.95	0.000	0.000	FRANA_334_8_L_0						
18 D	11.01	-3.1697E-21	66.77	55.04	66.77	55.04	V-C	1.3241E+04	-2.730	0.000	
1.000	1.000	55.04	0.000	0.000	FRANA_334_8_L_0						
19 D	11.62	-3.2294E-21	71.28	58.12	71.28	58.12	V-C	1.3241E+04	-2.930	0.000	
1.000	1.000	58.12	0.000	0.000	FRANA_334_8_L_0						
20 D	12.24	-3.2846E-21	75.80	61.18	75.80	61.18	V-C	1.3241E+04	-3.130	0.000	
1.000	1.000	61.18	0.000	0.000	FRANA_334_8_L_0						
21 D	12.84	-3.3346E-21	79.71	64.22	79.71	64.22	V-C	1.3241E+04	-3.330	0.000	
1.000	1.000	64.22	0.000	0.000	FRANA_334_8_L_0						
22 D	11.34	-3.3789E-21	83.36	55.88	83.36	55.88	V-C	8.8520E+04	-3.530	0.8000	
1.000	1.000	56.68	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	11.98	-3.4167E-21	85.78	57.12	85.78	57.12	V-C	8.8520E+04	-3.730	2.800	
1.000	1.000	59.92	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	12.63	-3.4471E-21	87.68	58.35	87.68	58.35	V-C	8.8520E+04	-3.930	4.800	
1.000	1.000	63.15	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	13.28	-3.4689E-21	90.06	59.58	90.06	59.58	V-C	8.8520E+04	-4.130	6.800	
1.000	1.000	66.38	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	13.92	-3.4824E-21	92.42	60.80	92.42	60.80	V-C	8.8520E+04	-4.330	8.800	
1.000	1.000	69.60	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	14.56	-3.4951E-21	94.74	62.01	94.74	62.01	V-C	8.8520E+04	-4.530	10.80	
1.000	1.000	72.81	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	15.21	-3.5158E-21	96.64	63.23	96.64	63.23	V-C	8.8520E+04	-4.730	12.80	
1.000	1.000	76.03	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	11.89	-3.5533E-21	98.94	64.44	98.94	64.44	V-C	8.8520E+04	-4.930	14.80	
1.000	1.000	79.24	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	12.13	-3.5810E-21	99.88	65.04	99.88	65.04	V-C	8.8520E+04	-5.030	15.80	
1.000	1.000	80.84	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	16.81	-3.6590E-21	102.2	66.24	102.2	66.24	V-C	8.8520E+04	-5.230	17.80	
1.000	1.000	84.04	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	17.45	-3.7736E-21	104.4	67.45	104.4	67.45	V-C	8.8520E+04	-5.430	19.80	
1.000	1.000	87.25	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	18.09	-3.9323E-21	106.7	68.65	106.7	68.65	V-C	8.8520E+04	-5.630	21.80	
1.000	1.000	90.45	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	18.73	-4.1419E-21	108.6	69.85	108.6	69.85	V-C	8.8520E+04	-5.830	23.80
1.000	1.000	93.65	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-6.030	25.80
35 D	19.37	-4.4086E-21	110.8	71.04	110.8	71.04	V-C	8.8520E+04	-6.230	27.80
1.000	1.000	96.84	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-6.430	29.80
36 D	20.01	-4.7385E-21	113.0	72.24	113.0	72.24	V-C	8.8520E+04	-6.630	31.80
1.000	1.000	100.0	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-6.830	33.80
37 D	20.65	-5.1367E-21	115.2	73.44	115.2	73.44	V-C	8.8520E+04	-7.030	35.80
1.000	1.000	103.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-7.230	37.80
38 D	21.29	-5.6082E-21	117.1	74.63	117.1	74.63	V-C	8.8520E+04	-7.430	39.80
1.000	1.000	106.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-7.630	41.80
39 D	21.93	-6.1568E-21	119.3	75.83	119.3	75.83	V-C	8.8520E+04	-7.830	43.80
1.000	1.000	109.6	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-8.030	45.80
40 D	22.56	-6.7823E-21	121.5	77.02	121.5	77.02	V-C	8.8520E+04	-8.230	47.80
1.000	1.000	112.8	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-8.430	49.80
41 D	23.20	-7.4727E-21	123.4	78.21	123.4	78.21	V-C	8.8520E+04	-8.630	51.80
1.000	1.000	116.0	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-8.830	53.80
42 D	23.84	-8.2259E-21	125.6	79.41	125.6	79.41	V-C	8.8520E+04	-9.030	55.80
1.000	1.000	119.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-9.230	57.80
43 D	24.48	-9.0429E-21	127.7	80.60	127.7	80.60	V-C	8.8520E+04	-9.430	59.80
1.000	1.000	122.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-9.630	61.80
44 D	25.12	-9.9235E-21	129.9	81.79	129.9	81.79	V-C	8.8520E+04	-9.830	63.80
1.000	1.000	125.6	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-10.030	65.80
45 D	25.76	-1.0867E-20	131.8	82.98	131.8	82.98	V-C	8.8520E+04	-10.230	67.80
1.000	1.000	128.8	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-10.430	69.80
46 D	26.40	-1.1870E-20	133.9	84.18	133.9	84.18	V-C	8.8520E+04	-10.630	71.80
1.000	1.000	132.0	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-10.830	73.80
47 D	27.03	-1.2930E-20	136.1	85.37	136.1	85.37	V-C	8.8520E+04	-11.030	75.80
1.000	1.000	135.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-11.230	77.80
48 D	27.67	-1.4042E-20	138.2	86.56	138.2	86.56	V-C	8.8520E+04	-11.430	79.80
1.000	1.000	138.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-11.630	81.80
49 D	28.31	-1.5200E-20	140.1	87.75	140.1	87.75	V-C	8.8520E+04	-11.830	83.80
1.000	1.000	141.6	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-12.030	85.80
50 D	28.95	-1.6395E-20	142.3	88.95	142.3	88.95	V-C	8.8520E+04	-12.230	87.80
1.000	1.000	144.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-12.430	89.80
51 D	29.59	-1.7619E-20	144.4	90.14	144.4	90.14	V-C	8.8520E+04	-12.630	91.80
1.000	1.000	147.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-12.830	93.80
52 D	30.23	-1.8861E-20	146.3	91.33	146.3	91.33	V-C	8.8520E+04	-13.030	95.80
1.000	1.000	151.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-13.230	97.80
53 D	30.87	-2.0107E-20	148.4	92.53	148.4	92.53	V-C	8.8520E+04	-13.430	99.80
1.000	1.000	154.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-13.630	101.80
54 D	31.50	-2.1343E-20	150.5	93.72	150.5	93.72	V-C	8.8520E+04	-13.830	103.80
1.000	1.000	157.5	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-14.030	105.80
55 D	32.14	-2.2551E-20	152.7	94.91	152.7	94.91	V-C	8.8520E+04	-14.230	107.80
1.000	1.000	160.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-14.430	109.80
56 D	32.78	-2.3713E-20	154.6	96.11	154.6	96.11	V-C	8.8520E+04	-14.630	111.80
1.000	1.000	163.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-14.830	113.80
57 D	33.42	-2.4815E-20	156.7	97.30	156.7	97.30	V-C	8.8520E+04	-15.030	115.80
1.000	1.000	167.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-15.230	117.80
58 D	34.06	-2.5870E-20	158.8	98.50	158.8	98.50	V-C	8.8520E+04	-15.430	119.80
1.000	1.000	170.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-15.630	121.80
59 D	34.70	-2.6896E-20	160.9	99.69	160.9	99.69	V-C	8.8520E+04	-15.830	123.80
1.000	1.000	173.5	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-16.030	125.80
60 D	35.34	-2.7907E-20	162.8	100.9	162.8	100.9	V-C	8.8520E+04	-16.230	127.80
1.000	1.000	176.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-16.430	129.80
61 D	35.98	-2.8917E-20	164.9	102.1	164.9	102.1	V-C	8.8520E+04	-16.630	131.80
1.000	1.000	179.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-16.830	133.80
62 D	36.62	-2.9935E-20	167.0	103.3	167.0	103.3	V-C	8.8520E+04	-17.030	135.80
1.000	1.000	183.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-17.230	137.80
63 D	37.26	-3.0969E-20	168.9	104.5	168.9	104.5	V-C	8.8520E+04	-17.430	139.80
1.000	1.000	186.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-17.630	141.80
64 D	37.89	-3.2021E-20	171.0	105.7	171.0	105.7	V-C	8.8520E+04	-17.830	143.80
1.000	1.000	189.5	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-18.030	145.80
65 D	38.53	-3.3091E-20	173.1	106.9	173.1	106.9	V-C	8.8520E+04	-18.230	147.80
1.000	1.000	192.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-18.430	149.80
66 D	39.17	-3.4178E-20	175.2	108.1	175.2	108.1	V-C	8.8520E+04	-18.630	151.80
1.000	1.000	195.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-18.830	153.80
67 D	39.81	-3.5275E-20	177.1	109.3	177.1	109.3	V-C	8.8520E+04	-19.030	155.80
1.000	1.000	199.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-19.230	157.80
68 D	40.45	-3.6371E-20	179.2	110.5	179.2	110.5	V-C	8.8520E+04	-19.430	159.80
1.000	1.000	202.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-19.630	161.80
69 D	41.09	-3.7454E-20	181.3	111.7	181.3	111.7	V-C	8.8520E+04	-19.830	163.80
1.000	1.000	205.5	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-20.030	165.80
70 D	41.73	-3.8513E-20	183.4	112.9	183.4	112.9	V-C	8.8520E+04	-20.230	167.80
1.000	1.000	208.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-20.430	169.80
71 D	42.37	-3.9556E-20	185.3	114.1	185.3	114.1	V-C	8.8520E+04	-20.630	171.80
1.000	1.000	211.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-20.830	173.80
72 D	43.01	-4.0573E-20	187.3	115.3	187.3	115.3	V-C	8.8520E+04	-21.030	175.80
1.000	1.000	215.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-21.230	177.80
73 D	43.65	-4.1571E-20	189.4	116.5	189.4	116.5	V-C	8.8520E+04	-21.430	179.80
1.000	1.000	218.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-21.630	181.80
74 D	40.97	-4.2560E-20	191.3	117.7	191.3	117.7	V-C	8.8520E+04	-21.830	183.80
1.000	1.000	221.5	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-22.030	185.80
75 D	19.06	-4.3399E-20	193.1	118.7	193.1	118.7	V-C	8.8520E+04	-22.230	187.80
1.000	1.000	224.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	8.8520E+04	-22.430	189.80

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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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    75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.000	1.9159E-21	0.000	0.000	0.000	0.000	V-C	1.6165E+04	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
2 D	0.7550	1.9987E-21	4.000	3.775	4.000	3.775	V-C	1.6165E+04	0.3000	0.000	
1.000	1.000	3.775	0.000	0.000	FRANA_334_8_L_0						
3 D	1.506	2.0814E-21	8.000	7.530	8.000	7.530	V-C	1.6165E+04	0.1000	0.000	
1.000	1.000	7.530	0.000	0.000	FRANA_334_8_L_0						
4 D	2.250	2.1642E-21	12.00	11.25	12.00	11.25	V-C	1.6165E+04	-0.1000	0.000	
1.000	1.000	11.25	0.000	0.000	FRANA_334_8_L_0						
5 D	2.983	2.2467E-21	16.00	14.91	16.00	14.91	V-C	1.6165E+04	-0.3000	0.000	
1.000	1.000	14.91	0.000	0.000	FRANA_334_8_L_0						
6 D	3.704	2.3291E-21	20.00	18.52	20.00	18.52	V-C	1.6165E+04	-0.5000	0.000	
1.000	1.000	18.52	0.000	0.000	FRANA_334_8_L_0						
7 D	4.412	2.4111E-21	24.00	22.06	24.00	22.06	V-C	1.6165E+04	-0.7000	0.000	
1.000	1.000	22.06	0.000	0.000	FRANA_334_8_L_0						
8 D	5.107	2.4926E-21	28.00	25.53	28.00	25.53	V-C	1.6165E+04	-0.9000	0.000	
1.000	1.000	25.53	0.000	0.000	FRANA_334_8_L_0						
9 D	5.789	2.5733E-21	32.00	28.94	32.00	28.94	V-C	1.6165E+04	-1.100	0.000	
1.000	1.000	28.94	0.000	0.000	FRANA_334_8_L_0						
10 D	6.459	2.6532E-21	36.00	32.30	36.00	32.30	V-C	1.6165E+04	-1.300	0.000	
1.000	1.000	32.30	0.000	0.000	FRANA_334_8_L_0						
11 D	7.119	2.7318E-21	40.00	35.59	40.00	35.59	V-C	1.6165E+04	-1.500	0.000	
1.000	1.000	35.59	0.000	0.000	FRANA_334_8_L_0						
12 D	7.769	2.8090E-21	44.00	38.84	44.00	38.84	V-C	1.6165E+04	-1.700	0.000	
1.000	1.000	38.84	0.000	0.000	FRANA_334_8_L_0						
13 D	8.410	2.8844E-21	48.00	42.05	48.00	42.05	V-C	1.6165E+04	-1.900	0.000	
1.000	1.000	42.05	0.000	0.000	FRANA_334_8_L_0						
14 D	9.045	2.9576E-21	52.00	45.22	52.00	45.22	V-C	1.6165E+04	-2.100	0.000	
1.000	1.000	45.22	0.000	0.000	FRANA_334_8_L_0						
15 D	9.673	3.0283E-21	56.00	48.37	56.00	48.37	V-C	1.6165E+04	-2.300	0.000	
1.000	1.000	48.37	0.000	0.000	FRANA_334_8_L_0						
16 D	5.921	3.0960E-21	60.00	51.48	60.00	51.48	V-C	1.6165E+04	-2.500	0.000	
1.000	1.000	51.48	0.000	0.000	FRANA_334_8_L_0						
17 D	5.974	3.1059E-21	60.60	51.95	60.60	51.95	V-C	1.6165E+04	-2.530	0.000	
1.000	1.000	51.95	0.000	0.000	FRANA_334_8_L_0						
18 D	11.01	3.1697E-21	64.60	55.04	64.60	55.04	V-C	1.6165E+04	-2.730	0.000	
1.000	1.000	55.04	0.000	0.000	FRANA_334_8_L_0						
19 D	11.62	3.2294E-21	68.60	58.12	68.60	58.12	V-C	1.6165E+04	-2.930	0.000	
1.000	1.000	58.12	0.000	0.000	FRANA_334_8_L_0						
20 D	12.24	3.2846E-21	72.60	61.18	72.60	61.18	V-C	1.6165E+04	-3.130	0.000	
1.000	1.000	61.18	0.000	0.000	FRANA_334_8_L_0						
21 D	12.84	3.3346E-21	76.60	64.22	76.60	64.22	V-C	1.6165E+04	-3.330	0.000	
1.000	1.000	64.22	0.000	0.000	FRANA_334_8_L_0						
22 D	11.34	3.3789E-21	79.80	55.88	79.80	55.88	V-C	7.9942E+04	-3.530	0.8000	
1.000	1.000	56.68	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	11.98	3.4167E-21	81.80	57.12	81.80	57.12	V-C	7.9942E+04	-3.730	2.800	
1.000	1.000	59.92	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	12.63	3.4471E-21	83.80	58.35	83.80	58.35	V-C	7.9942E+04	-3.930	4.800	
1.000	1.000	63.15	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	13.28	3.4689E-21	85.80	59.58	85.80	59.58	V-C	7.9942E+04	-4.130	6.800	
1.000	1.000	66.38	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	13.92	3.4824E-21	87.80	60.80	87.80	60.80	V-C	7.9942E+04	-4.330	8.800	
1.000	1.000	69.60	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	14.56	3.4951E-21	89.80	62.01	89.80	62.01	V-C	7.9942E+04	-4.530	10.80	
1.000	1.000	72.81	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	15.21	3.5158E-21	91.80	63.23	91.80	63.23	V-C	7.9942E+04	-4.730	12.80	
1.000	1.000	76.03	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	11.89	3.5533E-21	93.80	64.44	93.80	64.44	V-C	7.9942E+04	-4.930	14.80	
1.000	1.000	79.24	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	12.13	3.5810E-21	94.80	65.04	94.80	65.04	V-C	7.9942E+04	-5.030	15.80	
1.000	1.000	80.84	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	16.81	3.6590E-21	96.80	66.24	96.80	66.24	V-C	7.9942E+04	-5.230	17.80	
1.000	1.000	84.04	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	17.45	3.7736E-21	98.80	67.45	98.80	67.45	V-C	7.9942E+04	-5.430	19.80	
1.000	1.000	87.25	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	18.09	3.9323E-21	100.8	68.65	100.8	68.65	V-C	7.9942E+04	-5.630	21.80	
1.000	1.000	90.45	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	18.73	4.1419E-21	102.8	69.85	102.8	69.85	V-C	7.9942E+04	-5.830	23.80
1.000	1.000	93.65	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-6.030	25.80
35 D	19.37	4.4086E-21	104.8	71.04	104.8	71.04	V-C	7.9942E+04	-6.230	27.80
1.000	1.000	96.84	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-6.430	29.80
36 D	20.01	4.7385E-21	106.8	72.24	106.8	72.24	V-C	7.9942E+04	-6.630	31.80
1.000	1.000	100.0	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-6.830	33.80
37 D	20.65	5.1367E-21	108.8	73.44	108.8	73.44	V-C	7.9942E+04	-7.030	35.80
1.000	1.000	103.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-7.230	37.80
38 D	21.29	5.6082E-21	110.8	74.63	110.8	74.63	V-C	7.9942E+04	-7.430	39.80
1.000	1.000	106.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-7.630	41.80
39 D	21.93	6.1568E-21	112.8	75.83	112.8	75.83	V-C	7.9942E+04	-7.830	43.80
1.000	1.000	109.6	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-8.030	45.80
40 D	22.56	6.7823E-21	114.8	77.02	114.8	77.02	V-C	7.9942E+04	-8.230	47.80
1.000	1.000	112.8	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-8.430	49.80
41 D	23.20	7.4727E-21	116.8	78.21	116.8	78.21	V-C	7.9942E+04	-8.630	51.80
1.000	1.000	116.0	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-8.830	53.80
42 D	23.84	8.2259E-21	118.8	79.41	118.8	79.41	V-C	7.9942E+04	-9.030	55.80
1.000	1.000	119.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-9.230	57.80
43 D	24.48	9.0429E-21	120.8	80.60	120.8	80.60	V-C	7.9942E+04	-9.430	59.80
1.000	1.000	122.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-9.630	61.80
44 D	25.12	9.9235E-21	122.8	81.79	122.8	81.79	V-C	7.9942E+04	-9.830	63.80
1.000	1.000	125.6	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-10.030	65.80
45 D	25.76	1.0867E-20	124.8	82.98	124.8	82.98	V-C	7.9942E+04	-10.230	67.80
1.000	1.000	128.8	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-10.430	69.80
46 D	26.40	1.1870E-20	126.8	84.18	126.8	84.18	V-C	7.9942E+04	-10.630	71.80
1.000	1.000	132.0	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-10.830	73.80
47 D	27.03	1.2930E-20	128.8	85.37	128.8	85.37	V-C	7.9942E+04	-11.030	75.80
1.000	1.000	135.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-11.230	77.80
48 D	27.67	1.4042E-20	130.8	86.56	130.8	86.56	V-C	7.9942E+04	-11.430	79.80
1.000	1.000	138.4	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-11.630	81.80
49 D	28.31	1.5200E-20	132.8	87.75	132.8	87.75	V-C	7.9942E+04	-11.830	83.80
1.000	1.000	141.6	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-12.030	85.80
50 D	28.95	1.6395E-20	134.8	88.95	134.8	88.95	V-C	7.9942E+04	-12.230	87.80
1.000	1.000	144.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-12.430	89.80
51 D	29.59	1.7619E-20	136.8	90.14	136.8	90.14	V-C	7.9942E+04	-12.630	91.80
1.000	1.000	147.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-12.830	93.80
52 D	30.23	1.8861E-20	138.8	91.33	138.8	91.33	V-C	7.9942E+04	-13.030	95.80
1.000	1.000	151.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-13.230	97.80
53 D	30.87	2.0107E-20	140.8	92.53	140.8	92.53	V-C	7.9942E+04	-13.430	99.80
1.000	1.000	154.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-13.630	101.80
54 D	31.50	2.1343E-20	142.8	93.72	142.8	93.72	V-C	7.9942E+04	-13.830	103.80
1.000	1.000	157.5	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-14.030	105.80
55 D	32.14	2.2551E-20	144.8	94.91	144.8	94.91	V-C	7.9942E+04	-14.230	107.80
1.000	1.000	160.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-14.430	109.80
56 D	32.78	2.3713E-20	146.8	96.11	146.8	96.11	V-C	7.9942E+04	-14.630	111.80
1.000	1.000	163.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-14.830	113.80
57 D	33.42	2.4815E-20	148.8	97.30	148.8	97.30	V-C	7.9942E+04	-15.030	115.80
1.000	1.000	167.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-15.230	117.80
58 D	34.06	2.5870E-20	150.8	98.50	150.8	98.50	V-C	7.9942E+04	-15.430	119.80
1.000	1.000	170.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-15.630	121.80
59 D	34.70	2.6896E-20	152.8	99.69	152.8	99.69	V-C	7.9942E+04	-15.830	123.80
1.000	1.000	173.5	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-16.030	125.80
60 D	35.34	2.7907E-20	154.8	100.9	154.8	100.9	V-C	7.9942E+04	-16.230	127.80
1.000	1.000	176.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-16.430	129.80
61 D	35.98	2.8917E-20	156.8	102.1	156.8	102.1	V-C	7.9942E+04	-16.630	131.80
1.000	1.000	179.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-16.830	133.80
62 D	36.62	2.9935E-20	158.8	103.3	158.8	103.3	V-C	7.9942E+04	-17.030	135.80
1.000	1.000	183.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-17.230	137.80
63 D	37.26	3.0969E-20	160.8	104.5	160.8	104.5	V-C	7.9942E+04	-17.430	139.80
1.000	1.000	186.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-17.630	141.80
64 D	37.89	3.2021E-20	162.8	105.7	162.8	105.7	V-C	7.9942E+04	-17.830	143.80
1.000	1.000	189.5	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-18.030	145.80
65 D	38.53	3.3091E-20	164.8	106.9	164.8	106.9	V-C	7.9942E+04	-18.230	147.80
1.000	1.000	192.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-18.430	149.80
66 D	39.17	3.4178E-20	166.8	108.1	166.8	108.1	V-C	7.9942E+04	-18.630	151.80
1.000	1.000	195.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-18.830	153.80
67 D	39.81	3.5275E-20	168.8	109.3	168.8	109.3	V-C	7.9942E+04	-19.030	155.80
1.000	1.000	199.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-19.230	157.80
68 D	40.45	3.6371E-20	170.8	110.5	170.8	110.5	V-C	7.9942E+04	-19.430	159.80
1.000	1.000	202.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-19.630	161.80
69 D	41.09	3.7454E-20	172.8	111.7	172.8	111.7	V-C	7.9942E+04	-19.830	163.80
1.000	1.000	205.5	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-20.030	165.80
70 D	41.73	3.8513E-20	174.8	112.9	174.8	112.9	V-C	7.9942E+04	-20.230	167.80
1.000	1.000	208.7	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-20.430	169.80
71 D	42.37	3.9556E-20	176.8	114.1	176.8	114.1	V-C	7.9942E+04	-20.630	171.80
1.000	1.000	211.9	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-20.830	173.80
72 D	43.01	4.0573E-20	178.8	115.3	178.8	115.3	V-C	7.9942E+04	-21.030	175.80
1.000	1.000	215.1	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-21.230	177.80
73 D	43.65	4.1571E-20	180.8	116.5	180.8	116.5	V-C	7.9942E+04	-21.430	179.80
1.000	1.000	218.3	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-21.630	181.80
74 D	40.97	4.2560E-20	182.8	117.7	182.8	117.7	V-C	7.9942E+04	-21.830	183.80
1.000	1.000	221.5	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-22.030	185.80
75 D	19.06	4.3399E-20	184.5	118.7	184.5	118.7	V-C	7.9942E+04	-22.230	187.80
1.000	1.000	224.2	0.000	0.000	BNA2_(2)_335_337_L_0		V-C	7.9942E+04	-22.430	189.80

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 15:33:37 |  
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## 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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 74  
C U R R E N T T I M E I S 1.0000

