COMMITTENTE:

RFI RETE FERROVIARIA ITALIANA
GRUPPO FERROVIE DELLO STATO ITALIANE

PROGETTAZIONE:

ITALFERR
GRUPPO FERROVIE DELLO STATO ITALIANE

CUP: J64H17000140001

U.O. INFRASTRUTTURE NORD

PROGETTO DEFINITIVO

RADDOPPIO PONTE S.PIETRO - BERGAMO - MONTELLO

APPALTO 2: PRG PONTE SAN PIETRO E RADDOPPIO DELLA LINEA DA CURNO A BERGAMO

OPERE DI SOSTEGNO SEDE

Paratia da pk 3+375 a pk 3+534

Relazione di calcolo

COMMESSA	LOTTO	FASE	ENTE	TIPO DOC.	OPERA/DISCIPLINA	PROGR.	REV.
NB1R	02	D	26	CL	RI0005	002	A

Rev	Descrizione	Redatto	Data	Verificato	Data	Approvato	Data	Autorizzato Data
A	EMISSIONE ESECUTIVA	F. Serrau	Marzo 2020	A. Maran	Marzo 2020	M. Berlingieri	Marzo 2020	A. Perego Marzo 2020

ORDINE DEGLI INGEGNERI DELLA PROVINCIA DI MILANO
DOTT. ING. PEREGO ANDREA
Sez. A Settori: a) civile e ambientale b) industriale c) dell'informazione
n. A32428

File: NB1R02D26CLRI0005002.docx | n. Elab.:

INDICE

1.-..PREMESSA E SCOPO DEL DOCUMENTO

Nella presente relazione si presentano il dimensionamento e la verifica della paratia di pali accostati in prossimità di rotonda Locatelli, nell'ambito del "Progetto Definitivo raddoppio Ponte S.Pietro – Bergamo – Montello".

Nella figura che segue si riporta la planimetria delle paratie di pali oggetto dello studio:

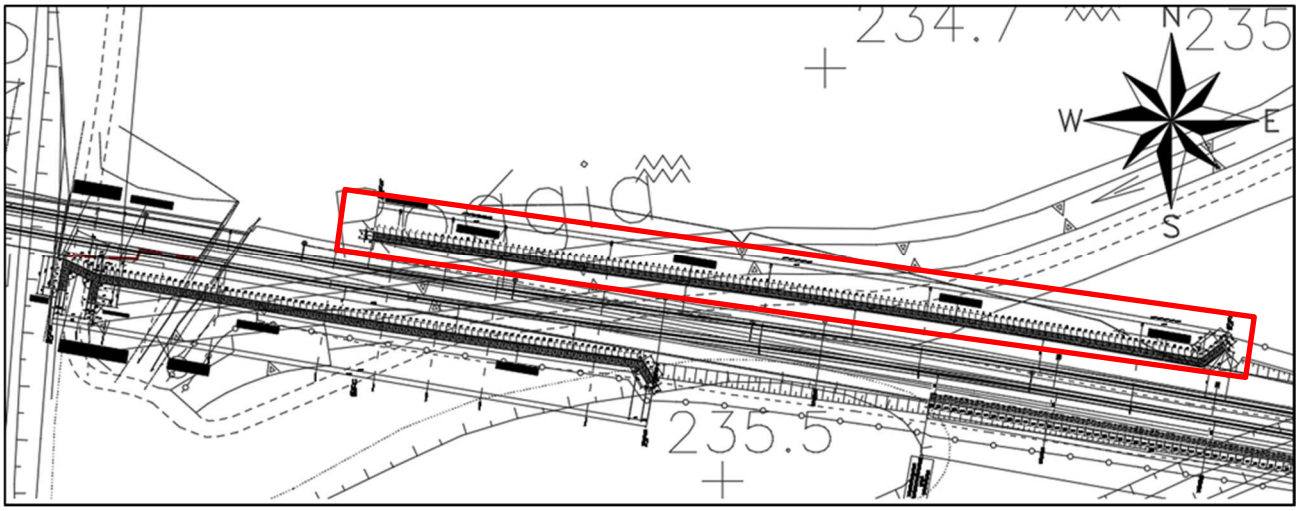


Figura 1-1 Inquadramento di area di intervento

Di seguito si illustrano le assunzioni strutturali di progetto prese a base di calcolo, la normativa di riferimento, i materiali utilizzati, il modello geotecnico definitivo, i carichi di progetto e le relative condizioni e combinazioni, lo schema strutturale adottato e le verifiche effettuate.

Il dimensionamento della struttura segue i criteri generali riportati nel D.M. 17/01/2018, "*Aggiornamento delle Norme Tecniche per le Costruzioni*" e le relative specifiche ferroviarie.

2.-..NORMATIVA E DOCUMENTAZIONE DI RIFERIMENTO

2.1.-..NORMATIVA DI RIFERIMENTO

La progettazione è conforme alle normative vigenti elencate di seguito.

[1] Decreto Ministeriale del 17 gennaio 2018: "Aggiornamento delle Norme Tecniche per le Costruzioni", Supplemento Ordinario alla G.U. n.42 del 20.2.2018.

[2] Circolare 21 gennaio 2019 n.7" Istruzioni per l'applicazione dell'«Aggiornamento delle "Norme tecniche per le costruzioni"» di cui al decreto ministeriale 17 gennaio 2018″

[3] UNI EN 206-1/2006 – "Calcestruzzo. Specificazione, prestazione, produzione e conformità";

[4] UNI 11104/2004 – "Calcestruzzo. Specificazione, prestazione, produzione e conformità. Istruzioni complementari per l'applicazione della EN 206-1";

[5] EN 1992-1-1:2005 Eurocodice 2 – Progettazione delle strutture di calcestruzzo - Regole generali e regole per gli edifici

[6] Norme UNI ENV 1991; UNI ENV 1992; UNI EN 1993; UNI EN 1997; UNI EN 1998;

[7] Manuale di progettazione delle opere civili RFI parte II – sezione 2 - Ponti e strutture" - RFI DTC SI PS MA IFS 001 C

[8] Regolamento (UE) N. 1299/2014 della Commissione del 18 novembre 2014 relativo alle specifiche tecniche di interoperabilità per il sottosistema «infrastruttura» del sistema ferroviario dell'Unione europea, modificato dal Regolamento di esecuzione (UE) N° 2019/776 della Commissione del 16 maggio 2019;

[9] Regolamento (UE) N. 1300/2014/UE Specifiche Tecniche di Interoperabilità per l'accessibilità del sistema ferroviario dell'Unione europea per le persone con disabilità e le persone a mobilità ridotta del 18/11/2014, modificato con il Regolamento di esecuzione (UE) N° 2019/772 della Commissione del 16 maggio 2019;

[10] Regolamento (UE) N° 1303/2014 della Commissione del 18 novembre 2014 relativo alla specifica tecnica di interoperabilità concernente la "sicurezza nelle gallerie ferroviarie" del sistema ferroviario dell'Unione europea, rettificato dal Regolamento (UE) 2016/912 del 9 giugno 2016 e modificato dal Regolamento di esecuzione (UE) N° 2019/776 della Commissione del 16 maggio 2019

[11] Regolamento UE N. 1301/2014 della Commissione del 18 novembre 2014 relativo alle specifiche tecniche di interoperabilità per il sottosistema «Energia» del sistema ferroviario dell'Unione europea, modificato dal Regolamento di Esecuzione (UE) 2018/868 del 13 giugno 2018 e dal successivo Regolamento di esecuzione (UE) N° 2019/776 della Commissione del 16 maggio 2019

[12] Regolamento (UE) N. 2016/919 della Commissione del 27 maggio 2016 relativo alla specifica tecnica di interoperabilità per i sottosistemi "controllo-comando e segnalamento" del sistema ferroviario

nell'Unione europea modificata con la Rettifica del 15 giugno 2016 e dal Regolamento di esecuzione (UE) N° 2019/776 della Commissione del 16 maggio 2019;

[13] REGOLAMENTO DI ESECUZIONE (UE) 2019/772 DELLA COMMISISONE del 16 maggio 2019 che modifica il regolamento (UE) n. 1300/2014 per quanto riguarda l'inventario delle attività al fine di individuare le barriere all'accessibilità, fornire informazioni agli utenti e monitorare e valutare i progressi compiuti in materia di accessibilità.

[14] REGOLAMENTO DI ESECUZIONE (UE) 2019/776 DELLA COMMISISONE del 16 maggio 2019 che modifica i regolamenti (UE) n. 321/2013, (UE) n. 1299/2014, (UE) n. 1301/2014, (UE) n. 1302/2014, (UE) n. 1303/2014 e (UE) 2016/919 della Commissione e la decisione di esecuzione 2011/665/UE della Commissione per quanto riguarda l'allineamento alla direttiva (UE) 2016/797 del Parlamento europeo e del Consiglio e l'attuazione di obiettivi specifici stabili nella decisione delegata (UE) 2017/1471 della Commissione.

2.2.-..DOCUMENTI DI RIFERIMENTO

[15] NB1R01D26P7CS0000003A - Planimetria di progetto Tav. 3/7

[16] NB1R01D26P7CS0000006A - Planimetria di progetto Tav. 6/7

[17] NB1R01D26P7CS0000007A - Planimetria di progetto Tav. 7/7

[18] NB1R01D26W9CS000000(1-15) A - Sezioni trasversali Tav. 1-15

[19] NB1R00D26TTOC0001001A - Tabella dei materiali

[20] Relazione Geotecnica

3.-..CARATTERISTICHE DEI MATERIALI

3.1.-..CALCESTRUZZO

Tabella 3-1 - Calcestruzzo classe C25/30 – Pali, trave di coronamento

Resistenza caratteristica a 28 gg.	Rck = 300 daN/cm^2
Classe di esposizione	XC2
Rapporto acqua/cemento max	0.60
Dose minima cemento	300 kg/m^3
Consistenza	S4-S5
Diametro massimo degli aggregati	32 mm

3.2.-..ACCIAIO

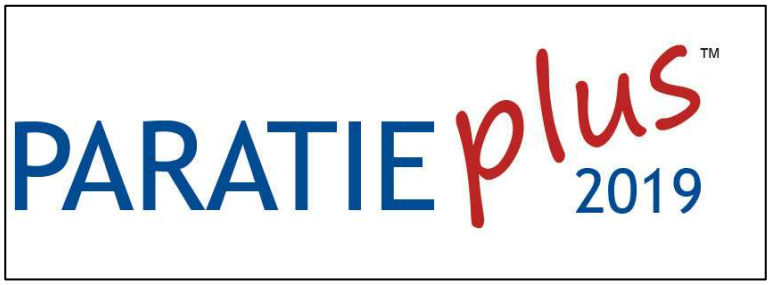
Tabella 3-2 - Acciaio per calcestruzzo armato

Acciaio ad aderenza migliorata B450C					
Descrizione	**Simbolo**	**Formula**	**Unità di misura**	**Valore**	**Note**
Resistenza caratteristica di rottura	$f_{t\ nom}$		N/mm^2	540	
Resistenza caratteristica a snervamento	$f_{y\ nom}$		N/mm^2	450	
Coefficiente parziale di sicurezza relativo all'acciaio	γ_s		-	1.15	
Resistenza di calcolo	f_{yd}	f_{yk} / γ_s	N/mm^2	391.3	
Modulo elastico	E_s		N/mm^2	206000	
Tensioni di progetto del cls allo S.L.E.					
Tensione massima di esercizio per l'acciaio	σ_s	0.75 * f_{yk}	N/mm^2	337.5	

4.-..SOFTWARE DI CALCOLO

Dala la caratteristica di opera in linea il muro è progettato per sezioni.

- ParatiePlus ver. 19.1.2



- RC-SEC 2018

5.-..DESCRIZIONE DELLE OPERE

La presente relazione di calcolo ha per oggetto l'analisi e le verifiche geotecniche e strutturali della paratia dei pali accostati in calcestruzzo armato tra pk 3+374.6 e 3+534.5. La paratia ha uno sviluppo longitudinale totale circa 160 m, con lunghezza dei pali pari a 19 m. Nella parte ovest dell'opera sono stati previsti del contrafforte, realizzando un palo posizionato perpendicolarmente rispetto alla paratia, in modo da ridurre gli spostamenti orizzontali dell'opera. Per ulteriori indicazioni si rimanda agli elaborati progettuali.

Di seguito si riporta la sezione di verifica per eseguire le verifiche geotecniche e strutturali:

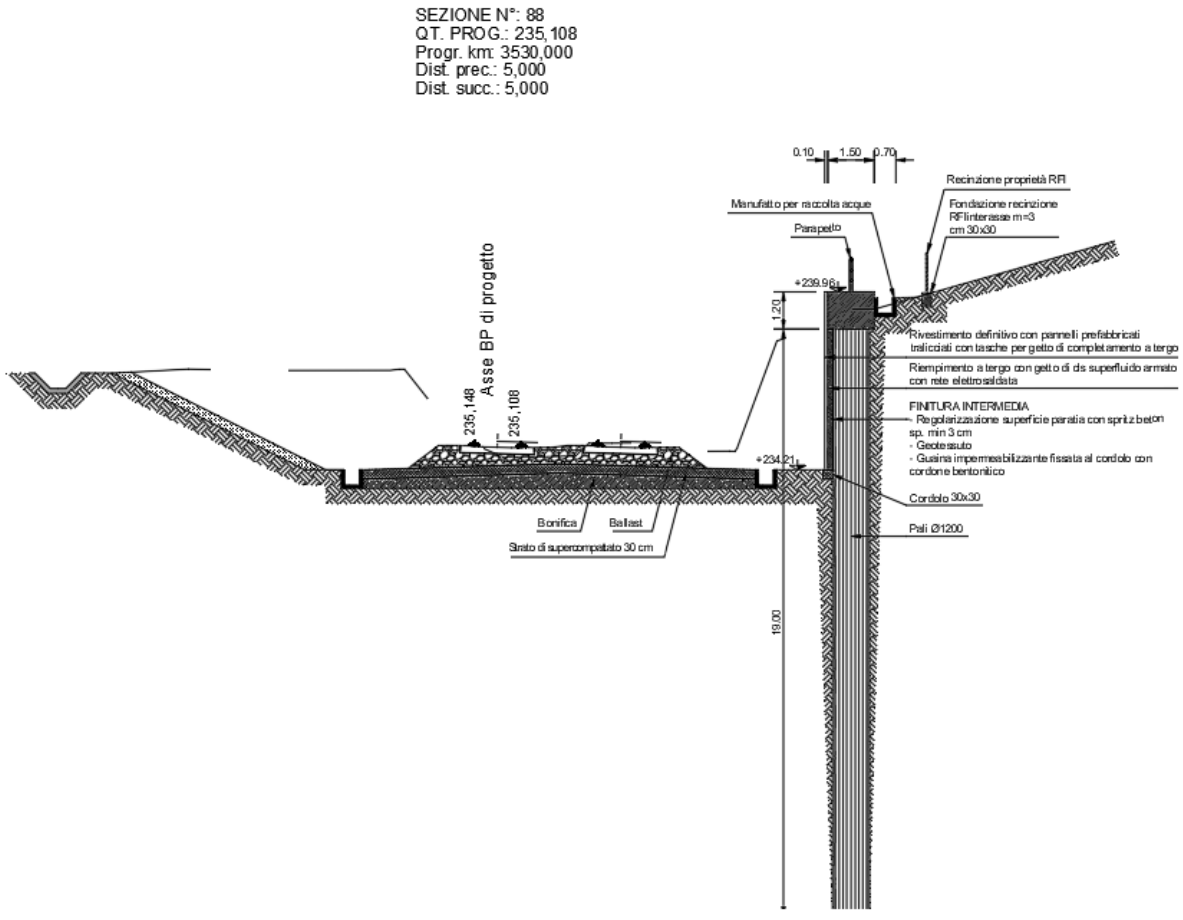


Figura 5-1 sezione di studio

6.-.. CARATTERISTICHE DEL TERRENO

Le verifiche sono state condotte in riferimento alle caratteristiche geotecniche peggiori riscontrabili sulla linea oggetto di intervento e dichiarate nella relazione geotecnico (Doc. [20]).

Il terreno si considera quindi costituito dai seguenti parametri:

Strato 1: Ug2 – sabbia limosa e limo sabbioso

Profondità: da 0m a 2m (da p.c.)

$C_u = 30$ kPa
$c' = 0\ kPa$
$\varphi' = 26°$
$E_{OP1} = 4$ Mpa
$E_{OP2} = 6$ Mpa
$K_y = 1.00E\text{-}6$ m/s; permeabilità verticale
$\gamma = 19.5\ kN/m^3$

Strato 2: Ug3 – argilla sabbiosa e argilla con sabbia

Profondità: da 2m a -13m (da p.c.)

$C_u = 50\text{-}200$ kPa
$c' = 0\ kPa$
$\varphi' = 24°$
$E_{OP1} = 10$ Mpa
$E_{OP2} = 17$ Mpa
$K_y = 1.00E\text{-}10$ m/s; permeabilità verticale
$\gamma = 19\ kN/m^3$

Strato 3: A_M – Arenarie/Marne alternanze

Profondità: da -13m in poi (da p.c.)

$C_u = 250$ kPa
$c' = 0\ kPa$
$\varphi' = 40°$
$E_{OP1} = 100$ Mpa
$E_{OP2} = 200$ Mpa
$K_y = 1.00E\text{-}9$ m/s; permeabilità verticale
$\gamma = 20\ kN/m^3$

Si evidenzia che il livello di falda è variabile rispetto al profilo topografico. facendo riferimento alla Relazione Geotecnica, la falda è stata posta ad una quota pari a -12.5 da p.c..

7.-..MODELLO DI CALCOLO

Al fine di rappresentare il comportamento delle paratie durante le varie fasi di lavoro (scavi e/o inserimento degli elementi di contrasto) è opportuno l'impiego di un metodo di calcolo iterativo atto a simulare l'interazione in fase elasto-plastica terreno-paratia.

Allo scopo si impiega il programma di calcolo “PARATIE PLUS” Versione 19.1.2 della HarpaCeas S.r.l. di Milano.

Lo studio del comportamento di un elemento di paratia inserito nel terreno viene effettuato tenendo conto della deformabilità dell'elemento stesso, considerato in regime elastico, e soggetto alle azioni derivanti dalla spinta dei terreni, dalle eventuali differenze di pressione idrostatiche, dalle spinte dovute ai sovraccarichi esterni e dalla presenza degli elementi di contrasto.

La paratia viene discretizzata con elementi finiti monodimensionali a due gradi di libertà per nodo (spostamento orizzontale e rotazione).

Il terreno viene schematizzato con delle molle secondo un modello elasto-plastico. Esso reagisce elasticamente sino a valori limite dello spostamento, raggiunti i quali la reazione corrisponde, a seconda del segno dello stesso spostamento, ai valori limite della pressione attiva o passiva.

Gli spostamenti vengono computati a partire dalla situazione di spinta "a riposo".

Con tale metodo, si può quindi seguire analiticamente la successione delle fasi di costruzione, di carico e di contrasto, consentendo di fornire informazioni attendibili sull'entità delle deformazioni e sugli effetti che esse inducono sul diagramma delle pressioni esercitate dal terreno sulla paratia.

I parametri che caratterizzano il modello dunque possono essere distinti in due classi: parametri di spinta e parametri di deformabilità del terreno che compaiono nella definizione della rigidezza delle molle.

7.1.-..PARAMETRI DI SPINTA DEL TERRENO

I parametri di spinta sono il coefficiente di spinta a riposo e i coefficienti di spinta attiva e passiva.

Il coefficiente di spinta a riposo fornisce lo stato tensionale presente in sito prima delle operazioni di scavo. Esso lega la tensione orizzontale efficace σ'_h a quella verticale σ'_v attraverso la relazione:

$$\sigma'_h = K_0 \sigma'_v$$

K_0 dipende dalla resistenza del terreno, attraverso il suo angolo di attrito efficace ϕ' e dalla sua storia geologica. Si può assumere che:

$$K_0 = K_0^{NC}(OCR)^m$$

dove:

$$K_0^{NC} = 1 - sin\phi'$$

è il coefficiente di spinta a riposo per un terreno normalconsolidato (OCR=1). OCR è il grado di sovraconsolidazione e m è un parametro empirico, di solito compreso tra 0.4 e 0.7. Ladd et al. (1977), Jamiolkowski et al. (1979) forniscono valori di m per argille italiane.

Il coefficiente di spinta attiva e passiva sono dati secondo Rankine per una parete liscia, da

$$K_A = \tan^2(45° - \phi'/2)$$

$$K_P = \tan^2(45° + \phi'/2)$$

Attraverso valori opportuni di K_A e K_P si può tener conto dell'angolo di attrito δ tra paratia e terreno e della pendenza del terreno a monte ed entro la luce di scavo; si possono usare a questo scopo i valori desunti da NAVFAC (1986)) o quelle elaborate da Caquot e Kerisel (1948)

Il valore limite della tensione orizzontale sarà dato da

$$\sigma'_A = K_A \sigma'_v - 2c'\sqrt{K_A} \text{ oppure}$$

$$\sigma'_P = K_P \sigma'_v + 2c'\sqrt{K_P}$$

a seconda che il collasso avvenga in spinta attiva o passiva rispettivamente. c' è la coesione drenata del terreno. Nel caso in cui si voglia tenere conto dell'adesione a tra parete e terreno, i limiti attivo e passivo si modificano come segue.

$$\sigma'_A = K_A \sigma'_v - c' K_{ac} \text{ con } K_{ac} = 2\sqrt{K_A(1 + a/c')} \leq 2.56\sqrt{K_A}$$

$$\sigma'_P = K_P \sigma'_v + c' K_{pc} \text{ con } K_{pc} = 2\sqrt{K_P(1 + a/c')} \leq 2.56\sqrt{K_P}$$

Per terreni a pendenza nulla, con angolo di attrito paratia-terreno "δ" diverso da zero, i coefficienti di spinta attiva e passiva sono calcolati con la relazione di Lancellotta (2002) e valgono:

$$k_{a,p} = \left[\frac{\cos\delta}{1 \pm \sin\varphi'}\left(\cos\delta \mp \sqrt{\sin^2\varphi' - \sin^2\delta}\right)\right] e^{\mp 2\theta tan\varphi'}$$

$$2\theta_{p,a} = arcsen\left(\frac{\sin\delta}{\sin\varphi'}\right) \mp \delta$$

7.2.-..PARAMETRI DI DEFORMABILITÀ DEL TERRENO

Per la definizione del modulo di Young si utilizza il modello elasto-plastico inserendo il valore di E manualmente. Il programma provvede automaticamente a calcolare le costanti di sottofondo per ogni fase di scavo come:

$$K_{monte} = \frac{E_m \cdot \Delta}{B_m} \quad e \quad K_{valle} = \frac{E_v \cdot \Delta}{B_v}$$

Nelle relazioni presentate, Δ è il valore fornito dalla schematizzazione agli elementi finiti e B_m e B_v sono rispettivamente le estensioni laterali del cuneo di spinta attiva e passiva del terreno alla quota del baricentro del cuneo stesso, per ogni fase di scavo:

$$B_m = \frac{2}{3} \cdot \lambda_A \cdot \tan\left(45° - \frac{\varphi'}{2}\right)$$

$$B_v = \frac{2}{3} \cdot \lambda_p \cdot \tan\left(45° + \frac{\varphi'}{2}\right)$$

$$\lambda_A = min(H_{paratia}; 2H_{scavo})$$

$$\lambda_p = min(H_{paratia} - H_{scavo}; H_{scavo})$$

Si assume in ogni caso un valore di altezza dello scavo H_{scavo} non minore di 1/10 dell'altezza totale della paratia $H_{paratia}$.

Il modulo elastico in fase incrudente si assume pari a 1.60 volte il modulo elastico di primo carico E_{vc} (ha un valore assunto pari al modulo elastico del terreno):

$$E_{ur} = 1.60 \cdot E_{vc}$$

8.-..ANALISI DEI CARICHI

I carichi considerati nel modello di calcolo si riferiscono ai carichi permanenti strutturali associati alla spinta del terreno.

8.1.-..PESO PROPRIO

Il contributo del peso proprio del terreno viene valutato sulla base del peso di volume indicato per ciascuno strato nel 6.-.

8.2.-..SPINTE TERRENO

La spinta attiva e passiva del terreno a monte e a valle della paratia è valutata a partire dal modello geotecnico adottato secondo l'approccio di Rankine per cui:

$$K_A = tan^2(45 - \phi'/2)$$

$$K_P = tan^2(45 + \phi'/2)$$

Il valore limite della tensione orizzontale è quindi pari a:

$$\sigma'_h = K_A \sigma'_v - 2c'\sqrt{K_A}$$

$$\sigma'_h = K_P \sigma'_v + 2c'\sqrt{K_P}$$

Le forze dovute alle spinte attiva e passiva del terreno sono automaticamente valutate dal software di calcolo per le diverse fasi di realizzazione dell'opera.

8.3.-..AZIONE SISMICA

Con riferimento alla normativa vigente (NTC2018), le azioni sismiche di progetto si definiscono a partire dalla "pericolosità sismica di base" del sito di costruzione. Essa costituisce l'elemento di conoscenza primario per la determinazione delle azioni sismiche.

La pericolosità sismica è definita in termini di accelerazione orizzontale massima attesa ag in condizioni di campo libero su sito di riferimento rigido con superficie topografica orizzontale (di categoria A quale definita al § 3.2.2 del D.M. 2018), nonché di ordinate dello spettro di risposta elastico in accelerazione ad essa corrispondente Se(T), con riferimento a prefissate probabilità di eccedenza PVR, come definite nel § 3.2.1 del D.M. 2018, nel periodo di riferimento V_R, come definito nel § 2.4 del D.M. 2018.

Le forme spettrali sono definite, per ciascuna delle probabilità di superamento nel periodo di riferimento PVR, a partire dai valori dei seguenti parametri su sito di riferimento rigido orizzontale:

ag accelerazione orizzontale massima al sito;

Fo valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale;

Tc* periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale.

Gli spettri di risposta di progetto sono stati definiti per tutti gli stati limite considerati, e, note la latitudine e la longitudine del sito, si sono ricavati i valori dei parametri necessari alla definizione dell'azione sismica e quindi del relativo spettro di risposta. Più avanti sono indicati i valori di ag, Fo e Tc* necessari per la determinazione delle azioni sismiche.

8.3.1.-..*Vita nominale*

La vita nominale di un'opera strutturale VN è intesa come il numero di anni nel quale la struttura, purché soggetta alla manutenzione ordinaria, deve potere essere usata per lo scopo al quale è destinata. Per la definizione della Vita Nominale da assegnare ad ogni singolo manufatto facente parte di una infrastruttura ferroviaria si rimanda al "MANUALE DI PROGETTAZIONE DELLE OPERE CIVILI" - RFI DTC SICS MA IFS 001 A del 29.12.2105;

L'oggetto della presente relazione risulta essere un'opera nuova su infrastrutture ferroviarie esistenti a velocità convenzionale (v<250 km/h).

Tabella 8-1 - Vita Nominale in funzione del tipo di costruzione

Tipo di costruzione (1)	**Vita Nominale [V_N] (1)**
Opere nuove su infrastrutture ferroviarie esistenti opere nuove su infrastrutture ferroviarie progettate con le norme vigenti prima del dm 14/01/2018 a velocità convenzionale (V<250 Km/h)	50
Altre opere nuove a velocità (v<250 km/h)	75
Altre opere nuove a velocità (v≥250 km/h)	100
Opere di grandi dimensioni: ponti e viadotti con campate di luce maggiore di 150 m	≥ 100 (2)

(1) - La medesima V_N si applica anche ad apparecchi di appoggio, coprigiunti e impermeabilizzazione delle stesse opere.

(2) - Da definirsi per il singolo progetto a cura di RFI.

Tenendo conto delle indicazioni precedenti le strutture di progetto avranno vita nominale V_N =50 anni.

8.3.2.-..*Classe d'uso*

In presenza di azioni sismiche, con riferimento alle conseguenze di una interruzione di operatività o di un eventuale collasso, le costruzioni sono suddivise in classi d'uso così definite:

Classe I: Costruzioni con presenza solo occasionale di persone, edifici agricoli.

Classe II: Costruzioni il cui uso preveda normali affollamenti, senza contenuti pericolosi per l'ambiente e senza funzioni pubbliche e sociali essenziali. Industrie con attività non pericolose per

l'ambiente. Ponti, opere infrastrutturali, reti viarie non ricadenti in Classe d'uso III o in Classe d'uso IV, reti ferroviarie la cui interruzione non provochi situazioni di emergenza. Dighe il cui collasso non provochi conseguenze rilevanti.

Classe III: Costruzioni il cui uso preveda affollamenti significativi. Industrie con attività pericolose per l'ambiente. Reti viarie extraurbane non ricadenti in Classe d'uso IV. Ponti e reti ferroviarie la cui interruzione provochi situazioni di emergenza. Dighe rilevanti per le conseguenze di un loro eventuale collasso.

Classe IV: Costruzioni con funzioni pubbliche o strategiche importanti, anche con riferimento alla gestione della protezione civile in caso di calamità. Industrie con attività particolarmente pericolose per l'ambiente. Reti viarie di tipo A o B, di cui al D.M. 5 novembre 2001, n. 6792, "Norme funzionali e geometriche per la costruzione delle strade", e di tipo C quando appartenenti ad itinerari di collegamento tra capoluoghi di provincia non altresì serviti da strade di tipo A o B. Ponti e reti ferroviarie di importanza critica per il mantenimento delle vie di comunicazione, particolarmente dopo un evento sismico. Dighe connesse al funzionamento di acquedotti e a impianti di produzione di energia elettrica.

Per la definizione della Classe di uso da assegnare ad ogni singolo manufatto facente parte di una infrastruttura ferroviaria esistente si rimanda al punto 1.1.1 dell'Istruzione RFI " Specifica per la progettazione e l'esecuzione dei ponti ferroviari e di altre opere minori sotto binario" - RFI DTC-INC-PO SP IFS 001 A del 21.12.2011".

Tabella 8-2 - Tabella Classe d'uso Coeff. d'uso in funzione del tipo di costruzione per l'infrastruttura ferroviaria

Tipo di costruzione	Classe d'uso	Coefficiente d'uso [C_U]
Grandi stazioni	C IV	2,0
Opere d'arte del sistema di grande viabilità ferroviaria	C III	1,5
Altre opere d'arte	C II	1,0

Facendo riferimento al, "MANUALE DI PROGETTAZIONE DELLE OPERE CIVILI" pag.151 di 431 – Ponti e strutture - RFI DTC SICS MA IFS 001 A del 29.12.2105, le strutture di progetto non ricadono in una linea del sistema di grande viabilità strategica pertanto nel progetto si considera una classe d'uso tipo II con coefficiente d'uso CU=1,0.

8.3.3.-.*Periodo di riferimento*

Le azioni sismiche su ciascuna costruzione vengono valutate in relazione ad un periodo di riferimento V_R che si ricava, per ciascun tipo di costruzione, moltiplicandone la vita nominale V_N per il coefficiente d'uso C_U:

$V_R = V_N \cdot C_U = 50 \cdot 1.00 = 50$ anni (periodo di riferimento).

Valutazione dei parametri di pericolosità sismica

Fissata la vita di riferimento V_R, i due parametri T_R e PVR sono immediatamente esprimibili, l'uno in funzione dell'altro, mediante l'espressione:

Tabella 8-3 - Probabilità di superamento P_{VR} al variare dello stato limite considerato

Stato limite		P_{VR}: probabilità di superamento nel periodo di riferimento
SLE	SLO - Stato Limite di Operatività	81%
	SLD - Stato Limite di Danno	63%
SLU	SLV - Stato Limite di salvaguardia della Vita	10%
	SLC - Stato Limite di prevenzione del Collasso	5%

$T_R = -\frac{V_R}{ln\left(1 - P_{V_R}\right)} = -\frac{Cu \cdot V_N}{ln\left(1 - P_{V_R}\right)}$ da cui si ottiene la seguente tabella:

Tabella 8-4 - Probabilità di superamento P_{VR} al variare dello stato limite considerato

Stati limite		Valori in anni del periodo di ritorno T_R al variare del periodo di riferimento V_R (anni)
SLE	SLO	30
	SLD	50
SLU	SLV	475
	SLC	975

Per il sito in esame, in base ai parametri precedentemente adottati, il periodo T_R in corrispondenza dello stato limite ultimo SLV è pari a T_R = 475 anni.

Le strutture di progetto avranno quindi i seguenti parametri sismici:

vita nominale V_N = 50 anni;

periodo di riferimento pari a V_R = 50 anni;

il periodo T_R in corrispondenza dello SLV sarà pari a T_R = 475 anni.

8.3.4.-..***Caratterizzazione sismica del terreno***

Categorie di Sottosuolo

Ai fini della definizione dell'azione sismica di progetto, si rende necessario valutare l'effetto della risposta sismica locale. Per la definizione dell'azione sismica si può fare riferimento a un approccio

semplificato, che si basa sull'individuazione delle categorie di sottosuolo di riferimento in accordo a quanto indicato nel § 3.2.2 delle NTC2018.

I terreni di progetto possono essere caratterizzati come appartenenti a terreni di Categoria B facendo riferimento ai risultati delle prove MASW (10÷11). Per ulteriori dettagli si rimanda alla Relazione Geotecnica.

Condizioni topografiche

In condizioni topografiche superficiali semplici si può adottare la seguente classificazione:

Tabella 8-5 - Classificazione topografie superfici

Categoria	Caratteristiche della superficie topografica
T1	Superficie pianeggiante, pendii e rilievi isolati con inclinazione media i ≤15°
T2	Pendii con inclinazione media i > 15°
T3	Rilievi con larghezza in cresta molto minore che alla base e inclinazione media 15° ≤ i ≤ 30°
T4	Rilievi con larghezza in cresta molto minore che alla base e inclinazione media i > 30°

Le categorie topografiche appena definite si riferiscono a configurazioni geometriche prevalentemente bidimensionali, creste o dorsali allungate, e devono essere considerate nella definizione dell'azione sismica se di altezza maggiore di 30 m. L'area interessata risulta classificabile come T1.

Amplificazione Stratigrafica e Topografica

In riferimento a quanto indicato nel §3.2.3.2.1 delle NTC2018 per la definizione dello spettro elastico in accelerazione è necessario valutare il valore del coefficiente $S = S_S \cdot S_T$ e di C_C in base alla categoria di sottosuolo e alle condizioni topografiche; si fa riferimento nella valutazione dei coefficienti alle tabelle che sono riportate di seguito:

Tabella 8-6 - Tabella delle espressioni per S_S e C_C

Categoria sottosuolo	S_S	C_C
A	1,00	1,00
B	$1{,}00 \le 1{,}40 - 0{,}40 \cdot F_0 \cdot \frac{a_g}{g} \le 1{,}20$	$1{,}10 \cdot \left(T_C^*\right)^{-0{,}20}$
C	$1{,}00 \le 1{,}70 - 0{,}60 \cdot F_0 \cdot \frac{a_g}{g} \le 1{,}50$	$1{,}05 \cdot \left(T_C^*\right)^{-0{,}33}$
D	$0{,}90 \le 2{,}40 - 1{,}50 \cdot F_0 \cdot \frac{a_g}{g} \le 1{,}80$	$1{,}25 \cdot \left(T_C^*\right)^{-0{,}50}$

E	$1{,}00 \le 2{,}00 - 1{,}10 \cdot F_0 \cdot \frac{a_g}{g} \le 1{,}60$	$1{,}15 \cdot \left(T_C^*\right)^{-0{,}40}$

Tabella 8-7 - Tabella valori massimi del coeff. di amplificazione topografica ST

Categoria Topografica	Ubicazione dell'opera dell'intervento	S_T
T1	-	1,0
T2	In corrispondenza della sommità del pendio	1,2
T3	In corrispondenza della cresta del rilievo	1,2
T4	In corrispondenza della cresta del rilievo	1,4

Il valore del coefficiente di amplificazione topografica è posto pari a $S_T = 1$

I valori dei coefficienti di amplificazione stratigrafica sono pari a $S_S = 1{,}20$ e $C_C = 1{,}428$

Parametri sismici di calcolo

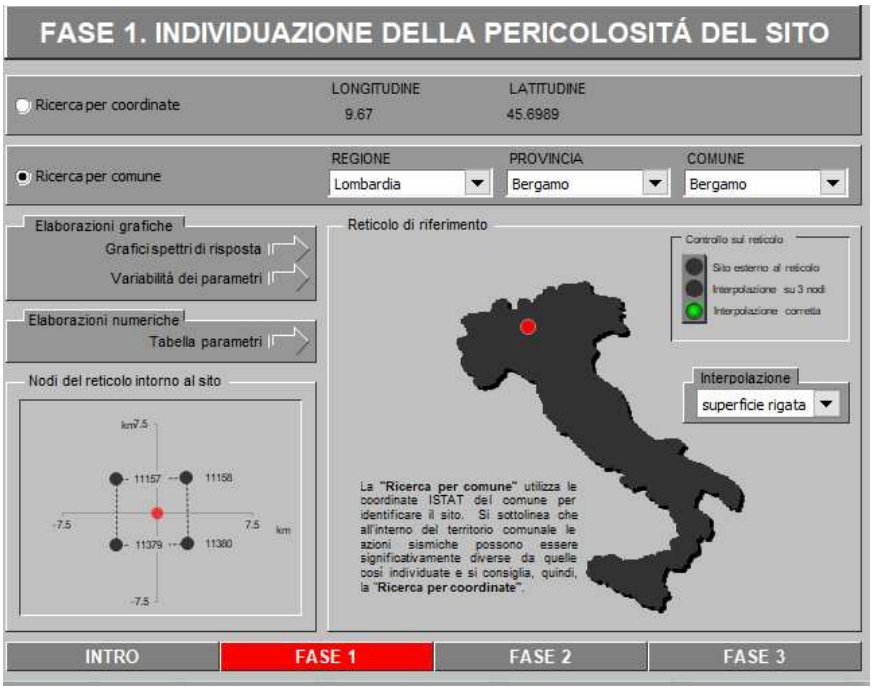


Figura 8-1 - Individuazione della pericolosità del sito (Fase 1)

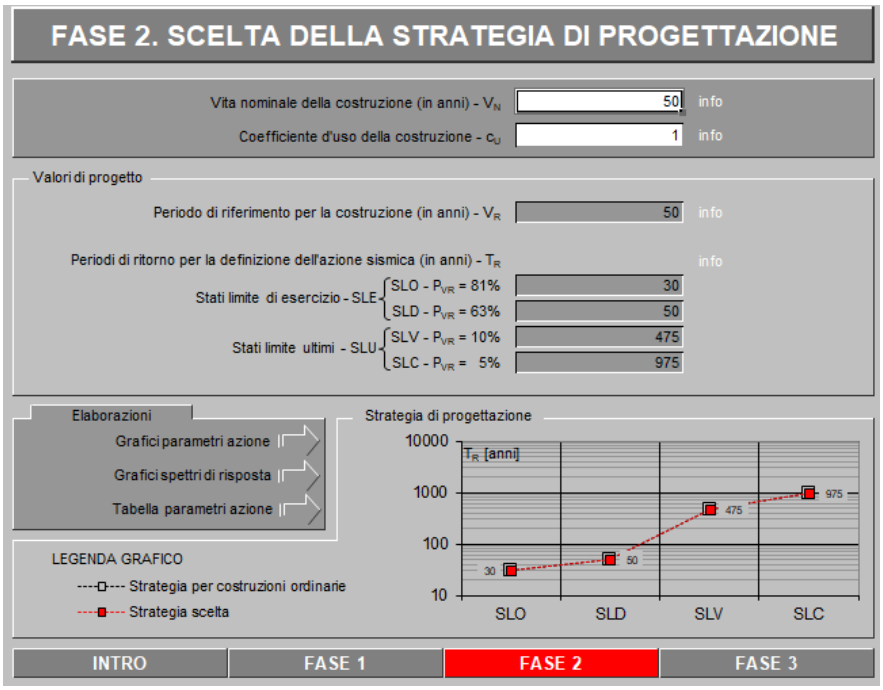


Figura 8-2 - Scelta della strategia di progettazione (Fase 2)

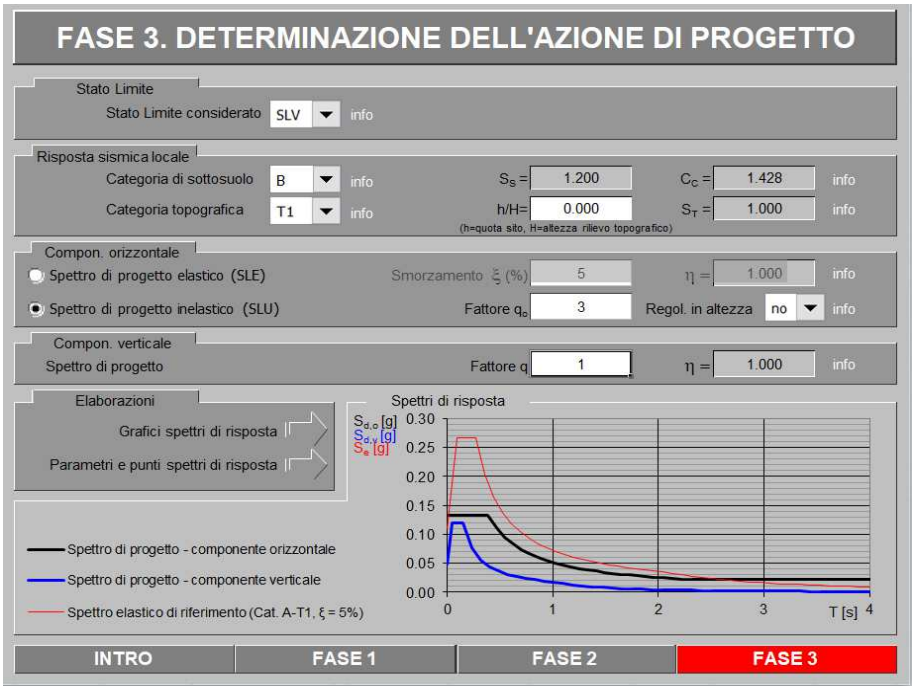


Figura 8-3 - Determinazione dell'azione di progetto (Fase 3)

Parametri indipendenti

STATO LIMITE	SLV
a_g	0.110 g
F_o	2.418
T_C^*	0.271 s
S_S	1.200
C_C	1.428
S_T	1.000
q	2.400

Parametri dipendenti

S	1.200
η	0.417
T_B	0.129 s
T_C	0.387 s
T_D	2.041 s

Espressioni dei parametri dipendenti

$S = S_S \cdot S_T$ (NTC-08 Eq. 3.2.5)

$\eta = \sqrt{10/(5+\xi)} \geq 0{,}55;\ \eta = 1/q$ (NTC-08 Eq. 3.2.6; §. 3.2.3.5)

$T_B = T_C / 3$ (NTC-07 Eq. 3.2.8)

$T_C = C_C \cdot T_C^*$ (NTC-07 Eq. 3.2.7)

$T_D = 4{,}0 \cdot a_g / g + 1{,}6$ (NTC-07 Eq. 3.2.9)

Espressioni dello spettro di risposta (NTC-08 Eq. 3.2.4)

$0 \leq T < T_B \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left[\frac{T}{T_B} + \frac{1}{\eta \cdot F_o}\left(1 - \frac{T}{T_B}\right)\right]$

$T_B \leq T < T_C \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o$

$T_C \leq T < T_D \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_C}{T}\right)$

$T_D \leq T \quad S_e(T) = a_g \cdot S \cdot \eta \cdot F_o \cdot \left(\frac{T_C T_D}{T^2}\right)$

Lo spettro di progetto $S_d(T)$ per le verifiche agli Stati Limite Ultimi è ottenuto dalle espressioni dello spettro elastico $S_e(T)$ sostituendo η con 1/q, dove q è il fattore di struttura. (NTC-08 § 3.2.3.5)

Punti dello spettro di risposta

	T [s]	Se [g]
	0.000	0.132
T_B	0.129	0.133
T_C	0.387	0.133
	0.466	0.111
	0.545	0.095
	0.623	0.083
	0.702	0.073
	0.781	0.066
	0.860	0.060
	0.938	0.055
	1.017	0.051
	1.096	0.047
	1.175	0.044
	1.253	0.041
	1.332	0.039
	1.411	0.037
	1.490	0.035
	1.568	0.033
	1.647	0.031
	1.726	0.030
	1.805	0.029
	1.884	0.027
	1.962	0.026
T_D	2.041	0.025
	2.134	0.023
	2.228	0.022
	2.321	0.022
	2.414	0.022
	2.507	0.022
	2.601	0.022
	2.694	0.022
	2.787	0.022
	2.881	0.022
	2.974	0.022
	3.067	0.022
	3.160	0.022
	3.254	0.022
	3.347	0.022
	3.440	0.022
	3.534	0.022
	3.627	0.022
	3.720	0.022
	3.813	0.022
	3.907	0.022
	4.000	0.022

Figura 8-4 – parametri sismici di calcolo

8.3.5.-..***Forza d'inerzia***

Le forze di inerzia della paratia sono state valutate come:

$$F_p = k_h W_i$$

$$F_v = \pm k_v W_i$$

in cui k_h e k_v sono, rispettivamente, il coefficiente di accelerazione sismica orizzontale ed il coefficiente di accelerazione sismica verticale e W_i è il peso della struttura considerata. Tali azioni sono applicate nel baricentro della struttura. I coefficienti di accelerazione sismica k_h e k_v valgono rispettivamente:

$$k_h = \beta_m \, a_{max}/g$$

$$k_v = \pm 0.5 \, k_h$$

8.3.6.-..***Spinta del terreno in condizioni sismiche***

Per analisi dell'opera nelle condizioni sismiche è stato fatto riferimento al metodo classico di calcolo delle spinte sismiche pseudo-statiche, in base ai quali vengono definiti i valori dei coefficienti di spinta.

9.-..CRITERI DI VERIFICA

Le analisi di verifica della paratia sono state effettuate secondo le NTC 2018 tenendo conto di possibili SLU di tipo geotecnico e di tipo strutturale. Nello specifico sono state effettuate le verifiche dei seguenti stati limite:

- SLU di tipo geotecnico (GEO)
  - collasso per raggiungimento della resistenza del terreno con rotazione attorno ad un punto della paratia;
- SLU di tipo strutturale (STR)
  - raggiungimento della resistenza strutturale della paratia;

9.1.-..VERIFICHE GEOTECNICHE DELLA PARATIA

Le verifiche per il dimensionamento strutturale e geotecnico sono state effettuate con la Combinazione 1 dell'Approccio 1 (A1+M1+R1) e Combinazione 2 dell'Approccio 1 (A2+M2+R1). I coefficienti numerici per A, M ed R sono riportati nelle Tabelle 6.2.I e 6.2.II, 6.5.I e 6.8.I delle NTC 2018. In condizioni di esercizio sono stati valutati gli spostamenti dell'opera per valutare la compatibilità con la funzionalità della stessa e con la sicurezza e funzionalità di eventuali preesistenze.

Nelle immagini a seguire si riportano le tabelle con i coefficienti di calcolo per le verifiche strutturali e geotecniche dell'opera di sostegno oggetto dello studio.

Tabella 9-1 Coefficienti parziali per le azioni o per l'effetto delle azioni nelle verifiche SLU (6.2.I)

Tab. 6.2.I – *Coefficienti parziali per le azioni o per l'effetto delle azioni*

	Effetto	Coefficiente Parziale γ_F (o γ_E)	EQU	(A1)	(A2)
Carichi permanenti G_1	Favorevole	γ_{G1}	0,9	1,0	1,0
	Sfavorevole		1,1	1,3	1,0
Carichi permanenti G_2 (1)	Favorevole	γ_{G2}	0,8	0,8	0,8
	Sfavorevole		1,5	1,5	1,3
Azioni variabili Q	Favorevole	γ_{Qi}	0,0	0,0	0,0
	Sfavorevole		1,5	1,5	1,3

(1) Per i carichi permanenti G_2 si applica quanto indicato alla Tabella 2.6.I. Per la spinta delle terre si fa riferimento ai coefficienti γ_{G1}

Tabella 9-2 Coefficienti parziali per i parametri geotecnici del terreno (6.2.II)

Tab. 6.2.II – *Coefficienti parziali per i parametri geotecnici del terreno*

Parametro	Grandezza alla quale applicare il coefficiente parziale	Coefficiente parziale γ_M	(M1)	(M2)
Tangente dell'angolo di resistenza al taglio	$\tan \varphi'_k$	$\gamma_{\varphi'}$	1,0	1,25
Coesione efficace	c'_k	$\gamma_{c'}$	1,0	1,25
Resistenza non drenata	c_{uk}	γ_{cu}	1,0	1,4
Peso dell'unità di volume	γ_γ	γ_γ	1,0	1,0

10.-..ANALISI

Le analisi eseguite si riferiscono alle condizioni statiche e sismiche, trattandosi di opere definitive. Al fine di valutare gli spostamenti orizzontali in condizioni SLE e le sollecitazioni sugli elementi strutturali in condizioni SLU sono state eseguite le analisi numeriche. Di seguito si riportano le fasi costruttive dell'opera e i risultati ottenuti.

10.1.-..FASI COSTRUTTIVE OPERA

1. Stato tensionale geostatico iniziale.
2. Getto dei pali in c.a. di diametro 1200.00 mm.
3. Scavo a quota -2.5 m da p.c..
4. Scavo massimo a -5.10 m da p.c.
5. Simulazione il comportamento del terreno a lungo termine (condizione drenata).
6. Attivazione l'azione sismica.

