XDO

eXcavation Design Online

例 題 驗 證 說 明 書

XDO 例題驗證說明書

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一．前言

1.1 XDO 程式運作方式

XDO 是 CATii 的子程式之一，CATii（Civil-engineering App Tool Intelligent Interface）土木工程應用工具智慧型介面，是一套成熟的網頁版分析設計軟體，您不需要安裝程式，透過瀏覽器開啟 CATii 網頁，即可隨時隨地進行土木工程分析設計。使用者以電腦透過瀏覽器開啟 CATii 網頁之後，點選 XDO 程式，輸入分析設計所需資料，上傳至伺服器，經過伺服器之運算之後，輸出分析結果或計算書至使用者之電腦或手機。

1.2 XDO 例題驗證使用之電腦及作業系統環境

XDO 為網頁版分析設計軟體，實際執行運算者乃為遠端之伺服器，以下說明伺服器之規格。

(1)伺服器電腦：Intel(R) Core(TM) i7-7700 CPU @ 3.60GHz 3.60 GHz
(2)伺服器作業系統：Microsoft Windows 10，64 位元

本例題驗證將比對同類型軟體 RIDO 4.2 及 TORSA 3 之分析結果，RIDO4.2 及 TORSA 3 乃由使用者個人電腦進行運算，以下說明個人電腦之規格。

(1)個人電腦：12th Gen Intel(R) Core(TM) i7-1255U 1.70 GHz
(2)個人電腦作業系統：Microsoft Windows 11，64 位元

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XDO 與 RIDO 4.2 及 TORSA 3 分析結果互相比較。

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XDO 與 RIDO 4.2 程式分析結果互相比較。

(3)案例三：連續壁及內扶壁+逆打工法+總應力法

XDO 與 RIDO 4.2 程式分析結果互相比較。

二、XDO 例題驗證

2.1 案例一：連續壁+順打 4 階支撐+有效應力法

本案例擬與 RIDO 4.2 及 TORSA 3 的分析結果互相比較。XDO 與 RIDO 的元素切割邏輯相同，只要輸入條件一樣，皆可得到相同的節點位置；XDO 與 TORSA 切割網格的邏輯不同，即使設定的最大分析元素長度相同，通常也不會得到完全相同的節點位置。為消除節點位置不同造成的分析結果誤差，並使不同軟體分析結果可以在相同節點位置直接比對，故將本案例的地層分界、開挖深度、支撐位置...等經過特別設計，使三種軟體在實際執行分析後的所有節點位置皆在 0.5 m 的倍數上。(註：XDO 與 RIDO 的元素切割邏輯請見 XDO 使用手冊 3.1.2 節)

本案例開挖深度為 14 公尺，採用連續壁做為擋土措施，連續壁厚度 80 cm，長度 24 m，以順打工法開挖，配合 4 階型鋼內支撐。地下開挖施工步驟如表 2.1-1 所示，分析用簡化地層參數如表 2.1-2 所示，擋土壁、支撐之參數及勁度如表 2.1-3 及表 2.1-4 所示，開挖擋土剖面請見圖 2.1-1。本案例所有地層皆無凝聚力，因此 Padfield & Mair 土壓力計算法(TORSA 採用，XDO 可選用)及 RIDO 土壓力計算法(RIDO 採用，XDO 可選用)兩者得之土壓力相同，三種軟體之計算結果可以互相比對。(註：有關土壓力計算法理論請見 XDO 使用手冊 5.6 節)

本基地地層主要為砂土，初始地下水位在地表面，分析時採用有效應力法，開挖時地下水位控制在開挖面，連續壁為水密性擋土壁，開挖抽水後考慮連續壁底兩側滲流。

各程式之輸入檔及詳細輸出結果請見附錄一，XDO 之分析結果摘要請見圖 2.1-2，RIDO 4.2 之分析結果摘要請見圖 2.1-3，TORSA 3 之分析結果摘要請見圖 2.1-4，三種程式之重要分析結果比較請見表 2.1-5。

結論：XDO vs RIDO 4.2 分析結果分析結果相當一致，誤差僅約 0.2%~0.6%；TORSA 3 除了第一階支撐最大支撐力分析結果與 XDO 及 RIDO 4.2 比較誤差略大之外(2.6% 及 2.8%，仍在大地工程可接受誤差範圍)，其他項目分析結果之誤差皆不大(0.0%~1.1% 及 0.0%~0.8%)。

表 2.1-1　案例一地下開挖施工步驟

Phase	降水 / 開挖	支撐或樓板	說明
1			地表超載
2	2.0 m / 2.0 m		第 1 階降水及開挖
3		1.0 m	第 1 階支撐 H350@5m，預壓 50 tf
4	5.0 m / 5.0 m		第 2 階降水及開挖
5		4.0 m	第 2 階支撐 H400@5m，預壓 100 tf
6	8.0 m / 8.0 m		第 3 階降水及開挖
7		7.0 m	第 3 階支撐 H400@5m，預壓 100 tf
8	11.0 m / 11.0 m		第 4 階降水及開挖
9		10.0 m	第 3 階支撐 H414@5m，預壓 180 tf
10	14.0 m / 14.0 m		第 4 階降水及開挖

表 2.1-2　案例一分析用簡化地層參數

No	分類	Z	SPT-N	γ_t	c'	ϕ'	S_u	K_a	K_o	K_p	k_h
		(m)		(tf/m^3)	(tf/m^2)	(deg.)	(tf/m^2)				(tf/m^3)
1	SF	3.0	10	1.90	0	28	-	0.317	0.531	4.197	1250
2	SM	6.0	18	1.85	0	30	-	0.291	0.500	4.807	2250
3	SM	9.0	24	1.80	0	31	-	0.279	0.485	5.160	3000
4	SM	12.0	30	1.85	0	32	-	0.267	0.470	5.551	3750
5	SM	14.0	36	1.90	0	33	-	0.256	0.455	5.986	4500
6	SM	22.0	28	1.85	0	32	-	0.267	0.470	5.551	3500
7	SM	24.0	25	1.90	0	31	-	0.279	0.485	5.160	3125

註：K_a 及 K_p 採 Coulomb 用土壓力係數計算法，取 D_a=0.5、D_b=0.5。

表 2.1-3　案例一擋土壁參數及勁度

擋土壁型式	f_c'	E	I'	ϕ	R
	(kgf/cm^2)	(tf/m^2)	(m^4/m)		($tf\text{-}m^2/m$)
連續壁，厚度 80 cm	280	2509980	0.042667	0.6	64256

註：擋土壁勁度 $R=\phi EI'$，$E=150000\sqrt{f_c'}$。

表 2.1-4　案例一支撐參數及勁度

No	型號	Z	S	F	n	E	A	L	ϕ	R
		(m)	(m)	(tf)		(tf/m^2)	(m^2)	(m)		(tf/m)
1	H350×350×12×19	1.0	5	50	1	20400000	0.01739	30	0.6	7095
2	H400×400×13×21	4.0	5	100	1	20400000	0.02187	30	0.6	8923
3	H400×400×13×21	7.0	5	100	1	20400000	0.02187	30	0.6	8923
4	H414×405×18×28	10.0	5	180	1	20400000	0.02954	30	0.6	12052

註：支撐勁度 $R=\phi nEA/L$，長度 L 取支撐長度或開挖寬度之半。

表 2.1-5　三種程式之重要分析結果比較

物理量			分析結果			差值比較		
			XDO	RIDO	TORSA	XDO vs RIDO	XDO vs TORSA	RIDO vs TORSA
最大變形		mm	58.11	58.45	58.24	0.6%	0.2%	0.4%
最大彎矩		tf-m/m	-121.75	-122.50	-123.10	0.6%	1.1%	0.5%
		tf-m/m	56.03	56.17	55.70	0.2%	0.6%	0.8%
最大剪力		tf/m	-57.13	-57.22	-57.11	0.2%	0.0%	0.2%
		tf/m	27.47	27.41	27.47	0.2%	0.0%	0.2%
最　大支撐力	S-1	tf	-99.90	-100.07	-97.30	0.2%	2.6%	2.8%
	S-2	tf	-172.15	-172.51	-171.30	0.2%	0.5%	0.7%
	S-3	tf	-194.79	-195.29	-194.80	0.3%	0.0%	0.3%
	S-4	tf	-321.20	-322.22	-322.10	0.3%	0.3%	0.0%

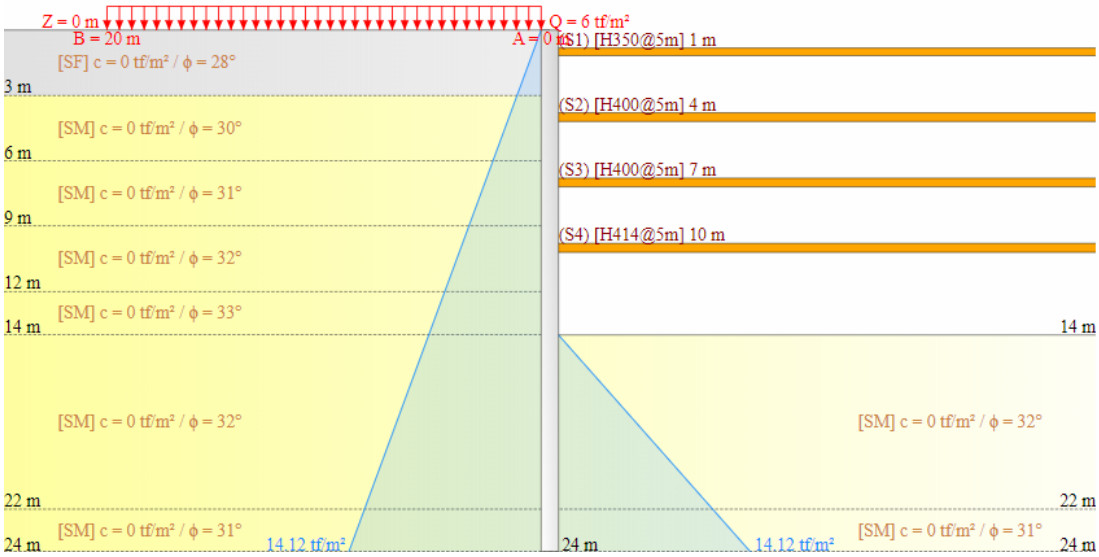


圖 2.1-1　案例一開挖擋土剖面（開挖至大底）

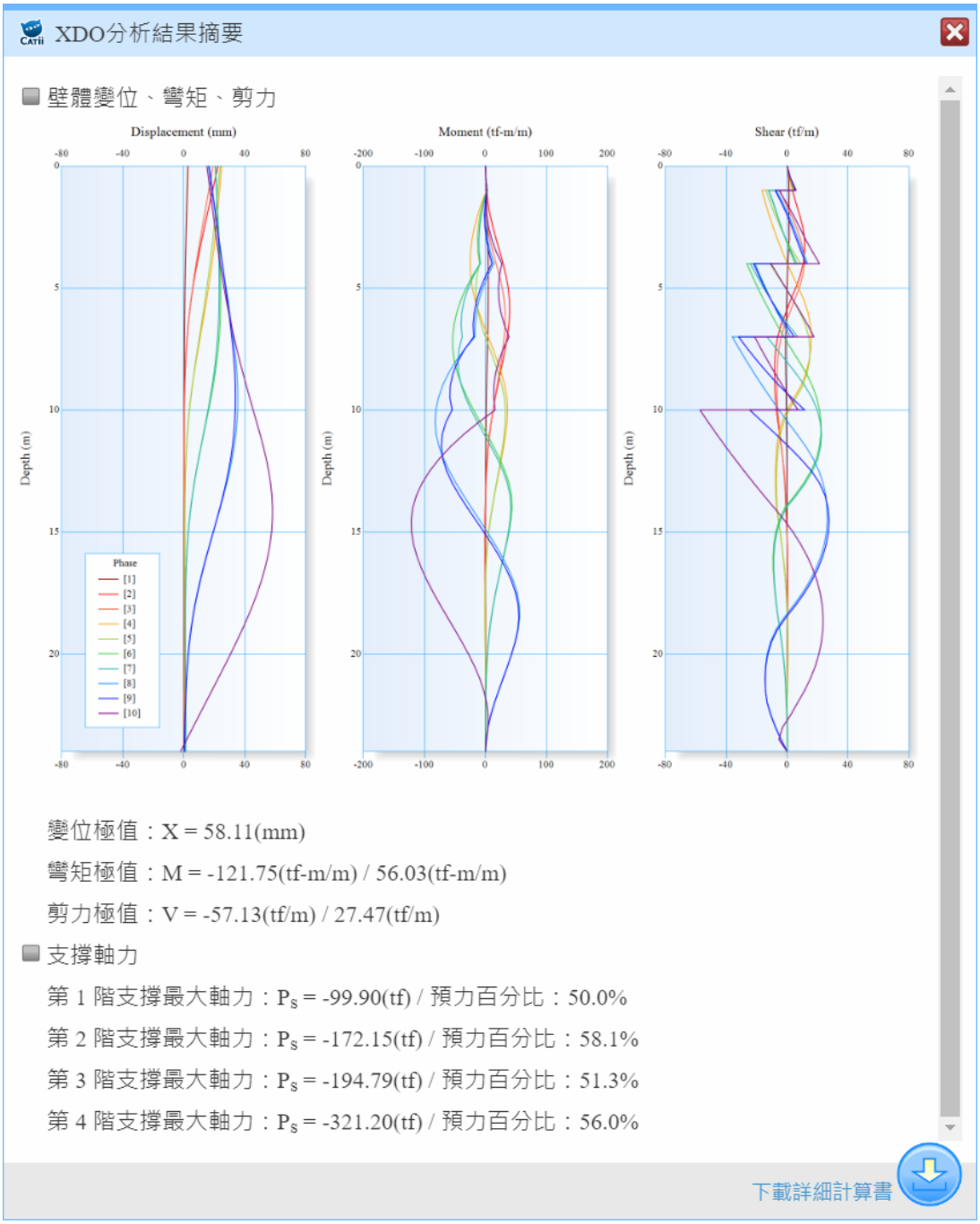


圖 2.1-2　案例一 XDO 分析結果摘要

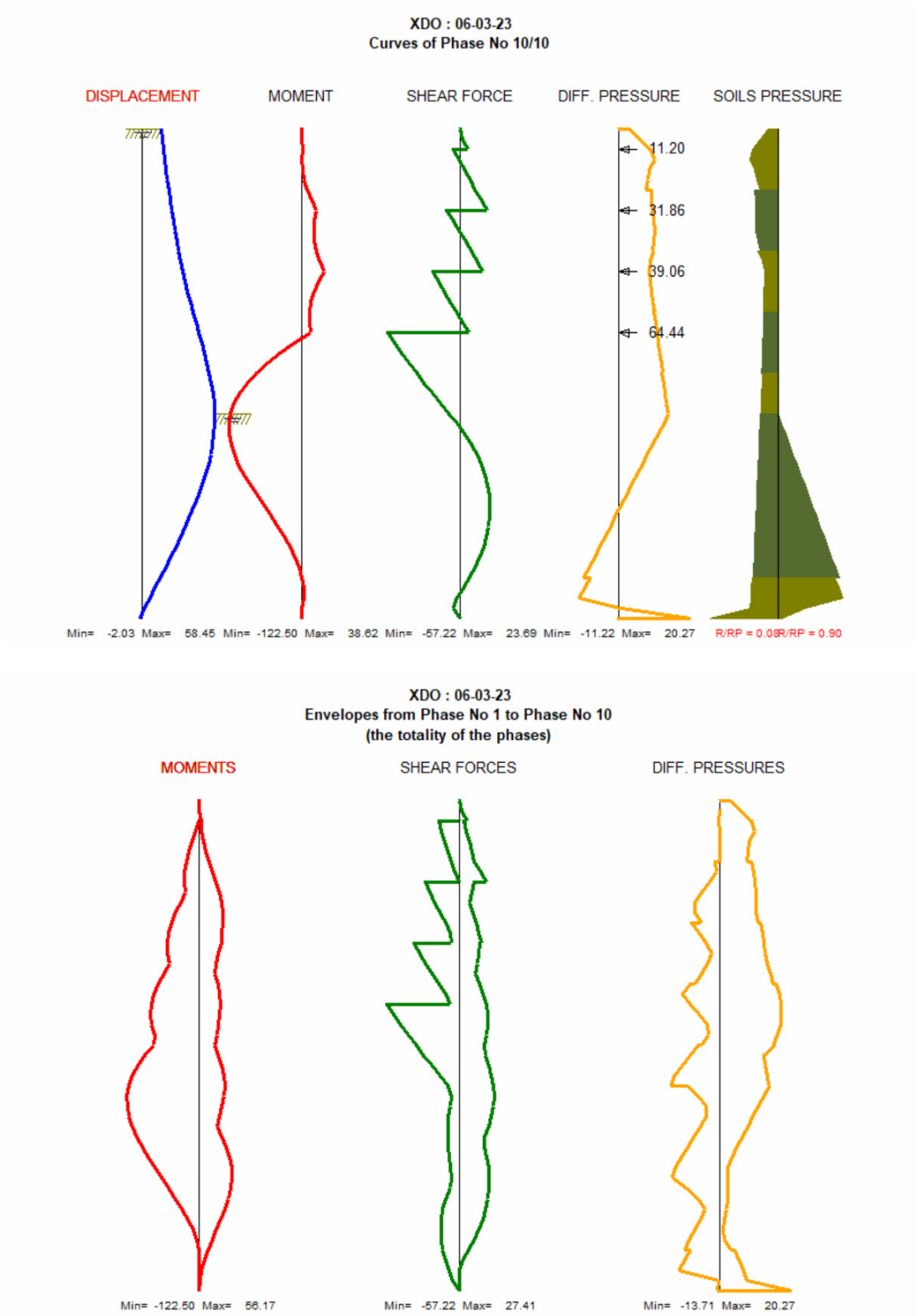


圖 2.1-3　案例一 RIDO 4.2 分析結果摘要

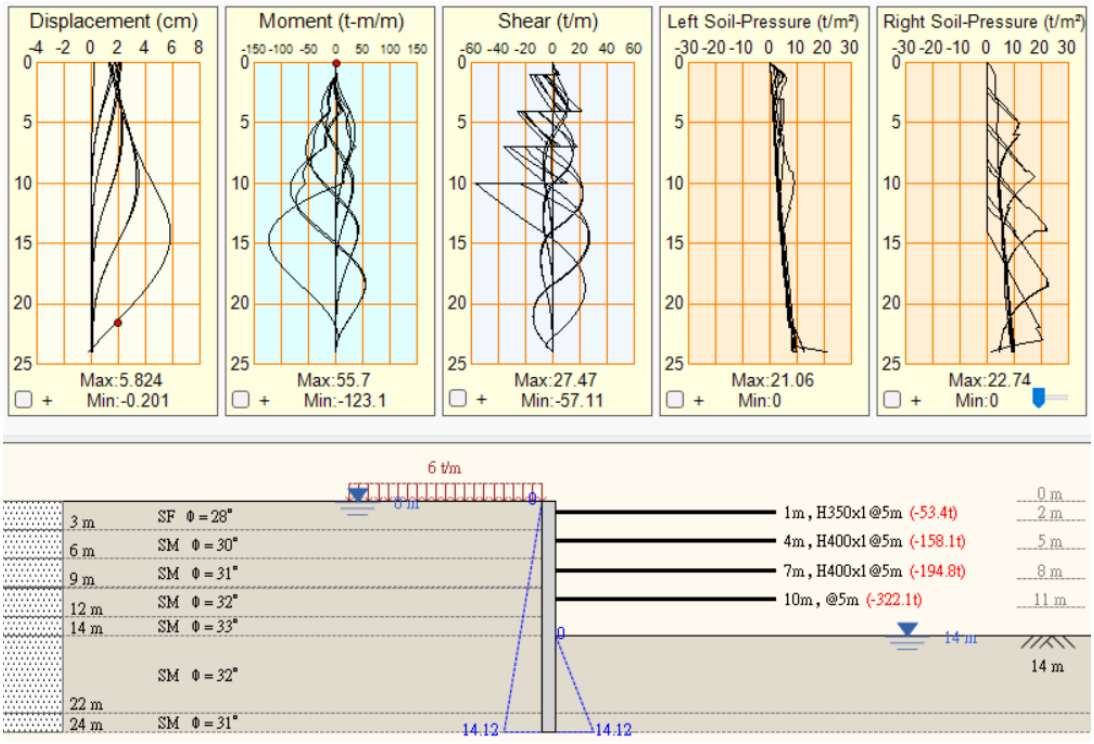


圖 2.1-4　案例一 TORSA 3 分析結果摘要

2.2 案例二：連續壁+順打 3 階支撐+有效應力法

本案例為地下 3 層，開挖深度為 12.5 公尺，採用連續壁做為擋土壁，厚度 70 cm，長度 28 m，以順打工法開挖，配合 3 階型鋼內支撐。地下開挖施工步驟如表 2.2-1 所示，分析用簡化地層參數如表 2.2-2 所示，擋土壁、支撐、樓板之參數及勁度如表 2.2-3~表 2.2-5 所示，開挖擋土剖面請見圖 2.2-1 及圖 2.2-2。

本基地地層主要為砂土與黏土互層，初始地下水位在地表下 1.5 m，分析時無論砂土或黏土皆採用有效應力法，開挖時黏土層之地下水位控制在開挖面，砂土層之地下水位控制在開挖面下 1 m，考慮開挖解壓後下方受壓含水層可能需要降水解壓以免發生上舉隆起，連續壁為水密性擋土壁，開挖抽水後考慮連續壁底兩側滲流。本案例所有地層皆無凝聚力，因此 Padfield & Mair 土壓力計算法（XDO 可選用）及 RIDO 土壓力計算法（RIDO 採用，XDO 可選用）兩者得之土壓力相同，兩種軟體之計算結果可以互相比對。（註：有關土壓力計算法理論請見 XDO 使用手冊 5.6 節）

各程式之輸入檔及詳細輸出結果請見附錄二，XDO 之分析結果摘要請見圖 2.2-2，RIDO 4.2 之分析結果摘要請見圖 2.2-3，XDO 與 RIDO 4.2 之重要分析結果比較請見表 2.2-6。

結論：XDO vs RIDO 4.2 分析結果分析結果相當一致，各分析項目之誤差僅約 0.1%~1.0%。

表 2.2-1　案例二地下開挖施工步驟

Phase	降水 / 開挖	支撐或樓板	說明
1	2.5 m / 2.5 m		第 1 階降水及開挖
2		1.5 m	第 1 階支撐 H350@5.5m，預壓 45 tf
3	7.6 m / 6.6 m		第 2 階降水(AQ2)及開挖
4		5.6 m	第 2 階支撐 H400@5.5m，預壓 110 tf
5	10.6 m / 9.6 m		第 3 階降水(AQ2)及開挖
6		8.6 m	第 3 階支撐 H400@5.5m，預壓 110 tf
7	13.5 m / 12.5 m		第 4 階降水(AQ2)及開挖 AQ3 解壓抽水
8		12.45 m 12.0 m 9.7 m	打設 PC，10 cm 打設 BSF 板，80 cm 打設 B3F 板，20 cm
9		-	拆除第 3 階支撐
10		6.7 m	打設 B2F 板，20 cm
11		-	拆除第 2 階支撐
12		3.7 m	打設 B1F 板，20 cm
13		-	拆除第 1 階支撐

註：AQ2、AQ3 代表由上而下的含水層編號。

表 2.2-2　案例二分析用簡化地層參數

No	分類	Z	SPT-N	γ_t	c'	ϕ'	S_u	K_a	K_o	K_p	k_h
		(m)		(tf/m^3)	(tf/m^2)	(deg.)	(tf/m^2)				(tf/m^3)
1	SF	2.3	10	1.93	0	28	-	0.326	0.531	4.325	1250
2	CL	4.1	6	1.91	0	28	6	0.326	0.531	4.325	1500
3	CL/ML	7.2	4	1.90	0	27	4	0.340	0.546	4.044	1000
4	SM	20.3	15	1.96	0	30	-	0.301	0.500	4.977	1875
5	CL	26.0	7	1.92	0	28	5.5	0.326	0.531	4.325	1375
6	SM	28.9	19	2.04	0	32	-	0.278	0.470	5.775	2375
7	CL	30.0	10	2.01	0	29	9	0.314	0.515	4.635	2250

註：K_a 及 K_p 採 Coulomb 用土壓力係數計算法，取 D_a=0.5、D_b=0.5。

表 2.2-3　案例二擋土壁參數及勁度

擋土壁型式	f_c'	E	I'	ϕ	R
	(kgf/cm^2)	(tf/m^2)	(m^4/m)		($tf\text{-}m^2/m$)
連續壁，厚度 70 cm	245	2347871	0.028583	0.6	40266

註：擋土壁勁度 $R=\phi EI'$，$E=150000\sqrt{f_c'}$。

表 2.2-4　案例二支撐參數及勁度

No	型號	Z	S	F	n	E	A	L	ϕ	R
		(m)	(m)	(tf)		(tf/m^2)	(m^2)	(m)		(tf/m)
1	H350×350×12×19	1.5	5.5	45	1	20400000	0.01739	45	0.6	4730
2	H400×400×13×21	5.6	5.5	110	1	20400000	0.02187	45	0.6	5949
3	H400×400×13×21	8.6	5.5	110	1	20400000	0.02187	45	0.6	5949

註：支撐勁度 $R=\phi nEA/L$，長度 L 取支撐長度或開挖寬度之半。

表 2.2-5　案例二樓板參數及勁度

No	樓板說明	Z	S	F	f_c'	E	A	L	ϕ	R
		(m)	(m)	(tf)	(kgf/cm^2)	(tf/m^2)	(m^2)	(m)		(tf/m)
4	PC	12.45	1	0	140	1774824	0.1	45	0.6	2366
5	BSF 板	12.0	1	0	280	2509980	0.8	45	0.6	26773
6	B3F 板	9.7	1	0	280	2509980	0.2	45	0.6	6693
7	B2F 板	6.7	1	0	280	2509980	0.2	45	0.6	6693
8	B1F 板	3.7	1	0	280	2509980	0.2	45	0.6	6693

註：(1)模擬樓板時，取支撐間距 S=1m，預力 F=0，支撐斷面積＝板厚×1m。
(2)樓板勁度 $R=\phi nEA/L$，長度 L 取樓板長度或開挖寬度之半，$E=150000\sqrt{f_c'}$。

表 2.2-6　XDO 與 RIDO 4.2 之重要分析結果比較

物理量			分析結果		差值比較
			XDO	RIDO	XDO vs RIDO
最大變形		mm	-48.16	-48.27	0.2%
最大彎矩		tf-m/m	-47.06	-46.91	0.3%
		tf-m/m	81.02	80.20	1.0%
最大剪力		tf/m	-27.95	-27.87	0.3%
		tf/m	37.08	37.17	0.2%
最　大 支撐力	S-1	tf	85.90	86.03	0.2%
	S-2	tf	229.53	229.89	0.2%
	S-3	tf	212.85	213.04	0.1%

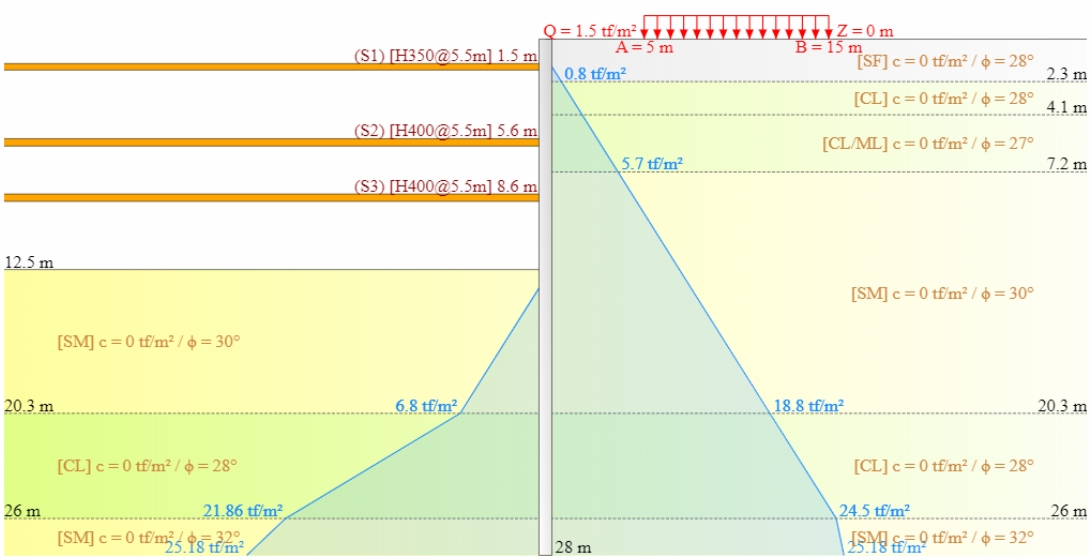


圖 2.2-1　案例二開挖擋土剖面（開挖至大底）

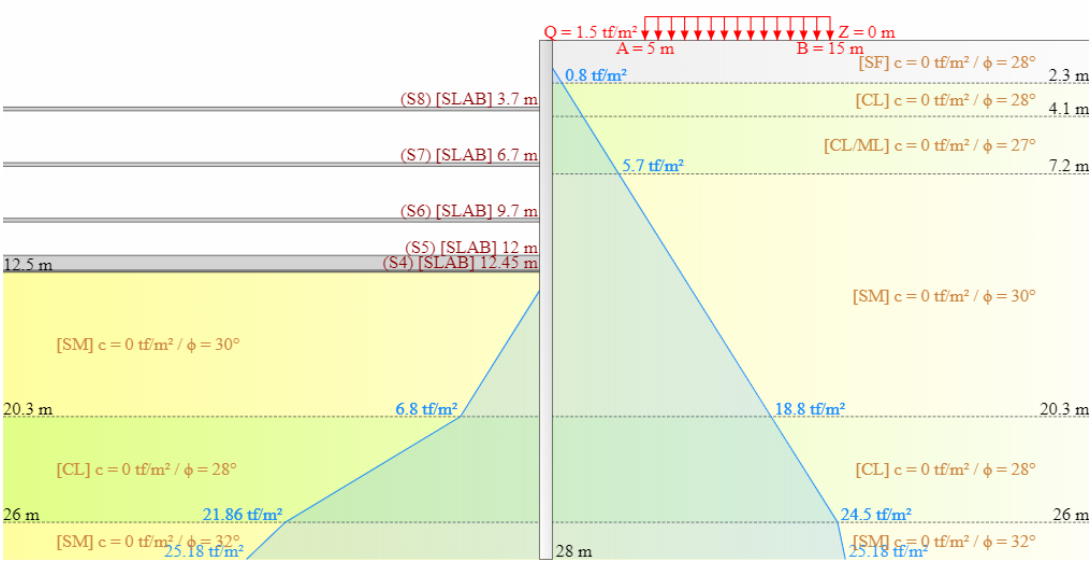


圖 2.2-2　案例二開挖擋土剖面（地下樓板完成）

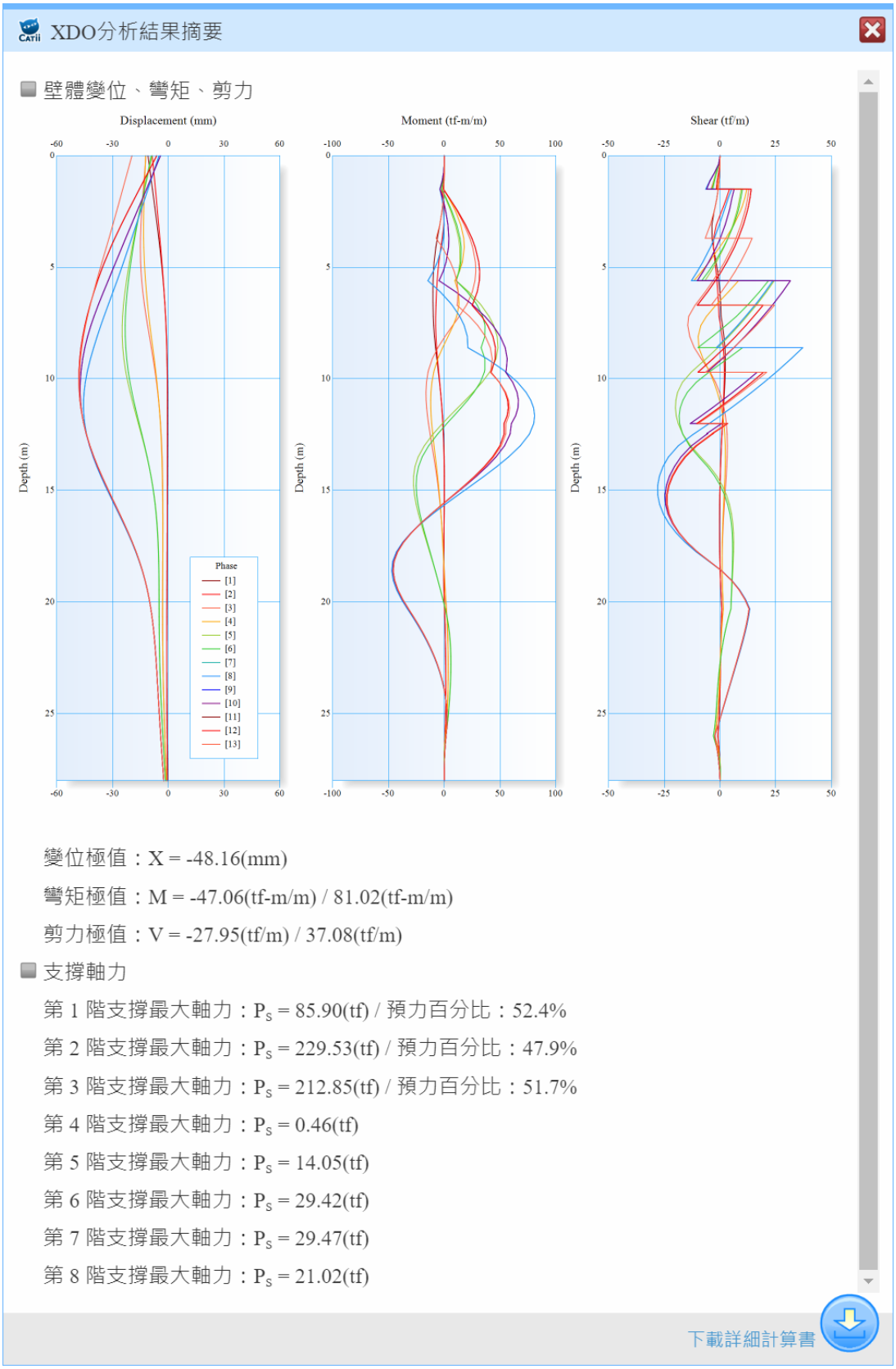


圖 2.2-3　案例二 XDO 分析結果摘要

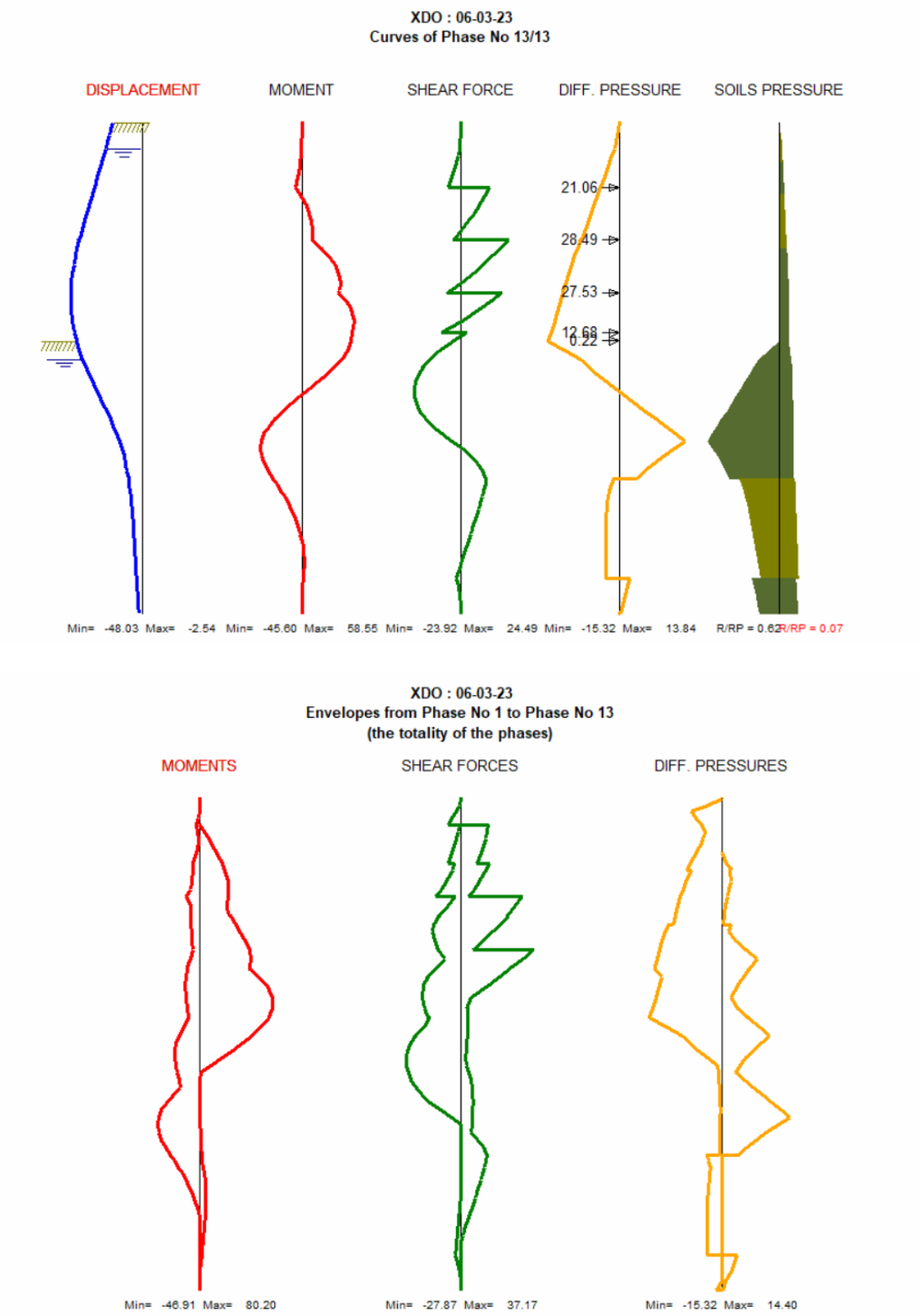


圖 2.2-4　案例二 RIDO 4.2 分析結果摘要

2.3 案例三：連續壁及內扶壁+逆打工法+總應力法

本案例為地下 5 層，開挖深度為 23.32 公尺，採用連續壁配合內扶壁做為擋土措施，連續壁厚度 100 cm，長度 37 m，內扶壁深度範圍為 2.5 公尺至 33 公尺，長度 8 公尺，面寬 66 公尺配置 9 道扶壁，以逆打工法開挖。地下開挖施工步驟如表 2.3-1 所示，分析用簡化地層參數如表 2.3-2 所示，擋土壁、支撐、樓板之參數及勁度如表 2.3-3~表 2.3-5 所示，開挖擋土剖面請見圖 2.3-1 及圖 2.3-2。

本基地地層主要為砂土與黏土互層，淺層地下水位在地表下 1.7 m，第 2~4 層含水層之地下水位則分別為地表下 1.7 m、6.5 m、6.5 m，分析時砂土採有效應力法，黏土採用總應力法，考慮開挖解壓後下方受壓含水層可能需要降水解壓以免發生上舉隆起，連續壁為水密性擋土壁，開挖抽水後考慮連續壁底兩側滲流。上述內扶壁係轉換為類似地盤改良後的等值的土壤參數。本案例地層含有凝聚力，因此 Padfield & Mair 土壓力計算法（XDO 可選用）及 RIDO 土壓力計算法（RIDO 採用，XDO 可選用）兩者得之土壓力不相同，為使兩種軟體之分析結果能夠直接比對，XDO 選擇採用 RIDO 土壓力計算法。（註：有關土壓力計算法理論請見 XDO 使用手冊 5.6 節）

各程式之輸入檔及詳細輸出結果請見附錄三，XDO 之分析結果摘要請見圖 2.3-3，RIDO 4.2 之分析結果摘要請見圖 2.3-4，XDO 與 RIDO 4.2 之重要分析結果比較請見表 2.3-6。

結論：XDO vs RIDO 4.2 分析結果分析結果相當一致，各分析項目之誤差僅約 0.0%~0.9%。

表 2.3-1　案例三地下開挖施工步驟

Phase	降水 / 開挖	支撐或樓板	說明
1	2.5 m / 2.5 m		第 1 階降水(AQ1)及開挖 內扶壁參數設定
2		1.85 m	第 1 階支撐 H300@7.5m，預壓 30 tf
3	- / 7.52 m		第 2 階開挖
4		5.745 m	打設 B1F 板，25 cm
5		-	拆除第 1 階支撐
6		0.1 m	打設 1F 板，20 cm
7	- / 12.02 m		第 3 階開挖 AQ3 解壓抽水
8		10.345 m	打設 B2F 板，45 cm
9	- / 15.42 m		第 4 階開挖 AQ3、AQ4 解壓抽水
10		13.745 m	打設 B3F 板，45 cm
11	18.82 m / 18.82 m		第 5 階降水(AQ3)及開挖 AQ4 解壓抽水
12		17.145 m	打設 B4F 板，45 cm
13	- / 23.32 m		第 6 階開挖 AQ4 解壓抽水
14		23.22 m 22.67 m 20.42 m	打設 PC，20 cm 打設 BSF 板，90 cm 打設 B5F 板，20 cm

註：AQ1~AQ4 代表由上而下的含水層編號。

表 2.3-2　案例三分析用簡化地層參數

No	分類	Z	SPT-N	γ_t	c'	ϕ'	S_u	K_a	K_o	K_p	k_h
		(m)		(tf/m^3)	(tf/m^2)	(deg.)	(tf/m^2)				(tf/m^3)
1	SF	2.79	8	1.95	0	27	-	0.334	0.546	4.771	1000
2	CL	4.99	4	1.88	-	-	6.5	1	1	1	1625
3	SM/ML1	6.19	4	1.87	0	28	-	0.321	0.531	5.172	500
4	CL	18.09	4	1.89	-	-	4.5	1	1	1	1125
5	SM/ML2	19.99	13	1.89	0	31	-	0.286	0.485	6.710	1625
6	CL	25.69	6	1.94	-	-	6.5	1	1	1	1625
7	SM/ML3	31.69	19	1.94	0.5	32	-	0.275	0.470	7.371	2375
8	SM	35.49	25	1.94	0.5	33	-	0.264	0.455	8.130	3125
9	SS/SH	50.0	100	2.20	5	35	-	0.244	0.426	10.028	12500

註：K_a 及 K_p 採 Coulomb 用土壓力係數計算法，取 D_a=0.67、D_b=0.67。

表 2.3-3　案例三擋土壁參數及勁度

擋土壁型式	f_c'	E	I'	ϕ	R
	(kgf/cm^2)	(tf/m^2)	(m^4/m)		($tf\text{-}m^2/m$)
連續壁，厚度 100 cm	280	2509980	0.083333	0.6	125498

註：擋土壁勁度 $R=\phi EI'$，$E=150000\sqrt{f_c'}$。

表 2.3-4　案例三支撐參數及勁度

No	型號	Z	S	F	n	E	A	L	ϕ	R
		(m)	(m)	(tf)		(tf/m^2)	(m^2)	(m)		(tf/m)
1	H300×300×10×15	1.85	7.5	30	1	20400000	0.01198	48	0.6	3055

註：支撐勁度 $R=\phi nEA/L$。

表 2.3-5　案例三樓板參數及勁度

No	樓板說明	Z	S	F	f_c'	E	A	L	ϕ	R
		(m)	(m)	(tf)	(kgf/cm^2)	(tf/m^2)	(m^2)	(m)		(tf/m)
2	B1F 板	5.745	1	0	280	2509980	0.25	110	0.7	3993
3	B2F 板	0.1	1	0	280	2509980	0.2	110	0.7	3195
4	B3F 板	10.345	1	0	280	2509980	0.45	110	0.7	7188
5	B4F 板	13.745	1	0	280	2509980	0.45	110	0.7	7188
6	B5F 板	17.145	1	0	280	2509980	0.45	110	0.7	7188
7	PC	23.22	1	0	140	1774824	0.2	110	0.7	2259
8	BSF 板	22.67	1	0	280	2509980	0.9	110	0.7	14375
9	B6F 板	20.42	1	0	280	2509980	0.2	110	0.7	3195

註：(1)模擬樓板時，取支撐間距 S=1m，預力 F=0，支撐斷面積＝板厚×1m。
(2)樓板勁度 $R=\phi nEA/L$，長度 L 取樓板長度或開挖寬度之半，$E=150000\sqrt{f_c'}$。

表 2.3-6　XDO 與 RIDO 4.2 之重要分析結果比較

物理量			分析結果		差值比較
			XDO	RIDO	XDO vs RIDO
最大變形		mm	-51.67	-51.78	0.2%
最大彎矩		tf-m/m	-103.27	-102.96	0.3%
		tf-m/m	249.33	251.67	0.9%
最大剪力		tf/m	-53.53	-53.60	0.1%
		tf/m	100.77	100.73	0.0%
最大支撐力	S-1	tf	55.43	55.43	0.0%

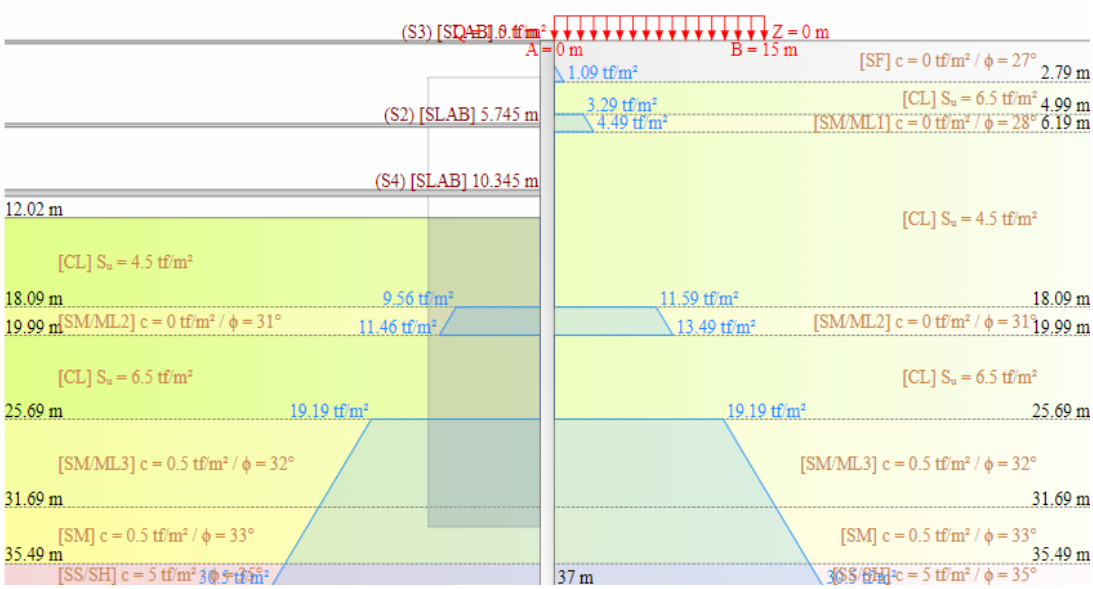


圖 2.3-1　案例三開挖擋土剖面（B3F 樓板完成）

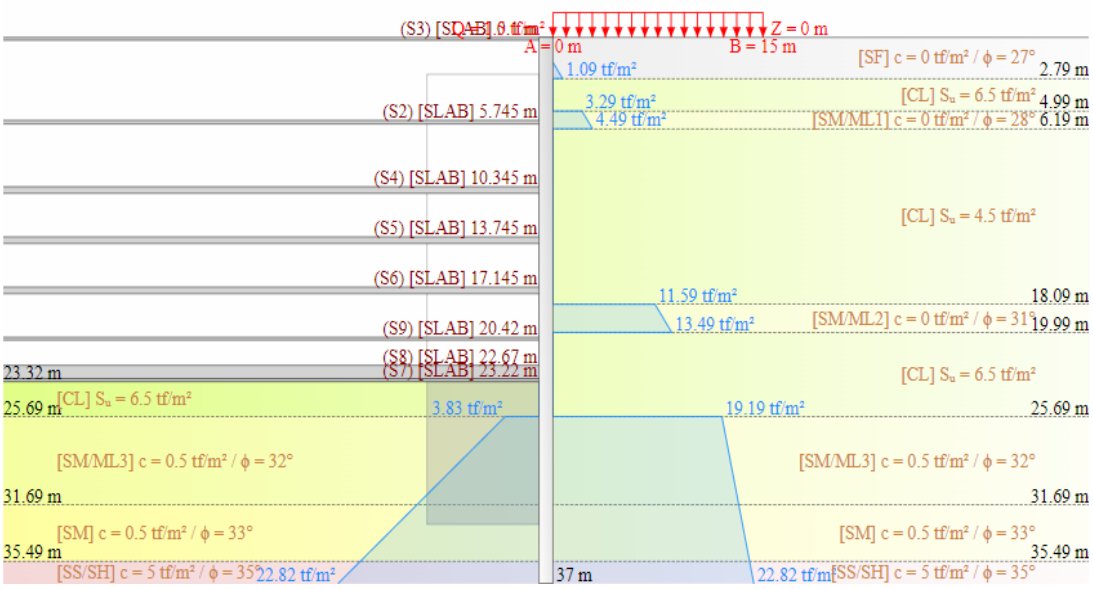


圖 2.3-2　案例三開挖擋土剖面（地下樓板完成）

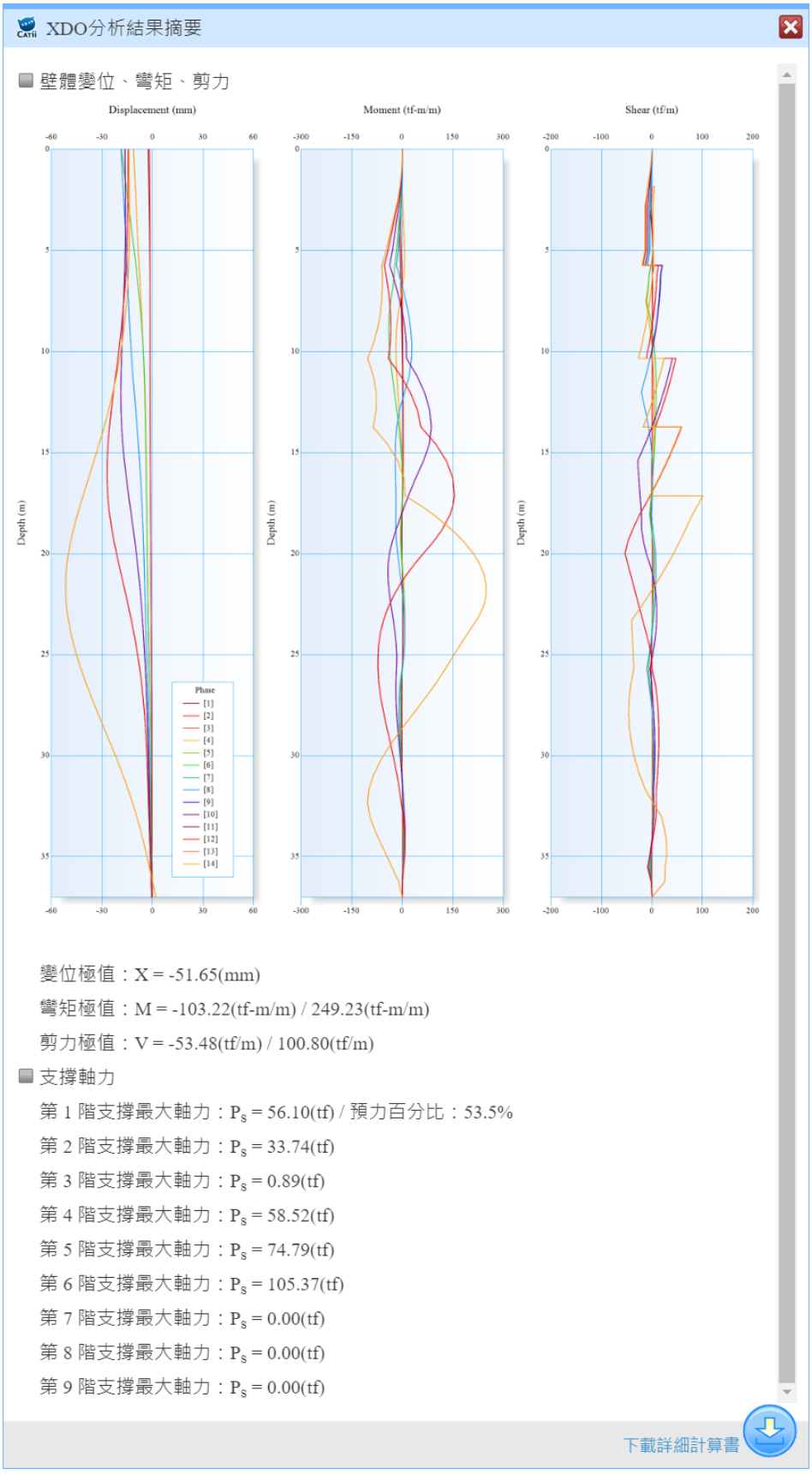


圖 2.3-3　案例三分析結果摘要

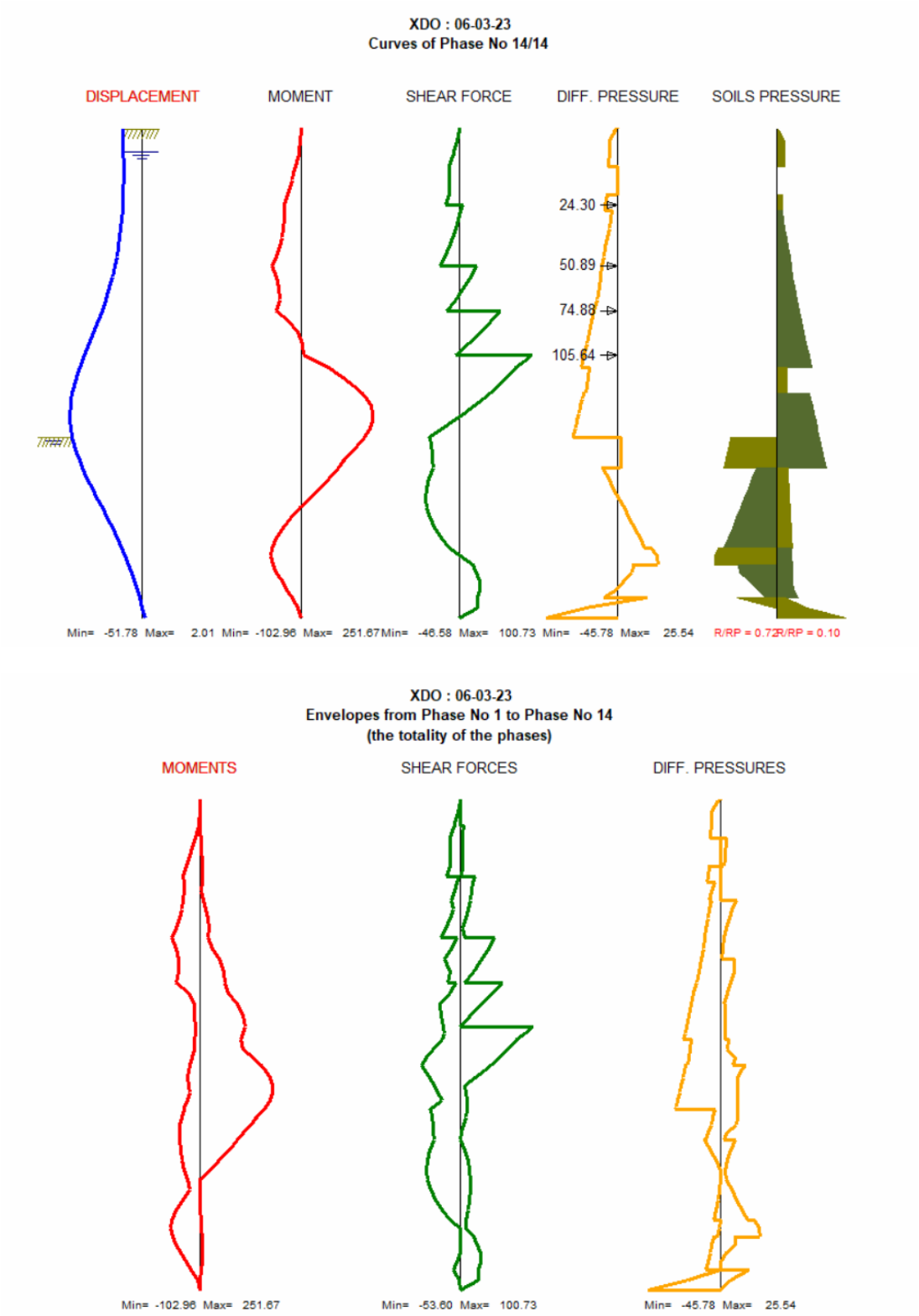


圖 2.3-4　案例三 RIDO 4.2 分析結果摘要

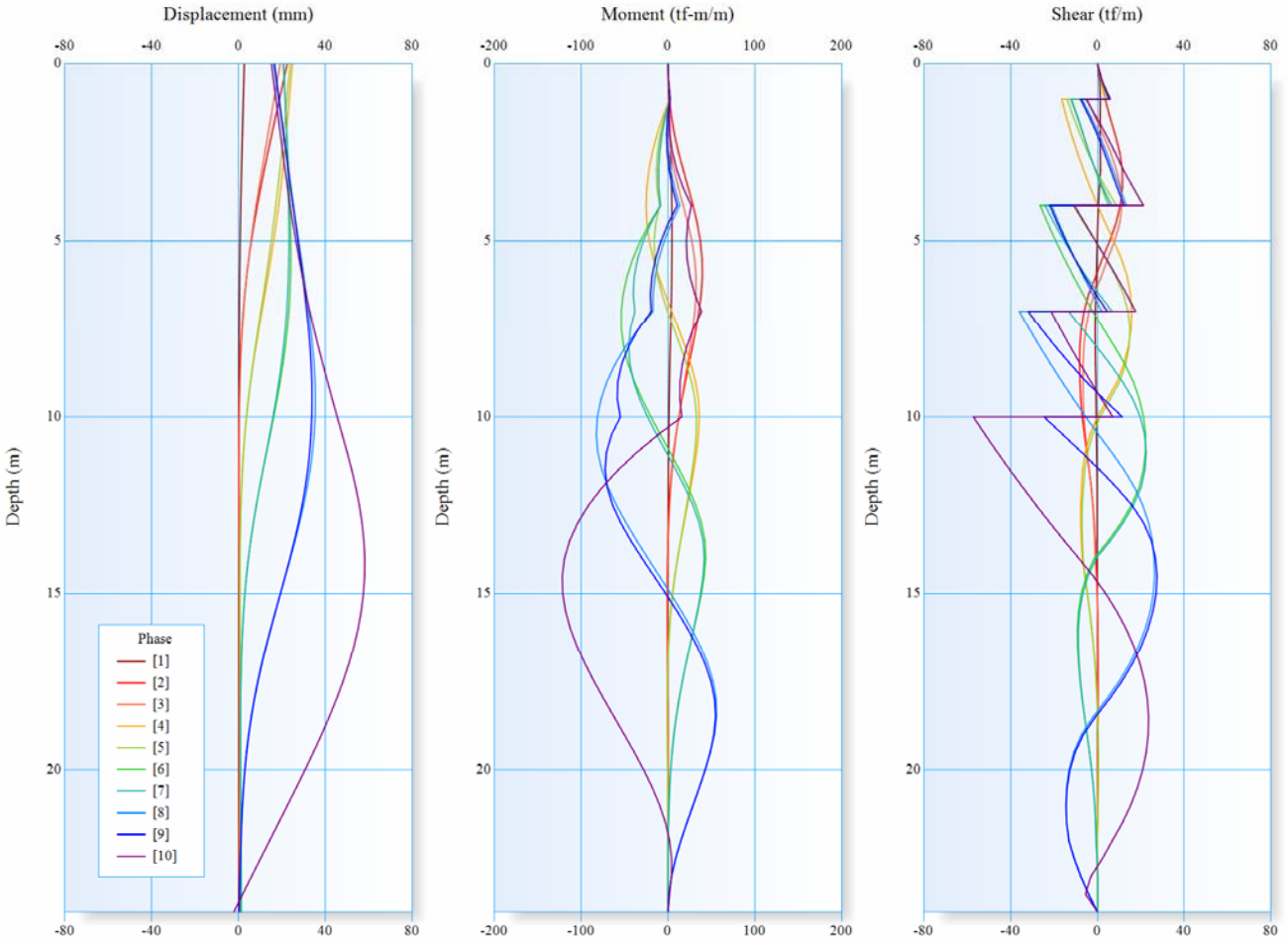
附錄一

案例一 XDO、RIDO 及 TORSA 之輸入檔及詳細輸出結果

計畫名稱：
主　　題：XDO 開挖擋土分析設計

XDO 綜合分析結果

▼壁體變位、彎矩、剪力



LEVEL	X_{min}	X_{max}	M_{min}	M_{max}	V_{min}	V_{max}
(m)	(mm)	(mm)	(tf-m/m)	(tf-m/m)	(tf/m)	(tf/m)
0.000	0.00	24.75	0.00	0.00	0.00	0.00
0.500	0.00	24.06	0.00	0.55	0.00	2.23
1.000	0.00	23.37	0.00	2.58	0.00	5.93
1.000	0.00	23.37	0.00	2.58	-16.47	3.53
1.500	0.00	22.68	-6.08	3.97	-14.34	5.70
2.000	0.00	22.27	-12.68	7.41	-11.95	8.13
2.500	0.00	22.67	-18.02	12.04	-9.31	10.25
3.000	0.00	23.03	-21.97	17.51	-6.41	11.96
3.500	0.00	24.04	-24.42	23.29	-3.30	16.51
4.000	0.00	25.22	-25.25	28.82	0.00	21.17
4.000	0.00	25.22	-25.25	28.82	-26.40	11.26
4.500	0.00	26.44	-24.35	33.63	-22.93	10.28
5.000	0.00	27.67	-31.79	37.22	-19.22	7.93
5.500	0.00	28.89	-40.45	39.19	-15.27	11.03
6.000	0.00	30.07	-47.08	39.51	-11.09	13.64
6.500	0.00	31.20	-51.56	38.27	-6.72	15.17
7.000	0.00	32.79	-53.81	38.60	-6.18	17.60
7.000	0.00	32.79	-53.81	38.60	-35.98	15.79
7.500	0.00	34.69	-53.69	32.22	-31.40	15.49
8.000	0.00	36.70	-51.10	28.29	-26.60	14.59

8.500	0.00	38.79	-60.76	26.22	-21.59	12.99
9.000	0.00	40.95	-70.30	31.57	-16.36	16.48
9.500	0.00	43.16	-77.18	35.01	-10.97	19.34
10.000	0.00	45.43	-81.30	36.07	-7.00	21.22
10.000	0.00	45.43	-81.30	36.07	-57.13	21.22
10.500	0.00	47.73	-82.57	35.13	-51.73	22.15
11.000	0.00	50.00	-80.87	32.81	-46.14	22.42
11.500	0.00	52.12	-76.18	29.66	-40.34	21.86
12.000	0.00	54.02	-75.90	26.10	-34.33	20.10
12.500	0.00	55.62	-91.50	31.93	-28.21	20.85
13.000	0.00	56.87	-103.98	38.55	-21.88	23.58
13.500	0.00	57.71	-113.24	42.54	-15.34	25.32
14.000	0.00	58.11	-119.18	43.41	-8.59	26.73
14.500	0.00	58.05	-121.75	41.68	-5.84	27.47
15.000	0.00	57.52	-121.22	38.47	-7.43	27.02
15.500	0.00	56.51	-117.97	34.36	-8.73	25.58
16.000	0.00	55.04	-112.37	29.82	-9.23	23.28
16.500	0.00	53.14	-104.80	37.28	-9.16	20.13
17.000	0.00	50.82	-95.63	45.71	-8.70	19.58
17.500	0.00	48.14	-85.24	51.92	-8.00	21.66
18.000	0.00	45.11	-74.00	55.48	-7.08	22.98
18.500	0.00	41.80	-62.28	56.03	-5.95	23.56
19.000	0.00	38.25	-50.45	53.59	-7.30	23.40
19.500	0.00	34.50	-38.90	48.94	-10.90	22.49
20.000	0.00	30.60	-27.99	42.85	-13.10	20.84
20.500	0.00	26.58	-18.09	36.05	-14.23	18.44
21.000	0.00	22.49	-9.57	28.90	-14.54	15.30
21.500	0.00	18.37	-2.81	21.70	-14.18	11.41
22.000	0.00	14.23	0.00	14.79	-13.15	6.79
22.500	0.00	10.11	-0.05	8.76	-10.75	2.27
23.000	0.00	5.99	-0.07	4.09	-7.71	0.11
23.500	0.00	1.90	-0.02	1.73	-5.50	0.16
24.000	-2.19	1.30	0.00	0.00	0.00	0.00
Max	-	58.11	-	56.03	-	27.47
Min	-2.19	-	-121.75	-	-57.13	-

▼支撐力

Phase	Position(m) / Force(tf)			
	S1	S2	S3	S4
	1(m)	4(m)	7(m)	10(m)
#1				
#2				
#3	-50.00			
#4	-99.90			
#5	-92.13	-100.00		
#6	-85.99	-158.08		
#7	-86.48	-152.78	-100.00	
#8	-64.68	-172.15	-190.06	
#9	-66.58	-171.27	-182.49	-180.00
#10	-56.10	-159.00	-194.79	-321.20
Extremum	-99.90	-172.15	-194.79	-321.20
Preload	-50.00	-100.00	-100.00	-180.00
Preload Ratio	50.0%	58.1%	51.3%	56.0%

▼分析條件

計畫名稱：

主　　題：XDO 開挖擋土分析設計

▼分析方法設定

排水地層採有效應力法分析，不排水地層採總應力法分析

▼主、被動土壓力

採用 Padfield & Mair 土壓力計算法

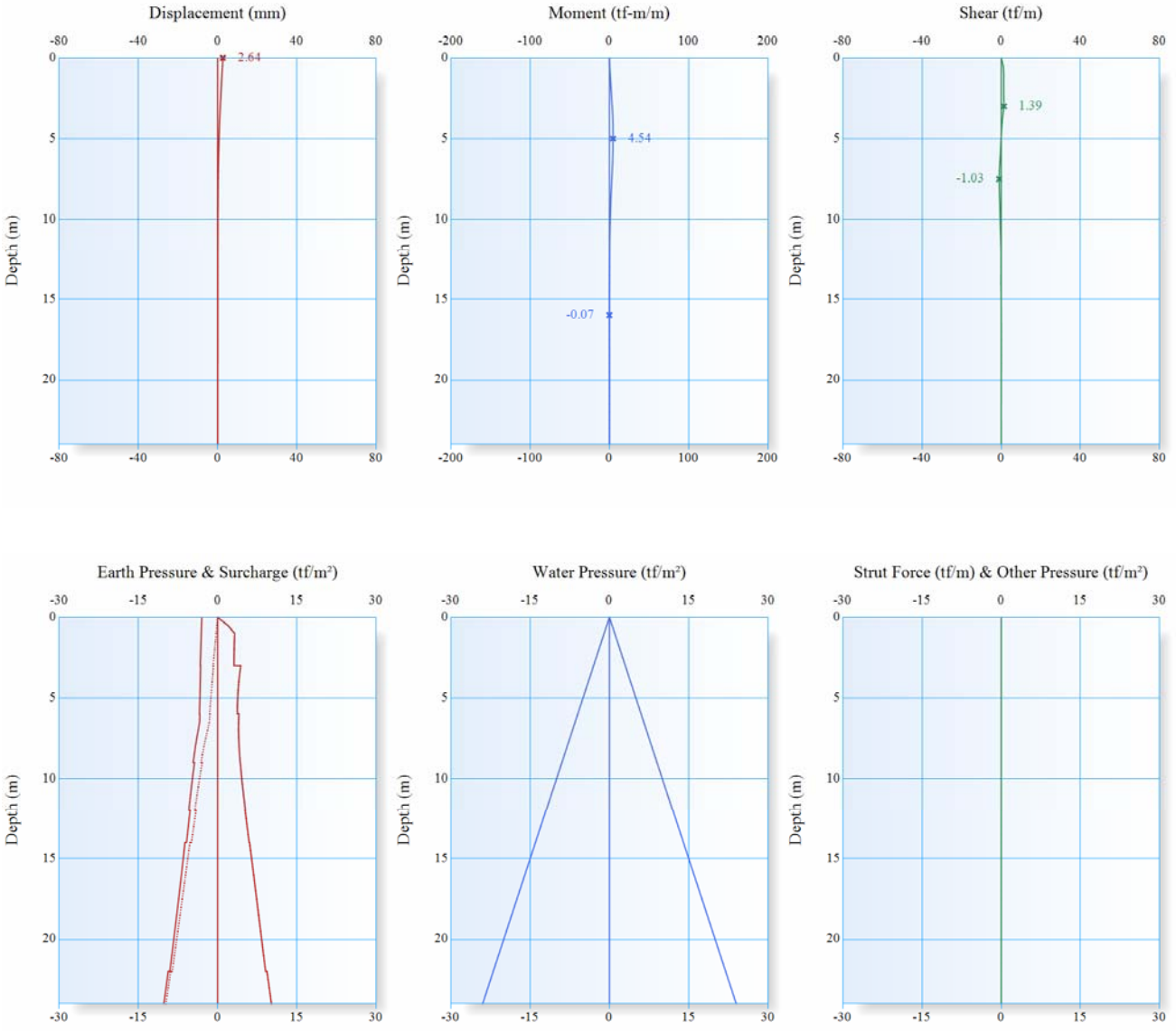
▼SUB 超載轉換法

由 Boussinesq 公式計算水平荷重 S_h 後，側向土壓力直接加入 S_h

計畫名稱：
主　　題：XDO 開挖擋土分析設計

XDO 各階分析結果

▼ PHASE 1



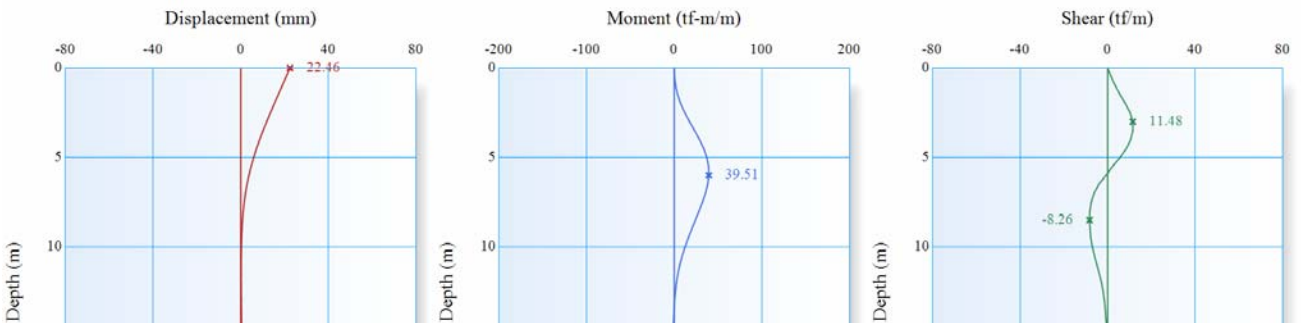
LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	2.64	0.00	0.00		1	3.00	0.00	1250	3	0.00	0.00	1250	
0.500	2.41	0.30	1.04		1	3.05	0.50	1250	3	1.89	0.50	1250	
1.000	2.19	0.91	1.30		1	3.09	1.00	1250	2	3.21	1.00	1250	
1.500	1.96	1.55	1.26		1	3.14	1.50	1250	2	3.17	1.50	1250	
2.000	1.75	2.18	1.27		1	3.19	2.00	1250	2	3.14	2.00	1250	
2.500	1.54	2.82	1.31		1	3.24	2.50	1250	2	3.12	2.50	1250	
3.000	1.34	3.50	1.39		1	3.29	3.00	1250	2	3.11	3.00	1250	
					1	3.22	3.00	2250	2	4.37	3.00	2250	
3.500	1.16	4.06	0.87		1	3.25	3.50	2250	2	4.17	3.50	2250	
4.000	0.99	4.39	0.46		1	3.29	4.00	2250	2	4.01	4.00	2250	
4.500	0.84	4.53	0.14		1	3.33	4.50	2250	2	3.88	4.50	2250	
5.000	0.71	4.54	-0.10		1	3.36	5.00	2250	2	3.79	5.00	2250	

計畫名稱：

主　　題：XDO 開挖擋土分析設計

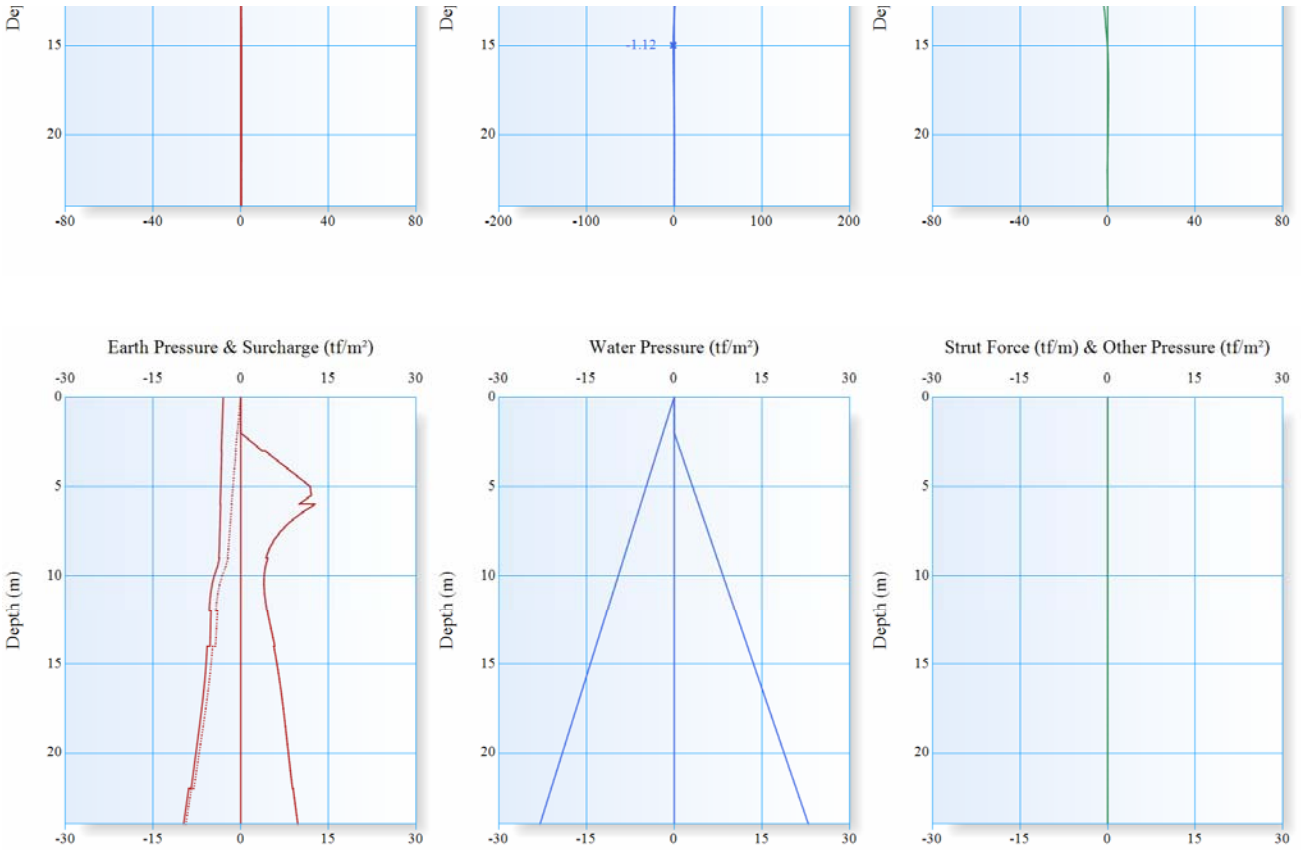
5.500	0.59	4.44	-0.29		1	3.40	5.50	2250	2	3.74	5.50	2250	
6.000	0.49	4.26	-0.45		1	3.45	6.00	2250	2	3.73	6.00	2250	
					1	3.38	6.00	3000	2	4.02	6.00	3000	
6.500	0.41	3.96	-0.74		1	3.41	6.50	3000	2	3.96	6.50	3000	
7.000	0.34	3.53	-0.95		2	3.67	7.00	3000	2	3.96	7.00	3000	
7.500	0.29	3.03	-1.03		2	3.96	7.50	3000	2	3.99	7.50	3000	
8.000	0.24	2.53	-0.99		2	4.21	8.00	3000	2	4.05	8.00	3000	
8.500	0.21	2.05	-0.89		2	4.43	8.50	3000	2	4.15	8.50	3000	
9.000	0.19	1.65	-0.72		2	4.63	9.00	3000	2	4.27	9.00	3000	
					2	4.38	9.00	3750	2	4.29	9.00	3750	
9.500	0.17	1.30	-0.66		2	4.59	9.50	3750	2	4.42	9.50	3750	
10.000	0.15	0.99	-0.56		2	4.78	10.00	3750	2	4.56	10.00	3750	
10.500	0.14	0.74	-0.45		2	4.96	10.50	3750	2	4.72	10.50	3750	
11.000	0.13	0.54	-0.34		2	5.13	11.00	3750	2	4.90	11.00	3750	
11.500	0.13	0.40	-0.22		2	5.29	11.50	3750	2	5.07	11.50	3750	
12.000	0.12	0.32	-0.12		2	5.46	12.00	3750	2	5.26	12.00	3750	
					2	5.21	12.00	4500	2	5.19	12.00	4500	
12.500	0.12	0.26	-0.11		2	5.38	12.50	4500	2	5.38	12.50	4500	
13.000	0.12	0.20	-0.12		2	5.55	13.00	4500	2	5.58	13.00	4500	
13.500	0.11	0.14	-0.14		2	5.72	13.50	4500	2	5.77	13.50	4500	
14.000	0.11	0.06	-0.17		2	5.89	14.00	4500	2	5.97	14.00	4500	
					2	6.18	14.00	3500	2	6.04	14.00	3500	
14.500	0.11	-0.01	-0.11		2	6.34	14.50	3500	2	6.23	14.50	3500	
15.000	0.11	-0.05	-0.06		2	6.51	15.00	3500	2	6.42	15.00	3500	
15.500	0.11	-0.06	-0.02		2	6.68	15.50	3500	2	6.62	15.50	3500	
16.000	0.11	-0.07	0.01		2	6.85	16.00	3500	2	6.81	16.00	3500	
16.500	0.10	-0.06	0.02		2	7.02	16.50	3500	2	7.00	16.50	3500	
17.000	0.10	-0.04	0.03		2	7.20	17.00	3500	2	7.19	17.00	3500	
17.500	0.10	-0.03	0.04		2	7.38	17.50	3500	2	7.38	17.50	3500	
18.000	0.09	-0.01	0.04		2	7.56	18.00	3500	2	7.57	18.00	3500	
18.500	0.09	0.01	0.03		2	7.74	18.50	3500	2	7.75	18.50	3500	
19.000	0.09	0.03	0.03		2	7.93	19.00	3500	2	7.94	19.00	3500	
19.500	0.08	0.04	0.02		2	8.11	19.50	3500	2	8.13	19.50	3500	
20.000	0.08	0.05	0.01		2	8.30	20.00	3500	2	8.32	20.00	3500	
20.500	0.08	0.05	0.00		2	8.49	20.50	3500	2	8.51	20.50	3500	
21.000	0.07	0.05	-0.01		2	8.67	21.00	3500	2	8.70	21.00	3500	
21.500	0.07	0.04	-0.02		2	8.86	21.50	3500	2	8.89	21.50	3500	
22.000	0.07	0.03	-0.03		2	9.05	22.00	3500	2	9.08	22.00	3500	
					2	9.36	22.00	3125	2	9.34	22.00	3125	
22.500	0.07	0.02	-0.02		2	9.57	22.50	3125	2	9.55	22.50	3125	
23.000	0.06	0.01	-0.01		2	9.77	23.00	3125	2	9.76	23.00	3125	
23.500	0.06	0.00	-0.01		2	9.98	23.50	3125	2	9.97	23.50	3125	
24.000	0.06	0.00	0.00		2	10.19	24.00	3125	2	10.18	24.00	3125	
Max	2.64	4.54	1.39		D_e = 0 (m)　D_w = 0 (m)				D_e = 0 (m)　D_w = 0 (m)				
Min	0.06	-0.07	-1.03		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 2



計畫名稱：

主　　題：XDO 開挖擋土分析設計



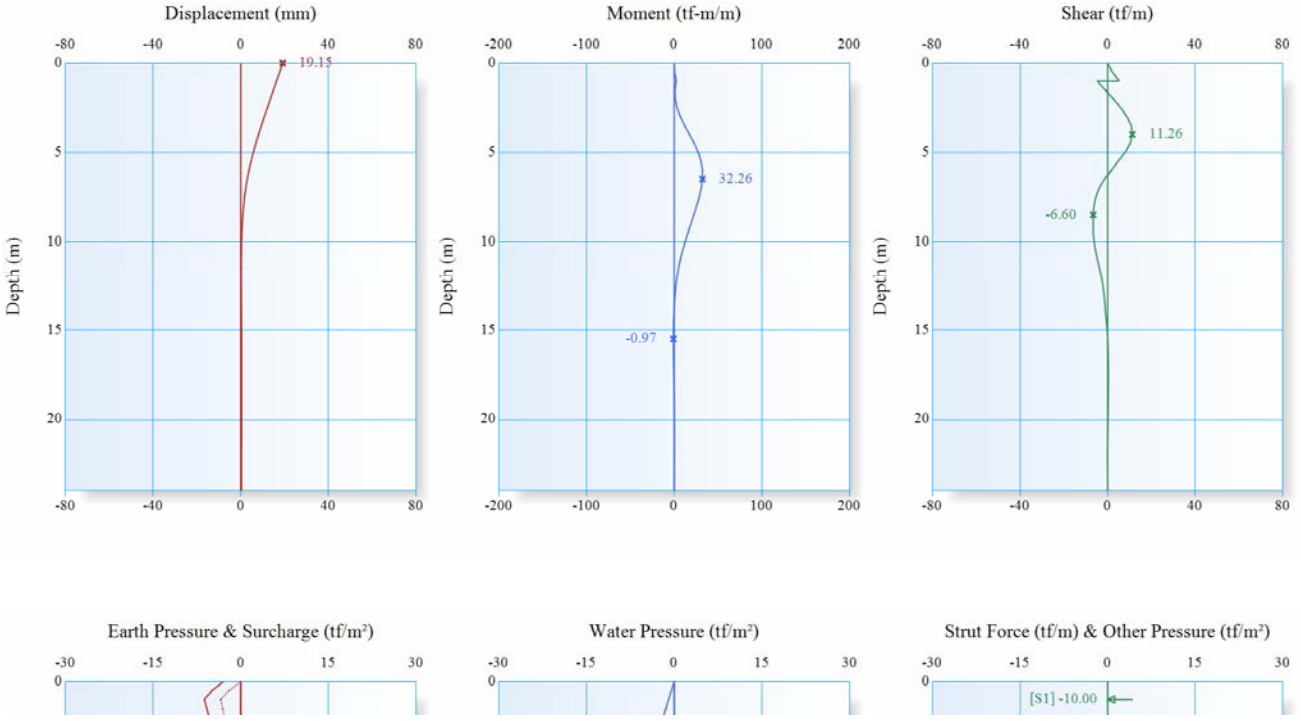
LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	22.46	0.00	0.00		1	3.00	0.00	1250	0				
0.500	20.66	0.39	1.63		1	3.05	0.48	1250	0				
1.000	18.85	1.67	3.53		1	3.11	0.96	1250	0				
1.500	17.05	3.97	5.70		1	3.16	1.44	1250	0				
2.000	15.27	7.41	8.13		1	3.22	1.91	1250	0		0.00		
					1	3.22	1.91	1250	3	0.00	0.00	1250	
2.500	13.52	12.04	10.25		1	3.28	2.39	1250	3	1.80	0.52	1250	
3.000	11.81	17.51	11.48		1	3.33	2.87	1250	3	3.59	1.04	1250	
					1	3.26	2.87	2250	3	4.12	1.04	2250	
3.500	10.17	23.29	11.48		1	3.30	3.35	2250	3	6.05	1.57	2250	
4.000	8.62	28.82	10.51		1	3.34	3.83	2250	3	7.99	2.09	2250	
4.500	7.19	33.63	8.57		1	3.38	4.31	2250	3	9.93	2.61	2250	
5.000	5.88	37.22	5.66		1	3.43	4.78	2250	3	11.87	3.13	2250	
5.500	4.72	39.19	2.22		1	3.47	5.26	2250	2	12.06	3.65	2250	
6.000	3.71	39.51	-0.75		1	3.52	5.74	2250	2	9.99	4.17	2250	
					1	3.46	5.74	3000	2	12.72	4.17	3000	
6.500	2.85	38.27	-4.01		1	3.49	6.22	3000	2	10.34	4.70	3000	
7.000	2.15	35.68	-6.18		1	3.53	6.70	3000	2	8.39	5.22	3000	
7.500	1.57	32.22	-7.49		1	3.58	7.18	3000	2	6.86	5.74	3000	
8.000	1.13	28.29	-8.12		1	3.62	7.65	3000	2	5.70	6.26	3000	
8.500	0.79	24.18	-8.26		1	3.67	8.13	3000	2	4.87	6.78	3000	
9.000	0.54	20.09	-8.04		2	3.75	8.61	3000	2	4.32	7.31	3000	
					1	3.62	8.61	3750	2	4.64	7.31	3750	
9.500	0.38	16.13	-7.70		2	3.99	9.09	3750	2	4.20	7.83	3750	
10.000	0.27	12.44	-7.00		2	4.54	9.57	3750	2	3.99	8.35	3750	

計畫名稱：

主　　題：XDO 開挖擋土分析設計

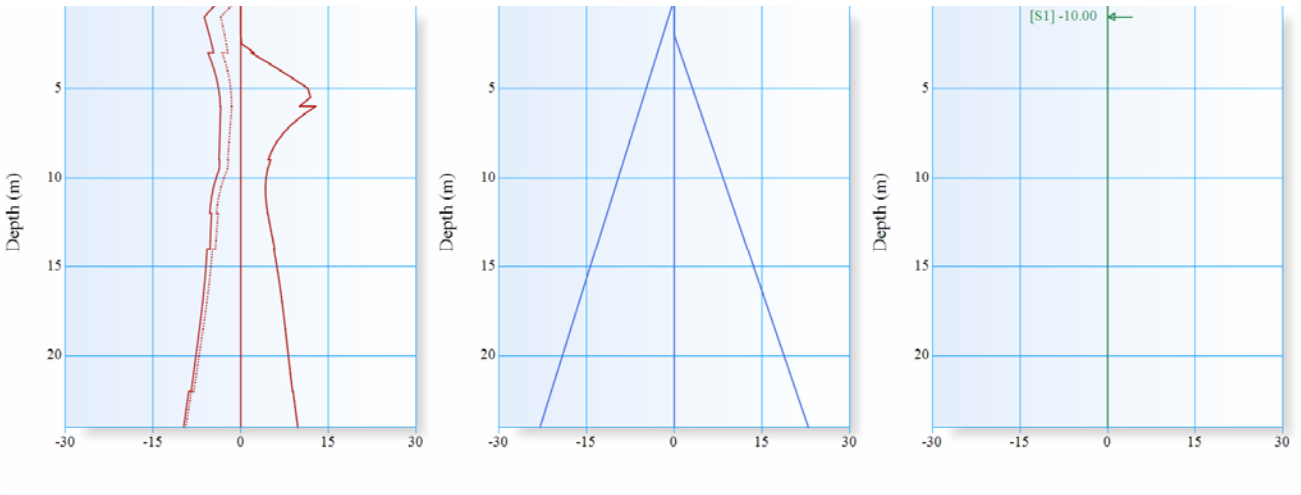
10.500	0.21	9.18	-6.02		2	4.91	10.05	3750	2	3.96	8.87	3750	
11.000	0.19	6.43	-4.94		2	5.16	10.52	3750	2	4.06	9.39	3750	
11.500	0.19	4.24	-3.84		2	5.31	11.00	3750	2	4.25	9.91	3750	
12.000	0.20	2.57	-2.81		2	5.41	11.48	3750	2	4.50	10.44	3750	
					2	5.10	11.48	4500	2	4.53	10.44	4500	
12.500	0.23	1.35	-2.08		2	5.15	11.96	4500	2	4.83	10.96	4500	
13.000	0.26	0.46	-1.50		2	5.19	12.44	4500	2	5.16	11.48	4500	
13.500	0.29	-0.18	-1.10		2	5.22	12.92	4500	2	5.49	12.00	4500	
14.000	0.31	-0.67	-0.86		2	5.26	13.39	4500	2	5.82	12.52	4500	
					2	5.76	13.39	3500	2	5.65	12.52	3500	
14.500	0.34	-0.99	-0.43		2	5.84	13.87	3500	2	5.93	13.05	3500	
15.000	0.36	-1.12	-0.11		2	5.94	14.35	3500	2	6.19	13.57	3500	
15.500	0.38	-1.12	0.11		2	6.05	14.83	3500	2	6.44	14.09	3500	
16.000	0.39	-1.03	0.25		2	6.18	15.31	3500	2	6.67	14.61	3500	
16.500	0.40	-0.89	0.33		2	6.33	15.79	3500	2	6.88	15.13	3500	
17.000	0.40	-0.71	0.37		2	6.50	16.26	3500	2	7.08	15.65	3500	
17.500	0.40	-0.53	0.37		2	6.68	16.74	3500	2	7.27	16.18	3500	
18.000	0.40	-0.35	0.34		2	6.87	17.22	3500	2	7.45	16.70	3500	
18.500	0.39	-0.19	0.31		2	7.06	17.70	3500	2	7.63	17.22	3500	
19.000	0.39	-0.05	0.26		2	7.26	18.18	3500	2	7.80	17.74	3500	
19.500	0.38	0.06	0.20		2	7.46	18.66	3500	2	7.97	18.26	3500	
20.000	0.38	0.14	0.15		2	7.67	19.13	3500	2	8.14	18.79	3500	
20.500	0.37	0.20	0.08		2	7.87	19.61	3500	2	8.31	19.31	3500	
21.000	0.37	0.22	0.01		2	8.08	20.09	3500	2	8.49	19.83	3500	
21.500	0.36	0.20	-0.07		2	8.28	20.57	3500	2	8.67	20.35	3500	
22.000	0.36	0.14	-0.16		2	8.48	21.05	3500	2	8.85	20.87	3500	
					2	8.91	21.05	3125	2	8.95	20.87	3125	
22.500	0.36	0.07	-0.10		2	9.13	21.53	3125	2	9.15	21.39	3125	
23.000	0.36	0.03	-0.05		2	9.34	22.00	3125	2	9.35	21.92	3125	
23.500	0.35	0.01	-0.02		2	9.56	22.48	3125	2	9.55	22.44	3125	
24.000	0.35	0.00	0.00		2	9.78	22.96	3125	2	9.75	22.96	3125	
Max	22.46	39.51	11.48		D_e = 0 (m) D_w = 0 (m)				D_e = 2 (m) D_w = 2 (m)				
Min	0.19	-1.12	-8.26		[STATE] -1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 3



計畫名稱：

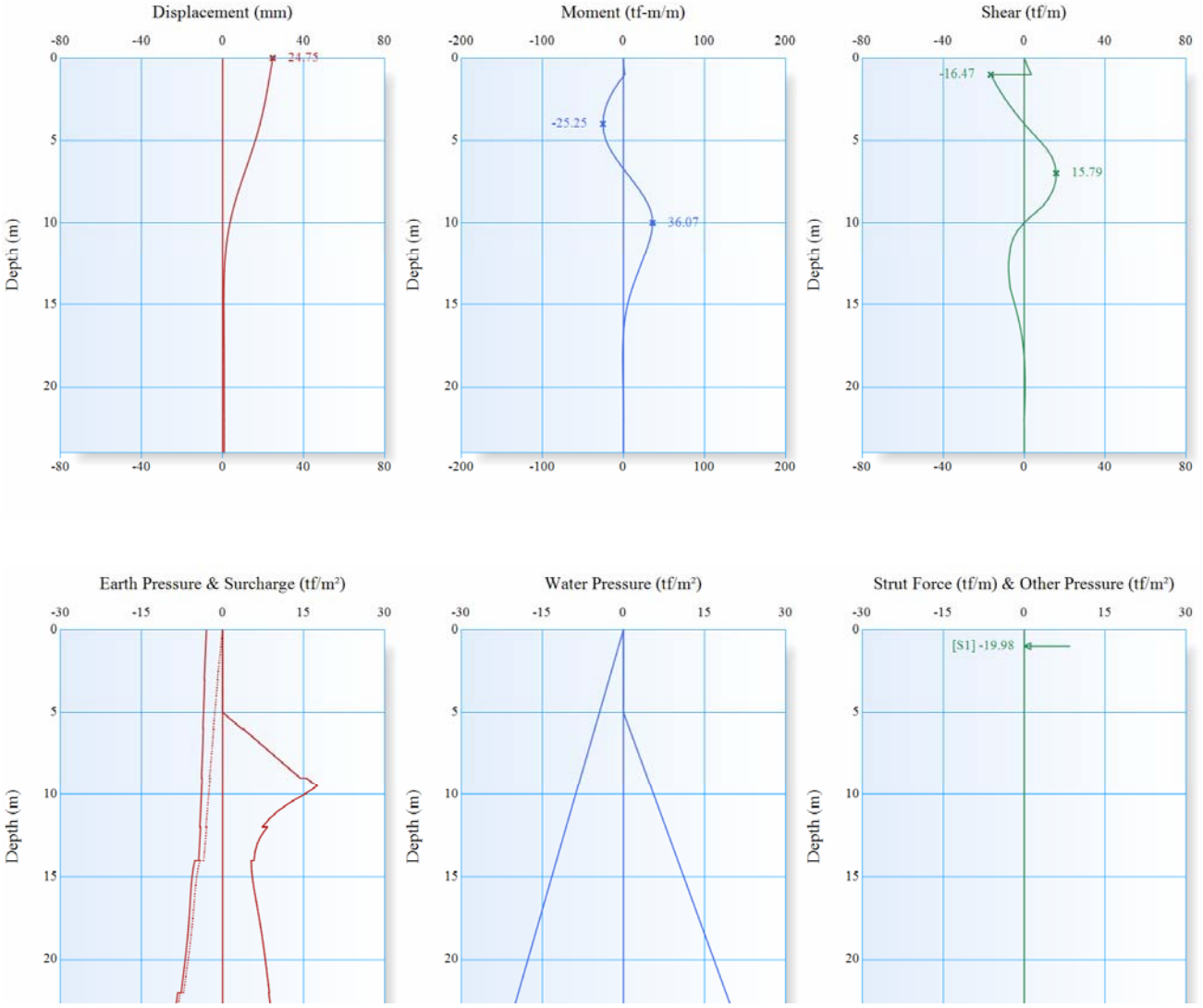
主　　題：XDO 開挖擋土分析設計



LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	19.15	0.00	0.00		1	3.00	0.00	1250	0				
0.500	17.74	0.47	2.09		3	4.88	0.48	1250	0				
1.000	16.33	2.25	5.23		2	6.26	0.96	1250	0				-50.00
			-4.77		2	6.26	0.96	1250	0				
1.500	14.93	0.77	-1.15		2	5.81	1.44	1250	0				
2.000	13.53	1.09	2.49		2	5.39	1.91	1250	0		0.00		
					2	5.39	1.91	1250	3	0.00	0.00	1250	
2.500	12.14	3.22	6.00		2	5.00	2.39	1250	1	0.14	0.52	1250	
3.000	10.76	6.95	8.73		2	4.65	2.87	1250	2	2.28	1.04	1250	
					2	5.63	2.87	2250	2	1.75	1.04	2250	
3.500	9.40	11.89	10.77		2	5.02	3.35	2250	2	4.33	1.57	2250	
4.000	8.10	17.45	11.26		2	4.52	3.83	2250	2	6.81	2.09	2250	
4.500	6.86	22.89	10.28		2	4.12	4.31	2250	2	9.19	2.61	2250	
5.000	5.71	27.48	7.93		2	3.81	4.78	2250	2	11.48	3.13	2250	
5.500	4.67	30.66	4.74		2	3.59	5.26	2250	2	11.94	3.65	2250	
6.000	3.75	32.25	1.81		1	3.52	5.74	2250	2	10.07	4.17	2250	
					1	3.46	5.74	3000	2	12.83	4.17	3000	
6.500	2.95	32.26	-1.55		1	3.49	6.22	3000	2	10.61	4.70	3000	
7.000	2.27	30.86	-3.89		1	3.53	6.70	3000	2	8.78	5.22	3000	
7.500	1.72	28.50	-5.40		1	3.58	7.18	3000	2	7.30	5.74	3000	
8.000	1.28	25.56	-6.25		1	3.62	7.65	3000	2	6.15	6.26	3000	
8.500	0.93	22.32	-6.60		1	3.67	8.13	3000	2	5.29	6.78	3000	
9.000	0.67	19.00	-6.59		1	3.72	8.61	3000	2	4.70	7.31	3000	
					1	3.62	8.61	3750	2	5.12	7.31	3750	
9.500	0.48	15.70	-6.56		1	3.68	9.09	3750	2	4.61	7.83	3750	
10.000	0.36	12.49	-6.20		2	4.21	9.57	3750	2	4.33	8.35	3750	
10.500	0.28	9.54	-5.53		2	4.65	10.05	3750	2	4.22	8.87	3750	
11.000	0.24	6.98	-4.67		2	4.96	10.52	3750	2	4.26	9.39	3750	
11.500	0.22	4.87	-3.74		2	5.17	11.00	3750	2	4.39	9.91	3750	
12.000	0.23	3.22	-2.83		2	5.32	11.48	3750	2	4.59	10.44	3750	
					2	4.99	11.48	4500	2	4.64	10.44	4500	
12.500	0.24	1.96	-2.19		2	5.09	11.96	4500	2	4.90	10.96	4500	
13.000	0.26	1.00	-1.66		2	5.16	12.44	4500	2	5.19	11.48	4500	
13.500	0.29	0.27	-1.27		2	5.21	12.92	4500	2	5.49	12.00	4500	
14.000	0.31	-0.30	-1.02		2	5.27	13.39	4500	2	5.80	12.52	4500	
					2	5.77	13.39	3500	2	5.64	12.52	3500	
14.500	0.33	-0.70	-0.58		2	5.86	13.87	3500	2	5.91	13.05	3500	

15.000	0.35	-0.91	-0.24		2	5.96	14.35	3500	2	6.17	13.57	3500	
15.500	0.37	-0.97	0.00		2	6.07	14.83	3500	2	6.41	14.09	3500	
16.000	0.38	-0.93	0.17		2	6.21	15.31	3500	2	6.64	14.61	3500	
16.500	0.39	-0.83	0.27		2	6.36	15.79	3500	2	6.86	15.13	3500	
17.000	0.39	-0.68	0.32		2	6.52	16.26	3500	2	7.06	15.65	3500	
17.500	0.39	-0.52	0.34		2	6.69	16.74	3500	2	7.26	16.18	3500	
18.000	0.39	-0.36	0.33		2	6.88	17.22	3500	2	7.44	16.70	3500	
18.500	0.39	-0.20	0.30		2	7.07	17.70	3500	2	7.62	17.22	3500	
19.000	0.39	-0.07	0.26		2	7.27	18.18	3500	2	7.79	17.74	3500	
19.500	0.38	0.05	0.21		2	7.47	18.66	3500	2	7.97	18.26	3500	
20.000	0.38	0.13	0.16		2	7.67	19.13	3500	2	8.14	18.79	3500	
20.500	0.37	0.19	0.09		2	7.87	19.61	3500	2	8.31	19.31	3500	
21.000	0.37	0.21	0.02		2	8.08	20.09	3500	2	8.49	19.83	3500	
21.500	0.36	0.20	-0.06		2	8.28	20.57	3500	2	8.67	20.35	3500	
22.000	0.36	0.14	-0.15		2	8.48	21.05	3500	2	8.85	20.87	3500	
					2	8.91	21.05	3125	2	8.95	20.87	3125	
22.500	0.36	0.07	-0.09		2	9.12	21.53	3125	2	9.15	21.39	3125	
23.000	0.36	0.03	-0.05		2	9.34	22.00	3125	2	9.35	21.92	3125	
23.500	0.36	0.01	-0.02		2	9.56	22.48	3125	2	9.56	22.44	3125	
24.000	0.35	0.00	0.00		2	9.78	22.96	3125	2	9.76	22.96	3125	
Max	19.15	32.26	11.26		D_e = 0 (m)　D_w = 0 (m)				D_e = 2 (m)　D_w = 2 (m)				
Min	0.22	-0.97	-6.60		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 4



計畫名稱：

主　　題：XDO 開挖擋土分析設計

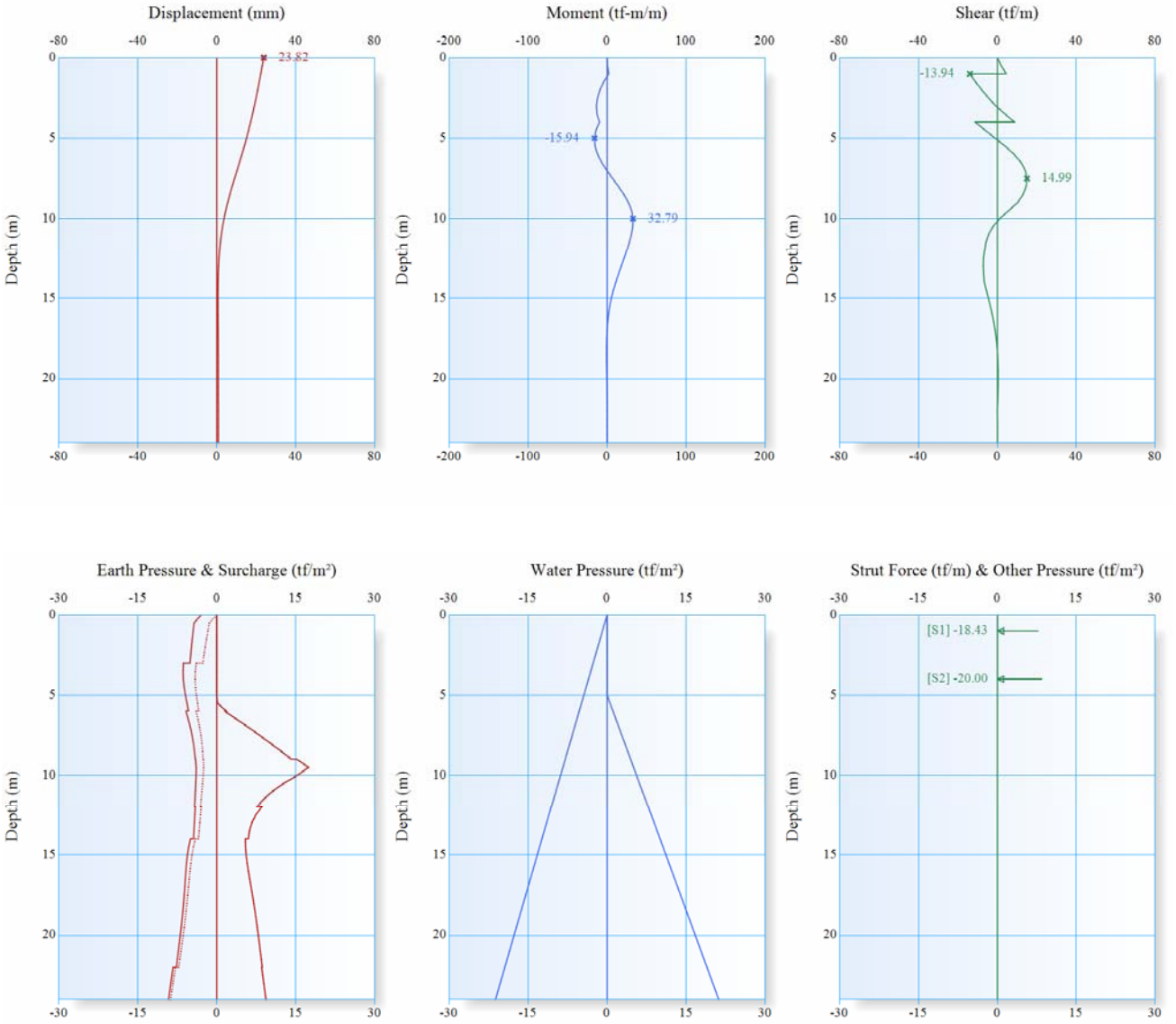
LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	24.75	0.00	0.00		1	3.00	0.00	1250	0				
0.500	24.06	0.38	1.63		1	3.07	0.44	1250	0				
1.000	23.37	1.64	3.51		1	3.13	0.88	1250	0				-99.90
			-16.47		1	3.13	0.88	1250	0				
1.500	22.68	-6.08	-14.34		1	3.20	1.33	1250	0				
2.000	21.96	-12.68	-11.95		1	3.26	1.77	1250	0				
2.500	21.20	-18.02	-9.31		1	3.33	2.21	1250	0				
3.000	20.37	-21.97	-6.41		1	3.40	2.65	1250	0				
					1	3.32	2.65	2250	0				
3.500	19.45	-24.42	-3.30		1	3.37	3.09	2250	0				
4.000	18.45	-25.25	0.06		1	3.42	3.54	2250	0				
4.500	17.34	-24.35	3.66		1	3.48	3.98	2250	0				
5.000	16.14	-21.58	7.51		1	3.53	4.42	2250	0		0.00		
					1	3.53	4.42	2250	3	0.00	0.00	2250	
5.500	14.86	-16.91	11.03		1	3.59	4.86	2250	3	1.76	0.56	2250	
6.000	13.51	-10.72	13.64		1	3.65	5.30	2250	3	3.53	1.12	2250	
					1	3.58	5.30	3000	3	3.79	1.12	3000	
6.500	12.12	-3.49	15.17		1	3.63	5.74	3000	3	5.55	1.67	3000	
7.000	10.72	4.28	15.79		1	3.68	6.19	3000	3	7.31	2.23	3000	
7.500	9.33	12.12	15.49		1	3.73	6.63	3000	3	9.08	2.79	3000	
8.000	7.99	19.59	14.28		1	3.79	7.07	3000	3	10.84	3.35	3000	
8.500	6.73	26.22	12.16		1	3.84	7.51	3000	3	12.61	3.91	3000	
9.000	5.57	31.57	9.13		1	3.90	7.95	3000	3	14.37	4.47	3000	
					1	3.80	7.95	3750	3	15.46	4.47	3750	
9.500	4.53	35.01	4.52		1	3.86	8.40	3750	3	17.49	5.02	3750	
10.000	3.62	36.07	-0.06		1	3.93	8.84	3750	2	15.25	5.58	3750	
10.500	2.86	35.13	-3.43		1	4.00	9.28	3750	2	12.55	6.14	3750	
11.000	2.23	32.81	-5.60		1	4.07	9.72	3750	2	10.36	6.70	3750	
11.500	1.73	29.66	-6.81		1	4.14	10.16	3750	2	8.64	7.26	3750	
12.000	1.34	26.10	-7.29		1	4.22	10.61	3750	2	7.35	7.81	3750	
					1	4.09	10.61	4500	2	8.28	7.81	4500	
12.500	1.05	22.31	-7.72		1	4.17	11.05	4500	2	7.15	8.37	4500	
13.000	0.84	18.43	-7.69		1	4.26	11.49	4500	2	6.41	8.93	4500	
13.500	0.71	14.64	-7.39		1	4.34	11.93	4500	2	5.99	9.49	4500	
14.000	0.63	11.03	-6.96		1	4.43	12.37	4500	2	5.82	10.05	4500	
					2	5.13	12.37	3500	2	5.29	10.05	3500	
14.500	0.59	7.81	-5.84		2	5.45	12.81	3500	2	5.33	10.61	3500	
15.000	0.59	5.17	-4.69		2	5.66	13.26	3500	2	5.48	11.16	3500	
15.500	0.60	3.08	-3.60		2	5.80	13.70	3500	2	5.70	11.72	3500	
16.000	0.62	1.52	-2.63		2	5.91	14.14	3500	2	5.95	12.28	3500	
16.500	0.65	0.41	-1.79		2	6.01	14.58	3500	2	6.22	12.84	3500	
17.000	0.68	-0.32	-1.10		2	6.10	15.02	3500	2	6.50	13.40	3500	
17.500	0.71	-0.74	-0.56		2	6.20	15.47	3500	2	6.76	13.95	3500	
18.000	0.73	-0.93	-0.15		2	6.31	15.91	3500	2	7.02	14.51	3500	
18.500	0.75	-0.94	0.15		2	6.45	16.35	3500	2	7.26	15.07	3500	
19.000	0.77	-0.83	0.33		2	6.59	16.79	3500	2	7.48	15.63	3500	
19.500	0.78	-0.65	0.43		2	6.76	17.23	3500	2	7.69	16.19	3500	
20.000	0.78	-0.44	0.45		2	6.93	17.68	3500	2	7.89	16.74	3500	

計畫名稱：

主　　題：XDO 開挖擋土分析設計

20.500	0.79	-0.24	0.40		2	7.11	18.12	3500	2	8.09	17.30	3500	
21.000	0.79	-0.08	0.29		2	7.30	18.56	3500	2	8.28	17.86	3500	
21.500	0.80	0.02	0.13		2	7.49	19.00	3500	2	8.46	18.42	3500	
22.000	0.80	0.02	-0.09		2	7.69	19.44	3500	2	8.65	18.98	3500	
					2	8.31	19.44	3125	2	8.53	18.98	3125	
22.500	0.81	-0.02	0.01		2	8.53	19.88	3125	2	8.73	19.54	3125	
23.000	0.81	-0.02	0.05		2	8.74	20.33	3125	2	8.93	20.09	3125	
23.500	0.81	0.00	0.05		2	8.96	20.77	3125	2	9.13	20.65	3125	
24.000	0.82	0.00	0.00		2	9.18	21.21	3125	2	9.33	21.21	3125	
Max	24.75	36.07	15.79		D_e = 0 (m)　D_w = 0 (m)				D_e = 5 (m)　D_w = 5 (m)				
Min	0.59	-25.25	-16.47		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 5



LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	23.82	0.00	0.00		1	3.00	0.00	1250	0				
0.500	23.05	0.44	1.94		2	4.33	0.44	1250	0				
1.000	22.27	2.02	4.48		2	4.50	0.88	1250	0				-92.13

計畫名稱：

主　　題：XDO 開挖擋土分析設計

			-13.94		2	4.50	0.88	1250	0				
1.500	21.50	-4.27	-11.10		2	4.67	1.33	1250	0				
2.000	20.71	-9.06	-7.95		2	4.83	1.77	1250	0				
2.500	19.89	-12.20	-4.50		2	4.97	2.21	1250	0				
3.000	19.02	-13.54	-0.77		2	5.09	2.65	1250	0				
					2	6.36	2.65	2250	0				
3.500	18.10	-12.79	3.86		2	6.42	3.09	2250	0				
4.000	17.13	-9.67	8.71		2	6.38	3.54	2250	0				-100.00
			-11.29		2	6.38	3.54	2250	0				
4.500	16.12	-14.08	-6.26		2	6.22	3.98	2250	0				
5.000	15.06	-15.94	-1.12		2	5.97	4.42	2250	0		0.00		
					2	5.97	4.42	2250	3	0.00	0.00	2250	
5.500	13.93	-15.23	3.95		2	5.67	4.86	2250	1	0.11	0.56	2250	
6.000	12.75	-12.13	8.34		2	5.36	5.30	2250	2	1.82	1.12	2250	
					2	5.86	5.30	3000	2	1.51	1.12	3000	
6.500	11.52	-7.02	11.92		2	5.43	5.74	3000	2	3.75	1.67	3000	
7.000	10.26	-0.47	14.11		2	5.04	6.19	3000	2	5.95	2.23	3000	
7.500	9.00	6.84	14.99		2	4.71	6.63	3000	2	8.10	2.79	3000	
8.000	7.77	14.28	14.59		2	4.44	7.07	3000	2	10.19	3.35	3000	
8.500	6.60	21.21	12.99		2	4.24	7.51	3000	2	12.21	3.91	3000	
9.000	5.51	27.05	10.25		2	4.09	7.95	3000	2	14.18	4.47	3000	
					2	4.03	7.95	3750	2	15.22	4.47	3750	
9.500	4.52	31.10	5.78		2	3.91	8.40	3750	2	17.45	5.02	3750	
10.000	3.65	32.79	1.20		1	3.93	8.84	3750	2	15.34	5.58	3750	
10.500	2.91	32.47	-2.23		1	4.00	9.28	3750	2	12.73	6.14	3750	
11.000	2.29	30.73	-4.51		1	4.07	9.72	3750	2	10.59	6.70	3750	
11.500	1.79	28.09	-5.84		1	4.14	10.16	3750	2	8.90	7.26	3750	
12.000	1.40	24.98	-6.45		1	4.22	10.61	3750	2	7.61	7.81	3750	
					1	4.09	10.61	4500	2	8.59	7.81	4500	
12.500	1.11	21.57	-7.02		1	4.17	11.05	4500	2	7.44	8.37	4500	
13.000	0.90	18.00	-7.14		1	4.26	11.49	4500	2	6.67	8.93	4500	
13.500	0.76	14.46	-6.96		1	4.34	11.93	4500	2	6.21	9.49	4500	
14.000	0.67	11.04	-6.63		1	4.43	12.37	4500	2	6.00	10.05	4500	
					2	4.99	12.37	3500	2	5.43	10.05	3500	
14.500	0.63	7.96	-5.63		2	5.33	12.81	3500	2	5.44	10.61	3500	
15.000	0.61	5.39	-4.58		2	5.57	13.26	3500	2	5.57	11.16	3500	
15.500	0.62	3.34	-3.57		2	5.74	13.70	3500	2	5.76	11.72	3500	
16.000	0.63	1.78	-2.64		2	5.87	14.14	3500	2	5.99	12.28	3500	
16.500	0.66	0.66	-1.84		2	5.98	14.58	3500	2	6.25	12.84	3500	
17.000	0.68	-0.10	-1.16		2	6.09	15.02	3500	2	6.51	13.40	3500	
17.500	0.71	-0.56	-0.63		2	6.20	15.47	3500	2	6.77	13.95	3500	
18.000	0.73	-0.78	-0.22		2	6.32	15.91	3500	2	7.01	14.51	3500	
18.500	0.75	-0.82	0.08		2	6.45	16.35	3500	2	7.25	15.07	3500	
19.000	0.76	-0.74	0.27		2	6.60	16.79	3500	2	7.47	15.63	3500	
19.500	0.77	-0.59	0.38		2	6.77	17.23	3500	2	7.68	16.19	3500	
20.000	0.78	-0.40	0.41		2	6.94	17.68	3500	2	7.88	16.74	3500	
20.500	0.79	-0.21	0.37		2	7.12	18.12	3500	2	8.08	17.30	3500	
21.000	0.79	-0.06	0.27		2	7.31	18.56	3500	2	8.27	17.86	3500	
21.500	0.80	0.02	0.12		2	7.50	19.00	3500	2	8.45	18.42	3500	
22.000	0.80	0.02	-0.10		2	7.69	19.44	3500	2	8.64	18.98	3500	
					2	8.31	19.44	3125	2	8.53	18.98	3125	
22.500	0.80	-0.02	0.00		2	8.53	19.88	3125	2	8.73	19.54	3125	
23.000	0.81	-0.02	0.05		2	8.75	20.33	3125	2	8.93	20.09	3125	
23.500	0.81	0.00	0.05		2	8.96	20.77	3125	2	9.13	20.65	3125	
24.000	0.82	0.00	0.00		2	9.18	21.21	3125	2	9.33	21.21	3125	
Max	23.82	32.79	14.99		D_e = 0 (m)		D_w = 0 (m)		D_e = 5 (m)		D_w = 5 (m)		

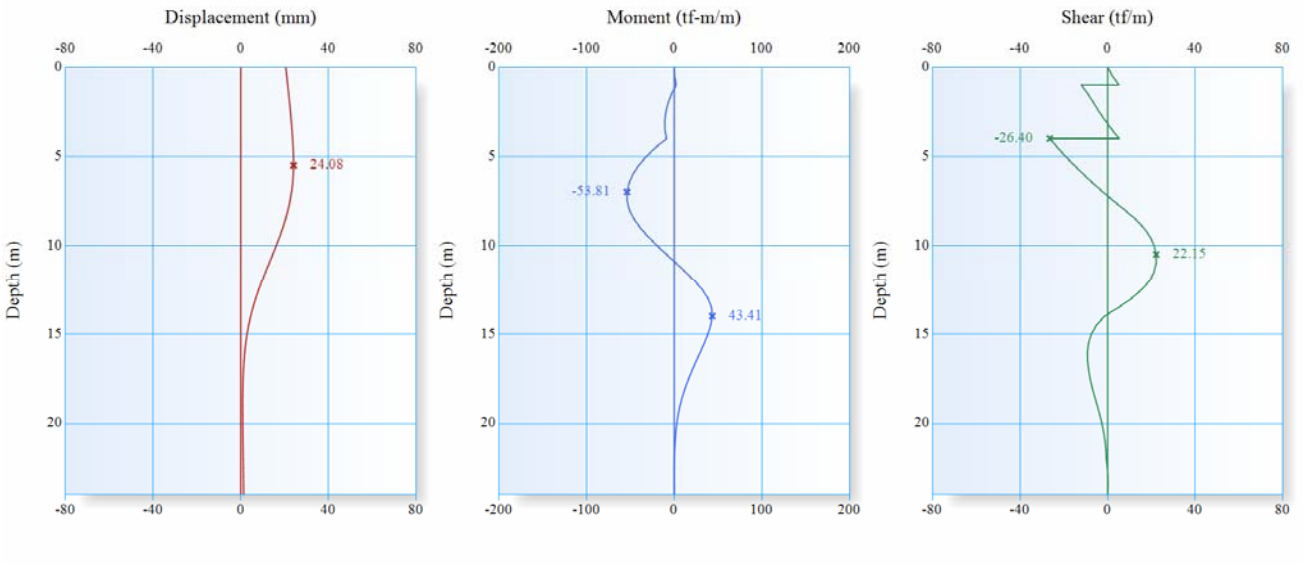
計畫名稱：

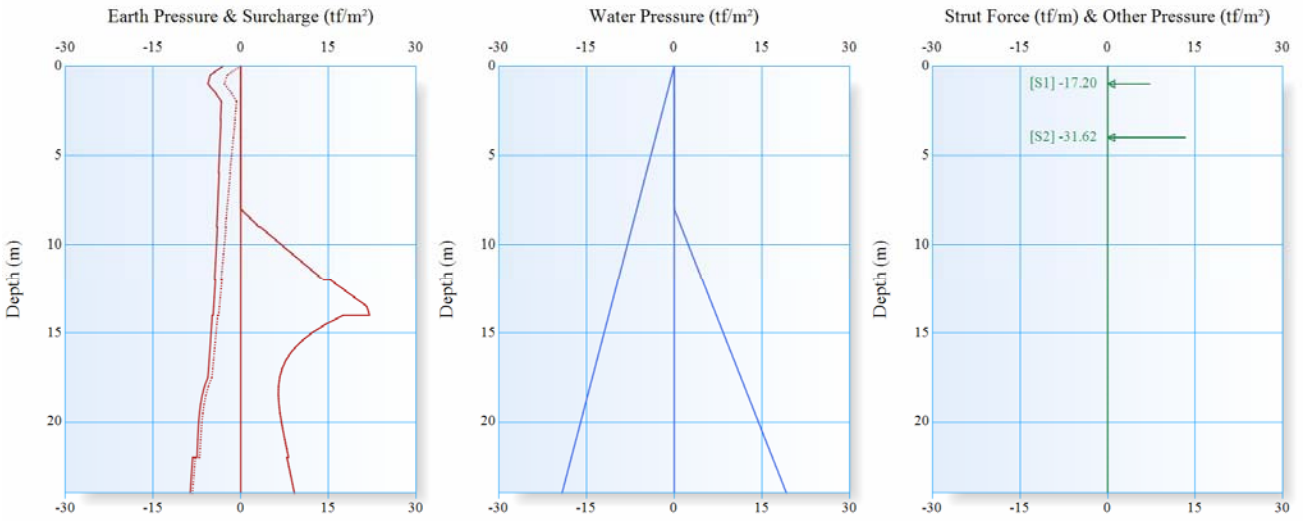
主　　題：XDO 開挖擋土分析設計

Min	0.61	-15.94	-13.94

[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態

▼ PHASE 6





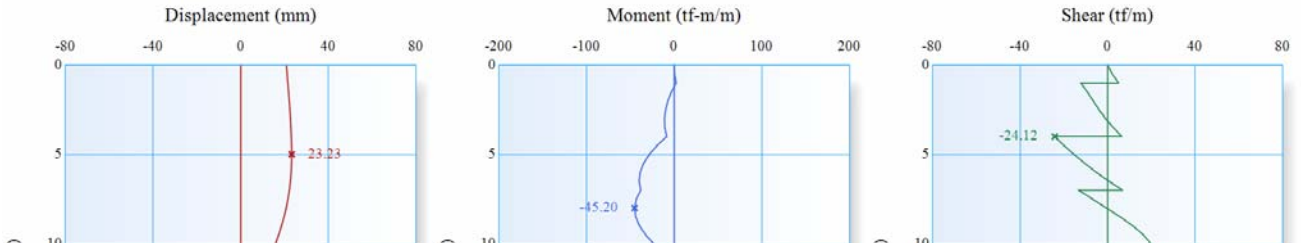
LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	20.54	0.00	0.00		1	3.00	0.00	1250	0				
0.500	20.97	0.46	2.15		3	5.21	0.40	1250	0				
1.000	21.41	2.24	5.16		2	5.63	0.80	1250	0				-85.99
			-12.03		2	5.63	0.80	1250	0				
1.500	21.84	-3.04	-9.05		2	4.31	1.20	1250	0				
2.000	22.27	-6.92	-6.44		1	3.32	1.60	1250	0				
2.500	22.67	-9.54	-3.87		1	3.40	2.00	1250	0				
3.000	23.03	-10.80	-1.05		1	3.48	2.40	1250	0				
					1	3.40	2.40	2250	0				
3.500	23.36	-10.61	1.97		1	3.46	2.80	2250	0				
4.000	23.64	-8.85	5.21		1	3.52	3.20	2250	0				-158.08
			-26.40		1	3.52	3.20	2250	0				
4.500	23.88	-21.22	-22.93		1	3.59	3.60	2250	0				