## WALL2D ELEMENT

EL	TA	TB	MA	MB
1-2.19774E-18	2.19774E-18	6.86309E-29	4.39549E-19	
2-6.69049E-18	6.69049E-18	4.39549E-19	1.77765E-18	
3-1.12805E-17	1.12805E-17	1.77765E-18	4.03376E-18	
4-1.59681E-17	1.59681E-17	4.03376E-18	7.22738E-18	
5-2.07537E-17	2.07537E-17	7.22738E-18	1.13781E-17	
6-2.56381E-17	2.56381E-17	1.13781E-17	1.65058E-17	
7-3.06228E-17	3.06228E-17	1.65058E-17	2.26303E-17	
8-3.57097E-17	3.57097E-17	2.26303E-17	2.97722E-17	
9-4.09017E-17	4.09017E-17	2.97722E-17	3.79526E-17	
10-4.62025E-17	4.62025E-17	3.79526E-17	4.71931E-17	
11-5.16173E-17	5.16173E-17	4.71931E-17	5.75165E-17	
12-5.71522E-17	5.71522E-17	5.75165E-17	6.89470E-17	
13-6.28151E-17	6.28151E-17	6.89470E-17	8.15100E-17	
14-6.86156E-17	6.86156E-17	8.15100E-17	9.52331E-17	
15-7.45651E-17	7.45651E-17	9.52331E-17	1.10146E-16	
16-7.80796E-17	7.80796E-17	1.10146E-16	1.12489E-16	
17-8.16088E-17	8.16088E-17	1.12489E-16	1.28810E-16	
18-8.79279E-17	8.79279E-17	1.28810E-16	1.46396E-16	
19-9.44471E-17	9.44471E-17	1.46396E-16	1.65285E-16	
20-1.01188E-16	1.01188E-16	1.65285E-16	1.85523E-16	
21-1.08176E-16	1.08176E-16	1.85523E-16	2.07158E-16	
22-1.49785E-16	1.49785E-16	2.07158E-16	2.37115E-16	
23-1.93149E-16	1.93149E-16	2.37115E-16	2.757545E-16	
24-2.38477E-16	2.38477E-16	2.757545E-16	3.23440E-16	
25-1.49035E-15	1.49035E-15	3.23440E-16	4.62537E-17	
26-1.44033E-15	1.44033E-15	2.53710E-17	2.62696E-16	
27-1.38752E-15	1.38752E-15	2.62696E-16	5.40200E-16	
28-1.33154E-15	1.33154E-15	5.40200E-16	8.06507E-16	
29-1.28687E-15	1.28687E-15	8.06507E-16	9.35196E-16	
30-1.24074E-15	1.24074E-15	9.35196E-16	1.18334E-15	
31-1.17493E-15	1.17493E-15	1.18334E-15	1.41833E-15	
32-1.10430E-15	1.10430E-15	1.41833E-15	1.63919E-15	
33-1.02826E-15	1.02826E-15	1.63919E-15	1.84484E-15	
34-9.46185E-16	9.46185E-16	1.84484E-15	2.03408E-15	
35-8.57403E-16	8.57403E-16	2.03408E-15	2.20556E-15	
36-7.61211E-16	7.61211E-16	2.20556E-15	2.35780E-15	
37-6.56878E-16	6.56878E-16	2.35780E-15	2.48918E-15	
38-5.43648E-16	5.43648E-16	2.48918E-15	2.59791E-15	
39-3.13196E-15	3.13196E-15	2.59791E-15	1.97151E-15	
40-2.87412E-16	2.87412E-16	1.97151E-15	2.02900E-15	
41-1.42851E-16	1.42851E-16	2.02900E-15	2.05757E-15	
42-1.36965E-17	1.36965E-17	2.05757E-15	2.05483E-15	
43-1.82983E-16	1.82983E-16	2.05483E-15	2.01823E-15	
44-3.65734E-16	3.65734E-16	2.01823E-15	1.94508E-15	
45-5.62645E-16	5.62645E-16	1.94508E-15	1.83255E-15	
46-7.74375E-16	7.74375E-16	1.83255E-15	1.67768E-15	
47-1.00154E-15	1.00154E-15	1.67768E-15	1.47737E-15	
48-1.24470E-15	1.24470E-15	1.47737E-15	1.22843E-15	
49-1.50437E-15	1.50437E-15	1.22843E-15	9.27560E-16	
50-1.78101E-15	1.78101E-15	9.27560E-16	5.71358E-16	
51-2.07503E-15	2.07503E-15	5.71358E-16	1.56355E-16	
52-2.38676E-15	2.38676E-15	1.56355E-16	3.20997E-16	
53-2.71650E-15	2.71650E-15	3.20997E-16	8.64297E-16	
54-3.06448E-15	3.06448E-15	8.64297E-16	1.47721E-15	
55-3.43090E-15	3.43090E-15	1.47721E-15	2.16338E-15	
56-3.28954E-15	3.28954E-15	2.16338E-15	1.50548E-15	
57-2.88587E-15	2.88587E-15	1.50548E-15	9.28303E-16	
58-2.46345E-15	2.46345E-15	9.28303E-16	4.35612E-16	
59-2.02224E-15	2.02224E-15	4.35612E-16	3.11848E-17	
60-1.56221E-15	1.56221E-15	3.11848E-17	2.81258E-16	
61-1.08333E-15	1.08333E-15	2.81258E-16	4.97930E-16	
62-5.85695E-16	5.85695E-16	4.97930E-16	6.15069E-16	
63-6.92267E-17	6.92267E-17	6.15069E-16	6.28914E-16	
64-4.66022E-16	4.66022E-16	6.28914E-16	5.35710E-16	
65-1.02003E-15	1.02003E-15	5.35710E-16	3.31704E-15	
66-1.59276E-15	1.59276E-15	3.31704E-16	1.31519E-17	
67-2.18420E-15	2.18420E-15	1.31519E-17	4.23688E-16	
68-2.79431E-15	2.79431E-15	4.23688E-16	9.82550E-16	
69-3.62835E-15	3.62835E-15	9.82550E-16	12.46081E-15	
70-4.07047E-15	4.07047E-15	12.46081E-15	1.60189E-15	

71 2.36894E-15-2.36894E-15 1.06018E-15-5.86387E-16  
72 1.68433E-15-1.68433E-15 5.86387E-16-2.49520E-16  
73 9.81131E-16-9.81131E-16 2.49520E-16-5.32940E-17  
74 3.13476E-16-3.13476E-16 5.32940E-17 2.47387E-27

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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| Exe Time :25 June 2020 15:33:37 |  
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New Project
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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\_341 :  
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
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\*\*\*\*\* NO ONE ELEMENT ACTIVE AT CURRENT STEP \*\*\*\*\*

PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION \*Build date: Sept23, 2015\*

NewProject.BaseDesignSection\_25.Nominal\_60

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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 .    5

Tieback\_342 :  
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=0.9191E+05 RIMNOR=0.1800E-27  
RENORM= 1151. REMNOR=0.3397E-52 RATIO =0.1119 TOLER =0.1000E-03 NOT CONVERGED

RFMAX = 43.62 RMMAX =0.2598E-14

RTSMAL=0.1000E-03 RMSMAL=0.1000E-19

RDT = 0.9191E+05 RDR =0.1000E-19

RATIOT=0.1119 RATIOR= 0.000

MAX UN= 12.84 IEQ= 41 NODE 21 DOF 1 Y-DISPL.F

MIN UN=-.2474E-26 IEQ= 150 NODE 75 DOF 2 X-ROT. F

NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER 2 RNORM = 0.000 RMNORM= 0.000  
RINORM=0.9191E+05 RIMNOR=0.1800E-27  
RENORM= 34.77 REMNOR=0.2427E-17 RATIO =0.1945E-01 TOLER =0.1000E-03 NOT CONVERGED

RFMAX = 43.62 RMMAX =0.2598E-14

RTSMAL=0.1000E-03 RMSMAL=0.1000E-19

RDT = 0.9191E+05 RDR =0.1000E-19

RATIOT=0.1945E-01 RATIOR= 0.000

MAX UN= 3.372 IEQ= 43 NODE 22 DOF 1 Y-DISPL.F

MIN UN=-.9336E-07 IEQ= 33 NODE 17 DOF 1 Y-DISPL.F

NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER 3 RNORM = 0.000 RMNORM= 0.000  
RINORM=0.9191E+05 RIMNOR=0.1800E-27  
RENORM= 1.842 REMNOR=0.1418E-18 RATIO =0.4477E-02 TOLER =0.1000E-03 NOT CONVERGED

RFMAX = 43.62 RMMAX =0.2598E-14

RTSMAL=0.1000E-03 RMSMAL=0.1000E-19

RDT = 0.9191E+05 RDR =0.1000E-19

RATIOT=0.4477E-02 RATIOR= 0.000

MAX UN= 1.168 IEQ= 45 NODE 23 DOF 1 Y-DISPL.F

MIN UN=-.1176E-02 IEQ= 147 NODE 74 DOF 1 Y-DISPL.F

NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER 4 RNORM = 0.000 RMNORM= 0.000  
RINORM=0.9191E+05 RIMNOR=0.1800E-27  
RENORM=0.1130E-01 REMNOR=0.2070E-17 RATIO =0.3507E-03 TOLER =0.1000E-03 NOT CONVERGED

RFMAX = 43.62 RMMAX =0.2598E-14

RTSMAL=0.1000E-03 RMSMAL=0.1000E-19

RDT = 0.9191E+05 RDR =0.1000E-19

RATIOT=0.3507E-03 RATIOR= 0.000

MAX UN=0.9918E-01 IEQ= 49 NODE 25 DOF 1 Y-DISPL.F

MIN UN=-.2034E-02 IEQ= 83 NODE 42 DOF 1 Y-DISPL.F

NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER 5 RNORM = 0.000 RMNORM= 0.000  
RINORM=0.9191E+05 RIMNOR=0.1800E-27  
RENORM=0.8082E-08 REMNOR=0.2599E-17 RATIO =0.2965E-06 TOLER =0.1000E-03 CONVERGED !

RFMAX = 43.62 RMMAX =0.2598E-14

RTSMAL=0.1000E-03 RMSMAL=0.1000E-19

RDT = 0.9191E+05 RDR =0.1000E-19

RATIOT=0.2965E-06 RATIOR= 0.000

MAX UN=0.7596E-07 IEQ= 33 NODE 17 DOF 1 Y-DISPL.F

MIN UN=-.8984E-04 IEQ= 87 NODE 44 DOF 1 Y-DISPL.F

NO. OF CONTACT CONSTRAINT VIOLATIONS 0

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
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New Project
SOLUTION REACHED USING      5 ITERATIONS ON    40

P R I N T   O U T   F O R   T I M E   S T E P   2   ( A T T I M E   2 . 0 0 0   )

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

      Y-DISPL. F      X-ROT. F
      (02)          (04)      (
1  3.3815063E-03 -5.7085079E-04
2  3.2673362E-03 -5.7085079E-04
3  3.1531660E-03 -5.7085079E-04
4  3.0389958E-03 -5.7085079E-04
5  2.9248259E-03 -5.7084738E-04
6  2.8106581E-03 -5.7082605E-04
7  2.6964987E-03 -5.7075689E-04
8  2.5823615E-03 -5.7059444E-04
9  2.4682712E-03 -5.7027765E-04
10 2.3542659E-03 -5.6972973E-04
11 2.2404009E-03 -5.6885813E-04
12 2.1267514E-03 -5.6755442E-04
13 2.0134165E-03 -5.6569013E-04
14 1.9005230E-03 -5.6311197E-04
15 1.7882312E-03 -5.5964151E-04
16 1.6767394E-03 -5.5507532E-04
17 1.6600990E-03 -5.5428502E-04
18 1.5498283E-03 -5.4817456E-04
19 1.4409369E-03 -5.4044749E-04
20 1.3337758E-03 -5.3082309E-04
21 1.2287545E-03 -5.1899644E-04
22 1.1263459E-03 -5.0463866E-04
23 1.0270677E-03 -4.8775031E-04
24 9.3139081E-04 -4.6868716E-04
25 8.3971224E-04 -4.4783332E-04
26 7.5234997E-04 -4.2559207E-04
27 6.6954204E-04 -4.0235136E-04
28 5.9145290E-04 -3.7845867E-04
29 5.1818188E-04 -3.5422186E-04
30 4.8336782E-04 -3.4205190E-04
31 4.1738617E-04 -3.1779213E-04
32 3.5623320E-04 -2.9379884E-04
33 2.9983639E-04 -2.7025926E-04
34 2.4808895E-04 -2.4733167E-04
35 2.0085443E-04 -2.2514732E-04
36 1.5797333E-04 -2.0381333E-04
37 1.1926676E-04 -1.8341445E-04
38 8.4540905E-05 -1.6401530E-04
39 5.3591037E-05 -1.4566246E-04
40 2.6204319E-05 -1.2838603E-04
41 2.1638020E-06 -1.1220194E-04
42 -1.8749468E-05 -9.7113009E-05
43 -3.6753878E-05 -8.3111224E-05
44 -5.2065298E-05 -7.0179542E-05
45 -6.4895363E-05 -5.8292885E-05
46 -7.5449999E-05 -4.7419429E-05
47 -8.3928149E-05 -3.7521800E-05
48 -9.0520926E-05 -2.8557942E-05
49 -9.5410545E-05 -2.0482368E-05
50 -9.8769875E-05 -1.3246827E-05
51 -1.0076193E-04 -6.8011364E-06
52 -1.0153956E-04 -1.0939110E-06
53 -1.0124525E-04 3.9269224E-06
54 -1.0001108E-04 8.3134019E-06
55 -9.7958690E-05 1.2117231E-05
56 -9.5199617E-05 1.5389032E-05
57 -9.1835238E-05 1.8178429E-05
58 -8.7957206E-05 2.0533421E-05
59 -8.3647751E-05 2.2500187E-05
60 -7.8980311E-05 2.4122789E-05
61 -7.4019007E-05 2.5443287E-05
62 -6.8820509E-05 2.6501094E-05
63 -6.3433616E-05 2.7333191E-05
64 -5.7899990E-05 2.7973932E-05
65 -5.2254691E-05 2.8454963E-05
66 -4.6526727E-05 2.8805162E-05
67 -4.0739611E-05 2.9050590E-05
68 -3.4911928E-05 2.9214456E-05
69 -2.9057910E-05 2.9317096E-05
70 -2.3188008E-05 2.9375954E-05
71 -1.7309478E-05 2.9405570E-05
72 -1.1426954E-05 2.9417581E-05
73 -5.5430374E-06 2.9420711E-05
74 3.4112566E-07 2.9420772E-05

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75 5.3429326E-06 2.9420609E-05

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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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 75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.000	-3.3815E-03	0.000	0.000	0.000	0.000	ACTIVE	0.000	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
2 D	0.000	-3.2673E-03	4.002	0.000	4.002	3.775	ACTIVE	0.000	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
3 D	0.000	-3.1532E-03	8.013	0.000	8.013	7.530	ACTIVE	0.000	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
4 D	0.2196	-3.0390E-03	12.04	1.098	12.04	11.25	ACTIVE	0.000	-0.1000	0.000	
1.000	1.000	1.098	0.000	0.000	FRANA_334_8_L_0						
5 D	0.7142	-2.9248E-03	16.10	3.571	16.10	14.91	ACTIVE	0.000	-0.3000	0.000	
1.000	1.000	3.571	0.000	0.000	FRANA_334_8_L_0						
6 D	1.212	-2.8107E-03	20.18	6.060	20.18	18.52	ACTIVE	0.000	-0.5000	0.000	
1.000	1.000	6.060	0.000	0.000	FRANA_334_8_L_0						
7 D	1.713	-2.6965E-03	24.29	8.567	24.29	22.06	ACTIVE	0.000	-0.7000	0.000	
1.000	1.000	8.567	0.000	0.000	FRANA_334_8_L_0						
8 D	2.218	-2.5824E-03	28.42	11.09	28.42	25.53	ACTIVE	0.000	-0.9000	0.000	
1.000	1.000	11.09	0.000	0.000	FRANA_334_8_L_0						
9 D	2.725	-2.4683E-03	32.58	13.62	32.58	28.94	ACTIVE	0.000	-1.100	0.000	
1.000	1.000	13.62	0.000	0.000	FRANA_334_8_L_0						
10 D	3.234	-2.3543E-03	36.75	16.17	36.75	32.30	ACTIVE	0.000	-1.300	0.000	
1.000	1.000	16.17	0.000	0.000	FRANA_334_8_L_0						
11 D	3.745	-2.2404E-03	40.94	18.73	40.94	35.59	ACTIVE	0.000	-1.500	0.000	
1.000	1.000	18.73	0.000	0.000	FRANA_334_8_L_0						
12 D	4.526	-2.1268E-03	45.14	22.63	45.14	38.84	UL-RL	7622.	-1.700	0.000	
1.000	1.000	22.63	0.000	0.000	FRANA_334_8_L_0						
13 D	5.341	-2.0134E-03	49.34	26.70	49.34	42.05	UL-RL	7622.	-1.900	0.000	
1.000	1.000	26.70	0.000	0.000	FRANA_334_8_L_0						
14 D	6.148	-1.9005E-03	53.54	30.74	53.54	45.22	UL-RL	7622.	-2.100	0.000	
1.000	1.000	30.74	0.000	0.000	FRANA_334_8_L_0						
15 D	6.947	-1.7882E-03	57.74	34.74	57.74	48.37	UL-RL	7622.	-2.300	0.000	
1.000	1.000	34.74	0.000	0.000	FRANA_334_8_L_0						
16 D	4.451	-1.6767E-03	61.94	38.70	61.94	51.48	UL-RL	7622.	-2.500	0.000	
1.000	1.000	38.70	0.000	0.000	FRANA_334_8_L_0						
17 D	4.519	-1.6601E-03	62.57	39.30	62.57	51.95	UL-RL	7622.	-2.530	0.000	
1.000	1.000	39.30	0.000	0.000	FRANA_334_8_L_0						
18 D	8.646	-1.5498E-03	66.77	43.23	66.77	55.04	UL-RL	7622.	-2.730	0.000	
1.000	1.000	43.23	0.000	0.000	FRANA_334_8_L_0						
19 D	9.426	-1.4409E-03	71.28	47.13	71.28	58.12	UL-RL	7622.	-2.930	0.000	
1.000	1.000	47.13	0.000	0.000	FRANA_334_8_L_0						
20 D	10.20	-1.3338E-03	75.80	51.01	75.80	61.18	UL-RL	7622.	-3.130	0.000	
1.000	1.000	51.01	0.000	0.000	FRANA_334_8_L_0						
21 D	10.97	-1.2288E-03	79.71	54.86	79.71	64.22	UL-RL	7622.	-3.330	0.000	
1.000	1.000	54.86	0.000	0.000	FRANA_334_8_L_0						
22 D	2.317	-1.1263E-03	83.37	10.79	83.37	55.88	ACTIVE	0.000	-3.530	0.7970	
1.000	1.000	11.59	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	2.935	-1.0271E-03	85.79	11.89	85.79	57.12	ACTIVE	0.000	-3.730	2.789	
1.000	1.000	14.68	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	3.506	-9.3139E-04	87.70	12.75	87.70	58.36	ACTIVE	0.000	-3.930	4.782	
1.000	1.000	17.53	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	4.715	-8.3971E-04	90.09	16.80	90.09	59.59	UL-RL	5.0959E+04	-4.130	6.774	
1.000	1.000	23.58	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	6.249	-7.5235E-04	92.45	22.48	92.45	60.82	UL-RL	5.0959E+04	-4.330	8.767	
1.000	1.000	31.25	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	7.736	-6.6954E-04	94.78	27.92	94.78	62.04	UL-RL	5.0959E+04	-4.530	10.76	
1.000	1.000	38.68	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	9.174	-5.9145E-04	96.68	33.12	96.68	63.26	UL-RL	5.0959E+04	-4.730	12.75	
1.000	1.000	45.87	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	7.921	-5.1818E-04	98.99	38.06	98.99	64.47	UL-RL	5.0959E+04	-4.930	14.74	
1.000	1.000	52.81	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	8.428	-4.8337E-04	99.94	40.44	99.94	65.08	UL-RL	5.0959E+04	-5.030	15.74	
1.000	1.000	56.18	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	12.55	-4.1739E-04	102.2	45.02	102.2	66.29	UL-RL	5.0959E+04	-5.230	17.73	
1.000	1.000	62.75	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	13.81	-3.5623E-04	104.5	49.34	104.5	67.49	UL-RL	5.0959E+04	-5.430	19.72	
1.000	1.000	69.07	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	15.03	-2.9984E-04	106.8	53.42	106.8	68.70	UL-RL	5.0959E+04	-5.630	21.72	
1.000	1.000	75.14	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	16.19	-2.4809E-04	108.7	57.26	108.7	69.90	UL-RL	5.0959E+04	-5.830	23.71
1.000	1.000	80.97	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	17.31	-2.0085E-04	110.9	60.87	110.9	71.11	UL-RL	5.0959E+04	-6.030	25.70
1.000	1.000	86.57	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	18.39	-1.5797E-04	113.1	64.26	113.1	72.31	UL-RL	5.0959E+04	-6.230	27.69
1.000	1.000	91.95	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	19.42	-1.1927E-04	115.3	67.43	115.3	73.51	UL-RL	5.0959E+04	-6.430	29.69
1.000	1.000	97.12	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	20.42	-8.4541E-05	117.2	70.40	117.2	74.71	UL-RL	5.0959E+04	-6.630	31.68
1.000	1.000	102.1	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	21.37	-5.3591E-05	119.4	73.18	119.4	75.91	UL-RL	5.0959E+04	-6.830	33.67
1.000	1.000	106.8	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	22.29	-2.6204E-05	121.6	75.77	121.6	77.10	UL-RL	5.0959E+04	-7.030	35.66
1.000	1.000	111.4	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	23.17	-2.1638E-06	123.5	78.19	123.5	78.30	UL-RL	5.0959E+04	-7.230	37.66
1.000	1.000	115.8	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	23.95	1.8749E-05	125.7	80.09	125.7	80.12	UL-RL	5.0959E+04	-7.430	39.65
1.000	1.000	119.7	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	24.70	3.6754E-05	127.9	81.87	127.9	81.87	UL-RL	5.0959E+04	-7.630	41.64
1.000	1.000	123.5	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	25.44	5.2065E-05	130.1	83.55	130.1	83.55	UL-RL	5.0959E+04	-7.830	43.63
1.000	1.000	127.2	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	26.16	6.4895E-05	132.0	85.16	132.0	85.16	UL-RL	5.0959E+04	-8.030	45.63
1.000	1.000	130.8	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	26.86	7.5450E-05	134.1	86.69	134.1	86.69	V-C	3.1850E+04	-8.230	47.62
1.000	1.000	134.3	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	27.55	8.3928E-05	136.3	88.16	136.3	88.16	V-C	3.1850E+04	-8.430	49.61
1.000	1.000	137.8	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	28.23	9.0521E-05	138.4	89.57	138.4	89.57	V-C	3.1850E+04	-8.630	51.60
1.000	1.000	141.2	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	28.90	9.5411E-05	140.3	90.92	140.3	90.92	V-C	3.1850E+04	-8.830	53.60
1.000	1.000	144.5	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	29.56	9.8770E-05	142.5	92.23	142.5	92.23	V-C	3.1850E+04	-9.030	55.59
1.000	1.000	147.8	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	30.21	1.0076E-04	144.6	93.49	144.6	93.49	V-C	3.1850E+04	-9.230	57.58
1.000	1.000	151.1	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	30.86	1.0154E-04	146.5	94.71	146.5	94.71	V-C	3.1850E+04	-9.430	59.57
1.000	1.000	154.3	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	31.49	1.0125E-04	148.7	95.90	148.7	95.90	V-C	3.1850E+04	-9.630	61.56
1.000	1.000	157.5	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	32.12	1.0001E-04	150.8	97.06	150.8	97.06	V-C	3.1850E+04	-9.830	63.56
1.000	1.000	160.6	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	32.75	9.7959E-05	152.9	98.19	152.9	98.19	V-C	3.1850E+04	-10.03	65.55
1.000	1.000	163.7	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	33.37	9.5200E-05	154.8	99.30	154.8	99.30	V-C	3.1850E+04	-10.23	67.54
1.000	1.000	166.8	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	33.99	9.1835E-05	156.9	100.4	156.9	100.4	V-C	3.1850E+04	-10.43	69.53
1.000	1.000	169.9	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	34.60	8.7957E-05	159.1	101.5	159.1	101.5	V-C	3.1850E+04	-10.63	71.53
1.000	1.000	173.0	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	35.21	8.3648E-05	161.2	102.5	161.2	102.5	V-C	3.1850E+04	-10.83	73.52
1.000	1.000	176.1	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	35.82	7.8980E-05	163.1	103.6	163.1	103.6	V-C	3.1850E+04	-11.03	75.51
1.000	1.000	179.1	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	36.43	7.4019E-05	165.2	104.6	165.2	104.6	V-C	3.1850E+04	-11.23	77.50
1.000	1.000	182.1	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	37.03	6.8821E-05	167.3	105.7	167.3	105.7	V-C	3.1850E+04	-11.43	79.50
1.000	1.000	185.2	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	37.64	6.3434E-05	169.2	106.7	169.2	106.7	V-C	3.1850E+04	-11.63	81.49
1.000	1.000	188.2	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	38.24	5.7900E-05	171.3	107.7	171.3	107.7	V-C	3.1850E+04	-11.83	83.48
1.000	1.000	191.2	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	38.84	5.2255E-05	173.4	108.7	173.4	108.7	V-C	3.1850E+04	-12.03	85.47
1.000	1.000	194.2	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	39.44	4.6527E-05	175.5	109.8	175.5	109.8	V-C	3.1850E+04	-12.23	87.47
1.000	1.000	197.2	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	40.05	4.0740E-05	177.4	110.8	177.4	110.8	V-C	3.1850E+04	-12.43	89.46
1.000	1.000	200.2	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	40.65	3.4912E-05	179.5	111.8	179.5	111.8	V-C	3.1850E+04	-12.63	91.45
1.000	1.000	203.2	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	41.25	2.9058E-05	181.6	112.8	181.6	112.8	V-C	3.1850E+04	-12.83	93.44
1.000	1.000	206.3	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	41.85	2.3188E-05	183.7	113.8	183.7	113.8	V-C	3.1850E+04	-13.03	95.44
1.000	1.000	209.3	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	42.45	1.7309E-05	185.6	114.8	185.6	114.8	V-C	3.1850E+04	-13.23	97.43
1.000	1.000	212.3	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	43.06	1.1427E-05	187.7	115.9	187.7	115.9	V-C	3.1850E+04	-13.43	99.42
1.000	1.000	215.3	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	43.66	5.5430E-06	189.8	116.9	189.8	116.9	V-C	3.1850E+04	-13.63	101.4
1.000	1.000	218.3	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	40.94	-3.4113E-07	191.7	117.9	191.7	117.9	UL-RL	5.0959E+04	-13.83	103.4
1.000	1.000	221.3	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	19.02	-5.3429E-06	193.5	118.7	193.5	118.9	UL-RL	5.0959E+04	-14.00	105.1
1.000	1.000	223.8	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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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