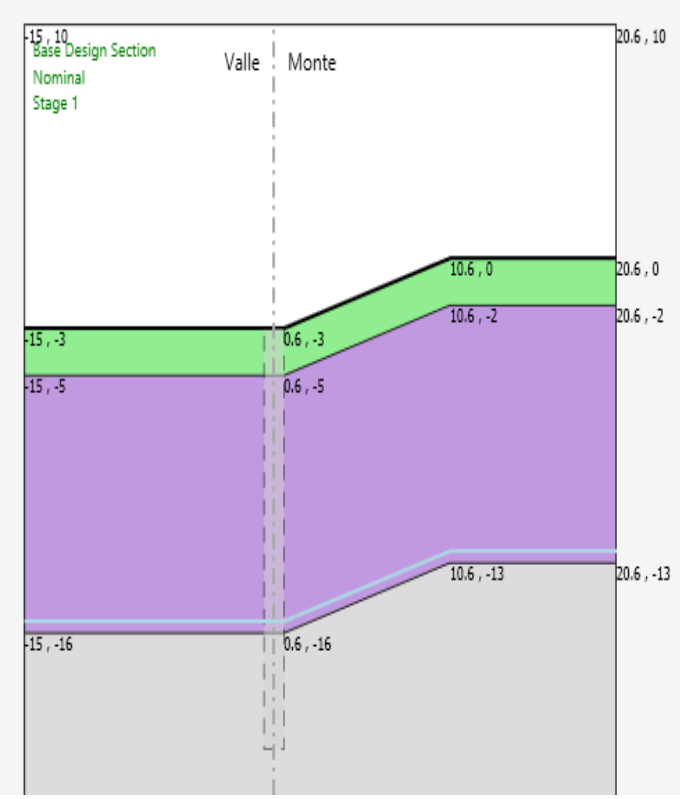


Figura 10-1 - Fase 1

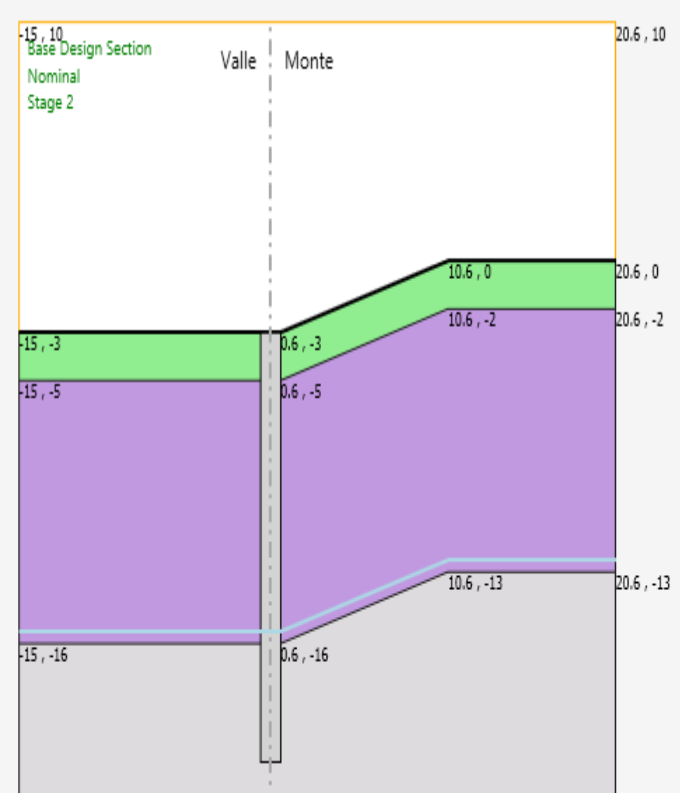


Figura 10-2 – Fase 2

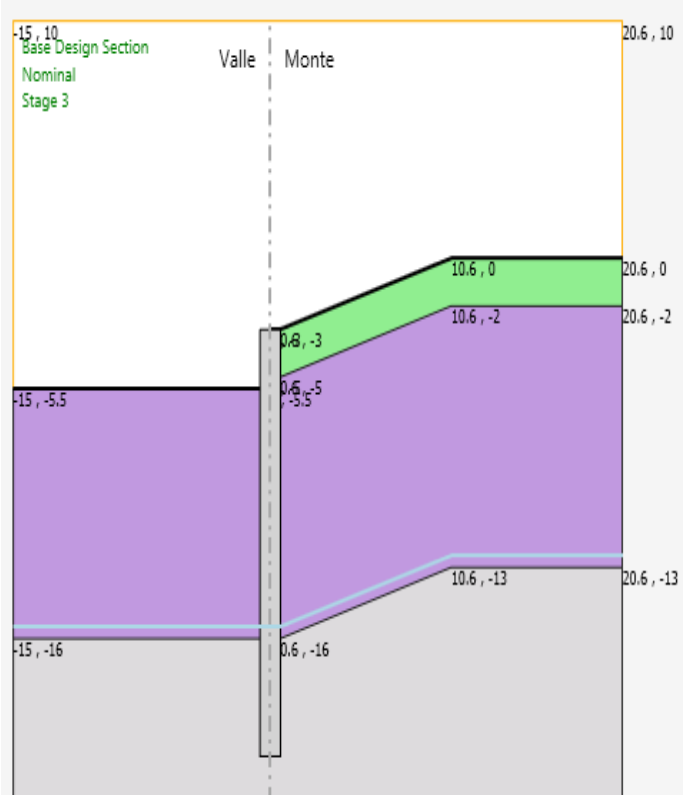


Figura 10-3 – Fase 3

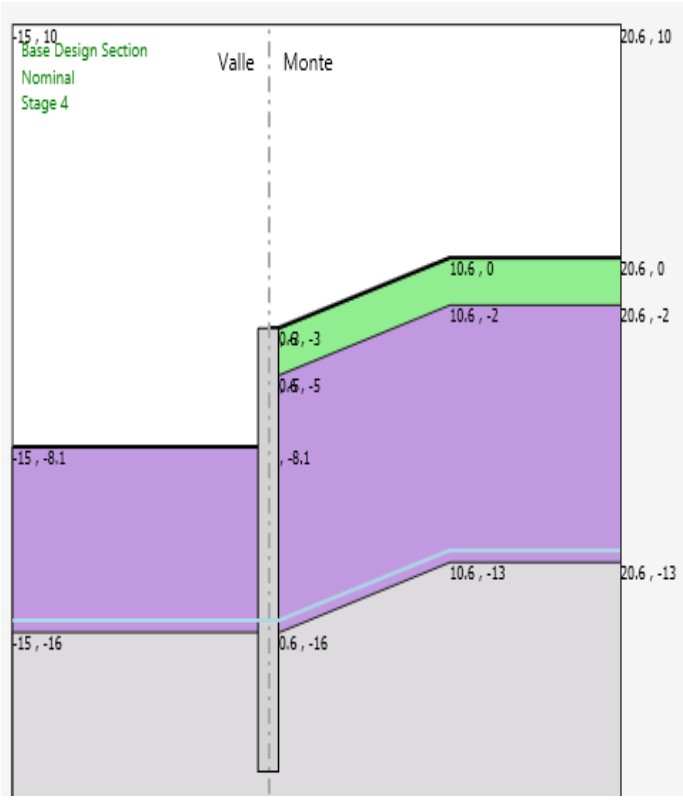


Figura 10-4 – Fase 4

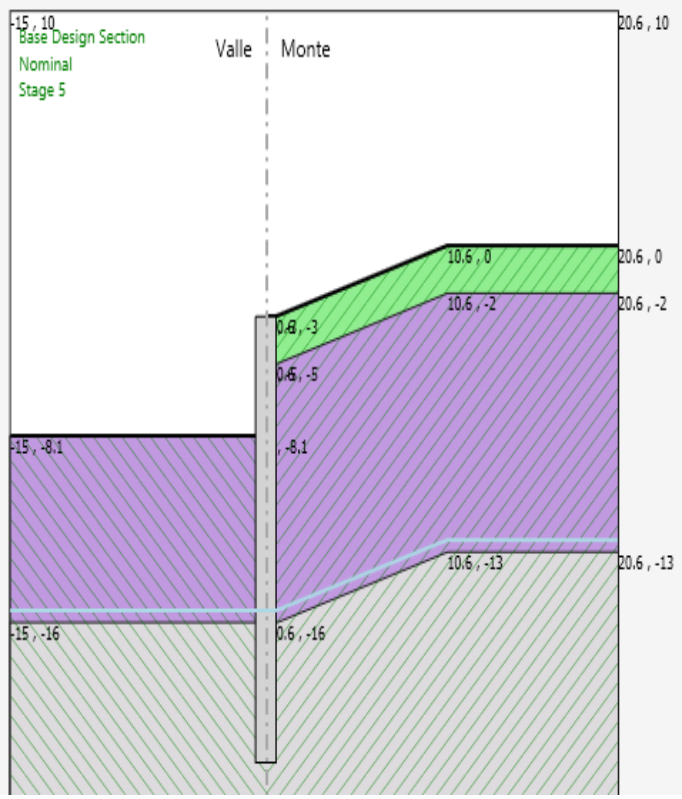


Figura 10-5 – Fase 5

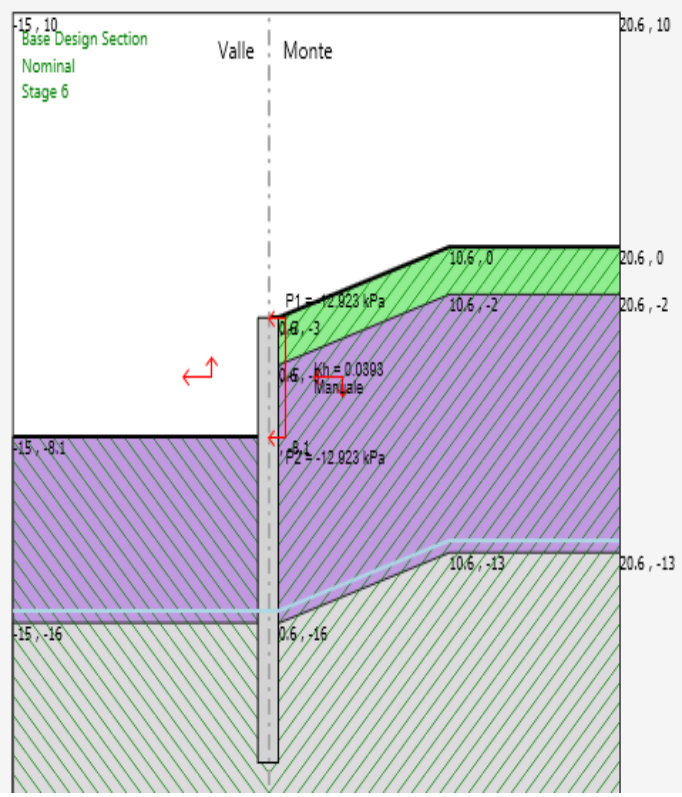


Figura 10-6 – Fase 6

10.2.-..RISULTATI

Di seguito vengono rappresentati i diagrammi di inviluppo delle sollecitazioni e gli spostamenti nello Stato Limite Ultimo/Esercizio:

Diagramma degli spostamenti (SLE):

u_{max} = 4.2 cm; spostamento massimo

Si osserva che tale spostamento è da ritenersi una stima cautelativa in ragione delle assunzioni fatte in fase di simulazione. In particolare, nella modellazione bidimensionale sono stati trascurati elementi tridimensionali in grado di vincolare gli spostamenti, quali la presenza di contrafforti, la variabilità del profilo di scavo che, soprattutto nel tratto più ad est, risulta di molto inferiore all'altezza di scavo assunta nei calcoli e la presenza di sovraccarichi strutturali e non a valle della paratia. Per questi motivi e considerata l'assenza a monte di edifici o altre strutture per distanze superiori a 15m, si ritiene che i risultati ottenuti soddisfino i requisiti prestazionali dell'opera agli stati limite di esercizio.

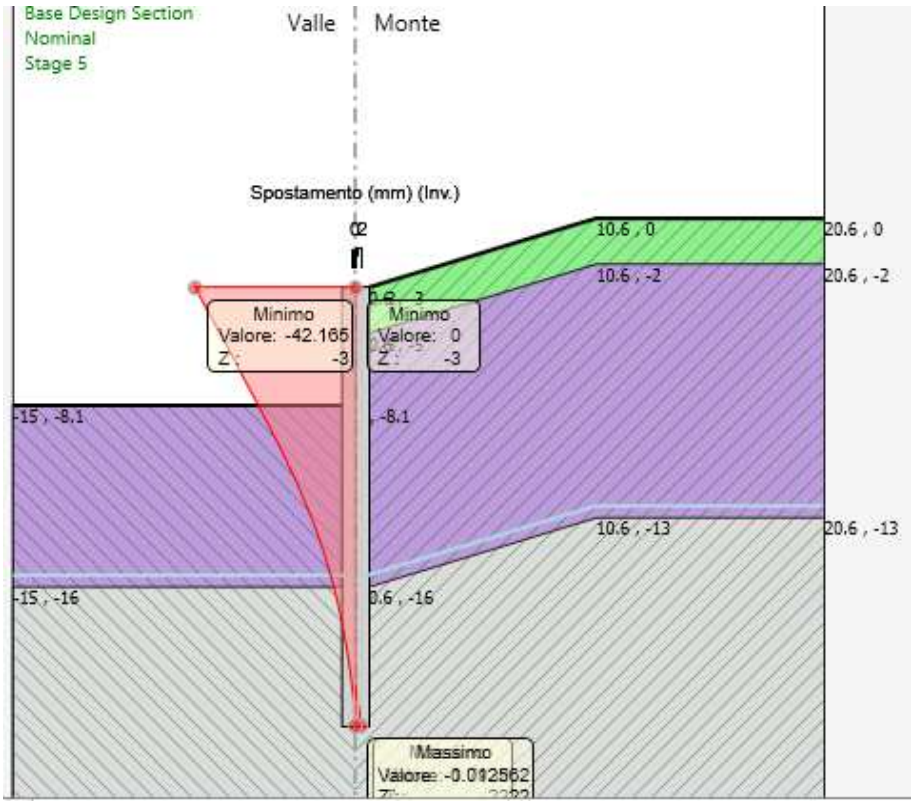


Figura 10-7

Diagramma inviluppo del momento flettente (SLU):
Mmax = 1211.3 kNm/m;

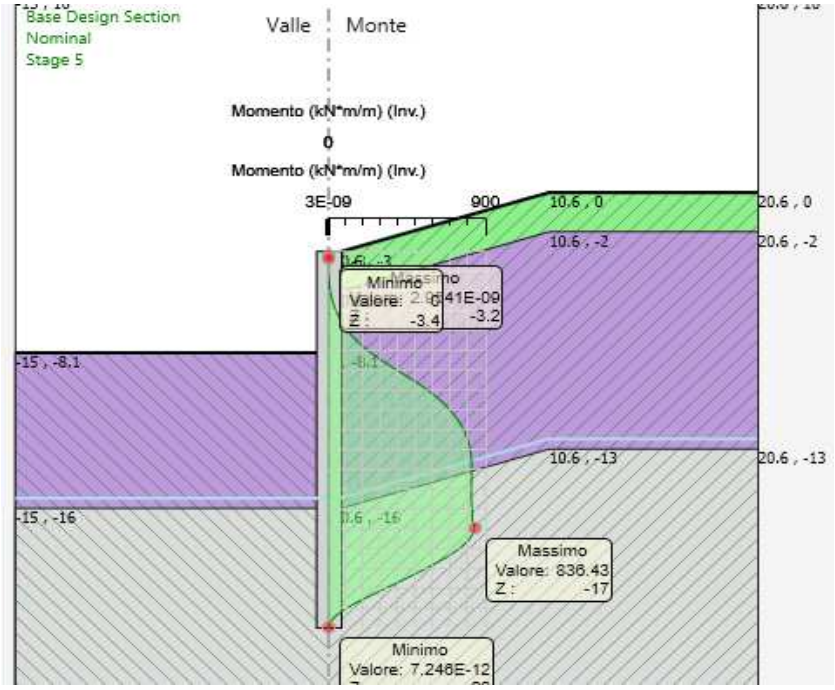


Figura 10-8 – inviluppo del momento flettente (SLU) – A1 M1 R1

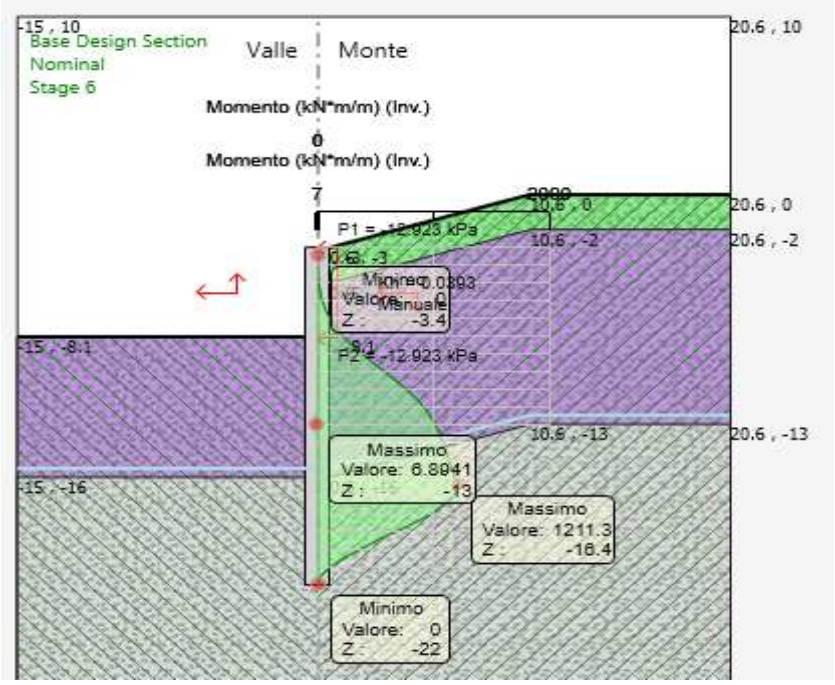


Figura 10-9 - inviluppo del momento flettente (SLU) – A2 M2 R1

Diagramma inviluppo del taglio (SLU):
Tmax = 330.69 kN/m

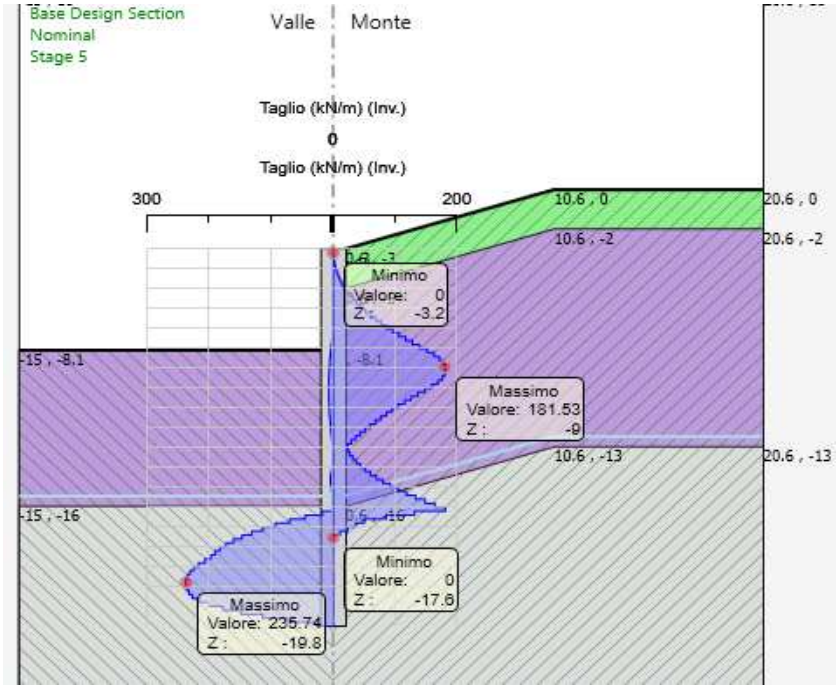


Figura 10-10 - inviluppo del taglio (SLU) – A1 M1 R1

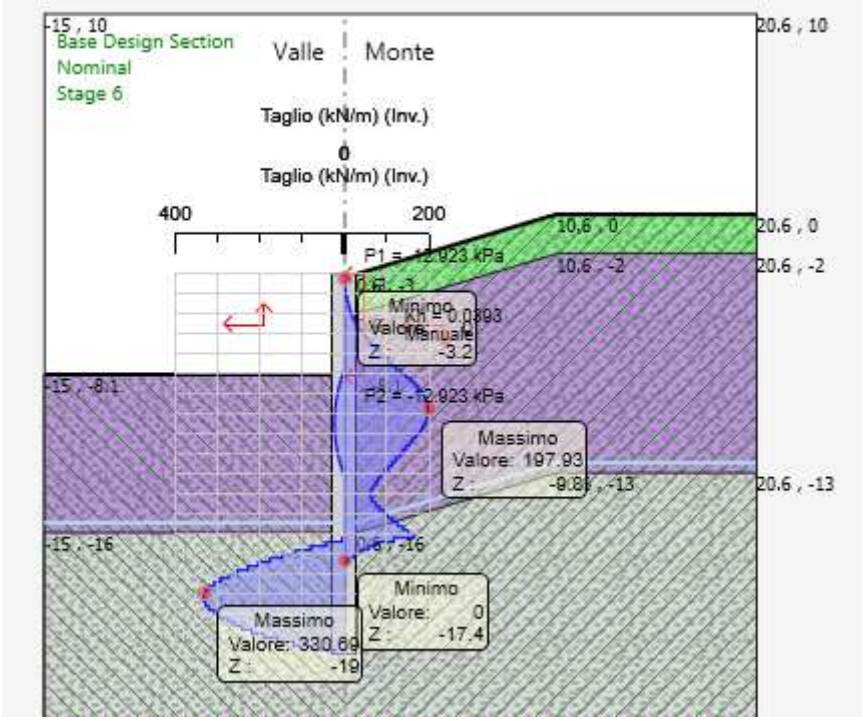


Figura 10-11 – inviluppo del taglio (SLU) – A2 M2 R1

Diagramma inviluppo del momento flettente (SLE):
Mmax = 644 kNm/m

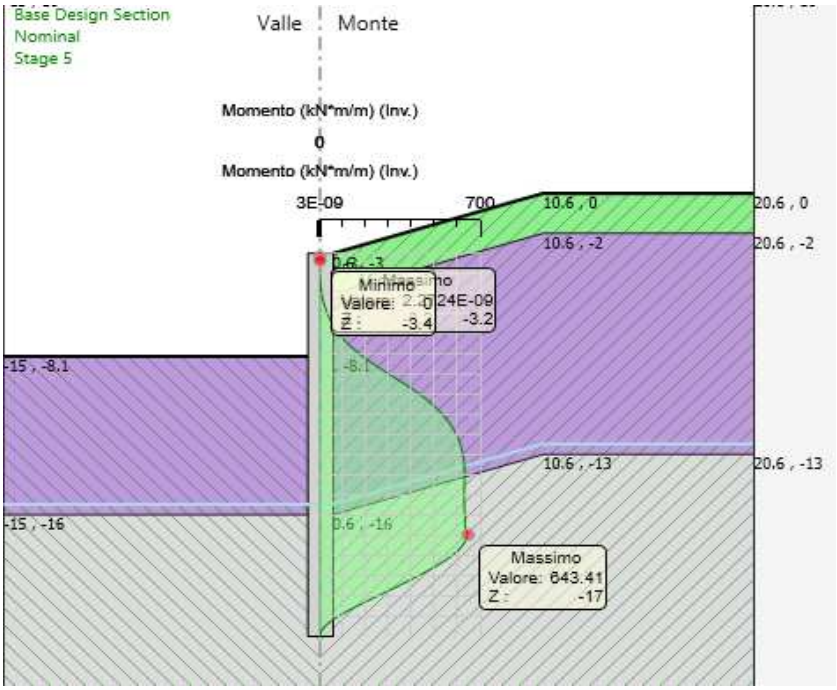


Figura 10-12 – inviluppo del momento flettente (SLE)

10.3.-..VERIFICHE STRUTTURALI

10.3.1.-.*Pali*

Di seguito vengono riportate le verifiche agli stati limiti SLU e SLE per due gabbie di armatura. La gabbia 1, di lunghezza 8m, è stata progetteta per la parta superiore e meno sollecitata dei pali, mentre la gabbia 2 riguarda alla parte inferiore dei pali avendo una lunghezza pari a 11m.

Le azioni ottenute dalle analisi vengono moltiplicate per l'interasse dei pali (i=1.2 m).

- **Gabbia 1 (da -3.0m a -11.0 m)**

Verifica a SLU:

M	T	D	Armature	δ	staffe	$M_{resistente}/M_{agente}$	$T_{resistente}/T_{agente}$
(kNm)	(kN)	(cm)		[cm]			
926	237.4	120	26 ϕ 26	8.8	ϕ 14 / 20 cm	2.6	>1

δ = copriferro

Verifica a SLE:

M	σs	σs lim	σc	σc lim	wk	wlim
(kNm)	[MPa]	[MPa]	[MPa]	[MPa]	[mm]	[mm]
645	130.99	360	5.08	11.25	0.187	0.2

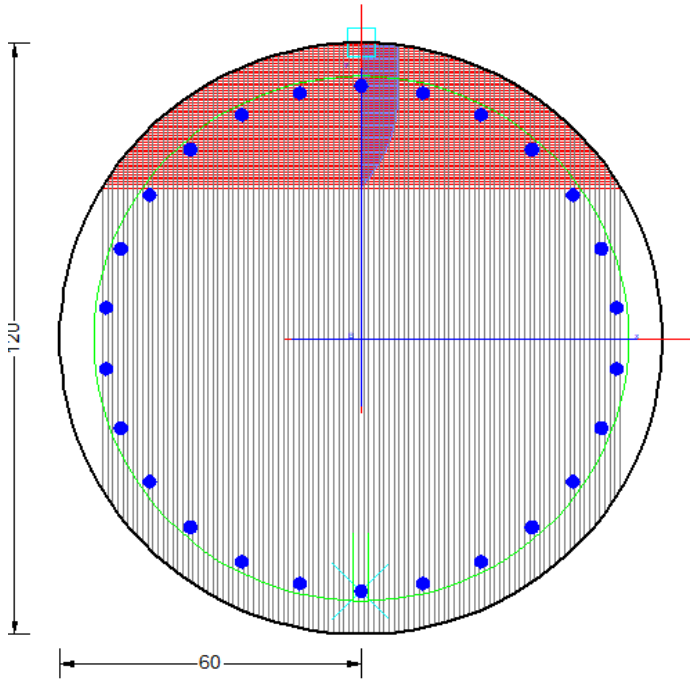


Figura 10-13 – Sezione di calcolo I

- **Gabbia 2 (da -11.0m a -22.0 m)**

Verifica a SLU:

M	T	D	Armature	δ	staffe	$M_{resistente}/M_{agente}$	$T_{resistente}/T_{agente}$
(kNm)	(kN)	(cm)		[cm]			
1454	397	120	36 ϕ 26	8.8	ϕ 14 / 20 cm	2.1	>1

δ = copriferro

Verifica a SLE:

M	σs	σs lim	σc	σc lim	wk	wlim
(kNm)	[MPa]	[MPa]	[MPa]	[MPa]	[mm]	[mm]
775	137.33	360	5.23	11.25	0.195	0.2

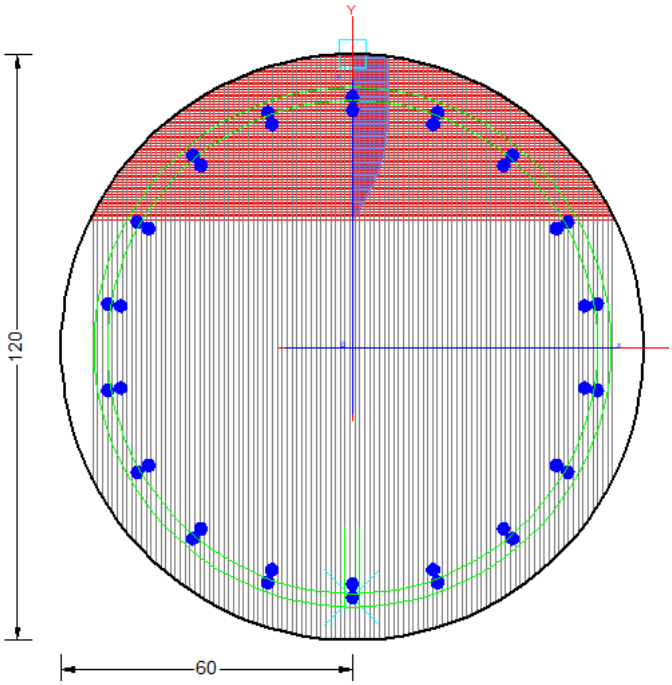


Figura 10-14 – Sezione di calcolo II

10.3.2.-..***Trave di coronamento***

Per la trave di coronamento sono state previste le armature minime secondo quanto richiesto in Capitolo 4.1.6.1.1 (NTC2018). L'incidenza totale risulta pari a 55 kg/m^3.

11.-..CONCLUSIONE

Dalle verifiche effettuate si può concludere che la struttura risulta rispondere a tutti i requisiti di resistenza e funzionalità previsti allo SLU e SLE, con opportuno margine di sicurezza. La struttura oggetto della presente relazione è conforme ai criteri di progettazione e di resistenza indicati della normativa vigente, prendendo in considerazione anche le azioni sismiche.

L'analisi critica dei risultati e dei parametri di controllo associata al confronto con verifiche di massima eseguite manualmente porta a confermare la validità dei risultati.

Dovrà essere posta attenzione alle effettive misure dello stato di fatto in modo da posizionare la struttura in oggetto in maniera conforme alle indicazioni di progetto.

La struttura a collaudo dovrà essere conforme alle tolleranze dimensionali prescritte nella presente relazione, inoltre relativamente alle prestazioni attese esse dovranno essere quelle di cui al § 9 del D.M. 17.01.2018.

Per la paratia si riporta un riepilogo delle armature, riportando inoltre il valore dell'incidenza associato.

Pali
Gabbia 1 (lunghezza = 8 m):
Armature principali: 26 φ 26
Staffe: φ14/20 cm
Gabbia 2 (lunghezza = 11 m):
Armature principali: 36 φ 26
Staffe: φ14/20 cm

incidenza totale = 160 kg/m^3

Trave di coronamento

Armature principali: 10 φ 26
Staffe: φ16/20 cm
incidenza totale = 55 kg/m^3

12.-..ALLEGATI

Di seguito si riportano dei tabulati del calcolo e delle verifiche.

12.1.-..VERIFICHE STRUTTURALI - PALO

12.1.1.-..*Gabbia 1*

Descrizione Sezione:

Metodo di calcolo resistenza:	Resistenze agli Stati Limite Ultimi
Tipologia sezione:	Sezione generica di Pilastro
Normativa di riferimento:	N.T.C.
Percorso sollecitazione:	A Sforzo Norm. costante
Condizioni Ambientali:	Moderat. aggressive
Riferimento Sforzi assegnati:	Assi x,y principali d'inerzia
Riferimento alla sismicità:	Zona non sismica

CARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -	Classe:	C25/30	
	Resis. compr. di progetto fcd:	14.160	MPa
	Resis. compr. ridotta fcd':	7.080	MPa
	Def.unit. max resistenza ec2:	0.0020	
	Def.unit. ultima ecu:	0.0035	
	Diagramma tensione-deformaz.:	Parabola-Rettangolo	
	Modulo Elastico Normale Ec:	31475.0	MPa
	Resis. media a trazione fctm:	2.560	MPa
	Coeff. Omogen. S.L.E.:	15.00	
	Coeff. Omogen. S.L.E.:	15.00	
	Sc limite S.L.E. comb. Frequenti:	150.00	daN/cm²
	Ap.Fessure limite S.L.E. comb. Frequenti:	0.300	mm
	Sc limite S.L.E. comb. Q.Permanenti:	0.00	Mpa
	Ap.Fess.limite S.L.E. comb. Q.Perm.:	0.200	mm
ACCIAIO -	Tipo:	B450C	
	Resist. caratt. snervam. fyk:	450.00	MPa
	Resist. caratt. rottura ftk:	450.00	MPa
	Resist. snerv. di progetto fyd:	391.30	MPa
	Resist. ultima di progetto ftd:	391.30	MPa
	Deform. ultima di progetto Epu:	0.068	
	Modulo Elastico Ef	2000000	daN/cm²
	Diagramma tensione-deformaz.:	Bilineare finito	
	Coeff. Aderenza istantaneo ß1*ß2 :	1.00	
	Coeff. Aderenza differito ß1*ß2 :	0.50	
	Sf limite S.L.E. Comb. Rare:	360.00	MPa

CARATTERISTICHE DOMINIO CONGLOMERATO

Forma del Dominio:	Circolare
Classe Conglomerato:	C25/30

Raggio circ.:	60.0 cm
X centro circ.:	0.0 cm
Y centro circ.:	0.0 cm

DATI GENERAZIONI CIRCOLARI DI BARRE

N°Gen.	Numero assegnato alla singola generazione circolare di barre
Xcentro	Ascissa [cm] del centro della circonf. lungo cui sono disposte le barre generate

Ycentro	Ordinata [cm] del centro della circonf. lungo cui sono disposte le barre genrate
Raggio	Raggio [cm] della circonferenza lungo cui sono disposte le barre generate
N°Barre	Numero di barre generate equidist. disposte lungo la circonferenza
Ø	Diametro [mm] della singola barra generata

N°Gen.	Xcentro	Ycentro	Raggio	N°Barre	Ø
1	0.0	0.0	51.2	26	26

ARMATURE A TAGLIO

Diametro staffe:	14	mm
Passo staffe:	20.0	cm
Staffe:		Una sola staffa chiusa perimetrale

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [kN] applicato nel Baric. (+ se di compressione)
Mx	Momento flettente [kNm] intorno all'asse x princ. d'inerzia con verso positivo se tale da comprimere il lembo sup. della sez.
My	Momento flettente [kNm] intorno all'asse y princ. d'inerzia con verso positivo se tale da comprimere il lembo destro della sez.
Vy	Componente del Taglio [kN] parallela all'asse princ.d'inerzia y
Vx	Componente del Taglio [kN] parallela all'asse princ.d'inerzia x

N°Comb.	N	Mx	My	Vy	Vx
1	0.00	926.00	0.00	237.40	0.00

COMB. RARE (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)
Mx	Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My	Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	226.20	645.00	0.00

COMB. FREQUENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)
Mx	Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My	Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	226.20	645.00 (582.92)	0.00 (0.00)

COMB. QUASI PERMANENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)
Mx	Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My	Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My

1	226.20	645.00 (582.92)	0.00 (0.00)

RISULTATI DEL CALCOLO

Copriferro netto minimo barre longitudinali:	7.5	cm
Interferro netto minimo barre longitudinali:	9.7	cm
Copriferro netto minimo staffe:	6.1	cm

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

Ver	S = combinazione verificata / N = combin. non verificata
N	Sforzo normale assegnato [kN] nel baricentro B sezione cls.(positivo se di compressione)
Mx	Componente del momento assegnato [kNm] riferito all'asse x princ. d'inerzia
My	Componente del momento assegnato [kNm] riferito all'asse y princ. d'inerzia
N Res	Sforzo normale resistente [kN] nel baricentro B sezione cls.(positivo se di compress.)
Mx Res	Momento flettente resistente [kNm] riferito all'asse x princ. d'inerzia
My Res	Momento flettente resistente [kNm] riferito all'asse y princ. d'inerzia
Mis.Sic.	Misura sicurezza = rapporto vettoriale tra (N r,Mx Res,My Res) e (N,Mx,My) Verifica positiva se tale rapporto risulta >=1.000
As Tesa	Area armature trave [cm²] in zona tesa. [Tra parentesi l'area minima ex (4.1.15)NTC]

N°Comb	Ver	N	Mx	My	N Res	Mx Res	My Res	Mis.Sic.	As Tesa
1	N	0.00	926.00	0.00	0.00	2378.18	0.00	2.57	90.3(16.6)

METODO AGLI STATI LIMITE ULTIMI - DEFORMAZIONI UNITARIE ALLO STATO ULTIMO

ec max	Deform. unit. massima del conglomerato a compressione
x/d	Rapporto di duttilità [§ 4.1.2.1.2.1 NTC] deve essere < 0.45
Xc max	Ascissa in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
Yc max	Ordinata in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
es min	Deform. unit. minima nell'acciaio (negativa se di trazione)
Xs min	Ascissa in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
Ys min	Ordinata in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
es max	Deform. unit. massima nell'acciaio (positiva se di compress.)
Xs max	Ascissa in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)
Ys max	Ordinata in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)

N°Comb	ec max	x/d	Xc max	Yc max	es min	Xs min	Ys min	es max	Xs max	Ys max
1	0.00350	0.265	0.0	60.0	0.00245	0.0	51.2	-0.00972	0.0	-51.2

POSIZIONE ASSE NEUTRO PER OGNI COMB. DI RESISTENZA

a, b, c	Coeff. a, b, c nell'eq. dell'asse neutro aX+bY+c=0 nel rif. X,Y,O gen.
x/d	Rapp. di duttilità (travi e solette)[§ 4.1.2.1.2.1 NTC]: deve essere < 0.45
C.Rid.	Coeff. di riduz. momenti per sola flessione in travi continue

N°Comb	a	b	c	x/d	C.Rid.
1	0.000000000	0.000118906	-0.003634382	0.265	0.771

VERIFICHE A TAGLIO

Diam. Staffe:	14 mm	
Passo staffe:	20.0 cm	[Passo massimo di normativa = 33.0 cm]

Ver	S = comb. verificata a taglio / N = comb. non verificata
Ved	Taglio di progetto [kN] = proiez. di Vx e Vy sulla normale all'asse neutro
Vcd	Taglio resistente ultimo [kN] lato conglomerato compresso [(4.1.28) NTC]
Vwd	Taglio resistente [kN] assorbito dalle staffe [(4.1.18) NTC]
Dmed	Altezza utile media pesata [cm] valutata lungo strisce ortog. all'asse neutro. Vengono prese nella media le strisce con almeno un estremo compresso. I pesi della media sono costituiti dalle stesse lunghezze delle strisce.

bw	Larghezza media resistente a taglio [cm] misurate parallel. all'asse neutro E' data dal rapporto tra l'area delle sopradette strisce resistenti e Dmed.
Ctg	Cotangente dell'angolo di inclinazione dei puntoni di conglomerato
Acw	Coefficiente maggiorativo della resistenza a taglio per compressione
Ast	Area staffe+legature strettam. necessarie a taglio per metro di pil.[cm²/m]
A.Eff	Area staffe+legature efficaci nella direzione del taglio di combinaz.[cm²/m] Tra parentesi è indicata la quota dell'area relativa alle sole legature. L'area della legatura è ridotta col fattore L/d_max con L=lungh.legat.proietta- ta sulla direz. del taglio e d_max= massima altezza utile nella direz.del taglio.

N°Comb	Ver	Ved	Vcd	Vwd	Dmed	bw	Ctg	Acw	Ast	A.Eff
1	S	237.40	2146.99	1307.78	96.5	101.3	2.500	1.000	2.8	15.4(0.0)

COMBINAZIONI RARE IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

Ver	S = comb. verificata/ N = comb. non verificata
Sc max	Massima tensione (positiva se di compressione) nel conglomerato [Mpa]
Xc max, Yc max	Ascissa, Ordinata [cm] del punto corrisp. a Sc max (sistema rif. X,Y,O)
Sf min	Minima tensione (negativa se di trazione) nell'acciaio [Mpa]
Xs min, Ys min	Ascissa, Ordinata [cm] della barra corrisp. a Sf min (sistema rif. X,Y,O)
Ac eff.	Area di calcestruzzo [cm²] in zona tesa considerata aderente alle barre
As eff.	Area barre [cm²] in zona tesa considerate efficaci per l'apertura delle fessure

N°Comb	Ver	Sc max	Xc max	Yc max	Sf min	Xs min	Ys min	Ac eff.	As eff.
1	S	5.08	0.0	0.0	-131.0	0.0	-51.2	1855	37.2

COMBINAZIONI FREQUENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	Sc max	Xc max	Yc max	Sf min	Xs min	Ys min	Ac eff.	As eff.
1	S	5.08	0.0	0.0	-131.0	0.0	-51.2	1855	37.2

COMBINAZIONI FREQUENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

	La sezione viene assunta sempre fessurata anche nel caso in cui la trazione minima del calcestruzzo sia inferiore a fctm
Ver.	Esito della verifica
e1	Massima deformazione unitaria di trazione nel calcestruzzo (trazione -) valutata in sezione fessurata
e2	Minima deformazione unitaria di trazione nel calcestruzzo (trazione -) valutata in sezione fessurata
k1	= 0.8 per barre ad aderenza migliorata [eq.(7.11)EC2]
kt	= 0.4 per comb. quasi permanenti / = 0.6 per comb.frequenti [cfr. eq.(7.9)EC2]
k2	= 0.5 per flessione; =(e1 + e2)/(2*e1) per trazione eccentrica [eq.(7.13)EC2]
k3	= 3.400 Coeff. in eq.(7.11) come da annessi nazionali
k4	= 0.425 Coeff. in eq.(7.11) come da annessi nazionali
Ø	Diametro [mm] equivalente delle barre tese comprese nell'area efficace Ac eff [eq.(7.11)EC2]
Cf	Copriferro [mm] netto calcolato con riferimento alla barra più tesa
e sm - e cm	Differenza tra le deformazioni medie di acciaio e calcestruzzo [(7.8)EC2 e (C4.1.7)NTC] Tra parentesi: valore minimo = 0.6 Smax / Es [(7.9)EC2 e (C4.1.8)NTC]
sr max	Massima distanza tra le fessure [mm]
wk	Apertura fessure in mm calcolata = sr max*(e_sm - e_cm) [(7.8)EC2 e (C4.1.7)NTC]. Valore limite tra parentesi
Mx fess.	Componente momento di prima fessurazione intorno all'asse X [kNm]
My fess.	Componente momento di prima fessurazione intorno all'asse Y [kNm]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00074	0	0.500	26.0	75	0.00039 (0.00039)	476	0.187 (0.30)	582.92	0.00

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	Sc max	Xc max	Yc max	Sf min	Xs min	Ys min	Ac eff.	As eff.
1	S	5.08	0.0	0.0	-131.0	0.0	-51.2	1855	37.2

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00074	0	0.500	26.0	75	0.00039 (0.00039)	476	0.187 (0.20)	582.92	0.00

12.1.2.-..*Gabbia 2*

Descrizione Sezione:

Metodo di calcolo resistenza:	Resistenze agli Stati Limite Ultimi
Tipologia sezione:	Sezione generica di Pilastro
Normativa di riferimento:	N.T.C.
Percorso sollecitazione:	A Sforzo Norm. costante
Condizioni Ambientali:	Moderat. aggressive
Riferimento Sforzi assegnati:	Assi x,y principali d'inerzia
Riferimento alla sismicità:	Zona non sismica

CARATTERISTICHE DI RESISTENZA DEI MATERIALI IMPIEGATI

CALCESTRUZZO -	Classe:	C25/30	
	Resis. compr. di progetto fcd:	14.160	MPa
	Resis. compr. ridotta fcd':	7.080	MPa
	Def.unit. max resistenza ec2:	0.0020	
	Def.unit. ultima ecu:	0.0035	
	Diagramma tensione-deformaz.:	Parabola-Rettangolo	
	Modulo Elastico Normale Ec:	31475.0	MPa
	Resis. media a trazione fctm:	2.560	MPa
	Coeff. Omogen. S.L.E.:	15.00	
	Coeff. Omogen. S.L.E.:	15.00	
	Sc limite S.L.E. comb. Frequenti:	150.00	daN/cm²
	Ap.Fessure limite S.L.E. comb. Frequenti:	0.300	mm
	Sc limite S.L.E. comb. Q.Permanenti:	0.00	Mpa
	Ap.Fess.limite S.L.E. comb. Q.Perm.:	0.200	mm
ACCIAIO -	Tipo:	B450C	
	Resist. caratt. snervam. fyk:	450.00	MPa
	Resist. caratt. rottura ftk:	450.00	MPa
	Resist. snerv. di progetto fyd:	391.30	MPa
	Resist. ultima di progetto ftd:	391.30	MPa
	Deform. ultima di progetto Epu:	0.068	
	Modulo Elastico Ef	2000000	daN/cm²
	Diagramma tensione-deformaz.:	Bilineare finito	
	Coeff. Aderenza istantaneo ß1*ß2 :	1.00	
	Coeff. Aderenza differito ß1*ß2 :	0.50	
	Sf limite S.L.E. Comb. Rare:	360.00	MPa

CARATTERISTICHE DOMINIO CONGLOMERATO

Forma del Dominio:	Circolare
Classe Conglomerato:	C25/30

Raggio circ.:	60.0 cm
X centro circ.:	0.0 cm
Y centro circ.:	0.0 cm

DATI GENERAZIONI CIRCOLARI DI BARRE

N°Gen.	Numero assegnato alla singola generazione circolare di barre
Xcentro	Ascissa [cm] del centro della circonf. lungo cui sono disposte le barre generate
Ycentro	Ordinata [cm] del centro della circonf. lungo cui sono disposte le barre genrate

Raggio	Raggio [cm] della circonferenza lungo cui sono disposte le barre generate
N°Barre	Numero di barre generate equidist. disposte lungo la circonferenza
Ø	Diametro [mm] della singola barra generata

N°Gen.	Xcentro	Ycentro	Raggio	N°Barre	Ø
1	0.0	0.0	51.2	18	26
2	0.0	0.0	48.6	18	26

ARMATURE A TAGLIO

Diametro staffe:	14	mm
Passo staffe:	20.0	cm
Staffe:		Una sola staffa chiusa perimetrale

CALCOLO DI RESISTENZA - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [kN] applicato nel Baric. (+ se di compressione)
Mx	Momento flettente [kNm] intorno all'asse x princ. d'inerzia con verso positivo se tale da comprimere il lembo sup. della sez.
My	Momento flettente [kNm] intorno all'asse y princ. d'inerzia con verso positivo se tale da comprimere il lembo destro della sez.
Vy	Componente del Taglio [kN] parallela all'asse princ.d'inerzia y
Vx	Componente del Taglio [kN] parallela all'asse princ.d'inerzia x

N°Comb.	N	Mx	My	Vy	Vx
1	0.00	1454.00	0.00	397.00	0.00

COMB. RARE (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)
Mx	Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My	Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	0.00	775.00	0.00

COMB. FREQUENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)
Mx	Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My	Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My
1	0.00	775.00 (586.69)	0.00 (0.00)

COMB. QUASI PERMANENTI (S.L.E.) - SFORZI PER OGNI COMBINAZIONE ASSEGNATA

N	Sforzo normale [kN] applicato nel Baricentro (+ se di compressione)
Mx	Momento flettente [kNm] intorno all'asse x princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo superiore della sezione
My	Momento flettente [kNm] intorno all'asse y princ. d'inerzia (tra parentesi Mom.Fessurazione) con verso positivo se tale da comprimere il lembo destro della sezione

N°Comb.	N	Mx	My

1	0.00	775.00 (586.69)	0.00 (0.00)

RISULTATI DEL CALCOLO

Copriferro netto minimo barre longitudinali:	7.5	cm
Interferro netto minimo barre longitudinali:	14.3	cm
Copriferro netto minimo staffe:	6.1	cm

VERIFICHE DI RESISTENZA IN PRESSO-TENSO FLESSIONE ALLO STATO LIMITE ULTIMO

Ver	S = combinazione verificata / N = combin. non verificata
N	Sforzo normale assegnato [kN] nel baricentro B sezione cls.(positivo se di compressione)
Mx	Componente del momento assegnato [kNm] riferito all'asse x princ. d'inerzia
My	Componente del momento assegnato [kNm] riferito all'asse y princ. d'inerzia
N Res	Sforzo normale resistente [kN] nel baricentro B sezione cls.(positivo se di compress.)
Mx Res	Momento flettente resistente [kNm] riferito all'asse x princ. d'inerzia
My Res	Momento flettente resistente [kNm] riferito all'asse y princ. d'inerzia
Mis.Sic.	Misura sicurezza = rapporto vettoriale tra (N r,Mx Res,My Res) e (N,Mx,My) Verifica positiva se tale rapporto risulta >=1.000
As Tesa	Area armature trave [cm²] in zona tesa. [Tra parentesi l'area minima ex (4.1.15)NTC]

N°Comb	Ver	N	Mx	My	N Res	Mx Res	My Res	Mis.Sic.	As Tesa
1	N	0.00	1454.00	0.00	0.00	3115.93	0.00	2.14	116.8(16.6)

METODO AGLI STATI LIMITE ULTIMI - DEFORMAZIONI UNITARIE ALLO STATO ULTIMO

ec max	Deform. unit. massima del conglomerato a compressione
x/d	Rapporto di duttilità [§ 4.1.2.1.2.1 NTC] deve essere < 0.45
Xc max	Ascissa in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
Yc max	Ordinata in cm della fibra corrisp. a ec max (sistema rif. X,Y,O sez.)
es min	Deform. unit. minima nell'acciaio (negativa se di trazione)
Xs min	Ascissa in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
Ys min	Ordinata in cm della barra corrisp. a es min (sistema rif. X,Y,O sez.)
es max	Deform. unit. massima nell'acciaio (positiva se di compress.)
Xs max	Ascissa in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)
Ys max	Ordinata in cm della barra corrisp. a es max (sistema rif. X,Y,O sez.)

N°Comb	ec max	x/d	Xc max	Yc max	es min	Xs min	Ys min	es max	Xs max	Ys max
1	0.00350	0.305	0.0	60.0	0.00259	0.0	51.2	-0.00799	0.0	-51.2

POSIZIONE ASSE NEUTRO PER OGNI COMB. DI RESISTENZA

a, b, c	Coeff. a, b, c nell'eq. dell'asse neutro aX+bY+c=0 nel rif. X,Y,O gen.
x/d	Rapp. di duttilità (travi e solette)[§ 4.1.2.1.2.1 NTC]: deve essere < 0.45
C.Rid.	Coeff. di riduz. momenti per sola flessione in travi continue

N°Comb	a	b	c	x/d	C.Rid.
1	0.000000000	0.000103296	-0.002697750	0.305	0.821

VERIFICHE A TAGLIO

Diam. Staffe:	14	mm
Passo staffe:	20.0	cm [Passo massimo di normativa = 33.0 cm]

Ver	S = comb. verificata a taglio / N = comb. non verificata
Ved	Taglio di progetto [kN] = proiez. di Vx e Vy sulla normale all'asse neutro
Vcd	Taglio resistente ultimo [kN] lato conglomerato compresso [(4.1.28) NTC]
Vwd	Taglio resistente [kN] assorbito dalle staffe [(4.1.18) NTC]
Dmed	Altezza utile media pesata [cm] valutata lungo strisce ortog. all'asse neutro. Vengono prese nella media le strisce con almeno un estremo compresso.

I pesi della media sono costituiti dalle stesse lunghezze delle strisce.
bw — Larghezza media resistente a taglio [cm] misurate parallel. all'asse neutro
E' data dal rapporto tra l'area delle sopradette strisce resistenti e Dmed.
Ctg — Cotangente dell'angolo di inclinazione dei puntoni di conglomerato
Acw — Coefficiente maggiorativo della resistenza a taglio per compressione
Ast — Area staffe+legature strettam. necessarie a taglio per metro di pil.[cm²/m]
A.Eff — Area staffe+legature efficaci nella direzione del taglio di combinaz.[cm²/m]
Tra parentesi è indicata la quota dell'area relativa alle sole legature.
L'area della legatura è ridotta col fattore L/d_max con L=lungh.legat.proietta-
ta sulla direz. del taglio e d_max= massima altezza utile nella direz.del taglio.