計畫名稱：

主　　題：XDO 開挖擋土分析設計

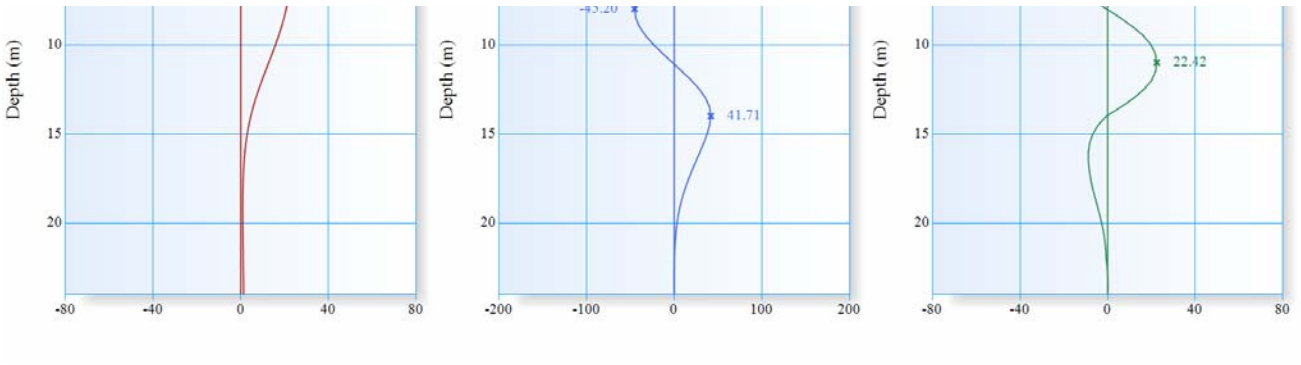
5.000	24.04	-31.79	-19.22		1	3.65	4.00	2250	0				
5.500	24.08	-40.45	-15.27		1	3.72	4.40	2250	0				
6.000	23.97	-47.08	-11.09		1	3.79	4.80	2250	0				
					1	3.72	4.80	3000	0				
6.500	23.67	-51.56	-6.72		1	3.78	5.20	3000	0				
7.000	23.18	-53.81	-2.12		1	3.84	5.60	3000	0				
7.500	22.47	-53.69	2.72		1	3.90	6.00	3000	0				
8.000	21.57	-51.10	7.79		1	3.97	6.40	3000	0		0.00		
					1	3.97	6.40	3000	3	0.00	0.00	3000	
8.500	20.46	-46.01	12.56		1	4.04	6.80	3000	3	1.55	0.60	3000	
9.000	19.18	-38.74	16.48		1	4.11	7.20	3000	3	3.10	1.20	3000	
					1	4.00	7.20	3750	3	3.33	1.20	3750	
9.500	17.74	-29.77	19.34		1	4.08	7.60	3750	3	5.13	1.80	3750	
10.000	16.20	-19.62	21.22		1	4.15	8.00	3750	3	6.94	2.40	3750	
10.500	14.58	-8.76	22.15		1	4.23	8.40	3750	3	8.74	3.00	3750	
11.000	12.92	2.32	22.12		1	4.32	8.80	3750	3	10.55	3.60	3750	
11.500	11.27	13.14	21.12		1	4.40	9.20	3750	3	12.35	4.20	3750	
12.000	9.68	23.23	19.16		1	4.49	9.60	3750	3	14.16	4.80	3750	
					1	4.35	9.60	4500	3	15.26	4.80	4500	
12.500	8.18	31.93	15.56		1	4.44	10.00	4500	3	17.36	5.40	4500	
13.000	6.79	38.55	10.84		1	4.53	10.40	4500	3	19.45	6.00	4500	
13.500	5.56	42.54	5.03		1	4.63	10.80	4500	3	21.55	6.60	4500	
14.000	4.50	43.41	-1.48		1	4.73	11.20	4500	2	22.03	7.20	4500	
					1	4.89	11.20	3500	2	17.59	7.20	3500	
14.500	3.60	41.68	-5.11		1	4.99	11.60	3500	2	14.60	7.80	3500	
15.000	2.86	38.47	-7.43		1	5.09	12.00	3500	2	12.17	8.40	3500	
15.500	2.27	34.36	-8.73		1	5.19	12.40	3500	2	10.26	9.00	3500	
16.000	1.82	29.82	-9.23		1	5.29	12.80	3500	2	8.82	9.60	3500	
16.500	1.47	25.18	-9.16		1	5.40	13.20	3500	2	7.78	10.20	3500	
17.000	1.23	20.68	-8.70		1	5.50	13.60	3500	2	7.08	10.80	3500	
17.500	1.07	16.47	-8.00		2	5.63	14.00	3500	2	6.66	11.40	3500	
18.000	0.97	12.66	-7.08		2	6.20	14.40	3500	2	6.46	12.00	3500	
18.500	0.91	9.37	-5.95		2	6.60	14.80	3500	2	6.43	12.60	3500	
19.000	0.90	6.67	-4.77		2	6.88	15.20	3500	2	6.53	13.20	3500	
19.500	0.91	4.54	-3.64		2	7.07	15.60	3500	2	6.71	13.80	3500	
20.000	0.93	2.95	-2.64		2	7.20	16.00	3500	2	6.95	14.40	3500	
20.500	0.97	1.81	-1.82		2	7.30	16.40	3500	2	7.23	15.00	3500	
21.000	1.01	1.04	-1.19		2	7.37	16.80	3500	2	7.54	15.60	3500	
21.500	1.06	0.53	-0.79		2	7.43	17.20	3500	2	7.85	16.20	3500	
22.000	1.11	0.16	-0.62		2	7.49	17.60	3500	2	8.17	16.80	3500	
					2	8.25	17.60	3125	2	7.90	16.80	3125	
22.500	1.16	-0.05	-0.15		2	8.35	18.00	3125	2	8.22	17.40	3125	
23.000	1.20	-0.07	0.11		2	8.45	18.40	3125	2	8.54	18.00	3125	
23.500	1.25	-0.02	0.16		2	8.55	18.80	3125	2	8.86	18.60	3125	
24.000	1.30	0.00	0.00		2	8.65	19.20	3125	2	9.17	19.20	3125	
Max	24.08	43.41	22.15		D_e = 0 (m)　D_w = 0 (m)				D_e = 8 (m)　D_w = 8 (m)				
Min	0.90	-53.81	-26.40		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

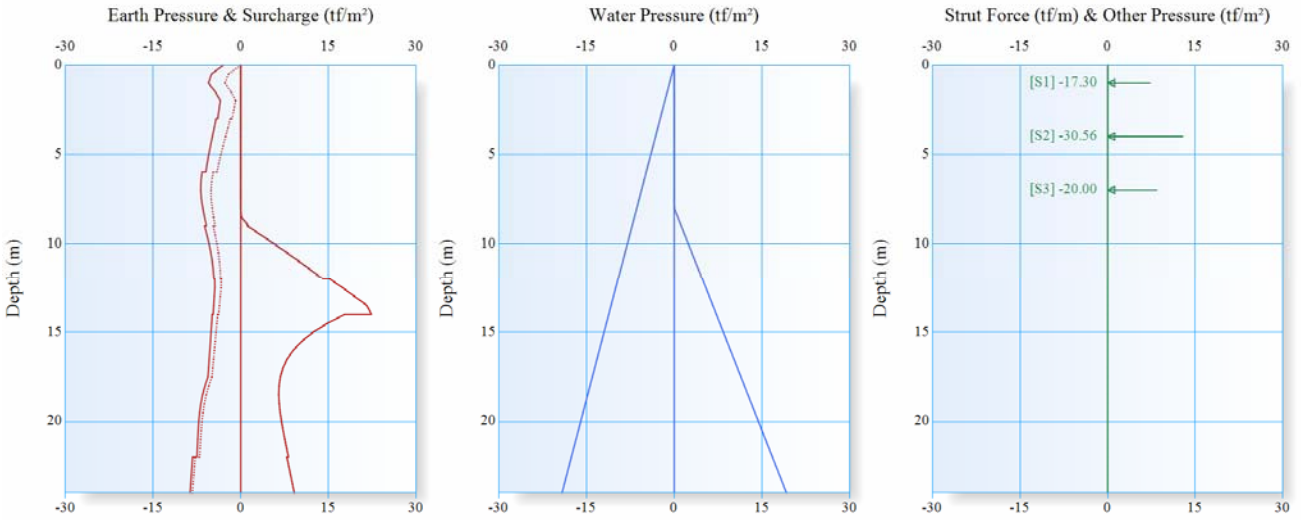
▼ PHASE 7



計畫名稱：

主　　題：XDO 開挖擋土分析設計





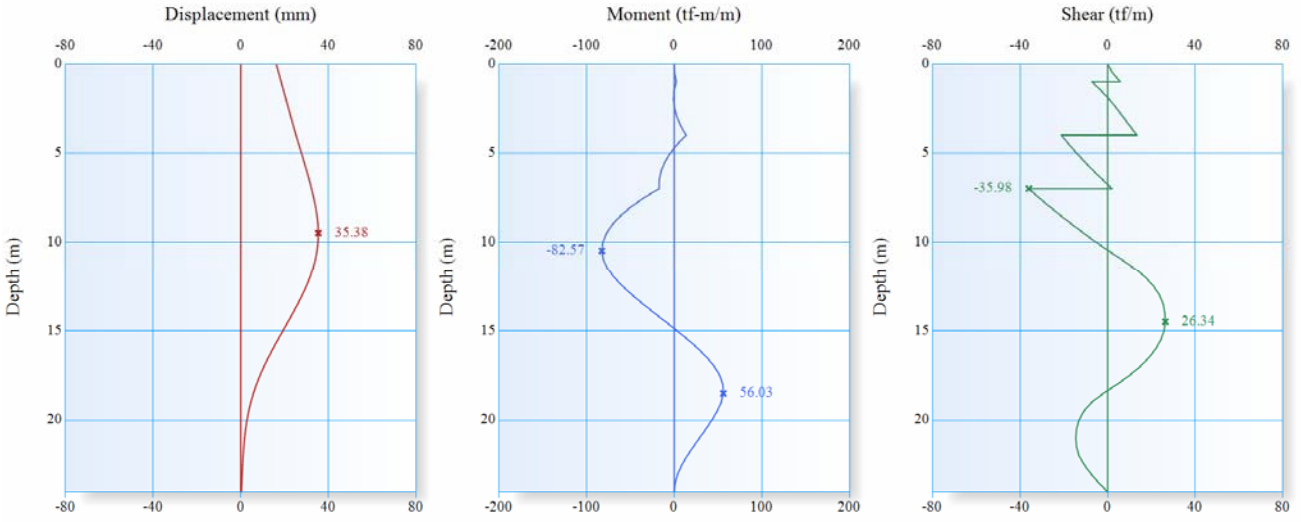
LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	20.83	0.00	0.00		1	3.00	0.00	1250	0				
0.500	21.15	0.45	2.10		2	4.99	0.40	1250	0				
1.000	21.48	2.19	5.03		2	5.54	0.80	1250	0				-86.48
			-12.27		2	5.54	0.80	1250	0				
1.500	21.80	-3.21	-9.29		2	4.36	1.20	1250	0				
2.000	22.12	-7.20	-6.63		2	3.50	1.60	1250	0				
2.500	22.41	-9.88	-3.92		2	3.72	2.00	1250	0				
3.000	22.66	-11.12	-0.91		2	3.94	2.40	1250	0				
					2	4.22	2.40	2250	0				
3.500	22.88	-10.74	2.58		2	4.54	2.80	2250	0				
4.000	23.05	-8.53	6.43		2	4.86	3.20	2250	0				-152.78
			-24.12		2	4.86	3.20	2250	0				
4.500	23.18	-19.58	-19.92		2	5.17	3.60	2250	0				
5.000	23.23	-28.44	-15.35		2	5.48	4.00	2250	0				
5.500	23.18	-34.93	-10.45		2	5.75	4.40	2250	0				
6.000	23.00	-38.88	-5.21		2	5.98	4.80	2250	0				
					2	6.64	4.80	3000	0				
6.500	22.66	-40.05	0.65		2	6.81	5.20	3000	0				
7.000	22.17	-38.23	6.77		2	6.86	5.60	3000	0				-100.00
			-13.23		2	6.86	5.60	3000	0				
7.500	21.53	-43.31	-6.93		2	6.74	6.00	3000	0				
8.000	20.72	-45.20	-0.52		2	6.51	6.40	3000	0		0.00		
					2	6.51	6.40	3000	3	0.00	0.00	3000	

計畫名稱：

主　　題：XDO 開挖擋土分析設計

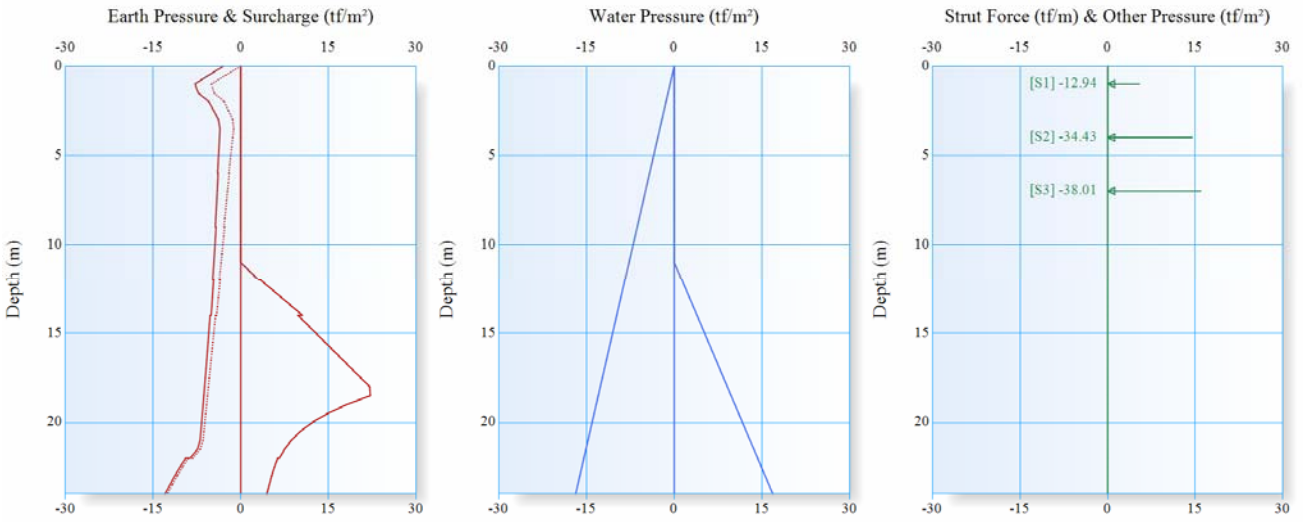
8.500	19.74	-43.90	5.78		2	6.21	6.80	3000	1	0.08	0.60	3000	
9.000	18.59	-39.56	11.50		2	5.88	7.20	3000	2	1.33	1.20	3000	
					2	6.21	7.20	3750	2	1.12	1.20	3750	
9.500	17.28	-32.57	16.32		2	5.80	7.60	3750	2	3.41	1.80	3750	
10.000	15.86	-23.52	19.71		2	5.43	8.00	3750	2	5.66	2.40	3750	
10.500	14.34	-13.13	21.73		2	5.13	8.40	3750	2	7.85	3.00	3750	
11.000	12.77	-2.07	22.42		2	4.88	8.80	3750	2	9.98	3.60	3750	
11.500	11.19	9.03	21.86		2	4.71	9.20	3750	2	12.05	4.20	3750	
12.000	9.65	19.54	20.10		2	4.59	9.60	3750	2	14.06	4.80	3750	
					2	4.47	9.60	4500	2	15.15	4.80	4500	
12.500	8.19	28.74	16.56		1	4.44	10.00	4500	3	17.36	5.40	4500	
13.000	6.84	35.86	11.84		1	4.53	10.40	4500	3	19.45	6.00	4500	
13.500	5.62	40.35	6.03		1	4.63	10.80	4500	3	21.55	6.60	4500	
14.000	4.57	41.71	-0.56		1	4.73	11.20	4500	2	22.34	7.20	4500	
					1	4.89	11.20	3500	2	17.84	7.20	3500	
14.500	3.67	40.41	-4.31		1	4.99	11.60	3500	2	14.85	7.80	3500	
15.000	2.93	37.57	-6.76		1	5.09	12.00	3500	2	12.42	8.40	3500	
15.500	2.34	33.77	-8.17		1	5.19	12.40	3500	2	10.50	9.00	3500	
16.000	1.87	29.48	-8.79		1	5.29	12.80	3500	2	9.03	9.60	3500	
16.500	1.53	25.03	-8.81		1	5.40	13.20	3500	2	7.96	10.20	3500	
17.000	1.27	20.69	-8.43		1	5.50	13.60	3500	2	7.23	10.80	3500	
17.500	1.10	16.59	-7.81		1	5.61	14.00	3500	2	6.78	11.40	3500	
18.000	0.99	12.87	-6.96		2	6.11	14.40	3500	2	6.55	12.00	3500	
18.500	0.93	9.62	-5.91		2	6.53	14.80	3500	2	6.50	12.60	3500	
19.000	0.91	6.92	-4.79		2	6.83	15.20	3500	2	6.57	13.20	3500	
19.500	0.91	4.78	-3.70		2	7.04	15.60	3500	2	6.74	13.80	3500	
20.000	0.94	3.16	-2.72		2	7.19	16.00	3500	2	6.97	14.40	3500	
20.500	0.97	1.99	-1.90		2	7.29	16.40	3500	2	7.24	15.00	3500	
21.000	1.01	1.18	-1.28		2	7.37	16.80	3500	2	7.53	15.60	3500	
21.500	1.06	0.63	-0.87		2	7.44	17.20	3500	2	7.84	16.20	3500	
22.000	1.10	0.23	-0.68		2	7.50	17.60	3500	2	8.16	16.80	3500	
					2	8.26	17.60	3125	2	7.88	16.80	3125	
22.500	1.15	-0.01	-0.20		2	8.36	18.00	3125	2	8.20	17.40	3125	
23.000	1.20	-0.06	0.07		2	8.46	18.40	3125	2	8.52	18.00	3125	
23.500	1.25	-0.02	0.14		2	8.57	18.80	3125	2	8.84	18.60	3125	
24.000	1.29	0.00	0.00		2	8.67	19.20	3125	2	9.15	19.20	3125	
Max	23.23	41.71	22.42		D_e = 0 (m) D_w = 0 (m)				D_e = 8 (m) D_w = 8 (m)				
Min	0.91	-45.20	-24.12		[STATE] -1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 8



計畫名稱：

主　　題：XDO 開挖擋土分析設計



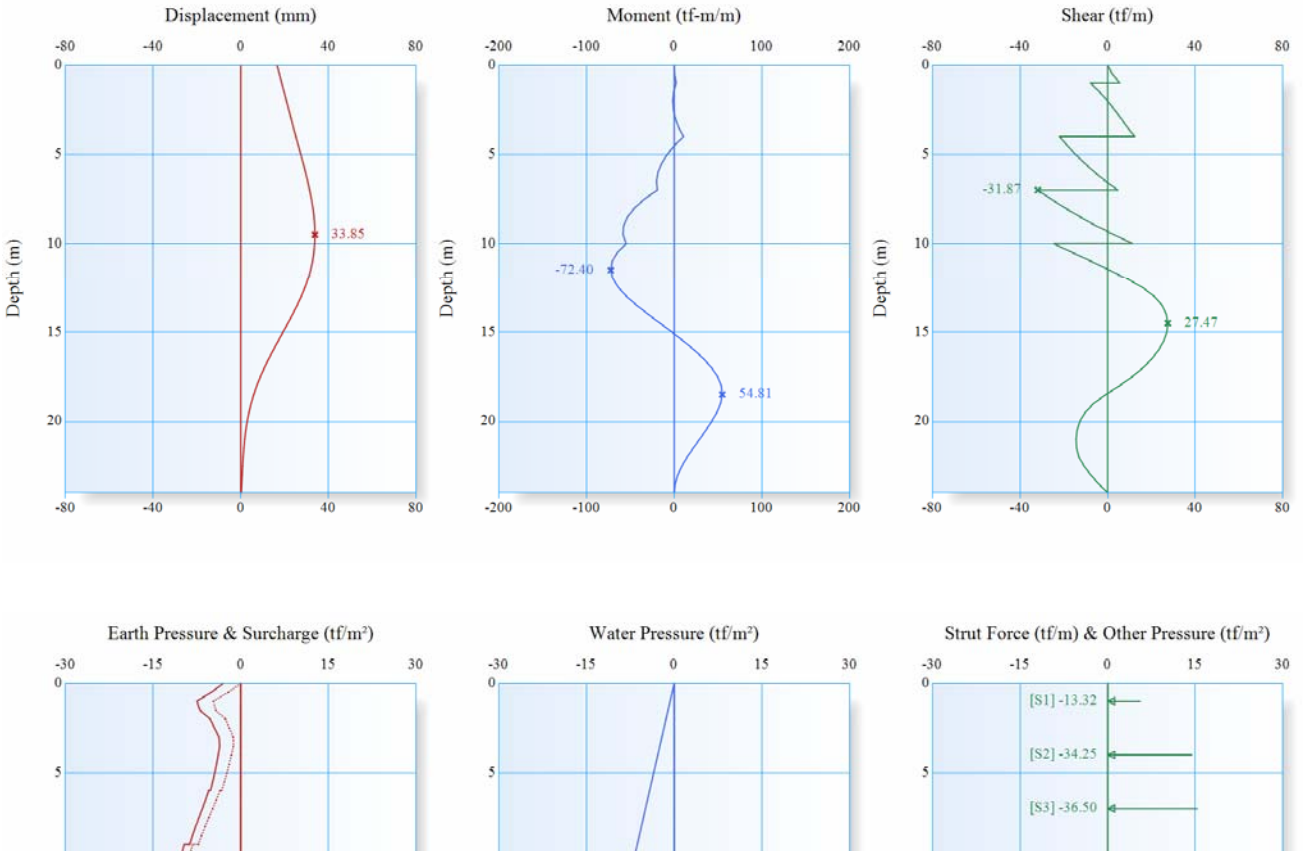
LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	16.17	0.00	0.00		1	3.00	0.00	1250	0				
0.500	17.28	0.45	2.19		3	5.42	0.35	1250	0				
1.000	18.40	2.35	5.77		3	7.84	0.70	1250	0				-64.68
			-7.17		3	7.84	0.70	1250	0				
1.500	19.53	-0.22	-2.95		2	7.28	1.05	1250	0				
2.000	20.65	-0.75	0.84		2	5.44	1.41	1250	0				
2.500	21.77	0.47	4.15		2	4.65	1.76	1250	0				
3.000	22.90	3.28	7.23		2	3.80	2.11	1250	0				
					2	3.84	2.11	2250	0				
3.500	24.04	7.61	10.22		1	3.56	2.46	2250	0				
4.000	25.22	13.45	13.33		1	3.64	2.81	2250	0				-172.15
			-21.10		1	3.64	2.81	2250	0				
4.500	26.44	3.68	-17.77		1	3.71	3.16	2250	0				
5.000	27.67	-4.36	-14.23		1	3.80	3.51	2250	0				
5.500	28.89	-10.58	-10.46		1	3.88	3.86	2250	0				
6.000	30.07	-14.87	-6.48		1	3.96	4.22	2250	0				
					1	3.88	4.22	3000	0				
6.500	31.20	-17.12	-2.33		1	3.95	4.57	3000	0				
7.000	32.26	-17.24	2.04		1	4.03	4.92	3000	0				-190.06
			-35.98		1	4.03	4.92	3000	0				
7.500	33.25	-34.13	-31.40		1	4.11	5.27	3000	0				
8.000	34.11	-48.67	-26.60		1	4.19	5.62	3000	0				
8.500	34.78	-60.76	-21.59		1	4.27	5.97	3000	0				
9.000	35.21	-70.30	-16.36		1	4.36	6.32	3000	0				
					1	4.24	6.32	3750	0				
9.500	35.38	-77.18	-10.97		1	4.32	6.67	3750	0				
10.000	35.25	-81.30	-5.36		1	4.41	7.03	3750	0				
10.500	34.80	-82.57	0.47		1	4.51	7.38	3750	0				
11.000	34.04	-80.87	6.52		1	4.60	7.73	3750	0		0.00		
					1	4.60	7.73	3750	3	0.00	0.00	3750	
11.500	32.97	-76.18	12.25		1	4.70	8.08	3750	3	1.54	0.65	3750	
12.000	31.60	-68.84	17.11		1	4.80	8.43	3750	3	3.07	1.30	3750	

計畫名稱：

主　　題：XDO 開挖擋土分析設計

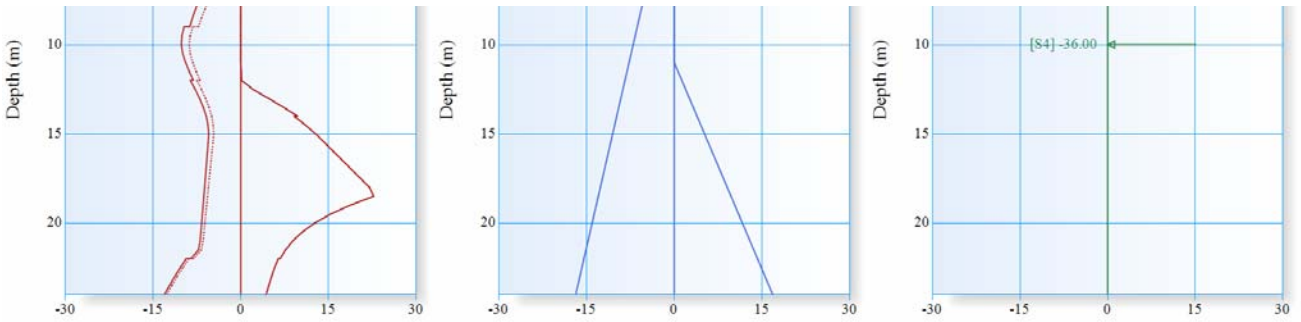
					1	4.65	8.43	4500	3	3.31	1.30	4500	
12.500	29.96	-59.35	20.85		1	4.75	8.78	4500	3	5.12	1.95	4500	
13.000	28.10	-48.24	23.58		1	4.86	9.13	4500	3	6.92	2.59	4500	
13.500	26.05	-36.01	25.32		1	4.97	9.48	4500	3	8.73	3.24	4500	
14.000	23.86	-23.16	26.06		1	5.07	9.84	4500	3	10.53	3.89	4500	
					1	5.25	9.84	3500	3	9.77	3.89	3500	
14.500	21.58	-10.06	26.34		1	5.36	10.19	3500	3	11.30	4.54	3500	
15.000	19.27	2.96	25.76		1	5.48	10.54	3500	3	12.84	5.19	3500	
15.500	16.96	15.48	24.32		1	5.59	10.89	3500	3	14.37	5.84	3500	
16.000	14.72	27.06	22.02		1	5.71	11.24	3500	3	15.91	6.48	3500	
16.500	12.58	37.28	18.87		1	5.83	11.59	3500	3	17.44	7.13	3500	
17.000	10.59	45.71	14.85		1	5.95	11.94	3500	3	18.98	7.78	3500	
17.500	8.78	51.92	9.99		1	6.07	12.29	3500	3	20.51	8.43	3500	
18.000	7.16	55.48	4.26		1	6.19	12.65	3500	3	22.05	9.08	3500	
18.500	5.76	56.03	-1.96		1	6.32	13.00	3500	2	22.16	9.73	3500	
19.000	4.58	53.59	-7.30		1	6.44	13.35	3500	2	18.15	10.38	3500	
19.500	3.60	48.94	-10.90		1	6.57	13.70	3500	2	14.87	11.02	3500	
20.000	2.82	42.85	-13.10		1	6.70	14.05	3500	2	12.25	11.67	3500	
20.500	2.20	35.95	-14.23		1	6.83	14.40	3500	2	10.22	12.32	3500	
21.000	1.72	28.69	-14.54		1	6.96	14.75	3500	2	8.67	12.97	3500	
21.500	1.35	21.44	-14.18		2	7.39	15.10	3500	2	7.50	13.62	3500	
22.000	1.06	14.56	-13.04		2	8.65	15.46	3500	2	6.63	14.27	3500	
					2	9.43	15.46	3125	2	6.33	14.27	3125	
22.500	0.83	8.60	-10.58		2	10.41	15.81	3125	2	5.75	14.91	3125	
23.000	0.64	4.01	-7.55		2	11.30	16.16	3125	2	5.29	15.56	3125	
23.500	0.46	1.06	-4.01		2	12.14	16.51	3125	2	4.87	16.21	3125	
24.000	0.28	0.00	0.00		2	12.96	16.86	3125	2	4.47	16.86	3125	
Max	35.38	56.03	26.34		D_e = 0 (m)　D_w = 0 (m)				D_e = 11 (m)　D_w = 11 (m)				
Min	0.28	-82.57	-35.98		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 9



計畫名稱：

主　　題：XDO 開挖擋土分析設計



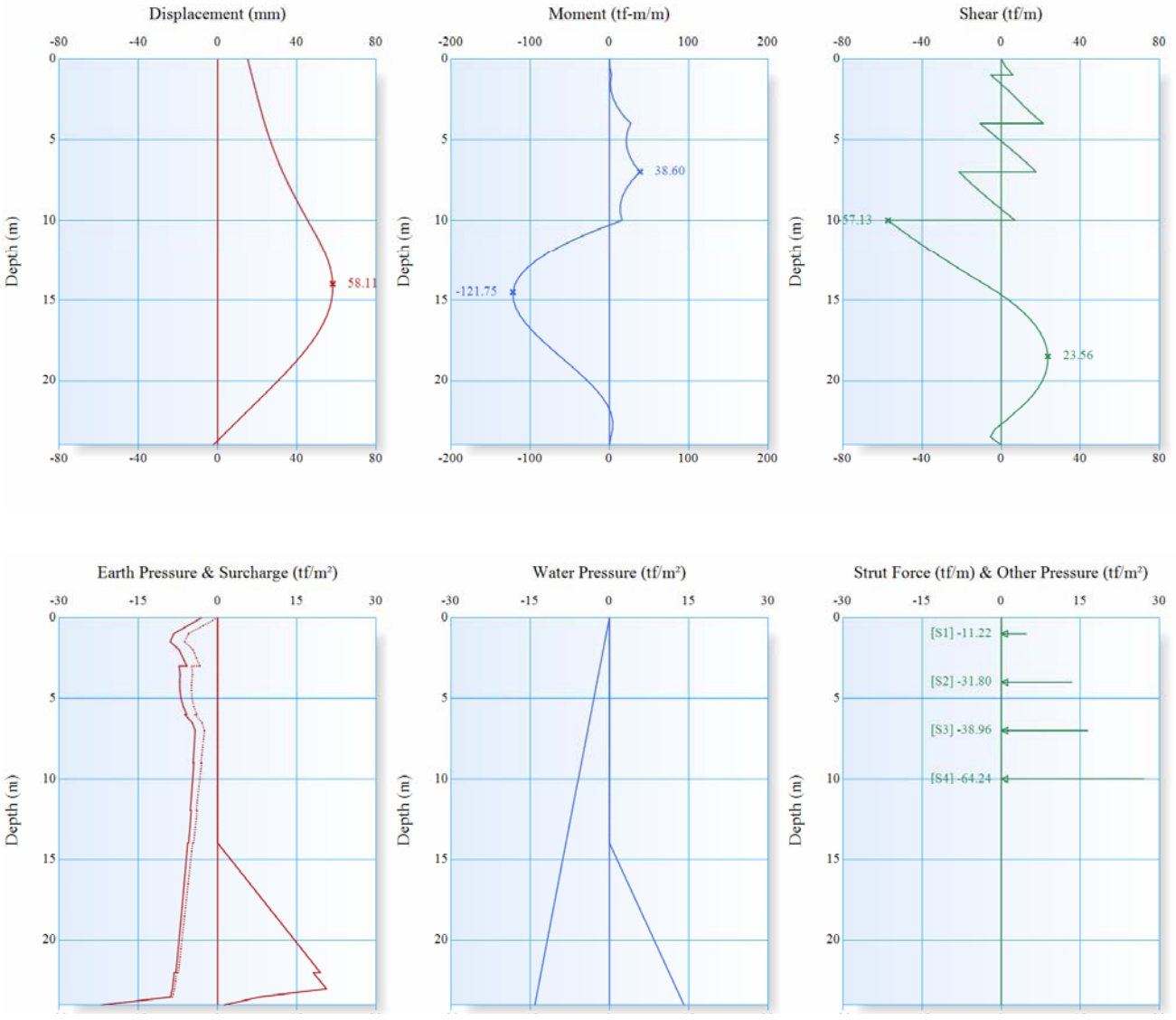
LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	16.54	0.00	0.00		1	3.00	0.00	1250	0				
0.500	17.60	0.44	2.09		2	5.02	0.35	1250	0				
1.000	18.67	2.25	5.48		2	7.50	0.70	1250	0				-66.58
			-7.83		2	7.50	0.70	1250	0				
1.500	19.74	-0.68	-3.77		2	7.01	1.05	1250	0				
2.000	20.82	-1.65	-0.09		2	5.24	1.41	1250	0				
2.500	21.88	-0.92	3.13		2	4.51	1.76	1250	0				
3.000	22.95	1.38	6.16		2	3.74	2.11	1250	0				
					2	3.73	2.11	2250	0				
3.500	24.02	5.17	9.13		2	3.60	2.46	2250	0				
4.000	25.12	10.49	12.31		2	3.86	2.81	2250	0				-171.27
			-21.94		2	3.86	2.81	2250	0				
4.500	26.25	0.34	-18.45		2	4.14	3.16	2250	0				
5.000	27.38	-7.98	-14.64		2	4.45	3.51	2250	0				
5.500	28.48	-14.30	-10.48		2	4.80	3.86	2250	0				
6.000	29.53	-18.46	-5.97		2	5.18	4.22	2250	0				
					2	5.51	4.22	3000	0				
6.500	30.51	-20.22	-0.89		2	6.02	4.57	3000	0				
7.000	31.42	-19.34	4.63		2	6.57	4.92	3000	0				-182.49
			-31.87		2	6.57	4.92	3000	0				
7.500	32.24	-33.83	-25.89		2	7.15	5.27	3000	0				
8.000	32.93	-45.22	-19.45		2	7.73	5.62	3000	0				
8.500	33.44	-53.27	-12.56		2	8.27	5.97	3000	0				
9.000	33.76	-57.77	-5.23		2	8.73	6.32	3000	0				
					2	9.70	6.32	3750	0				
9.500	33.85	-58.38	2.96		2	10.07	6.67	3750	0				
10.000	33.71	-54.82	11.44		2	10.18	7.03	3750	0				-180.00
			-24.56		2	10.18	7.03	3750	0				
10.500	33.36	-64.98	-15.93		2	9.94	7.38	3750	0				
11.000	32.75	-70.82	-7.31		2	9.45	7.73	3750	0		0.00		
					2	9.45	7.73	3750	3	0.00	0.00	3750	
11.500	31.87	-72.40	1.02		2	8.81	8.08	3750	1	0.07	0.65	3750	
12.000	30.71	-69.94	8.84		2	8.12	8.43	3750	1	0.15	1.30	3750	
					2	8.64	8.43	4500	1	0.14	1.30	4500	
12.500	29.28	-63.73	15.89		2	7.81	8.78	4500	2	2.06	1.95	4500	
13.000	27.61	-54.39	21.26		2	7.07	9.13	4500	2	4.71	2.59	4500	
13.500	25.72	-42.82	24.84		2	6.43	9.48	4500	2	7.26	3.24	4500	
14.000	23.67	-29.90	26.73		2	5.92	9.84	4500	2	9.69	3.89	4500	
					2	5.91	9.84	3500	2	9.11	3.89	3500	
14.500	21.51	-16.33	27.47		2	5.62	10.19	3500	2	11.04	4.54	3500	
15.000	19.28	-2.69	27.02		1	5.48	10.54	3500	3	12.84	5.19	3500	

計畫名稱：

主　　題：XDO 開挖擋土分析設計

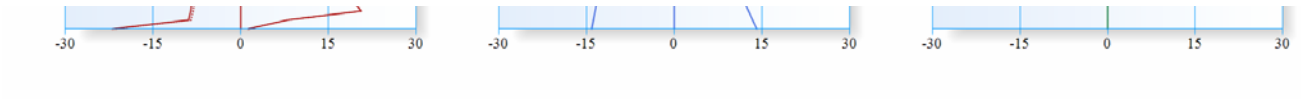
15.500	17.05	10.47	25.58		1	5.59	10.89	3500	3	14.37	5.84	3500	
16.000	14.85	22.69	23.28		1	5.71	11.24	3500	3	15.91	6.48	3500	
16.500	12.74	33.54	20.13		1	5.83	11.59	3500	3	17.44	7.13	3500	
17.000	10.77	42.61	16.12		1	5.95	11.94	3500	3	18.98	7.78	3500	
17.500	8.95	49.46	11.25		1	6.07	12.29	3500	3	20.51	8.43	3500	
18.000	7.33	53.66	5.53		1	6.19	12.65	3500	3	22.05	9.08	3500	
18.500	5.92	54.81	-0.84		1	6.32	13.00	3500	2	22.73	9.73	3500	
19.000	4.72	52.88	-6.44		1	6.44	13.35	3500	2	18.66	10.38	3500	
19.500	3.73	48.61	-10.27		1	6.57	13.70	3500	2	15.31	11.02	3500	
20.000	2.92	42.79	-12.68		1	6.70	14.05	3500	2	12.62	11.67	3500	
20.500	2.28	36.05	-13.97		1	6.83	14.40	3500	2	10.51	12.32	3500	
21.000	1.78	28.90	-14.40		1	6.96	14.75	3500	2	8.88	12.97	3500	
21.500	1.39	21.70	-14.17		2	7.24	15.10	3500	2	7.65	13.62	3500	
22.000	1.09	14.79	-13.15		2	8.56	15.46	3500	2	6.72	14.27	3500	
					2	9.35	15.46	3125	2	6.40	14.27	3125	
22.500	0.84	8.76	-10.75		2	10.39	15.81	3125	2	5.78	14.91	3125	
23.000	0.63	4.09	-7.71		2	11.33	16.16	3125	2	5.26	15.56	3125	
23.500	0.43	1.08	-4.11		2	12.22	16.51	3125	2	4.79	16.21	3125	
24.000	0.24	0.00	0.00		2	13.09	16.86	3125	2	4.34	16.86	3125	
Max	33.85	54.81	27.47		D_e = 0 (m)　D_w = 0 (m)				D_e = 11 (m)　D_w = 11 (m)				
Min	0.24	-72.40	-31.87		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 10



計畫名稱：

主　　題：XDO 開挖擋土分析設計



LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	15.12	0.00	0.00		1	3.00	0.00	1250	0				
0.500	16.15	0.55	2.23		3	5.66	0.29	1250	0				
1.000	17.19	2.58	5.93		3	8.31	0.59	1250	0				-56.10
			-5.29		3	8.31	0.59	1250	0				
1.500	18.24	1.13	-0.61		2	8.98	0.88	1250	0				
2.000	19.29	2.05	3.95		2	7.26	1.18	1250	0				
2.500	20.35	5.11	8.06		2	6.57	1.47	1250	0				
3.000	21.43	10.18	11.96		2	5.82	1.77	1250	0				
					2	7.31	1.77	2250	0				
3.500	22.56	17.35	16.51		2	7.11	2.06	2250	0				
4.000	23.74	26.81	21.17		2	7.18	2.35	2250	0				-159.00
			-10.63		2	7.18	2.35	2250	0				
4.500	25.03	22.74	-5.81		2	7.14	2.65	2250	0				
5.000	26.40	21.12	-0.90		2	6.94	2.94	2250	0				
5.500	27.86	21.94	4.00		2	6.52	3.24	2250	0				
6.000	29.40	25.19	8.77		2	5.83	3.53	2250	0				
					2	6.24	3.53	3000	0				
6.500	31.04	30.80	13.36		2	4.81	3.82	3000	0				
7.000	32.79	38.60	17.60		1	4.25	4.12	3000	0				-194.79
			-21.36		1	4.25	4.12	3000	0				
7.500	34.69	29.03	-17.08		1	4.35	4.41	3000	0				
8.000	36.70	21.65	-12.61		1	4.44	4.71	3000	0				
8.500	38.79	16.56	-7.94		1	4.54	5.00	3000	0				
9.000	40.95	13.84	-3.08		1	4.65	5.30	3000	0				
					1	4.51	5.30	3750	0				
9.500	43.16	13.60	1.92		1	4.61	5.59	3750	0				
10.000	45.43	15.90	7.11		1	4.72	5.88	3750	0				-321.20
			-57.13		1	4.72	5.88	3750	0				
10.500	47.73	-11.28	-51.73		1	4.83	6.18	3750	0				
11.000	50.00	-35.70	-46.14		1	4.94	6.47	3750	0				
11.500	52.12	-57.28	-40.34		1	5.05	6.77	3750	0				
12.000	54.02	-75.90	-34.33		1	5.17	7.06	3750	0				
					1	5.00	7.06	4500	0				
12.500	55.62	-91.50	-28.21		1	5.12	7.35	4500	0				
13.000	56.87	-103.98	-21.88		1	5.24	7.65	4500	0				
13.500	57.71	-113.24	-15.34		1	5.36	7.94	4500	0				
14.000	58.11	-119.18	-8.59		1	5.48	8.24	4500	0		0.00		
					1	5.68	8.24	3500	3	0.00	0.00	3500	
14.500	58.05	-121.75	-2.02		1	5.81	8.53	3500	3	1.22	0.71	3500	
15.000	57.52	-121.22	3.80		1	5.93	8.83	3500	3	2.43	1.41	3500	
15.500	56.51	-117.97	8.87		1	6.06	9.12	3500	3	3.65	2.12	3500	
16.000	55.04	-112.37	13.19		1	6.20	9.41	3500	3	4.86	2.82	3500	
16.500	53.14	-104.80	16.76		1	6.33	9.71	3500	3	6.08	3.53	3500	
17.000	50.82	-95.63	19.58		1	6.47	10.00	3500	3	7.29	4.24	3500	
17.500	48.14	-85.24	21.66		1	6.60	10.30	3500	3	8.51	4.94	3500	
18.000	45.11	-74.00	22.98		1	6.74	10.59	3500	3	9.73	5.65	3500	
18.500	41.80	-62.28	23.56		1	6.88	10.88	3500	3	10.94	6.35	3500	
19.000	38.25	-50.45	23.40		1	7.02	11.18	3500	3	12.16	7.06	3500	
19.500	34.50	-38.90	22.49		1	7.17	11.47	3500	3	13.37	7.77	3500	

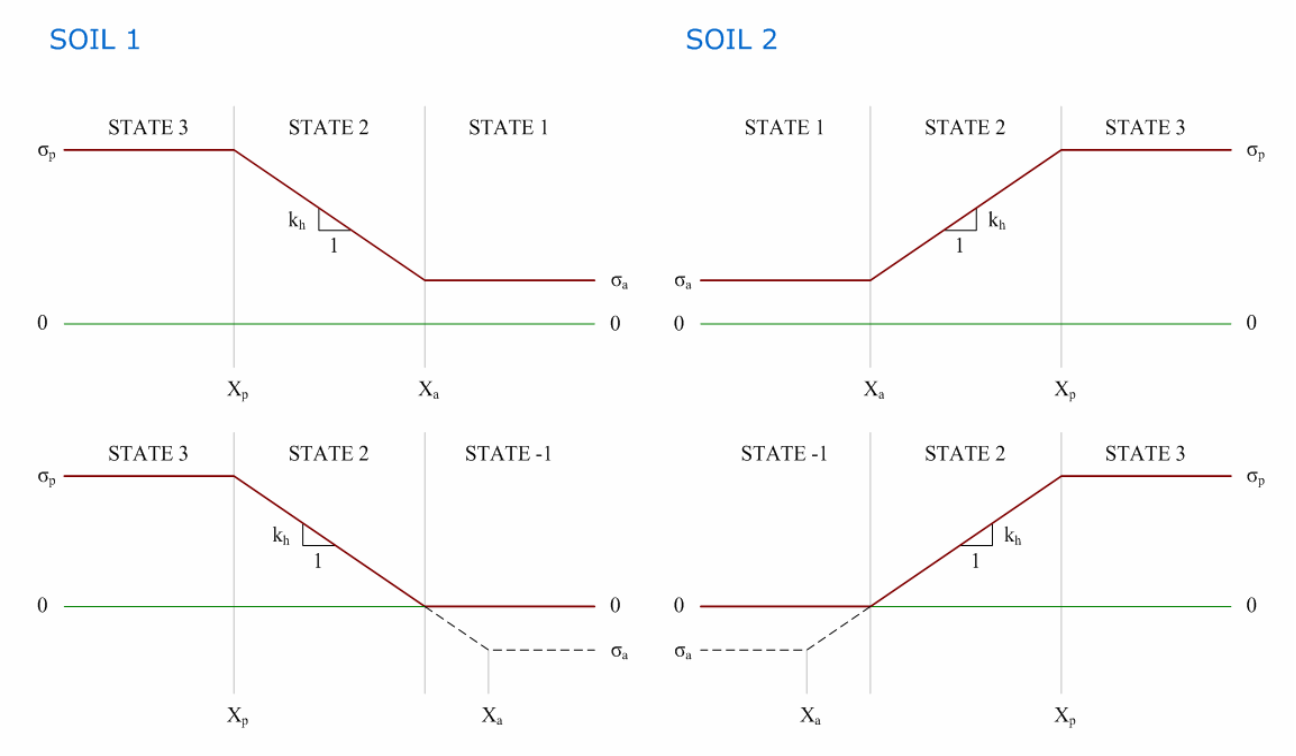
計畫名稱：

主　　題：XDO 開挖擋土分析設計

20.000	30.60	-27.99	20.84		1	7.31	11.77	3500	3	14.59	8.47	3500	
20.500	26.58	-18.09	18.44		1	7.45	12.06	3500	3	15.80	9.18	3500	
21.000	22.49	-9.57	15.30		1	7.60	12.36	3500	3	17.02	9.88	3500	
21.500	18.37	-2.81	11.41		1	7.75	12.65	3500	3	18.24	10.59	3500	
22.000	14.23	1.82	6.79		1	7.90	12.94	3500	3	19.45	11.30	3500	
					1	8.23	12.94	3125	3	18.08	11.30	3125	
22.500	10.11	4.17	2.27		1	8.39	13.24	3125	3	19.34	12.00	3125	
23.000	5.99	4.07	-3.00		1	8.56	13.53	3125	3	20.60	12.71	3125	
23.500	1.90	1.73	-5.50		2	8.94	13.83	3125	2	7.98	13.41	3125	
24.000	-2.19	0.00	0.00		2	22.02	14.12	3125	1	1.25	14.12	3125	
Max	58.11	38.60	23.56		D_e = 0 (m)　D_w = 0 (m)				D_e = 14 (m)　D_w = 14 (m)				
Min	-2.19	-121.75	-57.13		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

計畫名稱：
主　　題：XDO 開挖擋土分析設計

XDO 土壤彈簧應力與變位



▼ PHASE 1

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	2.64	1	3.00	0.00	3.00	-	-	3.00	3.00	1250	3	0.00	0.00	0.00	-	-	0.00	0.00	1250
0.500	2.41	1	3.05	0.14	2.90	0.08	-1.32	3.05	4.79	1250	3	1.89	1.89	0.00	-0.08	1.32	0.14	1.89	1250
1.000	2.19	1	3.09	0.29	2.81	0.15	-2.64	3.09	6.59	1250	2	3.21	3.21	0.00	-0.15	2.64	0.29	3.78	1250
1.500	1.96	1	3.14	0.43	2.71	0.23	-3.96	3.14	8.38	1250	2	3.17	3.17	0.00	-0.23	3.96	0.43	5.67	1250
2.000	1.75	1	3.19	0.57	2.62	0.31	-5.28	3.19	10.18	1250	2	3.14	3.14	0.00	-0.31	5.28	0.57	7.55	1250
2.500	1.54	1	3.24	0.71	2.53	0.39	-6.60	3.24	11.97	1250	2	3.12	3.12	0.00	-0.39	6.60	0.71	9.44	1250
3.000	1.34	1	3.29	0.86	2.44	0.46	-7.92	3.29	13.77	1250	2	3.11	3.11	0.00	-0.46	7.92	0.86	11.33	1250
		1	3.22	0.79	2.44	0.25	-5.17	3.22	15.41	2250	2	4.37	4.37	0.00	-0.25	5.17	0.79	12.98	2250
3.500	1.16	1	3.25	0.91	2.34	0.29	-5.98	3.25	17.37	2250	2	4.17	4.17	0.00	-0.29	5.98	0.91	15.02	2250
4.000	0.99	1	3.29	1.03	2.26	0.33	-6.80	3.29	19.32	2250	2	4.01	4.01	0.00	-0.33	6.80	1.03	17.06	2250
4.500	0.84	1	3.33	1.16	2.17	0.37	-7.61	3.33	21.28	2250	2	3.88	3.88	0.00	-0.37	7.61	1.16	19.11	2250
5.000	0.71	1	3.36	1.28	2.08	0.41	-8.42	3.36	23.23	2250	2	3.79	3.79	0.00	-0.41	8.42	1.28	21.15	2250
5.500	0.59	1	3.40	1.40	2.00	0.45	-9.24	3.40	25.19	2250	2	3.74	3.74	0.00	-0.45	9.24	1.40	23.19	2250
6.000	0.49	1	3.45	1.53	1.92	0.49	-10.05	3.45	27.15	2250	2	3.73	3.73	0.00	-0.49	10.05	1.53	25.24	2250
		1	3.38	1.46	1.92	0.36	-8.18	3.38	29.01	3000	2	4.02	4.02	0.00	-0.36	8.18	1.46	27.09	3000
6.500	0.41	1	3.41	1.58	1.84	0.39	-8.80	3.41	30.99	3000	2	3.96	3.96	0.00	-0.39	8.80	1.58	29.15	3000
7.000	0.34	2	3.67	1.91	1.76	0.42	-9.43	3.45	32.98	3000	2	3.96	3.96	0.00	-0.42	9.43	1.69	31.22	3000
7.500	0.29	2	3.96	2.27	1.69	0.44	-10.05	3.49	34.97	3000	2	3.99	3.99	0.00	-0.44	10.05	1.80	33.28	3000
8.000	0.24	2	4.21	2.59	1.61	0.47	-10.67	3.53	36.96	3000	2	4.05	4.05	0.00	-0.47	10.67	1.91	35.35	3000
8.500	0.21	2	4.43	2.88	1.55	0.50	-11.30	3.57	38.96	3000	2	4.15	4.15	0.00	-0.50	11.30	2.02	37.41	3000
9.000	0.19	2	4.63	3.15	1.48	0.53	-11.92	3.61	40.95	3000	2	4.27	4.27	0.00	-0.53	11.92	2.13	39.47	3000
		2	4.38	2.90	1.48	0.41	-10.37	3.52	43.94	3750	2	4.29	4.29	0.00	-0.41	10.37	2.04	42.47	3750
9.500	0.17	2	4.59	3.17	1.41	0.44	-10.94	3.57	46.24	3750	2	4.42	4.42	0.00	-0.44	10.94	2.16	44.82	3750
10.000	0.15	2	4.78	3.43	1.35	0.46	-11.52	3.62	48.53	3750	2	4.56	4.56	0.00	-0.46	11.52	2.27	47.18	3750
10.500	0.14	2	4.96	3.66	1.29	0.48	-12.09	3.67	50.83	3750	2	4.72	4.72	0.00	-0.48	12.09	2.38	49.54	3750

11.000	0.13	2	5.13	3.89	1.23	0.51	-12.67	3.73	53.14	3750	2	4.90	4.90	0.00	-0.51	12.67	2.50	51.90	3750
11.500	0.13	2	5.29	4.12	1.18	0.53	-13.24	3.79	55.44	3750	2	5.07	5.07	0.00	-0.53	13.24	2.61	54.26	3750
12.000	0.12	2	5.46	4.33	1.13	0.55	-13.82	3.85	57.75	3750	2	5.26	5.26	0.00	-0.55	13.82	2.72	56.62	3750
		2	5.21	4.09	1.13	0.45	-12.54	3.74	62.18	4500	2	5.19	5.19	0.00	-0.45	12.54	2.61	61.06	4500
12.500	0.12	2	5.38	4.31	1.07	0.47	-13.09	3.80	64.83	4500	2	5.38	5.38	0.00	-0.47	13.09	2.73	63.75	4500
13.000	0.12	2	5.55	4.53	1.03	0.49	-13.64	3.87	67.47	4500	2	5.58	5.58	0.00	-0.49	13.64	2.84	66.44	4500
13.500	0.11	2	5.72	4.74	0.98	0.51	-14.20	3.94	70.12	4500	2	5.77	5.77	0.00	-0.51	14.20	2.96	69.14	4500
14.000	0.11	2	5.89	4.95	0.94	0.53	-14.75	4.01	72.77	4500	2	5.97	5.97	0.00	-0.53	14.75	3.07	71.83	4500
		2	6.18	5.24	0.94	0.70	-17.42	4.14	67.55	3500	2	6.04	6.04	0.00	-0.70	17.42	3.20	66.61	3500
14.500	0.11	2	6.34	5.45	0.89	0.72	-18.04	4.21	69.87	3500	2	6.23	6.23	0.00	-0.72	18.04	3.32	68.97	3500
15.000	0.11	2	6.51	5.66	0.85	0.75	-18.65	4.29	72.18	3500	2	6.42	6.42	0.00	-0.75	18.65	3.43	71.33	3500
15.500	0.11	2	6.68	5.86	0.82	0.77	-19.27	4.36	74.51	3500	2	6.62	6.62	0.00	-0.77	19.27	3.54	73.69	3500
16.000	0.11	2	6.85	6.07	0.78	0.79	-19.89	4.44	76.83	3500	2	6.81	6.81	0.00	-0.79	19.89	3.66	76.05	3500
16.500	0.10	2	7.02	6.28	0.75	0.82	-20.51	4.52	79.15	3500	2	7.00	7.00	0.00	-0.82	20.51	3.77	78.41	3500
17.000	0.10	2	7.20	6.49	0.71	0.84	-21.12	4.60	81.48	3500	2	7.19	7.19	0.00	-0.84	21.12	3.88	80.77	3500
17.500	0.10	2	7.38	6.70	0.68	0.87	-21.74	4.68	83.81	3500	2	7.38	7.38	0.00	-0.87	21.74	4.00	83.13	3500
18.000	0.09	2	7.56	6.91	0.65	0.89	-22.36	4.76	86.14	3500	2	7.57	7.57	0.00	-0.89	22.36	4.11	85.49	3500
18.500	0.09	2	7.74	7.12	0.62	0.92	-22.97	4.85	88.47	3500	2	7.75	7.75	0.00	-0.92	22.97	4.23	87.84	3500
19.000	0.09	2	7.93	7.33	0.60	0.94	-23.59	4.93	90.80	3500	2	7.94	7.94	0.00	-0.94	23.59	4.34	90.20	3500
19.500	0.08	2	8.11	7.54	0.57	0.97	-24.21	5.02	93.13	3500	2	8.13	8.13	0.00	-0.97	24.21	4.45	92.56	3500
20.000	0.08	2	8.30	7.76	0.55	0.99	-24.82	5.11	95.47	3500	2	8.32	8.32	0.00	-0.99	24.82	4.57	94.92	3500
20.500	0.08	2	8.49	7.97	0.52	1.02	-25.44	5.20	97.80	3500	2	8.51	8.51	0.00	-1.02	25.44	4.68	97.28	3500
21.000	0.07	2	8.67	8.18	0.50	1.04	-26.06	5.29	100.14	3500	2	8.70	8.70	0.00	-1.04	26.06	4.79	99.64	3500
21.500	0.07	2	8.86	8.38	0.48	1.07	-26.68	5.38	102.48	3500	2	8.89	8.89	0.00	-1.07	26.68	4.91	102.00	3500
22.000	0.07	2	9.05	8.59	0.46	1.09	-27.29	5.48	104.82	3500	2	9.08	9.08	0.00	-1.09	27.29	5.02	104.36	3500
		2	9.36	8.90	0.46	1.24	-28.12	5.70	97.47	3125	2	9.34	9.34	0.00	-1.24	28.12	5.25	97.01	3125
22.500	0.07	2	9.57	9.13	0.44	1.27	-28.80	5.81	99.77	3125	2	9.55	9.55	0.00	-1.27	28.80	5.37	99.33	3125
23.000	0.06	2	9.77	9.35	0.42	1.30	-29.47	5.92	102.07	3125	2	9.76	9.76	0.00	-1.30	29.47	5.50	101.65	3125
23.500	0.06	2	9.98	9.58	0.40	1.33	-30.14	6.03	104.38	3125	2	9.97	9.97	0.00	-1.33	30.14	5.62	103.97	3125
24.000	0.06	2	10.19	9.80	0.39	1.36	-30.82	6.14	106.68	3125	2	10.18	10.18	0.00	-1.36	30.82	5.75	106.30	3125

▼ PHASE 2

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	22.46	1	3.00	0.00	3.00	-	-	3.00	3.00	1250	0								
0.500	20.66	1	3.05	0.15	2.90	2.41	0.95	3.05	4.88	1250	0								
1.000	18.85	1	3.11	0.30	2.81	2.19	-0.74	3.11	6.77	1250	0								
1.500	17.05	1	3.16	0.45	2.71	1.96	-2.43	3.16	8.65	1250	0								
2.000	15.27	1	3.22	0.60	2.62	1.75	-4.11	3.22	10.54	1250	0								
		1	3.22	0.60	2.62	1.75	-4.11	3.22	10.54	1250	3	0.00	0.00	0.00	-	-	0.00	0.00	1250
2.500	13.52	1	3.28	0.75	2.53	1.54	-5.78	3.28	12.43	1250	3	1.80	1.80	0.00	0.21	1.54	0.14	1.80	1250
3.000	11.81	1	3.33	0.90	2.44	1.34	-7.44	3.33	14.31	1250	3	3.59	3.59	0.00	-0.15	2.51	0.27	3.59	1250
		1	3.26	0.82	2.44	1.34	-4.34	3.26	16.04	2250	3	4.12	4.12	0.00	-0.08	1.64	0.25	4.12	2250
3.500	10.17	1	3.30	0.95	2.34	1.16	-5.42	3.30	18.10	2250	3	6.05	6.05	0.00	-0.12	2.41	0.37	6.05	2250
4.000	8.62	1	3.34	1.08	2.26	0.99	-6.48	3.34	20.15	2250	3	7.99	7.99	0.00	-0.15	3.18	0.48	7.99	2250
4.500	7.19	1	3.38	1.21	2.17	0.84	-7.53	3.38	22.21	2250	3	9.93	9.93	0.00	-0.19	3.95	0.60	9.93	2250
5.000	5.88	1	3.43	1.34	2.08	0.71	-8.56	3.43	24.28	2250	3	11.87	11.87	0.00	-0.23	4.73	0.72	11.87	2250
5.500	4.72	1	3.47	1.47	2.00	0.59	-9.57	3.47	26.34	2250	2	12.06	12.06	0.00	-0.27	5.50	0.84	13.81	2250
6.000	3.71	1	3.52	1.60	1.92	0.51	-10.55	3.52	28.40	2250	2	9.99	9.99	0.00	-0.30	6.27	0.95	15.75	2250
		1	3.46	1.54	1.92	0.49	-8.47	3.46	30.35	3000	2	12.72	12.72	0.00	-0.22	5.10	0.91	16.90	3000
6.500	2.85	1	3.49	1.65	1.84	0.41	-9.24	3.49	32.45	3000	2	10.34	10.34	0.00	-0.25	5.69	1.02	18.85	3000
7.000	2.15	1	3.53	1.77	1.76	0.44	-9.90	3.53	34.54	3000	2	8.39	8.39	0.00	-0.28	6.28	1.12	20.80	3000
7.500	1.57	1	3.58	1.89	1.69	0.47	-10.56	3.58	36.65	3000	2	6.86	6.86	0.00	-0.30	6.87	1.23	22.76	3000
8.000	1.13	1	3.62	2.01	1.61	0.49	-11.21	3.62	38.75	3000	2	5.70	5.70	0.00	-0.33	7.46	1.34	24.71	3000
8.500	0.79	1	3.67	2.13	1.55	0.52	-11.87	3.67	40.86	3000	2	4.87	4.87	0.00	-0.35	8.05	1.44	26.66	3000

9.000	0.54	2	3.75	2.27	1.48	0.55	-12.53	3.72	42.96	3000	2	4.32	4.32	0.00	-0.38	8.64	1.55	28.61	3000
		1	3.62	2.15	1.48	0.44	-10.89	3.62	46.11	3750	2	4.64	4.64	0.00	-0.30	7.51	1.48	30.78	3750
9.500	0.38	2	3.99	2.58	1.41	0.46	-11.50	3.68	48.52	3750	2	4.20	4.20	0.00	-0.32	8.06	1.59	33.02	3750
10.000	0.27	2	4.54	3.19	1.35	0.48	-12.10	3.74	50.94	3750	2	3.99	3.99	0.00	-0.34	8.61	1.70	35.25	3750
10.500	0.21	2	4.91	3.62	1.29	0.51	-12.71	3.80	53.36	3750	2	3.96	3.96	0.00	-0.37	9.15	1.80	37.49	3750
11.000	0.19	2	5.16	3.92	1.23	0.53	-13.31	3.86	55.78	3750	2	4.06	4.06	0.00	-0.39	9.70	1.91	39.73	3750
11.500	0.19	2	5.31	4.13	1.18	0.56	-13.92	3.92	58.21	3750	2	4.25	4.25	0.00	-0.41	10.24	2.02	41.97	3750
12.000	0.20	2	5.41	4.28	1.13	0.58	-14.52	3.99	60.63	3750	2	4.50	4.50	0.00	-0.43	10.79	2.13	44.21	3750
		2	5.10	3.97	1.13	0.47	-13.18	3.87	65.30	4500	2	4.53	4.53	0.00	-0.35	9.79	2.04	47.67	4500
12.500	0.23	2	5.15	4.08	1.07	0.49	-13.76	3.94	68.07	4500	2	4.83	4.83	0.00	-0.37	10.31	2.15	50.23	4500
13.000	0.26	2	5.19	4.16	1.03	0.52	-14.34	4.01	70.84	4500	2	5.16	5.16	0.00	-0.39	10.84	2.26	52.80	4500
13.500	0.29	2	5.22	4.24	0.98	0.54	-14.92	4.09	73.62	4500	2	5.49	5.49	0.00	-0.41	11.37	2.37	55.36	4500
14.000	0.31	2	5.26	4.32	0.94	0.56	-15.50	4.16	76.40	4500	2	5.82	5.82	0.00	-0.43	11.89	2.48	57.92	4500
		2	5.76	4.83	0.94	0.73	-18.30	4.30	70.92	3500	2	5.65	5.65	0.00	-0.56	14.05	2.58	53.71	3500
14.500	0.34	2	5.84	4.95	0.89	0.76	-18.95	4.38	73.35	3500	2	5.93	5.93	0.00	-0.58	14.63	2.69	55.95	3500
15.000	0.36	2	5.94	5.08	0.85	0.78	-19.60	4.46	75.79	3500	2	6.19	6.19	0.00	-0.61	15.22	2.80	58.19	3500
15.500	0.38	2	6.05	5.23	0.82	0.81	-20.25	4.54	78.23	3500	2	6.44	6.44	0.00	-0.63	15.80	2.91	60.43	3500
16.000	0.39	2	6.18	5.40	0.78	0.83	-20.90	4.62	80.68	3500	2	6.67	6.67	0.00	-0.65	16.39	3.01	62.67	3500
16.500	0.40	2	6.33	5.59	0.75	0.86	-21.54	4.71	83.12	3500	2	6.88	6.88	0.00	-0.68	16.97	3.12	64.90	3500
17.000	0.40	2	6.50	5.79	0.71	0.89	-22.19	4.79	85.57	3500	2	7.08	7.08	0.00	-0.70	17.56	3.23	67.14	3500
17.500	0.40	2	6.68	6.00	0.68	0.91	-22.84	4.88	88.02	3500	2	7.27	7.27	0.00	-0.72	18.14	3.34	69.38	3500
18.000	0.40	2	6.87	6.22	0.65	0.94	-23.49	4.97	90.47	3500	2	7.45	7.45	0.00	-0.75	18.73	3.44	71.62	3500
18.500	0.39	2	7.06	6.44	0.62	0.96	-24.14	5.06	92.92	3500	2	7.63	7.63	0.00	-0.77	19.32	3.55	73.86	3500
19.000	0.39	2	7.26	6.67	0.60	0.99	-24.79	5.15	95.37	3500	2	7.80	7.80	0.00	-0.80	19.90	3.66	76.09	3500
19.500	0.38	2	7.46	6.89	0.57	1.02	-25.43	5.25	97.82	3500	2	7.97	7.97	0.00	-0.82	20.49	3.77	78.33	3500
20.000	0.38	2	7.67	7.12	0.55	1.04	-26.08	5.34	100.28	3500	2	8.14	8.14	0.00	-0.84	21.07	3.88	80.57	3500
20.500	0.37	2	7.87	7.35	0.52	1.07	-26.73	5.44	102.73	3500	2	8.31	8.31	0.00	-0.87	21.66	3.98	82.81	3500
21.000	0.37	2	8.08	7.58	0.50	1.09	-27.38	5.54	105.19	3500	2	8.49	8.49	0.00	-0.89	22.24	4.09	85.05	3500
21.500	0.36	2	8.28	7.80	0.48	1.12	-28.03	5.63	107.65	3500	2	8.67	8.67	0.00	-0.91	22.83	4.20	87.28	3500
22.000	0.36	2	8.48	8.02	0.46	1.15	-28.68	5.73	110.11	3500	2	8.85	8.85	0.00	-0.94	23.41	4.31	89.52	3500
		2	8.91	8.45	0.46	1.30	-29.55	5.97	102.39	3125	2	8.95	8.95	0.00	-1.06	24.13	4.50	83.22	3125
22.500	0.36	2	9.13	8.69	0.44	1.33	-30.26	6.08	104.80	3125	2	9.15	9.15	0.00	-1.09	24.77	4.62	85.43	3125
23.000	0.36	2	9.34	8.92	0.42	1.36	-30.96	6.20	107.22	3125	2	9.35	9.35	0.00	-1.12	25.41	4.74	87.64	3125
23.500	0.35	2	9.56	9.16	0.40	1.40	-31.67	6.31	109.63	3125	2	9.55	9.55	0.00	-1.15	26.05	4.86	89.85	3125
24.000	0.35	2	9.78	9.39	0.39	1.43	-32.37	6.43	112.05	3125	2	9.75	9.75	0.00	-1.18	26.69	4.98	92.05	3125

▼ PHASE 3

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	19.15	1	3.00	0.00	3.00	-	-	3.00	3.00	1250	0								
0.500	17.74	3	4.88	1.98	2.90	20.66	19.19	3.05	4.88	1250	0								
1.000	16.33	2	6.26	3.45	2.81	18.85	15.92	3.11	6.77	1250	0								
1.500	14.93	2	5.81	3.10	2.71	17.05	12.66	3.16	8.65	1250	0								
2.000	13.53	2	5.39	2.77	2.62	15.27	9.41	3.22	10.54	1250	0								
		2	5.39	2.77	2.62	15.27	9.41	3.22	10.54	1250	3	0.00	0.00	0.00	-	-	0.00	0.00	1250
2.500	12.14	2	5.00	2.47	2.53	13.52	6.20	3.28	12.43	1250	1	0.14	0.14	0.00	12.19	13.52	0.14	1.80	1250
3.000	10.76	2	4.65	2.21	2.44	11.81	3.03	3.33	14.31	1250	2	2.28	2.28	0.00	9.15	11.81	0.27	3.59	1250
		2	5.63	3.19	2.44	11.81	6.13	3.26	16.04	2250	2	1.75	1.75	0.00	10.09	11.81	0.25	4.12	2250
3.500	9.40	2	5.02	2.68	2.34	10.17	3.60	3.30	18.10	2250	2	4.33	4.33	0.00	7.64	10.17	0.37	6.05	2250
4.000	8.10	2	4.52	2.27	2.26	8.62	1.15	3.34	20.15	2250	2	6.81	6.81	0.00	5.29	8.62	0.48	7.99	2250
4.500	6.86	2	4.12	1.95	2.17	7.19	-1.18	3.38	22.21	2250	2	9.19	9.19	0.00	3.04	7.19	0.60	9.93	2250
5.000	5.71	2	3.81	1.73	2.08	5.88	-3.38	3.43	24.28	2250	2	11.48	11.48	0.00	0.93	5.88	0.72	11.87	2250
5.500	4.67	2	3.59	1.59	2.00	4.72	-5.44	3.47	26.34	2250	2	11.94	11.94	0.00	-0.27	5.50	0.84	13.81	2250
6.000	3.75	1	3.52	1.60	1.92	3.71	-7.35	3.52	28.40	2250	2	10.07	10.07	0.00	-0.30	6.27	0.95	15.75	2250
		1	3.46	1.54	1.92	3.71	-5.25	3.46	30.35	3000	2	12.83	12.83	0.00	-0.22	5.10	0.91	16.90	3000

6.500	2.95	1	3.49	1.65	1.84	2.85	-6.80	3.49	32.45	3000	2	10.61	10.61	0.00	-0.25	5.69	1.02	18.85	3000
7.000	2.27	1	3.53	1.77	1.76	2.15	-8.19	3.53	34.54	3000	2	8.78	8.78	0.00	-0.28	6.28	1.12	20.80	3000
7.500	1.72	1	3.58	1.89	1.69	1.57	-9.45	3.58	36.65	3000	2	7.30	7.30	0.00	-0.30	6.87	1.23	22.76	3000
8.000	1.28	1	3.62	2.01	1.61	1.13	-10.58	3.62	38.75	3000	2	6.15	6.15	0.00	-0.33	7.46	1.34	24.71	3000
8.500	0.93	1	3.67	2.13	1.55	0.79	-11.61	3.67	40.86	3000	2	5.29	5.29	0.00	-0.35	8.05	1.44	26.66	3000
9.000	0.67	1	3.72	2.24	1.48	0.55	-12.53	3.72	42.96	3000	2	4.70	4.70	0.00	-0.38	8.64	1.55	28.61	3000
		1	3.62	2.15	1.48	0.54	-10.79	3.62	46.11	3750	2	5.12	5.12	0.00	-0.30	7.51	1.48	30.78	3750
9.500	0.48	1	3.68	2.27	1.41	0.46	-11.50	3.68	48.52	3750	2	4.61	4.61	0.00	-0.32	8.06	1.59	33.02	3750
10.000	0.36	2	4.21	2.86	1.35	0.48	-12.10	3.74	50.94	3750	2	4.33	4.33	0.00	-0.34	8.61	1.70	35.25	3750
10.500	0.28	2	4.65	3.36	1.29	0.51	-12.71	3.80	53.36	3750	2	4.22	4.22	0.00	-0.37	9.15	1.80	37.49	3750
11.000	0.24	2	4.96	3.73	1.23	0.53	-13.31	3.86	55.78	3750	2	4.26	4.26	0.00	-0.39	9.70	1.91	39.73	3750
11.500	0.22	2	5.17	3.99	1.18	0.56	-13.92	3.92	58.21	3750	2	4.39	4.39	0.00	-0.41	10.24	2.02	41.97	3750
12.000	0.23	2	5.32	4.19	1.13	0.58	-14.52	3.99	60.63	3750	2	4.59	4.59	0.00	-0.43	10.79	2.13	44.21	3750
		2	4.99	3.86	1.13	0.47	-13.18	3.87	65.30	4500	2	4.64	4.64	0.00	-0.35	9.79	2.04	47.67	4500
12.500	0.24	2	5.09	4.01	1.07	0.49	-13.76	3.94	68.07	4500	2	4.90	4.90	0.00	-0.37	10.31	2.15	50.23	4500
13.000	0.26	2	5.16	4.13	1.03	0.52	-14.34	4.01	70.84	4500	2	5.19	5.19	0.00	-0.39	10.84	2.26	52.80	4500
13.500	0.29	2	5.21	4.23	0.98	0.54	-14.92	4.09	73.62	4500	2	5.49	5.49	0.00	-0.41	11.37	2.37	55.36	4500
14.000	0.31	2	5.27	4.34	0.94	0.56	-15.50	4.16	76.40	4500	2	5.80	5.80	0.00	-0.43	11.89	2.48	57.92	4500
		2	5.77	4.84	0.94	0.73	-18.30	4.30	70.92	3500	2	5.64	5.64	0.00	-0.56	14.05	2.58	53.71	3500
14.500	0.33	2	5.86	4.96	0.89	0.76	-18.95	4.38	73.35	3500	2	5.91	5.91	0.00	-0.58	14.63	2.69	55.95	3500
15.000	0.35	2	5.96	5.10	0.85	0.78	-19.60	4.46	75.79	3500	2	6.17	6.17	0.00	-0.61	15.22	2.80	58.19	3500
15.500	0.37	2	6.07	5.26	0.82	0.81	-20.25	4.54	78.23	3500	2	6.41	6.41	0.00	-0.63	15.80	2.91	60.43	3500
16.000	0.38	2	6.21	5.43	0.78	0.83	-20.90	4.62	80.68	3500	2	6.64	6.64	0.00	-0.65	16.39	3.01	62.67	3500
16.500	0.39	2	6.36	5.61	0.75	0.86	-21.54	4.71	83.12	3500	2	6.86	6.86	0.00	-0.68	16.97	3.12	64.90	3500
17.000	0.39	2	6.52	5.81	0.71	0.89	-22.19	4.79	85.57	3500	2	7.06	7.06	0.00	-0.70	17.56	3.23	67.14	3500
17.500	0.39	2	6.69	6.01	0.68	0.91	-22.84	4.88	88.02	3500	2	7.26	7.26	0.00	-0.72	18.14	3.34	69.38	3500
18.000	0.39	2	6.88	6.23	0.65	0.94	-23.49	4.97	90.47	3500	2	7.44	7.44	0.00	-0.75	18.73	3.44	71.62	3500
18.500	0.39	2	7.07	6.45	0.62	0.96	-24.14	5.06	92.92	3500	2	7.62	7.62	0.00	-0.77	19.32	3.55	73.86	3500
19.000	0.39	2	7.27	6.67	0.60	0.99	-24.79	5.15	95.37	3500	2	7.79	7.79	0.00	-0.80	19.90	3.66	76.09	3500
19.500	0.38	2	7.47	6.90	0.57	1.02	-25.43	5.25	97.82	3500	2	7.97	7.97	0.00	-0.82	20.49	3.77	78.33	3500
20.000	0.38	2	7.67	7.13	0.55	1.04	-26.08	5.34	100.28	3500	2	8.14	8.14	0.00	-0.84	21.07	3.88	80.57	3500
20.500	0.37	2	7.87	7.35	0.52	1.07	-26.73	5.44	102.73	3500	2	8.31	8.31	0.00	-0.87	21.66	3.98	82.81	3500
21.000	0.37	2	8.08	7.58	0.50	1.09	-27.38	5.54	105.19	3500	2	8.49	8.49	0.00	-0.89	22.24	4.09	85.05	3500
21.500	0.36	2	8.28	7.80	0.48	1.12	-28.03	5.63	107.65	3500	2	8.67	8.67	0.00	-0.91	22.83	4.20	87.28	3500
22.000	0.36	2	8.48	8.02	0.46	1.15	-28.68	5.73	110.11	3500	2	8.85	8.85	0.00	-0.94	23.41	4.31	89.52	3500
		2	8.91	8.45	0.46	1.30	-29.55	5.97	102.39	3125	2	8.95	8.95	0.00	-1.06	24.13	4.50	83.22	3125
22.500	0.36	2	9.12	8.69	0.44	1.33	-30.26	6.08	104.80	3125	2	9.15	9.15	0.00	-1.09	24.77	4.62	85.43	3125
23.000	0.36	2	9.34	8.92	0.42	1.36	-30.96	6.20	107.22	3125	2	9.35	9.35	0.00	-1.12	25.41	4.74	87.64	3125
23.500	0.36	2	9.56	9.16	0.40	1.40	-31.67	6.31	109.63	3125	2	9.56	9.56	0.00	-1.15	26.05	4.86	89.85	3125
24.000	0.35	2	9.78	9.39	0.39	1.43	-32.37	6.43	112.05	3125	2	9.76	9.76	0.00	-1.18	26.69	4.98	92.05	3125

▼ PHASE 4

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	24.75	1	3.00	0.00	3.00	-	-	3.00	3.00	1250	0								
0.500	24.06	1	3.07	0.16	2.90	19.32	17.74	3.07	5.04	1250	0								
1.000	23.37	1	3.13	0.32	2.81	18.86	15.71	3.13	7.07	1250	0								
1.500	22.68	1	3.20	0.48	2.71	17.07	12.34	3.20	9.11	1250	0								
2.000	21.96	1	3.26	0.64	2.62	15.29	8.99	3.26	11.15	1250	0								
2.500	21.20	1	3.33	0.81	2.53	13.55	5.66	3.33	13.19	1250	0								
3.000	20.37	1	3.40	0.97	2.44	11.85	2.38	3.40	15.23	1250	0								
		1	3.32	0.89	2.44	11.83	5.71	3.32	17.09	2250	0								
3.500	19.45	1	3.37	1.03	2.34	10.20	3.11	3.37	19.32	2250	0								
4.000	18.45	1	3.42	1.17	2.26	8.65	0.59	3.42	21.56	2250	0								
4.500	17.34	1	3.48	1.31	2.17	7.22	-1.81	3.48	23.79	2250	0								

5.000	16.14	1	3.53	1.45	2.08	5.92	-4.08	3.53	26.03	2250	0								
		1	3.53	1.45	2.08	5.92	-4.08	3.53	26.03	2250	3	0.00	0.00	0.00	-	-	0.00	0.00	2250
5.500	14.86	1	3.59	1.59	2.00	4.76	-6.21	3.59	28.27	2250	3	1.76	1.76	0.00	3.93	4.67	0.11	1.76	2250
6.000	13.51	1	3.65	1.73	1.92	3.75	-8.18	3.65	30.51	2250	3	3.53	3.53	0.00	2.27	3.75	0.21	3.53	2250
		1	3.58	1.66	1.92	3.75	-5.93	3.58	32.61	3000	3	3.79	3.79	0.00	2.55	3.75	0.20	3.79	3000
6.500	12.12	1	3.63	1.79	1.84	2.95	-7.47	3.63	34.89	3000	3	5.55	5.55	0.00	1.20	2.95	0.30	5.55	3000
7.000	10.72	1	3.68	1.92	1.76	2.27	-8.89	3.68	37.18	3000	3	7.31	7.31	0.00	-0.03	2.27	0.40	7.31	3000
7.500	9.33	1	3.73	2.04	1.69	1.72	-10.19	3.73	39.47	3000	3	9.08	9.08	0.00	-0.12	2.74	0.49	9.08	3000
8.000	7.99	1	3.79	2.17	1.61	1.28	-11.38	3.79	41.76	3000	3	10.84	10.84	0.00	-0.14	3.27	0.59	10.84	3000
8.500	6.73	1	3.84	2.30	1.55	0.93	-12.47	3.84	44.05	3000	3	12.61	12.61	0.00	-0.17	3.81	0.68	12.61	3000
9.000	5.57	1	3.90	2.43	1.48	0.67	-13.48	3.90	46.35	3000	3	14.37	14.37	0.00	-0.19	4.34	0.78	14.37	3000
		1	3.80	2.32	1.48	0.67	-11.58	3.80	49.75	3750	3	15.46	15.46	0.00	-0.15	3.77	0.74	15.46	3750
9.500	4.53	1	3.86	2.45	1.41	0.50	-12.44	3.86	52.37	3750	3	17.49	17.49	0.00	-0.17	4.27	0.84	17.49	3750
10.000	3.62	1	3.93	2.58	1.35	0.52	-13.09	3.93	54.99	3750	2	15.25	15.25	0.00	-0.19	4.77	0.94	19.53	3750
10.500	2.86	1	4.00	2.71	1.29	0.55	-13.75	4.00	57.61	3750	2	12.55	12.55	0.00	-0.21	5.26	1.04	21.57	3750
11.000	2.23	1	4.07	2.84	1.23	0.58	-14.40	4.07	60.23	3750	2	10.36	10.36	0.00	-0.23	5.76	1.14	23.60	3750
11.500	1.73	1	4.14	2.97	1.18	0.60	-15.06	4.14	62.86	3750	2	8.64	8.64	0.00	-0.25	6.26	1.23	25.64	3750
12.000	1.34	1	4.22	3.10	1.13	0.63	-15.71	4.22	65.49	3750	2	7.35	7.35	0.00	-0.27	6.76	1.33	27.68	3750
		1	4.09	2.97	1.13	0.51	-14.25	4.09	70.53	4500	2	8.28	8.28	0.00	-0.22	6.13	1.28	29.84	4500
12.500	1.05	1	4.17	3.10	1.07	0.54	-14.88	4.17	73.52	4500	2	7.15	7.15	0.00	-0.24	6.61	1.38	32.19	4500
13.000	0.84	1	4.26	3.23	1.03	0.56	-15.50	4.26	76.52	4500	2	6.41	6.41	0.00	-0.26	7.09	1.48	34.54	4500
13.500	0.71	1	4.34	3.36	0.98	0.58	-16.13	4.34	79.51	4500	2	5.99	5.99	0.00	-0.27	7.57	1.58	36.88	4500
14.000	0.63	1	4.43	3.49	0.94	0.60	-16.75	4.43	82.51	4500	2	5.82	5.82	0.00	-0.29	8.05	1.68	39.23	4500
		2	5.13	4.20	0.94	0.79	-19.78	4.57	76.58	3500	2	5.29	5.29	0.00	-0.38	9.51	1.75	36.38	3500
14.500	0.59	2	5.45	4.55	0.89	0.82	-20.48	4.66	79.22	3500	2	5.33	5.33	0.00	-0.40	10.05	1.85	38.41	3500
15.000	0.59	2	5.66	4.80	0.85	0.85	-21.19	4.75	81.86	3500	2	5.48	5.48	0.00	-0.42	10.58	1.95	40.45	3500
15.500	0.60	2	5.80	4.99	0.82	0.87	-21.89	4.84	84.51	3500	2	5.70	5.70	0.00	-0.44	11.11	2.04	42.49	3500
16.000	0.62	2	5.91	5.13	0.78	0.90	-22.59	4.93	87.15	3500	2	5.95	5.95	0.00	-0.47	11.64	2.14	44.52	3500
16.500	0.65	2	6.01	5.26	0.75	0.93	-23.29	5.03	89.80	3500	2	6.22	6.22	0.00	-0.49	12.18	2.24	46.56	3500
17.000	0.68	2	6.10	5.39	0.71	0.96	-23.99	5.12	92.45	3500	2	6.50	6.50	0.00	-0.51	12.71	2.34	48.59	3500
17.500	0.71	2	6.20	5.52	0.68	0.99	-24.69	5.22	95.10	3500	2	6.76	6.76	0.00	-0.53	13.24	2.44	50.63	3500
18.000	0.73	2	6.31	5.66	0.65	1.01	-25.39	5.32	97.75	3500	2	7.02	7.02	0.00	-0.55	13.77	2.53	52.67	3500
18.500	0.75	2	6.45	5.82	0.62	1.04	-26.10	5.42	100.41	3500	2	7.26	7.26	0.00	-0.57	14.31	2.63	54.70	3500
19.000	0.77	2	6.59	6.00	0.60	1.07	-26.80	5.52	103.06	3500	2	7.48	7.48	0.00	-0.59	14.84	2.73	56.74	3500
19.500	0.78	2	6.76	6.19	0.57	1.10	-27.50	5.63	105.72	3500	2	7.69	7.69	0.00	-0.61	15.37	2.83	58.78	3500
20.000	0.78	2	6.93	6.39	0.55	1.13	-28.20	5.73	108.37	3500	2	7.89	7.89	0.00	-0.64	15.90	2.93	60.81	3500
20.500	0.79	2	7.11	6.59	0.52	1.15	-28.90	5.84	111.03	3500	2	8.09	8.09	0.00	-0.66	16.44	3.02	62.85	3500
21.000	0.79	2	7.30	6.80	0.50	1.18	-29.60	5.94	113.69	3500	2	8.28	8.28	0.00	-0.68	16.97	3.12	64.89	3500
21.500	0.80	2	7.49	7.02	0.48	1.21	-30.30	6.05	116.35	3500	2	8.46	8.46	0.00	-0.70	17.50	3.22	66.92	3500
22.000	0.80	2	7.69	7.23	0.46	1.24	-31.01	6.16	119.01	3500	2	8.65	8.65	0.00	-0.72	18.03	3.32	68.96	3500
		2	8.31	7.85	0.46	1.41	-31.95	6.42	110.66	3125	2	8.53	8.53	0.00	-0.82	18.58	3.47	64.10	3125
22.500	0.81	2	8.53	8.09	0.44	1.44	-32.71	6.54	113.27	3125	2	8.73	8.73	0.00	-0.84	19.17	3.58	66.12	3125
23.000	0.81	2	8.74	8.32	0.42	1.47	-33.47	6.66	115.87	3125	2	8.93	8.93	0.00	-0.87	19.76	3.68	68.14	3125
23.500	0.81	2	8.96	8.56	0.40	1.51	-34.23	6.79	118.47	3125	2	9.13	9.13	0.00	-0.90	20.34	3.79	70.17	3125
24.000	0.82	2	9.18	8.80	0.39	1.54	-34.99	6.91	121.08	3125	2	9.33	9.33	0.00	-0.92	20.93	3.90	72.19	3125

▼ PHASE 5

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	23.82	1	3.00	0.00	3.00	-	-	3.00	3.00	1250	0								
0.500	23.05	2	4.33	1.43	2.90	24.06	22.48	3.07	5.04	1250	0								
1.000	22.27	2	4.50	1.69	2.81	23.37	20.21	3.13	7.07	1250	0								
1.500	21.50	2	4.67	1.96	2.71	22.68	17.95	3.20	9.11	1250	0								
2.000	20.71	2	4.83	2.21	2.62	21.96	15.65	3.26	11.15	1250	0								
2.500	19.89	2	4.97	2.45	2.53	21.20	13.32	3.33	13.19	1250	0								

3.000	19.02	2	5.09	2.65	2.44	20.37	10.91	3.40	15.23	1250	0								
		2	6.36	3.92	2.44	20.37	14.25	3.32	17.09	2250	0								
3.500	18.10	2	6.42	4.07	2.34	19.45	12.37	3.37	19.32	2250	0								
4.000	17.13	2	6.38	4.12	2.26	18.45	10.39	3.42	21.56	2250	0								
4.500	16.12	2	6.22	4.05	2.17	17.34	8.31	3.48	23.79	2250	0								
5.000	15.06	2	5.97	3.88	2.08	16.14	6.14	3.53	26.03	2250	0								
		2	5.97	3.88	2.08	16.14	6.14	3.53	26.03	2250	3	0.00	0.00	0.00	-	-	0.00	0.00	2250
5.500	13.93	2	5.67	3.67	2.00	14.86	3.89	3.59	28.27	2250	1	0.11	0.11	0.00	14.12	14.86	0.11	1.76	2250
6.000	12.75	2	5.36	3.44	1.92	13.51	1.57	3.65	30.51	2250	2	1.82	1.82	0.00	12.03	13.51	0.21	3.53	2250
		2	5.86	3.94	1.92	13.51	3.83	3.58	32.61	3000	2	1.51	1.51	0.00	12.31	13.51	0.20	3.79	3000
6.500	11.52	2	5.43	3.59	1.84	12.12	1.70	3.63	34.89	3000	2	3.75	3.75	0.00	10.37	12.12	0.30	5.55	3000
7.000	10.26	2	5.04	3.28	1.76	10.72	-0.45	3.68	37.18	3000	2	5.95	5.95	0.00	8.41	10.72	0.40	7.31	3000
7.500	9.00	2	4.71	3.02	1.69	9.33	-2.58	3.73	39.47	3000	2	8.10	8.10	0.00	6.47	9.33	0.49	9.08	3000
8.000	7.77	2	4.44	2.83	1.61	7.99	-4.67	3.79	41.76	3000	2	10.19	10.19	0.00	4.57	7.99	0.59	10.84	3000
8.500	6.60	2	4.24	2.69	1.55	6.73	-6.67	3.84	44.05	3000	2	12.21	12.21	0.00	2.76	6.73	0.68	12.61	3000
9.000	5.51	2	4.09	2.61	1.48	5.57	-8.58	3.90	46.35	3000	2	14.18	14.18	0.00	1.04	5.57	0.78	14.37	3000
		2	4.03	2.56	1.48	5.57	-6.68	3.80	49.75	3750	2	15.22	15.22	0.00	1.64	5.57	0.74	15.46	3750
9.500	4.52	2	3.91	2.49	1.41	4.53	-8.41	3.86	52.37	3750	2	17.45	17.45	0.00	0.09	4.53	0.84	17.49	3750
10.000	3.65	1	3.93	2.58	1.35	3.62	-9.99	3.93	54.99	3750	2	15.34	15.34	0.00	-0.19	4.77	0.94	19.53	3750
10.500	2.91	1	4.00	2.71	1.29	2.86	-11.44	4.00	57.61	3750	2	12.73	12.73	0.00	-0.21	5.26	1.04	21.57	3750
11.000	2.29	1	4.07	2.84	1.23	2.23	-12.75	4.07	60.23	3750	2	10.59	10.59	0.00	-0.23	5.76	1.14	23.60	3750
11.500	1.79	1	4.14	2.97	1.18	1.73	-13.93	4.14	62.86	3750	2	8.90	8.90	0.00	-0.25	6.26	1.23	25.64	3750
12.000	1.40	1	4.22	3.10	1.13	1.34	-15.00	4.22	65.49	3750	2	7.61	7.61	0.00	-0.27	6.76	1.33	27.68	3750
		1	4.09	2.97	1.13	1.34	-13.43	4.09	70.53	4500	2	8.59	8.59	0.00	-0.22	6.13	1.28	29.84	4500
12.500	1.11	1	4.17	3.10	1.07	1.05	-14.37	4.17	73.52	4500	2	7.44	7.44	0.00	-0.24	6.61	1.38	32.19	4500
13.000	0.90	1	4.26	3.23	1.03	0.84	-15.22	4.26	76.52	4500	2	6.67	6.67	0.00	-0.26	7.09	1.48	34.54	4500
13.500	0.76	1	4.34	3.36	0.98	0.71	-16.00	4.34	79.51	4500	2	6.21	6.21	0.00	-0.27	7.57	1.58	36.88	4500
14.000	0.67	1	4.43	3.49	0.94	0.63	-16.72	4.43	82.51	4500	2	6.00	6.00	0.00	-0.29	8.05	1.68	39.23	4500
		2	4.99	4.06	0.94	0.79	-19.78	4.57	76.58	3500	2	5.43	5.43	0.00	-0.38	9.51	1.75	36.38	3500
14.500	0.63	2	5.33	4.44	0.89	0.82	-20.48	4.66	79.22	3500	2	5.44	5.44	0.00	-0.40	10.05	1.85	38.41	3500
15.000	0.61	2	5.57	4.72	0.85	0.85	-21.19	4.75	81.86	3500	2	5.57	5.57	0.00	-0.42	10.58	1.95	40.45	3500
15.500	0.62	2	5.74	4.93	0.82	0.87	-21.89	4.84	84.51	3500	2	5.76	5.76	0.00	-0.44	11.11	2.04	42.49	3500
16.000	0.63	2	5.87	5.09	0.78	0.90	-22.59	4.93	87.15	3500	2	5.99	5.99	0.00	-0.47	11.64	2.14	44.52	3500
16.500	0.66	2	5.98	5.24	0.75	0.93	-23.29	5.03	89.80	3500	2	6.25	6.25	0.00	-0.49	12.18	2.24	46.56	3500
17.000	0.68	2	6.09	5.37	0.71	0.96	-23.99	5.12	92.45	3500	2	6.51	6.51	0.00	-0.51	12.71	2.34	48.59	3500
17.500	0.71	2	6.20	5.52	0.68	0.99	-24.69	5.22	95.10	3500	2	6.77	6.77	0.00	-0.53	13.24	2.44	50.63	3500
18.000	0.73	2	6.32	5.67	0.65	1.01	-25.39	5.32	97.75	3500	2	7.01	7.01	0.00	-0.55	13.77	2.53	52.67	3500
18.500	0.75	2	6.45	5.83	0.62	1.04	-26.10	5.42	100.41	3500	2	7.25	7.25	0.00	-0.57	14.31	2.63	54.70	3500
19.000	0.76	2	6.60	6.01	0.60	1.07	-26.80	5.52	103.06	3500	2	7.47	7.47	0.00	-0.59	14.84	2.73	56.74	3500
19.500	0.77	2	6.77	6.20	0.57	1.10	-27.50	5.63	105.72	3500	2	7.68	7.68	0.00	-0.61	15.37	2.83	58.78	3500
20.000	0.78	2	6.94	6.40	0.55	1.13	-28.20	5.73	108.37	3500	2	7.88	7.88	0.00	-0.64	15.90	2.93	60.81	3500
20.500	0.79	2	7.12	6.60	0.52	1.15	-28.90	5.84	111.03	3500	2	8.08	8.08	0.00	-0.66	16.44	3.02	62.85	3500
21.000	0.79	2	7.31	6.81	0.50	1.18	-29.60	5.94	113.69	3500	2	8.27	8.27	0.00	-0.68	16.97	3.12	64.89	3500
21.500	0.80	2	7.50	7.02	0.48	1.21	-30.30	6.05	116.35	3500	2	8.45	8.45	0.00	-0.70	17.50	3.22	66.92	3500
22.000	0.80	2	7.69	7.24	0.46	1.24	-31.01	6.16	119.01	3500	2	8.64	8.64	0.00	-0.72	18.03	3.32	68.96	3500
		2	8.31	7.86	0.46	1.41	-31.95	6.42	110.66	3125	2	8.53	8.53	0.00	-0.82	18.58	3.47	64.10	3125
22.500	0.80	2	8.53	8.09	0.44	1.44	-32.71	6.54	113.27	3125	2	8.73	8.73	0.00	-0.84	19.17	3.58	66.12	3125
23.000	0.81	2	8.75	8.32	0.42	1.47	-33.47	6.66	115.87	3125	2	8.93	8.93	0.00	-0.87	19.76	3.68	68.14	3125
23.500	0.81	2	8.96	8.56	0.40	1.51	-34.23	6.79	118.47	3125	2	9.13	9.13	0.00	-0.90	20.34	3.79	70.17	3125
24.000	0.82	2	9.18	8.80	0.39	1.54	-34.99	6.91	121.08	3125	2	9.33	9.33	0.00	-0.92	20.93	3.90	72.19	3125

▼ PHASE 6

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	20.54	1	3.00	0.00	3.00	-	-	3.00	3.00	1250	0								

計畫名稱：

主　　題：XDO 開挖擋土分析設計

0.500	20.97	3	5.21	2.31	2.90	24.07	22.36	3.08	5.21	1250	0								
1.000	21.41	2	5.63	2.82	2.81	23.38	19.97	3.16	7.43	1250	0								
1.500	21.84	2	4.31	1.59	2.71	22.70	17.58	3.24	9.64	1250	0								
2.000	22.27	1	3.32	0.70	2.62	21.99	15.16	3.32	11.85	1250	0								
2.500	22.67	1	3.40	0.87	2.53	21.24	12.70	3.40	14.07	1250	0								
3.000	23.03	1	3.48	1.05	2.44	20.41	10.17	3.48	16.29	1250	0								
		1	3.40	0.96	2.44	20.39	13.77	3.40	18.30	2250	0								
3.500	23.36	1	3.46	1.11	2.34	19.48	11.80	3.46	20.73	2250	0								
4.000	23.64	1	3.52	1.27	2.26	18.48	9.75	3.52	23.17	2250	0								
4.500	23.88	1	3.59	1.42	2.17	17.37	7.59	3.59	25.60	2250	0								
5.000	24.04	1	3.65	1.57	2.08	16.18	5.34	3.65	28.04	2250	0								
5.500	24.08	1	3.72	1.72	2.00	14.90	3.01	3.72	30.48	2250	0								
6.000	23.97	1	3.79	1.88	1.92	13.55	0.61	3.79	32.92	2250	0								
		1	3.72	1.80	1.92	13.54	3.05	3.72	35.20	3000	0								
6.500	23.67	1	3.78	1.94	1.84	12.16	0.85	3.78	37.70	3000	0								
7.000	23.18	1	3.84	2.08	1.76	10.76	-1.36	3.84	40.20	3000	0								
7.500	22.47	1	3.90	2.22	1.69	9.37	-3.56	3.90	42.71	3000	0								
8.000	21.57	1	3.97	2.36	1.61	8.04	-5.71	3.97	45.22	3000	0								
		1	3.97	2.36	1.61	8.04	-5.71	3.97	45.22	3000	3	0.00	0.00	0.00	-	-	0.00	0.00	3000
8.500	20.46	1	4.04	2.50	1.55	6.78	-7.78	4.04	47.73	3000	3	1.55	1.55	0.00	6.11	6.60	0.08	1.55	3000
9.000	19.18	1	4.11	2.64	1.48	5.62	-9.75	4.11	50.24	3000	3	3.10	3.10	0.00	4.53	5.51	0.17	3.10	3000
		1	4.00	2.52	1.48	5.61	-7.71	4.00	53.93	3750	3	3.33	3.33	0.00	4.66	5.51	0.16	3.33	3750
9.500	17.74	1	4.08	2.66	1.41	4.57	-9.48	4.08	56.78	3750	3	5.13	5.13	0.00	3.21	4.52	0.25	5.13	3750
10.000	16.20	1	4.15	2.80	1.35	3.67	-11.12	4.15	59.64	3750	3	6.94	6.94	0.00	1.89	3.65	0.33	6.94	3750
10.500	14.58	1	4.23	2.94	1.29	2.91	-12.63	4.23	62.49	3750	3	8.74	8.74	0.00	0.69	2.91	0.42	8.74	3750
11.000	12.92	1	4.32	3.08	1.23	2.29	-13.98	4.32	65.35	3750	3	10.55	10.55	0.00	-0.10	2.57	0.51	10.55	3750
11.500	11.27	1	4.40	3.22	1.18	1.79	-15.22	4.40	68.21	3750	3	12.35	12.35	0.00	-0.12	3.01	0.59	12.35	3750
12.000	9.68	1	4.49	3.36	1.13	1.40	-16.35	4.49	71.07	3750	3	14.16	14.16	0.00	-0.14	3.46	0.68	14.16	3750
		1	4.35	3.23	1.13	1.40	-14.64	4.35	76.55	4500	3	15.26	15.26	0.00	-0.11	3.13	0.65	15.26	4500
12.500	8.18	1	4.44	3.37	1.07	1.11	-15.63	4.44	79.79	4500	3	17.36	17.36	0.00	-0.13	3.56	0.74	17.36	4500
13.000	6.79	1	4.53	3.51	1.03	0.90	-16.55	4.53	83.03	4500	3	19.45	19.45	0.00	-0.14	3.99	0.83	19.45	4500
13.500	5.56	1	4.63	3.65	0.98	0.76	-17.39	4.63	86.28	4500	3	21.55	21.55	0.00	-0.16	4.42	0.92	21.55	4500
14.000	4.50	1	4.73	3.79	0.94	0.68	-18.16	4.73	89.53	4500	2	22.03	22.03	0.00	-0.17	4.86	1.01	23.64	4500
		1	4.89	3.95	0.94	0.86	-21.49	4.89	83.09	3500	2	17.59	17.59	0.00	-0.23	5.73	1.05	21.93	3500
14.500	3.60	1	4.99	4.09	0.89	0.89	-22.25	4.99	85.96	3500	2	14.60	14.60	0.00	-0.25	6.21	1.14	23.73	3500
15.000	2.86	1	5.09	4.23	0.85	0.92	-23.01	5.09	88.84	3500	2	12.17	12.17	0.00	-0.27	6.68	1.23	25.53	3500
15.500	2.27	1	5.19	4.37	0.82	0.95	-23.77	5.19	91.71	3500	2	10.26	10.26	0.00	-0.29	7.15	1.32	27.34	3500
16.000	1.82	1	5.29	4.51	0.78	0.98	-24.53	5.29	94.59	3500	2	8.82	8.82	0.00	-0.30	7.62	1.40	29.14	3500
16.500	1.47	1	5.40	4.65	0.75	1.01	-25.30	5.40	97.47	3500	2	7.78	7.78	0.00	-0.32	8.09	1.49	30.95	3500
17.000	1.23	1	5.50	4.79	0.71	1.04	-26.06	5.50	100.35	3500	2	7.08	7.08	0.00	-0.34	8.57	1.58	32.75	3500
17.500	1.07	2	5.63	4.95	0.68	1.07	-26.82	5.61	103.24	3500	2	6.66	6.66	0.00	-0.36	9.04	1.66	34.56	3500
18.000	0.97	2	6.20	5.55	0.65	1.10	-27.58	5.72	106.12	3500	2	6.46	6.46	0.00	-0.38	9.51	1.75	36.36	3500
18.500	0.91	2	6.60	5.98	0.62	1.13	-28.34	5.84	109.01	3500	2	6.43	6.43	0.00	-0.40	9.98	1.84	38.16	3500
19.000	0.90	2	6.88	6.28	0.60	1.16	-29.11	5.95	111.89	3500	2	6.53	6.53	0.00	-0.42	10.45	1.92	39.97	3500
19.500	0.91	2	7.07	6.50	0.57	1.19	-29.87	6.06	114.78	3500	2	6.71	6.71	0.00	-0.44	10.92	2.01	41.77	3500
20.000	0.93	2	7.20	6.65	0.55	1.22	-30.63	6.18	117.67	3500	2	6.95	6.95	0.00	-0.46	11.40	2.10	43.58	3500
20.500	0.97	2	7.30	6.77	0.52	1.25	-31.39	6.30	120.56	3500	2	7.23	7.23	0.00	-0.47	11.87	2.18	45.38	3500
21.000	1.01	2	7.37	6.87	0.50	1.28	-32.16	6.41	123.45	3500	2	7.54	7.54	0.00	-0.49	12.34	2.27	47.18	3500
21.500	1.06	2	7.43	6.95	0.48	1.32	-32.92	6.53	126.35	3500	2	7.85	7.85	0.00	-0.51	12.81	2.36	48.99	3500
22.000	1.11	2	7.49	7.03	0.46	1.35	-33.68	6.65	129.24	3500	2	8.17	8.17	0.00	-0.53	13.28	2.44	50.79	3500
		2	8.25	7.79	0.46	1.53	-34.71	6.93	120.17	3125	2	7.90	7.90	0.00	-0.60	13.69	2.55	47.21	3125
22.500	1.16	2	8.35	7.91	0.44	1.57	-35.53	7.07	122.99	3125	2	8.22	8.22	0.00	-0.63	14.21	2.65	49.02	3125
23.000	1.20	2	8.45	8.03	0.42	1.60	-36.35	7.20	125.81	3125	2	8.54	8.54	0.00	-0.65	14.74	2.75	50.83	3125
23.500	1.25	2	8.55	8.14	0.40	1.64	-37.18	7.34	128.63	3125	2	8.86	8.86	0.00	-0.67	15.26	2.85	52.63	3125
24.000	1.30	2	8.65	8.26	0.39	1.67	-38.00	7.47	131.45	3125	2	9.17	9.17	0.00	-0.70	15.78	2.94	54.44	3125

計畫名稱：

主　　題：XDO 開挖擋土分析設計

▼ PHASE 7

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	20.83	1	3.00	0.00	3.00	-	-	3.00	3.00	1250	0								
0.500	21.15	2	4.99	2.09	2.90	22.68	20.97	3.08	5.21	1250	0								
1.000	21.48	2	5.54	2.73	2.81	23.38	19.97	3.16	7.43	1250	0								
1.500	21.80	2	4.36	1.64	2.71	22.70	17.58	3.24	9.64	1250	0								
2.000	22.12	2	3.50	0.88	2.62	22.27	15.44	3.32	11.85	1250	0								
2.500	22.41	2	3.72	1.19	2.53	22.67	14.13	3.40	14.07	1250	0								
3.000	22.66	2	3.94	1.51	2.44	23.03	12.79	3.48	16.29	1250	0								
		2	4.22	1.79	2.44	23.03	16.41	3.40	18.30	2250	0								
3.500	22.88	2	4.54	2.19	2.34	23.36	15.68	3.46	20.73	2250	0								
4.000	23.05	2	4.86	2.60	2.26	23.64	14.91	3.52	23.17	2250	0								
4.500	23.18	2	5.17	3.01	2.17	23.88	14.10	3.59	25.60	2250	0								
5.000	23.23	2	5.48	3.39	2.08	24.04	13.21	3.65	28.04	2250	0								
5.500	23.18	2	5.75	3.75	2.00	24.08	12.19	3.72	30.48	2250	0								
6.000	23.00	2	5.98	4.07	1.92	23.97	11.02	3.79	32.92	2250	0								
		2	6.64	4.72	1.92	23.97	13.47	3.72	35.20	3000	0								
6.500	22.66	2	6.81	4.97	1.84	23.67	12.36	3.78	37.70	3000	0								
7.000	22.17	2	6.86	5.10	1.76	23.18	11.06	3.84	40.20	3000	0								
7.500	21.53	2	6.74	5.06	1.69	22.47	9.54	3.90	42.71	3000	0								
8.000	20.72	2	6.51	4.89	1.61	21.57	7.82	3.97	45.22	3000	0								
		2	6.51	4.89	1.61	21.57	7.82	3.97	45.22	3000	3	0.00	0.00	0.00	-	-	0.00	0.00	3000
8.500	19.74	2	6.21	4.66	1.55	20.46	5.90	4.04	47.73	3000	1	0.08	0.08	0.00	19.97	20.46	0.08	1.55	3000
9.000	18.59	2	5.88	4.40	1.48	19.18	3.80	4.11	50.24	3000	2	1.33	1.33	0.00	18.20	19.18	0.17	3.10	3000
		2	6.21	4.73	1.48	19.18	5.86	4.00	53.93	3750	2	1.12	1.12	0.00	18.33	19.18	0.16	3.33	3750
9.500	17.28	2	5.80	4.39	1.41	17.74	3.69	4.08	56.78	3750	2	3.41	3.41	0.00	16.44	17.74	0.25	5.13	3750
10.000	15.86	2	5.43	4.08	1.35	16.20	1.40	4.15	59.64	3750	2	5.66	5.66	0.00	14.44	16.20	0.33	6.94	3750
10.500	14.34	2	5.13	3.84	1.29	14.58	-0.96	4.23	62.49	3750	2	7.85	7.85	0.00	12.36	14.58	0.42	8.74	3750
11.000	12.77	2	4.88	3.65	1.23	12.92	-3.35	4.32	65.35	3750	2	9.98	9.98	0.00	10.24	12.92	0.51	10.55	3750
11.500	11.19	2	4.71	3.53	1.18	11.27	-5.74	4.40	68.21	3750	2	12.05	12.05	0.00	8.14	11.27	0.59	12.35	3750
12.000	9.65	2	4.59	3.46	1.13	9.68	-8.07	4.49	71.07	3750	2	14.06	14.06	0.00	6.09	9.68	0.68	14.16	3750
		2	4.47	3.34	1.13	9.68	-6.36	4.35	76.55	4500	2	15.15	15.15	0.00	6.43	9.68	0.65	15.26	4500
12.500	8.19	1	4.44	3.37	1.07	8.18	-8.57	4.44	79.79	4500	3	17.36	17.36	0.00	4.48	8.18	0.74	17.36	4500
13.000	6.84	1	4.53	3.51	1.03	6.79	-10.65	4.53	83.03	4500	3	19.45	19.45	0.00	2.66	6.79	0.83	19.45	4500
13.500	5.62	1	4.63	3.65	0.98	5.56	-12.58	4.63	86.28	4500	3	21.55	21.55	0.00	0.98	5.56	0.92	21.55	4500
14.000	4.57	1	4.73	3.79	0.94	4.50	-14.35	4.73	89.53	4500	2	22.34	22.34	0.00	-0.17	4.86	1.01	23.64	4500
		1	4.89	3.95	0.94	4.50	-17.85	4.89	83.09	3500	2	17.84	17.84	0.00	-0.23	5.73	1.05	21.93	3500
14.500	3.67	1	4.99	4.09	0.89	3.60	-19.54	4.99	85.96	3500	2	14.85	14.85	0.00	-0.25	6.21	1.14	23.73	3500
15.000	2.93	1	5.09	4.23	0.85	2.86	-21.07	5.09	88.84	3500	2	12.42	12.42	0.00	-0.27	6.68	1.23	25.53	3500
15.500	2.34	1	5.19	4.37	0.82	2.27	-22.45	5.19	91.71	3500	2	10.50	10.50	0.00	-0.29	7.15	1.32	27.34	3500
16.000	1.87	1	5.29	4.51	0.78	1.82	-23.70	5.29	94.59	3500	2	9.03	9.03	0.00	-0.30	7.62	1.40	29.14	3500
16.500	1.53	1	5.40	4.65	0.75	1.47	-24.83	5.40	97.47	3500	2	7.96	7.96	0.00	-0.32	8.09	1.49	30.95	3500
17.000	1.27	1	5.50	4.79	0.71	1.23	-25.87	5.50	100.35	3500	2	7.23	7.23	0.00	-0.34	8.57	1.58	32.75	3500
17.500	1.10	1	5.61	4.93	0.68	1.07	-26.82	5.61	103.24	3500	2	6.78	6.78	0.00	-0.36	9.04	1.66	34.56	3500
18.000	0.99	2	6.11	5.46	0.65	1.10	-27.58	5.72	106.12	3500	2	6.55	6.55	0.00	-0.38	9.51	1.75	36.36	3500
18.500	0.93	2	6.53	5.91	0.62	1.13	-28.34	5.84	109.01	3500	2	6.50	6.50	0.00	-0.40	9.98	1.84	38.16	3500
19.000	0.91	2	6.83	6.24	0.60	1.16	-29.11	5.95	111.89	3500	2	6.57	6.57	0.00	-0.42	10.45	1.92	39.97	3500
19.500	0.91	2	7.04	6.47	0.57	1.19	-29.87	6.06	114.78	3500	2	6.74	6.74	0.00	-0.44	10.92	2.01	41.77	3500
20.000	0.94	2	7.19	6.64	0.55	1.22	-30.63	6.18	117.67	3500	2	6.97	6.97	0.00	-0.46	11.40	2.10	43.58	3500
20.500	0.97	2	7.29	6.77	0.52	1.25	-31.39	6.30	120.56	3500	2	7.24	7.24	0.00	-0.47	11.87	2.18	45.38	3500
21.000	1.01	2	7.37	6.87	0.50	1.28	-32.16	6.41	123.45	3500	2	7.53	7.53	0.00	-0.49	12.34	2.27	47.18	3500
21.500	1.06	2	7.44	6.96	0.48	1.32	-32.92	6.53	126.35	3500	2	7.84	7.84	0.00	-0.51	12.81	2.36	48.99	3500
22.000	1.10	2	7.50	7.04	0.46	1.35	-33.68	6.65	129.24	3500	2	8.16	8.16	0.00	-0.53	13.28	2.44	50.79	3500
		2	8.26	7.81	0.46	1.53	-34.71	6.93	120.17	3125	2	7.88	7.88	0.00	-0.60	13.69	2.55	47.21	3125

22.500	1.15	2	8.36	7.92	0.44	1.57	-35.53	7.07	122.99	3125	2	8.20	8.20	0.00	-0.63	14.21	2.65	49.02	3125
23.000	1.20	2	8.46	8.04	0.42	1.60	-36.35	7.20	125.81	3125	2	8.52	8.52	0.00	-0.65	14.74	2.75	50.83	3125
23.500	1.25	2	8.57	8.16	0.40	1.64	-37.18	7.34	128.63	3125	2	8.84	8.84	0.00	-0.67	15.26	2.85	52.63	3125
24.000	1.29	2	8.67	8.28	0.39	1.67	-38.00	7.47	131.45	3125	2	9.15	9.15	0.00	-0.70	15.78	2.94	54.44	3125

▼ PHASE 8

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	16.17	1	3.00	0.00	3.00	-	-	3.00	3.00	1250	0								
0.500	17.28	3	5.42	2.51	2.90	22.69	20.83	3.09	5.42	1250	0								
1.000	18.40	3	7.84	5.03	2.81	23.40	19.68	3.19	7.84	1250	0								
1.500	19.53	2	7.28	4.57	2.71	22.72	17.15	3.28	10.25	1250	0								
2.000	20.65	2	5.44	2.82	2.62	22.30	14.87	3.38	12.67	1250	0								
2.500	21.77	2	4.65	2.12	2.53	22.71	13.42	3.48	15.09	1250	0								
3.000	22.90	2	3.80	1.36	2.44	23.08	11.93	3.57	17.51	1250	0								
		2	3.84	1.40	2.44	23.06	15.85	3.48	19.70	2250	0								
3.500	24.04	1	3.56	1.21	2.34	23.39	15.03	3.56	22.37	2250	0								
4.000	25.22	1	3.64	1.38	2.26	23.68	14.16	3.64	25.04	2250	0								
4.500	26.44	1	3.71	1.55	2.17	23.92	13.26	3.71	27.71	2250	0								
5.000	27.67	1	3.80	1.71	2.08	24.09	12.27	3.80	30.38	2250	0								
5.500	28.89	1	3.88	1.88	2.00	24.13	11.17	3.88	33.06	2250	0								
6.000	30.07	1	3.96	2.05	1.92	24.02	9.90	3.96	35.74	2250	0								
		1	3.88	1.96	1.92	24.01	12.56	3.88	38.22	3000	0								
6.500	31.20	1	3.95	2.12	1.84	23.72	11.38	3.95	40.97	3000	0								
7.000	32.26	1	4.03	2.27	1.76	23.22	9.99	4.03	43.73	3000	0								
7.500	33.25	1	4.11	2.42	1.69	22.52	8.40	4.11	46.48	3000	0								
8.000	34.11	1	4.19	2.58	1.61	21.62	6.60	4.19	49.24	3000	0								
8.500	34.78	1	4.27	2.73	1.55	20.52	4.61	4.27	52.00	3000	0								
9.000	35.21	1	4.36	2.88	1.48	19.24	2.43	4.36	54.77	3000	0								
		1	4.24	2.76	1.48	19.22	4.67	4.24	58.81	3750	0								
9.500	35.38	1	4.32	2.91	1.41	17.79	2.43	4.32	61.93	3750	0								
10.000	35.25	1	4.41	3.06	1.35	16.25	0.08	4.41	65.05	3750	0								
10.500	34.80	1	4.51	3.22	1.29	14.63	-2.35	4.51	68.17	3750	0								
11.000	34.04	1	4.60	3.37	1.23	12.98	-4.81	4.60	71.30	3750	0								
		1	4.60	3.37	1.23	12.98	-4.81	4.60	71.30	3750	3	0.00	0.00	0.00	-	-	0.00	0.00	3750
11.500	32.97	1	4.70	3.52	1.18	11.33	-7.26	4.70	74.43	3750	3	1.54	1.54	0.00	10.80	11.19	0.07	1.54	3750
12.000	31.60	1	4.80	3.68	1.13	9.74	-9.66	4.80	77.56	3750	3	3.07	3.07	0.00	8.87	9.65	0.15	3.07	3750
		1	4.65	3.53	1.13	9.73	-7.80	4.65	83.55	4500	3	3.31	3.31	0.00	8.95	9.65	0.14	3.31	4500
12.500	29.96	1	4.75	3.68	1.07	8.23	-10.07	4.75	87.09	4500	3	5.12	5.12	0.00	7.10	8.19	0.22	5.12	4500
13.000	28.10	1	4.86	3.83	1.03	6.85	-12.21	4.86	90.62	4500	3	6.92	6.92	0.00	5.36	6.84	0.30	6.92	4500
13.500	26.05	1	4.97	3.99	0.98	5.62	-14.20	4.97	94.16	4500	3	8.73	8.73	0.00	3.77	5.62	0.37	8.73	4500
14.000	23.86	1	5.07	4.14	0.94	4.57	-16.02	5.07	97.70	4500	3	10.53	10.53	0.00	2.33	4.57	0.45	10.53	4500
		1	5.25	4.32	0.94	4.58	-19.83	5.25	90.67	3500	3	9.77	9.77	0.00	1.91	4.57	0.47	9.77	3500
14.500	21.58	1	5.36	4.47	0.89	3.68	-21.59	5.36	93.81	3500	3	11.30	11.30	0.00	0.60	3.67	0.54	11.30	3500
15.000	19.27	1	5.48	4.62	0.85	2.94	-23.19	5.48	96.96	3500	3	12.84	12.84	0.00	-0.13	3.36	0.62	12.84	3500
15.500	16.96	1	5.59	4.78	0.82	2.36	-24.64	5.59	100.10	3500	3	14.37	14.37	0.00	-0.15	3.76	0.69	14.37	3500
16.000	14.72	1	5.71	4.93	0.78	1.91	-25.96	5.71	103.25	3500	3	15.91	15.91	0.00	-0.17	4.16	0.77	15.91	3500
16.500	12.58	1	5.83	5.08	0.75	1.57	-27.17	5.83	106.40	3500	3	17.44	17.44	0.00	-0.18	4.56	0.84	17.44	3500
17.000	10.59	1	5.95	5.24	0.71	1.33	-28.27	5.95	109.55	3500	3	18.98	18.98	0.00	-0.20	4.96	0.91	18.98	3500
17.500	8.78	1	6.07	5.39	0.68	1.17	-29.30	6.07	112.71	3500	3	20.51	20.51	0.00	-0.21	5.36	0.99	20.51	3500
18.000	7.16	1	6.19	5.54	0.65	1.20	-30.13	6.19	115.86	3500	3	22.05	22.05	0.00	-0.23	5.77	1.06	22.05	3500
18.500	5.76	1	6.32	5.69	0.62	1.24	-30.96	6.32	119.02	3500	2	22.16	22.16	0.00	-0.25	6.17	1.13	23.58	3500
19.000	4.58	1	6.44	5.85	0.60	1.27	-31.80	6.44	122.18	3500	2	18.15	18.15	0.00	-0.26	6.57	1.21	25.12	3500
19.500	3.60	1	6.57	6.00	0.57	1.30	-32.63	6.57	125.34	3500	2	14.87	14.87	0.00	-0.28	6.97	1.28	26.65	3500
20.000	2.82	1	6.70	6.15	0.55	1.34	-33.46	6.70	128.50	3500	2	12.25	12.25	0.00	-0.29	7.37	1.36	28.19	3500

20.500	2.20	1	6.83	6.31	0.52	1.37	-34.29	6.83	131.66	3500	2	10.22	10.22	0.00	-0.31	7.77	1.43	29.72	3500
21.000	1.72	1	6.96	6.46	0.50	1.40	-35.13	6.96	134.82	3500	2	8.67	8.67	0.00	-0.33	8.17	1.50	31.26	3500
21.500	1.35	2	7.39	6.92	0.48	1.44	-35.96	7.09	137.98	3500	2	7.50	7.50	0.00	-0.34	8.58	1.58	32.79	3500
22.000	1.06	2	8.65	8.19	0.46	1.47	-36.79	7.23	141.15	3500	2	6.63	6.63	0.00	-0.36	8.98	1.65	34.33	3500
		2	9.43	8.97	0.46	1.67	-37.92	7.53	131.24	3125	2	6.33	6.33	0.00	-0.41	9.25	1.73	31.91	3125
22.500	0.83	2	10.41	9.97	0.44	1.71	-38.81	7.68	134.31	3125	2	5.75	5.75	0.00	-0.43	9.70	1.81	33.46	3125
23.000	0.64	2	11.30	10.88	0.42	1.75	-39.71	7.83	137.38	3125	2	5.29	5.29	0.00	-0.45	10.15	1.89	35.02	3125
23.500	0.46	2	12.14	11.73	0.40	1.79	-40.60	7.98	140.45	3125	2	4.87	4.87	0.00	-0.47	10.60	1.98	36.58	3125
24.000	0.28	2	12.96	12.57	0.39	1.83	-41.50	8.13	143.53	3125	2	4.47	4.47	0.00	-0.49	11.06	2.06	38.13	3125

▼ PHASE 9

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	16.54	1	3.00	0.00	3.00	-	-	3.00	3.00	1250	0								
0.500	17.60	2	5.02	2.12	2.90	19.14	17.28	3.09	5.42	1250	0								
1.000	18.67	2	7.50	4.69	2.81	22.12	18.40	3.19	7.84	1250	0								
1.500	19.74	2	7.01	4.29	2.71	22.72	17.15	3.28	10.25	1250	0								
2.000	20.82	2	5.24	2.61	2.62	22.30	14.87	3.38	12.67	1250	0								
2.500	21.88	2	4.51	1.98	2.53	22.71	13.42	3.48	15.09	1250	0								
3.000	22.95	2	3.74	1.30	2.44	23.08	11.93	3.57	17.51	1250	0								
		2	3.73	1.29	2.44	23.06	15.85	3.48	19.70	2250	0								
3.500	24.02	2	3.60	1.26	2.34	24.04	15.68	3.56	22.37	2250	0								
4.000	25.12	2	3.86	1.60	2.26	25.22	15.70	3.64	25.04	2250	0								
4.500	26.25	2	4.14	1.97	2.17	26.44	15.77	3.71	27.71	2250	0								
5.000	27.38	2	4.45	2.37	2.08	27.67	15.85	3.80	30.38	2250	0								
5.500	28.48	2	4.80	2.80	2.00	28.89	15.92	3.88	33.06	2250	0								
6.000	29.53	2	5.18	3.27	1.92	30.07	15.95	3.96	35.74	2250	0								
		2	5.51	3.59	1.92	30.07	18.63	3.88	38.22	3000	0								
6.500	30.51	2	6.02	4.18	1.84	31.20	18.86	3.95	40.97	3000	0								
7.000	31.42	2	6.57	4.81	1.76	32.26	19.03	4.03	43.73	3000	0								
7.500	32.24	2	7.15	5.47	1.69	33.25	19.13	4.11	46.48	3000	0								
8.000	32.93	2	7.73	6.12	1.61	34.11	19.09	4.19	49.24	3000	0								
8.500	33.44	2	8.27	6.73	1.55	34.78	18.87	4.27	52.00	3000	0								
9.000	33.76	2	8.73	7.26	1.48	35.21	18.41	4.36	54.77	3000	0								
		2	9.70	8.22	1.48	35.21	20.66	4.24	58.81	3750	0								
9.500	33.85	2	10.07	8.66	1.41	35.38	20.02	4.32	61.93	3750	0								
10.000	33.71	2	10.18	8.83	1.35	35.25	19.08	4.41	65.05	3750	0								
10.500	33.36	2	9.94	8.65	1.29	34.80	17.83	4.51	68.17	3750	0								
11.000	32.75	2	9.45	8.21	1.23	34.04	16.26	4.60	71.30	3750	0								
		2	9.45	8.21	1.23	34.04	16.26	4.60	71.30	3750	3	0.00	0.00	0.00	-	-	0.00	0.00	3750
11.500	31.87	2	8.81	7.63	1.18	32.97	14.37	4.70	74.43	3750	1	0.07	0.07	0.00	32.58	32.97	0.07	1.54	3750
12.000	30.71	2	8.12	7.00	1.13	31.60	12.19	4.80	77.56	3750	1	0.15	0.15	0.00	30.82	31.60	0.15	3.07	3750
		2	8.64	7.51	1.13	31.60	14.06	4.65	83.55	4500	1	0.14	0.14	0.00	30.89	31.60	0.14	3.31	4500
12.500	29.28	2	7.81	6.74	1.07	29.96	11.67	4.75	87.09	4500	2	2.06	2.06	0.00	28.87	29.96	0.22	5.12	4500
13.000	27.61	2	7.07	6.04	1.03	28.10	9.04	4.86	90.62	4500	2	4.71	4.71	0.00	26.63	28.10	0.30	6.92	4500
13.500	25.72	2	6.43	5.45	0.98	26.05	6.23	4.97	94.16	4500	2	7.26	7.26	0.00	24.19	26.05	0.37	8.73	4500
14.000	23.67	2	5.92	4.98	0.94	23.86	3.28	5.07	97.70	4500	2	9.69	9.69	0.00	21.62	23.86	0.45	10.53	4500
		2	5.91	4.97	0.94	23.86	-0.54	5.25	90.67	3500	2	9.11	9.11	0.00	21.20	23.86	0.47	9.77	3500
14.500	21.51	2	5.62	4.73	0.89	21.58	-3.69	5.36	93.81	3500	2	11.04	11.04	0.00	18.51	21.58	0.54	11.30	3500
15.000	19.28	1	5.48	4.62	0.85	19.27	-6.87	5.48	96.96	3500	3	12.84	12.84	0.00	15.78	19.27	0.62	12.84	3500
15.500	17.05	1	5.59	4.78	0.82	16.96	-10.04	5.59	100.10	3500	3	14.37	14.37	0.00	13.06	16.96	0.69	14.37	3500
16.000	14.85	1	5.71	4.93	0.78	14.72	-13.15	5.71	103.25	3500	3	15.91	15.91	0.00	10.40	14.72	0.77	15.91	3500
16.500	12.74	1	5.83	5.08	0.75	12.58	-16.15	5.83	106.40	3500	3	17.44	17.44	0.00	7.84	12.58	0.84	17.44	3500
17.000	10.77	1	5.95	5.24	0.71	10.59	-19.01	5.95	109.55	3500	3	18.98	18.98	0.00	5.43	10.59	0.91	18.98	3500
17.500	8.95	1	6.07	5.39	0.68	8.78	-21.69	6.07	112.71	3500	3	20.51	20.51	0.00	3.20	8.78	0.99	20.51	3500