O\_R  
ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
15	0.000	--	--	--	--	--	REMOVED	--	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
16	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
17	0.000	--	--	--	--	--	REMOVED	--	-2.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
18	0.000	--	--	--	--	--	REMOVED	--	-2.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
19	0.000	--	--	--	--	--	REMOVED	--	-2.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
20	0.000	--	--	--	--	--	REMOVED	--	-3.130	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
21	0.000	--	--	--	--	--	REMOVED	--	-3.330	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
22	D 13.32	1.1263E-03	0.000	66.62	79.80	66.62	PASSIVE	0.000	-3.530	0.000	
1.000	1.000	66.62	0.000	0.000	BNA2_(2)_335_337_L_0						
23	D 14.83	1.0271E-03	1.992	72.15	81.80	72.15	PASSIVE	0.000	-3.730	2.008	
1.000	1.000	74.16	0.000	0.000	BNA2_(2)_335_337_L_0						
24	D 16.34	9.3139E-04	3.985	77.68	83.80	77.68	PASSIVE	0.000	-3.930	4.015	
1.000	1.000	81.69	0.000	0.000	BNA2_(2)_335_337_L_0						
25	D 17.84	8.3971E-04	5.977	83.20	85.80	83.20	PASSIVE	0.000	-4.130	6.023	
1.000	1.000	89.22	0.000	0.000	BNA2_(2)_335_337_L_0						
26	D 18.09	7.5235E-04	7.970	82.44	87.80	82.44	V-C	2.8763E+04	-4.330	8.030	
1.000	1.000	90.47	0.000	0.000	BNA2_(2)_335_337_L_0						
27	D 18.26	6.6954E-04	9.962	81.27	89.80	81.27	V-C	2.8763E+04	-4.530	10.04	
1.000	1.000	91.31	0.000	0.000	BNA2_(2)_335_337_L_0						
28	D 18.46	5.9145E-04	11.95	80.24	91.80	80.24	V-C	2.8763E+04	-4.730	12.05	
1.000	1.000	92.28	0.000	0.000	BNA2_(2)_335_337_L_0						
29	D 14.01	5.1818E-04	13.95	79.34	93.80	79.34	V-C	2.8763E+04	-4.930	14.05	
1.000	1.000	93.39	0.000	0.000	BNA2_(2)_335_337_L_0						
30	D 14.10	4.8337E-04	14.94	78.94	94.80	78.94	V-C	2.8763E+04	-5.030	15.06	
1.000	1.000	94.00	0.000	0.000	BNA2_(2)_335_337_L_0						
31	D 19.06	4.1739E-04	16.94	78.25	96.80	78.25	V-C	2.8763E+04	-5.230	17.06	
1.000	1.000	95.31	0.000	0.000	BNA2_(2)_335_337_L_0						
32	D 19.35	3.5623E-04	18.93	77.69	98.80	77.69	V-C	2.8763E+04	-5.430	19.07	
1.000	1.000	96.77	0.000	0.000	BNA2_(2)_335_337_L_0						
33	D 19.67	2.9984E-04	20.92	77.27	100.8	77.27	V-C	2.8763E+04	-5.630	21.08	
1.000	1.000	98.35	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	20.01	2.4809E-04	22.91	76.98	102.8	76.98	V-C	2.8763E+04	-5.830	23.09
1.000	1.000	100.1	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	20.38	2.0085E-04	24.90	76.82	104.8	76.82	V-C	2.8763E+04	-6.030	25.10
1.000	1.000	101.9	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	20.78	1.5797E-04	26.90	76.79	106.8	76.79	V-C	2.8763E+04	-6.230	27.10
1.000	1.000	103.9	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	21.20	1.1927E-04	28.89	76.87	108.8	76.87	V-C	2.8763E+04	-6.430	29.11
1.000	1.000	106.0	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	21.64	8.4541E-05	30.88	77.06	110.8	77.06	V-C	2.8763E+04	-6.630	31.12
1.000	1.000	108.2	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	22.10	5.3591E-05	32.87	77.37	112.8	77.37	V-C	2.8763E+04	-6.830	33.13
1.000	1.000	110.5	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	22.58	2.6204E-05	34.87	77.75	114.8	77.82	UL-RL	4.6021E+04	-7.030	35.13
1.000	1.000	112.9	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	23.06	2.1638E-06	36.86	78.17	116.8	78.45	UL-RL	4.6021E+04	-7.230	37.14
1.000	1.000	115.3	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	23.54	-1.8749E-05	38.85	78.54	118.8	79.41	UL-RL	4.6021E+04	-7.430	39.15
1.000	1.000	117.7	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	24.01	-3.6754E-05	40.84	78.91	120.8	80.60	UL-RL	4.6021E+04	-7.630	41.16
1.000	1.000	120.1	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	24.51	-5.2065E-05	42.84	79.40	122.8	81.79	UL-RL	4.6021E+04	-7.830	43.16
1.000	1.000	122.6	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	25.03	-6.4895E-05	44.83	80.00	124.8	82.98	UL-RL	4.6021E+04	-8.030	45.17
1.000	1.000	125.2	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	25.58	-7.5450E-05	46.82	80.70	126.8	84.18	UL-RL	4.6021E+04	-8.230	47.18
1.000	1.000	127.9	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	26.14	-8.3928E-05	48.81	81.51	128.8	85.37	UL-RL	4.6021E+04	-8.430	49.19
1.000	1.000	130.7	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	26.72	-9.0521E-05	50.81	82.40	130.8	86.56	UL-RL	4.6021E+04	-8.630	51.19
1.000	1.000	133.6	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	27.31	-9.5411E-05	52.80	83.36	132.8	87.75	UL-RL	4.6021E+04	-8.830	53.20
1.000	1.000	136.6	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	27.92	-9.8770E-05	54.79	84.40	134.8	88.95	UL-RL	4.6021E+04	-9.030	55.21
1.000	1.000	139.6	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	28.54	-1.0076E-04	56.78	85.50	136.8	90.14	UL-RL	4.6021E+04	-9.230	57.22
1.000	1.000	142.7	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	29.18	-1.0154E-04	58.78	86.66	138.8	91.33	UL-RL	4.6021E+04	-9.430	59.22
1.000	1.000	145.9	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	29.82	-1.0125E-04	60.77	87.87	140.8	92.53	UL-RL	4.6021E+04	-9.630	61.23
1.000	1.000	149.1	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	30.47	-1.0001E-04	62.76	89.12	142.8	93.72	UL-RL	4.6021E+04	-9.830	63.24
1.000	1.000	152.4	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	31.13	-9.7959E-05	64.75	90.41	144.8	94.91	UL-RL	4.6021E+04	-10.03	65.25
1.000	1.000	155.7	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	31.80	-9.5200E-05	66.75	91.73	146.8	96.11	UL-RL	4.6021E+04	-10.23	67.25
1.000	1.000	159.0	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	32.47	-9.1835E-05	68.74	93.08	148.8	97.30	UL-RL	4.6021E+04	-10.43	69.26
1.000	1.000	162.3	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	33.14	-8.7957E-05	70.73	94.45	150.8	98.50	UL-RL	4.6021E+04	-10.63	71.27
1.000	1.000	165.7	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	33.82	-8.3648E-05	72.72	95.84	152.8	99.69	UL-RL	4.6021E+04	-10.83	73.28
1.000	1.000	169.1	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	34.51	-7.8980E-05	74.71	97.25	154.8	100.9	UL-RL	4.6021E+04	-11.03	75.29
1.000	1.000	172.5	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	35.19	-7.4019E-05	76.71	98.68	156.8	102.1	UL-RL	4.6021E+04	-11.23	77.29
1.000	1.000	176.0	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	35.88	-6.8821E-05	78.70	100.1	158.8	103.3	UL-RL	4.6021E+04	-11.43	79.30
1.000	1.000	179.4	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	36.57	-6.3434E-05	80.69	101.6	160.8	104.5	UL-RL	4.6021E+04	-11.63	81.31
1.000	1.000	182.9	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	37.26	-5.7900E-05	82.68	103.0	162.8	105.7	UL-RL	4.6021E+04	-11.83	83.32
1.000	1.000	186.3	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	37.96	-5.2255E-05	84.68	104.5	164.8	106.9	UL-RL	4.6021E+04	-12.03	85.32
1.000	1.000	189.8	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	38.65	-4.6527E-05	86.67	105.9	166.8	108.1	UL-RL	4.6021E+04	-12.23	87.33
1.000	1.000	193.3	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	39.35	-4.0740E-05	88.66	107.4	168.8	109.3	UL-RL	4.6021E+04	-12.43	89.34
1.000	1.000	196.7	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	40.04	-3.4912E-05	90.65	108.9	170.8	110.5	UL-RL	4.6021E+04	-12.63	91.35
1.000	1.000	200.2	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	40.74	-2.9058E-05	92.65	110.3	172.8	111.7	UL-RL	4.6021E+04	-12.83	93.35
1.000	1.000	203.7	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	41.43	-2.3188E-05	94.64	111.8	174.8	112.9	UL-RL	4.6021E+04	-13.03	95.36
1.000	1.000	207.2	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	42.13	-1.7309E-05	96.63	113.3	176.8	114.1	UL-RL	4.6021E+04	-13.23	97.37
1.000	1.000	210.6	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	42.82	-1.1427E-05	98.62	114.7	178.8	115.3	UL-RL	4.6021E+04	-13.43	99.38
1.000	1.000	214.1	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	43.52	-5.5430E-06	100.6	116.2	180.8	116.5	UL-RL	4.6021E+04	-13.63	101.4
1.000	1.000	217.6	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	40.90	3.4113E-07	102.6	117.7	182.8	117.7	UL-RL	4.6021E+04	-13.83	103.4
1.000	1.000	221.1	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	19.03	5.3429E-06	104.3	118.8	184.5	118.8	UL-RL	4.6021E+04	-14.00	105.1
1.000	1.000	223.9	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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| | NewProject.BaseDesignSection_25.Nominal_60 |  
| | Exe Time :25 June 2020 15:33:37 |  
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## New Project

STRESS RESULTS FOR GROUP NO. 3

WallElement\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 74  
C U R R E N T T I M E I S 2.0000

## WALL2D ELEMENT

EL	TA	TB	MA	MB
1	-4.34198E-10	4.34198E-10	-4.38618E-11	-4.63416E-11
2	3.47470E-10	-3.47470E-10	3.82760E-11	2.45491E-10
3	-3.44173E-10	3.44173E-10	-2.45850E-10	3.09907E-10
4	0.21959	-0.21959	-3.44375E-10	4.39189E-02
5	0.93377	-0.93377	-4.39189E-02	0.23067
6	2.1459	-2.1459	-0.23067	0.65984
7	3.8592	-3.8592	-0.65984	1.4317
8	6.0770	-6.0770	-1.4317	2.6471
9	8.8019	-8.8019	-2.6471	4.4075
10	12.036	-12.036	-4.4075	6.8147
11	15.781	-15.781	-6.8147	9.9708
12	20.307	-20.307	-9.9708	14.032
13	25.648	-25.648	-14.032	19.162
14	31.796	-31.796	-19.162	25.521
15	38.743	-38.743	-25.521	33.270
16	43.194	-43.194	-33.270	34.565
17	47.713	-47.713	-34.565	44.108
18	56.358	-56.358	-44.108	55.380
19	65.785	-65.785	-55.380	68.537
20	75.987	-75.987	-68.537	83.734
21	86.958	-86.958	-83.734	101.13
22	75.951	-75.951	-101.13	116.32
23	64.055	-64.055	-116.32	129.13
24	51.223	-51.223	-129.13	139.37
25	38.093	-38.093	-139.37	146.99
26	26.249	-26.249	-146.99	152.24
27	15.722	-15.722	-152.24	155.38
28	6.4392	-6.4392	-155.38	156.67
29	0.35144	-0.35144	-156.67	156.71
30	-5.3208	5.3208	-156.71	155.64
31	-11.834	11.834	-155.64	153.28
32	-17.374	17.374	-153.28	149.80
33	-22.017	22.017	-149.80	145.40
34	-25.837	25.837	-145.40	140.23
35	-28.906	28.906	-140.23	134.45
36	-31.293	31.293	-134.45	128.19
37	-33.065	33.065	-128.19	121.58
38	-34.286	34.286	-121.58	114.72
39	-35.015	35.015	-114.72	107.72
40	-35.305	35.305	-107.72	100.66
41	-35.197	35.197	-100.66	93.617
42	-34.789	34.789	-93.617	86.659
43	-34.100	34.100	-86.659	79.839
44	-33.175	33.175	-79.839	73.204
45	-32.051	32.051	-73.204	66.794
46	-30.766	30.766	-66.794	60.641
47	-29.350	29.350	-60.641	54.771
48	-27.834	27.834	-54.771	49.204
49	-26.244	26.244	-49.204	43.955
50	-24.604	24.604	-43.955	39.034
51	-22.934	22.934	-39.034	34.448
52	-21.255	21.255	-34.448	30.197
53	-19.582	19.582	-30.197	26.280
54	-17.931	17.931	-26.280	22.694
55	-16.314	16.314	-22.694	19.431
56	-14.742	14.742	-19.431	16.483
57	-13.224	13.224	-16.483	13.838
58	-11.769	11.769	-13.838	11.484
59	-10.383	10.383	-11.484	9.4080
60	-9.0714	9.0714	-9.4080	7.5937
61	-7.8396	7.8396	-7.5937	6.0258
62	-6.6908	6.6908	-6.0258	4.6876
63	-5.6280	5.6280	-4.6876	3.5620
64	-4.6535	4.6535	-3.5620	2.6313
65	-3.7690	3.7690	-2.6313	1.8775
66	-2.9758	2.9758	-1.8775	1.2824
67	-2.2748	2.2748	-1.2824	0.82743
68	-1.6667	1.6667	-0.82743	0.49408
69	-1.1519	1.1519	-0.49408	0.26371
70	-0.73053	0.73053	-0.26371	0.11761

71-0.40285 0.40285 -0.11761 3.70360E-02  
72-0.16888 0.16888 -3.70360E-02 3.25938E-03  
73-2.86476E-02 2.86476E-02-3.25938E-03-2.47013E-03  
74 1.45293E-02-1.45293E-02 2.47013E-03-6.27276E-14

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 15:33:37 |  
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New Project
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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\_341 :  
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
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\*\*\*\*\* NO ONE ELEMENT ACTIVE AT CURRENT STEP \*\*\*\*\*

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 15:33:37 |  
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New Project
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## New Project

STRESS RESULTS FOR GROUP NO. 5

Tieback\_342 :  
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 \*\*\*\*\*

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ITER      0 RINORM = 0.000      RMNORM= 0.000
          RINORM=0.2259E+06 RIMNOR=0.8860E+06
          RENORM= 6132.      REMNOR=0.2599E-17 RATIO =0.1647      TOLER =0.1000E-03 NOT CONVERGED
          RFMAX = 86.96      RMMAX = 156.7
          RTSMAL=0.1000E-03 RMSMAL=0.1000E-02
          RDT   = 0.2259E+06 RDR   = 0.8860E+06
          RATIOT=0.1647      RATORI= 0.000
          MAX UN=0.7760E-09 IEQ=     13 NODE      7 DOF      1 Y-DISPL.F
          MIN UN=-78.30       IEQ=     33 NODE      17 DOF      1 Y-DISPL.F
          NO. OF CONTACT CONSTRAINT VIOLATIONS      0

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ITER    2 RNORM = 0.000      RMNORM= 0.000
        RINORM=0.2259E+06   RIMNOR=0.8860E+06
        RENORM=0.1236       REMNOR=0.1975E-18 RATIO =0.7396E-03 TOLER =0.1000E-03 NOT CONVERGED
        RFMAX = 86.96       RMMAX = 156.7
        RTSMAL=0.1000E-03   RMSMAL=0.1000E-02
        RDT  = -0.2259E+06   RDR  = -0.8860E+06
        RATIOT=0.7396E-03   RATIOR= 0.000
        MAX UN=0.5744E-07   IEQ=     33 NODE      17 DOF    1 Y-DISPL.F
        MIN UN=-.3480       IEQ=      3 NODE      2 DOF    1 Y-DISPL.F
        NO. OF CONTACT CONSTRAINT VIOLATIONS      0

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ITER      3 RNORM = 0.000      RMNORM= 0.000
          RINORM=0.2259E+06 RIMNOR=0.8860E+06
          RENORM=0.2936E-05 REMNOR=0.3204E-18 RATIO =0.3605E-05 TOLER =0.1000E-03      CONVERGED !
          RFMAX = 86.96      RMMAX = 156.7
          RTSMAL=0.1000E-03 RMSMAL=0.1000E-02
          RDT =0.2259E+06 RDR =0.8860E+06
          RATIO=0.3605E-05 RATIOR= 0.000
          MAX UN=0.2636E-07 IEQ= 31 NODE 16 DOF 1 Y-DISPL.F
          MIN UN=-.1714E-02 IEQ= 81 NODE 41 DOF 1 Y-DISPL.F
          NO. OF CONTACT CONSTRAINT VIOLATIONS 0

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 15:33:37
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New Project
SOLUTION REACHED USING      3 ITERATIONS ON    40

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

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

      Y-DISPL. F      X-ROT. F
      (02)          (04)      (
1  2.2297897E-03 -4.0896224E-04
2  2.1479978E-03 -4.0895372E-04
3  2.0662107E-03 -4.0890718E-04
4  1.9844405E-03 -4.0877681E-04
5  1.9027091E-03 -4.0850936E-04
6  1.8210502E-03 -4.0804114E-04
7  1.7395112E-03 -4.0729459E-04
8  1.6581570E-03 -4.0617817E-04
9  1.5770717E-03 -4.0458628E-04
10 1.4963622E-03 -4.0239913E-04
11 1.4161606E-03 -3.9948274E-04
12 1.3366276E-03 -3.9568888E-04
13 1.2579547E-03 -3.9085081E-04
14 1.1803695E-03 -3.8477868E-04
15 1.1041397E-03 -3.7725907E-04
16 1.0295782E-03 -3.6805533E-04
17 1.0185595E-03 -3.6651705E-04
18 9.4628594E-04 -3.5626991E-04
19 8.7604069E-04 -3.4618488E-04
20 8.0782174E-04 -3.3595356E-04
21 7.4169106E-04 -3.2524523E-04
22 6.7777897E-04 -3.1370701E-04
23 6.1627333E-04 -3.0119276E-04
24 5.5736048E-04 -2.8779933E-04
25 5.0120236E-04 -2.7367439E-04
26 4.4792692E-04 -2.5900653E-04
27 3.9762300E-04 -2.4398997E-04
28 3.5034259E-04 -2.2879857E-04
29 3.0610523E-04 -2.1358555E-04
30 2.8512557E-04 -2.0600929E-04
31 2.4542772E-04 -1.9100758E-04
32 2.0870393E-04 -1.7628501E-04
33 1.7488904E-04 -1.6193254E-04
34 1.4390132E-04 -1.4802634E-04
35 1.1564476E-04 -1.3462868E-04
36 9.0012606E-05 -1.2178959E-04
37 6.6889110E-05 -1.0954767E-04
38 4.6151837E-05 -9.7931274E-05
39 2.7673709E-05 -8.6959605E-05
40 1.1324387E-05 -7.6643468E-05
41 -3.0276189E-06 -6.6986447E-05
42 -1.5513930E-05 -5.7985501E-05
43 -2.6264996E-05 -4.9632212E-05
44 -3.5409131E-05 -4.1913667E-05
45 -4.3071653E-05 -3.4812971E-05
46 -4.9374161E-05 -2.8309892E-05
47 -5.4433896E-05 -2.2381472E-05
48 -5.8363349E-05 -1.7002436E-05
49 -6.1269701E-05 -1.2145852E-05
50 -6.3254634E-05 -7.7834429E-06
51 -6.4414077E-05 -3.8860140E-06
52 -6.4838054E-05 -4.2382175E-07
53 -6.4610616E-05 2.6331759E-06
54 -6.3809800E-05 5.3149331E-06
55 -6.2507649E-05 7.6511819E-06
56 -6.0770397E-05 9.6710137E-06
57 -5.8658435E-05 1.1402968E-05
58 -5.6226560E-05 1.2874674E-05
59 -5.3524141E-05 1.4112754E-05
60 -5.0595485E-05 1.5142661E-05
61 -4.7479475E-05 1.5988768E-05
62 -4.4210705E-05 1.6673971E-05
63 -4.0819175E-05 1.7219842E-05
64 -3.7330715E-05 1.7646504E-05
65 -3.3767278E-05 1.7972595E-05
66 -3.0147241E-05 1.8215223E-05
67 -2.6485716E-05 1.8389946E-05
68 -2.2794858E-05 1.8510743E-05
69 -1.9084188E-05 1.8590003E-05
70 -1.5360907E-05 1.8638514E-05
71 -1.1630220E-05 1.8665456E-05
72 -7.8956581E-06 1.8678394E-05
73 -4.1593996E-06 1.8683277E-05
74 -4.2259546E-07 1.8684437E-05

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75 2.7539544E-06 1.8684514E-05

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 15:33:37
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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