N°Comb	Ver	Ved	Vcd	Vwd	Dmed	bw	Ctg	Acw	Ast	A.Eff
1	S	397.00	2190.32	2522.41	95.5	104.4	2.500	1.000	4.7	30.0(0.0)

COMBINAZIONI RARE IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

Ver — S = comb. verificata/ N = comb. non verificata
Sc max — Massima tensione (positiva se di compressione) nel conglomerato [Mpa]
Xc max, Yc max — Ascissa, Ordinata [cm] del punto corrisp. a Sc max (sistema rif. X,Y,O)
Sf min — Minima tensione (negativa se di trazione) nell'acciaio [Mpa]
Xs min, Ys min — Ascissa, Ordinata [cm] della barra corrisp. a Sf min (sistema rif. X,Y,O)
Ac eff. — Area di calcestruzzo [cm²] in zona tesa considerata aderente alle barre
As eff. — Area barre [cm²] in zona tesa considerate efficaci per l'apertura delle fessure

N°Comb	Ver	Sc max	Xc max	Yc max	Sf min	Xs min	Ys min	Ac eff.	As eff.
1	S	5.23	0.0	0.0	-137.3	0.0	-51.2	1855	53.1

COMBINAZIONI FREQUENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	Sc max	Xc max	Yc max	Sf min	Xs min	Ys min	Ac eff.	As eff.
1	S	5.23	0.0	0.0	-137.3	0.0	-51.2	1855	53.1

COMBINAZIONI FREQUENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

La sezione viene assunta sempre fessurata anche nel caso in cui la trazione minima del calcestruzzo sia inferiore a fctm
Ver. — Esito della verifica
e1 — Massima deformazione unitaria di trazione nel calcestruzzo (trazione -) valutata in sezione fessurata
e2 — Minima deformazione unitaria di trazione nel calcestruzzo (trazione -) valutata in sezione fessurata
k1 — = 0.8 per barre ad aderenza migliorata [eq.(7.11)EC2]
kt — = 0.4 per comb. quasi permanenti / = 0.6 per comb.frequenti [cfr. eq.(7.9)EC2]
k2 — = 0.5 per flessione; =(e1 + e2)/(2*e1) per trazione eccentrica [eq.(7.13)EC2]
k3 — = 3.400 Coeff. in eq.(7.11) come da annessi nazionali
k4 — = 0.425 Coeff. in eq.(7.11) come da annessi nazionali
Ø — Diametro [mm] equivalente delle barre tese comprese nell'area efficace Ac eff [eq.(7.11)EC2]
Cf — Copriferro [mm] netto calcolato con riferimento alla barra più tesa
e sm - e cm — Differenza tra le deformazioni medie di acciaio e calcestruzzo [(7.8)EC2 e (C4.1.7)NTC]
Tra parentesi: valore minimo = 0.6 Smax / Es [(7.9)EC2 e (C4.1.8)NTC]
sr max — Massima distanza tra le fessure [mm]
wk — Apertura fessure in mm calcolata = sr max*(e_sm - e_cm) [(7.8)EC2 e (C4.1.7)NTC]. Valore limite tra parentesi
Mx fess. — Componente momento di prima fessurazione intorno all'asse X [kNm]
My fess. — Componente momento di prima fessurazione intorno all'asse Y [kNm]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00077	0	0.500	26.0	75	0.00041 (0.00041)	409	0.169 (0.30)	586.69	0.00

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - MASSIME TENSIONI NORMALI ED APERTURA FESSURE (NTC/EC2)

N°Comb	Ver	Sc max	Xc max	Yc max	Sf min	Xs min	Ys min	Ac eff.	As eff.
1	S	5.23	0.0	0.0	-137.3	0.0	-51.2	1855	53.1

COMBINAZIONI QUASI PERMANENTI IN ESERCIZIO - APERTURA FESSURE [§ 7.3.4 EC2]

Comb.	Ver	e1	e2	k2	Ø	Cf	e sm - e cm	sr max	wk	Mx fess	My fess
1	S	-0.00077	0	0.500	26.0	75	0.00048 (0.00041)	409	0.195 (0.20)	586.69	0.00

12.2.-..TABULATI PARATIE

Descrizione della Stratigrafia e degli Strati di Terreno

Tipo:POLYLINE

Punti

(-15;0)

(20;0)

(20.6;0)

(20.6;-45)

(-15;-45)

OCR:1

Tipo:POLYLINE

Punti

(-15;-5)

(-15;-5)

(0.6;-5)

(10.6;-2)

(20.6;-2)

(20.6;-45)

(-15;-45)

OCR:1

Tipo:POLYLINE

Punti

(-15;-16)

(0.6;-16)

(10.6;-13)

(20.6;-13)

(20.6;-45)

(-15;-45)

OCR : 1

	Strato di Terreno	Terreno	γ dry	γ sat	øcv	øp	c'	Su	Modulo Elastico	Evc	Eur
			kN/m^3	kN/m^3	°	°	kPa	kPa		kPa	kPa
1		UG2	19.5	19.5	26	26	0	30	Constant	4000	6000
2		UG3	19	19	24	24	0	50	Constant	10000	17000
3		A_M	20	20	40	40	0	250	Constant	100000	200000

Design Assumption : Nominal

Tabella Spostamento Nominal - RIGHT Stage: Stage 1

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 1	-3	0
Stage 1	-3.2	0
Stage 1	-3.4	0
Stage 1	-3.6	0
Stage 1	-3.8	0
Stage 1	-4	0
Stage 1	-4.2	0
Stage 1	-4.4	0
Stage 1	-4.6	0
Stage 1	-4.8	0
Stage 1	-5	0
Stage 1	-5.2	0
Stage 1	-5.4	0
Stage 1	-5.6	0
Stage 1	-5.8	0
Stage 1	-6	0
Stage 1	-6.2	0
Stage 1	-6.4	0
Stage 1	-6.6	0
Stage 1	-6.8	0
Stage 1	-7	0
Stage 1	-7.2	0
Stage 1	-7.4	0
Stage 1	-7.6	0
Stage 1	-7.8	0
Stage 1	-8	0
Stage 1	-8.2	0
Stage 1	-8.4	0
Stage 1	-8.6	0
Stage 1	-8.8	0
Stage 1	-9	0
Stage 1	-9.2	0
Stage 1	-9.4	0
Stage 1	-9.6	0
Stage 1	-9.8	0
Stage 1	-10	0
Stage 1	-10.2	0
Stage 1	-10.4	0
Stage 1	-10.6	0
Stage 1	-10.8	0
Stage 1	-11	0

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 1	-11.2	0
Stage 1	-11.4	0
Stage 1	-11.6	0
Stage 1	-11.8	0
Stage 1	-12	0
Stage 1	-12.2	0
Stage 1	-12.4	0
Stage 1	-12.6	0
Stage 1	-12.8	0
Stage 1	-13	0
Stage 1	-13.2	0
Stage 1	-13.4	0
Stage 1	-13.6	0
Stage 1	-13.8	0
Stage 1	-14	0
Stage 1	-14.2	0
Stage 1	-14.4	0
Stage 1	-14.6	0
Stage 1	-14.8	0
Stage 1	-15	0
Stage 1	-15.2	0
Stage 1	-15.4	0
Stage 1	-15.6	0
Stage 1	-15.8	0
Stage 1	-16	0
Stage 1	-16.2	0
Stage 1	-16.4	0
Stage 1	-16.6	0
Stage 1	-16.8	0
Stage 1	-17	0
Stage 1	-17.2	0
Stage 1	-17.4	0
Stage 1	-17.6	0
Stage 1	-17.8	0
Stage 1	-18	0
Stage 1	-18.2	0
Stage 1	-18.4	0
Stage 1	-18.6	0
Stage 1	-18.8	0
Stage 1	-19	0
Stage 1	-19.2	0
Stage 1	-19.4	0
Stage 1	-19.6	0
Stage 1	-19.8	0

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 1	-20	0
Stage 1	-20.2	0
Stage 1	-20.4	0
Stage 1	-20.6	0
Stage 1	-20.8	0
Stage 1	-21	0
Stage 1	-21.2	0
Stage 1	-21.4	0
Stage 1	-21.6	0
Stage 1	-21.8	0
Stage 1	-22	0

Tabella Spostamento Nominal - RIGHT Stage: Stage 2

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 2	-3	0
Stage 2	-3.2	0
Stage 2	-3.4	0
Stage 2	-3.6	0
Stage 2	-3.8	0
Stage 2	-4	0
Stage 2	-4.2	0
Stage 2	-4.4	0
Stage 2	-4.6	0
Stage 2	-4.8	0
Stage 2	-5	0
Stage 2	-5.2	0
Stage 2	-5.4	0
Stage 2	-5.6	0
Stage 2	-5.8	0
Stage 2	-6	0
Stage 2	-6.2	0
Stage 2	-6.4	0
Stage 2	-6.6	0
Stage 2	-6.8	0
Stage 2	-7	0
Stage 2	-7.2	0
Stage 2	-7.4	0
Stage 2	-7.6	0
Stage 2	-7.8	0
Stage 2	-8	0
Stage 2	-8.2	0
Stage 2	-8.4	0
Stage 2	-8.6	0

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 2	-8.8	0
Stage 2	-9	0
Stage 2	-9.2	0
Stage 2	-9.4	0
Stage 2	-9.6	0
Stage 2	-9.8	0
Stage 2	-10	0
Stage 2	-10.2	0
Stage 2	-10.4	0
Stage 2	-10.6	0
Stage 2	-10.8	0
Stage 2	-11	0
Stage 2	-11.2	0
Stage 2	-11.4	0
Stage 2	-11.6	0
Stage 2	-11.8	0
Stage 2	-12	0
Stage 2	-12.2	0
Stage 2	-12.4	0
Stage 2	-12.6	0
Stage 2	-12.8	0
Stage 2	-13	0
Stage 2	-13.2	0
Stage 2	-13.4	0
Stage 2	-13.6	0
Stage 2	-13.8	0
Stage 2	-14	0
Stage 2	-14.2	0
Stage 2	-14.4	0
Stage 2	-14.6	0
Stage 2	-14.8	0
Stage 2	-15	0
Stage 2	-15.2	0
Stage 2	-15.4	0
Stage 2	-15.6	0
Stage 2	-15.8	0
Stage 2	-16	0
Stage 2	-16.2	0
Stage 2	-16.4	0
Stage 2	-16.6	0
Stage 2	-16.8	0
Stage 2	-17	0
Stage 2	-17.2	0
Stage 2	-17.4	0

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 2	-17.6	0
Stage 2	-17.8	0
Stage 2	-18	0
Stage 2	-18.2	0
Stage 2	-18.4	0
Stage 2	-18.6	0
Stage 2	-18.8	0
Stage 2	-19	0
Stage 2	-19.2	0
Stage 2	-19.4	0
Stage 2	-19.6	0
Stage 2	-19.8	0
Stage 2	-20	0
Stage 2	-20.2	0
Stage 2	-20.4	0
Stage 2	-20.6	0
Stage 2	-20.8	0
Stage 2	-21	0
Stage 2	-21.2	0
Stage 2	-21.4	0
Stage 2	-21.6	0
Stage 2	-21.8	0
Stage 2	-22	0

Tabella Spostamento Nominal - RIGHT Stage: Stage 3

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 3	-3	-5.71
Stage 3	-3.2	-5.63
Stage 3	-3.4	-5.54
Stage 3	-3.6	-5.46
Stage 3	-3.8	-5.38
Stage 3	-4	-5.29
Stage 3	-4.2	-5.21
Stage 3	-4.4	-5.12
Stage 3	-4.6	-5.04
Stage 3	-4.8	-4.96
Stage 3	-5	-4.87
Stage 3	-5.2	-4.79
Stage 3	-5.4	-4.7
Stage 3	-5.6	-4.62
Stage 3	-5.8	-4.54
Stage 3	-6	-4.45
Stage 3	-6.2	-4.37

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 3	-6.4	-4.29
Stage 3	-6.6	-4.21
Stage 3	-6.8	-4.13
Stage 3	-7	-4.05
Stage 3	-7.2	-3.97
Stage 3	-7.4	-3.89
Stage 3	-7.6	-3.81
Stage 3	-7.8	-3.73
Stage 3	-8	-3.65
Stage 3	-8.2	-3.57
Stage 3	-8.4	-3.5
Stage 3	-8.6	-3.42
Stage 3	-8.8	-3.34
Stage 3	-9	-3.27
Stage 3	-9.2	-3.19
Stage 3	-9.4	-3.12
Stage 3	-9.6	-3.04
Stage 3	-9.8	-2.97
Stage 3	-10	-2.9
Stage 3	-10.2	-2.82
Stage 3	-10.4	-2.75
Stage 3	-10.6	-2.68
Stage 3	-10.8	-2.61
Stage 3	-11	-2.54
Stage 3	-11.2	-2.47
Stage 3	-11.4	-2.39
Stage 3	-11.6	-2.32
Stage 3	-11.8	-2.25
Stage 3	-12	-2.18
Stage 3	-12.2	-2.12
Stage 3	-12.4	-2.05
Stage 3	-12.6	-1.98
Stage 3	-12.8	-1.91
Stage 3	-13	-1.84
Stage 3	-13.2	-1.77
Stage 3	-13.4	-1.71
Stage 3	-13.6	-1.64
Stage 3	-13.8	-1.57
Stage 3	-14	-1.51
Stage 3	-14.2	-1.44
Stage 3	-14.4	-1.37
Stage 3	-14.6	-1.31
Stage 3	-14.8	-1.24
Stage 3	-15	-1.18

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 3	-15.2	-1.12
Stage 3	-15.4	-1.06
Stage 3	-15.6	-0.99
Stage 3	-15.8	-0.93
Stage 3	-16	-0.88
Stage 3	-16.2	-0.82
Stage 3	-16.4	-0.76
Stage 3	-16.6	-0.71
Stage 3	-16.8	-0.66
Stage 3	-17	-0.61
Stage 3	-17.2	-0.57
Stage 3	-17.4	-0.52
Stage 3	-17.6	-0.48
Stage 3	-17.8	-0.44
Stage 3	-18	-0.41
Stage 3	-18.2	-0.37
Stage 3	-18.4	-0.34
Stage 3	-18.6	-0.31
Stage 3	-18.8	-0.28
Stage 3	-19	-0.26
Stage 3	-19.2	-0.23
Stage 3	-19.4	-0.21
Stage 3	-19.6	-0.19
Stage 3	-19.8	-0.17
Stage 3	-20	-0.16
Stage 3	-20.2	-0.14
Stage 3	-20.4	-0.12
Stage 3	-20.6	-0.11
Stage 3	-20.8	-0.09
Stage 3	-21	-0.08
Stage 3	-21.2	-0.07
Stage 3	-21.4	-0.05
Stage 3	-21.6	-0.04
Stage 3	-21.8	-0.03
Stage 3	-22	-0.01

Tabella Spostamento Nominal - RIGHT Stage: Stage 4

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 4	-3	-36.76
Stage 4	-3.2	-36.21
Stage 4	-3.4	-35.66
Stage 4	-3.6	-35.11
Stage 4	-3.8	-34.55

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 4	-4	-34
Stage 4	-4.2	-33.45
Stage 4	-4.4	-32.9
Stage 4	-4.6	-32.35
Stage 4	-4.8	-31.79
Stage 4	-5	-31.24
Stage 4	-5.2	-30.69
Stage 4	-5.4	-30.14
Stage 4	-5.6	-29.59
Stage 4	-5.8	-29.04
Stage 4	-6	-28.48
Stage 4	-6.2	-27.93
Stage 4	-6.4	-27.38
Stage 4	-6.6	-26.84
Stage 4	-6.8	-26.29
Stage 4	-7	-25.74
Stage 4	-7.2	-25.19
Stage 4	-7.4	-24.65
Stage 4	-7.6	-24.11
Stage 4	-7.8	-23.56
Stage 4	-8	-23.03
Stage 4	-8.2	-22.49
Stage 4	-8.4	-21.95
Stage 4	-8.6	-21.42
Stage 4	-8.8	-20.9
Stage 4	-9	-20.37
Stage 4	-9.2	-19.85
Stage 4	-9.4	-19.34
Stage 4	-9.6	-18.82
Stage 4	-9.8	-18.32
Stage 4	-10	-17.81
Stage 4	-10.2	-17.32
Stage 4	-10.4	-16.82
Stage 4	-10.6	-16.34
Stage 4	-10.8	-15.85
Stage 4	-11	-15.38
Stage 4	-11.2	-14.9
Stage 4	-11.4	-14.44
Stage 4	-11.6	-13.98
Stage 4	-11.8	-13.52
Stage 4	-12	-13.07
Stage 4	-12.2	-12.63
Stage 4	-12.4	-12.19
Stage 4	-12.6	-11.76

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 4	-12.8	-11.33
Stage 4	-13	-10.91
Stage 4	-13.2	-10.49
Stage 4	-13.4	-10.08
Stage 4	-13.6	-9.68
Stage 4	-13.8	-9.28
Stage 4	-14	-8.89
Stage 4	-14.2	-8.51
Stage 4	-14.4	-8.13
Stage 4	-14.6	-7.76
Stage 4	-14.8	-7.39
Stage 4	-15	-7.03
Stage 4	-15.2	-6.68
Stage 4	-15.4	-6.34
Stage 4	-15.6	-6
Stage 4	-15.8	-5.67
Stage 4	-16	-5.35
Stage 4	-16.2	-5.04
Stage 4	-16.4	-4.74
Stage 4	-16.6	-4.44
Stage 4	-16.8	-4.16
Stage 4	-17	-3.88
Stage 4	-17.2	-3.62
Stage 4	-17.4	-3.36
Stage 4	-17.6	-3.12
Stage 4	-17.8	-2.88
Stage 4	-18	-2.65
Stage 4	-18.2	-2.43
Stage 4	-18.4	-2.22
Stage 4	-18.6	-2.02
Stage 4	-18.8	-1.83
Stage 4	-19	-1.64
Stage 4	-19.2	-1.46
Stage 4	-19.4	-1.28
Stage 4	-19.6	-1.11
Stage 4	-19.8	-0.94
Stage 4	-20	-0.78
Stage 4	-20.2	-0.62
Stage 4	-20.4	-0.47
Stage 4	-20.6	-0.32
Stage 4	-20.8	-0.17
Stage 4	-21	-0.02
Stage 4	-21.2	0.13
Stage 4	-21.4	0.27

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 4	-21.6	0.42
Stage 4	-21.8	0.57
Stage 4	-22	0.71

Tabella Spostamento Nominal - RIGHT Stage: Stage 5

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 5	-3	-42.17
Stage 5	-3.2	-41.5
Stage 5	-3.4	-40.84
Stage 5	-3.6	-40.17
Stage 5	-3.8	-39.51
Stage 5	-4	-38.84
Stage 5	-4.2	-38.18
Stage 5	-4.4	-37.52
Stage 5	-4.6	-36.85
Stage 5	-4.8	-36.19
Stage 5	-5	-35.53
Stage 5	-5.2	-34.86
Stage 5	-5.4	-34.2
Stage 5	-5.6	-33.54
Stage 5	-5.8	-32.87
Stage 5	-6	-32.21
Stage 5	-6.2	-31.55
Stage 5	-6.4	-30.89
Stage 5	-6.6	-30.23
Stage 5	-6.8	-29.57
Stage 5	-7	-28.91
Stage 5	-7.2	-28.25
Stage 5	-7.4	-27.6
Stage 5	-7.6	-26.94
Stage 5	-7.8	-26.29
Stage 5	-8	-25.64
Stage 5	-8.2	-24.99
Stage 5	-8.4	-24.35
Stage 5	-8.6	-23.71
Stage 5	-8.8	-23.07
Stage 5	-9	-22.44
Stage 5	-9.2	-21.81
Stage 5	-9.4	-21.19
Stage 5	-9.6	-20.57
Stage 5	-9.8	-19.96
Stage 5	-10	-19.36
Stage 5	-10.2	-18.76

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 5	-10.4	-18.17
Stage 5	-10.6	-17.58
Stage 5	-10.8	-17.01
Stage 5	-11	-16.44
Stage 5	-11.2	-15.87
Stage 5	-11.4	-15.32
Stage 5	-11.6	-14.78
Stage 5	-11.8	-14.24
Stage 5	-12	-13.72
Stage 5	-12.2	-13.2
Stage 5	-12.4	-12.69
Stage 5	-12.6	-12.19
Stage 5	-12.8	-11.7
Stage 5	-13	-11.22
Stage 5	-13.2	-10.75
Stage 5	-13.4	-10.28
Stage 5	-13.6	-9.83
Stage 5	-13.8	-9.39
Stage 5	-14	-8.95
Stage 5	-14.2	-8.53
Stage 5	-14.4	-8.11
Stage 5	-14.6	-7.71
Stage 5	-14.8	-7.31
Stage 5	-15	-6.93
Stage 5	-15.2	-6.55
Stage 5	-15.4	-6.18
Stage 5	-15.6	-5.82
Stage 5	-15.8	-5.47
Stage 5	-16	-5.13
Stage 5	-16.2	-4.8
Stage 5	-16.4	-4.48
Stage 5	-16.6	-4.17
Stage 5	-16.8	-3.87
Stage 5	-17	-3.58
Stage 5	-17.2	-3.3
Stage 5	-17.4	-3.02
Stage 5	-17.6	-2.76
Stage 5	-17.8	-2.5
Stage 5	-18	-2.25
Stage 5	-18.2	-2.01
Stage 5	-18.4	-1.77
Stage 5	-18.6	-1.54
Stage 5	-18.8	-1.32
Stage 5	-19	-1.1

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 5	-19.2	-0.89
Stage 5	-19.4	-0.68
Stage 5	-19.6	-0.48
Stage 5	-19.8	-0.28
Stage 5	-20	-0.08
Stage 5	-20.2	0.11
Stage 5	-20.4	0.31
Stage 5	-20.6	0.49
Stage 5	-20.8	0.68
Stage 5	-21	0.87
Stage 5	-21.2	1.05
Stage 5	-21.4	1.24
Stage 5	-21.6	1.42
Stage 5	-21.8	1.61
Stage 5	-22	1.79

Tabella Spostamento Nominal - RIGHT Stage: Stage 6

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 6	-3	-57.96
Stage 6	-3.2	-56.99
Stage 6	-3.4	-56.02
Stage 6	-3.6	-55.05
Stage 6	-3.8	-54.09
Stage 6	-4	-53.12
Stage 6	-4.2	-52.15
Stage 6	-4.4	-51.18
Stage 6	-4.6	-50.21
Stage 6	-4.8	-49.24
Stage 6	-5	-48.28
Stage 6	-5.2	-47.31
Stage 6	-5.4	-46.34
Stage 6	-5.6	-45.38
Stage 6	-5.8	-44.41
Stage 6	-6	-43.45
Stage 6	-6.2	-42.49
Stage 6	-6.4	-41.53
Stage 6	-6.6	-40.57
Stage 6	-6.8	-39.62
Stage 6	-7	-38.66
Stage 6	-7.2	-37.71
Stage 6	-7.4	-36.77
Stage 6	-7.6	-35.82
Stage 6	-7.8	-34.88

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 6	-8	-33.95
Stage 6	-8.2	-33.02
Stage 6	-8.4	-32.1
Stage 6	-8.6	-31.18
Stage 6	-8.8	-30.27
Stage 6	-9	-29.37
Stage 6	-9.2	-28.47
Stage 6	-9.4	-27.58
Stage 6	-9.6	-26.71
Stage 6	-9.8	-25.84
Stage 6	-10	-24.98
Stage 6	-10.2	-24.14
Stage 6	-10.4	-23.3
Stage 6	-10.6	-22.48
Stage 6	-10.8	-21.67
Stage 6	-11	-20.87
Stage 6	-11.2	-20.09
Stage 6	-11.4	-19.31
Stage 6	-11.6	-18.56
Stage 6	-11.8	-17.81
Stage 6	-12	-17.09
Stage 6	-12.2	-16.37
Stage 6	-12.4	-15.67
Stage 6	-12.6	-14.99
Stage 6	-12.8	-14.32
Stage 6	-13	-13.67
Stage 6	-13.2	-13.03
Stage 6	-13.4	-12.41
Stage 6	-13.6	-11.8
Stage 6	-13.8	-11.21
Stage 6	-14	-10.63
Stage 6	-14.2	-10.07
Stage 6	-14.4	-9.53
Stage 6	-14.6	-9
Stage 6	-14.8	-8.48
Stage 6	-15	-7.98
Stage 6	-15.2	-7.5
Stage 6	-15.4	-7.03
Stage 6	-15.6	-6.58
Stage 6	-15.8	-6.14
Stage 6	-16	-5.72
Stage 6	-16.2	-5.31
Stage 6	-16.4	-4.92
Stage 6	-16.6	-4.54

Design Assumption: Nominal Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 6	-16.8	-4.18
Stage 6	-17	-3.83
Stage 6	-17.2	-3.49
Stage 6	-17.4	-3.17
Stage 6	-17.6	-2.86
Stage 6	-17.8	-2.56
Stage 6	-18	-2.28
Stage 6	-18.2	-2
Stage 6	-18.4	-1.74
Stage 6	-18.6	-1.48
Stage 6	-18.8	-1.24
Stage 6	-19	-1
Stage 6	-19.2	-0.77
Stage 6	-19.4	-0.55
Stage 6	-19.6	-0.33
Stage 6	-19.8	-0.12
Stage 6	-20	0.09
Stage 6	-20.2	0.3
Stage 6	-20.4	0.5
Stage 6	-20.6	0.7
Stage 6	-20.8	0.89
Stage 6	-21	1.09
Stage 6	-21.2	1.28
Stage 6	-21.4	1.47
Stage 6	-21.6	1.67
Stage 6	-21.8	1.86
Stage 6	-22	2.05

Inviluppi Spostamento Nominal

Tabella Inviluppi Spostamento Nominal Right wall

Design Assumption: Nominal Inviluppi: Spostamento Muro: RIGHT

Z (m)	Lato sinistro (mm)	Lato destro (mm)
-3	-57.961	0
-3.2	-56.992	0
-3.4	-56.023	0
-3.6	-55.054	0
-3.8	-54.085	0
-4	-53.117	0
-4.2	-52.148	0
-4.4	-51.18	0
-4.6	-50.211	0
-4.8	-49.244	0
-5	-48.276	0
-5.2	-47.309	0

Design Assumption: Nominal Inviluppi: Spostamento Muro: RIGHT

Z (m)	Lato sinistro (mm)	Lato destro (mm)
-5.4	-46.343	0
-5.6	-45.378	0
-5.8	-44.414	0
-6	-43.451	0
-6.2	-42.489	0
-6.4	-41.529	0
-6.6	-40.571	0
-6.8	-39.615	0
-7	-38.662	0
-7.2	-37.712	0
-7.4	-36.765	0
-7.6	-35.822	0
-7.8	-34.883	0
-8	-33.949	0
-8.2	-33.019	0
-8.4	-32.096	0
-8.6	-31.179	0
-8.8	-30.268	0
-9	-29.366	0
-9.2	-28.471	0
-9.4	-27.585	0
-9.6	-26.708	0
-9.8	-25.84	0
-10	-24.983	0
-10.2	-24.137	0
-10.4	-23.302	0
-10.6	-22.479	0
-10.8	-21.669	0
-11	-20.871	0
-11.2	-20.086	0
-11.4	-19.315	0
-11.6	-18.558	0
-11.8	-17.814	0
-12	-17.086	0
-12.2	-16.372	0
-12.4	-15.673	0
-12.6	-14.988	0
-12.8	-14.32	0
-13	-13.666	0
-13.2	-13.028	0
-13.4	-12.405	0
-13.6	-11.798	0
-13.8	-11.207	0
-14	-10.631	0

Design Assumption: Nominal Inviluppi: Spostamento Muro: RIGHT

Z (m)	Lato sinistro (mm)	Lato destro (mm)
-14.2	-10.07	0
-14.4	-9.525	0
-14.6	-8.996	0
-14.8	-8.482	0
-15	-7.983	0
-15.2	-7.499	0
-15.4	-7.031	0
-15.6	-6.578	0
-15.8	-6.14	0
-16	-5.718	0
-16.2	-5.31	0
-16.4	-4.917	0
-16.6	-4.539	0
-16.8	-4.176	0
-17	-3.884	0
-17.2	-3.619	0
-17.4	-3.364	0
-17.6	-3.118	0
-17.8	-2.882	0
-18	-2.654	0
-18.2	-2.435	0
-18.4	-2.224	0
-18.6	-2.021	0
-18.8	-1.826	0
-19	-1.637	0
-19.2	-1.455	0
-19.4	-1.279	0
-19.6	-1.108	0
-19.8	-0.942	0
-19.911	0	0
-20	-0.78	0.093
-20.2	-0.623	0.298
-20.4	-0.468	0.499
-20.6	-0.316	0.697
-20.8	-0.166	0.894
-21	-0.079	1.088
-21.2	-0.066	1.282
-21.4	-0.052	1.475
-21.6	-0.039	1.667
-21.8	-0.026	1.859
-22	-0.013	2.051

Risultati Paratia

Tabella Risultati Paratia Nominal - Stage: Stage 1

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-3	0	0
Stage 1	-3.2	0	0
Stage 1	-3.4	0	0
Stage 1	-3.6	0	0
Stage 1	-3.8	0	0
Stage 1	-4	0	0
Stage 1	-4.2	0	0
Stage 1	-4.4	0	0
Stage 1	-4.6	0	0
Stage 1	-4.8	0	0
Stage 1	-5	0	0
Stage 1	-5.2	0	0
Stage 1	-5.4	0	0
Stage 1	-5.6	0	0
Stage 1	-5.8	0	0
Stage 1	-6	0	0
Stage 1	-6.2	0	0
Stage 1	-6.4	0	0
Stage 1	-6.6	0	0
Stage 1	-6.8	0	0
Stage 1	-7	0	0
Stage 1	-7.2	0	0
Stage 1	-7.4	0	0
Stage 1	-7.6	0	0
Stage 1	-7.8	0	0
Stage 1	-8	0	0
Stage 1	-8.2	0	0
Stage 1	-8.4	0	0
Stage 1	-8.6	0	0
Stage 1	-8.8	0	0
Stage 1	-9	0	0
Stage 1	-9.2	0	0
Stage 1	-9.4	0	0
Stage 1	-9.6	0	0
Stage 1	-9.8	0	0
Stage 1	-10	0	0
Stage 1	-10.2	0	0
Stage 1	-10.4	0	0
Stage 1	-10.6	0	0
Stage 1	-10.8	0	0
Stage 1	-11	0	0
Stage 1	-11.2	0	0
Stage 1	-11.4	0	0
Stage 1	-11.6	0	0

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-11.8	0	0
Stage 1	-12	0	0
Stage 1	-12.2	0	0
Stage 1	-12.4	0	0
Stage 1	-12.6	0	0
Stage 1	-12.8	0	0
Stage 1	-13	0	0
Stage 1	-13.2	0	0
Stage 1	-13.4	0	0
Stage 1	-13.6	0	0
Stage 1	-13.8	0	0
Stage 1	-14	0	0
Stage 1	-14.2	0	0
Stage 1	-14.4	0	0
Stage 1	-14.6	0	0
Stage 1	-14.8	0	0
Stage 1	-15	0	0
Stage 1	-15.2	0	0
Stage 1	-15.4	0	0
Stage 1	-15.6	0	0
Stage 1	-15.8	0	0
Stage 1	-16	0	0
Stage 1	-16.2	0	0
Stage 1	-16.4	0	0
Stage 1	-16.6	0	0
Stage 1	-16.8	0	0
Stage 1	-17	0	0
Stage 1	-17.2	0	0
Stage 1	-17.4	0	0
Stage 1	-17.6	0	0
Stage 1	-17.8	0	0
Stage 1	-18	0	0
Stage 1	-18.2	0	0
Stage 1	-18.4	0	0
Stage 1	-18.6	0	0
Stage 1	-18.8	0	0
Stage 1	-19	0	0
Stage 1	-19.2	0	0
Stage 1	-19.4	0	0
Stage 1	-19.6	0	0
Stage 1	-19.8	0	0
Stage 1	-20	0	0
Stage 1	-20.2	0	0
Stage 1	-20.4	0	0

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-20.6	0	0
Stage 1	-20.8	0	0
Stage 1	-21	0	0
Stage 1	-21.2	0	0
Stage 1	-21.4	0	0
Stage 1	-21.6	0	0
Stage 1	-21.8	0	0
Stage 1	-22	0	0

Tabella Risultati Paratia Nominal - Stage: Stage 2

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-3	0	0
Stage 2	-3.2	0	0
Stage 2	-3.4	0	0
Stage 2	-3.6	0	0
Stage 2	-3.8	0	0
Stage 2	-4	0	0
Stage 2	-4.2	0	0
Stage 2	-4.4	0	0
Stage 2	-4.6	0	0
Stage 2	-4.8	0	0
Stage 2	-5	0	0
Stage 2	-5.2	0	0
Stage 2	-5.4	0	0
Stage 2	-5.6	0	0
Stage 2	-5.8	0	0
Stage 2	-6	0	0
Stage 2	-6.2	0	0
Stage 2	-6.4	0	0
Stage 2	-6.6	0	0
Stage 2	-6.8	0	0
Stage 2	-7	0	0
Stage 2	-7.2	0	0
Stage 2	-7.4	0	0
Stage 2	-7.6	0	0
Stage 2	-7.8	0	0
Stage 2	-8	0	0
Stage 2	-8.2	0	0
Stage 2	-8.4	0	0
Stage 2	-8.6	0	0
Stage 2	-8.8	0	0
Stage 2	-9	0	0
Stage 2	-9.2	0	0

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-9.4	0	0
Stage 2	-9.6	0	0
Stage 2	-9.8	0	0
Stage 2	-10	0	0
Stage 2	-10.2	0	0
Stage 2	-10.4	0	0
Stage 2	-10.6	0	0
Stage 2	-10.8	0	0
Stage 2	-11	0	0
Stage 2	-11.2	0	0
Stage 2	-11.4	0	0
Stage 2	-11.6	0	0
Stage 2	-11.8	0	0
Stage 2	-12	0	0
Stage 2	-12.2	0	0
Stage 2	-12.4	0	0
Stage 2	-12.6	0	0
Stage 2	-12.8	0	0
Stage 2	-13	0	0
Stage 2	-13.2	0	0
Stage 2	-13.4	0	0
Stage 2	-13.6	0	0
Stage 2	-13.8	0	0
Stage 2	-14	0	0
Stage 2	-14.2	0	0
Stage 2	-14.4	0	0
Stage 2	-14.6	0	0
Stage 2	-14.8	0	0
Stage 2	-15	0	0
Stage 2	-15.2	0	0
Stage 2	-15.4	0	0
Stage 2	-15.6	0	0
Stage 2	-15.8	0	0
Stage 2	-16	0	0
Stage 2	-16.2	0	0
Stage 2	-16.4	0	0
Stage 2	-16.6	0	0
Stage 2	-16.8	0	0
Stage 2	-17	0	0
Stage 2	-17.2	0	0
Stage 2	-17.4	0	0
Stage 2	-17.6	0	0
Stage 2	-17.8	0	0
Stage 2	-18	0	0

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-18.2	0	0
Stage 2	-18.4	0	0
Stage 2	-18.6	0	0
Stage 2	-18.8	0	0
Stage 2	-19	0	0
Stage 2	-19.2	0	0
Stage 2	-19.4	0	0
Stage 2	-19.6	0	0
Stage 2	-19.8	0	0
Stage 2	-20	0	0
Stage 2	-20.2	0	0
Stage 2	-20.4	0	0
Stage 2	-20.6	0	0
Stage 2	-20.8	0	0
Stage 2	-21	0	0
Stage 2	-21.2	0	0
Stage 2	-21.4	0	0
Stage 2	-21.6	0	0
Stage 2	-21.8	0	0
Stage 2	-22	0	0

Tabella Risultati Paratia Nominal - Stage: Stage 3

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 3	-3	0	0
Stage 3	-3.2	0	0
Stage 3	-3.2	0	0
Stage 3	-3.4	0.05	0.24
Stage 3	-3.6	0.19	0.71
Stage 3	-3.8	0.48	1.43
Stage 3	-4	0.95	2.38
Stage 3	-4.2	1.67	3.57
Stage 3	-4.4	2.67	5
Stage 3	-4.6	4	6.67
Stage 3	-4.8	5.72	8.57
Stage 3	-5	7.86	10.72
Stage 3	-5.2	10.48	13.1
Stage 3	-5.4	13.88	17.02
Stage 3	-5.6	18.14	21.29
Stage 3	-5.8	22.15	20.05
Stage 3	-6	25.7	17.75
Stage 3	-6.2	28.58	14.38
Stage 3	-6.4	30.75	10.84
Stage 3	-6.6	32.31	7.83

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 3	-6.8	33.38	5.34
Stage 3	-7	34.05	3.36
Stage 3	-7.2	34.43	1.91
Stage 3	-7.4	34.63	0.97
Stage 3	-7.6	34.67	0.21
Stage 3	-7.8	34.57	-0.49
Stage 3	-8	34.35	-1.12
Stage 3	-8.2	34.01	-1.68
Stage 3	-8.4	33.57	-2.19
Stage 3	-8.6	33.04	-2.64
Stage 3	-8.8	32.44	-3.03
Stage 3	-9	31.77	-3.36
Stage 3	-9.2	31.04	-3.64
Stage 3	-9.4	30.27	-3.86
Stage 3	-9.6	29.46	-4.02
Stage 3	-9.8	28.64	-4.13
Stage 3	-10	27.8	-4.19
Stage 3	-10.2	26.96	-4.2
Stage 3	-10.4	26.13	-4.15
Stage 3	-10.6	25.31	-4.06
Stage 3	-10.8	24.53	-3.92
Stage 3	-11	23.79	-3.72
Stage 3	-11.2	23.09	-3.48
Stage 3	-11.4	22.45	-3.2
Stage 3	-11.6	21.88	-2.86
Stage 3	-11.8	21.38	-2.49
Stage 3	-12	20.97	-2.06
Stage 3	-12.2	20.65	-1.59
Stage 3	-12.4	20.43	-1.08
Stage 3	-12.6	20.33	-0.53
Stage 3	-12.8	20.34	0.08
Stage 3	-13	20.54	1
Stage 3	-13.2	21.02	2.37
Stage 3	-13.4	21.85	4.2
Stage 3	-13.6	23.15	6.47
Stage 3	-13.8	24.99	9.2
Stage 3	-14	27.46	12.38
Stage 3	-14.2	30.67	16
Stage 3	-14.4	34.68	20.08
Stage 3	-14.6	39.6	24.6
Stage 3	-14.8	45.51	29.57
Stage 3	-15	52.51	34.98
Stage 3	-15.2	60.68	40.84
Stage 3	-15.4	70.11	47.14

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 3	-15.6	80.88	53.88
Stage 3	-15.8	93.08	60.97
Stage 3	-16	106.74	68.34
Stage 3	-16.2	121.94	75.98
Stage 3	-16.4	134.49	62.78
Stage 3	-16.6	144.58	50.43
Stage 3	-16.8	152.36	38.89
Stage 3	-17	157.99	28.14
Stage 3	-17.2	161.61	18.12
Stage 3	-17.4	163.37	8.81
Stage 3	-17.6	163.4	0.15
Stage 3	-17.8	161.82	-7.89
Stage 3	-18	158.76	-15.35
Stage 3	-18.2	154.3	-22.27
Stage 3	-18.4	148.56	-28.69
Stage 3	-18.6	141.63	-34.66
Stage 3	-18.8	133.59	-40.2
Stage 3	-19	124.52	-45.36
Stage 3	-19.2	114.53	-49.92
Stage 3	-19.4	103.9	-53.17
Stage 3	-19.6	92.86	-55.21
Stage 3	-19.8	81.63	-56.12
Stage 3	-20	70.43	-55.99
Stage 3	-20.2	59.46	-54.89
Stage 3	-20.4	48.89	-52.86
Stage 3	-20.6	38.89	-49.95
Stage 3	-20.8	29.65	-46.22
Stage 3	-21	21.34	-41.56
Stage 3	-21.2	14.14	-35.99
Stage 3	-21.4	8.23	-29.53
Stage 3	-21.6	3.79	-22.2
Stage 3	-21.8	0.99	-14.01
Stage 3	-22	0	-4.96

Tabella Risultati Paratia Nominal - Stage: Stage 4

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-3	0	0
Stage 4	-3.2	0	0
Stage 4	-3.2	0	0
Stage 4	-3.4	0.05	0.24
Stage 4	-3.6	0.19	0.71
Stage 4	-3.8	0.48	1.43
Stage 4	-4	0.95	2.38

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-4.2	1.67	3.57
Stage 4	-4.4	2.67	5
Stage 4	-4.6	4	6.67
Stage 4	-4.8	5.72	8.57
Stage 4	-5	7.86	10.72
Stage 4	-5.2	10.48	13.1
Stage 4	-5.4	13.88	17.02
Stage 4	-5.6	18.14	21.29
Stage 4	-5.8	23.32	25.91
Stage 4	-6	29.5	30.88
Stage 4	-6.2	36.74	36.19
Stage 4	-6.4	45.11	41.86
Stage 4	-6.6	54.68	47.87
Stage 4	-6.8	65.53	54.23
Stage 4	-7	77.72	60.94
Stage 4	-7.2	91.32	68
Stage 4	-7.4	106.4	75.4
Stage 4	-7.6	123.03	83.15
Stage 4	-7.8	141.28	91.26
Stage 4	-8	161.22	99.71
Stage 4	-8.2	182.92	108.5
Stage 4	-8.4	203.73	104.06
Stage 4	-8.6	223.46	98.62
Stage 4	-8.8	241.91	92.26
Stage 4	-9	258.91	84.99
Stage 4	-9.2	274.3	76.95
Stage 4	-9.4	288.18	69.43
Stage 4	-9.6	300.67	62.42
Stage 4	-9.8	311.85	55.91
Stage 4	-10	321.83	49.9
Stage 4	-10.2	330.71	44.39
Stage 4	-10.4	338.58	39.37
Stage 4	-10.6	345.55	34.83
Stage 4	-10.8	351.7	30.76
Stage 4	-11	357.13	27.17
Stage 4	-11.2	361.94	24.05
Stage 4	-11.4	366.22	21.39
Stage 4	-11.6	370.06	19.18
Stage 4	-11.8	373.54	17.42
Stage 4	-12	376.76	16.1
Stage 4	-12.2	379.81	15.22
Stage 4	-12.4	382.76	14.77
Stage 4	-12.6	385.71	14.74
Stage 4	-12.8	388.73	15.13

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-13	391.98	16.22
Stage 4	-13.2	395.6	18.12
Stage 4	-13.4	399.77	20.83
Stage 4	-13.6	404.64	24.35
Stage 4	-13.8	410.37	28.66
Stage 4	-14	417.12	33.77
Stage 4	-14.2	425.05	39.65
Stage 4	-14.4	434.32	46.32
Stage 4	-14.6	445.07	53.76
Stage 4	-14.8	457.46	61.95
Stage 4	-15	471.64	70.91
Stage 4	-15.2	487.76	80.61
Stage 4	-15.4	505.97	91.05
Stage 4	-15.6	526.42	102.22
Stage 4	-15.8	549.22	114.04
Stage 4	-16	574.5	126.4
Stage 4	-16.2	602.36	139.3
Stage 4	-16.4	622.62	101.26
Stage 4	-16.6	635.84	66.11
Stage 4	-16.8	642.59	33.76
Stage 4	-17	643.41	4.1
Stage 4	-17.2	638.82	-22.96
Stage 4	-17.4	629.31	-47.52
Stage 4	-17.6	615.38	-69.68
Stage 4	-17.8	597.47	-89.54
Stage 4	-18	576.03	-107.2
Stage 4	-18.2	551.48	-122.74
Stage 4	-18.4	524.22	-136.27
Stage 4	-18.6	494.65	-147.86
Stage 4	-18.8	463.13	-157.61
Stage 4	-19	430.01	-165.58
Stage 4	-19.2	395.64	-171.86
Stage 4	-19.4	360.34	-176.52
Stage 4	-19.6	324.41	-179.61
Stage 4	-19.8	288.17	-181.2
Stage 4	-20	251.9	-181.34
Stage 4	-20.2	215.89	-180.07
Stage 4	-20.4	180.4	-177.43
Stage 4	-20.6	145.71	-173.46
Stage 4	-20.8	112.61	-165.51
Stage 4	-21	81.99	-153.08
Stage 4	-21.2	54.91	-135.42
Stage 4	-21.4	32.29	-113.08
Stage 4	-21.6	15.02	-86.36

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-21.8	3.97	-55.27
Stage 4	-22	0	-19.83

Tabella Risultati Paratia Nominal - Stage: Stage 5

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-3	0	0
Stage 5	-3.2	0	0
Stage 5	-3.2	0	0
Stage 5	-3.4	0.06	0.29
Stage 5	-3.6	0.23	0.87
Stage 5	-3.8	0.58	1.73
Stage 5	-4	1.15	2.89
Stage 5	-4.2	2.02	4.33
Stage 5	-4.4	3.23	6.06
Stage 5	-4.6	4.85	8.08
Stage 5	-4.8	6.93	10.39
Stage 5	-5	9.52	12.99
Stage 5	-5.2	12.7	15.87
Stage 5	-5.4	16.7	20.02
Stage 5	-5.6	21.61	24.53
Stage 5	-5.8	27.49	29.41
Stage 5	-6	34.42	34.65
Stage 5	-6.2	42.47	40.27
Stage 5	-6.4	51.72	46.25
Stage 5	-6.6	62.24	52.6
Stage 5	-6.8	74.1	59.32
Stage 5	-7	87.39	66.4
Stage 5	-7.2	102.16	73.86
Stage 5	-7.4	118.49	81.68
Stage 5	-7.6	136.47	89.87
Stage 5	-7.8	156.15	98.42
Stage 5	-8	177.62	107.35
Stage 5	-8.2	200.95	116.64
Stage 5	-8.4	225.98	125.14
Stage 5	-8.6	252.32	131.69
Stage 5	-8.8	279.57	136.29
Stage 5	-9	307.36	138.94
Stage 5	-9.2	335.29	139.64
Stage 5	-9.4	362.97	138.39
Stage 5	-9.6	390	135.18
Stage 5	-9.8	416.01	130.03
Stage 5	-10	440.59	122.92
Stage 5	-10.2	463.39	113.98

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-10.4	484.45	105.32
Stage 5	-10.6	503.84	96.95
Stage 5	-10.8	521.62	88.87
Stage 5	-11	537.83	81.06
Stage 5	-11.2	552.53	73.53
Stage 5	-11.4	565.79	66.26
Stage 5	-11.6	577.64	59.27
Stage 5	-11.8	588.15	52.53
Stage 5	-12	597.36	46.06
Stage 5	-12.2	605.32	39.83
Stage 5	-12.4	612.09	33.85
Stage 5	-12.6	617.72	28.11
Stage 5	-12.8	622.24	22.62
Stage 5	-13	625.76	17.61
Stage 5	-13.2	628.4	13.19
Stage 5	-13.4	630.27	9.35
Stage 5	-13.6	631.49	6.07
Stage 5	-13.8	632.16	3.36
Stage 5	-14	632.39	1.19
Stage 5	-14.2	632.31	-0.44
Stage 5	-14.4	632	-1.53
Stage 5	-14.6	631.58	-2.1
Stage 5	-14.8	631.15	-2.15
Stage 5	-15	630.81	-1.69
Stage 5	-15.2	630.67	-0.73
Stage 5	-15.4	630.81	0.72
Stage 5	-15.6	631.34	2.66
Stage 5	-15.8	632.35	5.02
Stage 5	-16	633.89	7.73
Stage 5	-16.2	636.04	10.75
Stage 5	-16.4	633.57	-12.37
Stage 5	-16.6	626.86	-33.53
Stage 5	-16.8	616.3	-52.8
Stage 5	-17	602.26	-70.22
Stage 5	-17.2	585.09	-85.84
Stage 5	-17.4	565.15	-99.71
Stage 5	-17.6	542.77	-111.88
Stage 5	-17.8	518.3	-122.38
Stage 5	-18	492.02	-131.41
Stage 5	-18.2	464.21	-139.04
Stage 5	-18.4	435.15	-145.3
Stage 5	-18.6	405.1	-150.21
Stage 5	-18.8	374.34	-153.8
Stage 5	-19	343.13	-156.08

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-19.2	311.71	-157.07
Stage 5	-19.4	280.36	-156.78
Stage 5	-19.6	249.31	-155.23
Stage 5	-19.8	218.79	-152.6
Stage 5	-20	189.01	-148.9
Stage 5	-20.2	160.18	-144.14
Stage 5	-20.4	132.52	-138.32
Stage 5	-20.6	106.23	-131.46
Stage 5	-20.8	81.71	-122.58
Stage 5	-21	59.41	-111.51
Stage 5	-21.2	39.81	-97.97
Stage 5	-21.4	23.45	-81.82
Stage 5	-21.6	10.9	-62.73
Stage 5	-21.8	2.86	-40.22
Stage 5	-22	0	-14.31

Tabella Risultati Paratia Nominal - Stage: Stage 6

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-3	0	1.4
Stage 6	-3.2	0.28	1.4
Stage 6	-3.4	1.18	4.49
Stage 6	-3.6	2.74	7.84
Stage 6	-3.8	5.03	11.45
Stage 6	-4	8.1	15.31
Stage 6	-4.2	11.98	19.43
Stage 6	-4.4	16.75	23.81
Stage 6	-4.6	22.44	28.45
Stage 6	-4.8	29.12	33.4
Stage 6	-5	36.84	38.62
Stage 6	-5.2	45.66	44.1
Stage 6	-5.4	55.85	50.97
Stage 6	-5.6	67.49	58.19
Stage 6	-5.8	80.64	65.76
Stage 6	-6	95.38	73.68
Stage 6	-6.2	111.77	81.96
Stage 6	-6.4	129.89	90.59
Stage 6	-6.6	149.8	99.57
Stage 6	-6.8	171.58	108.9
Stage 6	-7	195.3	118.58
Stage 6	-7.2	221.02	128.62
Stage 6	-7.4	248.82	139.01
Stage 6	-7.6	278.77	149.74
Stage 6	-7.8	310.94	160.83

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-8	345.41	172.35
Stage 6	-8.2	382.11	183.51
Stage 6	-8.4	419.79	188.42
Stage 6	-8.6	458.18	191.92
Stage 6	-8.8	496.98	194.02
Stage 6	-9	535.93	194.74
Stage 6	-9.2	574.74	194.08
Stage 6	-9.4	613.17	192.13
Stage 6	-9.6	650.95	188.89
Stage 6	-9.8	687.82	184.36
Stage 6	-10	723.53	178.54
Stage 6	-10.2	757.82	171.46
Stage 6	-10.4	790.56	163.69
Stage 6	-10.6	821.61	155.25
Stage 6	-10.8	850.83	146.13
Stage 6	-11	878.09	136.32
Stage 6	-11.2	903.26	125.82
Stage 6	-11.4	926.19	114.64
Stage 6	-11.6	946.74	102.77
Stage 6	-11.8	964.91	90.85
Stage 6	-12	980.8	79.45
Stage 6	-12.2	994.51	68.57
Stage 6	-12.4	1006.15	58.17
Stage 6	-12.6	1015.8	48.27
Stage 6	-12.8	1023.57	38.82
Stage 6	-13	1029.53	29.79
Stage 6	-13.2	1033.78	21.28
Stage 6	-13.4	1036.5	13.59
Stage 6	-13.6	1037.84	6.72
Stage 6	-13.8	1037.97	0.64
Stage 6	-14	1037.04	-4.64
Stage 6	-14.2	1035.21	-9.15
Stage 6	-14.4	1032.63	-12.91
Stage 6	-14.6	1029.45	-15.91
Stage 6	-14.8	1025.81	-18.19
Stage 6	-15	1021.86	-19.74
Stage 6	-15.2	1017.74	-20.59
Stage 6	-15.4	1013.59	-20.75
Stage 6	-15.6	1009.55	-20.23
Stage 6	-15.8	1005.73	-19.12
Stage 6	-16	1002.22	-17.51
Stage 6	-16.2	999.14	-15.42
Stage 6	-16.4	989.4	-48.71
Stage 6	-16.6	973.45	-79.73

Design Assumption: Nominal Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-16.8	951.73	-108.61
Stage 6	-17	924.64	-135.47
Stage 6	-17.2	892.63	-160.02
Stage 6	-17.4	856.45	-180.92
Stage 6	-17.6	816.77	-198.4
Stage 6	-17.8	774.23	-212.65
Stage 6	-18	729.43	-224.01
Stage 6	-18.2	682.89	-232.7
Stage 6	-18.4	635.12	-238.87
Stage 6	-18.6	586.58	-242.67
Stage 6	-18.8	537.74	-244.21
Stage 6	-19	489	-243.73
Stage 6	-19.2	440.7	-241.49
Stage 6	-19.4	393.18	-237.59
Stage 6	-19.6	346.76	-232.1
Stage 6	-19.8	301.74	-225.08
Stage 6	-20	258.43	-216.6
Stage 6	-20.2	217.09	-206.69
Stage 6	-20.4	178	-195.41
Stage 6	-20.6	141.44	-182.79
Stage 6	-20.8	107.87	-167.87
Stage 6	-21	77.77	-150.49
Stage 6	-21.2	51.7	-130.39
Stage 6	-21.4	30.21	-107.44
Stage 6	-21.6	13.94	-81.32
Stage 6	-21.8	3.63	-51.56
Stage 6	-22	0	-18.16

Inviluppi Risultati Paratia Nominal

Tabella Inviluppi Momento Nominal WallElement

Design Assumption: Nominal Inviluppi: Momento Muro: WallElement

Z (m)	Lato sinistro (kN*m/m)	Lato destro (kN*m/m)
-3	0	0
-3.2	0	0.28
-3.4	0	1.177
-3.6	0	2.745
-3.8	0	5.034
-4	0	8.096
-4.2	0	11.983
-4.4	0	16.746
-4.6	0	22.436
-4.8	0	29.116
-5	0	36.839
-5.2	0	45.659

Design Assumption: Nominal Inviluppi: Momento Muro: WallElement

Z (m)	Lato sinistro (kN*m/m)	Lato destro (kN*m/m)
-5.4	0	55.852
-5.6	0	67.489
-5.8	0	80.641
-6	0	95.378
-6.2	0	111.77
-6.4	0	129.888
-6.6	0	149.802
-6.8	0	171.582
-7	0	195.299
-7.2	0	221.023
-7.4	0	248.824
-7.6	0	278.773
-7.8	0	310.94
-8	0	345.409
-8.2	0	382.11
-8.4	0	419.794
-8.6	0	458.177
-8.8	0	496.981
-9	0	535.929
-9.2	0	574.745
-9.4	0	613.17
-9.6	0	650.948
-9.8	0	687.819
-10	0	723.526
-10.2	0	757.816
-10.4	0	790.555
-10.6	0	821.606
-10.8	0	850.831
-11	0	878.094
-11.2	0	903.259
-11.4	0	926.187
-11.6	0	946.74
-11.8	0	964.91
-12	0	980.801
-12.2	0	994.514
-12.4	0	1006.149
-12.6	0	1015.802
-12.8	0	1023.567
-13	0	1029.526
-13.2	0	1033.781
-13.4	0	1036.499
-13.6	0	1037.842
-13.8	0	1037.971
-14	0	1037.043

Design Assumption: Nominal Inviluppi: Momento Muro: WallElement

Z (m)	Lato sinistro (kN*m/m)	Lato destro (kN*m/m)
-14.2	0	1035.212
-14.4	0	1032.63
-14.6	0	1029.447
-14.8	0	1025.81
-15	0	1021.862
-15.2	0	1017.743
-15.4	0	1013.594
-15.6	0	1009.549
-15.8	0	1005.726
-16	0	1002.224
-16.2	0	999.14
-16.4	0	989.397
-16.6	0	973.452
-16.8	0	951.73
-17	0	924.635
-17.2	0	892.632
-17.4	0	856.447
-17.6	0	816.766
-17.8	0	774.234
-18	0	729.432
-18.2	0	682.892
-18.4	0	635.117
-18.6	0	586.584
-18.8	0	537.741
-19	0	488.996
-19.2	0	440.697
-19.4	0	393.18
-19.6	0	346.761
-19.8	0	301.745
-20	0	258.425
-20.2	0	217.086
-20.4	0	180.402
-20.6	0	145.71
-20.8	0	112.608
-21	0	81.992
-21.2	0	54.909
-21.4	0	32.292
-21.6	0	15.02
-21.8	0	3.965
-22	0	0