18.000	7.33	1	6.19	5.54	0.65	7.16	-24.17	6.19	115.86	3500	3	22.05	22.05	0.00	1.17	7.16	1.06	22.05	3500
18.500	5.92	1	6.32	5.69	0.62	5.76	-26.44	6.32	119.02	3500	2	22.73	22.73	0.00	-0.25	6.17	1.13	23.58	3500
19.000	4.72	1	6.44	5.85	0.60	4.58	-28.49	6.44	122.18	3500	2	18.66	18.66	0.00	-0.26	6.57	1.21	25.12	3500
19.500	3.73	1	6.57	6.00	0.57	3.60	-30.33	6.57	125.34	3500	2	15.31	15.31	0.00	-0.28	6.97	1.28	26.65	3500
20.000	2.92	1	6.70	6.15	0.55	2.82	-31.98	6.70	128.50	3500	2	12.62	12.62	0.00	-0.29	7.37	1.36	28.19	3500
20.500	2.28	1	6.83	6.31	0.52	2.20	-33.47	6.83	131.66	3500	2	10.51	10.51	0.00	-0.31	7.77	1.43	29.72	3500
21.000	1.78	1	6.96	6.46	0.50	1.72	-34.81	6.96	134.82	3500	2	8.88	8.88	0.00	-0.33	8.17	1.50	31.26	3500
21.500	1.39	2	7.24	6.76	0.48	1.44	-35.96	7.09	137.98	3500	2	7.65	7.65	0.00	-0.34	8.58	1.58	32.79	3500
22.000	1.09	2	8.56	8.10	0.46	1.47	-36.79	7.23	141.15	3500	2	6.72	6.72	0.00	-0.36	8.98	1.65	34.33	3500
		2	9.35	8.89	0.46	1.67	-37.92	7.53	131.24	3125	2	6.40	6.40	0.00	-0.41	9.25	1.73	31.91	3125
22.500	0.84	2	10.39	9.95	0.44	1.71	-38.81	7.68	134.31	3125	2	5.78	5.78	0.00	-0.43	9.70	1.81	33.46	3125
23.000	0.63	2	11.33	10.91	0.42	1.75	-39.71	7.83	137.38	3125	2	5.26	5.26	0.00	-0.45	10.15	1.89	35.02	3125
23.500	0.43	2	12.22	11.81	0.40	1.79	-40.60	7.98	140.45	3125	2	4.79	4.79	0.00	-0.47	10.60	1.98	36.58	3125
24.000	0.24	2	13.09	12.70	0.39	1.83	-41.50	8.13	143.53	3125	2	4.34	4.34	0.00	-0.49	11.06	2.06	38.13	3125

▼ PHASE 10

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	15.12	1	3.00	0.00	3.00	-	-	3.00	3.00	1250	0								
0.500	16.15	3	5.66	2.75	2.90	19.15	17.12	3.11	5.66	1250	0								
1.000	17.19	3	8.31	5.51	2.81	22.14	18.07	3.23	8.31	1250	0								
1.500	18.24	2	8.98	6.26	2.71	22.75	16.65	3.34	10.97	1250	0								
2.000	19.29	2	7.26	4.64	2.62	22.34	14.20	3.45	13.63	1250	0								
2.500	20.35	2	6.57	4.05	2.53	22.76	12.58	3.57	16.29	1250	0								
3.000	21.43	2	5.82	3.38	2.44	23.14	10.93	3.68	18.95	1250	0								
		2	7.31	4.87	2.44	23.09	15.19	3.58	21.35	2250	0								
3.500	22.56	2	7.11	4.76	2.34	24.08	14.92	3.67	24.29	2250	0								
4.000	23.74	2	7.18	4.92	2.26	25.26	14.83	3.77	27.24	2250	0								
4.500	25.03	2	7.14	4.97	2.17	26.48	14.79	3.86	30.18	2250	0								
5.000	26.40	2	6.94	4.86	2.08	27.72	14.76	3.96	33.13	2250	0								
5.500	27.86	2	6.52	4.52	2.00	28.95	14.72	4.06	36.08	2250	0								
6.000	29.40	2	5.83	3.91	1.92	30.14	14.64	4.16	39.03	2250	0								
		2	6.24	4.32	1.92	30.12	17.56	4.07	41.75	3000	0								
6.500	31.04	2	4.81	2.97	1.84	31.25	17.71	4.16	44.80	3000	0								
7.000	32.79	1	4.25	2.49	1.76	32.32	17.79	4.25	47.85	3000	0								
7.500	34.69	1	4.35	2.66	1.69	33.31	17.79	4.35	50.90	3000	0								
8.000	36.70	1	4.44	2.83	1.61	34.17	17.67	4.44	53.95	3000	0								
8.500	38.79	1	4.54	3.00	1.55	34.84	17.36	4.54	57.01	3000	0								
9.000	40.95	1	4.65	3.17	1.48	35.28	16.81	4.65	60.07	3000	0								
		1	4.51	3.03	1.48	35.27	19.27	4.51	64.51	3750	0								
9.500	43.16	1	4.61	3.20	1.41	35.44	18.55	4.61	67.95	3750	0								
10.000	45.43	1	4.72	3.37	1.35	35.31	17.53	4.72	71.39	3750	0								
10.500	47.73	1	4.83	3.54	1.29	34.87	16.20	4.83	74.83	3750	0								
11.000	50.00	1	4.94	3.71	1.23	34.11	14.55	4.94	78.27	3750	0								
11.500	52.12	1	5.05	3.87	1.18	33.04	12.59	5.05	81.72	3750	0								
12.000	54.02	1	5.17	4.04	1.13	31.67	10.34	5.17	85.17	3750	0								
		1	5.00	3.88	1.13	31.66	12.38	5.00	91.75	4500	0								
12.500	55.62	1	5.12	4.04	1.07	30.03	9.91	5.12	95.63	4500	0								
13.000	56.87	1	5.24	4.21	1.03	28.16	7.22	5.24	99.51	4500	0								
13.500	57.71	1	5.36	4.38	0.98	26.12	4.33	5.36	103.39	4500	0								
14.000	58.11	1	5.48	4.55	0.94	23.93	1.31	5.48	107.27	4500	0								
		1	5.68	4.74	0.94	23.95	-2.86	5.68	99.54	3500	3	0.00	0.00	0.00	-	-	0.00	0.00	3500
14.500	58.05	1	5.81	4.91	0.89	21.68	-6.09	5.81	103.00	3500	3	1.22	1.22	0.00	21.18	21.51	0.06	1.22	3500
15.000	57.52	1	5.93	5.08	0.85	19.37	-9.36	5.93	106.46	3500	3	2.43	2.43	0.00	18.62	19.28	0.12	2.43	3500
15.500	56.51	1	6.06	5.25	0.82	17.07	-12.61	6.06	109.93	3500	3	3.65	3.65	0.00	16.05	17.05	0.18	3.65	3500

16.000	55.04	1	6.20	5.42	0.78	14.85	-15.78	6.20	113.39	3500	3	4.86	4.86	0.00	13.53	14.85	0.23	4.86	3500
16.500	53.14	1	6.33	5.59	0.75	12.74	-18.84	6.33	116.86	3500	3	6.08	6.08	0.00	11.09	12.74	0.29	6.08	3500
17.000	50.82	1	6.47	5.75	0.71	10.77	-21.77	6.47	120.33	3500	3	7.29	7.29	0.00	8.78	10.77	0.35	7.29	3500
17.500	48.14	1	6.60	5.92	0.68	8.95	-24.53	6.60	123.80	3500	3	8.51	8.51	0.00	6.64	8.95	0.41	8.51	3500
18.000	45.11	1	6.74	6.09	0.65	7.33	-27.10	6.74	127.27	3500	3	9.73	9.73	0.00	4.69	7.33	0.47	9.73	3500
18.500	41.80	1	6.88	6.26	0.62	5.92	-29.47	6.88	130.74	3500	3	10.94	10.94	0.00	2.95	5.92	0.53	10.94	3500
19.000	38.25	1	7.02	6.43	0.60	4.72	-31.62	7.02	134.22	3500	3	12.16	12.16	0.00	1.42	4.72	0.58	12.16	3500
19.500	34.50	1	7.17	6.60	0.57	3.73	-33.56	7.17	137.69	3500	3	13.37	13.37	0.00	0.09	3.73	0.64	13.37	3500
20.000	30.60	1	7.31	6.76	0.55	2.95	-35.29	7.31	141.17	3500	3	14.59	14.59	0.00	-0.15	3.82	0.70	14.59	3500
20.500	26.58	1	7.45	6.93	0.52	2.34	-36.86	7.45	144.65	3500	3	15.80	15.80	0.00	-0.17	4.13	0.76	15.80	3500
21.000	22.49	1	7.60	7.10	0.50	1.86	-38.29	7.60	148.13	3500	3	17.02	17.02	0.00	-0.18	4.45	0.82	17.02	3500
21.500	18.37	1	7.75	7.27	0.48	1.58	-39.52	7.75	151.61	3500	3	18.24	18.24	0.00	-0.19	4.77	0.88	18.24	3500
22.000	14.23	1	7.90	7.44	0.46	1.62	-40.44	7.90	155.09	3500	3	19.45	19.45	0.00	-0.20	5.09	0.94	19.45	3500
		1	8.23	7.77	0.46	1.84	-41.67	8.23	144.20	3125	3	18.08	18.08	0.00	-0.23	5.24	0.98	18.08	3125
22.500	10.11	1	8.39	7.96	0.44	1.88	-42.65	8.39	147.56	3125	3	19.34	19.34	0.00	-0.25	5.61	1.05	19.34	3125
23.000	5.99	1	8.56	8.14	0.42	1.92	-43.64	8.56	150.93	3125	3	20.60	20.60	0.00	-0.26	5.97	1.11	20.60	3125
23.500	1.90	2	8.94	8.54	0.40	1.97	-44.62	8.73	154.30	3125	2	7.98	7.98	0.00	-0.28	6.34	1.18	21.86	3125
24.000	-2.19	2	22.02	21.63	0.39	2.01	-45.60	8.89	157.66	3125	1	1.25	1.25	0.00	-0.30	6.70	1.25	23.12	3125

XDO 支撐彈簧應力與變位

▼ PHASE 3

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.000	1	5.00	0.00	50.00	7095	9.29	16.33	18.85	16.33	-10.00	-50.00

▼ PHASE 4

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.000	1	5.00	0.00	50.00	7095	9.29	16.33	16.33	23.37	-19.98	-99.90

▼ PHASE 5

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.000	1	5.00	0.00	50.00	7095	9.29	16.33	23.37	22.27	-18.43	-92.13
2	4.000	1	5.00	0.00	100.00	8923	5.93	17.13	18.45	17.13	-20.00	-100.00

▼ PHASE 6

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.000	1	5.00	0.00	50.00	7095	9.29	16.33	22.27	21.41	-17.20	-85.99
2	4.000	1	5.00	0.00	100.00	8923	5.93	17.13	17.13	23.64	-31.62	-158.08

▼ PHASE 7

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.000	1	5.00	0.00	50.00	7095	9.29	16.33	21.41	21.48	-17.30	-86.48
2	4.000	1	5.00	0.00	100.00	8923	5.93	17.13	23.64	23.05	-30.56	-152.78
3	7.000	1	5.00	0.00	100.00	8923	10.96	22.17	23.18	22.17	-20.00	-100.00

▼ PHASE 8

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.000	1	5.00	0.00	50.00	7095	9.29	16.33	21.48	18.40	-12.94	-64.68

2	4.000	1	5.00	0.00	100.00	8923	5.93	17.13	23.05	25.22	-34.43	-172.15
3	7.000	1	5.00	0.00	100.00	8923	10.96	22.17	22.17	32.26	-38.01	-190.06

▼ PHASE 9

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.000	1	5.00	0.00	50.00	7095	9.29	16.33	18.40	18.67	-13.32	-66.58
2	4.000	1	5.00	0.00	100.00	8923	5.93	17.13	25.22	25.12	-34.25	-171.27
3	7.000	1	5.00	0.00	100.00	8923	10.96	22.17	32.26	31.42	-36.50	-182.49
4	10.000	1	5.00	0.00	180.00	12052	18.78	33.71	35.25	33.71	-36.00	-180.00

▼ PHASE 10

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.000	1	5.00	0.00	50.00	7095	9.29	16.33	18.67	17.19	-11.22	-56.10
2	4.000	1	5.00	0.00	100.00	8923	5.93	17.13	25.12	23.74	-31.80	-159.00
3	7.000	1	5.00	0.00	100.00	8923	10.96	22.17	31.42	32.79	-38.96	-194.79
4	10.000	1	5.00	0.00	180.00	12052	18.78	33.71	33.71	45.43	-64.24	-321.20

計畫名稱：
主　　題：XDO 開挖擋土分析設計

XDO 輸入指令

```
XDO *A*
*XDO SaSpCode:Padfield&Mair
*XDO khByDepth:Constant
*XDO KaKp:Coulomb
*XDO khD:N[125]
*XDO khU:Su[250]
*XDO Ana:D_E/U_T
*Retaining Wall Depth & Rigitity
0
24    64256
*Strata Properties
*Z UW UW' Ka Ko Kp c phi Da Dp kh khp Cv
0
3     1.9   0.9   0.317 0.531 4.197 0     28    0.5   0.5   1250  0     0
6     1.85  0.85  0.291 0.5   4.807 0     30    0.5   0.5   2250  0     0
9     1.8   0.8   0.279 0.485 5.16  0     31    0.5   0.5   3000  0     0
12    1.85  0.85  0.267 0.47  5.551 0     32    0.5   0.5   3750  0     0
14    1.9   0.9   0.256 0.455 5.986 0     33    0.5   0.5   4500  0     0
22    1.85  0.85  0.267 0.47  5.551 0     32    0.5   0.5   3500  0     0
24    1.9   0.9   0.279 0.485 5.16  0     31    0.5   0.5   3125  0     0
*XDO SF,D,0,28,,0,10
*XDO SM,D,0,30,,0,18
*XDO SM,D,0,31,,0,24
*XDO SM,D,0,32,,0,30
*XDO SM,D,0,33,,0,36
*XDO SM,D,0,32,,0,28
*XDO SM,D,0,31,,0,25
*Initial Water Table & Element Size
0     0.5
*Construction Stage
*PHASE 1
*Boussinesq Type Surcharge
SUB(1) 0     0     20    6
CAL(0)
*PHASE 2
*Water Table and/or Water Pressure // Excavation
EXC(2) 2
WAT(1) 0     0
WAT(1) 24    22.96
WAT(2) 2     0
WAT(2) 24    22.96
CAL(0)
*PHASE 3
*1st Strut
STR(1) 1     5     0     50    7095
CAL(0)
*PHASE 4
*Water Table and/or Water Pressure // Excavation
EXC(2) 5
WAT(1) 0     0
WAT(1) 24    21.21
WAT(2) 5     0
WAT(2) 24    21.21
```

計畫名稱：
主　　題：XDO 開挖擋土分析設計

```
CAL(0)
*PHASE 5
*2nd Strut
STR(1) 4     5     0     100   8923
CAL(0)
*PHASE 6
*Water Table and/or Water Pressure // Excavation
EXC(2) 8
WAT(1) 0     0
WAT(1) 24    19.2
WAT(2) 8     0
WAT(2) 24    19.2
CAL(0)
*PHASE 7
*3rd Strut
STR(1) 7     5     0     100   8923
CAL(0)
*PHASE 8
*Water Table and/or Water Pressure // Excavation
EXC(2) 11
WAT(1) 0     0
WAT(1) 24    16.86
WAT(2) 11    0
WAT(2) 24    16.86
CAL(0)
*PHASE 9
*4th Strut
STR(1) 10    5     0     180   12052
CAL(0)
*PHASE 10
*Water Table and/or Water Pressure // Excavation
EXC(2) 14
WAT(1) 0     0
WAT(1) 24    14.12
WAT(2) 14    0
WAT(2) 24    14.12
CAL(0)
*End of Calculation
END
EVP
STA
STOP
*XDO GUI
*XDO ProjectName:
*XDO ProjectNo:
*XDO Designer:
*XDO Remark:
*XDO IsDefaultFileName:False
*XDO IsUserDefinedFileName:True
*XDO IsNoSubject:False
*XDO IsDefaultSubject:True
*XDO IsUserDefinedSubject:False
*XDO UserDefinedFileName:XDO_RIDO_TORSA
*XDO UserDefinedProjectName:
*XDO UserDefinedTitle:
*XDO STR-1:型鋼,H350×350×12×19,,,,1,20400000,,0.01739,30,0.6,7095
```

計畫名稱：

主　　題：XDO 開挖擋土分析設計

```
*XDO STR-2:型鋼,H400×400×13×21,,,,1,20400000,,0.02187,30,0.6,8923
*XDO STR-3:型鋼,H400×400×13×21,,,,1,20400000,,0.02187,30,0.6,8923
*XDO STR-4:型鋼,H414×405×18×28,,,,1,20400000,,0.02954,30,0.6,12052
*XDO WALL:連續壁,0.8,,,,280,,,,,2509980,20400000,,0.042667,0.6,64256,1
*XDO BTRS:N,,,,,,
```

```
***** DATA FILE NAME : XDO_RIDO_TORSA.RIO

      XDO *A*
      *XDO SaSpCode:Padfield&Mair
      *XDO khByDepth:Constant
      *XDO KaKp:Coulomb
      *XDO khD:N[125]
      *XDO khU:Su[250]
      *XDO Ana:D_E/U_T
      *Retaining Wall Depth & Rigitity
      : 0
 1 ...  0
      : 24    64256
 2 ...  24 64256
      *Strata Properties
      *Z UW UW' Ka Ko Kp c phi Da Dp kh khp Cv
      : 0
 3 ...  0
      : 3     1.9   0.9   0.317 0.531 4.197 0     28    0.5   0.5   1250  0     0
 4 ...  3 1.9 0.9 0.317 0.531 4.197 0 28 0.5 0.5 1250 0 0
      : 6     1.85  0.85  0.291 0.5   4.807 0     30    0.5   0.5   2250  0     0
 5 ...  6 1.85 0.85 0.291 0.5 4.807 0 30 0.5 0.5 2250 0 0
      : 9     1.8   0.8   0.279 0.485 5.16  0     31    0.5   0.5   3000  0     0
 6 ...  9 1.8 0.8 0.279 0.485 5.16 0 31 0.5 0.5 3000 0 0
      : 12    1.85  0.85  0.267 0.47  5.551 0     32    0.5   0.5   3750  0     0
 7 ...  12 1.85 0.85 0.267 0.47 5.551 0 32 0.5 0.5 3750 0 0
      : 14    1.9   0.9   0.256 0.455 5.986 0     33    0.5   0.5   4500  0     0
 8 ...  14 1.9 0.9 0.256 0.455 5.986 0 33 0.5 0.5 4500 0 0
      : 22    1.85  0.85  0.267 0.47  5.551 0     32    0.5   0.5   3500  0     0
 9 ...  22 1.85 0.85 0.267 0.47 5.551 0 32 0.5 0.5 3500 0 0
      : 24    1.9   0.9   0.279 0.485 5.16  0     31    0.5   0.5   3125  0     0
10 ...  24 1.9 0.9 0.279 0.485 5.16 0 31 0.5 0.5 3125 0 0
      *XDO SF,D,0,28,,0,10
      *XDO SM,D,0,30,,0,18
      *XDO SM,D,0,31,,0,24
      *XDO SM,D,0,32,,0,30
      *XDO SM,D,0,33,,0,36
      *XDO SM,D,0,32,,0,28
      *XDO SM,D,0,31,,0,25
      *Initial Water Table & Element Size
      : 0     0.5
11 ...  0 0.5
      *Construction Stage
      *PHASE 1
      *Boussinesq Type Surcharge
      : SUB(1) 0     0     20    6
12 ... SUB(1)  0 0 20 6
      : CAL(0)
13 ... CAL(0)
      *PHASE 2
      *Water Table and/or Water Pressure // Excavation
      : EXC(2) 2
14 ... EXC(2)  2
      : WAT(1) 0     0
15 ... WAT(1)  0 0
      : WAT(1) 24    22.96
16 ... WAT(1)  24 22.96
      : WAT(2) 2     0
17 ... WAT(2)  2 0
      : WAT(2) 24    22.96
18 ... WAT(2)  24 22.96
      : CAL(0)
19 ... CAL(0)
      *PHASE 3
      *1st Strut
      : STR(1) 1     5     0     50    7095
20 ... STR(1)  1 5 0 50 7095
      : CAL(0)
21 ... CAL(0)
      *PHASE 4
      *Water Table and/or Water Pressure // Excavation
      : EXC(2) 5
22 ... EXC(2)  5
      : WAT(1) 0     0
23 ... WAT(1)  0 0
      : WAT(1) 24    21.21
24 ... WAT(1)  24 21.21
      : WAT(2) 5     0
25 ... WAT(2)  5 0
      : WAT(2) 24    21.21
26 ... WAT(2)  24 21.21
      : CAL(0)
27 ... CAL(0)
      *PHASE 5
      *2nd Strut
      : STR(1) 4     5     0     100   8923
28 ... STR(1)  4 5 0 100 8923
      : CAL(0)
29 ... CAL(0)
      *PHASE 6
      *Water Table and/or Water Pressure // Excavation
      : EXC(2) 8
30 ... EXC(2)  8
      : WAT(1) 0     0
31 ... WAT(1)  0 0
      : WAT(1) 24    19.2
```

```
  32 ... WAT(1)  24 19.2
         : WAT(2) 8     0
  33 ... WAT(2)  8 0
         : WAT(2) 24    19.2
  34 ... WAT(2)  24 19.2
         : CAL(0)
  35 ... CAL(0)
         *PHASE 7
         *3rd Strut
         : STR(1) 7     5     0     100   8923
  36 ... STR(1)  7 5 0 100 8923
         : CAL(0)
  37 ... CAL(0)
         *PHASE 8
         *Water Table and/or Water Pressure // Excavation
         : EXC(2) 11
  38 ... EXC(2)  11
         : WAT(1) 0     0
  39 ... WAT(1)  0 0
         : WAT(1) 24    16.86
  40 ... WAT(1)  24 16.86
         : WAT(2) 11    0
  41 ... WAT(2)  11 0
         : WAT(2) 24    16.86
  42 ... WAT(2)  24 16.86
         : CAL(0)
  43 ... CAL(0)
         *PHASE 9
         *4th Strut
         : STR(1) 10    5     0     180   12052
  44 ... STR(1)  10 5 0 180 12052
         : CAL(0)
  45 ... CAL(0)
         *PHASE 10
         *Water Table and/or Water Pressure // Excavation
         : EXC(2) 14
  46 ... EXC(2)  14
         : WAT(1) 0     0
  47 ... WAT(1)  0 0
         : WAT(1) 24    14.12
  48 ... WAT(1)  24 14.12
         : WAT(2) 14    0
  49 ... WAT(2)  14 0
         : WAT(2) 24    14.12
  50 ... WAT(2)  24 14.12
         : CAL(0)
  51 ... CAL(0)
         *End of Calculation
         : END
  52 ... END
         : EVP
  53 ... EVP
         : STA
  54 ... STA
         : STOP
  55 ... STOP
 **     RIDO V:4.24.c (C) R.F.L.  **                                    XDO                                     **  PAGE   1  **
================================================================================================================================
**    RIDO V:4.22 (C) R.F.L.     **                                                                            **  06-03-23  **
----------------------------------                                                                            ----------------


                 *XDO SaSpCode:Padfield&Mair
                 *XDO khByDepth:Constant
                 *XDO KaKp:Coulomb
                 *XDO khD:N[125]
                 *XDO khU:Su[250]
                 *XDO Ana:D_E/U_T
                 *Retaining Wall Depth & Rigitity

                 --------------------------------------------------------------------------------

                                            ** STARTING DATA **
                                            ---------------------


  * BOUSSINESQ SURCHARGES NOT FUNCTION OF STATE OF SOIL
    FOR THIS OLD ADDITIVE MODEL THE SURCHARGES HAVE NO EFFECT ON THE WEIGHT OF THE SOIL


*** WALL DESCRIPTION :
                                                INERTIA PRODUCT EI          CYLINDRICAL RIGIDITY          DEAD WEIGHT
    SECTION No  1 FROM   0.000 m  TO  24.000 m  :              64256. T.m2/m                      0. T/m3           0.000 T/m2

                 *Strata Properties
                 *Z UW UW' Ka Ko Kp c phi Da Dp kh khp Cv


*** SOIL DESCRIPTION :

     LAYER No  1 FROM   0.000 m  TO   3.000 m  :

                 SATURATED UNIT WEIGHT              GH  =       1.900 T/m3
                 SUBMERGED UNIT WEIGHT              GD  =       0.900 T/m3
                 HOR. ACTIVE PRESSURE COEFFICIENT   KA  =       0.317
                 HOR. AT REST PRESSURE COEFFICIENT  K0  =       0.531
```

HOR. PASSIVE PRESSURE COEFFICIENT KP = 4.197
COHESION C = 0.000 T/m2
ANGLE OF INTERNAL FRICTION PHI = 28.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI = 0.500
FOR PASSIVE PRESS. DELTA/PHI = -0.500
ELASTIC REACTION COEFFICIENT (AT P=0) = 1250.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE = 0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT = 0.125

LAYER No 2 FROM 3.000 m TO 6.000 m :

SATURATED UNIT WEIGHT GH = 1.850 T/m3
SUBMERGED UNIT WEIGHT GD = 0.850 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT KA = 0.291
HOR. AT REST PRESSURE COEFFICIENT K0 = 0.500
HOR. PASSIVE PRESSURE COEFFICIENT KP = 4.807
COHESION C = 0.000 T/m2
ANGLE OF INTERNAL FRICTION PHI = 30.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI = 0.500
FOR PASSIVE PRESS. DELTA/PHI = -0.500
ELASTIC REACTION COEFFICIENT (AT P=0) = 2250.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE = 0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT = 0.125

LAYER No 3 FROM 6.000 m TO 9.000 m :

SATURATED UNIT WEIGHT GH = 1.800 T/m3
SUBMERGED UNIT WEIGHT GD = 0.800 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT KA = 0.279
HOR. AT REST PRESSURE COEFFICIENT K0 = 0.485
HOR. PASSIVE PRESSURE COEFFICIENT KP = 5.160
COHESION C = 0.000 T/m2
ANGLE OF INTERNAL FRICTION PHI = 31.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI = 0.500
FOR PASSIVE PRESS. DELTA/PHI = -0.500
ELASTIC REACTION COEFFICIENT (AT P=0) = 3000.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE = 0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT = 0.125

LAYER No 4 FROM 9.000 m TO 12.000 m :

SATURATED UNIT WEIGHT GH = 1.850 T/m3
SUBMERGED UNIT WEIGHT GD = 0.850 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT KA = 0.267
HOR. AT REST PRESSURE COEFFICIENT K0 = 0.470
HOR. PASSIVE PRESSURE COEFFICIENT KP = 5.551
COHESION C = 0.000 T/m2
ANGLE OF INTERNAL FRICTION PHI = 32.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI = 0.500
FOR PASSIVE PRESS. DELTA/PHI = -0.500
ELASTIC REACTION COEFFICIENT (AT P=0) = 3750.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE = 0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT = 0.125

LAYER No 5 FROM 12.000 m TO 14.000 m :

SATURATED UNIT WEIGHT GH = 1.900 T/m3
SUBMERGED UNIT WEIGHT GD = 0.900 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT KA = 0.256
HOR. AT REST PRESSURE COEFFICIENT K0 = 0.455
HOR. PASSIVE PRESSURE COEFFICIENT KP = 5.986
COHESION C = 0.000 T/m2
ANGLE OF INTERNAL FRICTION PHI = 33.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI = 0.500
FOR PASSIVE PRESS. DELTA/PHI = -0.500
ELASTIC REACTION COEFFICIENT (AT P=0) = 4500.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE = 0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT = 0.125

LAYER No 6 FROM 14.000 m TO 22.000 m :

SATURATED UNIT WEIGHT GH = 1.850 T/m3
SUBMERGED UNIT WEIGHT GD = 0.850 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT KA = 0.267
HOR. AT REST PRESSURE COEFFICIENT K0 = 0.470
HOR. PASSIVE PRESSURE COEFFICIENT KP = 5.551
COHESION C = 0.000 T/m2
ANGLE OF INTERNAL FRICTION PHI = 32.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI = 0.500
FOR PASSIVE PRESS. DELTA/PHI = -0.500
ELASTIC REACTION COEFFICIENT (AT P=0) = 3500.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE = 0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT = 0.125

LAYER No 7 FROM 22.000 m TO 24.000 m :

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SATURATED UNIT WEIGHT              GH  =       1.900 T/m3
SUBMERGED UNIT WEIGHT              GD  =       0.900 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT   KA  =       0.279
HOR. AT REST PRESSURE COEFFICIENT  K0  =       0.485
HOR. PASSIVE PRESSURE COEFFICIENT  KP  =       5.160
COHESION                            C  =       0.000 T/m2
ANGLE OF INTERNAL FRICTION        PHI  =      31.000 DEGREES
         FOR ACTIVE  PRESS. DELTA/PHI  =       0.500
         FOR PASSIVE PRESS. DELTA/PHI  =      -0.500
ELASTIC REACTION COEFFICIENT (AT P=0)  =    3125.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE     =       0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT     =       0.125

*XDO SF,D,0,28,,0,10
*XDO SM,D,0,30,,0,18
*XDO SM,D,0,31,,0,24
*XDO SM,D,0,32,,0,30
*XDO SM,D,0,33,,0,36
*XDO SM,D,0,32,,0,28
*XDO SM,D,0,31,,0,25
*Initial Water Table & Element Size
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** PHASE No 1 **

*Construction Stage
*PHASE 1
*Boussinesq Type Surcharge

* ADDING A BOUSSINESQ SURCHARGE ON SOIL 1
LEV. = 0.000 m A = 0.000 m B = 20.000 m Q = 6.000 T/m2

PHASE 1

	WALL						SOIL 1 (EXCAVATION: 0.00 m; WATER LEVEL: 0.00 m; CAQUOT SURC.: 0.00 T/m2)				SOIL 2 (EXCAVATION: 0.00 m; WATER LEVEL: 0.00 m; CAQUOT SURC.: 0.00 T/m2)				STRUTS/ ANCHORS	
LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	2.64	-0.46	0.00	0.00	0.00		1	3.00	3.00	1250	3	0.00		1250		
0.500	2.42	-0.46	0.30	1.04	0.07		1	3.05	2.90	1250	3	1.89		1250		
1.000	2.19	-0.45	0.91	1.30	0.23		1	3.09	2.81	1250	2	3.22		1250		
1.500	1.97	-0.44	1.55	1.26	0.48		1	3.14	2.71	1250	2	3.18		1250		
2.000	1.75	-0.43	2.18	1.26	0.85		1	3.19	2.62	1250	2	3.14		1250		
2.500	1.54	-0.41	2.82	1.31	1.24		1	3.24	2.53	1250	2	3.12		1250		
3.000	1.34	-0.38	3.49	1.38	1.65		1	3.29	2.44	1250	2	3.11		1250		
							1	3.22	2.44	2250	2	4.37		2250		
3.500	1.16	-0.35	4.04	0.86	2.08		1	3.25	2.34	2250	2	4.17		2250		
4.000	0.99	-0.32	4.37	0.45	2.51		1	3.29	2.26	2250	2	4.01		2250		
4.500	0.84	-0.29	4.51	0.14	2.95		1	3.33	2.17	2250	2	3.88		2250		
5.000	0.71	-0.25	4.51	-0.11	3.40		1	3.36	2.08	2250	2	3.79		2250		
5.500	0.59	-0.22	4.41	-0.30	3.86		1	3.40	2.00	2250	2	3.74		2250		
6.000	0.49	-0.18	4.22	-0.46	4.31		1	3.45	1.92	2250	2	3.73		2250		
							1	3.38	1.92	3000	2	4.02		3000		
6.500	0.41	-0.15	3.92	-0.75	4.79		1	3.41	1.84	3000	2	3.96		3000		
7.000	0.34	-0.12	3.48	-0.96	5.13		2	3.68	1.76	3000	2	3.95		3000		
7.500	0.29	-0.10	2.98	-1.03	5.28		2	3.96	1.69	3000	2	3.98		3000		
8.000	0.24	-0.07	2.47	-1.00	5.34		2	4.21	1.61	3000	2	4.05		3000		
8.500	0.21	-0.06	2.00	-0.89	5.36		2	4.43	1.54	3000	2	4.15		3000		
9.000	0.18	-0.04	1.59	-0.72	5.37		2	4.63	1.48	3000	2	4.26		3000		
							2	4.38	1.48	3750	2	4.29		3750		
9.500	0.17	-0.03	1.24	-0.66	5.39		2	4.59	1.41	3750	2	4.42		3750		
10.000	0.15	-0.02	0.94	-0.56	5.40		2	4.78	1.35	3750	2	4.56		3750		
10.500	0.14	-0.02	0.68	-0.45	5.40		2	4.96	1.29	3750	2	4.72		3750		
11.000	0.13	-0.01	0.49	-0.33	5.40		2	5.13	1.23	3750	2	4.89		3750		
11.500	0.13	-0.01	0.35	-0.22	5.41		2	5.30	1.18	3750	2	5.07		3750		
12.000	0.12	-0.01	0.27	-0.11	5.41		2	5.46	1.13	3750	2	5.25		3750		
							2	5.21	1.13	4500	2	5.19		4500		
12.500	0.12	-0.01	0.21	-0.11	5.41		2	5.38	1.07	4500	2	5.38		4500		
13.000	0.12	0.00	0.16	-0.11	5.41		2	5.55	1.03	4500	2	5.58		4500		
13.500	0.11	0.00	0.10	-0.13	5.41		2	5.72	0.98	4500	2	5.77		4500		
14.000	0.11	0.00	0.03	-0.16	5.42		2	5.89	0.94	4500	2	5.97		4500		
							2	6.18	0.94	3500	2	6.04		3500		
14.500	0.11	0.00	-0.04	-0.10	5.42		2	6.34	0.89	3500	2	6.23		3500		
15.000	0.11	0.00	-0.07	-0.05	5.42		2	6.51	0.85	3500	2	6.42		3500		
15.500	0.11	0.00	-0.09	-0.01	5.42		2	6.68	0.82	3500	2	6.62		3500		
16.000	0.11	0.00	-0.09	0.01	5.42		2	6.85	0.78	3500	2	6.81		3500		
16.500	0.10	-0.01	-0.08	0.03	5.42		2	7.02	0.75	3500	2	7.00		3500		
17.000	0.10	-0.01	-0.06	0.04	5.42		2	7.20	0.71	3500	2	7.19		3500		
17.500	0.10	-0.01	-0.04	0.04	5.42		2	7.38	0.68	3500	2	7.38		3500		
18.000	0.09	-0.01	-0.02	0.04	5.42		2	7.56	0.65	3500	2	7.57		3500		
18.500	0.09	-0.01	0.00	0.04	5.42		2	7.74	0.62	3500	2	7.75		3500		
19.000	0.09	-0.01	0.02	0.03	5.42		2	7.93	0.60	3500	2	7.94		3500		
19.500	0.08	-0.01	0.03	0.02	5.42		2	8.11	0.57	3500	2	8.13		3500		
20.000	0.08	-0.01	0.04	0.01	5.42		2	8.30	0.55	3500	2	8.32		3500		
20.500	0.08	-0.01	0.05	0.00	5.42		2	8.49	0.52	3500	2	8.51		3500		

21.000	0.07	-0.01	0.05	-0.01	5.42		2	8.67	0.50	3500	2	8.70		3500					
21.500	0.07	-0.01	0.04	-0.02	5.42		2	8.86	0.48	3500	2	8.89		3500					
22.000	0.07	0.00	0.03	-0.03	5.42		2	9.05	0.46	3500	2	9.08		3500					
							2	9.36	0.46	3125	2	9.34		3125					
22.500	0.07	0.00	0.01	-0.02	5.42		2	9.57	0.44	3125	2	9.55		3125					
23.000	0.06	0.00	0.01	-0.01	5.42		2	9.77	0.42	3125	2	9.76		3125					
23.500	0.06	0.00	0.00	-0.01	5.42		2	9.98	0.40	3125	2	9.97		3125					
24.000	0.06	0.00	0.00	0.00	5.42		2	10.19	0.39	3125	2	10.18		3125					
m	mm rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T				

PHASE 1 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE PRE.	SURCH.	ELAST.	STATE PRE.	SURCH.	ELAST.	No	LOAD
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3	T/m2	T/m2	T/m3		T

MAXIMUM DISPLACEMENT = 2.64 mm
MAXIMUM MOMENT = 4.51 m.T/m
VERTICAL REACTION IN FOOT = -5.42 T/m

CODIFICATION :
OF STATE :
OF SOIL :

-1 = SEPARATION
0 = EXCAVATION
1 = ACTIVE PR.
2 = ELASTIC
3 = PASSIVE PR.

(5 IT.)

CANTILEVER WALL

RATIOS OF SECURITY ON THE EMBEDMENT (according to the simplified method, for FRANCE) : WITHOUT PARTIAL FACTOR
CONFIGURATION INCOMPATIBLE WITH THIS SIMPLIFIED MODEL !

FOR THE SUPPORTED ZONE : SINCE THE LEVEL OF EXCAVATION 0.000 m UNTIL THE LEVEL OF PIVOTING 1.707 m
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.727 = (4.00 T/m)/(5.50 T/m)
SIMPLY INDICATIVE

FOR THE SUPPORTED ZONE : SINCE THE LEVEL OF PIVOTING 1.707 m UNTIL THE LEVEL 24.000 m
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.097 = (132.12 T/m)/(1364.38 T/m)
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 31.85 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 0.00 T/m

** PHASE No 2 **

*PHASE 2
*Water Table and/or Water Pressure // Excavation

* EXCAVATION IN SOIL 2 TO LEVEL = 2.000 m

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 1 TO LEVEL = 0.000 m
WATER PRESSURE IN SOIL 1 TO LEVEL = 24.000 m PR. = 22.960 T/m2

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 2 TO LEVEL = 2.000 m
WATER PRESSURE IN SOIL 2 TO LEVEL = 24.000 m PR. = 22.960 T/m2

PHASE 2

WALL | SOIL 1: EXCAVATION: 0.00 m, WATER LEVEL: 0.00 m, CAQUOT SURC.: 0.00 T/m2 | SOIL 2: EXCAVATION: 2.00 m, WATER LEVEL: 2.00 m, CAQUOT SURC.: 0.00 T/m2 | STRUTS/ ANCHORS

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE PRE.	SURCH.	ELAST.	STATE PRE.	SURCH.	ELAST.	No	LOAD
0.000	22.55	-3.63	0.00	0.00	0.00	0.00	1	3.00	3.00	1250	0			
0.500	20.73	-3.63	0.40	1.63	0.19	0.48	1	3.05	2.90	1250	0			
1.000	18.92	-3.62	1.68	3.53	0.57	0.96	1	3.11	2.81	1250	0			
1.500	17.12	-3.60	3.97	5.70	0.97	1.43	1	3.16	2.71	1250	0			
2.000	15.33	-3.55	7.42	8.13	1.36	1.91	1	3.22	2.62	1250	0			
							1	3.22	2.62	1250	3	0.00	1250	
2.500	13.57	-3.48	12.05	10.25	1.66	1.87	1	3.28	2.53	1250	3	1.80	1250	
3.000	11.86	-3.36	17.52	11.48	1.73	1.83	1	3.33	2.44	1250	3	3.59	1250	
							1	3.26	2.44	2250	3	4.12	2250	
3.500	10.21	-3.20	23.30	11.48	1.49	1.78	1	3.30	2.34	2250	3	6.05	2250	
4.000	8.66	-3.00	28.84	10.51	0.99	1.74	1	3.34	2.26	2250	3	7.99	2250	
4.500	7.22	-2.76	33.65	8.56	0.24	1.70	1	3.38	2.17	2250	3	9.93	2250	
5.000	5.91	-2.48	37.24	5.65	-0.76	1.65	1	3.43	2.08	2250	3	11.87	2250	
5.500	4.74	-2.18	39.21	2.20	-1.61	1.61	1	3.47	2.00	2250	2	12.10	2250	
6.000	3.73	-1.88	39.52	-0.79	-1.78	1.57	1	3.52	1.92	2250	2	10.02	2250	
							1	3.45	1.92	3000	2	12.76	3000	
6.500	2.86	-1.57	38.26	-4.06	-1.71	1.52	1	3.49	1.84	3000	2	10.36	3000	

7.000	2.15	-1.28	35.64	-6.25	-1.33	1.48	1	3.53	1.76	3000	2	8.41		3000		
7.500	1.58	-1.02	32.16	-7.56	-0.86	1.43	1	3.58	1.69	3000	2	6.87		3000		
8.000	1.13	-0.78	28.19	-8.19	-0.37	1.39	1	3.62	1.61	3000	2	5.70		3000		
8.500	0.79	-0.58	24.05	-8.33	0.14	1.35	1	3.67	1.54	3000	2	4.87		3000		
9.000	0.54	-0.41	19.93	-8.10	0.63	1.30	2	3.76	1.48	3000	2	4.31		3000		
							1	3.62	1.48	3750	2	4.63		3750		
9.500	0.37	-0.27	15.94	-7.76	1.00	1.26	2	4.01	1.41	3750	2	4.19		3750		
10.000	0.27	-0.16	12.23	-7.04	1.14	1.22	2	4.56	1.35	3750	2	3.98		3750		
10.500	0.21	-0.08	8.95	-6.05	1.17	1.17	2	4.93	1.29	3750	2	3.95		3750		
11.000	0.18	-0.02	6.19	-4.95	1.18	1.13	2	5.17	1.23	3750	2	4.05		3750		
11.500	0.18	0.02	3.99	-3.85	1.19	1.09	2	5.32	1.18	3750	2	4.24		3750		
12.000	0.20	0.04	2.33	-2.81	1.20	1.04	2	5.42	1.13	3750	2	4.49		3750		
							2	5.11	1.13	4500	2	4.52		4500		
12.500	0.22	0.06	1.12	-2.07	1.22	1.00	2	5.16	1.07	4500	2	4.83		4500		
13.000	0.25	0.06	0.24	-1.49	1.25	0.96	2	5.19	1.03	4500	2	5.15		4500		
13.500	0.28	0.06	-0.39	-1.07	1.29	0.91	2	5.22	0.98	4500	2	5.49		4500		
14.000	0.31	0.06	-0.86	-0.83	1.34	0.87	2	5.26	0.94	4500	2	5.81		4500		
							2	5.76	0.94	3500	2	5.65		3500		
14.500	0.34	0.05	-1.17	-0.40	1.37	0.83	2	5.84	0.89	3500	2	5.93		3500		
15.000	0.36	0.04	-1.28	-0.08	1.39	0.78	2	5.94	0.85	3500	2	6.19		3500		
15.500	0.38	0.03	-1.27	0.14	1.42	0.74	2	6.05	0.82	3500	2	6.44		3500		
16.000	0.39	0.02	-1.16	0.28	1.45	0.70	2	6.18	0.78	3500	2	6.67		3500		
16.500	0.40	0.01	-1.00	0.36	1.48	0.65	2	6.33	0.75	3500	2	6.88		3500		
17.000	0.40	0.00	-0.81	0.39	1.51	0.61	2	6.50	0.71	3500	2	7.08		3500		
17.500	0.40	0.00	-0.62	0.39	1.54	0.57	2	6.68	0.68	3500	2	7.27		3500		
18.000	0.40	-0.01	-0.43	0.36	1.57	0.52	2	6.86	0.65	3500	2	7.45		3500		
18.500	0.39	-0.01	-0.26	0.32	1.59	0.48	2	7.06	0.62	3500	2	7.63		3500		
19.000	0.39	-0.01	-0.11	0.27	1.61	0.43	2	7.26	0.60	3500	2	7.80		3500		
19.500	0.38	-0.01	0.01	0.22	1.62	0.39	2	7.46	0.57	3500	2	7.97		3500		
20.000	0.38	-0.01	0.10	0.15	1.64	0.35	2	7.67	0.55	3500	2	8.14		3500		
20.500	0.37	-0.01	0.17	0.09	1.65	0.30	2	7.87	0.52	3500	2	8.32		3500		
21.000	0.37	-0.01	0.19	0.01	1.66	0.26	2	8.08	0.50	3500	2	8.49		3500		
21.500	0.36	-0.01	0.18	-0.07	1.67	0.22	2	8.28	0.48	3500	2	8.67		3500		
22.000	0.36	-0.01	0.12	-0.16	1.68	0.17	2	8.48	0.46	3500	2	8.85		3500		
							2	8.91	0.46	3125	2	8.95		3125		
22.500	0.36	0.00	0.06	-0.10	1.68	0.13	2	9.13	0.44	3125	2	9.15		3125		
23.000	0.36	0.00	0.02	-0.05	1.69	0.09	2	9.34	0.42	3125	2	9.35		3125		
23.500	0.35	0.00	0.00	-0.02	1.69	0.04	2	9.56	0.40	3125	2	9.55		3125		
24.000	0.35	0.00	0.00	0.00	1.69	0.00	2	9.78	0.39	3125	2	9.75		3125		
m	mm rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T

PHASE 2 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE PRE.	SURCH.	ELAST.	STATE PRE.	SURCH.	ELAST.	No	LOAD
m	mm rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3	T/m2	T/m2	T/m3		T

MAXIMUM DISPLACEMENT = 22.55 mm
MAXIMUM MOMENT = 39.52 m.T/m
VERTICAL REACTION IN FOOT = -1.69 T/m

CODIFICATION :
OF STATE :
OF SOIL :

-1 = SEPARATION
0 = EXCAVATION
1 = ACTIVE PR.
2 = ELASTIC
3 = PASSIVE PR.

(5 IT.)

CANTILEVER WALL

RATIOS OF SECURITY ON THE EMBEDMENT (according to the simplified method, for FRANCE) : WITHOUT PARTIAL FACTOR
HIGHEST LEVEL WITH DIFFERENTIAL NIL PRESSURE ZA = 3.249 m
LEVEL OF APPLICATION OF THE CONCENTRATED FORCE ZB = 8.105 m
CONCENTRATED FORCE SIMULATING THE EFFECT OF THE MINIMAL EMBEDMENT = 36.733 T/m
Bottom of the wall at ZD = 24.000 m (ZA-ZD)/(ZA-ZB) = 4.274

FOR THE SUPPORTED ZONE : SINCE THE LEVEL OF EXCAVATION 2.000 m UNTIL THE LEVEL OF PIVOTING 8.409 m
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.585 = (48.94 T/m)/(83.64 T/m)
SIMPLY INDICATIVE

FOR THE SUPPORTED ZONE : SINCE THE LEVEL OF PIVOTING 8.409 m UNTIL THE LEVEL 24.000 m
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.080 = (101.10 T/m)/(1264.70 T/m)
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 31.85 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 0.00 T/m

** PHASE No 3 **

*PHASE 3
*1st Strut

* INSTALLATION OF A LINE OF STRUTS No 1
LEVEL = 1.000 m
SPACING = 5.000 m
INCLINATION = 0.000 DEGREES
PRELOAD = -50.000 T
STIFFNESS = 7095.000 T/m

EFFECTIVE LENGTH = 0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 1

** RIDO V:4.22 (C) R.F.L. ** ** 06-03-23 **

PHASE 3

	WALL	SOIL 1 EXCAVATION: 0.00 m WATER LEVEL: 0.00 m CAQUOT SURC.: 0.00 T/m2	SOIL 2 EXCAVATION: 2.00 m WATER LEVEL: 2.00 m CAQUOT SURC.: 0.00 T/m2	STRUTS/ ANCHORS

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	19.23	-2.83	0.00	0.00		0.00	3	3.00	3.00	1250	0					
0.500	17.81	-2.83	0.47	2.09	-0.30	0.48	3	4.88	2.90	1250	0					
1.000	16.40	-2.82	2.27	5.24	-0.83	0.96	2	6.26	2.81	1250	0					
				-4.76			2	6.26	2.81	1250	0				1	-50.00
1.500	14.99	-2.81	0.79	-1.15	-1.08	1.43	2	5.82	2.71	1250	0					
2.000	13.59	-2.80	1.12	2.49	-1.10	1.91	2	5.39	2.62	1250	0					
							2	5.39	2.62	1250	1	0.00		1250		
2.500	12.19	-2.79	3.26	6.00	-1.10	1.87	2	5.00	2.53	1250	1	0.14		1250		
3.000	10.80	-2.75	7.00	8.74	-1.12	1.83	2	4.65	2.44	1250	2	2.28		1250		
							2	5.63	2.44	2250	2	1.75		2250		
3.500	9.44	-2.68	11.95	10.78	-1.21	1.78	2	5.02	2.34	2250	2	4.33		2250		
4.000	8.13	-2.56	17.52	11.26	-1.56	1.74	2	4.52	2.26	2250	2	6.81		2250		
4.500	6.89	-2.40	22.97	10.28	-2.29	1.70	2	4.12	2.17	2250	2	9.20		2250		
5.000	5.74	-2.21	27.57	7.93	-3.42	1.65	2	3.81	2.08	2250	2	11.49		2250		
5.500	4.69	-1.98	30.75	4.72	-4.41	1.61	2	3.59	2.00	2250	2	11.99		2250		
6.000	3.76	-1.73	32.34	1.77	-4.66	1.57	1	3.52	1.92	2250	2	10.10		2250		
							1	3.45	1.92	3000	2	12.87		3000		
6.500	2.96	-1.48	32.34	-1.60	-4.62	1.52	1	3.49	1.84	3000	2	10.65		3000		
7.000	2.28	-1.23	30.91	-3.95	-4.25	1.48	1	3.53	1.76	3000	2	8.80		3000		
7.500	1.72	-1.00	28.52	-5.47	-3.79	1.43	1	3.58	1.69	3000	2	7.31		3000		
8.000	1.28	-0.79	25.55	-6.33	-3.30	1.39	1	3.62	1.61	3000	2	6.15		3000		
8.500	0.93	-0.60	22.27	-6.69	-2.79	1.35	1	3.67	1.54	3000	2	5.29		3000		
9.000	0.67	-0.44	18.92	-6.67	-2.28	1.30	1	3.72	1.48	3000	2	4.69		3000		
							1	3.62	1.48	3750	2	5.11		3750		
9.500	0.48	-0.31	15.59	-6.63	-1.76	1.26	1	3.68	1.41	3750	2	4.60		3750		
10.000	0.35	-0.20	12.34	-6.27	-1.41	1.22	2	4.22	1.35	3750	2	4.32		3750		
10.500	0.28	-0.12	9.37	-5.58	-1.31	1.17	2	4.66	1.29	3750	2	4.21		3750		
11.000	0.23	-0.05	6.79	-4.71	-1.28	1.13	2	4.97	1.23	3750	2	4.24		3750		
11.500	0.22	-0.01	4.67	-3.77	-1.26	1.09	2	5.18	1.18	3750	2	4.38		3750		
12.000	0.22	0.02	3.02	-2.85	-1.25	1.04	2	5.33	1.13	3750	2	4.58		3750		
							2	5.00	1.13	4500	2	4.63		4500		
12.500	0.24	0.04	1.76	-2.19	-1.22	1.00	2	5.10	1.07	4500	2	4.89		4500		
13.000	0.26	0.05	0.80	-1.66	-1.18	0.96	2	5.16	1.03	4500	2	5.18		4500		
13.500	0.28	0.05	0.08	-1.26	-1.14	0.91	2	5.22	0.98	4500	2	5.49		4500		
14.000	0.31	0.05	-0.49	-1.01	-1.09	0.87	2	5.28	0.94	4500	2	5.80		4500		
							2	5.78	0.94	3500	2	5.63		3500		
14.500	0.33	0.04	-0.88	-0.57	-1.07	0.83	2	5.86	0.89	3500	2	5.91		3500		
15.000	0.35	0.04	-1.07	-0.23	-1.04	0.78	2	5.96	0.85	3500	2	6.17		3500		
15.500	0.37	0.03	-1.12	0.02	-1.01	0.74	2	6.07	0.82	3500	2	6.41		3500		
16.000	0.38	0.02	-1.07	0.18	-0.98	0.70	2	6.21	0.78	3500	2	6.64		3500		
16.500	0.39	0.01	-0.95	0.28	-0.96	0.65	2	6.35	0.75	3500	2	6.86		3500		
17.000	0.39	0.00	-0.79	0.33	-0.93	0.61	2	6.52	0.71	3500	2	7.06		3500		
17.500	0.40	0.00	-0.62	0.35	-0.90	0.57	2	6.69	0.68	3500	2	7.26		3500		
18.000	0.39	0.00	-0.45	0.34	-0.88	0.52	2	6.88	0.65	3500	2	7.44		3500		
18.500	0.39	-0.01	-0.28	0.31	-0.86	0.48	2	7.07	0.62	3500	2	7.62		3500		
19.000	0.39	-0.01	-0.14	0.27	-0.84	0.43	2	7.27	0.60	3500	2	7.80		3500		
19.500	0.38	-0.01	-0.02	0.22	-0.82	0.39	2	7.47	0.57	3500	2	7.97		3500		
20.000	0.38	-0.01	0.08	0.16	-0.81	0.35	2	7.67	0.55	3500	2	8.14		3500		
20.500	0.37	-0.01	0.14	0.10	-0.80	0.30	2	7.87	0.52	3500	2	8.31		3500		
21.000	0.37	-0.01	0.17	0.02	-0.79	0.26	2	8.08	0.50	3500	2	8.49		3500		
21.500	0.36	-0.01	0.16	-0.06	-0.78	0.22	2	8.28	0.48	3500	2	8.67		3500		
22.000	0.36	0.00	0.11	-0.15	-0.77	0.17	2	8.48	0.46	3500	2	8.85		3500		
							2	8.91	0.46	3125	2	8.95		3125		
22.500	0.36	0.00	0.05	-0.09	-0.76	0.13	2	9.12	0.44	3125	2	9.15		3125		
23.000	0.36	0.00	0.02	-0.05	-0.76	0.09	2	9.34	0.42	3125	2	9.35		3125		
23.500	0.36	0.00	0.00	-0.02	-0.75	0.04	2	9.56	0.40	3125	2	9.56		3125		
24.000	0.35	0.00	0.00	0.00	-0.75	0.00	2	9.78	0.39	3125	2	9.76		3125		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T

** RIDO V:4.22 (C) R.F.L. ** ** 06-03-23 **

PHASE 3 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T

MAXIMUM DISPLACEMENT = 19.23 mm
MAXIMUM MOMENT = 32.34 m.T/m
VERTICAL REACTION IN FOOT = 0.75 T/m

CODIFICATION OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR.
CODIFICATION OF SOIL : 2 = ELASTIC, 3 = PASSIVE PR.

(6 IT.)

CANTILEVER WALL

RATIOS OF SECURITY ON THE EMBEDMENT (according to the simplified method, for FRANCE) : WITHOUT PARTIAL FACTOR
HIGHEST LEVEL WITH DIFFERENTIAL NIL PRESSURE ZA = 3.249 m
LEVEL OF APPLICATION OF THE CONCENTRATED FORCE ZB = 8.105 m
CONCENTRATED FORCE SIMULATING THE EFFECT OF THE MINIMAL EMBEDMENT = 36.733 T/m
Bottom of the wall at ZD = 24.000 m (ZA-ZD)/(ZA-ZB) = 4.274

FOR THE SUPPORTED ZONE : SINCE THE LEVEL OF EXCAVATION 2.000 m UNTIL THE LEVEL OF PIVOTING 8.727 m
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.517 = (47.67 T/m)/(92.19 T/m)
SIMPLY INDICATIVE

FOR THE SUPPORTED ZONE : SINCE THE LEVEL OF PIVOTING 8.727 m UNTIL THE LEVEL 24.000 m
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.079 = (99.29 T/m)/(1251.64 T/m)
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 31.85 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 0.00 T/m

** PHASE No 4 **

*PHASE 4
*Water Table and/or Water Pressure // Excavation

* EXCAVATION IN SOIL 2 TO LEVEL = 5.000 m

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 1 TO LEVEL = 0.000 m
WATER PRESSURE IN SOIL 1 TO LEVEL = 24.000 m PR. = 21.210 T/m2

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 2 TO LEVEL = 5.000 m
WATER PRESSURE IN SOIL 2 TO LEVEL = 24.000 m PR. = 21.210 T/m2

PHASE 4

WALL							SOIL 1 EXCAVATION: 0.00 m WATER LEVEL: 0.00 m CAQUOT SURC.: 0.00 T/m2				SOIL 2 EXCAVATION: 5.00 m WATER LEVEL: 5.00 m CAQUOT SURC.: 0.00 T/m2				STRUTS/ ANCHORS	
LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	24.84	-1.39	0.00	0.00	0.00	0.00	1	3.00	3.00	1250	0					
0.500	24.15	-1.39	0.40	1.63	0.19	0.44	1	3.07	2.90	1250	0					
1.000	23.46	-1.38	1.67	3.51	0.58	0.88	1	3.13	2.81	1250	0					
				-16.51			1	3.13	2.81	1250	0				1	-100.07
1.500	22.76	-1.40	-6.06	-14.37	0.97	1.33	1	3.20	2.71	1250	0					
2.000	22.05	-1.47	-12.66	-11.98	1.37	1.77	1	3.26	2.62	1250	0					
2.500	21.29	-1.59	-18.00	-9.34	1.79	2.21	1	3.33	2.53	1250	0					
3.000	20.45	-1.75	-21.96	-6.44	2.21	2.65	1	3.40	2.44	1250	0					
							1	3.32	2.44	2250	0					
3.500	19.53	-1.93	-24.41	-3.33	2.65	3.09	1	3.37	2.34	2250	0					
4.000	18.52	-2.12	-25.25	0.03	3.11	3.53	1	3.42	2.26	2250	0					
4.500	17.41	-2.32	-24.34	3.63	3.57	3.98	1	3.48	2.17	2250	0					
5.000	16.21	-2.50	-21.57	7.48	4.04	4.42	1	3.53	2.08	2250	0					
							1	3.53	2.08	2250	3	0.00		2250		
5.500	14.92	-2.65	-16.92	11.00	4.40	4.30	1	3.59	2.00	2250	3	1.76		2250		
6.000	13.57	-2.76	-10.73	13.61	4.53	4.19	1	3.65	1.92	2250	3	3.53		2250		
							1	3.58	1.92	3000	3	3.79		3000		
6.500	12.17	-2.81	-3.50	15.14	4.38	4.07	1	3.63	1.84	3000	3	5.55		3000		
7.000	10.76	-2.81	4.26	15.76	4.00	3.95	1	3.68	1.76	3000	3	7.31		3000		
7.500	9.37	-2.75	12.10	15.46	3.37	3.84	1	3.73	1.69	3000	3	9.08		3000		
8.000	8.03	-2.62	19.57	14.25	2.51	3.72	1	3.79	1.61	3000	3	10.84		3000		
8.500	6.76	-2.44	26.20	12.12	1.42	3.60	1	3.84	1.54	3000	3	12.61		3000		
9.000	5.59	-2.22	31.54	9.09	0.08	3.49	1	3.90	1.48	3000	3	14.37		3000		
							1	3.80	1.48	3750	3	15.46		3750		
9.500	4.55	-1.96	34.98	4.48	-1.73	3.37	1	3.86	1.41	3750	3	17.49		3750		
10.000	3.64	-1.68	36.02	-0.11	-2.90	3.26	1	3.93	1.35	3750	2	15.30		3750		
10.500	2.87	-1.40	35.07	-3.50	-2.94	3.14	1	4.00	1.29	3750	2	12.58		3750		
11.000	2.23	-1.14	32.73	-5.68	-2.54	3.02	1	4.07	1.23	3750	2	10.38		3750		
11.500	1.73	-0.89	29.55	-6.90	-2.00	2.91	1	4.14	1.18	3750	2	8.65		3750		
12.000	1.33	-0.68	25.95	-7.38	-1.41	2.79	1	4.22	1.13	3750	2	7.35		3750		
							1	4.09	1.13	4500	2	8.28		4500		
12.500	1.04	-0.49	22.13	-7.80	-0.81	2.67	1	4.17	1.07	4500	2	7.14		4500		
13.000	0.84	-0.33	18.23	-7.77	-0.18	2.56	1	4.25	1.03	4500	2	6.40		4500		
13.500	0.70	-0.21	14.41	-7.47	0.45	2.44	1	4.34	0.98	4500	2	5.97		4500		
14.000	0.63	-0.11	10.78	-7.03	1.10	2.33	1	4.42	0.94	4500	2	5.80		4500		
							2	5.15	0.94	3500	2	5.27		3500		
14.500	0.59	-0.04	7.55	-5.89	1.32	2.21	2	5.46	0.89	3500	2	5.32		3500		
15.000	0.58	0.01	4.90	-4.73	1.49	2.09	2	5.67	0.85	3500	2	5.47		3500		
15.500	0.60	0.04	2.81	-3.63	1.64	1.98	2	5.81	0.82	3500	2	5.68		3500		
16.000	0.62	0.05	1.25	-2.64	1.79	1.86	2	5.92	0.78	3500	2	5.94		3500		
16.500	0.65	0.06	0.15	-1.79	1.96	1.74	2	6.01	0.75	3500	2	6.21		3500		
17.000	0.68	0.06	-0.56	-1.10	2.14	1.63	2	6.10	0.71	3500	2	6.49		3500		
17.500	0.71	0.05	-0.97	-0.55	2.33	1.51	2	6.20	0.68	3500	2	6.76		3500		
18.000	0.73	0.04	-1.13	-0.13	2.53	1.40	2	6.32	0.65	3500	2	7.02		3500		
18.500	0.75	0.03	-1.12	0.16	2.73	1.28	2	6.45	0.62	3500	2	7.26		3500		

19.000	0.76	0.03	-1.00	0.34	2.94	1.16	2	6.59	0.60	3500	2	7.48		3500		
19.500	0.78	0.02	-0.80	0.44	3.14	1.05	2	6.76	0.57	3500	2	7.69		3500		
20.000	0.78	0.01	-0.57	0.46	3.34	0.93	2	6.93	0.55	3500	2	7.89		3500		
20.500	0.79	0.01	-0.35	0.41	3.53	0.81	2	7.11	0.52	3500	2	8.09		3500		
21.000	0.79	0.01	-0.17	0.30	3.71	0.70	2	7.30	0.50	3500	2	8.28		3500		
21.500	0.80	0.01	-0.06	0.13	3.88	0.58	2	7.49	0.48	3500	2	8.46		3500		
22.000	0.80	0.01	-0.04	-0.09	4.04	0.47	2	7.69	0.46	3500	2	8.65		3500		
							2	8.31	0.46	3125	2	8.53		3125		
22.500	0.81	0.01	-0.06	0.01	4.13	0.35	2	8.53	0.44	3125	2	8.73		3125		
23.000	0.81	0.01	-0.04	0.05	4.22	0.23	2	8.74	0.42	3125	2	8.93		3125		
23.500	0.81	0.01	-0.01	0.05	4.30	0.12	2	8.96	0.40	3125	2	9.13		3125		
24.000	0.82	0.01	0.00	0.00	4.37	0.00	2	9.18	0.39	3125	2	9.33		3125		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T

PHASE 4 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T

MAXIMUM DISPLACEMENT = 24.84 mm
MAXIMUM MOMENT = 36.02 m.T/m
VERTICAL REACTION IN FOOT = -4.37 T/m

CODIFICATION OF STATE OF SOIL :
-1 = SEPARATION
0 = EXCAVATION
1 = ACTIVE PR.
2 = ELASTIC
3 = PASSIVE PR.

(7 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.077 = (120.53 T/m)/(1556.89 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.213 = (153.54 T/m)/(720.40 T/m)

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 31.85 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 0.00 T/m

** PHASE No 5 **

*PHASE 5
*2nd Strut

* INSTALLATION OF A LINE OF STRUTS No 2

LEVEL = 4.000 m
SPACING = 5.000 m
INCLINATION = 0.000 DEGREES
PRELOAD = -100.000 T
STIFFNESS = 8923.000 T/m
EFFECTIVE LENGTH = 0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 1

PHASE 5

	W A L L	S O I L 1	S O I L 2	STRUTS/ ANCHORS
		EXCAVATION: 0.00 m	EXCAVATION: 5.00 m	
		WATER LEVEL: 0.00 m	WATER LEVEL: 5.00 m	
		CAQUOT SURC.: 0.00 T/m2	CAQUOT SURC.: 0.00 T/m2	

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	23.91	-1.56	0.00	0.00		0.00	3	3.00	3.00	1250	0					
0.500	23.13	-1.55	0.45	1.94	-0.05	0.44	2	4.33	2.90	1250	0					
1.000	22.36	-1.55	2.04	4.48	-0.10	0.88	2	4.50	2.81	1250	0					
				-13.97			2	4.50	2.81	1250	0				1	-92.29
1.500	21.59	-1.56	-4.25	-11.13	-0.10	1.33	2	4.67	2.71	1250	0					
2.000	20.80	-1.61	-9.04	-7.98	-0.10	1.77	2	4.83	2.62	1250	0					
2.500	19.97	-1.69	-12.18	-4.53	-0.10	2.21	2	4.97	2.53	1250	0					
3.000	19.10	-1.79	-13.52	-0.80	-0.10	2.65	2	5.09	2.44	1250	0					
							2	6.36	2.44	2250	0					
3.500	18.18	-1.90	-12.78	3.83	-0.11	3.09	2	6.42	2.34	2250	0					
4.000	17.21	-1.99	-9.66	8.69	-0.11	3.53	2	6.38	2.26	2250	0					
				-11.31			2	6.38	2.26	2250	0				2	-100.00
4.500	16.19	-2.08	-14.06	-6.29	-0.11	3.98	2	6.22	2.17	2250	0					
5.000	15.12	-2.20	-15.92	-1.14	-0.11	4.42	2	5.97	2.08	2250	0					
							2	5.97	2.08	2250	1	0.00		2250		
5.500	13.99	-2.32	-15.22	3.92	-0.10	4.30	2	5.67	2.00	2250	1	0.11		2250		
6.000	12.81	-2.43	-12.11	8.32	-0.10	4.19	2	5.36	1.92	2250	2	1.82		2250		
							2	5.86	1.92	3000	2	1.50		3000		
6.500	11.57	-2.50	-7.00	11.89	-0.17	4.07	2	5.43	1.84	3000	2	3.75		3000		
7.000	10.31	-2.53	-0.44	14.09	-0.44	3.95	2	5.04	1.76	3000	2	5.95		3000		
7.500	9.05	-2.51	6.87	14.96	-1.02	3.84	2	4.71	1.69	3000	2	8.10		3000		
8.000	7.81	-2.43	14.31	14.57	-1.93	3.72	2	4.44	1.61	3000	2	10.19		3000		
8.500	6.63	-2.29	21.24	12.97	-3.14	3.60	2	4.23	1.54	3000	2	12.21		3000		

9.000	5.53	-2.10	27.09	10.22	-4.57	3.49	2	4.09	1.48	3000	2	14.18		3000					
							2	4.03	1.48	3750	2	15.23		3750					
9.500	4.54	-1.87	31.13	5.75	-6.44	3.37	2	3.90	1.41	3750	2	17.45		3750					
10.000	3.66	-1.62	32.82	1.15	-7.63	3.26	1	3.93	1.35	3750	2	15.39		3750					
10.500	2.92	-1.37	32.48	-2.30	-7.70	3.14	1	4.00	1.29	3750	2	12.77		3750					
11.000	2.30	-1.12	30.71	-4.59	-7.31	3.02	1	4.07	1.23	3750	2	10.61		3750					
11.500	1.80	-0.89	28.04	-5.93	-6.77	2.91	1	4.14	1.18	3750	2	8.91		3750					
12.000	1.40	-0.68	24.90	-6.55	-6.19	2.79	1	4.22	1.13	3750	2	7.61		3750					
							1	4.09	1.13	4500	2	8.59		4500					
12.500	1.11	-0.50	21.46	-7.12	-5.59	2.67	1	4.17	1.07	4500	2	7.43		4500					
13.000	0.90	-0.35	17.86	-7.23	-4.97	2.56	1	4.25	1.03	4500	2	6.66		4500					
13.500	0.75	-0.22	14.28	-7.04	-4.33	2.44	1	4.34	0.98	4500	2	6.20		4500					
14.000	0.67	-0.13	10.84	-6.70	-3.68	2.33	1	4.42	0.94	4500	2	5.98		4500					
							2	5.01	0.94	3500	2	5.41		3500					
14.500	0.62	-0.06	7.74	-5.69	-3.40	2.21	2	5.35	0.89	3500	2	5.43		3500					
15.000	0.61	-0.01	5.16	-4.63	-3.20	2.09	2	5.59	0.85	3500	2	5.55		3500					
15.500	0.61	0.03	3.11	-3.60	-3.03	1.98	2	5.75	0.82	3500	2	5.74		3500					
16.000	0.63	0.04	1.55	-2.66	-2.86	1.86	2	5.88	0.78	3500	2	5.98		3500					
16.500	0.66	0.05	0.43	-1.85	-2.68	1.74	2	5.99	0.75	3500	2	6.24		3500					
17.000	0.68	0.05	-0.32	-1.17	-2.50	1.63	2	6.09	0.71	3500	2	6.50		3500					
17.500	0.71	0.05	-0.76	-0.62	-2.31	1.51	2	6.20	0.68	3500	2	6.76		3500					
18.000	0.73	0.04	-0.97	-0.21	-2.11	1.40	2	6.32	0.65	3500	2	7.01		3500					
18.500	0.75	0.03	-0.99	0.09	-1.90	1.28	2	6.45	0.62	3500	2	7.25		3500					
19.000	0.76	0.03	-0.90	0.28	-1.70	1.16	2	6.60	0.60	3500	2	7.47		3500					
19.500	0.77	0.02	-0.73	0.39	-1.50	1.05	2	6.77	0.57	3500	2	7.68		3500					
20.000	0.78	0.01	-0.52	0.42	-1.30	0.93	2	6.94	0.55	3500	2	7.88		3500					
20.500	0.79	0.01	-0.32	0.38	-1.12	0.81	2	7.12	0.52	3500	2	8.08		3500					
21.000	0.79	0.01	-0.15	0.28	-0.94	0.70	2	7.31	0.50	3500	2	8.27		3500					
21.500	0.80	0.01	-0.05	0.12	-0.78	0.58	2	7.50	0.48	3500	2	8.46		3500					
22.000	0.80	0.01	-0.04	-0.09	-0.62	0.47	2	7.69	0.46	3500	2	8.64		3500					
							2	8.31	0.46	3125	2	8.53		3125					
22.500	0.80	0.01	-0.06	0.01	-0.53	0.35	2	8.53	0.44	3125	2	8.73		3125					
23.000	0.81	0.01	-0.04	0.05	-0.44	0.23	2	8.75	0.42	3125	2	8.93		3125					
23.500	0.81	0.01	-0.01	0.05	-0.36	0.12	2	8.96	0.40	3125	2	9.13		3125					
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3		T/m2	T/m2	T/m3					T	

PHASE 5 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
24.000	0.82	0.01	0.00	0.00	-0.28	0.00	2	9.18	0.39	3125	2	9.33		3125		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3		T/m2	T/m2	T/m3			T

MAXIMUM DISPLACEMENT = 23.91 mm
MAXIMUM MOMENT = 32.82 m.T/m
VERTICAL REACTION IN FOOT = 0.28 T/m

CODIFICATION :
OF STATE :
OF SOIL :

-1 = SEPARATION
0 = EXCAVATION
1 = ACTIVE PR.
2 = ELASTIC
3 = PASSIVE PR.

(4 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.087 = (135.55 T/m)/(1556.89 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.208 = (150.12 T/m)/(720.40 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 31.85 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 0.00 T/m

** PHASE No 6 **

*PHASE 6
*Water Table and/or Water Pressure // Excavation

* EXCAVATION IN SOIL 2 TO LEVEL = 8.000 m

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 1 TO LEVEL = 0.000 m
WATER PRESSURE IN SOIL 1 TO LEVEL = 24.000 m PR. = 19.200 T/m2

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 2 TO LEVEL = 8.000 m
WATER PRESSURE IN SOIL 2 TO LEVEL = 24.000 m PR. = 19.200 T/m2

PHASE 6

WALL	SOIL 1	SOIL 2	STRUTS/ ANCHORS
	EXCAVATION: 0.00 m	EXCAVATION: 8.00 m	
	WATER LEVEL: 0.00 m	WATER LEVEL: 8.00 m	
	CAQUOT SURC.: 0.00 T/m2	CAQUOT SURC.: 0.00 T/m2	

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	20.61	0.87	0.00	0.00		0.00	3	3.00	3.00	1250	0					
0.500	21.05	0.87	0.48	2.15	-0.32	0.40	3	5.21	2.90	1250	0					
1.000	21.49	0.88	2.30	5.17	-0.69	0.80	2	5.64	2.81	1250	0					
				-12.05			2	5.64	2.81	1250	0				1	-86.09
1.500	21.93	0.88	-2.96	-9.06	-0.74	1.20	2	4.31	2.71	1250	0					
2.000	22.36	0.84	-6.83	-6.46	-0.53	1.60	1	3.32	2.62	1250	0					
2.500	22.76	0.78	-9.43	-3.88	-0.11	2.00	1	3.40	2.53	1250	0					
3.000	23.13	0.70	-10.67	-1.06	0.32	2.40	1	3.48	2.44	1250	0					
							1	3.40	2.44	2250	0					
3.500	23.46	0.61	-10.46	1.96	0.77	2.80	1	3.46	2.34	2250	0					
4.000	23.74	0.54	-8.68	5.20	1.24	3.20	1	3.52	2.26	2250	0					
				-26.47			1	3.52	2.26	2250	0				2	-158.33
4.500	23.99	0.42	-21.05	-22.99	1.72	3.60	1	3.59	2.17	2250	0					
5.000	24.15	0.21	-31.63	-19.28	2.20	4.00	1	3.65	2.08	2250	0					
5.500	24.19	-0.07	-40.29	-15.33	2.70	4.40	1	3.72	2.00	2250	0					
6.000	24.07	-0.41	-46.92	-11.16	3.20	4.80	1	3.79	1.92	2250	0					
							1	3.72	1.92	3000	0					
6.500	23.78	-0.79	-51.42	-6.78	3.72	5.20	1	3.78	1.84	3000	0					
7.000	23.28	-1.20	-53.67	-2.18	4.25	5.60	1	3.84	1.76	3000	0					
7.500	22.57	-1.62	-53.56	2.66	4.79	6.00	1	3.90	1.69	3000	0					
8.000	21.66	-2.03	-50.97	7.73	5.33	6.40	1	3.97	1.61	3000	0					
							1	3.97	1.61	3000	3	0.00		3000		
8.500	20.55	-2.41	-45.88	12.49	5.78	6.20	1	4.04	1.54	3000	3	1.55		3000		
9.000	19.26	-2.74	-38.61	16.42	6.02	6.00	1	4.11	1.48	3000	3	3.10		3000		
							1	4.00	1.48	3750	3	3.33		3750		
9.500	17.82	-3.00	-29.65	19.28	6.00	5.80	1	4.08	1.41	3750	3	5.13		3750		
10.000	16.27	-3.20	-19.50	21.17	5.72	5.60	1	4.15	1.35	3750	3	6.94		3750		
10.500	14.64	-3.31	-8.64	22.09	5.20	5.40	1	4.23	1.29	3750	3	8.74		3750		
11.000	12.98	-3.33	2.43	22.06	4.43	5.20	1	4.32	1.23	3750	3	10.55		3750		
11.500	11.33	-3.27	13.25	21.06	3.41	5.00	1	4.40	1.18	3750	3	12.35		3750		
12.000	9.72	-3.12	23.34	19.11	2.15	4.80	1	4.49	1.13	3750	3	14.16		3750		
							1	4.35	1.13	4500	3	15.26		4500		
12.500	8.21	-2.91	32.04	15.50	0.38	4.60	1	4.44	1.07	4500	3	17.36		4500		
13.000	6.83	-2.63	38.65	10.79	-1.68	4.40	1	4.53	1.03	4500	3	19.45		4500		
13.500	5.59	-2.31	42.64	4.98	-4.04	4.20	1	4.63	0.98	4500	3	21.55		4500		
14.000	4.51	-1.98	43.52	-1.55	-6.25	4.00	1	4.73	0.94	4500	2	22.11		4500		
							1	4.89	0.94	3500	2	17.66		3500		
14.500	3.61	-1.64	41.77	-5.20	-6.34	3.80	1	4.99	0.89	3500	2	14.65		3500		
15.000	2.87	-1.33	38.53	-7.55	-5.87	3.60	1	5.09	0.85	3500	2	12.20		3500		
15.500	2.28	-1.05	34.39	-8.85	-5.22	3.40	1	5.19	0.82	3500	2	10.28		3500		
16.000	1.82	-0.80	29.81	-9.36	-4.50	3.20	1	5.29	0.78	3500	2	8.83		3500		
16.500	1.47	-0.58	25.13	-9.29	-3.74	3.00	1	5.40	0.75	3500	2	7.78		3500		
17.000	1.23	-0.40	20.59	-8.82	-2.96	2.80	1	5.50	0.71	3500	2	7.07		3500		
17.500	1.06	-0.26	16.35	-8.12	-2.18	2.60	2	5.64	0.68	3500	2	6.65		3500		
18.000	0.96	-0.15	12.52	-7.18	-1.55	2.40	2	6.21	0.65	3500	2	6.45		3500		
18.500	0.91	-0.06	9.21	-6.03	-1.14	2.20	2	6.61	0.62	3500	2	6.42		3500		
19.000	0.89	0.00	6.49	-4.84	-0.82	2.00	2	6.89	0.60	3500	2	6.51		3500		
19.500	0.90	0.04	4.36	-3.70	-0.52	1.80	2	7.08	0.57	3500	2	6.70		3500		
20.000	0.93	0.07	2.77	-2.68	-0.24	1.60	2	7.21	0.55	3500	2	6.94		3500		
20.500	0.97	0.08	1.65	-1.84	0.07	1.40	2	7.31	0.52	3500	2	7.22		3500		
21.000	1.01	0.09	0.90	-1.21	0.40	1.20	2	7.38	0.50	3500	2	7.53		3500		
21.500	1.06	0.10	0.40	-0.80	0.77	1.00	2	7.44	0.48	3500	2	7.85		3500		
22.000	1.11	0.10	0.06	-0.62	1.19	0.80	2	7.49	0.46	3500	2	8.17		3500		
							2	8.26	0.46	3125	2	7.89		3125		
22.500	1.15	0.10	-0.13	-0.15	1.46	0.60	2	8.35	0.44	3125	2	8.22		3125		
23.000	1.20	0.10	-0.13	0.11	1.76	0.40	2	8.45	0.42	3125	2	8.54		3125		
23.500	1.25	0.10	-0.05	0.16	2.10	0.20	2	8.54	0.40	3125	2	8.86		3125		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m2	T/m3	T/m2	T/m2	T/m3		T	

PHASE 6 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
24.000	1.30	0.10	0.00	0.00	2.46	0.00	2	8.65	0.39	3125	2	9.18		3125		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m2	T/m3	T/m2	T/m2	T/m3		T	

MAXIMUM DISPLACEMENT = 24.19 mm
MAXIMUM MOMENT = -53.67 m.T/m
VERTICAL REACTION IN FOOT = -2.46 T/m

CODIFICATION OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR.
CODIFICATION OF SOIL : 2 = ELASTIC, 3 = PASSIVE PR.

(7 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.073 = (123.45 T/m)/(1688.13 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.330 = (151.36 T/m)/(459.21 T/m)

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 31.85 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 0.00 T/m

** PHASE No 7 **

*PHASE 7
*3rd Strut

* INSTALLATION OF A LINE OF STRUTS No 3

LEVEL	=	7.000 m
SPACING	=	5.000 m
INCLINATION	=	0.000 DEGREES
PRELOAD	=	-100.000 T
STIFFNESS	=	8923.000 T/m
EFFECTIVE LENGTH	=	0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 1

PHASE 7

WALL	SOIL 1	SOIL 2	
	EXCAVATION: 0.00 m	EXCAVATION: 8.00 m	STRUTS/
	WATER LEVEL: 0.00 m	WATER LEVEL: 8.00 m	ANCHORS
	CAQUOT SURC.: 0.00 T/m2	CAQUOT SURC.: 0.00 T/m2	

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	20.90	0.65	0.00	0.00		0.00	1	3.00	3.00	1250	0					
0.500	21.23	0.66	0.47	2.10	-0.20	0.40	2	4.99	2.90	1250	0					
1.000	21.56	0.67	2.24	5.03	-0.44	0.80	2	5.55	2.81	1250	0					
				-12.29			2	5.55	2.81	1250	0				1	-86.59
1.500	21.89	0.66	-3.15	-9.31	-0.48	1.20	2	4.36	2.71	1250	0					
2.000	22.21	0.62	-7.12	-6.64	-0.45	1.60	2	3.50	2.62	1250	0					
2.500	22.51	0.55	-9.78	-3.94	-0.42	2.00	2	3.72	2.53	1250	0					
3.000	22.76	0.47	-11.01	-0.92	-0.40	2.40	2	3.94	2.44	1250	0					
							2	4.22	2.44	2250	0					
3.500	22.98	0.39	-10.62	2.57	-0.40	2.80	2	4.54	2.34	2250	0					
4.000	23.15	0.31	-8.39	6.42	-0.40	3.20	2	4.86	2.26	2250	0					
				-24.19			2	4.86	2.26	2250	0				2	-153.03
4.500	23.28	0.20	-19.44	-19.98	-0.40	3.60	2	5.18	2.17	2250	0					
5.000	23.34	0.01	-28.31	-15.42	-0.40	4.00	2	5.48	2.08	2250	0					
5.500	23.29	-0.23	-34.80	-10.51	-0.40	4.40	2	5.76	2.00	2250	0					
6.000	23.10	-0.52	-38.76	-5.27	-0.40	4.80	2	5.99	1.92	2250	0					
							2	6.64	1.92	3000	0					
6.500	22.76	-0.83	-39.94	0.60	-0.40	5.20	2	6.82	1.84	3000	0					
7.000	22.27	-1.13	-38.12	6.72	-0.40	5.60	2	6.86	1.76	3000	0					
				-13.28			2	6.86	1.76	3000	0				3	-100.00
7.500	21.62	-1.45	-43.19	-6.98	-0.40	6.00	2	6.75	1.69	3000	0					
8.000	20.81	-1.80	-45.08	-0.57	-0.40	6.40	2	6.51	1.61	3000	0					
							2	6.51	1.61	3000	1	0.00		3000		
8.500	19.83	-2.15	-43.78	5.74	-0.40	6.20	2	6.21	1.54	3000	1	0.08		3000		
9.000	18.67	-2.47	-39.44	11.46	-0.40	6.00	2	5.88	1.48	3000	2	1.33		3000		
							2	6.21	1.48	3750	2	1.12		3750		
9.500	17.36	-2.75	-32.44	16.28	-0.46	5.80	2	5.80	1.41	3750	2	3.41		3750		
10.000	15.93	-2.97	-23.39	19.68	-0.71	5.60	2	5.43	1.35	3750	2	5.66		3750		
10.500	14.40	-3.11	-13.00	21.69	-1.26	5.40	2	5.12	1.29	3750	2	7.85		3750		
11.000	12.83	-3.17	-1.93	22.38	-2.10	5.20	2	4.88	1.23	3750	2	9.98		3750		
11.500	11.25	-3.14	9.17	21.82	-3.20	5.00	2	4.70	1.18	3750	2	12.05		3750		
12.000	9.70	-3.03	19.69	20.06	-4.51	4.80	2	4.58	1.13	3750	2	14.06		3750		
							2	4.46	1.13	4500	2	15.15		4500		
12.500	8.23	-2.84	28.88	16.51	-6.30	4.60	1	4.44	1.07	4500	3	17.36		4500		
13.000	6.87	-2.59	36.01	11.80	-8.36	4.40	1	4.53	1.03	4500	3	19.45		4500		
13.500	5.65	-2.29	40.50	5.99	-10.72	4.20	1	4.63	0.98	4500	3	21.55		4500		
14.000	4.59	-1.96	41.86	-0.62	-13.01	4.00	1	4.73	0.94	4500	2	22.43		4500		
							1	4.89	0.94	3500	2	17.91		3500		
14.500	3.68	-1.64	40.55	-4.40	-13.16	3.80	1	4.99	0.89	3500	2	14.90		3500		
15.000	2.94	-1.34	37.68	-6.87	-12.72	3.60	1	5.09	0.85	3500	2	12.45		3500		
15.500	2.34	-1.06	33.85	-8.30	-12.07	3.40	1	5.19	0.82	3500	2	10.51		3500		
16.000	1.88	-0.81	29.52	-8.91	-11.35	3.20	1	5.29	0.78	3500	2	9.03		3500		
16.500	1.52	-0.60	25.03	-8.94	-10.59	3.00	1	5.40	0.75	3500	2	7.96		3500		
17.000	1.27	-0.42	20.65	-8.56	-9.82	2.80	1	5.50	0.71	3500	2	7.22		3500		
17.500	1.10	-0.28	16.52	-7.92	-9.02	2.60	1	5.61	0.68	3500	2	6.76		3500		
18.000	0.99	-0.16	12.76	-7.06	-8.36	2.40	2	6.12	0.65	3500	2	6.54		3500		
18.500	0.93	-0.08	9.49	-6.00	-7.90	2.20	2	6.55	0.62	3500	2	6.48		3500		
19.000	0.91	-0.01	6.78	-4.86	-7.56	2.00	2	6.85	0.60	3500	2	6.55		3500		
19.500	0.91	0.03	4.63	-3.75	-7.25	1.80	2	7.05	0.57	3500	2	6.72		3500		
20.000	0.93	0.06	3.01	-2.76	-6.96	1.60	2	7.20	0.55	3500	2	6.95		3500		
20.500	0.97	0.08	1.84	-1.93	-6.65	1.40	2	7.30	0.52	3500	2	7.23		3500		
21.000	1.01	0.09	1.04	-1.29	-6.31	1.20	2	7.38	0.50	3500	2	7.52		3500		
21.500	1.05	0.09	0.51	-0.88	-5.95	1.00	2	7.45	0.48	3500	2	7.84		3500		
22.000	1.10	0.10	0.13	-0.69	-5.54	0.80	2	7.51	0.46	3500	2	8.16		3500		
							2	8.27	0.46	3125	2	7.88		3125		
22.500	1.15	0.10	-0.08	-0.20	-5.27	0.60	2	8.36	0.44	3125	2	8.20		3125		
23.000	1.20	0.10	-0.11	0.08	-4.97	0.40	2	8.46	0.42	3125	2	8.52		3125		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T

PHASE 7 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
23.500	1.25	0.09	-0.04	0.14	-4.64	0.20	2	8.56	0.40	3125	2	8.84		3125		
24.000	1.29	0.09	0.00	0.00	-4.29	0.00	2	8.67	0.39	3125	2	9.16		3125		

m	mm rd/1000	m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3	T/m2	T/m2	T/m3	T
									-1 = SEPARATION			
	MAXIMUM DISPLACEMENT = 23.34 mm					CODIFICATION	:	0 = EXCAVATION				
	MAXIMUM MOMENT = -45.08 m.T/m					OF STATE	:	1 = ACTIVE PR.				
	VERTICAL REACTION IN FOOT = 4.29 T/m					OF SOIL	:	2 = ELASTIC				
								3 = PASSIVE PR.				

(5 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.082 = (139.24 T/m)/(1688.13 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.323 = (148.12 T/m)/(459.21 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 31.85 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 0.00 T/m

** PHASE No 8 **

*PHASE 8
*Water Table and/or Water Pressure // Excavation

* EXCAVATION IN SOIL 2 TO LEVEL = 11.000 m

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 1 TO LEVEL = 0.000 m
WATER PRESSURE IN SOIL 1 TO LEVEL = 24.000 m PR. = 16.860 T/m2

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 2 TO LEVEL = 11.000 m
WATER PRESSURE IN SOIL 2 TO LEVEL = 24.000 m PR. = 16.860 T/m2

PHASE 8

	WALL						SOIL 1				SOIL 2					
							EXCAVATION: 0.00 m				EXCAVATION: 11.00 m				STRUTS/	
							WATER LEVEL: 0.00 m				WATER LEVEL: 11.00 m				ANCHORS	
							CAQUOT SURC.: 0.00 T/m2				CAQUOT SURC.: 0.00 T/m2					
LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	16.22	2.25	0.00	0.00		0.00	3	3.00	3.00	1250	0					
0.500	17.34	2.25	0.49	2.19	-0.34	0.35	3	5.42	2.90	1250	0					
1.000	18.47	2.26	2.42	5.77	-1.16	0.70	3	7.84	2.81	1250	0					
				-7.17			3	7.84	2.81	1250	0				1	-64.69
1.500	19.60	2.27	-0.10	-2.95	-1.71	1.05	2	7.29	2.71	1250	0					
2.000	20.74	2.27	-0.59	0.85	-1.77	1.41	2	5.45	2.62	1250	0					
2.500	21.87	2.26	0.67	4.17	-1.77	1.76	2	4.65	2.53	1250	0					
3.000	23.00	2.28	3.53	7.24	-1.71	2.11	2	3.80	2.44	1250	0					
							2	3.83	2.44	2250	0					
3.500	24.15	2.32	7.90	10.23	-1.46	2.46	1	3.56	2.34	2250	0					
4.000	25.33	2.41	13.79	13.35	-0.97	2.81	1	3.64	2.26	2250	0					
				-21.16			1	3.64	2.26	2250	0				2	-172.51
4.500	26.56	2.48	4.03	-17.82	-0.48	3.16	1	3.71	2.17	2250	0					
5.000	27.80	2.47	-4.00	-14.28	0.02	3.51	1	3.80	2.08	2250	0					
5.500	29.02	2.42	-10.21	-10.52	0.54	3.86	1	3.88	2.00	2250	0					
6.000	30.21	2.32	-14.48	-6.54	1.06	4.22	1	3.96	1.92	2250	0					
							1	3.88	1.92	3000	0					
6.500	31.34	2.20	-16.72	-2.38	1.60	4.57	1	3.95	1.84	3000	0					
7.000	32.40	2.07	-16.83	1.99	2.16	4.92	1	4.03	1.76	3000	0					
				-36.10			1	4.03	1.76	3000	0				3	-190.42
7.500	33.39	1.87	-33.74	-31.52	2.72	5.27	1	4.11	1.69	3000	0					
8.000	34.25	1.55	-48.31	-26.72	3.30	5.62	1	4.19	1.61	3000	0					
8.500	34.92	1.12	-60.42	-21.71	3.88	5.97	1	4.27	1.54	3000	0					
9.000	35.36	0.61	-69.98	-16.48	4.48	6.32	1	4.36	1.48	3000	0					
							1	4.24	1.48	3750	0					
9.500	35.52	0.04	-76.88	-11.09	5.10	6.67	1	4.32	1.41	3750	0					
10.000	35.39	-0.58	-81.03	-5.48	5.72	7.03	1	4.41	1.35	3750	0					
10.500	34.94	-1.21	-82.32	0.35	6.36	7.38	1	4.51	1.29	3750	0					
11.000	34.18	-1.85	-80.64	6.41	7.02	7.73	1	4.60	1.23	3750	0					
							1	4.60	1.23	3750	3	0.00		3750		
11.500	33.10	-2.46	-75.96	12.14	7.57	7.43	1	4.70	1.18	3750	3	1.54		3750		
12.000	31.72	-3.03	-68.64	17.00	7.92	7.13	1	4.80	1.13	3750	3	3.07		3750		
							1	4.65	1.13	4500	3	3.31		4500		
12.500	30.08	-3.52	-59.16	20.74	8.00	6.84	1	4.75	1.07	4500	3	5.12		4500		
13.000	28.21	-3.94	-48.07	23.48	7.82	6.54	1	4.86	1.03	4500	3	6.92		4500		
13.500	26.16	-4.27	-35.85	25.22	7.38	6.24	1	4.97	0.98	4500	3	8.73		4500		
14.000	23.96	-4.50	-23.02	25.96	6.70	5.94	1	5.07	0.94	4500	3	10.53		4500		
							1	5.25	0.94	3500	3	9.77		3500		
14.500	21.68	-4.63	-9.93	26.25	5.95	5.65	1	5.36	0.89	3500	3	11.30		3500		
15.000	19.35	-4.65	3.09	25.67	5.00	5.35	1	5.48	0.85	3500	3	12.84		3500		
15.500	17.04	-4.58	15.60	24.24	3.84	5.05	1	5.59	0.82	3500	3	14.37		3500		
16.000	14.79	-4.41	27.18	21.94	2.48	4.76	1	5.71	0.78	3500	3	15.91		3500		
16.500	12.64	-4.16	37.40	18.80	0.92	4.46	1	5.83	0.75	3500	3	17.44		3500		
17.000	10.64	-3.83	45.83	14.79	-0.85	4.16	1	5.95	0.71	3500	3	18.98		3500		
17.500	8.82	-3.45	52.05	9.93	-2.82	3.86	1	6.07	0.68	3500	3	20.51		3500		

18.000	7.19	-3.03	55.62	4.21	-4.99	3.57	1	6.19	0.65	3500	3	22.05		3500					
18.500	5.79	-2.59	56.17	-2.03	-6.98	3.27	1	6.32	0.62	3500	2	22.26		3500					
19.000	4.60	-2.17	53.74	-7.40	-7.81	2.97	1	6.44	0.60	3500	2	18.22		3500					
19.500	3.62	-1.76	49.07	-11.02	-7.45	2.67	1	6.57	0.57	3500	2	14.92		3500					
20.000	2.83	-1.41	42.95	-13.24	-6.68	2.38	1	6.70	0.55	3500	2	12.28		3500					
20.500	2.20	-1.10	36.01	-14.37	-5.77	2.08	1	6.83	0.52	3500	2	10.23		3500					
21.000	1.72	-0.85	28.72	-14.68	-4.80	1.78	1	6.96	0.50	3500	2	8.67		3500					
21.500	1.35	-0.65	21.45	-14.31	-3.91	1.49	2	7.40	0.48	3500	2	7.49		3500					
22.000	1.06	-0.51	14.54	-13.15	-3.38	1.19	2	8.66	0.46	3500	2	6.62		3500					
							2	9.44	0.46	3125	2	6.31		3125					
22.500	0.83	-0.42	8.56	-10.68	-3.27	0.89	2	10.43	0.44	3125	2	5.73		3125					
23.000	0.63	-0.37	3.97	-7.61	-3.23	0.59	2	11.32	0.42	3125	2	5.26		3125					
m	mm rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T				

PHASE 8 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
23.500	0.45	-0.36	1.03	-4.04	-3.22	0.30	2	12.16	0.40	3125	2	4.84		3125		
24.000	0.27	-0.35	0.00	0.00	-3.22	0.00	2	12.99	0.39	3125	2	4.43		3125		
m	mm rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T	

MAXIMUM DISPLACEMENT = 35.52 mm
MAXIMUM MOMENT = -82.32 m.T/m
VERTICAL REACTION IN FOOT = 3.22 T/m

-1 = SEPARATION
CODIFICATION : 0 = EXCAVATION
OF STATE : 1 = ACTIVE PR.
OF SOIL : 2 = ELASTIC
3 = PASSIVE PR.

(8 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.074 = (136.60 T/m)/(1840.92 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.549 = (143.80 T/m)/(261.79 T/m)

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 31.85 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 0.00 T/m

** PHASE No 9 **

*PHASE 9
*4th Strut

* INSTALLATION OF A LINE OF STRUTS No 4

LEVEL = 10.000 m
SPACING = 5.000 m
INCLINATION = 0.000 DEGREES
PRELOAD = -180.000 T
STIFFNESS = 12052.000 T/m
EFFECTIVE LENGTH = 0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 1

PHASE 9

WALL | SOIL 1: EXCAVATION: 0.00 m, WATER LEVEL: 0.00 m, CAQUOT SURC.: 0.00 T/m2 | SOIL 2: EXCAVATION: 11.00 m, WATER LEVEL: 11.00 m, CAQUOT SURC.: 0.00 T/m2 | STRUTS/ ANCHORS

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	16.58	2.15	0.00	0.00		0.00	1	3.00	3.00	1250	0					
0.500	17.66	2.15	0.47	2.09	-0.15	0.35	2	5.02	2.90	1250	0					
1.000	18.74	2.16	2.31	5.49	-0.66	0.70	2	7.50	2.81	1250	0					
				-7.83			2	7.50	2.81	1250	0				1	-66.60
1.500	19.82	2.17	-0.59	-3.77	-1.06	1.05	2	7.02	2.71	1250	0					
2.000	20.90	2.16	-1.52	-0.09	-1.10	1.41	2	5.24	2.62	1250	0					
2.500	21.98	2.15	-0.75	3.14	-1.10	1.76	2	4.51	2.53	1250	0					
3.000	23.05	2.15	1.59	6.17	-1.01	2.11	2	3.73	2.44	1250	0					
							2	3.72	2.44	2250	0					
3.500	24.13	2.18	5.41	9.14	-0.77	2.46	2	3.60	2.34	2250	0					
4.000	25.24	2.24	10.76	12.32	-0.48	2.81	2	3.86	2.26	2250	0					
				-22.01			2	3.86	2.26	2250	0				2	-171.64
4.500	26.37	2.28	0.62	-18.52	-0.36	3.16	2	4.14	2.17	2250	0					
5.000	27.51	2.25	-7.70	-14.70	-0.31	3.51	2	4.45	2.08	2250	0					
5.500	28.61	2.17	-14.03	-10.54	-0.29	3.86	2	4.80	2.00	2250	0					
6.000	29.67	2.04	-18.18	-6.03	-0.29	4.22	2	5.19	1.92	2250	0					
							2	5.51	1.92	3000	0					
6.500	30.65	1.89	-19.95	-0.95	-0.29	4.57	2	6.02	1.84	3000	0					
7.000	31.55	1.74	-19.06	4.57	-0.29	4.92	2	6.58	1.76	3000	0					
				-32.00			2	6.58	1.76	3000	0				3	-182.85
7.500	32.38	1.53	-33.58	-26.02	-0.29	5.27	2	7.16	1.69	3000	0					

8.000	33.07	1.22	-45.00	-19.57	-0.29	5.62	2	7.74	1.61	3000	0							
8.500	33.59	0.84	-53.07	-12.67	-0.29	5.97	2	8.28	1.54	3000	0							
9.000	33.90	0.41	-57.59	-5.34	-0.29	6.32	2	8.74	1.48	3000	0							
							2	9.71	1.48	3750	0							
9.500	33.99	-0.05	-58.23	2.86	-0.29	6.67	2	10.08	1.41	3750	0							
10.000	33.85	-0.49	-54.68	11.35	-0.29	7.03	2	10.19	1.35	3750	0							
				-24.65			2	10.19	1.35	3750	0						4	-180.00
10.500	33.49	-0.96	-64.85	-16.01	-0.29	7.38	2	9.95	1.29	3750	0							
11.000	32.88	-1.49	-70.70	-7.39	-0.29	7.73	2	9.46	1.23	3750	0							
							2	9.46	1.23	3750	1	0.00		3750				
11.500	32.00	-2.05	-72.29	0.95	-0.29	7.43	2	8.82	1.18	3750	1	0.07		3750				
12.000	30.84	-2.60	-69.83	8.77	-0.27	7.13	2	8.13	1.13	3750	1	0.15		3750				
							2	8.64	1.13	4500	1	0.14		4500				
12.500	29.40	-3.12	-63.62	15.83	-0.27	6.84	2	7.82	1.07	4500	2	2.05		4500				
13.000	27.72	-3.58	-54.28	21.21	-0.36	6.54	2	7.07	1.03	4500	2	4.71		4500				
13.500	25.83	-3.96	-42.71	24.78	-0.72	6.24	2	6.43	0.98	4500	2	7.26		4500				
14.000	23.78	-4.25	-29.78	26.67	-1.41	5.94	2	5.91	0.94	4500	2	9.70		4500				
							2	5.90	0.94	3500	2	9.12		3500				
14.500	21.60	-4.42	-16.21	27.41	-2.22	5.65	2	5.62	0.89	3500	2	11.05		3500				
15.000	19.37	-4.50	-2.57	26.96	-3.20	5.35	1	5.48	0.85	3500	3	12.84		3500				
15.500	17.12	-4.47	10.58	25.52	-4.36	5.05	1	5.59	0.82	3500	3	14.37		3500				
16.000	14.92	-4.34	22.81	23.23	-5.72	4.76	1	5.71	0.78	3500	3	15.91		3500				
16.500	12.80	-4.11	33.67	20.08	-7.28	4.46	1	5.83	0.75	3500	3	17.44		3500				
17.000	10.82	-3.82	42.75	16.08	-9.05	4.16	1	5.95	0.71	3500	3	18.98		3500				
17.500	9.00	-3.46	49.61	11.22	-11.02	3.86	1	6.07	0.68	3500	3	20.51		3500				
18.000	7.37	-3.05	53.82	5.50	-13.19	3.57	1	6.19	0.65	3500	3	22.05		3500				
18.500	5.95	-2.63	55.00	-0.88	-15.34	3.27	1	6.32	0.62	3500	2	22.83		3500				
19.000	4.74	-2.20	53.06	-6.52	-16.38	2.97	1	6.44	0.60	3500	2	18.73		3500				
19.500	3.74	-1.81	48.77	-10.38	-16.10	2.67	1	6.57	0.57	3500	2	15.36		3500				
20.000	2.93	-1.45	42.92	-12.80	-15.36	2.38	1	6.70	0.55	3500	2	12.65		3500				
20.500	2.29	-1.14	36.16	-14.10	-14.45	2.08	1	6.83	0.52	3500	2	10.52		3500				
21.000	1.78	-0.89	28.97	-14.54	-13.49	1.78	1	6.96	0.50	3500	2	8.89		3500				
21.500	1.39	-0.69	21.73	-14.30	-12.55	1.49	2	7.25	0.48	3500	2	7.65		3500				
22.000	1.08	-0.55	14.80	-13.27	-11.95	1.19	2	8.57	0.46	3500	2	6.70		3500				
							2	9.36	0.46	3125	2	6.39		3125				
22.500	0.84	-0.46	8.74	-10.84	-11.83	0.89	2	10.41	0.44	3125	2	5.76		3125				
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3		T/m2	T/m2	T/m3				T	

PHASE 9 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
23.000	0.62	-0.41	4.06	-7.78	-11.79	0.59	2	11.35	0.42	3125	2	5.23		3125		
23.500	0.42	-0.39	1.06	-4.15	-11.78	0.30	2	12.25	0.40	3125	2	4.76		3125		
24.000	0.23	-0.39	0.00	0.00	-11.77	0.00	2	13.12	0.39	3125	2	4.30		3125		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3		T/m2	T/m2	T/m3			T

MAXIMUM DISPLACEMENT = 33.99 mm
MAXIMUM MOMENT = -72.29 m.T/m
VERTICAL REACTION IN FOOT = 11.77 T/m

CODIFICATION :
OF STATE : 0 = EXCAVATION, 1 = ACTIVE PR., 2 = ELASTIC
OF SOIL : -1 = SEPARATION, 2 = ELASTIC, 3 = PASSIVE PR.

(5 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.090 = (166.42 T/m)/(1840.92 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.531 = (138.93 T/m)/(261.79 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 31.85 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 0.00 T/m

** PHASE No 10 **

*PHASE 10
*Water Table and/or Water Pressure // Excavation

* EXCAVATION IN SOIL 2 TO LEVEL = 14.000 m

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 1 TO LEVEL = 0.000 m
WATER PRESSURE IN SOIL 1 TO LEVEL = 24.000 m PR. = 14.120 T/m2

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 2 TO LEVEL = 14.000 m
WATER PRESSURE IN SOIL 2 TO LEVEL = 24.000 m PR. = 14.120 T/m2

PHASE 10

	SOIL 1	SOIL 2

	W A L L	EXCAVATION: 0.00 m WATER LEVEL: 0.00 m CAQUOT SURC.: 0.00 T/m2	EXCAVATION: 14.00 m WATER LEVEL: 14.00 m CAQUOT SURC.: 0.00 T/m2	STRUTS/ ANCHORS

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	15.15	2.09	0.00	0.00		0.00	3	3.00	3.00	1250	0					
0.500	16.20	2.10	0.50	2.24	-0.35	0.29	3	5.66	2.90	1250	0					
1.000	17.25	2.11	2.48	5.95	-1.22	0.59	3	8.31	2.81	1250	0					
				-5.25			3	8.31	2.81	1250	0				1	-56.02
1.500	18.30	2.12	1.01	-0.55	-1.93	0.88	2	9.01	2.71	1250	0					
2.000	19.37	2.13	1.91	4.03	-2.14	1.18	2	7.28	2.62	1250	0					
2.500	20.43	2.15	4.97	8.16	-2.15	1.47	2	6.59	2.53	1250	0					
3.000	21.52	2.21	10.04	12.08	-2.15	1.76	2	5.83	2.44	1250	0					
							2	7.33	2.44	2250	0					
3.500	22.65	2.32	17.21	16.65	-2.15	2.06	2	7.13	2.34	2250	0					
4.000	23.85	2.48	26.70	21.33	-2.15	2.35	2	7.20	2.26	2250	0					
				-10.53			2	7.20	2.26	2250	0				2	-159.28
4.500	25.14	2.68	22.64	-5.69	-2.15	2.65	2	7.16	2.17	2250	0					
5.000	26.52	2.84	21.03	-0.76	-2.15	2.94	2	6.95	2.08	2250	0					
5.500	27.99	3.01	21.88	4.15	-2.15	3.24	2	6.53	2.00	2250	0					
6.000	29.53	3.19	25.16	8.93	-2.15	3.53	2	5.82	1.92	2250	0					
							2	6.24	1.92	3000	0					
6.500	31.18	3.41	30.79	13.52	-2.11	3.82	2	4.79	1.84	3000	0					
7.000	32.95	3.68	38.62	17.77	-1.76	4.12	1	4.25	1.76	3000	0					
				-21.29			1	4.25	1.76	3000	0				3	-195.29
7.500	34.86	3.94	29.04	-17.01	-1.17	4.41	1	4.35	1.69	3000	0					
8.000	36.87	4.13	21.65	-12.53	-0.56	4.71	1	4.44	1.61	3000	0					
8.500	38.98	4.28	16.54	-7.85	0.07	5.00	1	4.54	1.54	3000	0					
9.000	41.15	4.40	13.82	-2.98	0.70	5.30	1	4.65	1.48	3000	0					
							1	4.51	1.48	3750	0					
9.500	43.37	4.50	13.58	2.02	1.36	5.59	1	4.61	1.41	3750	0					
10.000	45.65	4.61	15.88	7.22	2.03	5.88	1	4.72	1.35	3750	0					
				-57.22			1	4.72	1.35	3750	0				4	-322.22
10.500	47.97	4.63	-11.39	-51.82	2.71	6.18	1	4.83	1.29	3750	0					
11.000	50.25	4.44	-35.91	-46.22	3.41	6.47	1	4.94	1.23	3750	0					
11.500	52.39	4.08	-57.58	-40.41	4.13	6.77	1	5.05	1.18	3750	0					
12.000	54.30	3.56	-76.29	-34.40	4.86	7.06	1	5.17	1.13	3750	0					
							1	5.00	1.13	4500	0					
12.500	55.92	2.90	-91.96	-28.27	5.61	7.35	1	5.12	1.07	4500	0					
13.000	57.18	2.13	-104.52	-21.93	6.37	7.65	1	5.24	1.03	4500	0					
13.500	58.04	1.28	-113.85	-15.38	7.16	7.94	1	5.36	0.98	4500	0					
14.000	58.45	0.37	-119.86	-8.62	7.96	8.24	1	5.48	0.94	4500	0					
							1	5.68	0.94	3500	3	0.00		3500		
14.500	58.40	-0.58	-122.50	-2.04	8.70	7.82	1	5.81	0.89	3500	3	1.22		3500		
15.000	57.88	-1.53	-122.03	3.79	9.28	7.41	1	5.93	0.85	3500	3	2.43		3500		
15.500	56.88	-2.47	-118.83	8.88	9.70	7.00	1	6.06	0.82	3500	3	3.65		3500		
16.000	55.41	-3.37	-113.27	13.21	9.97	6.59	1	6.20	0.78	3500	3	4.86		3500		
16.500	53.51	-4.23	-105.74	16.80	10.09	6.18	1	6.33	0.75	3500	3	6.08		3500		
17.000	51.20	-5.01	-96.60	19.64	10.04	5.77	1	6.47	0.71	3500	3	7.29		3500		
17.500	48.51	-5.73	-86.22	21.74	9.85	5.35	1	6.60	0.68	3500	3	8.51		3500		
18.000	45.49	-6.35	-74.99	23.09	9.50	4.94	1	6.74	0.65	3500	3	9.73		3500		
18.500	42.17	-6.89	-63.26	23.69	8.99	4.53	1	6.88	0.62	3500	3	10.94		3500		
19.000	38.61	-7.34	-51.42	23.56	8.33	4.12	1	7.02	0.60	3500	3	12.16		3500		
19.500	34.85	-7.69	-39.83	22.68	7.52	3.71	1	7.17	0.57	3500	3	13.37		3500		
20.000	30.93	-7.96	-28.86	21.06	6.55	3.29	1	7.31	0.55	3500	3	14.59		3500		
20.500	26.91	-8.14	-18.89	18.70	5.43	2.88	1	7.45	0.52	3500	3	15.80		3500		
21.000	22.80	-8.26	-10.29	15.59	4.16	2.47	1	7.60	0.50	3500	3	17.02		3500		
21.500	18.66	-8.31	-3.42	11.75	2.73	2.06	1	7.75	0.48	3500	3	18.24		3500		
22.000	14.50	-8.32	1.34	7.16	1.15	1.65	1	7.90	0.46	3500	3	19.45		3500		
							1	8.23	0.46	3125	3	18.08		3125		
22.500	10.35	-8.29	3.83	2.69	-0.29	1.24	1	8.39	0.44	3125	3	19.34		3125		
23.000	6.21	-8.26	3.90	-2.55	-1.88	0.82	1	8.56	0.42	3125	3	20.60		3125		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m2	T/m3	T/m2	T/m2	T/m3		T	

PHASE 10 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
23.500	2.09	-8.24	1.71	-5.21	-2.13	0.41	1	8.72	0.40	3125	2	8.57		3125		
24.000	-2.03	-8.23	0.00	0.00	-1.46	0.00	2	21.52	0.39	3125	1	1.25		3125		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m2	T/m3	T/m2	T/m2	T/m3		T	

MAXIMUM DISPLACEMENT = 58.45 mm
MAXIMUM MOMENT = -122.50 m.T/m
VERTICAL REACTION IN FOOT = 1.46 T/m

CODIFICATION :
OF STATE :
OF SOIL :

-1 = SEPARATION
0 = EXCAVATION
1 = ACTIVE PR.
2 = ELASTIC
3 = PASSIVE PR.

(8 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.077 = (154.61 T/m)/(2019.83 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.898 = (106.89 T/m)/(119.00 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 31.85 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 0.00 T/m

*** END OF CALCULUS

ENVELOPE CURVES FROM PHASE 1 TO PHASE 10

LEVEL	MINI MOMENT	MAXI MOMENT	MINI SH.FO.	MAXI SH.FO.
0.000	0.00	0.00	0.00	0.00
0.500	0.00	0.50	0.00	2.24
1.000	0.00	2.48	0.00	5.95
	0.00	2.48	-16.51	3.53
1.500	-6.06	3.97	-14.37	5.70
2.000	-12.66	7.42	-11.98	8.13
2.500	-18.00	12.05	-9.34	10.25
3.000	-21.96	17.52	-6.44	12.08
3.500	-24.41	23.30	-3.33	16.65
4.000	-25.25	28.84	0.00	21.33
	-25.25	28.84	-26.47	11.26
4.500	-24.34	33.65	-22.99	10.28
5.000	-31.63	37.24	-19.28	7.93
5.500	-40.29	39.21	-15.33	11.00
6.000	-46.92	39.52	-11.16	13.61
6.500	-51.42	38.26	-6.78	15.14
7.000	-53.67	38.62	-6.25	17.77
	-53.67	38.62	-36.10	15.76
7.500	-53.56	32.16	-31.52	15.46
8.000	-50.97	28.19	-26.72	14.57
8.500	-60.42	26.20	-21.71	12.97
9.000	-69.98	31.54	-16.48	16.42
9.500	-76.88	34.98	-11.09	19.28
10.000	-81.03	36.02	-7.04	21.17
	-81.03	36.02	-57.22	21.17
10.500	-82.32	35.07	-51.82	22.09
11.000	-80.64	32.73	-46.22	22.38
11.500	-75.96	29.55	-40.41	21.82
12.000	-76.29	25.95	-34.40	20.06
12.500	-91.96	32.04	-28.27	20.74
13.000	-104.52	38.65	-21.93	23.48
13.500	-113.85	42.64	-15.38	25.22
14.000	-119.86	43.52	-8.62	26.67
14.500	-122.50	41.77	-5.89	27.41
15.000	-122.03	38.53	-7.55	26.96
15.500	-118.83	34.39	-8.85	25.52
16.000	-113.27	29.81	-9.36	23.23
16.500	-105.74	37.40	-9.29	20.08
17.000	-96.60	45.83	-8.82	19.64
17.500	-86.22	52.05	-8.12	21.74
18.000	-74.99	55.62	-7.18	23.09
18.500	-63.26	56.17	-6.03	23.69
19.000	-51.42	53.74	-7.40	23.56
19.500	-39.83	49.07	-11.02	22.68
20.000	-28.86	42.95	-13.24	21.06
20.500	-18.89	36.16	-14.37	18.70
21.000	-10.29	28.97	-14.68	15.59
21.500	-3.42	21.73	-14.31	11.75
22.000	-0.04	14.80	-13.27	7.16
22.500	-0.13	8.74	-10.84	2.69
23.000	-0.13	4.06	-7.78	0.11
23.500	-0.05	1.71	-5.21	0.16
24.000	0.00	0.00	0.00	0.00
m	m.T/m	m.T/m	T/m	T/m

SOIL 1 MAXIMUM (EFFECTIVE REACTION)/(PASSIVE REACTION) IN PHASE No 1 = 0.097 IN FINAL PHASE No 10 NOT APPLICABLE
SOIL 2 MAXIMUM (EFFECTIVE REACTION)/(PASSIVE REACTION) IN PHASE No 8 = 0.549 IN FINAL PHASE No 10 NOT APPLICABLE

ENVELOPE CURVES FROM PHASE 1 TO PHASE 10

(the totality of the phases)

LEVEL	MINI MOMENT	MAXI MOMENT	MINI SH.FO.	MAXI SH.FO.

0.000	0.00	0.00	0.00	0.00
0.500	0.00	0.50	0.00	2.24
1.000	0.00	2.48	0.00	5.95
	0.00	2.48	-16.51	3.53
1.500	-6.06	3.97	-14.37	5.70
2.000	-12.66	7.42	-11.98	8.13
2.500	-18.00	12.05	-9.34	10.25
3.000	-21.96	17.52	-6.44	12.08
3.500	-24.41	23.30	-3.33	16.65
4.000	-25.25	28.84	0.00	21.33
	-25.25	28.84	-26.47	11.26
4.500	-24.34	33.65	-22.99	10.28
5.000	-31.63	37.24	-19.28	7.93
5.500	-40.29	39.21	-15.33	11.00
6.000	-46.92	39.52	-11.16	13.61
6.500	-51.42	38.26	-6.78	15.14
7.000	-53.67	38.62	-6.25	17.77
	-53.67	38.62	-36.10	15.76
7.500	-53.56	32.16	-31.52	15.46
8.000	-50.97	28.19	-26.72	14.57
8.500	-60.42	26.20	-21.71	12.97
9.000	-69.98	31.54	-16.48	16.42
9.500	-76.88	34.98	-11.09	19.28
10.000	-81.03	36.02	-7.04	21.17
	-81.03	36.02	-57.22	21.17
10.500	-82.32	35.07	-51.82	22.09
11.000	-80.64	32.73	-46.22	22.38
11.500	-75.96	29.55	-40.41	21.82
12.000	-76.29	25.95	-34.40	20.06
12.500	-91.96	32.04	-28.27	20.74
13.000	-104.52	38.65	-21.93	23.48
13.500	-113.85	42.64	-15.38	25.22
14.000	-119.86	43.52	-8.62	26.67
14.500	-122.50	41.77	-5.89	27.41
15.000	-122.03	38.53	-7.55	26.96
15.500	-118.83	34.39	-8.85	25.52
16.000	-113.27	29.81	-9.36	23.23
16.500	-105.74	37.40	-9.29	20.08
17.000	-96.60	45.83	-8.82	19.64
17.500	-86.22	52.05	-8.12	21.74
18.000	-74.99	55.62	-7.18	23.09
18.500	-63.26	56.17	-6.03	23.69
19.000	-51.42	53.74	-7.40	23.56
19.500	-39.83	49.07	-11.02	22.68
20.000	-28.86	42.95	-13.24	21.06
20.500	-18.89	36.16	-14.37	18.70
21.000	-10.29	28.97	-14.68	15.59
21.500	-3.42	21.73	-14.31	11.75
22.000	-0.04	14.80	-13.27	7.16
22.500	-0.13	8.74	-10.84	2.69
23.000	-0.13	4.06	-7.78	0.11
23.500	-0.05	1.71	-5.21	0.16
24.000	0.00	0.00	0.00	0.00
m	m.T/m	m.T/m	T/m	T/m

SOIL 1 MAXIMUM (EFFECTIVE REACTION)/(PASSIVE REACTION) IN PHASE No 1 = 0.097 IN FINAL PHASE No 10 NOT APPLICABLE
SOIL 2 MAXIMUM (EFFECTIVE REACTION)/(PASSIVE REACTION) IN PHASE No 8 = 0.549 IN FINAL PHASE No 10 NOT APPLICABLE

IN WHAT FOLLOWS THE NUMBERS OF PHASE ARE THE ONES PHASES OF CALCULUS

FOR THE WORKING PHASES :

MAXIMUM DISPLACEMENT IN PHASE No 10 = 58.45 mm IN FINAL PHASE No 10 = 58.45 mm
MAXIMUM MOMENT IN PHASE No 10 = -122.50 m.T/m IN FINAL PHASE No 10 = -122.50 m.T/m

STRUT/ANCHOR		PRELOAD		MAXIMUM		FINAL STATE		
NUMBER	LEVEL	PHASE	FORCE	PHASE	FORCE	PHASE	FORCE	GLIDING
1	1.00	3	-50.00	4	-100.07	10	-56.02	0.00
2	4.00	5	-100.00	8	-172.51	10	-159.28	0.00
3	7.00	7	-100.00	10	-195.29	10	-195.29	0.00
4	10.00	9	-180.00	10	-322.22	10	-322.22	0.00
m		T		T		T		mm

Declaration : Units of output data follow with the input data.
One should use a consistency system, e.g., SI, metric units, etc.

<<<<<<<<<< LIST OF INPUT DATA >>>>>>>>>>

XDO-RIDO-TORSA TEST

GROUND LEVEL = 0.00

WALL NO	LEVEL	EI
1	24.00	64256.00

SOIL NO	LEVEL	WEIGHT	Ka	Ko	Kp	Su	Suw	Kh
1	3.00	1.90	0.3170	0.5310	4.1970	0.00	0.00	1250.00
2	6.00	1.85	0.2910	0.5000	4.8070	0.00	0.00	2250.00
3	9.00	1.80	0.2790	0.4850	5.1600	0.00	0.00	3000.00
4	12.00	1.85	0.2670	0.4700	5.5510	0.00	0.00	3750.00
5	14.00	1.90	0.2560	0.4550	5.9860	0.00	0.00	4500.00
6	22.00	1.85	0.2670	0.4700	5.5510	0.00	0.00	3500.00
7	24.00	1.90	0.2790	0.4850	5.1600	0.00	0.00	3125.00

INITIAL GROUND WATER LEVEL = 0.00
MAXIMUM LENGTH OF F.E.M. ELEMENT = 0.50

*** PHASE NO. 1

SUB(1) BOUSSINESQ SURCHARGE, LEVEL-DISTANCE A-DISTANCE B-LOAD = 0.00 0.00 20.00 6.00

*** PHASE NO. 2

EXC(2) EXCAVATION LEVEL = 2.00
WAT(1) LEVEL-PRESSURE = 0.00 0.00
WAT(1) LEVEL-PRESSURE = 24.00 22.96
WAT(2) LEVEL-PRESSURE = 2.00 0.00
WAT(2) LEVEL-PRESSURE = 24.00 22.96

*** PHASE NO. 3

BUT(1) LEVEL-SPAN-DEGREE-LOAD-STIFFNESS = 1.00 5.00 0.00 -50.00 7095.00 (BUT NO. 1)

*** PHASE NO. 4

EXC(2) EXCAVATION LEVEL = 5.00
WAT(1) LEVEL-PRESSURE = 0.00 0.00
WAT(1) LEVEL-PRESSURE = 24.00 21.21
WAT(2) LEVEL-PRESSURE = 5.00 0.00
WAT(2) LEVEL-PRESSURE = 24.00 21.21

*** PHASE NO. 5

BUT(1) LEVEL-SPAN-DEGREE-LOAD-STIFFNESS = 4.00 5.00 0.00 -100.00 8923.00 (BUT NO. 2)

*** PHASE NO. 6

EXC(2) EXCAVATION LEVEL = 8.00
WAT(1) LEVEL-PRESSURE = 0.00 0.00
WAT(1) LEVEL-PRESSURE = 24.00 19.20
WAT(2) LEVEL-PRESSURE = 8.00 0.00
WAT(2) LEVEL-PRESSURE = 24.00 19.20

*** PHASE NO. 7

BUT(1) LEVEL-SPAN-DEGREE-LOAD-STIFFNESS = 7.00 5.00 0.00 -100.00 8923.00 (BUT NO. 3)

*** PHASE NO. 8

EXC(2) EXCAVATION LEVEL = 11.00
WAT(1) LEVEL-PRESSURE = 0.00 0.00
WAT(1) LEVEL-PRESSURE = 24.00 16.86
WAT(2) LEVEL-PRESSURE = 11.00 0.00
WAT(2) LEVEL-PRESSURE = 24.00 16.86

*** PHASE NO. 9

BUT(1) LEVEL-SPAN-DEGREE-LOAD-STIFFNESS = 10.00 5.00 0.00 -180.00 12052.00 (BUT NO. 4)

*** PHASE NO. 10

EXC(2) EXCAVATION LEVEL = 14.00
WAT(1) LEVEL-PRESSURE = 0.00 0.00
WAT(1) LEVEL-PRESSURE = 24.00 14.12
WAT(2) LEVEL-PRESSURE = 14.00 0.00
WAT(2) LEVEL-PRESSURE = 24.00 14.12

<<<<<<<<<< END OF INPUT DATA >>>>>>>>>>

PHASE # 1	W A L L	S O I L - 1 / S I D E - 1 EXCAVATION LEVEL = 0.00 WATER LEVEL = 0.00 CAQUOT SURCHARGE = 0.00	S O I L - 2 / S I D E - 2 EXCAVATION LEVEL = 0.00 WATER LEVEL = 0.00 CAQUOT SURCHARGE = 0.00	STRUTS/ FLOORS

LEVEL	DISPL.	MOMENT	SHEAR	ID	Pearth	Pwater	Pother	KH	ID	Pearth	Pwater	Pother	KH	NO.	FORCE
0.000	0.222	0.00	0.00	1	0.00	0.00	0.00	1250.00	3	0.00	0.00	0.00	1250.00		
0.500	0.205	0.05	0.29	1	0.14	0.50	2.90	1250.00	3	1.89	0.50	0.00	1250.00		
1.000	0.188	0.30	0.65	1	0.29	1.00	2.81	1250.00	2	2.82	1.00	0.00	1250.00		
1.500	0.170	0.66	0.79	1	0.43	1.50	2.71	1250.00	2	2.85	1.50	0.00	1250.00		
2.000	0.153	1.09	0.94	1	0.57	2.00	2.62	1250.00	2	2.87	2.00	0.00	1250.00		
2.500	0.137	1.60	1.11	1	0.71	2.50	2.53	1250.00	2	2.90	2.50	0.00	1250.00		
3.000	0.121	2.19	1.28	1	0.86	3.00	2.44	1250.00	2	2.94	3.00	0.00	1250.00		
			1.28	1	0.79	3.00	2.44	2250.00	2	4.07	3.00	0.00	2250.00		
3.500	0.106	2.73	0.89	1	0.91	3.50	2.34	2250.00	2	3.94	3.50	0.00	2250.00		
4.000	0.092	3.09	0.58	1	1.03	4.00	2.26	2250.00	2	3.84	4.00	0.00	2250.00		
4.500	0.079	3.32	0.33	1	1.16	4.50	2.17	2250.00	2	3.77	4.50	0.00	2250.00		
5.000	0.068	3.43	0.14	1	1.28	5.00	2.08	2250.00	2	3.72	5.00	0.00	2250.00		
5.500	0.057	3.45	-0.03	1	1.40	5.50	2.00	2250.00	2	3.70	5.50	0.00	2250.00		
6.000	0.048	3.40	-0.17	2	1.53	6.00	1.92	2250.00	2	3.72	6.00	0.00	2250.00		
			-0.17	1	1.46	6.00	1.92	3000.00	2	4.00	6.00	0.00	3000.00		
6.500	0.041	3.23	-0.46	1	1.58	6.50	1.84	3000.00	2	3.97	6.50	0.00	3000.00		
7.000	0.035	2.94	-0.68	2	1.89	7.00	1.76	3000.00	2	3.97	7.00	0.00	3000.00		
7.500	0.030	2.57	-0.78	2	2.24	7.50	1.69	3000.00	2	4.01	7.50	0.00	3000.00		
8.000	0.025	2.17	-0.78	2	2.56	8.00	1.61	3000.00	2	4.08	8.00	0.00	3000.00		
8.500	0.022	1.79	-0.70	2	2.85	8.50	1.54	3000.00	2	4.18	8.50	0.00	3000.00		
9.000	0.020	1.47	-0.57	2	3.12	9.00	1.48	3000.00	2	4.30	9.00	0.00	3000.00		
			-0.57	2	2.86	9.00	1.48	3750.00	2	4.33	9.00	0.00	3750.00		
9.500	0.017	1.18	-0.54	2	3.14	9.50	1.41	3750.00	2	4.45	9.50	0.00	3750.00		
10.000	0.016	0.92	-0.48	2	3.40	10.00	1.35	3750.00	2	4.59	10.00	0.00	3750.00		
10.500	0.015	0.70	-0.39	2	3.64	10.50	1.29	3750.00	2	4.75	10.50	0.00	3750.00		
11.000	0.014	0.53	-0.30	2	3.88	11.00	1.23	3750.00	2	4.91	11.00	0.00	3750.00		
11.500	0.013	0.40	-0.20	2	4.10	11.50	1.18	3750.00	2	5.08	11.50	0.00	3750.00		
12.000	0.013	0.32	-0.10	2	4.32	12.00	1.13	3750.00	2	5.26	12.00	0.00	3750.00		
			-0.10	2	4.08	12.00	1.13	4500.00	2	5.20	12.00	0.00	4500.00		
12.500	0.012	0.27	-0.10	2	4.30	12.50	1.07	4500.00	2	5.39	12.50	0.00	4500.00		
13.000	0.012	0.21	-0.12	2	4.52	13.00	1.03	4500.00	2	5.58	13.00	0.00	4500.00		
13.500	0.011	0.14	-0.14	2	4.74	13.50	0.98	4500.00	2	5.77	13.50	0.00	4500.00		
14.000	0.011	0.06	-0.17	2	4.95	14.00	0.94	4500.00	2	5.97	14.00	0.00	4500.00		
			-0.17	2	5.24	14.00	0.94	3500.00	2	6.04	14.00	0.00	3500.00		
14.500	0.011	-0.01	-0.10	2	5.45	14.50	0.89	3500.00	2	6.23	14.50	0.00	3500.00		
15.000	0.011	-0.05	-0.05	2	5.66	15.00	0.85	3500.00	2	6.42	15.00	0.00	3500.00		
15.500	0.011	-0.07	-0.01	2	5.86	15.50	0.82	3500.00	2	6.61	15.50	0.00	3500.00		
16.000	0.011	-0.08	0.01	2	6.07	16.00	0.78	3500.00	2	6.81	16.00	0.00	3500.00		
16.500	0.010	-0.07	0.03	2	6.28	16.50	0.75	3500.00	2	7.00	16.50	0.00	3500.00		
17.000	0.010	-0.06	0.04	2	6.49	17.00	0.71	3500.00	2	7.19	17.00	0.00	3500.00		
17.500	0.010	-0.04	0.05	2	6.70	17.50	0.68	3500.00	2	7.38	17.50	0.00	3500.00		
18.000	0.009	-0.02	0.05	2	6.91	18.00	0.65	3500.00	2	7.56	18.00	0.00	3500.00		
18.500	0.009	0.00	0.04	2	7.12	18.50	0.62	3500.00	2	7.75	18.50	0.00	3500.00		
19.000	0.009	0.02	0.04	2	7.33	19.00	0.60	3500.00	2	7.94	19.00	0.00	3500.00		
19.500	0.008	0.03	0.03	2	7.54	19.50	0.57	3500.00	2	8.13	19.50	0.00	3500.00		
20.000	0.008	0.04	0.02	2	7.76	20.00	0.55	3500.00	2	8.32	20.00	0.00	3500.00		
20.500	0.008	0.04	0.01	2	7.97	20.50	0.52	3500.00	2	8.51	20.50	0.00	3500.00		
21.000	0.007	0.05	0.00	2	8.18	21.00	0.50	3500.00	2	8.70	21.00	0.00	3500.00		
21.500	0.007	0.04	-0.01	2	8.38	21.50	0.48	3500.00	2	8.89	21.50	0.00	3500.00		
22.000	0.007	0.03	-0.02	2	8.59	22.00	0.46	3500.00	2	9.08	22.00	0.00	3500.00		
			-0.02	2	8.90	22.00	0.46	3125.00	2	9.34	22.00	0.00	3125.00		
22.500	0.007	0.01	-0.01	2	9.13	22.50	0.44	3125.00	2	9.55	22.50	0.00	3125.00		
23.000	0.006	0.01	0.00	2	9.35	23.00	0.42	3125.00	2	9.76	23.00	0.00	3125.00		
23.500	0.006	0.00	0.00	2	9.58	23.50	0.40	3125.00	2	9.97	23.50	0.00	3125.00		
24.000	0.006	0.00	0.00	2	9.80	24.00	0.39	3125.00	2	10.18	24.00	0.00	3125.00		

	MAX DIS.= 0.222*E-02	SOIL -1 = SEPARATION	Soil-1 / Side-1 !	Soil-2 / Side-2
	0.006*E-02	STATE: 0 = EXCAVATION	+----> Positive Displ.	
	MAX MOMENT = 3.45	(ID) 1 = ACTIVE EARTH PRESSURE	& Strut Load	
	-0.08	2 = ELASTIC	Positive Earth,---->|<---- Positive Earth,	

	MAX SHEAR = 1.28	3 = PASSIVE EARTH PRESSURE	Water & Other Press.	Water & Other Press.