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ELEMENT TYPE 5 NO.OF ELEMENTS. IN THIS GROUP 75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.5487	-2.2298E-03	0.000	5.487	0.000	5.487	V-C	4764.	0.5000	0.000	
1.000	1.000	5.487	0.000	0.000	FRANA_334_8_L_0						
2 D	1.350	-2.1480E-03	4.002	6.748	4.002	6.748	V-C	4764.	0.3000	0.000	
1.000	1.000	6.748	0.000	0.000	FRANA_334_8_L_0						
3 D	1.600	-2.0662E-03	8.013	8.002	8.013	8.002	V-C	4764.	0.1000	0.000	
1.000	1.000	8.002	0.000	0.000	FRANA_334_8_L_0						
4 D	1.827	-1.9844E-03	12.04	9.136	12.04	11.25	UL-RL	7622.	-0.1000	0.000	
1.000	1.000	9.136	0.000	0.000	FRANA_334_8_L_0						
5 D	2.272	-1.9027E-03	16.10	11.36	16.10	14.91	UL-RL	7622.	-0.3000	0.000	
1.000	1.000	11.36	0.000	0.000	FRANA_334_8_L_0						
6 D	2.721	-1.8211E-03	20.18	13.60	20.18	18.52	UL-RL	7622.	-0.5000	0.000	
1.000	1.000	13.60	0.000	0.000	FRANA_334_8_L_0						
7 D	3.172	-1.7395E-03	24.29	15.86	24.29	22.06	UL-RL	7622.	-0.7000	0.000	
1.000	1.000	15.86	0.000	0.000	FRANA_334_8_L_0						
8 D	3.627	-1.6582E-03	28.42	18.13	28.42	25.53	UL-RL	7622.	-0.9000	0.000	
1.000	1.000	18.13	0.000	0.000	FRANA_334_8_L_0						
9 D	4.083	-1.5771E-03	32.58	20.42	32.58	28.94	UL-RL	7622.	-1.100	0.000	
1.000	1.000	20.42	0.000	0.000	FRANA_334_8_L_0						
10 D	4.542	-1.4964E-03	36.75	22.71	36.75	32.30	UL-RL	7622.	-1.300	0.000	
1.000	1.000	22.71	0.000	0.000	FRANA_334_8_L_0						
11 D	5.002	-1.4162E-03	40.94	25.01	40.94	35.59	UL-RL	7622.	-1.500	0.000	
1.000	1.000	25.01	0.000	0.000	FRANA_334_8_L_0						
12 D	5.731	-1.3366E-03	45.14	28.65	45.14	38.84	UL-RL	7622.	-1.700	0.000	
1.000	1.000	28.65	0.000	0.000	FRANA_334_8_L_0						
13 D	6.492	-1.2580E-03	49.34	32.46	49.34	42.05	UL-RL	7622.	-1.900	0.000	
1.000	1.000	32.46	0.000	0.000	FRANA_334_8_L_0						
14 D	7.245	-1.1804E-03	53.54	36.23	53.54	45.22	UL-RL	7622.	-2.100	0.000	
1.000	1.000	36.23	0.000	0.000	FRANA_334_8_L_0						
15 D	7.990	-1.1041E-03	57.74	39.95	57.74	48.37	UL-RL	7622.	-2.300	0.000	
1.000	1.000	39.95	0.000	0.000	FRANA_334_8_L_0						
16 D	5.018	-1.0296E-03	61.94	43.64	61.94	51.48	UL-RL	7622.	-2.500	0.000	
1.000	1.000	43.64	0.000	0.000	FRANA_334_8_L_0						
17 D	5.081	-1.0186E-03	62.57	44.19	62.57	51.95	UL-RL	7622.	-2.530	0.000	
1.000	1.000	44.19	0.000	0.000	FRANA_334_8_L_0						
18 D	9.566	-9.4629E-04	66.77	47.83	66.77	55.04	UL-RL	7622.	-2.730	0.000	
1.000	1.000	47.83	0.000	0.000	FRANA_334_8_L_0						
19 D	10.29	-8.7604E-04	71.28	51.44	71.28	58.12	UL-RL	7622.	-2.930	0.000	
1.000	1.000	51.44	0.000	0.000	FRANA_334_8_L_0						
20 D	11.00	-8.0782E-04	75.80	55.02	75.80	61.18	UL-RL	7622.	-3.130	0.000	
1.000	1.000	55.02	0.000	0.000	FRANA_334_8_L_0						
21 D	11.71	-7.4169E-04	79.71	58.57	79.71	64.22	UL-RL	7622.	-3.330	0.000	
1.000	1.000	58.57	0.000	0.000	FRANA_334_8_L_0						
22 D	6.889	-6.7778E-04	83.37	33.65	83.37	55.88	UL-RL	5.0959E+04	-3.530	0.7970	
1.000	1.000	34.45	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	7.122	-6.1627E-04	85.79	32.82	85.79	57.12	UL-RL	5.0959E+04	-3.730	2.789	
1.000	1.000	35.61	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	7.318	-5.5736E-04	87.70	31.81	87.70	58.36	UL-RL	5.0959E+04	-3.930	4.782	
1.000	1.000	36.59	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	8.165	-5.0120E-04	90.09	34.05	90.09	59.59	UL-RL	5.0959E+04	-4.130	6.774	
1.000	1.000	40.83	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	9.352	-4.4793E-04	92.45	37.99	92.45	60.82	UL-RL	5.0959E+04	-4.330	8.767	
1.000	1.000	46.76	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	10.51	-3.9762E-04	94.78	41.78	94.78	62.04	UL-RL	5.0959E+04	-4.530	10.76	
1.000	1.000	52.54	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	11.63	-3.5034E-04	96.68	45.40	96.68	63.26	UL-RL	5.0959E+04	-4.730	12.75	
1.000	1.000	58.16	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	9.542	-3.0611E-04	98.99	48.87	98.99	64.47	UL-RL	5.0959E+04	-4.930	14.74	
1.000	1.000	63.62	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	9.943	-2.8513E-04	99.94	50.55	99.94	65.08	UL-RL	5.0959E+04	-5.030	15.74	
1.000	1.000	66.29	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	14.30	-2.4543E-04	102.2	53.78	102.2	66.29	UL-RL	5.0959E+04	-5.230	17.73	
1.000	1.000	71.51	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	15.32	-2.0870E-04	104.5	56.86	104.5	67.49	UL-RL	5.0959E+04	-5.430	19.72	
1.000	1.000	76.58	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	16.30	-1.7489E-04	106.8	59.79	106.8	68.70	UL-RL	5.0959E+04	-5.630	21.72	
1.000	1.000	81.50	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	17.26	-1.4390E-04	108.7	62.57	108.7	69.90	UL-RL	5.0959E+04	-5.830	23.71
1.000	1.000	86.28	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	18.18	-1.1564E-04	110.9	65.21	110.9	71.11	UL-RL	5.0959E+04	-6.030	25.70
1.000	1.000	90.91	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	19.08	-9.0013E-05	113.1	67.72	113.1	72.31	UL-RL	5.0959E+04	-6.230	27.69
1.000	1.000	95.41	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	19.96	-6.6889E-05	115.3	70.10	115.3	73.51	UL-RL	5.0959E+04	-6.430	29.69
1.000	1.000	99.79	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	20.81	-4.6152E-05	117.2	72.36	117.2	74.71	UL-RL	5.0959E+04	-6.630	31.68
1.000	1.000	104.0	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	21.63	-2.7674E-05	119.4	74.50	119.4	75.91	UL-RL	5.0959E+04	-6.830	33.67
1.000	1.000	108.2	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	22.44	-1.1324E-05	121.6	76.53	121.6	77.10	UL-RL	5.0959E+04	-7.030	35.66
1.000	1.000	112.2	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	23.21	3.0276E-06	123.5	78.39	123.5	78.41	UL-RL	5.0959E+04	-7.230	37.66
1.000	1.000	116.0	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	23.91	1.5514E-05	125.7	79.92	125.7	80.12	UL-RL	5.0959E+04	-7.430	39.65
1.000	1.000	119.6	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	24.59	2.6265E-05	127.9	81.33	127.9	81.87	UL-RL	5.0959E+04	-7.630	41.64
1.000	1.000	123.0	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	25.27	3.5409E-05	130.1	82.70	130.1	83.55	UL-RL	5.0959E+04	-7.830	43.63
1.000	1.000	126.3	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	25.93	4.3072E-05	132.0	84.05	132.0	85.16	UL-RL	5.0959E+04	-8.030	45.63
1.000	1.000	129.7	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	26.60	4.9374E-05	134.1	85.36	134.1	86.69	UL-RL	5.0959E+04	-8.230	47.62
1.000	1.000	133.0	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	27.25	5.4434E-05	136.3	86.66	136.3	88.16	UL-RL	5.0959E+04	-8.430	49.61
1.000	1.000	136.3	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	27.91	5.8363E-05	138.4	87.93	138.4	89.57	UL-RL	5.0959E+04	-8.630	51.60
1.000	1.000	139.5	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	28.56	6.1270E-05	140.3	89.18	140.3	90.92	UL-RL	5.0959E+04	-8.830	53.60
1.000	1.000	142.8	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	29.20	6.3255E-05	142.5	90.42	142.5	92.23	UL-RL	5.0959E+04	-9.030	55.59
1.000	1.000	146.0	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	29.84	6.4414E-05	144.6	91.63	144.6	93.49	UL-RL	5.0959E+04	-9.230	57.58
1.000	1.000	149.2	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	30.48	6.4838E-05	146.5	92.84	146.5	94.71	UL-RL	5.0959E+04	-9.430	59.57
1.000	1.000	152.4	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	31.12	6.4611E-05	148.7	94.03	148.7	95.90	UL-RL	5.0959E+04	-9.630	61.56
1.000	1.000	155.6	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	31.75	6.3810E-05	150.8	95.21	150.8	97.06	UL-RL	5.0959E+04	-9.830	63.56
1.000	1.000	158.8	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	32.39	6.2508E-05	152.9	96.38	152.9	98.19	UL-RL	5.0959E+04	-10.03	65.55
1.000	1.000	161.9	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	33.02	6.0770E-05	154.8	97.55	154.8	99.30	UL-RL	5.0959E+04	-10.23	67.54
1.000	1.000	165.1	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	33.65	5.8658E-05	156.9	98.70	156.9	100.4	UL-RL	5.0959E+04	-10.43	69.53
1.000	1.000	168.2	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	34.28	5.6227E-05	159.1	99.85	159.1	101.5	UL-RL	5.0959E+04	-10.63	71.53
1.000	1.000	171.4	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	34.90	5.3524E-05	161.2	101.0	161.2	102.5	UL-RL	5.0959E+04	-10.83	73.52
1.000	1.000	174.5	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	35.53	5.0595E-05	163.1	102.1	163.1	103.6	UL-RL	5.0959E+04	-11.03	75.51
1.000	1.000	177.6	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	36.16	4.7479E-05	165.2	103.3	165.2	104.6	UL-RL	5.0959E+04	-11.23	77.50
1.000	1.000	180.8	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	36.78	4.4211E-05	167.3	104.4	167.3	105.7	UL-RL	5.0959E+04	-11.43	79.50
1.000	1.000	183.9	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	37.41	4.0819E-05	169.2	105.5	169.2	106.7	UL-RL	5.0959E+04	-11.63	81.49
1.000	1.000	187.0	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	38.03	3.7331E-05	171.3	106.7	171.3	107.7	UL-RL	5.0959E+04	-11.83	83.48
1.000	1.000	190.1	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	38.65	3.3767E-05	173.4	107.8	173.4	108.7	UL-RL	5.0959E+04	-12.03	85.47
1.000	1.000	193.3	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	39.28	3.0147E-05	175.5	108.9	175.5	109.8	UL-RL	5.0959E+04	-12.23	87.47
1.000	1.000	196.4	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	39.90	2.6486E-05	177.4	110.0	177.4	110.8	UL-RL	5.0959E+04	-12.43	89.46
1.000	1.000	199.5	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	40.53	2.2795E-05	179.5	111.2	179.5	111.8	UL-RL	5.0959E+04	-12.63	91.45
1.000	1.000	202.6	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	41.15	1.9084E-05	181.6	112.3	181.6	112.8	UL-RL	5.0959E+04	-12.83	93.44
1.000	1.000	205.7	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	41.77	1.5361E-05	183.7	113.4	183.7	113.8	UL-RL	5.0959E+04	-13.03	95.44
1.000	1.000	208.9	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	42.40	1.1630E-05	185.6	114.6	185.6	114.8	UL-RL	5.0959E+04	-13.23	97.43
1.000	1.000	212.0	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	43.02	7.8957E-06	187.7	115.7	187.7	115.9	UL-RL	5.0959E+04	-13.43	99.42
1.000	1.000	215.1	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	43.64	4.1594E-06	189.8	116.8	189.8	116.9	UL-RL	5.0959E+04	-13.63	101.4
1.000	1.000	218.2	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	40.95	4.2260E-07	191.7	117.9	191.7	117.9	V-C	3.1850E+04	-13.83	103.4
1.000	1.000	221.3	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	19.03	-2.7540E-06	193.5	118.8	193.5	118.9	UL-RL	5.0959E+04	-14.00	105.1
1.000	1.000	223.9	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 15:33:37
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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

O\_R  
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
15	0.000	--	--	--	--	--	REMOVED	--	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
16	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
17	0.000	--	--	--	--	--	REMOVED	--	-2.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
18	0.000	--	--	--	--	--	REMOVED	--	-2.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
19	0.000	--	--	--	--	--	REMOVED	--	-2.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
20	0.000	--	--	--	--	--	REMOVED	--	-3.130	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
21	0.000	--	--	--	--	--	REMOVED	--	-3.330	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
22	D 9.196	6.7778E-04	0.000	45.98	79.80	66.62	UL-RL	4.6021E+04	-3.530	0.000	
1.000	1.000	45.98	0.000	0.000	BNA2_(2)_335_337_L_0						
23	D 11.05	6.1627E-04	1.992	53.24	81.80	72.15	UL-RL	4.6021E+04	-3.730	2.008	
1.000	1.000	55.25	0.000	0.000	BNA2_(2)_335_337_L_0						
24	D 12.90	5.5736E-04	3.985	60.46	83.80	77.68	UL-RL	4.6021E+04	-3.930	4.015	
1.000	1.000	64.48	0.000	0.000	BNA2_(2)_335_337_L_0						
25	D 14.73	5.0120E-04	5.977	67.62	85.80	83.20	UL-RL	4.6021E+04	-4.130	6.023	
1.000	1.000	73.65	0.000	0.000	BNA2_(2)_335_337_L_0						
26	D 15.29	4.4793E-04	7.970	68.43	87.80	82.44	UL-RL	4.6021E+04	-4.330	8.030	
1.000	1.000	76.46	0.000	0.000	BNA2_(2)_335_337_L_0						
27	D 15.76	3.9762E-04	9.962	68.76	89.80	81.27	UL-RL	4.6021E+04	-4.530	10.04	
1.000	1.000	78.80	0.000	0.000	BNA2_(2)_335_337_L_0						
28	D 16.24	3.5034E-04	11.95	69.14	91.80	80.24	UL-RL	4.6021E+04	-4.730	12.05	
1.000	1.000	81.19	0.000	0.000	BNA2_(2)_335_337_L_0						
29	D 12.55	3.0611E-04	13.95	69.58	93.80	79.34	UL-RL	4.6021E+04	-4.930	14.05	
1.000	1.000	83.63	0.000	0.000	BNA2_(2)_335_337_L_0						
30	D 12.73	2.8513E-04	14.94	69.82	94.80	78.94	UL-RL	4.6021E+04	-5.030	15.06	
1.000	1.000	84.88	0.000	0.000	BNA2_(2)_335_337_L_0						
31	D 17.48	2.4543E-04	16.94	70.34	96.80	78.25	UL-RL	4.6021E+04	-5.230	17.06	
1.000	1.000	87.40	0.000	0.000	BNA2_(2)_335_337_L_0						
32	D 18.00	2.0870E-04	18.93	70.90	98.80	77.69	UL-RL	4.6021E+04	-5.430	19.07	
1.000	1.000	89.98	0.000	0.000	BNA2_(2)_335_337_L_0						
33	D 18.52	1.7489E-04	20.92	71.52	100.8	77.27	UL-RL	4.6021E+04	-5.630	21.08	
1.000	1.000	92.60	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	19.06	1.4390E-04	22.91	72.19	102.8	76.98	UL-RL	4.6021E+04	-5.830	23.09
1.000	1.000	95.28	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	19.60	1.1564E-04	24.90	72.90	104.8	76.82	UL-RL	4.6021E+04	-6.030	25.10
1.000	1.000	98.00	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	20.15	9.0013E-05	26.90	73.66	106.8	76.79	UL-RL	4.6021E+04	-6.230	27.10
1.000	1.000	100.8	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	20.71	6.6898E-05	28.89	74.46	108.8	76.87	UL-RL	4.6021E+04	-6.430	29.11
1.000	1.000	103.6	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	21.28	4.6152E-05	30.88	75.30	110.8	77.06	UL-RL	4.6021E+04	-6.630	31.12
1.000	1.000	106.4	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	21.86	2.7674E-05	32.87	76.17	112.8	77.37	UL-RL	4.6021E+04	-6.830	33.13
1.000	1.000	109.3	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	22.44	1.1324E-05	34.87	77.06	114.8	77.82	UL-RL	4.6021E+04	-7.030	35.13
1.000	1.000	112.2	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	23.01	-3.0276E-06	36.86	77.93	116.8	78.45	UL-RL	4.6021E+04	-7.230	37.14
1.000	1.000	115.1	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	23.57	-1.5514E-05	38.85	78.69	118.8	79.41	UL-RL	4.6021E+04	-7.430	39.15
1.000	1.000	117.8	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	24.11	-2.6265E-05	40.84	79.39	120.8	80.60	UL-RL	4.6021E+04	-7.630	41.16
1.000	1.000	120.5	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	24.67	-3.5409E-05	42.84	80.16	122.8	81.79	UL-RL	4.6021E+04	-7.830	43.16
1.000	1.000	123.3	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	25.23	-4.3072E-05	44.83	81.00	124.8	82.98	UL-RL	4.6021E+04	-8.030	45.17
1.000	1.000	126.2	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	25.82	-4.9374E-05	46.82	81.90	126.8	84.18	UL-RL	4.6021E+04	-8.230	47.18
1.000	1.000	129.1	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	26.41	-5.4434E-05	48.81	82.86	128.8	85.37	UL-RL	4.6021E+04	-8.430	49.19
1.000	1.000	132.1	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	27.01	-5.8363E-05	50.81	83.88	130.8	86.56	UL-RL	4.6021E+04	-8.630	51.19
1.000	1.000	135.1	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	27.63	-6.1270E-05	52.80	84.93	132.8	87.75	UL-RL	4.6021E+04	-8.830	53.20
1.000	1.000	138.1	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	28.25	-6.3255E-05	54.79	86.04	134.8	88.95	UL-RL	4.6021E+04	-9.030	55.21
1.000	1.000	141.2	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	28.88	-6.4414E-05	56.78	87.18	136.8	90.14	UL-RL	4.6021E+04	-9.230	57.22
1.000	1.000	144.4	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	29.51	-6.4838E-05	58.78	88.35	138.8	91.33	UL-RL	4.6021E+04	-9.430	59.22
1.000	1.000	147.6	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	30.16	-6.4611E-05	60.77	89.55	140.8	92.53	UL-RL	4.6021E+04	-9.630	61.23
1.000	1.000	150.8	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	30.80	-6.3810E-05	62.76	90.78	142.8	93.72	UL-RL	4.6021E+04	-9.830	63.24
1.000	1.000	154.0	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	31.46	-6.2508E-05	64.75	92.04	144.8	94.91	UL-RL	4.6021E+04	-10.03	65.25
1.000	1.000	157.3	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	32.11	-6.0770E-05	66.75	93.31	146.8	96.11	UL-RL	4.6021E+04	-10.23	67.25
1.000	1.000	160.6	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	32.77	-5.8658E-05	68.74	94.60	148.8	97.30	UL-RL	4.6021E+04	-10.43	69.26
1.000	1.000	163.9	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	33.44	-5.6227E-05	70.73	95.91	150.8	98.50	UL-RL	4.6021E+04	-10.63	71.27
1.000	1.000	167.2	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	34.10	-5.3524E-05	72.72	97.23	152.8	99.69	UL-RL	4.6021E+04	-10.83	73.28
1.000	1.000	170.5	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	34.77	-5.0595E-05	74.71	98.56	154.8	100.9	UL-RL	4.6021E+04	-11.03	75.29
1.000	1.000	173.8	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	35.44	-4.7479E-05	76.71	99.90	156.8	102.1	UL-RL	4.6021E+04	-11.23	77.29
1.000	1.000	177.2	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	36.11	-4.4211E-05	78.70	101.2	158.8	103.3	UL-RL	4.6021E+04	-11.43	79.30
1.000	1.000	180.5	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	36.78	-4.0819E-05	80.69	102.6	160.8	104.5	UL-RL	4.6021E+04	-11.63	81.31
1.000	1.000	183.9	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	37.45	-3.7331E-05	82.68	104.0	162.8	105.7	UL-RL	4.6021E+04	-11.83	83.32
1.000	1.000	187.3	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	38.13	-3.3767E-05	84.68	105.3	164.8	106.9	UL-RL	4.6021E+04	-12.03	85.32
1.000	1.000	190.6	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	38.80	-3.0147E-05	86.67	106.7	166.8	108.1	UL-RL	4.6021E+04	-12.23	87.33
1.000	1.000	194.0	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	39.48	-2.6486E-05	88.66	108.0	168.8	109.3	UL-RL	4.6021E+04	-12.43	89.34
1.000	1.000	197.4	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	40.15	-2.2795E-05	90.65	109.4	170.8	110.5	UL-RL	4.6021E+04	-12.63	91.35
1.000	1.000	200.8	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	40.83	-1.9084E-05	92.65	110.8	172.8	111.7	UL-RL	4.6021E+04	-12.83	93.35
1.000	1.000	204.1	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	41.50	-1.5361E-05	94.64	112.2	174.8	112.9	UL-RL	4.6021E+04	-13.03	95.36
1.000	1.000	207.5	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	42.18	-1.1630E-05	96.63	113.5	176.8	114.1	UL-RL	4.6021E+04	-13.23	97.37
1.000	1.000	210.9	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	42.85	-7.8957E-06	98.62	114.9	178.8	115.3	UL-RL	4.6021E+04	-13.43	99.38
1.000	1.000	214.3	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	43.53	-4.1594E-06	100.6	116.3	180.8	116.5	UL-RL	4.6021E+04	-13.63	101.4
1.000	1.000	217.7	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	40.89	-4.2260E-07	102.6	117.6	182.8	117.7	UL-RL	4.6021E+04	-13.83	103.4
1.000	1.000	221.0	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	19.02	2.7540E-06	104.3	118.7	184.5	118.8	UL-RL	4.6021E+04	-14.00	105.1
1.000	1.000	223.8	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 15:33:37
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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\_30 :  
ELEMENT TYPE    2 NO.OF ELEMENTS. IN THIS GROUP    74  
C U R R E N T    T I M E    I S    3.0000

WALL2D ELEMENT

EL	TA	TB	MA	MB
1	0.54868	-0.54868	6.01403E-11	0.10974
2	1.8983	-1.8983	-0.10974	0.48940
3	3.4988	-3.4988	-0.48940	1.1892
4	5.3260	-5.3260	-1.1892	2.2544
5	7.5984	-7.5984	-2.2544	3.7741
6	10.319	-10.319	-3.7741	5.8379
7	13.491	-13.491	-5.8379	8.5362
8	17.118	-17.118	-8.5362	11.960
9	21.202	-21.202	-11.960	16.200
10	25.744	-25.744	-16.200	21.349
11	30.745	-30.745	-21.349	27.498
12	36.476	-36.476	-27.498	34.793
13	42.969	-42.969	-34.793	43.387
14	50.214	-50.214	-43.387	53.430
15	58.204	-58.204	-53.430	65.070
16	63.222	-63.222	-65.070	66.967
17	-10.001	10.001	-66.967	64.967
18	-0.43523	0.43523	-64.967	64.880
19	9.8524	-9.8524	-64.880	66.850
20	20.856	-20.856	-66.850	71.022
21	32.570	-32.570	-71.022	77.535
22	30.263	-30.263	-77.535	83.588
23	26.335	-26.335	-83.588	88.855
24	20.758	-20.758	-88.855	93.007
25	14.194	-14.194	-93.007	95.845
26	8.2538	-8.2538	-95.845	97.496
27	3.0018	-3.0018	-97.496	98.096
28	-1.6049	1.6049	-98.096	97.775
29	-4.6076	4.6076	-97.775	97.315
30	-7.3960	7.3960	-97.315	95.835
31	-10.574	10.574	-95.835	93.721
32	-13.252	13.252	-93.721	91.070
33	-15.472	15.472	-91.070	87.976
34	-17.271	17.271	-87.976	84.522
35	-18.687	18.687	-84.522	80.784
36	-19.756	19.756	-80.784	76.833
37	-20.513	20.513	-76.833	72.730
38	-20.989	20.989	-72.730	68.533
39	-21.215	21.215	-68.533	64.290
40	-21.216	21.216	-64.290	60.046
41	-21.020	21.020	-60.046	55.843
42	-20.674	20.674	-55.843	51.708
43	-20.189	20.189	-51.708	47.670
44	-19.586	19.586	-47.670	43.753
45	-18.886	18.886	-43.753	39.976
46	-18.106	18.106	-39.976	36.354
47	-17.263	17.263	-36.354	32.902
48	-16.370	16.370	-32.902	29.628
49	-15.443	15.443	-29.628	26.539
50	-14.491	14.491	-26.539	23.641
51	-13.527	13.527	-23.641	20.936
52	-12.559	12.559	-20.936	18.424
53	-11.597	11.597	-18.424	16.104
54	-10.648	10.648	-16.104	13.975
55	-9.7184	9.7184	-13.975	12.031
56	-8.8140	8.8140	-12.031	10.268
57	-7.9398	7.9398	-10.268	8.6803
58	-7.1000	7.1000	-8.6803	7.2603
59	-6.2983	6.2983	-7.2603	6.0007
60	-5.5377	5.5377	-6.0007	4.8931
61	-4.8206	4.8206	-4.8931	3.9290
62	-4.1491	4.1491	-3.9290	3.0992
63	-3.5250	3.5250	-3.0992	2.3942
64	-2.9494	2.9494	-2.3942	1.8043
65	-2.4235	2.4235	-1.8043	1.3196
66	-1.9480	1.9480	-1.3196	0.92999
67	-1.5235	1.5235	-0.92999	0.62529
68	-1.1504	1.1504	-0.62529	0.39520
69	-0.82904	0.82904	-0.39520	0.22939
70	-0.55953	0.55953	-0.22939	0.11749

71-0.34200 0.34200 -0.11749 4.90885E-02  
72-0.17653 0.17653 -4.90885E-02 1.37835E-02  
73-6.31266E-02 6.31266E-02-1.37835E-02 1.15818E-03  
74-6.81242E-03 6.81242E-03-1.15818E-03 6.29496E-14

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020      15:33:37
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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_341      :
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    83.330    -6.02850E-04  -6.02850E-04    0.0000    0.0000    0.0000    0.0000    BORN NOW JUST ACTIVATED

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PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION \*Build date: Sept23, 2015\*

NewProject.BaseDesignSection\_25.Nominal\_60

Exe Time :25 June 2020 15:33:37

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 .    5

Tieback\_342 :  
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=0.1341E+06 RIMNOR=0.4007E+06  
RENORM= 3413. REMNOR=0.3204E-18 RATIO =0.1596 TOLER =0.1000E-03 NOT CONVERGED

RFMAX = 78.30 RMMAX = 98.10

RTSMAL=0.1000E-03 RMSMAL=0.1000E-03

RDT = 0.1341E+06 RDR = 0.4007E+06

RATIOT=0.1596 RATIOR= 0.000

MAX UN= 18.37 IEQ= 69 NODE 35 DOF 1 Y-DISPL.F

MIN UN=-.2552E-07 IEQ= 33 NODE 17 DOF 1 Y-DISPL.F

NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER 2 RNORM = 0.000 RMNORM= 0.000  
RINORM=0.1341E+06 RIMNOR=0.4007E+06  
RENORM= 158.1 REMNOR=0.1144E-16 RATIO =0.3434E-01 TOLER =0.1000E-03 NOT CONVERGED

RFMAX = 78.30 RMMAX = 98.10

RTSMAL=0.1000E-03 RMSMAL=0.1000E-03

RDT = 0.1341E+06 RDR = 0.4007E+06

RATIOT=0.3434E-01 RATIOR= 0.000

MAX UN= 4.929 IEQ= 73 NODE 37 DOF 1 Y-DISPL.F

MIN UN=-.2408E-06 IEQ= 31 NODE 16 DOF 1 Y-DISPL.F

NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER 3 RNORM = 0.000 RMNORM= 0.000  
RINORM=0.1341E+06 RIMNOR=0.4007E+06  
RENORM= 12.66 REMNOR=0.9451E-17 RATIO =0.9718E-02 TOLER =0.1000E-03 NOT CONVERGED

RFMAX = 78.30 RMMAX = 98.10

RTSMAL=0.1000E-03 RMSMAL=0.1000E-03

RDT = 0.1341E+06 RDR = 0.4007E+06

RATIOT=0.9718E-02 RATIOR= 0.000

MAX UN= 2.452 IEQ= 61 NODE 31 DOF 1 Y-DISPL.F

MIN UN=-.1489E-06 IEQ= 33 NODE 17 DOF 1 Y-DISPL.F

NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER 4 RNORM = 0.000 RMNORM= 0.000  
RINORM=0.1341E+06 RIMNOR=0.4007E+06  
RENORM= 0.5264 REMNOR=0.7155E-18 RATIO =0.1982E-02 TOLER =0.1000E-03 NOT CONVERGED

RFMAX = 78.30 RMMAX = 98.10

RTSMAL=0.1000E-03 RMSMAL=0.1000E-03

RDT = 0.1341E+06 RDR = 0.4007E+06

RATIOT=0.1982E-02 RATIOR= 0.000

MAX UN=0.6506 IEQ= 69 NODE 35 DOF 1 Y-DISPL.F

MIN UN=-.6295E-02 IEQ= 149 NODE 75 DOF 1 Y-DISPL.F

NO. OF CONTACT CONSTRAINT VIOLATIONS 0

ITER 5 RNORM = 0.000 RMNORM= 0.000  
RINORM=0.1341E+06 RIMNOR=0.4007E+06  
RENORM=0.8169E-03 REMNOR=0.4356E-18 RATIO =0.7806E-04 TOLER =0.1000E-03 CONVERGED !