Tabella Inviluppi Taglio Nominal WallElement

Design Assumption: Nominal Inviluppi: Taglio Muro: WallElement

Z (m)	Lato sinistro (kN/m)	Lato destro (kN/m)
-3	0	1.398

Design Assumption: Nominal Inviluppi: Taglio Muro: WallElement

Z (m)	Lato sinistro (kN/m)	Lato destro (kN/m)
-3.2	0	4.487
-3.4	0	7.838
-3.6	0	11.446
-3.8	0	15.312
-4	0	19.434
-4.2	0	23.813
-4.4	0	28.45
-4.6	0	33.401
-4.8	0	38.617
-5	0	44.096
-5.2	0	50.966
-5.4	0	58.187
-5.6	0	65.76
-5.8	0	73.685
-6	0	81.961
-6.2	0	90.589
-6.4	0	99.569
-6.6	0	108.901
-6.8	0	118.584
-7	0	128.619
-7.2	0	139.006
-7.4	0	149.744
-7.6	0.486	160.835
-7.8	1.116	172.347
-8	1.685	183.507
-8.2	2.193	188.417
-8.4	2.641	191.915
-8.6	3.03	194.023
-8.8	3.362	194.74
-9	3.637	194.74
-9.2	3.857	194.078
-9.4	4.022	192.127
-9.6	4.133	188.886
-9.8	4.191	184.356
-10	4.198	178.536
-10.2	4.198	171.456
-10.4	4.154	163.695
-10.6	4.06	155.252
-10.8	3.916	146.127
-11	3.724	136.317
-11.2	3.484	125.822
-11.4	3.197	114.639
-11.6	2.864	102.768
-11.8	2.485	90.848

Design Assumption: Nominal Inviluppi: Taglio Muro: WallElement

Z (m)	Lato sinistro (kN/m)	Lato destro (kN/m)
-12	2.062	79.454
-12.2	1.594	68.567
-12.4	1.083	58.175
-12.6	0.529	48.265
-12.8	0	38.824
-13	0	29.793
-13.2	0	21.278
-13.4	0	24.347
-13.6	0	28.661
-13.8	4.642	33.766
-14	9.155	39.654
-14.2	12.907	46.32
-14.4	15.914	53.756
-14.6	18.187	61.955
-14.8	19.742	70.909
-15	20.59	80.611
-15.2	20.747	91.052
-15.4	20.747	102.224
-15.6	20.225	114.036
-15.8	19.115	126.398
-16	17.509	139.3
-16.2	48.715	139.3
-16.4	79.727	101.262
-16.6	108.61	66.112
-16.8	135.471	38.894
-17	160.017	28.138
-17.2	180.925	18.121
-17.4	198.403	8.806
-17.6	212.649	0.15
-17.8	224.013	0
-18	232.702	0
-18.2	238.872	0
-18.4	242.666	0
-18.6	244.215	0
-18.8	244.215	0
-19	243.728	0
-19.2	241.49	0
-19.4	237.588	0
-19.6	232.096	0
-19.8	225.08	0
-20	216.597	0
-20.2	206.694	0
-20.4	195.414	0
-20.6	182.788	0

Design Assumption: Nominal Inviluppi: Taglio Muro: WallElement

Z (m)	Lato sinistro (kN/m)	Lato destro (kN/m)
-20.8	167.866	0
-21	153.08	0
-21.2	135.418	0
-21.4	113.081	0
-21.6	86.362	0
-21.8	55.274	0
-22	19.827	0

Risultati Terreno

Tabella Risultati Terreno Right wall - Nominal - Stage 1

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato LEFT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 1	-3	0	0	UL-RL	0	0	0	0	0	0	0
Stage 1	-3.2	3.9	2.192	UL-RL	0	0	0	0	0	0	2.192
Stage 1	-3.4	7.8	4.384	UL-RL	0	0	0	0	0	0	4.384
Stage 1	-3.6	11.7	6.575	UL-RL	0	0	0	0	0	0	6.575
Stage 1	-3.8	15.6	8.767	UL-RL	0	0	0	0	0	0	8.767
Stage 1	-4	19.5	10.959	UL-RL	0	0	0	0	0	0	10.959
Stage 1	-4.2	23.4	13.151	UL-RL	0	0	0	0	0	0	13.151
Stage 1	-4.4	27.3	15.343	UL-RL	0	0	0	0	0	0	15.343
Stage 1	-4.6	31.2	17.534	UL-RL	0	0	0	0	0	0	17.534
Stage 1	-4.8	35.1	19.726	UL-RL	0	0	0	0	0	0	19.726
Stage 1	-5	39	21.918	UL-RL	0	0	0	0	0	0	21.918
Stage 1	-5.2	42.8	25.38	UL-RL	0	0	0	0	0	0	25.38
Stage 1	-5.4	46.6	27.634	UL-RL	0	0	0	0	0	0	27.634
Stage 1	-5.6	50.4	29.887	UL-RL	0	0	0	0	0	0	29.887
Stage 1	-5.8	54.2	32.141	UL-RL	0	0	0	0	0	0	32.141
Stage 1	-6	58	34.394	UL-RL	0	0	0	0	0	0	34.394
Stage 1	-6.2	61.8	36.647	UL-RL	0	0	0	0	0	0	36.647
Stage 1	-6.4	65.6	38.901	UL-RL	0	0	0	0	0	0	38.901
Stage 1	-6.6	69.4	41.154	UL-RL	0	0	0	0	0	0	41.154
Stage 1	-6.8	73.2	43.408	UL-RL	0	0	0	0	0	0	43.408
Stage 1	-7	77	45.661	UL-RL	0	0	0	0	0	0	45.661
Stage 1	-7.2	80.8	47.914	UL-RL	0	0	0	0	0	0	47.914
Stage 1	-7.4	84.6	50.168	UL-RL	0	0	0	0	0	0	50.168
Stage 1	-7.6	88.4	52.421	UL-RL	0	0	0	0	0	0	52.421
Stage 1	-7.8	92.2	54.675	UL-RL	0	0	0	0	0	0	54.675
Stage 1	-8	96	56.928	UL-RL	0	0	0	0	0	0	56.928
Stage 1	-8.2	99.8	59.181	UL-RL	0	0	0	0	0	0	59.181
Stage 1	-8.4	103.6	61.435	UL-RL	0	0	0	0	0	0	61.435
Stage 1	-8.6	107.4	63.688	UL-RL	0	0	0	0	0	0	63.688
Stage 1	-8.8	111.2	65.942	UL-RL	0	0	0	0	0	0	65.942
Stage 1	-9	115	68.195	UL-RL	0	0	0	0	0	0	68.195
Stage 1	-9.2	118.8	70.448	UL-RL	0	0	0	0	0	0	70.448

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato LEFT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 1	-9.4	122.6	72.702	UL-RL	0	0	0	0	0	0	72.702
Stage 1	-9.6	126.4	74.955	UL-RL	0	0	0	0	0	0	74.955
Stage 1	-9.8	130.2	77.209	UL-RL	0	0	0	0	0	0	77.209
Stage 1	-10	134	79.462	UL-RL	0	0	0	0	0	0	79.462
Stage 1	-10.2	137.8	81.715	UL-RL	0	0	0	0	0	0	81.715
Stage 1	-10.4	141.6	83.969	UL-RL	0	0	0	0	0	0	83.969
Stage 1	-10.6	145.4	86.222	UL-RL	0	0	0	0	0	0	86.222
Stage 1	-10.8	149.2	88.475	UL-RL	0	0	0	0	0	0	88.475
Stage 1	-11	153	90.729	UL-RL	0	0	0	0	0	0	90.729
Stage 1	-11.2	156.8	92.982	UL-RL	0	0	0	0	0	0	92.982
Stage 1	-11.4	160.6	95.236	UL-RL	0	0	0	0	0	0	95.236
Stage 1	-11.6	164.4	97.489	UL-RL	0	0	0	0	0	0	97.489
Stage 1	-11.8	168.2	99.742	UL-RL	0	0	0	0	0	0	99.742
Stage 1	-12	172	101.996	UL-RL	0	0	0	0	0	0	101.996
Stage 1	-12.2	175.8	104.249	UL-RL	0	0	0	0	0	0	104.249
Stage 1	-12.4	179.6	106.503	UL-RL	0	0	0	0	0	0	106.503
Stage 1	-12.6	183.4	108.756	UL-RL	0	0	0	0	0	0	108.756
Stage 1	-12.8	187.2	111.01	UL-RL	0	0	0	0	0	0	111.01
Stage 1	-13	191	113.263	UL-RL	0	0	0	0	0	0	113.263
Stage 1	-13.2	194.8	115.516	UL-RL	0	0	0	0	0	0	115.516
Stage 1	-13.4	198.6	117.77	UL-RL	0	0	0	0	0	0	117.77
Stage 1	-13.6	202.4	120.023	UL-RL	0	0	0	0	0	0	120.023
Stage 1	-13.8	206.2	122.276	UL-RL	0	0	0	0	0	0	122.276
Stage 1	-14	210	124.53	UL-RL	0	0	0	0	0	0	124.53
Stage 1	-14.2	213.8	126.783	UL-RL	0	0	0	0	0	0	126.783
Stage 1	-14.4	217.6	129.037	UL-RL	0	0	0	0	0	0	129.037
Stage 1	-14.6	221.4	131.29	UL-RL	0	0	0	0	0	0	131.29
Stage 1	-14.8	225.2	133.544	UL-RL	0	0	0	0	0	0	133.544
Stage 1	-15	229	135.797	UL-RL	0	0	0	0	0	0	135.797
Stage 1	-15.2	232.8	138.05	UL-RL	0	0	0	0	0	0	138.05
Stage 1	-15.4	236.6	140.304	UL-RL	0	0	0	0	0	0	140.304
Stage 1	-15.6	240.4	142.964	UL-RL	0	0	0	0	0	1	142.964
Stage 1	-15.8	244.2	146.031	UL-RL	0	0	0	0	0	3	146.031
Stage 1	-16	248	149.099	UL-RL	0	0	0	0	0	5	149.099
Stage 1	-16.2	252	94.465	UL-RL	0	0	0	0	0	7	94.465
Stage 1	-16.4	256	97.179	UL-RL	0	0	0	0	0	9	97.179
Stage 1	-16.6	260	99.893	UL-RL	0	0	0	0	0	11	99.893
Stage 1	-16.8	264	102.607	UL-RL	0	0	0	0	0	13	102.607
Stage 1	-17	268	105.321	UL-RL	0	0	0	0	0	15	105.321
Stage 1	-17.2	272	108.035	UL-RL	0	0	0	0	0	17	108.035
Stage 1	-17.4	276	110.749	UL-RL	0	0	0	0	0	19	110.749
Stage 1	-17.6	280	113.463	UL-RL	0	0	0	0	0	21	113.463
Stage 1	-17.8	284	116.177	UL-RL	0	0	0	0	0	23	116.177
Stage 1	-18	288	118.891	UL-RL	0	0	0	0	0	25	118.891

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato LEFT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 1	-18.2	292	121.605	UL-RL	0	0	0	0	0	27	121.605
Stage 1	-18.4	296	124.319	UL-RL	0	0	0	0	0	29	124.319
Stage 1	-18.6	300	127.033	UL-RL	0	0	0	0	0	31	127.033
Stage 1	-18.8	304	129.747	UL-RL	0	0	0	0	0	33	129.747
Stage 1	-19	308	132.461	UL-RL	0	0	0	0	0	35	132.461
Stage 1	-19.2	312	135.175	UL-RL	0	0	0	0	0	37	135.175
Stage 1	-19.4	316	137.889	UL-RL	0	0	0	0	0	39	137.889
Stage 1	-19.6	320	140.603	UL-RL	0	0	0	0	0	41	140.603
Stage 1	-19.8	324	143.317	UL-RL	0	0	0	0	0	43	143.317
Stage 1	-20	328	146.031	UL-RL	0	0	0	0	0	45	146.031
Stage 1	-20.2	332	148.745	UL-RL	0	0	0	0	0	47	148.745
Stage 1	-20.4	336	151.459	UL-RL	0	0	0	0	0	49	151.459
Stage 1	-20.6	340	154.173	UL-RL	0	0	0	0	0	51	154.173
Stage 1	-20.8	344	156.887	UL-RL	0	0	0	0	0	53	156.887
Stage 1	-21	348	159.601	UL-RL	0	0	0	0	0	55	159.601
Stage 1	-21.2	352	162.315	UL-RL	0	0	0	0	0	57	162.315
Stage 1	-21.4	356	165.029	UL-RL	0	0	0	0	0	59	165.029
Stage 1	-21.6	360	167.743	UL-RL	0	0	0	0	0	61	167.743
Stage 1	-21.8	364	170.457	UL-RL	0	0	0	0	0	63	170.457
Stage 1	-22	368	173.171	UL-RL	0	0	0	0	0	65	173.171

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 1	-3	0	0	UL-RL	0	0	0	0	0	0	0
Stage 1	-3.2	3.9	2.192	UL-RL	0	0	0	0	0	0	2.192
Stage 1	-3.4	7.8	4.384	UL-RL	0	0	0	0	0	0	4.384
Stage 1	-3.6	11.7	6.575	UL-RL	0	0	0	0	0	0	6.575
Stage 1	-3.8	15.6	8.767	UL-RL	0	0	0	0	0	0	8.767
Stage 1	-4	19.5	10.959	UL-RL	0	0	0	0	0	0	10.959
Stage 1	-4.2	23.4	13.151	UL-RL	0	0	0	0	0	0	13.151
Stage 1	-4.4	27.3	15.343	UL-RL	0	0	0	0	0	0	15.343
Stage 1	-4.6	31.2	17.534	UL-RL	0	0	0	0	0	0	17.534
Stage 1	-4.8	35.1	19.726	UL-RL	0	0	0	0	0	0	19.726
Stage 1	-5	39	21.918	UL-RL	0	0	0	0	0	0	21.918
Stage 1	-5.2	42.8	25.38	UL-RL	0	0	0	0	0	0	25.38
Stage 1	-5.4	46.6	27.634	UL-RL	0	0	0	0	0	0	27.634
Stage 1	-5.6	50.4	29.887	UL-RL	0	0	0	0	0	0	29.887
Stage 1	-5.8	54.2	32.141	UL-RL	0	0	0	0	0	0	32.141
Stage 1	-6	58	34.394	UL-RL	0	0	0	0	0	0	34.394
Stage 1	-6.2	61.8	36.647	UL-RL	0	0	0	0	0	0	36.647
Stage 1	-6.4	65.6	38.901	UL-RL	0	0	0	0	0	0	38.901
Stage 1	-6.6	69.4	41.154	UL-RL	0	0	0	0	0	0	41.154
Stage 1	-6.8	73.2	43.408	UL-RL	0	0	0	0	0	0	43.408
Stage 1	-7	77	45.661	UL-RL	0	0	0	0	0	0	45.661
Stage 1	-7.2	80.8	47.914	UL-RL	0	0	0	0	0	0	47.914

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 1	-7.4	84.6	50.168	UL-RL	0	0	0	0	0	0	50.168
Stage 1	-7.6	88.4	52.421	UL-RL	0	0	0	0	0	0	52.421
Stage 1	-7.8	92.2	54.675	UL-RL	0	0	0	0	0	0	54.675
Stage 1	-8	96	56.928	UL-RL	0	0	0	0	0	0	56.928
Stage 1	-8.2	99.8	59.181	UL-RL	0	0	0	0	0	0	59.181
Stage 1	-8.4	103.6	61.435	UL-RL	0	0	0	0	0	0	61.435
Stage 1	-8.6	107.4	63.688	UL-RL	0	0	0	0	0	0	63.688
Stage 1	-8.8	111.2	65.942	UL-RL	0	0	0	0	0	0	65.942
Stage 1	-9	115	68.195	UL-RL	0	0	0	0	0	0	68.195
Stage 1	-9.2	118.8	70.448	UL-RL	0	0	0	0	0	0	70.448
Stage 1	-9.4	122.6	72.702	UL-RL	0	0	0	0	0	0	72.702
Stage 1	-9.6	126.4	74.955	UL-RL	0	0	0	0	0	0	74.955
Stage 1	-9.8	130.2	77.209	UL-RL	0	0	0	0	0	0	77.209
Stage 1	-10	134	79.462	UL-RL	0	0	0	0	0	0	79.462
Stage 1	-10.2	137.8	81.715	UL-RL	0	0	0	0	0	0	81.715
Stage 1	-10.4	141.6	83.969	UL-RL	0	0	0	0	0	0	83.969
Stage 1	-10.6	145.4	86.222	UL-RL	0	0	0	0	0	0	86.222
Stage 1	-10.8	149.2	88.475	UL-RL	0	0	0	0	0	0	88.475
Stage 1	-11	153	90.729	UL-RL	0	0	0	0	0	0	90.729
Stage 1	-11.2	156.8	92.982	UL-RL	0	0	0	0	0	0	92.982
Stage 1	-11.4	160.6	95.236	UL-RL	0	0	0	0	0	0	95.236
Stage 1	-11.6	164.4	97.489	UL-RL	0	0	0	0	0	0	97.489
Stage 1	-11.8	168.2	99.742	UL-RL	0	0	0	0	0	0	99.742
Stage 1	-12	172	101.996	UL-RL	0	0	0	0	0	0	101.996
Stage 1	-12.2	175.8	104.249	UL-RL	0	0	0	0	0	0	104.249
Stage 1	-12.4	179.6	106.503	UL-RL	0	0	0	0	0	0	106.503
Stage 1	-12.6	183.4	108.756	UL-RL	0	0	0	0	0	0	108.756
Stage 1	-12.8	187.2	111.01	UL-RL	0	0	0	0	0	0	111.01
Stage 1	-13	191	113.263	UL-RL	0	0	0	0	0	0	113.263
Stage 1	-13.2	194.8	115.516	UL-RL	0	0	0	0	0	0	115.516
Stage 1	-13.4	198.6	117.77	UL-RL	0	0	0	0	0	0	117.77
Stage 1	-13.6	202.4	120.023	UL-RL	0	0	0	0	0	0	120.023
Stage 1	-13.8	206.2	122.276	UL-RL	0	0	0	0	0	0	122.276
Stage 1	-14	210	124.53	UL-RL	0	0	0	0	0	0	124.53
Stage 1	-14.2	213.8	126.783	UL-RL	0	0	0	0	0	0	126.783
Stage 1	-14.4	217.6	129.037	UL-RL	0	0	0	0	0	0	129.037
Stage 1	-14.6	221.4	131.29	UL-RL	0	0	0	0	0	0	131.29
Stage 1	-14.8	225.2	133.544	UL-RL	0	0	0	0	0	0	133.544
Stage 1	-15	229	135.797	UL-RL	0	0	0	0	0	0	135.797
Stage 1	-15.2	232.8	138.05	UL-RL	0	0	0	0	0	0	138.05
Stage 1	-15.4	236.6	140.304	UL-RL	0	0	0	0	0	0	140.304
Stage 1	-15.6	240.4	142.964	UL-RL	0	0	0	0	0	1	142.964
Stage 1	-15.8	244.2	146.031	UL-RL	0	0	0	0	0	3	146.031
Stage 1	-16	248	149.099	UL-RL	0	0	0	0	0	5	149.099

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 1	-16.2	252	94.465	UL-RL	0	0	0	0	0	7	94.465
Stage 1	-16.4	256	97.179	UL-RL	0	0	0	0	0	9	97.179
Stage 1	-16.6	260	99.893	UL-RL	0	0	0	0	0	11	99.893
Stage 1	-16.8	264	102.607	UL-RL	0	0	0	0	0	13	102.607
Stage 1	-17	268	105.321	UL-RL	0	0	0	0	0	15	105.321
Stage 1	-17.2	272	108.035	UL-RL	0	0	0	0	0	17	108.035
Stage 1	-17.4	276	110.749	UL-RL	0	0	0	0	0	19	110.749
Stage 1	-17.6	280	113.463	UL-RL	0	0	0	0	0	21	113.463
Stage 1	-17.8	284	116.177	UL-RL	0	0	0	0	0	23	116.177
Stage 1	-18	288	118.891	UL-RL	0	0	0	0	0	25	118.891
Stage 1	-18.2	292	121.605	UL-RL	0	0	0	0	0	27	121.605
Stage 1	-18.4	296	124.319	UL-RL	0	0	0	0	0	29	124.319
Stage 1	-18.6	300	127.033	UL-RL	0	0	0	0	0	31	127.033
Stage 1	-18.8	304	129.747	UL-RL	0	0	0	0	0	33	129.747
Stage 1	-19	308	132.461	UL-RL	0	0	0	0	0	35	132.461
Stage 1	-19.2	312	135.175	UL-RL	0	0	0	0	0	37	135.175
Stage 1	-19.4	316	137.889	UL-RL	0	0	0	0	0	39	137.889
Stage 1	-19.6	320	140.603	UL-RL	0	0	0	0	0	41	140.603
Stage 1	-19.8	324	143.317	UL-RL	0	0	0	0	0	43	143.317
Stage 1	-20	328	146.031	UL-RL	0	0	0	0	0	45	146.031
Stage 1	-20.2	332	148.745	UL-RL	0	0	0	0	0	47	148.745
Stage 1	-20.4	336	151.459	UL-RL	0	0	0	0	0	49	151.459
Stage 1	-20.6	340	154.173	UL-RL	0	0	0	0	0	51	154.173
Stage 1	-20.8	344	156.887	UL-RL	0	0	0	0	0	53	156.887
Stage 1	-21	348	159.601	UL-RL	0	0	0	0	0	55	159.601
Stage 1	-21.2	352	162.315	UL-RL	0	0	0	0	0	57	162.315
Stage 1	-21.4	356	165.029	UL-RL	0	0	0	0	0	59	165.029
Stage 1	-21.6	360	167.743	UL-RL	0	0	0	0	0	61	167.743
Stage 1	-21.8	364	170.457	UL-RL	0	0	0	0	0	63	170.457
Stage 1	-22	368	173.171	UL-RL	0	0	0	0	0	65	173.171

Tabella Risultati Terreno Right wall - Nominal - Stage 2

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato LEFT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 2	-3	0	0	UL-RL	0	0	0	0	0	0	0
Stage 2	-3.2	3.9	2.192	UL-RL	0	0	0	0	0	0	2.192
Stage 2	-3.4	7.8	4.384	UL-RL	0	0	0	0	0	0	4.384
Stage 2	-3.6	11.7	6.575	UL-RL	0	0	0	0	0	0	6.575
Stage 2	-3.8	15.6	8.767	UL-RL	0	0	0	0	0	0	8.767
Stage 2	-4	19.5	10.959	UL-RL	0	0	0	0	0	0	10.959
Stage 2	-4.2	23.4	13.151	UL-RL	0	0	0	0	0	0	13.151
Stage 2	-4.4	27.3	15.343	UL-RL	0	0	0	0	0	0	15.343
Stage 2	-4.6	31.2	17.534	UL-RL	0	0	0	0	0	0	17.534
Stage 2	-4.8	35.1	19.726	UL-RL	0	0	0	0	0	0	19.726

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato LEFT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 2	-5	39	21.918	UL-RL	0	0	0	0	0	0	21.918
Stage 2	-5.2	42.8	25.38	UL-RL	0	0	0	0	0	0	25.38
Stage 2	-5.4	46.6	27.634	UL-RL	0	0	0	0	0	0	27.634
Stage 2	-5.6	50.4	29.887	UL-RL	0	0	0	0	0	0	29.887
Stage 2	-5.8	54.2	32.141	UL-RL	0	0	0	0	0	0	32.141
Stage 2	-6	58	34.394	UL-RL	0	0	0	0	0	0	34.394
Stage 2	-6.2	61.8	36.647	UL-RL	0	0	0	0	0	0	36.647
Stage 2	-6.4	65.6	38.901	UL-RL	0	0	0	0	0	0	38.901
Stage 2	-6.6	69.4	41.154	UL-RL	0	0	0	0	0	0	41.154
Stage 2	-6.8	73.2	43.408	UL-RL	0	0	0	0	0	0	43.408
Stage 2	-7	77	45.661	UL-RL	0	0	0	0	0	0	45.661
Stage 2	-7.2	80.8	47.914	UL-RL	0	0	0	0	0	0	47.914
Stage 2	-7.4	84.6	50.168	UL-RL	0	0	0	0	0	0	50.168
Stage 2	-7.6	88.4	52.421	UL-RL	0	0	0	0	0	0	52.421
Stage 2	-7.8	92.2	54.675	UL-RL	0	0	0	0	0	0	54.675
Stage 2	-8	96	56.928	UL-RL	0	0	0	0	0	0	56.928
Stage 2	-8.2	99.8	59.181	UL-RL	0	0	0	0	0	0	59.181
Stage 2	-8.4	103.6	61.435	UL-RL	0	0	0	0	0	0	61.435
Stage 2	-8.6	107.4	63.688	UL-RL	0	0	0	0	0	0	63.688
Stage 2	-8.8	111.2	65.942	UL-RL	0	0	0	0	0	0	65.942
Stage 2	-9	115	68.195	UL-RL	0	0	0	0	0	0	68.195
Stage 2	-9.2	118.8	70.448	UL-RL	0	0	0	0	0	0	70.448
Stage 2	-9.4	122.6	72.702	UL-RL	0	0	0	0	0	0	72.702
Stage 2	-9.6	126.4	74.955	UL-RL	0	0	0	0	0	0	74.955
Stage 2	-9.8	130.2	77.209	UL-RL	0	0	0	0	0	0	77.209
Stage 2	-10	134	79.462	UL-RL	0	0	0	0	0	0	79.462
Stage 2	-10.2	137.8	81.715	UL-RL	0	0	0	0	0	0	81.715
Stage 2	-10.4	141.6	83.969	UL-RL	0	0	0	0	0	0	83.969
Stage 2	-10.6	145.4	86.222	UL-RL	0	0	0	0	0	0	86.222
Stage 2	-10.8	149.2	88.475	UL-RL	0	0	0	0	0	0	88.475
Stage 2	-11	153	90.729	UL-RL	0	0	0	0	0	0	90.729
Stage 2	-11.2	156.8	92.982	UL-RL	0	0	0	0	0	0	92.982
Stage 2	-11.4	160.6	95.236	UL-RL	0	0	0	0	0	0	95.236
Stage 2	-11.6	164.4	97.489	UL-RL	0	0	0	0	0	0	97.489
Stage 2	-11.8	168.2	99.742	UL-RL	0	0	0	0	0	0	99.742
Stage 2	-12	172	101.996	UL-RL	0	0	0	0	0	0	101.996
Stage 2	-12.2	175.8	104.249	UL-RL	0	0	0	0	0	0	104.249
Stage 2	-12.4	179.6	106.503	UL-RL	0	0	0	0	0	0	106.503
Stage 2	-12.6	183.4	108.756	UL-RL	0	0	0	0	0	0	108.756
Stage 2	-12.8	187.2	111.01	UL-RL	0	0	0	0	0	0	111.01
Stage 2	-13	191	113.263	UL-RL	0	0	0	0	0	0	113.263
Stage 2	-13.2	194.8	115.516	UL-RL	0	0	0	0	0	0	115.516
Stage 2	-13.4	198.6	117.77	UL-RL	0	0	0	0	0	0	117.77
Stage 2	-13.6	202.4	120.023	UL-RL	0	0	0	0	0	0	120.023

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato LEFT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 2	-13.8	206.2	122.276	UL-RL	0	0	0	0	0	0	122.276
Stage 2	-14	210	124.53	UL-RL	0	0	0	0	0	0	124.53
Stage 2	-14.2	213.8	126.783	UL-RL	0	0	0	0	0	0	126.783
Stage 2	-14.4	217.6	129.037	UL-RL	0	0	0	0	0	0	129.037
Stage 2	-14.6	221.4	131.29	UL-RL	0	0	0	0	0	0	131.29
Stage 2	-14.8	225.2	133.544	UL-RL	0	0	0	0	0	0	133.544
Stage 2	-15	229	135.797	UL-RL	0	0	0	0	0	0	135.797
Stage 2	-15.2	232.8	138.05	UL-RL	0	0	0	0	0	0	138.05
Stage 2	-15.4	236.6	140.304	UL-RL	0	0	0	0	0	0	140.304
Stage 2	-15.6	240.4	142.964	UL-RL	0	0	0	0	0	1	142.964
Stage 2	-15.8	244.2	146.031	UL-RL	0	0	0	0	0	3	146.031
Stage 2	-16	248	149.099	UL-RL	0	0	0	0	0	5	149.099
Stage 2	-16.2	252	94.465	UL-RL	0	0	0	0	0	7	94.465
Stage 2	-16.4	256	97.179	UL-RL	0	0	0	0	0	9	97.179
Stage 2	-16.6	260	99.893	UL-RL	0	0	0	0	0	11	99.893
Stage 2	-16.8	264	102.607	UL-RL	0	0	0	0	0	13	102.607
Stage 2	-17	268	105.321	UL-RL	0	0	0	0	0	15	105.321
Stage 2	-17.2	272	108.035	UL-RL	0	0	0	0	0	17	108.035
Stage 2	-17.4	276	110.749	UL-RL	0	0	0	0	0	19	110.749
Stage 2	-17.6	280	113.463	UL-RL	0	0	0	0	0	21	113.463
Stage 2	-17.8	284	116.177	UL-RL	0	0	0	0	0	23	116.177
Stage 2	-18	288	118.891	UL-RL	0	0	0	0	0	25	118.891
Stage 2	-18.2	292	121.605	UL-RL	0	0	0	0	0	27	121.605
Stage 2	-18.4	296	124.319	UL-RL	0	0	0	0	0	29	124.319
Stage 2	-18.6	300	127.033	UL-RL	0	0	0	0	0	31	127.033
Stage 2	-18.8	304	129.747	UL-RL	0	0	0	0	0	33	129.747
Stage 2	-19	308	132.461	UL-RL	0	0	0	0	0	35	132.461
Stage 2	-19.2	312	135.175	UL-RL	0	0	0	0	0	37	135.175
Stage 2	-19.4	316	137.889	UL-RL	0	0	0	0	0	39	137.889
Stage 2	-19.6	320	140.603	UL-RL	0	0	0	0	0	41	140.603
Stage 2	-19.8	324	143.317	UL-RL	0	0	0	0	0	43	143.317
Stage 2	-20	328	146.031	UL-RL	0	0	0	0	0	45	146.031
Stage 2	-20.2	332	148.745	UL-RL	0	0	0	0	0	47	148.745
Stage 2	-20.4	336	151.459	UL-RL	0	0	0	0	0	49	151.459
Stage 2	-20.6	340	154.173	UL-RL	0	0	0	0	0	51	154.173
Stage 2	-20.8	344	156.887	UL-RL	0	0	0	0	0	53	156.887
Stage 2	-21	348	159.601	UL-RL	0	0	0	0	0	55	159.601
Stage 2	-21.2	352	162.315	UL-RL	0	0	0	0	0	57	162.315
Stage 2	-21.4	356	165.029	UL-RL	0	0	0	0	0	59	165.029
Stage 2	-21.6	360	167.743	UL-RL	0	0	0	0	0	61	167.743
Stage 2	-21.8	364	170.457	UL-RL	0	0	0	0	0	63	170.457
Stage 2	-22	368	173.171	UL-RL	0	0	0	0	0	65	173.171

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 2	-3	0	0	UL-RL	0	0	0	0	0	0	0
Stage 2	-3.2	3.9	2.192	UL-RL	0	0	0	0	0	0	2.192
Stage 2	-3.4	7.8	4.384	UL-RL	0	0	0	0	0	0	4.384
Stage 2	-3.6	11.7	6.575	UL-RL	0	0	0	0	0	0	6.575
Stage 2	-3.8	15.6	8.767	UL-RL	0	0	0	0	0	0	8.767
Stage 2	-4	19.5	10.959	UL-RL	0	0	0	0	0	0	10.959
Stage 2	-4.2	23.4	13.151	UL-RL	0	0	0	0	0	0	13.151
Stage 2	-4.4	27.3	15.343	UL-RL	0	0	0	0	0	0	15.343
Stage 2	-4.6	31.2	17.534	UL-RL	0	0	0	0	0	0	17.534
Stage 2	-4.8	35.1	19.726	UL-RL	0	0	0	0	0	0	19.726
Stage 2	-5	39	21.918	UL-RL	0	0	0	0	0	0	21.918
Stage 2	-5.2	42.8	25.38	UL-RL	0	0	0	0	0	0	25.38
Stage 2	-5.4	46.6	27.634	UL-RL	0	0	0	0	0	0	27.634
Stage 2	-5.6	50.4	29.887	UL-RL	0	0	0	0	0	0	29.887
Stage 2	-5.8	54.2	32.141	UL-RL	0	0	0	0	0	0	32.141
Stage 2	-6	58	34.394	UL-RL	0	0	0	0	0	0	34.394
Stage 2	-6.2	61.8	36.647	UL-RL	0	0	0	0	0	0	36.647
Stage 2	-6.4	65.6	38.901	UL-RL	0	0	0	0	0	0	38.901
Stage 2	-6.6	69.4	41.154	UL-RL	0	0	0	0	0	0	41.154
Stage 2	-6.8	73.2	43.408	UL-RL	0	0	0	0	0	0	43.408
Stage 2	-7	77	45.661	UL-RL	0	0	0	0	0	0	45.661
Stage 2	-7.2	80.8	47.914	UL-RL	0	0	0	0	0	0	47.914
Stage 2	-7.4	84.6	50.168	UL-RL	0	0	0	0	0	0	50.168
Stage 2	-7.6	88.4	52.421	UL-RL	0	0	0	0	0	0	52.421
Stage 2	-7.8	92.2	54.675	UL-RL	0	0	0	0	0	0	54.675
Stage 2	-8	96	56.928	UL-RL	0	0	0	0	0	0	56.928
Stage 2	-8.2	99.8	59.181	UL-RL	0	0	0	0	0	0	59.181
Stage 2	-8.4	103.6	61.435	UL-RL	0	0	0	0	0	0	61.435
Stage 2	-8.6	107.4	63.688	UL-RL	0	0	0	0	0	0	63.688
Stage 2	-8.8	111.2	65.942	UL-RL	0	0	0	0	0	0	65.942
Stage 2	-9	115	68.195	UL-RL	0	0	0	0	0	0	68.195
Stage 2	-9.2	118.8	70.448	UL-RL	0	0	0	0	0	0	70.448
Stage 2	-9.4	122.6	72.702	UL-RL	0	0	0	0	0	0	72.702
Stage 2	-9.6	126.4	74.955	UL-RL	0	0	0	0	0	0	74.955
Stage 2	-9.8	130.2	77.209	UL-RL	0	0	0	0	0	0	77.209
Stage 2	-10	134	79.462	UL-RL	0	0	0	0	0	0	79.462
Stage 2	-10.2	137.8	81.715	UL-RL	0	0	0	0	0	0	81.715
Stage 2	-10.4	141.6	83.969	UL-RL	0	0	0	0	0	0	83.969
Stage 2	-10.6	145.4	86.222	UL-RL	0	0	0	0	0	0	86.222
Stage 2	-10.8	149.2	88.475	UL-RL	0	0	0	0	0	0	88.475
Stage 2	-11	153	90.729	UL-RL	0	0	0	0	0	0	90.729
Stage 2	-11.2	156.8	92.982	UL-RL	0	0	0	0	0	0	92.982
Stage 2	-11.4	160.6	95.236	UL-RL	0	0	0	0	0	0	95.236
Stage 2	-11.6	164.4	97.489	UL-RL	0	0	0	0	0	0	97.489

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 2	-11.8	168.2	99.742	UL-RL	0	0	0	0	0	0	99.742
Stage 2	-12	172	101.996	UL-RL	0	0	0	0	0	0	101.996
Stage 2	-12.2	175.8	104.249	UL-RL	0	0	0	0	0	0	104.249
Stage 2	-12.4	179.6	106.503	UL-RL	0	0	0	0	0	0	106.503
Stage 2	-12.6	183.4	108.756	UL-RL	0	0	0	0	0	0	108.756
Stage 2	-12.8	187.2	111.01	UL-RL	0	0	0	0	0	0	111.01
Stage 2	-13	191	113.263	UL-RL	0	0	0	0	0	0	113.263
Stage 2	-13.2	194.8	115.516	UL-RL	0	0	0	0	0	0	115.516
Stage 2	-13.4	198.6	117.77	UL-RL	0	0	0	0	0	0	117.77
Stage 2	-13.6	202.4	120.023	UL-RL	0	0	0	0	0	0	120.023
Stage 2	-13.8	206.2	122.276	UL-RL	0	0	0	0	0	0	122.276
Stage 2	-14	210	124.53	UL-RL	0	0	0	0	0	0	124.53
Stage 2	-14.2	213.8	126.783	UL-RL	0	0	0	0	0	0	126.783
Stage 2	-14.4	217.6	129.037	UL-RL	0	0	0	0	0	0	129.037
Stage 2	-14.6	221.4	131.29	UL-RL	0	0	0	0	0	0	131.29
Stage 2	-14.8	225.2	133.544	UL-RL	0	0	0	0	0	0	133.544
Stage 2	-15	229	135.797	UL-RL	0	0	0	0	0	0	135.797
Stage 2	-15.2	232.8	138.05	UL-RL	0	0	0	0	0	0	138.05
Stage 2	-15.4	236.6	140.304	UL-RL	0	0	0	0	0	0	140.304
Stage 2	-15.6	240.4	142.964	UL-RL	0	0	0	0	0	1	142.964
Stage 2	-15.8	244.2	146.031	UL-RL	0	0	0	0	0	3	146.031
Stage 2	-16	248	149.099	UL-RL	0	0	0	0	0	5	149.099
Stage 2	-16.2	252	94.465	UL-RL	0	0	0	0	0	7	94.465
Stage 2	-16.4	256	97.179	UL-RL	0	0	0	0	0	9	97.179
Stage 2	-16.6	260	99.893	UL-RL	0	0	0	0	0	11	99.893
Stage 2	-16.8	264	102.607	UL-RL	0	0	0	0	0	13	102.607
Stage 2	-17	268	105.321	UL-RL	0	0	0	0	0	15	105.321
Stage 2	-17.2	272	108.035	UL-RL	0	0	0	0	0	17	108.035
Stage 2	-17.4	276	110.749	UL-RL	0	0	0	0	0	19	110.749
Stage 2	-17.6	280	113.463	UL-RL	0	0	0	0	0	21	113.463
Stage 2	-17.8	284	116.177	UL-RL	0	0	0	0	0	23	116.177
Stage 2	-18	288	118.891	UL-RL	0	0	0	0	0	25	118.891
Stage 2	-18.2	292	121.605	UL-RL	0	0	0	0	0	27	121.605
Stage 2	-18.4	296	124.319	UL-RL	0	0	0	0	0	29	124.319
Stage 2	-18.6	300	127.033	UL-RL	0	0	0	0	0	31	127.033
Stage 2	-18.8	304	129.747	UL-RL	0	0	0	0	0	33	129.747
Stage 2	-19	308	132.461	UL-RL	0	0	0	0	0	35	132.461
Stage 2	-19.2	312	135.175	UL-RL	0	0	0	0	0	37	135.175
Stage 2	-19.4	316	137.889	UL-RL	0	0	0	0	0	39	137.889
Stage 2	-19.6	320	140.603	UL-RL	0	0	0	0	0	41	140.603
Stage 2	-19.8	324	143.317	UL-RL	0	0	0	0	0	43	143.317
Stage 2	-20	328	146.031	UL-RL	0	0	0	0	0	45	146.031
Stage 2	-20.2	332	148.745	UL-RL	0	0	0	0	0	47	148.745
Stage 2	-20.4	336	151.459	UL-RL	0	0	0	0	0	49	151.459

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 2	-20.6	340	154.173	UL-RL	0	0	0	0	0	51	154.173
Stage 2	-20.8	344	156.887	UL-RL	0	0	0	0	0	53	156.887
Stage 2	-21	348	159.601	UL-RL	0	0	0	0	0	55	159.601
Stage 2	-21.2	352	162.315	UL-RL	0	0	0	0	0	57	162.315
Stage 2	-21.4	356	165.029	UL-RL	0	0	0	0	0	59	165.029
Stage 2	-21.6	360	167.743	UL-RL	0	0	0	0	0	61	167.743
Stage 2	-21.8	364	170.457	UL-RL	0	0	0	0	0	63	170.457
Stage 2	-22	368	173.171	UL-RL	0	0	0	0	0	65	173.171

Tabella Risultati Terreno Right wall - Nominal - Stage 3

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato LEFT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 3	-3	0	0	REMOVED	0	0	0	0	0	0	0
Stage 3	-3.2	0	0	REMOVED	0	0	0	0	0	0	0
Stage 3	-3.4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 3	-3.6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 3	-3.8	0	0	REMOVED	0	0	0	0	0	0	0
Stage 3	-4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 3	-4.2	0	0	REMOVED	0	0	0	0	0	0	0
Stage 3	-4.4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 3	-4.6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 3	-4.8	0	0	REMOVED	0	0	0	0	0	0	0
Stage 3	-5	0	0	REMOVED	0	0	0	0	0	0	0
Stage 3	-5.2	0	0	REMOVED	0	0	0	0	0	0	0
Stage 3	-5.4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 3	-5.6	1.9	29.282	PASSIVE	0	0	0	0	0	-11.451	29.282
Stage 3	-5.8	5.7	36.359	PASSIVE	0	0	0	0	0	-9.248	36.359
Stage 3	-6	9.5	43.435	PASSIVE	0	0	0	0	0	-7.046	43.435
Stage 3	-6.2	13.3	45.993	V-C	0	0	0	0	0	-7.689	45.993
Stage 3	-6.4	17.1	45.13	V-C	0	0	0	0	0	-10.486	45.13
Stage 3	-6.6	20.9	44.271	V-C	0	0	0	0	0	-13.28	44.271
Stage 3	-6.8	24.7	43.417	V-C	0	0	0	0	0	-16.071	43.417
Stage 3	-7	28.5	42.568	V-C	0	0	0	0	0	-18.859	42.568
Stage 3	-7.2	32.3	41.725	V-C	0	0	0	0	0	-21.643	41.725
Stage 3	-7.4	36.1	42.555	V-C	0	0	0	0	0	-22.756	42.555
Stage 3	-7.6	39.9	43.976	V-C	0	0	0	0	0	-23.28	43.976
Stage 3	-7.8	43.7	45.403	V-C	0	0	0	0	0	-23.801	45.403
Stage 3	-8	47.5	46.835	V-C	0	0	0	0	0	-24.318	46.835
Stage 3	-8.2	51.3	48.272	V-C	0	0	0	0	0	-24.832	48.272
Stage 3	-8.4	55.1	49.715	V-C	0	0	0	0	0	-25.342	49.715
Stage 3	-8.6	58.9	51.163	V-C	0	0	0	0	0	-25.849	51.163
Stage 3	-8.8	62.7	52.616	V-C	0	0	0	0	0	-26.353	52.616
Stage 3	-9	66.5	54.074	V-C	0	0	0	0	0	-26.854	54.074
Stage 3	-9.2	70.3	55.538	V-C	0	0	0	0	0	-27.351	55.538

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato LEFT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 3	-9.4	74.1	57.006	V-C	0	0	0	0	0	-27.846	57.006
Stage 3	-9.6	77.9	58.479	V-C	0	0	0	0	0	-28.337	58.479
Stage 3	-9.8	81.7	59.957	V-C	0	0	0	0	0	-28.825	59.957
Stage 3	-10	85.5	61.439	V-C	0	0	0	0	0	-29.311	61.439
Stage 3	-10.2	89.3	62.925	V-C	0	0	0	0	0	-29.794	62.925
Stage 3	-10.4	93.1	64.416	V-C	0	0	0	0	0	-30.274	64.416
Stage 3	-10.6	96.9	65.911	V-C	0	0	0	0	0	-30.752	65.911
Stage 3	-10.8	100.7	67.41	V-C	0	0	0	0	0	-31.227	67.41
Stage 3	-11	104.5	68.913	V-C	0	0	0	0	0	-31.699	68.913
Stage 3	-11.2	108.3	70.419	V-C	0	0	0	0	0	-32.169	70.419
Stage 3	-11.4	112.1	71.929	V-C	0	0	0	0	0	-32.637	71.929
Stage 3	-11.6	115.9	73.443	V-C	0	0	0	0	0	-33.103	73.443
Stage 3	-11.8	119.7	74.96	V-C	0	0	0	0	0	-33.567	74.96
Stage 3	-12	123.5	76.481	V-C	0	0	0	0	0	-34.028	76.481
Stage 3	-12.2	127.3	78.004	V-C	0	0	0	0	0	-34.488	78.004
Stage 3	-12.4	131.1	79.531	V-C	0	0	0	0	0	-34.945	79.531
Stage 3	-12.6	134.9	81.062	V-C	0	0	0	0	0	-35.4	81.062
Stage 3	-12.8	138.7	82.595	V-C	0	0	0	0	0	-35.853	82.595
Stage 3	-13	142.5	84.132	V-C	0	0	0	0	0	-36.305	84.132
Stage 3	-13.2	146.3	85.672	V-C	0	0	0	0	0	-36.754	85.672
Stage 3	-13.4	150.1	87.215	V-C	0	0	0	0	0	-37.201	87.215
Stage 3	-13.6	153.9	88.762	V-C	0	0	0	0	0	-37.646	88.762
Stage 3	-13.8	157.7	90.312	V-C	0	0	0	0	0	-38.089	90.312
Stage 3	-14	161.5	91.867	V-C	0	0	0	0	0	-38.529	91.867
Stage 3	-14.2	165.3	93.425	V-C	0	0	0	0	0	-38.966	93.425
Stage 3	-14.4	169.1	94.989	V-C	0	0	0	0	0	-39.4	94.989
Stage 3	-14.6	172.9	96.558	V-C	0	0	0	0	0	-39.831	96.558
Stage 3	-14.8	176.7	98.133	V-C	0	0	0	0	0	-40.258	98.133
Stage 3	-15	180.5	99.716	V-C	0	0	0	0	0	-40.681	99.716
Stage 3	-15.2	184.3	101.307	V-C	0	0	0	0	0	-41.098	101.307
Stage 3	-15.4	188.1	102.907	V-C	0	0	0	0	0	-41.509	102.907
Stage 3	-15.6	191.9	104.926	V-C	0	0	0	0	0	-40.913	104.926
Stage 3	-15.8	195.7	107.364	V-C	0	0	0	0	0	-39.309	107.364
Stage 3	-16	199.5	109.817	V-C	0	0	0	0	0	-37.696	109.817
Stage 3	-16.2	203.5	114.742	V-C	0	0	0	0	0	4.352	114.742
Stage 3	-16.4	207.5	112.842	V-C	0	0	0	0	0	3.275	112.842
Stage 3	-16.6	211.5	111.11	V-C	0	0	0	0	0	2.311	111.11
Stage 3	-16.8	215.5	109.559	V-C	0	0	0	0	0	1.468	109.559
Stage 3	-17	219.5	108.2	V-C	0	0	0	0	0	0.752	108.2
Stage 3	-17.2	223.5	107.038	V-C	0	0	0	0	0	0.169	107.038
Stage 3	-17.4	227.5	106.08	V-C	0	0	0	0	0	-0.279	106.08
Stage 3	-17.6	231.5	105.327	V-C	0	0	0	0	0	-0.591	105.327
Stage 3	-17.8	235.5	104.778	V-C	0	0	0	0	0	-0.766	104.778
Stage 3	-18	239.5	104.433	V-C	0	0	0	0	0	-0.805	104.433

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato LEFT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 3	-18.2	243.5	104.288	V-C	0	0	0	0	0	-0.712	104.288
Stage 3	-18.4	247.5	104.336	V-C	0	0	0	0	0	-0.489	104.336
Stage 3	-18.6	251.5	104.57	V-C	0	0	0	0	0	-0.142	104.57
Stage 3	-18.8	255.5	104.983	V-C	0	0	0	0	0	0.324	104.983
Stage 3	-19	259.5	105.563	V-C	0	0	0	0	0	0.901	105.563
Stage 3	-19.2	263.5	106.299	V-C	0	0	0	0	0	1.583	106.299
Stage 3	-19.4	267.5	107.18	V-C	0	0	0	0	0	2.361	107.18
Stage 3	-19.6	271.5	108.191	V-C	0	0	0	0	0	3.225	108.191
Stage 3	-19.8	275.5	109.319	V-C	0	0	0	0	0	4.168	109.319
Stage 3	-20	279.5	110.549	V-C	0	0	0	0	0	5.179	110.549
Stage 3	-20.2	283.5	111.868	V-C	0	0	0	0	0	6.249	111.868
Stage 3	-20.4	287.5	113.262	UL-RL	0	0	0	0	0	7.369	113.262
Stage 3	-20.6	291.5	114.717	UL-RL	0	0	0	0	0	8.53	114.717
Stage 3	-20.8	295.5	116.018	UL-RL	0	0	0	0	0	9.723	116.018
Stage 3	-21	299.5	117.36	UL-RL	0	0	0	0	0	10.942	117.36
Stage 3	-21.2	303.5	118.732	UL-RL	0	0	0	0	0	12.179	118.732
Stage 3	-21.4	307.5	120.123	UL-RL	0	0	0	0	0	13.428	120.123
Stage 3	-21.6	311.5	121.527	UL-RL	0	0	0	0	0	14.683	121.527
Stage 3	-21.8	315.5	122.936	UL-RL	0	0	0	0	0	15.943	122.936
Stage 3	-22	319.5	124.347	UL-RL	0	0	0	0	0	17.203	124.347

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 3	-3	0	0	ACTIVE	0	0	0	0	0	0	0
Stage 3	-3.2	3.9	1.191	ACTIVE	0	0	0	0	0	-0.4	1.191
Stage 3	-3.4	7.8	2.381	ACTIVE	0	0	0	0	0	-0.801	2.381
Stage 3	-3.6	11.7	3.572	ACTIVE	0	0	0	0	0	-1.201	3.572
Stage 3	-3.8	15.6	4.763	ACTIVE	0	0	0	0	0	-1.602	4.763
Stage 3	-4	19.5	5.954	ACTIVE	0	0	0	0	0	-2.002	5.954
Stage 3	-4.2	23.4	7.144	ACTIVE	0	0	0	0	0	-2.403	7.144
Stage 3	-4.4	27.3	8.335	ACTIVE	0	0	0	0	0	-2.803	8.335
Stage 3	-4.6	31.2	9.526	ACTIVE	0	0	0	0	0	-3.203	9.526
Stage 3	-4.8	35.1	10.717	ACTIVE	0	0	0	0	0	-3.604	10.717
Stage 3	-5	39	11.907	ACTIVE	0	0	0	0	0	-4.004	11.907
Stage 3	-5.2	42.8	19.613	ACTIVE	0	0	0	0	0	-2.136	19.613
Stage 3	-5.4	46.6	21.354	ACTIVE	0	0	0	0	0	-2.326	21.354
Stage 3	-5.6	50.4	23.096	ACTIVE	0	0	0	0	0	-2.515	23.096
Stage 3	-5.8	54.2	24.837	ACTIVE	0	0	0	0	0	-2.705	24.837
Stage 3	-6	58	26.578	ACTIVE	0	0	0	0	0	-2.895	26.578
Stage 3	-6.2	61.8	28.32	ACTIVE	0	0	0	0	0	-3.084	28.32
Stage 3	-6.4	65.6	30.061	ACTIVE	0	0	0	0	0	-3.274	30.061
Stage 3	-6.6	69.4	31.802	ACTIVE	0	0	0	0	0	-3.464	31.802
Stage 3	-6.8	73.2	33.544	ACTIVE	0	0	0	0	0	-3.653	33.544
Stage 3	-7	77	35.285	ACTIVE	0	0	0	0	0	-3.843	35.285
Stage 3	-7.2	80.8	37.026	ACTIVE	0	0	0	0	0	-4.033	37.026