PHASE # 2 — WALL — SOIL - 1 / SIDE - 1: EXCAVATION LEVEL = 0.00, WATER LEVEL = 0.00, CAQUOT SURCHARGE = 0.00 — SOIL - 2 / SIDE - 2: EXCAVATION LEVEL = 2.00, WATER LEVEL = 2.00, CAQUOT SURCHARGE = 0.00 — STRUTS/FLOORS

LEVEL	DISPL.	MOMENT	SHEAR	ID	Pearth	Pwater	Pother	KH	ID	Pearth	Pwater	Pother	KH	NO.	FORCE
0.000	2.025	0.00	0.00	1	0.00	0.00	0.00	1250.00	0						
0.500	1.864	0.15	0.88	1	0.15	0.48	2.90	1250.00	0						
1.000	1.702	1.05	2.78	1	0.30	0.96	2.81	1250.00	0						
1.500	1.541	2.97	4.95	1	0.45	1.43	2.71	1250.00	0						
2.000	1.381	6.04	7.38	1	0.60	1.91	2.62	1250.00	0						
			7.38	1	0.60	1.91	2.62	1250.00	3	0.00	0.00	0.00	1250.00		
2.500	1.224	10.30	9.50	1	0.75	2.39	2.53	1250.00	3	1.80	0.52	0.00	1250.00		
3.000	1.070	15.39	10.73	1	0.90	2.87	2.44	1250.00	3	3.59	1.04	0.00	1250.00		
			10.73	1	0.82	2.87	2.44	2250.00	3	4.12	1.04	0.00	2250.00		
3.500	0.923	20.79	10.73	1	0.95	3.35	2.34	2250.00	3	6.05	1.57	0.00	2250.00		
4.000	0.783	25.95	9.76	1	1.08	3.83	2.26	2250.00	3	7.99	2.09	0.00	2250.00		
4.500	0.654	30.38	7.81	1	1.21	4.30	2.17	2250.00	3	9.93	2.61	0.00	2250.00		
5.000	0.536	33.60	4.90	1	1.34	4.78	2.08	2250.00	3	11.87	3.13	0.00	2250.00		
5.500	0.432	35.23	1.69	1	1.47	5.26	2.00	2250.00	2	11.15	3.65	0.00	2250.00		
6.000	0.341	35.39	-0.88	1	1.60	5.74	1.92	2250.00	2	9.30	4.17	0.00	2250.00		
			-0.88	1	1.54	5.74	1.92	3000.00	2	11.81	4.17	0.00	3000.00		
6.500	0.264	34.18	-3.75	1	1.65	6.22	1.84	3000.00	2	9.68	4.70	0.00	3000.00		
7.000	0.200	31.80	-5.64	1	1.77	6.70	1.76	3000.00	2	7.95	5.22	0.00	3000.00		
7.500	0.148	28.66	-6.77	1	1.89	7.17	1.69	3000.00	2	6.58	5.74	0.00	3000.00		
8.000	0.108	25.12	-7.30	1	2.01	7.65	1.61	3000.00	2	5.55	6.26	0.00	3000.00		
8.500	0.077	21.43	-7.38	1	2.13	8.13	1.54	3000.00	2	4.82	6.78	0.00	3000.00		
9.000	0.055	17.78	-7.15	2	2.26	8.61	1.48	3000.00	2	4.33	7.31	0.00	3000.00		
			-7.15	1	2.15	8.61	1.48	3750.00	2	4.66	7.31	0.00	3750.00		
9.500	0.039	14.25	-6.86	2	2.51	9.09	1.41	3750.00	2	4.27	7.83	0.00	3750.00		
10.000	0.029	10.96	-6.24	2	3.09	9.57	1.35	3750.00	2	4.09	8.35	0.00	3750.00		
10.500	0.024	8.05	-5.37	2	3.51	10.04	1.29	3750.00	2	4.07	8.87	0.00	3750.00		
11.000	0.021	5.61	-4.39	2	3.81	10.52	1.23	3750.00	2	4.17	9.39	0.00	3750.00		
11.500	0.021	3.66	-3.40	2	4.03	11.00	1.18	3750.00	2	4.35	9.91	0.00	3750.00		
12.000	0.022	2.19	-2.47	2	4.20	11.48	1.13	3750.00	2	4.59	10.44	0.00	3750.00		
			-2.47	2	3.87	11.48	1.13	4500.00	2	4.64	10.44	0.00	4500.00		
12.500	0.025	1.11	-1.83	2	3.99	11.96	1.07	4500.00	2	4.92	10.96	0.00	4500.00		
13.000	0.027	0.32	-1.34	2	4.09	12.44	1.03	4500.00	2	5.23	11.48	0.00	4500.00		
13.500	0.030	-0.26	-1.00	2	4.18	12.91	0.98	4500.00	2	5.55	12.00	0.00	4500.00		
14.000	0.032	-0.71	-0.81	2	4.28	13.39	0.94	4500.00	2	5.86	12.52	0.00	4500.00		
			-0.81	2	4.79	13.39	0.94	3500.00	2	5.68	12.52	0.00	3500.00		
14.500	0.035	-1.01	-0.40	2	4.92	13.87	0.89	3500.00	2	5.95	13.05	0.00	3500.00		
15.000	0.036	-1.14	-0.10	2	5.07	14.35	0.85	3500.00	2	6.20	13.57	0.00	3500.00		
15.500	0.038	-1.14	0.11	2	5.23	14.83	0.82	3500.00	2	6.44	14.09	0.00	3500.00		
16.000	0.039	-1.05	0.25	2	5.40	15.31	0.78	3500.00	2	6.67	14.61	0.00	3500.00		
16.500	0.040	-0.91	0.32	2	5.59	15.78	0.75	3500.00	2	6.88	15.13	0.00	3500.00		
17.000	0.040	-0.74	0.36	2	5.79	16.26	0.71	3500.00	2	7.08	15.65	0.00	3500.00		
17.500	0.040	-0.56	0.36	2	6.00	16.74	0.68	3500.00	2	7.27	16.18	0.00	3500.00		
18.000	0.040	-0.39	0.34	2	6.22	17.22	0.65	3500.00	2	7.45	16.70	0.00	3500.00		
18.500	0.039	-0.23	0.31	2	6.44	17.70	0.62	3500.00	2	7.62	17.22	0.00	3500.00		
19.000	0.039	-0.10	0.26	2	6.67	18.18	0.60	3500.00	2	7.80	17.74	0.00	3500.00		
19.500	0.038	0.02	0.21	2	6.90	18.65	0.57	3500.00	2	7.97	18.26	0.00	3500.00		
20.000	0.038	0.11	0.15	2	7.13	19.13	0.55	3500.00	2	8.14	18.79	0.00	3500.00		
20.500	0.037	0.16	0.09	2	7.35	19.61	0.52	3500.00	2	8.31	19.31	0.00	3500.00		
21.000	0.037	0.19	0.02	2	7.58	20.09	0.50	3500.00	2	8.49	19.83	0.00	3500.00		
21.500	0.036	0.18	-0.06	2	7.80	20.57	0.48	3500.00	2	8.66	20.35	0.00	3500.00		
22.000	0.036	0.12	-0.15	2	8.02	21.05	0.46	3500.00	2	8.84	20.87	0.00	3500.00		
			-0.15	2	8.45	21.05	0.46	3125.00	2	8.95	20.87	0.00	3125.00		
22.500	0.036	0.06	-0.09	2	8.69	21.52	0.44	3125.00	2	9.15	21.39	0.00	3125.00		
23.000	0.036	0.02	-0.04	2	8.92	22.00	0.42	3125.00	2	9.35	21.92	0.00	3125.00		
23.500	0.035	0.00	-0.01	2	9.16	22.48	0.40	3125.00	2	9.55	22.44	0.00	3125.00		
24.000	0.035	0.00	0.00	2	9.39	22.96	0.39	3125.00	2	9.76	22.96	0.00	3125.00		

	MAX DIS.= 2.025*E-02	SOIL -1 = SEPARATION	Soil-1 / Side-1 ! Soil-2 / Side-2
	0.021*E-02	STATE: 0 = EXCAVATION	+----> Positive Displ.
	MAX MOMENT = 35.39	(ID) 1 = ACTIVE EARTH PRESSURE	& Strut Load
	-1.14	2 = ELASTIC	Positive Earth,----><---- Positive Earth,
	MAX SHEAR = 10.73	3 = PASSIVE EARTH PRESSURE	Water & Other Press. Water & Other Press.

PHASE # 3 — WALL — SOIL - 1 / SIDE - 1: EXCAVATION LEVEL = 0.00, WATER LEVEL = 0.00, CAQUOT SURCHARGE = 0.00 — SOIL - 2 / SIDE - 2: EXCAVATION LEVEL = 2.00, WATER LEVEL = 2.00, CAQUOT SURCHARGE = 0.00 — STRUTS/FLOORS

LEVEL	DISPL.	MOMENT	SHEAR	ID	Pearth	Pwater	Pother	KH	ID	Pearth	Pwater	Pother	KH	NO.	FORCE

0.000	1.694	0.00	0.00	3	0.00	0.00	0.00	1250.00	0								
0.500	1.572	0.22	1.34	3	1.98	0.48	2.90	1250.00	0								
1.000	1.450	1.64	4.49	2	3.45	0.96	2.81	1250.00	0							1	-50.0
			-5.51	2	3.45	0.96	2.81	1250.00	0								
1.500	1.329	-0.21	-1.90	2	3.10	1.43	2.71	1250.00	0								
2.000	1.207	-0.25	1.74	2	2.77	1.91	2.62	1250.00	0								
			1.74	2	2.77	1.91	2.62	1250.00	1	0.00	0.00	0.00	1250.00				
2.500	1.086	1.51	5.25	2	2.47	2.39	2.53	1250.00	1	0.14	0.52	0.00	1250.00				
3.000	0.965	4.87	7.98	2	2.21	2.87	2.44	1250.00	2	2.28	1.04	0.00	1250.00				
			7.98	2	3.19	2.87	2.44	2250.00	2	1.75	1.04	0.00	2250.00				
3.500	0.846	9.45	10.03	2	2.68	3.35	2.34	2250.00	2	4.33	1.57	0.00	2250.00				
4.000	0.731	14.64	10.51	2	2.26	3.83	2.26	2250.00	2	6.81	2.09	0.00	2250.00				
4.500	0.621	19.71	9.52	2	1.95	4.30	2.17	2250.00	2	9.20	2.61	0.00	2250.00				
5.000	0.519	23.94	7.17	2	1.72	4.78	2.08	2250.00	2	11.49	3.13	0.00	2250.00				
5.500	0.427	26.78	4.20	2	1.58	5.26	2.00	2250.00	2	11.04	3.65	0.00	2250.00				
6.000	0.344	28.22	1.66	1	1.60	5.74	1.92	2250.00	2	9.39	4.17	0.00	2250.00				
			1.66	1	1.54	5.74	1.92	3000.00	2	11.92	4.17	0.00	3000.00				
6.500	0.273	28.27	-1.30	1	1.65	6.22	1.84	3000.00	2	9.97	4.70	0.00	3000.00				
7.000	0.213	27.07	-3.37	1	1.77	6.70	1.76	3000.00	2	8.34	5.22	0.00	3000.00				
7.500	0.163	25.02	-4.71	1	1.89	7.17	1.69	3000.00	2	7.03	5.74	0.00	3000.00				
8.000	0.123	22.46	-5.46	1	2.01	7.65	1.61	3000.00	2	6.01	6.26	0.00	3000.00				
8.500	0.091	19.64	-5.76	1	2.13	8.13	1.54	3000.00	2	5.25	6.78	0.00	3000.00				
9.000	0.068	16.75	-5.74	1	2.24	8.61	1.48	3000.00	2	4.72	7.31	0.00	3000.00				
			-5.74	1	2.15	8.61	1.48	3750.00	2	5.14	7.31	0.00	3750.00				
9.500	0.050	13.87	-5.73	1	2.27	9.09	1.41	3750.00	2	4.69	7.83	0.00	3750.00				
10.000	0.039	11.06	-5.45	2	2.75	9.57	1.35	3750.00	2	4.43	8.35	0.00	3750.00				
10.500	0.031	8.47	-4.89	2	3.24	10.04	1.29	3750.00	2	4.34	8.87	0.00	3750.00				
11.000	0.027	6.21	-4.14	2	3.61	10.52	1.23	3750.00	2	4.37	9.39	0.00	3750.00				
11.500	0.025	4.34	-3.33	2	3.89	11.00	1.18	3750.00	2	4.49	9.91	0.00	3750.00				
12.000	0.025	2.88	-2.51	2	4.10	11.48	1.13	3750.00	2	4.68	10.44	0.00	3750.00				
			-2.51	2	3.75	11.48	1.13	4500.00	2	4.75	10.44	0.00	4500.00				
12.500	0.026	1.76	-1.97	2	3.92	11.96	1.07	4500.00	2	4.99	10.96	0.00	4500.00				
13.000	0.028	0.89	-1.52	2	4.06	12.44	1.03	4500.00	2	5.26	11.48	0.00	4500.00				
13.500	0.030	0.22	-1.19	2	4.18	12.91	0.98	4500.00	2	5.55	12.00	0.00	4500.00				
14.000	0.032	-0.32	-1.00	2	4.30	13.39	0.94	4500.00	2	5.84	12.52	0.00	4500.00				
			-1.00	2	4.81	13.39	0.94	3500.00	2	5.67	12.52	0.00	3500.00				
14.500	0.034	-0.71	-0.58	2	4.94	13.87	0.89	3500.00	2	5.93	13.05	0.00	3500.00				
15.000	0.036	-0.92	-0.25	2	5.09	14.35	0.85	3500.00	2	6.18	13.57	0.00	3500.00				
15.500	0.037	-0.98	-0.02	2	5.25	14.83	0.82	3500.00	2	6.42	14.09	0.00	3500.00				
16.000	0.038	-0.95	0.14	2	5.43	15.31	0.78	3500.00	2	6.65	14.61	0.00	3500.00				
16.500	0.039	-0.85	0.24	2	5.61	15.78	0.75	3500.00	2	6.86	15.13	0.00	3500.00				
17.000	0.039	-0.72	0.30	2	5.81	16.26	0.71	3500.00	2	7.06	15.65	0.00	3500.00				
17.500	0.039	-0.57	0.32	2	6.02	16.74	0.68	3500.00	2	7.25	16.18	0.00	3500.00				
18.000	0.039	-0.41	0.31	2	6.23	17.22	0.65	3500.00	2	7.44	16.70	0.00	3500.00				
18.500	0.039	-0.26	0.29	2	6.45	17.70	0.62	3500.00	2	7.61	17.22	0.00	3500.00				
19.000	0.038	-0.12	0.25	2	6.68	18.18	0.60	3500.00	2	7.79	17.74	0.00	3500.00				
19.500	0.038	-0.01	0.21	2	6.90	18.65	0.57	3500.00	2	7.96	18.26	0.00	3500.00				
20.000	0.038	0.08	0.15	2	7.13	19.13	0.55	3500.00	2	8.14	18.79	0.00	3500.00				
20.500	0.037	0.14	0.09	2	7.35	19.61	0.52	3500.00	2	8.31	19.31	0.00	3500.00				
21.000	0.037	0.17	0.02	2	7.58	20.09	0.50	3500.00	2	8.49	19.83	0.00	3500.00				
21.500	0.036	0.16	-0.06	2	7.80	20.57	0.48	3500.00	2	8.67	20.35	0.00	3500.00				
22.000	0.036	0.11	-0.15	2	8.02	21.05	0.46	3500.00	2	8.85	20.87	0.00	3500.00				
			-0.15	2	8.45	21.05	0.46	3125.00	2	8.95	20.87	0.00	3125.00				
22.500	0.036	0.05	-0.09	2	8.69	21.52	0.44	3125.00	2	9.15	21.39	0.00	3125.00				
23.000	0.036	0.02	-0.04	2	8.92	22.00	0.42	3125.00	2	9.35	21.92	0.00	3125.00				
23.500	0.036	0.00	-0.01	2	9.15	22.48	0.40	3125.00	2	9.56	22.44	0.00	3125.00				
24.000	0.035	0.00	0.00	2	9.39	22.96	0.39	3125.00	2	9.76	22.96	0.00	3125.00				

MAX DIS.= 1.694*E-02 0.025*E-02	SOIL -1 = SEPARATION STATE: 0 = EXCAVATION	Soil-1 / Side-1	! Soil-2 / Side-2 +----> Positive Displ. ! & Strut Load
MAX MOMENT = 28.27 -0.98	(ID) 1 = ACTIVE EARTH PRESSURE 2 = ELASTIC	Positive Earth,---->|Water & Other Press.|	<---- Positive Earth, Water & Other Press.
MAX SHEAR = 10.51	3 = PASSIVE EARTH PRESSURE		

PHASE # 4	WALL	SOIL-1 / SIDE-1 EXCAVATION LEVEL = 0.00 WATER LEVEL = 0.00 CAQUOT SURCHARGE = 0.00	SOIL-2 / SIDE-2 EXCAVATION LEVEL = 5.00 WATER LEVEL = 5.00 CAQUOT SURCHARGE = 0.00	STRUTS/ FLOORS

LEVEL	DISPL.	MOMENT	SHEAR	ID	Pearth	Pwater	Pother	KH	ID	Pearth	Pwater	Pother	KH	NO.	FORCE		
0.000	2.222	0.00	0.00	1	0.00	0.00	0.00	1250.00	0								
0.500	2.169	0.15	0.88	1	0.16	0.44	2.90	1250.00	0								
1.000	2.116	1.04	2.76	1	0.32	0.88	2.81	1250.00	0							1	-97.3
			-16.70	1	0.32	0.88	2.81	1250.00	0								
1.500	2.063	-6.78	-14.56	1	0.48	1.33	2.71	1250.00	0								
2.000	2.007	-13.48	-12.17	1	0.64	1.77	2.62	1250.00	0								
2.500	1.946	-18.91	-9.53	1	0.81	2.21	2.53	1250.00	0								
3.000	1.878	-22.97	-6.63	1	0.97	2.65	2.44	1250.00	0								
			-6.63	1	0.89	2.65	2.44	2250.00	0								

LEVEL	DISPL.	MOMENT	SHEAR	ID	Pearth	Pwater	Pother	KH	ID	Pearth	Pwater	Pother	KH	NO.	FORCE
3.500	1.801	-25.52	-3.52	1	1.03	3.09	2.34	2250.00	0						
4.000	1.713	-26.45	-0.16	1	1.17	3.54	2.26	2250.00	0						
4.500	1.616	-25.64	3.44	1	1.31	3.98	2.17	2250.00	0						
5.000	1.509	-22.97	7.29	1	1.45	4.42	2.08	2250.00	0						
			7.29	1	1.45	4.42	2.08	2250.00	3	0.00	0.00	0.00	2250.00		
5.500	1.393	-18.42	10.81	1	1.59	4.86	2.00	2250.00	3	1.76	0.56	0.00	2250.00		
6.000	1.269	-12.33	13.42	1	1.73	5.30	1.92	2250.00	3	3.53	1.12	0.00	2250.00		
			13.42	1	1.66	5.30	1.92	3000.00	3	3.79	1.12	0.00	3000.00		
6.500	1.141	-5.20	14.95	1	1.79	5.74	1.84	3000.00	3	5.55	1.67	0.00	3000.00		
7.000	1.011	2.46	15.57	1	1.91	6.19	1.76	3000.00	3	7.31	2.23	0.00	3000.00		
7.500	0.882	10.20	15.27	1	2.04	6.63	1.69	3000.00	3	9.08	2.79	0.00	3000.00		
8.000	0.757	17.56	14.06	1	2.17	7.07	1.61	3000.00	3	10.84	3.35	0.00	3000.00		
8.500	0.639	24.08	11.93	1	2.30	7.51	1.54	3000.00	3	12.61	3.91	0.00	3000.00		
9.000	0.530	29.31	8.90	1	2.43	7.95	1.48	3000.00	3	14.37	4.47	0.00	3000.00		
			8.90	1	2.32	7.95	1.48	3750.00	3	15.46	4.47	0.00	3750.00		
9.500	0.432	32.64	4.29	1	2.45	8.40	1.41	3750.00	3	17.49	5.02	0.00	3750.00		
10.000	0.347	33.61	-0.14	1	2.58	8.84	1.35	3750.00	2	14.68	5.58	0.00	3750.00		
10.500	0.275	32.69	-3.27	1	2.71	9.28	1.29	3750.00	2	12.15	6.14	0.00	3750.00		
11.000	0.216	30.50	-5.27	1	2.84	9.72	1.23	3750.00	2	10.10	6.70	0.00	3750.00		
11.500	0.168	27.54	-6.38	1	2.97	10.16	1.18	3750.00	2	8.49	7.26	0.00	3750.00		
12.000	0.132	24.20	-6.81	1	3.10	10.61	1.13	3750.00	2	7.28	7.81	0.00	3750.00		
			-6.81	1	2.97	10.61	1.13	4500.00	2	8.19	7.81	0.00	4500.00		
12.500	0.104	20.66	-7.21	1	3.10	11.05	1.07	4500.00	2	7.14	8.37	0.00	4500.00		
13.000	0.085	17.03	-7.19	1	3.23	11.49	1.03	4500.00	2	6.45	8.93	0.00	4500.00		
13.500	0.072	13.48	-6.92	1	3.36	11.93	0.98	4500.00	2	6.06	9.49	0.00	4500.00		
14.000	0.065	10.10	-6.53	1	3.49	12.37	0.94	4500.00	2	5.90	10.05	0.00	4500.00		
			-6.53	2	4.14	12.37	0.94	3500.00	2	5.35	10.05	0.00	3500.00		
14.500	0.061	7.08	-5.47	2	4.49	12.81	0.89	3500.00	2	5.40	10.61	0.00	3500.00		
15.000	0.061	4.60	-4.38	2	4.74	13.26	0.85	3500.00	2	5.55	11.16	0.00	3500.00		
15.500	0.062	2.65	-3.36	2	4.93	13.70	0.82	3500.00	2	5.75	11.72	0.00	3500.00		
16.000	0.064	1.20	-2.44	2	5.08	14.14	0.78	3500.00	2	6.00	12.28	0.00	3500.00		
16.500	0.066	0.17	-1.64	2	5.22	14.58	0.75	3500.00	2	6.26	12.84	0.00	3500.00		
17.000	0.069	-0.50	-0.99	2	5.35	15.02	0.71	3500.00	2	6.53	13.40	0.00	3500.00		
17.500	0.071	-0.88	-0.48	2	5.49	15.47	0.68	3500.00	2	6.79	13.95	0.00	3500.00		
18.000	0.074	-1.04	-0.09	2	5.64	15.91	0.65	3500.00	2	7.04	14.51	0.00	3500.00		
18.500	0.075	-1.02	0.18	2	5.81	16.35	0.62	3500.00	2	7.27	15.07	0.00	3500.00		
19.000	0.077	-0.90	0.36	2	5.99	16.79	0.60	3500.00	2	7.49	15.63	0.00	3500.00		
19.500	0.078	-0.71	0.45	2	6.18	17.23	0.57	3500.00	2	7.70	16.19	0.00	3500.00		
20.000	0.078	-0.50	0.46	2	6.38	17.68	0.55	3500.00	2	7.90	16.74	0.00	3500.00		
20.500	0.079	-0.29	0.41	2	6.59	18.12	0.52	3500.00	2	8.09	17.30	0.00	3500.00		
21.000	0.079	-0.13	0.31	2	6.80	18.56	0.50	3500.00	2	8.27	17.86	0.00	3500.00		
21.500	0.080	-0.03	0.14	2	7.02	19.00	0.48	3500.00	2	8.46	18.42	0.00	3500.00		
22.000	0.080	-0.02	-0.07	2	7.23	19.44	0.46	3500.00	2	8.64	18.98	0.00	3500.00		
			-0.07	2	7.85	19.44	0.46	3125.00	2	8.53	18.98	0.00	3125.00		
22.500	0.080	-0.05	0.03	2	8.09	19.88	0.44	3125.00	2	8.73	19.54	0.00	3125.00		
23.000	0.081	-0.04	0.08	2	8.33	20.33	0.42	3125.00	2	8.93	20.09	0.00	3125.00		
23.500	0.081	-0.01	0.08	2	8.56	20.77	0.40	3125.00	2	9.13	20.65	0.00	3125.00		
24.000	0.081	0.00	0.00	2	8.80	21.21	0.39	3125.00	2	9.33	21.21	0.00	3125.00		

MAX DIS.= 2.222*E-02	SOIL -1 = SEPARATION	Soil-1 / Side-1	!	Soil-2 / Side-2
0.061*E-02	STATE: 0 = EXCAVATION		+----> Positive Displ.	
MAX MOMENT = 33.61	(ID) 1 = ACTIVE EARTH PRESSURE			& Strut Load
-26.45	2 = ELASTIC	Positive Earth,---->	<---- Positive Earth,	
MAX SHEAR = 16.70	3 = PASSIVE EARTH PRESSURE	Water & Other Press.	Water & Other Press.	

PHASE # 5	W A L L	S O I L - 1 / S I D E - 1	S O I L - 2 / S I D E - 2	STRUTS/ FLOORS
		EXCAVATION LEVEL = 0.00	EXCAVATION LEVEL = 5.00	
		WATER LEVEL = 0.00	WATER LEVEL = 5.00	
		CAQUOT SURCHARGE = 0.00	CAQUOT SURCHARGE = 0.00	

LEVEL	DISPL.	MOMENT	SHEAR	ID	Pearth	Pwater	Pother	KH	ID	Pearth	Pwater	Pother	KH	NO.	FORCE
0.000	2.130	0.00	0.00	3	0.00	0.00	0.00	1250.00	0						
0.500	2.068	0.20	1.19	2	1.43	0.44	2.90	1250.00	0						
1.000	2.007	1.42	3.73	2	1.69	0.88	2.81	1250.00	0					1	-89.5
			-14.17	2	1.69	0.88	2.81	1250.00	0						
1.500	1.945	-4.97	-11.32	2	1.95	1.33	2.71	1250.00	0						
2.000	1.882	-9.85	-8.17	2	2.21	1.77	2.62	1250.00	0						
2.500	1.815	-13.09	-4.73	2	2.45	2.21	2.53	1250.00	0						
3.000	1.743	-14.53	-1.00	2	2.65	2.65	2.44	1250.00	0						
			-1.00	2	3.92	2.65	2.44	2250.00	0						
3.500	1.665	-13.89	3.63	2	4.07	3.09	2.34	2250.00	0						
4.000	1.582	-10.86	8.49	2	4.12	3.54	2.26	2250.00	0					2	-100.0
			-11.51	2	4.12	3.54	2.26	2250.00	0						
4.500	1.494	-15.37	-6.48	2	4.05	3.98	2.17	2250.00	0						
5.000	1.401	-17.33	-1.34	2	3.88	4.42	2.08	2250.00	0						
			-1.34	2	3.88	4.42	2.08	2250.00	1	0.00	0.00	0.00	2250.00		
5.500	1.300	-16.72	3.72	2	3.67	4.86	2.00	2250.00	1	0.11	0.56	0.00	2250.00		
6.000	1.194	-13.71	8.12	2	3.44	5.30	1.92	2250.00	2	1.82	1.12	0.00	2250.00		
			8.12	2	3.94	5.30	1.92	3000.00	2	1.51	1.12	0.00	3000.00		
6.500	1.081	-8.70	11.69	2	3.59	5.74	1.84	3000.00	2	3.75	1.67	0.00	3000.00		

7.000	0.966	-2.25	13.89	2	3.28	6.19	1.76	3000.00	2	5.95	2.23	0.00	3000.00				
7.500	0.850	4.96	14.76	2	3.02	6.63	1.69	3000.00	2	8.10	2.79	0.00	3000.00				
8.000	0.735	12.29	14.36	2	2.82	7.07	1.61	3000.00	2	10.19	3.35	0.00	3000.00				
8.500	0.626	19.12	12.76	2	2.69	7.51	1.54	3000.00	2	12.22	3.91	0.00	3000.00				
9.000	0.524	24.86	10.01	2	2.61	7.95	1.48	3000.00	2	14.18	4.47	0.00	3000.00				
			10.01	2	2.55	7.95	1.48	3750.00	2	15.23	4.47	0.00	3750.00				
9.500	0.431	28.80	5.54	2	2.49	8.40	1.41	3750.00	2	17.45	5.02	0.00	3750.00				
10.000	0.350	30.40	1.10	1	2.58	8.84	1.35	3750.00	2	14.77	5.58	0.00	3750.00				
10.500	0.280	30.10	-2.10	1	2.71	9.28	1.29	3750.00	2	12.33	6.14	0.00	3750.00				
11.000	0.222	28.48	-4.20	1	2.84	9.72	1.23	3750.00	2	10.33	6.70	0.00	3750.00				
11.500	0.175	26.04	-5.44	1	2.97	10.16	1.18	3750.00	2	8.74	7.26	0.00	3750.00				
12.000	0.139	23.15	-5.99	1	3.10	10.61	1.13	3750.00	2	7.54	7.81	0.00	3750.00				
			-5.99	1	2.97	10.61	1.13	4500.00	2	8.50	7.81	0.00	4500.00				
12.500	0.111	19.99	-6.54	1	3.10	11.05	1.07	4500.00	2	7.43	8.37	0.00	4500.00				
13.000	0.091	16.66	-6.66	1	3.23	11.49	1.03	4500.00	2	6.71	8.93	0.00	4500.00				
13.500	0.077	13.35	-6.51	1	3.36	11.93	0.98	4500.00	2	6.28	9.49	0.00	4500.00				
14.000	0.069	10.16	-6.21	1	3.49	12.37	0.94	4500.00	2	6.08	10.05	0.00	4500.00				
			-6.21	2	4.00	12.37	0.94	3500.00	2	5.49	10.05	0.00	3500.00				
14.500	0.065	7.27	-5.28	2	4.38	12.81	0.89	3500.00	2	5.51	10.61	0.00	3500.00				
15.000	0.063	4.87	-4.29	2	4.66	13.26	0.85	3500.00	2	5.63	11.16	0.00	3500.00				
15.500	0.063	2.95	-3.33	2	4.87	13.70	0.82	3500.00	2	5.81	11.72	0.00	3500.00				
16.000	0.065	1.49	-2.46	2	5.04	14.14	0.78	3500.00	2	6.04	12.28	0.00	3500.00				
16.500	0.067	0.44	-1.70	2	5.20	14.58	0.75	3500.00	2	6.29	12.84	0.00	3500.00				
17.000	0.069	-0.26	-1.07	2	5.34	15.02	0.71	3500.00	2	6.54	13.40	0.00	3500.00				
17.500	0.072	-0.68	-0.56	2	5.49	15.47	0.68	3500.00	2	6.79	13.95	0.00	3500.00				
18.000	0.074	-0.87	-0.17	2	5.65	15.91	0.65	3500.00	2	7.03	14.51	0.00	3500.00				
18.500	0.075	-0.89	0.11	2	5.82	16.35	0.62	3500.00	2	7.26	15.07	0.00	3500.00				
19.000	0.076	-0.80	0.29	2	6.00	16.79	0.60	3500.00	2	7.48	15.63	0.00	3500.00				
19.500	0.077	-0.64	0.39	2	6.19	17.23	0.57	3500.00	2	7.69	16.19	0.00	3500.00				
20.000	0.078	-0.45	0.42	2	6.39	17.68	0.55	3500.00	2	7.88	16.74	0.00	3500.00				
20.500	0.079	-0.26	0.38	2	6.60	18.12	0.52	3500.00	2	8.08	17.30	0.00	3500.00				
21.000	0.079	-0.11	0.28	2	6.81	18.56	0.50	3500.00	2	8.26	17.86	0.00	3500.00				
21.500	0.080	-0.02	0.13	2	7.03	19.00	0.48	3500.00	2	8.45	18.42	0.00	3500.00				
22.000	0.080	-0.02	-0.08	2	7.24	19.44	0.46	3500.00	2	8.64	18.98	0.00	3500.00				
			-0.08	2	7.86	19.44	0.46	3125.00	2	8.52	18.98	0.00	3125.00				
22.500	0.080	-0.05	0.02	2	8.09	19.88	0.44	3125.00	2	8.73	19.54	0.00	3125.00				
23.000	0.081	-0.04	0.07	2	8.33	20.33	0.42	3125.00	2	8.93	20.09	0.00	3125.00				
23.500	0.081	-0.01	0.08	2	8.56	20.77	0.40	3125.00	2	9.13	20.65	0.00	3125.00				
24.000	0.081	0.00	0.00	2	8.80	21.21	0.39	3125.00	2	9.33	21.21	0.00	3125.00				

MAX DIS.=	2.130*E-02	SOIL -1 = SEPARATION	Soil-1 / Side-1 ! Soil-2 / Side-2
	0.063*E-02	STATE: 0 = EXCAVATION	+----> Positive Displ.
MAX MOMENT =	30.40	(ID) 1 = ACTIVE EARTH PRESSURE	& Strut Load
	-17.33	2 = ELASTIC	Positive Earth,----> <---- Positive Earth,
MAX SHEAR =	14.76	3 = PASSIVE EARTH PRESSURE	Water & Other Press. Water & Other Press.

PHASE # 6	WALL	SOIL - 1 / SIDE - 1	SOIL - 2 / SIDE - 2	STRUTS/ FLOORS
		EXCAVATION LEVEL = 0.00	EXCAVATION LEVEL = 8.00	
		WATER LEVEL = 0.00	WATER LEVEL = 8.00	
		CAQUOT SURCHARGE = 0.00	CAQUOT SURCHARGE = 0.00	

LEVEL	DISPL.	MOMENT	SHEAR	ID	Pearth	Pwater	Pother	KH	ID	Pearth	Pwater	Pother	KH	NO.	FORCE
0.000	1.804	0.00	0.00	3	0.00	0.00	0.00	1250.00	0						
0.500	1.862	0.23	1.40	3	2.31	0.40	2.90	1250.00	0						
1.000	1.920	1.67	4.41	2	2.82	0.80	2.81	1250.00	0					1	-83.3
			-12.26	2	2.82	0.80	2.81	1250.00	0						
1.500	1.978	-3.69	-9.27	2	1.61	1.20	2.71	1250.00	0						
2.000	2.035	-7.66	-6.65	1	0.70	1.60	2.62	1250.00	0						
2.500	2.088	-10.35	-4.08	1	0.87	2.00	2.53	1250.00	0						
3.000	2.138	-11.69	-1.26	1	1.05	2.40	2.44	1250.00	0						
			-1.26	1	0.96	2.40	2.44	2250.00	0						
3.500	2.183	-11.58	1.76	1	1.11	2.80	2.34	2250.00	0						
4.000	2.224	-9.90	5.00	1	1.27	3.20	2.26	2250.00	0					2	-157.3
			-26.45	1	1.27	3.20	2.26	2250.00	0						
4.500	2.260	-22.26	-22.97	1	1.42	3.60	2.17	2250.00	0						
5.000	2.287	-32.83	-19.26	1	1.57	4.00	2.08	2250.00	0						
5.500	2.302	-41.49	-15.32	1	1.72	4.40	2.00	2250.00	0						
6.000	2.300	-48.11	-11.14	1	1.88	4.80	1.92	2250.00	0						
			-11.14	1	1.80	4.80	1.92	3000.00	0						
6.500	2.280	-52.60	-6.76	1	1.94	5.20	1.84	3000.00	0						
7.000	2.240	-54.85	-2.16	1	2.08	5.60	1.76	3000.00	0						
7.500	2.178	-54.73	2.68	1	2.22	6.00	1.69	3000.00	0						
8.000	2.095	-52.14	7.75	1	2.36	6.40	1.61	3000.00	0						
			7.75	1	2.36	6.40	1.61	3000.00	3	0.00	0.00	0.00	3000.00		
8.500	1.992	-47.04	12.51	1	2.50	6.80	1.54	3000.00	3	1.55	0.60	0.00	3000.00		
9.000	1.870	-39.78	16.44	1	2.64	7.20	1.48	3000.00	3	3.10	1.20	0.00	3000.00		
			16.44	1	2.52	7.20	1.48	3750.00	3	3.33	1.20	0.00	3750.00		
9.500	1.733	-30.81	19.29	1	2.66	7.60	1.41	3750.00	3	5.13	1.80	0.00	3750.00		
10.000	1.584	-20.67	21.18	1	2.80	8.00	1.35	3750.00	3	6.94	2.40	0.00	3750.00		
10.500	1.428	-9.81	22.11	1	2.94	8.40	1.29	3750.00	3	8.74	3.00	0.00	3750.00		

11.000	1.267	1.26	22.07	1	3.08	8.80	1.23	3750.00	3	10.55	3.60	0.00	3750.00					
11.500	1.107	12.07	21.08	1	3.22	9.20	1.18	3750.00	3	12.35	4.20	0.00	3750.00					
12.000	0.951	22.14	19.13	1	3.36	9.60	1.13	3750.00	3	14.16	4.80	0.00	3750.00					
			19.13	1	3.23	9.60	1.13	4500.00	3	15.26	4.80	0.00	4500.00					
12.500	0.804	30.83	15.52	1	3.37	10.00	1.07	4500.00	3	17.36	5.40	0.00	4500.00					
13.000	0.669	37.44	10.81	1	3.51	10.40	1.03	4500.00	3	19.45	6.00	0.00	4500.00					
13.500	0.549	41.42	5.00	1	3.65	10.80	0.98	4500.00	3	21.55	6.60	0.00	4500.00					
14.000	0.444	42.29	-1.45	1	3.79	11.20	0.94	4500.00	2	21.79	7.20	0.00	4500.00					
			-1.45	1	3.95	11.20	0.94	3500.00	2	17.41	7.20	0.00	3500.00					
14.500	0.356	40.60	-5.00	1	4.09	11.60	0.89	3500.00	2	14.48	7.80	0.00	3500.00					
15.000	0.284	37.45	-7.28	1	4.23	12.00	0.85	3500.00	2	12.10	8.40	0.00	3500.00					
15.500	0.226	33.44	-8.54	1	4.37	12.40	0.82	3500.00	2	10.23	9.00	0.00	3500.00					
16.000	0.181	29.00	-9.03	1	4.51	12.80	0.78	3500.00	2	8.81	9.60	0.00	3500.00					
16.500	0.148	24.46	-8.96	1	4.65	13.20	0.75	3500.00	2	7.79	10.20	0.00	3500.00					
17.000	0.124	20.05	-8.50	1	4.79	13.60	0.71	3500.00	2	7.10	10.80	0.00	3500.00					
17.500	0.107	15.94	-7.82	1	4.93	14.00	0.68	3500.00	2	6.68	11.40	0.00	3500.00					
18.000	0.097	12.22	-6.91	2	5.52	14.40	0.65	3500.00	2	6.49	12.00	0.00	3500.00					
18.500	0.092	9.01	-5.81	2	5.95	14.80	0.62	3500.00	2	6.46	12.60	0.00	3500.00					
19.000	0.090	6.37	-4.66	2	6.26	15.20	0.60	3500.00	2	6.55	13.20	0.00	3500.00					
19.500	0.091	4.30	-3.55	2	6.48	15.60	0.57	3500.00	2	6.73	13.80	0.00	3500.00					
20.000	0.094	2.75	-2.57	2	6.64	16.00	0.55	3500.00	2	6.97	14.40	0.00	3500.00					
20.500	0.097	1.65	-1.76	2	6.76	16.40	0.52	3500.00	2	7.25	15.00	0.00	3500.00					
21.000	0.101	0.91	-1.14	2	6.86	16.80	0.50	3500.00	2	7.55	15.60	0.00	3500.00					
21.500	0.106	0.42	-0.75	2	6.95	17.20	0.48	3500.00	2	7.86	16.20	0.00	3500.00					
22.000	0.111	0.07	-0.58	2	7.03	17.60	0.46	3500.00	2	8.18	16.80	0.00	3500.00					
			-0.58	2	7.79	17.60	0.46	3125.00	2	7.90	16.80	0.00	3125.00					
22.500	0.116	-0.11	-0.11	2	7.91	18.00	0.44	3125.00	2	8.22	17.40	0.00	3125.00					
23.000	0.120	-0.12	0.15	2	8.03	18.40	0.42	3125.00	2	8.54	18.00	0.00	3125.00					
23.500	0.125	-0.05	0.20	2	8.15	18.80	0.40	3125.00	2	8.85	18.60	0.00	3125.00					
24.000	0.130	0.00	0.00	2	8.27	19.20	0.39	3125.00	2	9.17	19.20	0.00	3125.00					

	MAX DIS.= 2.302*E-02	SOIL -1 = SEPARATION	Soil-1 / Side-1 ! Soil-2 / Side-2
	0.090*E-02	STATE: 0 = EXCAVATION	+----> Positive Displ.
	MAX MOMENT = 42.29	(ID) 1 = ACTIVE EARTH PRESSURE	& Strut Load
	-54.85	2 = ELASTIC	Positive Earth,----><---- Positive Earth,
	MAX SHEAR = 26.45	3 = PASSIVE EARTH PRESSURE	Water & Other Press. Water & Other Press.

PHASE # 7	W A L L	S O I L - 1 / S I D E - 1 EXCAVATION LEVEL = 0.00 WATER LEVEL = 0.00 CAQUOT SURCHARGE = 0.00	S O I L - 2 / S I D E - 2 EXCAVATION LEVEL = 8.00 WATER LEVEL = 8.00 CAQUOT SURCHARGE = 0.00	STRUTS/ FLOORS

LEVEL	DISPL.	MOMENT	SHEAR	ID	Pearth	Pwater	Pother	KH	ID	Pearth	Pwater	Pother	KH	NO.	FORCE
0.000	1.833	0.00	0.00	1	0.00	0.00	0.00	1250.00	0						
0.500	1.880	0.22	1.35	2	2.08	0.40	2.90	1250.00	0						
1.000	1.927	1.61	4.28	2	2.73	0.80	2.81	1250.00	0					1	-83.8
			-12.49	2	2.73	0.80	2.81	1250.00	0						
1.500	1.974	-3.87	-9.51	2	1.66	1.20	2.71	1250.00	0						
2.000	2.020	-7.95	-6.84	2	0.88	1.60	2.62	1250.00	0						
2.500	2.063	-10.71	-4.14	2	1.19	2.00	2.53	1250.00	0						
3.000	2.101	-12.04	-1.12	2	1.51	2.40	2.44	1250.00	0						
			-1.12	2	1.79	2.40	2.44	2250.00	0						
3.500	2.135	-11.74	2.37	2	2.19	2.80	2.34	2250.00	0						
4.000	2.164	-9.61	6.22	2	2.60	3.20	2.26	2250.00	0					2	-152.0
			-24.17	2	2.60	3.20	2.26	2250.00	0						
4.500	2.189	-20.66	-19.97	2	3.01	3.60	2.17	2250.00	0						
5.000	2.206	-29.51	-15.40	2	3.40	4.00	2.08	2250.00	0						
5.500	2.211	-36.00	-10.49	2	3.76	4.40	2.00	2250.00	0						
6.000	2.203	-39.95	-5.26	2	4.07	4.80	1.92	2250.00	0						
			-5.26	2	4.72	4.80	1.92	3000.00	0						
6.500	2.179	-41.13	0.61	2	4.98	5.20	1.84	3000.00	0						
7.000	2.139	-39.30	6.72	2	5.10	5.60	1.76	3000.00	0					3	-100.0
			-13.28	2	5.10	5.60	1.76	3000.00	0						
7.500	2.083	-44.37	-6.98	2	5.06	6.00	1.69	3000.00	0						
8.000	2.010	-46.26	-0.56	2	4.89	6.40	1.61	3000.00	0						
			-0.56	2	4.89	6.40	1.61	3000.00	1	0.00	0.00	0.00	3000.00		
8.500	1.919	-44.95	5.75	2	4.66	6.80	1.54	3000.00	1	0.08	0.60	0.00	3000.00		
9.000	1.811	-40.61	11.46	2	4.40	7.20	1.48	3000.00	2	1.33	1.20	0.00	3000.00		
			11.46	2	4.73	7.20	1.48	3750.00	2	1.12	1.20	0.00	3750.00		
9.500	1.687	-33.61	16.28	2	4.39	7.60	1.41	3750.00	2	3.41	1.80	0.00	3750.00		
10.000	1.550	-24.57	19.67	2	4.08	8.00	1.35	3750.00	2	5.66	2.40	0.00	3750.00		
10.500	1.404	-14.17	21.68	2	3.83	8.40	1.29	3750.00	2	7.85	3.00	0.00	3750.00		
11.000	1.252	-3.11	22.37	2	3.65	8.80	1.23	3750.00	2	9.98	3.60	0.00	3750.00		
11.500	1.099	7.99	21.81	2	3.52	9.20	1.18	3750.00	2	12.05	4.20	0.00	3750.00		
12.000	0.949	18.50	20.05	2	3.46	9.60	1.13	3750.00	2	14.06	4.80	0.00	3750.00		
			20.05	2	3.34	9.60	1.13	4500.00	2	15.15	4.80	0.00	4500.00		
12.500	0.806	27.69	16.50	1	3.37	10.00	1.07	4500.00	3	17.36	5.40	0.00	4500.00		
13.000	0.674	34.80	11.79	1	3.51	10.40	1.03	4500.00	3	19.45	6.00	0.00	4500.00		
13.500	0.555	39.28	5.98	1	3.65	10.80	0.98	4500.00	3	21.55	6.60	0.00	4500.00		
14.000	0.451	40.64	-0.54	1	3.79	11.20	0.94	4500.00	2	22.11	7.20	0.00	4500.00		

			-0.54	1	3.95	11.20	0.94	3500.00	2	17.65	7.20	0.00	3500.00		
14.500	0.364	39.38	-4.22	1	4.09	11.60	0.89	3500.00	2	14.73	7.80	0.00	3500.00		
15.000	0.291	36.61	-6.62	1	4.23	12.00	0.85	3500.00	2	12.35	8.40	0.00	3500.00		
15.500	0.233	32.90	-8.00	1	4.37	12.40	0.82	3500.00	2	10.46	9.00	0.00	3500.00		
16.000	0.187	28.70	-8.60	1	4.51	12.80	0.78	3500.00	2	9.02	9.60	0.00	3500.00		
16.500	0.153	24.36	-8.63	1	4.65	13.20	0.75	3500.00	2	7.96	10.20	0.00	3500.00		
17.000	0.128	20.11	-8.25	1	4.79	13.60	0.71	3500.00	2	7.25	10.80	0.00	3500.00		
17.500	0.111	16.11	-7.63	1	4.93	14.00	0.68	3500.00	2	6.80	11.40	0.00	3500.00		
18.000	0.100	12.46	-6.80	2	5.43	14.40	0.65	3500.00	2	6.58	12.00	0.00	3500.00		
18.500	0.094	9.29	-5.78	2	5.89	14.80	0.62	3500.00	2	6.52	12.60	0.00	3500.00		
19.000	0.092	6.65	-4.68	2	6.21	15.20	0.60	3500.00	2	6.59	13.20	0.00	3500.00		
19.500	0.092	4.56	-3.61	2	6.45	15.60	0.57	3500.00	2	6.76	13.80	0.00	3500.00		
20.000	0.094	2.98	-2.65	2	6.62	16.00	0.55	3500.00	2	6.98	14.40	0.00	3500.00		
20.500	0.097	1.84	-1.84	2	6.76	16.40	0.52	3500.00	2	7.25	15.00	0.00	3500.00		
21.000	0.101	1.06	-1.23	2	6.86	16.80	0.50	3500.00	2	7.54	15.60	0.00	3500.00		
21.500	0.106	0.53	-0.83	2	6.96	17.20	0.48	3500.00	2	7.85	16.20	0.00	3500.00		
22.000	0.110	0.15	-0.65	2	7.04	17.60	0.46	3500.00	2	8.16	16.80	0.00	3500.00		
			-0.65	2	7.80	17.60	0.46	3125.00	2	7.89	16.80	0.00	3125.00		
22.500	0.115	-0.07	-0.17	2	7.92	18.00	0.44	3125.00	2	8.20	17.40	0.00	3125.00		
23.000	0.120	-0.10	0.11	2	8.04	18.40	0.42	3125.00	2	8.52	18.00	0.00	3125.00		
23.500	0.124	-0.04	0.18	2	8.17	18.80	0.40	3125.00	2	8.83	18.60	0.00	3125.00		
24.000	0.129	0.00	0.00	2	8.29	19.20	0.39	3125.00	2	9.15	19.20	0.00	3125.00		

	MAX DIS.= 2.211*E-02	SOIL -1 = SEPARATION	Soil-1 / Side-1 ! Soil-2 / Side-2
	0.092*E-02	STATE: 0 = EXCAVATION	+----> Positive Displ.
	MAX MOMENT = 40.64	(ID) 1 = ACTIVE EARTH PRESSURE	& Strut Load
	-46.26	2 = ELASTIC	Positive Earth,----><---- Positive Earth,
	MAX SHEAR = 24.17	3 = PASSIVE EARTH PRESSURE	Water & Other Press. Water & Other Press.

PHASE # 8	W A L L	S O I L - 1 / S I D E - 1 EXCAVATION LEVEL = 0.00 WATER LEVEL = 0.00 CAQUOT SURCHARGE = 0.00	S O I L - 2 / S I D E - 2 EXCAVATION LEVEL = 11.00 WATER LEVEL = 11.00 CAQUOT SURCHARGE = 0.00	STRUTS/ FLOORS

LEVEL	DISPL.	MOMENT	SHEAR	ID	Pearth	Pwater	Pother	KH	ID	Pearth	Pwater	Pother	KH	NO.	FORCE
0.000	1.367	0.00	0.00	3	0.00	0.00	0.00	1250.00	0						
0.500	1.494	0.24	1.44	3	2.51	0.35	2.90	1250.00	0						
1.000	1.620	1.80	5.02	3	5.03	0.70	2.81	1250.00	0					1	-62.1
			-7.39	3	5.03	0.70	2.81	1250.00	0						
1.500	1.747	-0.84	-3.17	2	4.58	1.05	2.71	1250.00	0						
2.000	1.873	-1.44	0.63	2	2.82	1.41	2.62	1250.00	0						
2.500	1.999	-0.29	3.94	2	2.12	1.76	2.53	1250.00	0						
3.000	2.125	2.46	7.01	2	1.36	2.11	2.44	1250.00	0						
			7.01	2	1.40	2.11	2.44	2250.00	0						
3.500	2.252	6.71	10.00	1	1.21	2.46	2.34	2250.00	0						
4.000	2.382	12.48	13.12	1	1.38	2.81	2.26	2250.00	0					2	-171.3
			-21.15	1	1.38	2.81	2.26	2250.00	0						
4.500	2.515	2.73	-17.82	1	1.55	3.16	2.17	2250.00	0						
5.000	2.649	-5.30	-14.27	1	1.71	3.51	2.08	2250.00	0						
5.500	2.782	-11.50	-10.51	1	1.88	3.86	2.00	2250.00	0						
6.000	2.910	-15.77	-6.53	1	2.05	4.21	1.92	2250.00	0						
			-6.53	1	1.96	4.21	1.92	3000.00	0						
6.500	3.032	-18.01	-2.37	1	2.12	4.57	1.84	3000.00	0						
7.000	3.147	-18.11	1.99	1	2.27	4.92	1.76	3000.00	0					3	-190.0
			-36.00	1	2.27	4.92	1.76	3000.00	0						
7.500	3.254	-34.98	-31.42	1	2.42	5.27	1.69	3000.00	0						
8.000	3.347	-49.50	-26.62	1	2.58	5.62	1.61	3000.00	0						
8.500	3.421	-61.57	-21.61	1	2.73	5.97	1.54	3000.00	0						
9.000	3.472	-71.08	-16.38	1	2.88	6.32	1.48	3000.00	0						
			-16.38	1	2.76	6.32	1.48	3750.00	0						
9.500	3.494	-77.93	-10.99	1	2.91	6.67	1.41	3750.00	0						
10.000	3.487	-82.04	-5.38	1	3.06	7.02	1.35	3750.00	0						
10.500	3.448	-83.28	0.45	1	3.22	7.38	1.29	3750.00	0						
11.000	3.376	-81.56	6.51	1	3.37	7.73	1.23	3750.00	0						
			6.51	1	3.37	7.73	1.23	3750.00	3	0.00	0.00	0.00	3750.00		
11.500	3.273	-76.84	12.24	1	3.52	8.08	1.18	3750.00	3	1.54	0.65	0.00	3750.00		
12.000	3.140	-69.48	17.10	1	3.68	8.43	1.13	3750.00	3	3.07	1.30	0.00	3750.00		
			17.10	1	3.53	8.43	1.13	4500.00	3	3.31	1.30	0.00	4500.00		
12.500	2.979	-59.96	20.84	1	3.68	8.78	1.07	4500.00	3	5.12	1.95	0.00	4500.00		
13.000	2.796	-48.83	23.58	1	3.83	9.13	1.03	4500.00	3	6.92	2.59	0.00	4500.00		
13.500	2.594	-36.58	25.32	1	3.98	9.48	0.98	4500.00	3	8.73	3.24	0.00	4500.00		
14.000	2.377	-23.72	26.06	1	4.14	9.83	0.94	4500.00	3	10.53	3.89	0.00	4500.00		
			26.06	1	4.32	9.83	0.94	3500.00	3	9.77	3.89	0.00	3500.00		
14.500	2.152	-10.60	26.34	1	4.47	10.19	0.89	3500.00	3	11.30	4.54	0.00	3500.00		
15.000	1.922	2.44	25.77	1	4.62	10.54	0.85	3500.00	3	12.84	5.19	0.00	3500.00		
15.500	1.693	14.98	24.34	1	4.78	10.89	0.82	3500.00	3	14.37	5.84	0.00	3500.00		
16.000	1.470	26.59	22.04	1	4.93	11.24	0.78	3500.00	3	15.91	6.48	0.00	3500.00		
16.500	1.257	36.83	18.89	1	5.08	11.59	0.75	3500.00	3	17.44	7.13	0.00	3500.00		
17.000	1.058	45.29	14.89	1	5.24	11.94	0.71	3500.00	3	18.98	7.78	0.00	3500.00		
17.500	0.877	51.53	10.03	1	5.39	12.29	0.68	3500.00	3	20.51	8.43	0.00	3500.00		

	18.000	0.716	55.12	4.31	1	5.54	12.65	0.65	3500.00	3	22.05	9.08	0.00	3500.00					
	18.500	0.577	55.70	-1.91	1	5.69	13.00	0.62	3500.00	2	22.18	9.73	0.00	3500.00					
	19.000	0.458	53.30	-7.24	1	5.85	13.35	0.60	3500.00	2	18.17	10.38	0.00	3500.00					
	19.500	0.361	48.68	-10.84	1	6.00	13.70	0.57	3500.00	2	14.89	11.02	0.00	3500.00					
	20.000	0.282	42.63	-13.05	1	6.15	14.05	0.55	3500.00	2	12.27	11.67	0.00	3500.00					
	20.500	0.220	35.75	-14.18	1	6.31	14.40	0.52	3500.00	2	10.23	12.32	0.00	3500.00					
	21.000	0.172	28.52	-14.50	1	6.46	14.75	0.50	3500.00	2	8.68	12.97	0.00	3500.00					
	21.500	0.135	21.30	-14.14	2	6.91	15.10	0.48	3500.00	2	7.51	13.62	0.00	3500.00					
	22.000	0.107	14.45	-13.00	2	8.18	15.45	0.46	3500.00	2	6.64	14.27	0.00	3500.00					
				-13.00	2	8.96	15.45	0.46	3125.00	2	6.33	14.27	0.00	3125.00					
	22.500	0.084	8.51	-10.54	2	9.97	15.81	0.44	3125.00	2	5.76	14.91	0.00	3125.00					
	23.000	0.064	3.94	-7.50	2	10.88	16.16	0.42	3125.00	2	5.29	15.56	0.00	3125.00					
	23.500	0.046	1.02	-3.96	2	11.74	16.51	0.40	3125.00	2	4.87	16.21	0.00	3125.00					
	24.000	0.028	0.00	0.00	2	12.58	16.86	0.39	3125.00	2	4.46	16.86	0.00	3125.00					

	MAX DIS.= 3.494*E-02 0.028*E-02	SOIL -1 = SEPARATION STATE: 0 = EXCAVATION	Soil-1 / Side-1 ! Soil-2 / Side-2 +----> Positive Displ. & Strut Load
	MAX MOMENT = 55.70 -83.28	(ID) 1 = ACTIVE EARTH PRESSURE 2 = ELASTIC	Positive Earth,----> Water & Other Press.
	MAX SHEAR = 36.00	3 = PASSIVE EARTH PRESSURE	<---- Positive Earth, Water & Other Press.

PHASE # 9	WALL	SOIL - 1 / SIDE - 1 EXCAVATION LEVEL = 0.00 WATER LEVEL = 0.00 CAQUOT SURCHARGE = 0.00	SOIL - 2 / SIDE - 2 EXCAVATION LEVEL = 11.00 WATER LEVEL = 11.00 CAQUOT SURCHARGE = 0.00	STRUTS/ FLOORS

	LEVEL	DISPL.	MOMENT	SHEAR	ID	Pearth	Pwater	Pother	KH	ID	Pearth	Pwater	Pother	KH	NO.	FORCE
	0.000	1.404	0.00	0.00	1	0.00	0.00	0.00	1250.00	0						
	0.500	1.525	0.22	1.34	2	2.11	0.35	2.90	1250.00	0						
	1.000	1.647	1.68	4.74	2	4.69	0.70	2.81	1250.00	0					1	-64.0
				-8.06	2	4.69	0.70	2.81	1250.00	0						
	1.500	1.769	-1.32	-3.99	2	4.31	1.05	2.71	1250.00	0						
	2.000	1.890	-2.37	-0.31	2	2.61	1.41	2.62	1250.00	0						
	2.500	2.010	-1.71	2.91	2	1.98	1.76	2.53	1250.00	0						
	3.000	2.130	0.51	5.94	2	1.30	2.11	2.44	1250.00	0						
				5.94	2	1.28	2.11	2.44	2250.00	0						
	3.500	2.250	4.22	8.91	2	1.26	2.46	2.34	2250.00	0						
	4.000	2.372	9.46	12.09	2	1.60	2.81	2.26	2250.00	0					2	-170.5
				-22.00	2	1.60	2.81	2.26	2250.00	0						
	4.500	2.496	-0.68	-18.51	2	1.97	3.16	2.17	2250.00	0						
	5.000	2.620	-9.00	-14.69	2	2.37	3.51	2.08	2250.00	0						
	5.500	2.741	-15.32	-10.54	2	2.80	3.86	2.00	2250.00	0						
	6.000	2.856	-19.48	-6.02	2	3.27	4.21	1.92	2250.00	0						
				-6.02	2	3.59	4.21	1.92	3000.00	0						
	6.500	2.963	-21.23	-0.94	2	4.18	4.57	1.84	3000.00	0						
	7.000	3.062	-20.34	4.58	2	4.81	4.92	1.76	3000.00	0					3	-182.4
				-31.90	2	4.81	4.92	1.76	3000.00	0						
	7.500	3.152	-34.82	-25.92	2	5.47	5.27	1.69	3000.00	0						
	8.000	3.229	-46.19	-19.48	2	6.12	5.62	1.61	3000.00	0						
	8.500	3.288	-54.22	-12.58	2	6.73	5.97	1.54	3000.00	0						
	9.000	3.326	-58.69	-5.25	2	7.26	6.32	1.48	3000.00	0						
				-5.25	2	8.23	6.32	1.48	3750.00	0						
	9.500	3.341	-59.28	2.95	2	8.67	6.67	1.41	3750.00	0						
	10.000	3.333	-55.70	11.44	2	8.83	7.02	1.35	3750.00	0					4	-180.0
				-24.56	2	8.83	7.02	1.35	3750.00	0						
	10.500	3.303	-65.82	-15.93	2	8.65	7.38	1.29	3750.00	0						
	11.000	3.247	-71.63	-7.30	2	8.22	7.73	1.23	3750.00	0						
				-7.30	2	8.22	7.73	1.23	3750.00	1	0.00	0.00	0.00	3750.00		
	11.500	3.163	-73.17	1.03	2	7.64	8.08	1.18	3750.00	1	0.07	0.65	0.00	3750.00		
	12.000	3.051	-70.68	8.85	2	7.00	8.43	1.13	3750.00	1	0.15	1.30	0.00	3750.00		
				8.85	2	7.51	8.43	1.13	4500.00	1	0.14	1.30	0.00	4500.00		
	12.500	2.912	-64.42	15.91	2	6.74	8.78	1.07	4500.00	2	2.06	1.95	0.00	4500.00		
	13.000	2.747	-55.05	21.28	2	6.04	9.13	1.03	4500.00	2	4.72	2.59	0.00	4500.00		
	13.500	2.561	-43.45	24.85	2	5.44	9.48	0.98	4500.00	2	7.27	3.24	0.00	4500.00		
	14.000	2.359	-30.48	26.74	2	4.97	9.83	0.94	4500.00	2	9.70	3.89	0.00	4500.00		
				26.74	2	4.96	9.83	0.94	3500.00	2	9.12	3.89	0.00	3500.00		
	14.500	2.144	-16.88	27.47	2	4.72	10.19	0.89	3500.00	2	11.05	4.54	0.00	3500.00		
	15.000	1.923	-3.21	27.02	1	4.62	10.54	0.85	3500.00	3	12.84	5.19	0.00	3500.00		
	15.500	1.701	9.97	25.59	1	4.78	10.89	0.82	3500.00	3	14.37	5.84	0.00	3500.00		
	16.000	1.483	22.22	23.30	1	4.93	11.24	0.78	3500.00	3	15.91	6.48	0.00	3500.00		
	16.500	1.273	33.11	20.15	1	5.08	11.59	0.75	3500.00	3	17.44	7.13	0.00	3500.00		
	17.000	1.076	42.21	16.14	1	5.24	11.94	0.71	3500.00	3	18.98	7.78	0.00	3500.00		
	17.500	0.895	49.09	11.28	1	5.39	12.29	0.68	3500.00	3	20.51	8.43	0.00	3500.00		
	18.000	0.734	53.33	5.57	1	5.54	12.65	0.65	3500.00	3	22.05	9.08	0.00	3500.00		
	18.500	0.593	54.53	-0.80	1	5.69	13.00	0.62	3500.00	2	22.74	9.73	0.00	3500.00		
	19.000	0.473	52.63	-6.40	1	5.85	13.35	0.60	3500.00	2	18.68	10.38	0.00	3500.00		
	19.500	0.374	48.39	-10.24	1	6.00	13.70	0.57	3500.00	2	15.33	11.02	0.00	3500.00		
	20.000	0.293	42.60	-12.65	1	6.15	14.05	0.55	3500.00	2	12.64	11.67	0.00	3500.00		
	20.500	0.229	35.90	-13.94	1	6.31	14.40	0.52	3500.00	2	10.52	12.32	0.00	3500.00		
	21.000	0.179	28.77	-14.38	1	6.46	14.75	0.50	3500.00	2	8.90	12.97	0.00	3500.00		

21.500	0.140	21.59	-14.16	2	6.76	15.10	0.48	3500.00	2	7.66	13.62	0.00	3500.00						
22.000	0.109	14.70	-13.14	2	8.10	15.45	0.46	3500.00	2	6.72	14.27	0.00	3500.00						
			-13.14	2	8.88	15.45	0.46	3125.00	2	6.41	14.27	0.00	3125.00						
22.500	0.084	8.69	-10.73	2	9.95	15.81	0.44	3125.00	2	5.78	14.91	0.00	3125.00						
23.000	0.063	4.04	-7.69	2	10.91	16.16	0.42	3125.00	2	5.26	15.56	0.00	3125.00						
23.500	0.043	1.05	-4.09	2	11.82	16.51	0.40	3125.00	2	4.78	16.21	0.00	3125.00						
24.000	0.024	0.00	0.00	2	12.71	16.86	0.39	3125.00	2	4.33	16.86	0.00	3125.00						

	MAX DIS.= 3.341*E-02	SOIL -1 = SEPARATION	Soil-1 / Side-1 ! Soil-2 / Side-2
	0.024*E-02	STATE: 0 = EXCAVATION	+----> Positive Displ.
	MAX MOMENT = 54.53	(ID) 1 = ACTIVE EARTH PRESSURE	& Strut Load
	-73.17	2 = ELASTIC	Positive Earth,----><---- Positive Earth,
	MAX SHEAR = 31.90	3 = PASSIVE EARTH PRESSURE	Water & Other Press. Water & Other Press.

PHASE # 10

WALL	SOIL - 1 / SIDE - 1	SOIL - 2 / SIDE - 2	STRUTS/ FLOORS
	EXCAVATION LEVEL = 0.00	EXCAVATION LEVEL = 14.00	
	WATER LEVEL = 0.00	WATER LEVEL = 14.00	
	CAQUOT SURCHARGE = 0.00	CAQUOT SURCHARGE = 0.00	

LEVEL	DISPL.	MOMENT	SHEAR	ID	Pearth	Pwater	Pother	KH	ID	Pearth	Pwater	Pother	KH	NO.	FORCE
0.000	1.261	0.00	0.00	3	0.00	0.00	0.00	1250.00	0						
0.500	1.379	0.25	1.49	3	2.75	0.29	2.90	1250.00	0						
1.000	1.498	1.86	5.20	3	5.51	0.59	2.81	1250.00	0					1	-53.4
			-5.48	3	5.51	0.59	2.81	1250.00	0						
1.500	1.617	0.27	-0.78	2	6.29	0.88	2.71	1250.00	0						
2.000	1.736	1.06	3.80	2	4.65	1.18	2.62	1250.00	0						
2.500	1.856	4.00	7.93	2	4.06	1.47	2.53	1250.00	0						
3.000	1.977	8.95	11.84	2	3.39	1.76	2.44	1250.00	0						
			11.84	2	4.89	1.76	2.44	2250.00	0						
3.500	2.102	16.01	16.41	2	4.78	2.06	2.34	2250.00	0						
4.000	2.233	25.38	21.10	2	4.94	2.35	2.26	2250.00	0					2	-158.1
			-10.53	2	4.94	2.35	2.26	2250.00	0						
4.500	2.374	21.32	-5.69	2	4.98	2.65	2.17	2250.00	0						
5.000	2.522	19.71	-0.77	2	4.86	2.94	2.08	2250.00	0						
5.500	2.678	20.56	4.14	2	4.53	3.24	2.00	2250.00	0						
6.000	2.843	23.83	8.92	2	3.91	3.53	1.92	2250.00	0						
			8.92	2	4.32	3.53	1.92	3000.00	0						
6.500	3.016	29.47	13.52	2	2.95	3.82	1.84	3000.00	0						
7.000	3.202	37.29	17.76	1	2.49	4.12	1.76	3000.00	0					3	-194.8
			-21.20	1	2.49	4.12	1.76	3000.00	0						
7.500	3.400	27.75	-16.92	1	2.66	4.41	1.69	3000.00	0						
8.000	3.609	20.40	-12.44	1	2.83	4.71	1.61	3000.00	0						
8.500	3.827	15.34	-7.77	1	3.00	5.00	1.54	3000.00	0						
9.000	4.050	12.67	-2.90	1	3.17	5.29	1.48	3000.00	0						
			-2.90	1	3.03	5.29	1.48	3750.00	0						
9.500	4.279	12.46	2.11	1	3.20	5.59	1.41	3750.00	0						
10.000	4.512	14.81	7.31	1	3.37	5.88	1.35	3750.00	0					4	-322.1
			-57.11	1	3.37	5.88	1.35	3750.00	0						
10.500	4.749	-12.41	-51.71	1	3.54	6.18	1.29	3750.00	0						
11.000	4.982	-36.87	-46.11	1	3.71	6.47	1.23	3750.00	0						
11.500	5.200	-58.49	-40.30	1	3.87	6.77	1.18	3750.00	0						
12.000	5.395	-77.15	-34.29	1	4.04	7.06	1.13	3750.00	0						
			-34.29	1	3.88	7.06	1.13	4500.00	0						
12.500	5.561	-92.77	-28.16	1	4.04	7.35	1.07	4500.00	0						
13.000	5.691	-105.27	-21.82	1	4.21	7.65	1.03	4500.00	0						
13.500	5.779	-114.56	-15.27	1	4.38	7.94	0.98	4500.00	0						
14.000	5.824	-120.52	-8.51	1	4.55	8.24	0.94	4500.00	0						
			-8.51	1	4.74	8.24	0.94	3500.00	3	0.00	0.00	0.00	3500.00		
14.500	5.821	-123.10	-1.93	1	4.91	8.53	0.89	3500.00	3	1.22	0.71	0.00	3500.00		
15.000	5.771	-122.59	3.90	1	5.08	8.82	0.85	3500.00	3	2.43	1.41	0.00	3500.00		
15.500	5.673	-119.34	8.99	1	5.25	9.12	0.82	3500.00	3	3.65	2.12	0.00	3500.00		
16.000	5.529	-113.75	13.32	1	5.42	9.41	0.78	3500.00	3	4.86	2.82	0.00	3500.00		
16.500	5.340	-106.17	16.91	1	5.58	9.71	0.75	3500.00	3	6.08	3.53	0.00	3500.00		
17.000	5.110	-96.99	19.75	1	5.75	10.00	0.71	3500.00	3	7.29	4.24	0.00	3500.00		
17.500	4.843	-86.58	21.85	1	5.92	10.30	0.68	3500.00	3	8.51	4.94	0.00	3500.00		
18.000	4.542	-75.30	23.20	1	6.09	10.59	0.65	3500.00	3	9.73	5.65	0.00	3500.00		
18.500	4.212	-63.54	23.80	1	6.26	10.88	0.62	3500.00	3	10.94	6.35	0.00	3500.00		
19.000	3.857	-51.66	23.67	1	6.43	11.18	0.60	3500.00	3	12.16	7.06	0.00	3500.00		
19.500	3.481	-40.04	22.79	1	6.60	11.47	0.57	3500.00	3	13.37	7.77	0.00	3500.00		
20.000	3.091	-29.04	21.17	1	6.76	11.77	0.55	3500.00	3	14.59	8.47	0.00	3500.00		
20.500	2.689	-19.05	18.80	1	6.93	12.06	0.52	3500.00	3	15.80	9.18	0.00	3500.00		
21.000	2.279	-10.42	15.70	1	7.10	12.35	0.50	3500.00	3	17.02	9.88	0.00	3500.00		
21.500	1.865	-3.52	11.86	1	7.27	12.65	0.48	3500.00	3	18.24	10.59	0.00	3500.00		
22.000	1.450	1.26	7.27	1	7.44	12.94	0.46	3500.00	3	19.45	11.30	0.00	3500.00		
			7.27	1	7.77	12.94	0.46	3125.00	3	18.08	11.30	0.00	3125.00		
22.500	1.035	3.78	2.80	1	7.95	13.24	0.44	3125.00	3	19.34	12.00	0.00	3125.00		
23.000	0.622	3.87	-2.44	1	8.14	13.53	0.42	3125.00	3	20.60	12.71	0.00	3125.00		
23.500	0.210	1.70	-5.11	1	8.32	13.83	0.40	3125.00	2	8.63	13.41	0.00	3125.00		
24.000	-0.201	0.00	0.00	2	21.06	14.12	0.39	3125.00	1	1.25	14.12	0.00	3125.00		

	MAX DIS.= 5.824*E-02	SOIL -1 = SEPARATION	Soil-1 / Side-1	Soil-2 / Side-2
	-0.201*E-02	STATE: 0 = EXCAVATION		+----> Positive Displ.
	MAX MOMENT = 37.29	(ID) 1 = ACTIVE EARTH PRESSURE		& Strut Load
	-123.10	2 = ELASTIC	Positive Earth,---->	<---- Positive Earth,
	MAX SHEAR = 57.11	3 = PASSIVE EARTH PRESSURE	Water & Other Press.	Water & Other Press.

Summary of Wall Displacements (*E-02) of All Phases with Envelope

LEVEL	MIN.	MAX.	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10
0.000	0.222	2.222	0.222	2.025	1.694	2.222	2.130	1.804	1.833	1.367	1.404	1.261
0.500	0.205	2.169	0.205	1.864	1.572	2.169	2.068	1.862	1.880	1.494	1.525	1.379
1.000	0.188	2.116	0.188	1.702	1.450	2.116	2.007	1.920	1.927	1.620	1.647	1.498
1.500	0.170	2.063	0.170	1.541	1.329	2.063	1.945	1.978	1.974	1.747	1.769	1.617
2.000	0.153	2.035	0.153	1.381	1.207	2.007	1.882	2.035	2.020	1.873	1.890	1.736
2.500	0.137	2.088	0.137	1.224	1.086	1.946	1.815	2.088	2.063	1.999	2.010	1.856
3.000	0.121	2.138	0.121	1.070	0.965	1.878	1.743	2.138	2.101	2.125	2.130	1.977
3.500	0.106	2.252	0.106	0.923	0.846	1.801	1.665	2.183	2.135	2.252	2.250	2.102
4.000	0.092	2.382	0.092	0.783	0.731	1.713	1.582	2.224	2.164	2.382	2.372	2.233
4.500	0.079	2.515	0.079	0.654	0.621	1.616	1.494	2.260	2.189	2.515	2.496	2.374
5.000	0.068	2.649	0.068	0.536	0.519	1.509	1.401	2.287	2.206	2.649	2.620	2.522
5.500	0.057	2.782	0.057	0.432	0.427	1.393	1.300	2.302	2.211	2.782	2.741	2.678
6.000	0.048	2.910	0.048	0.341	0.344	1.269	1.194	2.300	2.203	2.910	2.856	2.843
6.500	0.041	3.032	0.041	0.264	0.273	1.141	1.081	2.280	2.179	3.032	2.963	3.016
7.000	0.035	3.202	0.035	0.200	0.213	1.011	0.966	2.240	2.139	3.147	3.062	3.202
7.500	0.030	3.400	0.030	0.148	0.163	0.882	0.850	2.178	2.083	3.254	3.152	3.400
8.000	0.025	3.609	0.025	0.108	0.123	0.757	0.735	2.095	2.010	3.347	3.229	3.609
8.500	0.022	3.827	0.022	0.077	0.091	0.639	0.626	1.992	1.919	3.421	3.288	3.827
9.000	0.020	4.050	0.020	0.055	0.068	0.530	0.524	1.870	1.811	3.472	3.326	4.050
9.500	0.017	4.279	0.017	0.039	0.050	0.432	0.431	1.733	1.687	3.494	3.341	4.279
10.000	0.016	4.512	0.016	0.029	0.039	0.347	0.350	1.584	1.550	3.487	3.333	4.512
10.500	0.015	4.749	0.015	0.024	0.031	0.275	0.280	1.428	1.404	3.448	3.303	4.749
11.000	0.014	4.982	0.014	0.021	0.027	0.216	0.222	1.267	1.252	3.376	3.247	4.982
11.500	0.013	5.200	0.013	0.021	0.025	0.168	0.175	1.107	1.099	3.273	3.163	5.200
12.000	0.013	5.395	0.013	0.022	0.025	0.132	0.139	0.951	0.949	3.140	3.051	5.395
12.500	0.012	5.561	0.012	0.025	0.026	0.104	0.111	0.804	0.806	2.979	2.912	5.561
13.000	0.012	5.691	0.012	0.027	0.028	0.085	0.091	0.669	0.674	2.796	2.747	5.691
13.500	0.011	5.779	0.011	0.030	0.030	0.072	0.077	0.549	0.555	2.594	2.561	5.779
14.000	0.011	5.824	0.011	0.032	0.032	0.065	0.069	0.444	0.451	2.377	2.359	5.824
14.500	0.011	5.821	0.011	0.035	0.034	0.061	0.065	0.356	0.364	2.152	2.144	5.821
15.000	0.011	5.771	0.011	0.036	0.036	0.061	0.063	0.284	0.291	1.922	1.923	5.771
15.500	0.011	5.673	0.011	0.038	0.037	0.062	0.063	0.226	0.233	1.693	1.701	5.673
16.000	0.011	5.529	0.011	0.039	0.038	0.064	0.065	0.181	0.187	1.470	1.483	5.529
16.500	0.010	5.340	0.010	0.040	0.039	0.066	0.067	0.148	0.153	1.257	1.273	5.340
17.000	0.010	5.110	0.010	0.040	0.039	0.069	0.069	0.124	0.128	1.058	1.076	5.110
17.500	0.010	4.843	0.010	0.040	0.039	0.071	0.072	0.107	0.111	0.877	0.895	4.843
18.000	0.009	4.542	0.009	0.040	0.039	0.074	0.074	0.097	0.100	0.716	0.734	4.542
18.500	0.009	4.212	0.009	0.039	0.039	0.075	0.075	0.092	0.094	0.577	0.593	4.212
19.000	0.009	3.857	0.009	0.039	0.038	0.077	0.076	0.090	0.092	0.458	0.473	3.857
19.500	0.008	3.481	0.008	0.038	0.038	0.078	0.077	0.091	0.092	0.361	0.374	3.481
20.000	0.008	3.091	0.008	0.038	0.038	0.078	0.078	0.094	0.094	0.282	0.293	3.091
20.500	0.008	2.689	0.008	0.037	0.037	0.079	0.079	0.097	0.097	0.220	0.229	2.689
21.000	0.007	2.279	0.007	0.037	0.037	0.079	0.079	0.101	0.101	0.172	0.179	2.279
21.500	0.007	1.865	0.007	0.036	0.036	0.080	0.080	0.106	0.106	0.135	0.140	1.865
22.000	0.007	1.450	0.007	0.036	0.036	0.080	0.080	0.111	0.110	0.107	0.109	1.450
22.500	0.007	1.035	0.007	0.036	0.036	0.080	0.080	0.116	0.115	0.084	0.084	1.035
23.000	0.006	0.622	0.006	0.036	0.036	0.081	0.081	0.120	0.120	0.064	0.063	0.622
23.500	0.006	0.210	0.006	0.035	0.036	0.081	0.081	0.125	0.124	0.046	0.043	0.210
24.000	-0.201	0.130	0.006	0.035	0.035	0.081	0.081	0.130	0.129	0.028	0.024	-0.201

MAXIMUM DISPLACEMENT = 5.824*E-02
MINIMUM DISPLACEMENT = -0.201*E-02

Summary of Wall Moment of All Phases with Envelope

LEVEL	MIN.	MAX.	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10
0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.500	0.05	0.25	0.05	0.15	0.22	0.15	0.20	0.23	0.22	0.24	0.22	0.25
1.000	0.30	1.86	0.30	1.05	1.64	1.04	1.42	1.67	1.61	1.80	1.68	1.86
1.500	-6.78	2.97	0.66	2.97	-0.21	-6.78	-4.97	-3.69	-3.87	-0.84	-1.32	0.27
2.000	-13.48	6.04	1.09	6.04	-0.25	-13.48	-9.85	-7.66	-7.95	-1.44	-2.37	1.06
2.500	-18.91	10.30	1.60	10.30	1.51	-18.91	-13.09	-10.35	-10.71	-0.29	-1.71	4.00
3.000	-22.97	15.39	2.19	15.39	4.87	-22.97	-14.53	-11.69	-12.04	2.46	0.51	8.95
3.500	-25.52	20.79	2.73	20.79	9.45	-25.52	-13.89	-11.58	-11.74	6.71	4.22	16.01
4.000	-26.45	25.95	3.09	25.95	14.64	-26.45	-10.86	-9.90	-9.61	12.48	9.46	25.38
4.500	-25.64	30.38	3.32	30.38	19.71	-25.64	-15.37	-22.26	-20.66	2.73	-0.68	21.32
5.000	-32.83	33.60	3.43	33.60	23.94	-22.97	-17.33	-32.83	-29.51	-5.30	-9.00	19.71
5.500	-41.49	35.23	3.45	35.23	26.78	-18.42	-16.72	-41.49	-36.00	-11.50	-15.32	20.56
6.000	-48.11	35.39	3.40	35.39	28.22	-12.33	-13.71	-48.11	-39.95	-15.77	-19.48	23.83

6.500	-52.60	34.18	3.23	34.18	28.27	-5.20	-8.70	-52.60	-41.13	-18.01	-21.23	29.47
7.000	-54.85	37.29	2.94	31.80	27.07	2.46	-2.25	-54.85	-39.30	-18.11	-20.34	37.29
7.500	-54.73	28.66	2.57	28.66	25.02	10.20	4.96	-54.73	-44.37	-34.98	-34.82	27.75
8.000	-52.14	25.12	2.17	25.12	22.46	17.56	12.29	-52.14	-46.26	-49.50	-46.19	20.40
8.500	-61.57	24.08	1.79	21.43	19.64	24.08	19.12	-47.04	-44.95	-61.57	-54.22	15.34
9.000	-71.08	29.31	1.47	17.78	16.75	29.31	24.86	-39.78	-40.61	-71.08	-58.69	12.67
9.500	-77.93	32.64	1.18	14.25	13.87	32.64	28.80	-30.81	-33.61	-77.93	-59.28	12.46
10.000	-82.04	33.61	0.92	10.96	11.06	33.61	30.40	-20.67	-24.57	-82.04	-55.70	14.81
10.500	-83.28	32.69	0.70	8.05	8.47	32.69	30.10	-9.81	-14.17	-83.28	-65.82	-12.41
11.000	-81.56	30.50	0.53	5.61	6.21	30.50	28.48	1.26	-3.11	-81.56	-71.63	-36.87
11.500	-76.84	27.54	0.40	3.66	4.34	27.54	26.04	12.07	7.99	-76.84	-73.17	-58.49
12.000	-77.15	24.20	0.32	2.19	2.88	24.20	23.15	22.14	18.50	-69.48	-70.68	-77.15
12.500	-92.77	30.83	0.27	1.11	1.76	20.66	19.99	30.83	27.69	-59.96	-64.42	-92.77
13.000	-105.27	37.44	0.21	0.32	0.89	17.03	16.66	37.44	34.80	-48.83	-55.05	-105.27
13.500	-114.56	41.42	0.14	-0.26	0.22	13.48	13.35	41.42	39.28	-36.58	-43.45	-114.56
14.000	-120.52	42.29	0.06	-0.71	-0.32	10.10	10.16	42.29	40.64	-23.72	-30.48	-120.52
14.500	-123.10	40.60	-0.01	-1.01	-0.71	7.08	7.27	40.60	39.38	-10.60	-16.88	-123.10
15.000	-122.59	37.45	-0.05	-1.14	-0.92	4.60	4.87	37.45	36.61	2.44	-3.21	-122.59
15.500	-119.34	33.44	-0.07	-1.14	-0.98	2.65	2.95	33.44	32.90	14.98	9.97	-119.34
16.000	-113.75	29.00	-0.08	-1.05	-0.95	1.20	1.49	29.00	28.70	26.59	22.22	-113.75
16.500	-106.17	36.83	-0.07	-0.91	-0.85	0.17	0.44	24.46	24.36	36.83	33.11	-106.17
17.000	-96.99	45.29	-0.06	-0.74	-0.72	-0.50	-0.26	20.05	20.11	45.29	42.21	-96.99
17.500	-86.58	51.53	-0.04	-0.56	-0.57	-0.88	-0.68	15.94	16.11	51.53	49.09	-86.58
18.000	-75.30	55.12	-0.02	-0.39	-0.41	-1.04	-0.87	12.22	12.46	55.12	53.33	-75.30
18.500	-63.54	55.70	0.00	-0.23	-0.26	-1.02	-0.89	9.01	9.29	55.70	54.53	-63.54
19.000	-51.66	53.30	0.02	-0.10	-0.12	-0.90	-0.80	6.37	6.65	53.30	52.63	-51.66
19.500	-40.04	48.68	0.03	0.02	-0.01	-0.71	-0.64	4.30	4.56	48.68	48.39	-40.04
20.000	-29.04	42.63	0.04	0.11	0.08	-0.50	-0.45	2.75	2.98	42.63	42.60	-29.04
20.500	-19.05	35.90	0.04	0.16	0.14	-0.29	-0.26	1.65	1.84	35.75	35.90	-19.05
21.000	-10.42	28.77	0.05	0.19	0.17	-0.13	-0.11	0.91	1.06	28.52	28.77	-10.42
21.500	-3.52	21.59	0.04	0.18	0.16	-0.03	-0.02	0.42	0.53	21.30	21.59	-3.52
22.000	-0.02	14.70	0.03	0.12	0.11	-0.02	-0.02	0.07	0.15	14.45	14.70	1.26
22.500	-0.11	8.69	0.01	0.06	0.05	-0.05	-0.05	-0.11	-0.07	8.51	8.69	3.78
23.000	-0.12	4.04	0.01	0.02	0.02	-0.04	-0.04	-0.12	-0.10	3.94	4.04	3.87
23.500	-0.05	1.70	0.00	0.00	0.00	-0.01	-0.01	-0.05	-0.04	1.02	1.05	1.70
24.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

MAXIMUM MOMENT = 55.70
MINIMUM MOMENT = -123.10

Summary of Wall Shear of All Phases with Envelope

LEVEL	MIN.	MAX.	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10
0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.500	0.29	1.49	0.29	0.88	1.34	0.88	1.19	1.40	1.35	1.44	1.34	1.49
1.000	0.65	5.20	0.65	2.78	4.49	2.76	3.73	4.41	4.28	5.02	4.74	5.20
1.000	-16.70	2.78	0.65	2.78	-5.51	-16.70	-14.17	-12.26	-12.49	-7.39	-8.06	-5.48
1.500	-14.56	4.95	0.79	4.95	-1.90	-14.56	-11.32	-9.27	-9.51	-3.17	-3.99	-0.78
2.000	-12.17	7.38	0.94	7.38	1.74	-12.17	-8.17	-6.65	-6.84	0.63	-0.31	3.80
2.500	-9.53	9.50	1.11	9.50	5.25	-9.53	-4.73	-4.08	-4.14	3.94	2.91	7.93
3.000	-6.63	11.84	1.28	10.73	7.98	-6.63	-1.00	-1.26	-1.12	7.01	5.94	11.84
3.500	-3.52	16.41	0.89	10.73	10.03	-3.52	3.63	1.76	2.37	10.00	8.91	16.41
4.000	-0.16	21.10	0.58	9.76	10.51	-0.16	8.49	5.00	6.22	13.12	12.09	21.10
4.000	-26.45	10.51	0.58	9.76	10.51	-0.16	-11.51	-26.45	-24.17	-21.15	-22.00	-10.53
4.500	-22.97	9.52	0.33	7.81	9.52	3.44	-6.48	-22.97	-19.97	-17.82	-18.51	-5.69
5.000	-19.26	7.29	0.14	4.90	7.17	7.29	-1.34	-19.26	-15.40	-14.27	-14.69	-0.77
5.500	-15.32	10.81	-0.03	1.69	4.20	10.81	3.72	-15.32	-10.49	-10.51	-10.54	4.14
6.000	-11.14	13.42	-0.17	-0.88	1.66	13.42	8.12	-11.14	-5.26	-6.53	-6.02	8.92
6.500	-6.76	14.95	-0.46	-3.75	-1.30	14.95	11.69	-6.76	0.61	-2.37	-0.94	13.52
7.000	-5.64	17.76	-0.68	-5.64	-3.37	15.57	13.89	-2.16	6.72	1.99	4.58	17.76
7.000	-36.00	15.57	-0.68	-5.64	-3.37	15.57	13.89	-2.16	-13.28	-36.00	-31.90	-21.20
7.500	-31.42	15.27	-0.78	-6.77	-4.71	15.27	14.76	2.68	-6.98	-31.42	-25.92	-16.92
8.000	-26.62	14.36	-0.78	-7.30	-5.46	14.06	14.36	7.75	-0.56	-26.62	-19.48	-12.44
8.500	-21.61	12.76	-0.70	-7.38	-5.76	11.93	12.76	12.51	5.75	-21.61	-12.58	-7.77
9.000	-16.38	16.44	-0.57	-7.15	-5.74	8.90	10.01	16.44	11.46	-16.38	-5.25	-2.90
9.500	-10.99	19.29	-0.54	-6.86	-5.73	4.29	5.54	19.29	16.28	-10.99	2.95	2.11
10.000	-6.24	21.18	-0.48	-6.24	-5.45	-0.14	1.10	21.18	19.67	-5.38	11.44	7.31
10.000	-57.11	21.18	-0.48	-6.24	-5.45	-0.14	1.10	21.18	19.67	-5.38	-24.56	-57.11
10.500	-51.71	22.11	-0.39	-5.37	-4.89	-3.27	-2.10	22.11	21.68	0.45	-15.93	-51.71
11.000	-46.11	22.37	-0.30	-4.39	-4.14	-5.27	-4.20	22.07	22.37	6.51	-7.30	-46.11
11.500	-40.30	21.81	-0.20	-3.40	-3.33	-6.38	-5.44	21.08	21.81	12.24	1.03	-40.30
12.000	-34.29	20.05	-0.10	-2.47	-2.51	-6.81	-5.99	19.13	20.05	17.10	8.85	-34.29
12.500	-28.16	20.84	-0.10	-1.83	-1.97	-7.21	-6.54	15.52	16.50	20.84	15.91	-28.16
13.000	-21.82	23.58	-0.12	-1.34	-1.52	-7.19	-6.66	10.81	11.79	23.58	21.28	-21.82
13.500	-15.27	25.32	-0.14	-1.00	-1.19	-6.92	-6.51	5.00	5.98	25.32	24.85	-15.27
14.000	-8.51	26.74	-0.17	-0.81	-1.00	-6.53	-6.21	-1.45	-0.54	26.06	26.74	-8.51
14.500	-5.47	27.47	-0.10	-0.40	-0.58	-5.47	-5.28	-5.00	-4.22	26.34	27.47	-1.93
15.000	-7.28	27.02	-0.05	-0.10	-0.25	-4.38	-4.29	-7.28	-6.62	25.77	27.02	3.90
15.500	-8.54	25.59	-0.01	0.11	-0.02	-3.36	-3.33	-8.54	-8.00	24.34	25.59	8.99
16.000	-9.03	23.30	0.01	0.25	0.14	-2.44	-2.46	-9.03	-8.60	22.04	23.30	13.32
16.500	-8.96	20.15	0.03	0.32	0.24	-1.64	-1.70	-8.96	-8.63	18.89	20.15	16.91

17.000	-8.50	19.75	0.04	0.36	0.30	-0.99	-1.07	-8.50	-8.25	14.89	16.14	19.75
17.500	-7.82	21.85	0.05	0.36	0.32	-0.48	-0.56	-7.82	-7.63	10.03	11.28	21.85
18.000	-6.91	23.20	0.05	0.34	0.31	-0.09	-0.17	-6.91	-6.80	4.31	5.57	23.20
18.500	-5.81	23.80	0.04	0.31	0.29	0.18	0.11	-5.81	-5.78	-1.91	-0.80	23.80
19.000	-7.24	23.67	0.04	0.26	0.25	0.36	0.29	-4.66	-4.68	-7.24	-6.40	23.67
19.500	-10.84	22.79	0.03	0.21	0.21	0.45	0.39	-3.55	-3.61	-10.84	-10.24	22.79
20.000	-13.05	21.17	0.02	0.15	0.15	0.46	0.42	-2.57	-2.65	-13.05	-12.65	21.17
20.500	-14.18	18.80	0.01	0.09	0.09	0.41	0.38	-1.76	-1.84	-14.18	-13.94	18.80
21.000	-14.50	15.70	0.00	0.02	0.02	0.31	0.28	-1.14	-1.23	-14.50	-14.38	15.70
21.500	-14.16	11.86	-0.01	-0.06	-0.06	0.14	0.13	-0.75	-0.83	-14.14	-14.16	11.86
22.000	-13.14	7.27	-0.02	-0.15	-0.15	-0.07	-0.08	-0.58	-0.65	-13.00	-13.14	7.27
22.500	-10.73	2.80	-0.01	-0.09	-0.09	0.03	0.02	-0.11	-0.17	-10.54	-10.73	2.80
23.000	-7.69	0.15	0.00	-0.04	-0.04	0.08	0.07	0.15	0.11	-7.50	-7.69	-2.44
23.500	-5.11	0.20	0.00	-0.01	-0.01	0.08	0.08	0.20	0.18	-3.96	-4.09	-5.11
24.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

MAXIMUM SHEAR = 57.11

Summary of BUT forces of All Phases with Envelope

BUT	MAX.(1)	MAX.(2)	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10
NO. 1	-97.3	0.0	*******	*******	-50.0	-97.3	-89.5	-83.3	-83.8	-62.1	-64.0	-53.4
NO. 2	-171.3	0.0	*******	*******	*******	*******	-100.0	-157.3	-152.0	-171.3	-170.5	-158.1
NO. 3	-194.8	0.0	*******	*******	*******	*******	*******	*******	-100.0	-190.0	-182.4	-194.8
NO. 4	-322.1	0.0	*******	*******	*******	*******	*******	*******	*******	*******	-180.0	-322.1

Note: MAX.(1) for BUT(1), MAX.(2) for BUT(2), MAX.(1) & MAX.(2) for BUT(0).

Pa-Pp PRESSURE BALANCE CHECK

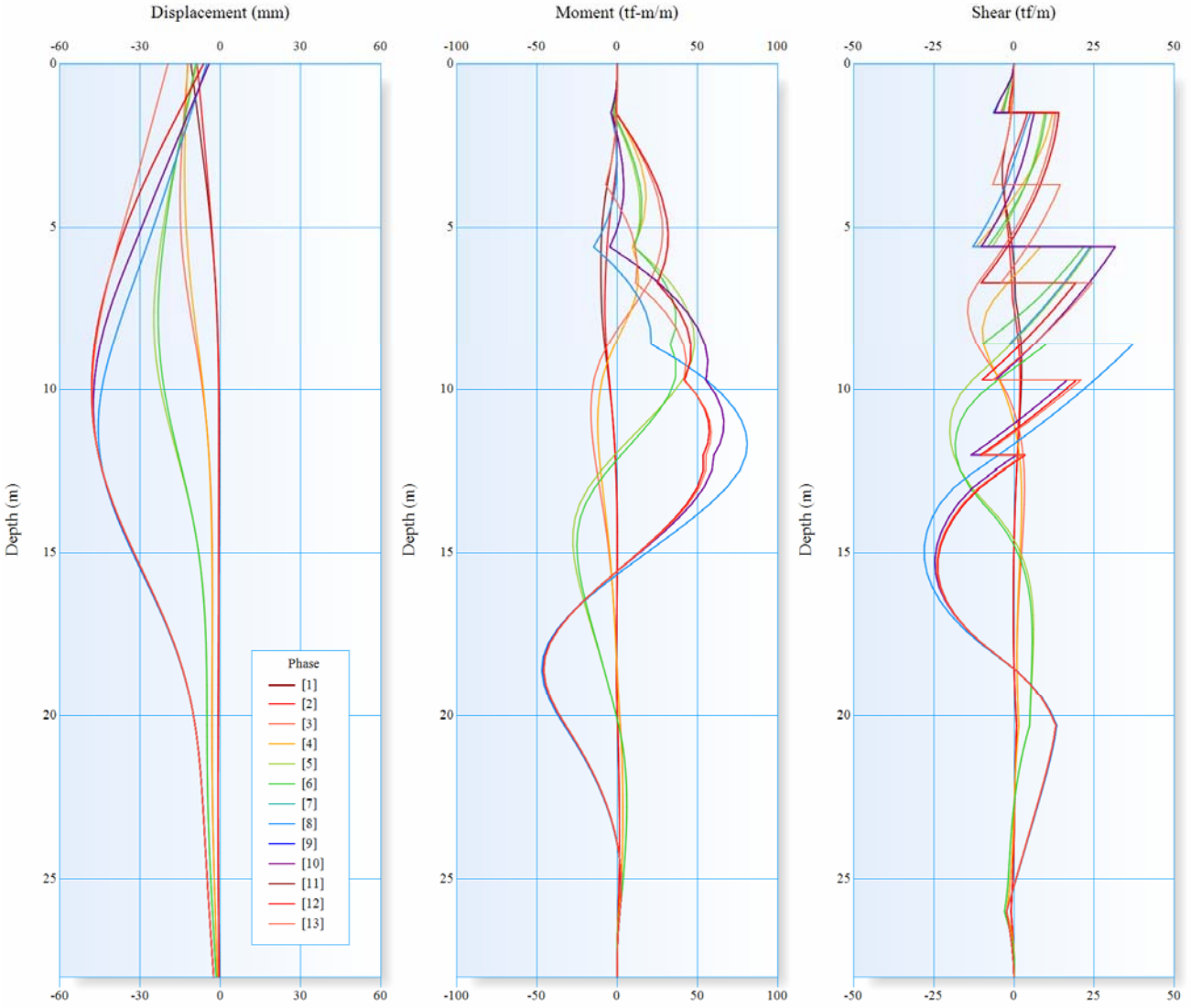
TOTAL RESISTANT MOMENT= 2121.01 T-M
TOTAL DRIVING MOMENT= 1789.68 T-M
PENETRATION SAFTEY FACTOR(F.S.)= 1.19 <1.5-- N.G.

附錄二
案例二 XDO 及 RIDO 之輸入檔及詳細輸出結果

計畫名稱：XDO Example 2
主　　題：連續壁 + 順打 3 階支撐 + 有效應力法

XDO 綜合分析結果

▼壁體變位、彎矩、剪力



LEVEL	X_{min}	X_{max}	M_{min}	M_{max}	V_{min}	V_{max}
(m)	(mm)	(mm)	(tf-m/m)	(tf-m/m)	(tf/m)	(tf/m)
0.000	-19.63	0.00	0.00	0.00	0.00	0.00
0.375	-20.87	0.00	-0.07	0.01	-0.60	0.00
0.750	-22.11	0.00	-0.56	0.00	-2.38	0.00
1.125	-23.35	0.00	-1.86	0.00	-4.59	0.00
1.500	-24.59	0.00	-3.92	0.00	-6.40	0.00
1.500	-24.59	0.00	-3.92	0.00	-0.84	13.98
1.900	-25.92	0.00	-2.13	4.67	-1.40	13.42
2.300	-27.25	0.00	-1.56	9.81	-2.19	12.64
2.500	-27.92	0.00	-2.05	12.30	-2.66	12.17
3.100	-29.94	0.00	-4.00	19.14	-4.40	10.43
3.700	-31.99	0.00	-7.25	24.78	-6.63	8.20
3.700	-31.99	0.00	-7.25	24.78	-3.58	14.39
4.100	-33.39	0.00	-7.52	27.74	-4.30	12.65
4.761	-35.72	0.00	-9.09	30.94	-7.69	9.25
5.180	-37.17	0.00	-9.84	31.74	-10.15	6.80

5.600	-38.59	0.00	-14.63	31.46	-12.83	4.11
5.600	-38.59	0.00	-14.63	31.46	-3.13	31.53
6.100	-40.21	0.00	-10.16	29.59	-6.62	28.04
6.600	-41.87	0.00	-10.10	31.47	-10.44	24.22
6.700	-42.21	0.00	-10.07	33.13	-11.20	23.42
6.700	-42.21	0.00	-10.07	33.13	-11.20	24.40
7.200	-43.81	0.00	-9.87	40.20	-14.06	20.09
7.600	-44.94	0.00	-9.54	44.33	-14.48	16.38
8.100	-46.13	0.00	-8.82	50.27	-13.58	11.40
8.600	-47.06	0.00	-7.82	54.64	-11.56	6.20
8.600	-47.06	0.00	-7.82	54.64	-11.56	37.08
9.100	-47.71	0.00	-10.73	56.47	-8.41	31.83
9.600	-48.07	0.00	-14.05	55.59	-11.83	26.26
9.700	-48.11	0.00	-14.52	55.54	-12.93	25.11
10.150	-48.16	0.00	-15.93	65.67	-16.84	19.77
10.600	-47.96	0.00	-16.40	73.34	-19.03	14.18
10.950	-47.62	0.00	-16.26	77.53	-19.79	9.65
11.300	-47.11	0.00	-15.78	80.11	-20.00	4.97
11.650	-46.42	0.00	-15.04	81.02	-19.65	2.39
12.000	-45.57	0.00	-14.11	80.21	-18.75	2.83
12.000	-45.57	0.00	-14.11	80.21	-18.75	3.40
12.450	-44.30	0.00	-12.75	76.56	-16.80	3.16
12.500	-44.14	0.00	-12.59	75.97	-16.58	3.18
13.000	-42.44	0.00	-17.95	68.14	-18.77	3.28
13.500	-40.49	0.00	-23.43	57.60	-23.15	3.19
13.925	-38.54	0.00	-26.23	47.24	-25.56	3.02
14.350	-36.38	0.00	-27.50	36.02	-27.16	2.78
14.775	-34.06	0.00	-27.57	24.30	-27.95	2.51
15.200	-31.64	0.00	-26.70	12.42	-27.92	2.90
15.625	-29.15	0.00	-25.16	0.73	-27.08	4.25
16.050	-26.66	0.00	-23.13	0.00	-25.42	5.16
16.475	-24.22	0.00	-21.28	0.00	-22.95	5.73
16.900	-21.87	0.00	-29.79	0.00	-19.67	6.02
17.325	-19.65	0.00	-37.29	0.00	-15.57	6.11
17.750	-17.60	0.00	-42.88	0.00	-10.67	6.05
18.175	-15.74	0.00	-46.21	0.00	-4.94	5.91
18.600	-14.09	0.00	-47.06	0.04	0.00	5.71
19.025	-12.64	0.00	-45.74	0.46	0.00	5.49
19.450	-11.40	0.00	-42.71	0.91	0.00	8.77
19.875	-10.34	0.00	-38.38	1.42	0.00	11.41
20.300	-9.46	0.00	-33.08	2.00	0.00	13.32
20.656	-8.85	0.00	-28.41	2.54	0.00	12.77
21.013	-8.32	0.00	-23.96	3.77	0.00	12.07
21.369	-7.87	0.00	-19.80	4.70	0.00	11.23
21.725	-7.47	0.00	-15.94	5.36	0.00	10.31
22.081	-7.13	0.00	-12.42	5.79	0.00	9.33
22.438	-6.82	0.00	-9.26	6.01	0.00	8.31
22.794	-6.53	0.00	-6.47	6.06	-0.09	7.26
23.150	-6.27	0.00	-4.05	5.97	-0.48	6.21
23.506	-6.01	0.00	-2.02	5.75	-0.81	5.14
23.863	-5.76	0.00	-0.36	5.41	-1.09	4.08
24.219	-5.52	0.00	0.00	4.99	-1.34	3.02
24.575	-5.26	0.00	0.00	4.48	-1.56	1.96
24.931	-5.00	0.00	0.00	3.90	-1.77	0.90
25.288	-4.74	0.00	0.00	3.23	-2.05	0.00
25.644	-4.46	0.00	0.00	2.44	-2.45	0.00

26.000	-4.18	0.00	0.00	1.65	-2.98	0.00
26.500	-3.77	0.00	0.00	0.74	-1.52	0.00
27.000	-3.36	0.00	-0.10	0.24	-0.72	0.00
27.500	-2.95	0.00	-0.09	0.03	-0.24	0.18
28.000	-2.53	0.00	0.00	0.00	0.00	0.00
Max	-	0.00	-	81.02	-	37.08
Min	-48.16	-	-47.06	-	-27.95	-

▼支撐力

Phase	Position(m) / Force(tf)							
	S1	S2	S3	S4	S5	S6	S7	S8
	1.5(m)	5.6(m)	8.6(m)	12.45(m)	12(m)	9.7(m)	6.7(m)	3.7(m)
#1								
#2	45.00							
#3	75.79							
#4	72.99	110.00						
#5	72.53	170.74						
#6	73.10	164.54	110.00					
#7	63.87	200.94	212.85					
#8	63.87	200.94	212.85	0.00	0.00	0.00		
#9	67.82	229.53	-	0.46	14.05	22.38		
#10	67.82	229.53	-	0.46	14.05	22.38	0.00	
#11	85.90	-	-	0.26	13.86	29.42	29.47	
#12	85.90	-	-	0.26	13.86	29.42	29.47	0.00
#13	-	-	-	0.22	12.66	27.50	28.44	21.02
Extremum	85.90	229.53	212.85	0.46	14.05	29.42	29.47	21.02
Preload	45.00	110.00	110.00	0.00	0.00	0.00	0.00	0.00
Preload Ratio	52.4%	47.9%	51.7%	-	-	-	-	-

▼分析條件

▼分析方法設定

排水地層及不排水地層皆採有效應力法分析

▼主、被動土壓力

採用 RIDO 土壓力計算法

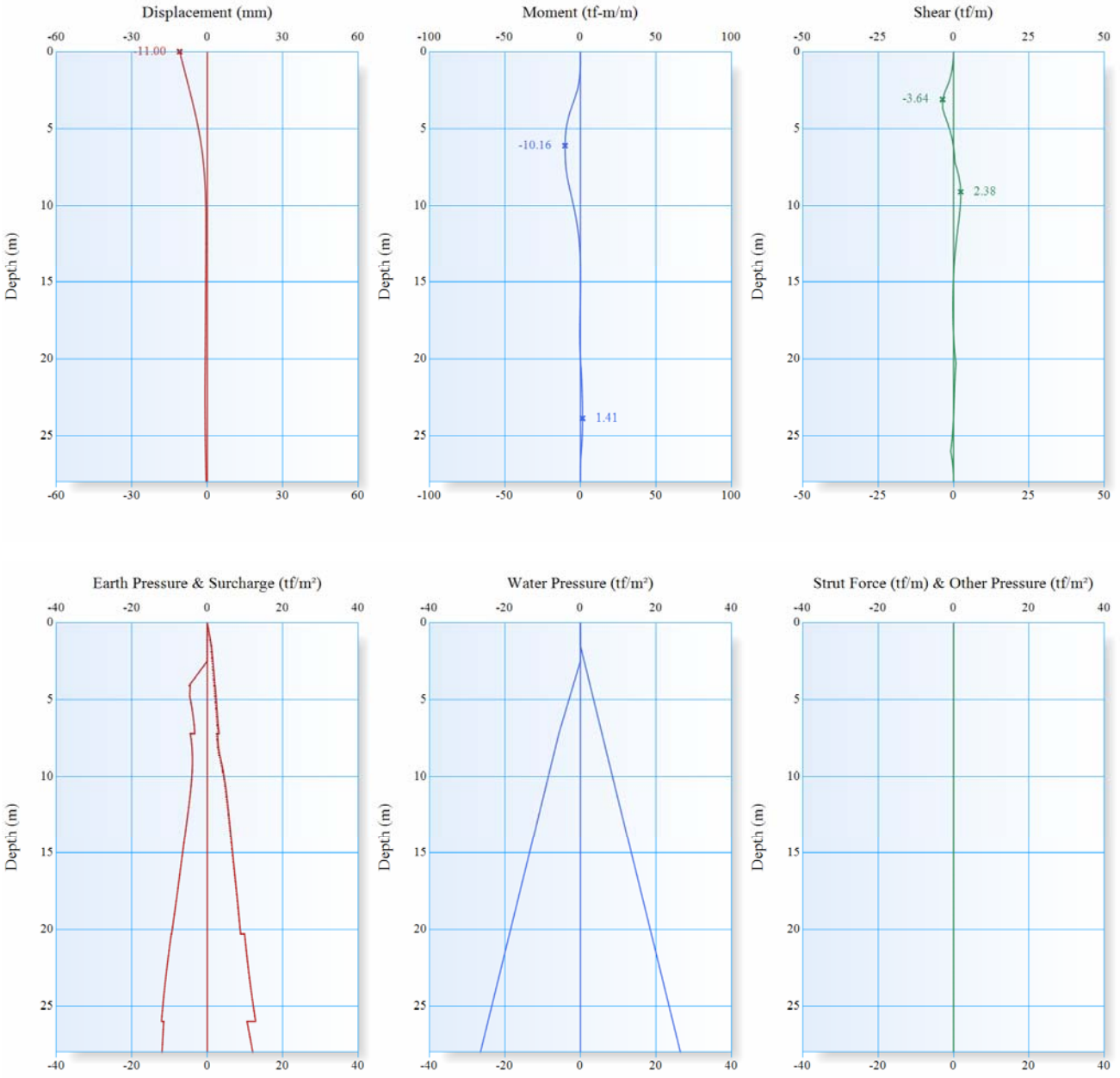
▼SUB 超載轉換法

由 Boussinesq 公式計算水平荷重 S_h 後，側向土壓力直接加入 S_h

計畫名稱：XDO Example 2
主　　題：連續壁 + 順打 3 階支撐 + 有效應力法

XDO 各階分析結果

▼ PHASE 1



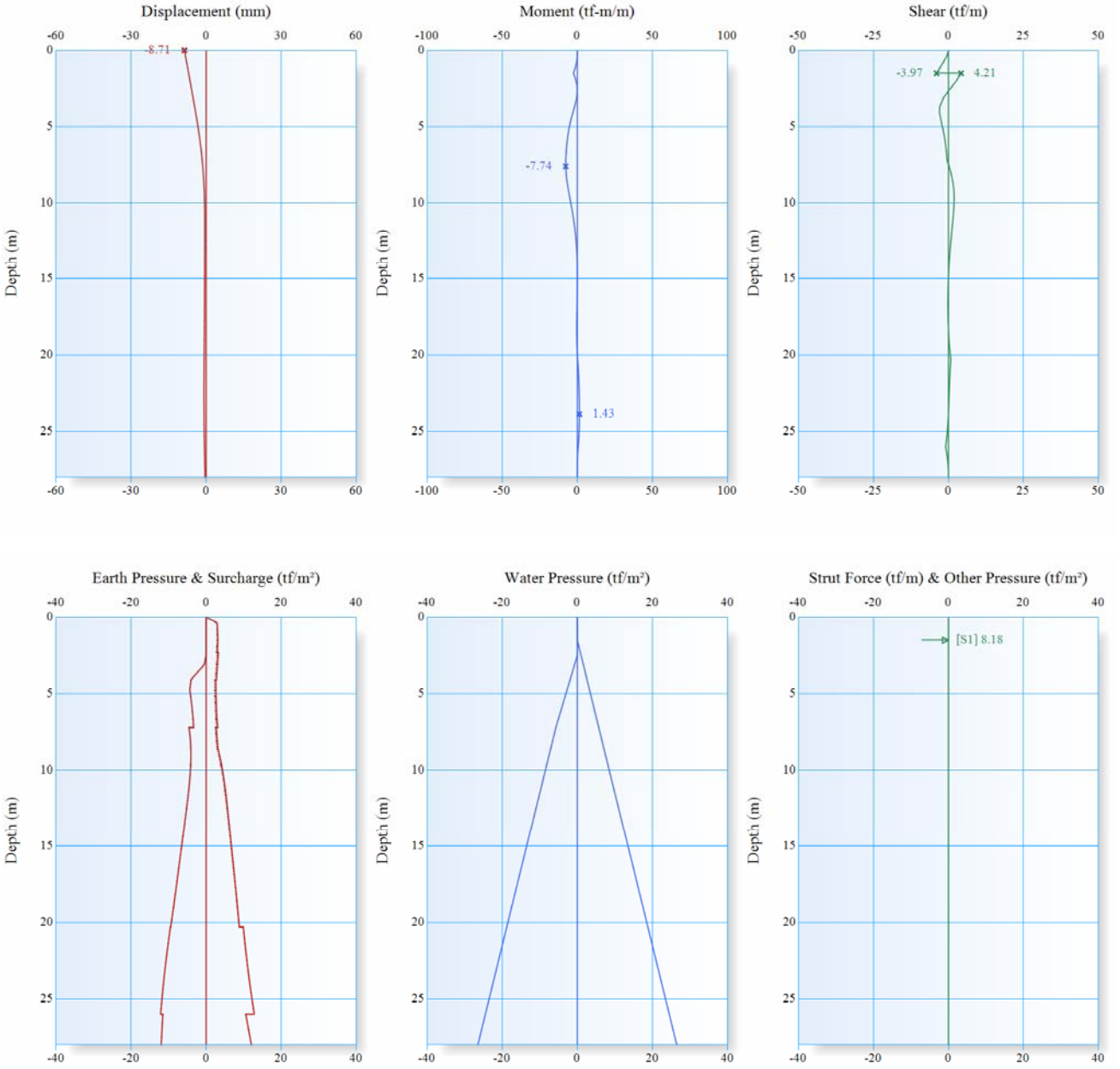
LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-11.00	0.00	0.00		0				1	0.00		1250	
0.375	-10.40	0.00	-0.05		0				1	0.28		1250	
0.750	-9.80	-0.05	-0.21		0				1	0.57		1250	
1.125	-9.21	-0.17	-0.48		0				1	0.84		1250	
1.500	-8.61	-0.41	-0.84		0				1	1.12	0.00	1250	
1.900	-7.98	-0.85	-1.40		0				1	1.28	0.40	1250	
2.300	-7.35	-1.56	-2.19		0				1	1.43	0.80	1250	
					0				1	1.43	0.80	1500	
2.500	-7.04	-2.05	-2.66		0		0.00		1	1.50	1.00	1500	
					3	0.00	0.00	1500	1	1.50	1.00	1500	

3.100	-6.12	-3.98	-3.64		3	1.81	0.73	1500	1	1.71	1.60	1500	
3.700	-5.23	-6.20	-3.58		3	3.62	1.46	1500	1	1.91	2.20	1500	
4.100	-4.67	-7.52	-2.96		3	4.83	1.94	1500	1	2.03	2.60	1500	
					3	4.51	1.94	1000	1	2.11	2.60	1000	
4.761	-3.81	-9.09	-1.78		2	4.67	2.74	1000	1	2.31	3.26	1000	
5.180	-3.32	-9.68	-1.09		2	4.33	3.25	1000	1	2.44	3.68	1000	
5.600	-2.86	-10.02	-0.55		2	4.03	3.76	1000	1	2.57	4.10	1000	
6.100	-2.38	-10.16	-0.07		2	3.74	4.37	1000	1	2.71	4.60	1000	
6.600	-1.96	-10.10	0.26		2	3.51	4.97	1000	1	2.86	5.10	1000	
6.700	-1.88	-10.07	0.31		2	3.47	5.09	1000	1	2.88	5.20	1000	
7.200	-1.54	-9.87	0.47		2	3.31	5.70	1000	2	3.15	5.70	1000	
					2	4.50	5.70	1875	1	2.71	5.70	1875	
7.600	-1.30	-9.54	1.12		2	4.26	6.10	1875	1	2.82	6.10	1875	
8.100	-1.06	-8.82	1.75		2	4.05	6.60	1875	1	2.95	6.60	1875	
8.600	-0.88	-7.82	2.18		2	3.94	7.10	1875	2	3.31	7.10	1875	
9.100	-0.74	-6.67	2.38		2	3.93	7.60	1875	2	3.79	7.60	1875	
9.600	-0.65	-5.47	2.36		2	3.99	8.10	1875	2	4.20	8.10	1875	
9.700	-0.63	-5.24	2.33		2	4.01	8.20	1875	2	4.28	8.20	1875	
10.150	-0.58	-4.22	2.17		2	4.12	8.65	1875	2	4.58	8.65	1875	
10.600	-0.55	-3.29	1.94		2	4.28	9.10	1875	2	4.84	9.10	1875	
10.950	-0.53	-2.64	1.74		2	4.42	9.45	1875	2	5.03	9.45	1875	
11.300	-0.53	-2.07	1.52		2	4.58	9.80	1875	2	5.20	9.80	1875	
11.650	-0.53	-1.58	1.30		2	4.75	10.15	1875	2	5.36	10.15	1875	
12.000	-0.53	-1.15	1.09		2	4.93	10.50	1875	2	5.51	10.50	1875	
12.450	-0.54	-0.72	0.84		2	5.16	10.95	1875	2	5.70	10.95	1875	
12.500	-0.55	-0.68	0.81		2	5.19	11.00	1875	2	5.72	11.00	1875	
13.000	-0.56	-0.33	0.56		2	5.46	11.50	1875	2	5.92	11.50	1875	
13.500	-0.58	-0.10	0.35		2	5.73	12.00	1875	2	6.12	12.00	1875	
13.925	-0.59	0.02	0.20		2	5.96	12.43	1875	2	6.29	12.43	1875	
14.350	-0.61	0.08	0.07		2	6.19	12.85	1875	2	6.46	12.85	1875	
14.775	-0.62	0.09	-0.03		2	6.42	13.28	1875	2	6.64	13.28	1875	
15.200	-0.63	0.06	-0.11		2	6.65	13.70	1875	2	6.81	13.70	1875	
15.625	-0.65	0.00	-0.17		2	6.88	14.13	1875	2	6.99	14.13	1875	
16.050	-0.66	-0.08	-0.20		2	7.10	14.55	1875	2	7.16	14.55	1875	
16.475	-0.67	-0.17	-0.22		2	7.33	14.98	1875	2	7.34	14.98	1875	
16.900	-0.68	-0.26	-0.21		2	7.55	15.40	1875	2	7.52	15.40	1875	
17.325	-0.69	-0.34	-0.19		2	7.78	15.83	1875	2	7.69	15.83	1875	
17.750	-0.71	-0.41	-0.14		2	8.01	16.25	1875	2	7.87	16.25	1875	
18.175	-0.72	-0.45	-0.06		2	8.25	16.68	1875	2	8.04	16.68	1875	
18.600	-0.74	-0.45	0.04		2	8.48	17.10	1875	2	8.20	17.10	1875	
19.025	-0.76	-0.40	0.18		2	8.72	17.53	1875	2	8.37	17.53	1875	
19.450	-0.78	-0.29	0.34		2	8.96	17.95	1875	2	8.53	17.95	1875	
19.875	-0.80	-0.10	0.55		2	9.21	18.38	1875	2	8.69	18.38	1875	
20.300	-0.82	0.19	0.78		2	9.45	18.80	1875	2	8.85	18.80	1875	
					2	9.53	18.80	1375	2	9.90	18.80	1375	
20.656	-0.84	0.44	0.66		2	9.73	19.16	1375	2	10.05	19.16	1375	
21.013	-0.85	0.66	0.55		2	9.92	19.51	1375	2	10.20	19.51	1375	
21.369	-0.87	0.85	0.46		2	10.12	19.87	1375	2	10.35	19.87	1375	
21.725	-0.88	1.00	0.38		2	10.31	20.23	1375	2	10.51	20.23	1375	
22.081	-0.89	1.12	0.31		2	10.49	20.58	1375	2	10.67	20.58	1375	
22.438	-0.89	1.23	0.25		2	10.67	20.94	1375	2	10.84	20.94	1375	
22.794	-0.89	1.31	0.19		2	10.84	21.29	1375	2	11.01	21.29	1375	
23.150	-0.89	1.37	0.13		2	11.01	21.65	1375	2	11.19	21.65	1375	
23.506	-0.88	1.40	0.06		2	11.17	22.01	1375	2	11.37	22.01	1375	
23.863	-0.86	1.41	-0.02		2	11.33	22.36	1375	2	11.57	22.36	1375	
24.219	-0.85	1.39	-0.11		2	11.48	22.72	1375	2	11.76	22.72	1375	