RFMAX = 78.30 RMMAX = 98.10

RTSMAL=0.1000E-03 RMSMAL=0.1000E-03

RDT = 0.1341E+06 RDR = 0.4007E+06

RATIOT=0.7806E-04 RATIOR= 0.000

MAX UN=0.2839E-01 IEQ= 71 NODE 36 DOF 1 Y-DISPL.F

MIN UN=-.3452E-07 IEQ= 31 NODE 16 DOF 1 Y-DISPL.F

NO. OF CONTACT CONSTRAINT VIOLATIONS 0

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
| |
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 15:33:37
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New Project  
SOLUTION REACHED USING 5 ITERATIONS ON 40

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

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

	Y-DISPL. F (02)	X-ROT. F (04)	(
1	5.0046341E-03	-5.3370258E-04	
2	4.8978936E-03	-5.3370258E-04	
3	4.7911531E-03	-5.3370258E-04	
4	4.6844126E-03	-5.3370258E-04	
5	4.5776723E-03	-5.3369917E-04	
6	4.4709341E-03	-5.3367784E-04	
7	4.3642043E-03	-5.3360868E-04	
8	4.2574969E-03	-5.3344623E-04	
9	4.1508361E-03	-5.3312944E-04	
10	4.0442605E-03	-5.3258152E-04	
11	3.9378251E-03	-5.3170992E-04	
12	3.8316053E-03	-5.3040621E-04	
13	3.7256997E-03	-5.2854610E-04	
14	3.6202333E-03	-5.2598937E-04	
15	3.5153608E-03	-5.2257989E-04	
16	3.4112697E-03	-5.1814556E-04	
17	3.3957367E-03	-5.1738296E-04	
18	3.2927357E-03	-5.1283758E-04	
19	3.1905252E-03	-5.0943985E-04	
20	3.0888992E-03	-5.0694950E-04	
21	2.9877024E-03	-5.0510295E-04	
22	2.8868343E-03	-5.0361349E-04	
23	2.7862455E-03	-5.0229735E-04	
24	2.6859088E-03	-5.0107904E-04	
25	2.5858132E-03	-4.9987140E-04	
26	2.4859661E-03	-4.9857563E-04	
27	2.3863962E-03	-4.9708066E-04	
28	2.2871553E-03	-4.9526326E-04	
29	2.1883219E-03	-4.9298865E-04	
30	2.1390886E-03	-4.9163929E-04	
31	2.0410720E-03	-4.8840021E-04	
32	1.9437851E-03	-4.8431306E-04	
33	1.8474157E-03	-4.7919241E-04	
34	1.7521911E-03	-4.7283453E-04	
35	1.6583796E-03	-4.6501774E-04	
36	1.5662972E-03	-4.5550262E-04	
37	1.4762936E-03	-4.4426170E-04	
38	1.3886945E-03	-4.3149138E-04	
39	1.3037860E-03	-4.1739416E-04	
40	1.2218118E-03	-4.0217911E-04	
41	1.1429744E-03	-3.8606312E-04	
42	1.0674316E-03	-3.6927169E-04	
43	9.9529603E-04	-3.5202530E-04	
44	9.2663841E-04	-3.3452429E-04	
45	8.6149130E-04	-3.1694854E-04	
46	7.9985328E-04	-2.9945855E-04	
47	7.4169296E-04	-2.8219663E-04	
48	6.8695140E-04	-2.6528754E-04	
49	6.3554717E-04	-2.4884012E-04	
50	5.8737833E-04	-2.3294795E-04	
51	5.4232568E-04	-2.1769040E-04	
52	5.0025565E-04	-2.0313370E-04	
53	4.6102210E-04	-1.8933159E-04	
54	4.2446988E-04	-1.7632660E-04	
55	3.9043554E-04	-1.6415039E-04	
56	3.5875227E-04	-1.5282558E-04	
57	3.2924769E-04	-1.4236504E-04	
58	3.0174832E-04	-1.3277353E-04	
59	2.7608055E-04	-1.2404790E-04	
60	2.5207329E-04	-1.1617808E-04	
61	2.2955467E-04	-1.0914612E-04	
62	2.0836052E-04	-1.0292900E-04	
63	1.8833070E-04	-9.7497505E-05	
64	1.6931145E-04	-9.2817008E-05	
65	1.5115648E-04	-8.8847821E-05	
66	1.3372787E-04	-8.5545491E-05	
67	1.1689709E-04	-8.2861050E-05	
68	1.0054581E-04	-8.0741229E-05	
69	8.4566787E-05	-7.9128528E-05	
70	6.8864709E-05	-7.7961146E-05	
71	5.3357048E-05	-7.7172980E-05	
72	3.7974924E-05	-7.6693702E-05	
73	2.2663941E-05	-7.6448808E-05	
74	7.3850180E-06	-7.6359656E-05	

75 -5.5953716E-06 -7.6346285E-05

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 15:33:37
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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 75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.000	-5.0046E-03	0.000	0.000	0.000	5.487	ACTIVE	0.000	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
2 D	0.000	-4.8979E-03	4.002	0.000	4.002	6.748	ACTIVE	0.000	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
3 D	0.000	-4.7912E-03	8.013	0.000	8.013	8.002	ACTIVE	0.000	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	FRANA_334_8_L_0						
4 D	0.2196	-4.6844E-03	12.04	1.098	12.04	11.25	ACTIVE	0.000	-0.1000	0.000	
1.000	1.000	1.098	0.000	0.000	FRANA_334_8_L_0						
5 D	0.7142	-4.5777E-03	16.10	3.571	16.10	14.91	ACTIVE	0.000	-0.3000	0.000	
1.000	1.000	3.571	0.000	0.000	FRANA_334_8_L_0						
6 D	1.212	-4.4709E-03	20.18	6.060	20.18	18.52	ACTIVE	0.000	-0.5000	0.000	
1.000	1.000	6.060	0.000	0.000	FRANA_334_8_L_0						
7 D	1.713	-4.3642E-03	24.29	8.567	24.29	22.06	ACTIVE	0.000	-0.7000	0.000	
1.000	1.000	8.567	0.000	0.000	FRANA_334_8_L_0						
8 D	2.218	-4.2575E-03	28.42	11.09	28.42	25.53	ACTIVE	0.000	-0.9000	0.000	
1.000	1.000	11.09	0.000	0.000	FRANA_334_8_L_0						
9 D	2.725	-4.1508E-03	32.58	13.62	32.58	28.94	ACTIVE	0.000	-1.100	0.000	
1.000	1.000	13.62	0.000	0.000	FRANA_334_8_L_0						
10 D	3.234	-4.0443E-03	36.75	16.17	36.75	32.30	ACTIVE	0.000	-1.300	0.000	
1.000	1.000	16.17	0.000	0.000	FRANA_334_8_L_0						
11 D	3.745	-3.9378E-03	40.94	18.73	40.94	35.59	ACTIVE	0.000	-1.500	0.000	
1.000	1.000	18.73	0.000	0.000	FRANA_334_8_L_0						
12 D	4.257	-3.8316E-03	45.14	21.28	45.14	38.84	ACTIVE	0.000	-1.700	0.000	
1.000	1.000	21.28	0.000	0.000	FRANA_334_8_L_0						
13 D	4.770	-3.7257E-03	49.34	23.85	49.34	42.05	ACTIVE	0.000	-1.900	0.000	
1.000	1.000	23.85	0.000	0.000	FRANA_334_8_L_0						
14 D	5.282	-3.6202E-03	53.54	26.41	53.54	45.22	ACTIVE	0.000	-2.100	0.000	
1.000	1.000	26.41	0.000	0.000	FRANA_334_8_L_0						
15 D	5.795	-3.5154E-03	57.74	28.98	57.74	48.37	ACTIVE	0.000	-2.300	0.000	
1.000	1.000	28.98	0.000	0.000	FRANA_334_8_L_0						
16 D	3.730	-3.4113E-03	61.94	32.43	61.94	51.48	UL-RL	4704.	-2.500	0.000	
1.000	1.000	32.43	0.000	0.000	FRANA_334_8_L_0						
17 D	3.795	-3.3957E-03	62.57	33.00	62.57	51.95	UL-RL	4704.	-2.530	0.000	
1.000	1.000	33.00	0.000	0.000	FRANA_334_8_L_0						
18 D	7.358	-3.2927E-03	66.77	36.79	66.77	55.04	UL-RL	4704.	-2.730	0.000	
1.000	1.000	36.79	0.000	0.000	FRANA_334_8_L_0						
19 D	8.110	-3.1905E-03	71.28	40.55	71.28	58.12	UL-RL	4704.	-2.930	0.000	
1.000	1.000	40.55	0.000	0.000	FRANA_334_8_L_0						
20 D	8.857	-3.0889E-03	75.80	44.29	75.80	61.18	UL-RL	4704.	-3.130	0.000	
1.000	1.000	44.29	0.000	0.000	FRANA_334_8_L_0						
21 D	9.600	-2.9877E-03	79.71	48.00	79.71	64.22	UL-RL	4704.	-3.330	0.000	
1.000	1.000	48.00	0.000	0.000	FRANA_334_8_L_0						
22 D	2.230	-2.8868E-03	84.16	11.15	84.16	55.88	ACTIVE	0.000	-3.530	0.000	
1.000	1.000	11.15	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	2.629	-2.7862E-03	88.58	13.15	88.58	57.12	ACTIVE	0.000	-3.730	0.000	
1.000	1.000	13.15	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	2.982	-2.6859E-03	92.48	14.91	92.48	58.36	ACTIVE	0.000	-3.930	0.000	
1.000	1.000	14.91	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	3.378	-2.5858E-03	96.86	16.89	96.86	59.59	ACTIVE	0.000	-4.130	0.000	
1.000	1.000	16.89	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	3.771	-2.4860E-03	101.2	18.86	101.2	60.82	ACTIVE	0.000	-4.330	0.000	
1.000	1.000	18.86	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	4.163	-2.3864E-03	105.5	20.81	105.5	62.04	ACTIVE	0.000	-4.530	0.000	
1.000	1.000	20.81	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	4.514	-2.2872E-03	109.4	22.57	109.4	63.26	ACTIVE	0.000	-4.730	0.000	
1.000	1.000	22.57	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	3.678	-2.1883E-03	113.7	24.52	113.7	64.47	ACTIVE	0.000	-4.930	0.000	
1.000	1.000	24.52	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	3.809	-2.1391E-03	115.7	25.40	115.7	65.08	ACTIVE	0.000	-5.030	0.000	
1.000	1.000	25.40	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	5.673	-2.0411E-03	118.1	26.48	118.1	66.29	ACTIVE	0.000	-5.230	1.882	
1.000	1.000	28.36	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	6.264	-1.9438E-03	120.5	27.56	120.5	67.49	ACTIVE	0.000	-5.430	3.764	
1.000	1.000	31.32	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	6.854	-1.8474E-03	122.8	28.63	122.8	69.80	ACTIVE	0.000	-5.630	5.646	
1.000	1.000	34.27	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	7.412	-1.7522E-03	124.8	29.53	124.8	72.65	ACTIVE	0.000	-5.830	7.528
1.000	1.000	37.06	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	8.001	-1.6584E-03	127.2	30.60	127.2	75.36	ACTIVE	0.000	-6.030	9.410
1.000	1.000	40.01	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	8.589	-1.5663E-03	129.5	31.65	129.5	77.94	ACTIVE	0.000	-6.230	11.29
1.000	1.000	42.94	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	9.847	-1.4763E-03	131.8	36.06	131.8	80.39	UL-RL	3.1450E+04	-6.430	13.17
1.000	1.000	49.24	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	11.11	-1.3887E-03	133.9	40.49	133.9	82.71	UL-RL	3.1450E+04	-6.630	15.06
1.000	1.000	55.55	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	12.35	-1.3038E-03	136.2	44.79	136.2	84.92	UL-RL	3.1450E+04	-6.830	16.94
1.000	1.000	61.73	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	13.55	-1.2218E-03	138.5	48.95	138.5	87.02	UL-RL	3.1450E+04	-7.030	18.82
1.000	1.000	67.77	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	14.72	-1.1430E-03	140.5	52.91	140.5	88.95	UL-RL	3.1450E+04	-7.230	20.70
1.000	1.000	73.61	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	15.82	-1.0674E-03	142.8	56.49	142.8	90.55	UL-RL	3.1450E+04	-7.430	22.58
1.000	1.000	79.08	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	16.87	-9.9530E-04	145.1	59.91	145.1	92.03	UL-RL	3.1450E+04	-7.630	24.47
1.000	1.000	84.37	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	17.91	-9.2664E-04	147.3	63.22	147.3	93.47	UL-RL	3.1450E+04	-7.830	26.35
1.000	1.000	89.57	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	18.93	-8.6149E-04	149.4	66.44	149.4	94.89	UL-RL	3.1450E+04	-8.030	28.23
1.000	1.000	94.67	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	19.93	-7.9985E-04	151.6	69.56	151.6	96.27	UL-RL	3.1450E+04	-8.230	30.11
1.000	1.000	99.67	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	20.92	-7.4169E-04	153.9	72.60	153.9	97.63	UL-RL	3.1450E+04	-8.430	31.99
1.000	1.000	104.6	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	21.88	-6.8695E-04	156.2	75.53	156.2	98.97	UL-RL	3.1450E+04	-8.630	33.87
1.000	1.000	109.4	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	22.83	-6.3555E-04	158.2	78.38	158.2	100.3	UL-RL	3.1450E+04	-8.830	35.76
1.000	1.000	114.1	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	23.75	-5.8738E-04	160.4	81.14	160.4	101.6	UL-RL	3.1450E+04	-9.030	37.64
1.000	1.000	118.8	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	24.66	-5.4233E-04	162.7	83.80	162.7	102.9	UL-RL	3.1450E+04	-9.230	39.52
1.000	1.000	123.3	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	25.56	-5.0026E-04	164.7	86.39	164.7	104.2	UL-RL	3.1450E+04	-9.430	41.40
1.000	1.000	127.8	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	26.43	-4.6102E-04	166.9	88.89	166.9	105.4	UL-RL	3.1450E+04	-9.630	43.28
1.000	1.000	132.2	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	27.30	-4.2447E-04	169.2	91.31	169.2	106.7	UL-RL	3.1450E+04	-9.830	45.17
1.000	1.000	136.5	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	28.14	-3.9044E-04	171.4	93.66	171.4	107.9	UL-RL	3.1450E+04	-10.03	47.05
1.000	1.000	140.7	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	28.98	-3.5875E-04	173.4	95.95	173.4	109.1	UL-RL	3.1450E+04	-10.23	48.93
1.000	1.000	144.9	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	29.80	-3.2925E-04	175.7	98.17	175.7	110.4	UL-RL	3.1450E+04	-10.43	50.81
1.000	1.000	149.0	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	30.60	-3.0175E-04	177.9	100.3	177.9	111.6	UL-RL	3.1450E+04	-10.63	52.69
1.000	1.000	153.0	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	31.40	-2.7608E-04	180.1	102.4	180.1	112.8	UL-RL	3.1450E+04	-10.83	54.58
1.000	1.000	157.0	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	32.19	-2.5207E-04	182.1	104.5	182.1	114.0	UL-RL	3.1450E+04	-11.03	56.46
1.000	1.000	160.9	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	32.97	-2.2955E-04	184.4	106.5	184.4	115.2	UL-RL	3.1450E+04	-11.23	58.34
1.000	1.000	164.8	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	33.74	-2.0836E-04	186.6	108.5	186.6	116.4	UL-RL	3.1450E+04	-11.43	60.22
1.000	1.000	168.7	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	34.50	-1.8833E-04	188.6	110.4	188.6	117.6	UL-RL	3.1450E+04	-11.63	62.10
1.000	1.000	172.5	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	35.26	-1.6931E-04	190.8	112.3	190.8	118.8	UL-RL	3.1450E+04	-11.83	63.99
1.000	1.000	176.3	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	36.01	-1.5116E-04	193.0	114.2	193.0	120.0	UL-RL	3.1450E+04	-12.03	65.87
1.000	1.000	180.1	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	36.76	-1.3373E-04	195.2	116.1	195.2	121.2	UL-RL	3.1450E+04	-12.23	67.75
1.000	1.000	183.8	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	37.50	-1.1690E-04	197.3	117.9	197.3	122.4	UL-RL	3.1450E+04	-12.43	69.63
1.000	1.000	187.5	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	38.25	-1.0055E-04	199.5	119.7	199.5	123.6	UL-RL	3.1450E+04	-12.63	71.51
1.000	1.000	191.2	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	38.99	-8.4567E-05	201.7	121.5	201.7	124.8	UL-RL	3.1450E+04	-12.83	73.40
1.000	1.000	194.9	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	39.72	-6.8865E-05	203.9	123.3	203.9	126.0	UL-RL	3.1450E+04	-13.03	75.28
1.000	1.000	198.6	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	40.46	-5.3357E-05	205.9	125.1	205.9	127.2	UL-RL	3.1450E+04	-13.23	77.16
1.000	1.000	202.3	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	41.20	-3.7975E-05	208.1	126.9	208.1	128.4	UL-RL	3.1450E+04	-13.43	79.04
1.000	1.000	206.0	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	41.93	-2.2664E-05	210.3	128.7	210.3	129.6	UL-RL	3.1450E+04	-13.63	80.92
1.000	1.000	209.7	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	39.46	-7.3850E-06	212.3	130.5	212.3	130.8	UL-RL	3.1450E+04	-13.83	82.81
1.000	1.000	213.3	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	18.38	5.5954E-06	214.2	131.8	214.2	131.8	V-C	1.9656E+04	-14.00	84.40
1.000	1.000	216.3	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
|
| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 15:33:37
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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

O\_R  
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
15	0.000	--	--	--	--	--	REMOVED	--	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
16	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
17	0.000	--	--	--	--	--	REMOVED	--	-2.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
18	0.000	--	--	--	--	--	REMOVED	--	-2.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
19	0.000	--	--	--	--	--	REMOVED	--	-2.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
20	0.000	--	--	--	--	--	REMOVED	--	-3.130	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
21	0.000	--	--	--	--	--	REMOVED	--	-3.330	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
22	0.000	--	--	--	--	--	REMOVED	--	-3.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
23	0.000	--	--	--	--	--	REMOVED	--	-3.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
24	0.000	--	--	--	--	--	REMOVED	--	-3.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
25	0.000	--	--	--	--	--	REMOVED	--	-4.130	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
26	0.000	--	--	--	--	--	REMOVED	--	-4.330	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
27	0.000	--	--	--	--	--	REMOVED	--	-4.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
28	0.000	--	--	--	--	--	REMOVED	--	-4.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
29	0.000	--	--	--	--	--	REMOVED	--	-4.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
30	0.000	--	--	--	--	--	REMOVED	--	-5.030	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
31	0.000	--	--	--	--	--	REMOVED	--	-5.230	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
32	0.000	--	--	--	--	--	REMOVED	--	-5.430	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
33	0.000	--	--	--	--	--	REMOVED	--	-5.630	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					

34	0.000	--	--	--	--	--	REMOVED	--	-5.830	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
35	0.000	--	--	--	--	--	REMOVED	--	-6.030	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
36 D	14.79	1.5663E-03	1.882	71.84	106.8	76.79	PASSIVE	0.000	-6.230	2.118
1.000	1.000	73.96	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	16.26	1.4763E-03	3.764	77.06	108.8	77.06	PASSIVE	0.000	-6.430	4.236
1.000	1.000	81.30	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	17.73	1.3887E-03	5.646	82.28	110.8	82.28	PASSIVE	0.000	-6.630	6.354
1.000	1.000	88.64	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	19.20	1.3038E-03	7.528	87.50	112.8	87.50	PASSIVE	0.000	-6.830	8.472
1.000	1.000	95.98	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	20.66	1.2218E-03	9.410	92.72	114.8	92.72	PASSIVE	0.000	-7.030	10.59
1.000	1.000	103.3	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	22.13	1.1430E-03	11.29	97.94	116.8	97.94	PASSIVE	0.000	-7.230	12.71
1.000	1.000	110.7	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	22.60	1.0674E-03	13.17	98.18	118.8	98.18	V-C	1.7751E+04	-7.430	14.83
1.000	1.000	113.0	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	22.98	9.9530E-04	15.06	97.98	120.8	97.98	V-C	1.7751E+04	-7.630	16.94
1.000	1.000	114.9	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	23.38	9.2664E-04	16.94	97.85	122.8	97.85	V-C	1.7751E+04	-7.830	19.06
1.000	1.000	116.9	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	23.80	8.6149E-04	18.82	97.80	124.8	97.80	V-C	1.7751E+04	-8.030	21.18
1.000	1.000	119.0	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	24.23	7.9985E-04	20.70	97.83	126.8	97.83	V-C	1.7751E+04	-8.230	23.30
1.000	1.000	121.1	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	24.67	7.4169E-04	22.58	97.94	128.8	97.94	V-C	1.7751E+04	-8.430	25.42
1.000	1.000	123.4	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	25.13	6.8695E-04	24.47	98.11	130.8	98.11	V-C	1.7751E+04	-8.630	27.53
1.000	1.000	125.6	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	25.60	6.3555E-04	26.35	98.36	132.8	98.36	V-C	1.7751E+04	-8.830	29.65
1.000	1.000	128.0	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	26.09	5.8738E-04	28.23	98.68	134.8	98.68	V-C	1.7751E+04	-9.030	31.77
1.000	1.000	130.4	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	26.59	5.4233E-04	30.11	99.06	136.8	99.06	V-C	1.7751E+04	-9.230	33.89
1.000	1.000	132.9	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	27.10	5.0026E-04	31.99	99.50	138.8	99.50	V-C	1.7751E+04	-9.430	36.01
1.000	1.000	135.5	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	27.62	4.6102E-04	33.87	100.0	140.8	100.0	V-C	1.7751E+04	-9.630	38.13
1.000	1.000	138.1	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	28.16	4.2447E-04	35.76	100.6	142.8	100.6	V-C	1.7751E+04	-9.830	40.24
1.000	1.000	140.8	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	28.70	3.9044E-04	37.64	101.2	144.8	101.2	V-C	1.7751E+04	-10.03	42.36
1.000	1.000	143.5	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	29.26	3.5875E-04	39.52	101.8	146.8	101.8	V-C	1.7751E+04	-10.23	44.48
1.000	1.000	146.3	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	29.82	3.2925E-04	41.40	102.5	148.8	102.5	UL-RL	2.8402E+04	-10.43	46.60
1.000	1.000	149.1	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	30.38	3.0175E-04	43.28	103.2	150.8	103.3	UL-RL	2.8402E+04	-10.63	48.72
1.000	1.000	151.9	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	30.95	2.7608E-04	45.17	103.9	152.8	104.1	UL-RL	2.8402E+04	-10.83	50.83
1.000	1.000	154.8	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	31.53	2.5207E-04	47.05	104.7	154.8	105.0	UL-RL	2.8402E+04	-11.03	52.95
1.000	1.000	157.7	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	32.12	2.2955E-04	48.93	105.5	156.8	105.8	UL-RL	2.8402E+04	-11.23	55.07
1.000	1.000	160.6	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	32.71	2.0836E-04	50.81	106.4	158.8	106.7	UL-RL	2.8402E+04	-11.43	57.19
1.000	1.000	163.5	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	33.30	1.8833E-04	52.69	107.2	160.8	107.6	UL-RL	2.8402E+04	-11.63	59.31
1.000	1.000	166.5	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	33.90	1.6931E-04	54.58	108.1	162.8	108.6	UL-RL	2.8402E+04	-11.83	61.42
1.000	1.000	169.5	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	34.51	1.5116E-04	56.46	109.0	164.8	109.5	UL-RL	2.8402E+04	-12.03	63.54
1.000	1.000	172.5	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	35.11	1.3373E-04	58.34	109.9	166.8	110.4	UL-RL	2.8402E+04	-12.23	65.66
1.000	1.000	175.6	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	35.72	1.1690E-04	60.22	110.8	168.8	111.4	UL-RL	2.8402E+04	-12.43	67.78
1.000	1.000	178.6	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	36.33	1.0055E-04	62.10	111.7	170.8	112.4	UL-RL	2.8402E+04	-12.63	69.90
1.000	1.000	181.6	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	36.93	8.4567E-05	63.99	112.6	172.8	113.5	UL-RL	2.8402E+04	-12.83	72.01
1.000	1.000	184.6	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	37.53	6.8865E-05	65.87	113.5	174.8	114.6	UL-RL	2.8402E+04	-13.03	74.13
1.000	1.000	187.6	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	38.13	5.3357E-05	67.75	114.4	176.8	115.7	UL-RL	2.8402E+04	-13.23	76.25
1.000	1.000	190.6	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	38.73	3.7975E-05	69.63	115.3	178.8	116.8	UL-RL	2.8402E+04	-13.43	78.37
1.000	1.000	193.7	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	39.33	2.2664E-05	71.51	116.2	180.8	117.9	UL-RL	2.8402E+04	-13.63	80.49
1.000	1.000	196.7	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	36.94	7.3850E-06	73.40	117.1	182.8	119.0	UL-RL	2.8402E+04	-13.83	82.60
1.000	1.000	199.7	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	17.19	-5.5954E-06	75.00	117.8	184.5	119.9	UL-RL	2.8402E+04	-14.00	84.40
1.000	1.000	202.2	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
|  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 15:33:37 |  
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New Project
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## 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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 74  
C U R R E N T T I M E I S 4.0000