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 3	-7.4	84.6	38.768	ACTIVE	0	0	0	0	0	-4.222	38.768
Stage 3	-7.6	88.4	40.509	ACTIVE	0	0	0	0	0	-4.412	40.509
Stage 3	-7.8	92.2	42.25	ACTIVE	0	0	0	0	0	-4.602	42.25
Stage 3	-8	96	43.992	ACTIVE	0	0	0	0	0	-4.791	43.992
Stage 3	-8.2	99.8	45.733	ACTIVE	0	0	0	0	0	-4.981	45.733
Stage 3	-8.4	103.6	47.474	ACTIVE	0	0	0	0	0	-5.171	47.474
Stage 3	-8.6	107.4	49.216	ACTIVE	0	0	0	0	0	-5.36	49.216
Stage 3	-8.8	111.2	50.957	ACTIVE	0	0	0	0	0	-5.55	50.957
Stage 3	-9	115	52.698	ACTIVE	0	0	0	0	0	-5.739	52.698
Stage 3	-9.2	118.8	54.44	ACTIVE	0	0	0	0	0	-5.929	54.44
Stage 3	-9.4	122.6	56.181	ACTIVE	0	0	0	0	0	-6.119	56.181
Stage 3	-9.6	126.4	57.922	ACTIVE	0	0	0	0	0	-6.308	57.922
Stage 3	-9.8	130.2	59.664	ACTIVE	0	0	0	0	0	-6.498	59.664
Stage 3	-10	134	61.405	ACTIVE	0	0	0	0	0	-6.688	61.405
Stage 3	-10.2	137.8	63.146	ACTIVE	0	0	0	0	0	-6.877	63.146
Stage 3	-10.4	141.6	64.888	ACTIVE	0	0	0	0	0	-7.067	64.888
Stage 3	-10.6	145.4	66.629	ACTIVE	0	0	0	0	0	-7.257	66.629
Stage 3	-10.8	149.2	68.37	ACTIVE	0	0	0	0	0	-7.446	68.37
Stage 3	-11	153	70.112	ACTIVE	0	0	0	0	0	-7.636	70.112
Stage 3	-11.2	156.8	71.853	ACTIVE	0	0	0	0	0	-7.826	71.853
Stage 3	-11.4	160.6	73.594	ACTIVE	0	0	0	0	0	-8.015	73.594
Stage 3	-11.6	164.4	75.336	ACTIVE	0	0	0	0	0	-8.205	75.336
Stage 3	-11.8	168.2	77.077	ACTIVE	0	0	0	0	0	-8.395	77.077
Stage 3	-12	172	78.818	ACTIVE	0	0	0	0	0	-8.584	78.818
Stage 3	-12.2	175.8	80.56	ACTIVE	0	0	0	0	0	-8.774	80.56
Stage 3	-12.4	179.6	82.301	ACTIVE	0	0	0	0	0	-8.964	82.301
Stage 3	-12.6	183.4	84.089	V-C	0	0	0	0	0	-9.136	84.089
Stage 3	-12.8	187.2	87.2	ACTIVE	0	0	0	0	0	-8.818	87.2
Stage 3	-13	191	91	ACTIVE	0	0	0	0	0	-8.246	91
Stage 3	-13.2	194.8	94.8	ACTIVE	0	0	0	0	0	-7.673	94.8
Stage 3	-13.4	198.6	98.6	ACTIVE	0	0	0	0	0	-7.1	98.6
Stage 3	-13.6	202.4	102.4	ACTIVE	0	0	0	0	0	-6.527	102.4
Stage 3	-13.8	206.2	106.2	ACTIVE	0	0	0	0	0	-5.954	106.2
Stage 3	-14	210	110	ACTIVE	0	0	0	0	0	-5.382	110
Stage 3	-14.2	213.8	113.8	ACTIVE	0	0	0	0	0	-4.809	113.8
Stage 3	-14.4	217.6	117.6	ACTIVE	0	0	0	0	0	-4.236	117.6
Stage 3	-14.6	221.4	121.4	ACTIVE	0	0	0	0	0	-3.663	121.4
Stage 3	-14.8	225.2	125.2	ACTIVE	0	0	0	0	0	-3.09	125.2
Stage 3	-15	229	129	ACTIVE	0	0	0	0	0	-2.517	129
Stage 3	-15.2	232.8	132.8	ACTIVE	0	0	0	0	0	-1.945	132.8
Stage 3	-15.4	236.6	136.6	ACTIVE	0	0	0	0	0	-1.372	136.6
Stage 3	-15.6	240.4	140.4	ACTIVE	0	0	0	0	0	0.05	140.4
Stage 3	-15.8	244.2	144.2	ACTIVE	0	0	0	0	0	2.322	144.2
Stage 3	-16	248	148	ACTIVE	0	0	0	0	0	4.593	148

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 3	-16.2	252	48.755	ACTIVE	0	0	0	0	0	-8.237	48.755
Stage 3	-16.4	256	51.096	ACTIVE	0	0	0	0	0	-6.361	51.096
Stage 3	-16.6	260	53.437	ACTIVE	0	0	0	0	0	-4.485	53.437
Stage 3	-16.8	264	55.778	ACTIVE	0	0	0	0	0	-2.61	55.778
Stage 3	-17	268	58.119	ACTIVE	0	0	0	0	0	-0.734	58.119
Stage 3	-17.2	272	60.459	ACTIVE	0	0	0	0	0	1.141	60.459
Stage 3	-17.4	276	62.8	ACTIVE	0	0	0	0	0	3.017	62.8
Stage 3	-17.6	280	65.141	ACTIVE	0	0	0	0	0	4.893	65.141
Stage 3	-17.8	284	67.482	ACTIVE	0	0	0	0	0	6.768	67.482
Stage 3	-18	288	69.823	ACTIVE	0	0	0	0	0	8.644	69.823
Stage 3	-18.2	292	72.164	ACTIVE	0	0	0	0	0	10.52	72.164
Stage 3	-18.4	296	74.505	ACTIVE	0	0	0	0	0	12.395	74.505
Stage 3	-18.6	300	76.846	ACTIVE	0	0	0	0	0	14.271	76.846
Stage 3	-18.8	304	79.186	ACTIVE	0	0	0	0	0	16.146	79.186
Stage 3	-19	308	82.789	V-C	0	0	0	0	0	18.443	82.789
Stage 3	-19.2	312	90.05	V-C	0	0	0	0	0	21.958	90.05
Stage 3	-19.4	316	96.98	V-C	0	0	0	0	0	25.364	96.98
Stage 3	-19.6	320	103.61	V-C	0	0	0	0	0	28.669	103.61
Stage 3	-19.8	324	109.971	V-C	0	0	0	0	0	31.885	109.971
Stage 3	-20	328	116.096	V-C	0	0	0	0	0	35.022	116.096
Stage 3	-20.2	332	122.018	V-C	0	0	0	0	0	38.091	122.018
Stage 3	-20.4	336	127.768	UL-RL	0	0	0	0	0	41.103	127.768
Stage 3	-20.6	340	133.377	UL-RL	0	0	0	0	0	44.069	133.377
Stage 3	-20.8	344	139.34	UL-RL	0	0	0	0	0	47.463	139.34
Stage 3	-21	348	145.209	UL-RL	0	0	0	0	0	50.822	145.209
Stage 3	-21.2	352	151.01	UL-RL	0	0	0	0	0	54.154	151.01
Stage 3	-21.4	356	156.765	UL-RL	0	0	0	0	0	57.467	156.765
Stage 3	-21.6	360	162.492	UL-RL	0	0	0	0	0	60.769	162.492
Stage 3	-21.8	364	168.206	UL-RL	0	0	0	0	0	64.066	168.206
Stage 3	-22	368	173.916	UL-RL	0	0	0	0	0	67.361	173.916

Tabella Risultati Terreno Right wall - Nominal - Stage 4

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato LEFT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 4	-3	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-3.2	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-3.4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-3.6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-3.8	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-4.2	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-4.4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-4.6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-4.8	0	0	REMOVED	0	0	0	0	0	0	0

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato LEFT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 4	-5	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-5.2	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-5.4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-5.6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-5.8	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-6.2	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-6.4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-6.6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-6.8	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-7	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-7.2	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-7.4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-7.6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-7.8	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-8	0	0	REMOVED	0	0	0	0	0	0	0
Stage 4	-8.2	1.9	67.965	PASSIVE	0	0	0	0	0	-30.311	67.965
Stage 4	-8.4	5.7	74.669	PASSIVE	0	0	0	0	0	-27.927	74.669
Stage 4	-8.6	9.5	80.998	PASSIVE	0	0	0	0	0	-25.36	80.998
Stage 4	-8.8	13.3	87.328	PASSIVE	0	0	0	0	0	-22.794	87.328
Stage 4	-9	17.1	92.882	V-C	0	0	0	0	0	-20.716	92.882
Stage 4	-9.2	20.9	92.05	V-C	0	0	0	0	0	-22.658	92.05
Stage 4	-9.4	24.7	91.242	V-C	0	0	0	0	0	-24.586	91.242
Stage 4	-9.6	28.5	90.459	V-C	0	0	0	0	0	-26.498	90.459
Stage 4	-9.8	32.3	89.701	V-C	0	0	0	0	0	-28.394	89.701
Stage 4	-10	36.1	88.97	V-C	0	0	0	0	0	-30.273	88.97
Stage 4	-10.2	39.9	88.265	V-C	0	0	0	0	0	-32.135	88.265
Stage 4	-10.4	43.7	87.589	V-C	0	0	0	0	0	-33.98	87.589
Stage 4	-10.6	47.5	86.94	V-C	0	0	0	0	0	-35.807	86.94
Stage 4	-10.8	51.3	86.32	V-C	0	0	0	0	0	-37.616	86.32
Stage 4	-11	55.1	85.73	V-C	0	0	0	0	0	-39.407	85.73
Stage 4	-11.2	58.9	85.169	V-C	0	0	0	0	0	-41.179	85.169
Stage 4	-11.4	62.7	84.638	V-C	0	0	0	0	0	-42.932	84.638
Stage 4	-11.6	66.5	84.136	V-C	0	0	0	0	0	-44.666	84.136
Stage 4	-11.8	70.3	83.666	V-C	0	0	0	0	0	-46.382	83.666
Stage 4	-12	74.1	83.225	V-C	0	0	0	0	0	-48.078	83.225
Stage 4	-12.2	77.9	82.816	V-C	0	0	0	0	0	-49.754	82.816
Stage 4	-12.4	81.7	82.437	V-C	0	0	0	0	0	-51.411	82.437
Stage 4	-12.6	85.5	82.09	V-C	0	0	0	0	0	-53.049	82.09
Stage 4	-12.8	89.3	81.774	V-C	0	0	0	0	0	-54.666	81.774
Stage 4	-13	93.1	81.49	V-C	0	0	0	0	0	-56.264	81.49
Stage 4	-13.2	96.9	81.238	V-C	0	0	0	0	0	-57.842	81.238
Stage 4	-13.4	100.7	81.018	V-C	0	0	0	0	0	-59.399	81.018
Stage 4	-13.6	104.5	80.831	V-C	0	0	0	0	0	-60.936	80.831

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato LEFT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 4	-13.8	108.3	80.677	V-C	0	0	0	0	0	-62.452	80.677
Stage 4	-14	112.1	80.556	V-C	0	0	0	0	0	-63.946	80.556
Stage 4	-14.2	115.9	80.471	V-C	0	0	0	0	0	-65.419	80.471
Stage 4	-14.4	119.7	80.42	V-C	0	0	0	0	0	-66.87	80.42
Stage 4	-14.6	123.5	80.406	V-C	0	0	0	0	0	-68.298	80.406
Stage 4	-14.8	127.3	80.429	V-C	0	0	0	0	0	-69.702	80.429
Stage 4	-15	131.1	80.492	V-C	0	0	0	0	0	-71.081	80.492
Stage 4	-15.2	134.9	80.595	V-C	0	0	0	0	0	-72.435	80.595
Stage 4	-15.4	138.7	80.74	V-C	0	0	0	0	0	-73.762	80.74
Stage 4	-15.6	142.5	81.338	V-C	0	0	0	0	0	-74.061	81.338
Stage 4	-15.8	146.3	82.389	V-C	0	0	0	0	0	-73.33	82.389
Stage 4	-16	150.1	83.491	V-C	0	0	0	0	0	-72.568	83.491
Stage 4	-16.2	154.1	238.944	V-C	0	0	0	0	0	70.686	238.944
Stage 4	-16.4	158.1	226.846	V-C	0	0	0	0	0	62.811	226.846
Stage 4	-16.6	162.1	215.217	V-C	0	0	0	0	0	55.249	215.217
Stage 4	-16.8	166.1	204.071	V-C	0	0	0	0	0	48.01	204.071
Stage 4	-17	170.1	193.419	V-C	0	0	0	0	0	41.099	193.419
Stage 4	-17.2	174.1	183.264	V-C	0	0	0	0	0	34.519	183.264
Stage 4	-17.4	178.1	173.605	V-C	0	0	0	0	0	28.271	173.605
Stage 4	-17.6	182.1	164.439	V-C	0	0	0	0	0	22.35	164.439
Stage 4	-17.8	186.1	155.755	V-C	0	0	0	0	0	16.752	155.755
Stage 4	-18	190.1	147.544	V-C	0	0	0	0	0	11.468	147.544
Stage 4	-18.2	194.1	139.788	V-C	0	0	0	0	0	6.489	139.788
Stage 4	-18.4	198.1	132.472	V-C	0	0	0	0	0	1.802	132.472
Stage 4	-18.6	202.1	125.573	V-C	0	0	0	0	0	-2.607	125.573
Stage 4	-18.8	206.1	119.069	V-C	0	0	0	0	0	-6.752	119.069
Stage 4	-19	210.1	112.937	V-C	0	0	0	0	0	-10.65	112.937
Stage 4	-19.2	214.1	107.149	V-C	0	0	0	0	0	-14.318	107.149
Stage 4	-19.4	218.1	101.678	V-C	0	0	0	0	0	-17.774	101.678
Stage 4	-19.6	222.1	96.496	V-C	0	0	0	0	0	-21.038	96.496
Stage 4	-19.8	226.1	91.573	V-C	0	0	0	0	0	-24.129	91.573
Stage 4	-20	230.1	86.88	V-C	0	0	0	0	0	-27.067	86.88
Stage 4	-20.2	234.1	82.388	V-C	0	0	0	0	0	-29.871	82.388
Stage 4	-20.4	238.1	78.067	V-C	0	0	0	0	0	-32.562	78.067
Stage 4	-20.6	242.1	73.888	V-C	0	0	0	0	0	-35.157	73.888
Stage 4	-20.8	246.1	69.824	UL-RL	0	0	0	0	0	-37.675	69.824
Stage 4	-21	250.1	64.608	UL-RL	0	0	0	0	0	-40.134	64.608
Stage 4	-21.2	254.1	60.238	UL-RL	0	0	0	0	0	-40.987	60.238
Stage 4	-21.4	258.1	56.31	UL-RL	0	0	0	0	0	-41.421	56.31
Stage 4	-21.6	262.1	52.405	UL-RL	0	0	0	0	0	-41.848	52.405
Stage 4	-21.8	266.1	48.511	UL-RL	0	0	0	0	0	-42.272	48.511
Stage 4	-22	270.1	44.852	V-C	0	0	0	0	0	-42.463	44.852

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 4	-3	0	0	ACTIVE	0	0	0	0	0	0	0
Stage 4	-3.2	3.9	1.191	ACTIVE	0	0	0	0	0	-0.4	1.191
Stage 4	-3.4	7.8	2.381	ACTIVE	0	0	0	0	0	-0.801	2.381
Stage 4	-3.6	11.7	3.572	ACTIVE	0	0	0	0	0	-1.201	3.572
Stage 4	-3.8	15.6	4.763	ACTIVE	0	0	0	0	0	-1.602	4.763
Stage 4	-4	19.5	5.954	ACTIVE	0	0	0	0	0	-2.002	5.954
Stage 4	-4.2	23.4	7.144	ACTIVE	0	0	0	0	0	-2.403	7.144
Stage 4	-4.4	27.3	8.335	ACTIVE	0	0	0	0	0	-2.803	8.335
Stage 4	-4.6	31.2	9.526	ACTIVE	0	0	0	0	0	-3.203	9.526
Stage 4	-4.8	35.1	10.717	ACTIVE	0	0	0	0	0	-3.604	10.717
Stage 4	-5	39	11.907	ACTIVE	0	0	0	0	0	-4.004	11.907
Stage 4	-5.2	42.8	19.613	ACTIVE	0	0	0	0	0	-2.136	19.613
Stage 4	-5.4	46.6	21.354	ACTIVE	0	0	0	0	0	-2.326	21.354
Stage 4	-5.6	50.4	23.096	ACTIVE	0	0	0	0	0	-2.515	23.096
Stage 4	-5.8	54.2	24.837	ACTIVE	0	0	0	0	0	-2.705	24.837
Stage 4	-6	58	26.578	ACTIVE	0	0	0	0	0	-2.895	26.578
Stage 4	-6.2	61.8	28.32	ACTIVE	0	0	0	0	0	-3.084	28.32
Stage 4	-6.4	65.6	30.061	ACTIVE	0	0	0	0	0	-3.274	30.061
Stage 4	-6.6	69.4	31.802	ACTIVE	0	0	0	0	0	-3.464	31.802
Stage 4	-6.8	73.2	33.544	ACTIVE	0	0	0	0	0	-3.653	33.544
Stage 4	-7	77	35.285	ACTIVE	0	0	0	0	0	-3.843	35.285
Stage 4	-7.2	80.8	37.026	ACTIVE	0	0	0	0	0	-4.033	37.026
Stage 4	-7.4	84.6	38.768	ACTIVE	0	0	0	0	0	-4.222	38.768
Stage 4	-7.6	88.4	40.509	ACTIVE	0	0	0	0	0	-4.412	40.509
Stage 4	-7.8	92.2	42.25	ACTIVE	0	0	0	0	0	-4.602	42.25
Stage 4	-8	96	43.992	ACTIVE	0	0	0	0	0	-4.791	43.992
Stage 4	-8.2	99.8	45.733	ACTIVE	0	0	0	0	0	-4.981	45.733
Stage 4	-8.4	103.6	47.474	ACTIVE	0	0	0	0	0	-5.171	47.474
Stage 4	-8.6	107.4	49.216	ACTIVE	0	0	0	0	0	-5.36	49.216
Stage 4	-8.8	111.2	50.957	ACTIVE	0	0	0	0	0	-5.55	50.957
Stage 4	-9	115	52.698	ACTIVE	0	0	0	0	0	-5.739	52.698
Stage 4	-9.2	118.8	54.44	ACTIVE	0	0	0	0	0	-5.929	54.44
Stage 4	-9.4	122.6	56.181	ACTIVE	0	0	0	0	0	-6.119	56.181
Stage 4	-9.6	126.4	57.922	ACTIVE	0	0	0	0	0	-6.308	57.922
Stage 4	-9.8	130.2	59.664	ACTIVE	0	0	0	0	0	-6.498	59.664
Stage 4	-10	134	61.405	ACTIVE	0	0	0	0	0	-6.688	61.405
Stage 4	-10.2	137.8	63.146	ACTIVE	0	0	0	0	0	-6.877	63.146
Stage 4	-10.4	141.6	64.888	ACTIVE	0	0	0	0	0	-7.067	64.888
Stage 4	-10.6	145.4	66.629	ACTIVE	0	0	0	0	0	-7.257	66.629
Stage 4	-10.8	149.2	68.37	ACTIVE	0	0	0	0	0	-7.446	68.37
Stage 4	-11	153	70.112	ACTIVE	0	0	0	0	0	-7.636	70.112
Stage 4	-11.2	156.8	71.853	ACTIVE	0	0	0	0	0	-7.826	71.853
Stage 4	-11.4	160.6	73.594	ACTIVE	0	0	0	0	0	-8.015	73.594
Stage 4	-11.6	164.4	75.336	ACTIVE	0	0	0	0	0	-8.205	75.336

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 4	-11.8	168.2	77.077	ACTIVE	0	0	0	0	0	-8.395	77.077
Stage 4	-12	172	78.818	ACTIVE	0	0	0	0	0	-8.584	78.818
Stage 4	-12.2	175.8	80.56	ACTIVE	0	0	0	0	0	-8.774	80.56
Stage 4	-12.4	179.6	82.301	ACTIVE	0	0	0	0	0	-8.964	82.301
Stage 4	-12.6	183.4	84.042	ACTIVE	0	0	0	0	0	-9.153	84.042
Stage 4	-12.8	187.2	87.2	ACTIVE	0	0	0	0	0	-8.818	87.2
Stage 4	-13	191	91	ACTIVE	0	0	0	0	0	-8.246	91
Stage 4	-13.2	194.8	94.8	ACTIVE	0	0	0	0	0	-7.673	94.8
Stage 4	-13.4	198.6	98.6	ACTIVE	0	0	0	0	0	-7.1	98.6
Stage 4	-13.6	202.4	102.4	ACTIVE	0	0	0	0	0	-6.527	102.4
Stage 4	-13.8	206.2	106.2	ACTIVE	0	0	0	0	0	-5.954	106.2
Stage 4	-14	210	110	ACTIVE	0	0	0	0	0	-5.382	110
Stage 4	-14.2	213.8	113.8	ACTIVE	0	0	0	0	0	-4.809	113.8
Stage 4	-14.4	217.6	117.6	ACTIVE	0	0	0	0	0	-4.236	117.6
Stage 4	-14.6	221.4	121.4	ACTIVE	0	0	0	0	0	-3.663	121.4
Stage 4	-14.8	225.2	125.2	ACTIVE	0	0	0	0	0	-3.09	125.2
Stage 4	-15	229	129	ACTIVE	0	0	0	0	0	-2.517	129
Stage 4	-15.2	232.8	132.8	ACTIVE	0	0	0	0	0	-1.945	132.8
Stage 4	-15.4	236.6	136.6	ACTIVE	0	0	0	0	0	-1.372	136.6
Stage 4	-15.6	240.4	140.4	ACTIVE	0	0	0	0	0	0.05	140.4
Stage 4	-15.8	244.2	144.2	ACTIVE	0	0	0	0	0	2.322	144.2
Stage 4	-16	248	148	ACTIVE	0	0	0	0	0	4.593	148
Stage 4	-16.2	252	48.755	ACTIVE	0	0	0	0	0	-8.237	48.755
Stage 4	-16.4	256	51.096	ACTIVE	0	0	0	0	0	-6.361	51.096
Stage 4	-16.6	260	53.437	ACTIVE	0	0	0	0	0	-4.485	53.437
Stage 4	-16.8	264	55.778	ACTIVE	0	0	0	0	0	-2.61	55.778
Stage 4	-17	268	58.119	ACTIVE	0	0	0	0	0	-0.734	58.119
Stage 4	-17.2	272	60.459	ACTIVE	0	0	0	0	0	1.141	60.459
Stage 4	-17.4	276	62.8	ACTIVE	0	0	0	0	0	3.017	62.8
Stage 4	-17.6	280	65.141	ACTIVE	0	0	0	0	0	4.893	65.141
Stage 4	-17.8	284	67.482	ACTIVE	0	0	0	0	0	6.768	67.482
Stage 4	-18	288	69.823	ACTIVE	0	0	0	0	0	8.644	69.823
Stage 4	-18.2	292	72.164	ACTIVE	0	0	0	0	0	10.52	72.164
Stage 4	-18.4	296	74.505	ACTIVE	0	0	0	0	0	12.395	74.505
Stage 4	-18.6	300	76.846	ACTIVE	0	0	0	0	0	14.271	76.846
Stage 4	-18.8	304	79.186	ACTIVE	0	0	0	0	0	16.146	79.186
Stage 4	-19	308	81.527	ACTIVE	0	0	0	0	0	18.022	81.527
Stage 4	-19.2	312	83.868	ACTIVE	0	0	0	0	0	19.898	83.868
Stage 4	-19.4	316	86.209	ACTIVE	0	0	0	0	0	21.773	86.209
Stage 4	-19.6	320	88.55	ACTIVE	0	0	0	0	0	23.649	88.55
Stage 4	-19.8	324	90.891	ACTIVE	0	0	0	0	0	25.525	90.891
Stage 4	-20	328	93.232	ACTIVE	0	0	0	0	0	27.4	93.232
Stage 4	-20.2	332	95.572	ACTIVE	0	0	0	0	0	29.276	95.572
Stage 4	-20.4	336	97.913	ACTIVE	0	0	0	0	0	31.152	97.913

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 4	-20.6	340	113.668	V-C	0	0	0	0	0	37.498	113.668
Stage 4	-20.8	344	131.969	UL-RL	0	0	0	0	0	44.696	131.969
Stage 4	-21	348	152.917	UL-RL	0	0	0	0	0	54.676	152.917
Stage 4	-21.2	352	171.921	UL-RL	0	0	0	0	0	66.407	171.921
Stage 4	-21.4	356	189.907	UL-RL	0	0	0	0	0	78.08	189.907
Stage 4	-21.6	360	207.841	UL-RL	0	0	0	0	0	89.719	207.841
Stage 4	-21.8	364	225.75	UL-RL	0	0	0	0	0	101.341	225.75
Stage 4	-22	368	243.119	V-C	0	0	0	0	0	112.958	243.119

Tabella Risultati Terreno Right wall - Nominal - Stage 5

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato LEFT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 5	-3	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-3.2	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-3.4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-3.6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-3.8	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-4.2	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-4.4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-4.6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-4.8	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-5	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-5.2	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-5.4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-5.6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-5.8	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-6.2	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-6.4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-6.6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-6.8	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-7	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-7.2	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-7.4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-7.6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-7.8	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-8	0	0	REMOVED	0	0	0	0	0	0	0
Stage 5	-8.2	1.9	5.797	PASSIVE	0	0	0	0	0	0	5.797
Stage 5	-8.4	5.7	17.39	PASSIVE	0	0	0	0	0	0	17.39
Stage 5	-8.6	9.5	28.984	PASSIVE	0	0	0	0	0	0	28.984
Stage 5	-8.8	13.3	40.578	PASSIVE	0	0	0	0	0	0	40.578
Stage 5	-9	17.1	52.172	PASSIVE	0	0	0	0	0	0	52.172
Stage 5	-9.2	20.9	63.766	PASSIVE	0	0	0	0	0	0	63.766

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato LEFT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 5	-9.4	24.7	75.359	PASSIVE	0	0	0	0	0	0	75.359
Stage 5	-9.6	28.5	86.953	PASSIVE	0	0	0	0	0	0	86.953
Stage 5	-9.8	32.3	98.547	PASSIVE	0	0	0	0	0	0	98.547
Stage 5	-10	36.1	109.57	UL-RL	0	0	0	0	0	0	109.57
Stage 5	-10.2	39.9	109.97	UL-RL	0	0	0	0	0	0	109.97
Stage 5	-10.4	43.7	110.382	UL-RL	0	0	0	0	0	0	110.382
Stage 5	-10.6	47.5	110.809	UL-RL	0	0	0	0	0	0	110.809
Stage 5	-10.8	51.3	111.253	UL-RL	0	0	0	0	0	0	111.253
Stage 5	-11	55.1	111.717	UL-RL	0	0	0	0	0	0	111.717
Stage 5	-11.2	58.9	112.202	UL-RL	0	0	0	0	0	0	112.202
Stage 5	-11.4	62.7	112.709	UL-RL	0	0	0	0	0	0	112.709
Stage 5	-11.6	66.5	113.24	UL-RL	0	0	0	0	0	0	113.24
Stage 5	-11.8	70.3	113.795	UL-RL	0	0	0	0	0	0	113.795
Stage 5	-12	74.1	114.376	UL-RL	0	0	0	0	0	0	114.376
Stage 5	-12.2	77.9	114.982	UL-RL	0	0	0	0	0	0	114.982
Stage 5	-12.4	81.7	115.615	UL-RL	0	0	0	0	0	0	115.615
Stage 5	-12.6	85.5	116.274	UL-RL	0	0	0	0	0	0	116.274
Stage 5	-12.8	89.3	116.961	UL-RL	0	0	0	0	0	0	116.961
Stage 5	-13	93.1	117.676	UL-RL	0	0	0	0	0	0	117.676
Stage 5	-13.2	96.9	118.418	UL-RL	0	0	0	0	0	0	118.418
Stage 5	-13.4	100.7	119.189	UL-RL	0	0	0	0	0	0	119.189
Stage 5	-13.6	104.5	119.987	UL-RL	0	0	0	0	0	0	119.987
Stage 5	-13.8	108.3	120.814	UL-RL	0	0	0	0	0	0	120.814
Stage 5	-14	112.1	121.67	UL-RL	0	0	0	0	0	0	121.67
Stage 5	-14.2	115.9	122.554	UL-RL	0	0	0	0	0	0	122.554
Stage 5	-14.4	119.7	123.466	UL-RL	0	0	0	0	0	0	123.466
Stage 5	-14.6	123.5	124.408	UL-RL	0	0	0	0	0	0	124.408
Stage 5	-14.8	127.3	125.379	UL-RL	0	0	0	0	0	0	125.379
Stage 5	-15	131.1	126.379	UL-RL	0	0	0	0	0	0	126.379
Stage 5	-15.2	134.9	127.408	UL-RL	0	0	0	0	0	0	127.408
Stage 5	-15.4	138.7	128.468	UL-RL	0	0	0	0	0	0	128.468
Stage 5	-15.6	141.5	128.944	UL-RL	0	0	0	1	0	0	129.944
Stage 5	-15.8	143.3	128.84	UL-RL	0	0	0	3	0	0	131.84
Stage 5	-16	145.1	128.769	UL-RL	0	0	0	5	0	0	133.769
Stage 5	-16.2	147.1	184.575	UL-RL	0	0	0	7	0	0	191.575
Stage 5	-16.4	149.1	176.347	UL-RL	0	0	0	9	0	0	185.347
Stage 5	-16.6	151.1	168.392	UL-RL	0	0	0	11	0	0	179.392
Stage 5	-16.8	153.1	160.709	UL-RL	0	0	0	13	0	0	173.709
Stage 5	-17	155.1	153.298	UL-RL	0	0	0	15	0	0	168.298
Stage 5	-17.2	157.1	146.153	UL-RL	0	0	0	17	0	0	163.153
Stage 5	-17.4	159.1	139.271	UL-RL	0	0	0	19	0	0	158.271
Stage 5	-17.6	161.1	132.643	UL-RL	0	0	0	21	0	0	153.643
Stage 5	-17.8	163.1	127.095	UL-RL	0	0	0	23	0	0	150.095
Stage 5	-18	165.1	121.96	UL-RL	0	0	0	25	0	0	146.96

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato LEFT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 5	-18.2	167.1	117.045	UL-RL	0	0	0	27	0	0	144.045
Stage 5	-18.4	169.1	112.334	UL-RL	0	0	0	29	0	0	141.334
Stage 5	-18.6	171.1	107.809	UL-RL	0	0	0	31	0	0	138.809
Stage 5	-18.8	173.1	103.456	UL-RL	0	0	0	33	0	0	136.456
Stage 5	-19	175.1	99.259	UL-RL	0	0	0	35	0	0	134.259
Stage 5	-19.2	177.1	95.204	UL-RL	0	0	0	37	0	0	132.204
Stage 5	-19.4	179.1	91.277	UL-RL	0	0	0	39	0	0	130.277
Stage 5	-19.6	181.1	87.462	UL-RL	0	0	0	41	0	0	128.462
Stage 5	-19.8	183.1	83.748	UL-RL	0	0	0	43	0	0	126.748
Stage 5	-20	185.1	80.121	UL-RL	0	0	0	45	0	0	125.122
Stage 5	-20.2	187.1	76.57	UL-RL	0	0	0	47	0	0	123.57
Stage 5	-20.4	189.1	73.081	UL-RL	0	0	0	49	0	0	122.081
Stage 5	-20.6	191.1	69.646	UL-RL	0	0	0	51	0	0	120.646
Stage 5	-20.8	193.1	66.252	UL-RL	0	0	0	53	0	0	119.252
Stage 5	-21	195.1	61.653	UL-RL	0	0	0	55	0	0	116.653
Stage 5	-21.2	197.1	56.524	UL-RL	0	0	0	57	0	0	113.524
Stage 5	-21.4	199.1	51.476	UL-RL	0	0	0	59	0	0	110.476
Stage 5	-21.6	201.1	46.441	UL-RL	0	0	0	61	0	0	107.441
Stage 5	-21.8	203.1	41.412	UL-RL	0	0	0	63	0	0	104.412
Stage 5	-22	205.1	38.354	ACTIVE	0	0	0	65	0	0	103.354

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 5	-3	0	0	ACTIVE	0	0	0	0	0	0	0
Stage 5	-3.2	3.9	1.443	ACTIVE	0	0	0	0	0	0	1.443
Stage 5	-3.4	7.8	2.886	ACTIVE	0	0	0	0	0	0	2.886
Stage 5	-3.6	11.7	4.329	ACTIVE	0	0	0	0	0	0	4.329
Stage 5	-3.8	15.6	5.772	ACTIVE	0	0	0	0	0	0	5.772
Stage 5	-4	19.5	7.215	ACTIVE	0	0	0	0	0	0	7.215
Stage 5	-4.2	23.4	8.658	ACTIVE	0	0	0	0	0	0	8.658
Stage 5	-4.4	27.3	10.101	ACTIVE	0	0	0	0	0	0	10.101
Stage 5	-4.6	31.2	11.544	ACTIVE	0	0	0	0	0	0	11.544
Stage 5	-4.8	35.1	12.987	ACTIVE	0	0	0	0	0	0	12.987
Stage 5	-5	39	14.43	ACTIVE	0	0	0	0	0	0	14.43
Stage 5	-5.2	42.8	20.715	ACTIVE	0	0	0	0	0	0	20.715
Stage 5	-5.4	46.6	22.554	ACTIVE	0	0	0	0	0	0	22.554
Stage 5	-5.6	50.4	24.394	ACTIVE	0	0	0	0	0	0	24.394
Stage 5	-5.8	54.2	26.233	ACTIVE	0	0	0	0	0	0	26.233
Stage 5	-6	58	28.072	ACTIVE	0	0	0	0	0	0	28.072
Stage 5	-6.2	61.8	29.911	ACTIVE	0	0	0	0	0	0	29.911
Stage 5	-6.4	65.6	31.75	ACTIVE	0	0	0	0	0	0	31.75
Stage 5	-6.6	69.4	33.59	ACTIVE	0	0	0	0	0	0	33.59
Stage 5	-6.8	73.2	35.429	ACTIVE	0	0	0	0	0	0	35.429
Stage 5	-7	77	37.268	ACTIVE	0	0	0	0	0	0	37.268
Stage 5	-7.2	80.8	39.107	ACTIVE	0	0	0	0	0	0	39.107

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 5	-7.4	84.6	40.946	ACTIVE	0	0	0	0	0	0	40.946
Stage 5	-7.6	88.4	42.786	ACTIVE	0	0	0	0	0	0	42.786
Stage 5	-7.8	92.2	44.625	ACTIVE	0	0	0	0	0	0	44.625
Stage 5	-8	96	46.464	ACTIVE	0	0	0	0	0	0	46.464
Stage 5	-8.2	99.8	48.303	ACTIVE	0	0	0	0	0	0	48.303
Stage 5	-8.4	103.6	50.142	ACTIVE	0	0	0	0	0	0	50.142
Stage 5	-8.6	107.4	51.982	ACTIVE	0	0	0	0	0	0	51.982
Stage 5	-8.8	111.2	53.821	ACTIVE	0	0	0	0	0	0	53.821
Stage 5	-9	115	55.66	ACTIVE	0	0	0	0	0	0	55.66
Stage 5	-9.2	118.8	57.499	ACTIVE	0	0	0	0	0	0	57.499
Stage 5	-9.4	122.6	59.338	ACTIVE	0	0	0	0	0	0	59.338
Stage 5	-9.6	126.4	61.178	ACTIVE	0	0	0	0	0	0	61.178
Stage 5	-9.8	130.2	63.017	ACTIVE	0	0	0	0	0	0	63.017
Stage 5	-10	134	64.856	ACTIVE	0	0	0	0	0	0	64.856
Stage 5	-10.2	137.8	66.695	ACTIVE	0	0	0	0	0	0	66.695
Stage 5	-10.4	141.6	68.534	ACTIVE	0	0	0	0	0	0	68.534
Stage 5	-10.6	145.4	70.374	ACTIVE	0	0	0	0	0	0	70.374
Stage 5	-10.8	149.2	72.213	ACTIVE	0	0	0	0	0	0	72.213
Stage 5	-11	153	74.052	ACTIVE	0	0	0	0	0	0	74.052
Stage 5	-11.2	156.8	75.891	ACTIVE	0	0	0	0	0	0	75.891
Stage 5	-11.4	160.6	77.73	ACTIVE	0	0	0	0	0	0	77.73
Stage 5	-11.6	164.4	79.57	ACTIVE	0	0	0	0	0	0	79.57
Stage 5	-11.8	168.2	81.409	ACTIVE	0	0	0	0	0	0	81.409
Stage 5	-12	172	83.248	ACTIVE	0	0	0	0	0	0	83.248
Stage 5	-12.2	175.8	85.087	ACTIVE	0	0	0	0	0	0	85.087
Stage 5	-12.4	179.6	86.926	ACTIVE	0	0	0	0	0	0	86.926
Stage 5	-12.6	183.4	88.782	UL-RL	0	0	0	0	0	0	88.782
Stage 5	-12.8	187.2	91.951	UL-RL	0	0	0	0	0	0	91.951
Stage 5	-13	191	95.583	UL-RL	0	0	0	0	0	0	95.583
Stage 5	-13.2	194.8	99.201	UL-RL	0	0	0	0	0	0	99.201
Stage 5	-13.4	198.6	102.805	UL-RL	0	0	0	0	0	0	102.805
Stage 5	-13.6	202.4	106.396	UL-RL	0	0	0	0	0	0	106.396
Stage 5	-13.8	206.2	109.973	UL-RL	0	0	0	0	0	0	109.973
Stage 5	-14	210	113.537	UL-RL	0	0	0	0	0	0	113.537
Stage 5	-14.2	213.8	117.088	UL-RL	0	0	0	0	0	0	117.088
Stage 5	-14.4	217.6	120.627	UL-RL	0	0	0	0	0	0	120.627
Stage 5	-14.6	221.4	124.155	UL-RL	0	0	0	0	0	0	124.155
Stage 5	-14.8	225.2	127.671	UL-RL	0	0	0	0	0	0	127.671
Stage 5	-15	229	131.177	UL-RL	0	0	0	0	0	0	131.177
Stage 5	-15.2	232.8	134.674	UL-RL	0	0	0	0	0	0	134.674
Stage 5	-15.4	236.6	138.162	UL-RL	0	0	0	0	0	0	138.162
Stage 5	-15.6	239.4	140.749	UL-RL	0	0	0	1	0	0	141.749
Stage 5	-15.8	241.2	142.392	UL-RL	0	0	0	3	0	0	145.392
Stage 5	-16	243	143.856	UL-RL	0	0	0	5	0	0	148.855

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 5	-16.2	245	68.99	UL-RL	0	0	0	7	0	0	75.989
Stage 5	-16.4	247	70.535	UL-RL	0	0	0	9	0	0	79.535
Stage 5	-16.6	249	72.069	UL-RL	0	0	0	11	0	0	83.069
Stage 5	-16.8	251	73.612	UL-RL	0	0	0	13	0	0	86.612
Stage 5	-17	253	75.179	UL-RL	0	0	0	15	0	0	90.179
Stage 5	-17.2	255	76.784	UL-RL	0	0	0	17	0	0	93.784
Stage 5	-17.4	257	78.44	UL-RL	0	0	0	19	0	0	97.44
Stage 5	-17.6	259	80.157	UL-RL	0	0	0	21	0	0	101.157
Stage 5	-17.8	261	81.941	UL-RL	0	0	0	23	0	0	104.942
Stage 5	-18	263	83.801	UL-RL	0	0	0	25	0	0	108.801
Stage 5	-18.2	265	85.739	UL-RL	0	0	0	27	0	0	112.739
Stage 5	-18.4	267	87.759	UL-RL	0	0	0	29	0	0	116.759
Stage 5	-18.6	269	89.864	UL-RL	0	0	0	31	0	0	120.864
Stage 5	-18.8	271	92.053	UL-RL	0	0	0	33	0	0	125.053
Stage 5	-19	273	94.325	UL-RL	0	0	0	35	0	0	129.325
Stage 5	-19.2	275	96.68	UL-RL	0	0	0	37	0	0	133.68
Stage 5	-19.4	277	99.001	V-C	0	0	0	39	0	0	138.001
Stage 5	-19.6	279	100.613	V-C	0	0	0	41	0	0	141.613
Stage 5	-19.8	281	102.26	V-C	0	0	0	43	0	0	145.26
Stage 5	-20	283	103.94	V-C	0	0	0	45	0	0	148.94
Stage 5	-20.2	285	105.649	V-C	0	0	0	47	0	0	152.649
Stage 5	-20.4	287	107.385	V-C	0	0	0	49	0	0	156.385
Stage 5	-20.6	289	114.024	V-C	0	0	0	51	0	0	165.024
Stage 5	-20.8	291	121.603	V-C	0	0	0	53	0	0	174.603
Stage 5	-21	293	129.374	V-C	0	0	0	55	0	0	184.374
Stage 5	-21.2	295	137.273	V-C	0	0	0	57	0	0	194.273
Stage 5	-21.4	297	146.93	V-C	0	0	0	59	0	0	205.93
Stage 5	-21.6	299	158.996	V-C	0	0	0	61	0	0	219.997
Stage 5	-21.8	301	170.959	V-C	0	0	0	63	0	0	233.96
Stage 5	-22	303	181.43	V-C	0	0	0	65	0	0	246.43

Tabella Risultati Terreno Right wall - Nominal - Stage 6

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato LEFT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 6	-3	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-3.2	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-3.4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-3.6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-3.8	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-4.2	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-4.4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-4.6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-4.8	0	0	REMOVED	0	0	0	0	0	0	0

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato LEFT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 6	-5	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-5.2	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-5.4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-5.6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-5.8	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-6.2	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-6.4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-6.6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-6.8	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-7	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-7.2	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-7.4	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-7.6	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-7.8	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-8	0	0	REMOVED	0	0	0	0	0	0	0
Stage 6	-8.2	1.9	22.574	UL-RL	0	0	0	0	0	8.389	22.574
Stage 6	-8.4	5.7	31.405	UL-RL	0	0	0	0	0	7.007	31.405
Stage 6	-8.6	9.5	40.13	UL-RL	0	0	0	0	0	5.573	40.13
Stage 6	-8.8	13.3	48.854	UL-RL	0	0	0	0	0	4.138	48.854
Stage 6	-9	17.1	57.524	UL-RL	0	0	0	0	0	2.676	57.524
Stage 6	-9.2	20.9	65.743	UL-RL	0	0	0	0	0	0.988	65.743
Stage 6	-9.4	24.7	73.963	UL-RL	0	0	0	0	0	-0.698	73.963
Stage 6	-9.6	28.5	82.185	UL-RL	0	0	0	0	0	-2.384	82.185
Stage 6	-9.8	32.3	90.409	UL-RL	0	0	0	0	0	-4.069	90.409
Stage 6	-10	36.1	98.479	UL-RL	0	0	0	0	0	-5.545	98.479
Stage 6	-10.2	39.9	103.655	UL-RL	0	0	0	0	0	-3.157	103.655
Stage 6	-10.4	43.7	108.837	UL-RL	0	0	0	0	0	-0.772	108.837
Stage 6	-10.6	47.5	114.025	UL-RL	0	0	0	0	0	1.608	114.025
Stage 6	-10.8	51.3	119.22	UL-RL	0	0	0	0	0	3.984	119.22
Stage 6	-11	55.1	124.422	UL-RL	0	0	0	0	0	6.353	124.422
Stage 6	-11.2	58.9	129.632	UL-RL	0	0	0	0	0	8.715	129.632
Stage 6	-11.4	62.7	134.84	PASSIVE	0	0	0	0	0	11.065	134.84
Stage 6	-11.6	66.5	137.786	UL-RL	0	0	0	0	0	12.273	137.786
Stage 6	-11.8	70.3	136.994	UL-RL	0	0	0	0	0	11.599	136.994
Stage 6	-12	74.1	136.263	UL-RL	0	0	0	0	0	10.944	136.263
Stage 6	-12.2	77.9	135.596	UL-RL	0	0	0	0	0	10.307	135.596
Stage 6	-12.4	81.7	134.992	UL-RL	0	0	0	0	0	9.689	134.992
Stage 6	-12.6	85.5	134.454	UL-RL	0	0	0	0	0	9.09	134.454
Stage 6	-12.8	89.3	133.982	UL-RL	0	0	0	0	0	8.51	133.982
Stage 6	-13	93.1	133.577	UL-RL	0	0	0	0	0	7.95	133.577
Stage 6	-13.2	96.9	133.238	UL-RL	0	0	0	0	0	7.41	133.238
Stage 6	-13.4	100.7	132.968	UL-RL	0	0	0	0	0	6.89	132.968
Stage 6	-13.6	104.5	132.764	UL-RL	0	0	0	0	0	6.389	132.764

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato LEFT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 6	-13.8	108.3	132.629	UL-RL	0	0	0	0	0	5.908	132.629
Stage 6	-14	112.1	132.562	UL-RL	0	0	0	0	0	5.446	132.562
Stage 6	-14.2	115.9	132.562	UL-RL	0	0	0	0	0	5.005	132.562
Stage 6	-14.4	119.7	132.631	UL-RL	0	0	0	0	0	4.582	132.631
Stage 6	-14.6	123.5	132.768	UL-RL	0	0	0	0	0	4.18	132.768
Stage 6	-14.8	127.3	132.972	UL-RL	0	0	0	0	0	3.797	132.972
Stage 6	-15	131.1	133.244	UL-RL	0	0	0	0	0	3.433	133.244
Stage 6	-15.2	134.9	133.583	UL-RL	0	0	0	0	0	3.087	133.583
Stage 6	-15.4	138.7	133.99	UL-RL	0	0	0	0	0	2.761	133.99
Stage 6	-15.6	142.5	134.851	UL-RL	0	0	0	0	0	3.454	134.851
Stage 6	-15.8	146.3	136.169	UL-RL	0	0	0	0	0	5.164	136.169
Stage 6	-16	150.1	137.556	UL-RL	0	0	0	0	0	6.893	137.556
Stage 6	-16.2	154.1	215.57	V-C	0	0	0	0	0	20.857	215.57
Stage 6	-16.4	158.1	206.598	V-C	0	0	0	0	0	20.868	206.598
Stage 6	-16.6	162.1	198.115	V-C	0	0	0	0	0	21.024	198.115
Stage 6	-16.8	166.1	190.12	V-C	0	0	0	0	0	21.324	190.12
Stage 6	-17	170.1	181.819	UL-RL	0	0	0	0	0	21.76	181.819
Stage 6	-17.2	174.1	173.813	UL-RL	0	0	0	0	0	22.33	173.813
Stage 6	-17.4	178.1	166.321	UL-RL	0	0	0	0	0	23.025	166.321
Stage 6	-17.6	182.1	159.324	UL-RL	0	0	0	0	0	23.84	159.324
Stage 6	-17.8	186.1	153.631	UL-RL	0	0	0	0	0	24.768	153.631
Stage 6	-18	190.1	148.561	UL-RL	0	0	0	0	0	25.801	148.561
Stage 6	-18.2	194.1	143.907	UL-RL	0	0	0	0	0	26.931	143.907
Stage 6	-18.4	198.1	139.636	UL-RL	0	0	0	0	0	28.151	139.636
Stage 6	-18.6	202.1	135.716	UL-RL	0	0	0	0	0	29.454	135.716
Stage 6	-18.8	206.1	132.117	UL-RL	0	0	0	0	0	30.831	132.117
Stage 6	-19	210.1	128.809	UL-RL	0	0	0	0	0	32.275	128.809
Stage 6	-19.2	214.1	125.762	UL-RL	0	0	0	0	0	33.779	125.762
Stage 6	-19.4	218.1	122.949	UL-RL	0	0	0	0	0	35.336	122.949
Stage 6	-19.6	222.1	120.342	UL-RL	0	0	0	0	0	36.94	120.342
Stage 6	-19.8	226.1	117.916	UL-RL	0	0	0	0	0	38.584	117.916
Stage 6	-20	230.1	115.644	UL-RL	0	0	0	0	0	40.262	115.644
Stage 6	-20.2	234.1	113.506	UL-RL	0	0	0	0	0	41.968	113.506
Stage 6	-20.4	238.1	111.477	UL-RL	0	0	0	0	0	43.698	111.477
Stage 6	-20.6	242.1	109.539	UL-RL	0	0	0	0	0	45.447	109.539
Stage 6	-20.8	246.1	107.672	UL-RL	0	0	0	0	0	47.21	107.672
Stage 6	-21	250.1	104.621	UL-RL	0	0	0	0	0	48.984	104.621
Stage 6	-21.2	254.1	101.056	UL-RL	0	0	0	0	0	50.766	101.056
Stage 6	-21.4	258.1	97.581	UL-RL	0	0	0	0	0	52.553	97.581
Stage 6	-21.6	262.1	94.125	UL-RL	0	0	0	0	0	54.342	94.125
Stage 6	-21.8	266.1	90.678	UL-RL	0	0	0	0	0	56.133	90.678
Stage 6	-22	270.1	89.203	UL-RL	0	0	0	0	0	57.924	89.203

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 6	-3	0	0	PASSIVE	0	0	0	0	0	0	0
Stage 6	-3.2	3.9	1.457	UL-RL	0	0	0	0	0	-0.144	1.457
Stage 6	-3.4	7.8	2.772	UL-RL	0	0	0	0	0	-0.39	2.772
Stage 6	-3.6	11.7	4.057	UL-RL	0	0	0	0	0	-0.635	4.057
Stage 6	-3.8	15.6	5.342	UL-RL	0	0	0	0	0	-0.881	5.342
Stage 6	-4	19.5	6.627	UL-RL	0	0	0	0	0	-1.126	6.627
Stage 6	-4.2	23.4	7.912	UL-RL	0	0	0	0	0	-1.371	7.912
Stage 6	-4.4	27.3	9.197	UL-RL	0	0	0	0	0	-1.617	9.197
Stage 6	-4.6	31.2	10.772	UL-RL	0	0	0	0	0	-1.403	10.772
Stage 6	-4.8	35.1	12.093	UL-RL	0	0	0	0	0	-1.591	12.093
Stage 6	-5	39	13.414	UL-RL	0	0	0	0	0	-1.778	13.414
Stage 6	-5.2	42.8	20.363	UL-RL	0	0	0	0	0	-1.264	20.363
Stage 6	-5.4	46.6	22.122	UL-RL	0	0	0	0	0	-1.401	22.122
Stage 6	-5.6	50.4	23.88	UL-RL	0	0	0	0	0	-1.538	23.88
Stage 6	-5.8	54.2	25.639	UL-RL	0	0	0	0	0	-1.674	25.639
Stage 6	-6	58	27.398	UL-RL	0	0	0	0	0	-1.811	27.398
Stage 6	-6.2	61.8	29.156	UL-RL	0	0	0	0	0	-1.948	29.156
Stage 6	-6.4	65.6	30.915	UL-RL	0	0	0	0	0	-2.085	30.915
Stage 6	-6.6	69.4	32.674	UL-RL	0	0	0	0	0	-2.222	32.674
Stage 6	-6.8	73.2	34.432	UL-RL	0	0	0	0	0	-2.359	34.432
Stage 6	-7	77	36.191	UL-RL	0	0	0	0	0	-2.496	36.191
Stage 6	-7.2	80.8	37.949	UL-RL	0	0	0	0	0	-2.632	37.949
Stage 6	-7.4	84.6	39.708	UL-RL	0	0	0	0	0	-2.769	39.708
Stage 6	-7.6	88.4	41.466	UL-RL	0	0	0	0	0	-2.906	41.466
Stage 6	-7.8	92.2	43.576	UL-RL	0	0	0	0	0	-2.362	43.576
Stage 6	-8	96	45.349	UL-RL	0	0	0	0	0	-2.471	45.349
Stage 6	-8.2	99.8	47.122	UL-RL	0	0	0	0	0	-2.58	47.122
Stage 6	-8.4	103.6	48.895	UL-RL	0	0	0	0	0	-2.689	48.895
Stage 6	-8.6	107.4	50.668	UL-RL	0	0	0	0	0	-2.798	50.668
Stage 6	-8.8	111.2	52.441	UL-RL	0	0	0	0	0	-2.906	52.441
Stage 6	-9	115	54.214	UL-RL	0	0	0	0	0	-3.015	54.214
Stage 6	-9.2	118.8	55.987	UL-RL	0	0	0	0	0	-3.124	55.987
Stage 6	-9.4	122.6	57.76	UL-RL	0	0	0	0	0	-3.233	57.76
Stage 6	-9.6	126.4	59.533	UL-RL	0	0	0	0	0	-3.342	59.533
Stage 6	-9.8	130.2	61.306	UL-RL	0	0	0	0	0	-3.451	61.306
Stage 6	-10	134	63.079	UL-RL	0	0	0	0	0	-3.56	63.079
Stage 6	-10.2	137.8	64.852	UL-RL	0	0	0	0	0	-3.669	64.852
Stage 6	-10.4	141.6	66.625	UL-RL	0	0	0	0	0	-3.777	66.625
Stage 6	-10.6	145.4	68.398	UL-RL	0	0	0	0	0	-3.886	68.398
Stage 6	-10.8	149.2	70.172	UL-RL	0	0	0	0	0	-3.995	70.172
Stage 6	-11	153	71.945	UL-RL	0	0	0	0	0	-4.103	71.945
Stage 6	-11.2	156.8	73.719	UL-RL	0	0	0	0	0	-2.947	73.719
Stage 6	-11.4	160.6	75.504	ACTIVE	0	0	0	0	0	-3.019	75.504
Stage 6	-11.6	164.4	78.213	ACTIVE	0	0	0	0	0	-0.678	78.213