計畫名稱：XDO Example 2
主　　題：連續壁 + 順打 3 階支撐 + 有效應力法

24.575	-0.82	1.34	-0.22		2	11.62	23.08	1375	2	11.97	23.08	1375	
24.931	-0.80	1.24	-0.36		2	11.76	23.43	1375	2	12.17	23.43	1375	
25.288	-0.77	1.08	-0.52		2	11.89	23.79	1375	2	12.39	23.79	1375	
25.644	-0.73	0.87	-0.71		2	12.02	24.14	1375	2	12.61	24.14	1375	
26.000	-0.69	0.58	-0.94		2	12.14	24.50	1375	2	12.83	24.50	1375	
					2	11.55	24.50	2375	2	10.56	24.50	2375	
26.500	-0.64	0.22	-0.51		2	11.67	25.00	2375	2	10.93	25.00	2375	
27.000	-0.58	0.05	-0.21		2	11.78	25.50	2375	2	11.31	25.50	2375	
27.500	-0.53	0.00	-0.04		2	11.89	26.00	2375	2	11.68	26.00	2375	
28.000	-0.47	0.00	0.00		2	12.00	26.50	2375	2	12.06	26.50	2375	
Max	-0.47	1.41	2.38		D_e = 2.5 (m)　D_w = 2.5 (m)				D_e = 0 (m)　D_w = 1.5 (m)				
Min	-11.00	-10.16	-3.64		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 2

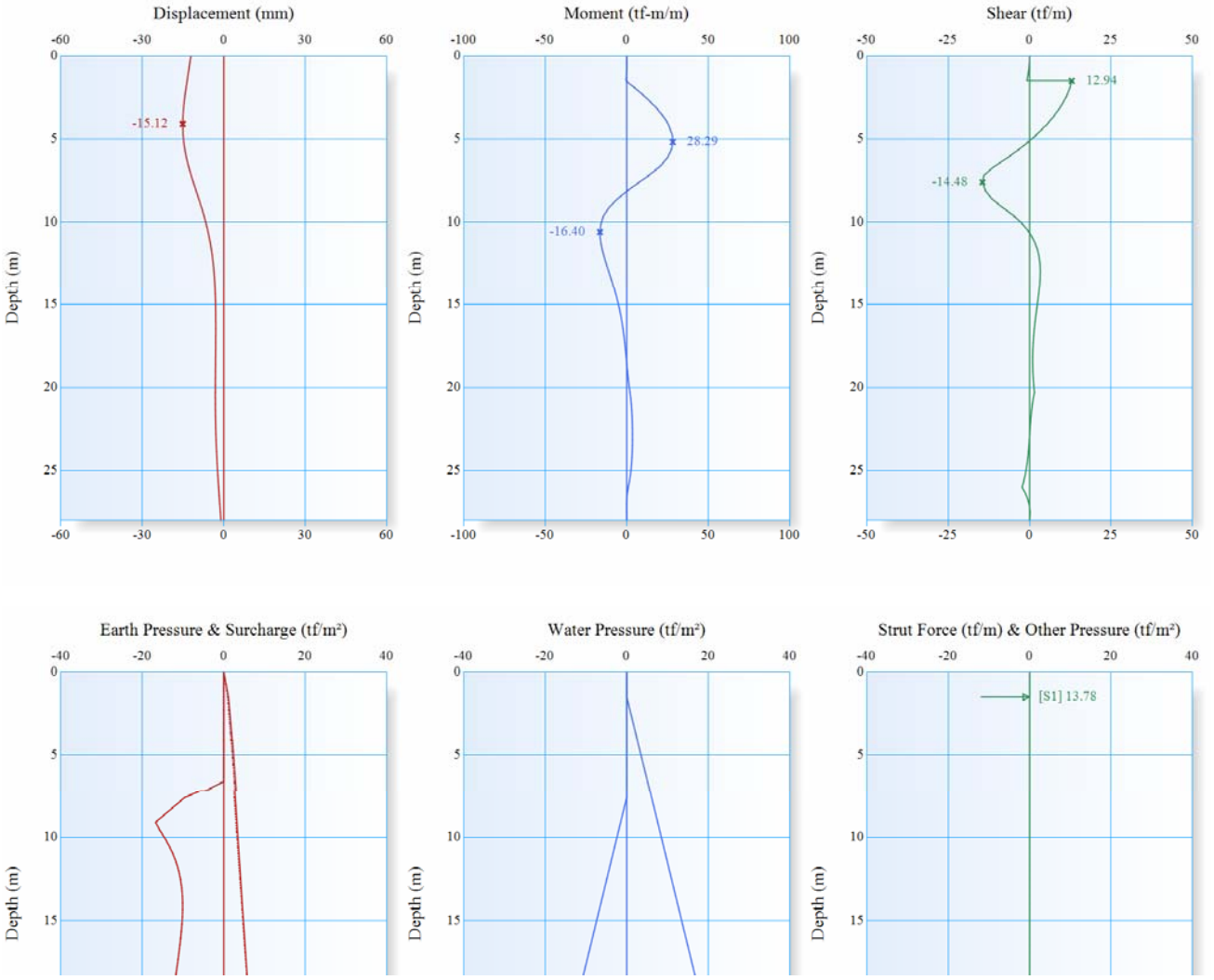


LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)

0.000	-8.71	0.00	0.00		0				1	0.00		1250	
0.375	-8.28	-0.07	-0.55		0				2	2.93		1250	
0.750	-7.85	-0.48	-1.66		0				2	3.01		1250	
1.125	-7.43	-1.32	-2.80		0				2	3.07		1250	
1.500	-7.00	-2.59	-3.97		0				2	3.13	0.00	1250	45.00
			4.21		0				2	3.13	0.00	1250	
1.900	-6.56	-1.16	2.90		0				2	3.05	0.40	1250	
2.300	-6.13	-0.28	1.45		0				2	2.96	0.80	1250	
					0				2	3.27	0.80	1500	
2.500	-5.91	-0.07	0.63		0		0.00		2	3.20	1.00	1500	
					3	0.00	0.00	1500	2	3.20	1.00	1500	
3.100	-5.26	-0.40	-1.64		2	0.52	0.73	1500	2	3.00	1.60	1500	
3.700	-4.61	-1.84	-2.92		2	2.68	1.46	1500	2	2.84	2.20	1500	
4.100	-4.19	-3.04	-2.97		2	4.10	1.94	1500	2	2.76	2.60	1500	
					2	4.03	1.94	1000	2	2.59	2.60	1000	
4.761	-3.52	-4.79	-2.30		2	4.37	2.74	1000	2	2.61	3.26	1000	
5.180	-3.12	-5.65	-1.82		2	4.13	3.25	1000	2	2.64	3.68	1000	
5.600	-2.74	-6.33	-1.41		2	3.91	3.76	1000	2	2.69	4.10	1000	
6.100	-2.33	-6.93	-1.01		2	3.69	4.37	1000	2	2.76	4.60	1000	
6.600	-1.96	-7.35	-0.71		2	3.51	4.97	1000	1	2.86	5.10	1000	
6.700	-1.89	-7.42	-0.66		2	3.48	5.09	1000	1	2.88	5.20	1000	
7.200	-1.58	-7.69	-0.47		2	3.35	5.70	1000	2	3.11	5.70	1000	
					2	4.59	5.70	1875	1	2.71	5.70	1875	
7.600	-1.37	-7.74	0.21		2	4.38	6.10	1875	1	2.82	6.10	1875	
8.100	-1.14	-7.45	0.91		2	4.19	6.60	1875	1	2.95	6.60	1875	
8.600	-0.96	-6.85	1.45		2	4.09	7.10	1875	2	3.16	7.10	1875	
9.100	-0.82	-6.03	1.79		2	4.07	7.60	1875	2	3.65	7.60	1875	
9.600	-0.71	-5.10	1.90		2	4.11	8.10	1875	2	4.07	8.10	1875	
9.700	-0.70	-4.91	1.90		2	4.13	8.20	1875	2	4.15	8.20	1875	
10.150	-0.64	-4.06	1.84		2	4.23	8.65	1875	2	4.47	8.65	1875	
10.600	-0.60	-3.26	1.70		2	4.37	9.10	1875	2	4.75	9.10	1875	
10.950	-0.58	-2.69	1.56		2	4.50	9.45	1875	2	4.95	9.45	1875	
11.300	-0.56	-2.17	1.40		2	4.65	9.80	1875	2	5.13	9.80	1875	
11.650	-0.56	-1.71	1.23		2	4.81	10.15	1875	2	5.31	10.15	1875	
12.000	-0.56	-1.31	1.05		2	4.97	10.50	1875	2	5.47	10.50	1875	
12.450	-0.56	-0.88	0.83		2	5.20	10.95	1875	2	5.67	10.95	1875	
12.500	-0.56	-0.84	0.81		2	5.22	11.00	1875	2	5.69	11.00	1875	
13.000	-0.57	-0.49	0.59		2	5.48	11.50	1875	2	5.90	11.50	1875	
13.500	-0.58	-0.25	0.39		2	5.74	12.00	1875	2	6.11	12.00	1875	
13.925	-0.60	-0.11	0.24		2	5.97	12.43	1875	2	6.29	12.43	1875	
14.350	-0.61	-0.03	0.12		2	6.20	12.85	1875	2	6.46	12.85	1875	
14.775	-0.62	0.00	0.02		2	6.42	13.28	1875	2	6.64	13.28	1875	
15.200	-0.63	-0.01	-0.06		2	6.65	13.70	1875	2	6.81	13.70	1875	
15.625	-0.64	-0.05	-0.12		2	6.87	14.13	1875	2	6.99	14.13	1875	
16.050	-0.65	-0.11	-0.16		2	7.10	14.55	1875	2	7.17	14.55	1875	
16.475	-0.66	-0.19	-0.18		2	7.32	14.98	1875	2	7.35	14.98	1875	
16.900	-0.68	-0.27	-0.18		2	7.55	15.40	1875	2	7.52	15.40	1875	
17.325	-0.69	-0.34	-0.16		2	7.78	15.83	1875	2	7.70	15.83	1875	
17.750	-0.70	-0.40	-0.12		2	8.01	16.25	1875	2	7.87	16.25	1875	
18.175	-0.72	-0.43	-0.04		2	8.24	16.68	1875	2	8.04	16.68	1875	
18.600	-0.74	-0.43	0.06		2	8.48	17.10	1875	2	8.21	17.10	1875	
19.025	-0.76	-0.38	0.19		2	8.72	17.53	1875	2	8.37	17.53	1875	
19.450	-0.78	-0.26	0.35		2	8.96	17.95	1875	2	8.53	17.95	1875	
19.875	-0.80	-0.07	0.55		2	9.21	18.38	1875	2	8.69	18.38	1875	
20.300	-0.82	0.21	0.79		2	9.45	18.80	1875	2	8.85	18.80	1875	
					2	9.53	18.80	1375	2	9.90	18.80	1375	

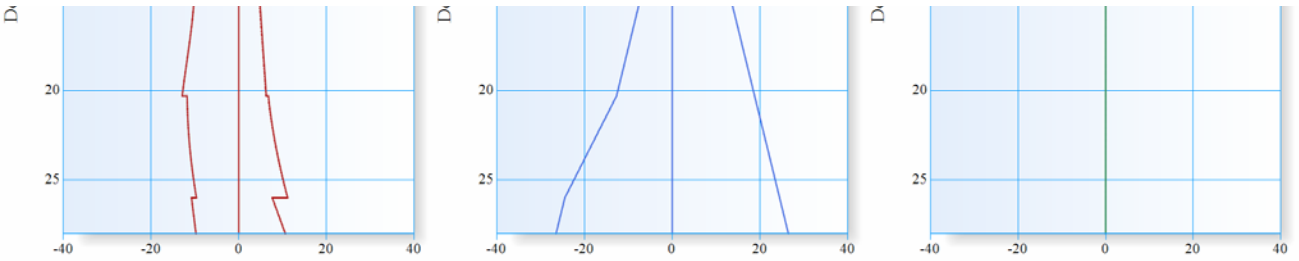
20.656	-0.84	0.47	0.66		2	9.73	19.16	1375	2	10.05	19.16	1375	
21.013	-0.85	0.69	0.55		2	9.92	19.51	1375	2	10.20	19.51	1375	
21.369	-0.87	0.87	0.46		2	10.12	19.87	1375	2	10.35	19.87	1375	
21.725	-0.88	1.02	0.38		2	10.31	20.23	1375	2	10.51	20.23	1375	
22.081	-0.89	1.15	0.31		2	10.49	20.58	1375	2	10.67	20.58	1375	
22.438	-0.89	1.25	0.25		2	10.67	20.94	1375	2	10.84	20.94	1375	
22.794	-0.89	1.33	0.19		2	10.84	21.29	1375	2	11.01	21.29	1375	
23.150	-0.89	1.38	0.13		2	11.01	21.65	1375	2	11.19	21.65	1375	
23.506	-0.88	1.42	0.06		2	11.17	22.01	1375	2	11.37	22.01	1375	
23.863	-0.86	1.43	-0.02		2	11.33	22.36	1375	2	11.57	22.36	1375	
24.219	-0.85	1.41	-0.11		2	11.48	22.72	1375	2	11.76	22.72	1375	
24.575	-0.82	1.35	-0.22		2	11.62	23.08	1375	2	11.97	23.08	1375	
24.931	-0.80	1.25	-0.36		2	11.76	23.43	1375	2	12.17	23.43	1375	
25.288	-0.77	1.09	-0.52		2	11.89	23.79	1375	2	12.39	23.79	1375	
25.644	-0.73	0.88	-0.71		2	12.02	24.14	1375	2	12.61	24.14	1375	
26.000	-0.70	0.58	-0.94		2	12.14	24.50	1375	2	12.83	24.50	1375	
					2	11.55	24.50	2375	2	10.56	24.50	2375	
26.500	-0.64	0.23	-0.51		2	11.67	25.00	2375	2	10.93	25.00	2375	
27.000	-0.58	0.06	-0.21		2	11.78	25.50	2375	2	11.31	25.50	2375	
27.500	-0.53	0.00	-0.04		2	11.89	26.00	2375	2	11.68	26.00	2375	
28.000	-0.47	0.00	0.00		2	12.00	26.50	2375	2	12.06	26.50	2375	
Max	-0.47	1.43	4.21		D_e = 2.5 (m)　D_w = 2.5 (m)				D_e = 0 (m)　D_w = 1.5 (m)				
Min	-8.71	-7.74	-3.97		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 3



計畫名稱：XDO Example 2

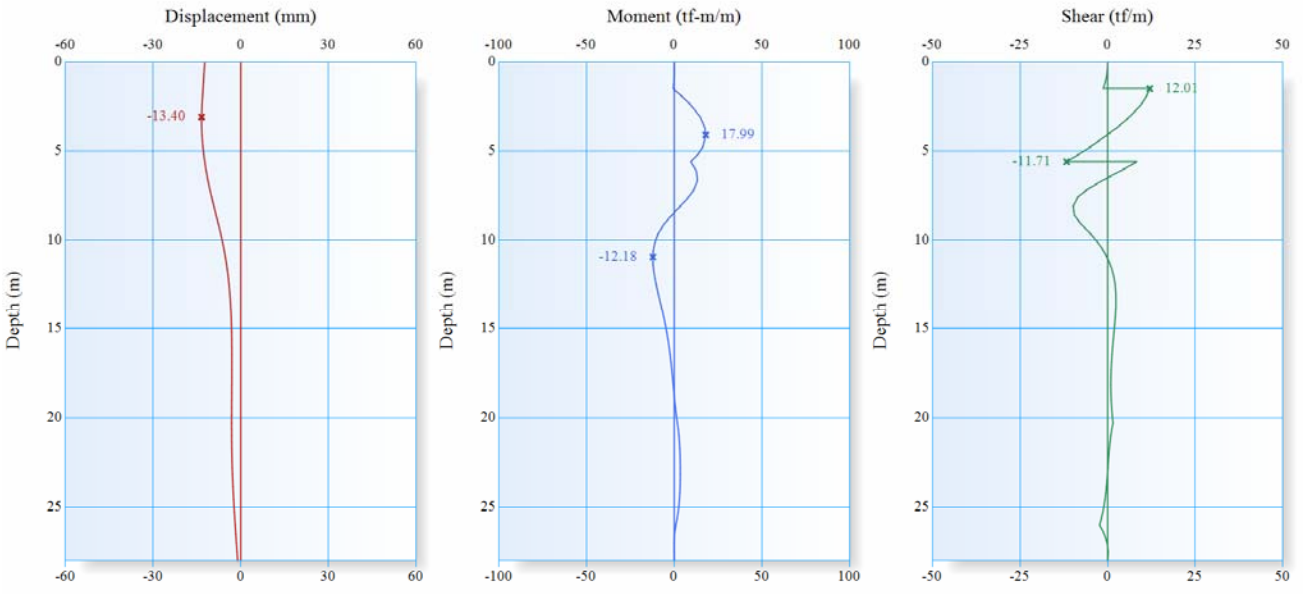
主　　題：連續壁 + 順打 3 階支撐 + 有效應力法



LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-12.13	0.00	0.00		0				1	0.00		1250	
0.375	-12.47	0.00	-0.05		0				1	0.28		1250	
0.750	-12.82	-0.04	-0.21		0				1	0.57		1250	
1.125	-13.17	-0.16	-0.48		0				1	0.84		1250	
1.500	-13.51	-0.40	-0.84		0				1	1.12	0.00	1250	75.79
			12.94		0				1	1.12	0.00	1250	
1.900	-13.88	4.67	12.38		0				1	1.28	0.40	1250	
2.300	-14.24	9.48	11.60		0				1	1.43	0.80	1250	
					0				1	1.43	0.80	1500	
2.500	-14.40	11.76	11.12		0				1	1.50	1.00	1500	
3.100	-14.81	17.94	9.38		0				1	1.71	1.60	1500	
3.700	-15.06	22.93	7.15		0				1	1.91	2.20	1500	
4.100	-15.12	25.46	5.41		0				1	2.03	2.60	1500	
					0				1	2.11	2.60	1000	
4.761	-14.99	27.95	2.01		0				1	2.31	3.26	1000	
5.180	-14.75	28.29	-0.44		0				1	2.44	3.68	1000	
5.600	-14.39	27.55	-3.13		0				1	2.57	4.10	1000	
6.100	-13.80	25.13	-6.62		0				1	2.71	4.60	1000	
6.600	-13.06	20.89	-10.44		0		0.00		1	2.86	5.10	1000	
					3	0.00	0.00	1000	1	2.86	5.10	1000	
6.700	-12.90	19.81	-11.20		3	0.77	0.00	1000	1	2.88	5.20	1000	
7.200	-12.01	13.43	-14.06		3	4.61	0.00	1000	1	3.03	5.70	1000	
					3	5.67	0.00	1875	1	2.71	5.70	1875	
7.600	-11.23	7.69	-14.48		3	9.58	0.00	1875	1	2.82	6.10	1875	
8.100	-10.23	0.63	-13.58		3	11.96	0.50	1875	1	2.95	6.60	1875	
8.600	-9.22	-5.69	-11.56		3	14.35	1.00	1875	1	3.08	7.10	1875	
9.100	-8.24	-10.73	-8.41		3	16.74	1.50	1875	1	3.22	7.60	1875	
9.600	-7.33	-14.05	-5.00		2	15.66	2.00	1875	1	3.35	8.10	1875	
9.700	-7.16	-14.52	-4.39		2	15.39	2.10	1875	1	3.38	8.20	1875	
10.150	-6.43	-15.93	-2.02		2	14.24	2.55	1875	1	3.50	8.65	1875	
10.600	-5.78	-16.40	-0.18		2	13.24	3.00	1875	1	3.62	9.10	1875	
10.950	-5.33	-16.26	0.92		2	12.56	3.35	1875	1	3.71	9.45	1875	
11.300	-4.93	-15.78	1.77		2	11.98	3.70	1875	1	3.80	9.80	1875	
11.650	-4.58	-15.04	2.39		2	11.49	4.05	1875	1	3.90	10.15	1875	
12.000	-4.27	-14.11	2.83		2	11.09	4.40	1875	1	3.99	10.50	1875	
12.450	-3.94	-12.75	3.16		2	10.68	4.85	1875	1	4.11	10.95	1875	
12.500	-3.91	-12.59	3.18		2	10.64	4.90	1875	1	4.13	11.00	1875	
13.000	-3.62	-10.96	3.28		2	10.34	5.40	1875	1	4.26	11.50	1875	
13.500	-3.40	-9.33	3.19		2	10.17	5.90	1875	1	4.40	12.00	1875	
13.925	-3.26	-8.00	3.02		2	10.11	6.33	1875	1	4.51	12.43	1875	
14.350	-3.15	-6.76	2.78		2	10.11	6.75	1875	1	4.63	12.85	1875	
14.775	-3.08	-5.63	2.51		2	10.18	7.18	1875	1	4.75	13.28	1875	
15.200	-3.03	-4.62	2.22		2	10.28	7.60	1875	1	4.86	13.70	1875	
15.625	-2.99	-3.73	1.94		2	10.43	8.03	1875	1	4.98	14.13	1875	

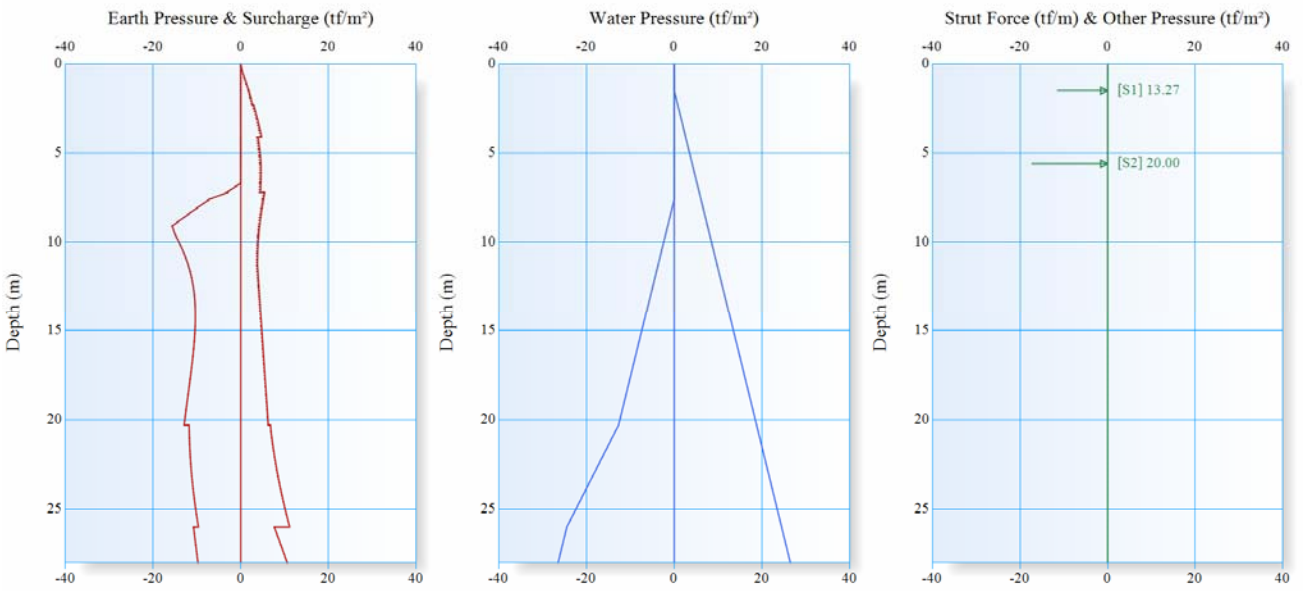
16.050	-2.98	-2.96	1.67		2	10.60	8.45	1875	1	5.10	14.55	1875	
16.475	-2.98	-2.29	1.44		2	10.80	8.88	1875	1	5.22	14.98	1875	
16.900	-2.98	-1.72	1.24		2	11.02	9.30	1875	1	5.33	15.40	1875	
17.325	-3.00	-1.22	1.09		2	11.25	9.73	1875	1	5.45	15.83	1875	
17.750	-3.01	-0.77	0.99		2	11.49	10.15	1875	1	5.57	16.25	1875	
18.175	-3.04	-0.36	0.94		2	11.73	10.58	1875	1	5.69	16.68	1875	
18.600	-3.06	0.04	0.94		2	11.98	11.00	1875	1	5.81	17.10	1875	
19.025	-3.08	0.46	1.00		2	12.22	11.43	1875	1	5.93	17.53	1875	
19.450	-3.10	0.91	1.11		2	12.46	11.85	1875	1	6.05	17.95	1875	
19.875	-3.12	1.42	1.27		2	12.70	12.28	1875	1	6.17	18.38	1875	
20.300	-3.12	2.00	1.47		2	12.92	12.70	1875	1	6.28	18.80	1875	
					2	11.79	12.70	1375	1	6.80	18.80	1375	
20.656	-3.12	2.47	1.12		2	11.76	13.44	1375	2	6.91	19.16	1375	
21.013	-3.12	2.82	0.84		2	11.72	14.18	1375	2	7.09	19.51	1375	
21.369	-3.10	3.09	0.62		2	11.67	14.91	1375	2	7.29	19.87	1375	
21.725	-3.07	3.28	0.43		2	11.61	15.65	1375	2	7.50	20.23	1375	
22.081	-3.03	3.41	0.28		2	11.52	16.39	1375	2	7.72	20.58	1375	
22.438	-2.98	3.49	0.15		2	11.43	17.13	1375	2	7.96	20.94	1375	
22.794	-2.92	3.53	0.03		2	11.32	17.86	1375	2	8.21	21.29	1375	
23.150	-2.85	3.52	-0.09		2	11.19	18.60	1375	2	8.48	21.65	1375	
23.506	-2.77	3.47	-0.22		2	11.05	19.34	1375	2	8.77	22.01	1375	
23.863	-2.68	3.37	-0.37		2	10.89	20.08	1375	2	9.07	22.36	1375	
24.219	-2.57	3.22	-0.55		2	10.72	20.81	1375	2	9.39	22.72	1375	
24.575	-2.46	2.99	-0.78		2	10.53	21.55	1375	2	9.72	23.08	1375	
24.931	-2.33	2.67	-1.06		2	10.34	22.29	1375	2	10.06	23.43	1375	
25.288	-2.20	2.24	-1.40		2	10.12	23.03	1375	2	10.41	23.79	1375	
25.644	-2.06	1.67	-1.81		2	9.90	23.76	1375	2	10.78	24.14	1375	
26.000	-1.92	0.95	-2.30		2	9.68	24.50	1375	2	11.15	24.50	1375	
					2	10.78	24.50	2375	2	7.66	24.50	2375	
26.500	-1.71	0.15	-0.98		2	10.53	25.00	2375	2	8.39	25.00	2375	
27.000	-1.50	-0.10	-0.16		2	10.28	25.50	2375	2	9.13	25.50	2375	
27.500	-1.29	-0.07	0.17		2	10.03	26.00	2375	2	9.87	26.00	2375	
28.000	-1.08	0.00	0.00		2	9.78	26.50	2375	2	10.61	26.50	2375	
Max	-1.08	28.29	12.94		D_e = 6.6 (m)　D_w = 6.6 (m)				D_e = 0 (m)　D_w = 1.5 (m)				
Min	-15.12	-16.40	-14.48		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 4



計畫名稱：XDO Example 2

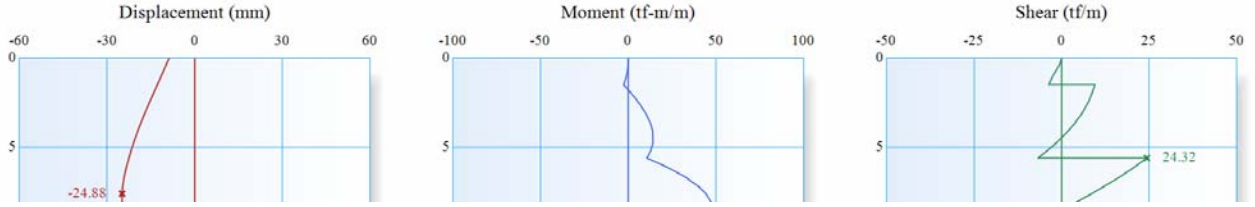
主　　題：連續壁 + 順打 3 階支撐 + 有效應力法



LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-12.32	0.00	0.00		0				1	0.00		1250	
0.375	-12.47	0.00	-0.05		0				2	0.28		1250	
0.750	-12.62	-0.05	-0.26		0				2	0.81		1250	
1.125	-12.77	-0.21	-0.66		0				2	1.34		1250	
1.500	-12.92	-0.56	-1.26		0				2	1.86	0.00	1250	72.99
			12.01		0				2	1.86	0.00	1250	
1.900	-13.08	4.08	11.10		0				2	2.28	0.40	1250	
2.300	-13.23	8.29	9.87		0				2	2.69	0.80	1250	
					0				2	2.94	0.80	1500	
2.500	-13.29	10.19	9.08		0				2	3.17	1.00	1500	
3.100	-13.40	14.82	6.20		0				2	3.82	1.60	1500	
3.700	-13.39	17.50	2.59		0				2	4.41	2.20	1500	
4.100	-13.29	17.99	-0.20		0				2	4.77	2.60	1500	
					0				2	3.93	2.60	1000	
4.761	-12.98	16.37	-4.86		0				2	4.32	3.26	1000	
5.180	-12.69	13.65	-8.17		0				2	4.50	3.68	1000	
5.600	-12.34	9.49	-11.71		0				2	4.61	4.10	1000	110.00
			8.29		0				2	4.61	4.10	1000	
6.100	-11.86	12.53	3.80		0				2	4.65	4.60	1000	
6.600	-11.31	13.26	-0.94		0		0.00		2	4.61	5.10	1000	
					3	0.00	0.00	1000	2	4.61	5.10	1000	
6.700	-11.19	13.12	-1.91		1	0.06	0.00	1000	2	4.59	5.20	1000	
7.200	-10.54	11.06	-6.11		2	3.14	0.00	1000	2	4.50	5.70	1000	
					2	2.92	0.00	1875	2	5.47	5.70	1875	
7.600	-9.97	8.07	-8.58		2	7.20	0.00	1875	2	5.19	6.10	1875	
8.100	-9.21	3.41	-9.82		2	10.06	0.50	1875	2	4.85	6.60	1875	
8.600	-8.44	-1.47	-9.48		2	12.89	1.00	1875	2	4.55	7.10	1875	
9.100	-7.67	-5.80	-7.60		2	15.67	1.50	1875	2	4.29	7.60	1875	
9.600	-6.94	-8.95	-5.09		2	14.93	2.00	1875	2	4.08	8.10	1875	
9.700	-6.80	-9.43	-4.62		2	14.72	2.10	1875	2	4.05	8.20	1875	
10.150	-6.20	-11.07	-2.74		2	13.81	2.55	1875	2	3.93	8.65	1875	
10.600	-5.65	-11.94	-1.20		2	13.00	3.00	1875	2	3.85	9.10	1875	

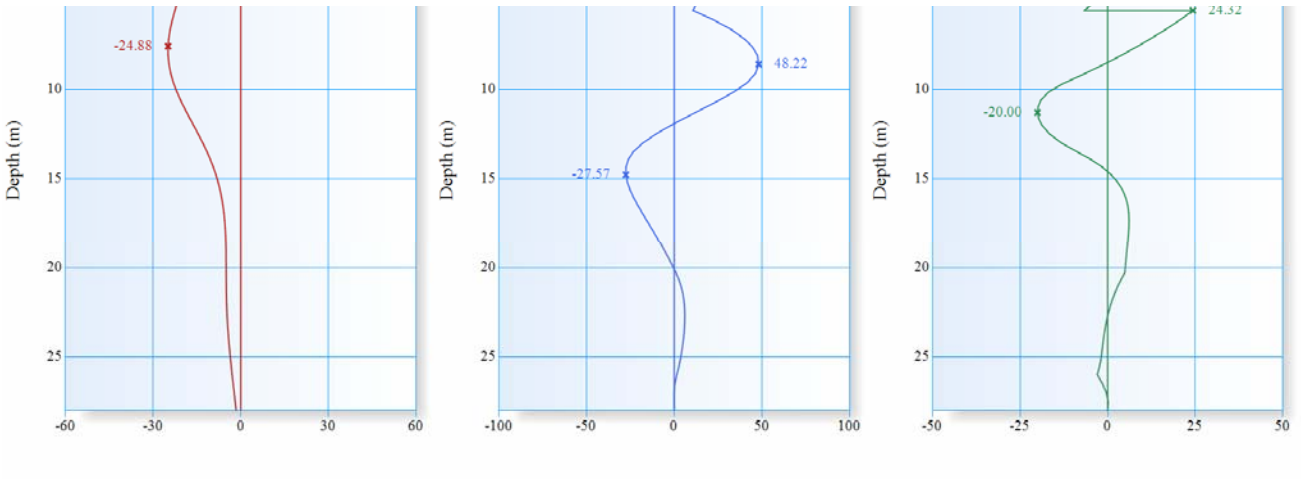
10.950	-5.27	-12.18	-0.22		2	12.46	3.35	1875	2	3.82	9.45	1875	
11.300	-4.93	-12.10	0.59		2	11.98	3.70	1875	2	3.81	9.80	1875	
11.650	-4.62	-11.78	1.22		2	11.57	4.05	1875	1	3.90	10.15	1875	
12.000	-4.35	-11.26	1.70		2	11.22	4.40	1875	1	3.99	10.50	1875	
12.450	-4.04	-10.39	2.10		2	10.87	4.85	1875	1	4.11	10.95	1875	
12.500	-4.01	-10.28	2.13		2	10.84	4.90	1875	1	4.13	11.00	1875	
13.000	-3.75	-9.15	2.34		2	10.58	5.40	1875	1	4.26	11.50	1875	
13.500	-3.53	-7.96	2.38		2	10.42	5.90	1875	1	4.40	12.00	1875	
13.925	-3.39	-6.96	2.31		2	10.36	6.33	1875	1	4.51	12.43	1875	
14.350	-3.28	-6.00	2.17		2	10.36	6.75	1875	1	4.63	12.85	1875	
14.775	-3.20	-5.10	2.00		2	10.40	7.18	1875	1	4.75	13.28	1875	
15.200	-3.14	-4.29	1.80		2	10.49	7.60	1875	1	4.86	13.70	1875	
15.625	-3.09	-3.56	1.61		2	10.61	8.03	1875	1	4.98	14.13	1875	
16.050	-3.07	-2.91	1.41		2	10.77	8.45	1875	1	5.10	14.55	1875	
16.475	-3.05	-2.34	1.24		2	10.94	8.88	1875	1	5.22	14.98	1875	
16.900	-3.05	-1.84	1.10		2	11.14	9.30	1875	1	5.33	15.40	1875	
17.325	-3.05	-1.39	1.00		2	11.35	9.73	1875	1	5.45	15.83	1875	
17.750	-3.06	-0.97	0.93		2	11.57	10.15	1875	1	5.57	16.25	1875	
18.175	-3.07	-0.58	0.91		2	11.80	10.58	1875	1	5.69	16.68	1875	
18.600	-3.09	-0.18	0.94		2	12.03	11.00	1875	1	5.81	17.10	1875	
19.025	-3.10	0.24	1.02		2	12.26	11.43	1875	1	5.93	17.53	1875	
19.450	-3.11	0.70	1.14		2	12.49	11.85	1875	1	6.05	17.95	1875	
19.875	-3.12	1.23	1.31		2	12.71	12.28	1875	1	6.17	18.38	1875	
20.300	-3.13	1.83	1.52		2	12.93	12.70	1875	1	6.28	18.80	1875	
					2	11.80	12.70	1375	1	6.80	18.80	1375	
20.656	-3.13	2.31	1.17		2	11.77	13.44	1375	2	6.91	19.16	1375	
21.013	-3.12	2.69	0.89		2	11.72	14.18	1375	2	7.09	19.51	1375	
21.369	-3.10	2.97	0.67		2	11.67	14.91	1375	2	7.29	19.87	1375	
21.725	-3.07	3.17	0.48		2	11.60	15.65	1375	2	7.50	20.23	1375	
22.081	-3.03	3.32	0.33		2	11.52	16.39	1375	2	7.73	20.58	1375	
22.438	-2.98	3.42	0.19		2	11.42	17.13	1375	2	7.97	20.94	1375	
22.794	-2.92	3.47	0.07		2	11.31	17.86	1375	2	8.22	21.29	1375	
23.150	-2.85	3.48	-0.05		2	11.19	18.60	1375	2	8.49	21.65	1375	
23.506	-2.77	3.44	-0.19		2	11.04	19.34	1375	2	8.78	22.01	1375	
23.863	-2.67	3.35	-0.34		2	10.89	20.08	1375	2	9.08	22.36	1375	
24.219	-2.57	3.20	-0.53		2	10.72	20.81	1375	2	9.39	22.72	1375	
24.575	-2.45	2.97	-0.76		2	10.53	21.55	1375	2	9.72	23.08	1375	
24.931	-2.33	2.66	-1.05		2	10.33	22.29	1375	2	10.06	23.43	1375	
25.288	-2.20	2.23	-1.39		2	10.12	23.03	1375	2	10.42	23.79	1375	
25.644	-2.06	1.67	-1.80		2	9.90	23.76	1375	2	10.78	24.14	1375	
26.000	-1.91	0.95	-2.29		2	9.67	24.50	1375	2	11.15	24.50	1375	
					2	10.78	24.50	2375	2	7.66	24.50	2375	
26.500	-1.71	0.16	-0.98		2	10.53	25.00	2375	2	8.40	25.00	2375	
27.000	-1.50	-0.10	-0.16		2	10.28	25.50	2375	2	9.14	25.50	2375	
27.500	-1.29	-0.07	0.17		2	10.03	26.00	2375	2	9.87	26.00	2375	
28.000	-1.08	0.00	0.00		2	9.78	26.50	2375	2	10.61	26.50	2375	
Max	-1.08	17.99	12.01		D_e = 6.6 (m) D_w = 6.6 (m)				D_e = 0 (m) D_w = 1.5 (m)				
Min	-13.40	-12.18	-11.71		[STATE] -1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

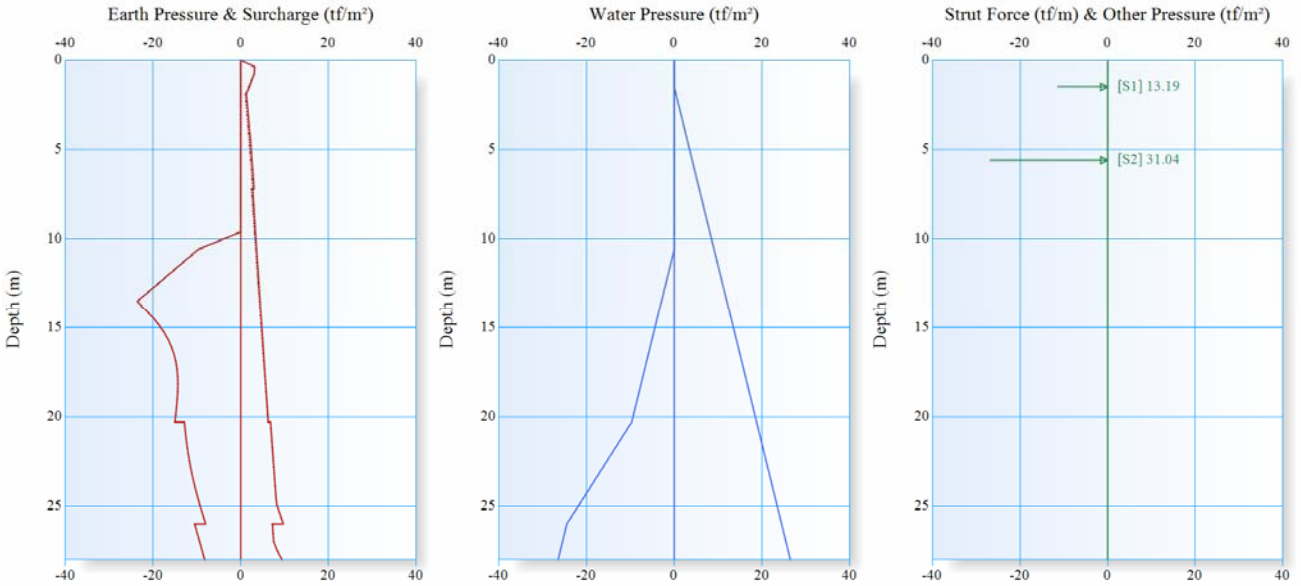
▼ PHASE 5



計畫名稱：XDO Example 2

主　　題：連續壁 + 順打 3 階支撐 + 有效應力法



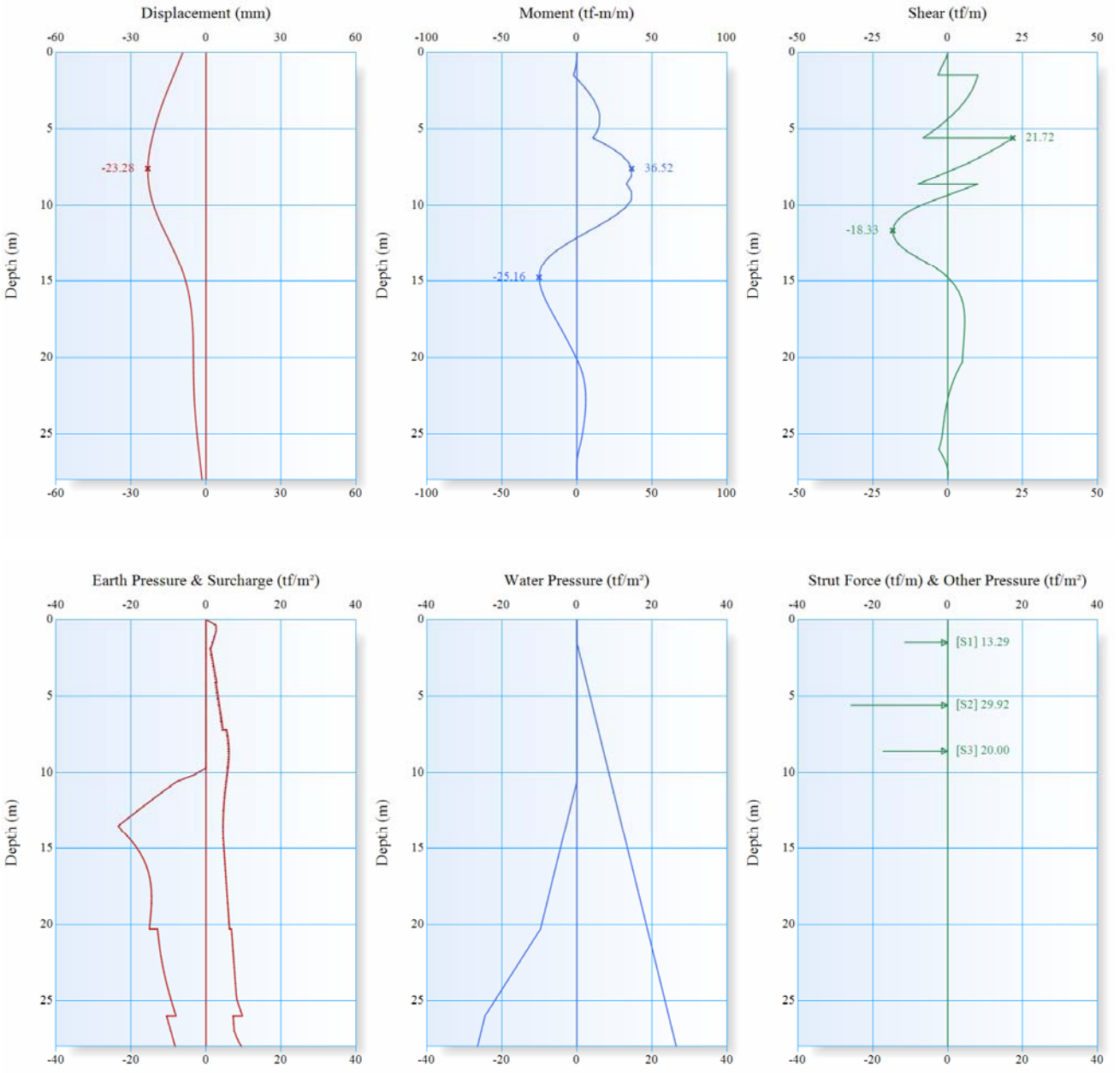


LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-8.77	0.00	0.00		0				1	0.00		1250	
0.375	-9.78	-0.07	-0.60		0				3	3.18		1250	
0.750	-10.79	-0.50	-1.77		0				2	3.10		1250	
1.125	-11.81	-1.36	-2.83		0				2	2.54		1250	
1.500	-12.82	-2.58	-3.68		0				2	1.98	0.00	1250	72.53
			9.51		0				2	1.98	0.00	1250	
1.900	-13.92	1.08	8.78		0				1	1.28	0.40	1250	
2.300	-15.01	4.45	8.00		0				1	1.43	0.80	1250	
					0				1	1.43	0.80	1500	
2.500	-15.55	6.01	7.52		0				1	1.50	1.00	1500	
3.100	-17.12	10.04	5.78		0				1	1.71	1.60	1500	
3.700	-18.61	12.87	3.55		0				1	1.91	2.20	1500	
4.100	-19.54	13.96	1.81		0				1	2.03	2.60	1500	
					0				1	2.11	2.60	1000	
4.761	-20.96	14.08	-1.59		0				1	2.31	3.26	1000	
5.180	-21.78	12.92	-4.04		0				1	2.44	3.68	1000	
5.600	-22.55	10.67	-6.73		0				1	2.57	4.10	1000	170.74
			24.32		0				1	2.57	4.10	1000	
6.100	-23.39	21.98	20.82		0				1	2.71	4.60	1000	

6.600	-24.10	31.47	17.01		0				1	2.86	5.10	1000	
6.700	-24.21	33.13	16.20		0				1	2.88	5.20	1000	
7.200	-24.68	40.20	12.00		0				1	3.03	5.70	1000	
					0				1	2.71	5.70	1875	
7.600	-24.88	44.33	8.54		0				1	2.82	6.10	1875	
8.100	-24.88	47.47	3.92		0				1	2.95	6.60	1875	
8.600	-24.58	48.22	-1.01		0				1	3.08	7.10	1875	
9.100	-23.99	46.42	-6.26		0				1	3.22	7.60	1875	
9.600	-23.11	41.92	-11.83		0				1	3.35	8.10	1875	
					3	0.00		1875	1	3.35	8.10	1875	
9.700	-22.91	40.69	-12.93		3	0.98		1875	1	3.38	8.20	1875	
10.150	-21.85	33.93	-16.84		3	5.37		1875	1	3.50	8.65	1875	
10.600	-20.63	25.81	-19.03		3	9.75	0.00	1875	1	3.62	9.10	1875	
10.950	-19.59	19.00	-19.79		3	11.43	0.35	1875	1	3.71	9.45	1875	
11.300	-18.49	12.03	-20.00		3	13.10	0.70	1875	1	3.80	9.80	1875	
11.650	-17.35	5.08	-19.65		3	14.77	1.05	1875	1	3.90	10.15	1875	
12.000	-16.20	-1.65	-18.75		3	16.44	1.40	1875	1	3.99	10.50	1875	
12.450	-14.72	-9.67	-16.79		3	18.59	1.85	1875	1	4.11	10.95	1875	
12.500	-14.56	-10.50	-16.51		3	18.83	1.90	1875	1	4.13	11.00	1875	
13.000	-12.99	-17.95	-13.14		3	21.22	2.40	1875	1	4.26	11.50	1875	
13.500	-11.53	-23.43	-8.64		3	23.61	2.90	1875	1	4.40	12.00	1875	
13.925	-10.40	-26.23	-4.69		2	22.08	3.33	1875	1	4.51	12.43	1875	
14.350	-9.39	-27.50	-1.47		2	20.39	3.75	1875	1	4.63	12.85	1875	
14.775	-8.50	-27.57	1.02		2	18.93	4.18	1875	1	4.75	13.28	1875	
15.200	-7.74	-26.70	2.90		2	17.70	4.60	1875	1	4.86	13.70	1875	
15.625	-7.09	-25.16	4.25		2	16.68	5.03	1875	1	4.98	14.13	1875	
16.050	-6.55	-23.13	5.16		2	15.88	5.45	1875	1	5.10	14.55	1875	
16.475	-6.12	-20.80	5.73		2	15.27	5.88	1875	1	5.22	14.98	1875	
16.900	-5.78	-18.29	6.02		2	14.84	6.30	1875	1	5.33	15.40	1875	
17.325	-5.52	-15.69	6.11		2	14.56	6.73	1875	1	5.45	15.83	1875	
17.750	-5.33	-13.10	6.05		2	14.40	7.15	1875	1	5.57	16.25	1875	
18.175	-5.19	-10.54	5.91		2	14.36	7.58	1875	1	5.69	16.68	1875	
18.600	-5.11	-8.07	5.71		2	14.40	8.00	1875	1	5.81	17.10	1875	
19.025	-5.06	-5.68	5.49		2	14.50	8.43	1875	1	5.93	17.53	1875	
19.450	-5.03	-3.38	5.28		2	14.66	8.85	1875	1	6.05	17.95	1875	
19.875	-5.02	-1.17	5.08		2	14.84	9.28	1875	1	6.17	18.38	1875	
20.300	-5.01	0.96	4.92		2	15.02	9.70	1875	1	6.28	18.80	1875	
					2	12.87	9.70	1375	1	6.80	18.80	1375	
20.656	-5.00	2.54	3.90		2	12.73	10.63	1375	1	6.91	19.16	1375	
21.013	-4.98	3.77	2.99		2	12.57	11.55	1375	1	7.01	19.51	1375	
21.369	-4.95	4.70	2.19		2	12.40	12.48	1375	1	7.11	19.87	1375	
21.725	-4.90	5.36	1.49		2	12.21	13.40	1375	1	7.22	20.23	1375	
22.081	-4.83	5.79	0.88		2	11.99	14.33	1375	1	7.32	20.58	1375	
22.438	-4.75	6.01	0.36		2	11.75	15.25	1375	1	7.43	20.94	1375	
22.794	-4.65	6.06	-0.09		2	11.48	16.18	1375	1	7.53	21.29	1375	
23.150	-4.53	5.97	-0.48		2	11.19	17.10	1375	1	7.64	21.65	1375	
23.506	-4.39	5.75	-0.81		2	10.87	18.03	1375	1	7.74	22.01	1375	
23.863	-4.23	5.41	-1.09		2	10.52	18.95	1375	1	7.85	22.36	1375	
24.219	-4.05	4.99	-1.34		2	10.15	19.88	1375	1	7.95	22.72	1375	
24.575	-3.86	4.48	-1.56		2	9.75	20.80	1375	1	8.06	23.08	1375	
24.931	-3.65	3.90	-1.77		2	9.34	21.73	1375	2	8.25	23.43	1375	
25.288	-3.43	3.23	-2.05		2	8.91	22.65	1375	2	8.72	23.79	1375	
25.644	-3.20	2.44	-2.45		2	8.47	23.58	1375	2	9.21	24.14	1375	
26.000	-2.96	1.48	-2.98		2	8.01	24.50	1375	2	9.71	24.50	1375	
					2	10.52	24.50	2375	1	7.24	24.50	2375	
26.500	-2.62	0.38	-1.52		2	9.96	25.00	2375	1	7.38	25.00	2375	

27.000	-2.28	-0.07	-0.41		2	9.38	25.50	2375	1	7.52	25.50	2375	
27.500	-1.93	-0.09	0.17		2	8.81	26.00	2375	2	8.35	26.00	2375	
28.000	-1.59	0.00	0.00		2	8.24	26.50	2375	2	9.41	26.50	2375	
Max	-1.59	48.22	24.32		D_e = 9.6 (m) D_w = 10.6 (m)				D_e = 0 (m) D_w = 1.5 (m)				
Min	-24.88	-27.57	-20.00		[STATE] -1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 6

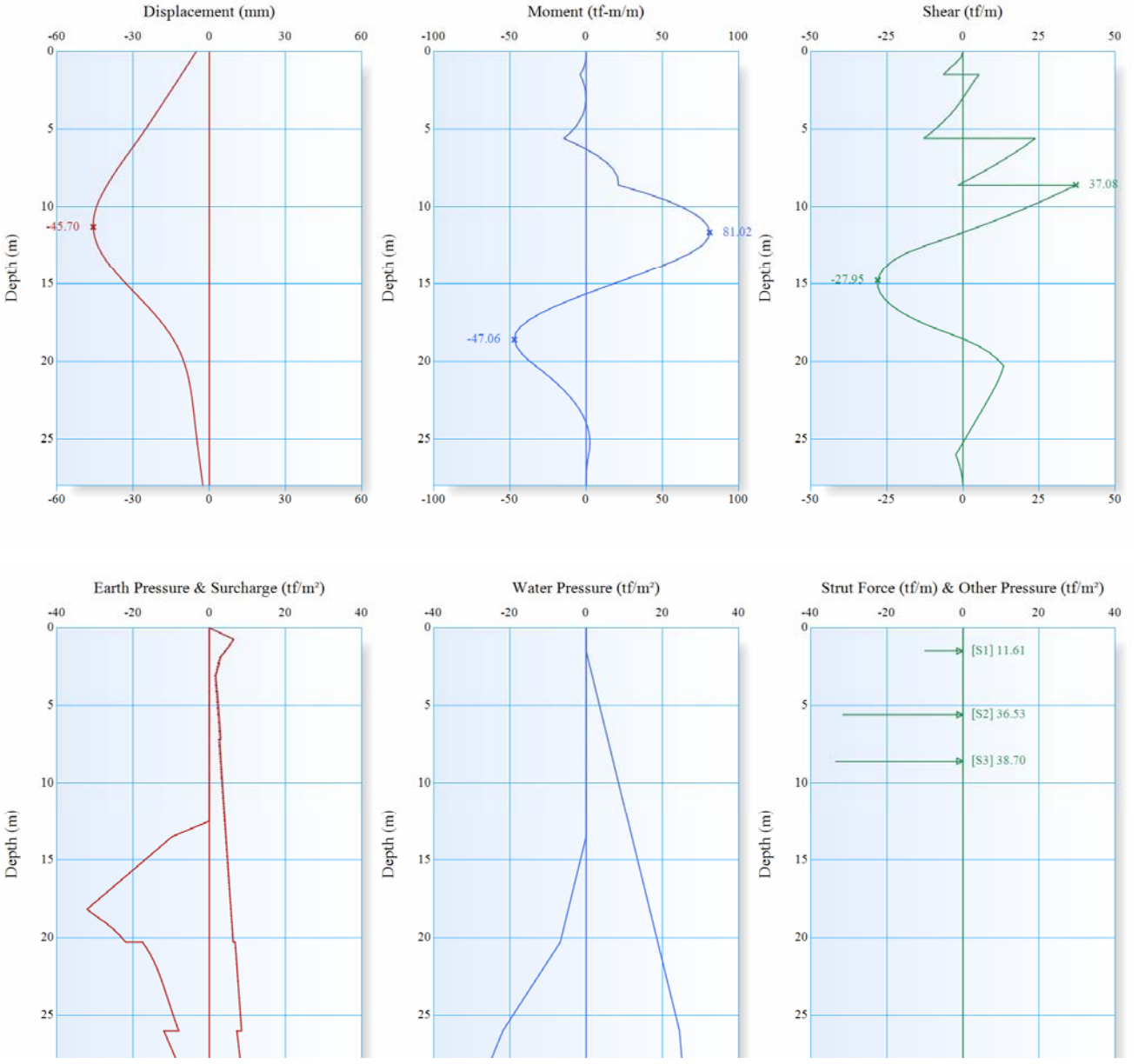


LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-9.24	0.00	0.00		0				1	0.00		1250	
0.375	-10.17	-0.06	-0.51		0				2	2.70		1250	
0.750	-11.09	-0.43	-1.52		0				2	2.73		1250	
1.125	-12.02	-1.18	-2.46		0				2	2.28		1250	
1.500	-12.95	-2.24	-3.23		0				2	1.83	0.00	1250	73.10
			10.06		0				2	1.83	0.00	1250	
1.900	-13.94	1.65	9.36		0				1	1.28	0.40	1250	

2.300	-14.93	5.24	8.56		0				2	1.52	0.80	1250	
					0				2	1.54	0.80	1500	
2.500	-15.42	6.91	8.05		0				2	1.69	1.00	1500	
3.100	-16.84	11.21	6.13		0				2	2.13	1.60	1500	
3.700	-18.17	14.16	3.58		0				2	2.58	2.20	1500	
4.100	-18.98	15.20	1.53		0				2	2.88	2.60	1500	
					0				2	2.67	2.60	1000	
4.761	-20.19	15.00	-2.31		0				2	3.08	3.26	1000	
5.180	-20.88	13.46	-5.11		0				2	3.34	3.68	1000	
5.600	-21.51	10.68	-8.20		0				2	3.61	4.10	1000	164.54
			21.72		0				2	3.61	4.10	1000	
6.100	-22.19	20.55	17.66		0				2	3.92	4.60	1000	
6.600	-22.74	28.29	13.20		0				2	4.22	5.10	1000	
6.700	-22.83	29.57	12.26		0				2	4.27	5.20	1000	
7.200	-23.16	34.49	7.33		0				2	4.55	5.70	1000	
					0				2	5.56	5.70	1875	
7.600	-23.28	36.52	2.70		0				2	5.82	6.10	1875	
8.100	-23.22	36.36	-3.44		0				2	6.05	6.60	1875	
8.600	-22.94	33.04	-9.92		0				2	6.16	7.10	1875	110.00
			10.08		0				2	6.16	7.10	1875	
9.100	-22.45	36.41	3.34		0				2	6.11	7.60	1875	
9.600	-21.73	36.36	-3.60		0				2	5.94	8.10	1875	
					3	0.00		1875	2	5.94	8.10	1875	
9.700	-21.56	35.93	-5.00		1	0.06		1875	2	5.90	8.20	1875	
10.150	-20.69	32.37	-10.67		2	3.18		1875	2	5.68	8.65	1875	
10.600	-19.65	26.60	-14.67		2	7.92	0.00	1875	2	5.45	9.10	1875	
10.950	-18.75	21.11	-16.62		2	9.86	0.35	1875	2	5.28	9.45	1875	
11.300	-17.78	15.06	-17.84		2	11.79	0.70	1875	2	5.12	9.80	1875	
11.650	-16.77	8.72	-18.33		2	13.70	1.05	1875	2	4.97	10.15	1875	
12.000	-15.74	2.33	-18.11		2	15.59	1.40	1875	2	4.85	10.50	1875	
12.450	-14.40	-5.56	-16.80		2	17.98	1.85	1875	2	4.72	10.95	1875	
12.500	-14.25	-6.39	-16.58		2	18.25	1.90	1875	2	4.71	11.00	1875	
13.000	-12.80	-14.01	-13.69		2	20.86	2.40	1875	2	4.62	11.50	1875	
13.500	-11.43	-19.84	-9.47		2	23.43	2.90	1875	2	4.58	12.00	1875	
13.925	-10.37	-23.02	-5.62		2	22.02	3.33	1875	2	4.58	12.43	1875	
14.350	-9.41	-24.70	-2.42		2	20.42	3.75	1875	1	4.63	12.85	1875	
14.775	-8.56	-25.16	0.10		2	19.03	4.18	1875	1	4.75	13.28	1875	
15.200	-7.81	-24.68	2.03		2	17.84	4.60	1875	1	4.86	13.70	1875	
15.625	-7.18	-23.50	3.44		2	16.86	5.03	1875	1	4.98	14.13	1875	
16.050	-6.66	-21.80	4.44		2	16.08	5.45	1875	1	5.10	14.55	1875	
16.475	-6.23	-19.76	5.09		2	15.48	5.88	1875	1	5.22	14.98	1875	
16.900	-5.89	-17.50	5.46		2	15.04	6.30	1875	1	5.33	15.40	1875	
17.325	-5.62	-15.13	5.64		2	14.75	6.73	1875	1	5.45	15.83	1875	
17.750	-5.43	-12.71	5.66		2	14.58	7.15	1875	1	5.57	16.25	1875	
18.175	-5.28	-10.31	5.59		2	14.52	7.58	1875	1	5.69	16.68	1875	
18.600	-5.19	-7.95	5.46		2	14.55	8.00	1875	1	5.81	17.10	1875	
19.025	-5.13	-5.66	5.30		2	14.64	8.43	1875	1	5.93	17.53	1875	
19.450	-5.09	-3.43	5.14		2	14.77	8.85	1875	1	6.05	17.95	1875	
19.875	-5.07	-1.27	5.00		2	14.94	9.28	1875	1	6.17	18.38	1875	
20.300	-5.05	0.83	4.87		2	15.11	9.70	1875	1	6.28	18.80	1875	
					2	12.93	9.70	1375	1	6.80	18.80	1375	
20.656	-5.03	2.39	3.87		2	12.78	10.63	1375	1	6.91	19.16	1375	
21.013	-5.01	3.62	2.98		2	12.62	11.55	1375	1	7.01	19.51	1375	
21.369	-4.97	4.54	2.19		2	12.44	12.48	1375	1	7.11	19.87	1375	
21.725	-4.92	5.20	1.50		2	12.24	13.40	1375	1	7.22	20.23	1375	
22.081	-4.85	5.63	0.90		2	12.02	14.33	1375	1	7.32	20.58	1375	

22.438	-4.76	5.86	0.38		2	11.77	15.25	1375	1	7.43	20.94	1375	
22.794	-4.66	5.93	-0.06		2	11.50	16.18	1375	1	7.53	21.29	1375	
23.150	-4.53	5.84	-0.44		2	11.20	17.10	1375	1	7.64	21.65	1375	
23.506	-4.39	5.63	-0.77		2	10.87	18.03	1375	1	7.74	22.01	1375	
23.863	-4.23	5.31	-1.05		2	10.52	18.95	1375	1	7.85	22.36	1375	
24.219	-4.05	4.90	-1.30		2	10.15	19.88	1375	1	7.95	22.72	1375	
24.575	-3.86	4.40	-1.51		2	9.75	20.80	1375	2	8.06	23.08	1375	
24.931	-3.65	3.83	-1.73		2	9.34	21.73	1375	2	8.25	23.43	1375	
25.288	-3.43	3.18	-2.01		2	8.91	22.65	1375	2	8.73	23.79	1375	
25.644	-3.20	2.40	-2.41		2	8.46	23.58	1375	2	9.22	24.14	1375	
26.000	-2.96	1.46	-2.95		2	8.01	24.50	1375	2	9.72	24.50	1375	
					2	10.51	24.50	2375	2	7.24	24.50	2375	
26.500	-2.62	0.37	-1.49		2	9.95	25.00	2375	2	7.39	25.00	2375	
27.000	-2.27	-0.08	-0.39		2	9.37	25.50	2375	2	7.53	25.50	2375	
27.500	-1.93	-0.09	0.18		2	8.80	26.00	2375	2	8.36	26.00	2375	
28.000	-1.58	0.00	0.00		2	8.23	26.50	2375	2	9.42	26.50	2375	
Max	-1.58	36.52	21.72		D_e = 9.6 (m)　D_w = 10.6 (m)				D_e = 0 (m)　D_w = 1.5 (m)				
Min	-23.28	-25.16	-18.33		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 7



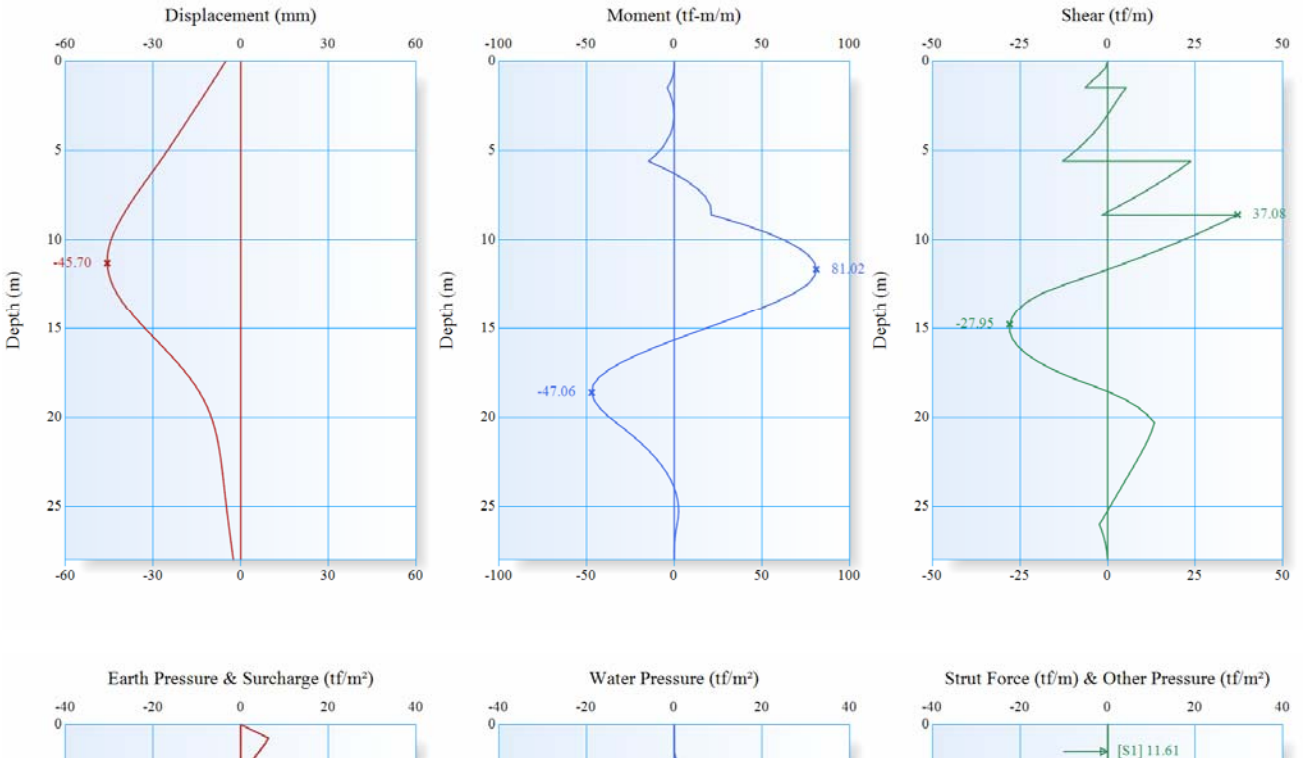
計畫名稱：XDO Example 2

主　　題：連續壁 + 順打 3 階支撐 + 有效應力法

LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-5.11	0.00	0.00		0				1	0.00		1250	
0.375	-6.58	-0.06	-0.60		0				3	3.18		1250	
0.750	-8.05	-0.56	-2.38		0				3	6.35		1250	
1.125	-9.52	-1.86	-4.59		0				2	5.41		1250	
1.500	-10.99	-3.92	-6.40		0				2	4.27	0.00	1250	63.87
			5.21		0				2	4.27	0.00	1250	
1.900	-12.58	-2.13	3.68		0				2	2.98	0.40	1250	
2.300	-14.18	-0.91	2.36		0				2	2.46	0.80	1250	
					0				2	2.67	0.80	1500	
2.500	-14.98	-0.50	1.67		0				2	2.35	1.00	1500	
3.100	-17.39	-0.07	-0.32		0				1	1.71	1.60	1500	
3.700	-19.80	-0.88	-2.55		0				1	1.91	2.20	1500	
4.100	-21.41	-2.22	-4.30		0				1	2.03	2.60	1500	
					0				1	2.11	2.60	1000	
4.761	-24.10	-6.12	-7.69		0				1	2.31	3.26	1000	
5.180	-25.84	-9.84	-10.15		0				1	2.44	3.68	1000	
5.600	-27.63	-14.63	-12.83		0				1	2.57	4.10	1000	200.94
			23.71		0				1	2.57	4.10	1000	
6.100	-29.82	-3.62	20.21		0				1	2.71	4.60	1000	
6.600	-32.05	5.57	16.40		0				1	2.86	5.10	1000	
6.700	-32.49	7.18	15.59		0				1	2.88	5.20	1000	
7.200	-34.67	13.96	11.39		0				1	3.03	5.70	1000	
					0				1	2.71	5.70	1875	
7.600	-36.35	17.85	7.93		0				1	2.82	6.10	1875	
8.100	-38.35	20.69	3.31		0				1	2.95	6.60	1875	
8.600	-40.23	21.15	-1.62		0				1	3.08	7.10	1875	212.85
			37.08		0				1	3.08	7.10	1875	
9.100	-41.96	38.41	31.83		0				1	3.22	7.60	1875	
9.600	-43.46	52.97	26.26		0				1	3.35	8.10	1875	
9.700	-43.72	55.54	25.11		0				1	3.38	8.20	1875	
10.150	-44.72	65.67	19.77		0				1	3.50	8.65	1875	
10.600	-45.39	73.34	14.18		0				1	3.62	9.10	1875	
10.950	-45.66	77.53	9.65		0				1	3.71	9.45	1875	
11.300	-45.70	80.11	4.97		0				1	3.80	9.80	1875	
11.650	-45.50	81.02	0.13		0				1	3.90	10.15	1875	
12.000	-45.04	80.21	-4.86		0				1	3.99	10.50	1875	
12.450	-44.11	76.56	-11.51		0				1	4.11	10.95	1875	
12.500	-43.98	75.97	-12.27		0				1	4.13	11.00	1875	
					3	0.00		1875	1	4.13	11.00	1875	
13.000	-42.44	68.14	-18.77		3	4.88		1875	1	4.26	11.50	1875	
13.500	-40.49	57.60	-23.15		3	9.75	0.00	1875	1	4.40	12.00	1875	
13.925	-38.54	47.24	-25.56		3	11.79	0.43	1875	1	4.51	12.43	1875	
14.350	-36.38	36.02	-27.16		3	13.82	0.85	1875	1	4.63	12.85	1875	
14.775	-34.06	24.30	-27.95		3	15.85	1.28	1875	1	4.75	13.28	1875	
15.200	-31.64	12.42	-27.92		3	17.88	1.70	1875	1	4.86	13.70	1875	
15.625	-29.15	0.73	-27.08		3	19.91	2.13	1875	1	4.98	14.13	1875	
16.050	-26.66	-10.44	-25.42		3	21.94	2.55	1875	1	5.10	14.55	1875	
16.475	-24.22	-20.73	-22.95		3	23.97	2.98	1875	1	5.22	14.98	1875	
16.900	-21.87	-29.79	-19.67		3	26.00	3.40	1875	1	5.33	15.40	1875	

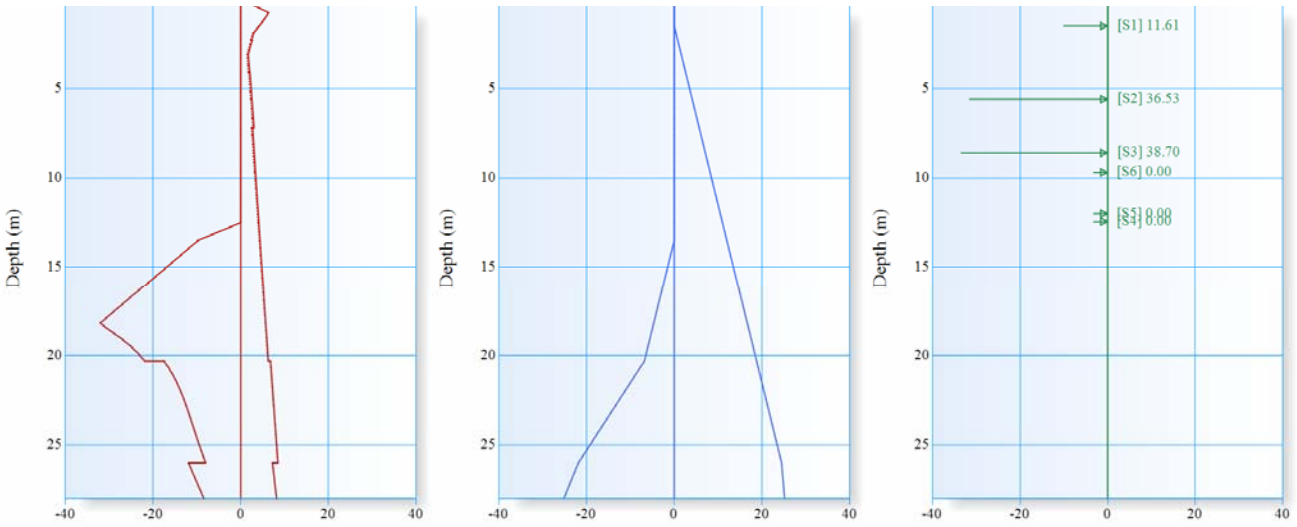
17.325	-19.65	-37.29	-15.57		3	28.03	3.83	1875	1	5.45	15.83	1875	
17.750	-17.60	-42.88	-10.67		3	30.06	4.25	1875	1	5.57	16.25	1875	
18.175	-15.74	-46.21	-4.94		3	32.09	4.68	1875	1	5.69	16.68	1875	
18.600	-14.09	-47.06	0.68		2	29.84	5.10	1875	1	5.81	17.10	1875	
19.025	-12.64	-45.74	5.24		2	27.33	5.53	1875	1	5.93	17.53	1875	
19.450	-11.40	-42.71	8.77		2	25.20	5.95	1875	1	6.05	17.95	1875	
19.875	-10.34	-38.38	11.41		2	23.43	6.38	1875	1	6.17	18.38	1875	
20.300	-9.46	-33.08	13.32		2	21.98	6.80	1875	1	6.28	18.80	1875	
					2	17.52	6.80	1375	1	6.80	18.80	1375	
20.656	-8.83	-28.41	12.77		2	16.52	7.74	1375	1	6.91	19.16	1375	
21.013	-8.30	-23.96	12.07		2	15.64	8.68	1375	1	7.01	19.51	1375	
21.369	-7.84	-19.80	11.23		2	14.87	9.62	1375	1	7.11	19.87	1375	
21.725	-7.44	-15.94	10.31		2	14.18	10.57	1375	1	7.22	20.23	1375	
22.081	-7.08	-12.42	9.33		2	13.56	11.51	1375	1	7.32	20.58	1375	
22.438	-6.77	-9.26	8.31		2	13.00	12.45	1375	1	7.43	20.94	1375	
22.794	-6.49	-6.47	7.26		2	12.47	13.39	1375	1	7.53	21.29	1375	
23.150	-6.22	-4.05	6.21		2	11.97	14.33	1375	1	7.64	21.65	1375	
23.506	-5.97	-2.02	5.14		2	11.49	15.27	1375	1	7.74	22.01	1375	
23.863	-5.72	-0.36	4.08		2	11.01	16.21	1375	1	7.85	22.36	1375	
24.219	-5.48	0.92	3.02		2	10.53	17.15	1375	1	7.95	22.72	1375	
24.575	-5.23	1.83	1.96		2	10.06	18.10	1375	1	8.06	23.08	1375	
24.931	-4.97	2.35	0.90		2	9.57	19.04	1375	1	8.16	23.43	1375	
25.288	-4.71	2.50	-0.17		2	9.07	19.98	1375	1	8.27	23.79	1375	
25.644	-4.44	2.26	-1.24		2	8.56	20.92	1375	1	8.37	24.14	1375	
26.000	-4.16	1.64	-2.33		2	8.04	21.86	1375	1	8.48	24.50	1375	
					2	11.93	21.86	2375	1	7.24	24.50	2375	
26.500	-3.76	0.74	-1.41		2	11.06	22.69	2375	1	7.47	24.67	2375	
27.000	-3.35	0.24	-0.72		2	10.19	23.52	2375	1	7.71	24.84	2375	
27.500	-2.94	0.03	-0.24		2	9.31	24.35	2375	1	7.94	25.01	2375	
28.000	-2.53	0.00	0.00		2	8.43	25.18	2375	1	8.18	25.18	2375	
Max	-2.53	81.02	37.08		D_e = 12.5 (m)　D_w = 13.5 (m)				D_e = 0 (m)　D_w = 1.5 (m)				
Min	-45.70	-47.06	-27.95		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 8



計畫名稱：XDO Example 2

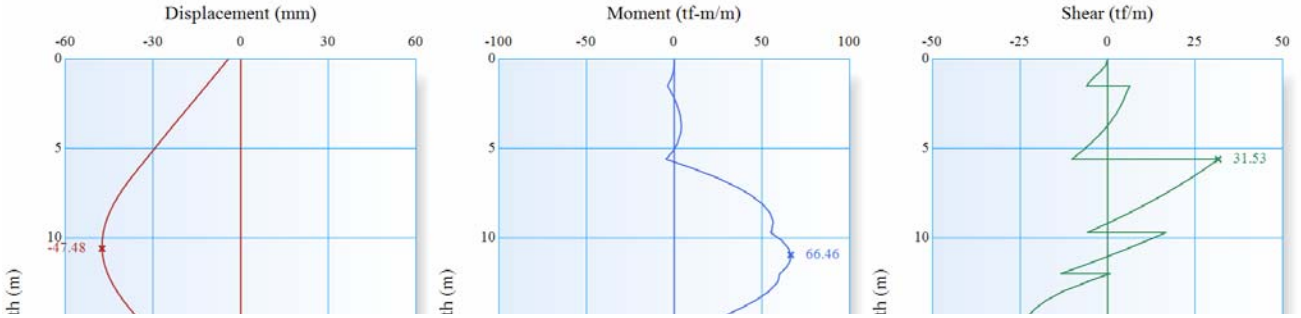
主　　題：連續壁 + 順打 3 階支撐 + 有效應力法



LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-5.11	0.00	0.00		0				1	0.00		1250	
0.375	-6.58	-0.06	-0.60		0				2	3.18		1250	
0.750	-8.05	-0.56	-2.38		0				2	6.35		1250	
1.125	-9.52	-1.86	-4.59		0				2	5.41		1250	
1.500	-10.99	-3.92	-6.40		0				2	4.27	0.00	1250	63.87
			5.21		0				2	4.27	0.00	1250	
1.900	-12.58	-2.13	3.68		0				2	2.98	0.40	1250	
2.300	-14.18	-0.91	2.36		0				2	2.46	0.80	1250	
					0				2	2.67	0.80	1500	
2.500	-14.98	-0.50	1.67		0				2	2.35	1.00	1500	
3.100	-17.39	-0.07	-0.32		0				2	1.71	1.60	1500	
3.700	-19.80	-0.88	-2.55		0				2	1.91	2.20	1500	
4.100	-21.41	-2.22	-4.30		0				2	2.03	2.60	1500	
					0				2	2.11	2.60	1000	
4.761	-24.10	-6.12	-7.69		0				2	2.31	3.26	1000	
5.180	-25.84	-9.84	-10.15		0				2	2.44	3.68	1000	
5.600	-27.63	-14.63	-12.83		0				2	2.57	4.10	1000	200.94
			23.71		0				2	2.57	4.10	1000	
6.100	-29.82	-3.62	20.21		0				2	2.71	4.60	1000	
6.600	-32.05	5.57	16.40		0				2	2.86	5.10	1000	
6.700	-32.49	7.18	15.59		0				2	2.88	5.20	1000	
7.200	-34.67	13.96	11.39		0				2	3.03	5.70	1000	
					0				2	2.71	5.70	1875	
7.600	-36.35	17.85	7.93		0				2	2.82	6.10	1875	
8.100	-38.35	20.69	3.31		0				2	2.95	6.60	1875	
8.600	-40.23	21.15	-1.62		0				2	3.08	7.10	1875	212.85
			37.08		0				2	3.08	7.10	1875	
9.100	-41.96	38.41	31.83		0				2	3.22	7.60	1875	
9.600	-43.46	52.97	26.26		0				2	3.35	8.10	1875	
9.700	-43.72	55.54	25.11		0				2	3.38	8.20	1875	0.00
10.150	-44.72	65.67	19.77		0				2	3.50	8.65	1875	
10.600	-45.39	73.34	14.18		0				2	3.62	9.10	1875	
10.950	-45.66	77.53	9.65		0				2	3.71	9.45	1875	
11.300	-45.70	80.11	4.97		0				2	3.80	9.80	1875	
11.650	-45.50	81.02	0.13		0				2	3.90	10.15	1875	
12.000	-45.04	80.21	-4.86		0				2	3.99	10.50	1875	0.00

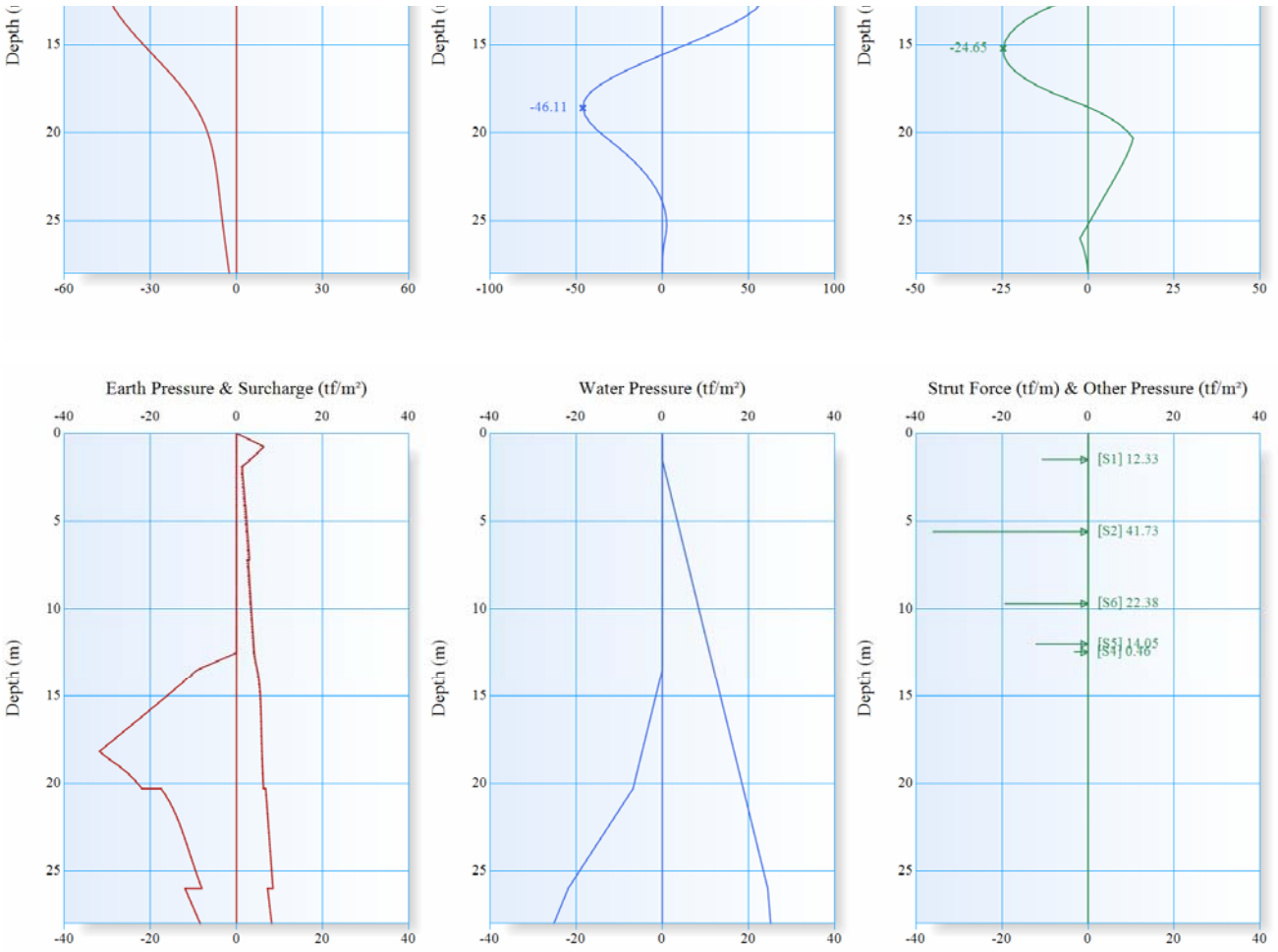
12.450	-44.11	76.56	-11.51		0				2	4.11	10.95	1875	0.00
12.500	-43.98	75.97	-12.27		0				2	4.13	11.00	1875	
					3	0.00		1875	2	4.13	11.00	1875	
13.000	-42.44	68.14	-18.77		2	4.88		1875	2	4.26	11.50	1875	
13.500	-40.49	57.60	-23.15		2	9.75	0.00	1875	2	4.40	12.00	1875	
13.925	-38.54	47.24	-25.56		2	11.79	0.43	1875	2	4.51	12.43	1875	
14.350	-36.38	36.02	-27.16		2	13.82	0.85	1875	2	4.63	12.85	1875	
14.775	-34.06	24.30	-27.95		2	15.85	1.28	1875	2	4.75	13.28	1875	
15.200	-31.64	12.42	-27.92		2	17.88	1.70	1875	2	4.86	13.70	1875	
15.625	-29.15	0.73	-27.08		2	19.91	2.13	1875	2	4.98	14.13	1875	
16.050	-26.66	-10.44	-25.42		2	21.94	2.55	1875	2	5.10	14.55	1875	
16.475	-24.22	-20.73	-22.95		2	23.97	2.98	1875	2	5.22	14.98	1875	
16.900	-21.87	-29.79	-19.67		2	26.00	3.40	1875	2	5.33	15.40	1875	
17.325	-19.65	-37.29	-15.57		2	28.03	3.83	1875	2	5.45	15.83	1875	
17.750	-17.60	-42.88	-10.67		2	30.06	4.25	1875	2	5.57	16.25	1875	
18.175	-15.74	-46.21	-4.94		2	32.09	4.68	1875	2	5.69	16.68	1875	
18.600	-14.09	-47.06	0.68		2	29.84	5.10	1875	2	5.81	17.10	1875	
19.025	-12.64	-45.74	5.24		2	27.33	5.53	1875	2	5.93	17.53	1875	
19.450	-11.40	-42.71	8.77		2	25.20	5.95	1875	2	6.05	17.95	1875	
19.875	-10.34	-38.38	11.41		2	23.43	6.38	1875	2	6.17	18.38	1875	
20.300	-9.46	-33.08	13.32		2	21.98	6.80	1875	2	6.28	18.80	1875	
					2	17.52	6.80	1375	2	6.80	18.80	1375	
20.656	-8.83	-28.41	12.77		2	16.52	7.74	1375	2	6.91	19.16	1375	
21.013	-8.30	-23.96	12.07		2	15.64	8.68	1375	2	7.01	19.51	1375	
21.369	-7.84	-19.80	11.23		2	14.87	9.62	1375	2	7.11	19.87	1375	
21.725	-7.44	-15.94	10.31		2	14.18	10.57	1375	2	7.22	20.23	1375	
22.081	-7.08	-12.42	9.33		2	13.56	11.51	1375	2	7.32	20.58	1375	
22.438	-6.77	-9.26	8.31		2	13.00	12.45	1375	2	7.43	20.94	1375	
22.794	-6.49	-6.47	7.26		2	12.47	13.39	1375	2	7.53	21.29	1375	
23.150	-6.22	-4.05	6.21		2	11.97	14.33	1375	2	7.64	21.65	1375	
23.506	-5.97	-2.02	5.14		2	11.49	15.27	1375	2	7.74	22.01	1375	
23.863	-5.72	-0.36	4.08		2	11.01	16.21	1375	2	7.85	22.36	1375	
24.219	-5.48	0.92	3.02		2	10.53	17.15	1375	2	7.95	22.72	1375	
24.575	-5.23	1.83	1.96		2	10.06	18.10	1375	2	8.06	23.08	1375	
24.931	-4.97	2.35	0.90		2	9.57	19.04	1375	2	8.16	23.43	1375	
25.288	-4.71	2.50	-0.17		2	9.07	19.98	1375	2	8.27	23.79	1375	
25.644	-4.44	2.26	-1.24		2	8.56	20.92	1375	2	8.37	24.14	1375	
26.000	-4.16	1.64	-2.33		2	8.04	21.86	1375	2	8.48	24.50	1375	
					2	11.93	21.86	2375	2	7.24	24.50	2375	
26.500	-3.76	0.74	-1.41		2	11.06	22.69	2375	2	7.47	24.67	2375	
27.000	-3.35	0.24	-0.72		2	10.19	23.52	2375	2	7.71	24.84	2375	
27.500	-2.94	0.03	-0.24		2	9.31	24.35	2375	2	7.94	25.01	2375	
28.000	-2.53	0.00	0.00		2	8.43	25.18	2375	2	8.18	25.18	2375	
Max	-2.53	81.02	37.08		D_e = 12.5 (m) D_w = 13.5 (m)				D_e = 0 (m) D_w = 1.5 (m)				
Min	-45.70	-47.06	-27.95		[STATE] -1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 9



計畫名稱：XDO Example 2

主　　題：連續壁 + 順打 3 階支撐 + 有效應力法



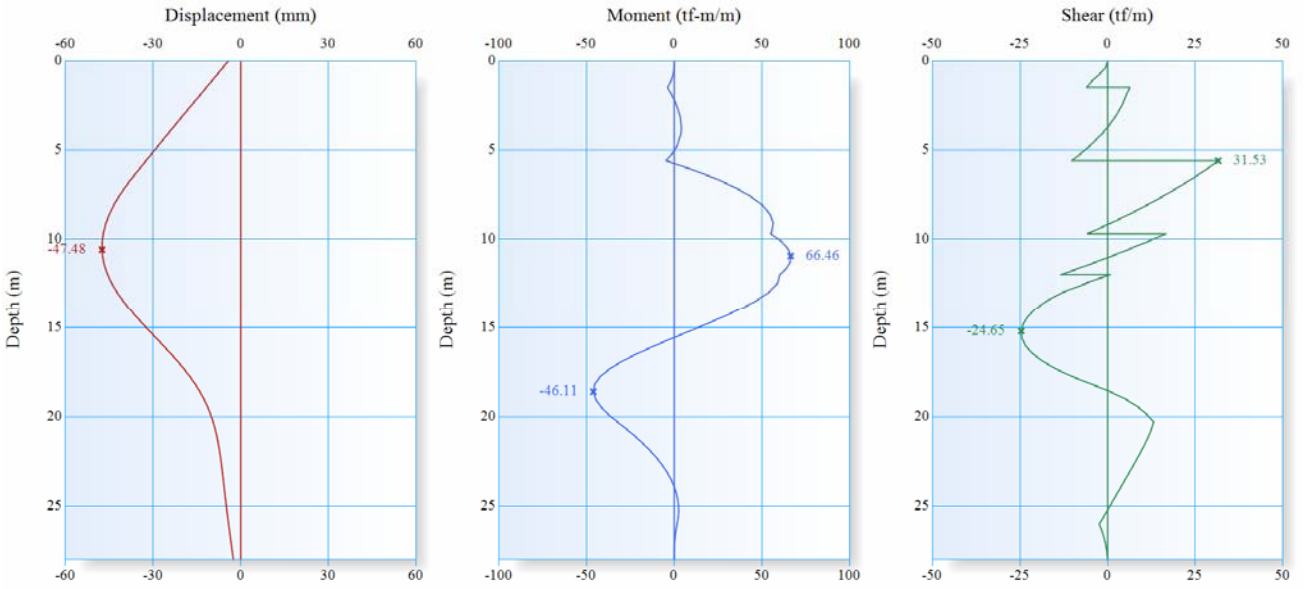
LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-4.27	0.00	0.00		0				1	0.00		1250	
0.375	-6.15	-0.06	-0.60		0				3	3.18		1250	
0.750	-8.04	-0.56	-2.38		0				3	6.35		1250	
1.125	-9.93	-1.84	-4.49		0				2	4.89		1250	
1.500	-11.83	-3.81	-6.01		0				2	3.23	0.00	1250	67.82
			6.32		0				2	3.23	0.00	1250	
1.900	-13.86	-1.48	5.32		0				2	1.38	0.40	1250	
2.300	-15.91	0.51	4.52		0				1	1.43	0.80	1250	
					0				1	1.43	0.80	1500	
2.500	-16.93	1.38	4.05		0				1	1.50	1.00	1500	
3.100	-19.98	3.34	2.30		0				1	1.71	1.60	1500	
3.700	-23.01	4.11	0.08		0				1	1.91	2.20	1500	
4.100	-25.01	3.82	-1.67		0				1	2.03	2.60	1500	
					0				1	2.11	2.60	1000	
4.761	-28.29	1.66	-5.06		0				1	2.31	3.26	1000	
5.180	-30.36	-0.95	-7.52		0				1	2.44	3.68	1000	
5.600	-32.43	-4.64	-10.20		0				1	2.57	4.10	1000	229.53
			31.53		0				1	2.57	4.10	1000	
6.100	-34.92	10.29	28.04		0				1	2.71	4.60	1000	
6.600	-37.34	23.40	24.22		0				1	2.86	5.10	1000	
6.700	-37.81	25.78	23.42		0				1	2.88	5.20	1000	
7.200	-40.05	36.48	19.22		0				1	3.03	5.70	1000	
					0				1	2.71	5.70	1875	

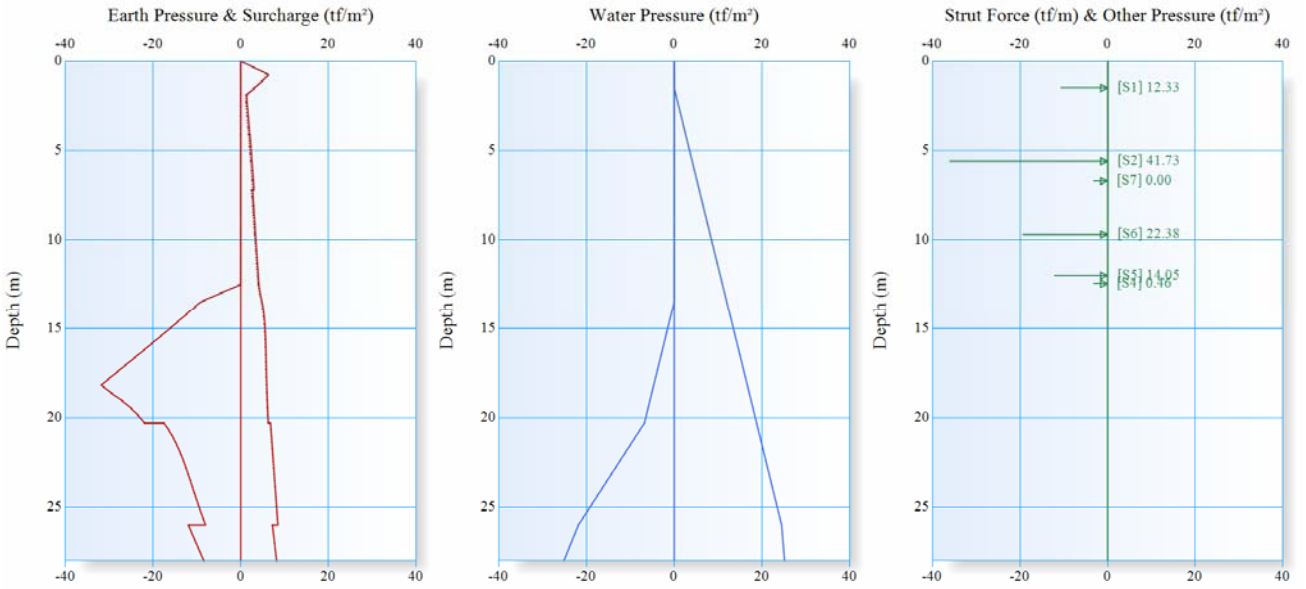
7.600	-41.69	43.50	15.75		0				1	2.82	6.10	1875	
8.100	-43.49	50.27	11.14		0				1	2.95	6.60	1875	
8.600	-44.98	54.64	6.20		0				1	3.08	7.10	1875	-
9.100	-46.13	56.47	0.95		0				1	3.22	7.60	1875	
9.600	-46.94	55.59	-4.61		0				1	3.35	8.10	1875	
9.700	-47.06	55.08	-5.76		0				1	3.38	8.20	1875	22.38
			16.62		0				1	3.38	8.20	1875	
10.150	-47.43	61.39	11.28		0				1	3.50	8.65	1875	
10.600	-47.48	65.24	5.69		0				1	3.62	9.10	1875	
10.950	-47.31	66.46	1.16		0				1	3.71	9.45	1875	
11.300	-46.92	66.07	-3.52		0				1	3.80	9.80	1875	
11.650	-46.34	64.01	-8.36		0				1	3.90	10.15	1875	
12.000	-45.57	60.23	-13.35		0				1	3.99	10.50	1875	14.05
			0.69		0				1	3.99	10.50	1875	
12.450	-44.30	59.08	-5.96		0				1	4.11	10.95	1875	0.46
			-5.50		0				1	4.11	10.95	1875	
12.500	-44.14	58.79	-6.25		0				1	4.13	11.00	1875	
					3	0.00		1875	1	4.13	11.00	1875	
13.000	-42.35	53.96	-12.84		2	4.71		1875	2	4.43	11.50	1875	
13.500	-40.23	46.32	-17.54		2	9.27	0.00	1875	2	4.88	12.00	1875	
13.925	-38.20	38.24	-20.44		2	11.14	0.43	1875	2	5.16	12.43	1875	
14.350	-35.99	29.09	-22.62		2	13.09	0.85	1875	2	5.36	12.85	1875	
14.775	-33.66	19.17	-24.04		2	15.09	1.28	1875	2	5.50	13.28	1875	
15.200	-31.24	8.82	-24.65		2	17.14	1.70	1875	2	5.60	13.70	1875	
15.625	-28.78	-1.62	-24.42		2	19.21	2.13	1875	2	5.68	14.13	1875	
16.050	-26.33	-11.77	-23.32		2	21.31	2.55	1875	2	5.73	14.55	1875	
16.475	-23.93	-21.28	-21.36		2	23.42	2.98	1875	2	5.77	14.98	1875	
16.900	-21.62	-29.76	-18.51		2	25.53	3.40	1875	2	5.81	15.40	1875	
17.325	-19.45	-36.84	-14.78		2	27.64	3.83	1875	2	5.84	15.83	1875	
17.750	-17.43	-42.16	-10.17		2	29.75	4.25	1875	2	5.89	16.25	1875	
18.175	-15.61	-45.32	-4.69		2	31.85	4.68	1875	2	5.93	16.68	1875	
18.600	-13.99	-46.11	0.75		2	29.66	5.10	1875	2	5.99	17.10	1875	
19.025	-12.57	-44.78	5.18		2	27.20	5.53	1875	2	6.05	17.53	1875	
19.450	-11.35	-41.80	8.62		2	25.12	5.95	1875	2	6.13	17.95	1875	
19.875	-10.32	-37.53	11.21		2	23.39	6.38	1875	2	6.21	18.38	1875	
20.300	-9.45	-32.32	13.10		2	21.97	6.80	1875	2	6.30	18.80	1875	
					2	17.51	6.80	1375	2	6.81	18.80	1375	
20.656	-8.84	-27.73	12.55		2	16.52	7.74	1375	1	6.91	19.16	1375	
21.013	-8.31	-23.36	11.85		2	15.66	8.68	1375	1	7.01	19.51	1375	
21.369	-7.86	-19.27	11.02		2	14.90	9.62	1375	1	7.11	19.87	1375	
21.725	-7.46	-15.48	10.12		2	14.22	10.57	1375	1	7.22	20.23	1375	
22.081	-7.11	-12.03	9.15		2	13.60	11.51	1375	1	7.32	20.58	1375	
22.438	-6.80	-8.93	8.14		2	13.04	12.45	1375	1	7.43	20.94	1375	
22.794	-6.52	-6.20	7.11		2	12.51	13.39	1375	1	7.53	21.29	1375	
23.150	-6.25	-3.83	6.07		2	12.01	14.33	1375	1	7.64	21.65	1375	
23.506	-6.00	-1.84	5.02		2	11.53	15.27	1375	1	7.74	22.01	1375	
23.863	-5.75	-0.22	3.97		2	11.05	16.21	1375	1	7.85	22.36	1375	
24.219	-5.51	1.03	2.93		2	10.57	17.15	1375	1	7.95	22.72	1375	
24.575	-5.25	1.91	1.88		2	10.09	18.10	1375	1	8.06	23.08	1375	
24.931	-5.00	2.41	0.83		2	9.60	19.04	1375	1	8.16	23.43	1375	
25.288	-4.73	2.53	-0.22		2	9.10	19.98	1375	1	8.27	23.79	1375	
25.644	-4.45	2.28	-1.29		2	8.58	20.92	1375	1	8.37	24.14	1375	
26.000	-4.17	1.65	-2.37		2	8.06	21.86	1375	1	8.48	24.50	1375	
					2	11.96	21.86	2375	1	7.24	24.50	2375	
26.500	-3.77	0.74	-1.43		2	11.09	22.69	2375	1	7.47	24.67	2375	
27.000	-3.36	0.23	-0.72		2	10.21	23.52	2375	1	7.71	24.84	2375	

計畫名稱：XDO Example 2
主　　題：連續壁 + 順打 3 階支撐 + 有效應力法

27.500	-2.95	0.03	-0.24		2	9.32	24.35	2375	1	7.94	25.01	2375	
28.000	-2.53	0.00	0.00		2	8.43	25.18	2375	2	8.18	25.18	2375	
Max	-2.53	66.46	31.53		D_e = 12.5 (m)　D_w = 13.5 (m)				D_e = 0 (m)　D_w = 1.5 (m)				
Min	-47.48	-46.11	-24.65		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 10



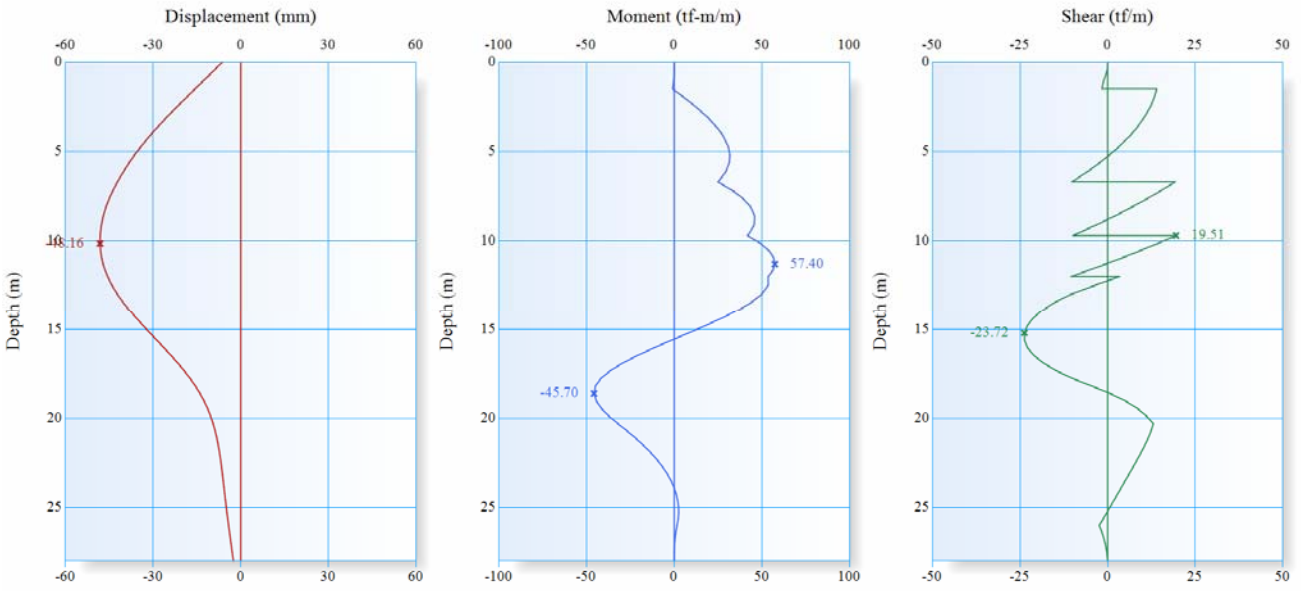


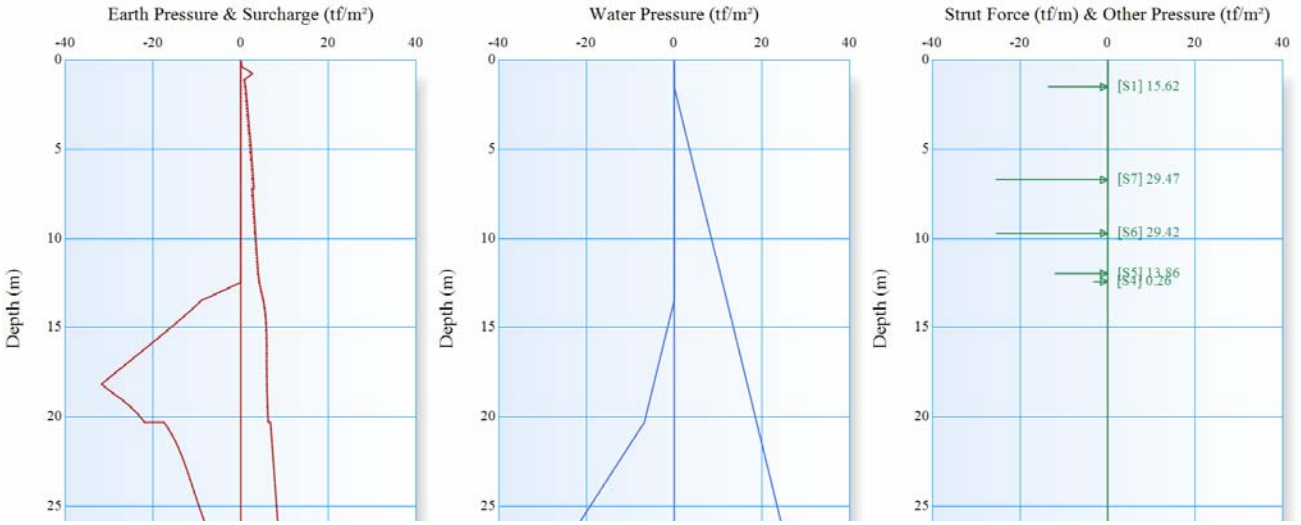
LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-4.27	0.00	0.00		0				1	0.00		1250	
0.375	-6.15	-0.06	-0.60		0				2	3.18		1250	
0.750	-8.04	-0.56	-2.38		0				2	6.35		1250	
1.125	-9.93	-1.84	-4.49		0				2	4.89		1250	
1.500	-11.83	-3.81	-6.01		0				2	3.23	0.00	1250	67.82
			6.32		0				2	3.23	0.00	1250	
1.900	-13.86	-1.48	5.32		0				2	1.38	0.40	1250	
2.300	-15.91	0.51	4.52		0				2	1.43	0.80	1250	

					0				2	1.43	0.80	1500	
2.500	-16.93	1.38	4.05		0				2	1.50	1.00	1500	
3.100	-19.98	3.34	2.30		0				2	1.71	1.60	1500	
3.700	-23.01	4.11	0.08		0				2	1.91	2.20	1500	
4.100	-25.01	3.82	-1.67		0				2	2.03	2.60	1500	
					0				2	2.11	2.60	1000	
4.761	-28.29	1.66	-5.06		0				2	2.31	3.26	1000	
5.180	-30.36	-0.95	-7.52		0				2	2.44	3.68	1000	
5.600	-32.43	-4.64	-10.20		0				2	2.57	4.10	1000	229.53
			31.53		0				2	2.57	4.10	1000	
6.100	-34.92	10.29	28.04		0				2	2.71	4.60	1000	
6.600	-37.34	23.40	24.22		0				2	2.86	5.10	1000	
6.700	-37.81	25.78	23.42		0				2	2.88	5.20	1000	0.00
7.200	-40.05	36.48	19.22		0				2	3.03	5.70	1000	
					0				2	2.71	5.70	1875	
7.600	-41.69	43.50	15.75		0				2	2.82	6.10	1875	
8.100	-43.49	50.27	11.14		0				2	2.95	6.60	1875	
8.600	-44.98	54.64	6.20		0				2	3.08	7.10	1875	-
9.100	-46.13	56.47	0.95		0				2	3.22	7.60	1875	
9.600	-46.94	55.59	-4.61		0				2	3.35	8.10	1875	
9.700	-47.06	55.08	-5.76		0				2	3.38	8.20	1875	22.38
			16.62		0				2	3.38	8.20	1875	
10.150	-47.43	61.39	11.28		0				2	3.50	8.65	1875	
10.600	-47.48	65.24	5.69		0				2	3.62	9.10	1875	
10.950	-47.31	66.46	1.16		0				2	3.71	9.45	1875	
11.300	-46.92	66.07	-3.52		0				2	3.80	9.80	1875	
11.650	-46.34	64.01	-8.36		0				2	3.90	10.15	1875	
12.000	-45.57	60.23	-13.35		0				2	3.99	10.50	1875	14.05
			0.69		0				2	3.99	10.50	1875	
12.450	-44.30	59.08	-5.96		0				2	4.11	10.95	1875	0.46
			-5.50		0				2	4.11	10.95	1875	
12.500	-44.14	58.79	-6.25		0				2	4.13	11.00	1875	
					3	0.00		1875	2	4.13	11.00	1875	
13.000	-42.35	53.96	-12.84		2	4.71		1875	2	4.43	11.50	1875	
13.500	-40.23	46.32	-17.54		2	9.27	0.00	1875	2	4.88	12.00	1875	
13.925	-38.20	38.24	-20.44		2	11.14	0.43	1875	2	5.16	12.43	1875	
14.350	-35.99	29.09	-22.62		2	13.09	0.85	1875	2	5.36	12.85	1875	
14.775	-33.66	19.17	-24.04		2	15.09	1.28	1875	2	5.50	13.28	1875	
15.200	-31.24	8.82	-24.65		2	17.14	1.70	1875	2	5.60	13.70	1875	
15.625	-28.78	-1.62	-24.42		2	19.21	2.13	1875	2	5.68	14.13	1875	
16.050	-26.33	-11.77	-23.32		2	21.31	2.55	1875	2	5.73	14.55	1875	
16.475	-23.93	-21.28	-21.36		2	23.42	2.98	1875	2	5.77	14.98	1875	
16.900	-21.62	-29.76	-18.51		2	25.53	3.40	1875	2	5.81	15.40	1875	
17.325	-19.45	-36.84	-14.78		2	27.64	3.83	1875	2	5.84	15.83	1875	
17.750	-17.43	-42.16	-10.17		2	29.75	4.25	1875	2	5.89	16.25	1875	
18.175	-15.61	-45.32	-4.69		2	31.85	4.68	1875	2	5.93	16.68	1875	
18.600	-13.99	-46.11	0.75		2	29.66	5.10	1875	2	5.99	17.10	1875	
19.025	-12.57	-44.78	5.18		2	27.20	5.53	1875	2	6.05	17.53	1875	
19.450	-11.35	-41.80	8.62		2	25.12	5.95	1875	2	6.13	17.95	1875	
19.875	-10.32	-37.53	11.21		2	23.39	6.38	1875	2	6.21	18.38	1875	
20.300	-9.45	-32.32	13.10		2	21.97	6.80	1875	2	6.30	18.80	1875	
					2	17.51	6.80	1375	2	6.81	18.80	1375	
20.656	-8.84	-27.73	12.55		2	16.52	7.74	1375	2	6.91	19.16	1375	
21.013	-8.31	-23.36	11.85		2	15.66	8.68	1375	2	7.01	19.51	1375	
21.369	-7.86	-19.27	11.02		2	14.90	9.62	1375	2	7.11	19.87	1375	
21.725	-7.46	-15.48	10.12		2	14.22	10.57	1375	2	7.22	20.23	1375	

22.081	-7.11	-12.03	9.15		2	13.60	11.51	1375	2	7.32	20.58	1375	
22.438	-6.80	-8.93	8.14		2	13.04	12.45	1375	2	7.43	20.94	1375	
22.794	-6.52	-6.20	7.11		2	12.51	13.39	1375	2	7.53	21.29	1375	
23.150	-6.25	-3.83	6.07		2	12.01	14.33	1375	2	7.64	21.65	1375	
23.506	-6.00	-1.84	5.02		2	11.53	15.27	1375	2	7.74	22.01	1375	
23.863	-5.75	-0.22	3.97		2	11.05	16.21	1375	2	7.85	22.36	1375	
24.219	-5.51	1.03	2.93		2	10.57	17.15	1375	2	7.95	22.72	1375	
24.575	-5.25	1.91	1.88		2	10.09	18.10	1375	2	8.06	23.08	1375	
24.931	-5.00	2.41	0.83		2	9.60	19.04	1375	2	8.16	23.43	1375	
25.288	-4.73	2.53	-0.22		2	9.10	19.98	1375	2	8.27	23.79	1375	
25.644	-4.45	2.28	-1.29		2	8.58	20.92	1375	2	8.37	24.14	1375	
26.000	-4.17	1.65	-2.37		2	8.06	21.86	1375	2	8.48	24.50	1375	
					2	11.96	21.86	2375	2	7.24	24.50	2375	
26.500	-3.77	0.74	-1.43		2	11.09	22.69	2375	2	7.47	24.67	2375	
27.000	-3.36	0.23	-0.72		2	10.21	23.52	2375	2	7.71	24.84	2375	
27.500	-2.95	0.03	-0.24		2	9.32	24.35	2375	2	7.94	25.01	2375	
28.000	-2.53	0.00	0.00		2	8.43	25.18	2375	2	8.18	25.18	2375	
Max	-2.53	66.46	31.53		D_e = 12.5 (m) D_w = 13.5 (m)				D_e = 0 (m) D_w = 1.5 (m)				
Min	-47.48	-46.11	-24.65		[STATE] -1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 11





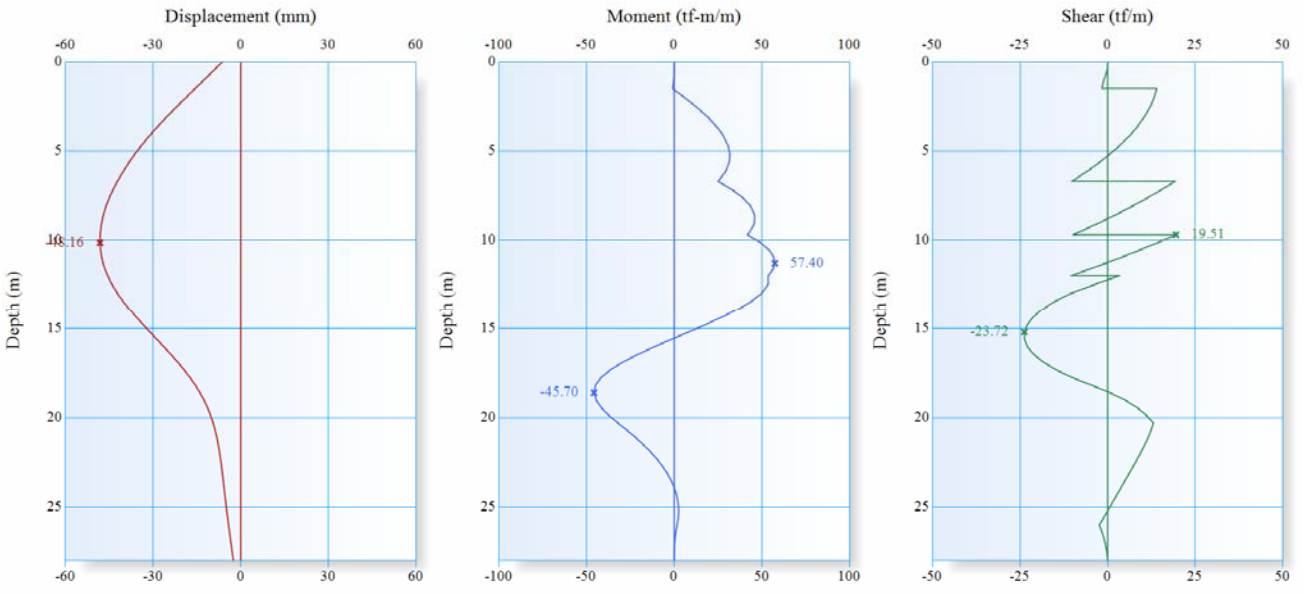
計畫名稱：XDO Example 2

主　　題：連續壁 + 順打 3 階支撐 + 有效應力法

LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-6.32	0.00	0.00		0				1	0.00		1250	
0.375	-8.65	0.01	-0.05		0				1	0.28		1250	
0.750	-10.98	-0.06	-0.61		0				2	2.68		1250	
1.125	-13.32	-0.42	-1.27		0				1	0.84		1250	
1.500	-15.65	-0.94	-1.64		0				1	1.12	0.00	1250	85.90
			13.98		0				1	1.12	0.00	1250	
1.900	-18.14	4.57	13.42		0				1	1.28	0.40	1250	
2.300	-20.62	9.81	12.64		0				1	1.43	0.80	1250	
					0				1	1.43	0.80	1500	
2.500	-21.84	12.30	12.17		0				1	1.50	1.00	1500	
3.100	-25.43	19.14	10.43		0				1	1.71	1.60	1500	
3.700	-28.85	24.78	8.20		0				1	1.91	2.20	1500	
4.100	-31.02	27.74	6.45		0				1	2.03	2.60	1500	
					0				1	2.11	2.60	1000	
4.761	-34.35	30.94	3.06		0				1	2.31	3.26	1000	
5.180	-36.29	31.74	0.60		0				1	2.44	3.68	1000	
5.600	-38.10	31.46	-2.08		0				1	2.57	4.10	1000	-
6.100	-40.08	29.59	-5.57		0				1	2.71	4.60	1000	
6.600	-41.87	25.89	-9.39		0				1	2.86	5.10	1000	
6.700	-42.21	24.91	-10.19		0				1	2.88	5.20	1000	29.47
			19.28		0				1	2.88	5.20	1000	
7.200	-43.81	33.54	15.08		0				1	3.03	5.70	1000	
					0				1	2.71	5.70	1875	
7.600	-44.94	38.91	11.61		0				1	2.82	6.10	1875	
8.100	-46.13	43.60	6.99		0				1	2.95	6.60	1875	
8.600	-47.06	45.90	2.06		0				1	3.08	7.10	1875	-
9.100	-47.71	45.66	-3.19		0				1	3.22	7.60	1875	
9.600	-48.07	42.71	-8.76		0				1	3.35	8.10	1875	
9.700	-48.11	41.78	-9.91		0				1	3.38	8.20	1875	29.42
			19.51		0				1	3.38	8.20	1875	
10.150	-48.16	49.39	14.17		0				1	3.50	8.65	1875	
10.600	-47.96	54.54	8.58		0				1	3.62	9.10	1875	
10.950	-47.62	56.78	4.05		0				1	3.71	9.45	1875	
11.300	-47.11	57.40	-0.63		0				1	3.80	9.80	1875	
11.650	-46.42	56.35	-5.47		0				1	3.90	10.15	1875	
12.000	-45.56	53.59	-10.46		0				2	4.00	10.50	1875	13.86
			3.40		0				2	4.00	10.50	1875	
12.450	-44.22	53.65	-3.29		0				2	4.27	10.95	1875	0.26
			-3.03		0				2	4.27	10.95	1875	
12.500	-44.05	53.48	-3.79		0				2	4.30	11.00	1875	
					3	0.00		1875	2	4.30	11.00	1875	
13.000	-42.21	49.84	-10.56		2	4.44		1875	2	4.70	11.50	1875	
13.500	-40.06	43.27	-15.56		2	8.96	0.00	1875	2	5.20	12.00	1875	
13.925	-38.02	35.98	-18.72		2	10.81	0.43	1875	2	5.49	12.43	1875	
14.350	-35.82	27.50	-21.18		2	12.76	0.85	1875	2	5.68	12.85	1875	
14.775	-33.50	18.13	-22.87		2	14.79	1.28	1875	2	5.81	13.28	1875	
15.200	-31.09	8.22	-23.72		2	16.86	1.70	1875	2	5.88	13.70	1875	
15.625	-28.65	-1.87	-23.71		2	18.97	2.13	1875	2	5.92	14.13	1875	

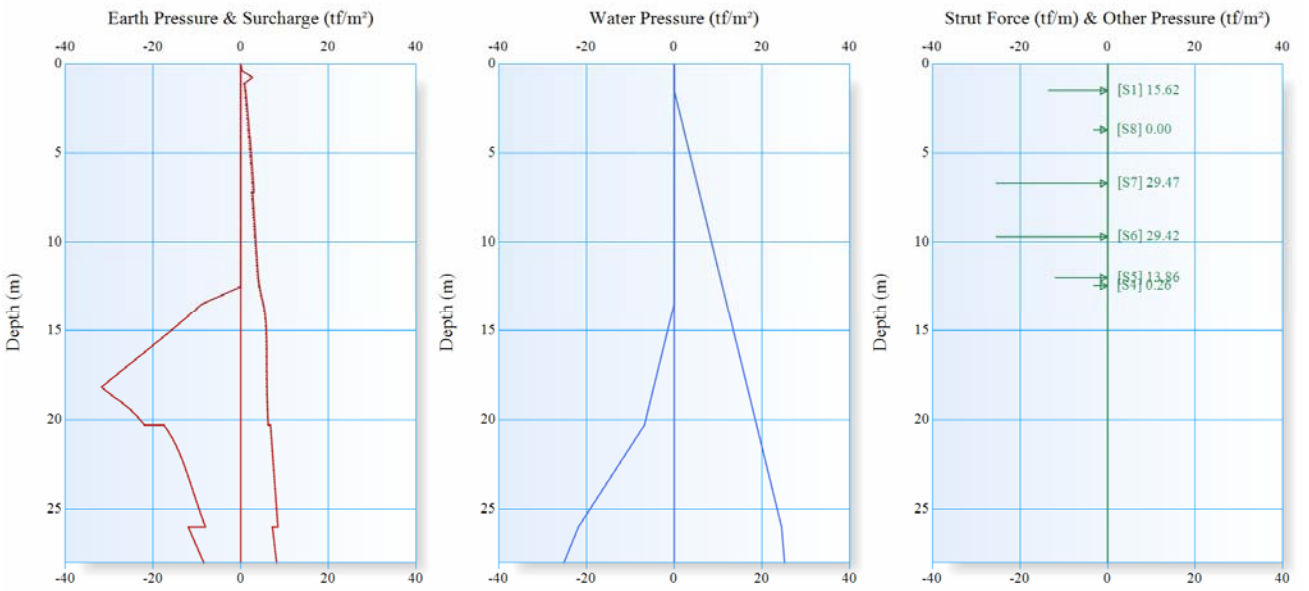
16.050	-26.22	-11.76	-22.81		2	21.10	2.55	1875	2	5.93	14.55	1875	
16.475	-23.84	-21.08	-21.00		2	23.24	2.98	1875	2	5.94	14.98	1875	
16.900	-21.55	-29.44	-18.29		2	25.39	3.40	1875	2	5.94	15.40	1875	
17.325	-19.39	-36.46	-14.67		2	27.53	3.83	1875	2	5.95	15.83	1875	
17.750	-17.39	-41.74	-10.14		2	29.67	4.25	1875	2	5.97	16.25	1875	
18.175	-15.58	-44.90	-4.71		2	31.79	4.68	1875	2	5.99	16.68	1875	
18.600	-13.97	-45.70	0.69		2	29.62	5.10	1875	2	6.03	17.10	1875	
19.025	-12.56	-44.41	5.10		2	27.18	5.53	1875	2	6.07	17.53	1875	
19.450	-11.35	-41.46	8.52		2	25.12	5.95	1875	2	6.13	17.95	1875	
19.875	-10.32	-37.24	11.11		2	23.39	6.38	1875	2	6.20	18.38	1875	
20.300	-9.46	-32.07	13.01		2	21.98	6.80	1875	2	6.29	18.80	1875	
					2	17.51	6.80	1375	2	6.80	18.80	1375	
20.656	-8.85	-27.51	12.46		2	16.54	7.74	1375	1	6.91	19.16	1375	
21.013	-8.32	-23.17	11.77		2	15.68	8.68	1375	1	7.01	19.51	1375	
21.369	-7.87	-19.11	10.95		2	14.92	9.62	1375	1	7.11	19.87	1375	
21.725	-7.47	-15.34	10.05		2	14.24	10.57	1375	1	7.22	20.23	1375	
22.081	-7.13	-11.92	9.09		2	13.62	11.51	1375	1	7.32	20.58	1375	
22.438	-6.82	-8.84	8.08		2	13.06	12.45	1375	1	7.43	20.94	1375	
22.794	-6.53	-6.12	7.06		2	12.53	13.39	1375	1	7.53	21.29	1375	
23.150	-6.27	-3.77	6.03		2	12.03	14.33	1375	1	7.64	21.65	1375	
23.506	-6.01	-1.79	4.99		2	11.55	15.27	1375	1	7.74	22.01	1375	
23.863	-5.76	-0.18	3.94		2	11.07	16.21	1375	1	7.85	22.36	1375	
24.219	-5.52	1.05	2.90		2	10.59	17.15	1375	1	7.95	22.72	1375	
24.575	-5.26	1.92	1.86		2	10.10	18.10	1375	1	8.06	23.08	1375	
24.931	-5.00	2.42	0.82		2	9.61	19.04	1375	1	8.16	23.43	1375	
25.288	-4.74	2.54	-0.23		2	9.11	19.98	1375	1	8.27	23.79	1375	
25.644	-4.46	2.29	-1.30		2	8.59	20.92	1375	1	8.37	24.14	1375	
26.000	-4.18	1.65	-2.37		2	8.07	21.86	1375	1	8.48	24.50	1375	
					2	11.98	21.86	2375	1	7.24	24.50	2375	
26.500	-3.77	0.73	-1.43		2	11.10	22.69	2375	1	7.47	24.67	2375	
27.000	-3.36	0.23	-0.72		2	10.21	23.52	2375	1	7.71	24.84	2375	
27.500	-2.95	0.02	-0.24		2	9.32	24.35	2375	2	7.94	25.01	2375	
28.000	-2.53	0.00	0.00		2	8.42	25.18	2375	2	8.18	25.18	2375	
Max	-2.53	57.40	19.51		D_e = 12.5 (m)　D_w = 13.5 (m)				D_e = 0 (m)　D_w = 1.5 (m)				
Min	-48.16	-45.70	-23.72		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 12