## WALL2D ELEMENT

EL	TA	TB	MA	MB
1	5.83697E-10-5.83697E-10	5.94333E-11	1.39785E-10	
2	-4.09344E-10	4.09344E-10-1.23806E-10	2.58749E-10	
3	2.39211E-10-2.39211E-10	-2.71102E-10	4.97234E-10	
4	0.21959	-0.21959	-5.73283E-10	4.39189E-02
5	0.93377	-0.93377	-4.39189E-02	0.23067
6	2.1459	-2.1459	-0.23067	0.65984
7	3.8592	-3.8592	-0.65984	1.4317
8	6.0770	-6.0770	-1.4317	2.6471
9	8.8019	-8.8019	-2.6471	4.4075
10	12.036	-12.036	-4.4075	6.8147
11	15.781	-15.781	-6.8147	9.9708
12	20.038	-20.038	-9.9708	13.978
13	24.808	-24.808	-13.978	18.940
14	30.090	-30.090	-18.940	24.958
15	35.885	-35.885	-24.958	32.135
16	39.615	-39.615	-32.135	33.323
17	-40.620	40.620	-33.323	25.199
18	-33.262	33.262	-25.199	18.547
19	-25.152	25.152	-18.547	13.517
20	-16.294	16.294	-13.517	10.258
21	-6.6937	6.6937	-10.258	8.9192
22	-4.4638	4.4638	-8.9192	8.0264
23	-1.8343	1.8343	-8.0264	7.6596
24	1.1477	-1.1477	-7.6596	7.8891
25	4.5258	-4.5258	-7.8891	8.7943
26	8.2973	-8.2973	-8.7943	10.454
27	12.460	-12.460	-10.454	12.946
28	16.974	-16.974	-12.946	16.341
29	20.652	-20.652	-16.341	18.406
30	24.461	-24.461	-18.406	23.298
31	30.134	-30.134	-23.298	29.325
32	36.398	-36.398	-29.325	36.604
33	43.253	-43.253	-36.604	45.255
34	50.665	-50.665	-45.255	55.388
35	58.666	-58.666	-55.388	67.121
36	52.435	-52.435	-67.121	77.608
37	46.022	-46.022	-77.608	86.812
38	39.404	-39.404	-86.812	94.693
39	32.554	-32.554	-94.693	101.20
40	25.445	-25.445	-101.20	106.29
41	18.037	-18.037	-106.29	109.90
42	11.251	-11.251	-109.90	112.15
43	5.1406	-5.1406	-112.15	113.18
44	-0.32909	0.32909	-113.18	113.11
45	-5.1924	5.1924	-113.11	112.07
46	-9.4835	9.4835	-112.07	110.18
47	-13.236	13.236	-110.18	107.53
48	-16.484	16.484	-107.53	104.23
49	-19.260	19.260	-104.23	100.38
50	-21.595	21.595	-100.38	96.063
51	-23.519	23.519	-96.063	91.359
52	-25.063	25.063	-91.359	86.346
53	-26.253	26.253	-86.346	81.096
54	-27.116	27.116	-81.096	75.672
55	-27.677	27.677	-75.672	70.137
56	-27.962	27.962	-70.137	64.545
57	-27.983	27.983	-64.545	58.948
58	-27.759	27.759	-58.948	53.396
59	-27.311	27.311	-53.396	47.934
60	-26.654	26.654	-47.934	42.604
61	-25.803	25.803	-42.604	37.443
62	-24.772	24.772	-37.443	32.489
63	-23.574	23.574	-32.489	27.774
64	-22.217	22.217	-27.774	23.330
65	-20.712	20.712	-23.330	19.188
66	-19.065	19.065	-19.188	15.375
67	-17.283	17.283	-15.375	11.918
68	-15.364	15.364	-11.918	8.8456
69	-13.304	13.304	-8.8456	6.1847
70	-11.108	11.108	-6.1847	3.9631

71	-8.7768	8.7768	-3.9631	2.2077
72	-6.3119	6.3119	-2.2077	0.94534
73	-3.7141	3.7141	-0.94534	0.20252
74	-1.1912	1.1912	-0.20252	-1.25344E-13

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
|  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 15:33:37 |  
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New Project
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## 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\_341 :  
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 LUS	1	89.422	-6.02850E-04	1.63097E-03	0.0000	2727.4	0.0000	0.0000	ELASTIC ORIGINAL YOUNG MODU-

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
| |  
| NewProject.BaseDesignSection_25.Nominal_60 |  
| Exe Time :25 June 2020 15:33:37 |  
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New Project
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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
----	-------	----	--------	---------	---	-----------	-----------

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

```

ITER      0 RNORM = 0.000      RMNORM= 0.000
          RINORM=0.1650E+06 RIMNOR=0.4628E+06
          RENORM= 6132.      REMNOR=0.4356E-18 RATIO =0.1928      TOLER =0.1000E-03 NOT CONVERGED
          RFMAX = 84.03      RMMAX = 113.2
          RTSMAL=0.1000E-03 RMSMAL=0.1000E-02
          RDT =0.1650E+06 RDR =0.4628E+06
          RATIOT=0.1928      RATIOR= 0.000
          MAX UN=0.2839E-01 IEQ= 71 NODE 36 DOF 1 Y-DISPL.F
          MIN UN=-78.30 IEQ= 59 NODE 30 DOF 1 Y-DISPL.F
NO. OF CONTACT CONSTRAINT VIOLATIONS 0

```

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ITER    2 RNORM = 0.000      RMNORM= 0.000
        RINORM=0.1650E+06 RIMNOR=0.4628E+06
        RENORM=0.5137E-02 REMNOR=0.4339E-17 RATIO =0.1765E-03 TOLER =0.1000E-03 NOT CONVERGED
        RFMAX = 84.03      RMMAX = 113.2
        RTSMAL=0.1000E-03 RMSMAL=0.1000E-02
        RDT  =0.1650E+06 RDR   =0.4628E+06
        RATIOT=0.1765E-03 RATIOR= 0.000
        MAX UN=0.3436E-01 IEQ= 135 NODE      68 DOF     1 Y-DISPL.F
        MIN UN=-.1270E-06 IEQ= 31 NODE      16 DOF     1 Y-DISPL.F
        NO. OF CONTACT CONSTRAINT VIOLATIONS 0

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ITER      3 RNORMAL = 0.000      RMNORM= 0.000
          RINORM=0.1650E+06 RIMNOR=0.4628E+06
          RENORM=0.3377E-13 REMNOR=0.7632E-17 RATIO =0.4524E-09 TOLER =0.1000E-03      CONVERGED !
          RFMAX = 84.03      RMMAX = 113.2
          RTSMAL=0.1000E-03 RMSMAL=0.1000E-02
          RDT   =0.1650E+06 RDR   =0.4628E+06
          RATIOT=0.4524E-09 RATIOR= 0.000
          MAX UN=0.1298E-06 IEQ=    33 NODE     17 DOF    1 Y-DISPL.F
          MIN UN=-1.3000E-06 IEQ=    31 NODE     16 DOF    1 Y-DISPL.F
          NO. OF CONTACT CONSTRAINT VIOLATIONS      0

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 15:33:37
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New Project
SOLUTION REACHED USING      3 ITERATIONS ON    40

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

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

      Y-DISPL. F      X-ROT. F
      (02)          (04)      (
1   4.4997265E-03 -5.3083002E-04
2   4.3935608E-03 -5.3082633E-04
3   4.2873970E-03 -5.3080789E-04
4   4.1812396E-03 -5.3075997E-04
5   4.0750962E-03 -5.3066444E-04
6   3.9689789E-03 -5.3049209E-04
7   3.8629074E-03 -5.3019833E-04
8   3.7569117E-03 -5.2972304E-04
9   3.6510354E-03 -5.2899053E-04
10  3.5453387E-03 -5.2790938E-04
11  3.4399020E-03 -5.2637245E-04
12  3.3348283E-03 -5.2425674E-04
13  3.2302471E-03 -5.2142343E-04
14  3.1263171E-03 -5.1771779E-04
15  3.0232295E-03 -5.1296923E-04
16  2.9212114E-03 -5.0699125E-04
17  2.9060167E-03 -5.0597874E-04
18  2.8054737E-03 -4.9961838E-04
19  2.70611110E-03 -4.9413367E-04
20  2.6077788E-03 -4.8927013E-04
21  2.5103801E-03 -4.8475009E-04
22  2.4138759E-03 -4.8027282E-04
23  2.3182839E-03 -4.7560135E-04
24  2.2236595E-03 -4.7056829E-04
25  2.1300926E-03 -4.6499555E-04
26  2.0377098E-03 -4.5869468E-04
27  1.9466765E-03 -4.5146627E-04
28  1.8571991E-03 -4.4310032E-04
29  1.7695273E-03 -4.3337712E-04
30  1.7264575E-03 -4.2794245E-04
31  1.6419767E-03 -4.1696637E-04
32  1.5596388E-03 -4.0647201E-04
33  1.4793733E-03 -3.9619743E-04
34  1.4011641E-03 -3.8586540E-04
35  1.3250508E-03 -3.7518395E-04
36  1.2511342E-03 -3.6384683E-04
37  1.1795637E-03 -3.5173494E-04
38  1.1104864E-03 -3.3893048E-04
39  1.0440317E-03 -3.2552903E-04
40  9.8030764E-04 -3.1163963E-04
41  9.1940010E-04 -2.9738598E-04
42  8.6136827E-04 -2.8290708E-04
43  8.0624291E-04 -2.6834354E-04
44  7.5402803E-04 -2.5382223E-04
45  7.0470370E-04 -2.3945576E-04
46  6.5822879E-04 -2.2534341E-04
47  6.1454382E-04 -2.1157196E-04
48  5.7357251E-04 -1.9821625E-04
49  5.3522533E-04 -1.8534036E-04
50  4.9940079E-04 -1.7299814E-04
51  4.6598754E-04 -1.6123394E-04
52  4.3486645E-04 -1.5008344E-04
53  4.0591158E-04 -1.3957404E-04
54  3.7899275E-04 -1.2972586E-04
55  3.5397580E-04 -1.2055191E-04
56  3.3072605E-04 -1.1205944E-04
57  3.0910653E-04 -1.0424936E-04
58  2.8898110E-04 -9.7117420E-05
59  2.7021497E-04 -9.0654344E-05
60  2.5267654E-04 -8.4846507E-05
61  2.3623482E-04 -7.9675171E-05
62  2.2076549E-04 -7.5118577E-05
63  2.0614812E-04 -7.1151052E-05
64  1.9226774E-04 -6.7743487E-05
65  1.7901556E-04 -6.4863450E-05
66  1.6628956E-04 -6.2475375E-05
67  1.5399518E-04 -6.0540745E-05
68  1.4204579E-04 -5.9018233E-05
69  1.3036334E-04 -5.7863823E-05
70  1.1887883E-04 -5.7030908E-05
71  1.0753282E-04 -5.6470357E-05
72  9.6275968E-05 -5.6130570E-05
73  8.5069478E-05 -5.5957510E-05
74  7.3885612E-05 -5.5894727E-05

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75 6.4384012E-05 -5.5885353E-05

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020 15:33:37
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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 75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	0.2375	-4.4997E-03	0.000	2.375	0.000	5.487	UL-RL	4704.	0.5000	0.000	
1.000	1.000	2.375	0.000	0.000	FRANA_334_8_L_0						
2 D	0.4745	-4.3936E-03	4.002	2.372	4.002	6.748	UL-RL	4704.	0.3000	0.000	
1.000	1.000	2.372	0.000	0.000	FRANA_334_8_L_0						
3 D	0.4740	-4.2874E-03	8.013	2.370	8.013	8.002	UL-RL	4704.	0.1000	0.000	
1.000	1.000	2.370	0.000	0.000	FRANA_334_8_L_0						
4 D	0.6930	-4.1812E-03	12.04	3.465	12.04	11.25	UL-RL	4704.	-0.1000	0.000	
1.000	1.000	3.465	0.000	0.000	FRANA_334_8_L_0						
5 D	1.187	-4.0751E-03	16.10	5.935	16.10	14.91	UL-RL	4704.	-0.3000	0.000	
1.000	1.000	5.935	0.000	0.000	FRANA_334_8_L_0						
6 D	1.684	-3.9690E-03	20.18	8.422	20.18	18.52	UL-RL	4704.	-0.5000	0.000	
1.000	1.000	8.422	0.000	0.000	FRANA_334_8_L_0						
7 D	2.185	-3.8629E-03	24.29	10.93	24.29	22.06	UL-RL	4704.	-0.7000	0.000	
1.000	1.000	10.93	0.000	0.000	FRANA_334_8_L_0						
8 D	2.689	-3.7569E-03	28.42	13.44	28.42	25.53	UL-RL	4704.	-0.9000	0.000	
1.000	1.000	13.44	0.000	0.000	FRANA_334_8_L_0						
9 D	3.195	-3.6510E-03	32.58	15.98	32.58	28.94	UL-RL	4704.	-1.100	0.000	
1.000	1.000	15.98	0.000	0.000	FRANA_334_8_L_0						
10 D	3.704	-3.5453E-03	36.75	18.52	36.75	32.30	UL-RL	4704.	-1.300	0.000	
1.000	1.000	18.52	0.000	0.000	FRANA_334_8_L_0						
11 D	4.213	-3.4399E-03	40.94	21.07	40.94	35.59	UL-RL	4704.	-1.500	0.000	
1.000	1.000	21.07	0.000	0.000	FRANA_334_8_L_0						
12 D	4.724	-3.3348E-03	45.14	23.62	45.14	38.84	UL-RL	4704.	-1.700	0.000	
1.000	1.000	23.62	0.000	0.000	FRANA_334_8_L_0						
13 D	5.236	-3.2302E-03	49.34	26.18	49.34	42.05	UL-RL	4704.	-1.900	0.000	
1.000	1.000	26.18	0.000	0.000	FRANA_334_8_L_0						
14 D	5.747	-3.1263E-03	53.54	28.74	53.54	45.22	UL-RL	4704.	-2.100	0.000	
1.000	1.000	28.74	0.000	0.000	FRANA_334_8_L_0						
15 D	6.258	-3.0232E-03	57.74	31.29	57.74	48.37	UL-RL	4704.	-2.300	0.000	
1.000	1.000	31.29	0.000	0.000	FRANA_334_8_L_0						
16 D	3.995	-2.9212E-03	61.94	34.74	61.94	51.48	UL-RL	4704.	-2.500	0.000	
1.000	1.000	34.74	0.000	0.000	FRANA_334_8_L_0						
17 D	4.060	-2.9060E-03	62.57	35.31	62.57	51.95	UL-RL	4704.	-2.530	0.000	
1.000	1.000	35.31	0.000	0.000	FRANA_334_8_L_0						
18 D	7.817	-2.8055E-03	66.77	39.08	66.77	55.04	UL-RL	4704.	-2.730	0.000	
1.000	1.000	39.08	0.000	0.000	FRANA_334_8_L_0						
19 D	8.566	-2.7061E-03	71.28	42.83	71.28	58.12	UL-RL	4704.	-2.930	0.000	
1.000	1.000	42.83	0.000	0.000	FRANA_334_8_L_0						
20 D	9.310	-2.6078E-03	75.80	46.55	75.80	61.18	UL-RL	4704.	-3.130	0.000	
1.000	1.000	46.55	0.000	0.000	FRANA_334_8_L_0						
21 D	10.05	-2.5104E-03	79.71	50.25	79.71	64.22	UL-RL	4704.	-3.330	0.000	
1.000	1.000	50.25	0.000	0.000	FRANA_334_8_L_0						
22 D	5.205	-2.4139E-03	84.16	26.02	84.16	55.88	UL-RL	3.1450E+04	-3.530	0.000	
1.000	1.000	26.02	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	5.573	-2.3183E-03	88.58	27.86	88.58	57.12	UL-RL	3.1450E+04	-3.730	0.000	
1.000	1.000	27.86	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	5.890	-2.2237E-03	92.48	29.45	92.48	58.36	UL-RL	3.1450E+04	-3.930	0.000	
1.000	1.000	29.45	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	6.244	-2.1301E-03	96.86	31.22	96.86	59.59	UL-RL	3.1450E+04	-4.130	0.000	
1.000	1.000	31.22	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	6.591	-2.0377E-03	101.2	32.95	101.2	60.82	UL-RL	3.1450E+04	-4.330	0.000	
1.000	1.000	32.95	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	6.928	-1.9467E-03	105.5	34.64	105.5	62.04	UL-RL	3.1450E+04	-4.530	0.000	
1.000	1.000	34.64	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	7.219	-1.8572E-03	109.4	36.09	109.4	63.26	UL-RL	3.1450E+04	-4.730	0.000	
1.000	1.000	36.09	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	5.653	-1.7695E-03	113.7	37.69	113.7	64.47	UL-RL	3.1450E+04	-4.930	0.000	
1.000	1.000	37.69	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	5.756	-1.7265E-03	115.7	38.37	115.7	65.08	UL-RL	3.1450E+04	-5.030	0.000	
1.000	1.000	38.37	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	8.183	-1.6420E-03	118.1	39.03	118.1	66.29	UL-RL	3.1450E+04	-5.230	1.882	
1.000	1.000	40.91	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	8.680	-1.5596E-03	120.5	39.64	120.5	67.49	UL-RL	3.1450E+04	-5.430	3.764	
1.000	1.000	43.40	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	9.169	-1.4794E-03	122.8	40.20	122.8	69.80	UL-RL	3.1450E+04	-5.630	5.646	
1.000	1.000	45.85	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	9.620	-1.4012E-03	124.8	40.57	124.8	72.65	UL-RL	3.1450E+04	-5.830	7.528
1.000	1.000	48.10	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	10.10	-1.3251E-03	127.2	41.08	127.2	75.36	UL-RL	3.1450E+04	-6.030	9.410
1.000	1.000	50.49	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	10.57	-1.2511E-03	129.5	41.56	129.5	77.94	UL-RL	3.1450E+04	-6.230	11.29
1.000	1.000	52.86	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	11.71	-1.1796E-03	131.8	45.39	131.8	80.39	UL-RL	3.1450E+04	-6.430	13.17
1.000	1.000	58.57	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	12.86	-1.1105E-03	133.9	49.24	133.9	82.71	UL-RL	3.1450E+04	-6.630	15.06
1.000	1.000	64.29	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	13.98	-1.0440E-03	136.2	52.96	136.2	84.92	UL-RL	3.1450E+04	-6.830	16.94
1.000	1.000	69.89	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	15.07	-9.8031E-04	138.5	56.55	138.5	87.02	UL-RL	3.1450E+04	-7.030	18.82
1.000	1.000	75.37	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	16.13	-9.1940E-04	140.5	59.94	140.5	88.95	UL-RL	3.1450E+04	-7.230	20.70
1.000	1.000	80.65	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	17.11	-8.6137E-04	142.8	62.98	142.8	90.55	UL-RL	3.1450E+04	-7.430	22.58
1.000	1.000	85.56	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	18.06	-8.0624E-04	145.1	65.85	145.1	92.03	UL-RL	3.1450E+04	-7.630	24.47
1.000	1.000	90.32	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	19.00	-7.5403E-04	147.3	68.65	147.3	93.47	UL-RL	3.1450E+04	-7.830	26.35
1.000	1.000	94.99	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	19.92	-7.0470E-04	149.4	71.37	149.4	94.89	UL-RL	3.1450E+04	-8.030	28.23
1.000	1.000	99.60	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	20.83	-6.5823E-04	151.6	74.02	151.6	96.27	UL-RL	3.1450E+04	-8.230	30.11
1.000	1.000	104.1	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	21.72	-6.1454E-04	153.9	76.59	153.9	97.63	UL-RL	3.1450E+04	-8.430	31.99
1.000	1.000	108.6	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	22.59	-5.7357E-04	156.2	79.10	156.2	98.97	UL-RL	3.1450E+04	-8.630	33.87
1.000	1.000	113.0	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	23.46	-5.3523E-04	158.2	81.53	158.2	100.3	UL-RL	3.1450E+04	-8.830	35.76
1.000	1.000	117.3	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	24.31	-4.9940E-04	160.4	83.90	160.4	101.6	UL-RL	3.1450E+04	-9.030	37.64
1.000	1.000	121.5	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	25.14	-4.6599E-04	162.7	86.20	162.7	102.9	UL-RL	3.1450E+04	-9.230	39.52
1.000	1.000	125.7	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	25.97	-4.3487E-04	164.7	88.44	164.7	104.2	UL-RL	3.1450E+04	-9.430	41.40
1.000	1.000	129.8	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	26.78	-4.0591E-04	166.9	90.62	166.9	105.4	UL-RL	3.1450E+04	-9.630	43.28
1.000	1.000	133.9	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	27.58	-3.7899E-04	169.2	92.74	169.2	106.7	UL-RL	3.1450E+04	-9.830	45.17
1.000	1.000	137.9	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	28.37	-3.5398E-04	171.4	94.81	171.4	107.9	UL-RL	3.1450E+04	-10.03	47.05
1.000	1.000	141.9	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	29.15	-3.3073E-04	173.4	96.83	173.4	109.1	UL-RL	3.1450E+04	-10.23	48.93
1.000	1.000	145.8	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	29.92	-3.0911E-04	175.7	98.80	175.7	110.4	UL-RL	3.1450E+04	-10.43	50.81
1.000	1.000	149.6	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	30.68	-2.8898E-04	177.9	100.7	177.9	111.6	UL-RL	3.1450E+04	-10.63	52.69
1.000	1.000	153.4	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	31.44	-2.7021E-04	180.1	102.6	180.1	112.8	UL-RL	3.1450E+04	-10.83	54.58
1.000	1.000	157.2	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	32.19	-2.5268E-04	182.1	104.5	182.1	114.0	UL-RL	3.1450E+04	-11.03	56.46
1.000	1.000	160.9	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	32.93	-2.3623E-04	184.4	106.3	184.4	115.2	UL-RL	3.1450E+04	-11.23	58.34
1.000	1.000	164.6	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	33.66	-2.2077E-04	186.6	108.1	186.6	116.4	UL-RL	3.1450E+04	-11.43	60.22
1.000	1.000	168.3	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	34.39	-2.0615E-04	188.6	109.8	188.6	117.6	UL-RL	3.1450E+04	-11.63	62.10
1.000	1.000	172.0	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	35.12	-1.9227E-04	190.8	111.6	190.8	118.8	UL-RL	3.1450E+04	-11.83	63.99
1.000	1.000	175.6	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	35.84	-1.7902E-04	193.0	113.3	193.0	120.0	UL-RL	3.1450E+04	-12.03	65.87
1.000	1.000	179.2	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	36.56	-1.6629E-04	195.2	115.0	195.2	121.2	UL-RL	3.1450E+04	-12.23	67.75
1.000	1.000	182.8	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	37.27	-1.5400E-04	197.3	116.7	197.3	122.4	UL-RL	3.1450E+04	-12.43	69.63
1.000	1.000	186.4	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	37.99	-1.4205E-04	199.5	118.4	199.5	123.6	UL-RL	3.1450E+04	-12.63	71.51
1.000	1.000	189.9	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	38.70	-1.3036E-04	201.7	120.1	201.7	124.8	UL-RL	3.1450E+04	-12.83	73.40
1.000	1.000	193.5	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	39.41	-1.1888E-04	203.9	121.8	203.9	126.0	UL-RL	3.1450E+04	-13.03	75.28
1.000	1.000	197.0	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	40.12	-1.0753E-04	205.9	123.4	205.9	127.2	UL-RL	3.1450E+04	-13.23	77.16
1.000	1.000	200.6	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	40.83	-9.6276E-05	208.1	125.1	208.1	128.4	UL-RL	3.1450E+04	-13.43	79.04
1.000	1.000	204.1	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	41.54	-8.5069E-05	210.3	126.8	210.3	129.6	UL-RL	3.1450E+04	-13.63	80.92
1.000	1.000	207.7	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	39.08	-7.3886E-05	212.3	128.4	212.3	130.8	UL-RL	3.1450E+04	-13.83	82.81
1.000	1.000	211.2	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	18.19	-6.4384E-05	214.2	129.6	214.2	131.8	UL-RL	3.1450E+04	-14.00	84.40
1.000	1.000	214.1	0.000	0.000	BNA2_(2)_335_337_L_0					

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| Exe Time :25 June 2020 15:33:37
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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

O\_R  
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    75  
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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
15	0.000	--	--	--	--	--	REMOVED	--	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
16	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
17	0.000	--	--	--	--	--	REMOVED	--	-2.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
18	0.000	--	--	--	--	--	REMOVED	--	-2.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
19	0.000	--	--	--	--	--	REMOVED	--	-2.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
20	0.000	--	--	--	--	--	REMOVED	--	-3.130	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
21	0.000	--	--	--	--	--	REMOVED	--	-3.330	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
22	0.000	--	--	--	--	--	REMOVED	--	-3.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
23	0.000	--	--	--	--	--	REMOVED	--	-3.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
24	0.000	--	--	--	--	--	REMOVED	--	-3.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
25	0.000	--	--	--	--	--	REMOVED	--	-4.130	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
26	0.000	--	--	--	--	--	REMOVED	--	-4.330	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
27	0.000	--	--	--	--	--	REMOVED	--	-4.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
28	0.000	--	--	--	--	--	REMOVED	--	-4.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
29	0.000	--	--	--	--	--	REMOVED	--	-4.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
30	0.000	--	--	--	--	--	REMOVED	--	-5.030	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
31	0.000	--	--	--	--	--	REMOVED	--	-5.230	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
32	0.000	--	--	--	--	--	REMOVED	--	-5.430	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
33	0.000	--	--	--	--	--	REMOVED	--	-5.630	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					