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 6	-11.8	168.2	80.02	ACTIVE	0	0	0	0	0	-0.694	80.02
Stage 6	-12	172	81.828	ACTIVE	0	0	0	0	0	-0.71	81.828
Stage 6	-12.2	175.8	83.636	ACTIVE	0	0	0	0	0	-0.726	83.636
Stage 6	-12.4	179.6	85.444	ACTIVE	0	0	0	0	0	-0.741	85.444
Stage 6	-12.6	183.4	87.248	ACTIVE	0	0	0	0	0	-0.767	87.248
Stage 6	-12.8	187.2	88.828	ACTIVE	0	0	0	0	0	-1.562	88.828
Stage 6	-13	191	91	ACTIVE	0	0	0	0	0	-2.292	91
Stage 6	-13.2	194.8	94.8	ACTIVE	0	0	0	0	0	-2.201	94.8
Stage 6	-13.4	198.6	98.6	ACTIVE	0	0	0	0	0	-2.103	98.6
Stage 6	-13.6	202.4	102.4	ACTIVE	0	0	0	0	0	-1.998	102.4
Stage 6	-13.8	206.2	106.2	ACTIVE	0	0	0	0	0	-1.886	106.2
Stage 6	-14	210	110	ACTIVE	0	0	0	0	0	-1.768	110
Stage 6	-14.2	213.8	113.8	ACTIVE	0	0	0	0	0	-1.644	113.8
Stage 6	-14.4	217.6	117.6	ACTIVE	0	0	0	0	0	-1.514	117.6
Stage 6	-14.6	221.4	121.4	ACTIVE	0	0	0	0	0	-1.377	121.4
Stage 6	-14.8	225.2	125.2	ACTIVE	0	0	0	0	0	-1.236	125.2
Stage 6	-15	229	129	ACTIVE	0	0	0	0	0	-1.089	129
Stage 6	-15.2	232.8	132.8	ACTIVE	0	0	0	0	0	-0.937	132.8
Stage 6	-15.4	236.6	136.6	ACTIVE	0	0	0	0	0	-0.781	136.6
Stage 6	-15.6	240.4	140.4	ACTIVE	0	0	0	0	0	0.325	140.4
Stage 6	-15.8	244.2	144.2	ACTIVE	0	0	0	0	0	2.404	144.2
Stage 6	-16	248	148	ACTIVE	0	0	0	0	0	4.577	148
Stage 6	-16.2	252	48.944	ACTIVE	0	0	0	0	0	-7.874	48.944
Stage 6	-16.4	256	51.338	ACTIVE	0	0	0	0	0	-5.895	51.338
Stage 6	-16.6	260	53.579	ACTIVE	0	0	0	0	0	-4.212	53.579
Stage 6	-16.8	264	55.8	ACTIVE	0	0	0	0	0	-2.581	55.8
Stage 6	-17	268	59.088	UL-RL	0	0	0	0	0	-0.545	59.088
Stage 6	-17.2	272	69.274	UL-RL	0	0	0	0	0	4.745	69.274
Stage 6	-17.4	276	78.929	UL-RL	0	0	0	0	0	9.744	78.929
Stage 6	-17.6	280	88.094	UL-RL	0	0	0	0	0	14.469	88.094
Stage 6	-17.8	284	96.811	UL-RL	0	0	0	0	0	18.935	96.811
Stage 6	-18	288	105.118	UL-RL	0	0	0	0	0	23.159	105.118
Stage 6	-18.2	292	113.056	UL-RL	0	0	0	0	0	27.159	113.056
Stage 6	-18.4	296	120.663	UL-RL	0	0	0	0	0	30.952	120.663
Stage 6	-18.6	300	127.975	UL-RL	0	0	0	0	0	34.556	127.975
Stage 6	-18.8	304	134.551	UL-RL	0	0	0	0	0	37.988	134.551
Stage 6	-19	308	139.996	UL-RL	0	0	0	0	0	41.266	139.996
Stage 6	-19.2	312	145.275	UL-RL	0	0	0	0	0	44.407	145.275
Stage 6	-19.4	316	150.41	UL-RL	0	0	0	0	0	47.425	150.41
Stage 6	-19.6	320	155.422	UL-RL	0	0	0	0	0	50.336	155.422
Stage 6	-19.8	324	160.331	UL-RL	0	0	0	0	0	53.155	160.331
Stage 6	-20	328	165.155	UL-RL	0	0	0	0	0	55.896	165.155
Stage 6	-20.2	332	169.909	UL-RL	0	0	0	0	0	58.571	169.909
Stage 6	-20.4	336	174.609	UL-RL	0	0	0	0	0	61.192	174.609

Design Assumption: Nominal Risultati Terreno Muro: RIGHT Lato RIGHT

Stage	Z (m)	Sigma V (kPa)	Sigma H (kPa)	Stato	Ka	Kp	Coesione (kPa)	Pore (kPa)	Gradiente	U* (kPa)	Peq (kPa)
Stage 6	-20.6	340	184.146	UL-RL	0	0	0	0	0	63.77	184.146
Stage 6	-20.8	344	194.574	UL-RL	0	0	0	0	0	66.314	194.574
Stage 6	-21	348	205.124	V-C	0	0	0	0	0	68.834	205.124
Stage 6	-21.2	352	215.776	V-C	0	0	0	0	0	71.335	215.776
Stage 6	-21.4	356	228.168	V-C	0	0	0	0	0	73.826	228.168
Stage 6	-21.6	360	242.961	V-C	0	0	0	0	0	76.31	242.961
Stage 6	-21.8	364	257.645	V-C	0	0	0	0	0	78.79	257.645
Stage 6	-22	368	270.835	V-C	0	0	0	0	0	81.27	270.835

Riepilogo spinte

Design Assumption: Tipo Risultato: Muro: RIGHT Lato LEFT
Nominal Riepilogo spinte

Stage	Vera effettiva (kN/m)	Pressione neutra (kN/m)	Vera Totale (kN/m)	Min ammissibile (kN/m)	Max ammissibile (kN/m)	Percentuale resistenza massima	di Vera / Attiva
Stage 1	1758.9	0	1758.9	1115.5	5536.6	31.77%	1.58
Stage 2	1758.9	0	1758.9	1115.5	5536.6	31.77%	1.58
Stage 3	1384.5	0	1384.5	414	4626.8	29.92%	3.34
Stage 4	1392.6	0	1392.6	72.4	3753	37.11%	19.23
Stage 5	1439.2	211.3	1650.5	420.5	10529.9	13.67%	3.42
Stage 6	1717.1	0	1717.1	112	3347	51.3%	15.33

Design Assumption: Tipo Risultato: Muro: RIGHT Lato RIGHT
Nominal Riepilogo spinte

Stage	Vera effettiva (kN/m)	Pressione neutra (kN/m)	Vera Totale (kN/m)	Min ammissibile (kN/m)	Max ammissibile (kN/m)	Percentuale resistenza massima	di Vera / Attiva
Stage 1	1758.9	0	1758.9	1291.4	5627.2	31.26%	1.36
Stage 2	1758.9	0	1758.9	1291.4	5627.2	31.26%	1.36
Stage 3	1384.5	0	1384.5	1291.4	5589.5	24.77%	1.07
Stage 4	1392.6	0	1392.6	1295	5585	24.93%	1.08
Stage 5	1439.2	211.3	1650.5	1142.5	23041.7	6.25%	1.26
Stage 6	1646.4	0	1646.4	1260	5650.2	29.14%	1.31

Descrizione Coefficienti Design Assumption

Coefficienti A

Nome	Carichi Permanenti Sfavorevoli (F_dead_load_unfavour)	Carichi Permanenti Favorevoli (F_dead_load_favour)	Carichi Variabili Sfavorevoli (F_live_load_unfavour)	Carichi Variabili Favorevoli (F_live_load_favour)	Carico Sismico (F_seism_load)	Pressioni Acqua Lato Monte (F_WaterDR)	Pressioni Acqua Lato Valle (F_WaterRes)	Carichi Permanenti Destabilizzanti (F_UPL_GDStab)	Carichi Permanenti Stabilizzanti (F_UPL_GStab)	Carichi Variabili Destabilizzanti (F_UPL_QDStab)	Carichi Permanenti Destabilizzanti (F_HYD_GDStab)	Carichi Permanenti Stabilizzanti (F_HYD_GStab)	Carichi Variabili Destabilizzanti (F_HYD_QDStab)
Simbolo	γG	γG	γQ	γQ	γQE	γG	γG	γGdst	γGstb	γQdst	γGdst	γGstb	γQdst
Nominal	1	1	1	1	1	1	1	1	1	1	1	1	1
NTC2018: SLE (Rara/Frequente/Quasi Permanente)	1	1	1	1	0	1	1	1	1	1	1	1	1
NTC2018: A1+M1+R1 (R3 per tiranti)	1.3	1	1.5	1	0	1.3	1	1	1	1	1.3	0.9	1
NTC2018: A2+M2+R1	1	1	1.3	1	0	1	1	1	1	1	1.3	0.9	1
NTC2018: SISMICA STR	1	1	1	1	1	1	1	1	1	1	1	1	1
NTC2018: SISMICA GEO	1	1	1	1	1	1	1	1	1	1	1.3	0.9	1

Coefficienti M

Nome	Parziale su tan(ø') (F_Fr)	Parziale su c' (F_eff_cohe)	Parziale su Su (F_Su)	Parziale su qu (F_qu)	Parziale su peso specifico (F_gamma)
Simbolo	γφ	γc	γcu	γqu	γγ
Nominal	1	1	1	1	1
NTC2018: SLE (Rara/Frequente/Quasi Permanente)	1	1	1	1	1
NTC2018: A1+M1+R1 (R3 per tiranti)	1	1	1	1	1
NTC2018: A2+M2+R1	1.25	1.25	1.4	1	1
NTC2018: SISMICA STR	1	1	1	1	1
NTC2018: SISMICA GEO	1	1	1	1	1

Coefficienti R

Nome	Parziale resistenza terreno (es. Kp) (F_Soil_Res_walls)	Parziale resistenza Tiranti permanenti (F_Anch_P)	Parziale resistenza Tiranti temporanei (F_Anch_T)	Parziale elementi strutturali (F_wall)
Simbolo	γRe	γap	γat	
Nominal	1	1	1	1

Nome	Parziale resistenza terreno (es. Kp) (F_Soil_Res_walls)	Parziale resistenza Tiranti permanenti (F_Anch_P)	Parziale resistenza Tiranti temporanei (F_Anch_T)	Parziale elementi strutturali (F_wall)
Simbolo	γRe	γap	γat	
NTC2018: SLE (Rara/Frequente/Quasi Permanente)	1	1	1	1
NTC2018: A1+M1+R1 (R3 per tiranti)	1	1.2	1.1	1
NTC2018: A2+M2+R1	1	1.2	1.1	1
NTC2018: SISMICA STR	1	1.2	1.1	1
NTC2018: SISMICA GEO	1	1.2	1.1	1

Risultati NTC2018: SLE (Rara/Frequente/Quasi Permanente)

Tabella Spostamento NTC2018: SLE (Rara/Frequente/Quasi Permanente) - RIGHT Stage: Stage 1

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 1	-3	0
Stage 1	-3.2	0
Stage 1	-3.4	0
Stage 1	-3.6	0
Stage 1	-3.8	0
Stage 1	-4	0
Stage 1	-4.2	0
Stage 1	-4.4	0
Stage 1	-4.6	0
Stage 1	-4.8	0
Stage 1	-5	0
Stage 1	-5.2	0
Stage 1	-5.4	0
Stage 1	-5.6	0
Stage 1	-5.8	0
Stage 1	-6	0
Stage 1	-6.2	0
Stage 1	-6.4	0
Stage 1	-6.6	0
Stage 1	-6.8	0
Stage 1	-7	0
Stage 1	-7.2	0
Stage 1	-7.4	0
Stage 1	-7.6	0
Stage 1	-7.8	0
Stage 1	-8	0
Stage 1	-8.2	0
Stage 1	-8.4	0
Stage 1	-8.6	0
Stage 1	-8.8	0

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 1	-9	0
Stage 1	-9.2	0
Stage 1	-9.4	0
Stage 1	-9.6	0
Stage 1	-9.8	0
Stage 1	-10	0
Stage 1	-10.2	0
Stage 1	-10.4	0
Stage 1	-10.6	0
Stage 1	-10.8	0
Stage 1	-11	0
Stage 1	-11.2	0
Stage 1	-11.4	0
Stage 1	-11.6	0
Stage 1	-11.8	0
Stage 1	-12	0
Stage 1	-12.2	0
Stage 1	-12.4	0
Stage 1	-12.6	0
Stage 1	-12.8	0
Stage 1	-13	0
Stage 1	-13.2	0
Stage 1	-13.4	0
Stage 1	-13.6	0
Stage 1	-13.8	0
Stage 1	-14	0
Stage 1	-14.2	0
Stage 1	-14.4	0
Stage 1	-14.6	0
Stage 1	-14.8	0
Stage 1	-15	0
Stage 1	-15.2	0
Stage 1	-15.4	0
Stage 1	-15.6	0
Stage 1	-15.8	0
Stage 1	-16	0
Stage 1	-16.2	0
Stage 1	-16.4	0
Stage 1	-16.6	0
Stage 1	-16.8	0
Stage 1	-17	0
Stage 1	-17.2	0
Stage 1	-17.4	0
Stage 1	-17.6	0

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 1	-17.8	0
Stage 1	-18	0
Stage 1	-18.2	0
Stage 1	-18.4	0
Stage 1	-18.6	0
Stage 1	-18.8	0
Stage 1	-19	0
Stage 1	-19.2	0
Stage 1	-19.4	0
Stage 1	-19.6	0
Stage 1	-19.8	0
Stage 1	-20	0
Stage 1	-20.2	0
Stage 1	-20.4	0
Stage 1	-20.6	0
Stage 1	-20.8	0
Stage 1	-21	0
Stage 1	-21.2	0
Stage 1	-21.4	0
Stage 1	-21.6	0
Stage 1	-21.8	0
Stage 1	-22	0

Tabella Risultati Paratia NTC2018: SLE (Rara/Frequente/Quasi Permanente) - Right wall - Stage: Stage 1

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-3	0	0
Stage 1	-3.2	0	0
Stage 1	-3.4	0	0
Stage 1	-3.6	0	0
Stage 1	-3.8	0	0
Stage 1	-4	0	0
Stage 1	-4.2	0	0
Stage 1	-4.4	0	0
Stage 1	-4.6	0	0
Stage 1	-4.8	0	0
Stage 1	-5	0	0
Stage 1	-5.2	0	0
Stage 1	-5.4	0	0
Stage 1	-5.6	0	0
Stage 1	-5.8	0	0
Stage 1	-6	0	0
Stage 1	-6.2	0	0

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-6.4	0	0
Stage 1	-6.6	0	0
Stage 1	-6.8	0	0
Stage 1	-7	0	0
Stage 1	-7.2	0	0
Stage 1	-7.4	0	0
Stage 1	-7.6	0	0
Stage 1	-7.8	0	0
Stage 1	-8	0	0
Stage 1	-8.2	0	0
Stage 1	-8.4	0	0
Stage 1	-8.6	0	0
Stage 1	-8.8	0	0
Stage 1	-9	0	0
Stage 1	-9.2	0	0
Stage 1	-9.4	0	0
Stage 1	-9.6	0	0
Stage 1	-9.8	0	0
Stage 1	-10	0	0
Stage 1	-10.2	0	0
Stage 1	-10.4	0	0
Stage 1	-10.6	0	0
Stage 1	-10.8	0	0
Stage 1	-11	0	0
Stage 1	-11.2	0	0
Stage 1	-11.4	0	0
Stage 1	-11.6	0	0
Stage 1	-11.8	0	0
Stage 1	-12	0	0
Stage 1	-12.2	0	0
Stage 1	-12.4	0	0
Stage 1	-12.6	0	0
Stage 1	-12.8	0	0
Stage 1	-13	0	0
Stage 1	-13.2	0	0
Stage 1	-13.4	0	0
Stage 1	-13.6	0	0
Stage 1	-13.8	0	0
Stage 1	-14	0	0
Stage 1	-14.2	0	0
Stage 1	-14.4	0	0
Stage 1	-14.6	0	0
Stage 1	-14.8	0	0
Stage 1	-15	0	0

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-15.2	0	0
Stage 1	-15.4	0	0
Stage 1	-15.6	0	0
Stage 1	-15.8	0	0
Stage 1	-16	0	0
Stage 1	-16.2	0	0
Stage 1	-16.4	0	0
Stage 1	-16.6	0	0
Stage 1	-16.8	0	0
Stage 1	-17	0	0
Stage 1	-17.2	0	0
Stage 1	-17.4	0	0
Stage 1	-17.6	0	0
Stage 1	-17.8	0	0
Stage 1	-18	0	0
Stage 1	-18.2	0	0
Stage 1	-18.4	0	0
Stage 1	-18.6	0	0
Stage 1	-18.8	0	0
Stage 1	-19	0	0
Stage 1	-19.2	0	0
Stage 1	-19.4	0	0
Stage 1	-19.6	0	0
Stage 1	-19.8	0	0
Stage 1	-20	0	0
Stage 1	-20.2	0	0
Stage 1	-20.4	0	0
Stage 1	-20.6	0	0
Stage 1	-20.8	0	0
Stage 1	-21	0	0
Stage 1	-21.2	0	0
Stage 1	-21.4	0	0
Stage 1	-21.6	0	0
Stage 1	-21.8	0	0
Stage 1	-22	0	0

Tabella Spostamento NTC2018: SLE (Rara/Frequente/Quasi Permanente) - RIGHT Stage: Stage 2

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 2	-3	0
Stage 2	-3.2	0
Stage 2	-3.4	0
Stage 2	-3.6	0
Stage 2	-3.8	0

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 2	-4	0
Stage 2	-4.2	0
Stage 2	-4.4	0
Stage 2	-4.6	0
Stage 2	-4.8	0
Stage 2	-5	0
Stage 2	-5.2	0
Stage 2	-5.4	0
Stage 2	-5.6	0
Stage 2	-5.8	0
Stage 2	-6	0
Stage 2	-6.2	0
Stage 2	-6.4	0
Stage 2	-6.6	0
Stage 2	-6.8	0
Stage 2	-7	0
Stage 2	-7.2	0
Stage 2	-7.4	0
Stage 2	-7.6	0
Stage 2	-7.8	0
Stage 2	-8	0
Stage 2	-8.2	0
Stage 2	-8.4	0
Stage 2	-8.6	0
Stage 2	-8.8	0
Stage 2	-9	0
Stage 2	-9.2	0
Stage 2	-9.4	0
Stage 2	-9.6	0
Stage 2	-9.8	0
Stage 2	-10	0
Stage 2	-10.2	0
Stage 2	-10.4	0
Stage 2	-10.6	0
Stage 2	-10.8	0
Stage 2	-11	0
Stage 2	-11.2	0
Stage 2	-11.4	0
Stage 2	-11.6	0
Stage 2	-11.8	0
Stage 2	-12	0
Stage 2	-12.2	0
Stage 2	-12.4	0
Stage 2	-12.6	0

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 2	-12.8	0
Stage 2	-13	0
Stage 2	-13.2	0
Stage 2	-13.4	0
Stage 2	-13.6	0
Stage 2	-13.8	0
Stage 2	-14	0
Stage 2	-14.2	0
Stage 2	-14.4	0
Stage 2	-14.6	0
Stage 2	-14.8	0
Stage 2	-15	0
Stage 2	-15.2	0
Stage 2	-15.4	0
Stage 2	-15.6	0
Stage 2	-15.8	0
Stage 2	-16	0
Stage 2	-16.2	0
Stage 2	-16.4	0
Stage 2	-16.6	0
Stage 2	-16.8	0
Stage 2	-17	0
Stage 2	-17.2	0
Stage 2	-17.4	0
Stage 2	-17.6	0
Stage 2	-17.8	0
Stage 2	-18	0
Stage 2	-18.2	0
Stage 2	-18.4	0
Stage 2	-18.6	0
Stage 2	-18.8	0
Stage 2	-19	0
Stage 2	-19.2	0
Stage 2	-19.4	0
Stage 2	-19.6	0
Stage 2	-19.8	0
Stage 2	-20	0
Stage 2	-20.2	0
Stage 2	-20.4	0
Stage 2	-20.6	0
Stage 2	-20.8	0
Stage 2	-21	0
Stage 2	-21.2	0
Stage 2	-21.4	0

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 2	-21.6	0
Stage 2	-21.8	0
Stage 2	-22	0

Tabella Risultati Paratia NTC2018: SLE (Rara/Frequente/Quasi Permanente) - Right wall - Stage: Stage 2

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-3	0	0
Stage 2	-3.2	0	0
Stage 2	-3.4	0	0
Stage 2	-3.6	0	0
Stage 2	-3.8	0	0
Stage 2	-4	0	0
Stage 2	-4.2	0	0
Stage 2	-4.4	0	0
Stage 2	-4.6	0	0
Stage 2	-4.8	0	0
Stage 2	-5	0	0
Stage 2	-5.2	0	0
Stage 2	-5.4	0	0
Stage 2	-5.6	0	0
Stage 2	-5.8	0	0
Stage 2	-6	0	0
Stage 2	-6.2	0	0
Stage 2	-6.4	0	0
Stage 2	-6.6	0	0
Stage 2	-6.8	0	0
Stage 2	-7	0	0
Stage 2	-7.2	0	0
Stage 2	-7.4	0	0
Stage 2	-7.6	0	0
Stage 2	-7.8	0	0
Stage 2	-8	0	0
Stage 2	-8.2	0	0
Stage 2	-8.4	0	0
Stage 2	-8.6	0	0
Stage 2	-8.8	0	0
Stage 2	-9	0	0
Stage 2	-9.2	0	0
Stage 2	-9.4	0	0
Stage 2	-9.6	0	0
Stage 2	-9.8	0	0
Stage 2	-10	0	0

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-10.2	0	0
Stage 2	-10.4	0	0
Stage 2	-10.6	0	0
Stage 2	-10.8	0	0
Stage 2	-11	0	0
Stage 2	-11.2	0	0
Stage 2	-11.4	0	0
Stage 2	-11.6	0	0
Stage 2	-11.8	0	0
Stage 2	-12	0	0
Stage 2	-12.2	0	0
Stage 2	-12.4	0	0
Stage 2	-12.6	0	0
Stage 2	-12.8	0	0
Stage 2	-13	0	0
Stage 2	-13.2	0	0
Stage 2	-13.4	0	0
Stage 2	-13.6	0	0
Stage 2	-13.8	0	0
Stage 2	-14	0	0
Stage 2	-14.2	0	0
Stage 2	-14.4	0	0
Stage 2	-14.6	0	0
Stage 2	-14.8	0	0
Stage 2	-15	0	0
Stage 2	-15.2	0	0
Stage 2	-15.4	0	0
Stage 2	-15.6	0	0
Stage 2	-15.8	0	0
Stage 2	-16	0	0
Stage 2	-16.2	0	0
Stage 2	-16.4	0	0
Stage 2	-16.6	0	0
Stage 2	-16.8	0	0
Stage 2	-17	0	0
Stage 2	-17.2	0	0
Stage 2	-17.4	0	0
Stage 2	-17.6	0	0
Stage 2	-17.8	0	0
Stage 2	-18	0	0
Stage 2	-18.2	0	0
Stage 2	-18.4	0	0
Stage 2	-18.6	0	0
Stage 2	-18.8	0	0

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-19	0	0
Stage 2	-19.2	0	0
Stage 2	-19.4	0	0
Stage 2	-19.6	0	0
Stage 2	-19.8	0	0
Stage 2	-20	0	0
Stage 2	-20.2	0	0
Stage 2	-20.4	0	0
Stage 2	-20.6	0	0
Stage 2	-20.8	0	0
Stage 2	-21	0	0
Stage 2	-21.2	0	0
Stage 2	-21.4	0	0
Stage 2	-21.6	0	0
Stage 2	-21.8	0	0
Stage 2	-22	0	0

Tabella Spostamento NTC2018: SLE (Rara/Frequente/Quasi Permanente) - RIGHT Stage: Stage 3

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 3	-3	-5.71
Stage 3	-3.2	-5.63
Stage 3	-3.4	-5.54
Stage 3	-3.6	-5.46
Stage 3	-3.8	-5.38
Stage 3	-4	-5.29
Stage 3	-4.2	-5.21
Stage 3	-4.4	-5.12
Stage 3	-4.6	-5.04
Stage 3	-4.8	-4.96
Stage 3	-5	-4.87
Stage 3	-5.2	-4.79
Stage 3	-5.4	-4.7
Stage 3	-5.6	-4.62
Stage 3	-5.8	-4.54
Stage 3	-6	-4.45
Stage 3	-6.2	-4.37
Stage 3	-6.4	-4.29
Stage 3	-6.6	-4.21
Stage 3	-6.8	-4.13
Stage 3	-7	-4.05
Stage 3	-7.2	-3.97
Stage 3	-7.4	-3.89
Stage 3	-7.6	-3.81

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 3	-7.8	-3.73
Stage 3	-8	-3.65
Stage 3	-8.2	-3.57
Stage 3	-8.4	-3.5
Stage 3	-8.6	-3.42
Stage 3	-8.8	-3.34
Stage 3	-9	-3.27
Stage 3	-9.2	-3.19
Stage 3	-9.4	-3.12
Stage 3	-9.6	-3.04
Stage 3	-9.8	-2.97
Stage 3	-10	-2.9
Stage 3	-10.2	-2.82
Stage 3	-10.4	-2.75
Stage 3	-10.6	-2.68
Stage 3	-10.8	-2.61
Stage 3	-11	-2.54
Stage 3	-11.2	-2.47
Stage 3	-11.4	-2.39
Stage 3	-11.6	-2.32
Stage 3	-11.8	-2.25
Stage 3	-12	-2.18
Stage 3	-12.2	-2.12
Stage 3	-12.4	-2.05
Stage 3	-12.6	-1.98
Stage 3	-12.8	-1.91
Stage 3	-13	-1.84
Stage 3	-13.2	-1.77
Stage 3	-13.4	-1.71
Stage 3	-13.6	-1.64
Stage 3	-13.8	-1.57
Stage 3	-14	-1.51
Stage 3	-14.2	-1.44
Stage 3	-14.4	-1.37
Stage 3	-14.6	-1.31
Stage 3	-14.8	-1.24
Stage 3	-15	-1.18
Stage 3	-15.2	-1.12
Stage 3	-15.4	-1.06
Stage 3	-15.6	-0.99
Stage 3	-15.8	-0.93
Stage 3	-16	-0.88
Stage 3	-16.2	-0.82
Stage 3	-16.4	-0.76

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 3	-16.6	-0.71
Stage 3	-16.8	-0.66
Stage 3	-17	-0.61
Stage 3	-17.2	-0.57
Stage 3	-17.4	-0.52
Stage 3	-17.6	-0.48
Stage 3	-17.8	-0.44
Stage 3	-18	-0.41
Stage 3	-18.2	-0.37
Stage 3	-18.4	-0.34
Stage 3	-18.6	-0.31
Stage 3	-18.8	-0.28
Stage 3	-19	-0.26
Stage 3	-19.2	-0.23
Stage 3	-19.4	-0.21
Stage 3	-19.6	-0.19
Stage 3	-19.8	-0.17
Stage 3	-20	-0.16
Stage 3	-20.2	-0.14
Stage 3	-20.4	-0.12
Stage 3	-20.6	-0.11
Stage 3	-20.8	-0.09
Stage 3	-21	-0.08
Stage 3	-21.2	-0.07
Stage 3	-21.4	-0.05
Stage 3	-21.6	-0.04
Stage 3	-21.8	-0.03
Stage 3	-22	-0.01

Tabella Risultati Paratia NTC2018: SLE (Rara/Frequente/Quasi Permanente) - Right wall - Stage: Stage 3

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 3	-3	0	0
Stage 3	-3.2	0	0
Stage 3	-3.2	0	0
Stage 3	-3.4	0.05	0.24
Stage 3	-3.6	0.19	0.71
Stage 3	-3.8	0.48	1.43
Stage 3	-4	0.95	2.38
Stage 3	-4.2	1.67	3.57
Stage 3	-4.4	2.67	5
Stage 3	-4.6	4	6.67
Stage 3	-4.8	5.72	8.57

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 3	-5	7.86	10.72
Stage 3	-5.2	10.48	13.1
Stage 3	-5.4	13.88	17.02
Stage 3	-5.6	18.14	21.29
Stage 3	-5.8	22.15	20.05
Stage 3	-6	25.7	17.75
Stage 3	-6.2	28.58	14.38
Stage 3	-6.4	30.75	10.84
Stage 3	-6.6	32.31	7.83
Stage 3	-6.8	33.38	5.34
Stage 3	-7	34.05	3.36
Stage 3	-7.2	34.43	1.91
Stage 3	-7.4	34.63	0.97
Stage 3	-7.6	34.67	0.21
Stage 3	-7.8	34.57	-0.49
Stage 3	-8	34.35	-1.12
Stage 3	-8.2	34.01	-1.68
Stage 3	-8.4	33.57	-2.19
Stage 3	-8.6	33.04	-2.64
Stage 3	-8.8	32.44	-3.03
Stage 3	-9	31.77	-3.36
Stage 3	-9.2	31.04	-3.64
Stage 3	-9.4	30.27	-3.86
Stage 3	-9.6	29.46	-4.02
Stage 3	-9.8	28.64	-4.13
Stage 3	-10	27.8	-4.19
Stage 3	-10.2	26.96	-4.2
Stage 3	-10.4	26.13	-4.15
Stage 3	-10.6	25.31	-4.06
Stage 3	-10.8	24.53	-3.92
Stage 3	-11	23.79	-3.72
Stage 3	-11.2	23.09	-3.48
Stage 3	-11.4	22.45	-3.2
Stage 3	-11.6	21.88	-2.86
Stage 3	-11.8	21.38	-2.49
Stage 3	-12	20.97	-2.06
Stage 3	-12.2	20.65	-1.59
Stage 3	-12.4	20.43	-1.08
Stage 3	-12.6	20.33	-0.53
Stage 3	-12.8	20.34	0.08
Stage 3	-13	20.54	1
Stage 3	-13.2	21.02	2.37
Stage 3	-13.4	21.85	4.2
Stage 3	-13.6	23.15	6.47

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 3	-13.8	24.99	9.2
Stage 3	-14	27.46	12.38
Stage 3	-14.2	30.67	16
Stage 3	-14.4	34.68	20.08
Stage 3	-14.6	39.6	24.6
Stage 3	-14.8	45.51	29.57
Stage 3	-15	52.51	34.98
Stage 3	-15.2	60.68	40.84
Stage 3	-15.4	70.11	47.14
Stage 3	-15.6	80.88	53.88
Stage 3	-15.8	93.08	60.97
Stage 3	-16	106.74	68.34
Stage 3	-16.2	121.94	75.98
Stage 3	-16.4	134.49	62.78
Stage 3	-16.6	144.58	50.43
Stage 3	-16.8	152.36	38.89
Stage 3	-17	157.99	28.14
Stage 3	-17.2	161.61	18.12
Stage 3	-17.4	163.37	8.81
Stage 3	-17.6	163.4	0.15
Stage 3	-17.8	161.82	-7.89
Stage 3	-18	158.76	-15.35
Stage 3	-18.2	154.3	-22.27
Stage 3	-18.4	148.56	-28.69
Stage 3	-18.6	141.63	-34.66
Stage 3	-18.8	133.59	-40.2
Stage 3	-19	124.52	-45.36
Stage 3	-19.2	114.53	-49.92
Stage 3	-19.4	103.9	-53.17
Stage 3	-19.6	92.86	-55.21
Stage 3	-19.8	81.63	-56.12
Stage 3	-20	70.43	-55.99
Stage 3	-20.2	59.46	-54.89
Stage 3	-20.4	48.89	-52.86
Stage 3	-20.6	38.89	-49.95
Stage 3	-20.8	29.65	-46.22
Stage 3	-21	21.34	-41.56
Stage 3	-21.2	14.14	-35.99
Stage 3	-21.4	8.23	-29.53
Stage 3	-21.6	3.79	-22.2
Stage 3	-21.8	0.99	-14.01
Stage 3	-22	0	-4.96

Tabella Spostamento NTC2018: SLE (Rara/Frequente/Quasi Permanente) - RIGHT Stage: Stage 4

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 4	-3	-36.76
Stage 4	-3.2	-36.21
Stage 4	-3.4	-35.66
Stage 4	-3.6	-35.11
Stage 4	-3.8	-34.55
Stage 4	-4	-34
Stage 4	-4.2	-33.45
Stage 4	-4.4	-32.9
Stage 4	-4.6	-32.35
Stage 4	-4.8	-31.79
Stage 4	-5	-31.24
Stage 4	-5.2	-30.69
Stage 4	-5.4	-30.14
Stage 4	-5.6	-29.59
Stage 4	-5.8	-29.04
Stage 4	-6	-28.48
Stage 4	-6.2	-27.93
Stage 4	-6.4	-27.38
Stage 4	-6.6	-26.84
Stage 4	-6.8	-26.29
Stage 4	-7	-25.74
Stage 4	-7.2	-25.19
Stage 4	-7.4	-24.65
Stage 4	-7.6	-24.11
Stage 4	-7.8	-23.56
Stage 4	-8	-23.03
Stage 4	-8.2	-22.49
Stage 4	-8.4	-21.95
Stage 4	-8.6	-21.42
Stage 4	-8.8	-20.9
Stage 4	-9	-20.37
Stage 4	-9.2	-19.85
Stage 4	-9.4	-19.34
Stage 4	-9.6	-18.82
Stage 4	-9.8	-18.32
Stage 4	-10	-17.81
Stage 4	-10.2	-17.32
Stage 4	-10.4	-16.82
Stage 4	-10.6	-16.34
Stage 4	-10.8	-15.85
Stage 4	-11	-15.38
Stage 4	-11.2	-14.9
Stage 4	-11.4	-14.44
Stage 4	-11.6	-13.98

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 4	-11.8	-13.52
Stage 4	-12	-13.07
Stage 4	-12.2	-12.63
Stage 4	-12.4	-12.19
Stage 4	-12.6	-11.76
Stage 4	-12.8	-11.33
Stage 4	-13	-10.91
Stage 4	-13.2	-10.49
Stage 4	-13.4	-10.08
Stage 4	-13.6	-9.68
Stage 4	-13.8	-9.28
Stage 4	-14	-8.89
Stage 4	-14.2	-8.51
Stage 4	-14.4	-8.13
Stage 4	-14.6	-7.76
Stage 4	-14.8	-7.39
Stage 4	-15	-7.03
Stage 4	-15.2	-6.68
Stage 4	-15.4	-6.34
Stage 4	-15.6	-6
Stage 4	-15.8	-5.67
Stage 4	-16	-5.35
Stage 4	-16.2	-5.04
Stage 4	-16.4	-4.74
Stage 4	-16.6	-4.44
Stage 4	-16.8	-4.16
Stage 4	-17	-3.88
Stage 4	-17.2	-3.62
Stage 4	-17.4	-3.36
Stage 4	-17.6	-3.12
Stage 4	-17.8	-2.88
Stage 4	-18	-2.65
Stage 4	-18.2	-2.43
Stage 4	-18.4	-2.22
Stage 4	-18.6	-2.02
Stage 4	-18.8	-1.83
Stage 4	-19	-1.64
Stage 4	-19.2	-1.46
Stage 4	-19.4	-1.28
Stage 4	-19.6	-1.11
Stage 4	-19.8	-0.94
Stage 4	-20	-0.78
Stage 4	-20.2	-0.62
Stage 4	-20.4	-0.47

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 4	-20.6	-0.32
Stage 4	-20.8	-0.17
Stage 4	-21	-0.02
Stage 4	-21.2	0.13
Stage 4	-21.4	0.27
Stage 4	-21.6	0.42
Stage 4	-21.8	0.57
Stage 4	-22	0.71

Tabella Risultati Paratia NTC2018: SLE (Rara/Frequente/Quasi Permanente) - Right wall - Stage: Stage 4

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-3	0	0
Stage 4	-3.2	0	0
Stage 4	-3.2	0	0
Stage 4	-3.4	0.05	0.24
Stage 4	-3.6	0.19	0.71
Stage 4	-3.8	0.48	1.43
Stage 4	-4	0.95	2.38
Stage 4	-4.2	1.67	3.57
Stage 4	-4.4	2.67	5
Stage 4	-4.6	4	6.67
Stage 4	-4.8	5.72	8.57
Stage 4	-5	7.86	10.72
Stage 4	-5.2	10.48	13.1
Stage 4	-5.4	13.88	17.02
Stage 4	-5.6	18.14	21.29
Stage 4	-5.8	23.32	25.91
Stage 4	-6	29.5	30.88
Stage 4	-6.2	36.74	36.19
Stage 4	-6.4	45.11	41.86
Stage 4	-6.6	54.68	47.87
Stage 4	-6.8	65.53	54.23
Stage 4	-7	77.72	60.94
Stage 4	-7.2	91.32	68
Stage 4	-7.4	106.4	75.4
Stage 4	-7.6	123.03	83.15
Stage 4	-7.8	141.28	91.26
Stage 4	-8	161.22	99.71
Stage 4	-8.2	182.92	108.5
Stage 4	-8.4	203.73	104.06
Stage 4	-8.6	223.46	98.62
Stage 4	-8.8	241.91	92.26

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-9	258.91	84.99
Stage 4	-9.2	274.3	76.95
Stage 4	-9.4	288.18	69.43
Stage 4	-9.6	300.67	62.42
Stage 4	-9.8	311.85	55.91
Stage 4	-10	321.83	49.9
Stage 4	-10.2	330.71	44.39
Stage 4	-10.4	338.58	39.37
Stage 4	-10.6	345.55	34.83
Stage 4	-10.8	351.7	30.76
Stage 4	-11	357.13	27.17
Stage 4	-11.2	361.94	24.05
Stage 4	-11.4	366.22	21.39
Stage 4	-11.6	370.06	19.18
Stage 4	-11.8	373.54	17.42
Stage 4	-12	376.76	16.1
Stage 4	-12.2	379.81	15.22
Stage 4	-12.4	382.76	14.77
Stage 4	-12.6	385.71	14.74
Stage 4	-12.8	388.73	15.13
Stage 4	-13	391.98	16.22
Stage 4	-13.2	395.6	18.12
Stage 4	-13.4	399.77	20.83
Stage 4	-13.6	404.64	24.35
Stage 4	-13.8	410.37	28.66
Stage 4	-14	417.12	33.77
Stage 4	-14.2	425.05	39.65
Stage 4	-14.4	434.32	46.32
Stage 4	-14.6	445.07	53.76
Stage 4	-14.8	457.46	61.95
Stage 4	-15	471.64	70.91
Stage 4	-15.2	487.76	80.61
Stage 4	-15.4	505.97	91.05
Stage 4	-15.6	526.42	102.22
Stage 4	-15.8	549.22	114.04
Stage 4	-16	574.5	126.4
Stage 4	-16.2	602.36	139.3
Stage 4	-16.4	622.62	101.26
Stage 4	-16.6	635.84	66.11
Stage 4	-16.8	642.59	33.76
Stage 4	-17	643.41	4.1
Stage 4	-17.2	638.82	-22.96
Stage 4	-17.4	629.31	-47.52
Stage 4	-17.6	615.38	-69.68

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-17.8	597.47	-89.54
Stage 4	-18	576.03	-107.2
Stage 4	-18.2	551.48	-122.74
Stage 4	-18.4	524.22	-136.27
Stage 4	-18.6	494.65	-147.86
Stage 4	-18.8	463.13	-157.61
Stage 4	-19	430.01	-165.58
Stage 4	-19.2	395.64	-171.86
Stage 4	-19.4	360.34	-176.52
Stage 4	-19.6	324.41	-179.61
Stage 4	-19.8	288.17	-181.2
Stage 4	-20	251.9	-181.34
Stage 4	-20.2	215.89	-180.07
Stage 4	-20.4	180.4	-177.43
Stage 4	-20.6	145.71	-173.46
Stage 4	-20.8	112.61	-165.51
Stage 4	-21	81.99	-153.08
Stage 4	-21.2	54.91	-135.42
Stage 4	-21.4	32.29	-113.08
Stage 4	-21.6	15.02	-86.36
Stage 4	-21.8	3.97	-55.27
Stage 4	-22	0	-19.83

Tabella Spostamento NTC2018: SLE (Rara/Frequente/Quasi Permanente) - RIGHT Stage: Stage 5

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 5	-3	-42.17
Stage 5	-3.2	-41.5
Stage 5	-3.4	-40.84
Stage 5	-3.6	-40.17
Stage 5	-3.8	-39.51
Stage 5	-4	-38.84
Stage 5	-4.2	-38.18
Stage 5	-4.4	-37.52
Stage 5	-4.6	-36.85
Stage 5	-4.8	-36.19
Stage 5	-5	-35.53
Stage 5	-5.2	-34.86
Stage 5	-5.4	-34.2
Stage 5	-5.6	-33.54
Stage 5	-5.8	-32.87
Stage 5	-6	-32.21
Stage 5	-6.2	-31.55
Stage 5	-6.4	-30.89

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 5	-6.6	-30.23
Stage 5	-6.8	-29.57
Stage 5	-7	-28.91
Stage 5	-7.2	-28.25
Stage 5	-7.4	-27.6
Stage 5	-7.6	-26.94
Stage 5	-7.8	-26.29
Stage 5	-8	-25.64
Stage 5	-8.2	-24.99
Stage 5	-8.4	-24.35
Stage 5	-8.6	-23.71
Stage 5	-8.8	-23.07
Stage 5	-9	-22.44
Stage 5	-9.2	-21.81
Stage 5	-9.4	-21.19
Stage 5	-9.6	-20.57
Stage 5	-9.8	-19.96
Stage 5	-10	-19.36
Stage 5	-10.2	-18.76
Stage 5	-10.4	-18.17
Stage 5	-10.6	-17.58
Stage 5	-10.8	-17.01
Stage 5	-11	-16.44
Stage 5	-11.2	-15.87
Stage 5	-11.4	-15.32
Stage 5	-11.6	-14.78
Stage 5	-11.8	-14.24
Stage 5	-12	-13.72
Stage 5	-12.2	-13.2
Stage 5	-12.4	-12.69
Stage 5	-12.6	-12.19
Stage 5	-12.8	-11.7
Stage 5	-13	-11.22
Stage 5	-13.2	-10.75
Stage 5	-13.4	-10.28
Stage 5	-13.6	-9.83
Stage 5	-13.8	-9.39
Stage 5	-14	-8.95
Stage 5	-14.2	-8.53
Stage 5	-14.4	-8.11
Stage 5	-14.6	-7.71
Stage 5	-14.8	-7.31
Stage 5	-15	-6.93
Stage 5	-15.2	-6.55

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 5	-15.4	-6.18
Stage 5	-15.6	-5.82
Stage 5	-15.8	-5.47
Stage 5	-16	-5.13
Stage 5	-16.2	-4.8
Stage 5	-16.4	-4.48
Stage 5	-16.6	-4.17
Stage 5	-16.8	-3.87
Stage 5	-17	-3.58
Stage 5	-17.2	-3.3
Stage 5	-17.4	-3.02
Stage 5	-17.6	-2.76
Stage 5	-17.8	-2.5
Stage 5	-18	-2.25
Stage 5	-18.2	-2.01
Stage 5	-18.4	-1.77
Stage 5	-18.6	-1.54
Stage 5	-18.8	-1.32
Stage 5	-19	-1.1
Stage 5	-19.2	-0.89
Stage 5	-19.4	-0.68
Stage 5	-19.6	-0.48
Stage 5	-19.8	-0.28
Stage 5	-20	-0.08
Stage 5	-20.2	0.11
Stage 5	-20.4	0.31
Stage 5	-20.6	0.49
Stage 5	-20.8	0.68
Stage 5	-21	0.87
Stage 5	-21.2	1.05
Stage 5	-21.4	1.24
Stage 5	-21.6	1.42
Stage 5	-21.8	1.61
Stage 5	-22	1.79

Tabella Risultati Paratia NTC2018: SLE (Rara/Frequente/Quasi Permanente) - Right wall - Stage: Stage 5

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-3	0	0
Stage 5	-3.2	0	0
Stage 5	-3.2	0	0
Stage 5	-3.4	0.06	0.29
Stage 5	-3.6	0.23	0.87

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-3.8	0.58	1.73
Stage 5	-4	1.15	2.89
Stage 5	-4.2	2.02	4.33
Stage 5	-4.4	3.23	6.06
Stage 5	-4.6	4.85	8.08
Stage 5	-4.8	6.93	10.39
Stage 5	-5	9.52	12.99
Stage 5	-5.2	12.7	15.87
Stage 5	-5.4	16.7	20.02
Stage 5	-5.6	21.61	24.53
Stage 5	-5.8	27.49	29.41
Stage 5	-6	34.42	34.65
Stage 5	-6.2	42.47	40.27
Stage 5	-6.4	51.72	46.25
Stage 5	-6.6	62.24	52.6
Stage 5	-6.8	74.1	59.32
Stage 5	-7	87.39	66.4
Stage 5	-7.2	102.16	73.86
Stage 5	-7.4	118.49	81.68
Stage 5	-7.6	136.47	89.87
Stage 5	-7.8	156.15	98.42
Stage 5	-8	177.62	107.35
Stage 5	-8.2	200.95	116.64
Stage 5	-8.4	225.98	125.14
Stage 5	-8.6	252.32	131.69
Stage 5	-8.8	279.57	136.29
Stage 5	-9	307.36	138.94
Stage 5	-9.2	335.29	139.64
Stage 5	-9.4	362.97	138.39
Stage 5	-9.6	390	135.18
Stage 5	-9.8	416.01	130.03
Stage 5	-10	440.59	122.92
Stage 5	-10.2	463.39	113.98
Stage 5	-10.4	484.45	105.32
Stage 5	-10.6	503.84	96.95
Stage 5	-10.8	521.62	88.87
Stage 5	-11	537.83	81.06
Stage 5	-11.2	552.53	73.53
Stage 5	-11.4	565.79	66.26
Stage 5	-11.6	577.64	59.27
Stage 5	-11.8	588.15	52.53
Stage 5	-12	597.36	46.06
Stage 5	-12.2	605.32	39.83
Stage 5	-12.4	612.09	33.85

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-12.6	617.72	28.11
Stage 5	-12.8	622.24	22.62
Stage 5	-13	625.76	17.61
Stage 5	-13.2	628.4	13.19
Stage 5	-13.4	630.27	9.35
Stage 5	-13.6	631.49	6.07
Stage 5	-13.8	632.16	3.36
Stage 5	-14	632.39	1.19
Stage 5	-14.2	632.31	-0.44
Stage 5	-14.4	632	-1.53
Stage 5	-14.6	631.58	-2.1
Stage 5	-14.8	631.15	-2.15
Stage 5	-15	630.81	-1.69
Stage 5	-15.2	630.67	-0.73
Stage 5	-15.4	630.81	0.72
Stage 5	-15.6	631.34	2.66
Stage 5	-15.8	632.35	5.02
Stage 5	-16	633.89	7.73
Stage 5	-16.2	636.04	10.75
Stage 5	-16.4	633.57	-12.37
Stage 5	-16.6	626.86	-33.53
Stage 5	-16.8	616.3	-52.8
Stage 5	-17	602.26	-70.22
Stage 5	-17.2	585.09	-85.84
Stage 5	-17.4	565.15	-99.71
Stage 5	-17.6	542.77	-111.88
Stage 5	-17.8	518.3	-122.38
Stage 5	-18	492.02	-131.41
Stage 5	-18.2	464.21	-139.04
Stage 5	-18.4	435.15	-145.3
Stage 5	-18.6	405.1	-150.21
Stage 5	-18.8	374.34	-153.8
Stage 5	-19	343.13	-156.08
Stage 5	-19.2	311.71	-157.07
Stage 5	-19.4	280.36	-156.78
Stage 5	-19.6	249.31	-155.23
Stage 5	-19.8	218.79	-152.6
Stage 5	-20	189.01	-148.9
Stage 5	-20.2	160.18	-144.14
Stage 5	-20.4	132.52	-138.32
Stage 5	-20.6	106.23	-131.46
Stage 5	-20.8	81.71	-122.58
Stage 5	-21	59.41	-111.51
Stage 5	-21.2	39.81	-97.97

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-21.4	23.45	-81.82
Stage 5	-21.6	10.9	-62.73
Stage 5	-21.8	2.86	-40.22
Stage 5	-22	0	-14.31

Tabella Spostamento NTC2018: SLE (Rara/Frequente/Quasi Permanente) - RIGHT Stage: Stage 6

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 6	-3	-42.17
Stage 6	-3.2	-41.5
Stage 6	-3.4	-40.84
Stage 6	-3.6	-40.17
Stage 6	-3.8	-39.51
Stage 6	-4	-38.84
Stage 6	-4.2	-38.18
Stage 6	-4.4	-37.52
Stage 6	-4.6	-36.85
Stage 6	-4.8	-36.19
Stage 6	-5	-35.53
Stage 6	-5.2	-34.86
Stage 6	-5.4	-34.2
Stage 6	-5.6	-33.54
Stage 6	-5.8	-32.87
Stage 6	-6	-32.21
Stage 6	-6.2	-31.55
Stage 6	-6.4	-30.89
Stage 6	-6.6	-30.23
Stage 6	-6.8	-29.57
Stage 6	-7	-28.91
Stage 6	-7.2	-28.25
Stage 6	-7.4	-27.6
Stage 6	-7.6	-26.94
Stage 6	-7.8	-26.29
Stage 6	-8	-25.64
Stage 6	-8.2	-24.99
Stage 6	-8.4	-24.35
Stage 6	-8.6	-23.71
Stage 6	-8.8	-23.07
Stage 6	-9	-22.44
Stage 6	-9.2	-21.81
Stage 6	-9.4	-21.19
Stage 6	-9.6	-20.57
Stage 6	-9.8	-19.96
Stage 6	-10	-19.36

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 6	-10.2	-18.76
Stage 6	-10.4	-18.17
Stage 6	-10.6	-17.58
Stage 6	-10.8	-17.01
Stage 6	-11	-16.44
Stage 6	-11.2	-15.87
Stage 6	-11.4	-15.32
Stage 6	-11.6	-14.78
Stage 6	-11.8	-14.24
Stage 6	-12	-13.72
Stage 6	-12.2	-13.2
Stage 6	-12.4	-12.69
Stage 6	-12.6	-12.19
Stage 6	-12.8	-11.7
Stage 6	-13	-11.22
Stage 6	-13.2	-10.75
Stage 6	-13.4	-10.28
Stage 6	-13.6	-9.83
Stage 6	-13.8	-9.39
Stage 6	-14	-8.95
Stage 6	-14.2	-8.53
Stage 6	-14.4	-8.11
Stage 6	-14.6	-7.71
Stage 6	-14.8	-7.31
Stage 6	-15	-6.93
Stage 6	-15.2	-6.55
Stage 6	-15.4	-6.18
Stage 6	-15.6	-5.82
Stage 6	-15.8	-5.47
Stage 6	-16	-5.13
Stage 6	-16.2	-4.8
Stage 6	-16.4	-4.48
Stage 6	-16.6	-4.17
Stage 6	-16.8	-3.87
Stage 6	-17	-3.58
Stage 6	-17.2	-3.3
Stage 6	-17.4	-3.02
Stage 6	-17.6	-2.76
Stage 6	-17.8	-2.5
Stage 6	-18	-2.25
Stage 6	-18.2	-2.01
Stage 6	-18.4	-1.77
Stage 6	-18.6	-1.54
Stage 6	-18.8	-1.32

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Tipo Risultato: Spostamento Muro: RIGHT

Stage	Z (m)	Spostamento (mm)
Stage 6	-19	-1.1
Stage 6	-19.2	-0.89
Stage 6	-19.4	-0.68
Stage 6	-19.6	-0.48
Stage 6	-19.8	-0.28
Stage 6	-20	-0.08
Stage 6	-20.2	0.11
Stage 6	-20.4	0.31
Stage 6	-20.6	0.49
Stage 6	-20.8	0.68
Stage 6	-21	0.87
Stage 6	-21.2	1.05
Stage 6	-21.4	1.24
Stage 6	-21.6	1.42
Stage 6	-21.8	1.61
Stage 6	-22	1.79