計畫名稱：XDO Example 2

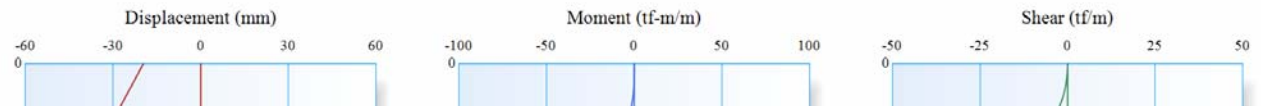
主　　題：連續壁 + 順打 3 階支撐 + 有效應力法



LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-6.32	0.00	0.00		0				1	0.00		1250	
0.375	-8.65	0.01	-0.05		0				2	0.28		1250	
0.750	-10.98	-0.06	-0.61		0				2	2.68		1250	
1.125	-13.32	-0.42	-1.27		0				2	0.84		1250	
1.500	-15.65	-0.94	-1.64		0				2	1.12	0.00	1250	85.90
			13.98		0				2	1.12	0.00	1250	
1.900	-18.14	4.57	13.42		0				2	1.28	0.40	1250	
2.300	-20.62	9.81	12.64		0				2	1.43	0.80	1250	
					0				2	1.43	0.80	1500	
2.500	-21.84	12.30	12.17		0				2	1.50	1.00	1500	
3.100	-25.43	19.14	10.43		0				2	1.71	1.60	1500	
3.700	-28.85	24.78	8.20		0				2	1.91	2.20	1500	0.00
4.100	-31.02	27.74	6.45		0				2	2.03	2.60	1500	
					0				2	2.11	2.60	1000	
4.761	-34.35	30.94	3.06		0				2	2.31	3.26	1000	
5.180	-36.29	31.74	0.60		0				2	2.44	3.68	1000	
5.600	-38.10	31.46	-2.08		0				2	2.57	4.10	1000	-
6.100	-40.08	29.59	-5.57		0				2	2.71	4.60	1000	
6.600	-41.87	25.89	-9.39		0				2	2.86	5.10	1000	
6.700	-42.21	24.91	-10.19		0				2	2.88	5.20	1000	29.47
			19.28		0				2	2.88	5.20	1000	
7.200	-43.81	33.54	15.08		0				2	3.03	5.70	1000	
					0				2	2.71	5.70	1875	
7.600	-44.94	38.91	11.61		0				2	2.82	6.10	1875	
8.100	-46.13	43.60	6.99		0				2	2.95	6.60	1875	
8.600	-47.06	45.90	2.06		0				2	3.08	7.10	1875	-
9.100	-47.71	45.66	-3.19		0				2	3.22	7.60	1875	
9.600	-48.07	42.71	-8.76		0				2	3.35	8.10	1875	
9.700	-48.11	41.78	-9.91		0				2	3.38	8.20	1875	29.42
			19.51		0				2	3.38	8.20	1875	
10.150	-48.16	49.39	14.17		0				2	3.50	8.65	1875	
10.600	-47.96	54.54	8.58		0				2	3.62	9.10	1875	

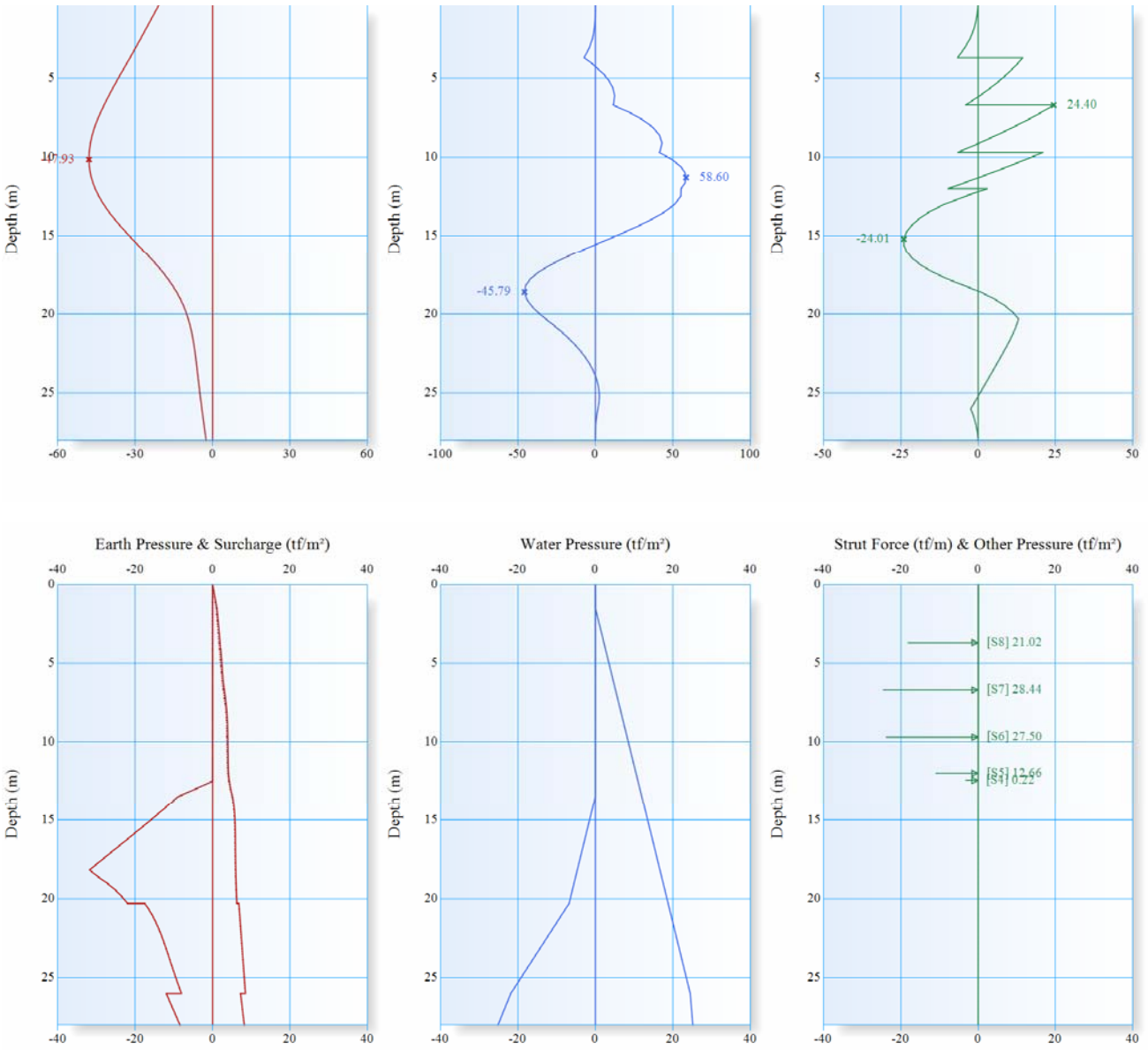
10.950	-47.62	56.78	4.05		0				2	3.71	9.45	1875	
11.300	-47.11	57.40	-0.63		0				2	3.80	9.80	1875	
11.650	-46.42	56.35	-5.47		0				2	3.90	10.15	1875	
12.000	-45.56	53.59	-10.46		0				2	4.00	10.50	1875	13.86
			3.40		0				2	4.00	10.50	1875	
12.450	-44.22	53.65	-3.29		0				2	4.27	10.95	1875	0.26
			-3.03		0				2	4.27	10.95	1875	
12.500	-44.05	53.48	-3.79		0				2	4.30	11.00	1875	
					3	0.00		1875	2	4.30	11.00	1875	
13.000	-42.21	49.84	-10.56		2	4.44		1875	2	4.70	11.50	1875	
13.500	-40.06	43.27	-15.56		2	8.96	0.00	1875	2	5.20	12.00	1875	
13.925	-38.02	35.98	-18.72		2	10.81	0.43	1875	2	5.49	12.43	1875	
14.350	-35.82	27.50	-21.18		2	12.76	0.85	1875	2	5.68	12.85	1875	
14.775	-33.50	18.13	-22.87		2	14.79	1.28	1875	2	5.81	13.28	1875	
15.200	-31.09	8.22	-23.72		2	16.86	1.70	1875	2	5.88	13.70	1875	
15.625	-28.65	-1.87	-23.71		2	18.97	2.13	1875	2	5.92	14.13	1875	
16.050	-26.22	-11.76	-22.81		2	21.10	2.55	1875	2	5.93	14.55	1875	
16.475	-23.84	-21.08	-21.00		2	23.24	2.98	1875	2	5.94	14.98	1875	
16.900	-21.55	-29.44	-18.29		2	25.39	3.40	1875	2	5.94	15.40	1875	
17.325	-19.39	-36.46	-14.67		2	27.53	3.83	1875	2	5.95	15.83	1875	
17.750	-17.39	-41.74	-10.14		2	29.67	4.25	1875	2	5.97	16.25	1875	
18.175	-15.58	-44.90	-4.71		2	31.79	4.68	1875	2	5.99	16.68	1875	
18.600	-13.97	-45.70	0.69		2	29.62	5.10	1875	2	6.03	17.10	1875	
19.025	-12.56	-44.41	5.10		2	27.18	5.53	1875	2	6.07	17.53	1875	
19.450	-11.35	-41.46	8.52		2	25.12	5.95	1875	2	6.13	17.95	1875	
19.875	-10.32	-37.24	11.11		2	23.39	6.38	1875	2	6.20	18.38	1875	
20.300	-9.46	-32.07	13.01		2	21.98	6.80	1875	2	6.29	18.80	1875	
					2	17.51	6.80	1375	2	6.80	18.80	1375	
20.656	-8.85	-27.51	12.46		2	16.54	7.74	1375	2	6.91	19.16	1375	
21.013	-8.32	-23.17	11.77		2	15.68	8.68	1375	2	7.01	19.51	1375	
21.369	-7.87	-19.11	10.95		2	14.92	9.62	1375	2	7.11	19.87	1375	
21.725	-7.47	-15.34	10.05		2	14.24	10.57	1375	2	7.22	20.23	1375	
22.081	-7.13	-11.92	9.09		2	13.62	11.51	1375	2	7.32	20.58	1375	
22.438	-6.82	-8.84	8.08		2	13.06	12.45	1375	2	7.43	20.94	1375	
22.794	-6.53	-6.12	7.06		2	12.53	13.39	1375	2	7.53	21.29	1375	
23.150	-6.27	-3.77	6.03		2	12.03	14.33	1375	2	7.64	21.65	1375	
23.506	-6.01	-1.79	4.99		2	11.55	15.27	1375	2	7.74	22.01	1375	
23.863	-5.76	-0.18	3.94		2	11.07	16.21	1375	2	7.85	22.36	1375	
24.219	-5.52	1.05	2.90		2	10.59	17.15	1375	2	7.95	22.72	1375	
24.575	-5.26	1.92	1.86		2	10.10	18.10	1375	2	8.06	23.08	1375	
24.931	-5.00	2.42	0.82		2	9.61	19.04	1375	2	8.16	23.43	1375	
25.288	-4.74	2.54	-0.23		2	9.11	19.98	1375	2	8.27	23.79	1375	
25.644	-4.46	2.29	-1.30		2	8.59	20.92	1375	2	8.37	24.14	1375	
26.000	-4.18	1.65	-2.37		2	8.07	21.86	1375	2	8.48	24.50	1375	
					2	11.98	21.86	2375	2	7.24	24.50	2375	
26.500	-3.77	0.73	-1.43		2	11.10	22.69	2375	2	7.47	24.67	2375	
27.000	-3.36	0.23	-0.72		2	10.21	23.52	2375	2	7.71	24.84	2375	
27.500	-2.95	0.02	-0.24		2	9.32	24.35	2375	2	7.94	25.01	2375	
28.000	-2.53	0.00	0.00		2	8.42	25.18	2375	2	8.18	25.18	2375	
Max	-2.53	57.40	19.51		D_e = 12.5 (m)		D_w = 13.5 (m)		D_e = 0 (m)		D_w = 1.5 (m)		
Min	-48.16	-45.70	-23.72		[STATE] -1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 13



計畫名稱：XDO Example 2

主　　題：連續壁 + 順打 3 階支撐 + 有效應力法



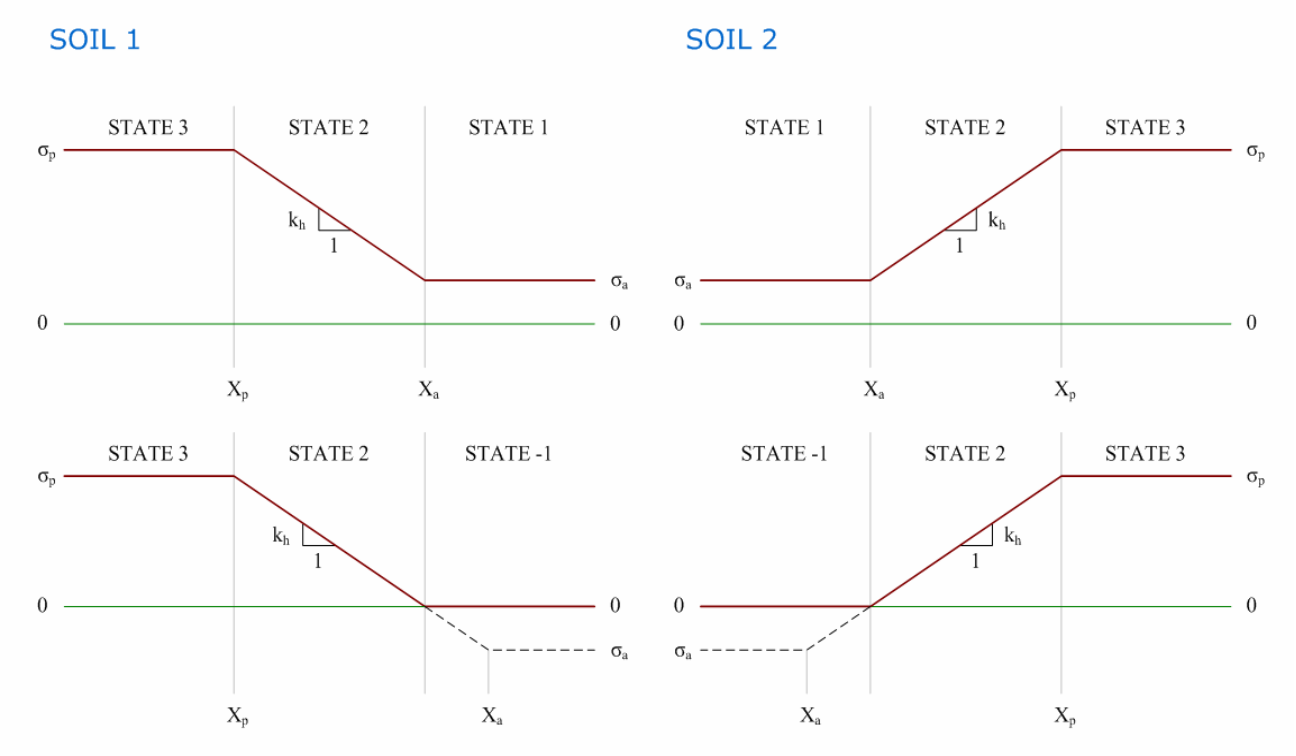
LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-19.63	0.00	0.00		0				1	0.00		1250	
0.375	-20.87	0.01	-0.05		0				1	0.28		1250	
0.750	-22.11	-0.02	-0.21		0				1	0.57		1250	
1.125	-23.35	-0.12	-0.48		0				1	0.84		1250	
1.500	-24.59	-0.35	-0.84		0				1	1.12	0.00	1250	-
1.900	-25.92	-0.77	-1.40		0				1	1.28	0.40	1250	
2.300	-27.25	-1.46	-2.18		0				1	1.43	0.80	1250	
					0				1	1.43	0.80	1500	
2.500	-27.92	-1.93	-2.66		0				1	1.50	1.00	1500	
3.100	-29.94	-4.00	-4.40		0				1	1.71	1.60	1500	
3.700	-31.99	-7.25	-6.63		0				1	1.91	2.20	1500	21.02
			14.39		0				1	1.91	2.20	1500	
4.100	-33.39	-1.82	12.65		0				1	2.03	2.60	1500	
					0				1	2.11	2.60	1000	
4.761	-35.72	5.48	9.25		0				1	2.31	3.26	1000	
5.180	-37.17	8.88	6.80		0				1	2.44	3.68	1000	

5.600	-38.59	11.20	4.11		0				1	2.57	4.10	1000	-
6.100	-40.21	12.42	0.62		0				1	2.71	4.60	1000	
6.600	-41.76	11.81	-3.22		0				2	2.97	5.10	1000	
6.700	-42.06	11.45	-4.04		0				2	3.04	5.20	1000	28.44
			24.40		0				2	3.04	5.20	1000	
7.200	-43.51	22.62	20.09		0				2	3.32	5.70	1000	
					0				2	3.27	5.70	1875	
7.600	-44.58	29.94	16.38		0				2	3.50	6.10	1875	
8.100	-45.74	36.92	11.40		0				2	3.69	6.60	1875	
8.600	-46.67	41.34	6.10		0				2	3.81	7.10	1875	-
9.100	-47.36	43.02	0.51		0				2	3.88	7.60	1875	
9.600	-47.77	41.85	-5.36		0				2	3.91	8.10	1875	
9.700	-47.83	41.25	-6.57		0				2	3.91	8.20	1875	27.50
			20.93		0				2	3.91	8.20	1875	
10.150	-47.93	49.45	15.37		0				2	3.93	8.65	1875	
10.600	-47.78	55.10	9.60		0				2	3.96	9.10	1875	
10.950	-47.48	57.67	4.97		0				2	3.98	9.45	1875	
11.300	-47.00	58.60	0.20		0				2	4.00	9.80	1875	
11.650	-46.35	57.83	-4.69		0				2	4.03	10.15	1875	
12.000	-45.52	55.33	-9.73		0				2	4.09	10.50	1875	12.66
			2.94		0				2	4.09	10.50	1875	
12.450	-44.20	55.18	-3.78		0				2	4.30	10.95	1875	0.22
			-3.55		0				2	4.30	10.95	1875	
12.500	-44.04	54.98	-4.32		0				2	4.32	11.00	1875	
					3	0.00		1875	2	4.32	11.00	1875	
13.000	-42.22	51.08	-11.08		2	4.46		1875	2	4.68	11.50	1875	
13.500	-40.08	44.25	-16.05		2	9.00	0.00	1875	2	5.15	12.00	1875	
13.925	-38.05	36.76	-19.17		2	10.87	0.43	1875	2	5.43	12.43	1875	
14.350	-35.86	28.10	-21.58		2	12.83	0.85	1875	2	5.62	12.85	1875	
14.775	-33.53	18.57	-23.21		2	14.85	1.28	1875	2	5.74	13.28	1875	
15.200	-31.13	8.53	-24.01		2	16.93	1.70	1875	2	5.81	13.70	1875	
15.625	-28.68	-1.67	-23.94		2	19.03	2.13	1875	2	5.86	14.13	1875	
16.050	-26.25	-11.65	-22.99		2	21.16	2.55	1875	2	5.88	14.55	1875	
16.475	-23.86	-21.04	-21.14		2	23.29	2.98	1875	2	5.89	14.98	1875	
16.900	-21.57	-29.45	-18.39		2	25.43	3.40	1875	2	5.90	15.40	1875	
17.325	-19.41	-36.50	-14.73		2	27.57	3.83	1875	2	5.92	15.83	1875	
17.750	-17.41	-41.80	-10.18		2	29.69	4.25	1875	2	5.94	16.25	1875	
18.175	-15.59	-44.98	-4.73		2	31.81	4.68	1875	2	5.97	16.68	1875	
18.600	-13.98	-45.79	0.69		2	29.64	5.10	1875	2	6.01	17.10	1875	
19.025	-12.57	-44.50	5.10		2	27.19	5.53	1875	2	6.06	17.53	1875	
19.450	-11.35	-41.54	8.54		2	25.12	5.95	1875	2	6.13	17.95	1875	
19.875	-10.32	-37.32	11.13		2	23.40	6.38	1875	2	6.20	18.38	1875	
20.300	-9.46	-32.14	13.03		2	21.98	6.80	1875	1	6.28	18.80	1875	
					2	17.52	6.80	1375	1	6.80	18.80	1375	
20.656	-8.85	-27.57	12.49		2	16.54	7.74	1375	1	6.91	19.16	1375	
21.013	-8.32	-23.22	11.79		2	15.68	8.68	1375	2	7.01	19.51	1375	
21.369	-7.87	-19.15	10.97		2	14.91	9.62	1375	2	7.12	19.87	1375	
21.725	-7.47	-15.38	10.07		2	14.23	10.57	1375	2	7.22	20.23	1375	
22.081	-7.12	-11.94	9.10		2	13.62	11.51	1375	2	7.33	20.58	1375	
22.438	-6.81	-8.86	8.10		2	13.06	12.45	1375	2	7.43	20.94	1375	
22.794	-6.53	-6.14	7.08		2	12.53	13.39	1375	2	7.54	21.29	1375	
23.150	-6.27	-3.79	6.04		2	12.03	14.33	1375	2	7.64	21.65	1375	
23.506	-6.01	-1.80	5.00		2	11.54	15.27	1375	2	7.75	22.01	1375	
23.863	-5.76	-0.19	3.95		2	11.07	16.21	1375	2	7.85	22.36	1375	
24.219	-5.51	1.05	2.91		2	10.59	17.15	1375	2	7.96	22.72	1375	
24.575	-5.26	1.92	1.87		2	10.10	18.10	1375	2	8.06	23.08	1375	

24.931	-5.00	2.42	0.82		2	9.61	19.04	1375	2	8.17	23.43	1375	
25.288	-4.74	2.54	-0.23		2	9.11	19.98	1375	2	8.27	23.79	1375	
25.644	-4.46	2.29	-1.29		2	8.59	20.92	1375	2	8.38	24.14	1375	
26.000	-4.18	1.65	-2.37		2	8.06	21.86	1375	2	8.48	24.50	1375	
					2	11.97	21.86	2375	2	7.24	24.50	2375	
26.500	-3.77	0.74	-1.43		2	11.10	22.69	2375	2	7.47	24.67	2375	
27.000	-3.36	0.23	-0.72		2	10.21	23.52	2375	2	7.71	24.84	2375	
27.500	-2.95	0.03	-0.24		2	9.32	24.35	2375	2	7.94	25.01	2375	
28.000	-2.53	0.00	0.00		2	8.42	25.18	2375	2	8.18	25.18	2375	
Max	-2.53	58.60	24.40		D_e = 12.5 (m)　D_w = 13.5 (m)				D_e = 0 (m)　D_w = 1.5 (m)				
Min	-47.93	-45.79	-24.01		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

計畫名稱：XDO Example 2
主　　題：連續壁 + 順打 3 階支撐 + 有效應力法

XDO 土壤彈簧應力與變位



▼ PHASE 1

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-11.00	0									1	0.00	0.00	0.00	-	-	0.00	0.00	1250
0.375	-10.40	0									1	0.28	0.24	0.05	-0.12	2.20	0.28	3.18	1250
0.750	-9.80	0									1	0.57	0.47	0.09	-0.24	4.39	0.57	6.35	1250
1.125	-9.21	0									1	0.84	0.71	0.14	-0.36	6.59	0.84	9.53	1250
1.500	-8.61	0									1	1.12	0.94	0.18	-0.47	8.79	1.12	12.70	1250
1.900	-7.98	0									1	1.28	1.07	0.21	-0.54	9.92	1.28	14.34	1250
2.300	-7.35	0									1	1.43	1.19	0.24	-0.60	11.05	1.43	15.98	1250
		0									1	1.43	1.19	0.24	-0.50	9.20	1.43	15.98	1500
2.500	-7.04	0									1	1.50	1.25	0.26	-0.52	9.66	1.50	16.78	1500
		3	0.00	0.00	0.00	-	-	0.00	0.00	1500	1	1.50	1.25	0.26	-0.52	9.66	1.50	16.78	1500
3.100	-6.12	3	1.81	1.81	0.00	0.06	-1.06	0.14	1.81	1500	1	1.71	1.42	0.29	-0.60	11.05	1.71	19.17	1500
3.700	-5.23	3	3.62	3.62	0.00	0.11	-2.12	0.27	3.62	1500	1	1.91	1.60	0.31	-0.67	12.43	1.91	21.55	1500
4.100	-4.67	3	4.83	4.83	0.00	0.15	-2.82	0.36	4.82	1500	1	2.03	1.72	0.31	-0.72	13.35	2.03	23.14	1500
		3	4.51	4.51	0.00	0.23	-3.90	0.38	4.51	1000	1	2.11	1.79	0.31	-1.09	18.46	2.11	21.65	1000
4.761	-3.81	2	4.67	4.67	0.00	0.32	-5.49	0.53	6.35	1000	1	2.31	2.00	0.32	-1.21	20.54	2.31	24.06	1000
5.180	-3.32	2	4.33	4.33	0.00	0.38	-6.50	0.63	7.51	1000	1	2.44	2.12	0.32	-1.29	21.86	2.44	25.59	1000
5.600	-2.86	2	4.03	4.03	0.00	0.44	-7.51	0.73	8.68	1000	1	2.57	2.25	0.31	-1.37	23.18	2.57	27.11	1000
6.100	-2.38	2	3.74	3.74	0.00	0.51	-8.71	0.85	10.07	1000	1	2.71	2.41	0.31	-1.46	24.76	2.71	28.92	1000
6.600	-1.96	2	3.51	3.51	0.00	0.58	-9.91	0.96	11.46	1000	1	2.86	2.56	0.30	-1.55	26.33	2.86	30.74	1000
6.700	-1.88	2	3.47	3.47	0.00	0.60	-10.15	0.99	11.74	1000	1	2.88	2.59	0.29	-1.57	26.64	2.88	31.10	1000
7.200	-1.54	2	3.31	3.31	0.00	0.67	-11.35	1.10	13.13	1000	2	3.15	2.87	0.28	-1.66	28.22	3.03	32.91	1000
		2	4.50	4.50	0.00	0.34	-7.75	0.98	16.16	1875	1	2.71	2.43	0.28	-0.86	19.26	2.71	40.43	1875
7.600	-1.30	2	4.26	4.26	0.00	0.39	-8.67	1.09	18.07	1875	1	2.82	2.54	0.28	-0.90	20.18	2.82	42.34	1875
8.100	-1.06	2	4.05	4.05	0.00	0.44	-9.81	1.24	20.46	1875	1	2.95	2.69	0.26	-0.95	21.32	2.95	44.71	1875
8.600	-0.88	2	3.94	3.94	0.00	0.49	-10.96	1.38	22.84	1875	2	3.31	3.06	0.25	-1.00	22.47	3.08	47.09	1875

9.100	-0.74	2	3.93	3.93	0.00	0.54	-12.11	1.53	25.23	1875	2	3.79	3.55	0.24	-1.05	23.62	3.22	49.47	1875
9.600	-0.65	2	3.99	3.99	0.00	0.59	-13.25	1.67	27.62	1875	2	4.20	3.97	0.23	-1.10	24.76	3.35	51.84	1875
9.700	-0.63	2	4.01	4.01	0.00	0.60	-13.48	1.70	28.10	1875	2	4.28	4.05	0.23	-1.11	24.99	3.38	52.32	1875
10.150	-0.58	2	4.12	4.12	0.00	0.65	-14.51	1.83	30.25	1875	2	4.58	4.36	0.22	-1.16	26.02	3.50	54.46	1875
10.600	-0.55	2	4.28	4.28	0.00	0.69	-15.54	1.96	32.40	1875	2	4.84	4.64	0.21	-1.20	27.06	3.62	56.60	1875
10.950	-0.53	2	4.42	4.42	0.00	0.73	-16.35	2.06	34.07	1875	2	5.03	4.83	0.20	-1.24	27.86	3.71	58.26	1875
11.300	-0.53	2	4.58	4.58	0.00	0.76	-17.15	2.16	35.74	1875	2	5.20	5.01	0.19	-1.27	28.66	3.80	59.93	1875
11.650	-0.53	2	4.75	4.75	0.00	0.80	-17.95	2.26	37.42	1875	2	5.36	5.18	0.18	-1.31	29.46	3.90	61.59	1875
12.000	-0.53	2	4.93	4.93	0.00	0.83	-18.75	2.36	39.09	1875	2	5.51	5.34	0.18	-1.35	30.26	3.99	63.26	1875
12.450	-0.54	2	5.16	5.16	0.00	0.88	-19.78	2.49	41.24	1875	2	5.70	5.53	0.17	-1.39	31.30	4.11	65.40	1875
12.500	-0.55	2	5.19	5.19	0.00	0.88	-19.90	2.51	41.48	1875	2	5.72	5.56	0.17	-1.40	31.41	4.13	65.64	1875
13.000	-0.56	2	5.46	5.46	0.00	0.94	-21.05	2.65	43.87	1875	2	5.92	5.77	0.16	-1.45	32.56	4.26	68.02	1875
13.500	-0.58	2	5.73	5.73	0.00	0.99	-22.19	2.80	46.26	1875	2	6.12	5.97	0.15	-1.50	33.70	4.40	70.40	1875
13.925	-0.59	2	5.96	5.96	0.00	1.03	-23.17	2.92	48.29	1875	2	6.29	6.15	0.14	-1.54	34.68	4.51	72.42	1875
14.350	-0.61	2	6.19	6.19	0.00	1.07	-24.14	3.04	50.32	1875	2	6.46	6.33	0.14	-1.58	35.65	4.63	74.45	1875
14.775	-0.62	2	6.42	6.42	0.00	1.12	-25.11	3.17	52.35	1875	2	6.64	6.51	0.13	-1.63	36.63	4.75	76.47	1875
15.200	-0.63	2	6.65	6.65	0.00	1.16	-26.09	3.29	54.38	1875	2	6.81	6.69	0.12	-1.67	37.60	4.86	78.50	1875
15.625	-0.65	2	6.88	6.88	0.00	1.20	-27.06	3.41	56.41	1875	2	6.99	6.87	0.12	-1.71	38.57	4.98	80.52	1875
16.050	-0.66	2	7.10	7.10	0.00	1.25	-28.04	3.53	58.44	1875	2	7.16	7.05	0.11	-1.76	39.55	5.10	82.55	1875
16.475	-0.67	2	7.33	7.33	0.00	1.29	-29.01	3.66	60.47	1875	2	7.34	7.23	0.11	-1.80	40.52	5.22	84.57	1875
16.900	-0.68	2	7.55	7.55	0.00	1.33	-29.99	3.78	62.50	1875	2	7.52	7.41	0.10	-1.84	41.50	5.33	86.60	1875
17.325	-0.69	2	7.78	7.78	0.00	1.38	-30.96	3.90	64.53	1875	2	7.69	7.59	0.10	-1.89	42.47	5.45	88.62	1875
17.750	-0.71	2	8.01	8.01	0.00	1.42	-31.93	4.03	66.56	1875	2	7.87	7.77	0.09	-1.93	43.44	5.57	90.65	1875
18.175	-0.72	2	8.25	8.25	0.00	1.46	-32.91	4.15	68.59	1875	2	8.04	7.95	0.09	-1.97	44.42	5.69	92.68	1875
18.600	-0.74	2	8.48	8.48	0.00	1.51	-33.88	4.27	70.62	1875	2	8.20	8.12	0.09	-2.02	45.39	5.81	94.70	1875
19.025	-0.76	2	8.72	8.72	0.00	1.55	-34.86	4.39	72.65	1875	2	8.37	8.29	0.08	-2.06	46.37	5.93	96.73	1875
19.450	-0.78	2	8.96	8.96	0.00	1.59	-35.83	4.52	74.68	1875	2	8.53	8.45	0.08	-2.10	47.34	6.05	98.76	1875
19.875	-0.80	2	9.21	9.21	0.00	1.64	-36.80	4.64	76.72	1875	2	8.69	8.62	0.07	-2.15	48.32	6.17	100.78	1875
20.300	-0.82	2	9.45	9.45	0.00	1.68	-37.78	4.76	78.75	1875	2	8.85	8.78	0.07	-2.19	49.29	6.28	102.81	1875
		2	9.53	9.53	0.00	2.36	-43.66	5.16	68.43	1375	2	9.90	9.83	0.07	-3.08	56.96	6.80	89.35	1375
20.656	-0.84	2	9.73	9.73	0.00	2.41	-44.56	5.26	69.85	1375	2	10.05	9.98	0.07	-3.13	57.86	6.91	90.77	1375
21.013	-0.85	2	9.92	9.92	0.00	2.46	-45.47	5.37	71.27	1375	2	10.20	10.13	0.07	-3.18	58.77	7.01	92.18	1375
21.369	-0.87	2	10.12	10.12	0.00	2.51	-46.37	5.48	72.68	1375	2	10.35	10.29	0.06	-3.22	59.67	7.11	93.60	1375
21.725	-0.88	2	10.31	10.31	0.00	2.55	-47.27	5.59	74.10	1375	2	10.51	10.45	0.06	-3.27	60.58	7.22	95.01	1375
22.081	-0.89	2	10.49	10.49	0.00	2.60	-48.18	5.69	75.52	1375	2	10.67	10.61	0.06	-3.32	61.48	7.32	96.43	1375
22.438	-0.89	2	10.67	10.67	0.00	2.65	-49.08	5.80	76.94	1375	2	10.84	10.78	0.06	-3.37	62.39	7.43	97.84	1375
22.794	-0.89	2	10.84	10.84	0.00	2.70	-49.99	5.91	78.35	1375	2	11.01	10.96	0.06	-3.42	63.29	7.53	99.26	1375
23.150	-0.89	2	11.01	11.01	0.00	2.75	-50.89	6.01	79.77	1375	2	11.19	11.14	0.05	-3.47	64.19	7.64	100.67	1375
23.506	-0.88	2	11.17	11.17	0.00	2.80	-51.80	6.12	81.19	1375	2	11.37	11.32	0.05	-3.52	65.10	7.74	102.09	1375
23.863	-0.86	2	11.33	11.33	0.00	2.85	-52.70	6.23	82.61	1375	2	11.57	11.52	0.05	-3.57	66.00	7.85	103.51	1375
24.219	-0.85	2	11.48	11.48	0.00	2.90	-53.61	6.33	84.02	1375	2	11.76	11.71	0.05	-3.62	66.91	7.95	104.92	1375
24.575	-0.82	2	11.62	11.62	0.00	2.95	-54.51	6.44	85.44	1375	2	11.97	11.92	0.05	-3.66	67.81	8.06	106.34	1375
24.931	-0.80	2	11.76	11.76	0.00	2.99	-55.41	6.55	86.86	1375	2	12.17	12.13	0.05	-3.71	68.72	8.16	107.75	1375
25.288	-0.77	2	11.89	11.89	0.00	3.04	-56.32	6.65	88.28	1375	2	12.39	12.35	0.04	-3.76	69.62	8.27	109.17	1375
25.644	-0.73	2	12.02	12.02	0.00	3.09	-57.22	6.76	89.69	1375	2	12.61	12.57	0.04	-3.81	70.52	8.37	110.59	1375
26.000	-0.69	2	12.14	12.14	0.00	3.14	-58.13	6.87	91.11	1375	2	12.83	12.79	0.04	-3.86	71.43	8.48	112.00	1375
		2	11.55	11.55	0.00	1.70	-47.05	5.86	121.66	2375	2	10.56	10.52	0.04	-2.09	57.82	7.24	149.54	2375
26.500	-0.64	2	11.67	11.67	0.00	1.75	-48.22	6.00	124.66	2375	2	10.93	10.89	0.04	-2.13	58.98	7.38	152.54	2375
27.000	-0.58	2	11.78	11.78	0.00	1.79	-49.38	6.15	127.66	2375	2	11.31	11.27	0.04	-2.18	60.15	7.52	155.54	2375
27.500	-0.53	2	11.89	11.89	0.00	1.83	-50.54	6.29	130.67	2375	2	11.68	11.65	0.04	-2.22	61.31	7.67	158.54	2375
28.000	-0.47	2	12.00	12.00	0.00	1.87	-51.70	6.43	133.67	2375	2	12.06	12.03	0.03	-2.26	62.47	7.81	161.54	2375

▼ PHASE 2

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)

計畫名稱：XDO Example 2

主　　題：連續壁 + 順打 3 階支撐 + 有效應力法

0.000	-8.71	0									1	0.00	0.00	0.00	-	-	0.00	0.00	1250
0.375	-8.28	0									2	2.93	2.89	0.05	-10.40	-8.08	0.28	3.18	1250
0.750	-7.85	0									2	3.01	2.91	0.09	-9.80	-5.17	0.57	6.35	1250
1.125	-7.43	0									2	3.07	2.94	0.14	-9.21	-2.26	0.84	9.53	1250
1.500	-7.00	0									2	3.13	2.96	0.18	-8.61	0.65	1.12	12.70	1250
1.900	-6.56	0									2	3.05	2.84	0.21	-7.98	2.47	1.28	14.34	1250
2.300	-6.13	0									2	2.96	2.72	0.24	-7.35	4.29	1.43	15.98	1250
		0									2	3.27	3.03	0.24	-7.35	2.35	1.43	15.98	1500
2.500	-5.91	0									2	3.20	2.94	0.26	-7.04	3.15	1.50	16.78	1500
		3	0.00	0.00	0.00	-	-	0.00	0.00	1500	2	3.20	2.94	0.26	-7.04	3.15	1.50	16.78	1500
3.100	-5.26	2	0.52	0.52	0.00	-5.00	-6.12	0.14	1.81	1500	2	3.00	2.72	0.29	-6.12	5.52	1.71	19.17	1500
3.700	-4.61	2	2.68	2.68	0.00	-3.00	-5.23	0.27	3.62	1500	2	2.84	2.54	0.31	-5.23	7.87	1.91	21.55	1500
4.100	-4.19	2	4.10	4.10	0.00	-1.70	-4.67	0.36	4.82	1500	2	2.76	2.45	0.31	-4.67	9.40	2.03	23.14	1500
		2	4.03	4.03	0.00	-0.54	-4.67	0.38	4.51	1000	2	2.59	2.28	0.31	-4.67	14.88	2.11	21.65	1000
4.761	-3.52	2	4.37	4.37	0.00	0.32	-5.49	0.53	6.35	1000	2	2.61	2.29	0.32	-3.81	17.94	2.31	24.06	1000
5.180	-3.12	2	4.13	4.13	0.00	0.38	-6.50	0.63	7.51	1000	2	2.64	2.32	0.32	-3.32	19.83	2.44	25.59	1000
5.600	-2.74	2	3.91	3.91	0.00	0.44	-7.51	0.73	8.68	1000	2	2.69	2.37	0.31	-2.86	21.68	2.57	27.11	1000
6.100	-2.33	2	3.69	3.69	0.00	0.51	-8.71	0.85	10.07	1000	2	2.76	2.45	0.31	-2.38	23.83	2.71	28.92	1000
6.600	-1.96	2	3.51	3.51	0.00	0.58	-9.91	0.96	11.46	1000	1	2.86	2.56	0.30	-1.96	25.92	2.86	30.74	1000
6.700	-1.89	2	3.48	3.48	0.00	0.60	-10.15	0.99	11.74	1000	1	2.88	2.59	0.29	-1.88	26.33	2.88	31.10	1000
7.200	-1.58	2	3.35	3.35	0.00	0.67	-11.35	1.10	13.13	1000	2	3.11	2.82	0.28	-1.66	28.22	3.03	32.91	1000
		2	4.59	4.59	0.00	0.34	-7.75	0.98	16.16	1875	1	2.71	2.43	0.28	-1.54	18.58	2.71	40.43	1875
7.600	-1.37	2	4.38	4.38	0.00	0.39	-8.67	1.09	18.07	1875	1	2.82	2.54	0.28	-1.30	19.77	2.82	42.34	1875
8.100	-1.14	2	4.19	4.19	0.00	0.44	-9.81	1.24	20.46	1875	1	2.95	2.69	0.26	-1.06	21.21	2.95	44.71	1875
8.600	-0.96	2	4.09	4.09	0.00	0.49	-10.96	1.38	22.84	1875	2	3.16	2.91	0.25	-1.00	22.47	3.08	47.09	1875
9.100	-0.82	2	4.07	4.07	0.00	0.54	-12.11	1.53	25.23	1875	2	3.65	3.41	0.24	-1.05	23.62	3.22	49.47	1875
9.600	-0.71	2	4.11	4.11	0.00	0.59	-13.25	1.67	27.62	1875	2	4.07	3.85	0.23	-1.10	24.76	3.35	51.84	1875
9.700	-0.70	2	4.13	4.13	0.00	0.60	-13.48	1.70	28.10	1875	2	4.15	3.93	0.23	-1.11	24.99	3.38	52.32	1875
10.150	-0.64	2	4.23	4.23	0.00	0.65	-14.51	1.83	30.25	1875	2	4.47	4.26	0.22	-1.16	26.02	3.50	54.46	1875
10.600	-0.60	2	4.37	4.37	0.00	0.69	-15.54	1.96	32.40	1875	2	4.75	4.55	0.21	-1.20	27.06	3.62	56.60	1875
10.950	-0.58	2	4.50	4.50	0.00	0.73	-16.35	2.06	34.07	1875	2	4.95	4.75	0.20	-1.24	27.86	3.71	58.26	1875
11.300	-0.56	2	4.65	4.65	0.00	0.76	-17.15	2.16	35.74	1875	2	5.13	4.94	0.19	-1.27	28.66	3.80	59.93	1875
11.650	-0.56	2	4.81	4.81	0.00	0.80	-17.95	2.26	37.42	1875	2	5.31	5.12	0.18	-1.31	29.46	3.90	61.59	1875
12.000	-0.56	2	4.97	4.97	0.00	0.83	-18.75	2.36	39.09	1875	2	5.47	5.29	0.18	-1.35	30.26	3.99	63.26	1875
12.450	-0.56	2	5.20	5.20	0.00	0.88	-19.78	2.49	41.24	1875	2	5.67	5.50	0.17	-1.39	31.30	4.11	65.40	1875
12.500	-0.56	2	5.22	5.22	0.00	0.88	-19.90	2.51	41.48	1875	2	5.69	5.52	0.17	-1.40	31.41	4.13	65.64	1875
13.000	-0.57	2	5.48	5.48	0.00	0.94	-21.05	2.65	43.87	1875	2	5.90	5.74	0.16	-1.45	32.56	4.26	68.02	1875
13.500	-0.58	2	5.74	5.74	0.00	0.99	-22.19	2.80	46.26	1875	2	6.11	5.96	0.15	-1.50	33.70	4.40	70.40	1875
13.925	-0.60	2	5.97	5.97	0.00	1.03	-23.17	2.92	48.29	1875	2	6.29	6.14	0.14	-1.54	34.68	4.51	72.42	1875
14.350	-0.61	2	6.20	6.20	0.00	1.07	-24.14	3.04	50.32	1875	2	6.46	6.33	0.14	-1.58	35.65	4.63	74.45	1875
14.775	-0.62	2	6.42	6.42	0.00	1.12	-25.11	3.17	52.35	1875	2	6.64	6.51	0.13	-1.63	36.63	4.75	76.47	1875
15.200	-0.63	2	6.65	6.65	0.00	1.16	-26.09	3.29	54.38	1875	2	6.81	6.69	0.12	-1.67	37.60	4.86	78.50	1875
15.625	-0.64	2	6.87	6.87	0.00	1.20	-27.06	3.41	56.41	1875	2	6.99	6.87	0.12	-1.71	38.57	4.98	80.52	1875
16.050	-0.65	2	7.10	7.10	0.00	1.25	-28.04	3.53	58.44	1875	2	7.17	7.06	0.11	-1.76	39.55	5.10	82.55	1875
16.475	-0.66	2	7.32	7.32	0.00	1.29	-29.01	3.66	60.47	1875	2	7.35	7.24	0.11	-1.80	40.52	5.22	84.57	1875
16.900	-0.68	2	7.55	7.55	0.00	1.33	-29.99	3.78	62.50	1875	2	7.52	7.42	0.10	-1.84	41.50	5.33	86.60	1875
17.325	-0.69	2	7.78	7.78	0.00	1.38	-30.96	3.90	64.53	1875	2	7.70	7.60	0.10	-1.89	42.47	5.45	88.62	1875
17.750	-0.70	2	8.01	8.01	0.00	1.42	-31.93	4.03	66.56	1875	2	7.87	7.78	0.09	-1.93	43.44	5.57	90.65	1875
18.175	-0.72	2	8.24	8.24	0.00	1.46	-32.91	4.15	68.59	1875	2	8.04	7.95	0.09	-1.97	44.42	5.69	92.68	1875
18.600	-0.74	2	8.48	8.48	0.00	1.51	-33.88	4.27	70.62	1875	2	8.21	8.12	0.09	-2.02	45.39	5.81	94.70	1875
19.025	-0.76	2	8.72	8.72	0.00	1.55	-34.86	4.39	72.65	1875	2	8.37	8.29	0.08	-2.06	46.37	5.93	96.73	1875
19.450	-0.78	2	8.96	8.96	0.00	1.59	-35.83	4.52	74.68	1875	2	8.53	8.46	0.08	-2.10	47.34	6.05	98.76	1875
19.875	-0.80	2	9.21	9.21	0.00	1.64	-36.80	4.64	76.72	1875	2	8.69	8.62	0.07	-2.15	48.32	6.17	100.78	1875
20.300	-0.82	2	9.45	9.45	0.00	1.68	-37.78	4.76	78.75	1875	2	8.85	8.78	0.07	-2.19	49.29	6.28	102.81	1875
		2	9.53	9.53	0.00	2.36	-43.66	5.16	68.43	1375	2	9.90	9.83	0.07	-3.08	56.96	6.80	89.35	1375
20.656	-0.84	2	9.73	9.73	0.00	2.41	-44.56	5.26	69.85	1375	2	10.05	9.98	0.07	-3.13	57.86	6.91	90.77	1375

21.013	-0.85	2	9.92	9.92	0.00	2.46	-45.47	5.37	71.27	1375	2	10.20	10.14	0.07	-3.18	58.77	7.01	92.18	1375
21.369	-0.87	2	10.12	10.12	0.00	2.51	-46.37	5.48	72.68	1375	2	10.35	10.29	0.06	-3.22	59.67	7.11	93.60	1375
21.725	-0.88	2	10.31	10.31	0.00	2.55	-47.27	5.59	74.10	1375	2	10.51	10.45	0.06	-3.27	60.58	7.22	95.01	1375
22.081	-0.89	2	10.49	10.49	0.00	2.60	-48.18	5.69	75.52	1375	2	10.67	10.61	0.06	-3.32	61.48	7.32	96.43	1375
22.438	-0.89	2	10.67	10.67	0.00	2.65	-49.08	5.80	76.94	1375	2	10.84	10.78	0.06	-3.37	62.39	7.43	97.84	1375
22.794	-0.89	2	10.84	10.84	0.00	2.70	-49.99	5.91	78.35	1375	2	11.01	10.96	0.06	-3.42	63.29	7.53	99.26	1375
23.150	-0.89	2	11.01	11.01	0.00	2.75	-50.89	6.01	79.77	1375	2	11.19	11.14	0.05	-3.47	64.19	7.64	100.67	1375
23.506	-0.88	2	11.17	11.17	0.00	2.80	-51.80	6.12	81.19	1375	2	11.37	11.32	0.05	-3.52	65.10	7.74	102.09	1375
23.863	-0.86	2	11.33	11.33	0.00	2.85	-52.70	6.23	82.61	1375	2	11.57	11.52	0.05	-3.57	66.00	7.85	103.51	1375
24.219	-0.85	2	11.48	11.48	0.00	2.90	-53.61	6.33	84.02	1375	2	11.76	11.71	0.05	-3.62	66.91	7.95	104.92	1375
24.575	-0.82	2	11.62	11.62	0.00	2.95	-54.51	6.44	85.44	1375	2	11.97	11.92	0.05	-3.66	67.81	8.06	106.34	1375
24.931	-0.80	2	11.76	11.76	0.00	2.99	-55.41	6.55	86.86	1375	2	12.17	12.13	0.05	-3.71	68.72	8.16	107.75	1375
25.288	-0.77	2	11.89	11.89	0.00	3.04	-56.32	6.65	88.28	1375	2	12.39	12.35	0.04	-3.76	69.62	8.27	109.17	1375
25.644	-0.73	2	12.02	12.02	0.00	3.09	-57.22	6.76	89.69	1375	2	12.61	12.57	0.04	-3.81	70.52	8.37	110.59	1375
26.000	-0.70	2	12.14	12.14	0.00	3.14	-58.13	6.87	91.11	1375	2	12.83	12.79	0.04	-3.86	71.43	8.48	112.00	1375
		2	11.55	11.55	0.00	1.70	-47.05	5.86	121.66	2375	2	10.56	10.52	0.04	-2.09	57.82	7.24	149.54	2375
26.500	-0.64	2	11.67	11.67	0.00	1.75	-48.22	6.00	124.66	2375	2	10.93	10.89	0.04	-2.13	58.98	7.38	152.54	2375
27.000	-0.58	2	11.78	11.78	0.00	1.79	-49.38	6.15	127.66	2375	2	11.31	11.27	0.04	-2.18	60.15	7.52	155.54	2375
27.500	-0.53	2	11.89	11.89	0.00	1.83	-50.54	6.29	130.67	2375	2	11.68	11.65	0.04	-2.22	61.31	7.67	158.54	2375
28.000	-0.47	2	12.00	12.00	0.00	1.87	-51.70	6.43	133.67	2375	2	12.06	12.02	0.03	-2.26	62.47	7.81	161.54	2375

▼ PHASE 3

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-12.13	0									1	0.00	0.00	0.00	-	-	0.00	0.00	1250
0.375	-12.47	0									1	0.28	0.24	0.05	-10.40	-8.08	0.28	3.18	1250
0.750	-12.82	0									1	0.57	0.47	0.09	-9.80	-5.17	0.57	6.35	1250
1.125	-13.17	0									1	0.84	0.71	0.14	-9.21	-2.26	0.84	9.53	1250
1.500	-13.51	0									1	1.12	0.94	0.18	-8.61	0.65	1.12	12.70	1250
1.900	-13.88	0									1	1.28	1.07	0.21	-7.98	2.47	1.28	14.34	1250
2.300	-14.24	0									1	1.43	1.19	0.24	-7.35	4.29	1.43	15.98	1250
		0									1	1.43	1.19	0.24	-7.35	2.35	1.43	15.98	1500
2.500	-14.40	0									1	1.50	1.25	0.26	-7.04	3.15	1.50	16.78	1500
3.100	-14.81	0									1	1.71	1.42	0.29	-6.12	5.52	1.71	19.17	1500
3.700	-15.06	0									1	1.91	1.60	0.31	-5.23	7.87	1.91	21.55	1500
4.100	-15.12	0									1	2.03	1.72	0.31	-4.67	9.40	2.03	23.14	1500
		0									1	2.11	1.79	0.31	-4.67	14.88	2.11	21.65	1000
4.761	-14.99	0									1	2.31	2.00	0.32	-3.81	17.94	2.31	24.06	1000
5.180	-14.75	0									1	2.44	2.12	0.32	-3.32	19.83	2.44	25.59	1000
5.600	-14.39	0									1	2.57	2.25	0.31	-2.86	21.68	2.57	27.11	1000
6.100	-13.80	0									1	2.71	2.41	0.31	-2.38	23.83	2.71	28.92	1000
6.600	-13.06	0									1	2.86	2.56	0.30	-1.96	25.92	2.86	30.74	1000
		3	0.00	0.00	0.00	-	-	0.00	0.00	1000	1	2.86	2.56	0.30	-1.96	25.92	2.86	30.74	1000
6.700	-12.90	3	0.77	0.77	0.00	-1.19	-1.89	0.06	0.77	1000	1	2.88	2.59	0.29	-1.89	26.32	2.88	31.10	1000
7.200	-12.01	3	4.61	4.61	0.00	0.23	-3.99	0.39	4.61	1000	1	3.03	2.74	0.28	-1.66	28.22	3.03	32.91	1000
		3	5.67	5.67	0.00	0.12	-2.72	0.34	5.67	1875	1	2.71	2.43	0.28	-1.58	18.54	2.71	40.43	1875
7.600	-11.23	3	9.58	9.58	0.00	0.20	-4.59	0.58	9.58	1875	1	2.82	2.54	0.28	-1.37	19.71	2.82	42.34	1875
8.100	-10.23	3	11.96	11.96	0.00	0.26	-5.74	0.72	11.96	1875	1	2.95	2.69	0.26	-1.14	21.13	2.95	44.71	1875
8.600	-9.22	3	14.35	14.35	0.00	0.31	-6.89	0.87	14.35	1875	1	3.08	2.83	0.25	-1.00	22.47	3.08	47.09	1875
9.100	-8.24	3	16.74	16.74	0.00	0.36	-8.03	1.01	16.74	1875	1	3.22	2.98	0.24	-1.05	23.62	3.22	49.47	1875
9.600	-7.33	2	15.66	15.66	0.00	0.41	-9.18	1.16	19.13	1875	1	3.35	3.12	0.23	-1.10	24.76	3.35	51.84	1875
9.700	-7.16	2	15.39	15.39	0.00	0.42	-9.41	1.19	19.61	1875	1	3.38	3.15	0.23	-1.11	24.99	3.38	52.32	1875
10.150	-6.43	2	14.24	14.24	0.00	0.46	-10.44	1.32	21.76	1875	1	3.50	3.28	0.22	-1.16	26.02	3.50	54.46	1875
10.600	-5.78	2	13.24	13.24	0.00	0.51	-11.47	1.45	23.91	1875	1	3.62	3.41	0.21	-1.20	27.06	3.62	56.60	1875
10.950	-5.33	2	12.56	12.56	0.00	0.55	-12.27	1.55	25.58	1875	1	3.71	3.51	0.20	-1.24	27.86	3.71	58.26	1875

11.300	-4.93	2	11.98	11.98	0.00	0.58	-13.08	1.65	27.25	1875	1	3.80	3.61	0.19	-1.27	28.66	3.80	59.93	1875
11.650	-4.58	2	11.49	11.49	0.00	0.62	-13.88	1.75	28.93	1875	1	3.90	3.71	0.18	-1.31	29.46	3.90	61.59	1875
12.000	-4.27	2	11.09	11.09	0.00	0.65	-14.68	1.85	30.60	1875	1	3.99	3.82	0.18	-1.35	30.26	3.99	63.26	1875
12.450	-3.94	2	10.68	10.68	0.00	0.70	-15.71	1.98	32.75	1875	1	4.11	3.95	0.17	-1.39	31.30	4.11	65.40	1875
12.500	-3.91	2	10.64	10.64	0.00	0.70	-15.83	2.00	32.99	1875	1	4.13	3.96	0.17	-1.40	31.41	4.13	65.64	1875
13.000	-3.62	2	10.34	10.34	0.00	0.75	-16.97	2.14	35.38	1875	1	4.26	4.10	0.16	-1.45	32.56	4.26	68.02	1875
13.500	-3.40	2	10.17	10.17	0.00	0.81	-18.12	2.28	37.77	1875	1	4.40	4.25	0.15	-1.50	33.70	4.40	70.40	1875
13.925	-3.26	2	10.11	10.11	0.00	0.85	-19.09	2.41	39.80	1875	1	4.51	4.37	0.14	-1.54	34.68	4.51	72.42	1875
14.350	-3.15	2	10.11	10.11	0.00	0.89	-20.07	2.53	41.83	1875	1	4.63	4.49	0.14	-1.58	35.65	4.63	74.45	1875
14.775	-3.08	2	10.18	10.18	0.00	0.94	-21.04	2.65	43.86	1875	1	4.75	4.62	0.13	-1.63	36.63	4.75	76.47	1875
15.200	-3.03	2	10.28	10.28	0.00	0.98	-22.01	2.78	45.89	1875	1	4.86	4.74	0.12	-1.67	37.60	4.86	78.50	1875
15.625	-2.99	2	10.43	10.43	0.00	1.02	-22.99	2.90	47.92	1875	1	4.98	4.86	0.12	-1.71	38.57	4.98	80.52	1875
16.050	-2.98	2	10.60	10.60	0.00	1.07	-23.96	3.02	49.95	1875	1	5.10	4.99	0.11	-1.76	39.55	5.10	82.55	1875
16.475	-2.98	2	10.80	10.80	0.00	1.11	-24.94	3.14	51.98	1875	1	5.22	5.11	0.11	-1.80	40.52	5.22	84.57	1875
16.900	-2.98	2	11.02	11.02	0.00	1.15	-25.91	3.27	54.01	1875	1	5.33	5.23	0.10	-1.84	41.50	5.33	86.60	1875
17.325	-3.00	2	11.25	11.25	0.00	1.20	-26.89	3.39	56.04	1875	1	5.45	5.35	0.10	-1.89	42.47	5.45	88.62	1875
17.750	-3.01	2	11.49	11.49	0.00	1.24	-27.86	3.51	58.07	1875	1	5.57	5.48	0.09	-1.93	43.44	5.57	90.65	1875
18.175	-3.04	2	11.73	11.73	0.00	1.28	-28.83	3.63	60.10	1875	1	5.69	5.60	0.09	-1.97	44.42	5.69	92.68	1875
18.600	-3.06	2	11.98	11.98	0.00	1.33	-29.81	3.76	62.13	1875	1	5.81	5.72	0.09	-2.02	45.39	5.81	94.70	1875
19.025	-3.08	2	12.22	12.22	0.00	1.37	-30.78	3.88	64.16	1875	1	5.93	5.85	0.08	-2.06	46.37	5.93	96.73	1875
19.450	-3.10	2	12.46	12.46	0.00	1.41	-31.76	4.00	66.19	1875	1	6.05	5.97	0.08	-2.10	47.34	6.05	98.76	1875
19.875	-3.12	2	12.70	12.70	0.00	1.45	-32.73	4.13	68.22	1875	1	6.17	6.09	0.07	-2.15	48.32	6.17	100.78	1875
20.300	-3.12	2	12.92	12.92	0.00	1.50	-33.71	4.25	70.26	1875	1	6.28	6.21	0.07	-2.19	49.29	6.28	102.81	1875
		2	11.79	11.79	0.00	2.10	-38.95	4.60	61.05	1375	1	6.80	6.73	0.07	-3.08	56.96	6.80	89.35	1375
20.656	-3.12	2	11.76	11.76	0.00	2.10	-38.80	4.58	60.82	1375	2	6.91	6.84	0.07	-3.13	57.86	6.91	90.77	1375
21.013	-3.12	2	11.72	11.72	0.00	2.09	-38.65	4.57	60.59	1375	2	7.09	7.03	0.07	-3.18	58.77	7.01	92.18	1375
21.369	-3.10	2	11.67	11.67	0.00	2.08	-38.51	4.55	60.36	1375	2	7.29	7.22	0.06	-3.22	59.67	7.11	93.60	1375
21.725	-3.07	2	11.61	11.61	0.00	2.07	-38.36	4.53	60.13	1375	2	7.50	7.43	0.06	-3.27	60.58	7.22	95.01	1375
22.081	-3.03	2	11.52	11.52	0.00	2.06	-38.21	4.51	59.89	1375	2	7.72	7.66	0.06	-3.32	61.48	7.32	96.43	1375
22.438	-2.98	2	11.43	11.43	0.00	2.06	-38.06	4.50	59.66	1375	2	7.96	7.90	0.06	-3.37	62.39	7.43	97.84	1375
22.794	-2.92	2	11.32	11.32	0.00	2.05	-37.92	4.48	59.43	1375	2	8.21	8.16	0.06	-3.42	63.29	7.53	99.26	1375
23.150	-2.85	2	11.19	11.19	0.00	2.04	-37.77	4.46	59.20	1375	2	8.48	8.43	0.05	-3.47	64.19	7.64	100.67	1375
23.506	-2.77	2	11.05	11.05	0.00	2.03	-37.62	4.44	58.97	1375	2	8.77	8.72	0.05	-3.52	65.10	7.74	102.09	1375
23.863	-2.68	2	10.89	10.89	0.00	2.02	-37.47	4.43	58.74	1375	2	9.07	9.02	0.05	-3.57	66.00	7.85	103.51	1375
24.219	-2.57	2	10.72	10.72	0.00	2.02	-37.33	4.41	58.51	1375	2	9.39	9.34	0.05	-3.62	66.91	7.95	104.92	1375
24.575	-2.46	2	10.53	10.53	0.00	2.01	-37.18	4.39	58.28	1375	2	9.72	9.67	0.05	-3.66	67.81	8.06	106.34	1375
24.931	-2.33	2	10.34	10.34	0.00	2.00	-37.03	4.38	58.04	1375	2	10.06	10.01	0.05	-3.71	68.72	8.16	107.75	1375
25.288	-2.20	2	10.12	10.12	0.00	1.99	-36.88	4.36	57.81	1375	2	10.41	10.37	0.04	-3.76	69.62	8.27	109.17	1375
25.644	-2.06	2	9.90	9.90	0.00	1.98	-36.74	4.34	57.58	1375	2	10.78	10.74	0.04	-3.81	70.52	8.37	110.59	1375
26.000	-1.92	2	9.68	9.68	0.00	1.98	-36.59	4.32	57.35	1375	2	11.15	11.11	0.04	-3.86	71.43	8.48	112.00	1375
		2	10.78	10.78	0.00	1.07	-29.62	3.69	76.58	2375	2	7.66	7.61	0.04	-2.09	57.82	7.24	149.54	2375
26.500	-1.71	2	10.53	10.53	0.00	1.11	-30.78	3.83	79.58	2375	2	8.39	8.35	0.04	-2.13	58.98	7.38	152.54	2375
27.000	-1.50	2	10.28	10.28	0.00	1.16	-31.94	3.98	82.58	2375	2	9.13	9.10	0.04	-2.18	60.15	7.52	155.54	2375
27.500	-1.29	2	10.03	10.03	0.00	1.20	-33.10	4.12	85.59	2375	2	9.87	9.84	0.04	-2.22	61.31	7.67	158.54	2375
28.000	-1.08	2	9.78	9.78	0.00	1.24	-34.26	4.26	88.59	2375	2	10.61	10.58	0.03	-2.26	62.47	7.81	161.54	2375

▼ PHASE 4

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-12.32	0									1	0.00	0.00	0.00	-	-	0.00	0.00	1250
0.375	-12.47	0									2	0.28	0.24	0.05	-12.47	-10.16	0.28	3.18	1250
0.750	-12.62	0									2	0.81	0.72	0.09	-12.82	-8.19	0.57	6.35	1250
1.125	-12.77	0									2	1.34	1.20	0.14	-13.17	-6.22	0.84	9.53	1250
1.500	-12.92	0									2	1.86	1.68	0.18	-13.51	-4.25	1.12	12.70	1250
1.900	-13.08	0									2	2.28	2.07	0.21	-13.88	-3.43	1.28	14.34	1250

計畫名稱：XDO Example 2

主　　題：連續壁 + 順打 3 階支撐 + 有效應力法

2.300	-13.23	0									2	2.69	2.45	0.24	-14.24	-2.59	1.43	15.98	1250
		0									2	2.94	2.70	0.24	-14.24	-4.53	1.43	15.98	1500
2.500	-13.29	0									2	3.17	2.91	0.26	-14.40	-4.21	1.50	16.78	1500
3.100	-13.40	0									2	3.82	3.53	0.29	-14.81	-3.17	1.71	19.17	1500
3.700	-13.39	0									2	4.41	4.11	0.31	-15.06	-1.96	1.91	21.55	1500
4.100	-13.29	0									2	4.77	4.45	0.31	-15.12	-1.05	2.03	23.14	1500
		0									2	3.93	3.62	0.31	-15.12	4.43	2.11	21.65	1000
4.761	-12.98	0									2	4.32	4.00	0.32	-14.99	6.76	2.31	24.06	1000
5.180	-12.69	0									2	4.50	4.18	0.32	-14.75	8.40	2.44	25.59	1000
5.600	-12.34	0									2	4.61	4.30	0.31	-14.39	10.16	2.57	27.11	1000
6.100	-11.86	0									2	4.65	4.34	0.31	-13.80	12.41	2.71	28.92	1000
6.600	-11.31	0									2	4.61	4.31	0.30	-13.06	14.82	2.86	30.74	1000
		3	0.00	0.00	0.00	-	-	0.00	0.00	1000	2	4.61	4.31	0.30	-13.06	14.82	2.86	30.74	1000
6.700	-11.19	1	0.06	0.06	0.00	-12.19	-12.90	0.06	0.77	1000	2	4.59	4.30	0.29	-12.90	15.32	2.88	31.10	1000
7.200	-10.54	2	3.14	3.14	0.00	-7.79	-12.01	0.39	4.61	1000	2	4.50	4.21	0.28	-12.01	17.87	3.03	32.91	1000
		2	2.92	2.92	0.00	-9.16	-12.01	0.34	5.67	1875	2	5.47	5.18	0.28	-12.01	8.11	2.71	40.43	1875
7.600	-9.97	2	7.20	7.20	0.00	-6.44	-11.23	0.58	9.58	1875	2	5.19	4.92	0.28	-11.23	9.84	2.82	42.34	1875
8.100	-9.21	2	10.06	10.06	0.00	-4.23	-10.23	0.72	11.96	1875	2	4.85	4.59	0.26	-10.23	12.05	2.95	44.71	1875
8.600	-8.44	2	12.89	12.89	0.00	-2.02	-9.22	0.87	14.35	1875	2	4.55	4.29	0.25	-9.22	14.25	3.08	47.09	1875
9.100	-7.67	2	15.67	15.67	0.00	0.15	-8.24	1.01	16.74	1875	2	4.29	4.05	0.24	-8.24	16.43	3.22	49.47	1875
9.600	-6.94	2	14.93	14.93	0.00	0.41	-9.18	1.16	19.13	1875	2	4.08	3.85	0.23	-7.33	18.53	3.35	51.84	1875
9.700	-6.80	2	14.72	14.72	0.00	0.42	-9.41	1.19	19.61	1875	2	4.05	3.82	0.23	-7.16	18.95	3.38	52.32	1875
10.150	-6.20	2	13.81	13.81	0.00	0.46	-10.44	1.32	21.76	1875	2	3.93	3.71	0.22	-6.43	20.75	3.50	54.46	1875
10.600	-5.65	2	13.00	13.00	0.00	0.51	-11.47	1.45	23.91	1875	2	3.85	3.64	0.21	-5.78	22.48	3.62	56.60	1875
10.950	-5.27	2	12.46	12.46	0.00	0.55	-12.27	1.55	25.58	1875	2	3.82	3.62	0.20	-5.33	23.77	3.71	58.26	1875
11.300	-4.93	2	11.98	11.98	0.00	0.58	-13.08	1.65	27.25	1875	2	3.81	3.62	0.19	-4.93	25.00	3.80	59.93	1875
11.650	-4.62	2	11.57	11.57	0.00	0.62	-13.88	1.75	28.93	1875	1	3.90	3.71	0.18	-4.58	26.19	3.90	61.59	1875
12.000	-4.35	2	11.22	11.22	0.00	0.65	-14.68	1.85	30.60	1875	1	3.99	3.82	0.18	-4.27	27.34	3.99	63.26	1875
12.450	-4.04	2	10.87	10.87	0.00	0.70	-15.71	1.98	32.75	1875	1	4.11	3.95	0.17	-3.94	28.75	4.11	65.40	1875
12.500	-4.01	2	10.84	10.84	0.00	0.70	-15.83	2.00	32.99	1875	1	4.13	3.96	0.17	-3.91	28.90	4.13	65.64	1875
13.000	-3.75	2	10.58	10.58	0.00	0.75	-16.97	2.14	35.38	1875	1	4.26	4.10	0.16	-3.62	30.38	4.26	68.02	1875
13.500	-3.53	2	10.42	10.42	0.00	0.81	-18.12	2.28	37.77	1875	1	4.40	4.25	0.15	-3.40	31.80	4.40	70.40	1875
13.925	-3.39	2	10.36	10.36	0.00	0.85	-19.09	2.41	39.80	1875	1	4.51	4.37	0.14	-3.26	32.96	4.51	72.42	1875
14.350	-3.28	2	10.36	10.36	0.00	0.89	-20.07	2.53	41.83	1875	1	4.63	4.49	0.14	-3.15	34.08	4.63	74.45	1875
14.775	-3.20	2	10.40	10.40	0.00	0.94	-21.04	2.65	43.86	1875	1	4.75	4.62	0.13	-3.08	35.18	4.75	76.47	1875
15.200	-3.14	2	10.49	10.49	0.00	0.98	-22.01	2.78	45.89	1875	1	4.86	4.74	0.12	-3.03	36.25	4.86	78.50	1875
15.625	-3.09	2	10.61	10.61	0.00	1.02	-22.99	2.90	47.92	1875	1	4.98	4.86	0.12	-2.99	37.29	4.98	80.52	1875
16.050	-3.07	2	10.77	10.77	0.00	1.07	-23.96	3.02	49.95	1875	1	5.10	4.99	0.11	-2.98	38.33	5.10	82.55	1875
16.475	-3.05	2	10.94	10.94	0.00	1.11	-24.94	3.14	51.98	1875	1	5.22	5.11	0.11	-2.98	39.35	5.22	84.57	1875
16.900	-3.05	2	11.14	11.14	0.00	1.15	-25.91	3.27	54.01	1875	1	5.33	5.23	0.10	-2.98	40.36	5.33	86.60	1875
17.325	-3.05	2	11.35	11.35	0.00	1.20	-26.89	3.39	56.04	1875	1	5.45	5.35	0.10	-3.00	41.36	5.45	88.62	1875
17.750	-3.06	2	11.57	11.57	0.00	1.24	-27.86	3.51	58.07	1875	1	5.57	5.48	0.09	-3.01	42.36	5.57	90.65	1875
18.175	-3.07	2	11.80	11.80	0.00	1.28	-28.83	3.63	60.10	1875	1	5.69	5.60	0.09	-3.04	43.36	5.69	92.68	1875
18.600	-3.09	2	12.03	12.03	0.00	1.33	-29.81	3.76	62.13	1875	1	5.81	5.72	0.09	-3.06	44.35	5.81	94.70	1875
19.025	-3.10	2	12.26	12.26	0.00	1.37	-30.78	3.88	64.16	1875	1	5.93	5.85	0.08	-3.08	45.35	5.93	96.73	1875
19.450	-3.11	2	12.49	12.49	0.00	1.41	-31.76	4.00	66.19	1875	1	6.05	5.97	0.08	-3.10	46.34	6.05	98.76	1875
19.875	-3.12	2	12.71	12.71	0.00	1.45	-32.73	4.13	68.22	1875	1	6.17	6.09	0.07	-3.12	47.35	6.17	100.78	1875
20.300	-3.13	2	12.93	12.93	0.00	1.50	-33.71	4.25	70.26	1875	1	6.28	6.21	0.07	-3.12	48.36	6.28	102.81	1875
		2	11.80	11.80	0.00	2.10	-38.95	4.60	61.05	1375	1	6.80	6.73	0.07	-3.12	56.91	6.80	89.35	1375
20.656	-3.13	2	11.77	11.77	0.00	2.10	-38.80	4.58	60.82	1375	2	6.91	6.84	0.07	-3.13	57.86	6.91	90.77	1375
21.013	-3.12	2	11.72	11.72	0.00	2.09	-38.65	4.57	60.59	1375	2	7.09	7.03	0.07	-3.18	58.77	7.01	92.18	1375
21.369	-3.10	2	11.67	11.67	0.00	2.08	-38.51	4.55	60.36	1375	2	7.29	7.23	0.06	-3.22	59.67	7.11	93.60	1375
21.725	-3.07	2	11.60	11.60	0.00	2.07	-38.36	4.53	60.13	1375	2	7.50	7.44	0.06	-3.27	60.58	7.22	95.01	1375
22.081	-3.03	2	11.52	11.52	0.00	2.06	-38.21	4.51	59.89	1375	2	7.73	7.67	0.06	-3.32	61.48	7.32	96.43	1375
22.438	-2.98	2	11.42	11.42	0.00	2.06	-38.06	4.50	59.66	1375	2	7.97	7.91	0.06	-3.37	62.39	7.43	97.84	1375
22.794	-2.92	2	11.31	11.31	0.00	2.05	-37.92	4.48	59.43	1375	2	8.22	8.16	0.06	-3.42	63.29	7.53	99.26	1375

23.150	-2.85	2	11.19	11.19	0.00	2.04	-37.77	4.46	59.20	1375	2	8.49	8.44	0.05	-3.47	64.19	7.64	100.67	1375
23.506	-2.77	2	11.04	11.04	0.00	2.03	-37.62	4.44	58.97	1375	2	8.78	8.72	0.05	-3.52	65.10	7.74	102.09	1375
23.863	-2.67	2	10.89	10.89	0.00	2.02	-37.47	4.43	58.74	1375	2	9.08	9.03	0.05	-3.57	66.00	7.85	103.51	1375
24.219	-2.57	2	10.72	10.72	0.00	2.02	-37.33	4.41	58.51	1375	2	9.39	9.34	0.05	-3.62	66.91	7.95	104.92	1375
24.575	-2.45	2	10.53	10.53	0.00	2.01	-37.18	4.39	58.28	1375	2	9.72	9.67	0.05	-3.66	67.81	8.06	106.34	1375
24.931	-2.33	2	10.33	10.33	0.00	2.00	-37.03	4.38	58.04	1375	2	10.06	10.02	0.05	-3.71	68.72	8.16	107.75	1375
25.288	-2.20	2	10.12	10.12	0.00	1.99	-36.88	4.36	57.81	1375	2	10.42	10.37	0.04	-3.76	69.62	8.27	109.17	1375
25.644	-2.06	2	9.90	9.90	0.00	1.98	-36.74	4.34	57.58	1375	2	10.78	10.74	0.04	-3.81	70.52	8.37	110.59	1375
26.000	-1.91	2	9.67	9.67	0.00	1.98	-36.59	4.32	57.35	1375	2	11.15	11.11	0.04	-3.86	71.43	8.48	112.00	1375
		2	10.78	10.78	0.00	1.07	-29.62	3.69	76.58	2375	2	7.66	7.62	0.04	-2.09	57.82	7.24	149.54	2375
26.500	-1.71	2	10.53	10.53	0.00	1.11	-30.78	3.83	79.58	2375	2	8.40	8.36	0.04	-2.13	58.98	7.38	152.54	2375
27.000	-1.50	2	10.28	10.28	0.00	1.16	-31.94	3.98	82.58	2375	2	9.14	9.10	0.04	-2.18	60.15	7.52	155.54	2375
27.500	-1.29	2	10.03	10.03	0.00	1.20	-33.10	4.12	85.59	2375	2	9.87	9.84	0.04	-2.22	61.31	7.67	158.54	2375
28.000	-1.08	2	9.78	9.78	0.00	1.24	-34.26	4.26	88.59	2375	2	10.61	10.58	0.03	-2.26	62.47	7.81	161.54	2375

▼ PHASE 5

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-8.77	0									1	0.00	0.00	0.00	-	-	0.00	0.00	1250
0.375	-9.78	0									3	3.18	3.13	0.05	-12.47	-10.16	0.28	3.18	1250
0.750	-10.79	0									2	3.10	3.00	0.09	-12.82	-8.19	0.57	6.35	1250
1.125	-11.81	0									2	2.54	2.41	0.14	-13.17	-6.22	0.84	9.53	1250
1.500	-12.82	0									2	1.98	1.81	0.18	-13.51	-4.25	1.12	12.70	1250
1.900	-13.92	0									1	1.28	1.07	0.21	-13.88	-3.43	1.28	14.34	1250
2.300	-15.01	0									1	1.43	1.19	0.24	-14.24	-2.59	1.43	15.98	1250
		0									1	1.43	1.19	0.24	-14.24	-4.53	1.43	15.98	1500
2.500	-15.55	0									1	1.50	1.25	0.26	-14.40	-4.21	1.50	16.78	1500
3.100	-17.12	0									1	1.71	1.42	0.29	-14.81	-3.17	1.71	19.17	1500
3.700	-18.61	0									1	1.91	1.60	0.31	-15.06	-1.96	1.91	21.55	1500
4.100	-19.54	0									1	2.03	1.72	0.31	-15.12	-1.05	2.03	23.14	1500
		0									1	2.11	1.79	0.31	-15.12	4.43	2.11	21.65	1000
4.761	-20.96	0									1	2.31	2.00	0.32	-14.99	6.76	2.31	24.06	1000
5.180	-21.78	0									1	2.44	2.12	0.32	-14.75	8.40	2.44	25.59	1000
5.600	-22.55	0									1	2.57	2.25	0.31	-14.39	10.16	2.57	27.11	1000
6.100	-23.39	0									1	2.71	2.41	0.31	-13.80	12.41	2.71	28.92	1000
6.600	-24.10	0									1	2.86	2.56	0.30	-13.06	14.82	2.86	30.74	1000
6.700	-24.21	0									1	2.88	2.59	0.29	-12.90	15.32	2.88	31.10	1000
7.200	-24.68	0									1	3.03	2.74	0.28	-12.01	17.87	3.03	32.91	1000
		0									1	2.71	2.43	0.28	-12.01	8.11	2.71	40.43	1875
7.600	-24.88	0									1	2.82	2.54	0.28	-11.23	9.84	2.82	42.34	1875
8.100	-24.88	0									1	2.95	2.69	0.26	-10.23	12.05	2.95	44.71	1875
8.600	-24.58	0									1	3.08	2.83	0.25	-9.22	14.25	3.08	47.09	1875
9.100	-23.99	0									1	3.22	2.98	0.24	-8.24	16.43	3.22	49.47	1875
9.600	-23.11	0									1	3.35	3.12	0.23	-7.33	18.53	3.35	51.84	1875
		3	0.00	0.00	0.00	-	-	0.00	0.00	1875	1	3.35	3.12	0.23	-7.33	18.53	3.35	51.84	1875
9.700	-22.91	3	0.98	0.98	0.00	-6.31	-6.80	0.06	0.98	1875	1	3.38	3.15	0.23	-7.16	18.95	3.38	52.32	1875
10.150	-21.85	3	5.37	5.37	0.00	-3.51	-6.20	0.32	5.37	1875	1	3.50	3.28	0.22	-6.43	20.75	3.50	54.46	1875
10.600	-20.63	3	9.75	9.75	0.00	-0.77	-5.65	0.59	9.75	1875	1	3.62	3.41	0.21	-5.78	22.48	3.62	56.60	1875
10.950	-19.59	3	11.43	11.43	0.00	0.24	-5.48	0.69	11.43	1875	1	3.71	3.51	0.20	-5.33	23.77	3.71	58.26	1875
11.300	-18.49	3	13.10	13.10	0.00	0.28	-6.28	0.79	13.10	1875	1	3.80	3.61	0.19	-4.93	25.00	3.80	59.93	1875
11.650	-17.35	3	14.77	14.77	0.00	0.32	-7.09	0.89	14.77	1875	1	3.90	3.71	0.18	-4.62	26.15	3.90	61.59	1875
12.000	-16.20	3	16.44	16.44	0.00	0.35	-7.89	0.99	16.44	1875	1	3.99	3.82	0.18	-4.35	27.26	3.99	63.26	1875
12.450	-14.72	3	18.59	18.59	0.00	0.40	-8.92	1.12	18.59	1875	1	4.11	3.95	0.17	-4.04	28.64	4.11	65.40	1875
12.500	-14.56	3	18.83	18.83	0.00	0.40	-9.04	1.14	18.83	1875	1	4.13	3.96	0.17	-4.01	28.79	4.13	65.64	1875
13.000	-12.99	3	21.22	21.22	0.00	0.45	-10.18	1.28	21.22	1875	1	4.26	4.10	0.16	-3.75	30.26	4.26	68.02	1875

13.500	-11.53	3	23.61	23.61	0.00	0.50	-11.33	1.43	23.61	1875	1	4.40	4.25	0.15	-3.53	31.67	4.40	70.40	1875
13.925	-10.40	2	22.08	22.08	0.00	0.55	-12.30	1.55	25.64	1875	1	4.51	4.37	0.14	-3.39	32.83	4.51	72.42	1875
14.350	-9.39	2	20.39	20.39	0.00	0.59	-13.28	1.67	27.67	1875	1	4.63	4.49	0.14	-3.28	33.95	4.63	74.45	1875
14.775	-8.50	2	18.93	18.93	0.00	0.63	-14.25	1.80	29.70	1875	1	4.75	4.62	0.13	-3.20	35.06	4.75	76.47	1875
15.200	-7.74	2	17.70	17.70	0.00	0.68	-15.22	1.92	31.73	1875	1	4.86	4.74	0.12	-3.14	36.14	4.86	78.50	1875
15.625	-7.09	2	16.68	16.68	0.00	0.72	-16.20	2.04	33.76	1875	1	4.98	4.86	0.12	-3.09	37.20	4.98	80.52	1875
16.050	-6.55	2	15.88	15.88	0.00	0.76	-17.17	2.16	35.79	1875	1	5.10	4.99	0.11	-3.07	38.24	5.10	82.55	1875
16.475	-6.12	2	15.27	15.27	0.00	0.81	-18.15	2.29	37.83	1875	1	5.22	5.11	0.11	-3.05	39.27	5.22	84.57	1875
16.900	-5.78	2	14.84	14.84	0.00	0.85	-19.12	2.41	39.86	1875	1	5.33	5.23	0.10	-3.05	40.30	5.33	86.60	1875
17.325	-5.52	2	14.56	14.56	0.00	0.89	-20.10	2.53	41.89	1875	1	5.45	5.35	0.10	-3.05	41.31	5.45	88.62	1875
17.750	-5.33	2	14.40	14.40	0.00	0.94	-21.07	2.66	43.92	1875	1	5.57	5.48	0.09	-3.06	42.32	5.57	90.65	1875
18.175	-5.19	2	14.36	14.36	0.00	0.98	-22.04	2.78	45.95	1875	1	5.69	5.60	0.09	-3.07	43.32	5.69	92.68	1875
18.600	-5.11	2	14.40	14.40	0.00	1.02	-23.02	2.90	47.98	1875	1	5.81	5.72	0.09	-3.09	44.33	5.81	94.70	1875
19.025	-5.06	2	14.50	14.50	0.00	1.07	-23.99	3.02	50.01	1875	1	5.93	5.85	0.08	-3.10	45.33	5.93	96.73	1875
19.450	-5.03	2	14.66	14.66	0.00	1.11	-24.97	3.15	52.04	1875	1	6.05	5.97	0.08	-3.11	46.33	6.05	98.76	1875
19.875	-5.02	2	14.84	14.84	0.00	1.15	-25.94	3.27	54.07	1875	1	6.17	6.09	0.07	-3.12	47.34	6.17	100.78	1875
20.300	-5.01	2	15.02	15.02	0.00	1.20	-26.91	3.39	56.10	1875	1	6.28	6.21	0.07	-3.13	48.35	6.28	102.81	1875
		2	12.87	12.87	0.00	1.68	-31.10	3.67	48.75	1375	1	6.80	6.73	0.07	-3.13	56.91	6.80	89.35	1375
20.656	-5.00	2	12.73	12.73	0.00	1.64	-30.44	3.60	47.71	1375	1	6.91	6.84	0.07	-3.13	57.86	6.91	90.77	1375
21.013	-4.98	2	12.57	12.57	0.00	1.61	-29.77	3.52	46.67	1375	1	7.01	6.94	0.07	-3.18	58.77	7.01	92.18	1375
21.369	-4.95	2	12.40	12.40	0.00	1.57	-29.11	3.44	45.62	1375	1	7.11	7.05	0.06	-3.22	59.67	7.11	93.60	1375
21.725	-4.90	2	12.21	12.21	0.00	1.54	-28.44	3.36	44.58	1375	1	7.22	7.16	0.06	-3.27	60.58	7.22	95.01	1375
22.081	-4.83	2	11.99	11.99	0.00	1.50	-27.78	3.28	43.54	1375	1	7.32	7.26	0.06	-3.32	61.48	7.32	96.43	1375
22.438	-4.75	2	11.75	11.75	0.00	1.47	-27.11	3.20	42.50	1375	1	7.43	7.37	0.06	-3.37	62.39	7.43	97.84	1375
22.794	-4.65	2	11.48	11.48	0.00	1.43	-26.45	3.12	41.46	1375	1	7.53	7.48	0.06	-3.42	63.29	7.53	99.26	1375
23.150	-4.53	2	11.19	11.19	0.00	1.39	-25.78	3.05	40.41	1375	1	7.64	7.58	0.05	-3.47	64.19	7.64	100.67	1375
23.506	-4.39	2	10.87	10.87	0.00	1.36	-25.12	2.97	39.37	1375	1	7.74	7.69	0.05	-3.52	65.10	7.74	102.09	1375
23.863	-4.23	2	10.52	10.52	0.00	1.32	-24.45	2.89	38.33	1375	1	7.85	7.80	0.05	-3.57	66.00	7.85	103.51	1375
24.219	-4.05	2	10.15	10.15	0.00	1.29	-23.79	2.81	37.29	1375	1	7.95	7.90	0.05	-3.62	66.91	7.95	104.92	1375
24.575	-3.86	2	9.75	9.75	0.00	1.25	-23.12	2.73	36.24	1375	1	8.06	8.01	0.05	-3.66	67.81	8.06	106.34	1375
24.931	-3.65	2	9.34	9.34	0.00	1.21	-22.46	2.65	35.20	1375	2	8.25	8.20	0.05	-3.71	68.72	8.16	107.75	1375
25.288	-3.43	2	8.91	8.91	0.00	1.18	-21.79	2.57	34.16	1375	2	8.72	8.68	0.04	-3.76	69.62	8.27	109.17	1375
25.644	-3.20	2	8.47	8.47	0.00	1.14	-21.13	2.50	33.12	1375	2	9.21	9.17	0.04	-3.81	70.52	8.37	110.59	1375
26.000	-2.96	2	8.01	8.01	0.00	1.11	-20.46	2.42	32.07	1375	2	9.71	9.67	0.04	-3.86	71.43	8.48	112.00	1375
		2	10.52	10.52	0.00	0.60	-16.57	2.06	42.83	2375	1	7.24	7.20	0.04	-2.09	57.82	7.24	149.54	2375
26.500	-2.62	2	9.96	9.96	0.00	0.64	-17.73	2.21	45.83	2375	1	7.38	7.34	0.04	-2.13	58.98	7.38	152.54	2375
27.000	-2.28	2	9.38	9.38	0.00	0.68	-18.89	2.35	48.83	2375	1	7.52	7.49	0.04	-2.18	60.15	7.52	155.54	2375
27.500	-1.93	2	8.81	8.81	0.00	0.73	-20.05	2.50	51.84	2375	2	8.35	8.31	0.04	-2.22	61.31	7.67	158.54	2375
28.000	-1.59	2	8.24	8.24	0.00	0.77	-21.21	2.64	54.84	2375	2	9.41	9.37	0.03	-2.26	62.47	7.81	161.54	2375

▼ PHASE 6

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-9.24	0									1	0.00	0.00	0.00	-	-	0.00	0.00	1250
0.375	-10.17	0									2	2.70	2.65	0.05	-12.10	-9.78	0.28	3.18	1250
0.750	-11.09	0									2	2.73	2.63	0.09	-12.82	-8.19	0.57	6.35	1250
1.125	-12.02	0									2	2.28	2.15	0.14	-13.17	-6.22	0.84	9.53	1250
1.500	-12.95	0									2	1.83	1.66	0.18	-13.51	-4.25	1.12	12.70	1250
1.900	-13.94	0									1	1.28	1.07	0.21	-13.92	-3.47	1.28	14.34	1250
2.300	-14.93	0									2	1.52	1.28	0.24	-15.01	-3.37	1.43	15.98	1250
		0									2	1.54	1.30	0.24	-15.01	-5.31	1.43	15.98	1500
2.500	-15.42	0									2	1.69	1.43	0.26	-15.55	-5.36	1.50	16.78	1500
3.100	-16.84	0									2	2.13	1.84	0.29	-17.12	-5.48	1.71	19.17	1500
3.700	-18.17	0									2	2.58	2.27	0.31	-18.61	-5.51	1.91	21.55	1500
4.100	-18.98	0									2	2.88	2.56	0.31	-19.54	-5.48	2.03	23.14	1500

計畫名稱：XDO Example 2

主　　題：連續壁 + 順打 3 階支撐 + 有效應力法

		0									2	2.67	2.36	0.31	-19.54	0.00	2.11	21.65	1000
4.761	-20.19	0									2	3.08	2.76	0.32	-20.96	0.79	2.31	24.06	1000
5.180	-20.88	0									2	3.34	3.03	0.32	-21.78	1.36	2.44	25.59	1000
5.600	-21.51	0									2	3.61	3.29	0.31	-22.55	2.00	2.57	27.11	1000
6.100	-22.19	0									2	3.92	3.61	0.31	-23.39	2.82	2.71	28.92	1000
6.600	-22.74	0									2	4.22	3.92	0.30	-24.10	3.78	2.86	30.74	1000
6.700	-22.83	0									2	4.27	3.98	0.29	-24.21	4.00	2.88	31.10	1000
7.200	-23.16	0									2	4.55	4.26	0.28	-24.68	5.20	3.03	32.91	1000
		0									2	5.56	5.28	0.28	-24.68	-4.56	2.71	40.43	1875
7.600	-23.28	0									2	5.82	5.54	0.28	-24.88	-3.80	2.82	42.34	1875
8.100	-23.22	0									2	6.05	5.79	0.26	-24.88	-2.60	2.95	44.71	1875
8.600	-22.94	0									2	6.16	5.91	0.25	-24.58	-1.11	3.08	47.09	1875
9.100	-22.45	0									2	6.11	5.87	0.24	-23.99	0.68	3.22	49.47	1875
9.600	-21.73	0									2	5.94	5.71	0.23	-23.11	2.75	3.35	51.84	1875
		3	0.00	0.00	0.00	-	-	0.00	0.00	1875	2	5.94	5.71	0.23	-23.11	2.75	3.35	51.84	1875
9.700	-21.56	1	0.06	0.06	0.00	-22.42	-22.91	0.06	0.98	1875	2	5.90	5.67	0.23	-22.91	3.20	3.38	52.32	1875
10.150	-20.69	2	3.18	3.18	0.00	-19.16	-21.85	0.32	5.37	1875	2	5.68	5.47	0.22	-21.85	5.33	3.50	54.46	1875
10.600	-19.65	2	7.92	7.92	0.00	-15.74	-20.63	0.59	9.75	1875	2	5.45	5.25	0.21	-20.63	7.63	3.62	56.60	1875
10.950	-18.75	2	9.86	9.86	0.00	-13.86	-19.59	0.69	11.43	1875	2	5.28	5.08	0.20	-19.59	9.51	3.71	58.26	1875
11.300	-17.78	2	11.79	11.79	0.00	-11.92	-18.49	0.79	13.10	1875	2	5.12	4.93	0.19	-18.49	11.45	3.80	59.93	1875
11.650	-16.77	2	13.70	13.70	0.00	-9.95	-17.35	0.89	14.77	1875	2	4.97	4.79	0.18	-17.35	13.42	3.90	61.59	1875
12.000	-15.74	2	15.59	15.59	0.00	-7.96	-16.20	0.99	16.44	1875	2	4.85	4.67	0.18	-16.20	15.41	3.99	63.26	1875
12.450	-14.40	2	17.98	17.98	0.00	-5.41	-14.72	1.12	18.59	1875	2	4.72	4.56	0.17	-14.72	17.96	4.11	65.40	1875
12.500	-14.25	2	18.25	18.25	0.00	-5.12	-14.56	1.14	18.83	1875	2	4.71	4.55	0.17	-14.56	18.25	4.13	65.64	1875
13.000	-12.80	2	20.86	20.86	0.00	-2.36	-12.99	1.28	21.22	1875	2	4.62	4.47	0.16	-12.99	21.01	4.26	68.02	1875
13.500	-11.43	2	23.43	23.43	0.00	0.30	-11.53	1.43	23.61	1875	2	4.58	4.43	0.15	-11.53	23.67	4.40	70.40	1875
13.925	-10.37	2	22.02	22.02	0.00	0.55	-12.30	1.55	25.64	1875	2	4.58	4.44	0.14	-10.40	25.81	4.51	72.42	1875
14.350	-9.41	2	20.42	20.42	0.00	0.59	-13.28	1.67	27.67	1875	1	4.63	4.49	0.14	-9.39	27.84	4.63	74.45	1875
14.775	-8.56	2	19.03	19.03	0.00	0.63	-14.25	1.80	29.70	1875	1	4.75	4.62	0.13	-8.50	29.75	4.75	76.47	1875
15.200	-7.81	2	17.84	17.84	0.00	0.68	-15.22	1.92	31.73	1875	1	4.86	4.74	0.12	-7.74	31.53	4.86	78.50	1875
15.625	-7.18	2	16.86	16.86	0.00	0.72	-16.20	2.04	33.76	1875	1	4.98	4.86	0.12	-7.09	33.20	4.98	80.52	1875
16.050	-6.66	2	16.08	16.08	0.00	0.76	-17.17	2.16	35.79	1875	1	5.10	4.99	0.11	-6.55	34.75	5.10	82.55	1875
16.475	-6.23	2	15.48	15.48	0.00	0.81	-18.15	2.29	37.83	1875	1	5.22	5.11	0.11	-6.12	36.20	5.22	84.57	1875
16.900	-5.89	2	15.04	15.04	0.00	0.85	-19.12	2.41	39.86	1875	1	5.33	5.23	0.10	-5.78	37.56	5.33	86.60	1875
17.325	-5.62	2	14.75	14.75	0.00	0.89	-20.10	2.53	41.89	1875	1	5.45	5.35	0.10	-5.52	38.84	5.45	88.62	1875
17.750	-5.43	2	14.58	14.58	0.00	0.94	-21.07	2.66	43.92	1875	1	5.57	5.48	0.09	-5.33	40.05	5.57	90.65	1875
18.175	-5.28	2	14.52	14.52	0.00	0.98	-22.04	2.78	45.95	1875	1	5.69	5.60	0.09	-5.19	41.20	5.69	92.68	1875
18.600	-5.19	2	14.55	14.55	0.00	1.02	-23.02	2.90	47.98	1875	1	5.81	5.72	0.09	-5.11	42.30	5.81	94.70	1875
19.025	-5.13	2	14.64	14.64	0.00	1.07	-23.99	3.02	50.01	1875	1	5.93	5.85	0.08	-5.06	43.37	5.93	96.73	1875
19.450	-5.09	2	14.77	14.77	0.00	1.11	-24.97	3.15	52.04	1875	1	6.05	5.97	0.08	-5.03	44.42	6.05	98.76	1875
19.875	-5.07	2	14.94	14.94	0.00	1.15	-25.94	3.27	54.07	1875	1	6.17	6.09	0.07	-5.02	45.45	6.17	100.78	1875
20.300	-5.05	2	15.11	15.11	0.00	1.20	-26.91	3.39	56.10	1875	1	6.28	6.21	0.07	-5.01	46.47	6.28	102.81	1875
		2	12.93	12.93	0.00	1.68	-31.10	3.67	48.75	1375	1	6.80	6.73	0.07	-5.01	55.03	6.80	89.35	1375
20.656	-5.03	2	12.78	12.78	0.00	1.64	-30.44	3.60	47.71	1375	1	6.91	6.84	0.07	-5.00	55.99	6.91	90.77	1375
21.013	-5.01	2	12.62	12.62	0.00	1.61	-29.77	3.52	46.67	1375	1	7.01	6.94	0.07	-4.98	56.97	7.01	92.18	1375
21.369	-4.97	2	12.44	12.44	0.00	1.57	-29.11	3.44	45.62	1375	1	7.11	7.05	0.06	-4.95	57.95	7.11	93.60	1375
21.725	-4.92	2	12.24	12.24	0.00	1.54	-28.44	3.36	44.58	1375	1	7.22	7.16	0.06	-4.90	58.95	7.22	95.01	1375
22.081	-4.85	2	12.02	12.02	0.00	1.50	-27.78	3.28	43.54	1375	1	7.32	7.26	0.06	-4.83	59.97	7.32	96.43	1375
22.438	-4.76	2	11.77	11.77	0.00	1.47	-27.11	3.20	42.50	1375	1	7.43	7.37	0.06	-4.75	61.01	7.43	97.84	1375
22.794	-4.66	2	11.50	11.50	0.00	1.43	-26.45	3.12	41.46	1375	1	7.53	7.48	0.06	-4.65	62.06	7.53	99.26	1375
23.150	-4.53	2	11.20	11.20	0.00	1.39	-25.78	3.05	40.41	1375	1	7.64	7.58	0.05	-4.53	63.14	7.64	100.67	1375
23.506	-4.39	2	10.87	10.87	0.00	1.36	-25.12	2.97	39.37	1375	1	7.74	7.69	0.05	-4.39	64.23	7.74	102.09	1375
23.863	-4.23	2	10.52	10.52	0.00	1.32	-24.45	2.89	38.33	1375	1	7.85	7.80	0.05	-4.23	65.34	7.85	103.51	1375
24.219	-4.05	2	10.15	10.15	0.00	1.29	-23.79	2.81	37.29	1375	1	7.95	7.90	0.05	-4.05	66.47	7.95	104.92	1375
24.575	-3.86	2	9.75	9.75	0.00	1.25	-23.12	2.73	36.24	1375	2	8.06	8.01	0.05	-3.86	67.62	8.06	106.34	1375
24.931	-3.65	2	9.34	9.34	0.00	1.21	-22.46	2.65	35.20	1375	2	8.25	8.21	0.05	-3.71	68.72	8.16	107.75	1375

25.288	-3.43	2	8.91	8.91	0.00	1.18	-21.79	2.57	34.16	1375	2	8.73	8.68	0.04	-3.76	69.62	8.27	109.17	1375
25.644	-3.20	2	8.46	8.46	0.00	1.14	-21.13	2.50	33.12	1375	2	9.22	9.17	0.04	-3.81	70.52	8.37	110.59	1375
26.000	-2.96	2	8.01	8.01	0.00	1.11	-20.46	2.42	32.07	1375	2	9.72	9.68	0.04	-3.86	71.43	8.48	112.00	1375
		2	10.51	10.51	0.00	0.60	-16.57	2.06	42.83	2375	2	7.24	7.20	0.04	-2.96	56.95	7.24	149.54	2375
26.500	-2.62	2	9.95	9.95	0.00	0.64	-17.73	2.21	45.83	2375	2	7.39	7.35	0.04	-2.62	58.50	7.38	152.54	2375
27.000	-2.27	2	9.37	9.37	0.00	0.68	-18.89	2.35	48.83	2375	2	7.53	7.49	0.04	-2.28	60.05	7.52	155.54	2375
27.500	-1.93	2	8.80	8.80	0.00	0.73	-20.05	2.50	51.84	2375	2	8.36	8.32	0.04	-2.22	61.31	7.67	158.54	2375
28.000	-1.58	2	8.23	8.23	0.00	0.77	-21.21	2.64	54.84	2375	2	9.42	9.38	0.03	-2.26	62.47	7.81	161.54	2375

▼ PHASE 7

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-5.11	0									1	0.00	0.00	0.00	-	-	0.00	0.00	1250
0.375	-6.58	0									3	3.18	3.13	0.05	-12.10	-9.78	0.28	3.18	1250
0.750	-8.05	0									3	6.35	6.26	0.09	-12.82	-8.19	0.57	6.35	1250
1.125	-9.52	0									2	5.41	5.27	0.14	-13.17	-6.22	0.84	9.53	1250
1.500	-10.99	0									2	4.27	4.10	0.18	-13.51	-4.25	1.12	12.70	1250
1.900	-12.58	0									2	2.98	2.77	0.21	-13.94	-3.49	1.28	14.34	1250
2.300	-14.18	0									2	2.46	2.22	0.24	-15.01	-3.37	1.43	15.98	1250
		0									2	2.67	2.43	0.24	-15.01	-5.31	1.43	15.98	1500
2.500	-14.98	0									2	2.35	2.09	0.26	-15.55	-5.36	1.50	16.78	1500
3.100	-17.39	0									1	1.71	1.42	0.29	-17.12	-5.48	1.71	19.17	1500
3.700	-19.80	0									1	1.91	1.60	0.31	-18.61	-5.51	1.91	21.55	1500
4.100	-21.41	0									1	2.03	1.72	0.31	-19.54	-5.48	2.03	23.14	1500
		0									1	2.11	1.79	0.31	-19.54	0.00	2.11	21.65	1000
4.761	-24.10	0									1	2.31	2.00	0.32	-20.96	0.79	2.31	24.06	1000
5.180	-25.84	0									1	2.44	2.12	0.32	-21.78	1.36	2.44	25.59	1000
5.600	-27.63	0									1	2.57	2.25	0.31	-22.55	2.00	2.57	27.11	1000
6.100	-29.82	0									1	2.71	2.41	0.31	-23.39	2.82	2.71	28.92	1000
6.600	-32.05	0									1	2.86	2.56	0.30	-24.10	3.78	2.86	30.74	1000
6.700	-32.49	0									1	2.88	2.59	0.29	-24.21	4.00	2.88	31.10	1000
7.200	-34.67	0									1	3.03	2.74	0.28	-24.68	5.20	3.03	32.91	1000
		0									1	2.71	2.43	0.28	-24.68	-4.56	2.71	40.43	1875
7.600	-36.35	0									1	2.82	2.54	0.28	-24.88	-3.80	2.82	42.34	1875
8.100	-38.35	0									1	2.95	2.69	0.26	-24.88	-2.60	2.95	44.71	1875
8.600	-40.23	0									1	3.08	2.83	0.25	-24.58	-1.11	3.08	47.09	1875
9.100	-41.96	0									1	3.22	2.98	0.24	-23.99	0.68	3.22	49.47	1875
9.600	-43.46	0									1	3.35	3.12	0.23	-23.11	2.75	3.35	51.84	1875
9.700	-43.72	0									1	3.38	3.15	0.23	-22.91	3.20	3.38	52.32	1875
10.150	-44.72	0									1	3.50	3.28	0.22	-21.85	5.33	3.50	54.46	1875
10.600	-45.39	0									1	3.62	3.41	0.21	-20.63	7.63	3.62	56.60	1875
10.950	-45.66	0									1	3.71	3.51	0.20	-19.59	9.51	3.71	58.26	1875
11.300	-45.70	0									1	3.80	3.61	0.19	-18.49	11.45	3.80	59.93	1875
11.650	-45.50	0									1	3.90	3.71	0.18	-17.35	13.42	3.90	61.59	1875
12.000	-45.04	0									1	3.99	3.82	0.18	-16.20	15.41	3.99	63.26	1875
12.450	-44.11	0									1	4.11	3.95	0.17	-14.72	17.96	4.11	65.40	1875
12.500	-43.98	0									1	4.13	3.96	0.17	-14.56	18.25	4.13	65.64	1875
		3	0.00	0.00	0.00	-	-	0.00	0.00	1875	1	4.13	3.96	0.17	-14.56	18.25	4.13	65.64	1875
13.000	-42.44	3	4.88	4.88	0.00	-10.35	-12.80	0.30	4.88	1875	1	4.26	4.10	0.16	-12.99	21.01	4.26	68.02	1875
13.500	-40.49	3	9.75	9.75	0.00	-6.55	-11.43	0.59	9.75	1875	1	4.40	4.25	0.15	-11.53	23.67	4.40	70.40	1875
13.925	-38.54	3	11.79	11.79	0.00	-4.46	-10.37	0.71	11.79	1875	1	4.51	4.37	0.14	-10.40	25.81	4.51	72.42	1875
14.350	-36.38	3	13.82	13.82	0.00	-2.48	-9.41	0.84	13.82	1875	1	4.63	4.49	0.14	-9.41	27.83	4.63	74.45	1875
14.775	-34.06	3	15.85	15.85	0.00	-0.61	-8.56	0.96	15.85	1875	1	4.75	4.62	0.13	-8.56	29.70	4.75	76.47	1875
15.200	-31.64	3	17.88	17.88	0.00	0.38	-8.58	1.08	17.88	1875	1	4.86	4.74	0.12	-7.81	31.46	4.86	78.50	1875
15.625	-29.15	3	19.91	19.91	0.00	0.42	-9.55	1.20	19.91	1875	1	4.98	4.86	0.12	-7.18	33.10	4.98	80.52	1875

16.050	-26.66	3	21.94	21.94	0.00	0.47	-10.53	1.33	21.94	1875	1	5.10	4.99	0.11	-6.66	34.65	5.10	82.55	1875
16.475	-24.22	3	23.97	23.97	0.00	0.51	-11.50	1.45	23.97	1875	1	5.22	5.11	0.11	-6.23	36.10	5.22	84.57	1875
16.900	-21.87	3	26.00	26.00	0.00	0.55	-12.47	1.57	26.00	1875	1	5.33	5.23	0.10	-5.89	37.45	5.33	86.60	1875
17.325	-19.65	3	28.03	28.03	0.00	0.60	-13.45	1.70	28.03	1875	1	5.45	5.35	0.10	-5.62	38.74	5.45	88.62	1875
17.750	-17.60	3	30.06	30.06	0.00	0.64	-14.42	1.82	30.06	1875	1	5.57	5.48	0.09	-5.43	39.95	5.57	90.65	1875
18.175	-15.74	3	32.09	32.09	0.00	0.68	-15.40	1.94	32.09	1875	1	5.69	5.60	0.09	-5.28	41.11	5.69	92.68	1875
18.600	-14.09	2	29.84	29.84	0.00	0.73	-16.37	2.06	34.12	1875	1	5.81	5.72	0.09	-5.19	42.22	5.81	94.70	1875
19.025	-12.64	2	27.33	27.33	0.00	0.77	-17.34	2.19	36.15	1875	1	5.93	5.85	0.08	-5.13	43.30	5.93	96.73	1875
19.450	-11.40	2	25.20	25.20	0.00	0.81	-18.32	2.31	38.18	1875	1	6.05	5.97	0.08	-5.09	44.36	6.05	98.76	1875
19.875	-10.34	2	23.43	23.43	0.00	0.86	-19.29	2.43	40.21	1875	1	6.17	6.09	0.07	-5.07	45.39	6.17	100.78	1875
20.300	-9.46	2	21.98	21.98	0.00	0.90	-20.27	2.55	42.24	1875	1	6.28	6.21	0.07	-5.05	46.43	6.28	102.81	1875
		2	17.52	17.52	0.00	1.27	-23.42	2.77	36.71	1375	1	6.80	6.73	0.07	-5.05	54.99	6.80	89.35	1375
20.656	-8.83	2	16.52	16.52	0.00	1.23	-22.71	2.68	35.60	1375	1	6.91	6.84	0.07	-5.03	55.96	6.91	90.77	1375
21.013	-8.30	2	15.64	15.64	0.00	1.19	-22.00	2.60	34.49	1375	1	7.01	6.94	0.07	-5.01	56.94	7.01	92.18	1375
21.369	-7.84	2	14.87	14.87	0.00	1.15	-21.29	2.52	33.37	1375	1	7.11	7.05	0.06	-4.97	57.93	7.11	93.60	1375
21.725	-7.44	2	14.18	14.18	0.00	1.11	-20.58	2.43	32.26	1375	1	7.22	7.16	0.06	-4.92	58.93	7.22	95.01	1375
22.081	-7.08	2	13.56	13.56	0.00	1.07	-19.87	2.35	31.15	1375	1	7.32	7.26	0.06	-4.85	59.95	7.32	96.43	1375
22.438	-6.77	2	13.00	13.00	0.00	1.04	-19.16	2.26	30.04	1375	1	7.43	7.37	0.06	-4.76	60.99	7.43	97.84	1375
22.794	-6.49	2	12.47	12.47	0.00	1.00	-18.45	2.18	28.92	1375	1	7.53	7.48	0.06	-4.66	62.05	7.53	99.26	1375
23.150	-6.22	2	11.97	11.97	0.00	0.96	-17.74	2.10	27.81	1375	1	7.64	7.58	0.05	-4.53	63.13	7.64	100.67	1375
23.506	-5.97	2	11.49	11.49	0.00	0.92	-17.03	2.01	26.70	1375	1	7.74	7.69	0.05	-4.39	64.23	7.74	102.09	1375
23.863	-5.72	2	11.01	11.01	0.00	0.88	-16.32	1.93	25.58	1375	1	7.85	7.80	0.05	-4.23	65.34	7.85	103.51	1375
24.219	-5.48	2	10.53	10.53	0.00	0.84	-15.61	1.84	24.47	1375	1	7.95	7.90	0.05	-4.05	66.47	7.95	104.92	1375
24.575	-5.23	2	10.06	10.06	0.00	0.81	-14.90	1.76	23.36	1375	1	8.06	8.01	0.05	-3.86	67.62	8.06	106.34	1375
24.931	-4.97	2	9.57	9.57	0.00	0.77	-14.19	1.68	22.25	1375	1	8.16	8.12	0.05	-3.71	68.72	8.16	107.75	1375
25.288	-4.71	2	9.07	9.07	0.00	0.73	-13.48	1.59	21.13	1375	1	8.27	8.23	0.04	-3.76	69.62	8.27	109.17	1375
25.644	-4.44	2	8.56	8.56	0.00	0.69	-12.77	1.51	20.02	1375	1	8.37	8.33	0.04	-3.81	70.52	8.37	110.59	1375
26.000	-4.16	2	8.04	8.04	0.00	0.65	-12.06	1.43	18.91	1375	1	8.48	8.44	0.04	-3.86	71.43	8.48	112.00	1375
		2	11.93	11.93	0.00	0.35	-9.77	1.22	25.25	2375	1	7.24	7.20	0.04	-2.96	56.95	7.24	149.54	2375
26.500	-3.76	2	11.06	11.06	0.00	0.37	-10.19	1.27	26.35	2375	1	7.47	7.43	0.04	-2.65	59.24	7.47	154.45	2375
27.000	-3.35	2	10.19	10.19	0.00	0.38	-10.61	1.32	27.44	2375	1	7.71	7.67	0.04	-2.33	61.52	7.71	159.35	2375
27.500	-2.94	2	9.31	9.31	0.00	0.40	-11.04	1.37	28.54	2375	1	7.94	7.91	0.04	-2.30	63.52	7.94	164.26	2375
28.000	-2.53	2	8.43	8.43	0.00	0.41	-11.46	1.43	29.64	2375	1	8.18	8.14	0.03	-2.37	65.42	8.18	169.17	2375

▼ PHASE 8

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-5.11	0									1	0.00	0.00	0.00	-	-	0.00	0.00	1250
0.375	-6.58	0									2	3.18	3.13	0.05	-8.89	-6.58	0.28	3.18	1250
0.750	-8.05	0									2	6.35	6.26	0.09	-12.68	-8.05	0.57	6.35	1250
1.125	-9.52	0									2	5.41	5.27	0.14	-13.17	-6.22	0.84	9.53	1250
1.500	-10.99	0									2	4.27	4.10	0.18	-13.51	-4.25	1.12	12.70	1250
1.900	-12.58	0									2	2.98	2.77	0.21	-13.94	-3.49	1.28	14.34	1250
2.300	-14.18	0									2	2.46	2.22	0.24	-15.01	-3.37	1.43	15.98	1250
		0									2	2.67	2.43	0.24	-15.01	-5.31	1.43	15.98	1500
2.500	-14.98	0									2	2.35	2.09	0.26	-15.55	-5.36	1.50	16.78	1500
3.100	-17.39	0									2	1.71	1.42	0.29	-17.39	-5.75	1.71	19.17	1500
3.700	-19.80	0									2	1.91	1.60	0.31	-19.80	-6.70	1.91	21.55	1500
4.100	-21.41	0									2	2.03	1.72	0.31	-21.41	-7.34	2.03	23.14	1500
		0									2	2.11	1.79	0.31	-21.41	-1.87	2.11	21.65	1000
4.761	-24.10	0									2	2.31	2.00	0.32	-24.10	-2.35	2.31	24.06	1000
5.180	-25.84	0									2	2.44	2.12	0.32	-25.84	-2.69	2.44	25.59	1000
5.600	-27.63	0									2	2.57	2.25	0.31	-27.63	-3.08	2.57	27.11	1000
6.100	-29.82	0									2	2.71	2.41	0.31	-29.82	-3.61	2.71	28.92	1000
6.600	-32.05	0									2	2.86	2.56	0.30	-32.05	-4.17	2.86	30.74	1000

6.700	-32.49	0									2	2.88	2.59	0.29	-32.49	-4.27	2.88	31.10	1000
7.200	-34.67	0									2	3.03	2.74	0.28	-34.67	-4.79	3.03	32.91	1000
		0									2	2.71	2.43	0.28	-34.67	-14.55	2.71	40.43	1875
7.600	-36.35	0									2	2.82	2.54	0.28	-36.35	-15.27	2.82	42.34	1875
8.100	-38.35	0									2	2.95	2.69	0.26	-38.35	-16.08	2.95	44.71	1875
8.600	-40.23	0									2	3.08	2.83	0.25	-40.23	-16.76	3.08	47.09	1875
9.100	-41.96	0									2	3.22	2.98	0.24	-41.96	-17.29	3.22	49.47	1875
9.600	-43.46	0									2	3.35	3.12	0.23	-43.46	-17.59	3.35	51.84	1875
9.700	-43.72	0									2	3.38	3.15	0.23	-43.72	-17.61	3.38	52.32	1875
10.150	-44.72	0									2	3.50	3.28	0.22	-44.72	-17.54	3.50	54.46	1875
10.600	-45.39	0									2	3.62	3.41	0.21	-45.39	-17.14	3.62	56.60	1875
10.950	-45.66	0									2	3.71	3.51	0.20	-45.66	-16.57	3.71	58.26	1875
11.300	-45.70	0									2	3.80	3.61	0.19	-45.70	-15.77	3.80	59.93	1875
11.650	-45.50	0									2	3.90	3.71	0.18	-45.50	-14.72	3.90	61.59	1875
12.000	-45.04	0									2	3.99	3.82	0.18	-45.04	-13.43	3.99	63.26	1875
12.450	-44.11	0									2	4.11	3.95	0.17	-44.11	-11.42	4.11	65.40	1875
12.500	-43.98	0									2	4.13	3.96	0.17	-43.98	-11.17	4.13	65.64	1875
		3	0.00	0.00	0.00	-	-	0.00	0.00	1875	2	4.13	3.96	0.17	-43.98	-11.17	4.13	65.64	1875
13.000	-42.44	2	4.88	4.88	0.00	-40.00	-42.44	0.30	4.88	1875	2	4.26	4.10	0.16	-42.44	-8.44	4.26	68.02	1875
13.500	-40.49	2	9.75	9.75	0.00	-35.60	-40.49	0.59	9.75	1875	2	4.40	4.25	0.15	-40.49	-5.29	4.40	70.40	1875
13.925	-38.54	2	11.79	11.79	0.00	-32.64	-38.54	0.71	11.79	1875	2	4.51	4.37	0.14	-38.54	-2.32	4.51	72.42	1875
14.350	-36.38	2	13.82	13.82	0.00	-29.46	-36.38	0.84	13.82	1875	2	4.63	4.49	0.14	-36.38	0.85	4.63	74.45	1875
14.775	-34.06	2	15.85	15.85	0.00	-26.12	-34.06	0.96	15.85	1875	2	4.75	4.62	0.13	-34.06	4.19	4.75	76.47	1875
15.200	-31.64	2	17.88	17.88	0.00	-22.68	-31.64	1.08	17.88	1875	2	4.86	4.74	0.12	-31.64	7.63	4.86	78.50	1875
15.625	-29.15	2	19.91	19.91	0.00	-19.18	-29.15	1.20	19.91	1875	2	4.98	4.86	0.12	-29.15	11.14	4.98	80.52	1875
16.050	-26.66	2	21.94	21.94	0.00	-15.67	-26.66	1.33	21.94	1875	2	5.10	4.99	0.11	-26.66	14.64	5.10	82.55	1875
16.475	-24.22	2	23.97	23.97	0.00	-12.21	-24.22	1.45	23.97	1875	2	5.22	5.11	0.11	-24.22	18.10	5.22	84.57	1875
16.900	-21.87	2	26.00	26.00	0.00	-8.84	-21.87	1.57	26.00	1875	2	5.33	5.23	0.10	-21.87	21.47	5.33	86.60	1875
17.325	-19.65	2	28.03	28.03	0.00	-5.61	-19.65	1.70	28.03	1875	2	5.45	5.35	0.10	-19.65	24.70	5.45	88.62	1875
17.750	-17.60	2	30.06	30.06	0.00	-2.54	-17.60	1.82	30.06	1875	2	5.57	5.48	0.09	-17.60	27.77	5.57	90.65	1875
18.175	-15.74	2	32.09	32.09	0.00	0.34	-15.74	1.94	32.09	1875	2	5.69	5.60	0.09	-15.74	30.65	5.69	92.68	1875
18.600	-14.09	2	29.84	29.84	0.00	0.73	-16.37	2.06	34.12	1875	2	5.81	5.72	0.09	-14.09	33.33	5.81	94.70	1875
19.025	-12.64	2	27.33	27.33	0.00	0.77	-17.34	2.19	36.15	1875	2	5.93	5.85	0.08	-12.64	35.79	5.93	96.73	1875
19.450	-11.40	2	25.20	25.20	0.00	0.81	-18.32	2.31	38.18	1875	2	6.05	5.97	0.08	-11.40	38.05	6.05	98.76	1875
19.875	-10.34	2	23.43	23.43	0.00	0.86	-19.29	2.43	40.21	1875	2	6.17	6.09	0.07	-10.34	40.12	6.17	100.78	1875
20.300	-9.46	2	21.98	21.98	0.00	0.90	-20.27	2.55	42.24	1875	2	6.28	6.21	0.07	-9.46	42.02	6.28	102.81	1875
		2	17.52	17.52	0.00	1.27	-23.42	2.77	36.71	1375	2	6.80	6.73	0.07	-9.46	50.58	6.80	89.35	1375
20.656	-8.83	2	16.52	16.52	0.00	1.23	-22.71	2.68	35.60	1375	2	6.91	6.84	0.07	-8.83	52.16	6.91	90.77	1375
21.013	-8.30	2	15.64	15.64	0.00	1.19	-22.00	2.60	34.49	1375	2	7.01	6.94	0.07	-8.30	53.65	7.01	92.18	1375
21.369	-7.84	2	14.87	14.87	0.00	1.15	-21.29	2.52	33.37	1375	2	7.11	7.05	0.06	-7.84	55.06	7.11	93.60	1375
21.725	-7.44	2	14.18	14.18	0.00	1.11	-20.58	2.43	32.26	1375	2	7.22	7.16	0.06	-7.44	56.42	7.22	95.01	1375
22.081	-7.08	2	13.56	13.56	0.00	1.07	-19.87	2.35	31.15	1375	2	7.32	7.26	0.06	-7.08	57.72	7.32	96.43	1375
22.438	-6.77	2	13.00	13.00	0.00	1.04	-19.16	2.26	30.04	1375	2	7.43	7.37	0.06	-6.77	58.99	7.43	97.84	1375
22.794	-6.49	2	12.47	12.47	0.00	1.00	-18.45	2.18	28.92	1375	2	7.53	7.48	0.06	-6.49	60.22	7.53	99.26	1375
23.150	-6.22	2	11.97	11.97	0.00	0.96	-17.74	2.10	27.81	1375	2	7.64	7.58	0.05	-6.22	61.44	7.64	100.67	1375
23.506	-5.97	2	11.49	11.49	0.00	0.92	-17.03	2.01	26.70	1375	2	7.74	7.69	0.05	-5.97	62.65	7.74	102.09	1375
23.863	-5.72	2	11.01	11.01	0.00	0.88	-16.32	1.93	25.58	1375	2	7.85	7.80	0.05	-5.72	63.85	7.85	103.51	1375
24.219	-5.48	2	10.53	10.53	0.00	0.84	-15.61	1.84	24.47	1375	2	7.95	7.90	0.05	-5.48	65.05	7.95	104.92	1375
24.575	-5.23	2	10.06	10.06	0.00	0.81	-14.90	1.76	23.36	1375	2	8.06	8.01	0.05	-5.23	66.25	8.06	106.34	1375
24.931	-4.97	2	9.57	9.57	0.00	0.77	-14.19	1.68	22.25	1375	2	8.16	8.12	0.05	-4.97	67.46	8.16	107.75	1375
25.288	-4.71	2	9.07	9.07	0.00	0.73	-13.48	1.59	21.13	1375	2	8.27	8.23	0.04	-4.71	68.67	8.27	109.17	1375
25.644	-4.44	2	8.56	8.56	0.00	0.69	-12.77	1.51	20.02	1375	2	8.37	8.33	0.04	-4.44	69.90	8.37	110.59	1375
26.000	-4.16	2	8.04	8.04	0.00	0.65	-12.06	1.43	18.91	1375	2	8.48	8.44	0.04	-4.16	71.13	8.48	112.00	1375
		2	11.93	11.93	0.00	0.35	-9.77	1.22	25.25	2375	2	7.24	7.20	0.04	-4.16	55.76	7.24	149.54	2375
26.500	-3.76	2	11.06	11.06	0.00	0.37	-10.19	1.27	26.35	2375	2	7.47	7.43	0.04	-3.76	58.13	7.47	154.45	2375
27.000	-3.35	2	10.19	10.19	0.00	0.38	-10.61	1.32	27.44	2375	2	7.71	7.67	0.04	-3.35	60.50	7.71	159.35	2375

27.500	-2.94	2	9.31	9.31	0.00	0.40	-11.04	1.37	28.54	2375	2	7.94	7.91	0.04	-2.94	62.88	7.94	164.26	2375
28.000	-2.53	2	8.43	8.43	0.00	0.41	-11.46	1.43	29.64	2375	2	8.18	8.14	0.03	-2.53	65.25	8.18	169.17	2375