34	0.000	--	--	--	--	--	REMOVED	--	-5.830	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
35	0.000	--	--	--	--	--	REMOVED	--	-6.030	0.000
1.000	1.000	0.000	0.000	0.000	0.000	not available				
36 D	13.00	1.2511E-03	1.882	62.89	106.8	76.79	UL-RL	2.8402E+04	-6.230	2.118
1.000	1.000	65.01	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	14.57	1.1796E-03	3.764	68.63	108.8	77.06	UL-RL	2.8402E+04	-6.430	4.236
1.000	1.000	72.87	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	16.15	1.1105E-03	5.646	74.38	110.8	82.28	UL-RL	2.8402E+04	-6.630	6.354
1.000	1.000	80.74	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	17.72	1.0440E-03	7.528	80.13	112.8	87.50	UL-RL	2.8402E+04	-6.830	8.472
1.000	1.000	88.60	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	19.29	9.8031E-04	9.410	85.86	114.8	92.72	UL-RL	2.8402E+04	-7.030	10.59
1.000	1.000	96.45	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	20.86	9.1940E-04	11.29	91.59	116.8	97.94	UL-RL	2.8402E+04	-7.230	12.71
1.000	1.000	104.3	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	21.43	8.6137E-04	13.17	92.33	118.8	98.18	UL-RL	2.8402E+04	-7.430	14.83
1.000	1.000	107.2	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	21.91	8.0624E-04	15.06	92.61	120.8	97.98	UL-RL	2.8402E+04	-7.630	16.94
1.000	1.000	109.6	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	22.40	7.5403E-04	16.94	92.95	122.8	97.85	UL-RL	2.8402E+04	-7.830	19.06
1.000	1.000	112.0	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	22.91	7.0470E-04	18.82	93.35	124.8	97.80	UL-RL	2.8402E+04	-8.030	21.18
1.000	1.000	114.5	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	23.42	6.5823E-04	20.70	93.81	126.8	97.83	UL-RL	2.8402E+04	-8.230	23.30
1.000	1.000	117.1	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	23.95	6.1454E-04	22.58	94.32	128.8	97.94	UL-RL	2.8402E+04	-8.430	25.42
1.000	1.000	119.7	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	24.49	5.7357E-04	24.47	94.89	130.8	98.11	UL-RL	2.8402E+04	-8.630	27.53
1.000	1.000	122.4	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	25.03	5.3523E-04	26.35	95.51	132.8	98.36	UL-RL	2.8402E+04	-8.830	29.65
1.000	1.000	125.2	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	25.59	4.9940E-04	28.23	96.18	134.8	98.68	UL-RL	2.8402E+04	-9.030	31.77
1.000	1.000	127.9	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	26.16	4.6599E-04	30.11	96.89	136.8	99.06	UL-RL	2.8402E+04	-9.230	33.89
1.000	1.000	130.8	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	26.73	4.3487E-04	31.99	97.64	138.8	99.50	UL-RL	2.8402E+04	-9.430	36.01
1.000	1.000	133.6	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	27.31	4.0591E-04	33.87	98.43	140.8	100.0	UL-RL	2.8402E+04	-9.630	38.13
1.000	1.000	136.6	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	27.90	3.7899E-04	35.76	99.26	142.8	100.6	UL-RL	2.8402E+04	-9.830	40.24
1.000	1.000	139.5	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	28.50	3.5398E-04	37.64	100.1	144.8	101.2	UL-RL	2.8402E+04	-10.03	42.36
1.000	1.000	142.5	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	29.10	3.3073E-04	39.52	101.0	146.8	101.8	UL-RL	2.8402E+04	-10.23	44.48
1.000	1.000	145.5	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	29.70	3.0911E-04	41.40	101.9	148.8	102.5	UL-RL	2.8402E+04	-10.43	46.60
1.000	1.000	148.5	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	30.31	2.8898E-04	43.28	102.8	150.8	103.3	UL-RL	2.8402E+04	-10.63	48.72
1.000	1.000	151.5	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	30.92	2.7021E-04	45.17	103.8	152.8	104.1	UL-RL	2.8402E+04	-10.83	50.83
1.000	1.000	154.6	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	31.54	2.5268E-04	47.05	104.7	154.8	105.0	UL-RL	2.8402E+04	-11.03	52.95
1.000	1.000	157.7	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	32.16	2.3623E-04	48.93	105.7	156.8	105.8	UL-RL	2.8402E+04	-11.23	55.07
1.000	1.000	160.8	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	32.78	2.2077E-04	50.81	106.7	158.8	106.7	UL-RL	2.8402E+04	-11.43	57.19
1.000	1.000	163.9	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	33.40	2.0615E-04	52.69	107.7	160.8	107.7	V-C	1.7751E+04	-11.63	59.31
1.000	1.000	167.0	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	34.02	1.9227E-04	54.58	108.7	162.8	108.7	V-C	1.7751E+04	-11.83	61.42
1.000	1.000	170.1	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	34.64	1.7902E-04	56.46	109.7	164.8	109.7	V-C	1.7751E+04	-12.03	63.54
1.000	1.000	173.2	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	35.27	1.6629E-04	58.34	110.7	166.8	110.7	V-C	1.7751E+04	-12.23	65.66
1.000	1.000	176.3	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	35.90	1.5400E-04	60.22	111.7	168.8	111.7	V-C	1.7751E+04	-12.43	67.78
1.000	1.000	179.5	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	36.53	1.4205E-04	62.10	112.7	170.8	112.7	V-C	1.7751E+04	-12.63	69.90
1.000	1.000	182.6	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	37.16	1.3036E-04	63.99	113.8	172.8	113.8	V-C	1.7751E+04	-12.83	72.01
1.000	1.000	185.8	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	37.79	1.1888E-04	65.87	114.8	174.8	114.8	V-C	1.7751E+04	-13.03	74.13
1.000	1.000	188.9	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	38.42	1.0753E-04	67.75	115.8	176.8	115.8	V-C	1.7751E+04	-13.23	76.25
1.000	1.000	192.1	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	39.05	9.6276E-05	69.63	116.9	178.8	116.9	V-C	1.7751E+04	-13.43	78.37
1.000	1.000	195.3	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	39.68	8.5059E-05	71.51	117.9	180.8	117.9	V-C	1.7751E+04	-13.63	80.49
1.000	1.000	198.4	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	37.29	7.3886E-05	73.40	119.0	182.8	119.0	UL-RL	2.8402E+04	-13.83	82.60
1.000	1.000	201.6	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	17.36	6.4384E-05	75.00	119.8	184.5	119.9	UL-RL	2.8402E+04	-14.00	84.40
1.000	1.000	204.2	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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## 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\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 74  
C U R R E N T T I M E I S 5.0000

## WALL2D ELEMENT

EL	TA	TB	MA	MB
1	0.23752	-0.23752	-7.13825E-11	4.75040E-02
2	0.71202	-0.71202	-4.75040E-02	0.18991
3	1.1860	-1.1860	-0.18991	0.42710
4	1.8790	-1.8790	-0.42710	0.80290
5	3.0660	-3.0660	-0.80290	1.4161
6	4.7503	-4.7503	-1.4161	2.3662
7	6.9354	-6.9354	-2.3662	3.7532
8	9.6241	-9.6241	-3.7532	5.6781
9	12.819	-12.819	-5.6781	8.2419
10	16.523	-16.523	-8.2419	11.546
11	20.736	-20.736	-11.546	15.694
12	25.461	-25.461	-15.694	20.786
13	30.696	-30.696	-20.786	26.925
14	36.443	-36.443	-26.925	34.214
15	42.701	-42.701	-34.214	42.754
16	46.696	-46.696	-42.754	44.155
17	-32.094	32.094	-44.155	37.736
18	-24.277	24.277	-37.736	32.881
19	-15.711	15.711	-32.881	29.738
20	-6.4014	6.4014	-29.738	28.458
21	3.6481	-3.6481	-28.458	29.188
22	8.8530	-8.8530	-29.188	30.958
23	14.426	-14.426	-30.958	33.843
24	20.315	-20.315	-33.843	37.907
25	26.560	-26.560	-37.907	43.219
26	33.151	-33.151	-43.219	49.849
27	40.079	-40.079	-49.849	57.865
28	47.298	-47.298	-57.865	67.324
29	52.951	-52.951	-67.324	72.619
30	-19.597	19.597	-72.619	68.700
31	-11.414	11.414	-68.700	66.417
32	-2.7339	2.7339	-66.417	65.870
33	6.4355	-6.4355	-65.870	67.157
34	16.056	-16.056	-67.157	70.369
35	26.154	-26.154	-70.369	75.599
36	23.723	-23.723	-75.599	80.344
37	20.862	-20.862	-80.344	84.516
38	17.574	-17.574	-84.516	88.031
39	13.833	-13.833	-88.031	90.798
40	9.6159	-9.6159	-90.798	92.721
41	4.8844	-4.8844	-92.721	93.698
42	0.56463	-0.56463	-93.698	93.811
43	-3.2827	3.2827	-93.811	93.154
44	-6.6862	6.6862	-93.154	91.817
45	-9.6727	9.6727	-91.817	89.882
46	-12.269	12.269	-89.882	87.429
47	-14.499	14.499	-87.429	84.529
48	-16.390	16.390	-84.529	81.251
49	-17.965	17.965	-81.251	77.658
50	-19.247	19.247	-77.658	73.809
51	-20.257	20.257	-73.809	69.757
52	-21.018	21.018	-69.757	65.554
53	-21.548	21.548	-65.554	61.244
54	-21.867	21.867	-61.244	56.870
55	-21.992	21.992	-56.870	52.472
56	-21.938	21.938	-52.472	48.084
57	-21.718	21.718	-48.084	43.741
58	-21.341	21.341	-43.741	39.473
59	-20.823	20.823	-39.473	35.308
60	-20.173	20.173	-35.308	31.274
61	-19.402	19.402	-31.274	27.393
62	-18.520	18.520	-27.393	23.689
63	-17.528	17.528	-23.689	20.184
64	-16.432	16.432	-20.184	16.897
65	-15.239	15.239	-16.897	13.850
66	-13.952	13.952	-13.850	11.059
67	-12.578	12.578	-11.059	8.5435
68	-11.119	11.119	-8.5435	6.3197
69	-9.5776	9.5776	-6.3197	4.4042
70	-7.9561	7.9561	-4.4042	2.8130

71	-6.2558	6.2558	-2.8130	1.5618
72	-4.4775	4.4775	-1.5618	0.66634
73	-2.6218	2.6218	-0.66634	0.14199
74	-0.83520	0.83520	-0.14199	-1.50913E-12

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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## S P R E A D S H E E T S      R E S O U R C E S      F O R      G R O U P      R O L E

TIEBACK\_341 :  
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

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	EL	FORCE	d0	EDISPL	pl. eps	K	-ve limit	+ve limit	
ANCHOR LUS	1	88.167	-6.02850E-04	1.17078E-03	0.0000	2727.4	0.0000	0.0000	ELASTIC ORIGINAL YOUNG MODU-

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
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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 .    5

Tieback\_342 :  
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	83.330	-3.87746E-04	-3.87746E-04	0.0000	0.0000	0.0000	0.0000	BORN NOW JUST ACTIVATED	
ITER	0	RNORM = 0.000	RMNORM= 0.000	RINORM=0.1332E+06	RIMNOR=0.4091E+06	RENORM= 1842.	REMNR=0.7632E-17	RATIO =0.1176	TOLER =0.1000E-03	NOT CONVERGED
		RFMAX = 82.85	RMMAX = 93.81	RTSMAL=0.1000E-03	RMSMAL=0.1000E-03	RDT =0.1332E+06	RDR =0.4091E+06	RATIO=0.1176	RATIO= 0.000	
		MAX UN= 20.17	IEQ= 81 NODE	41 DOF	1 Y-DISPL.F	MIN UN=-.4538	IEQ= 69 NODE	35 DOF	1 Y-DISPL.F	
		NO. OF CONTACT CONSTRAINT VIOLATIONS	0							
ITER	2	RNORM = 0.000	RMNORM= 0.000	RINORM=0.1332E+06	RIMNOR=0.4091E+06	RENORM= 25.10	REMNR=0.2678E-18	RATIO =0.1373E-01	TOLER =0.1000E-03	NOT CONVERGED
		RFMAX = 82.85	RMMAX = 93.81	RTSMAL=0.1000E-03	RMSMAL=0.1000E-03	RDT =0.1332E+06	RDR =0.4091E+06	RATIO=0.1373E-01	RATIO= 0.000	
		MAX UN= 2.714	IEQ= 93 NODE	47 DOF	1 Y-DISPL.F	MIN UN=-.2375E-07	IEQ= 31 NODE	16 DOF	1 Y-DISPL.F	
		NO. OF CONTACT CONSTRAINT VIOLATIONS	0							
ITER	3	RNORM = 0.000	RMNORM= 0.000	RINORM=0.1332E+06	RIMNOR=0.4091E+06	RENORM= 1.427	REMNR=0.2515E-18	RATIO =0.3274E-02	TOLER =0.1000E-03	NOT CONVERGED
		RFMAX = 82.85	RMMAX = 93.81	RTSMAL=0.1000E-03	RMSMAL=0.1000E-03	RDT =0.1332E+06	RDR =0.4091E+06	RATIO=0.3274E-02	RATIO= 0.000	
		MAX UN=0.8537	IEQ= 45 NODE	23 DOF	1 Y-DISPL.F	MIN UN=-.1217E-07	IEQ= 33 NODE	17 DOF	1 Y-DISPL.F	
		NO. OF CONTACT CONSTRAINT VIOLATIONS	0							
ITER	4	RNORM = 0.000	RMNORM= 0.000	RINORM=0.1332E+06	RIMNOR=0.4091E+06	RENORM=0.1880E-03	REMNR=0.1931E-18	RATIO =0.3757E-04	TOLER =0.1000E-03	CONVERGED !
		RFMAX = 82.85	RMMAX = 93.81	RTSMAL=0.1000E-03	RMSMAL=0.1000E-03	RDT =0.1332E+06	RDR =0.4091E+06	RATIO=0.3757E-04	RATIO= 0.000	
		MAX UN=0.7774E-02	IEQ= 141 NODE	71 DOF	1 Y-DISPL.F	MIN UN=-.9364E-08	IEQ= 33 NODE	17 DOF	1 Y-DISPL.F	
		NO. OF CONTACT CONSTRAINT VIOLATIONS	0							

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
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New Project  
SOLUTION REACHED USING 4 ITERATIONS ON 40

P R I N T   O U T   F O R   T I M E   S T E P   6     ( A T T I M E   6.000      )

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

	Y-DISPL.F (02)	X-ROT. F (04)	(
1	4.9682207E-03	-4.6691781E-04	
2	4.8748371E-03	-4.6691721E-04	
3	4.7814539E-03	-4.6691414E-04	
4	4.6880719E-03	-4.6690538E-04	
5	4.5946927E-03	-4.6688257E-04	
6	4.5013212E-03	-4.6682376E-04	
7	4.4079683E-03	-4.6668868E-04	
8	4.3146547E-03	-4.6641924E-04	
9	4.2214146E-03	-4.6594018E-04	
10	4.1282988E-03	-4.6515939E-04	
11	4.0353782E-03	-4.6396817E-04	
12	3.9427472E-03	-4.6224149E-04	
13	3.8505267E-03	-4.5983810E-04	
14	3.7588676E-03	-4.5660051E-04	
15	3.6679537E-03	-4.5235541E-04	
16	3.5780051E-03	-4.4691443E-04	
17	3.5646115E-03	-4.4598531E-04	
18	3.4760086E-03	-4.4022438E-04	
19	3.3884579E-03	-4.3542179E-04	
20	3.3017928E-03	-4.3132467E-04	
21	3.2158993E-03	-4.2765792E-04	
22	3.1307208E-03	-4.2412431E-04	
23	3.0462536E-03	-4.2053086E-04	
24	2.9625180E-03	-4.1679382E-04	
25	2.8795520E-03	-4.1281805E-04	
26	2.7974138E-03	-4.0849706E-04	
27	2.7161841E-03	-4.0371234E-04	
28	2.6359685E-03	-3.9833343E-04	
29	2.5569002E-03	-3.9221857E-04	
30	2.5178448E-03	-3.8884260E-04	
31	2.4407264E-03	-3.8258237E-04	
32	2.3647212E-03	-3.7768171E-04	
33	2.2895752E-03	-3.7395850E-04	
34	2.2150726E-03	-3.7121884E-04	
35	2.1410362E-03	-3.6925751E-04	
36	2.0673321E-03	-3.6785810E-04	
37	1.9938707E-03	-3.6679246E-04	
38	1.9206090E-03	-3.6581869E-04	
39	1.8475547E-03	-3.6467840E-04	
40	1.7747675E-03	-3.6309565E-04	
41	1.7023657E-03	-3.6077430E-04	
42	1.6305287E-03	-3.5738967E-04	
43	1.5594898E-03	-3.5280515E-04	
44	1.4894816E-03	-3.4709604E-04	
45	1.4207204E-03	-3.4035094E-04	
46	1.3534035E-03	-3.3267185E-04	
47	1.2877066E-03	-3.2417448E-04	
48	1.2237800E-03	-3.1498821E-04	
49	1.1617476E-03	-3.0525668E-04	
50	1.1017031E-03	-2.9513784E-04	
51	1.0437076E-03	-2.8479273E-04	
52	9.8779146E-04	-2.7437029E-04	
53	9.3395604E-04	-2.6400374E-04	
54	8.8217834E-04	-2.5381156E-04	
55	8.3241187E-04	-2.4389764E-04	
56	7.8459367E-04	-2.3435280E-04	
57	7.3864101E-04	-2.2525416E-04	
58	6.9445794E-04	-2.1666654E-04	
59	6.5193680E-04	-2.0864278E-04	
60	6.1096249E-04	-2.0122463E-04	
61	5.7140666E-04	-1.9444175E-04	
62	5.3314209E-04	-1.8831444E-04	
63	4.9603653E-04	-1.8285246E-04	
64	4.5995675E-04	-1.7805581E-04	
65	4.2477047E-04	-1.7391510E-04	
66	3.9034822E-04	-1.7041175E-04	
67	3.5656511E-04	-1.6751831E-04	
68	3.2330264E-04	-1.6519863E-04	
69	2.9045039E-04	-1.6340806E-04	
70	2.5790768E-04	-1.6209356E-04	
71	2.2558531E-04	-1.6119381E-04	
72	1.9340714E-04	-1.6063932E-04	
73	1.6131175E-04	-1.6035228E-04	
74	1.2925415E-04	-1.6024643E-04	

75 1.0201248E-04 -1.6023033E-04

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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 75  
C U R R E N T   T I M E   I S      6.0000

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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1 D	3.9017E-02	-4.9682E-03	0.000	0.3902	0.000	5.487	UL-RL	4237.	0.5000	0.000	
1.000	1.000	0.3902	0.000	0.000	FRANA_334_8_L_0						
2 D	8.0479E-02	-4.8748E-03	4.093	0.4024	4.093	6.748	UL-RL	4237.	0.3000	0.000	
1.000	1.000	0.4024	0.000	0.000	FRANA_334_8_L_0						
3 D	0.1274	-4.7815E-03	8.489	0.6368	8.489	8.002	UL-RL	4237.	0.1000	0.000	
1.000	1.000	0.6368	0.000	0.000	FRANA_334_8_L_0						
4 D	0.4104	-4.6881E-03	13.01	2.052	13.01	11.25	UL-RL	4237.	-0.1000	0.000	
1.000	1.000	2.052	0.000	0.000	FRANA_334_8_L_0						
5 D	1.003	-4.5947E-03	17.79	5.017	17.79	14.91	UL-RL	4237.	-0.3000	0.000	
1.000	1.000	5.017	0.000	0.000	FRANA_334_8_L_0						
6 D	1.589	-4.5013E-03	22.52	7.945	22.52	18.52	UL-RL	4237.	-0.5000	0.000	
1.000	1.000	7.945	0.000	0.000	FRANA_334_8_L_0						
7 D	2.150	-4.4080E-03	27.10	10.75	27.10	22.06	UL-RL	4237.	-0.7000	0.000	
1.000	1.000	10.75	0.000	0.000	FRANA_334_8_L_0						
8 D	2.696	-4.3147E-03	31.59	13.48	31.59	25.53	UL-RL	4237.	-0.9000	0.000	
1.000	1.000	13.48	0.000	0.000	FRANA_334_8_L_0						
9 D	3.233	-4.2214E-03	36.02	16.17	36.02	28.94	UL-RL	4237.	-1.100	0.000	
1.000	1.000	16.17	0.000	0.000	FRANA_334_8_L_0						
10 D	3.764	-4.1283E-03	40.41	18.82	40.41	32.30	UL-RL	4237.	-1.300	0.000	
1.000	1.000	18.82	0.000	0.000	FRANA_334_8_L_0						
11 D	4.285	-4.0354E-03	44.74	21.42	44.74	35.59	UL-RL	4237.	-1.500	0.000	
1.000	1.000	21.42	0.000	0.000	FRANA_334_8_L_0						
12 D	4.809	-3.9427E-03	49.09	24.04	49.09	38.84	UL-RL	4237.	-1.700	0.000	
1.000	1.000	24.04	0.000	0.000	FRANA_334_8_L_0						
13 D	5.329	-3.8505E-03	53.42	26.65	53.42	42.05	UL-RL	4237.	-1.900	0.000	
1.000	1.000	26.65	0.000	0.000	FRANA_334_8_L_0						
14 D	5.828	-3.7589E-03	57.61	29.14	57.61	45.22	UL-RL	4237.	-2.100	0.000	
1.000	1.000	29.14	0.000	0.000	FRANA_334_8_L_0						
15 D	6.299	-3.6680E-03	61.62	31.49	61.62	48.37	UL-RL	4237.	-2.300	0.000	
1.000	1.000	31.49	0.000	0.000	FRANA_334_8_L_0						
16 D	3.997	-3.5780E-03	65.64	34.76	65.64	51.48	UL-RL	4237.	-2.500	0.000	
1.000	1.000	34.76	0.000	0.000	FRANA_334_8_L_0						
17 D	4.059	-3.5646E-03	66.24	35.30	66.24	51.95	UL-RL	4237.	-2.530	0.000	
1.000	1.000	35.30	0.000	0.000	FRANA_334_8_L_0						
18 D	7.781	-3.4760E-03	70.28	38.90	70.28	55.04	UL-RL	4237.	-2.730	0.000	
1.000	1.000	38.90	0.000	0.000	FRANA_334_8_L_0						
19 D	8.498	-3.3885E-03	74.65	42.49	74.65	58.12	UL-RL	4237.	-2.930	0.000	
1.000	1.000	42.49	0.000	0.000	FRANA_334_8_L_0						
20 D	9.212	-3.3018E-03	79.03	46.06	79.03	61.18	UL-RL	4237.	-3.130	0.000	
1.000	1.000	46.06	0.000	0.000	FRANA_334_8_L_0						
21 D	9.923	-3.2159E-03	82.81	49.61	82.81	64.22	UL-RL	4237.	-3.330	0.000	
1.000	1.000	49.61	0.000	0.000	FRANA_334_8_L_0						
22 D	2.501	-3.1307E-03	87.16	12.50	87.16	55.88	ACTIVE	0.000	-3.530	0.000	
1.000	1.000	12.50	0.000	0.000	BNA2_(2)_335_337_L_0						
23 D	2.890	-3.0463E-03	91.47	14.45	91.47	57.12	ACTIVE	0.000	-3.730	0.000	
1.000	1.000	14.45	0.000	0.000	BNA2_(2)_335_337_L_0						
24 D	3.234	-2.9625E-03	95.27	16.17	95.27	58.36	ACTIVE	0.000	-3.930	0.000	
1.000	1.000	16.17	0.000	0.000	BNA2_(2)_335_337_L_0						
25 D	3.622	-2.8796E-03	99.56	18.11	99.56	59.59	ACTIVE	0.000	-4.130	0.000	
1.000	1.000	18.11	0.000	0.000	BNA2_(2)_335_337_L_0						
26 D	4.007	-2.7974E-03	103.8	20.04	103.8	60.82	ACTIVE	0.000	-4.330	0.000	
1.000	1.000	20.04	0.000	0.000	BNA2_(2)_335_337_L_0						
27 D	4.391	-2.7162E-03	108.1	21.96	108.1	62.04	ACTIVE	0.000	-4.530	0.000	
1.000	1.000	21.96	0.000	0.000	BNA2_(2)_335_337_L_0						
28 D	4.736	-2.6360E-03	111.9	23.68	111.9	63.26	ACTIVE	0.000	-4.730	0.000	
1.000	1.000	23.68	0.000	0.000	BNA2_(2)_335_337_L_0						
29 D	3.839	-2.5569E-03	116.1	25.59	116.1	64.47	ACTIVE	0.000	-4.930	0.000	
1.000	1.000	25.59	0.000	0.000	BNA2_(2)_335_337_L_0						
30 D	3.969	-2.5178E-03	118.0	26.46	118.0	65.08	ACTIVE	0.000	-5.030	0.000	
1.000	1.000	26.46	0.000	0.000	BNA2_(2)_335_337_L_0						
31 D	5.673	-2.4407E-03	122.2	28.36	122.2	66.29	ACTIVE	0.000	-5.230	0.000	
1.000	1.000	28.36	0.000	0.000	BNA2_(2)_335_337_L_0						
32 D	6.052	-2.3647E-03	126.4	30.26	126.4	67.49	ACTIVE	0.000	-5.430	0.000	
1.000	1.000	30.26	0.000	0.000	BNA2_(2)_335_337_L_0						
33 D	6.431	-2.2896E-03	130.6	32.15	130.6	69.80	ACTIVE	0.000	-5.630	0.000	
1.000	1.000	32.15	0.000	0.000	BNA2_(2)_335_337_L_0						