Tabella Risultati Paratia NTC2018: SLE (Rara/Frequente/Quasi Permanente) - Right wall - Stage: Stage 6

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-3	0	0
Stage 6	-3.2	0	0
Stage 6	-3.2	0	0
Stage 6	-3.4	0.06	0.29
Stage 6	-3.6	0.23	0.87
Stage 6	-3.8	0.58	1.73
Stage 6	-4	1.15	2.89
Stage 6	-4.2	2.02	4.33
Stage 6	-4.4	3.23	6.06
Stage 6	-4.6	4.85	8.08
Stage 6	-4.8	6.93	10.39
Stage 6	-5	9.52	12.99
Stage 6	-5.2	12.7	15.87
Stage 6	-5.4	16.7	20.02
Stage 6	-5.6	21.61	24.53
Stage 6	-5.8	27.49	29.41
Stage 6	-6	34.42	34.65
Stage 6	-6.2	42.47	40.27
Stage 6	-6.4	51.72	46.25
Stage 6	-6.6	62.24	52.6
Stage 6	-6.8	74.1	59.32
Stage 6	-7	87.39	66.4
Stage 6	-7.2	102.16	73.86

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-7.4	118.49	81.68
Stage 6	-7.6	136.47	89.87
Stage 6	-7.8	156.15	98.42
Stage 6	-8	177.62	107.35
Stage 6	-8.2	200.95	116.64
Stage 6	-8.4	225.98	125.14
Stage 6	-8.6	252.32	131.69
Stage 6	-8.8	279.57	136.29
Stage 6	-9	307.36	138.94
Stage 6	-9.2	335.29	139.64
Stage 6	-9.4	362.97	138.39
Stage 6	-9.6	390	135.18
Stage 6	-9.8	416.01	130.03
Stage 6	-10	440.59	122.92
Stage 6	-10.2	463.39	113.98
Stage 6	-10.4	484.45	105.32
Stage 6	-10.6	503.84	96.95
Stage 6	-10.8	521.62	88.87
Stage 6	-11	537.83	81.06
Stage 6	-11.2	552.53	73.53
Stage 6	-11.4	565.79	66.26
Stage 6	-11.6	577.64	59.27
Stage 6	-11.8	588.15	52.53
Stage 6	-12	597.36	46.06
Stage 6	-12.2	605.32	39.83
Stage 6	-12.4	612.09	33.85
Stage 6	-12.6	617.72	28.11
Stage 6	-12.8	622.24	22.62
Stage 6	-13	625.76	17.61
Stage 6	-13.2	628.4	13.19
Stage 6	-13.4	630.27	9.35
Stage 6	-13.6	631.49	6.07
Stage 6	-13.8	632.16	3.36
Stage 6	-14	632.39	1.19
Stage 6	-14.2	632.31	-0.44
Stage 6	-14.4	632	-1.53
Stage 6	-14.6	631.58	-2.1
Stage 6	-14.8	631.15	-2.15
Stage 6	-15	630.81	-1.69
Stage 6	-15.2	630.67	-0.73
Stage 6	-15.4	630.81	0.72
Stage 6	-15.6	631.34	2.66
Stage 6	-15.8	632.35	5.02
Stage 6	-16	633.89	7.73

Design Assumption: NTC2018: SLE (Rara/Frequente/Quasi Permanente) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-16.2	636.04	10.75
Stage 6	-16.4	633.57	-12.37
Stage 6	-16.6	626.86	-33.53
Stage 6	-16.8	616.3	-52.8
Stage 6	-17	602.26	-70.22
Stage 6	-17.2	585.09	-85.84
Stage 6	-17.4	565.15	-99.71
Stage 6	-17.6	542.77	-111.88
Stage 6	-17.8	518.3	-122.38
Stage 6	-18	492.02	-131.41
Stage 6	-18.2	464.21	-139.04
Stage 6	-18.4	435.15	-145.3
Stage 6	-18.6	405.1	-150.21
Stage 6	-18.8	374.34	-153.8
Stage 6	-19	343.13	-156.08
Stage 6	-19.2	311.71	-157.07
Stage 6	-19.4	280.36	-156.78
Stage 6	-19.6	249.31	-155.23
Stage 6	-19.8	218.79	-152.6
Stage 6	-20	189.01	-148.9
Stage 6	-20.2	160.18	-144.14
Stage 6	-20.4	132.52	-138.32
Stage 6	-20.6	106.23	-131.46
Stage 6	-20.8	81.71	-122.58
Stage 6	-21	59.41	-111.51
Stage 6	-21.2	39.81	-97.97
Stage 6	-21.4	23.45	-81.82
Stage 6	-21.6	10.9	-62.73
Stage 6	-21.8	2.86	-40.22
Stage 6	-22	0	-14.31

Risultati NTC2018: A1+M1+R1 (R3 per tiranti)

Tabella Risultati Paratia NTC2018: A1+M1+R1 (R3 per tiranti) - Right wall - Stage: Stage 1

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-3	0	0
Stage 1	-3.2	0	0
Stage 1	-3.4	0	0
Stage 1	-3.6	0	0
Stage 1	-3.8	0	0
Stage 1	-4	0	0
Stage 1	-4.2	0	0
Stage 1	-4.4	0	0
Stage 1	-4.6	0	0

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-4.8	0	0
Stage 1	-5	0	0
Stage 1	-5.2	0	0
Stage 1	-5.4	0	0
Stage 1	-5.6	0	0
Stage 1	-5.8	0	0
Stage 1	-6	0	0
Stage 1	-6.2	0	0
Stage 1	-6.4	0	0
Stage 1	-6.6	0	0
Stage 1	-6.8	0	0
Stage 1	-7	0	0
Stage 1	-7.2	0	0
Stage 1	-7.4	0	0
Stage 1	-7.6	0	0
Stage 1	-7.8	0	0
Stage 1	-8	0	0
Stage 1	-8.2	0	0
Stage 1	-8.4	0	0
Stage 1	-8.6	0	0
Stage 1	-8.8	0	0
Stage 1	-9	0	0
Stage 1	-9.2	0	0
Stage 1	-9.4	0	0
Stage 1	-9.6	0	0
Stage 1	-9.8	0	0
Stage 1	-10	0	0
Stage 1	-10.2	0	0
Stage 1	-10.4	0	0
Stage 1	-10.6	0	0
Stage 1	-10.8	0	0
Stage 1	-11	0	0
Stage 1	-11.2	0	0
Stage 1	-11.4	0	0
Stage 1	-11.6	0	0
Stage 1	-11.8	0	0
Stage 1	-12	0	0
Stage 1	-12.2	0	0
Stage 1	-12.4	0	0
Stage 1	-12.6	0	0
Stage 1	-12.8	0	0
Stage 1	-13	0	0
Stage 1	-13.2	0	0
Stage 1	-13.4	0	0

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-13.6	0	0
Stage 1	-13.8	0	0
Stage 1	-14	0	0
Stage 1	-14.2	0	0
Stage 1	-14.4	0	0
Stage 1	-14.6	0	0
Stage 1	-14.8	0	0
Stage 1	-15	0	0
Stage 1	-15.2	0	0
Stage 1	-15.4	0	0
Stage 1	-15.6	0	0
Stage 1	-15.8	0	0
Stage 1	-16	0	0
Stage 1	-16.2	0	0
Stage 1	-16.4	0	0
Stage 1	-16.6	0	0
Stage 1	-16.8	0	0
Stage 1	-17	0	0
Stage 1	-17.2	0	0
Stage 1	-17.4	0	0
Stage 1	-17.6	0	0
Stage 1	-17.8	0	0
Stage 1	-18	0	0
Stage 1	-18.2	0	0
Stage 1	-18.4	0	0
Stage 1	-18.6	0	0
Stage 1	-18.8	0	0
Stage 1	-19	0	0
Stage 1	-19.2	0	0
Stage 1	-19.4	0	0
Stage 1	-19.6	0	0
Stage 1	-19.8	0	0
Stage 1	-20	0	0
Stage 1	-20.2	0	0
Stage 1	-20.4	0	0
Stage 1	-20.6	0	0
Stage 1	-20.8	0	0
Stage 1	-21	0	0
Stage 1	-21.2	0	0
Stage 1	-21.4	0	0
Stage 1	-21.6	0	0
Stage 1	-21.8	0	0
Stage 1	-22	0	0

Tabella Risultati Paratia NTC2018: A1+M1+R1 (R3 per tiranti) - Right wall - Stage: Stage 2

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-3	0	0
Stage 2	-3.2	0	0
Stage 2	-3.4	0	0
Stage 2	-3.6	0	0
Stage 2	-3.8	0	0
Stage 2	-4	0	0
Stage 2	-4.2	0	0
Stage 2	-4.4	0	0
Stage 2	-4.6	0	0
Stage 2	-4.8	0	0
Stage 2	-5	0	0
Stage 2	-5.2	0	0
Stage 2	-5.4	0	0
Stage 2	-5.6	0	0
Stage 2	-5.8	0	0
Stage 2	-6	0	0
Stage 2	-6.2	0	0
Stage 2	-6.4	0	0
Stage 2	-6.6	0	0
Stage 2	-6.8	0	0
Stage 2	-7	0	0
Stage 2	-7.2	0	0
Stage 2	-7.4	0	0
Stage 2	-7.6	0	0
Stage 2	-7.8	0	0
Stage 2	-8	0	0
Stage 2	-8.2	0	0
Stage 2	-8.4	0	0
Stage 2	-8.6	0	0
Stage 2	-8.8	0	0
Stage 2	-9	0	0
Stage 2	-9.2	0	0
Stage 2	-9.4	0	0
Stage 2	-9.6	0	0
Stage 2	-9.8	0	0
Stage 2	-10	0	0
Stage 2	-10.2	0	0
Stage 2	-10.4	0	0
Stage 2	-10.6	0	0
Stage 2	-10.8	0	0
Stage 2	-11	0	0
Stage 2	-11.2	0	0
Stage 2	-11.4	0	0
Stage 2	-11.6	0	0

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-11.8	0	0
Stage 2	-12	0	0
Stage 2	-12.2	0	0
Stage 2	-12.4	0	0
Stage 2	-12.6	0	0
Stage 2	-12.8	0	0
Stage 2	-13	0	0
Stage 2	-13.2	0	0
Stage 2	-13.4	0	0
Stage 2	-13.6	0	0
Stage 2	-13.8	0	0
Stage 2	-14	0	0
Stage 2	-14.2	0	0
Stage 2	-14.4	0	0
Stage 2	-14.6	0	0
Stage 2	-14.8	0	0
Stage 2	-15	0	0
Stage 2	-15.2	0	0
Stage 2	-15.4	0	0
Stage 2	-15.6	0	0
Stage 2	-15.8	0	0
Stage 2	-16	0	0
Stage 2	-16.2	0	0
Stage 2	-16.4	0	0
Stage 2	-16.6	0	0
Stage 2	-16.8	0	0
Stage 2	-17	0	0
Stage 2	-17.2	0	0
Stage 2	-17.4	0	0
Stage 2	-17.6	0	0
Stage 2	-17.8	0	0
Stage 2	-18	0	0
Stage 2	-18.2	0	0
Stage 2	-18.4	0	0
Stage 2	-18.6	0	0
Stage 2	-18.8	0	0
Stage 2	-19	0	0
Stage 2	-19.2	0	0
Stage 2	-19.4	0	0
Stage 2	-19.6	0	0
Stage 2	-19.8	0	0
Stage 2	-20	0	0
Stage 2	-20.2	0	0
Stage 2	-20.4	0	0

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-20.6	0	0
Stage 2	-20.8	0	0
Stage 2	-21	0	0
Stage 2	-21.2	0	0
Stage 2	-21.4	0	0
Stage 2	-21.6	0	0
Stage 2	-21.8	0	0
Stage 2	-22	0	0

Tabella Risultati Paratia NTC2018: A1+M1+R1 (R3 per tiranti) - Right wall - Stage: Stage 3

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 3	-3	0	0
Stage 3	-3.2	0	0
Stage 3	-3.2	0	0
Stage 3	-3.4	0.06	0.31
Stage 3	-3.6	0.25	0.93
Stage 3	-3.8	0.62	1.86
Stage 3	-4	1.24	3.1
Stage 3	-4.2	2.17	4.64
Stage 3	-4.4	3.47	6.5
Stage 3	-4.6	5.2	8.67
Stage 3	-4.8	7.43	11.15
Stage 3	-5	10.22	13.93
Stage 3	-5.2	13.62	17.03
Stage 3	-5.4	18.05	22.13
Stage 3	-5.6	23.58	27.68
Stage 3	-5.8	28.8	26.07
Stage 3	-6	33.41	23.07
Stage 3	-6.2	37.15	18.69
Stage 3	-6.4	39.97	14.1
Stage 3	-6.6	42.01	10.18
Stage 3	-6.8	43.39	6.94
Stage 3	-7	44.27	4.37
Stage 3	-7.2	44.76	2.48
Stage 3	-7.4	45.01	1.25
Stage 3	-7.6	45.07	0.27
Stage 3	-7.8	44.94	-0.63
Stage 3	-8	44.65	-1.45
Stage 3	-8.2	44.21	-2.19
Stage 3	-8.4	43.64	-2.85
Stage 3	-8.6	42.96	-3.43
Stage 3	-8.8	42.17	-3.94
Stage 3	-9	41.29	-4.37

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 3	-9.2	40.35	-4.73
Stage 3	-9.4	39.35	-5.01
Stage 3	-9.6	38.3	-5.23
Stage 3	-9.8	37.23	-5.37
Stage 3	-10	36.14	-5.45
Stage 3	-10.2	35.04	-5.46
Stage 3	-10.4	33.96	-5.4
Stage 3	-10.6	32.91	-5.28
Stage 3	-10.8	31.89	-5.09
Stage 3	-11	30.92	-4.84
Stage 3	-11.2	30.02	-4.53
Stage 3	-11.4	29.19	-4.16
Stage 3	-11.6	28.44	-3.72
Stage 3	-11.8	27.8	-3.23
Stage 3	-12	27.26	-2.68
Stage 3	-12.2	26.84	-2.07
Stage 3	-12.4	26.56	-1.41
Stage 3	-12.6	26.43	-0.69
Stage 3	-12.8	26.44	0.1
Stage 3	-13	26.7	1.29
Stage 3	-13.2	27.32	3.08
Stage 3	-13.4	28.41	5.45
Stage 3	-13.6	30.09	8.41
Stage 3	-13.8	32.49	11.96
Stage 3	-14	35.7	16.09
Stage 3	-14.2	39.86	20.81
Stage 3	-14.4	45.09	26.1
Stage 3	-14.6	51.48	31.98
Stage 3	-14.8	59.17	38.44
Stage 3	-15	68.26	45.48
Stage 3	-15.2	78.88	53.09
Stage 3	-15.4	91.14	61.28
Stage 3	-15.6	105.15	70.04
Stage 3	-15.8	121	79.26
Stage 3	-16	138.77	88.84
Stage 3	-16.2	158.52	98.77
Stage 3	-16.4	174.84	81.61
Stage 3	-16.6	187.95	65.56
Stage 3	-16.8	198.07	50.56
Stage 3	-17	205.38	36.58
Stage 3	-17.2	210.09	23.56
Stage 3	-17.4	212.38	11.45
Stage 3	-17.6	212.42	0.19
Stage 3	-17.8	210.37	-10.25

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 3	-18	206.38	-19.95
Stage 3	-18.2	200.59	-28.95
Stage 3	-18.4	193.13	-37.3
Stage 3	-18.6	184.12	-45.06
Stage 3	-18.8	173.67	-52.27
Stage 3	-19	161.87	-58.97
Stage 3	-19.2	148.89	-64.89
Stage 3	-19.4	135.07	-69.12
Stage 3	-19.6	120.71	-71.77
Stage 3	-19.8	106.12	-72.96
Stage 3	-20	91.56	-72.79
Stage 3	-20.2	77.29	-71.35
Stage 3	-20.4	63.55	-68.71
Stage 3	-20.6	50.56	-64.94
Stage 3	-20.8	38.54	-60.09
Stage 3	-21	27.74	-54.03
Stage 3	-21.2	18.38	-46.78
Stage 3	-21.4	10.7	-38.39
Stage 3	-21.6	4.93	-28.87
Stage 3	-21.8	1.29	-18.21
Stage 3	-22	0	-6.44

Tabella Risultati Paratia NTC2018: A1+M1+R1 (R3 per tiranti) - Right wall - Stage: Stage 4

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-3	0	0
Stage 4	-3.2	0	0
Stage 4	-3.2	0	0
Stage 4	-3.4	0.06	0.31
Stage 4	-3.6	0.25	0.93
Stage 4	-3.8	0.62	1.86
Stage 4	-4	1.24	3.1
Stage 4	-4.2	2.17	4.64
Stage 4	-4.4	3.47	6.5
Stage 4	-4.6	5.2	8.67
Stage 4	-4.8	7.43	11.15
Stage 4	-5	10.22	13.93
Stage 4	-5.2	13.62	17.03
Stage 4	-5.4	18.05	22.13
Stage 4	-5.6	23.58	27.68
Stage 4	-5.8	30.32	33.68
Stage 4	-6	38.35	40.14
Stage 4	-6.2	47.76	47.05
Stage 4	-6.4	58.64	54.41

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-6.6	71.09	62.23
Stage 4	-6.8	85.19	70.5
Stage 4	-7	101.03	79.22
Stage 4	-7.2	118.71	88.39
Stage 4	-7.4	138.31	98.02
Stage 4	-7.6	159.94	108.1
Stage 4	-7.8	183.66	118.63
Stage 4	-8	209.59	129.62
Stage 4	-8.2	237.8	141.06
Stage 4	-8.4	264.85	135.28
Stage 4	-8.6	290.49	128.21
Stage 4	-8.8	314.48	119.94
Stage 4	-9	336.58	110.49
Stage 4	-9.2	356.59	100.04
Stage 4	-9.4	374.64	90.26
Stage 4	-9.6	390.87	81.14
Stage 4	-9.8	405.4	72.68
Stage 4	-10	418.38	64.87
Stage 4	-10.2	429.92	57.71
Stage 4	-10.4	440.16	51.18
Stage 4	-10.6	449.21	45.27
Stage 4	-10.8	457.21	39.99
Stage 4	-11	464.27	35.33
Stage 4	-11.2	470.53	31.27
Stage 4	-11.4	476.09	27.8
Stage 4	-11.6	481.07	24.93
Stage 4	-11.8	485.6	22.64
Stage 4	-12	489.79	20.93
Stage 4	-12.2	493.75	19.79
Stage 4	-12.4	497.59	19.2
Stage 4	-12.6	501.42	19.16
Stage 4	-12.8	505.35	19.67
Stage 4	-13	509.57	21.08
Stage 4	-13.2	514.28	23.55
Stage 4	-13.4	519.7	27.08
Stage 4	-13.6	526.03	31.65
Stage 4	-13.8	533.48	37.26
Stage 4	-14	542.26	43.9
Stage 4	-14.2	552.57	51.55
Stage 4	-14.4	564.61	60.22
Stage 4	-14.6	578.59	69.88
Stage 4	-14.8	594.7	80.54
Stage 4	-15	613.13	92.18
Stage 4	-15.2	634.09	104.79

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-15.4	657.76	118.37
Stage 4	-15.6	684.34	132.89
Stage 4	-15.8	713.99	148.25
Stage 4	-16	746.86	164.32
Stage 4	-16.2	783.07	181.09
Stage 4	-16.4	809.4	131.64
Stage 4	-16.6	826.59	85.95
Stage 4	-16.8	835.37	43.88
Stage 4	-17	836.43	5.33
Stage 4	-17.2	830.46	-29.85
Stage 4	-17.4	818.11	-61.78
Stage 4	-17.6	799.99	-90.59
Stage 4	-17.8	776.71	-116.41
Stage 4	-18	748.83	-139.36
Stage 4	-18.2	716.92	-159.57
Stage 4	-18.4	681.49	-177.15
Stage 4	-18.6	643.05	-192.22
Stage 4	-18.8	602.07	-204.89
Stage 4	-19	559.02	-215.26
Stage 4	-19.2	514.33	-223.42
Stage 4	-19.4	468.44	-229.48
Stage 4	-19.6	421.74	-233.5
Stage 4	-19.8	374.62	-235.57
Stage 4	-20	327.48	-235.74
Stage 4	-20.2	280.66	-234.09
Stage 4	-20.4	234.52	-230.66
Stage 4	-20.6	189.42	-225.5
Stage 4	-20.8	146.39	-215.16
Stage 4	-21	106.59	-199
Stage 4	-21.2	71.38	-176.04
Stage 4	-21.4	41.98	-147.01
Stage 4	-21.6	19.53	-112.27
Stage 4	-21.8	5.15	-71.86
Stage 4	-22	0	-25.77

Tabella Risultati Paratia NTC2018: A1+M1+R1 (R3 per tiranti) - Right wall - Stage: Stage 5

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-3	0	0
Stage 5	-3.2	0	0
Stage 5	-3.2	0	0
Stage 5	-3.4	0.08	0.38
Stage 5	-3.6	0.3	1.13
Stage 5	-3.8	0.75	2.25

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-4	1.5	3.75
Stage 5	-4.2	2.63	5.63
Stage 5	-4.4	4.2	7.88
Stage 5	-4.6	6.3	10.51
Stage 5	-4.8	9	13.51
Stage 5	-5	12.38	16.88
Stage 5	-5.2	16.51	20.63
Stage 5	-5.4	21.71	26.02
Stage 5	-5.6	28.09	31.88
Stage 5	-5.8	35.73	38.23
Stage 5	-6	44.74	45.05
Stage 5	-6.2	55.21	52.35
Stage 5	-6.4	67.24	60.12
Stage 5	-6.6	80.91	68.38
Stage 5	-6.8	96.34	77.11
Stage 5	-7	113.6	86.32
Stage 5	-7.2	132.8	96.01
Stage 5	-7.4	154.04	106.18
Stage 5	-7.6	177.4	116.83
Stage 5	-7.8	203	127.95
Stage 5	-8	230.91	139.55
Stage 5	-8.2	261.23	151.63
Stage 5	-8.4	293.77	162.69
Stage 5	-8.6	328.01	171.2
Stage 5	-8.8	363.45	177.18
Stage 5	-9	399.57	180.62
Stage 5	-9.2	435.88	181.53
Stage 5	-9.4	471.86	179.9
Stage 5	-9.6	507	175.74
Stage 5	-9.8	540.81	169.03
Stage 5	-10	572.77	159.8
Stage 5	-10.2	602.4	148.17
Stage 5	-10.4	629.79	136.92
Stage 5	-10.6	655	126.04
Stage 5	-10.8	678.1	115.53
Stage 5	-11	699.18	105.38
Stage 5	-11.2	718.29	95.58
Stage 5	-11.4	735.52	86.14
Stage 5	-11.6	750.93	77.05
Stage 5	-11.8	764.59	68.29
Stage 5	-12	776.56	59.87
Stage 5	-12.2	786.92	51.78
Stage 5	-12.4	795.72	44.01
Stage 5	-12.6	803.03	36.55

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-12.8	808.91	29.4
Stage 5	-13	813.49	22.9
Stage 5	-13.2	816.92	17.15
Stage 5	-13.4	819.35	12.16
Stage 5	-13.6	820.93	7.9
Stage 5	-13.8	821.8	4.36
Stage 5	-14	822.11	1.54
Stage 5	-14.2	822	-0.57
Stage 5	-14.4	821.6	-1.99
Stage 5	-14.6	821.05	-2.73
Stage 5	-14.8	820.5	-2.8
Stage 5	-15	820.06	-2.2
Stage 5	-15.2	819.86	-0.95
Stage 5	-15.4	820.05	0.94
Stage 5	-15.6	820.74	3.46
Stage 5	-15.8	822.05	6.53
Stage 5	-16	824.06	10.05
Stage 5	-16.2	826.85	13.97
Stage 5	-16.4	823.64	-16.08
Stage 5	-16.6	814.92	-43.59
Stage 5	-16.8	801.19	-68.63
Stage 5	-17	782.94	-91.28
Stage 5	-17.2	760.62	-111.59
Stage 5	-17.4	734.69	-129.63
Stage 5	-17.6	705.61	-145.44
Stage 5	-17.8	673.79	-159.09
Stage 5	-18	639.62	-170.83
Stage 5	-18.2	603.47	-180.75
Stage 5	-18.4	565.69	-188.89
Stage 5	-18.6	526.64	-195.28
Stage 5	-18.8	486.65	-199.94
Stage 5	-19	446.07	-202.91
Stage 5	-19.2	405.23	-204.19
Stage 5	-19.4	364.46	-203.81
Stage 5	-19.6	324.1	-201.8
Stage 5	-19.8	284.43	-198.38
Stage 5	-20	245.71	-193.57
Stage 5	-20.2	208.24	-187.38
Stage 5	-20.4	172.27	-179.82
Stage 5	-20.6	138.1	-170.9
Stage 5	-20.8	106.22	-159.36
Stage 5	-21	77.23	-144.97
Stage 5	-21.2	51.76	-127.36
Stage 5	-21.4	30.49	-106.36

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-21.6	14.18	-81.55
Stage 5	-21.8	3.72	-52.28
Stage 5	-22	0	-18.6

Tabella Risultati Paratia NTC2018: A1+M1+R1 (R3 per tiranti) - Right wall - Stage: Stage 6

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-3	0	0
Stage 6	-3.2	0	0
Stage 6	-3.2	0	0
Stage 6	-3.4	0.08	0.38
Stage 6	-3.6	0.3	1.13
Stage 6	-3.8	0.75	2.25
Stage 6	-4	1.5	3.75
Stage 6	-4.2	2.63	5.63
Stage 6	-4.4	4.2	7.88
Stage 6	-4.6	6.3	10.51
Stage 6	-4.8	9	13.51
Stage 6	-5	12.38	16.88
Stage 6	-5.2	16.51	20.63
Stage 6	-5.4	21.71	26.02
Stage 6	-5.6	28.09	31.88
Stage 6	-5.8	35.73	38.23
Stage 6	-6	44.74	45.05
Stage 6	-6.2	55.21	52.35
Stage 6	-6.4	67.24	60.12
Stage 6	-6.6	80.91	68.38
Stage 6	-6.8	96.34	77.11
Stage 6	-7	113.6	86.32
Stage 6	-7.2	132.8	96.01
Stage 6	-7.4	154.04	106.18
Stage 6	-7.6	177.4	116.83
Stage 6	-7.8	203	127.95
Stage 6	-8	230.91	139.55
Stage 6	-8.2	261.23	151.63
Stage 6	-8.4	293.77	162.69
Stage 6	-8.6	328.01	171.2
Stage 6	-8.8	363.45	177.18
Stage 6	-9	399.57	180.62
Stage 6	-9.2	435.88	181.53
Stage 6	-9.4	471.86	179.9
Stage 6	-9.6	507	175.74
Stage 6	-9.8	540.81	169.03
Stage 6	-10	572.77	159.8

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-10.2	602.4	148.17
Stage 6	-10.4	629.79	136.92
Stage 6	-10.6	655	126.04
Stage 6	-10.8	678.1	115.53
Stage 6	-11	699.18	105.38
Stage 6	-11.2	718.29	95.58
Stage 6	-11.4	735.52	86.14
Stage 6	-11.6	750.93	77.05
Stage 6	-11.8	764.59	68.29
Stage 6	-12	776.56	59.87
Stage 6	-12.2	786.92	51.78
Stage 6	-12.4	795.72	44.01
Stage 6	-12.6	803.03	36.55
Stage 6	-12.8	808.91	29.4
Stage 6	-13	813.49	22.9
Stage 6	-13.2	816.92	17.15
Stage 6	-13.4	819.35	12.16
Stage 6	-13.6	820.93	7.9
Stage 6	-13.8	821.8	4.36
Stage 6	-14	822.11	1.54
Stage 6	-14.2	822	-0.57
Stage 6	-14.4	821.6	-1.99
Stage 6	-14.6	821.05	-2.73
Stage 6	-14.8	820.5	-2.8
Stage 6	-15	820.06	-2.2
Stage 6	-15.2	819.86	-0.95
Stage 6	-15.4	820.05	0.94
Stage 6	-15.6	820.74	3.46
Stage 6	-15.8	822.05	6.53
Stage 6	-16	824.06	10.05
Stage 6	-16.2	826.85	13.97
Stage 6	-16.4	823.64	-16.08
Stage 6	-16.6	814.92	-43.59
Stage 6	-16.8	801.19	-68.63
Stage 6	-17	782.94	-91.28
Stage 6	-17.2	760.62	-111.59
Stage 6	-17.4	734.69	-129.63
Stage 6	-17.6	705.61	-145.44
Stage 6	-17.8	673.79	-159.09
Stage 6	-18	639.62	-170.83
Stage 6	-18.2	603.47	-180.75
Stage 6	-18.4	565.69	-188.89
Stage 6	-18.6	526.64	-195.28
Stage 6	-18.8	486.65	-199.94

Design Assumption: NTC2018: A1+M1+R1 (R3 per tiranti) Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-19	446.07	-202.91
Stage 6	-19.2	405.23	-204.19
Stage 6	-19.4	364.46	-203.81
Stage 6	-19.6	324.1	-201.8
Stage 6	-19.8	284.43	-198.38
Stage 6	-20	245.71	-193.57
Stage 6	-20.2	208.24	-187.38
Stage 6	-20.4	172.27	-179.82
Stage 6	-20.6	138.1	-170.9
Stage 6	-20.8	106.22	-159.36
Stage 6	-21	77.23	-144.97
Stage 6	-21.2	51.76	-127.36
Stage 6	-21.4	30.49	-106.36
Stage 6	-21.6	14.18	-81.55
Stage 6	-21.8	3.72	-52.28
Stage 6	-22	0	-18.6

Risultati NTC2018: A2+M2+R1

Tabella Risultati Paratia NTC2018: A2+M2+R1 - Right wall - Stage: Stage 1

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-3	0	0
Stage 1	-3.2	0	0
Stage 1	-3.4	0	0
Stage 1	-3.6	0	0
Stage 1	-3.8	0	0
Stage 1	-4	0	0
Stage 1	-4.2	0	0
Stage 1	-4.4	0	0
Stage 1	-4.6	0	0
Stage 1	-4.8	0	0
Stage 1	-5	0	0
Stage 1	-5.2	0	0
Stage 1	-5.4	0	0
Stage 1	-5.6	0	0
Stage 1	-5.8	0	0
Stage 1	-6	0	0
Stage 1	-6.2	0	0
Stage 1	-6.4	0	0
Stage 1	-6.6	0	0
Stage 1	-6.8	0	0
Stage 1	-7	0	0
Stage 1	-7.2	0	0
Stage 1	-7.4	0	0

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-7.6	0	0
Stage 1	-7.8	0	0
Stage 1	-8	0	0
Stage 1	-8.2	0	0
Stage 1	-8.4	0	0
Stage 1	-8.6	0	0
Stage 1	-8.8	0	0
Stage 1	-9	0	0
Stage 1	-9.2	0	0
Stage 1	-9.4	0	0
Stage 1	-9.6	0	0
Stage 1	-9.8	0	0
Stage 1	-10	0	0
Stage 1	-10.2	0	0
Stage 1	-10.4	0	0
Stage 1	-10.6	0	0
Stage 1	-10.8	0	0
Stage 1	-11	0	0
Stage 1	-11.2	0	0
Stage 1	-11.4	0	0
Stage 1	-11.6	0	0
Stage 1	-11.8	0	0
Stage 1	-12	0	0
Stage 1	-12.2	0	0
Stage 1	-12.4	0	0
Stage 1	-12.6	0	0
Stage 1	-12.8	0	0
Stage 1	-13	0	0
Stage 1	-13.2	0	0
Stage 1	-13.4	0	0
Stage 1	-13.6	0	0
Stage 1	-13.8	0	0
Stage 1	-14	0	0
Stage 1	-14.2	0	0
Stage 1	-14.4	0	0
Stage 1	-14.6	0	0
Stage 1	-14.8	0	0
Stage 1	-15	0	0
Stage 1	-15.2	0	0
Stage 1	-15.4	0	0
Stage 1	-15.6	0	0
Stage 1	-15.8	0	0
Stage 1	-16	0	0
Stage 1	-16.2	0	0

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-16.4	0	0
Stage 1	-16.6	0	0
Stage 1	-16.8	0	0
Stage 1	-17	0	0
Stage 1	-17.2	0	0
Stage 1	-17.4	0	0
Stage 1	-17.6	0	0
Stage 1	-17.8	0	0
Stage 1	-18	0	0
Stage 1	-18.2	0	0
Stage 1	-18.4	0	0
Stage 1	-18.6	0	0
Stage 1	-18.8	0	0
Stage 1	-19	0	0
Stage 1	-19.2	0	0
Stage 1	-19.4	0	0
Stage 1	-19.6	0	0
Stage 1	-19.8	0	0
Stage 1	-20	0	0
Stage 1	-20.2	0	0
Stage 1	-20.4	0	0
Stage 1	-20.6	0	0
Stage 1	-20.8	0	0
Stage 1	-21	0	0
Stage 1	-21.2	0	0
Stage 1	-21.4	0	0
Stage 1	-21.6	0	0
Stage 1	-21.8	0	0
Stage 1	-22	0	0

Tabella Risultati Paratia NTC2018: A2+M2+R1 - Right wall - Stage: Stage 2

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-3	0	0
Stage 2	-3.2	0	0
Stage 2	-3.4	0	0
Stage 2	-3.6	0	0
Stage 2	-3.8	0	0
Stage 2	-4	0	0
Stage 2	-4.2	0	0
Stage 2	-4.4	0	0
Stage 2	-4.6	0	0
Stage 2	-4.8	0	0
Stage 2	-5	0	0

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-5.2	0	0
Stage 2	-5.4	0	0
Stage 2	-5.6	0	0
Stage 2	-5.8	0	0
Stage 2	-6	0	0
Stage 2	-6.2	0	0
Stage 2	-6.4	0	0
Stage 2	-6.6	0	0
Stage 2	-6.8	0	0
Stage 2	-7	0	0
Stage 2	-7.2	0	0
Stage 2	-7.4	0	0
Stage 2	-7.6	0	0
Stage 2	-7.8	0	0
Stage 2	-8	0	0
Stage 2	-8.2	0	0
Stage 2	-8.4	0	0
Stage 2	-8.6	0	0
Stage 2	-8.8	0	0
Stage 2	-9	0	0
Stage 2	-9.2	0	0
Stage 2	-9.4	0	0
Stage 2	-9.6	0	0
Stage 2	-9.8	0	0
Stage 2	-10	0	0
Stage 2	-10.2	0	0
Stage 2	-10.4	0	0
Stage 2	-10.6	0	0
Stage 2	-10.8	0	0
Stage 2	-11	0	0
Stage 2	-11.2	0	0
Stage 2	-11.4	0	0
Stage 2	-11.6	0	0
Stage 2	-11.8	0	0
Stage 2	-12	0	0
Stage 2	-12.2	0	0
Stage 2	-12.4	0	0
Stage 2	-12.6	0	0
Stage 2	-12.8	0	0
Stage 2	-13	0	0
Stage 2	-13.2	0	0
Stage 2	-13.4	0	0
Stage 2	-13.6	0	0
Stage 2	-13.8	0	0

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-14	0	0
Stage 2	-14.2	0	0
Stage 2	-14.4	0	0
Stage 2	-14.6	0	0
Stage 2	-14.8	0	0
Stage 2	-15	0	0
Stage 2	-15.2	0	0
Stage 2	-15.4	0	0
Stage 2	-15.6	0	0
Stage 2	-15.8	0	0
Stage 2	-16	0	0
Stage 2	-16.2	0	0
Stage 2	-16.4	0	0
Stage 2	-16.6	0	0
Stage 2	-16.8	0	0
Stage 2	-17	0	0
Stage 2	-17.2	0	0
Stage 2	-17.4	0	0
Stage 2	-17.6	0	0
Stage 2	-17.8	0	0
Stage 2	-18	0	0
Stage 2	-18.2	0	0
Stage 2	-18.4	0	0
Stage 2	-18.6	0	0
Stage 2	-18.8	0	0
Stage 2	-19	0	0
Stage 2	-19.2	0	0
Stage 2	-19.4	0	0
Stage 2	-19.6	0	0
Stage 2	-19.8	0	0
Stage 2	-20	0	0
Stage 2	-20.2	0	0
Stage 2	-20.4	0	0
Stage 2	-20.6	0	0
Stage 2	-20.8	0	0
Stage 2	-21	0	0
Stage 2	-21.2	0	0
Stage 2	-21.4	0	0
Stage 2	-21.6	0	0
Stage 2	-21.8	0	0
Stage 2	-22	0	0

Tabella Risultati Paratia NTC2018: A2+M2+R1 - Right wall - Stage: Stage 3

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 3	-3	0	0
Stage 3	-3.2	0	0
Stage 3	-3.2	0	0
Stage 3	-3.4	0.07	0.33
Stage 3	-3.6	0.26	0.98
Stage 3	-3.8	0.65	1.96
Stage 3	-4	1.31	3.27
Stage 3	-4.2	2.29	4.92
Stage 3	-4.4	3.67	6.88
Stage 3	-4.6	5.51	9.18
Stage 3	-4.8	7.87	11.81
Stage 3	-5	10.82	14.76
Stage 3	-5.2	14.43	18.05
Stage 3	-5.4	19.09	23.28
Stage 3	-5.6	24.88	28.97
Stage 3	-5.8	30.91	30.15
Stage 3	-6	37.01	30.49
Stage 3	-6.2	43	29.97
Stage 3	-6.4	48.73	28.62
Stage 3	-6.6	54.01	26.42
Stage 3	-6.8	58.68	23.37
Stage 3	-7	62.58	19.48
Stage 3	-7.2	65.53	14.74
Stage 3	-7.4	67.58	10.27
Stage 3	-7.6	68.82	6.2
Stage 3	-7.8	69.3	2.42
Stage 3	-8	69.09	-1.09
Stage 3	-8.2	68.23	-4.31
Stage 3	-8.4	66.77	-7.26
Stage 3	-8.6	64.79	-9.93
Stage 3	-8.8	62.32	-12.32
Stage 3	-9	59.43	-14.45
Stage 3	-9.2	56.17	-16.31
Stage 3	-9.4	52.59	-17.9
Stage 3	-9.6	48.75	-19.23
Stage 3	-9.8	44.69	-20.29
Stage 3	-10	40.47	-21.09
Stage 3	-10.2	36.14	-21.63
Stage 3	-10.4	31.76	-21.91
Stage 3	-10.6	27.37	-21.94
Stage 3	-10.8	23.03	-21.7
Stage 3	-11	18.79	-21.21
Stage 3	-11.2	14.7	-20.46
Stage 3	-11.4	10.81	-19.46
Stage 3	-11.6	7.17	-18.2

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 3	-11.8	3.83	-16.69
Stage 3	-12	0.84	-14.93
Stage 3	-12.2	-1.74	-12.91
Stage 3	-12.4	-3.86	-10.6
Stage 3	-12.6	-5.47	-8.03
Stage 3	-12.8	-6.51	-5.21
Stage 3	-13	-6.89	-1.93
Stage 3	-13.2	-6.51	1.9
Stage 3	-13.4	-5.26	6.28
Stage 3	-13.6	-3.01	11.21
Stage 3	-13.8	0.32	16.69
Stage 3	-14	4.87	22.71
Stage 3	-14.2	10.72	29.29
Stage 3	-14.4	18	36.41
Stage 3	-14.6	26.82	44.08
Stage 3	-14.8	37.28	52.3
Stage 3	-15	49.49	61.06
Stage 3	-15.2	63.56	70.37
Stage 3	-15.4	79.58	80.09
Stage 3	-15.6	97.54	89.81
Stage 3	-15.8	117.45	99.52
Stage 3	-16	139.3	109.24
Stage 3	-16.2	163.09	118.96
Stage 3	-16.4	182.39	96.52
Stage 3	-16.6	197.55	75.79
Stage 3	-16.8	208.9	56.74
Stage 3	-17	216.76	39.29
Stage 3	-17.2	221.44	23.4
Stage 3	-17.4	223.24	9
Stage 3	-17.6	222.44	-3.98
Stage 3	-17.8	219.32	-15.59
Stage 3	-18	214.14	-25.91
Stage 3	-18.2	207.14	-34.99
Stage 3	-18.4	198.56	-42.89
Stage 3	-18.6	188.63	-49.67
Stage 3	-18.8	177.55	-55.38
Stage 3	-19	165.54	-60.09
Stage 3	-19.2	152.77	-63.83
Stage 3	-19.4	139.44	-66.66
Stage 3	-19.6	125.71	-68.62
Stage 3	-19.8	111.77	-69.74
Stage 3	-20	97.75	-70.07
Stage 3	-20.2	83.83	-69.62
Stage 3	-20.4	70.14	-68.44

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 3	-20.6	56.83	-66.54
Stage 3	-20.8	44.05	-63.94
Stage 3	-21	32.16	-59.41
Stage 3	-21.2	21.58	-52.93
Stage 3	-21.4	12.7	-44.38
Stage 3	-21.6	5.92	-33.92
Stage 3	-21.8	1.57	-21.74
Stage 3	-22	0	-7.85

Tabella Risultati Paratia NTC2018: A2+M2+R1 - Right wall - Stage: Stage 4

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-3	0	0
Stage 4	-3.2	0	0
Stage 4	-3.2	0	0
Stage 4	-3.4	0.07	0.33
Stage 4	-3.6	0.26	0.99
Stage 4	-3.8	0.66	1.97
Stage 4	-4	1.32	3.29
Stage 4	-4.2	2.3	4.93
Stage 4	-4.4	3.68	6.9
Stage 4	-4.6	5.52	9.2
Stage 4	-4.8	7.89	11.83
Stage 4	-5	10.85	14.79
Stage 4	-5.2	14.46	18.08
Stage 4	-5.4	19.12	23.3
Stage 4	-5.6	24.92	28.99
Stage 4	-5.8	31.95	35.15
Stage 4	-6	40.3	41.76
Stage 4	-6.2	50.07	48.85
Stage 4	-6.4	61.35	56.39
Stage 4	-6.6	74.23	64.4
Stage 4	-6.8	88.81	72.87
Stage 4	-7	105.17	81.81
Stage 4	-7.2	123.41	91.21
Stage 4	-7.4	143.63	101.08
Stage 4	-7.6	165.91	111.41
Stage 4	-7.8	190.35	122.2
Stage 4	-8	217.04	133.45
Stage 4	-8.2	246.08	145.17
Stage 4	-8.4	275.24	145.82
Stage 4	-8.6	304.39	145.74
Stage 4	-8.8	333.38	144.94
Stage 4	-9	362.06	143.42

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-9.2	390.3	141.18
Stage 4	-9.4	417.94	138.22
Stage 4	-9.6	444.84	134.53
Stage 4	-9.8	470.87	130.13
Stage 4	-10	495.93	125.28
Stage 4	-10.2	519.95	120.13
Stage 4	-10.4	542.89	114.69
Stage 4	-10.6	564.68	108.95
Stage 4	-10.8	585.26	102.92
Stage 4	-11	604.58	96.59
Stage 4	-11.2	622.57	89.97
Stage 4	-11.4	639.18	83.05
Stage 4	-11.6	654.35	75.83
Stage 4	-11.8	668.07	68.58
Stage 4	-12	680.52	62.26
Stage 4	-12.2	691.89	56.88
Stage 4	-12.4	702.39	52.5
Stage 4	-12.6	712.2	49.03
Stage 4	-12.8	721.49	46.45
Stage 4	-13	730.48	44.96
Stage 4	-13.2	739.41	44.65
Stage 4	-13.4	748.51	45.49
Stage 4	-13.6	758	47.47
Stage 4	-13.8	768.12	50.58
Stage 4	-14	779.08	54.8
Stage 4	-14.2	791.1	60.13
Stage 4	-14.4	804.42	66.56
Stage 4	-14.6	819.23	74.06
Stage 4	-14.8	835.75	82.62
Stage 4	-15	854.2	92.24
Stage 4	-15.2	874.78	102.89
Stage 4	-15.4	897.66	114.43
Stage 4	-15.6	922.95	126.43
Stage 4	-15.8	950.73	138.89
Stage 4	-16	981.08	151.78
Stage 4	-16.2	1014.1	165.09
Stage 4	-16.4	1037.68	117.89
Stage 4	-16.6	1051.71	70.15
Stage 4	-16.8	1056.08	21.86
Stage 4	-17	1050.95	-25.67
Stage 4	-17.2	1037.21	-68.69
Stage 4	-17.4	1015.74	-107.37
Stage 4	-17.6	987.36	-141.9
Stage 4	-17.8	952.86	-172.44

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-18	913.03	-199.17
Stage 4	-18.2	868.58	-222.24
Stage 4	-18.4	820.21	-241.84
Stage 4	-18.6	768.59	-258.1
Stage 4	-18.8	714.36	-271.18
Stage 4	-19	658.12	-281.2
Stage 4	-19.2	600.46	-288.3
Stage 4	-19.4	541.94	-292.59
Stage 4	-19.6	483.1	-294.19
Stage 4	-19.8	424.47	-293.18
Stage 4	-20	366.63	-289.17
Stage 4	-20.2	310.28	-281.74
Stage 4	-20.4	256.09	-270.98
Stage 4	-20.6	204.7	-256.95
Stage 4	-20.8	156.75	-239.71
Stage 4	-21	113.22	-217.66
Stage 4	-21.2	75.19	-190.17
Stage 4	-21.4	43.73	-157.29
Stage 4	-21.6	20.03	-118.49
Stage 4	-21.8	5.2	-74.16
Stage 4	-22	0	-26.01

Tabella Risultati Paratia NTC2018: A2+M2+R1 - Right wall - Stage: Stage 5

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-3	0	0
Stage 5	-3.2	0	0
Stage 5	-3.2	0	0
Stage 5	-3.4	0.07	0.35
Stage 5	-3.6	0.28	1.06
Stage 5	-3.8	0.71	2.12
Stage 5	-4	1.41	3.53
Stage 5	-4.2	2.47	5.29
Stage 5	-4.4	3.95	7.4
Stage 5	-4.6	5.92	9.87
Stage 5	-4.8	8.46	12.69
Stage 5	-5	11.63	15.87
Stage 5	-5.2	15.51	19.39
Stage 5	-5.4	20.44	24.61
Stage 5	-5.6	26.49	30.3
Stage 5	-5.8	33.78	36.45
Stage 5	-6	42.4	43.06
Stage 5	-6.2	52.42	50.13
Stage 5	-6.4	63.96	57.67

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-6.6	77.09	65.68
Stage 5	-6.8	91.92	74.14
Stage 5	-7	108.54	83.07
Stage 5	-7.2	127.03	92.47
Stage 5	-7.4	147.5	102.33
Stage 5	-7.6	170.03	112.65
Stage 5	-7.8	194.71	123.43
Stage 5	-8	221.65	134.68
Stage 5	-8.2	250.93	146.39
Stage 5	-8.4	282.46	157.65
Stage 5	-8.6	315.96	167.52
Stage 5	-8.8	351.16	176.01
Stage 5	-9	387.78	183.11
Stage 5	-9.2	425.55	188.84
Stage 5	-9.4	464.19	193.19
Stage 5	-9.6	503.42	196.15
Stage 5	-9.8	542.96	197.73
Stage 5	-10	582.55	197.93
Stage 5	-10.2	621.9	196.75
Stage 5	-10.4	660.73	194.18
Stage 5	-10.6	698.78	190.24
Stage 5	-10.8	735.76	184.91
Stage 5	-11	771.4	178.2
Stage 5	-11.2	805.43	170.11
Stage 5	-11.4	837.55	160.64
Stage 5	-11.6	867.51	149.79
Stage 5	-11.8	895.15	138.19
Stage 5	-12	920.59	127.2
Stage 5	-12.2	943.95	116.79
Stage 5	-12.4	965.34	106.95
Stage 5	-12.6	984.87	97.67
Stage 5	-12.8	1002.66	88.94
Stage 5	-13	1018.81	80.75
Stage 5	-13.2	1033.43	73.1
Stage 5	-13.4	1046.62	65.96
Stage 5	-13.6	1058.49	59.34
Stage 5	-13.8	1069.14	53.29
Stage 5	-14	1078.71	47.85
Stage 5	-14.2	1087.32	43.03
Stage 5	-14.4	1095.08	38.8
Stage 5	-14.6	1102.11	35.15
Stage 5	-14.8	1108.54	32.17
Stage 5	-15	1114.57	30.11
Stage 5	-15.2	1120.36	28.97

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-15.4	1126.08	28.63
Stage 5	-15.6	1131.85	28.81
Stage 5	-15.8	1137.75	29.49
Stage 5	-16	1143.88	30.66
Stage 5	-16.2	1150.34	32.29
Stage 5	-16.4	1149.42	-4.59
Stage 5	-16.6	1141.16	-41.29
Stage 5	-16.8	1125.6	-77.81
Stage 5	-17	1102.92	-113.4
Stage 5	-17.2	1073.73	-145.93
Stage 5	-17.4	1038.63	-175.51
Stage 5	-17.6	998.19	-202.22
Stage 5	-17.8	952.95	-226.18
Stage 5	-18	903.45	-247.48
Stage 5	-18.2	850.21	-266.22
Stage 5	-18.4	793.71	-282.49
Stage 5	-18.6	734.84	-294.34
Stage 5	-18.8	674.43	-302.04
Stage 5	-19	613.16	-306.36
Stage 5	-19.2	551.68	-307.38
Stage 5	-19.4	490.65	-305.15
Stage 5	-19.6	430.7	-299.78
Stage 5	-19.8	372.43	-291.32
Stage 5	-20	316.51	-279.63
Stage 5	-20.2	263.6	-264.54
Stage 5	-20.4	214.38	-246.11
Stage 5	-20.6	169.13	-226.24
Stage 5	-20.8	128.09	-205.2
Stage 5	-21	91.64	-182.24
Stage 5	-21.2	60.4	-156.19
Stage 5	-21.4	34.99	-127.06
Stage 5	-21.6	16.04	-94.77
Stage 5	-21.8	4.17	-59.35
Stage 5	-22	0	-20.83

Tabella Risultati Paratia NTC2018: A2+M2+R1 - Right wall - Stage: Stage 6

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-3	0	0
Stage 6	-3.2	0	0
Stage 6	-3.2	0	0
Stage 6	-3.4	0.07	0.34
Stage 6	-3.6	0.27	1.02
Stage 6	-3.8	0.68	2.05

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-4	1.37	3.42
Stage 6	-4.2	2.39	5.13
Stage 6	-4.4	3.83	7.18
Stage 6	-4.6	5.74	9.57
Stage 6	-4.8	8.2	12.31
Stage 6	-5	11.28	15.39
Stage 6	-5.2	15.04	18.81
Stage 6	-5.4	19.85	24.03
Stage 6	-5.6	25.79	29.72
Stage 6	-5.8	32.97	35.88
Stage 6	-6	41.47	42.49
Stage 6	-6.2	51.38	49.57
Stage 6	-6.4	62.8	57.11
Stage 6	-6.6	75.83	65.12
Stage 6	-6.8	90.55	73.59
Stage 6	-7	107.05	82.52
Stage 6	-7.2	125.43	91.91
Stage 6	-7.4	145.79	101.77
Stage 6	-7.6	168.2	112.09
Stage 6	-7.8	192.78	122.88
Stage 6	-8	219.61	134.13
Stage 6	-8.2	248.77	145.84
Stage 6	-8.4	279.63	154.3
Stage 6	-8.6	311.99	161.76
Stage 6	-8.8	345.63	168.2
Stage 6	-9	380.35	173.64
Stage 6	-9.2	415.97	178.07
Stage 6	-9.4	452.27	181.49
Stage 6	-9.6	489.05	183.9
Stage 6	-9.8	526.11	185.31
Stage 6	-10	563.25	185.73
Stage 6	-10.2	600.28	185.16
Stage 6	-10.4	637.01	183.61
Stage 6	-10.6	673.22	181.07
Stage 6	-10.8	708.73	177.56
Stage 6	-11	743.35	173.06
Stage 6	-11.2	776.86	167.58
Stage 6	-11.4	809.09	161.12
Stage 6	-11.6	839.86	153.89
Stage 6	-11.8	869.14	146.36
Stage 6	-12	896.84	138.54
Stage 6	-12.2	922.93	130.42
Stage 6	-12.4	947.33	122
Stage 6	-12.6	969.99	113.29