▼ PHASE 9

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-4.27	0									1	0.00	0.00	0.00	-	-	0.00	0.00	1250
0.375	-6.15	0									3	3.18	3.13	0.05	-8.89	-6.58	0.28	3.18	1250
0.750	-8.04	0									3	6.35	6.26	0.09	-12.68	-8.05	0.57	6.35	1250
1.125	-9.93	0									2	4.89	4.75	0.14	-13.17	-6.22	0.84	9.53	1250
1.500	-11.83	0									2	3.23	3.05	0.18	-13.51	-4.25	1.12	12.70	1250
1.900	-13.86	0									2	1.38	1.16	0.21	-13.94	-3.49	1.28	14.34	1250
2.300	-15.91	0									1	1.43	1.19	0.24	-15.01	-3.37	1.43	15.98	1250
		0									1	1.43	1.19	0.24	-15.01	-5.31	1.43	15.98	1500
2.500	-16.93	0									1	1.50	1.25	0.26	-15.55	-5.36	1.50	16.78	1500
3.100	-19.98	0									1	1.71	1.42	0.29	-17.39	-5.75	1.71	19.17	1500
3.700	-23.01	0									1	1.91	1.60	0.31	-19.80	-6.70	1.91	21.55	1500
4.100	-25.01	0									1	2.03	1.72	0.31	-21.41	-7.34	2.03	23.14	1500
		0									1	2.11	1.79	0.31	-21.41	-1.87	2.11	21.65	1000
4.761	-28.29	0									1	2.31	2.00	0.32	-24.10	-2.35	2.31	24.06	1000
5.180	-30.36	0									1	2.44	2.12	0.32	-25.84	-2.69	2.44	25.59	1000
5.600	-32.43	0									1	2.57	2.25	0.31	-27.63	-3.08	2.57	27.11	1000
6.100	-34.92	0									1	2.71	2.41	0.31	-29.82	-3.61	2.71	28.92	1000
6.600	-37.34	0									1	2.86	2.56	0.30	-32.05	-4.17	2.86	30.74	1000
6.700	-37.81	0									1	2.88	2.59	0.29	-32.49	-4.27	2.88	31.10	1000
7.200	-40.05	0									1	3.03	2.74	0.28	-34.67	-4.79	3.03	32.91	1000
		0									1	2.71	2.43	0.28	-34.67	-14.55	2.71	40.43	1875
7.600	-41.69	0									1	2.82	2.54	0.28	-36.35	-15.27	2.82	42.34	1875
8.100	-43.49	0									1	2.95	2.69	0.26	-38.35	-16.08	2.95	44.71	1875
8.600	-44.98	0									1	3.08	2.83	0.25	-40.23	-16.76	3.08	47.09	1875
9.100	-46.13	0									1	3.22	2.98	0.24	-41.96	-17.29	3.22	49.47	1875
9.600	-46.94	0									1	3.35	3.12	0.23	-43.46	-17.59	3.35	51.84	1875
9.700	-47.06	0									1	3.38	3.15	0.23	-43.72	-17.61	3.38	52.32	1875
10.150	-47.43	0									1	3.50	3.28	0.22	-44.72	-17.54	3.50	54.46	1875
10.600	-47.48	0									1	3.62	3.41	0.21	-45.39	-17.14	3.62	56.60	1875
10.950	-47.31	0									1	3.71	3.51	0.20	-45.66	-16.57	3.71	58.26	1875
11.300	-46.92	0									1	3.80	3.61	0.19	-45.70	-15.77	3.80	59.93	1875
11.650	-46.34	0									1	3.90	3.71	0.18	-45.50	-14.72	3.90	61.59	1875
12.000	-45.57	0									1	3.99	3.82	0.18	-45.04	-13.43	3.99	63.26	1875
12.450	-44.30	0									1	4.11	3.95	0.17	-44.11	-11.42	4.11	65.40	1875
12.500	-44.14	0									1	4.13	3.96	0.17	-43.98	-11.17	4.13	65.64	1875
		3	0.00	0.00	0.00	-	-	0.00	0.00	1875	1	4.13	3.96	0.17	-43.98	-11.17	4.13	65.64	1875
13.000	-42.35	2	4.71	4.71	0.00	-40.00	-42.44	0.30	4.88	1875	2	4.43	4.28	0.16	-42.44	-8.44	4.26	68.02	1875
13.500	-40.23	2	9.27	9.27	0.00	-35.60	-40.49	0.59	9.75	1875	2	4.88	4.73	0.15	-40.49	-5.29	4.40	70.40	1875
13.925	-38.20	2	11.14	11.14	0.00	-32.64	-38.54	0.71	11.79	1875	2	5.16	5.02	0.14	-38.54	-2.32	4.51	72.42	1875
14.350	-35.99	2	13.09	13.09	0.00	-29.46	-36.38	0.84	13.82	1875	2	5.36	5.22	0.14	-36.38	0.85	4.63	74.45	1875
14.775	-33.66	2	15.09	15.09	0.00	-26.12	-34.06	0.96	15.85	1875	2	5.50	5.37	0.13	-34.06	4.19	4.75	76.47	1875
15.200	-31.24	2	17.14	17.14	0.00	-22.68	-31.64	1.08	17.88	1875	2	5.60	5.48	0.12	-31.64	7.63	4.86	78.50	1875
15.625	-28.78	2	19.21	19.21	0.00	-19.18	-29.15	1.20	19.91	1875	2	5.68	5.56	0.12	-29.15	11.14	4.98	80.52	1875
16.050	-26.33	2	21.31	21.31	0.00	-15.67	-26.66	1.33	21.94	1875	2	5.73	5.62	0.11	-26.66	14.64	5.10	82.55	1875
16.475	-23.93	2	23.42	23.42	0.00	-12.21	-24.22	1.45	23.97	1875	2	5.77	5.66	0.11	-24.22	18.10	5.22	84.57	1875
16.900	-21.62	2	25.53	25.53	0.00	-8.84	-21.87	1.57	26.00	1875	2	5.81	5.70	0.10	-21.87	21.47	5.33	86.60	1875
17.325	-19.45	2	27.64	27.64	0.00	-5.61	-19.65	1.70	28.03	1875	2	5.84	5.75	0.10	-19.65	24.70	5.45	88.62	1875
17.750	-17.43	2	29.75	29.75	0.00	-2.54	-17.60	1.82	30.06	1875	2	5.89	5.79	0.09	-17.60	27.77	5.57	90.65	1875
18.175	-15.61	2	31.85	31.85	0.00	0.34	-15.74	1.94	32.09	1875	2	5.93	5.84	0.09	-15.74	30.65	5.69	92.68	1875

18.600	-13.99	2	29.66	29.66	0.00	0.73	-16.37	2.06	34.12	1875	2	5.99	5.90	0.09	-14.09	33.33	5.81	94.70	1875
19.025	-12.57	2	27.20	27.20	0.00	0.77	-17.34	2.19	36.15	1875	2	6.05	5.97	0.08	-12.64	35.79	5.93	96.73	1875
19.450	-11.35	2	25.12	25.12	0.00	0.81	-18.32	2.31	38.18	1875	2	6.13	6.05	0.08	-11.40	38.05	6.05	98.76	1875
19.875	-10.32	2	23.39	23.39	0.00	0.86	-19.29	2.43	40.21	1875	2	6.21	6.13	0.07	-10.34	40.12	6.17	100.78	1875
20.300	-9.45	2	21.97	21.97	0.00	0.90	-20.27	2.55	42.24	1875	2	6.30	6.23	0.07	-9.46	42.02	6.28	102.81	1875
		2	17.51	17.51	0.00	1.27	-23.42	2.77	36.71	1375	2	6.81	6.74	0.07	-9.46	50.58	6.80	89.35	1375
20.656	-8.84	2	16.52	16.52	0.00	1.23	-22.71	2.68	35.60	1375	1	6.91	6.84	0.07	-8.83	52.16	6.91	90.77	1375
21.013	-8.31	2	15.66	15.66	0.00	1.19	-22.00	2.60	34.49	1375	1	7.01	6.94	0.07	-8.30	53.65	7.01	92.18	1375
21.369	-7.86	2	14.90	14.90	0.00	1.15	-21.29	2.52	33.37	1375	1	7.11	7.05	0.06	-7.84	55.06	7.11	93.60	1375
21.725	-7.46	2	14.22	14.22	0.00	1.11	-20.58	2.43	32.26	1375	1	7.22	7.16	0.06	-7.44	56.42	7.22	95.01	1375
22.081	-7.11	2	13.60	13.60	0.00	1.07	-19.87	2.35	31.15	1375	1	7.32	7.26	0.06	-7.08	57.72	7.32	96.43	1375
22.438	-6.80	2	13.04	13.04	0.00	1.04	-19.16	2.26	30.04	1375	1	7.43	7.37	0.06	-6.77	58.99	7.43	97.84	1375
22.794	-6.52	2	12.51	12.51	0.00	1.00	-18.45	2.18	28.92	1375	1	7.53	7.48	0.06	-6.49	60.22	7.53	99.26	1375
23.150	-6.25	2	12.01	12.01	0.00	0.96	-17.74	2.10	27.81	1375	1	7.64	7.58	0.05	-6.22	61.44	7.64	100.67	1375
23.506	-6.00	2	11.53	11.53	0.00	0.92	-17.03	2.01	26.70	1375	1	7.74	7.69	0.05	-5.97	62.65	7.74	102.09	1375
23.863	-5.75	2	11.05	11.05	0.00	0.88	-16.32	1.93	25.58	1375	1	7.85	7.80	0.05	-5.72	63.85	7.85	103.51	1375
24.219	-5.51	2	10.57	10.57	0.00	0.84	-15.61	1.84	24.47	1375	1	7.95	7.90	0.05	-5.48	65.05	7.95	104.92	1375
24.575	-5.25	2	10.09	10.09	0.00	0.81	-14.90	1.76	23.36	1375	1	8.06	8.01	0.05	-5.23	66.25	8.06	106.34	1375
24.931	-5.00	2	9.60	9.60	0.00	0.77	-14.19	1.68	22.25	1375	1	8.16	8.12	0.05	-4.97	67.46	8.16	107.75	1375
25.288	-4.73	2	9.10	9.10	0.00	0.73	-13.48	1.59	21.13	1375	1	8.27	8.23	0.04	-4.71	68.67	8.27	109.17	1375
25.644	-4.45	2	8.58	8.58	0.00	0.69	-12.77	1.51	20.02	1375	1	8.37	8.33	0.04	-4.44	69.90	8.37	110.59	1375
26.000	-4.17	2	8.06	8.06	0.00	0.65	-12.06	1.43	18.91	1375	1	8.48	8.44	0.04	-4.16	71.13	8.48	112.00	1375
		2	11.96	11.96	0.00	0.35	-9.77	1.22	25.25	2375	1	7.24	7.20	0.04	-4.16	55.76	7.24	149.54	2375
26.500	-3.77	2	11.09	11.09	0.00	0.37	-10.19	1.27	26.35	2375	1	7.47	7.43	0.04	-3.76	58.13	7.47	154.45	2375
27.000	-3.36	2	10.21	10.21	0.00	0.38	-10.61	1.32	27.44	2375	1	7.71	7.67	0.04	-3.35	60.50	7.71	159.35	2375
27.500	-2.95	2	9.32	9.32	0.00	0.40	-11.04	1.37	28.54	2375	1	7.94	7.91	0.04	-2.94	62.88	7.94	164.26	2375
28.000	-2.53	2	8.43	8.43	0.00	0.41	-11.46	1.43	29.64	2375	2	8.18	8.14	0.03	-2.53	65.25	8.18	169.17	2375

▼ PHASE 10

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-4.27	0									1	0.00	0.00	0.00	-	-	0.00	0.00	1250
0.375	-6.15	0									2	3.18	3.13	0.05	-8.47	-6.15	0.28	3.18	1250
0.750	-8.04	0									2	6.35	6.26	0.09	-12.67	-8.04	0.57	6.35	1250
1.125	-9.93	0									2	4.89	4.75	0.14	-13.17	-6.22	0.84	9.53	1250
1.500	-11.83	0									2	3.23	3.05	0.18	-13.51	-4.25	1.12	12.70	1250
1.900	-13.86	0									2	1.38	1.16	0.21	-13.94	-3.49	1.28	14.34	1250
2.300	-15.91	0									2	1.43	1.19	0.24	-15.91	-4.26	1.43	15.98	1250
		0									2	1.43	1.19	0.24	-15.91	-6.21	1.43	15.98	1500
2.500	-16.93	0									2	1.50	1.25	0.26	-16.93	-6.74	1.50	16.78	1500
3.100	-19.98	0									2	1.71	1.42	0.29	-19.98	-8.34	1.71	19.17	1500
3.700	-23.01	0									2	1.91	1.60	0.31	-23.01	-9.91	1.91	21.55	1500
4.100	-25.01	0									2	2.03	1.72	0.31	-25.01	-10.94	2.03	23.14	1500
		0									2	2.11	1.79	0.31	-25.01	-5.46	2.11	21.65	1000
4.761	-28.29	0									2	2.31	2.00	0.32	-28.29	-6.54	2.31	24.06	1000
5.180	-30.36	0									2	2.44	2.12	0.32	-30.36	-7.21	2.44	25.59	1000
5.600	-32.43	0									2	2.57	2.25	0.31	-32.43	-7.89	2.57	27.11	1000
6.100	-34.92	0									2	2.71	2.41	0.31	-34.92	-8.70	2.71	28.92	1000
6.600	-37.34	0									2	2.86	2.56	0.30	-37.34	-9.46	2.86	30.74	1000
6.700	-37.81	0									2	2.88	2.59	0.29	-37.81	-9.60	2.88	31.10	1000
7.200	-40.05	0									2	3.03	2.74	0.28	-40.05	-10.17	3.03	32.91	1000
		0									2	2.71	2.43	0.28	-40.05	-19.93	2.71	40.43	1875
7.600	-41.69	0									2	2.82	2.54	0.28	-41.69	-20.61	2.82	42.34	1875
8.100	-43.49	0									2	2.95	2.69	0.26	-43.49	-21.22	2.95	44.71	1875
8.600	-44.98	0									2	3.08	2.83	0.25	-44.98	-21.51	3.08	47.09	1875

9.100	-46.13	0									2	3.22	2.98	0.24	-46.13	-21.47	3.22	49.47	1875
9.600	-46.94	0									2	3.35	3.12	0.23	-46.94	-21.08	3.35	51.84	1875
9.700	-47.06	0									2	3.38	3.15	0.23	-47.06	-20.96	3.38	52.32	1875
10.150	-47.43	0									2	3.50	3.28	0.22	-47.43	-20.25	3.50	54.46	1875
10.600	-47.48	0									2	3.62	3.41	0.21	-47.48	-19.23	3.62	56.60	1875
10.950	-47.31	0									2	3.71	3.51	0.20	-47.31	-18.21	3.71	58.26	1875
11.300	-46.92	0									2	3.80	3.61	0.19	-46.92	-16.99	3.80	59.93	1875
11.650	-46.34	0									2	3.90	3.71	0.18	-46.34	-15.57	3.90	61.59	1875
12.000	-45.57	0									2	3.99	3.82	0.18	-45.57	-13.96	3.99	63.26	1875
12.450	-44.30	0									2	4.11	3.95	0.17	-44.30	-11.61	4.11	65.40	1875
12.500	-44.14	0									2	4.13	3.96	0.17	-44.14	-11.33	4.13	65.64	1875
		3	0.00	0.00	0.00	-	-	0.00	0.00	1875	2	4.13	3.96	0.17	-44.14	-11.33	4.13	65.64	1875
13.000	-42.35	2	4.71	4.71	0.00	-40.00	-42.44	0.30	4.88	1875	2	4.43	4.28	0.16	-42.44	-8.44	4.26	68.02	1875
13.500	-40.23	2	9.27	9.27	0.00	-35.60	-40.49	0.59	9.75	1875	2	4.88	4.73	0.15	-40.49	-5.29	4.40	70.40	1875
13.925	-38.20	2	11.14	11.14	0.00	-32.64	-38.54	0.71	11.79	1875	2	5.16	5.02	0.14	-38.54	-2.32	4.51	72.42	1875
14.350	-35.99	2	13.09	13.09	0.00	-29.46	-36.38	0.84	13.82	1875	2	5.36	5.22	0.14	-36.38	0.85	4.63	74.45	1875
14.775	-33.66	2	15.09	15.09	0.00	-26.12	-34.06	0.96	15.85	1875	2	5.50	5.37	0.13	-34.06	4.19	4.75	76.47	1875
15.200	-31.24	2	17.14	17.14	0.00	-22.68	-31.64	1.08	17.88	1875	2	5.60	5.48	0.12	-31.64	7.63	4.86	78.50	1875
15.625	-28.78	2	19.21	19.21	0.00	-19.18	-29.15	1.20	19.91	1875	2	5.68	5.56	0.12	-29.15	11.14	4.98	80.52	1875
16.050	-26.33	2	21.31	21.31	0.00	-15.67	-26.66	1.33	21.94	1875	2	5.73	5.62	0.11	-26.66	14.64	5.10	82.55	1875
16.475	-23.93	2	23.42	23.42	0.00	-12.21	-24.22	1.45	23.97	1875	2	5.77	5.66	0.11	-24.22	18.10	5.22	84.57	1875
16.900	-21.62	2	25.53	25.53	0.00	-8.84	-21.87	1.57	26.00	1875	2	5.81	5.70	0.10	-21.87	21.47	5.33	86.60	1875
17.325	-19.45	2	27.64	27.64	0.00	-5.61	-19.65	1.70	28.03	1875	2	5.84	5.75	0.10	-19.65	24.70	5.45	88.62	1875
17.750	-17.43	2	29.75	29.75	0.00	-2.54	-17.60	1.82	30.06	1875	2	5.89	5.79	0.09	-17.60	27.77	5.57	90.65	1875
18.175	-15.61	2	31.85	31.85	0.00	0.34	-15.74	1.94	32.09	1875	2	5.93	5.84	0.09	-15.74	30.65	5.69	92.68	1875
18.600	-13.99	2	29.66	29.66	0.00	0.73	-16.37	2.06	34.12	1875	2	5.99	5.90	0.09	-14.09	33.33	5.81	94.70	1875
19.025	-12.57	2	27.20	27.20	0.00	0.77	-17.34	2.19	36.15	1875	2	6.05	5.97	0.08	-12.64	35.79	5.93	96.73	1875
19.450	-11.35	2	25.12	25.12	0.00	0.81	-18.32	2.31	38.18	1875	2	6.13	6.05	0.08	-11.40	38.05	6.05	98.76	1875
19.875	-10.32	2	23.39	23.39	0.00	0.86	-19.29	2.43	40.21	1875	2	6.21	6.13	0.07	-10.34	40.12	6.17	100.78	1875
20.300	-9.45	2	21.97	21.97	0.00	0.90	-20.27	2.55	42.24	1875	2	6.30	6.23	0.07	-9.46	42.02	6.28	102.81	1875
		2	17.51	17.51	0.00	1.27	-23.42	2.77	36.71	1375	2	6.81	6.74	0.07	-9.46	50.58	6.80	89.35	1375
20.656	-8.84	2	16.52	16.52	0.00	1.23	-22.71	2.68	35.60	1375	2	6.91	6.84	0.07	-8.84	52.15	6.91	90.77	1375
21.013	-8.31	2	15.66	15.66	0.00	1.19	-22.00	2.60	34.49	1375	2	7.01	6.94	0.07	-8.31	53.63	7.01	92.18	1375
21.369	-7.86	2	14.90	14.90	0.00	1.15	-21.29	2.52	33.37	1375	2	7.11	7.05	0.06	-7.86	55.04	7.11	93.60	1375
21.725	-7.46	2	14.22	14.22	0.00	1.11	-20.58	2.43	32.26	1375	2	7.22	7.16	0.06	-7.46	56.39	7.22	95.01	1375
22.081	-7.11	2	13.60	13.60	0.00	1.07	-19.87	2.35	31.15	1375	2	7.32	7.26	0.06	-7.11	57.69	7.32	96.43	1375
22.438	-6.80	2	13.04	13.04	0.00	1.04	-19.16	2.26	30.04	1375	2	7.43	7.37	0.06	-6.80	58.95	7.43	97.84	1375
22.794	-6.52	2	12.51	12.51	0.00	1.00	-18.45	2.18	28.92	1375	2	7.53	7.48	0.06	-6.52	60.19	7.53	99.26	1375
23.150	-6.25	2	12.01	12.01	0.00	0.96	-17.74	2.10	27.81	1375	2	7.64	7.58	0.05	-6.25	61.41	7.64	100.67	1375
23.506	-6.00	2	11.53	11.53	0.00	0.92	-17.03	2.01	26.70	1375	2	7.74	7.69	0.05	-6.00	62.62	7.74	102.09	1375
23.863	-5.75	2	11.05	11.05	0.00	0.88	-16.32	1.93	25.58	1375	2	7.85	7.80	0.05	-5.75	63.82	7.85	103.51	1375
24.219	-5.51	2	10.57	10.57	0.00	0.84	-15.61	1.84	24.47	1375	2	7.95	7.90	0.05	-5.51	65.02	7.95	104.92	1375
24.575	-5.25	2	10.09	10.09	0.00	0.81	-14.90	1.76	23.36	1375	2	8.06	8.01	0.05	-5.25	66.22	8.06	106.34	1375
24.931	-5.00	2	9.60	9.60	0.00	0.77	-14.19	1.68	22.25	1375	2	8.16	8.12	0.05	-5.00	67.43	8.16	107.75	1375
25.288	-4.73	2	9.10	9.10	0.00	0.73	-13.48	1.59	21.13	1375	2	8.27	8.23	0.04	-4.73	68.65	8.27	109.17	1375
25.644	-4.45	2	8.58	8.58	0.00	0.69	-12.77	1.51	20.02	1375	2	8.37	8.33	0.04	-4.45	69.88	8.37	110.59	1375
26.000	-4.17	2	8.06	8.06	0.00	0.65	-12.06	1.43	18.91	1375	2	8.48	8.44	0.04	-4.17	71.12	8.48	112.00	1375
		2	11.96	11.96	0.00	0.35	-9.77	1.22	25.25	2375	2	7.24	7.20	0.04	-4.17	55.74	7.24	149.54	2375
26.500	-3.77	2	11.09	11.09	0.00	0.37	-10.19	1.27	26.35	2375	2	7.47	7.43	0.04	-3.77	58.12	7.47	154.45	2375
27.000	-3.36	2	10.21	10.21	0.00	0.38	-10.61	1.32	27.44	2375	2	7.71	7.67	0.04	-3.36	60.49	7.71	159.35	2375
27.500	-2.95	2	9.32	9.32	0.00	0.40	-11.04	1.37	28.54	2375	2	7.94	7.91	0.04	-2.95	62.87	7.94	164.26	2375
28.000	-2.53	2	8.43	8.43	0.00	0.41	-11.46	1.43	29.64	2375	2	8.18	8.14	0.03	-2.53	65.25	8.18	169.17	2375

▼ PHASE 11

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h

計畫名稱：XDO Example 2

主　　題：連續壁 + 順打 3 階支撐 + 有效應力法

(m)	(mm)	STATE	(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)	STATE	(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-6.32	0									1	0.00	0.00	0.00	-	-	0.00	0.00	1250
0.375	-8.65	0									1	0.28	0.24	0.05	-8.47	-6.15	0.28	3.18	1250
0.750	-10.98	0									2	2.68	2.58	0.09	-12.67	-8.04	0.57	6.35	1250
1.125	-13.32	0									1	0.84	0.71	0.14	-13.17	-6.22	0.84	9.53	1250
1.500	-15.65	0									1	1.12	0.94	0.18	-13.51	-4.25	1.12	12.70	1250
1.900	-18.14	0									1	1.28	1.07	0.21	-13.94	-3.49	1.28	14.34	1250
2.300	-20.62	0									1	1.43	1.19	0.24	-15.91	-4.26	1.43	15.98	1250
		0									1	1.43	1.19	0.24	-15.91	-6.21	1.43	15.98	1500
2.500	-21.84	0									1	1.50	1.25	0.26	-16.93	-6.74	1.50	16.78	1500
3.100	-25.43	0									1	1.71	1.42	0.29	-19.98	-8.34	1.71	19.17	1500
3.700	-28.85	0									1	1.91	1.60	0.31	-23.01	-9.91	1.91	21.55	1500
4.100	-31.02	0									1	2.03	1.72	0.31	-25.01	-10.94	2.03	23.14	1500
		0									1	2.11	1.79	0.31	-25.01	-5.46	2.11	21.65	1000
4.761	-34.35	0									1	2.31	2.00	0.32	-28.29	-6.54	2.31	24.06	1000
5.180	-36.29	0									1	2.44	2.12	0.32	-30.36	-7.21	2.44	25.59	1000
5.600	-38.10	0									1	2.57	2.25	0.31	-32.43	-7.89	2.57	27.11	1000
6.100	-40.08	0									1	2.71	2.41	0.31	-34.92	-8.70	2.71	28.92	1000
6.600	-41.87	0									1	2.86	2.56	0.30	-37.34	-9.46	2.86	30.74	1000
6.700	-42.21	0									1	2.88	2.59	0.29	-37.81	-9.60	2.88	31.10	1000
7.200	-43.81	0									1	3.03	2.74	0.28	-40.05	-10.17	3.03	32.91	1000
		0									1	2.71	2.43	0.28	-40.05	-19.93	2.71	40.43	1875
7.600	-44.94	0									1	2.82	2.54	0.28	-41.69	-20.61	2.82	42.34	1875
8.100	-46.13	0									1	2.95	2.69	0.26	-43.49	-21.22	2.95	44.71	1875
8.600	-47.06	0									1	3.08	2.83	0.25	-44.98	-21.51	3.08	47.09	1875
9.100	-47.71	0									1	3.22	2.98	0.24	-46.13	-21.47	3.22	49.47	1875
9.600	-48.07	0									1	3.35	3.12	0.23	-46.94	-21.08	3.35	51.84	1875
9.700	-48.11	0									1	3.38	3.15	0.23	-47.06	-20.96	3.38	52.32	1875
10.150	-48.16	0									1	3.50	3.28	0.22	-47.43	-20.25	3.50	54.46	1875
10.600	-47.96	0									1	3.62	3.41	0.21	-47.48	-19.23	3.62	56.60	1875
10.950	-47.62	0									1	3.71	3.51	0.20	-47.31	-18.21	3.71	58.26	1875
11.300	-47.11	0									1	3.80	3.61	0.19	-46.92	-16.99	3.80	59.93	1875
11.650	-46.42	0									1	3.90	3.71	0.18	-46.34	-15.57	3.90	61.59	1875
12.000	-45.56	0									2	4.00	3.83	0.18	-45.57	-13.96	3.99	63.26	1875
12.450	-44.22	0									2	4.27	4.10	0.17	-44.30	-11.61	4.11	65.40	1875
12.500	-44.05	0									2	4.30	4.13	0.17	-44.14	-11.33	4.13	65.64	1875
		3	0.00	0.00	0.00	-	-	0.00	0.00	1875	2	4.30	4.13	0.17	-44.14	-11.33	4.13	65.64	1875
13.000	-42.21	2	4.44	4.44	0.00	-40.00	-42.44	0.30	4.88	1875	2	4.70	4.54	0.16	-42.44	-8.44	4.26	68.02	1875
13.500	-40.06	2	8.96	8.96	0.00	-35.60	-40.49	0.59	9.75	1875	2	5.20	5.05	0.15	-40.49	-5.29	4.40	70.40	1875
13.925	-38.02	2	10.81	10.81	0.00	-32.64	-38.54	0.71	11.79	1875	2	5.49	5.35	0.14	-38.54	-2.32	4.51	72.42	1875
14.350	-35.82	2	12.76	12.76	0.00	-29.46	-36.38	0.84	13.82	1875	2	5.68	5.55	0.14	-36.38	0.85	4.63	74.45	1875
14.775	-33.50	2	14.79	14.79	0.00	-26.12	-34.06	0.96	15.85	1875	2	5.81	5.68	0.13	-34.06	4.19	4.75	76.47	1875
15.200	-31.09	2	16.86	16.86	0.00	-22.68	-31.64	1.08	17.88	1875	2	5.88	5.76	0.12	-31.64	7.63	4.86	78.50	1875
15.625	-28.65	2	18.97	18.97	0.00	-19.18	-29.15	1.20	19.91	1875	2	5.92	5.80	0.12	-29.15	11.14	4.98	80.52	1875
16.050	-26.22	2	21.10	21.10	0.00	-15.67	-26.66	1.33	21.94	1875	2	5.93	5.82	0.11	-26.66	14.64	5.10	82.55	1875
16.475	-23.84	2	23.24	23.24	0.00	-12.21	-24.22	1.45	23.97	1875	2	5.94	5.83	0.11	-24.22	18.10	5.22	84.57	1875
16.900	-21.55	2	25.39	25.39	0.00	-8.84	-21.87	1.57	26.00	1875	2	5.94	5.84	0.10	-21.87	21.47	5.33	86.60	1875
17.325	-19.39	2	27.53	27.53	0.00	-5.61	-19.65	1.70	28.03	1875	2	5.95	5.85	0.10	-19.65	24.70	5.45	88.62	1875
17.750	-17.39	2	29.67	29.67	0.00	-2.54	-17.60	1.82	30.06	1875	2	5.97	5.87	0.09	-17.60	27.77	5.57	90.65	1875
18.175	-15.58	2	31.79	31.79	0.00	0.34	-15.74	1.94	32.09	1875	2	5.99	5.90	0.09	-15.74	30.65	5.69	92.68	1875
18.600	-13.97	2	29.62	29.62	0.00	0.73	-16.37	2.06	34.12	1875	2	6.03	5.94	0.09	-14.09	33.33	5.81	94.70	1875
19.025	-12.56	2	27.18	27.18	0.00	0.77	-17.34	2.19	36.15	1875	2	6.07	5.99	0.08	-12.64	35.79	5.93	96.73	1875
19.450	-11.35	2	25.12	25.12	0.00	0.81	-18.32	2.31	38.18	1875	2	6.13	6.06	0.08	-11.40	38.05	6.05	98.76	1875
19.875	-10.32	2	23.39	23.39	0.00	0.86	-19.29	2.43	40.21	1875	2	6.20	6.13	0.07	-10.34	40.12	6.17	100.78	1875
20.300	-9.46	2	21.98	21.98	0.00	0.90	-20.27	2.55	42.24	1875	2	6.29	6.21	0.07	-9.46	42.02	6.28	102.81	1875
		2	17.51	17.51	0.00	1.27	-23.42	2.77	36.71	1375	2	6.80	6.73	0.07	-9.46	50.58	6.80	89.35	1375

20.656	-8.85	2	16.54	16.54	0.00	1.23	-22.71	2.68	35.60	1375	1	6.91	6.84	0.07	-8.84	52.15	6.91	90.77	1375
21.013	-8.32	2	15.68	15.68	0.00	1.19	-22.00	2.60	34.49	1375	1	7.01	6.94	0.07	-8.31	53.63	7.01	92.18	1375
21.369	-7.87	2	14.92	14.92	0.00	1.15	-21.29	2.52	33.37	1375	1	7.11	7.05	0.06	-7.86	55.04	7.11	93.60	1375
21.725	-7.47	2	14.24	14.24	0.00	1.11	-20.58	2.43	32.26	1375	1	7.22	7.16	0.06	-7.46	56.39	7.22	95.01	1375
22.081	-7.13	2	13.62	13.62	0.00	1.07	-19.87	2.35	31.15	1375	1	7.32	7.26	0.06	-7.11	57.69	7.32	96.43	1375
22.438	-6.82	2	13.06	13.06	0.00	1.04	-19.16	2.26	30.04	1375	1	7.43	7.37	0.06	-6.80	58.95	7.43	97.84	1375
22.794	-6.53	2	12.53	12.53	0.00	1.00	-18.45	2.18	28.92	1375	1	7.53	7.48	0.06	-6.52	60.19	7.53	99.26	1375
23.150	-6.27	2	12.03	12.03	0.00	0.96	-17.74	2.10	27.81	1375	1	7.64	7.58	0.05	-6.25	61.41	7.64	100.67	1375
23.506	-6.01	2	11.55	11.55	0.00	0.92	-17.03	2.01	26.70	1375	1	7.74	7.69	0.05	-6.00	62.62	7.74	102.09	1375
23.863	-5.76	2	11.07	11.07	0.00	0.88	-16.32	1.93	25.58	1375	1	7.85	7.80	0.05	-5.75	63.82	7.85	103.51	1375
24.219	-5.52	2	10.59	10.59	0.00	0.84	-15.61	1.84	24.47	1375	1	7.95	7.90	0.05	-5.51	65.02	7.95	104.92	1375
24.575	-5.26	2	10.10	10.10	0.00	0.81	-14.90	1.76	23.36	1375	1	8.06	8.01	0.05	-5.25	66.22	8.06	106.34	1375
24.931	-5.00	2	9.61	9.61	0.00	0.77	-14.19	1.68	22.25	1375	1	8.16	8.12	0.05	-5.00	67.43	8.16	107.75	1375
25.288	-4.74	2	9.11	9.11	0.00	0.73	-13.48	1.59	21.13	1375	1	8.27	8.23	0.04	-4.73	68.65	8.27	109.17	1375
25.644	-4.46	2	8.59	8.59	0.00	0.69	-12.77	1.51	20.02	1375	1	8.37	8.33	0.04	-4.45	69.88	8.37	110.59	1375
26.000	-4.18	2	8.07	8.07	0.00	0.65	-12.06	1.43	18.91	1375	1	8.48	8.44	0.04	-4.17	71.12	8.48	112.00	1375
		2	11.98	11.98	0.00	0.35	-9.77	1.22	25.25	2375	1	7.24	7.20	0.04	-4.17	55.74	7.24	149.54	2375
26.500	-3.77	2	11.10	11.10	0.00	0.37	-10.19	1.27	26.35	2375	1	7.47	7.43	0.04	-3.77	58.12	7.47	154.45	2375
27.000	-3.36	2	10.21	10.21	0.00	0.38	-10.61	1.32	27.44	2375	1	7.71	7.67	0.04	-3.36	60.49	7.71	159.35	2375
27.500	-2.95	2	9.32	9.32	0.00	0.40	-11.04	1.37	28.54	2375	2	7.94	7.91	0.04	-2.95	62.87	7.94	164.26	2375
28.000	-2.53	2	8.42	8.42	0.00	0.41	-11.46	1.43	29.64	2375	2	8.18	8.15	0.03	-2.53	65.25	8.18	169.17	2375

▼ PHASE 12

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-6.32	0									1	0.00	0.00	0.00	-	-	0.00	0.00	1250
0.375	-8.65	0									2	0.28	0.24	0.05	-8.65	-6.34	0.28	3.18	1250
0.750	-10.98	0									2	2.68	2.58	0.09	-12.67	-8.04	0.57	6.35	1250
1.125	-13.32	0									2	0.84	0.71	0.14	-13.32	-6.37	0.84	9.53	1250
1.500	-15.65	0									2	1.12	0.94	0.18	-15.65	-6.39	1.12	12.70	1250
1.900	-18.14	0									2	1.28	1.07	0.21	-18.14	-7.69	1.28	14.34	1250
2.300	-20.62	0									2	1.43	1.19	0.24	-20.62	-8.97	1.43	15.98	1250
		0									2	1.43	1.19	0.24	-20.62	-10.91	1.43	15.98	1500
2.500	-21.84	0									2	1.50	1.25	0.26	-21.84	-11.65	1.50	16.78	1500
3.100	-25.43	0									2	1.71	1.42	0.29	-25.43	-13.79	1.71	19.17	1500
3.700	-28.85	0									2	1.91	1.60	0.31	-28.85	-15.75	1.91	21.55	1500
4.100	-31.02	0									2	2.03	1.72	0.31	-31.02	-16.95	2.03	23.14	1500
		0									2	2.11	1.79	0.31	-31.02	-11.47	2.11	21.65	1000
4.761	-34.35	0									2	2.31	2.00	0.32	-34.35	-12.60	2.31	24.06	1000
5.180	-36.29	0									2	2.44	2.12	0.32	-36.29	-13.14	2.44	25.59	1000
5.600	-38.10	0									2	2.57	2.25	0.31	-38.10	-13.55	2.57	27.11	1000
6.100	-40.08	0									2	2.71	2.41	0.31	-40.08	-13.86	2.71	28.92	1000
6.600	-41.87	0									2	2.86	2.56	0.30	-41.87	-13.99	2.86	30.74	1000
6.700	-42.21	0									2	2.88	2.59	0.29	-42.21	-14.00	2.88	31.10	1000
7.200	-43.81	0									2	3.03	2.74	0.28	-43.81	-13.93	3.03	32.91	1000
		0									2	2.71	2.43	0.28	-43.81	-23.69	2.71	40.43	1875
7.600	-44.94	0									2	2.82	2.54	0.28	-44.94	-23.86	2.82	42.34	1875
8.100	-46.13	0									2	2.95	2.69	0.26	-46.13	-23.86	2.95	44.71	1875
8.600	-47.06	0									2	3.08	2.83	0.25	-47.06	-23.59	3.08	47.09	1875
9.100	-47.71	0									2	3.22	2.98	0.24	-47.71	-23.04	3.22	49.47	1875
9.600	-48.07	0									2	3.35	3.12	0.23	-48.07	-22.21	3.35	51.84	1875
9.700	-48.11	0									2	3.38	3.15	0.23	-48.11	-22.01	3.38	52.32	1875
10.150	-48.16	0									2	3.50	3.28	0.22	-48.16	-20.98	3.50	54.46	1875
10.600	-47.96	0									2	3.62	3.41	0.21	-47.96	-19.70	3.62	56.60	1875
10.950	-47.62	0									2	3.71	3.51	0.20	-47.62	-18.52	3.71	58.26	1875

11.300	-47.11	0									2	3.80	3.61	0.19	-47.11	-17.17	3.80	59.93	1875
11.650	-46.42	0									2	3.90	3.71	0.18	-46.42	-15.65	3.90	61.59	1875
12.000	-45.56	0									2	4.00	3.83	0.18	-45.57	-13.96	3.99	63.26	1875
12.450	-44.22	0									2	4.27	4.10	0.17	-44.30	-11.61	4.11	65.40	1875
12.500	-44.05	0									2	4.30	4.13	0.17	-44.14	-11.33	4.13	65.64	1875
		3	0.00	0.00	0.00	-	-	0.00	0.00	1875	2	4.30	4.13	0.17	-44.14	-11.33	4.13	65.64	1875
13.000	-42.21	2	4.44	4.44	0.00	-40.00	-42.44	0.30	4.88	1875	2	4.70	4.54	0.16	-42.44	-8.44	4.26	68.02	1875
13.500	-40.06	2	8.96	8.96	0.00	-35.60	-40.49	0.59	9.75	1875	2	5.20	5.05	0.15	-40.49	-5.29	4.40	70.40	1875
13.925	-38.02	2	10.81	10.81	0.00	-32.64	-38.54	0.71	11.79	1875	2	5.49	5.35	0.14	-38.54	-2.32	4.51	72.42	1875
14.350	-35.82	2	12.76	12.76	0.00	-29.46	-36.38	0.84	13.82	1875	2	5.68	5.55	0.14	-36.38	0.85	4.63	74.45	1875
14.775	-33.50	2	14.79	14.79	0.00	-26.12	-34.06	0.96	15.85	1875	2	5.81	5.68	0.13	-34.06	4.19	4.75	76.47	1875
15.200	-31.09	2	16.86	16.86	0.00	-22.68	-31.64	1.08	17.88	1875	2	5.88	5.76	0.12	-31.64	7.63	4.86	78.50	1875
15.625	-28.65	2	18.97	18.97	0.00	-19.18	-29.15	1.20	19.91	1875	2	5.92	5.80	0.12	-29.15	11.14	4.98	80.52	1875
16.050	-26.22	2	21.10	21.10	0.00	-15.67	-26.66	1.33	21.94	1875	2	5.93	5.82	0.11	-26.66	14.64	5.10	82.55	1875
16.475	-23.84	2	23.24	23.24	0.00	-12.21	-24.22	1.45	23.97	1875	2	5.94	5.83	0.11	-24.22	18.10	5.22	84.57	1875
16.900	-21.55	2	25.39	25.39	0.00	-8.84	-21.87	1.57	26.00	1875	2	5.94	5.84	0.10	-21.87	21.47	5.33	86.60	1875
17.325	-19.39	2	27.53	27.53	0.00	-5.61	-19.65	1.70	28.03	1875	2	5.95	5.85	0.10	-19.65	24.70	5.45	88.62	1875
17.750	-17.39	2	29.67	29.67	0.00	-2.54	-17.60	1.82	30.06	1875	2	5.97	5.87	0.09	-17.60	27.77	5.57	90.65	1875
18.175	-15.58	2	31.79	31.79	0.00	0.34	-15.74	1.94	32.09	1875	2	5.99	5.90	0.09	-15.74	30.65	5.69	92.68	1875
18.600	-13.97	2	29.62	29.62	0.00	0.73	-16.37	2.06	34.12	1875	2	6.03	5.94	0.09	-14.09	33.33	5.81	94.70	1875
19.025	-12.56	2	27.18	27.18	0.00	0.77	-17.34	2.19	36.15	1875	2	6.07	5.99	0.08	-12.64	35.79	5.93	96.73	1875
19.450	-11.35	2	25.12	25.12	0.00	0.81	-18.32	2.31	38.18	1875	2	6.13	6.06	0.08	-11.40	38.05	6.05	98.76	1875
19.875	-10.32	2	23.39	23.39	0.00	0.86	-19.29	2.43	40.21	1875	2	6.20	6.13	0.07	-10.34	40.12	6.17	100.78	1875
20.300	-9.46	2	21.98	21.98	0.00	0.90	-20.27	2.55	42.24	1875	2	6.29	6.21	0.07	-9.46	42.02	6.28	102.81	1875
		2	17.51	17.51	0.00	1.27	-23.42	2.77	36.71	1375	2	6.80	6.73	0.07	-9.46	50.58	6.80	89.35	1375
20.656	-8.85	2	16.54	16.54	0.00	1.23	-22.71	2.68	35.60	1375	2	6.91	6.84	0.07	-8.85	52.14	6.91	90.77	1375
21.013	-8.32	2	15.68	15.68	0.00	1.19	-22.00	2.60	34.49	1375	2	7.01	6.94	0.07	-8.32	53.62	7.01	92.18	1375
21.369	-7.87	2	14.92	14.92	0.00	1.15	-21.29	2.52	33.37	1375	2	7.11	7.05	0.06	-7.87	55.03	7.11	93.60	1375
21.725	-7.47	2	14.24	14.24	0.00	1.11	-20.58	2.43	32.26	1375	2	7.22	7.16	0.06	-7.47	56.38	7.22	95.01	1375
22.081	-7.13	2	13.62	13.62	0.00	1.07	-19.87	2.35	31.15	1375	2	7.32	7.26	0.06	-7.13	57.68	7.32	96.43	1375
22.438	-6.82	2	13.06	13.06	0.00	1.04	-19.16	2.26	30.04	1375	2	7.43	7.37	0.06	-6.82	58.94	7.43	97.84	1375
22.794	-6.53	2	12.53	12.53	0.00	1.00	-18.45	2.18	28.92	1375	2	7.53	7.48	0.06	-6.53	60.18	7.53	99.26	1375
23.150	-6.27	2	12.03	12.03	0.00	0.96	-17.74	2.10	27.81	1375	2	7.64	7.58	0.05	-6.27	61.40	7.64	100.67	1375
23.506	-6.01	2	11.55	11.55	0.00	0.92	-17.03	2.01	26.70	1375	2	7.74	7.69	0.05	-6.01	62.60	7.74	102.09	1375
23.863	-5.76	2	11.07	11.07	0.00	0.88	-16.32	1.93	25.58	1375	2	7.85	7.80	0.05	-5.76	63.80	7.85	103.51	1375
24.219	-5.52	2	10.59	10.59	0.00	0.84	-15.61	1.84	24.47	1375	2	7.95	7.90	0.05	-5.52	65.01	7.95	104.92	1375
24.575	-5.26	2	10.10	10.10	0.00	0.81	-14.90	1.76	23.36	1375	2	8.06	8.01	0.05	-5.26	66.21	8.06	106.34	1375
24.931	-5.00	2	9.61	9.61	0.00	0.77	-14.19	1.68	22.25	1375	2	8.16	8.12	0.05	-5.00	67.43	8.16	107.75	1375
25.288	-4.74	2	9.11	9.11	0.00	0.73	-13.48	1.59	21.13	1375	2	8.27	8.23	0.04	-4.74	68.65	8.27	109.17	1375
25.644	-4.46	2	8.59	8.59	0.00	0.69	-12.77	1.51	20.02	1375	2	8.37	8.33	0.04	-4.46	69.87	8.37	110.59	1375
26.000	-4.18	2	8.07	8.07	0.00	0.65	-12.06	1.43	18.91	1375	2	8.48	8.44	0.04	-4.18	71.11	8.48	112.00	1375
		2	11.98	11.98	0.00	0.35	-9.77	1.22	25.25	2375	2	7.24	7.20	0.04	-4.18	55.74	7.24	149.54	2375
26.500	-3.77	2	11.10	11.10	0.00	0.37	-10.19	1.27	26.35	2375	2	7.47	7.43	0.04	-3.77	58.11	7.47	154.45	2375
27.000	-3.36	2	10.21	10.21	0.00	0.38	-10.61	1.32	27.44	2375	2	7.71	7.67	0.04	-3.36	60.49	7.71	159.35	2375
27.500	-2.95	2	9.32	9.32	0.00	0.40	-11.04	1.37	28.54	2375	2	7.94	7.91	0.04	-2.95	62.87	7.94	164.26	2375
28.000	-2.53	2	8.42	8.42	0.00	0.41	-11.46	1.43	29.64	2375	2	8.18	8.15	0.03	-2.53	65.25	8.18	169.17	2375

▼ PHASE 13

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-19.63	0									1	0.00	0.00	0.00	-	-	0.00	0.00	1250
0.375	-20.87	0									1	0.28	0.24	0.05	-8.65	-6.34	0.28	3.18	1250
0.750	-22.11	0									1	0.57	0.47	0.09	-12.67	-8.04	0.57	6.35	1250
1.125	-23.35	0									1	0.84	0.71	0.14	-13.32	-6.37	0.84	9.53	1250
1.500	-24.59	0									1	1.12	0.94	0.18	-15.65	-6.39	1.12	12.70	1250

計畫名稱：XDO Example 2

主　　題：連續壁 + 順打 3 階支撐 + 有效應力法

1.900	-25.92	0									1	1.28	1.07	0.21	-18.14	-7.69	1.28	14.34	1250
2.300	-27.25	0									1	1.43	1.19	0.24	-20.62	-8.97	1.43	15.98	1250
		0									1	1.43	1.19	0.24	-20.62	-10.91	1.43	15.98	1500
2.500	-27.92	0									1	1.50	1.25	0.26	-21.84	-11.65	1.50	16.78	1500
3.100	-29.94	0									1	1.71	1.42	0.29	-25.43	-13.79	1.71	19.17	1500
3.700	-31.99	0									1	1.91	1.60	0.31	-28.85	-15.75	1.91	21.55	1500
4.100	-33.39	0									1	2.03	1.72	0.31	-31.02	-16.95	2.03	23.14	1500
		0									1	2.11	1.79	0.31	-31.02	-11.47	2.11	21.65	1000
4.761	-35.72	0									1	2.31	2.00	0.32	-34.35	-12.60	2.31	24.06	1000
5.180	-37.17	0									1	2.44	2.12	0.32	-36.29	-13.14	2.44	25.59	1000
5.600	-38.59	0									1	2.57	2.25	0.31	-38.10	-13.55	2.57	27.11	1000
6.100	-40.21	0									1	2.71	2.41	0.31	-40.08	-13.86	2.71	28.92	1000
6.600	-41.76	0									2	2.97	2.67	0.30	-41.87	-13.99	2.86	30.74	1000
6.700	-42.06	0									2	3.04	2.74	0.29	-42.21	-14.00	2.88	31.10	1000
7.200	-43.51	0									2	3.32	3.04	0.28	-43.81	-13.93	3.03	32.91	1000
		0									2	3.27	2.99	0.28	-43.81	-23.69	2.71	40.43	1875
7.600	-44.58	0									2	3.50	3.22	0.28	-44.94	-23.86	2.82	42.34	1875
8.100	-45.74	0									2	3.69	3.43	0.26	-46.13	-23.86	2.95	44.71	1875
8.600	-46.67	0									2	3.81	3.56	0.25	-47.06	-23.59	3.08	47.09	1875
9.100	-47.36	0									2	3.88	3.64	0.24	-47.71	-23.04	3.22	49.47	1875
9.600	-47.77	0									2	3.91	3.68	0.23	-48.07	-22.21	3.35	51.84	1875
9.700	-47.83	0									2	3.91	3.69	0.23	-48.11	-22.01	3.38	52.32	1875
10.150	-47.93	0									2	3.93	3.72	0.22	-48.16	-20.98	3.50	54.46	1875
10.600	-47.78	0									2	3.96	3.75	0.21	-47.96	-19.70	3.62	56.60	1875
10.950	-47.48	0									2	3.98	3.78	0.20	-47.62	-18.52	3.71	58.26	1875
11.300	-47.00	0									2	4.00	3.81	0.19	-47.11	-17.17	3.80	59.93	1875
11.650	-46.35	0									2	4.03	3.85	0.18	-46.42	-15.65	3.90	61.59	1875
12.000	-45.52	0									2	4.09	3.91	0.18	-45.57	-13.96	3.99	63.26	1875
12.450	-44.20	0									2	4.30	4.13	0.17	-44.30	-11.61	4.11	65.40	1875
12.500	-44.04	0									2	4.32	4.16	0.17	-44.14	-11.33	4.13	65.64	1875
		3	0.00	0.00	0.00	-	-	0.00	0.00	1875	2	4.32	4.16	0.17	-44.14	-11.33	4.13	65.64	1875
13.000	-42.22	2	4.46	4.46	0.00	-40.00	-42.44	0.30	4.88	1875	2	4.68	4.53	0.16	-42.44	-8.44	4.26	68.02	1875
13.500	-40.08	2	9.00	9.00	0.00	-35.60	-40.49	0.59	9.75	1875	2	5.15	5.00	0.15	-40.49	-5.29	4.40	70.40	1875
13.925	-38.05	2	10.87	10.87	0.00	-32.64	-38.54	0.71	11.79	1875	2	5.43	5.29	0.14	-38.54	-2.32	4.51	72.42	1875
14.350	-35.86	2	12.83	12.83	0.00	-29.46	-36.38	0.84	13.82	1875	2	5.62	5.48	0.14	-36.38	0.85	4.63	74.45	1875
14.775	-33.53	2	14.85	14.85	0.00	-26.12	-34.06	0.96	15.85	1875	2	5.74	5.61	0.13	-34.06	4.19	4.75	76.47	1875
15.200	-31.13	2	16.93	16.93	0.00	-22.68	-31.64	1.08	17.88	1875	2	5.81	5.69	0.12	-31.64	7.63	4.86	78.50	1875
15.625	-28.68	2	19.03	19.03	0.00	-19.18	-29.15	1.20	19.91	1875	2	5.86	5.74	0.12	-29.15	11.14	4.98	80.52	1875
16.050	-26.25	2	21.16	21.16	0.00	-15.67	-26.66	1.33	21.94	1875	2	5.88	5.77	0.11	-26.66	14.64	5.10	82.55	1875
16.475	-23.86	2	23.29	23.29	0.00	-12.21	-24.22	1.45	23.97	1875	2	5.89	5.79	0.11	-24.22	18.10	5.22	84.57	1875
16.900	-21.57	2	25.43	25.43	0.00	-8.84	-21.87	1.57	26.00	1875	2	5.90	5.80	0.10	-21.87	21.47	5.33	86.60	1875
17.325	-19.41	2	27.57	27.57	0.00	-5.61	-19.65	1.70	28.03	1875	2	5.92	5.82	0.10	-19.65	24.70	5.45	88.62	1875
17.750	-17.41	2	29.69	29.69	0.00	-2.54	-17.60	1.82	30.06	1875	2	5.94	5.84	0.09	-17.60	27.77	5.57	90.65	1875
18.175	-15.59	2	31.81	31.81	0.00	0.34	-15.74	1.94	32.09	1875	2	5.97	5.88	0.09	-15.74	30.65	5.69	92.68	1875
18.600	-13.98	2	29.64	29.64	0.00	0.73	-16.37	2.06	34.12	1875	2	6.01	5.93	0.09	-14.09	33.33	5.81	94.70	1875
19.025	-12.57	2	27.19	27.19	0.00	0.77	-17.34	2.19	36.15	1875	2	6.06	5.98	0.08	-12.64	35.79	5.93	96.73	1875
19.450	-11.35	2	25.12	25.12	0.00	0.81	-18.32	2.31	38.18	1875	2	6.13	6.05	0.08	-11.40	38.05	6.05	98.76	1875
19.875	-10.32	2	23.40	23.40	0.00	0.86	-19.29	2.43	40.21	1875	2	6.20	6.13	0.07	-10.34	40.12	6.17	100.78	1875
20.300	-9.46	2	21.98	21.98	0.00	0.90	-20.27	2.55	42.24	1875	1	6.28	6.21	0.07	-9.46	42.02	6.28	102.81	1875
		2	17.52	17.52	0.00	1.27	-23.42	2.77	36.71	1375	1	6.80	6.73	0.07	-9.46	50.58	6.80	89.35	1375
20.656	-8.85	2	16.54	16.54	0.00	1.23	-22.71	2.68	35.60	1375	1	6.91	6.84	0.07	-8.85	52.14	6.91	90.77	1375
21.013	-8.32	2	15.68	15.68	0.00	1.19	-22.00	2.60	34.49	1375	2	7.01	6.94	0.07	-8.32	53.62	7.01	92.18	1375
21.369	-7.87	2	14.91	14.91	0.00	1.15	-21.29	2.52	33.37	1375	2	7.12	7.05	0.06	-7.87	55.03	7.11	93.60	1375
21.725	-7.47	2	14.23	14.23	0.00	1.11	-20.58	2.43	32.26	1375	2	7.22	7.16	0.06	-7.47	56.38	7.22	95.01	1375
22.081	-7.12	2	13.62	13.62	0.00	1.07	-19.87	2.35	31.15	1375	2	7.33	7.27	0.06	-7.13	57.68	7.32	96.43	1375
22.438	-6.81	2	13.06	13.06	0.00	1.04	-19.16	2.26	30.04	1375	2	7.43	7.37	0.06	-6.82	58.94	7.43	97.84	1375

22.794	-6.53	2	12.53	12.53	0.00	1.00	-18.45	2.18	28.92	1375	2	7.54	7.48	0.06	-6.53	60.18	7.53	99.26	1375
23.150	-6.27	2	12.03	12.03	0.00	0.96	-17.74	2.10	27.81	1375	2	7.64	7.59	0.05	-6.27	61.40	7.64	100.67	1375
23.506	-6.01	2	11.54	11.54	0.00	0.92	-17.03	2.01	26.70	1375	2	7.75	7.69	0.05	-6.01	62.60	7.74	102.09	1375
23.863	-5.76	2	11.07	11.07	0.00	0.88	-16.32	1.93	25.58	1375	2	7.85	7.80	0.05	-5.76	63.80	7.85	103.51	1375
24.219	-5.51	2	10.59	10.59	0.00	0.84	-15.61	1.84	24.47	1375	2	7.96	7.91	0.05	-5.52	65.01	7.95	104.92	1375
24.575	-5.26	2	10.10	10.10	0.00	0.81	-14.90	1.76	23.36	1375	2	8.06	8.01	0.05	-5.26	66.21	8.06	106.34	1375
24.931	-5.00	2	9.61	9.61	0.00	0.77	-14.19	1.68	22.25	1375	2	8.17	8.12	0.05	-5.00	67.43	8.16	107.75	1375
25.288	-4.74	2	9.11	9.11	0.00	0.73	-13.48	1.59	21.13	1375	2	8.27	8.23	0.04	-4.74	68.65	8.27	109.17	1375
25.644	-4.46	2	8.59	8.59	0.00	0.69	-12.77	1.51	20.02	1375	2	8.38	8.33	0.04	-4.46	69.87	8.37	110.59	1375
26.000	-4.18	2	8.06	8.06	0.00	0.65	-12.06	1.43	18.91	1375	2	8.48	8.44	0.04	-4.18	71.11	8.48	112.00	1375
		2	11.97	11.97	0.00	0.35	-9.77	1.22	25.25	2375	2	7.24	7.20	0.04	-4.18	55.74	7.24	149.54	2375
26.500	-3.77	2	11.10	11.10	0.00	0.37	-10.19	1.27	26.35	2375	2	7.47	7.43	0.04	-3.77	58.11	7.47	154.45	2375
27.000	-3.36	2	10.21	10.21	0.00	0.38	-10.61	1.32	27.44	2375	2	7.71	7.67	0.04	-3.36	60.49	7.71	159.35	2375
27.500	-2.95	2	9.32	9.32	0.00	0.40	-11.04	1.37	28.54	2375	2	7.94	7.91	0.04	-2.95	62.87	7.94	164.26	2375
28.000	-2.53	2	8.42	8.42	0.00	0.41	-11.46	1.43	29.64	2375	2	8.18	8.15	0.03	-2.53	65.25	8.18	169.17	2375

XDO 支撐彈簧應力與變位

▼ PHASE 2

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.500	2	5.50	0.00	45.00	4730	2.51	-7.00	-8.61	-7.00	8.18	45.00

▼ PHASE 3

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.500	2	5.50	0.00	45.00	4730	2.51	-7.00	-7.00	-13.51	13.78	75.79

▼ PHASE 4

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.500	2	5.50	0.00	45.00	4730	2.51	-7.00	-13.51	-12.92	13.27	72.99
2	5.600	2	5.50	0.00	110.00	5949	6.15	-12.34	-14.39	-12.34	20.00	110.00

▼ PHASE 5

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.500	2	5.50	0.00	45.00	4730	2.51	-7.00	-12.92	-12.82	13.19	72.53
2	5.600	2	5.50	0.00	110.00	5949	6.15	-12.34	-12.34	-22.55	31.04	170.74

▼ PHASE 6

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.500	2	5.50	0.00	45.00	4730	2.51	-7.00	-12.82	-12.95	13.29	73.10
2	5.600	2	5.50	0.00	110.00	5949	6.15	-12.34	-22.55	-21.51	29.92	164.54
3	8.600	2	5.50	0.00	110.00	5949	-4.45	-22.94	-24.58	-22.94	20.00	110.00

▼ PHASE 7

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.500	2	5.50	0.00	45.00	4730	2.51	-7.00	-12.95	-10.99	11.61	63.87
2	5.600	2	5.50	0.00	110.00	5949	6.15	-12.34	-21.51	-27.63	36.53	200.94
3	8.600	2	5.50	0.00	110.00	5949	-4.45	-22.94	-22.94	-40.23	38.70	212.85

計畫名稱：XDO Example 2
主　　題：連續壁 + 順打 3 階支撐 + 有效應力法

▼ PHASE 8

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.500	2	5.50	0.00	45.00	4730	2.51	-7.00	-10.99	-10.99	11.61	63.87
2	5.600	2	5.50	0.00	110.00	5949	6.15	-12.34	-27.63	-27.63	36.53	200.94
3	8.600	2	5.50	0.00	110.00	5949	-4.45	-22.94	-40.23	-40.23	38.70	212.85
4	12.450	2	1.00	0.00	0.00	2366	-44.11	-44.11	-44.11	-44.11	0.00	0.00
5	12.000	2	1.00	0.00	0.00	26773	-45.04	-45.04	-45.04	-45.04	0.00	0.00
6	9.700	2	1.00	0.00	0.00	6693	-43.72	-43.72	-43.72	-43.72	0.00	0.00

▼ PHASE 9

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.500	2	5.50	0.00	45.00	4730	2.51	-7.00	-10.99	-11.83	12.33	67.82
2	5.600	2	5.50	0.00	110.00	5949	6.15	-12.34	-27.63	-32.43	41.73	229.53
3	8.600	-	-	-	-	-	-	-	-	-	-	-
4	12.450	2	1.00	0.00	0.00	2366	-44.11	-44.11	-44.11	-44.30	0.46	0.46
5	12.000	2	1.00	0.00	0.00	26773	-45.04	-45.04	-45.04	-45.57	14.05	14.05
6	9.700	2	1.00	0.00	0.00	6693	-43.72	-43.72	-43.72	-47.06	22.38	22.38

▼ PHASE 10

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.500	2	5.50	0.00	45.00	4730	2.51	-7.00	-11.83	-11.83	12.33	67.82
2	5.600	2	5.50	0.00	110.00	5949	6.15	-12.34	-32.43	-32.43	41.73	229.53
3	8.600	-	-	-	-	-	-	-	-	-	-	-
4	12.450	2	1.00	0.00	0.00	2366	-44.11	-44.11	-44.30	-44.30	0.46	0.46
5	12.000	2	1.00	0.00	0.00	26773	-45.04	-45.04	-45.57	-45.57	14.05	14.05
6	9.700	2	1.00	0.00	0.00	6693	-43.72	-43.72	-47.06	-47.06	22.38	22.38
7	6.700	2	1.00	0.00	0.00	6693	-37.81	-37.81	-37.81	-37.81	0.00	0.00

▼ PHASE 11

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.500	2	5.50	0.00	45.00	4730	2.51	-7.00	-11.83	-15.65	15.62	85.90
2	5.600	-	-	-	-	-	-	-	-	-	-	-
3	8.600	-	-	-	-	-	-	-	-	-	-	-
4	12.450	2	1.00	0.00	0.00	2366	-44.11	-44.11	-44.30	-44.22	0.26	0.26
5	12.000	2	1.00	0.00	0.00	26773	-45.04	-45.04	-45.57	-45.56	13.86	13.86
6	9.700	2	1.00	0.00	0.00	6693	-43.72	-43.72	-47.06	-48.11	29.42	29.42
7	6.700	2	1.00	0.00	0.00	6693	-37.81	-37.81	-37.81	-42.21	29.47	29.47

▼ PHASE 12

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.500	2	5.50	0.00	45.00	4730	2.51	-7.00	-15.65	-15.65	15.62	85.90
2	5.600	-	-	-	-	-	-	-	-	-	-	-
3	8.600	-	-	-	-	-	-	-	-	-	-	-
4	12.450	2	1.00	0.00	0.00	2366	-44.11	-44.11	-44.22	-44.22	0.26	0.26
5	12.000	2	1.00	0.00	0.00	26773	-45.04	-45.04	-45.56	-45.56	13.86	13.86
6	9.700	2	1.00	0.00	0.00	6693	-43.72	-43.72	-48.11	-48.11	29.42	29.42
7	6.700	2	1.00	0.00	0.00	6693	-37.81	-37.81	-42.21	-42.21	29.47	29.47
8	3.700	2	1.00	0.00	0.00	6693	-28.85	-28.85	-28.85	-28.85	0.00	0.00

▼ PHASE 13

計畫名稱：XDO Example 2

主　　題：連續壁 + 順打 3 階支撐 + 有效應力法

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.500	-	-	-	-	-	-	-	-	-	-	-
2	5.600	-	-	-	-	-	-	-	-	-	-	-
3	8.600	-	-	-	-	-	-	-	-	-	-	-
4	12.450	2	1.00	0.00	0.00	2366	-44.11	-44.11	-44.22	-44.20	0.22	0.22
5	12.000	2	1.00	0.00	0.00	26773	-45.04	-45.04	-45.56	-45.52	12.66	12.66
6	9.700	2	1.00	0.00	0.00	6693	-43.72	-43.72	-48.11	-47.83	27.50	27.50
7	6.700	2	1.00	0.00	0.00	6693	-37.81	-37.81	-42.21	-42.06	28.44	28.44
8	3.700	2	1.00	0.00	0.00	6693	-28.85	-28.85	-28.85	-31.99	21.02	21.02

計畫名稱：XDO Example 2
主　　題：連續壁 + 順打 3 階支撐 + 有效應力法

XDO 輸入指令

```
XDO *A*
*XDO SaSpCode:RIDO
*XDO khByDepth:Constant
*XDO KaKp:Coulomb
*XDO khD:N[125]
*XDO khU:Su[250]
*XDO Ana:D_E/U_E
*Retaining Wall Depth & Rigitity
0
28    40266
*Strata Properties
*Z UW UW' Ka Ko Kp c phi Da Dp kh khp Cv
0
2.3   1.93  0.93  0.326 0.531 4.325 0     28    0.5   0.5   1250  0     0
4.1   1.91  0.91  0.326 0.531 4.325 0     28    0.5   0.5   1500  0     0
7.2   1.9   0.9   0.34  0.546 4.044 0     27    0.5   0.5   1000  0     0
20.3  1.96  0.96  0.301 0.5   4.977 0     30    0.5   0.5   1875  0     0
26    1.92  0.92  0.326 0.531 4.325 0     28    0.5   0.5   1375  0     0
28.9  2.04  1.04  0.278 0.47  5.775 0     32    0.5   0.5   2375  0     0
30    2.01  1.01  0.314 0.515 4.635 0     29    0.5   0.5   2250  0     0
*XDO SF,D,0,28,,,10
*XDO CL,U,0,28,6,,6
*XDO CL/ML,U,0,27,4,,4
*XDO SM,D,0,30,,,15
*XDO CL,U,0,28,5.5,,7
*XDO SM,D,0,32,,,19
*XDO CL,U,0,29,9,,10
*Initial Water Table & Element Size
1.5   0.7
*Construction Stage
*PHASE 1
*Boussinesq Type Surcharge // Water Table and/or Water Pressure // Excavation
SUB(2) 0     5     15    1.5
EXC(1) 2.5
WAT(1) 2.5   0
WAT(1) 7.2   5.7
WAT(1) 20.3  18.8
WAT(1) 26    24.5
WAT(1) 28    26.5
WAT(2) 1.5   0
WAT(2) 2.3   0.8
WAT(2) 7.2   5.7
WAT(2) 20.3  18.8
WAT(2) 26    24.5
WAT(2) 28    26.5
CAL(0)
*PHASE 2
*1st Strut
STR(2) 1.5   5.5   0     45    4730
CAL(0)
*PHASE 3
*Water Table and/or Water Pressure // Excavation
EXC(1) 6.6
```

```
WAT(1) 6.6   0
WAT(1) 7.6   0
WAT(1) 20.3  12.7
WAT(1) 26    24.5
WAT(1) 28    26.5
WAT(2) 1.5   0
WAT(2) 2.3   0.8
WAT(2) 7.2   5.7
WAT(2) 20.3  18.8
WAT(2) 26    24.5
WAT(2) 28    26.5
CAL(0)
*PHASE 4
*2nd Strut
STR(2) 5.6   5.5   0     110   5949
CAL(0)
*PHASE 5
*Water Table and/or Water Pressure // Excavation
EXC(1) 9.6
WAT(1) 10.6  0
WAT(1) 20.3  9.7
WAT(1) 26    24.5
WAT(1) 28    26.5
WAT(2) 1.5   0
WAT(2) 2.3   0.8
WAT(2) 7.2   5.7
WAT(2) 20.3  18.8
WAT(2) 26    24.5
WAT(2) 28    26.5
CAL(0)
*PHASE 6
*3rd Strut
STR(2) 8.6   5.5   0     110   5949
CAL(0)
*PHASE 7
*Water Table and/or Water Pressure // Excavation
EXC(1) 12.5
WAT(1) 13.5  0
WAT(1) 20.3  6.8
WAT(1) 26    21.86
WAT(1) 28    25.18
WAT(2) 1.5   0
WAT(2) 2.3   0.8
WAT(2) 7.2   5.7
WAT(2) 20.3  18.8
WAT(2) 26    24.5
WAT(2) 28    25.18
CAL(0)
*PHASE 8
*4th Strut / 5th Strut / 6th Strut
STR(2) 12.45 1     0     0     2366
STR(2) 12    1     0     0     26773
STR(2) 9.7   1     0     0     6693
CAL(0)
*PHASE 9
*Remove Strut
```

計畫名稱：XDO Example 2
主　　題：連續壁 + 順打 3 階支撐 + 有效應力法

```
STR(0,3)
CAL(0)
*PHASE 10
*7th Strut
STR(2) 6.7   1     0     0     6693
CAL(0)
*PHASE 11
*Remove Strut
STR(0,2)
CAL(0)
*PHASE 12
*8th Strut
STR(2) 3.7   1     0     0     6693
CAL(0)
*PHASE 13
*Remove Strut
STR(0,1)
CAL(0)
*End of Calculation
END
EVP
STA
STOP
*XDO GUI
*XDO ProjectName:
*XDO ProjectNo:
*XDO Designer:
*XDO Remark:
*XDO IsDefaultFileName:False
*XDO IsUserDefinedFileName:True
*XDO IsNoSubject:False
*XDO IsDefaultSubject:False
*XDO IsUserDefinedSubject:True
*XDO UserDefinedFileName:XDO_Ex2
*XDO UserDefinedProjectName:XDO Example 2
*XDO UserDefinedTitle:連續壁 + 順打 3 階支撐 + 有效應力法
*XDO STR-1:型鋼,H350×350×12×19,,,,1,20400000,,0.01739,45,0.6,4730
*XDO STR-2:型鋼,H400×400×13×21,,,,1,20400000,,0.02187,45,0.6,5949
*XDO STR-3:型鋼,H400×400×13×21,,,,1,20400000,,0.02187,45,0.6,5949
*XDO STR-4:樓板/RC板,,140,0.1,,,,1774824,0.1,45,0.6,2366
*XDO STR-5:樓板/RC板,,280,0.8,,,,2509980,0.8,45,0.6,26773
*XDO STR-6:樓板/RC板,,280,0.2,,,,2509980,0.2,45,0.6,6693
*XDO STR-7:樓板/RC板,,280,0.2,,,,2509980,0.2,45,0.6,6693
*XDO STR-8:樓板/RC板,,280,0.2,,,,2509980,0.2,45,0.6,6693
*XDO WALL:連續壁,0.7,,,,245,,,,,2347871,20400000,,0.028583,0.6,40266,1
*XDO BTRS:N,,,,,,
```

```
***** DATA FILE NAME : XDO_Ex2.RIO

      XDO *A*
      *XDO SaSpCode:RIDO
      *XDO khByDepth:Constant
      *XDO KaKp:Coulomb
      *XDO khD:N[125]
      *XDO khU:Su[250]
      *XDO Ana:D_E/U_E
      *Retaining Wall Depth & Rigitity
      : 0
 1 ...  0
      : 28    40266
 2 ...  28 40266
      *Strata Properties
      *Z UW UW' Ka Ko Kp c phi Da Dp kh khp Cv
      : 0
 3 ...  0
      : 2.3   1.93  0.93  0.326 0.531 4.325 0     28    0.5   0.5   1250  0     0
 4 ...  2.3 1.93 0.93 0.326 0.531 4.325 0 28 0.5 0.5 1250 0 0
      : 4.1   1.91  0.91  0.326 0.531 4.325 0     28    0.5   0.5   1500  0     0
 5 ...  4.1 1.91 0.91 0.326 0.531 4.325 0 28 0.5 0.5 1500 0 0
      : 7.2   1.9   0.9   0.34  0.546 4.044 0     27    0.5   0.5   1000  0     0
 6 ...  7.2 1.9 0.9 0.34 0.546 4.044 0 27 0.5 0.5 1000 0 0
      : 20.3  1.96  0.96  0.301 0.5   4.977 0     30    0.5   0.5   1875  0     0
 7 ...  20.3 1.96 0.96 0.301 0.5 4.977 0 30 0.5 0.5 1875 0 0
      : 26    1.92  0.92  0.326 0.531 4.325 0     28    0.5   0.5   1375  0     0
 8 ...  26 1.92 0.92 0.326 0.531 4.325 0 28 0.5 0.5 1375 0 0
      : 28.9  2.04  1.04  0.278 0.47  5.775 0     32    0.5   0.5   2375  0     0
 9 ...  28.9 2.04 1.04 0.278 0.47 5.775 0 32 0.5 0.5 2375 0 0
      : 30    2.01  1.01  0.314 0.515 4.635 0     29    0.5   0.5   2250  0     0
10 ...  30 2.01 1.01 0.314 0.515 4.635 0 29 0.5 0.5 2250 0 0
      *XDO SF,D,0,28,,,10
      *XDO CL,U,0,28,6,,6
      *XDO CL/ML,U,0,27,4,,4
      *XDO SM,D,0,30,,,15
      *XDO CL,U,0,28,5.5,,7
      *XDO SM,D,0,32,,,19
      *XDO CL,U,0,29,9,,10
      *Initial Water Table & Element Size
      : 1.5   0.7
11 ...  1.5 0.7
      *Construction Stage
      *PHASE 1
      *Boussinesq Type Surcharge // Water Table and/or Water Pressure // Excavation
      : SUB(2) 0     5     15    1.5
12 ... SUB(2)  0 5 15 1.5
      : EXC(1) 2.5
13 ... EXC(1)  2.5
      : WAT(1) 2.5   0
14 ... WAT(1)  2.5 0
      : WAT(1) 7.2   5.7
15 ... WAT(1)  7.2 5.7
      : WAT(1) 20.3  18.8
16 ... WAT(1)  20.3 18.8
      : WAT(1) 26    24.5
17 ... WAT(1)  26 24.5
      : WAT(1) 28    26.5
18 ... WAT(1)  28 26.5
      : WAT(2) 1.5   0
19 ... WAT(2)  1.5 0
      : WAT(2) 2.3   0.8
20 ... WAT(2)  2.3 0.8
      : WAT(2) 7.2   5.7
21 ... WAT(2)  7.2 5.7
      : WAT(2) 20.3  18.8
22 ... WAT(2)  20.3 18.8
      : WAT(2) 26    24.5
23 ... WAT(2)  26 24.5
      : WAT(2) 28    26.5
24 ... WAT(2)  28 26.5
      : CAL(0)
25 ... CAL(0)
      *PHASE 2
      *1st Strut
      : STR(2) 1.5   5.5   0     45    4730
26 ... STR(2)  1.5 5.5 0 45 4730
      : CAL(0)
27 ... CAL(0)
      *PHASE 3
      *Water Table and/or Water Pressure // Excavation
      : EXC(1) 6.6
28 ... EXC(1)  6.6
      : WAT(1) 6.6   0
29 ... WAT(1)  6.6 0
      : WAT(1) 7.6   0
30 ... WAT(1)  7.6 0
      : WAT(1) 20.3  12.7
31 ... WAT(1)  20.3 12.7
      : WAT(1) 26    24.5
32 ... WAT(1)  26 24.5
      : WAT(1) 28    26.5
33 ... WAT(1)  28 26.5
      : WAT(2) 1.5   0
34 ... WAT(2)  1.5 0
      : WAT(2) 2.3   0.8
```

```
35 ... WAT(2)  2.3 0.8
       : WAT(2) 7.2   5.7
36 ... WAT(2)  7.2 5.7
       : WAT(2) 20.3  18.8
37 ... WAT(2)  20.3 18.8
       : WAT(2) 26    24.5
38 ... WAT(2)  26 24.5
       : WAT(2) 28    26.5
39 ... WAT(2)  28 26.5
       : CAL(0)
40 ... CAL(0)
       *PHASE 4
       *2nd Strut
       : STR(2) 5.6   5.5   0     110   5949
41 ... STR(2)  5.6 5.5 0 110 5949
       : CAL(0)
42 ... CAL(0)
       *PHASE 5
       *Water Table and/or Water Pressure // Excavation
       : EXC(1) 9.6
43 ... EXC(1)  9.6
       : WAT(1) 10.6  0
44 ... WAT(1)  10.6 0
       : WAT(1) 20.3  9.7
45 ... WAT(1)  20.3 9.7
       : WAT(1) 26    24.5
46 ... WAT(1)  26 24.5
       : WAT(1) 28    26.5
47 ... WAT(1)  28 26.5
       : WAT(2) 1.5   0
48 ... WAT(2)  1.5 0
       : WAT(2) 2.3   0.8
49 ... WAT(2)  2.3 0.8
       : WAT(2) 7.2   5.7
50 ... WAT(2)  7.2 5.7
       : WAT(2) 20.3  18.8
51 ... WAT(2)  20.3 18.8
       : WAT(2) 26    24.5
52 ... WAT(2)  26 24.5
       : WAT(2) 28    26.5
53 ... WAT(2)  28 26.5
       : CAL(0)
54 ... CAL(0)
       *PHASE 6
       *3rd Strut
       : STR(2) 8.6   5.5   0     110   5949
55 ... STR(2)  8.6 5.5 0 110 5949
       : CAL(0)
56 ... CAL(0)
       *PHASE 7
       *Water Table and/or Water Pressure // Excavation
       : EXC(1) 12.5
57 ... EXC(1)  12.5
       : WAT(1) 13.5  0
58 ... WAT(1)  13.5 0
       : WAT(1) 20.3  6.8
59 ... WAT(1)  20.3 6.8
       : WAT(1) 26    21.86
60 ... WAT(1)  26 21.86
       : WAT(1) 28    25.18
61 ... WAT(1)  28 25.18
       : WAT(2) 1.5   0
62 ... WAT(2)  1.5 0
       : WAT(2) 2.3   0.8
63 ... WAT(2)  2.3 0.8
       : WAT(2) 7.2   5.7
64 ... WAT(2)  7.2 5.7
       : WAT(2) 20.3  18.8
65 ... WAT(2)  20.3 18.8
       : WAT(2) 26    24.5
66 ... WAT(2)  26 24.5
       : WAT(2) 28    25.18
67 ... WAT(2)  28 25.18
       : CAL(0)
68 ... CAL(0)
       *PHASE 8
       *4th Strut / 5th Strut / 6th Strut
       : STR(2) 12.45 1     0     0     2366
69 ... STR(2)  12.45 1 0 0 2366
       : STR(2) 12    1     0     0     26773
70 ... STR(2)  12 1 0 0 26773
       : STR(2) 9.7   1     0     0     6693
71 ... STR(2)  9.7 1 0 0 6693
       : CAL(0)
72 ... CAL(0)
       *PHASE 9
       *Remove Strut
       : STR(0,3)
73 ... STR(0,3)
       : CAL(0)
74 ... CAL(0)
       *PHASE 10
       *7th Strut
       : STR(2) 6.7   1     0     0     6693
75 ... STR(2)  6.7 1 0 0 6693
       : CAL(0)
```

```
  76 ... CAL(0)
         *PHASE 11
         *Remove Strut
         : STR(0,2)
  77 ... STR(0,2)
         : CAL(0)
  78 ... CAL(0)
         *PHASE 12
         *8th Strut
         : STR(2) 3.7   1     0     0     6693
  79 ... STR(2)  3.7 1 0 0 6693
         : CAL(0)
  80 ... CAL(0)
         *PHASE 13
         *Remove Strut
         : STR(0,1)
  81 ... STR(0,1)
         : CAL(0)
  82 ... CAL(0)
         *End of Calculation
         : END
  83 ... END
         : EVP
  84 ... EVP
         : STA
  85 ... STA
         : STOP
  86 ... STOP
 **     RIDO V:4.24.c (C) R.F.L.  **                                        XDO                                          **  PAGE   1  **
================================================================================================================================================
**    RIDO V:4.22 (C) R.F.L.     **                                                                                      **  06-03-23  **
----------------------------------                                                                                      ----------------


                 *XDO SaSpCode:RIDO
                 *XDO khByDepth:Constant
                 *XDO KaKp:Coulomb
                 *XDO khD:N[125]
                 *XDO khU:Su[250]
                 *XDO Ana:D_E/U_E
                 *Retaining Wall Depth & Rigitity

                 ------------------------------------------------------------------------------

                                              ** STARTING DATA **
                                              ---------------------


  * BOUSSINESQ SURCHARGES NOT FUNCTION OF STATE OF SOIL
    FOR THIS OLD ADDITIVE MODEL THE SURCHARGES HAVE NO EFFECT ON THE WEIGHT OF THE SOIL


*** WALL DESCRIPTION :
                                                 INERTIA PRODUCT EI          CYLINDRICAL RIGIDITY          DEAD WEIGHT
    SECTION No  1 FROM   0.000 m  TO  28.000 m  :              40266. T.m2/m                     0. T/m3           0.000 T/m2

                 *Strata Properties
                 *Z UW UW' Ka Ko Kp c phi Da Dp kh khp Cv


*** SOIL DESCRIPTION :

     LAYER No  1 FROM   0.000 m  TO   2.300 m  :

                 SATURATED UNIT WEIGHT              GH  =       1.930 T/m3
                 SUBMERGED UNIT WEIGHT              GD  =       0.930 T/m3
                 HOR. ACTIVE PRESSURE COEFFICIENT   KA  =       0.326
                 HOR. AT REST PRESSURE COEFFICIENT  K0  =       0.531
                 HOR. PASSIVE PRESSURE COEFFICIENT  KP  =       4.325
                 COHESION                            C  =       0.000 T/m2
                 ANGLE OF INTERNAL FRICTION        PHI  =      28.000 DEGREES
                          FOR ACTIVE  PRESS. DELTA/PHI  =       0.500
                          FOR PASSIVE PRESS. DELTA/PHI  =      -0.500
                 ELASTIC REACTION COEFFICIENT (AT P=0)  =    1250.000 T/m3
                 INCR. OF THIS COEFF. WITH PRESSURE     =       0.000 1/m
                 WALL'S VERTICAL STRESS COEFFICIENT     =       0.125

     LAYER No  2 FROM   2.300 m  TO   4.100 m  :

                 SATURATED UNIT WEIGHT              GH  =       1.910 T/m3
                 SUBMERGED UNIT WEIGHT              GD  =       0.910 T/m3
                 HOR. ACTIVE PRESSURE COEFFICIENT   KA  =       0.326
                 HOR. AT REST PRESSURE COEFFICIENT  K0  =       0.531
                 HOR. PASSIVE PRESSURE COEFFICIENT  KP  =       4.325
                 COHESION                            C  =       0.000 T/m2
                 ANGLE OF INTERNAL FRICTION        PHI  =      28.000 DEGREES
                          FOR ACTIVE  PRESS. DELTA/PHI  =       0.500
                          FOR PASSIVE PRESS. DELTA/PHI  =      -0.500
                 ELASTIC REACTION COEFFICIENT (AT P=0)  =    1500.000 T/m3
                 INCR. OF THIS COEFF. WITH PRESSURE     =       0.000 1/m
                 WALL'S VERTICAL STRESS COEFFICIENT     =       0.125
 **     RIDO V:4.24.c (C) R.F.L.  **                                        XDO                                          **  PAGE   2  **
================================================================================================================================================
**    RIDO V:4.22 (C) R.F.L.     **                                                                                      **  06-03-23  **
----------------------------------                                                                                      ----------------
```

LAYER No 3 FROM 4.100 m TO 7.200 m :

SATURATED UNIT WEIGHT	GH	=	1.900 T/m3
SUBMERGED UNIT WEIGHT	GD	=	0.900 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT	KA	=	0.340
HOR. AT REST PRESSURE COEFFICIENT	K0	=	0.546
HOR. PASSIVE PRESSURE COEFFICIENT	KP	=	4.044
COHESION	C	=	0.000 T/m2
ANGLE OF INTERNAL FRICTION	PHI	=	27.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI		=	0.500
FOR PASSIVE PRESS. DELTA/PHI		=	-0.500
ELASTIC REACTION COEFFICIENT (AT P=0)		=	1000.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE		=	0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT		=	0.125

LAYER No 4 FROM 7.200 m TO 20.300 m :

SATURATED UNIT WEIGHT	GH	=	1.960 T/m3
SUBMERGED UNIT WEIGHT	GD	=	0.960 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT	KA	=	0.301
HOR. AT REST PRESSURE COEFFICIENT	K0	=	0.500
HOR. PASSIVE PRESSURE COEFFICIENT	KP	=	4.977
COHESION	C	=	0.000 T/m2
ANGLE OF INTERNAL FRICTION	PHI	=	30.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI		=	0.500
FOR PASSIVE PRESS. DELTA/PHI		=	-0.500
ELASTIC REACTION COEFFICIENT (AT P=0)		=	1875.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE		=	0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT		=	0.125

LAYER No 5 FROM 20.300 m TO 26.000 m :

SATURATED UNIT WEIGHT	GH	=	1.920 T/m3
SUBMERGED UNIT WEIGHT	GD	=	0.920 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT	KA	=	0.326
HOR. AT REST PRESSURE COEFFICIENT	K0	=	0.531
HOR. PASSIVE PRESSURE COEFFICIENT	KP	=	4.325
COHESION	C	=	0.000 T/m2
ANGLE OF INTERNAL FRICTION	PHI	=	28.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI		=	0.500
FOR PASSIVE PRESS. DELTA/PHI		=	-0.500
ELASTIC REACTION COEFFICIENT (AT P=0)		=	1375.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE		=	0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT		=	0.125

LAYER No 6 FROM 26.000 m TO 28.900 m :

SATURATED UNIT WEIGHT	GH	=	2.040 T/m3
SUBMERGED UNIT WEIGHT	GD	=	1.040 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT	KA	=	0.278
HOR. AT REST PRESSURE COEFFICIENT	K0	=	0.470
HOR. PASSIVE PRESSURE COEFFICIENT	KP	=	5.775
COHESION	C	=	0.000 T/m2
ANGLE OF INTERNAL FRICTION	PHI	=	32.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI		=	0.500
FOR PASSIVE PRESS. DELTA/PHI		=	-0.500
ELASTIC REACTION COEFFICIENT (AT P=0)		=	2375.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE		=	0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT		=	0.125

LAYER No 7 FROM 28.900 m TO 30.000 m :

SATURATED UNIT WEIGHT	GH	=	2.010 T/m3
SUBMERGED UNIT WEIGHT	GD	=	1.010 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT	KA	=	0.314
HOR. AT REST PRESSURE COEFFICIENT	K0	=	0.515
HOR. PASSIVE PRESSURE COEFFICIENT	KP	=	4.635
COHESION	C	=	0.000 T/m2
ANGLE OF INTERNAL FRICTION	PHI	=	29.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI		=	0.500
FOR PASSIVE PRESS. DELTA/PHI		=	-0.500
ELASTIC REACTION COEFFICIENT (AT P=0)		=	2250.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE		=	0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT		=	0.125

*XDO SF,D,0,28,,,10
*XDO CL,U,0,28,6,,6
*XDO CL/ML,U,0,27,4,,4
*XDO SM,D,0,30,,,15
*XDO CL,U,0,28,5.5,,7
*XDO SM,D,0,32,,,19
*XDO CL,U,0,29,9,,10
*Initial Water Table & Element Size

** PHASE No 1 **

*Construction Stage
*PHASE 1
*Boussinesq Type Surcharge // Water Table and/or Water Pressure // Excavation

* ADDING A BOUSSINESQ SURCHARGE ON SOIL 2
LEV. = 0.000 m A = 5.000 m B = 15.000 m Q = 1.500 T/m2

* EXCAVATION IN SOIL 1 TO LEVEL = 2.500 m

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 1 TO LEVEL = 2.500 m
WATER PRESSURE IN SOIL 1 TO LEVEL = 7.200 m PR. = 5.700 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 20.300 m PR. = 18.800 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 26.000 m PR. = 24.500 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 28.000 m PR. = 26.500 T/m2

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 2 TO LEVEL = 1.500 m
WATER PRESSURE IN SOIL 2 TO LEVEL = 2.300 m PR. = 0.800 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 7.200 m PR. = 5.700 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 20.300 m PR. = 18.800 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 26.000 m PR. = 24.500 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 28.000 m PR. = 26.500 T/m2

PHASE 1

	WALL						SOIL 1 EXCAVATION: 2.50 m WATER LEVEL: 2.50 m CAQUOT SURC.: 0.00 T/m2				SOIL 2 EXCAVATION: 0.00 m WATER LEVEL: 1.50 m CAQUOT SURC.: 0.00 T/m2				
LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	STRUTS/ ANCHORS No LOAD
0.000	-11.04	1.59	0.00	0.00	0.00		0				1	0.00		1250	
0.375	-10.45	1.59	-0.01	-0.05	0.01		0				1	0.28	0.05	1250	
0.750	-9.85	1.59	-0.05	-0.21	0.05		0				1	0.57	0.09	1250	
1.125	-9.25	1.59	-0.18	-0.48	0.12		0				1	0.84	0.14	1250	
1.500	-8.65	1.59	-0.42	-0.84	0.21		0				1	1.12	0.18	1250	
1.900	-8.02	1.58	-0.87	-1.40	0.33	-0.40	0				1	1.28	0.21	1250	
2.300	-7.39	1.57	-1.58	-2.19	0.47	-0.80	0				1	1.43	0.24	1250	
2.500	-7.07	1.56	-2.06	-2.66	0.54	-1.00	0				1	1.50	0.26	1500	
							3	0.00		1500	1	1.50	0.26	1500	
3.100	-6.15	1.52	-4.00	-3.64	0.64	-0.87	3	1.81		1500	1	1.71	0.29	1500	
3.700	-5.26	1.44	-6.22	-3.58	0.51	-0.74	3	3.62		1500	1	1.91	0.31	1500	
4.100	-4.69	1.37	-7.55	-2.96	0.28	-0.66	3	4.82		1500	1	2.03	0.31	1500	
							3	4.51		1000	1	2.11	0.31	1000	
4.756	-3.83	1.24	-9.11	-1.78	0.16	-0.52	2	4.69		1000	1	2.31	0.32	1000	
5.178	-3.33	1.14	-9.71	-1.08	0.29	-0.43	2	4.35		1000	1	2.44	0.32	1000	
5.600	-2.87	1.04	-10.04	-0.53	0.51	-0.34	2	4.05		1000	1	2.57	0.31	1000	
6.100	-2.39	0.91	-10.17	-0.04	0.81	-0.23	2	3.75		1000	1	2.71	0.31	1000	
6.600	-1.96	0.78	-10.11	0.29	1.14	-0.13	2	3.51		1000	1	2.86	0.30	1000	
6.700	-1.89	0.76	-10.08	0.34	1.21	-0.11	2	3.47		1000	1	2.88	0.29	1000	
7.200	-1.54	0.63	-9.86	0.50	1.52		2	3.31		1000	2	3.15	0.28	1000	
							2	4.51		1875	1	2.71	0.28	1875	
7.600	-1.30	0.54	-9.52	1.15	1.81		2	4.26		1875	1	2.82	0.27	1875	
8.100	-1.06	0.42	-8.78	1.78	2.20		2	4.05		1875	1	2.95	0.26	1875	
8.600	-0.88	0.32	-7.77	2.22	2.52		2	3.94		1875	2	3.31	0.25	1875	
9.100	-0.74	0.23	-6.61	2.41	2.70		2	3.92		1875	2	3.80	0.24	1875	
9.600	-0.64	0.16	-5.40	2.38	2.78		2	3.98		1875	2	4.21	0.23	1875	
9.700	-0.63	0.14	-5.17	2.36	2.79		2	4.00		1875	2	4.28	0.23	1875	
10.150	-0.58	0.09	-4.14	2.19	2.82		2	4.12		1875	2	4.58	0.22	1875	
10.600	-0.54	0.05	-3.20	1.96	2.84		2	4.28		1875	2	4.85	0.21	1875	
11.300	-0.53	0.01	-1.98	1.54	2.87		2	4.58		1875	2	5.21	0.19	1875	
12.000	-0.53	-0.02	-1.05	1.11	2.89		2	4.92		1875	2	5.52	0.18	1875	
12.450	-0.54	-0.03	-0.61	0.85	2.90		2	5.16		1875	2	5.70	0.17	1875	
12.500	-0.54	-0.03	-0.57	0.82	2.90		2	5.19		1875	2	5.73	0.17	1875	
13.000	-0.56	-0.03	-0.23	0.57	2.91		2	5.46		1875	2	5.93	0.16	1875	
13.500	-0.58	-0.04	0.00	0.35	2.92		2	5.73		1875	2	6.12	0.15	1875	
13.925	-0.59	-0.03	0.12	0.20	2.93		2	5.96		1875	2	6.29	0.14	1875	
14.350	-0.61	-0.03	0.18	0.07	2.95		2	6.19		1875	2	6.46	0.14	1875	
14.775	-0.62	-0.03	0.18	-0.03	2.96		2	6.42		1875	2	6.64	0.13	1875	
15.200	-0.63	-0.03	0.15	-0.11	2.97		2	6.65		1875	2	6.81	0.12	1875	
15.625	-0.64	-0.03	0.09	-0.17	2.98		2	6.88		1875	2	6.99	0.12	1875	
16.050	-0.66	-0.03	0.01	-0.21	2.99		2	7.10		1875	2	7.16	0.11	1875	
16.475	-0.67	-0.03	-0.08	-0.22	3.00		2	7.33		1875	2	7.34	0.11	1875	
16.900	-0.68	-0.03	-0.18	-0.22	3.01		2	7.55		1875	2	7.52	0.10	1875	
17.325	-0.69	-0.03	-0.26	-0.19	3.03		2	7.78		1875	2	7.69	0.10	1875	
17.750	-0.71	-0.03	-0.33	-0.14	3.04		2	8.01		1875	2	7.86	0.09	1875	
18.175	-0.72	-0.04	-0.38	-0.06	3.05		2	8.25		1875	2	8.04	0.09	1875	
18.600	-0.74	-0.04	-0.38	0.04	3.06		2	8.48		1875	2	8.20	0.09	1875	
19.025	-0.76	-0.05	-0.34	0.18	3.07		2	8.72		1875	2	8.37	0.08	1875	
19.450	-0.78	-0.05	-0.23	0.34	3.08		2	8.96		1875	2	8.53	0.08	1875	
19.875	-0.80	-0.05	-0.04	0.54	3.10		2	9.21		1875	2	8.69	0.07	1875	
20.300	-0.82	-0.05	0.24	0.78	3.11		2	9.45		1875	2	8.85	0.07	1875	
							2	9.53		1375	2	9.90	0.07	1375	
20.656	-0.84	-0.05	0.49	0.66	3.11		2	9.73		1375	2	10.05	0.07	1375	
21.012	-0.85	-0.04	0.71	0.55	3.12		2	9.92		1375	2	10.20	0.07	1375	
21.369	-0.87	-0.03	0.89	0.46	3.12		2	10.12		1375	2	10.35	0.06	1375	
21.725	-0.88	-0.03	1.04	0.38	3.12		2	10.31		1375	2	10.51	0.06	1375	
22.081	-0.89	-0.02	1.16	0.31	3.13		2	10.49		1375	2	10.67	0.06	1375	

PHASE 1 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
22.438	-0.89	-0.01	1.26	0.25	3.13		2	10.67		1375	2	10.84	0.06	1375		
22.794	-0.89	0.01	1.34	0.19	3.13		2	10.84		1375	2	11.01	0.06	1375		
23.150	-0.89	0.02	1.40	0.13	3.14		2	11.01		1375	2	11.19	0.05	1375		
23.506	-0.88	0.03	1.43	0.06	3.14		2	11.17		1375	2	11.37	0.05	1375		
23.862	-0.86	0.04	1.44	-0.02	3.14		2	11.33		1375	2	11.56	0.05	1375		
24.219	-0.85	0.06	1.42	-0.11	3.14		2	11.48		1375	2	11.76	0.05	1375		
24.575	-0.82	0.07	1.36	-0.22	3.15		2	11.62		1375	2	11.97	0.05	1375		
24.931	-0.80	0.08	1.26	-0.36	3.15		2	11.76		1375	2	12.17	0.05	1375		
25.288	-0.77	0.09	1.10	-0.52	3.15		2	11.89		1375	2	12.39	0.04	1375		
25.644	-0.73	0.10	0.88	-0.71	3.15		2	12.02		1375	2	12.61	0.04	1375		
26.000	-0.70	0.11	0.59	-0.94	3.15		2	12.14		1375	2	12.83	0.04	1375		
							2	11.55		2375	2	10.56	0.04	2375		
26.500	-0.64	0.11	0.23	-0.51	3.16		2	11.67		2375	2	10.93	0.04	2375		
27.000	-0.58	0.11	0.06	-0.21	3.17		2	11.78		2375	2	11.31	0.04	2375		
27.500	-0.53	0.11	0.00	-0.04	3.17		2	11.89		2375	2	11.68	0.04	2375		
28.000	-0.47	0.11	0.00	0.00	3.18		2	12.00		2375	2	12.06	0.03	2375		
m	mm rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T	

MAXIMUM DISPLACEMENT = -11.04 mm
MAXIMUM MOMENT = -10.17 m.T/m
VERTICAL REACTION IN FOOT = -3.18 T/m

CODIFICATION OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR., 2 = ELASTIC, 3 = PASSIVE PR.

(6 IT.)

CANTILEVER WALL

RATIOS OF SECURITY ON THE EMBEDMENT (according to the simplified method, for FRANCE) : WITHOUT PARTIAL FACTOR
HIGHEST LEVEL WITH DIFFERENTIAL NIL PRESSURE ZA = 3.367 m
LEVEL OF APPLICATION OF THE CONCENTRATED FORCE ZB = 6.832 m
CONCENTRATED FORCE SIMULATING THE EFFECT OF THE MINIMAL EMBEDMENT = -11.840 T/m
Bottom of the wall at ZD = 28.000 m (ZA-ZD)/(ZA-ZB) = 7.108

FOR THE SUPPORTED ZONE : SINCE THE LEVEL OF EXCAVATION 2.500 m UNTIL THE LEVEL OF PIVOTING 9.282 m
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.331 = (24.88 T/m)/(75.20 T/m)
SIMPLY INDICATIVE

FOR THE SUPPORTED ZONE : SINCE THE LEVEL OF PIVOTING 9.282 m UNTIL THE LEVEL 28.000 m
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.092 = (159.63 T/m)/(1728.41 T/m)
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 4.21 T/m

** PHASE No 2 **

*PHASE 2
*1st Strut

* INSTALLATION OF A LINE OF STRUTS No 1
LEVEL = 1.500 m
SPACING = 5.500 m
INCLINATION = 0.000 DEGREES
PRELOAD = 45.000 T
STIFFNESS = 4730.000 T/m
EFFECTIVE LENGTH = 0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 2

PHASE 2

WALL | SOIL 1: EXCAVATION 2.50 m, WATER LEVEL 2.50 m, CAQUOT SURC. 0.00 T/m2 | SOIL 2: EXCAVATION 0.00 m, WATER LEVEL 1.50 m, CAQUOT SURC. 0.00 T/m2 | STRUTS/ANCHORS

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	-8.75	1.15	0.00	0.00			0				3	0.00		1250		
0.375	-8.32	1.15	-0.07	-0.55	-0.10		0				2	2.94	0.05	1250		
0.750	-7.89	1.15	-0.48	-1.67	-0.21		0				2	3.01	0.09	1250		
1.125	-7.46	1.14	-1.32	-2.81	-0.22		0				2	3.08	0.14	1250		
1.500	-7.04	1.12	-2.59	-3.97	-0.22		0				2	3.14	0.18	1250		
				4.21			0				2	3.14	0.18	1250	1	45.00
1.900	-6.60	1.10	-1.17	2.89	-0.22	-0.40	0				2	3.05	0.21	1250		

2.300	-6.16	1.09	-0.30	1.45	-0.22	-0.80	0				2	2.97	0.24	1250		
							0				2	3.27	0.24	1500		
2.500	-5.94	1.09	-0.09	0.62	-0.22	-1.00	0				2	3.20	0.26	1500		
							2	0.00		1500	2	3.20	0.26	1500		
3.100	-5.28	1.09	-0.42	-1.65	-0.22	-0.87	2	0.51		1500	2	3.01	0.29	1500		
3.700	-4.63	1.08	-1.87	-2.93	-0.29	-0.74	2	2.68		1500	2	2.84	0.31	1500		
4.100	-4.21	1.05	-3.07	-2.98	-0.45	-0.66	2	4.10		1500	2	2.76	0.31	1500		
							2	4.03		1000	2	2.59	0.31	1000		
4.756	-3.54	0.99	-4.82	-2.31	-0.67	-0.52	2	4.39		1000	2	2.61	0.32	1000		
5.178	-3.13	0.93	-5.69	-1.82	-0.64	-0.43	2	4.15		1000	2	2.64	0.32	1000		
5.600	-2.75	0.87	-6.37	-1.40	-0.52	-0.34	2	3.92		1000	2	2.69	0.31	1000		
6.100	-2.34	0.78	-6.96	-1.00	-0.28	-0.23	2	3.70		1000	2	2.76	0.31	1000		
6.600	-1.97	0.70	-7.38	-0.69	0.03	-0.13	2	3.52		1000	1	2.86	0.30	1000		
6.700	-1.90	0.68	-7.45	-0.64	0.10	-0.11	2	3.49		1000	1	2.88	0.29	1000		
7.200	-1.59	0.58	-7.71	-0.45	0.42		2	3.36		1000	2	3.10	0.28	1000		
							2	4.60		1875	1	2.71	0.28	1875		
7.600	-1.37	0.51	-7.75	0.24	0.71		2	4.38		1875	1	2.82	0.27	1875		
8.100	-1.14	0.41	-7.45	0.94	1.10		2	4.19		1875	1	2.95	0.26	1875		
8.600	-0.96	0.32	-6.84	1.48	1.47		2	4.09		1875	2	3.16	0.25	1875		
9.100	-0.82	0.24	-6.01	1.81	1.72		2	4.06		1875	2	3.66	0.24	1875		
9.600	-0.71	0.17	-5.06	1.92	1.84		2	4.11		1875	2	4.08	0.23	1875		
9.700	-0.70	0.16	-4.87	1.92	1.85		2	4.13		1875	2	4.15	0.23	1875		
10.150	-0.63	0.11	-4.02	1.86	1.90		2	4.23		1875	2	4.47	0.22	1875		
10.600	-0.59	0.07	-3.21	1.72	1.94		2	4.37		1875	2	4.76	0.21	1875		
11.300	-0.56	0.02	-2.11	1.41	1.97		2	4.64		1875	2	5.14	0.19	1875		
12.000	-0.56	0.00	-1.24	1.06	1.99		2	4.97		1875	2	5.47	0.18	1875		
12.450	-0.56	-0.02	-0.81	0.84	2.01		2	5.19		1875	2	5.67	0.17	1875		
12.500	-0.56	-0.02	-0.77	0.82	2.01		2	5.22		1875	2	5.69	0.17	1875		
13.000	-0.57	-0.02	-0.42	0.59	2.02		2	5.48		1875	2	5.90	0.16	1875		
13.500	-0.58	-0.03	-0.17	0.39	2.04		2	5.74		1875	2	6.11	0.15	1875		
13.925	-0.60	-0.03	-0.04	0.25	2.05		2	5.97		1875	2	6.29	0.14	1875		
14.350	-0.61	-0.03	0.04	0.12	2.06		2	6.19		1875	2	6.46	0.14	1875		
14.775	-0.62	-0.03	0.07	0.02	2.07		2	6.42		1875	2	6.64	0.13	1875		
15.200	-0.63	-0.03	0.05	-0.07	2.08		2	6.65		1875	2	6.81	0.12	1875		
15.625	-0.64	-0.03	0.01	-0.13	2.09		2	6.87		1875	2	6.99	0.12	1875		
16.050	-0.65	-0.03	-0.05	-0.17	2.10		2	7.10		1875	2	7.17	0.11	1875		
16.475	-0.66	-0.03	-0.13	-0.19	2.11		2	7.32		1875	2	7.35	0.11	1875		
16.900	-0.68	-0.03	-0.21	-0.19	2.13		2	7.55		1875	2	7.52	0.10	1875		
17.325	-0.69	-0.03	-0.28	-0.17	2.14		2	7.78		1875	2	7.70	0.10	1875		
17.750	-0.70	-0.04	-0.35	-0.12	2.15		2	8.01		1875	2	7.87	0.09	1875		
18.175	-0.72	-0.04	-0.38	-0.05	2.16		2	8.24		1875	2	8.04	0.09	1875		
18.600	-0.74	-0.04	-0.38	0.05	2.17		2	8.48		1875	2	8.21	0.09	1875		
19.025	-0.76	-0.05	-0.33	0.18	2.18		2	8.72		1875	2	8.37	0.08	1875		
19.450	-0.78	-0.05	-0.22	0.35	2.20		2	8.96		1875	2	8.53	0.08	1875		
19.875	-0.80	-0.05	-0.03	0.55	2.21		2	9.21		1875	2	8.69	0.07	1875		
20.300	-0.82	-0.05	0.25	0.78	2.22		2	9.45		1875	2	8.85	0.07	1875		
							2	9.53		1375	2	9.90	0.07	1375		
20.656	-0.84	-0.05	0.50	0.66	2.23		2	9.73		1375	2	10.05	0.07	1375		
21.012	-0.85	-0.04	0.72	0.55	2.23		2	9.92		1375	2	10.20	0.07	1375		
21.369	-0.87	-0.03	0.90	0.46	2.23		2	10.12		1375	2	10.35	0.06	1375		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T

PHASE 2 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
21.725	-0.88	-0.03	1.05	0.38	2.24		2	10.31		1375	2	10.51	0.06	1375		
22.081	-0.89	-0.02	1.17	0.31	2.24		2	10.49		1375	2	10.67	0.06	1375		
22.438	-0.89	-0.01	1.27	0.25	2.24		2	10.67		1375	2	10.84	0.06	1375		
22.794	-0.89	0.01	1.35	0.19	2.24		2	10.84		1375	2	11.01	0.06	1375		
23.150	-0.89	0.02	1.40	0.13	2.25		2	11.01		1375	2	11.19	0.05	1375		
23.506	-0.88	0.03	1.44	0.06	2.25		2	11.17		1375	2	11.37	0.05	1375		
23.862	-0.86	0.04	1.44	-0.02	2.25		2	11.33		1375	2	11.56	0.05	1375		
24.219	-0.85	0.06	1.42	-0.11	2.26		2	11.48		1375	2	11.76	0.05	1375		
24.575	-0.82	0.07	1.36	-0.22	2.26		2	11.62		1375	2	11.96	0.05	1375		
24.931	-0.80	0.08	1.26	-0.36	2.26		2	11.76		1375	2	12.17	0.05	1375		
25.288	-0.77	0.09	1.10	-0.52	2.26		2	11.89		1375	2	12.39	0.04	1375		
25.644	-0.73	0.10	0.88	-0.71	2.26		2	12.02		1375	2	12.61	0.04	1375		
26.000	-0.70	0.11	0.59	-0.94	2.26		2	12.14		1375	2	12.83	0.04	1375		
							2	11.55		2375	2	10.56	0.04	2375		
26.500	-0.64	0.11	0.23	-0.51	2.27		2	11.67		2375	2	10.93	0.04	2375		
27.000	-0.58	0.11	0.06	-0.21	2.28		2	11.78		2375	2	11.30	0.04	2375		
27.500	-0.53	0.11	0.00	-0.04	2.28		2	11.89		2375	2	11.68	0.04	2375		
28.000	-0.47	0.11	0.00	0.00	2.29		2	12.00		2375	2	12.06	0.03	2375		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T

MAXIMUM DISPLACEMENT = -8.75 mm
MAXIMUM MOMENT = -7.75 m.T/m
VERTICAL REACTION IN FOOT = -2.29 T/m

CODIFICATION OF STATE OF SOIL :
-1 = SEPARATION
0 = EXCAVATION
1 = ACTIVE PR.
2 = ELASTIC
3 = PASSIVE PR.

(5 IT.)

CANTILEVER WALL

RATIOS OF SECURITY ON THE EMBEDMENT (according to the simplified method, for FRANCE) : WITHOUT PARTIAL FACTOR
HIGHEST LEVEL WITH DIFFERENTIAL NIL PRESSURE ZA = 3.367 m
LEVEL OF APPLICATION OF THE CONCENTRATED FORCE ZB = 6.832 m
CONCENTRATED FORCE SIMULATING THE EFFECT OF THE MINIMAL EMBEDMENT = -11.840 T/m

Bottom of the wall at ZD = 28.000 m (ZA-ZD)/(ZA-ZB) = 7.108

FOR THE SUPPORTED ZONE : SINCE THE LEVEL OF EXCAVATION 2.500 m UNTIL THE LEVEL OF PIVOTING 9.655 m
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.291 = (24.82 T/m)/(85.25 T/m)
SIMPLY INDICATIVE

FOR THE SUPPORTED ZONE : SINCE THE LEVEL OF PIVOTING 9.655 m UNTIL THE LEVEL 28.000 m
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.092 = (157.88 T/m)/(1709.34 T/m)
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 4.21 T/m

** PHASE No 3 **

*PHASE 3
*Water Table and/or Water Pressure // Excavation

* EXCAVATION IN SOIL 1 TO LEVEL = 6.600 m

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 1 TO LEVEL = 6.600 m
WATER PRESSURE IN SOIL 1 TO LEVEL = 7.600 m PR. = 0.000 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 20.300 m PR. = 12.700 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 26.000 m PR. = 24.500 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 28.000 m PR. = 26.500 T/m2

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 2 TO LEVEL = 1.500 m
WATER PRESSURE IN SOIL 2 TO LEVEL = 2.300 m PR. = 0.800 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 7.200 m PR. = 5.700 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 20.300 m PR. = 18.800 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 26.000 m PR. = 24.500 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 28.000 m PR. = 26.500 T/m2

PHASE 3

WALL							SOIL 1 EXCAVATION: 6.60 m WATER LEVEL: 6.60 m CAQUOT SURC.: 0.00 T/m2			SOIL 2 EXCAVATION: 0.00 m WATER LEVEL: 1.50 m CAQUOT SURC.: 0.00 T/m2			STRUTS/ ANCHORS	
LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH. ELAST.	STATE	PRE.	SURCH.	ELAST.	No LOAD
0.000	-12.18	-0.93	0.00	0.00	0.00		0			1	0.00		1250	
0.375	-12.53	-0.93	-0.01	-0.05	0.01		0			1	0.28	0.05	1250	
0.750	-12.87	-0.93	-0.05	-0.21	0.05		0			1	0.57	0.09	1250	
1.125	-13.22	-0.93	-0.18	-0.48	0.12		0			1	0.84	0.14	1250	
1.500	-13.57	-0.93	-0.42	-0.84	0.21		0			1	1.12	0.18	1250	
				12.95			0			1	1.12	0.18	1250	1 75.87
1.900	-13.94	-0.91	4.65	12.39	0.33	-0.40	0			1	1.28	0.21	1250	
2.300	-14.29	-0.84	9.46	11.61	0.47	-0.80	0			1	1.43	0.24	1250	
2.500	-14.45	-0.78	11.74	11.14	0.54	-1.00	0			1	1.50	0.26	1500	
3.100	-14.86	-0.56	17.92	9.39	0.78	-1.60	0			1	1.71	0.29	1500	
3.700	-15.11	-0.26	22.91	7.17	1.05	-2.20	0			1	1.91	0.31	1500	
4.100	-15.16	-0.02	25.43	5.42	1.25	-2.60	0			1	2.03	0.31	1500	
							0			1	2.11	0.31	1000	
4.756	-15.03	0.42	27.91	2.05	1.59	-3.26	0			1	2.31	0.32	1000	
5.178	-14.79	0.72	28.27	-0.42	1.83	-3.68	0			1	2.44	0.32	1000	
5.600	-14.43	1.01	27.53	-3.11	2.09	-4.10	0			1	2.57	0.31	1000	
6.100	-13.84	1.34	25.11	-6.61	2.40	-4.60	0			1	2.71	0.31	1000	
6.600	-13.10	1.63	20.87	-10.43	2.74	-5.10	0			1	2.86	0.30	1000	
							3	0.00	1000	1	2.86	0.30	1000	
6.700	-12.93	1.68	19.79	-11.19	2.80	-5.20	3	0.77	1000	1	2.88	0.29	1000	
7.200	-12.04	1.88	13.41	-14.05	2.83	-5.70	3	4.61	1000	1	3.03	0.28	1000	
							3	5.67	1875	1	2.71	0.28	1875	
7.600	-11.26	1.99	7.66	-14.46	2.31	-6.10	3	9.58	1875	1	2.82	0.27	1875	
8.100	-10.25	2.04	0.61	-13.57	1.25	-6.10	3	11.96	1875	1	2.95	0.26	1875	
8.600	-9.24	2.01	-5.72	-11.55	-0.11	-6.10	3	14.35	1875	1	3.08	0.25	1875	
9.100	-8.26	1.90	-10.75	-8.40	-1.77	-6.10	3	16.74	1875	1	3.22	0.24	1875	
9.600	-7.34	1.75	-14.08	-4.99	-2.97	-6.10	2	15.69	1875	1	3.35	0.23	1875	
9.700	-7.17	1.71	-14.54	-4.38	-3.08	-6.10	2	15.41	1875	1	3.38	0.23	1875	
10.150	-6.44	1.54	-15.96	-1.99	-3.25	-6.10	2	14.25	1875	1	3.50	0.22	1875	
10.600	-5.78	1.36	-16.42	-0.15	-3.10	-6.10	2	13.25	1875	1	3.62	0.21	1875	
11.300	-4.93	1.08	-15.78	1.81	-2.60	-6.10	2	11.98	1875	1	3.80	0.19	1875	
12.000	-4.27	0.82	-14.09	2.89	-1.95	-6.10	2	11.08	1875	1	3.99	0.18	1875	
12.450	-3.94	0.67	-12.71	3.21	-1.48	-6.10	2	10.67	1875	1	4.11	0.17	1875	
12.500	-3.90	0.65	-12.55	3.24	-1.42	-6.10	2	10.64	1875	1	4.13	0.17	1875	
13.000	-3.62	0.50	-10.90	3.33	-0.88	-6.10	2	10.34	1875	1	4.26	0.16	1875	
13.500	-3.40	0.38	-9.25	3.24	-0.30	-6.10	2	10.16	1875	1	4.40	0.15	1875	
13.925	-3.25	0.29	-7.91	3.06	0.20	-6.10	2	10.10	1875	1	4.51	0.14	1875	
14.350	-3.15	0.21	-6.66	2.82	0.72	-6.10	2	10.11	1875	1	4.63	0.14	1875	
14.775	-3.07	0.15	-5.52	2.54	1.25	-6.10	2	10.17	1875	1	4.75	0.13	1875	
15.200	-3.02	0.10	-4.50	2.25	1.79	-6.10	2	10.27	1875	1	4.86	0.12	1875	
15.625	-2.99	0.05	-3.60	1.96	2.35	-6.10	2	10.42	1875	1	4.98	0.12	1875	
16.050	-2.97	0.02	-2.83	1.69	2.92	-6.10	2	10.59	1875	1	5.10	0.11	1875	
16.475	-2.97	-0.01	-2.16	1.45	3.51	-6.10	2	10.79	1875	1	5.22	0.11	1875	

16.900	-2.98	-0.03	-1.58	1.25	4.11	-6.10	2	11.01	1875	1	5.33	0.10	1875		
17.325	-2.99	-0.04	-1.09	1.10	4.72	-6.10	2	11.24	1875	1	5.45	0.10	1875		
17.750	-3.01	-0.05	-0.64	0.99	5.35	-6.10	2	11.48	1875	1	5.57	0.09	1875		
18.175	-3.03	-0.05	-0.23	0.94	5.99	-6.10	2	11.73	1875	1	5.69	0.09	1875		
18.600	-3.06	-0.05	0.16	0.94	6.64	-6.10	2	11.98	1875	1	5.81	0.09	1875		
19.025	-3.08	-0.05	0.57	1.00	7.31	-6.10	2	12.22	1875	1	5.93	0.08	1875		
19.450	-3.10	-0.04	1.02	1.11	7.99	-6.10	2	12.46	1875	1	6.05	0.08	1875		
19.875	-3.12	-0.03	1.52	1.27	8.69	-6.10	2	12.70	1875	1	6.17	0.07	1875		
20.300	-3.12	-0.01	2.11	1.47	9.39	-6.10	2	12.92	1875	1	6.28	0.07	1875		
							2	11.79	1375	1	6.80	0.07	1375		
20.656	-3.12	0.01	2.57	1.12	10.00	-5.72	2	11.76	1375	2	6.91	0.07	1375		
21.012	-3.12	0.04	2.91	0.84	10.60	-5.34	2	11.72	1375	2	7.09	0.07	1375		
21.369	-3.10	0.06	3.17	0.62	11.15	-4.96	2	11.67	1375	2	7.29	0.06	1375		
21.725	-3.07	0.09	3.36	0.43	11.67	-4.58	2	11.61	1375	2	7.50	0.06	1375		
m	mm rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3	T/m2	T/m2	T/m3	T		

PHASE 3 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
22.081	-3.03	0.12	3.48	0.28	12.15	-4.19	2	11.53		1375	2	7.72	0.06	1375		
22.438	-2.99	0.15	3.56	0.15	12.58	-3.81	2	11.43		1375	2	7.96	0.06	1375		
22.794	-2.93	0.18	3.59	0.03	12.96	-3.43	2	11.32		1375	2	8.21	0.06	1375		
23.150	-2.85	0.22	3.58	-0.09	13.29	-3.05	2	11.19		1375	2	8.48	0.05	1375		
23.506	-2.77	0.25	3.53	-0.22	13.58	-2.67	2	11.05		1375	2	8.77	0.05	1375		
23.862	-2.68	0.28	3.43	-0.37	13.83	-2.29	2	10.89		1375	2	9.07	0.05	1375		
24.219	-2.57	0.31	3.26	-0.55	14.03	-1.91	2	10.72		1375	2	9.39	0.05	1375		
24.575	-2.46	0.34	3.03	-0.78	14.19	-1.52	2	10.54		1375	2	9.72	0.05	1375		
24.931	-2.33	0.36	2.70	-1.06	14.32	-1.14	2	10.34		1375	2	10.06	0.05	1375		
25.288	-2.20	0.38	2.27	-1.40	14.42	-0.76	2	10.13		1375	2	10.41	0.04	1375		
25.644	-2.06	0.40	1.70	-1.81	14.49	-0.38	2	9.91		1375	2	10.78	0.04	1375		
26.000	-1.92	0.41	0.97	-2.29	14.55		2	9.68		1375	2	11.15	0.04	1375		
							2	10.79		2375	2	7.65	0.04	2375		
26.500	-1.71	0.42	0.17	-0.98	15.13		2	10.53		2375	2	8.39	0.04	2375		
27.000	-1.50	0.42	-0.09	-0.15	15.47		2	10.28		2375	2	9.13	0.04	2375		
27.500	-1.29	0.42	-0.06	0.17	15.65		2	10.03		2375	2	9.87	0.04	2375		
28.000	-1.08	0.42	0.00	0.00	15.74		2	9.78		2375	2	10.61	0.03	2375		
m	mm rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3	T		

MAXIMUM DISPLACEMENT = -15.16 mm
MAXIMUM MOMENT = 28.27 m.T/m
VERTICAL REACTION IN FOOT = -15.74 T/m

CODIFICATION OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR., 2 = ELASTIC, 3 = PASSIVE PR.
CODIFICATION OF SOIL :

(8 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.236 = (238.84 T/m)/(1013.97 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.071 = (139.18 T/m)/(1963.73 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 4.21 T/m

** PHASE No 4 **

*PHASE 4
*2nd Strut

* INSTALLATION OF A LINE OF STRUTS No 2

LEVEL	=	5.600 m
SPACING	=	5.500 m
INCLINATION	=	0.000 DEGREES
PRELOAD	=	110.000 T
STIFFNESS	=	5949.000 T/m
EFFECTIVE LENGTH	=	0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 2

PHASE 4

WALL

SOIL 1		SOIL 2	
EXCAVATION:	6.60 m	EXCAVATION:	0.00 m
WATER LEVEL:	6.60 m	WATER LEVEL:	1.50 m
CAQUOT SURC.:	0.00 T/m2	CAQUOT SURC.:	0.00 T/m2

STRUTS/ ANCHORS

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	-12.38	-0.40	0.00	0.00	0.00		0				1	0.00		1250		
0.375	-12.53	-0.40	-0.01	-0.05	0.01		0				1	0.28	0.05	1250		
0.750	-12.68	-0.40	-0.06	-0.26	0.03		0				2	0.81	0.09	1250		
1.125	-12.83	-0.40	-0.22	-0.66	0.03		0				2	1.34	0.14	1250		

1.500	-12.98	-0.40	-0.58	-1.26	0.03		0				2	1.86	0.18	1250					
				12.03			0				2	1.86	0.18	1250	1	73.07			
1.900	-13.14	-0.39	4.06	11.12	0.03	-0.40	0				2	2.28	0.21	1250					
2.300	-13.28	-0.32	8.27	9.88	0.03	-0.80	0				2	2.69	0.24	1250					
							0				2	2.94	0.24	1500					
2.500	-13.34	-0.28	10.17	9.09	0.03	-1.00	0				2	3.17	0.26	1500					
3.100	-13.45	-0.09	14.80	6.22	0.03	-1.60	0				2	3.82	0.29	1500					
3.700	-13.44	0.15	17.49	2.61	0.03	-2.20	0				2	4.42	0.31	1500					
4.100	-13.34	0.33	17.98	-0.19	0.03	-2.60	0				2	4.77	0.31	1500					
							0				2	3.93	0.31	1000					
4.756	-13.03	0.61	16.37	-4.82	0.03	-3.26	0				2	4.32	0.32	1000					
5.178	-12.73	0.77	13.65	-8.14	0.03	-3.68	0				2	4.50	0.32	1000					
5.600	-12.38	0.90	9.47	-11.70	0.03	-4.10	0				2	4.61	0.31	1000					
				8.30			0				2	4.61	0.31	1000	2	110.00			
6.100	-11.90	1.03	12.51	3.80	0.03	-4.60	0				2	4.65	0.31	1000					
6.600	-11.34	1.20	13.23	-0.94	0.03	-5.10	0				2	4.61	0.30	1000					
							1	0.00		1000	2	4.61	0.30	1000					
6.700	-11.22	1.23	13.09	-1.91	0.03	-5.20	1	0.06		1000	2	4.59	0.29	1000					
7.200	-10.57	1.38	11.03	-6.11	-0.01	-5.70	2	3.14		1000	2	4.50	0.28	1000					
							2	2.92		1875	2	5.47	0.28	1875					
7.600	-9.99	1.48	8.04	-8.58	-0.17	-6.10	2	7.20		1875	2	5.19	0.27	1875					
8.100	-9.24	1.55	3.37	-9.82	-0.71	-6.10	2	10.06		1875	2	4.85	0.26	1875					
8.600	-8.46	1.56	-1.52	-9.48	-1.68	-6.10	2	12.89		1875	2	4.54	0.25	1875					
9.100	-7.69	1.51	-5.85	-7.60	-3.10	-6.10	2	15.68		1875	2	4.28	0.24	1875					
9.600	-6.95	1.42	-9.01	-5.08	-4.31	-6.10	2	14.96		1875	2	4.08	0.23	1875					
9.700	-6.81	1.40	-9.49	-4.61	-4.44	-6.10	2	14.74		1875	2	4.05	0.23	1875					
10.150	-6.21	1.28	-11.13	-2.72	-4.80	-6.10	2	13.83		1875	2	3.92	0.22	1875					
10.600	-5.66	1.15	-11.99	-1.17	-4.82	-6.10	2	13.02		1875	2	3.84	0.21	1875					
11.300	-4.93	0.94	-12.14	0.63	-4.43	-6.10	2	11.98		1875	2	3.81	0.19	1875					
12.000	-4.35	0.73	-11.27	1.75	-3.78	-6.10	2	11.22		1875	1	3.99	0.18	1875					
12.450	-4.04	0.61	-10.39	2.15	-3.31	-6.10	2	10.87		1875	1	4.11	0.17	1875					
12.500	-4.01	0.60	-10.28	2.18	-3.26	-6.10	2	10.84		1875	1	4.13	0.17	1875					
13.000	-3.74	0.48	-9.13	2.39	-2.71	-6.10	2	10.57		1875	1	4.26	0.16	1875					
13.500	-3.53	0.37	-7.92	2.42	-2.14	-6.10	2	10.41		1875	1	4.40	0.15	1875					
13.925	-3.39	0.30	-6.90	2.35	-1.64	-6.10	2	10.35		1875	1	4.51	0.14	1875					
14.350	-3.28	0.23	-5.93	2.21	-1.12	-6.10	2	10.35		1875	1	4.63	0.14	1875					
14.775	-3.19	0.17	-5.03	2.03	-0.59	-6.10	2	10.39		1875	1	4.75	0.13	1875					
15.200	-3.13	0.12	-4.20	1.83	-0.04	-6.10	2	10.48		1875	1	4.86	0.12	1875					
15.625	-3.09	0.08	-3.47	1.63	0.51	-6.10	2	10.61		1875	1	4.98	0.12	1875					
16.050	-3.06	0.05	-2.82	1.44	1.09	-6.10	2	10.76		1875	1	5.10	0.11	1875					
16.475	-3.05	0.02	-2.24	1.26	1.67	-6.10	2	10.94		1875	1	5.22	0.11	1875					
16.900	-3.04	0.00	-1.74	1.12	2.27	-6.10	2	11.13		1875	1	5.33	0.10	1875					
17.325	-3.05	-0.02	-1.29	1.01	2.88	-6.10	2	11.34		1875	1	5.45	0.10	1875					
17.750	-3.06	-0.03	-0.87	0.94	3.51	-6.10	2	11.56		1875	1	5.57	0.09	1875					
18.175	-3.07	-0.03	-0.48	0.92	4.15	-6.10	2	11.79		1875	1	5.69	0.09	1875					
18.600	-3.08	-0.04	-0.08	0.95	4.80	-6.10	2	12.02		1875	1	5.81	0.09	1875					
19.025	-3.10	-0.04	0.34	1.02	5.47	-6.10	2	12.26		1875	1	5.93	0.08	1875					
19.450	-3.11	-0.03	0.79	1.14	6.15	-6.10	2	12.49		1875	1	6.05	0.08	1875					
19.875	-3.12	-0.02	1.31	1.31	6.85	-6.10	2	12.71		1875	1	6.17	0.07	1875					
20.300	-3.13	0.00	1.92	1.52	7.56	-6.10	2	12.92		1875	1	6.28	0.07	1875					
							2	11.80		1375	1	6.80	0.07	1375					
20.656	-3.13	0.02	2.39	1.18	8.16	-5.72	2	11.77		1375	2	6.91	0.07	1375					
21.012	-3.12	0.04	2.76	0.90	8.76	-5.34	2	11.72		1375	2	7.09	0.07	1375					
m	mm rd/1000		m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T				

PHASE 4 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD			
21.369	-3.10	0.07	3.04	0.67	9.32	-4.96	2	11.67		1375	2	7.29	0.06	1375					
21.725	-3.07	0.09	3.24	0.48	9.83	-4.58	2	11.60		1375	2	7.50	0.06	1375					
22.081	-3.03	0.12	3.39	0.33	10.31	-4.19	2	11.52		1375	2	7.72	0.06	1375					
22.438	-2.98	0.15	3.48	0.19	10.73	-3.81	2	11.42		1375	2	7.96	0.06	1375					
22.794	-2.92	0.18	3.53	0.07	11.11	-3.43	2	11.31		1375	2	8.22	0.06	1375					
23.150	-2.85	0.22	3.53	-0.05	11.45	-3.05	2	11.19		1375	2	8.49	0.05	1375					
23.506	-2.77	0.25	3.49	-0.19	11.73	-2.67	2	11.04		1375	2	8.77	0.05	1375					
23.862	-2.67	0.28	3.40	-0.34	11.97	-2.29	2	10.89		1375	2	9.08	0.05	1375					
24.219	-2.57	0.31	3.24	-0.53	12.17	-1.91	2	10.72		1375	2	9.39	0.05	1375					
24.575	-2.46	0.33	3.01	-0.76	12.34	-1.52	2	10.53		1375	2	9.72	0.05	1375					
24.931	-2.33	0.36	2.69	-1.04	12.46	-1.14	2	10.33		1375	2	10.06	0.05	1375					
25.288	-2.20	0.38	2.26	-1.39	12.56	-0.76	2	10.12		1375	2	10.42	0.04	1375					
25.644	-2.06	0.40	1.70	-1.80	12.64	-0.38	2	9.90		1375	2	10.78	0.04	1375					
26.000	-1.92	0.41	0.97	-2.29	12.69		2	9.67		1375	2	11.15	0.04	1375					
							2	10.78		2375	2	7.66	0.04	2375					
26.500	-1.71	0.42	0.17	-0.98	13.27		2	10.53		2375	2	8.40	0.04	2375					
27.000	-1.50	0.42	-0.09	-0.16	13.61		2	10.28		2375	2	9.13	0.04	2375					
27.500	-1.29	0.42	-0.06	0.17	13.79		2	10.03		2375	2	9.87	0.04	2375					
28.000	-1.08	0.42	0.00	0.00	13.89		2	9.78		2375	2	10.61	0.03	2375					
m	mm rd/1000		m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T				

MAXIMUM DISPLACEMENT = -13.45 mm
MAXIMUM MOMENT = 17.98 m.T/m
VERTICAL REACTION IN FOOT = -13.89 T/m

CODIFICATION OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR., 2 = ELASTIC
CODIFICATION OF SOIL : 2 = ELASTIC, 3 = PASSIVE PR.