34 D	6.778	-2.2151E-03	134.5	33.89	134.5	72.65	ACTIVE	0.000	-5.830	0.000
1.000	1.000	33.89	0.000	0.000	BNA2_(2)_335_337_L_0					
35 D	7.155	-2.1410E-03	138.6	35.78	138.6	75.36	ACTIVE	0.000	-6.030	0.000
1.000	1.000	35.78	0.000	0.000	BNA2_(2)_335_337_L_0					
36 D	7.532	-2.0673E-03	142.8	37.66	142.8	77.94	ACTIVE	0.000	-6.230	0.000
1.000	1.000	37.66	0.000	0.000	BNA2_(2)_335_337_L_0					
37 D	8.041	-1.9939E-03	145.8	38.99	145.8	80.39	ACTIVE	0.000	-6.430	1.210
1.000	1.000	40.20	0.000	0.000	BNA2_(2)_335_337_L_0					
38 D	8.592	-1.9206E-03	147.8	39.89	147.8	82.71	ACTIVE	0.000	-6.630	3.071
1.000	1.000	42.96	0.000	0.000	BNA2_(2)_335_337_L_0					
39 D	9.172	-1.8476E-03	150.0	40.93	150.0	84.92	ACTIVE	0.000	-6.830	4.932
1.000	1.000	45.86	0.000	0.000	BNA2_(2)_335_337_L_0					
40 D	9.893	-1.7748E-03	152.3	42.67	152.3	87.02	UL-RL	2.8326E+04	-7.030	6.793
1.000	1.000	49.47	0.000	0.000	BNA2_(2)_335_337_L_0					
41 D	11.01	-1.7024E-03	154.3	46.38	154.3	88.95	UL-RL	2.8326E+04	-7.230	8.654
1.000	1.000	55.04	0.000	0.000	BNA2_(2)_335_337_L_0					
42 D	12.06	-1.6305E-03	156.6	49.79	156.6	90.55	UL-RL	2.8326E+04	-7.430	10.52
1.000	1.000	60.31	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	13.10	-1.5595E-03	158.9	53.11	158.9	92.03	UL-RL	2.8326E+04	-7.630	12.38
1.000	1.000	65.49	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	14.13	-1.4895E-03	161.1	56.40	161.1	93.47	UL-RL	2.8326E+04	-7.830	14.24
1.000	1.000	70.64	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	15.15	-1.4207E-03	163.1	59.67	163.1	94.89	UL-RL	2.8326E+04	-8.030	16.10
1.000	1.000	75.76	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	16.17	-1.3534E-03	165.4	62.90	165.4	96.27	UL-RL	2.8326E+04	-8.230	17.96
1.000	1.000	80.86	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	17.18	-1.2877E-03	167.6	66.09	167.6	97.63	UL-RL	2.8326E+04	-8.430	19.82
1.000	1.000	85.91	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	18.18	-1.2238E-03	169.9	69.24	169.9	98.97	UL-RL	2.8326E+04	-8.630	21.68
1.000	1.000	90.92	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	19.18	-1.1617E-03	171.9	72.34	171.9	100.3	UL-RL	2.8326E+04	-8.830	23.54
1.000	1.000	95.89	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	20.16	-1.1017E-03	174.2	75.39	174.2	101.6	UL-RL	2.8326E+04	-9.030	25.40
1.000	1.000	100.8	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	21.13	-1.0437E-03	176.4	78.39	176.4	102.9	UL-RL	2.8326E+04	-9.230	27.27
1.000	1.000	105.7	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	22.09	-9.8779E-04	178.4	81.33	178.4	104.2	UL-RL	2.8326E+04	-9.430	29.13
1.000	1.000	110.5	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	23.04	-9.3396E-04	180.7	84.21	180.7	105.4	UL-RL	2.8326E+04	-9.630	30.99
1.000	1.000	115.2	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	23.98	-8.8218E-04	182.9	87.03	182.9	106.7	UL-RL	2.8326E+04	-9.830	32.85
1.000	1.000	119.9	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	24.90	-8.3241E-04	185.1	89.80	185.1	107.9	UL-RL	2.8326E+04	-10.03	34.71
1.000	1.000	124.5	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	25.82	-7.8459E-04	187.1	92.51	187.1	109.1	UL-RL	2.8326E+04	-10.23	36.57
1.000	1.000	129.1	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	26.72	-7.3864E-04	189.4	95.17	189.4	110.4	UL-RL	2.8326E+04	-10.43	38.43
1.000	1.000	133.6	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	27.61	-6.9446E-04	191.6	97.78	191.6	111.6	UL-RL	2.8326E+04	-10.63	40.29
1.000	1.000	138.1	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	28.50	-6.5194E-04	193.8	100.3	193.8	112.8	UL-RL	2.8326E+04	-10.83	42.15
1.000	1.000	142.5	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	29.37	-6.1096E-04	195.8	102.9	195.8	114.0	UL-RL	2.8326E+04	-11.03	44.02
1.000	1.000	146.9	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	30.24	-5.7141E-04	198.1	105.3	198.1	115.2	UL-RL	2.8326E+04	-11.23	45.88
1.000	1.000	151.2	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	31.10	-5.3314E-04	200.3	107.8	200.3	116.6	UL-RL	2.8326E+04	-11.43	47.74
1.000	1.000	155.5	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	31.96	-4.9604E-04	202.3	110.2	202.3	118.4	UL-RL	2.8326E+04	-11.63	49.60
1.000	1.000	159.8	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	32.80	-4.5996E-04	204.5	112.6	204.5	120.1	UL-RL	2.8326E+04	-11.83	51.46
1.000	1.000	164.0	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	33.64	-4.2477E-04	206.7	114.9	206.7	121.9	UL-RL	2.8326E+04	-12.03	53.32
1.000	1.000	168.2	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	34.48	-3.9035E-04	209.0	117.2	209.0	123.6	UL-RL	2.8326E+04	-12.23	55.18
1.000	1.000	172.4	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	35.32	-3.5657E-04	211.0	119.5	211.0	125.3	UL-RL	2.8326E+04	-12.43	57.04
1.000	1.000	176.6	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	36.15	-3.2330E-04	213.2	121.8	213.2	127.0	UL-RL	2.8326E+04	-12.63	58.90
1.000	1.000	180.7	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	36.98	-2.9045E-04	215.4	124.1	215.4	128.7	UL-RL	2.8326E+04	-12.83	60.77
1.000	1.000	184.9	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	37.80	-2.5791E-04	217.6	126.4	217.6	130.3	UL-RL	2.8326E+04	-13.03	62.63
1.000	1.000	189.0	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	38.63	-2.2559E-04	219.7	128.7	219.7	132.0	UL-RL	2.8326E+04	-13.23	64.49
1.000	1.000	193.1	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	39.45	-1.9341E-04	221.9	130.9	221.9	133.7	UL-RL	2.8326E+04	-13.43	66.35
1.000	1.000	197.3	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	40.28	-1.6131E-04	224.1	133.2	224.1	135.3	UL-RL	2.8326E+04	-13.63	68.21
1.000	1.000	201.4	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	38.02	-1.2925E-04	226.1	135.4	226.1	137.0	UL-RL	2.8326E+04	-13.83	70.07
1.000	1.000	205.5	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	17.75	-1.0201E-04	228.0	137.2	228.0	138.2	UL-RL	2.8326E+04	-14.00	71.65
1.000	1.000	208.8	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| Exe Time :25 June 2020 15:33:37
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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

O\_R  
ELEMENT TYPE    5 NO.OF ELEMENTS. IN THIS GROUP    75  
C U R R E N T    T I M E    I S    6.0000

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 FAC-
TOR	UFACTOR	Peq	Su_a	Su_p	LAYER						
1	0.000	--	--	--	--	--	REMOVED	--	0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
2	0.000	--	--	--	--	--	REMOVED	--	0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
3	0.000	--	--	--	--	--	REMOVED	--	0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
4	0.000	--	--	--	--	--	REMOVED	--	-0.1000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
5	0.000	--	--	--	--	--	REMOVED	--	-0.3000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
6	0.000	--	--	--	--	--	REMOVED	--	-0.5000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
7	0.000	--	--	--	--	--	REMOVED	--	-0.7000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
8	0.000	--	--	--	--	--	REMOVED	--	-0.9000	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
9	0.000	--	--	--	--	--	REMOVED	--	-1.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
10	0.000	--	--	--	--	--	REMOVED	--	-1.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
11	0.000	--	--	--	--	--	REMOVED	--	-1.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
12	0.000	--	--	--	--	--	REMOVED	--	-1.700	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
13	0.000	--	--	--	--	--	REMOVED	--	-1.900	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
14	0.000	--	--	--	--	--	REMOVED	--	-2.100	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
15	0.000	--	--	--	--	--	REMOVED	--	-2.300	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
16	0.000	--	--	--	--	--	REMOVED	--	-2.500	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
17	0.000	--	--	--	--	--	REMOVED	--	-2.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
18	0.000	--	--	--	--	--	REMOVED	--	-2.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
19	0.000	--	--	--	--	--	REMOVED	--	-2.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
20	0.000	--	--	--	--	--	REMOVED	--	-3.130	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
21	0.000	--	--	--	--	--	REMOVED	--	-3.330	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
22	0.000	--	--	--	--	--	REMOVED	--	-3.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
23	0.000	--	--	--	--	--	REMOVED	--	-3.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
24	0.000	--	--	--	--	--	REMOVED	--	-3.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
25	0.000	--	--	--	--	--	REMOVED	--	-4.130	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
26	0.000	--	--	--	--	--	REMOVED	--	-4.330	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
27	0.000	--	--	--	--	--	REMOVED	--	-4.530	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
28	0.000	--	--	--	--	--	REMOVED	--	-4.730	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
29	0.000	--	--	--	--	--	REMOVED	--	-4.930	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
30	0.000	--	--	--	--	--	REMOVED	--	-5.030	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
31	0.000	--	--	--	--	--	REMOVED	--	-5.230	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
32	0.000	--	--	--	--	--	REMOVED	--	-5.430	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					
33	0.000	--	--	--	--	--	REMOVED	--	-5.630	0.000	
1.000	1.000	0.000	0.000	0.000	0.000	not available					

34	0.000	--	--	--	--	--	REMOVED	--	-5.830	0.000
1.000	1.000	0.000	0.000	0.000	not available					
35	0.000	--	--	--	--	--	REMOVED	--	-6.030	0.000
1.000	1.000	0.000	0.000	0.000	not available					
36	0.000	--	--	--	--	--	REMOVED	--	-6.230	0.000
1.000	1.000	0.000	0.000	0.000	not available					
37	0.000	--	--	--	--	--	REMOVED	--	-6.430	0.000
1.000	1.000	0.000	0.000	0.000	not available					
38	0.000	--	--	--	--	--	REMOVED	--	-6.630	0.000
1.000	1.000	0.000	0.000	0.000	not available					
39	0.000	--	--	--	--	--	REMOVED	--	-6.830	0.000
1.000	1.000	0.000	0.000	0.000	not available					
40	0.000	--	--	--	--	--	REMOVED	--	-7.030	0.000
1.000	1.000	0.000	0.000	0.000	not available					
41	0.000	--	--	--	--	--	REMOVED	--	-7.230	0.000
1.000	1.000	0.000	0.000	0.000	not available					
42 D	14.27	1.6305E-03	1.210	69.98	118.8 98.18	PASSIVE	0.000	-7.430	1.390	
1.000	1.000	71.37	0.000	0.000	BNA2_(2)_335_337_L_0					
43 D	15.73	1.5595E-03	3.071	75.14	120.8 97.98	PASSIVE	0.000	-7.630	3.529	
1.000	1.000	78.67	0.000	0.000	BNA2_(2)_335_337_L_0					
44 D	17.19	1.4895E-03	4.932	80.30	122.8 97.85	PASSIVE	0.000	-7.830	5.668	
1.000	1.000	85.97	0.000	0.000	BNA2_(2)_335_337_L_0					
45 D	18.65	1.4207E-03	6.793	85.47	124.8 97.80	PASSIVE	0.000	-8.030	7.807	
1.000	1.000	93.27	0.000	0.000	BNA2_(2)_335_337_L_0					
46 D	20.11	1.3534E-03	8.654	90.63	126.8 97.83	PASSIVE	0.000	-8.230	9.946	
1.000	1.000	100.6	0.000	0.000	BNA2_(2)_335_337_L_0					
47 D	21.58	1.2877E-03	10.52	95.79	128.8 97.94	PASSIVE	0.000	-8.430	12.08	
1.000	1.000	107.9	0.000	0.000	BNA2_(2)_335_337_L_0					
48 D	23.04	1.2238E-03	12.38	101.0	130.8 101.0	PASSIVE	0.000	-8.630	14.22	
1.000	1.000	115.2	0.000	0.000	BNA2_(2)_335_337_L_0					
49 D	24.50	1.1617E-03	14.24	106.1	132.8 106.1	PASSIVE	0.000	-8.830	16.36	
1.000	1.000	122.5	0.000	0.000	BNA2_(2)_335_337_L_0					
50 D	25.21	1.1017E-03	16.10	107.5	134.8 107.5	V-C	1.7301E+04	-9.030	18.50	
1.000	1.000	126.0	0.000	0.000	BNA2_(2)_335_337_L_0					
51 D	25.67	1.0437E-03	17.96	107.7	136.8 107.7	V-C	1.7301E+04	-9.230	20.64	
1.000	1.000	128.3	0.000	0.000	BNA2_(2)_335_337_L_0					
52 D	26.14	9.87779E-04	19.82	107.9	138.8 107.9	V-C	1.7301E+04	-9.430	22.78	
1.000	1.000	130.7	0.000	0.000	BNA2_(2)_335_337_L_0					
53 D	26.61	9.3396E-04	21.68	108.2	140.8 108.2	V-C	1.7301E+04	-9.630	24.92	
1.000	1.000	133.1	0.000	0.000	BNA2_(2)_335_337_L_0					
54 D	27.10	8.8218E-04	23.54	108.5	142.8 108.5	V-C	1.7301E+04	-9.830	27.06	
1.000	1.000	135.5	0.000	0.000	BNA2_(2)_335_337_L_0					
55 D	27.60	8.3241E-04	25.40	108.8	144.8 108.8	V-C	1.7301E+04	-10.03	29.20	
1.000	1.000	138.0	0.000	0.000	BNA2_(2)_335_337_L_0					
56 D	28.10	7.8459E-04	27.27	109.2	146.8 109.2	V-C	1.7301E+04	-10.23	31.33	
1.000	1.000	140.5	0.000	0.000	BNA2_(2)_335_337_L_0					
57 D	28.61	7.3864E-04	29.13	109.6	148.8 109.6	V-C	1.7301E+04	-10.43	33.47	
1.000	1.000	143.0	0.000	0.000	BNA2_(2)_335_337_L_0					
58 D	29.13	6.9446E-04	30.99	110.0	150.8 110.0	V-C	1.7301E+04	-10.63	35.61	
1.000	1.000	145.6	0.000	0.000	BNA2_(2)_335_337_L_0					
59 D	29.65	6.5194E-04	32.85	110.5	152.8 110.5	V-C	1.7301E+04	-10.83	37.75	
1.000	1.000	148.3	0.000	0.000	BNA2_(2)_335_337_L_0					
60 D	30.18	6.1096E-04	34.71	111.0	154.8 111.0	V-C	1.7301E+04	-11.03	39.89	
1.000	1.000	150.9	0.000	0.000	BNA2_(2)_335_337_L_0					
61 D	30.72	5.7141E-04	36.57	111.6	156.8 111.6	V-C	1.7301E+04	-11.23	42.03	
1.000	1.000	153.6	0.000	0.000	BNA2_(2)_335_337_L_0					
62 D	31.26	5.3314E-04	38.43	112.1	158.8 112.1	V-C	1.7301E+04	-11.43	44.17	
1.000	1.000	156.3	0.000	0.000	BNA2_(2)_335_337_L_0					
63 D	31.80	4.9604E-04	40.29	112.7	160.8 112.7	V-C	1.7301E+04	-11.63	46.31	
1.000	1.000	159.0	0.000	0.000	BNA2_(2)_335_337_L_0					
64 D	32.35	4.5996E-04	42.15	113.3	162.8 113.3	UL-RL	2.7681E+04	-11.83	48.45	
1.000	1.000	161.7	0.000	0.000	BNA2_(2)_335_337_L_0					
65 D	32.90	4.2477E-04	44.02	113.9	164.8 113.9	UL-RL	2.7681E+04	-12.03	50.58	
1.000	1.000	164.5	0.000	0.000	BNA2_(2)_335_337_L_0					
66 D	33.45	3.9035E-04	45.88	114.5	166.8 114.6	UL-RL	2.7681E+04	-12.23	52.72	
1.000	1.000	167.3	0.000	0.000	BNA2_(2)_335_337_L_0					
67 D	34.01	3.5657E-04	47.74	115.2	168.8 115.2	UL-RL	2.7681E+04	-12.43	54.86	
1.000	1.000	170.1	0.000	0.000	BNA2_(2)_335_337_L_0					
68 D	34.57	3.2330E-04	49.60	115.8	170.8 115.9	UL-RL	2.7681E+04	-12.63	57.00	
1.000	1.000	172.8	0.000	0.000	BNA2_(2)_335_337_L_0					
69 D	35.13	2.9045E-04	51.46	116.5	172.8 116.6	UL-RL	2.7681E+04	-12.83	59.14	
1.000	1.000	175.6	0.000	0.000	BNA2_(2)_335_337_L_0					
70 D	35.69	2.5791E-04	53.32	117.2	174.8 117.3	UL-RL	2.7681E+04	-13.03	61.28	
1.000	1.000	178.5	0.000	0.000	BNA2_(2)_335_337_L_0					
71 D	36.25	2.2559E-04	55.18	117.8	176.8 117.9	UL-RL	2.7681E+04	-13.23	63.42	
1.000	1.000	181.3	0.000	0.000	BNA2_(2)_335_337_L_0					
72 D	36.81	1.9341E-04	57.04	118.5	178.8 118.7	UL-RL	2.7681E+04	-13.43	65.56	
1.000	1.000	184.1	0.000	0.000	BNA2_(2)_335_337_L_0					
73 D	37.37	1.6131E-04	58.90	119.1	180.8 119.4	UL-RL	2.7681E+04	-13.63	67.70	
1.000	1.000	186.8	0.000	0.000	BNA2_(2)_335_337_L_0					
74 D	35.08	1.2925E-04	60.77	119.8	182.8 120.2	UL-RL	2.7681E+04	-13.83	69.83	
1.000	1.000	189.6	0.000	0.000	BNA2_(2)_335_337_L_0					
75 D	16.32	1.0201E-04	62.35	120.3	184.5 120.9	UL-RL	2.7681E+04	-14.00	71.65	
1.000	1.000	191.9	0.000	0.000	BNA2_(2)_335_337_L_0					

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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New Project
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## New Project

STRESS RESULTS FOR GROUP NO. 3

WallElement\_30 :  
ELEMENT TYPE 2 NO.OF ELEMENTS. IN THIS GROUP 74  
C U R R E N T T I M E I S 6.0000

## WALL2D ELEMENT

EL	TA	TB	MA	MB
1	3.90168E-02	-3.90168E-02	1.66431E-11	7.80335E-03
2	0.11950	-0.11950	-7.80335E-03	3.17025E-02
3	0.24685	-0.24685	-3.17025E-02	8.10729E-02
4	0.65730	-0.65730	-8.10729E-02	0.21253
5	1.6606	-1.6606	-0.21253	0.54466
6	3.2496	-3.2496	-0.54466	1.1946
7	5.3994	-5.3994	-1.1946	2.2745
8	8.0954	-8.0954	-2.2745	3.8936
9	11.329	-11.329	-3.8936	6.1593
10	15.093	-15.093	-6.1593	9.1779
11	19.378	-19.378	-9.1779	13.053
12	24.186	-24.186	-13.053	17.891
13	29.516	-29.516	-17.891	23.794
14	35.344	-35.344	-23.794	30.863
15	41.643	-41.643	-30.863	39.191
16	45.640	-45.640	-39.191	40.560
17	-34.737	34.737	-40.560	33.613
18	-26.957	26.957	-33.613	28.221
19	-18.459	18.459	-28.221	24.530
20	-9.2469	9.2469	-24.530	22.680
21	0.67599	-0.67599	-22.680	22.816
22	3.1765	-3.1765	-22.816	23.451
23	6.0670	-6.0670	-23.451	24.664
24	9.3011	-9.3011	-24.664	26.525
25	12.923	-12.923	-26.525	29.109
26	16.930	-16.930	-29.109	32.495
27	21.322	-21.322	-32.495	36.759
28	26.058	-26.058	-36.759	41.971
29	29.897	-29.897	-41.971	44.961
30	-46.598	46.598	-44.961	35.641
31	-40.926	40.926	-35.641	27.456
32	-34.873	34.873	-27.456	20.481
33	-28.442	28.442	-20.481	14.793
34	-21.665	21.665	-14.793	10.460
35	-14.509	14.509	-10.460	7.5579
36	-6.9772	6.9772	-7.5579	6.1624
37	1.0636	-1.0636	-6.1624	6.3751
38	9.6560	-9.6560	-6.3751	8.3063
39	18.828	-18.828	-8.3063	12.072
40	28.721	-28.721	-12.072	17.816
41	39.728	-39.728	-17.816	25.762
42	37.516	-37.516	-25.762	33.265
43	34.880	-34.880	-33.265	40.241
44	31.814	-31.814	-40.241	46.604
45	28.312	-28.312	-46.604	52.266
46	24.369	-24.369	-52.266	57.140
47	19.976	-19.976	-57.140	61.135
48	15.126	-15.126	-61.135	64.160
49	9.8074	-9.8074	-64.160	66.122
50	4.7593	-4.7593	-66.122	67.074
51	0.22222	-0.22222	-67.074	67.118
52	-3.8242	3.8242	-67.118	66.353
53	-7.4002	7.4002	-66.353	64.873
54	-10.526	10.526	-64.873	62.768
55	-13.221	13.221	-62.768	60.124
56	-15.504	15.504	-60.124	57.023
57	-17.393	17.393	-57.023	53.544
58	-18.906	18.906	-53.544	49.763
59	-20.058	20.058	-49.763	45.752
60	-20.864	20.864	-45.752	41.579
61	-21.338	21.338	-41.579	37.311
62	-21.493	21.493	-37.311	33.013
63	-21.339	21.339	-33.013	28.745
64	-20.887	20.887	-28.745	24.568
65	-20.144	20.144	-24.568	20.539
66	-19.119	19.119	-20.539	16.715
67	-17.818	17.818	-16.715	13.151
68	-16.244	16.244	-13.151	9.9026
69	-14.403	14.403	-9.9026	7.0219
70	-12.297	12.297	-7.0219	4.5625

71	-9.9288	9.9288	-4.5625	2.5767
72	-7.2884	7.2884	-2.5767	1.1190
73	-4.3762	4.3762	-1.1190	0.24380
74	-1.4340	1.4340	-0.24380	-2.16283E-12

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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New Project
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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\_341 :  
ELEMENT TYPE    6 NO.OF ELEMENTS. IN THIS GROUP    1  
C U R R E N T    T I M E    I S    6.0000

POST-TENSION 2D-BOUNDARY ELEMENT

EL	FORCE	d0	EDISPL	pl. eps	K	-ve limit	+ve limit	
ANCHOR	1	89.855	-6.02850E-04	1.78966E-03	0.0000	2727.4	0.0000	0.0000    ELASTIC    ORIGINAL YOUNG MODU-
LUS								

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015* |  
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| | NewProject.BaseDesignSection_25.Nominal_60 |  
| | Exe Time :25 June 2020 15:33:37 |  
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## S P R E A D S      R E S O U R C E S      F O R      G R O U P      R E .

TIEBACK\_342 :  
ELEMENT TYPE 6 NO.OF ELEMENTS. IN THIS GROUP 1  
C U R R E N T T I M E I S 6.0000

## POST-TENSION 2D-BOUNDARY ELEMENT

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	EL	FORCE	d0	EDISPL	pl. eps	K	-ve limit	+ve limit	
ANCHOR LUS	1	85.628	-3.87746E-04	3.55914E-04	0.0000	3089.5	0.0000	0.0000	ELASTIC ORIGINAL YOUNG MODU-

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| PARATIE PLUS 2014 NLS ENGINE RELEASE 2016 FULL VERSION *Build date: Sept23, 2015*
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| NewProject.BaseDesignSection_25.Nominal_60
| Exe Time :25 June 2020      15:33:37
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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	3
4	CONVERGENCE :YES	5
5	CONVERGENCE :YES	3
6	CONVERGENCE :YES	4

END OF PROCESS FOR PROBLEM

New Project

NONLINEAR SOLUTION CPU TIME .... 0.05 [sec]  
DATABASE CREATION CPU TIME..... 0.18 [sec]