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-12.8	990.85	104.3
Stage 6	-13	1009.91	95.32
Stage 6	-13.2	1027.32	87.03
Stage 6	-13.4	1043.24	79.61
Stage 6	-13.6	1057.84	73.03
Stage 6	-13.8	1071.3	67.31
Stage 6	-14	1083.79	62.42
Stage 6	-14.2	1095.47	58.41
Stage 6	-14.4	1106.54	55.34
Stage 6	-14.6	1117.18	53.21
Stage 6	-14.8	1127.58	52.01
Stage 6	-15	1137.93	51.71
Stage 6	-15.2	1148.39	52.32
Stage 6	-15.4	1159.13	53.72
Stage 6	-15.6	1170.26	55.64
Stage 6	-15.8	1181.87	58.03
Stage 6	-16	1194.04	60.87
Stage 6	-16.2	1206.87	64.15
Stage 6	-16.4	1211.28	22.06
Stage 6	-16.6	1207.38	-19.53
Stage 6	-16.8	1195.26	-60.61
Stage 6	-17	1175.16	-100.46
Stage 6	-17.2	1147.78	-136.95
Stage 6	-17.4	1113.74	-170.19
Stage 6	-17.6	1073.71	-200.16
Stage 6	-17.8	1028.28	-227.11
Stage 6	-18	978.05	-251.15
Stage 6	-18.2	923.57	-272.38
Stage 6	-18.4	865.44	-290.67
Stage 6	-18.6	804.07	-306.86
Stage 6	-18.8	740.28	-318.93
Stage 6	-19	674.91	-326.84
Stage 6	-19.2	608.78	-330.69
Stage 6	-19.4	542.66	-330.59
Stage 6	-19.6	477.33	-326.65
Stage 6	-19.8	413.53	-318.98
Stage 6	-20	352.04	-307.48
Stage 6	-20.2	293.64	-292.01
Stage 6	-20.4	239.1	-272.67
Stage 6	-20.6	188.81	-251.43
Stage 6	-20.8	143.11	-228.53
Stage 6	-21	102.46	-203.24
Stage 6	-21.2	67.58	-174.4
Stage 6	-21.4	39.17	-142.03

Design Assumption: NTC2018: A2+M2+R1 Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-21.6	17.97	-106.04
Stage 6	-21.8	4.67	-66.48
Stage 6	-22	0	-23.35

Risultati NTC2018: SISMICA STR

Tabella Risultati Paratia NTC2018: SISMICA STR - Right wall - Stage: Stage 1

Design Assumption: NTC2018: SISMICA STR Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-3	0	0
Stage 1	-3.2	0	0
Stage 1	-3.4	0	0
Stage 1	-3.6	0	0
Stage 1	-3.8	0	0
Stage 1	-4	0	0
Stage 1	-4.2	0	0
Stage 1	-4.4	0	0
Stage 1	-4.6	0	0
Stage 1	-4.8	0	0
Stage 1	-5	0	0
Stage 1	-5.2	0	0
Stage 1	-5.4	0	0
Stage 1	-5.6	0	0
Stage 1	-5.8	0	0
Stage 1	-6	0	0
Stage 1	-6.2	0	0
Stage 1	-6.4	0	0
Stage 1	-6.6	0	0
Stage 1	-6.8	0	0
Stage 1	-7	0	0
Stage 1	-7.2	0	0
Stage 1	-7.4	0	0
Stage 1	-7.6	0	0
Stage 1	-7.8	0	0
Stage 1	-8	0	0
Stage 1	-8.2	0	0
Stage 1	-8.4	0	0
Stage 1	-8.6	0	0
Stage 1	-8.8	0	0
Stage 1	-9	0	0
Stage 1	-9.2	0	0
Stage 1	-9.4	0	0
Stage 1	-9.6	0	0
Stage 1	-9.8	0	0
Stage 1	-10	0	0

Design Assumption: NTC2018: SISMICA STR Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-10.2	0	0
Stage 1	-10.4	0	0
Stage 1	-10.6	0	0
Stage 1	-10.8	0	0
Stage 1	-11	0	0
Stage 1	-11.2	0	0
Stage 1	-11.4	0	0
Stage 1	-11.6	0	0
Stage 1	-11.8	0	0
Stage 1	-12	0	0
Stage 1	-12.2	0	0
Stage 1	-12.4	0	0
Stage 1	-12.6	0	0
Stage 1	-12.8	0	0
Stage 1	-13	0	0
Stage 1	-13.2	0	0
Stage 1	-13.4	0	0
Stage 1	-13.6	0	0
Stage 1	-13.8	0	0
Stage 1	-14	0	0
Stage 1	-14.2	0	0
Stage 1	-14.4	0	0
Stage 1	-14.6	0	0
Stage 1	-14.8	0	0
Stage 1	-15	0	0
Stage 1	-15.2	0	0
Stage 1	-15.4	0	0
Stage 1	-15.6	0	0
Stage 1	-15.8	0	0
Stage 1	-16	0	0
Stage 1	-16.2	0	0
Stage 1	-16.4	0	0
Stage 1	-16.6	0	0
Stage 1	-16.8	0	0
Stage 1	-17	0	0
Stage 1	-17.2	0	0
Stage 1	-17.4	0	0
Stage 1	-17.6	0	0
Stage 1	-17.8	0	0
Stage 1	-18	0	0
Stage 1	-18.2	0	0
Stage 1	-18.4	0	0
Stage 1	-18.6	0	0
Stage 1	-18.8	0	0

Design Assumption: NTC2018: SISMICA STR Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-19	0	0
Stage 1	-19.2	0	0
Stage 1	-19.4	0	0
Stage 1	-19.6	0	0
Stage 1	-19.8	0	0
Stage 1	-20	0	0
Stage 1	-20.2	0	0
Stage 1	-20.4	0	0
Stage 1	-20.6	0	0
Stage 1	-20.8	0	0
Stage 1	-21	0	0
Stage 1	-21.2	0	0
Stage 1	-21.4	0	0
Stage 1	-21.6	0	0
Stage 1	-21.8	0	0
Stage 1	-22	0	0

Tabella Risultati Paratia NTC2018: SISMICA STR - Right wall - Stage: Stage 2

Design Assumption: NTC2018: SISMICA STR Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-3	0	0
Stage 2	-3.2	0	0
Stage 2	-3.4	0	0
Stage 2	-3.6	0	0
Stage 2	-3.8	0	0
Stage 2	-4	0	0
Stage 2	-4.2	0	0
Stage 2	-4.4	0	0
Stage 2	-4.6	0	0
Stage 2	-4.8	0	0
Stage 2	-5	0	0
Stage 2	-5.2	0	0
Stage 2	-5.4	0	0
Stage 2	-5.6	0	0
Stage 2	-5.8	0	0
Stage 2	-6	0	0
Stage 2	-6.2	0	0
Stage 2	-6.4	0	0
Stage 2	-6.6	0	0
Stage 2	-6.8	0	0
Stage 2	-7	0	0
Stage 2	-7.2	0	0
Stage 2	-7.4	0	0
Stage 2	-7.6	0	0

Design Assumption: NTC2018: SISMICA STR Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-7.8	0	0
Stage 2	-8	0	0
Stage 2	-8.2	0	0
Stage 2	-8.4	0	0
Stage 2	-8.6	0	0
Stage 2	-8.8	0	0
Stage 2	-9	0	0
Stage 2	-9.2	0	0
Stage 2	-9.4	0	0
Stage 2	-9.6	0	0
Stage 2	-9.8	0	0
Stage 2	-10	0	0
Stage 2	-10.2	0	0
Stage 2	-10.4	0	0
Stage 2	-10.6	0	0
Stage 2	-10.8	0	0
Stage 2	-11	0	0
Stage 2	-11.2	0	0
Stage 2	-11.4	0	0
Stage 2	-11.6	0	0
Stage 2	-11.8	0	0
Stage 2	-12	0	0
Stage 2	-12.2	0	0
Stage 2	-12.4	0	0
Stage 2	-12.6	0	0
Stage 2	-12.8	0	0
Stage 2	-13	0	0
Stage 2	-13.2	0	0
Stage 2	-13.4	0	0
Stage 2	-13.6	0	0
Stage 2	-13.8	0	0
Stage 2	-14	0	0
Stage 2	-14.2	0	0
Stage 2	-14.4	0	0
Stage 2	-14.6	0	0
Stage 2	-14.8	0	0
Stage 2	-15	0	0
Stage 2	-15.2	0	0
Stage 2	-15.4	0	0
Stage 2	-15.6	0	0
Stage 2	-15.8	0	0
Stage 2	-16	0	0
Stage 2	-16.2	0	0
Stage 2	-16.4	0	0

Design Assumption: NTC2018: SISMICA STR Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-16.6	0	0
Stage 2	-16.8	0	0
Stage 2	-17	0	0
Stage 2	-17.2	0	0
Stage 2	-17.4	0	0
Stage 2	-17.6	0	0
Stage 2	-17.8	0	0
Stage 2	-18	0	0
Stage 2	-18.2	0	0
Stage 2	-18.4	0	0
Stage 2	-18.6	0	0
Stage 2	-18.8	0	0
Stage 2	-19	0	0
Stage 2	-19.2	0	0
Stage 2	-19.4	0	0
Stage 2	-19.6	0	0
Stage 2	-19.8	0	0
Stage 2	-20	0	0
Stage 2	-20.2	0	0
Stage 2	-20.4	0	0
Stage 2	-20.6	0	0
Stage 2	-20.8	0	0
Stage 2	-21	0	0
Stage 2	-21.2	0	0
Stage 2	-21.4	0	0
Stage 2	-21.6	0	0
Stage 2	-21.8	0	0
Stage 2	-22	0	0

Tabella Risultati Paratia NTC2018: SISMICA STR - Right wall - Stage: Stage 3

Design Assumption: NTC2018: SISMICA STR Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 3	-3	0	0
Stage 3	-3.2	0	0
Stage 3	-3.2	0	0
Stage 3	-3.4	0.05	0.24
Stage 3	-3.6	0.19	0.71
Stage 3	-3.8	0.48	1.43
Stage 3	-4	0.95	2.38
Stage 3	-4.2	1.67	3.57
Stage 3	-4.4	2.67	5
Stage 3	-4.6	4	6.67
Stage 3	-4.8	5.72	8.57
Stage 3	-5	7.86	10.72

Design Assumption: NTC2018: SISMICA STR Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 3	-5.2	10.48	13.1
Stage 3	-5.4	13.88	17.02
Stage 3	-5.6	18.14	21.29
Stage 3	-5.8	22.15	20.05
Stage 3	-6	25.7	17.75
Stage 3	-6.2	28.58	14.38
Stage 3	-6.4	30.75	10.84
Stage 3	-6.6	32.31	7.83
Stage 3	-6.8	33.38	5.34
Stage 3	-7	34.05	3.36
Stage 3	-7.2	34.43	1.91
Stage 3	-7.4	34.63	0.97
Stage 3	-7.6	34.67	0.21
Stage 3	-7.8	34.57	-0.49
Stage 3	-8	34.35	-1.12
Stage 3	-8.2	34.01	-1.68
Stage 3	-8.4	33.57	-2.19
Stage 3	-8.6	33.04	-2.64
Stage 3	-8.8	32.44	-3.03
Stage 3	-9	31.77	-3.36
Stage 3	-9.2	31.04	-3.64
Stage 3	-9.4	30.27	-3.86
Stage 3	-9.6	29.46	-4.02
Stage 3	-9.8	28.64	-4.13
Stage 3	-10	27.8	-4.19
Stage 3	-10.2	26.96	-4.2
Stage 3	-10.4	26.13	-4.15
Stage 3	-10.6	25.31	-4.06
Stage 3	-10.8	24.53	-3.92
Stage 3	-11	23.79	-3.72
Stage 3	-11.2	23.09	-3.48
Stage 3	-11.4	22.45	-3.2
Stage 3	-11.6	21.88	-2.86
Stage 3	-11.8	21.38	-2.49
Stage 3	-12	20.97	-2.06
Stage 3	-12.2	20.65	-1.59
Stage 3	-12.4	20.43	-1.08
Stage 3	-12.6	20.33	-0.53
Stage 3	-12.8	20.34	0.08
Stage 3	-13	20.54	1
Stage 3	-13.2	21.02	2.37
Stage 3	-13.4	21.85	4.2
Stage 3	-13.6	23.15	6.47
Stage 3	-13.8	24.99	9.2

Design Assumption: NTC2018: SISMICA STR Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 3	-14	27.46	12.38
Stage 3	-14.2	30.67	16
Stage 3	-14.4	34.68	20.08
Stage 3	-14.6	39.6	24.6
Stage 3	-14.8	45.51	29.57
Stage 3	-15	52.51	34.98
Stage 3	-15.2	60.68	40.84
Stage 3	-15.4	70.11	47.14
Stage 3	-15.6	80.88	53.88
Stage 3	-15.8	93.08	60.97
Stage 3	-16	106.74	68.34
Stage 3	-16.2	121.94	75.98
Stage 3	-16.4	134.49	62.78
Stage 3	-16.6	144.58	50.43
Stage 3	-16.8	152.36	38.89
Stage 3	-17	157.99	28.14
Stage 3	-17.2	161.61	18.12
Stage 3	-17.4	163.37	8.81
Stage 3	-17.6	163.4	0.15
Stage 3	-17.8	161.82	-7.89
Stage 3	-18	158.76	-15.35
Stage 3	-18.2	154.3	-22.27
Stage 3	-18.4	148.56	-28.69
Stage 3	-18.6	141.63	-34.66
Stage 3	-18.8	133.59	-40.2
Stage 3	-19	124.52	-45.36
Stage 3	-19.2	114.53	-49.92
Stage 3	-19.4	103.9	-53.17
Stage 3	-19.6	92.86	-55.21
Stage 3	-19.8	81.63	-56.12
Stage 3	-20	70.43	-55.99
Stage 3	-20.2	59.46	-54.89
Stage 3	-20.4	48.89	-52.86
Stage 3	-20.6	38.89	-49.95
Stage 3	-20.8	29.65	-46.22
Stage 3	-21	21.34	-41.56
Stage 3	-21.2	14.14	-35.99
Stage 3	-21.4	8.23	-29.53
Stage 3	-21.6	3.79	-22.2
Stage 3	-21.8	0.99	-14.01
Stage 3	-22	0	-4.96

Tabella Risultati Paratia NTC2018: SISMICA STR - Right wall - Stage: Stage 4

Design Assumption: NTC2018: SISMICA STR Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-3	0	0
Stage 4	-3.2	0	0
Stage 4	-3.2	0	0
Stage 4	-3.4	0.05	0.24
Stage 4	-3.6	0.19	0.71
Stage 4	-3.8	0.48	1.43
Stage 4	-4	0.95	2.38
Stage 4	-4.2	1.67	3.57
Stage 4	-4.4	2.67	5
Stage 4	-4.6	4	6.67
Stage 4	-4.8	5.72	8.57
Stage 4	-5	7.86	10.72
Stage 4	-5.2	10.48	13.1
Stage 4	-5.4	13.88	17.02
Stage 4	-5.6	18.14	21.29
Stage 4	-5.8	23.32	25.91
Stage 4	-6	29.5	30.88
Stage 4	-6.2	36.74	36.19
Stage 4	-6.4	45.11	41.86
Stage 4	-6.6	54.68	47.87
Stage 4	-6.8	65.53	54.23
Stage 4	-7	77.72	60.94
Stage 4	-7.2	91.32	68
Stage 4	-7.4	106.4	75.4
Stage 4	-7.6	123.03	83.15
Stage 4	-7.8	141.28	91.26
Stage 4	-8	161.22	99.71
Stage 4	-8.2	182.92	108.5
Stage 4	-8.4	203.73	104.06
Stage 4	-8.6	223.46	98.62
Stage 4	-8.8	241.91	92.26
Stage 4	-9	258.91	84.99
Stage 4	-9.2	274.3	76.95
Stage 4	-9.4	288.18	69.43
Stage 4	-9.6	300.67	62.42
Stage 4	-9.8	311.85	55.91
Stage 4	-10	321.83	49.9
Stage 4	-10.2	330.71	44.39
Stage 4	-10.4	338.58	39.37
Stage 4	-10.6	345.55	34.83
Stage 4	-10.8	351.7	30.76
Stage 4	-11	357.13	27.17
Stage 4	-11.2	361.94	24.05
Stage 4	-11.4	366.22	21.39
Stage 4	-11.6	370.06	19.18

Design Assumption: NTC2018: SISMICA STR Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-11.8	373.54	17.42
Stage 4	-12	376.76	16.1
Stage 4	-12.2	379.81	15.22
Stage 4	-12.4	382.76	14.77
Stage 4	-12.6	385.71	14.74
Stage 4	-12.8	388.73	15.13
Stage 4	-13	391.98	16.22
Stage 4	-13.2	395.6	18.12
Stage 4	-13.4	399.77	20.83
Stage 4	-13.6	404.64	24.35
Stage 4	-13.8	410.37	28.66
Stage 4	-14	417.12	33.77
Stage 4	-14.2	425.05	39.65
Stage 4	-14.4	434.32	46.32
Stage 4	-14.6	445.07	53.76
Stage 4	-14.8	457.46	61.95
Stage 4	-15	471.64	70.91
Stage 4	-15.2	487.76	80.61
Stage 4	-15.4	505.97	91.05
Stage 4	-15.6	526.42	102.22
Stage 4	-15.8	549.22	114.04
Stage 4	-16	574.5	126.4
Stage 4	-16.2	602.36	139.3
Stage 4	-16.4	622.62	101.26
Stage 4	-16.6	635.84	66.11
Stage 4	-16.8	642.59	33.76
Stage 4	-17	643.41	4.1
Stage 4	-17.2	638.82	-22.96
Stage 4	-17.4	629.31	-47.52
Stage 4	-17.6	615.38	-69.68
Stage 4	-17.8	597.47	-89.54
Stage 4	-18	576.03	-107.2
Stage 4	-18.2	551.48	-122.74
Stage 4	-18.4	524.22	-136.27
Stage 4	-18.6	494.65	-147.86
Stage 4	-18.8	463.13	-157.61
Stage 4	-19	430.01	-165.58
Stage 4	-19.2	395.64	-171.86
Stage 4	-19.4	360.34	-176.52
Stage 4	-19.6	324.41	-179.61
Stage 4	-19.8	288.17	-181.2
Stage 4	-20	251.9	-181.34
Stage 4	-20.2	215.89	-180.07
Stage 4	-20.4	180.4	-177.43

Design Assumption: NTC2018: SISMICA STR Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-20.6	145.71	-173.46
Stage 4	-20.8	112.61	-165.51
Stage 4	-21	81.99	-153.08
Stage 4	-21.2	54.91	-135.42
Stage 4	-21.4	32.29	-113.08
Stage 4	-21.6	15.02	-86.36
Stage 4	-21.8	3.97	-55.27
Stage 4	-22	0	-19.83

Tabella Risultati Paratia NTC2018: SISMICA STR - Right wall - Stage: Stage 5

Design Assumption: NTC2018: SISMICA STR Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-3	0	0
Stage 5	-3.2	0	0
Stage 5	-3.2	0	0
Stage 5	-3.4	0.06	0.29
Stage 5	-3.6	0.23	0.87
Stage 5	-3.8	0.58	1.73
Stage 5	-4	1.15	2.89
Stage 5	-4.2	2.02	4.33
Stage 5	-4.4	3.23	6.06
Stage 5	-4.6	4.85	8.08
Stage 5	-4.8	6.93	10.39
Stage 5	-5	9.52	12.99
Stage 5	-5.2	12.7	15.87
Stage 5	-5.4	16.7	20.02
Stage 5	-5.6	21.61	24.53
Stage 5	-5.8	27.49	29.41
Stage 5	-6	34.42	34.65
Stage 5	-6.2	42.47	40.27
Stage 5	-6.4	51.72	46.25
Stage 5	-6.6	62.24	52.6
Stage 5	-6.8	74.1	59.32
Stage 5	-7	87.39	66.4
Stage 5	-7.2	102.16	73.86
Stage 5	-7.4	118.49	81.68
Stage 5	-7.6	136.47	89.87
Stage 5	-7.8	156.15	98.42
Stage 5	-8	177.62	107.35
Stage 5	-8.2	200.95	116.64
Stage 5	-8.4	225.98	125.14
Stage 5	-8.6	252.32	131.69
Stage 5	-8.8	279.57	136.29
Stage 5	-9	307.36	138.94

Design Assumption: NTC2018: SISMICA STR Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-9.2	335.29	139.64
Stage 5	-9.4	362.97	138.39
Stage 5	-9.6	390	135.18
Stage 5	-9.8	416.01	130.03
Stage 5	-10	440.59	122.92
Stage 5	-10.2	463.39	113.98
Stage 5	-10.4	484.45	105.32
Stage 5	-10.6	503.84	96.95
Stage 5	-10.8	521.62	88.87
Stage 5	-11	537.83	81.06
Stage 5	-11.2	552.53	73.53
Stage 5	-11.4	565.79	66.26
Stage 5	-11.6	577.64	59.27
Stage 5	-11.8	588.15	52.53
Stage 5	-12	597.36	46.06
Stage 5	-12.2	605.32	39.83
Stage 5	-12.4	612.09	33.85
Stage 5	-12.6	617.72	28.11
Stage 5	-12.8	622.24	22.62
Stage 5	-13	625.76	17.61
Stage 5	-13.2	628.4	13.19
Stage 5	-13.4	630.27	9.35
Stage 5	-13.6	631.49	6.07
Stage 5	-13.8	632.16	3.36
Stage 5	-14	632.39	1.19
Stage 5	-14.2	632.31	-0.44
Stage 5	-14.4	632	-1.53
Stage 5	-14.6	631.58	-2.1
Stage 5	-14.8	631.15	-2.15
Stage 5	-15	630.81	-1.69
Stage 5	-15.2	630.67	-0.73
Stage 5	-15.4	630.81	0.72
Stage 5	-15.6	631.34	2.66
Stage 5	-15.8	632.35	5.02
Stage 5	-16	633.89	7.73
Stage 5	-16.2	636.04	10.75
Stage 5	-16.4	633.57	-12.37
Stage 5	-16.6	626.86	-33.53
Stage 5	-16.8	616.3	-52.8
Stage 5	-17	602.26	-70.22
Stage 5	-17.2	585.09	-85.84
Stage 5	-17.4	565.15	-99.71
Stage 5	-17.6	542.77	-111.88
Stage 5	-17.8	518.3	-122.38

Design Assumption: NTC2018: SISMICA STR Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-18	492.02	-131.41
Stage 5	-18.2	464.21	-139.04
Stage 5	-18.4	435.15	-145.3
Stage 5	-18.6	405.1	-150.21
Stage 5	-18.8	374.34	-153.8
Stage 5	-19	343.13	-156.08
Stage 5	-19.2	311.71	-157.07
Stage 5	-19.4	280.36	-156.78
Stage 5	-19.6	249.31	-155.23
Stage 5	-19.8	218.79	-152.6
Stage 5	-20	189.01	-148.9
Stage 5	-20.2	160.18	-144.14
Stage 5	-20.4	132.52	-138.32
Stage 5	-20.6	106.23	-131.46
Stage 5	-20.8	81.71	-122.58
Stage 5	-21	59.41	-111.51
Stage 5	-21.2	39.81	-97.97
Stage 5	-21.4	23.45	-81.82
Stage 5	-21.6	10.9	-62.73
Stage 5	-21.8	2.86	-40.22
Stage 5	-22	0	-14.31

Tabella Risultati Paratia NTC2018: SISMICA STR - Right wall - Stage: Stage 6

Design Assumption: NTC2018: SISMICA STR Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-3	0	1.4
Stage 6	-3.2	0.28	1.4
Stage 6	-3.4	1.18	4.49
Stage 6	-3.6	2.74	7.84
Stage 6	-3.8	5.03	11.45
Stage 6	-4	8.1	15.31
Stage 6	-4.2	11.98	19.43
Stage 6	-4.4	16.75	23.81
Stage 6	-4.6	22.44	28.45
Stage 6	-4.8	29.12	33.4
Stage 6	-5	36.84	38.62
Stage 6	-5.2	45.66	44.1
Stage 6	-5.4	55.85	50.97
Stage 6	-5.6	67.49	58.19
Stage 6	-5.8	80.64	65.76
Stage 6	-6	95.38	73.68
Stage 6	-6.2	111.77	81.96
Stage 6	-6.4	129.89	90.59
Stage 6	-6.6	149.8	99.57

Design Assumption: NTC2018: SISMICA STR Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-6.8	171.58	108.9
Stage 6	-7	195.3	118.58
Stage 6	-7.2	221.02	128.62
Stage 6	-7.4	248.82	139.01
Stage 6	-7.6	278.77	149.74
Stage 6	-7.8	310.94	160.83
Stage 6	-8	345.41	172.35
Stage 6	-8.2	382.11	183.51
Stage 6	-8.4	419.79	188.42
Stage 6	-8.6	458.18	191.92
Stage 6	-8.8	496.98	194.02
Stage 6	-9	535.93	194.74
Stage 6	-9.2	574.74	194.08
Stage 6	-9.4	613.17	192.13
Stage 6	-9.6	650.95	188.89
Stage 6	-9.8	687.82	184.36
Stage 6	-10	723.53	178.54
Stage 6	-10.2	757.82	171.46
Stage 6	-10.4	790.56	163.69
Stage 6	-10.6	821.61	155.25
Stage 6	-10.8	850.83	146.13
Stage 6	-11	878.09	136.32
Stage 6	-11.2	903.26	125.82
Stage 6	-11.4	926.19	114.64
Stage 6	-11.6	946.74	102.77
Stage 6	-11.8	964.91	90.85
Stage 6	-12	980.8	79.45
Stage 6	-12.2	994.51	68.57
Stage 6	-12.4	1006.15	58.17
Stage 6	-12.6	1015.8	48.27
Stage 6	-12.8	1023.57	38.82
Stage 6	-13	1029.53	29.79
Stage 6	-13.2	1033.78	21.28
Stage 6	-13.4	1036.5	13.59
Stage 6	-13.6	1037.84	6.72
Stage 6	-13.8	1037.97	0.64
Stage 6	-14	1037.04	-4.64
Stage 6	-14.2	1035.21	-9.15
Stage 6	-14.4	1032.63	-12.91
Stage 6	-14.6	1029.45	-15.91
Stage 6	-14.8	1025.81	-18.19
Stage 6	-15	1021.86	-19.74
Stage 6	-15.2	1017.74	-20.59
Stage 6	-15.4	1013.59	-20.75

Design Assumption: NTC2018: SISMICA STR Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-15.6	1009.55	-20.23
Stage 6	-15.8	1005.73	-19.12
Stage 6	-16	1002.22	-17.51
Stage 6	-16.2	999.14	-15.42
Stage 6	-16.4	989.4	-48.71
Stage 6	-16.6	973.45	-79.73
Stage 6	-16.8	951.73	-108.61
Stage 6	-17	924.64	-135.47
Stage 6	-17.2	892.63	-160.02
Stage 6	-17.4	856.45	-180.92
Stage 6	-17.6	816.77	-198.4
Stage 6	-17.8	774.23	-212.65
Stage 6	-18	729.43	-224.01
Stage 6	-18.2	682.89	-232.7
Stage 6	-18.4	635.12	-238.87
Stage 6	-18.6	586.58	-242.67
Stage 6	-18.8	537.74	-244.21
Stage 6	-19	489	-243.73
Stage 6	-19.2	440.7	-241.49
Stage 6	-19.4	393.18	-237.59
Stage 6	-19.6	346.76	-232.1
Stage 6	-19.8	301.74	-225.08
Stage 6	-20	258.43	-216.6
Stage 6	-20.2	217.09	-206.69
Stage 6	-20.4	178	-195.41
Stage 6	-20.6	141.44	-182.79
Stage 6	-20.8	107.87	-167.87
Stage 6	-21	77.77	-150.49
Stage 6	-21.2	51.7	-130.39
Stage 6	-21.4	30.21	-107.44
Stage 6	-21.6	13.94	-81.32
Stage 6	-21.8	3.63	-51.56
Stage 6	-22	0	-18.16

Risultati NTC2018: SISMICA GEO

Tabella Risultati Paratia NTC2018: SISMICA GEO - Right wall - Stage: Stage 1

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-3	0	0
Stage 1	-3.2	0	0
Stage 1	-3.4	0	0
Stage 1	-3.6	0	0
Stage 1	-3.8	0	0
Stage 1	-4	0	0

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-4.2	0	0
Stage 1	-4.4	0	0
Stage 1	-4.6	0	0
Stage 1	-4.8	0	0
Stage 1	-5	0	0
Stage 1	-5.2	0	0
Stage 1	-5.4	0	0
Stage 1	-5.6	0	0
Stage 1	-5.8	0	0
Stage 1	-6	0	0
Stage 1	-6.2	0	0
Stage 1	-6.4	0	0
Stage 1	-6.6	0	0
Stage 1	-6.8	0	0
Stage 1	-7	0	0
Stage 1	-7.2	0	0
Stage 1	-7.4	0	0
Stage 1	-7.6	0	0
Stage 1	-7.8	0	0
Stage 1	-8	0	0
Stage 1	-8.2	0	0
Stage 1	-8.4	0	0
Stage 1	-8.6	0	0
Stage 1	-8.8	0	0
Stage 1	-9	0	0
Stage 1	-9.2	0	0
Stage 1	-9.4	0	0
Stage 1	-9.6	0	0
Stage 1	-9.8	0	0
Stage 1	-10	0	0
Stage 1	-10.2	0	0
Stage 1	-10.4	0	0
Stage 1	-10.6	0	0
Stage 1	-10.8	0	0
Stage 1	-11	0	0
Stage 1	-11.2	0	0
Stage 1	-11.4	0	0
Stage 1	-11.6	0	0
Stage 1	-11.8	0	0
Stage 1	-12	0	0
Stage 1	-12.2	0	0
Stage 1	-12.4	0	0
Stage 1	-12.6	0	0
Stage 1	-12.8	0	0

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-13	0	0
Stage 1	-13.2	0	0
Stage 1	-13.4	0	0
Stage 1	-13.6	0	0
Stage 1	-13.8	0	0
Stage 1	-14	0	0
Stage 1	-14.2	0	0
Stage 1	-14.4	0	0
Stage 1	-14.6	0	0
Stage 1	-14.8	0	0
Stage 1	-15	0	0
Stage 1	-15.2	0	0
Stage 1	-15.4	0	0
Stage 1	-15.6	0	0
Stage 1	-15.8	0	0
Stage 1	-16	0	0
Stage 1	-16.2	0	0
Stage 1	-16.4	0	0
Stage 1	-16.6	0	0
Stage 1	-16.8	0	0
Stage 1	-17	0	0
Stage 1	-17.2	0	0
Stage 1	-17.4	0	0
Stage 1	-17.6	0	0
Stage 1	-17.8	0	0
Stage 1	-18	0	0
Stage 1	-18.2	0	0
Stage 1	-18.4	0	0
Stage 1	-18.6	0	0
Stage 1	-18.8	0	0
Stage 1	-19	0	0
Stage 1	-19.2	0	0
Stage 1	-19.4	0	0
Stage 1	-19.6	0	0
Stage 1	-19.8	0	0
Stage 1	-20	0	0
Stage 1	-20.2	0	0
Stage 1	-20.4	0	0
Stage 1	-20.6	0	0
Stage 1	-20.8	0	0
Stage 1	-21	0	0
Stage 1	-21.2	0	0
Stage 1	-21.4	0	0
Stage 1	-21.6	0	0

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 1	-21.8	0	0
Stage 1	-22	0	0

Tabella Risultati Paratia NTC2018: SISMICA GEO - Right wall - Stage: Stage 2

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-3	0	0
Stage 2	-3.2	0	0
Stage 2	-3.4	0	0
Stage 2	-3.6	0	0
Stage 2	-3.8	0	0
Stage 2	-4	0	0
Stage 2	-4.2	0	0
Stage 2	-4.4	0	0
Stage 2	-4.6	0	0
Stage 2	-4.8	0	0
Stage 2	-5	0	0
Stage 2	-5.2	0	0
Stage 2	-5.4	0	0
Stage 2	-5.6	0	0
Stage 2	-5.8	0	0
Stage 2	-6	0	0
Stage 2	-6.2	0	0
Stage 2	-6.4	0	0
Stage 2	-6.6	0	0
Stage 2	-6.8	0	0
Stage 2	-7	0	0
Stage 2	-7.2	0	0
Stage 2	-7.4	0	0
Stage 2	-7.6	0	0
Stage 2	-7.8	0	0
Stage 2	-8	0	0
Stage 2	-8.2	0	0
Stage 2	-8.4	0	0
Stage 2	-8.6	0	0
Stage 2	-8.8	0	0
Stage 2	-9	0	0
Stage 2	-9.2	0	0
Stage 2	-9.4	0	0
Stage 2	-9.6	0	0
Stage 2	-9.8	0	0
Stage 2	-10	0	0
Stage 2	-10.2	0	0
Stage 2	-10.4	0	0

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-10.6	0	0
Stage 2	-10.8	0	0
Stage 2	-11	0	0
Stage 2	-11.2	0	0
Stage 2	-11.4	0	0
Stage 2	-11.6	0	0
Stage 2	-11.8	0	0
Stage 2	-12	0	0
Stage 2	-12.2	0	0
Stage 2	-12.4	0	0
Stage 2	-12.6	0	0
Stage 2	-12.8	0	0
Stage 2	-13	0	0
Stage 2	-13.2	0	0
Stage 2	-13.4	0	0
Stage 2	-13.6	0	0
Stage 2	-13.8	0	0
Stage 2	-14	0	0
Stage 2	-14.2	0	0
Stage 2	-14.4	0	0
Stage 2	-14.6	0	0
Stage 2	-14.8	0	0
Stage 2	-15	0	0
Stage 2	-15.2	0	0
Stage 2	-15.4	0	0
Stage 2	-15.6	0	0
Stage 2	-15.8	0	0
Stage 2	-16	0	0
Stage 2	-16.2	0	0
Stage 2	-16.4	0	0
Stage 2	-16.6	0	0
Stage 2	-16.8	0	0
Stage 2	-17	0	0
Stage 2	-17.2	0	0
Stage 2	-17.4	0	0
Stage 2	-17.6	0	0
Stage 2	-17.8	0	0
Stage 2	-18	0	0
Stage 2	-18.2	0	0
Stage 2	-18.4	0	0
Stage 2	-18.6	0	0
Stage 2	-18.8	0	0
Stage 2	-19	0	0
Stage 2	-19.2	0	0

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 2	-19.4	0	0
Stage 2	-19.6	0	0
Stage 2	-19.8	0	0
Stage 2	-20	0	0
Stage 2	-20.2	0	0
Stage 2	-20.4	0	0
Stage 2	-20.6	0	0
Stage 2	-20.8	0	0
Stage 2	-21	0	0
Stage 2	-21.2	0	0
Stage 2	-21.4	0	0
Stage 2	-21.6	0	0
Stage 2	-21.8	0	0
Stage 2	-22	0	0

Tabella Risultati Paratia NTC2018: SISMICA GEO - Right wall - Stage: Stage 3

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 3	-3	0	0
Stage 3	-3.2	0	0
Stage 3	-3.2	0	0
Stage 3	-3.4	0.05	0.24
Stage 3	-3.6	0.19	0.71
Stage 3	-3.8	0.48	1.43
Stage 3	-4	0.95	2.38
Stage 3	-4.2	1.67	3.57
Stage 3	-4.4	2.67	5
Stage 3	-4.6	4	6.67
Stage 3	-4.8	5.72	8.57
Stage 3	-5	7.86	10.72
Stage 3	-5.2	10.48	13.1
Stage 3	-5.4	13.88	17.02
Stage 3	-5.6	18.14	21.29
Stage 3	-5.8	22.15	20.05
Stage 3	-6	25.7	17.75
Stage 3	-6.2	28.58	14.38
Stage 3	-6.4	30.75	10.84
Stage 3	-6.6	32.31	7.83
Stage 3	-6.8	33.38	5.34
Stage 3	-7	34.05	3.36
Stage 3	-7.2	34.43	1.91
Stage 3	-7.4	34.63	0.97
Stage 3	-7.6	34.67	0.21
Stage 3	-7.8	34.57	-0.49

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 3	-8	34.35	-1.12
Stage 3	-8.2	34.01	-1.68
Stage 3	-8.4	33.57	-2.19
Stage 3	-8.6	33.04	-2.64
Stage 3	-8.8	32.44	-3.03
Stage 3	-9	31.77	-3.36
Stage 3	-9.2	31.04	-3.64
Stage 3	-9.4	30.27	-3.86
Stage 3	-9.6	29.46	-4.02
Stage 3	-9.8	28.64	-4.13
Stage 3	-10	27.8	-4.19
Stage 3	-10.2	26.96	-4.2
Stage 3	-10.4	26.13	-4.15
Stage 3	-10.6	25.31	-4.06
Stage 3	-10.8	24.53	-3.92
Stage 3	-11	23.79	-3.72
Stage 3	-11.2	23.09	-3.48
Stage 3	-11.4	22.45	-3.2
Stage 3	-11.6	21.88	-2.86
Stage 3	-11.8	21.38	-2.49
Stage 3	-12	20.97	-2.06
Stage 3	-12.2	20.65	-1.59
Stage 3	-12.4	20.43	-1.08
Stage 3	-12.6	20.33	-0.53
Stage 3	-12.8	20.34	0.08
Stage 3	-13	20.54	1
Stage 3	-13.2	21.02	2.37
Stage 3	-13.4	21.85	4.2
Stage 3	-13.6	23.15	6.47
Stage 3	-13.8	24.99	9.2
Stage 3	-14	27.46	12.38
Stage 3	-14.2	30.67	16
Stage 3	-14.4	34.68	20.08
Stage 3	-14.6	39.6	24.6
Stage 3	-14.8	45.51	29.57
Stage 3	-15	52.51	34.98
Stage 3	-15.2	60.68	40.84
Stage 3	-15.4	70.11	47.14
Stage 3	-15.6	80.88	53.88
Stage 3	-15.8	93.08	60.97
Stage 3	-16	106.74	68.34
Stage 3	-16.2	121.94	75.98
Stage 3	-16.4	134.49	62.78
Stage 3	-16.6	144.58	50.43

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 3	-16.8	152.36	38.89
Stage 3	-17	157.99	28.14
Stage 3	-17.2	161.61	18.12
Stage 3	-17.4	163.37	8.81
Stage 3	-17.6	163.4	0.15
Stage 3	-17.8	161.82	-7.89
Stage 3	-18	158.76	-15.35
Stage 3	-18.2	154.3	-22.27
Stage 3	-18.4	148.56	-28.69
Stage 3	-18.6	141.63	-34.66
Stage 3	-18.8	133.59	-40.2
Stage 3	-19	124.52	-45.36
Stage 3	-19.2	114.53	-49.92
Stage 3	-19.4	103.9	-53.17
Stage 3	-19.6	92.86	-55.21
Stage 3	-19.8	81.63	-56.12
Stage 3	-20	70.43	-55.99
Stage 3	-20.2	59.46	-54.89
Stage 3	-20.4	48.89	-52.86
Stage 3	-20.6	38.89	-49.95
Stage 3	-20.8	29.65	-46.22
Stage 3	-21	21.34	-41.56
Stage 3	-21.2	14.14	-35.99
Stage 3	-21.4	8.23	-29.53
Stage 3	-21.6	3.79	-22.2
Stage 3	-21.8	0.99	-14.01
Stage 3	-22	0	-4.96

Tabella Risultati Paratia NTC2018: SISMICA GEO - Right wall - Stage: Stage 4

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-3	0	0
Stage 4	-3.2	0	0
Stage 4	-3.2	0	0
Stage 4	-3.4	0.05	0.24
Stage 4	-3.6	0.19	0.71
Stage 4	-3.8	0.48	1.43
Stage 4	-4	0.95	2.38
Stage 4	-4.2	1.67	3.57
Stage 4	-4.4	2.67	5
Stage 4	-4.6	4	6.67
Stage 4	-4.8	5.72	8.57
Stage 4	-5	7.86	10.72
Stage 4	-5.2	10.48	13.1

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-5.4	13.88	17.02
Stage 4	-5.6	18.14	21.29
Stage 4	-5.8	23.32	25.91
Stage 4	-6	29.5	30.88
Stage 4	-6.2	36.74	36.19
Stage 4	-6.4	45.11	41.86
Stage 4	-6.6	54.68	47.87
Stage 4	-6.8	65.53	54.23
Stage 4	-7	77.72	60.94
Stage 4	-7.2	91.32	68
Stage 4	-7.4	106.4	75.4
Stage 4	-7.6	123.03	83.15
Stage 4	-7.8	141.28	91.26
Stage 4	-8	161.22	99.71
Stage 4	-8.2	182.92	108.5
Stage 4	-8.4	203.73	104.06
Stage 4	-8.6	223.46	98.62
Stage 4	-8.8	241.91	92.26
Stage 4	-9	258.91	84.99
Stage 4	-9.2	274.3	76.95
Stage 4	-9.4	288.18	69.43
Stage 4	-9.6	300.67	62.42
Stage 4	-9.8	311.85	55.91
Stage 4	-10	321.83	49.9
Stage 4	-10.2	330.71	44.39
Stage 4	-10.4	338.58	39.37
Stage 4	-10.6	345.55	34.83
Stage 4	-10.8	351.7	30.76
Stage 4	-11	357.13	27.17
Stage 4	-11.2	361.94	24.05
Stage 4	-11.4	366.22	21.39
Stage 4	-11.6	370.06	19.18
Stage 4	-11.8	373.54	17.42
Stage 4	-12	376.76	16.1
Stage 4	-12.2	379.81	15.22
Stage 4	-12.4	382.76	14.77
Stage 4	-12.6	385.71	14.74
Stage 4	-12.8	388.73	15.13
Stage 4	-13	391.98	16.22
Stage 4	-13.2	395.6	18.12
Stage 4	-13.4	399.77	20.83
Stage 4	-13.6	404.64	24.35
Stage 4	-13.8	410.37	28.66
Stage 4	-14	417.12	33.77

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 4	-14.2	425.05	39.65
Stage 4	-14.4	434.32	46.32
Stage 4	-14.6	445.07	53.76
Stage 4	-14.8	457.46	61.95
Stage 4	-15	471.64	70.91
Stage 4	-15.2	487.76	80.61
Stage 4	-15.4	505.97	91.05
Stage 4	-15.6	526.42	102.22
Stage 4	-15.8	549.22	114.04
Stage 4	-16	574.5	126.4
Stage 4	-16.2	602.36	139.3
Stage 4	-16.4	622.62	101.26
Stage 4	-16.6	635.84	66.11
Stage 4	-16.8	642.59	33.76
Stage 4	-17	643.41	4.1
Stage 4	-17.2	638.82	-22.96
Stage 4	-17.4	629.31	-47.52
Stage 4	-17.6	615.38	-69.68
Stage 4	-17.8	597.47	-89.54
Stage 4	-18	576.03	-107.2
Stage 4	-18.2	551.48	-122.74
Stage 4	-18.4	524.22	-136.27
Stage 4	-18.6	494.65	-147.86
Stage 4	-18.8	463.13	-157.61
Stage 4	-19	430.01	-165.58
Stage 4	-19.2	395.64	-171.86
Stage 4	-19.4	360.34	-176.52
Stage 4	-19.6	324.41	-179.61
Stage 4	-19.8	288.17	-181.2
Stage 4	-20	251.9	-181.34
Stage 4	-20.2	215.89	-180.07
Stage 4	-20.4	180.4	-177.43
Stage 4	-20.6	145.71	-173.46
Stage 4	-20.8	112.61	-165.51
Stage 4	-21	81.99	-153.08
Stage 4	-21.2	54.91	-135.42
Stage 4	-21.4	32.29	-113.08
Stage 4	-21.6	15.02	-86.36
Stage 4	-21.8	3.97	-55.27
Stage 4	-22	0	-19.83

Tabella Risultati Paratia NTC2018: SISMICA GEO - Right wall - Stage: Stage 5

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-3	0	0
Stage 5	-3.2	0	0
Stage 5	-3.2	0	0
Stage 5	-3.4	0.06	0.29
Stage 5	-3.6	0.23	0.87
Stage 5	-3.8	0.58	1.73
Stage 5	-4	1.15	2.89
Stage 5	-4.2	2.02	4.33
Stage 5	-4.4	3.23	6.06
Stage 5	-4.6	4.85	8.08
Stage 5	-4.8	6.93	10.39
Stage 5	-5	9.52	12.99
Stage 5	-5.2	12.7	15.87
Stage 5	-5.4	16.7	20.02
Stage 5	-5.6	21.61	24.53
Stage 5	-5.8	27.49	29.41
Stage 5	-6	34.42	34.65
Stage 5	-6.2	42.47	40.27
Stage 5	-6.4	51.72	46.25
Stage 5	-6.6	62.24	52.6
Stage 5	-6.8	74.1	59.32
Stage 5	-7	87.39	66.4
Stage 5	-7.2	102.16	73.86
Stage 5	-7.4	118.49	81.68
Stage 5	-7.6	136.47	89.87
Stage 5	-7.8	156.15	98.42
Stage 5	-8	177.62	107.35
Stage 5	-8.2	200.95	116.64
Stage 5	-8.4	225.98	125.14
Stage 5	-8.6	252.32	131.69
Stage 5	-8.8	279.57	136.29
Stage 5	-9	307.36	138.94
Stage 5	-9.2	335.29	139.64
Stage 5	-9.4	362.97	138.39
Stage 5	-9.6	390	135.18
Stage 5	-9.8	416.01	130.03
Stage 5	-10	440.59	122.92
Stage 5	-10.2	463.39	113.98
Stage 5	-10.4	484.45	105.32
Stage 5	-10.6	503.84	96.95
Stage 5	-10.8	521.62	88.87
Stage 5	-11	537.83	81.06
Stage 5	-11.2	552.53	73.53
Stage 5	-11.4	565.79	66.26

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-11.6	577.64	59.27
Stage 5	-11.8	588.15	52.53
Stage 5	-12	597.36	46.06
Stage 5	-12.2	605.32	39.83
Stage 5	-12.4	612.09	33.85
Stage 5	-12.6	617.72	28.11
Stage 5	-12.8	622.24	22.62
Stage 5	-13	625.76	17.61
Stage 5	-13.2	628.4	13.19
Stage 5	-13.4	630.27	9.35
Stage 5	-13.6	631.49	6.07
Stage 5	-13.8	632.16	3.36
Stage 5	-14	632.39	1.19
Stage 5	-14.2	632.31	-0.44
Stage 5	-14.4	632	-1.53
Stage 5	-14.6	631.58	-2.1
Stage 5	-14.8	631.15	-2.15
Stage 5	-15	630.81	-1.69
Stage 5	-15.2	630.67	-0.73
Stage 5	-15.4	630.81	0.72
Stage 5	-15.6	631.34	2.66
Stage 5	-15.8	632.35	5.02
Stage 5	-16	633.89	7.73
Stage 5	-16.2	636.04	10.75
Stage 5	-16.4	633.57	-12.37
Stage 5	-16.6	626.86	-33.53
Stage 5	-16.8	616.3	-52.8
Stage 5	-17	602.26	-70.22
Stage 5	-17.2	585.09	-85.84
Stage 5	-17.4	565.15	-99.71
Stage 5	-17.6	542.77	-111.88
Stage 5	-17.8	518.3	-122.38
Stage 5	-18	492.02	-131.41
Stage 5	-18.2	464.21	-139.04
Stage 5	-18.4	435.15	-145.3
Stage 5	-18.6	405.1	-150.21
Stage 5	-18.8	374.34	-153.8
Stage 5	-19	343.13	-156.08
Stage 5	-19.2	311.71	-157.07
Stage 5	-19.4	280.36	-156.78
Stage 5	-19.6	249.31	-155.23
Stage 5	-19.8	218.79	-152.6
Stage 5	-20	189.01	-148.9
Stage 5	-20.2	160.18	-144.14

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 5	-20.4	132.52	-138.32
Stage 5	-20.6	106.23	-131.46
Stage 5	-20.8	81.71	-122.58
Stage 5	-21	59.41	-111.51
Stage 5	-21.2	39.81	-97.97
Stage 5	-21.4	23.45	-81.82
Stage 5	-21.6	10.9	-62.73
Stage 5	-21.8	2.86	-40.22
Stage 5	-22	0	-14.31

Tabella Risultati Paratia NTC2018: SISMICA GEO - Right wall - Stage: Stage 6

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-3	0	1.4
Stage 6	-3.2	0.28	1.4
Stage 6	-3.4	1.18	4.49
Stage 6	-3.6	2.74	7.84
Stage 6	-3.8	5.03	11.45
Stage 6	-4	8.1	15.31
Stage 6	-4.2	11.98	19.43
Stage 6	-4.4	16.75	23.81
Stage 6	-4.6	22.44	28.45
Stage 6	-4.8	29.12	33.4
Stage 6	-5	36.84	38.62
Stage 6	-5.2	45.66	44.1
Stage 6	-5.4	55.85	50.97
Stage 6	-5.6	67.49	58.19
Stage 6	-5.8	80.64	65.76
Stage 6	-6	95.38	73.68
Stage 6	-6.2	111.77	81.96
Stage 6	-6.4	129.89	90.59
Stage 6	-6.6	149.8	99.57
Stage 6	-6.8	171.58	108.9
Stage 6	-7	195.3	118.58
Stage 6	-7.2	221.02	128.62
Stage 6	-7.4	248.82	139.01
Stage 6	-7.6	278.77	149.74
Stage 6	-7.8	310.94	160.83
Stage 6	-8	345.41	172.35
Stage 6	-8.2	382.11	183.51
Stage 6	-8.4	419.79	188.42
Stage 6	-8.6	458.18	191.92
Stage 6	-8.8	496.98	194.02
Stage 6	-9	535.93	194.74

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-9.2	574.74	194.08
Stage 6	-9.4	613.17	192.13
Stage 6	-9.6	650.95	188.89
Stage 6	-9.8	687.82	184.36
Stage 6	-10	723.53	178.54
Stage 6	-10.2	757.82	171.46
Stage 6	-10.4	790.56	163.69
Stage 6	-10.6	821.61	155.25
Stage 6	-10.8	850.83	146.13
Stage 6	-11	878.09	136.32
Stage 6	-11.2	903.26	125.82
Stage 6	-11.4	926.19	114.64
Stage 6	-11.6	946.74	102.77
Stage 6	-11.8	964.91	90.85
Stage 6	-12	980.8	79.45
Stage 6	-12.2	994.51	68.57
Stage 6	-12.4	1006.15	58.17
Stage 6	-12.6	1015.8	48.27
Stage 6	-12.8	1023.57	38.82
Stage 6	-13	1029.53	29.79
Stage 6	-13.2	1033.78	21.28
Stage 6	-13.4	1036.5	13.59
Stage 6	-13.6	1037.84	6.72
Stage 6	-13.8	1037.97	0.64
Stage 6	-14	1037.04	-4.64
Stage 6	-14.2	1035.21	-9.15
Stage 6	-14.4	1032.63	-12.91
Stage 6	-14.6	1029.45	-15.91
Stage 6	-14.8	1025.81	-18.19
Stage 6	-15	1021.86	-19.74
Stage 6	-15.2	1017.74	-20.59
Stage 6	-15.4	1013.59	-20.75
Stage 6	-15.6	1009.55	-20.23
Stage 6	-15.8	1005.73	-19.12
Stage 6	-16	1002.22	-17.51
Stage 6	-16.2	999.14	-15.42
Stage 6	-16.4	989.4	-48.71
Stage 6	-16.6	973.45	-79.73
Stage 6	-16.8	951.73	-108.61
Stage 6	-17	924.64	-135.47
Stage 6	-17.2	892.63	-160.02
Stage 6	-17.4	856.45	-180.92
Stage 6	-17.6	816.77	-198.4
Stage 6	-17.8	774.23	-212.65

Design Assumption: NTC2018: SISMICA GEO Risultati Paratia Muro: RIGHT

Stage	Z (m)	Momento (kN*m/m)	Taglio (kN/m)
Stage 6	-18	729.43	-224.01
Stage 6	-18.2	682.89	-232.7
Stage 6	-18.4	635.12	-238.87
Stage 6	-18.6	586.58	-242.67
Stage 6	-18.8	537.74	-244.21
Stage 6	-19	489	-243.73
Stage 6	-19.2	440.7	-241.49
Stage 6	-19.4	393.18	-237.59
Stage 6	-19.6	346.76	-232.1
Stage 6	-19.8	301.74	-225.08
Stage 6	-20	258.43	-216.6
Stage 6	-20.2	217.09	-206.69
Stage 6	-20.4	178	-195.41
Stage 6	-20.6	141.44	-182.79
Stage 6	-20.8	107.87	-167.87
Stage 6	-21	77.77	-150.49
Stage 6	-21.2	51.7	-130.39
Stage 6	-21.4	30.21	-107.44
Stage 6	-21.6	13.94	-81.32
Stage 6	-21.8	3.63	-51.56
Stage 6	-22	0	-18.16