(4 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.232 = (234.91 T/m)/(1013.97 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.079 = (154.74 T/m)/(1963.73 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 4.21 T/m

** PHASE No 5 **

*PHASE 5
*Water Table and/or Water Pressure // Excavation

* EXCAVATION IN SOIL 1 TO LEVEL = 9.600 m

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 1 TO LEVEL = 10.600 m
WATER PRESSURE IN SOIL 1 TO LEVEL = 20.300 m PR. = 9.700 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 26.000 m PR. = 24.500 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 28.000 m PR. = 26.500 T/m2

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 2 TO LEVEL = 1.500 m
WATER PRESSURE IN SOIL 2 TO LEVEL = 2.300 m PR. = 0.800 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 7.200 m PR. = 5.700 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 20.300 m PR. = 18.800 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 26.000 m PR. = 24.500 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 28.000 m PR. = 26.500 T/m2

PHASE 5

	WALL						SOIL 1 EXCAVATION: 9.60 m WATER LEVEL: 10.60 m CAQUOT SURC.: 0.00 T/m2			SOIL 2 EXCAVATION: 0.00 m WATER LEVEL: 1.50 m CAQUOT SURC.: 0.00 T/m2			STRUTS/ ANCHORS	
LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	-8.81	-2.71	0.00	0.00			0				3	0.00		1250		
0.375	-9.82	-2.71	-0.07	-0.60	-0.15		0				3	3.18	0.05	1250		
0.750	-10.84	-2.71	-0.52	-1.77	-0.31		0				2	3.11	0.09	1250		
1.125	-11.86	-2.72	-1.39	-2.83	-0.31		0				2	2.55	0.14	1250		
1.500	-12.88	-2.74	-2.62	-3.68	-0.31		0				2	1.98	0.18	1250		
				9.52			0				2	1.98	0.18	1250	1	72.61
1.900	-13.97	-2.74	1.04	8.79	-0.25	-0.40	0				1	1.28	0.21	1250		
2.300	-15.07	-2.72	4.40	8.00	-0.12	-0.80	0				1	1.43	0.24	1250		
2.500	-15.61	-2.69	5.96	7.53	-0.04	-1.00	0				1	1.50	0.26	1500		
3.100	-17.19	-2.57	9.98	5.79	0.20	-1.60	0				1	1.71	0.29	1500		
3.700	-18.68	-2.40	12.80	3.56	0.47	-2.20	0				1	1.91	0.31	1500		
4.100	-19.61	-2.27	13.89	1.81	0.66	-2.60	0				1	2.03	0.31	1500		
							0				1	2.11	0.31	1000		
4.756	-21.03	-2.04	14.00	-1.56	1.01	-3.26	0				1	2.31	0.32	1000		
5.178	-21.85	-1.89	12.83	-4.02	1.25	-3.68	0				1	2.44	0.32	1000		
5.600	-22.63	-1.77	10.57	-6.72	1.51	-4.10	0				1	2.57	0.31	1000		
				24.36			0				1	2.57	0.31	1000	2	170.95
6.100	-23.47	-1.57	21.89	20.87	1.82	-4.60	0				1	2.71	0.31	1000		
6.600	-24.17	-1.23	31.39	17.05	2.16	-5.10	0				1	2.86	0.30	1000		
6.700	-24.29	-1.15	33.05	16.25	2.23	-5.20	0				1	2.88	0.29	1000		
7.200	-24.76	-0.70	40.14	12.05	2.58	-5.70	0				1	3.03	0.28	1000		
							0				1	2.71	0.28	1875		
7.600	-24.95	-0.28	44.27	8.58	2.88	-6.10	0				1	2.82	0.27	1875		
8.100	-24.95	0.30	47.42	3.96	3.26	-6.60	0				1	2.95	0.26	1875		
8.600	-24.65	0.89	48.18	-0.97	3.67	-7.10	0				1	3.08	0.25	1875		
9.100	-24.06	1.48	46.40	-6.22	4.09	-7.60	0				1	3.22	0.24	1875		
9.600	-23.18	2.03	41.91	-11.79	4.53	-8.10	0				1	3.35	0.23	1875		
							3	0.00		1875	1	3.35	0.23	1875		
9.700	-22.97	2.13	40.67	-12.89	4.61	-8.20	3	0.98		1875	1	3.38	0.23	1875		
10.150	-21.91	2.55	33.93	-16.80	4.64	-8.65	3	5.37		1875	1	3.50	0.22	1875		
10.600	-20.69	2.89	25.81	-18.99	4.16	-9.10	3	9.75		1875	1	3.62	0.21	1875		
11.300	-18.53	3.22	12.05	-19.96	2.71	-9.10	3	13.10		1875	1	3.80	0.19	1875		
12.000	-16.24	3.31	-1.62	-18.72	0.67	-9.10	3	16.44		1875	1	3.99	0.18	1875		
12.450	-14.76	3.24	-9.64	-16.75	-0.95	-9.10	3	18.59		1875	1	4.11	0.17	1875		
12.500	-14.60	3.23	-10.47	-16.48	-1.15	-9.10	3	18.83		1875	1	4.13	0.17	1875		
13.000	-13.02	3.05	-17.91	-13.11	-3.27	-9.10	3	21.22		1875	1	4.26	0.16	1875		
13.500	-11.56	2.79	-23.39	-8.62	-5.69	-9.10	3	23.61		1875	1	4.40	0.15	1875		
13.925	-10.42	2.53	-26.19	-4.66	-7.28	-9.10	2	22.12		1875	1	4.51	0.14	1875		
14.350	-9.41	2.25	-27.45	-1.43	-7.91	-9.10	2	20.42		1875	1	4.63	0.14	1875		
14.775	-8.52	1.96	-27.51	1.08	-7.99	-9.10	2	18.95		1875	1	4.75	0.13	1875		
15.200	-7.74	1.67	-26.63	2.96	-7.78	-9.10	2	17.71		1875	1	4.86	0.12	1875		
15.625	-7.09	1.40	-25.07	4.31	-7.41	-9.10	2	16.69		1875	1	4.98	0.12	1875		
16.050	-6.56	1.14	-23.03	5.22	-6.95	-9.10	2	15.89		1875	1	5.10	0.11	1875		
16.475	-6.12	0.91	-20.68	5.78	-6.44	-9.10	2	15.27		1875	1	5.22	0.11	1875		
16.900	-5.78	0.71	-18.15	6.07	-5.88	-9.10	2	14.84		1875	1	5.33	0.10	1875		
17.325	-5.52	0.53	-15.55	6.16	-5.30	-9.10	2	14.55		1875	1	5.45	0.10	1875		
17.750	-5.32	0.38	-12.94	6.10	-4.70	-9.10	2	14.39		1875	1	5.57	0.09	1875		
18.175	-5.19	0.26	-10.37	5.95	-4.08	-9.10	2	14.35		1875	1	5.69	0.09	1875		
18.600	-5.10	0.16	-7.89	5.74	-3.44	-9.10	2	14.39		1875	1	5.81	0.09	1875		
19.025	-5.05	0.09	-5.49	5.52	-2.78	-9.10	2	14.50		1875	1	5.93	0.08	1875		
19.450	-5.02	0.04	-3.19	5.30	-2.11	-9.10	2	14.65		1875	1	6.05	0.08	1875		

19.875	-5.01	0.02	-0.98	5.11	-1.42	-9.10	2	14.83		1875	1	6.17	0.07	1875					
20.300	-5.00	0.02	1.15	4.93	-0.72	-9.10	2	15.02		1875	1	6.28	0.07	1875					
							2	12.87		1375	1	6.80	0.07	1375					
20.656	-4.99	0.04	2.72	3.91	-0.12	-8.53	2	12.72		1375	1	6.91	0.07	1375					
21.012	-4.97	0.07	3.95	3.00	0.50	-7.96	2	12.57		1375	1	7.01	0.07	1375					
21.369	-4.94	0.11	4.87	2.20	1.12	-7.39	2	12.40		1375	1	7.11	0.06	1375					
m	mm rd/1000		m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T				

PHASE 5 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
21.725	-4.90	0.15	5.53	1.49	1.76	-6.83	2	12.21		1375	1	7.22	0.06	1375		
22.081	-4.83	0.20	5.95	0.88	2.40	-6.26	2	11.99		1375	1	7.32	0.06	1375		
22.438	-4.75	0.26	6.16	0.36	3.05	-5.69	2	11.75		1375	1	7.43	0.06	1375		
22.794	-4.65	0.31	6.21	-0.09	3.71	-5.12	2	11.48		1375	1	7.53	0.06	1375		
23.150	-4.53	0.37	6.10	-0.48	4.38	-4.55	2	11.19		1375	1	7.64	0.05	1375		
23.506	-4.39	0.42	5.87	-0.81	5.06	-3.98	2	10.87		1375	1	7.74	0.05	1375		
23.862	-4.23	0.47	5.53	-1.10	5.75	-3.41	2	10.52		1375	1	7.85	0.05	1375		
24.219	-4.05	0.52	5.10	-1.35	6.45	-2.84	2	10.15		1375	1	7.95	0.05	1375		
24.575	-3.86	0.56	4.58	-1.56	7.16	-2.27	2	9.76		1375	1	8.06	0.05	1375		
24.931	-3.65	0.60	3.98	-1.78	7.85	-1.71	2	9.34		1375	2	8.25	0.05	1375		
25.288	-3.43	0.63	3.30	-2.05	8.44	-1.14	2	8.91		1375	2	8.72	0.04	1375		
25.644	-3.20	0.66	2.50	-2.46	8.88	-0.57	2	8.47		1375	2	9.21	0.04	1375		
26.000	-2.96	0.68	1.54	-2.99	9.20		2	8.01		1375	2	9.71	0.04	1375		
							2	10.53		2375	1	7.24	0.04	2375		
26.500	-2.62	0.69	0.42	-1.52	10.24		2	9.96		2375	1	7.38	0.04	2375		
27.000	-2.28	0.69	-0.05	-0.41	11.31		2	9.39		2375	1	7.52	0.04	2375		
27.500	-1.93	0.69	-0.08	0.17	12.16		2	8.81		2375	2	8.34	0.04	2375		
28.000	-1.59	0.69	0.00	0.00	12.62		2	8.24		2375	2	9.40	0.03	2375		
m	mm rd/1000		m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T	

MAXIMUM DISPLACEMENT = -24.95 mm
MAXIMUM MOMENT = 48.18 m.T/m
VERTICAL REACTION IN FOOT = -12.62 T/m

CODIFICATION OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR.
CODIFICATION OF SOIL : 2 = ELASTIC, 3 = PASSIVE PR.

(9 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.377 = (246.01 T/m)/(652.30 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.069 = (134.68 T/m)/(1963.73 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 4.21 T/m

** PHASE No 6 **

*PHASE 6
*3rd Strut

* INSTALLATION OF A LINE OF STRUTS No 3

LEVEL	=	8.600 m
SPACING	=	5.500 m
INCLINATION	=	0.000 DEGREES
PRELOAD	=	110.000 T
STIFFNESS	=	5949.000 T/m
EFFECTIVE LENGTH	=	0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 2

PHASE 6

WALL | SOIL 1: EXCAVATION: 9.60 m, WATER LEVEL: 10.60 m, CAQUOT SURC.: 0.00 T/m2 | SOIL 2: EXCAVATION: 0.00 m, WATER LEVEL: 1.50 m, CAQUOT SURC.: 0.00 T/m2 | STRUTS/ANCHORS

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	-9.28	-2.47	0.00	0.00			0				1	0.00		1250		
0.375	-10.21	-2.47	-0.06	-0.51	-0.07		0				2	2.70	0.05	1250		
0.750	-11.14	-2.47	-0.44	-1.52	-0.14		0				2	2.73	0.09	1250		
1.125	-12.07	-2.48	-1.20	-2.47	-0.15		0				2	2.29	0.14	1250		
1.500	-13.00	-2.50	-2.27	-3.24	-0.15		0				2	1.83	0.18	1250		
				10.07			0				2	1.83	0.18	1250	1	73.19
1.900	-14.00	-2.50	1.61	9.37	-0.08	-0.40	0				1	1.28	0.21	1250		
2.300	-15.00	-2.47	5.21	8.57	0.02	-0.80	0				2	1.52	0.24	1250		
							0				2	1.54	0.24	1500		
2.500	-15.49	-2.44	6.88	8.07	0.06	-1.00	0				2	1.68	0.26	1500		
3.100	-16.91	-2.30	11.17	6.14	0.11	-1.60	0				2	2.13	0.29	1500		

3.700	-18.24	-2.11	14.12	3.59	0.12	-2.20	0				2	2.58	0.31	1500					
4.100	-19.05	-1.96	15.16	1.54	0.12	-2.60	0				2	2.88	0.31	1500					
							0				2	2.67	0.31	1000					
4.756	-20.26	-1.72	14.96	-2.27	0.13	-3.26	0				2	3.08	0.32	1000					
5.178	-20.95	-1.57	13.42	-5.08	0.13	-3.68	0				2	3.34	0.32	1000					
5.600	-21.58	-1.44	10.62	-8.19	0.14	-4.10	0				2	3.61	0.31	1000					
				21.76			0				2	3.61	0.31	1000	2	164.75			
6.100	-22.26	-1.24	20.51	17.71	0.14	-4.60	0				2	3.92	0.31	1000					
6.600	-22.81	-0.94	28.26	13.25	0.14	-5.10	0				2	4.22	0.30	1000					
6.700	-22.90	-0.87	29.54	12.31	0.14	-5.20	0				2	4.28	0.29	1000					
7.200	-23.24	-0.47	34.48	7.38	0.14	-5.70	0				2	4.55	0.28	1000					
							0				2	5.57	0.28	1875					
7.600	-23.35	-0.11	36.51	2.74	0.14	-6.10	0				2	5.82	0.27	1875					
8.100	-23.29	0.34	36.36	-3.41	0.14	-6.60	0				2	6.06	0.26	1875					
8.600	-23.01	0.78	33.05	-9.88	0.14	-7.10	0				2	6.16	0.25	1875					
				10.12			0				2	6.16	0.25	1875	3	110.00			
9.100	-22.52	1.21	36.43	3.37	0.14	-7.60	0				2	6.11	0.24	1875					
9.600	-21.80	1.67	36.39	-3.57	0.14	-8.10	0				2	5.94	0.23	1875					
							1	0.00		1875	2	5.94	0.23	1875					
9.700	-21.62	1.76	35.96	-4.97	0.14	-8.20	1	0.06		1875	2	5.90	0.23	1875					
10.150	-20.75	2.14	32.40	-10.64	0.11	-8.65	2	3.18		1875	2	5.68	0.22	1875					
10.600	-19.70	2.47	26.64	-14.64	-0.15	-9.10	2	7.92		1875	2	5.45	0.21	1875					
11.300	-17.83	2.84	15.10	-17.82	-1.25	-9.10	2	11.79		1875	2	5.12	0.19	1875					
12.000	-15.78	2.99	2.37	-18.09	-3.15	-9.10	2	15.59		1875	2	4.85	0.18	1875					
12.450	-14.43	2.97	-5.52	-16.79	-4.76	-9.10	2	17.98		1875	2	4.72	0.17	1875					
12.500	-14.29	2.97	-6.36	-16.57	-4.96	-9.10	2	18.25		1875	2	4.71	0.17	1875					
13.000	-12.83	2.84	-13.98	-13.68	-7.11	-9.10	2	20.86		1875	2	4.62	0.16	1875					
13.500	-11.46	2.63	-19.81	-9.46	-9.57	-9.10	2	23.43		1875	2	4.58	0.15	1875					
13.925	-10.39	2.40	-22.99	-5.60	-11.19	-9.10	2	22.06		1875	2	4.58	0.14	1875					
14.350	-9.42	2.15	-24.67	-2.39	-11.83	-9.10	2	20.45		1875	1	4.63	0.14	1875					
14.775	-8.57	1.88	-25.12	0.14	-11.92	-9.10	2	19.05		1875	1	4.75	0.13	1875					
15.200	-7.82	1.62	-24.63	2.07	-11.72	-9.10	2	17.86		1875	1	4.86	0.12	1875					
15.625	-7.19	1.37	-23.43	3.50	-11.36	-9.10	2	16.87		1875	1	4.98	0.12	1875					
16.050	-6.66	1.13	-21.72	4.49	-10.91	-9.10	2	16.09		1875	1	5.10	0.11	1875					
16.475	-6.23	0.91	-19.66	5.14	-10.39	-9.10	2	15.48		1875	1	5.22	0.11	1875					
16.900	-5.89	0.71	-17.39	5.52	-9.84	-9.10	2	15.04		1875	1	5.33	0.10	1875					
17.325	-5.62	0.54	-15.01	5.69	-9.27	-9.10	2	14.75		1875	1	5.45	0.10	1875					
17.750	-5.42	0.40	-12.58	5.71	-8.66	-9.10	2	14.58		1875	1	5.57	0.09	1875					
18.175	-5.28	0.28	-10.17	5.63	-8.04	-9.10	2	14.52		1875	1	5.69	0.09	1875					
18.600	-5.18	0.18	-7.80	5.49	-7.40	-9.10	2	14.54		1875	1	5.81	0.09	1875					
19.025	-5.12	0.11	-5.50	5.33	-6.75	-9.10	2	14.63		1875	1	5.93	0.08	1875					
19.450	-5.09	0.06	-3.27	5.17	-6.08	-9.10	2	14.76		1875	1	6.05	0.08	1875					
19.875	-5.06	0.04	-1.11	5.01	-5.39	-9.10	2	14.93		1875	1	6.17	0.07	1875					
20.300	-5.05	0.04	0.99	4.88	-4.69	-9.10	2	15.10		1875	1	6.28	0.07	1875					
							2	12.93		1375	1	6.80	0.07	1375					
20.656	-5.03	0.06	2.55	3.88	-4.09	-8.53	2	12.77		1375	1	6.91	0.07	1375					
m	mm rd/1000		m.T/m	T/m	T/m	T/m2	T/m2		T/m2	T/m3	T/m2		T/m2	T/m3	T				

PHASE 6 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
21.012	-5.01	0.09	3.77	2.98	-3.47	-7.96	2	12.61		1375	1	7.01	0.07	1375		
21.369	-4.97	0.12	4.69	2.19	-2.85	-7.39	2	12.43		1375	1	7.11	0.06	1375		
21.725	-4.92	0.17	5.34	1.50	-2.21	-6.83	2	12.24		1375	1	7.22	0.06	1375		
22.081	-4.85	0.22	5.77	0.90	-1.57	-6.26	2	12.01		1375	1	7.32	0.06	1375		
22.438	-4.76	0.27	5.99	0.38	-0.92	-5.69	2	11.77		1375	1	7.43	0.06	1375		
22.794	-4.66	0.32	6.05	-0.06	-0.26	-5.12	2	11.49		1375	1	7.53	0.06	1375		
23.150	-4.53	0.38	5.96	-0.45	0.41	-4.55	2	11.20		1375	1	7.64	0.05	1375		
23.506	-4.39	0.43	5.74	-0.77	1.09	-3.98	2	10.87		1375	1	7.74	0.05	1375		
23.862	-4.23	0.48	5.41	-1.06	1.78	-3.41	2	10.52		1375	1	7.85	0.05	1375		
24.219	-4.05	0.52	4.99	-1.30	2.48	-2.84	2	10.15		1375	1	7.95	0.05	1375		
24.575	-3.86	0.56	4.49	-1.52	3.19	-2.27	2	9.75		1375	2	8.06	0.05	1375		
24.931	-3.65	0.60	3.91	-1.73	3.88	-1.71	2	9.34		1375	2	8.25	0.05	1375		
25.288	-3.43	0.63	3.24	-2.01	4.47	-1.14	2	8.91		1375	2	8.73	0.04	1375		
25.644	-3.20	0.66	2.46	-2.42	4.91	-0.57	2	8.46		1375	2	9.22	0.04	1375		
26.000	-2.96	0.68	1.50	-2.96	5.22		2	8.01		1375	2	9.72	0.04	1375		
							2	10.52		2375	2	7.25	0.04	2375		
26.500	-2.62	0.69	0.40	-1.50	6.26		2	9.95		2375	2	7.39	0.04	2375		
27.000	-2.28	0.69	-0.05	-0.40	7.32		2	9.38		2375	2	7.53	0.04	2375		
27.500	-1.93	0.69	-0.08	0.18	8.17		2	8.81		2375	2	8.35	0.04	2375		
28.000	-1.59	0.69	0.00	0.00	8.62		2	8.23		2375	2	9.41	0.03	2375		
m	mm rd/1000		m.T/m	T/m	T/m	T/m2	T/m2		T/m2	T/m3	T/m2		T/m2	T/m3	T		

MAXIMUM DISPLACEMENT = -23.35 mm
MAXIMUM MOMENT = 36.51 m.T/m
VERTICAL REACTION IN FOOT = -8.62 T/m

CODIFICATION :
OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR., 2 = ELASTIC, 3 = PASSIVE PR.
OF SOIL :

(5 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.372 = (242.68 T/m)/(652.30 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.077 = (150.34 T/m)/(1963.73 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 4.21 T/m

** PHASE No 7 **

*PHASE 7
*Water Table and/or Water Pressure // Excavation

* EXCAVATION IN SOIL 1 TO LEVEL = 12.500 m

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 1 TO LEVEL = 13.500 m
WATER PRESSURE IN SOIL 1 TO LEVEL = 20.300 m PR. = 6.800 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 26.000 m PR. = 21.860 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 28.000 m PR. = 25.180 T/m2

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 2 TO LEVEL = 1.500 m
WATER PRESSURE IN SOIL 2 TO LEVEL = 2.300 m PR. = 0.800 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 7.200 m PR. = 5.700 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 20.300 m PR. = 18.800 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 26.000 m PR. = 24.500 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 28.000 m PR. = 25.180 T/m2

PHASE 7

	WALL						SOIL 1				SOIL 2				STRUTS/ ANCHORS	
							EXCAVATION: 12.50 m				EXCAVATION: 0.00 m					
							WATER LEVEL: 13.50 m				WATER LEVEL: 1.50 m					
							CAQUOT SURC.: 0.00 T/m2				CAQUOT SURC.: 0.00 T/m2					
LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	-5.14	-3.93	0.00	0.00			0				3	0.00		1250		
0.375	-6.61	-3.93	-0.07	-0.60	-0.15		0				3	3.18	0.05	1250		
0.750	-8.09	-3.93	-0.60	-2.38	-0.59		0				3	6.35	0.09	1250		
1.125	-9.56	-3.94	-1.91	-4.59	-0.92		0				2	5.42	0.14	1250		
1.500	-11.05	-3.97	-3.99	-6.41	-0.95		0				2	4.27	0.18	1250		
				5.22			0				2	4.27	0.18	1250	1	63.94
1.900	-12.64	-4.00	-2.22	3.69	-0.95	-0.40	0				2	2.98	0.21	1250		
2.300	-14.24	-4.02	-1.01	2.36	-0.95	-0.80	0				2	2.46	0.24	1250		
							0				2	2.66	0.24	1500		
2.500	-15.05	-4.02	-0.61	1.68	-0.95	-1.00	0				2	2.34	0.26	1500		
3.100	-17.46	-4.02	-0.20	-0.31	-0.82	-1.60	0				1	1.71	0.29	1500		
3.700	-19.88	-4.03	-1.03	-2.54	-0.55	-2.20	0				1	1.91	0.31	1500		
4.100	-21.49	-4.05	-2.39	-4.29	-0.36	-2.60	0				1	2.03	0.31	1500		
							0				1	2.11	0.31	1000		
4.756	-24.17	-4.12	-6.27	-7.66	-0.01	-3.26	0				1	2.31	0.32	1000		
5.178	-25.92	-4.20	-10.02	-10.12	0.23	-3.68	0				1	2.44	0.32	1000		
5.600	-27.72	-4.33	-14.85	-12.82	0.49	-4.10	0				1	2.57	0.31	1000		
				23.77			0				1	2.57	0.31	1000	2	201.25
6.100	-29.92	-4.44	-3.83	20.28	0.80	-4.60	0				1	2.71	0.31	1000		
6.600	-32.14	-4.43	5.37	16.46	1.14	-5.10	0				1	2.86	0.30	1000		
6.700	-32.58	-4.42	6.98	15.66	1.21	-5.20	0				1	2.88	0.29	1000		
7.200	-34.76	-4.29	13.77	11.45	1.56	-5.70	0				1	3.03	0.28	1000		
							0				1	2.71	0.28	1875		
7.600	-36.45	-4.13	17.66	7.99	1.86	-6.10	0				1	2.82	0.27	1875		
8.100	-38.45	-3.89	20.51	3.37	2.24	-6.60	0				1	2.95	0.26	1875		
8.600	-40.33	-3.63	20.98	-1.56	2.65	-7.10	0				1	3.08	0.25	1875		
				37.17			0				1	3.08	0.25	1875	3	213.04
9.100	-42.06	-3.26	38.26	31.92	3.07	-7.60	0				1	3.22	0.24	1875		
9.600	-43.56	-2.69	52.85	26.35	3.51	-8.10	0				1	3.35	0.23	1875		
9.700	-43.82	-2.56	55.42	25.20	3.60	-8.20	0				1	3.38	0.23	1875		
10.150	-44.82	-1.88	65.57	19.87	4.01	-8.65	0				1	3.50	0.22	1875		
10.600	-45.49	-1.10	73.27	14.27	4.44	-9.10	0				1	3.62	0.21	1875		
11.300	-45.80	0.24	80.07	5.06	5.14	-9.80	0				1	3.80	0.19	1875		
12.000	-45.14	1.65	80.20	-4.77	5.87	-10.50	0				1	3.99	0.18	1875		
12.450	-44.20	2.53	76.57	-11.42	6.36	-10.95	0				1	4.11	0.17	1875		
12.500	-44.07	2.62	75.98	-12.18	6.41	-11.00	0				1	4.13	0.17	1875		
							3	0.00		1875	1	4.13	0.17	1875		
13.000	-42.53	3.52	68.18	-18.68	6.65	-11.50	3	4.88		1875	1	4.26	0.16	1875		
13.500	-40.57	4.30	57.65	-23.06	6.25	-12.00	3	9.75		1875	1	4.40	0.15	1875		
13.925	-38.62	4.86	47.31	-25.48	5.53	-12.00	3	11.79		1875	1	4.51	0.14	1875		
14.350	-36.46	5.30	36.11	-27.08	4.59	-12.00	3	13.82		1875	1	4.63	0.14	1875		
14.775	-34.14	5.62	24.41	-27.87	3.44	-12.00	3	15.85		1875	1	4.75	0.13	1875		
15.200	-31.70	5.81	12.54	-27.84	2.06	-12.00	3	17.88		1875	1	4.86	0.12	1875		
15.625	-29.21	5.88	0.85	-27.01	0.47	-12.00	3	19.91		1875	1	4.98	0.12	1875		
16.050	-26.72	5.83	-10.30	-25.36	-1.34	-12.00	3	21.94		1875	1	5.10	0.11	1875		
16.475	-24.27	5.67	-20.58	-22.89	-3.36	-12.00	3	23.97		1875	1	5.22	0.11	1875		
16.900	-21.92	5.40	-29.64	-19.62	-5.61	-12.00	3	26.00		1875	1	5.33	0.10	1875		
17.325	-19.69	5.05	-37.14	-15.53	-8.07	-12.00	3	28.03		1875	1	5.45	0.10	1875		
17.750	-17.64	4.62	-42.73	-10.62	-10.75	-12.00	3	30.06		1875	1	5.57	0.09	1875		
18.175	-15.77	4.15	-46.05	-4.91	-13.65	-12.00	3	32.09		1875	1	5.69	0.09	1875		
18.600	-14.11	3.66	-46.91	0.72	-15.89	-12.00	2	29.88		1875	1	5.81	0.09	1875		
19.025	-12.66	3.17	-45.59	5.29	-16.88	-12.00	2	27.36		1875	1	5.93	0.08	1875		
19.450	-11.41	2.70	-42.56	8.82	-17.11	-12.00	2	25.23		1875	1	6.05	0.08	1875		
19.875	-10.35	2.28	-38.22	11.47	-16.93	-12.00	2	23.45		1875	1	6.17	0.07	1875		
20.300	-9.47	1.90	-32.92	13.38	-16.53	-12.00	2	21.99		1875	1	6.28	0.07	1875		
							2	17.52		1375	1	6.80	0.07	1375		
20.656	-8.84	1.63	-28.24	12.83	-16.00	-11.41	2	16.52		1375	1	6.91	0.07	1375		

PHASE 7 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
21.012	-8.30	1.40	-23.79	12.12	-15.45	-10.83	2	15.65		1375	1	7.01	0.07	1375		
21.369	-7.84	1.21	-19.62	11.29	-14.88	-10.25	2	14.87		1375	1	7.11	0.06	1375		
21.725	-7.43	1.05	-15.76	10.36	-14.29	-9.66	2	14.18		1375	1	7.22	0.06	1375		
22.081	-7.08	0.93	-12.24	9.38	-13.69	-9.07	2	13.56		1375	1	7.32	0.06	1375		
22.438	-6.77	0.84	-9.08	8.35	-13.08	-8.49	2	12.99		1375	1	7.43	0.06	1375		
22.794	-6.48	0.77	-6.29	7.30	-12.46	-7.90	2	12.47		1375	1	7.53	0.06	1375		
23.150	-6.22	0.72	-3.88	6.24	-11.82	-7.32	2	11.96		1375	1	7.64	0.05	1375		
23.506	-5.97	0.70	-1.85	5.17	-11.17	-6.74	2	11.48		1375	1	7.74	0.05	1375		
23.862	-5.72	0.69	-0.20	4.11	-10.52	-6.15	2	11.01		1375	1	7.85	0.05	1375		
24.219	-5.47	0.69	1.08	3.04	-9.85	-5.56	2	10.53		1375	1	7.95	0.05	1375		
24.575	-5.22	0.71	1.97	1.98	-9.17	-4.98	2	10.05		1375	1	8.06	0.05	1375		
24.931	-4.97	0.73	2.48	0.91	-8.48	-4.39	2	9.56		1375	1	8.16	0.05	1375		
25.288	-4.71	0.75	2.62	-0.16	-7.78	-3.81	2	9.07		1375	1	8.27	0.04	1375		
25.644	-4.44	0.77	2.37	-1.24	-7.07	-3.23	2	8.56		1375	1	8.37	0.04	1375		
26.000	-4.16	0.79	1.73	-2.33	-6.34	-2.64	2	8.04		1375	1	8.48	0.04	1375		
							2	11.93		2375	1	7.24	0.04	2375		
26.500	-3.76	0.81	0.81	-1.41	-5.38	-1.98	2	11.07		2375	1	7.47	0.04	2375		
27.000	-3.35	0.81	0.28	-0.72	-4.35	-1.32	2	10.20		2375	1	7.71	0.04	2375		
27.500	-2.95	0.81	0.05	-0.25	-3.26	-0.66	2	9.32		2375	1	7.94	0.04	2375		
28.000	-2.54	0.81	0.00	0.00	-2.12		2	8.44		2375	1	8.18	0.03	2375		
m	mm rd/1000		m.T/m	T/m	T/m	T/m2	T/m2		T/m2	T/m3	T/m2		T/m2	T/m3	T	

MAXIMUM DISPLACEMENT = -45.80 mm
MAXIMUM MOMENT = 80.20 m.T/m
VERTICAL REACTION IN FOOT = 2.12 T/m

CODIFICATION :
OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR.
OF SOIL : 2 = ELASTIC, 3 = PASSIVE PR.

(9 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.631 = (249.14 T/m)/(395.08 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.070 = (138.13 T/m)/(1971.35 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 4.21 T/m

** PHASE No 8 **

*PHASE 8
*4th Strut / 5th Strut / 6th Strut

* INSTALLATION OF A LINE OF STRUTS No 4
LEVEL = 12.450 m
SPACING = 1.000 m
INCLINATION = 0.000 DEGREES
PRELOAD = 0.000 T
STIFFNESS = 2366.000 T/m
EFFECTIVE LENGTH = 0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 2

* INSTALLATION OF A LINE OF STRUTS No 5
LEVEL = 12.000 m
SPACING = 1.000 m
INCLINATION = 0.000 DEGREES
PRELOAD = 0.000 T
STIFFNESS = 26773.000 T/m
EFFECTIVE LENGTH = 0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 2

* INSTALLATION OF A LINE OF STRUTS No 6
LEVEL = 9.700 m
SPACING = 1.000 m
INCLINATION = 0.000 DEGREES
PRELOAD = 0.000 T
STIFFNESS = 6693.000 T/m
EFFECTIVE LENGTH = 0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 2

PHASE 8

WALL	SOIL 1 EXCAVATION: 12.50 m	SOIL 2 EXCAVATION: 0.00 m	STRUTS/

							WATER LEVEL: 13.50 m CAQUOT SURC.: 0.00 T/m2			WATER LEVEL: 1.50 m CAQUOT SURC.: 0.00 T/m2			ANCHORS	
LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH. ELAST.	STATE	PRE.	SURCH. ELAST.	No	LOAD
0.000	-5.14	-3.93	0.00	0.00			0			3	0.00	1250		
0.375	-6.61	-3.93	-0.07	-0.60	-0.15		0			3	3.18	0.05 1250		
0.750	-8.09	-3.93	-0.60	-2.38	-0.59		0			3	6.35	0.09 1250		
1.125	-9.56	-3.94	-1.91	-4.59	-0.92		0			2	5.42	0.14 1250		
1.500	-11.05	-3.97	-3.99	-6.41	-0.95		0			2	4.27	0.18 1250		
				5.22			0			2	4.27	0.18 1250	1	63.94
1.900	-12.64	-4.00	-2.22	3.69	-0.95	-0.40	0			2	2.98	0.21 1250		
2.300	-14.24	-4.02	-1.01	2.36	-0.95	-0.80	0			2	2.46	0.24 1250		
							0			2	2.66	0.24 1500		
2.500	-15.05	-4.02	-0.61	1.68	-0.95	-1.00	0			2	2.34	0.26 1500		
3.100	-17.46	-4.02	-0.20	-0.31	-0.82	-1.60	0			1	1.71	0.29 1500		
3.700	-19.88	-4.03	-1.03	-2.54	-0.55	-2.20	0			1	1.91	0.31 1500		
4.100	-21.49	-4.05	-2.39	-4.29	-0.36	-2.60	0			1	2.03	0.31 1500		
							0			1	2.11	0.31 1000		
4.756	-24.17	-4.12	-6.27	-7.66	-0.01	-3.26	0			1	2.31	0.32 1000		
5.178	-25.92	-4.20	-10.02	-10.12	0.23	-3.68	0			1	2.44	0.32 1000		
5.600	-27.72	-4.33	-14.85	-12.82	0.49	-4.10	0			1	2.57	0.31 1000		
				23.77			0			1	2.57	0.31 1000	2	201.25
6.100	-29.92	-4.44	-3.83	20.28	0.80	-4.60	0			1	2.71	0.31 1000		
6.600	-32.14	-4.43	5.37	16.46	1.14	-5.10	0			1	2.86	0.30 1000		
6.700	-32.58	-4.42	6.98	15.66	1.21	-5.20	0			1	2.88	0.29 1000		
7.200	-34.76	-4.29	13.77	11.45	1.56	-5.70	0			1	3.03	0.28 1000		
							0			1	2.71	0.28 1875		
7.600	-36.45	-4.13	17.66	7.99	1.86	-6.10	0			1	2.82	0.27 1875		
8.100	-38.45	-3.89	20.51	3.37	2.24	-6.60	0			1	2.95	0.26 1875		
8.600	-40.33	-3.63	20.98	-1.56	2.65	-7.10	0			1	3.08	0.25 1875		
				37.17			0			1	3.08	0.25 1875	3	213.04
9.100	-42.06	-3.26	38.26	31.92	3.07	-7.60	0			1	3.22	0.24 1875		
9.600	-43.56	-2.69	52.85	26.35	3.51	-8.10	0			1	3.35	0.23 1875		
9.700	-43.82	-2.56	55.42	25.20	3.60	-8.20	0			1	3.38	0.23 1875		
							0			1	3.38	0.23 1875	6	0.00
10.150	-44.82	-1.88	65.57	19.87	4.01	-8.65	0			2	3.50	0.22 1875		
10.600	-45.49	-1.10	73.27	14.27	4.44	-9.10	0			2	3.62	0.21 1875		
11.300	-45.80	0.24	80.07	5.06	5.14	-9.80	0			2	3.80	0.19 1875		
12.000	-45.14	1.65	80.20	-4.77	5.87	-10.50	0			2	3.99	0.18 1875		
							0			2	3.99	0.18 1875	5	0.00
12.450	-44.20	2.53	76.57	-11.42	6.36	-10.95	0			2	4.11	0.17 1875		
							0			2	4.11	0.17 1875	4	0.00
12.500	-44.07	2.62	75.98	-12.18	6.41	-11.00	0			2	4.13	0.17 1875		
							2	0.00	1875	2	4.13	0.17 1875		
13.000	-42.53	3.52	68.18	-18.68	6.65	-11.50	2	4.88	1875	2	4.26	0.16 1875		
13.500	-40.57	4.30	57.65	-23.06	6.25	-12.00	2	9.75	1875	2	4.40	0.15 1875		
13.925	-38.62	4.86	47.31	-25.48	5.53	-12.00	2	11.79	1875	2	4.51	0.14 1875		
14.350	-36.46	5.30	36.11	-27.08	4.59	-12.00	2	13.82	1875	2	4.63	0.14 1875		
14.775	-34.14	5.62	24.41	-27.87	3.44	-12.00	2	15.85	1875	2	4.75	0.13 1875		
15.200	-31.70	5.81	12.54	-27.84	2.06	-12.00	2	17.88	1875	2	4.86	0.12 1875		
15.625	-29.21	5.88	0.85	-27.01	0.47	-12.00	2	19.91	1875	2	4.98	0.12 1875		
16.050	-26.72	5.83	-10.30	-25.36	-1.34	-12.00	2	21.94	1875	2	5.10	0.11 1875		
16.475	-24.27	5.67	-20.58	-22.89	-3.36	-12.00	2	23.97	1875	2	5.22	0.11 1875		
16.900	-21.92	5.40	-29.64	-19.62	-5.61	-12.00	2	26.00	1875	2	5.33	0.10 1875		
17.325	-19.69	5.05	-37.14	-15.53	-8.07	-12.00	2	28.03	1875	2	5.45	0.10 1875		
17.750	-17.64	4.62	-42.73	-10.62	-10.75	-12.00	2	30.06	1875	2	5.57	0.09 1875		
18.175	-15.77	4.15	-46.05	-4.91	-13.65	-12.00	2	32.09	1875	2	5.69	0.09 1875		
18.600	-14.11	3.66	-46.91	0.72	-15.89	-12.00	2	29.88	1875	1	5.81	0.09 1875		
19.025	-12.66	3.17	-45.59	5.29	-16.88	-12.00	2	27.36	1875	1	5.93	0.08 1875		
19.450	-11.41	2.70	-42.56	8.82	-17.11	-12.00	2	25.23	1875	1	6.05	0.08 1875		
19.875	-10.35	2.28	-38.22	11.47	-16.93	-12.00	2	23.45	1875	1	6.17	0.07 1875		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m2 T/m3	T/m2	T/m2	T/m3	T	

PHASE 8 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH. ELAST.	STATE	PRE.	SURCH. ELAST.	No	LOAD
20.300	-9.47	1.90	-32.92	13.38	-16.53	-12.00	2	21.99	1875	1	6.28	0.07 1875		
							2	17.52	1375	1	6.80	0.07 1375		
20.656	-8.84	1.63	-28.24	12.83	-16.00	-11.41	2	16.52	1375	1	6.91	0.07 1375		
21.012	-8.30	1.40	-23.79	12.12	-15.45	-10.83	2	15.65	1375	1	7.01	0.07 1375		
21.369	-7.84	1.21	-19.62	11.29	-14.88	-10.25	2	14.87	1375	1	7.11	0.06 1375		
21.725	-7.43	1.05	-15.76	10.36	-14.29	-9.66	2	14.18	1375	1	7.22	0.06 1375		
22.081	-7.08	0.93	-12.24	9.38	-13.69	-9.07	2	13.56	1375	1	7.32	0.06 1375		
22.438	-6.77	0.84	-9.08	8.35	-13.08	-8.49	2	12.99	1375	1	7.43	0.06 1375		
22.794	-6.48	0.77	-6.29	7.30	-12.46	-7.90	2	12.47	1375	1	7.53	0.06 1375		
23.150	-6.22	0.72	-3.88	6.24	-11.82	-7.32	2	11.96	1375	1	7.64	0.05 1375		
23.506	-5.97	0.70	-1.85	5.17	-11.17	-6.74	2	11.48	1375	1	7.74	0.05 1375		
23.862	-5.72	0.69	-0.20	4.11	-10.52	-6.15	2	11.01	1375	1	7.85	0.05 1375		
24.219	-5.47	0.69	1.08	3.04	-9.85	-5.56	2	10.53	1375	1	7.95	0.05 1375		
24.575	-5.22	0.71	1.97	1.98	-9.17	-4.98	2	10.05	1375	1	8.06	0.05 1375		
24.931	-4.97	0.73	2.48	0.91	-8.48	-4.39	2	9.56	1375	1	8.16	0.05 1375		
25.288	-4.71	0.75	2.62	-0.16	-7.78	-3.81	2	9.07	1375	1	8.27	0.04 1375		
25.644	-4.44	0.77	2.37	-1.24	-7.07	-3.23	2	8.56	1375	1	8.37	0.04 1375		
26.000	-4.16	0.79	1.73	-2.33	-6.34	-2.64	2	8.04	1375	1	8.48	0.04 1375		
							2	11.93	2375	1	7.24	0.04 2375		
26.500	-3.76	0.81	0.81	-1.41	-5.38	-1.98	2	11.07	2375	1	7.47	0.04 2375		
27.000	-3.35	0.81	0.28	-0.72	-4.35	-1.32	2	10.20	2375	2	7.71	0.04 2375		
27.500	-2.95	0.81	0.05	-0.25	-3.26	-0.66	2	9.32	2375	2	7.94	0.04 2375		
28.000	-2.54	0.81	0.00	0.00	-2.12		2	8.44	2375	2	8.18	0.03 2375		

m	mm rd/1000	m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3	T/m2	T/m2	T/m3	T
	MAXIMUM DISPLACEMENT = -45.80 mm					CODIFICATION		-1 = SEPARATION				
	MAXIMUM MOMENT = 80.20 m.T/m					OF STATE	:	0 = EXCAVATION				
	VERTICAL REACTION IN FOOT = 2.12 T/m					OF SOIL	:	1 = ACTIVE PR.				
								2 = ELASTIC				
								3 = PASSIVE PR.				

(3 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.631 = (249.14 T/m)/(395.08 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.070 = (138.13 T/m)/(1971.35 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 4.21 T/m

** PHASE No 9 **

*PHASE 9
*Remove Strut

* REMOVAL LINE OF STRUTS No 3

PHASE 9

	WALL						SOIL 1				SOIL 2				STRUTS/ ANCHORS	
							EXCAVATION: 12.50 m				EXCAVATION: 0.00 m					
							WATER LEVEL: 13.50 m				WATER LEVEL: 1.50 m					
							CAQUOT SURC.: 0.00 T/m2				CAQUOT SURC.: 0.00 T/m2					
LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	-4.30	-5.05	0.00	0.00			0				3	0.00		1250		
0.375	-6.19	-5.05	-0.07	-0.60	-0.15		0				3	3.18	0.05	1250		
0.750	-8.09	-5.05	-0.60	-2.38	-0.59		0				3	6.35	0.09	1250		
1.125	-9.98	-5.06	-1.90	-4.49	-0.91		0				2	4.89	0.14	1250		
1.500	-11.88	-5.09	-3.89	-6.01	-0.92		0				2	3.22	0.18	1250		
				6.33			0				2	3.22	0.18	1250	1	67.91
1.900	-13.93	-5.12	-1.58	5.34	-0.89	-0.40	0				2	1.37	0.21	1250		
2.300	-15.98	-5.12	0.40	4.54	-0.78	-0.80	0				1	1.43	0.24	1250		
2.500	-17.00	-5.12	1.26	4.06	-0.71	-1.00	0				1	1.50	0.26	1500		
3.100	-20.06	-5.08	3.20	2.32	-0.47	-1.60	0				1	1.71	0.29	1500		
3.700	-23.10	-5.03	3.95	0.09	-0.20	-2.20	0				1	1.91	0.31	1500		
4.100	-25.10	-4.99	3.65	-1.65	0.00	-2.60	0				1	2.03	0.31	1500		
							0				1	2.11	0.31	1000		
4.756	-28.36	-4.95	1.49	-5.03	0.35	-3.26	0				1	2.31	0.32	1000		
5.178	-30.44	-4.94	-1.15	-7.49	0.59	-3.68	0				1	2.44	0.32	1000		
5.600	-32.53	-4.97	-4.87	-10.19	0.84	-4.10	0				1	2.57	0.31	1000		
				31.61			0				1	2.57	0.31	1000	2	229.89
6.100	-35.02	-4.94	10.07	28.12	1.16	-4.60	0				1	2.71	0.31	1000		
6.600	-37.44	-4.73	23.19	24.30	1.49	-5.10	0				1	2.86	0.30	1000		
6.700	-37.91	-4.67	25.58	23.50	1.56	-5.20	0				1	2.88	0.29	1000		
7.200	-40.16	-4.28	36.29	19.29	1.91	-5.70	0				1	3.03	0.28	1000		
							0				1	2.71	0.28	1875		
7.600	-41.79	-3.89	43.32	15.83	2.21	-6.10	0				1	2.82	0.27	1875		
8.100	-43.60	-3.30	50.10	11.21	2.60	-6.60	0				1	2.95	0.26	1875		
8.600	-45.09	-2.65	54.48	6.28	3.00	-7.10	0				1	3.08	0.25	1875		
9.100	-46.24	-1.96	56.32	1.03	3.42	-7.60	0				1	3.22	0.24	1875		
9.600	-47.05	-1.27	55.45	-4.54	3.86	-8.10	0				1	3.35	0.23	1875		
9.700	-47.17	-1.13	54.94	-5.69	3.95	-8.20	0				1	3.38	0.23	1875		
				16.72			0				1	3.38	0.23	1875	6	22.41
10.150	-47.53	-0.48	61.27	11.38	4.37	-8.65	0				1	3.50	0.22	1875		
10.600	-47.59	0.23	65.14	5.78	4.80	-9.10	0				1	3.62	0.21	1875		
11.300	-47.03	1.38	66.01	-3.43	5.49	-9.80	0				1	3.80	0.19	1875		
12.000	-45.67	2.49	60.20	-13.26	6.22	-10.50	0				1	3.99	0.18	1875		
				0.81			0				1	3.99	0.18	1875	5	14.07
12.450	-44.39	3.16	59.08	-5.84	6.71	-10.95	0				1	4.11	0.17	1875		
				-5.38			0				1	4.11	0.17	1875	4	0.46
12.500	-44.23	3.23	58.79	-6.14	6.77	-11.00	0				1	4.13	0.17	1875		
							2	0.00		1875	1	4.13	0.17	1875		
13.000	-42.44	3.93	53.99	-12.73	6.99	-11.50	2	4.71		1875	2	4.43	0.16	1875		
13.500	-40.31	4.56	46.38	-17.44	6.54	-12.00	2	9.27		1875	2	4.88	0.15	1875		
13.925	-38.28	5.01	38.33	-20.33	5.79	-12.00	2	11.14		1875	2	5.16	0.14	1875		
14.350	-36.07	5.37	29.19	-22.52	4.83	-12.00	2	13.08		1875	2	5.36	0.14	1875		
14.775	-33.73	5.62	19.29	-23.94	3.66	-12.00	2	15.09		1875	2	5.51	0.13	1875		
15.200	-31.31	5.77	8.96	-24.56	2.27	-12.00	2	17.13		1875	2	5.61	0.12	1875		
15.625	-28.84	5.81	-1.46	-24.33	0.66	-12.00	2	19.21		1875	2	5.68	0.12	1875		
16.050	-26.38	5.74	-11.60	-23.25	-1.17	-12.00	2	21.31		1875	2	5.73	0.11	1875		
16.475	-23.98	5.57	-21.10	-21.29	-3.23	-12.00	2	23.41		1875	2	5.77	0.11	1875		
16.900	-21.66	5.30	-29.57	-18.45	-5.51	-12.00	2	25.53		1875	2	5.81	0.10	1875		
17.325	-19.48	4.95	-36.65	-14.73	-8.01	-12.00	2	27.64		1875	2	5.84	0.10	1875		
17.750	-17.47	4.53	-41.97	-10.12	-10.73	-12.00	2	29.75		1875	2	5.89	0.09	1875		
18.175	-15.64	4.07	-45.14	-4.65	-13.66	-12.00	2	31.85		1875	2	5.93	0.09	1875		
18.600	-14.01	3.59	-45.92	0.80	-15.95	-12.00	2	29.70		1875	2	5.99	0.09	1875		
19.025	-12.59	3.11	-44.60	5.24	-17.00	-12.00	2	27.24		1875	2	6.05	0.08	1875		

19.450	-11.37	2.65	-41.61	8.68	-17.28	-12.00	2	25.15		1875	2	6.13	0.08	1875					
19.875	-10.33	2.23	-37.34	11.27	-17.14	-12.00	2	23.41		1875	2	6.21	0.07	1875					
20.300	-9.46	1.87	-32.13	13.16	-16.75	-12.00	2	21.98		1875	2	6.30	0.07	1875					
							2	17.51		1375	2	6.81	0.07	1375					
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T				

PHASE 9 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
20.656	-8.84	1.60	-27.53	12.61	-16.22	-11.41	2	16.53		1375	1	6.91	0.07	1375		
21.012	-8.31	1.38	-23.16	11.91	-15.67	-10.83	2	15.66		1375	1	7.01	0.07	1375		
21.369	-7.86	1.19	-19.06	11.08	-15.10	-10.25	2	14.90		1375	1	7.11	0.06	1375		
21.725	-7.46	1.04	-15.27	10.17	-14.52	-9.66	2	14.22		1375	1	7.22	0.06	1375		
22.081	-7.11	0.92	-11.82	9.20	-13.92	-9.07	2	13.60		1375	1	7.32	0.06	1375		
22.438	-6.80	0.83	-8.73	8.19	-13.31	-8.49	2	13.04		1375	1	7.43	0.06	1375		
22.794	-6.52	0.77	-5.99	7.15	-12.69	-7.90	2	12.51		1375	1	7.53	0.06	1375		
23.150	-6.25	0.72	-3.63	6.10	-12.05	-7.32	2	12.01		1375	1	7.64	0.05	1375		
23.506	-6.00	0.70	-1.65	5.05	-11.41	-6.74	2	11.52		1375	1	7.74	0.05	1375		
23.862	-5.75	0.69	-0.03	4.00	-10.75	-6.15	2	11.05		1375	1	7.85	0.05	1375		
24.219	-5.50	0.70	1.20	2.95	-10.08	-5.56	2	10.57		1375	1	7.95	0.05	1375		
24.575	-5.25	0.71	2.07	1.90	-9.40	-4.98	2	10.09		1375	1	8.06	0.05	1375		
24.931	-4.99	0.73	2.56	0.85	-8.71	-4.39	2	9.60		1375	1	8.16	0.05	1375		
25.288	-4.73	0.76	2.67	-0.21	-8.01	-3.81	2	9.10		1375	1	8.27	0.04	1375		
25.644	-4.45	0.78	2.40	-1.28	-7.30	-3.23	2	8.58		1375	1	8.37	0.04	1375		
26.000	-4.17	0.80	1.76	-2.36	-6.58	-2.64	2	8.06		1375	1	8.48	0.04	1375		
							2	11.96		2375	1	7.24	0.04	2375		
26.500	-3.77	0.81	0.82	-1.43	-5.62	-1.98	2	11.09		2375	1	7.47	0.04	2375		
27.000	-3.36	0.82	0.29	-0.73	-4.59	-1.32	2	10.21		2375	1	7.71	0.04	2375		
27.500	-2.95	0.82	0.05	-0.25	-3.50	-0.66	2	9.33		2375	1	7.94	0.04	2375		
28.000	-2.54	0.82	0.00	0.00	-2.36		2	8.44		2375	2	8.18	0.03	2375		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T				

MAXIMUM DISPLACEMENT = -47.59 mm
MAXIMUM MOMENT = 66.01 m.T/m
VERTICAL REACTION IN FOOT = 2.36 T/m

CODIFICATION OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR.
CODIFICATION OF SOIL : 2 = ELASTIC, 3 = PASSIVE PR.

(7 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.623 = (246.23 T/m)/(395.08 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.071 = (139.35 T/m)/(1971.35 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 4.21 T/m

** PHASE No 10 **

*PHASE 10
*7th Strut

* INSTALLATION OF A LINE OF STRUTS No 7

LEVEL = 6.700 m
SPACING = 1.000 m
INCLINATION = 0.000 DEGREES
PRELOAD = 0.000 T
STIFFNESS = 6693.000 T/m
EFFECTIVE LENGTH = 0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 2

PHASE 10

WALL | SOIL 1: EXCAVATION: 12.50 m, WATER LEVEL: 13.50 m, CAQUOT SURC.: 0.00 T/m2 | SOIL 2: EXCAVATION: 0.00 m, WATER LEVEL: 1.50 m, CAQUOT SURC.: 0.00 T/m2 | STRUTS/ ANCHORS

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	-4.30	-5.05	0.00	0.00			0				3	0.00		1250		
0.375	-6.19	-5.05	-0.07	-0.60	-0.15		0				3	3.18	0.05	1250		
0.750	-8.09	-5.05	-0.60	-2.38	-0.59		0				2	6.35	0.09	1250		
1.125	-9.98	-5.06	-1.90	-4.49	-0.91		0				2	4.89	0.14	1250		
1.500	-11.88	-5.09	-3.89	-6.01	-0.92		0				2	3.22	0.18	1250		
				6.33			0				2	3.22	0.18	1250	1	67.91
1.900	-13.93	-5.12	-1.58	5.34	-0.89	-0.40	0				2	1.37	0.21	1250		
2.300	-15.98	-5.12	0.40	4.54	-0.78	-0.80	0				1	1.43	0.24	1250		
2.500	-17.00	-5.12	1.26	4.06	-0.71	-1.00	0				1	1.50	0.26	1500		
3.100	-20.06	-5.08	3.20	2.32	-0.47	-1.60	0				1	1.71	0.29	1500		

3.700	-23.10	-5.03	3.95	0.09	-0.20	-2.20	0				1	1.91	0.31	1500		
4.100	-25.10	-4.99	3.65	-1.65	0.00	-2.60	0				1	2.03	0.31	1500		
							0				1	2.11	0.31	1000		
4.756	-28.36	-4.95	1.49	-5.03	0.35	-3.26	0				1	2.31	0.32	1000		
5.178	-30.44	-4.94	-1.15	-7.49	0.59	-3.68	0				1	2.44	0.32	1000		
5.600	-32.53	-4.97	-4.87	-10.19	0.84	-4.10	0				1	2.57	0.31	1000		
				31.61			0				1	2.57	0.31	1000	2	229.89
6.100	-35.02	-4.94	10.07	28.12	1.16	-4.60	0				1	2.71	0.31	1000		
6.600	-37.44	-4.73	23.19	24.30	1.49	-5.10	0				1	2.86	0.30	1000		
6.700	-37.91	-4.67	25.58	23.50	1.56	-5.20	0				1	2.88	0.29	1000		
							0				1	2.88	0.29	1000	7	0.00
7.200	-40.16	-4.28	36.29	19.29	1.91	-5.70	0				1	3.03	0.28	1000		
							0				1	2.71	0.28	1875		
7.600	-41.79	-3.89	43.32	15.83	2.21	-6.10	0				1	2.82	0.27	1875		
8.100	-43.60	-3.30	50.10	11.21	2.60	-6.60	0				2	2.95	0.26	1875		
8.600	-45.09	-2.65	54.48	6.28	3.00	-7.10	0				2	3.08	0.25	1875		
9.100	-46.24	-1.96	56.32	1.03	3.42	-7.60	0				2	3.22	0.24	1875		
9.600	-47.05	-1.27	55.45	-4.54	3.86	-8.10	0				2	3.35	0.23	1875		
9.700	-47.17	-1.13	54.94	-5.69	3.95	-8.20	0				2	3.38	0.23	1875		
				16.72			0				2	3.38	0.23	1875	6	22.41
10.150	-47.53	-0.48	61.27	11.38	4.37	-8.65	0				2	3.50	0.22	1875		
10.600	-47.59	0.23	65.14	5.78	4.80	-9.10	0				2	3.62	0.21	1875		
11.300	-47.03	1.38	66.01	-3.43	5.49	-9.80	0				2	3.80	0.19	1875		
12.000	-45.67	2.49	60.20	-13.26	6.22	-10.50	0				2	3.99	0.18	1875		
				0.81			0				2	3.99	0.18	1875	5	14.07
12.450	-44.39	3.16	59.08	-5.84	6.71	-10.95	0				2	4.11	0.17	1875		
				-5.38			0				2	4.11	0.17	1875	4	0.46
12.500	-44.23	3.23	58.79	-6.14	6.77	-11.00	0				2	4.13	0.17	1875		
							2	0.00		1875	2	4.13	0.17	1875		
13.000	-42.44	3.93	53.99	-12.73	6.99	-11.50	2	4.71		1875	2	4.43	0.16	1875		
13.500	-40.31	4.56	46.38	-17.44	6.54	-12.00	2	9.27		1875	2	4.88	0.15	1875		
13.925	-38.28	5.01	38.33	-20.33	5.79	-12.00	2	11.14		1875	2	5.16	0.14	1875		
14.350	-36.07	5.37	29.19	-22.52	4.83	-12.00	2	13.08		1875	2	5.36	0.14	1875		
14.775	-33.73	5.62	19.29	-23.94	3.66	-12.00	2	15.09		1875	2	5.51	0.13	1875		
15.200	-31.31	5.77	8.96	-24.56	2.27	-12.00	2	17.13		1875	2	5.61	0.12	1875		
15.625	-28.84	5.81	-1.46	-24.33	0.66	-12.00	2	19.21		1875	2	5.68	0.12	1875		
16.050	-26.38	5.74	-11.60	-23.25	-1.17	-12.00	2	21.31		1875	2	5.73	0.11	1875		
16.475	-23.98	5.57	-21.10	-21.29	-3.23	-12.00	2	23.41		1875	2	5.77	0.11	1875		
16.900	-21.66	5.30	-29.57	-18.45	-5.51	-12.00	2	25.53		1875	2	5.81	0.10	1875		
17.325	-19.48	4.95	-36.65	-14.73	-8.01	-12.00	2	27.64		1875	2	5.84	0.10	1875		
17.750	-17.47	4.53	-41.97	-10.12	-10.73	-12.00	2	29.75		1875	2	5.89	0.09	1875		
18.175	-15.64	4.07	-45.14	-4.65	-13.66	-12.00	2	31.85		1875	2	5.93	0.09	1875		
18.600	-14.01	3.59	-45.92	0.80	-15.95	-12.00	2	29.70		1875	2	5.99	0.09	1875		
19.025	-12.59	3.11	-44.60	5.24	-17.00	-12.00	2	27.24		1875	2	6.05	0.08	1875		
19.450	-11.37	2.65	-41.61	8.68	-17.28	-12.00	2	25.15		1875	2	6.13	0.08	1875		
19.875	-10.33	2.23	-37.34	11.28	-17.14	-12.00	2	23.41		1875	2	6.21	0.07	1875		
20.300	-9.46	1.87	-32.13	13.16	-16.75	-12.00	2	21.98		1875	2	6.30	0.07	1875		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T

PHASE 10 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
							2	17.51		1375	2	6.81	0.07	1375		
20.656	-8.84	1.60	-27.53	12.61	-16.22	-11.41	2	16.53		1375	1	6.91	0.07	1375		
21.012	-8.31	1.38	-23.16	11.91	-15.67	-10.83	2	15.66		1375	1	7.01	0.07	1375		
21.369	-7.86	1.19	-19.06	11.08	-15.10	-10.25	2	14.90		1375	1	7.11	0.06	1375		
21.725	-7.46	1.04	-15.27	10.17	-14.52	-9.66	2	14.22		1375	1	7.22	0.06	1375		
22.081	-7.11	0.92	-11.82	9.20	-13.92	-9.07	2	13.60		1375	1	7.32	0.06	1375		
22.438	-6.80	0.83	-8.73	8.18	-13.31	-8.49	2	13.04		1375	1	7.43	0.06	1375		
22.794	-6.52	0.77	-5.99	7.15	-12.69	-7.90	2	12.51		1375	1	7.53	0.06	1375		
23.150	-6.25	0.72	-3.63	6.10	-12.05	-7.32	2	12.01		1375	1	7.64	0.05	1375		
23.506	-6.00	0.70	-1.65	5.05	-11.41	-6.74	2	11.52		1375	1	7.74	0.05	1375		
23.862	-5.75	0.69	-0.03	4.00	-10.75	-6.15	2	11.05		1375	1	7.85	0.05	1375		
24.219	-5.50	0.70	1.20	2.95	-10.08	-5.56	2	10.57		1375	1	7.95	0.05	1375		
24.575	-5.25	0.71	2.07	1.90	-9.40	-4.98	2	10.09		1375	1	8.06	0.05	1375		
24.931	-4.99	0.73	2.56	0.85	-8.71	-4.39	2	9.60		1375	1	8.16	0.05	1375		
25.288	-4.73	0.76	2.67	-0.21	-8.01	-3.81	2	9.10		1375	1	8.27	0.04	1375		
25.644	-4.45	0.78	2.40	-1.28	-7.30	-3.23	2	8.58		1375	1	8.37	0.04	1375		
26.000	-4.17	0.80	1.75	-2.36	-6.58	-2.64	2	8.06		1375	1	8.48	0.04	1375		
							2	11.96		2375	1	7.24	0.04	2375		
26.500	-3.77	0.81	0.81	-1.43	-5.62	-1.98	2	11.09		2375	1	7.47	0.04	2375		
27.000	-3.36	0.82	0.28	-0.72	-4.59	-1.32	2	10.21		2375	1	7.71	0.04	2375		
27.500	-2.95	0.82	0.05	-0.25	-3.49	-0.66	2	9.33		2375	1	7.94	0.04	2375		
28.000	-2.54	0.82	0.00	0.00	-2.36		2	8.44		2375	2	8.18	0.03	2375		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T

MAXIMUM DISPLACEMENT = -47.59 mm
MAXIMUM MOMENT = 66.01 m.T/m
VERTICAL REACTION IN FOOT = 2.36 T/m

CODIFICATION OF STATE OF SOIL :
-1 = SEPARATION
0 = EXCAVATION
1 = ACTIVE PR.
2 = ELASTIC
3 = PASSIVE PR.

(3 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.623 = (246.23 T/m)/(395.08 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.071 = (139.35 T/m)/(1971.35 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m

** PHASE No 11 **

*PHASE 11
*Remove Strut

* REMOVAL LINE OF STRUTS No 2

PHASE 11

	WALL	SOIL 1 EXCAVATION: 12.50 m WATER LEVEL: 13.50 m CAQUOT SURC.: 0.00 T/m2	SOIL 2 EXCAVATION: 0.00 m WATER LEVEL: 1.50 m CAQUOT SURC.: 0.00 T/m2	STRUTS/ ANCHORS

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	-6.35	-6.24	0.00	0.00	0.00		0				1	0.00		1250		
0.375	-8.69	-6.24	-0.01	-0.05	0.01		0				1	0.28	0.05	1250		
0.750	-11.03	-6.24	-0.10	-0.61	0.02		0				2	2.67	0.09	1250		
1.125	-13.37	-6.24	-0.47	-1.27	0.06		0				1	0.84	0.14	1250		
1.500	-15.72	-6.25	-1.01	-1.63	0.15		0				1	1.12	0.18	1250		
				14.01			0				1	1.12	0.18	1250	1	86.03
1.900	-18.21	-6.23	4.48	13.45	0.27	-0.40	0				1	1.28	0.21	1250		
2.300	-20.69	-6.16	9.72	12.67	0.41	-0.80	0				1	1.43	0.24	1250		
2.500	-21.92	-6.11	12.20	12.20	0.48	-1.00	0				1	1.50	0.26	1500		
3.100	-25.52	-5.87	19.02	10.45	0.72	-1.60	0				1	1.71	0.29	1500		
3.700	-28.95	-5.55	24.65	8.23	0.99	-2.20	0				1	1.91	0.31	1500		
4.100	-31.12	-5.29	27.60	6.48	1.19	-2.60	0				1	2.03	0.31	1500		
							0				1	2.11	0.31	1000		
4.756	-34.43	-4.81	30.77	3.11	1.53	-3.26	0				1	2.31	0.32	1000		
5.178	-36.39	-4.48	31.57	0.64	1.77	-3.68	0				1	2.44	0.32	1000		
5.600	-38.21	-4.15	31.28	-2.06	2.03	-4.10	0				1	2.57	0.31	1000		
6.100	-40.19	-3.77	29.39	-5.55	2.34	-4.60	0				1	2.71	0.31	1000		
6.600	-41.98	-3.43	25.68	-9.37	2.68	-5.10	0				1	2.86	0.30	1000		
6.700	-42.32	-3.36	24.70	-10.17	2.75	-5.20	0				1	2.88	0.29	1000		
				19.35			0				1	2.88	0.29	1000	7	29.52
7.200	-43.92	-3.00	33.34	15.15	3.10	-5.70	0				1	3.03	0.28	1000		
							0				1	2.71	0.28	1875		
7.600	-45.05	-2.64	38.71	11.68	3.40	-6.10	0				1	2.82	0.27	1875		
8.100	-46.25	-2.13	43.41	7.06	3.79	-6.60	0				1	2.95	0.26	1875		
8.600	-47.17	-1.57	45.72	2.13	4.19	-7.10	0				1	3.08	0.25	1875		
9.100	-47.82	-1.00	45.49	-3.12	4.61	-7.60	0				1	3.22	0.24	1875		
9.600	-48.18	-0.46	42.55	-8.69	5.05	-8.10	0				1	3.35	0.23	1875		
9.700	-48.22	-0.35	41.63	-9.84	5.14	-8.20	0				1	3.38	0.23	1875		
				19.62			0				1	3.38	0.23	1875	6	29.45
10.150	-48.27	0.16	49.26	14.28	5.56	-8.65	0				1	3.50	0.22	1875		
10.600	-48.07	0.74	54.44	8.69	5.98	-9.10	0				1	3.62	0.21	1875		
11.300	-47.21	1.72	57.33	-0.52	6.68	-9.80	0				1	3.80	0.19	1875		
12.000	-45.66	2.70	53.56	-10.36	7.40	-10.50	0				2	4.00	0.18	1875		
				3.52			0				2	4.00	0.18	1875	5	13.88
12.450	-44.31	3.30	53.65	-3.17	7.83	-10.95	0				2	4.27	0.17	1875		
				-2.91			0				2	4.27	0.17	1875	4	0.26
12.500	-44.14	3.36	53.48	-3.68	7.87	-11.00	0				2	4.30	0.17	1875		
							2	0.00		1875	2	4.30	0.17	1875		
13.000	-42.30	4.01	49.88	-10.44	8.01	-11.50	2	4.44		1875	2	4.70	0.16	1875		
13.500	-40.14	4.59	43.34	-15.44	7.57	-12.00	2	8.95		1875	2	5.20	0.15	1875		
13.925	-38.10	5.01	36.07	-18.61	6.85	-12.00	2	10.81		1875	2	5.49	0.14	1875		
14.350	-35.90	5.35	27.61	-21.08	5.94	-12.00	2	12.76		1875	2	5.69	0.14	1875		
14.775	-33.57	5.59	18.27	-22.77	4.82	-12.00	2	14.78		1875	2	5.81	0.13	1875		
15.200	-31.16	5.73	8.38	-23.63	3.48	-12.00	2	16.86		1875	2	5.88	0.12	1875		
15.625	-28.71	5.77	-1.70	-23.63	1.91	-12.00	2	18.97		1875	2	5.92	0.12	1875		
16.050	-26.27	5.70	-11.58	-22.73	0.11	-12.00	2	21.10		1875	2	5.94	0.11	1875		
16.475	-23.88	5.52	-20.89	-20.93	-1.93	-12.00	2	23.24		1875	2	5.94	0.11	1875		
16.900	-21.59	5.26	-29.25	-18.23	-4.20	-12.00	2	25.39		1875	2	5.95	0.10	1875		
17.325	-19.43	4.91	-36.25	-14.61	-6.69	-12.00	2	27.53		1875	2	5.95	0.10	1875		
17.750	-17.42	4.50	-41.53	-10.09	-9.41	-12.00	2	29.66		1875	2	5.97	0.09	1875		
18.175	-15.61	4.04	-44.70	-4.67	-12.35	-12.00	2	31.79		1875	2	5.99	0.09	1875		
18.600	-13.99	3.56	-45.51	0.74	-14.65	-12.00	2	29.66		1875	2	6.03	0.09	1875		
19.025	-12.58	3.09	-44.22	5.15	-15.70	-12.00	2	27.22		1875	2	6.07	0.08	1875		
19.450	-11.36	2.64	-41.27	8.58	-15.99	-12.00	2	25.14		1875	2	6.13	0.08	1875		
19.875	-10.33	2.22	-37.04	11.18	-15.85	-12.00	2	23.41		1875	2	6.20	0.07	1875		
20.300	-9.47	1.86	-31.87	13.07	-15.46	-12.00	2	21.99		1875	2	6.29	0.07	1875		
							2	17.52		1375	2	6.80	0.07	1375		
m	mm rd/1000		m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T

PHASE 11 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
20.656	-8.85	1.60	-27.30	12.53	-14.93	-11.41	2	16.54		1375	1	6.91	0.07	1375		

21.012	-8.32	1.37	-22.96	11.82	-14.38	-10.83	2	15.68	1375	1	7.01	0.07	1375				
21.369	-7.87	1.19	-18.89	11.00	-13.81	-10.25	2	14.92	1375	1	7.11	0.06	1375				
21.725	-7.47	1.04	-15.13	10.10	-13.23	-9.66	2	14.23	1375	1	7.22	0.06	1375				
22.081	-7.12	0.92	-11.70	9.13	-12.63	-9.07	2	13.62	1375	1	7.32	0.06	1375				
22.438	-6.81	0.83	-8.63	8.13	-12.02	-8.49	2	13.05	1375	1	7.43	0.06	1375				
22.794	-6.53	0.77	-5.92	7.10	-11.39	-7.90	2	12.53	1375	1	7.53	0.06	1375				
23.150	-6.26	0.73	-3.57	6.06	-10.76	-7.32	2	12.03	1375	1	7.64	0.05	1375				
23.506	-6.01	0.70	-1.60	5.01	-10.11	-6.74	2	11.54	1375	1	7.74	0.05	1375				
23.862	-5.76	0.70	0.00	3.97	-9.46	-6.15	2	11.06	1375	1	7.85	0.05	1375				
24.219	-5.51	0.70	1.23	2.92	-8.79	-5.56	2	10.58	1375	1	7.95	0.05	1375				
24.575	-5.26	0.72	2.08	1.87	-8.11	-4.98	2	10.10	1375	1	8.06	0.05	1375				
24.931	-5.00	0.74	2.56	0.83	-7.42	-4.39	2	9.61	1375	1	8.16	0.05	1375				
25.288	-4.73	0.76	2.67	-0.23	-6.72	-3.81	2	9.10	1375	1	8.27	0.04	1375				
25.644	-4.46	0.78	2.40	-1.29	-6.01	-3.23	2	8.59	1375	1	8.37	0.04	1375				
26.000	-4.18	0.80	1.75	-2.37	-5.29	-2.64	2	8.06	1375	1	8.48	0.04	1375				
							2	11.97	2375	1	7.24	0.04	2375				
26.500	-3.77	0.82	0.81	-1.43	-4.33	-1.98	2	11.10	2375	1	7.47	0.04	2375				
27.000	-3.36	0.82	0.28	-0.72	-3.30	-1.32	2	10.21	2375	1	7.71	0.04	2375				
27.500	-2.95	0.83	0.05	-0.24	-2.21	-0.66	2	9.32	2375	2	7.94	0.04	2375				
28.000	-2.53	0.83	0.00	0.00	-1.07		2	8.43	2375	2	8.19	0.03	2375				
m	mm rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T		

MAXIMUM DISPLACEMENT = -48.27 mm
MAXIMUM MOMENT = 57.33 m.T/m
VERTICAL REACTION IN FOOT = 1.07 T/m

CODIFICATION OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR., 2 = ELASTIC, 3 = PASSIVE PR.
CODIFICATION OF SOIL :

(7 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.620 = (245.06 T/m)/(395.08 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.069 = (135.86 T/m)/(1971.35 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 4.21 T/m

** PHASE No 12 **

*PHASE 12
*8th Strut

* INSTALLATION OF A LINE OF STRUTS No 8
LEVEL = 3.700 m
SPACING = 1.000 m
INCLINATION = 0.000 DEGREES
PRELOAD = 0.000 T
STIFFNESS = 6693.000 T/m
EFFECTIVE LENGTH = 0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 2

PHASE 12

WALL							SOIL 1				SOIL 2				STRUTS/ ANCHORS	
							EXCAVATION: 12.50 m				EXCAVATION: 0.00 m					
							WATER LEVEL: 13.50 m				WATER LEVEL: 1.50 m					
							CAQUOT SURC.: 0.00 T/m2				CAQUOT SURC.: 0.00 T/m2					
LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	-6.35	-6.24	0.00	0.00	0.00		0				3	0.00		1250		
0.375	-8.69	-6.24	-0.01	-0.05	0.01		0				2	0.28	0.05	1250		
0.750	-11.03	-6.24	-0.10	-0.61	0.02		0				2	2.67	0.09	1250		
1.125	-13.37	-6.24	-0.47	-1.27	0.06		0				2	0.84	0.14	1250		
1.500	-15.72	-6.25	-1.01	-1.63	0.15		0				2	1.12	0.18	1250		
				14.01			0				2	1.12	0.18	1250	1	86.03
1.900	-18.21	-6.23	4.48	13.45	0.27	-0.40	0				2	1.28	0.21	1250		
2.300	-20.69	-6.16	9.72	12.67	0.41	-0.80	0				2	1.43	0.24	1250		
2.500	-21.92	-6.11	12.20	12.20	0.48	-1.00	0				2	1.50	0.26	1500		
3.100	-25.52	-5.87	19.02	10.45	0.72	-1.60	0				2	1.71	0.29	1500		
3.700	-28.95	-5.55	24.65	8.23	0.99	-2.20	0				2	1.91	0.31	1500		
							0				2	1.91	0.31	1500	8	0.00
4.100	-31.12	-5.29	27.60	6.48	1.19	-2.60	0				1	2.03	0.31	1500		
							0				1	2.11	0.31	1000		
4.756	-34.43	-4.81	30.77	3.11	1.53	-3.26	0				1	2.31	0.32	1000		
5.178	-36.39	-4.48	31.57	0.64	1.77	-3.68	0				1	2.44	0.32	1000		
5.600	-38.21	-4.15	31.28	-2.06	2.03	-4.10	0				1	2.57	0.31	1000		
6.100	-40.19	-3.77	29.39	-5.55	2.34	-4.60	0				1	2.71	0.31	1000		
6.600	-41.98	-3.43	25.68	-9.37	2.68	-5.10	0				1	2.86	0.30	1000		
6.700	-42.32	-3.36	24.70	-10.17	2.75	-5.20	0				1	2.88	0.29	1000		
				19.35			0				1	2.88	0.29	1000	7	29.52
7.200	-43.92	-3.00	33.34	15.15	3.10	-5.70	0				1	3.03	0.28	1000		
							0				1	2.71	0.28	1875		
7.600	-45.05	-2.64	38.71	11.68	3.40	-6.10	0				1	2.82	0.27	1875		
8.100	-46.25	-2.13	43.41	7.06	3.79	-6.60	0				1	2.95	0.26	1875		
8.600	-47.17	-1.57	45.72	2.13	4.19	-7.10	0				1	3.08	0.25	1875		

9.100	-47.82	-1.00	45.49	-3.12	4.61	-7.60	0				1	3.22	0.24	1875		
9.600	-48.18	-0.46	42.55	-8.69	5.05	-8.10	0				1	3.35	0.23	1875		
9.700	-48.22	-0.35	41.63	-9.84	5.14	-8.20	0				1	3.38	0.23	1875		
				19.62			0				1	3.38	0.23	1875	6	29.45
10.150	-48.27	0.16	49.26	14.28	5.56	-8.65	0				1	3.50	0.22	1875		
10.600	-48.07	0.74	54.44	8.69	5.98	-9.10	0				1	3.62	0.21	1875		
11.300	-47.21	1.72	57.33	-0.52	6.68	-9.80	0				1	3.80	0.19	1875		
12.000	-45.66	2.70	53.56	-10.36	7.40	-10.50	0				2	4.00	0.18	1875		
				3.52			0				2	4.00	0.18	1875	5	13.88
12.450	-44.31	3.30	53.65	-3.17	7.83	-10.95	0				2	4.27	0.17	1875		
				-2.91			0				2	4.27	0.17	1875	4	0.26
12.500	-44.14	3.36	53.48	-3.68	7.87	-11.00	0				2	4.30	0.17	1875		
							2	0.00		1875	2	4.30	0.17	1875		
13.000	-42.30	4.01	49.88	-10.44	8.01	-11.50	2	4.44		1875	2	4.70	0.16	1875		
13.500	-40.14	4.59	43.34	-15.44	7.57	-12.00	2	8.95		1875	2	5.20	0.15	1875		
13.925	-38.10	5.01	36.07	-18.61	6.85	-12.00	2	10.81		1875	2	5.49	0.14	1875		
14.350	-35.90	5.35	27.61	-21.08	5.94	-12.00	2	12.76		1875	2	5.69	0.14	1875		
14.775	-33.57	5.59	18.27	-22.77	4.82	-12.00	2	14.78		1875	2	5.81	0.13	1875		
15.200	-31.16	5.73	8.38	-23.63	3.48	-12.00	2	16.86		1875	2	5.88	0.12	1875		
15.625	-28.71	5.77	-1.70	-23.63	1.91	-12.00	2	18.97		1875	2	5.92	0.12	1875		
16.050	-26.27	5.70	-11.58	-22.73	0.11	-12.00	2	21.10		1875	2	5.94	0.11	1875		
16.475	-23.88	5.52	-20.89	-20.93	-1.93	-12.00	2	23.24		1875	2	5.94	0.11	1875		
16.900	-21.59	5.26	-29.25	-18.23	-4.20	-12.00	2	25.39		1875	2	5.95	0.10	1875		
17.325	-19.43	4.91	-36.26	-14.61	-6.69	-12.00	2	27.53		1875	2	5.95	0.10	1875		
17.750	-17.42	4.50	-41.54	-10.09	-9.41	-12.00	2	29.66		1875	2	5.97	0.09	1875		
18.175	-15.61	4.04	-44.70	-4.67	-12.35	-12.00	2	31.79		1875	2	5.99	0.09	1875		
18.600	-13.99	3.56	-45.51	0.73	-14.65	-12.00	2	29.66		1875	2	6.03	0.09	1875		
19.025	-12.58	3.09	-44.22	5.15	-15.70	-12.00	2	27.22		1875	2	6.07	0.08	1875		
19.450	-11.36	2.64	-41.27	8.58	-15.99	-12.00	2	25.14		1875	2	6.13	0.08	1875		
19.875	-10.33	2.22	-37.04	11.18	-15.85	-12.00	2	23.41		1875	2	6.20	0.07	1875		
20.300	-9.47	1.86	-31.87	13.07	-15.46	-12.00	2	21.99		1875	2	6.28	0.07	1875		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T

** RIDO V:4.24.c (C) R.F.L. ** XDO ** PAGE 39 **

** RIDO V:4.22 (C) R.F.L. ** ** 06-03-23 **

PHASE 12 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
							2	17.52		1375	2	6.80	0.07	1375		
20.656	-8.85	1.60	-27.30	12.53	-14.93	-11.41	2	16.54		1375	1	6.91	0.07	1375		
21.012	-8.32	1.37	-22.96	11.82	-14.38	-10.83	2	15.68		1375	1	7.01	0.07	1375		
21.369	-7.87	1.19	-18.89	11.00	-13.81	-10.25	2	14.92		1375	1	7.11	0.06	1375		
21.725	-7.47	1.04	-15.13	10.10	-13.23	-9.66	2	14.23		1375	1	7.22	0.06	1375		
22.081	-7.12	0.92	-11.70	9.13	-12.63	-9.07	2	13.62		1375	1	7.32	0.06	1375		
22.438	-6.81	0.83	-8.63	8.13	-12.02	-8.49	2	13.06		1375	1	7.43	0.06	1375		
22.794	-6.53	0.77	-5.92	7.10	-11.39	-7.90	2	12.53		1375	1	7.53	0.06	1375		
23.150	-6.26	0.73	-3.57	6.06	-10.76	-7.32	2	12.03		1375	1	7.64	0.05	1375		
23.506	-6.01	0.70	-1.60	5.01	-10.11	-6.74	2	11.54		1375	1	7.74	0.05	1375		
23.862	-5.76	0.70	0.00	3.97	-9.46	-6.15	2	11.06		1375	1	7.85	0.05	1375		
24.219	-5.51	0.70	1.23	2.92	-8.79	-5.56	2	10.58		1375	1	7.95	0.05	1375		
24.575	-5.26	0.72	2.08	1.88	-8.11	-4.98	2	10.10		1375	1	8.06	0.05	1375		
24.931	-5.00	0.74	2.57	0.83	-7.42	-4.39	2	9.61		1375	1	8.16	0.05	1375		
25.288	-4.73	0.76	2.67	-0.23	-6.72	-3.81	2	9.11		1375	1	8.27	0.04	1375		
25.644	-4.46	0.78	2.40	-1.29	-6.01	-3.23	2	8.59		1375	1	8.37	0.04	1375		
26.000	-4.18	0.80	1.75	-2.37	-5.29	-2.64	2	8.06		1375	1	8.48	0.04	1375		
							2	11.98		2375	1	7.24	0.04	2375		
26.500	-3.77	0.82	0.81	-1.43	-4.33	-1.98	2	11.10		2375	1	7.47	0.04	2375		
27.000	-3.36	0.82	0.28	-0.72	-3.30	-1.32	2	10.22		2375	1	7.71	0.04	2375		
27.500	-2.95	0.83	0.05	-0.24	-2.20	-0.66	2	9.33		2375	2	7.94	0.04	2375		
28.000	-2.54	0.83	0.00	0.00	-1.07		2	8.43		2375	2	8.18	0.03	2375		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T

MAXIMUM DISPLACEMENT = -48.27 mm
MAXIMUM MOMENT = 57.33 m.T/m
VERTICAL REACTION IN FOOT = 1.07 T/m

CODIFICATION OF STATE OF SOIL :
-1 = SEPARATION
0 = EXCAVATION
1 = ACTIVE PR.
2 = ELASTIC
3 = PASSIVE PR.

(4 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.620 = (245.06 T/m)/(395.08 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.069 = (135.86 T/m)/(1971.35 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 4.21 T/m

** RIDO V:4.24.c (C) R.F.L. ** XDO ** PAGE 40 **

** RIDO V:4.22 (C) R.F.L. ** ** 06-03-23 **

** PHASE No 13 **

*PHASE 13
*Remove Strut

* REMOVAL LINE OF STRUTS No 1

** RIDO V:4.24.c (C) R.F.L. ** XDO ** PAGE 41 **

PHASE 13

	WALL	SOIL 1 EXCAVATION: 12.50 m WATER LEVEL: 13.50 m CAQUOT SURC.: 0.00 T/m2	SOIL 2 EXCAVATION: 0.00 m WATER LEVEL: 1.50 m CAQUOT SURC.: 0.00 T/m2	STRUTS/ ANCHORS

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	-19.70	-3.32	0.00	0.00	0.00		0				1	0.00		1250		
0.375	-20.94	-3.32	-0.01	-0.05	0.01		0				1	0.28	0.05	1250		
0.750	-22.19	-3.32	-0.05	-0.21	0.05		0				1	0.57	0.09	1250		
1.125	-23.43	-3.32	-0.18	-0.48	0.12		0				1	0.84	0.14	1250		
1.500	-24.68	-3.32	-0.42	-0.84	0.21		0				1	1.12	0.18	1250		
1.900	-26.01	-3.33	-0.87	-1.40	0.33	-0.40	0				1	1.28	0.21	1250		
2.300	-27.34	-3.34	-1.58	-2.19	0.47	-0.80	0				1	1.43	0.24	1250		
2.500	-28.01	-3.35	-2.06	-2.66	0.54	-1.00	0				1	1.50	0.26	1500		
3.100	-30.03	-3.40	-4.15	-4.40	0.78	-1.60	0				1	1.71	0.29	1500		
3.700	-32.10	-3.48	-7.44	-6.63	1.05	-2.20	0				1	1.91	0.31	1500		
				14.43			0				1	1.91	0.31	1500	8	21.06
4.100	-33.50	-3.53	-2.01	12.69	1.25	-2.60	0				1	2.03	0.31	1500		
							0				1	2.11	0.31	1000		
4.756	-35.81	-3.50	5.24	9.32	1.59	-3.26	0				1	2.31	0.32	1000		
5.178	-37.27	-3.42	8.66	6.85	1.83	-3.68	0				1	2.44	0.32	1000		
5.600	-38.70	-3.32	10.99	4.15	2.09	-4.10	0				1	2.57	0.31	1000		
6.100	-40.32	-3.17	12.20	0.66	2.40	-4.60	0				1	2.71	0.31	1000		
6.600	-41.87	-3.02	11.59	-3.19	2.69	-5.10	0				2	2.97	0.30	1000		
6.700	-42.17	-3.00	11.23	-4.00	2.74	-5.20	0				2	3.04	0.29	1000		
				24.49			0				2	3.04	0.29	1000	7	28.49
7.200	-43.62	-2.79	22.41	20.17	2.94	-5.70	0				2	3.33	0.28	1000		
							0				2	3.27	0.28	1875		
7.600	-44.69	-2.53	29.74	16.46	2.98	-6.10	0				2	3.50	0.27	1875		
8.100	-45.85	-2.11	36.74	11.48	3.03	-6.60	0				2	3.70	0.26	1875		
8.600	-46.78	-1.62	41.17	6.18	3.08	-7.10	0				2	3.81	0.25	1875		
9.100	-47.46	-1.10	42.87	0.58	3.15	-7.60	0				2	3.88	0.24	1875		
9.600	-47.88	-0.57	41.71	-5.29	3.26	-8.10	0				2	3.91	0.23	1875		
9.700	-47.93	-0.47	41.12	-6.50	3.28	-8.20	0				2	3.92	0.23	1875		
				21.03			0				2	3.92	0.23	1875	6	27.53
10.150	-48.03	0.04	49.34	15.47	3.43	-8.65	0				2	3.94	0.22	1875		
10.600	-47.89	0.63	55.01	9.71	3.63	-9.10	0				2	3.96	0.21	1875		
11.300	-47.10	1.62	58.55	0.31	4.06	-9.80	0				2	4.00	0.19	1875		
12.000	-45.61	2.62	55.31	-9.63	4.63	-10.50	0				2	4.09	0.18	1875		
				3.05			0				2	4.09	0.18	1875	5	12.68
12.450	-44.29	3.24	55.19	-3.67	5.02	-10.95	0				2	4.30	0.17	1875		
				-3.44			0				2	4.30	0.17	1875	4	0.22
12.500	-44.13	3.31	55.00	-4.21	5.06	-11.00	0				2	4.32	0.17	1875		
							2	0.00		1875	2	4.32	0.17	1875		
13.000	-42.31	3.97	51.13	-10.97	5.19	-11.50	2	4.45		1875	2	4.68	0.16	1875		
13.500	-40.17	4.57	44.32	-15.94	4.74	-12.00	2	9.00		1875	2	5.15	0.15	1875		
13.925	-38.13	5.00	36.86	-19.07	4.01	-12.00	2	10.87		1875	2	5.43	0.14	1875		
14.350	-35.93	5.34	28.22	-21.48	3.09	-12.00	2	12.83		1875	2	5.62	0.14	1875		
14.775	-33.60	5.59	18.71	-23.12	1.96	-12.00	2	14.85		1875	2	5.74	0.13	1875		
15.200	-31.19	5.74	8.69	-23.92	0.61	-12.00	2	16.92		1875	2	5.82	0.12	1875		
15.625	-28.74	5.77	-1.50	-23.86	-0.97	-12.00	2	19.03		1875	2	5.86	0.12	1875		
16.050	-26.30	5.70	-11.47	-22.92	-2.78	-12.00	2	21.16		1875	2	5.88	0.11	1875		
16.475	-23.91	5.53	-20.85	-21.07	-4.83	-12.00	2	23.29		1875	2	5.89	0.11	1875		
16.900	-21.61	5.27	-29.26	-18.33	-7.10	-12.00	2	25.43		1875	2	5.90	0.10	1875		
17.325	-19.44	4.92	-36.30	-14.68	-9.60	-12.00	2	27.56		1875	2	5.92	0.10	1875		
17.750	-17.44	4.51	-41.61	-10.13	-12.32	-12.00	2	29.69		1875	2	5.94	0.09	1875		
18.175	-15.62	4.05	-44.79	-4.69	-15.25	-12.00	2	31.81		1875	2	5.97	0.09	1875		
18.600	-14.00	3.57	-45.60	0.73	-17.55	-12.00	2	29.68		1875	2	6.01	0.09	1875		
19.025	-12.58	3.09	-44.31	5.16	-18.60	-12.00	2	27.23		1875	2	6.06	0.08	1875		
19.450	-11.37	2.64	-41.36	8.59	-18.88	-12.00	2	25.15		1875	2	6.13	0.08	1875		
19.875	-10.33	2.23	-37.12	11.19	-18.74	-12.00	2	23.42		1875	2	6.20	0.07	1875		
20.300	-9.47	1.86	-31.94	13.09	-18.34	-12.00	2	21.99		1875	1	6.28	0.07	1875		
							2	17.52		1375	1	6.80	0.07	1375		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2	T/m2		T/m2	T/m3	T/m2		T/m2	T/m3	T	

PHASE 13 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
20.656	-8.85	1.60	-27.37	12.55	-17.82	-11.41	2	16.54		1375	1	6.91	0.07	1375		
21.012	-8.32	1.38	-23.02	11.85	-17.27	-10.83	2	15.68		1375	2	7.01	0.07	1375		
21.369	-7.87	1.19	-18.94	11.03	-16.70	-10.25	2	14.91		1375	2	7.12	0.06	1375		
21.725	-7.47	1.04	-15.17	10.12	-16.12	-9.66	2	14.23		1375	2	7.22	0.06	1375		
22.081	-7.12	0.92	-11.74	9.15	-15.52	-9.07	2	13.62		1375	2	7.33	0.06	1375		
22.438	-6.81	0.83	-8.66	8.14	-14.91	-8.49	2	13.05		1375	2	7.43	0.06	1375		
22.794	-6.53	0.77	-5.94	7.11	-14.29	-7.90	2	12.53		1375	2	7.54	0.06	1375		
23.150	-6.26	0.72	-3.59	6.07	-13.65	-7.32	2	12.02		1375	2	7.64	0.05	1375		
23.506	-6.01	0.70	-1.61	5.03	-13.01	-6.74	2	11.54		1375	2	7.75	0.05	1375		
23.862	-5.76	0.70	-0.01	3.98	-12.35	-6.15	2	11.06		1375	2	7.85	0.05	1375		
24.219	-5.51	0.70	1.22	2.93	-11.69	-5.56	2	10.58		1375	2	7.96	0.05	1375		
24.575	-5.26	0.72	2.08	1.88	-11.01	-4.98	2	10.10		1375	2	8.06	0.05	1375		
24.931	-5.00	0.74	2.56	0.83	-10.32	-4.39	2	9.61		1375	2	8.17	0.05	1375		
25.288	-4.73	0.76	2.67	-0.22	-9.62	-3.81	2	9.10		1375	2	8.27	0.04	1375		
25.644	-4.46	0.78	2.40	-1.29	-8.91	-3.23	2	8.59		1375	2	8.38	0.04	1375		
26.000	-4.18	0.80	1.75	-2.37	-8.19	-2.64	2	8.06		1375	2	8.48	0.04	1375		
							2	11.97		2375	2	7.24	0.04	2375		

26.500	-3.77	0.82	0.81	-1.43	-7.23	-1.98	2	11.10		2375	2	7.47	0.04	2375	
27.000	-3.36	0.82	0.28	-0.72	-6.20	-1.32	2	10.22		2375	1	7.71	0.04	2375	
27.500	-2.95	0.83	0.05	-0.24	-5.11	-0.66	2	9.33		2375	1	7.94	0.04	2375	
28.000	-2.54	0.83	0.00	0.00	-3.97		2	8.44		2375	2	8.18	0.03	2375	
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3	T

MAXIMUM DISPLACEMENT = -48.03 mm
MAXIMUM MOMENT = 58.55 m.T/m
VERTICAL REACTION IN FOOT = 3.97 T/m

CODIFICATION OF STATE OF SOIL :
-1 = SEPARATION
0 = EXCAVATION
1 = ACTIVE PR.
2 = ELASTIC
3 = PASSIVE PR.

(5 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.621 = (245.34 T/m)/(395.08 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.070 = (137.36 T/m)/(1971.35 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 4.21 T/m

*** END OF CALCULUS

ENVELOPE CURVES FROM PHASE 1 TO PHASE 13

LEVEL	MINI MOMENT	MAXI MOMENT	MINI SH.FO.	MAXI SH.FO.
0.000	0.00	0.00	0.00	0.00
0.375	-0.07	0.00	-0.60	0.00
0.750	-0.60	0.00	-2.38	0.00
1.125	-1.91	0.00	-4.59	0.00
1.500	-3.99	0.00	-6.41	0.00
	-3.99	0.00	-0.84	14.01
1.900	-2.22	4.65	-1.40	13.45
2.300	-1.58	9.72	-2.19	12.67
2.500	-2.06	12.20	-2.66	12.20
3.100	-4.15	19.02	-4.40	10.45
3.700	-7.44	24.65	-6.63	8.23
	-7.44	24.65	-3.58	14.43
4.100	-7.55	27.60	-4.29	12.69
4.756	-9.11	30.77	-7.66	9.32
5.178	-10.02	31.57	-10.12	6.85
5.600	-14.85	31.28	-12.82	4.15
	-14.85	31.28	-3.11	31.61
6.100	-10.17	29.39	-6.61	28.12
6.600	-10.11	31.39	-10.43	24.30
6.700	-10.08	33.05	-11.19	23.50
	-10.08	33.05	-11.19	24.49
7.200	-9.86	40.14	-14.05	20.17
7.600	-9.52	44.27	-14.46	16.46
8.100	-8.78	50.10	-13.57	11.48
8.600	-7.77	54.48	-11.55	6.28
	-7.77	54.48	-11.55	37.17
9.100	-10.75	56.32	-8.40	31.92
9.600	-14.08	55.45	-11.79	26.35
9.700	-14.54	55.42	-12.89	25.20
10.150	-15.96	65.57	-16.80	19.87
10.600	-16.42	73.27	-18.99	14.27
11.300	-15.78	80.07	-19.96	5.06
12.000	-14.09	80.20	-18.72	2.89
	-14.09	80.20	-18.72	3.52
12.450	-12.71	76.57	-16.79	3.21
12.500	-12.55	75.98	-16.57	3.24
13.000	-17.91	68.18	-18.68	3.33
13.500	-23.39	57.65	-23.06	3.24
13.925	-26.19	47.31	-25.48	3.06
14.350	-27.45	36.11	-27.08	2.82
14.775	-27.51	24.41	-27.87	2.54
15.200	-26.63	12.54	-27.84	2.96
15.625	-25.07	0.85	-27.01	4.31
16.050	-23.03	0.01	-25.36	5.22
16.475	-21.10	0.00	-22.89	5.78
16.900	-29.64	0.00	-19.62	6.07
17.325	-37.14	0.00	-15.53	6.16
17.750	-42.73	0.00	-10.62	6.10
18.175	-46.05	0.00	-4.91	5.95
18.600	-46.91	0.16	0.00	5.74
19.025	-45.59	0.57	0.00	5.52
19.450	-42.56	1.02	0.00	8.82
19.875	-38.22	1.52	0.00	11.47
20.300	-32.92	2.11	0.00	13.38
20.656	-28.24	2.72	0.00	12.83
21.012	-23.79	3.95	0.00	12.12
21.369	-19.62	4.87	0.00	11.29

21.725	-15.76	5.53	0.00	10.36
22.081	-12.24	5.95	0.00	9.38
22.438	-9.08	6.16	0.00	8.35
22.794	-6.29	6.21	-0.09	7.30
23.150	-3.88	6.10	-0.48	6.24
23.506	-1.85	5.87	-0.81	5.17
23.862	-0.20	5.53	-1.10	4.11
24.219	0.00	5.10	-1.35	3.04
24.575	0.00	4.58	-1.56	1.98
24.931	0.00	3.98	-1.78	0.91
25.288	0.00	3.30	-2.05	0.00
25.644	0.00	2.50	-2.46	0.00
26.000	0.00	1.76	-2.99	0.00
26.500	0.00	0.82	-1.52	0.00
27.000	-0.09	0.29	-0.73	0.00
27.500	-0.08	0.05	-0.25	0.18
28.000	0.00	0.00	0.00	0.00
m	m.T/m	m.T/m	T/m	T/m

SOIL 1 MAXIMUM (EFFECTIVE REACTION)/(PASSIVE REACTION) IN PHASE No 7 = 0.631 IN FINAL PHASE No 13 = 0.621
SOIL 2 MAXIMUM (EFFECTIVE REACTION)/(PASSIVE REACTION) IN PHASE No 2 = 0.092 IN FINAL PHASE No 13 NOT APPLICABLE

ENVELOPE CURVES FROM PHASE 1 TO PHASE 13

(the totality of the phases)

LEVEL	MINI MOMENT	MAXI MOMENT	MINI SH.FO.	MAXI SH.FO.
0.000	0.00	0.00	0.00	0.00
0.375	-0.07	0.00	-0.60	0.00
0.750	-0.60	0.00	-2.38	0.00
1.125	-1.91	0.00	-4.59	0.00
1.500	-3.99	0.00	-6.41	0.00
	-3.99	0.00	-0.84	14.01
1.900	-2.22	4.65	-1.40	13.45
2.300	-1.58	9.72	-2.19	12.67
2.500	-2.06	12.20	-2.66	12.20
3.100	-4.15	19.02	-4.40	10.45
3.700	-7.44	24.65	-6.63	8.23
	-7.44	24.65	-3.58	14.43
4.100	-7.55	27.60	-4.29	12.69
4.756	-9.11	30.77	-7.66	9.32
5.178	-10.02	31.57	-10.12	6.85
5.600	-14.85	31.28	-12.82	4.15
	-14.85	31.28	-3.11	31.61
6.100	-10.17	29.39	-6.61	28.12
6.600	-10.11	31.39	-10.43	24.30
6.700	-10.08	33.05	-11.19	23.50
	-10.08	33.05	-11.19	24.49
7.200	-9.86	40.14	-14.05	20.17
7.600	-9.52	44.27	-14.46	16.46
8.100	-8.78	50.10	-13.57	11.48
8.600	-7.77	54.48	-11.55	6.28
	-7.77	54.48	-11.55	37.17
9.100	-10.75	56.32	-8.40	31.92
9.600	-14.08	55.45	-11.79	26.35
9.700	-14.54	55.42	-12.89	25.20
10.150	-15.96	65.57	-16.80	19.87
10.600	-16.42	73.27	-18.99	14.27
11.300	-15.78	80.07	-19.96	5.06
12.000	-14.09	80.20	-18.72	2.89
	-14.09	80.20	-18.72	3.52
12.450	-12.71	76.57	-16.79	3.21
12.500	-12.55	75.98	-16.57	3.24
13.000	-17.91	68.18	-18.68	3.33
13.500	-23.39	57.65	-23.06	3.24
13.925	-26.19	47.31	-25.48	3.06
14.350	-27.45	36.11	-27.08	2.82
14.775	-27.51	24.41	-27.87	2.54
15.200	-26.63	12.54	-27.84	2.96
15.625	-25.07	0.85	-27.01	4.31
16.050	-23.03	0.01	-25.36	5.22
16.475	-21.10	0.00	-22.89	5.78
16.900	-29.64	0.00	-19.62	6.07
17.325	-37.14	0.00	-15.53	6.16
17.750	-42.73	0.00	-10.62	6.10
18.175	-46.05	0.00	-4.91	5.95
18.600	-46.91	0.16	0.00	5.74
19.025	-45.59	0.57	0.00	5.52
19.450	-42.56	1.02	0.00	8.82

19.875	-38.22	1.52	0.00	11.47
20.300	-32.92	2.11	0.00	13.38
20.656	-28.24	2.72	0.00	12.83
21.012	-23.79	3.95	0.00	12.12
21.369	-19.62	4.87	0.00	11.29

21.725	-15.76	5.53	0.00	10.36
22.081	-12.24	5.95	0.00	9.38
22.438	-9.08	6.16	0.00	8.35
22.794	-6.29	6.21	-0.09	7.30
23.150	-3.88	6.10	-0.48	6.24
23.506	-1.85	5.87	-0.81	5.17
23.862	-0.20	5.53	-1.10	4.11
24.219	0.00	5.10	-1.35	3.04
24.575	0.00	4.58	-1.56	1.98
24.931	0.00	3.98	-1.78	0.91
25.288	0.00	3.30	-2.05	0.00
25.644	0.00	2.50	-2.46	0.00
26.000	0.00	1.76	-2.99	0.00
26.500	0.00	0.82	-1.52	0.00
27.000	-0.09	0.29	-0.73	0.00
27.500	-0.08	0.05	-0.25	0.18
28.000	0.00	0.00	0.00	0.00
m	m.T/m	m.T/m	T/m	T/m

SOIL 1 MAXIMUM (EFFECTIVE REACTION)/(PASSIVE REACTION) IN PHASE No 7 = 0.631 IN FINAL PHASE No 13 = 0.621
SOIL 2 MAXIMUM (EFFECTIVE REACTION)/(PASSIVE REACTION) IN PHASE No 2 = 0.092 IN FINAL PHASE No 13 NOT APPLICABLE

IN WHAT FOLLOWS THE NUMBERS OF PHASE ARE THE ONES PHASES OF CALCULUS

FOR THE WORKING PHASES :

MAXIMUM DISPLACEMENT IN PHASE No 11 = -48.27 mm IN FINAL PHASE No 13 = -48.03 mm
MAXIMUM MOMENT IN PHASE No 7 = 80.20 m.T/m IN FINAL PHASE No 13 = 58.55 m.T/m

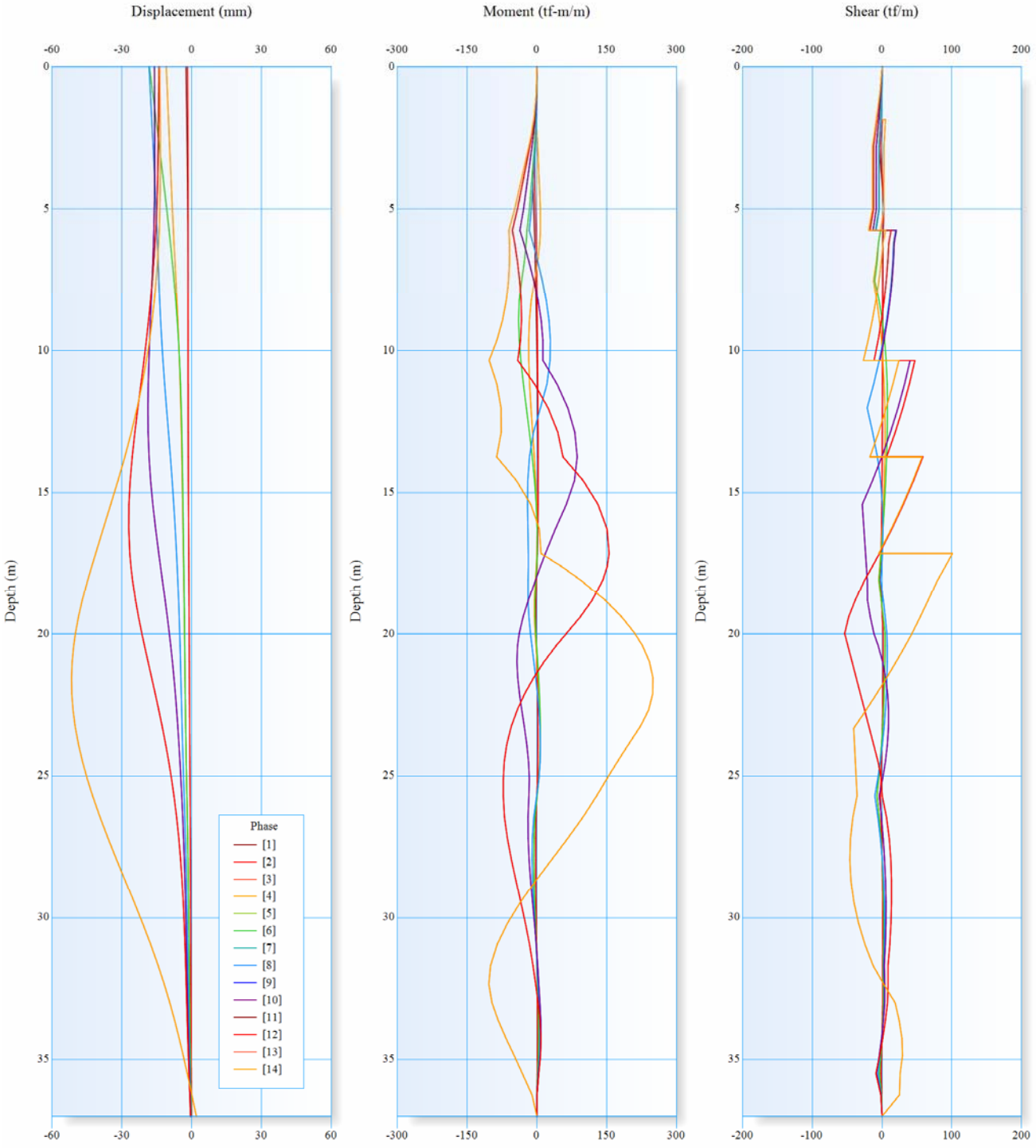
STRUT/ANCHOR		PRELOAD		MAXIMUM		FINAL STATE		
NUMBER	LEVEL	PHASE	FORCE	PHASE	FORCE	PHASE	FORCE	GLIDING
1	1.50	2	45.00	11	86.03	13	REMOVED	
2	5.60	4	110.00	10	229.89	11	REMOVED	
3	8.60	6	110.00	7	213.04	9	REMOVED	
4	12.45	8	0.00	9	0.46	13	0.22	0.00
5	12.00	8	0.00	9	14.07	13	12.68	0.00
6	9.70	8	0.00	12	29.45	13	27.53	0.00
7	6.70	10	0.00	12	29.52	13	28.49	0.00
8	3.70	12	0.00	13	21.06	13	21.06	0.00
m		T		T		T		mm

附錄三
案例三 XDO 及 RIDO 之輸入檔及詳細輸出結果

計畫名稱：XDO Example 3
主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

XDO 綜合分析結果

▼壁體變位、彎矩、剪力



LEVEL	X_{min}	X_{max}	M_{min}	M_{max}	V_{min}	V_{max}
(m)	(mm)	(mm)	(tf-m/m)	(tf-m/m)	(tf/m)	(tf/m)
0.000	-18.34	0.00	0.00	0.00	0.00	0.00
0.100	-18.28	0.00	-0.03	0.00	-0.12	0.00
0.100	-18.28	0.00	-0.03	0.00	-0.12	0.77
0.900	-17.78	0.00	-1.24	0.27	-2.95	0.00

計畫名稱：XDO Example 3

主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

1.700	-17.29	0.00	-5.51	0.00	-7.28	0.00
1.850	-17.19	0.00	-6.70	0.00	-8.11	0.00
1.850	-17.19	0.00	-6.70	0.00	-8.11	4.99
2.500	-16.79	0.00	-13.33	0.83	-11.88	3.46
2.790	-16.61	0.00	-17.10	1.71	-13.66	2.61
3.340	-16.28	0.00	-24.74	3.14	-13.66	2.61
3.890	-15.95	0.00	-32.38	4.56	-13.66	2.61
4.440	-16.00	0.00	-40.01	5.99	-13.66	2.61
4.990	-16.09	0.00	-47.65	7.42	-13.66	2.61
5.745	-16.28	0.00	-60.20	7.65	-19.24	1.77
5.745	-16.28	0.00	-60.20	7.65	-2.09	20.54
6.190	-16.44	0.00	-58.83	6.03	-5.19	17.44
6.855	-16.73	0.00	-58.85	2.08	-8.16	16.32
7.520	-17.05	0.00	-60.89	11.63	-12.27	14.39
8.226	-17.71	0.00	-65.73	20.04	-8.84	11.43
8.933	-18.56	0.00	-73.89	26.05	-13.97	7.56
9.639	-19.49	0.00	-85.97	28.99	-19.92	3.63
10.345	-20.51	0.00	-102.52	28.22	-26.60	5.84
10.345	-20.51	0.00	-102.52	28.22	-4.00	47.12
11.183	-21.83	0.00	-86.00	43.25	-12.00	39.12
12.020	-23.48	0.00	-77.12	66.41	-21.30	29.82
12.883	-25.98	0.00	-76.76	81.53	-13.48	18.87
13.745	-28.76	0.00	-86.44	86.60	-17.26	6.55
13.745	-28.76	0.00	-86.44	86.60	-6.70	58.49
14.583	-31.71	0.00	-43.93	99.50	-13.68	45.17
15.420	-34.82	0.00	-20.14	131.27	-28.31	30.54
16.283	-38.06	0.00	-19.26	150.60	-25.98	14.10
17.145	-41.28	0.00	-18.34	155.15	-23.64	0.59
17.145	-41.28	0.00	-18.34	155.15	-23.64	100.77
17.618	-43.02	0.00	-18.31	150.94	-22.36	90.42
18.090	-44.70	0.00	-18.89	141.73	-24.88	79.65
18.820	-47.07	0.00	-18.94	147.06	-38.49	66.05
19.405	-48.69	0.00	-29.66	182.25	-47.83	54.67
19.990	-50.00	0.00	-37.95	210.67	-53.53	42.87
20.420	-50.74	0.00	-41.62	226.96	-48.96	33.29
20.983	-51.39	0.00	-42.90	241.90	-42.99	20.22
21.545	-51.67	0.00	-41.18	249.33	-37.02	6.97
22.108	-51.55	0.00	-37.43	248.89	-31.04	7.96
22.670	-51.04	0.00	-42.07	240.24	-25.07	9.25
23.220	-50.17	0.00	-54.27	223.52	-37.81	9.22
23.320	-49.98	0.00	-56.14	219.57	-40.62	9.08
23.913	-48.61	0.00	-65.05	195.72	-39.42	7.52
24.505	-46.91	0.00	-70.25	172.59	-38.21	4.73
25.098	-44.89	0.00	-72.14	150.18	-36.99	0.82
25.690	-42.62	0.00	-72.31	128.48	-35.78	0.21
26.440	-39.43	0.00	-69.72	99.08	-41.75	6.34
27.190	-35.95	0.00	-63.38	66.14	-45.20	10.32
27.940	-32.29	0.00	-54.71	31.56	-46.12	12.59
28.690	-28.54	0.00	-44.86	0.00	-44.52	13.54
29.440	-24.80	0.00	-34.93	0.00	-40.39	13.51
30.190	-21.15	0.00	-63.05	0.00	-33.73	12.75
30.940	-17.67	0.00	-85.23	0.00	-24.54	11.17
31.690	-14.43	0.00	-99.58	1.71	-12.83	8.57
32.345	-11.82	0.00	-103.27	4.06	0.00	8.59
33.000	-9.43	0.00	-96.49	6.63	0.00	18.78
33.623	-7.35	0.00	-83.13	8.44	0.00	24.55

34.245	-5.43	0.00	-66.59	8.84	-0.69	28.50
34.868	-3.63	0.00	-48.61	7.79	-4.03	29.23
35.490	-1.94	0.00	-31.32	4.01	-8.80	25.96
36.245	-0.87	0.04	-10.43	0.30	-1.73	24.96
37.000	-0.54	1.99	0.00	0.00	0.00	0.00
Max	-	1.99	-	249.33	-	100.77
Min	-51.67	-	-103.27	-	-53.53	-

▼支撐力

Phase	Position(m) / Force(tf)								
	S1	S2	S3	S4	S5	S6	S7	S8	S9
	1.85(m)	5.745(m)	0.1(m)	10.345(m)	13.745(m)	17.145(m)	23.22(m)	22.67(m)	20.42(m)
#1									
#2	30.00								
#3	55.43								
#4	55.43	0.00							
#5	-	7.41							
#6	-	7.41	0.00						
#7	-	28.14	0.85						
#8	-	28.14	0.85	0.00					
#9	-	33.49	0.00	43.20					
#10	-	33.49	0.00	43.20	0.00				
#11	-	30.15	0.00	58.49	51.96				
#12	-	30.15	0.00	58.49	51.96	0.00			
#13	-	24.33	0.00	50.86	74.79	105.39			
#14	-	24.33	0.00	50.86	74.79	105.39	0.00	0.00	0.00
Extremum	55.43	33.49	0.85	58.49	74.79	105.39	0.00	0.00	0.00
Preload	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Preload Ratio	54.1%	-	-	-	-	-	-	-	-

▼分析條件

▼分析方法設定

排水地層採有效應力法分析，不排水地層採總應力法分析

▼主、被動土壓力

採用 RIDO 土壓力計算法

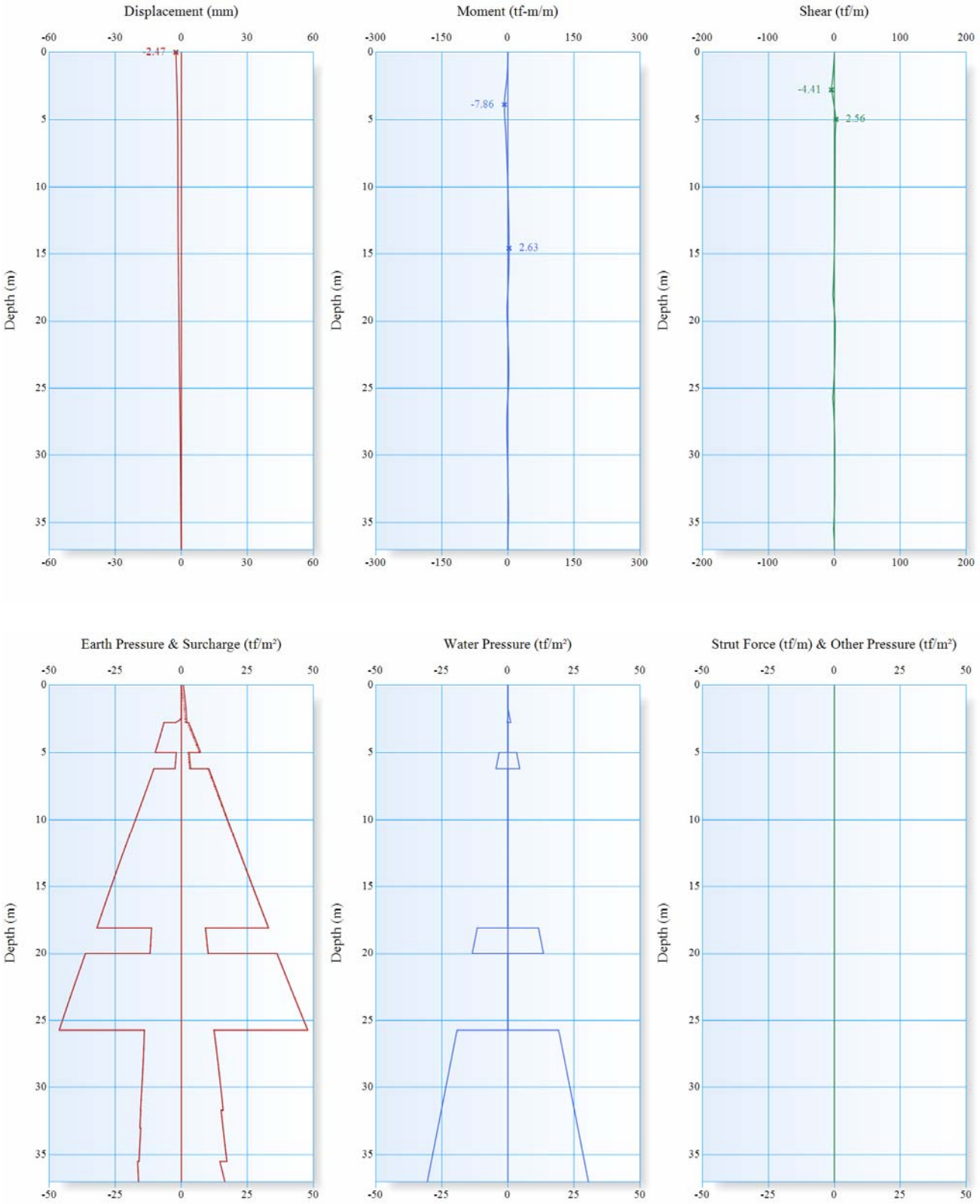
▼SUB 超載轉換法

由 Boussinesq 公式計算水平荷重 S_h 後，側向土壓力直接加入 S_h

計畫名稱：XDO Example 3
主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

XDO 各階分析結果

▼ PHASE 1



LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s

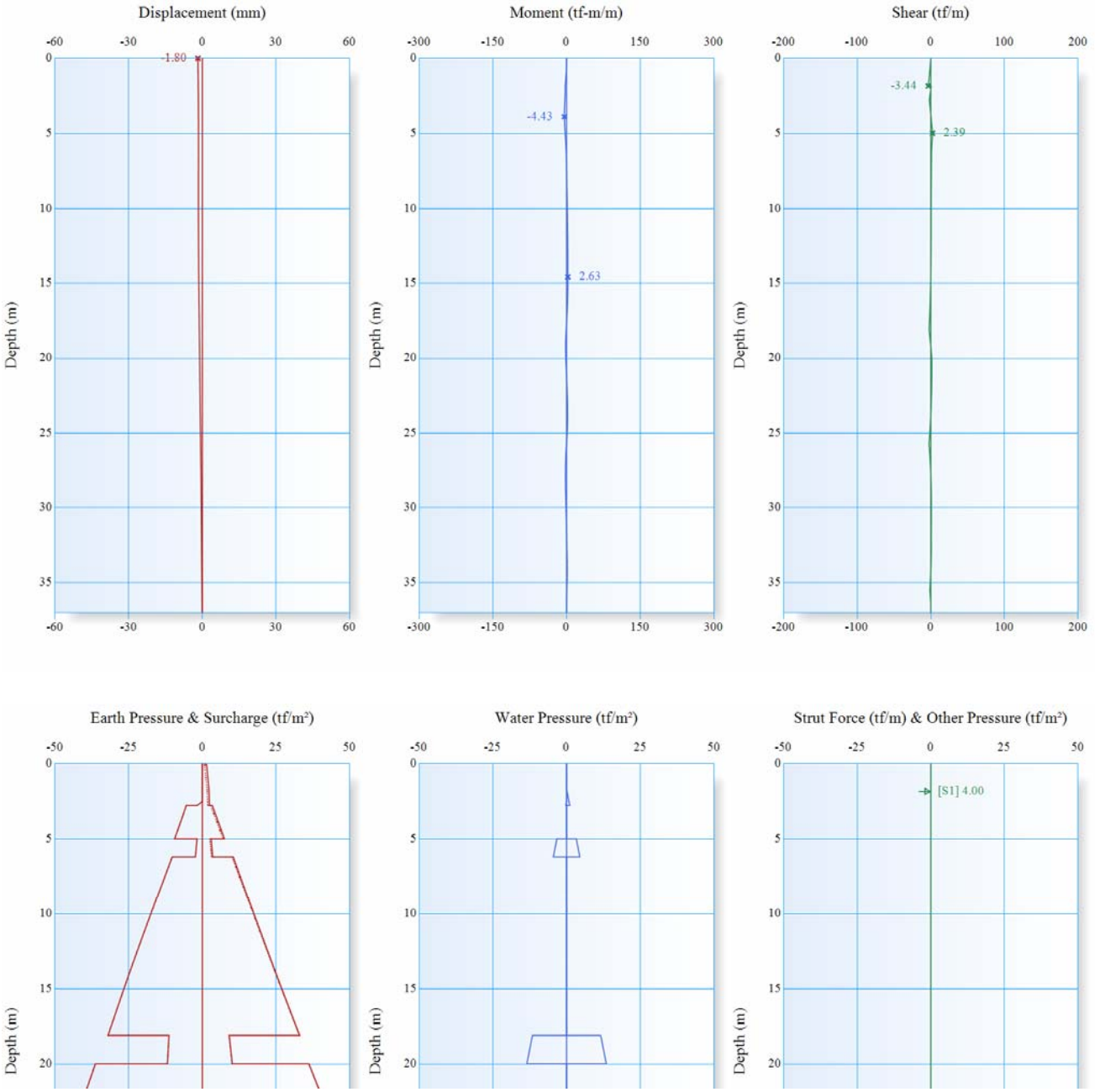
計畫名稱：XDO Example 3

主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)	STATE	(tf/m^2)	(tf/m^2)	(tf/m^3)	STATE	(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-2.47	0.00	0.00		0				1	0.75		1000	
0.100	-2.46	0.00	-0.08		0				1	0.81		1000	
0.900	-2.31	-0.38	-0.91		0				1	1.28		1000	
1.700	-2.17	-1.57	-2.12		0				1	1.75	0.00	1000	
1.850	-2.14	-1.91	-2.40		0				1	1.79	0.15	1000	
2.500	-2.03	-3.94	-3.93		0		0.00		1	1.95	0.80	1000	
					3	0.00	0.00	1349	1	1.95	0.80	1000	
2.790	-1.98	-5.16	-4.41		3	2.25	0.29	1349	1	2.03	1.09	1000	
					2	6.60	0.00	3043	2	2.80	0.00	1625	
3.340	-1.90	-7.03	-2.42		2	7.37	0.00	3043	2	3.93	0.00	1625	
3.890	-1.82	-7.86	-0.61		2	8.18	0.00	3043	2	5.06	0.00	1625	
4.440	-1.76	-7.74	1.04		2	9.03	0.00	3043	2	6.16	0.00	1625	
4.990	-1.71	-6.75	2.56		2	9.91	0.00	3043	2	7.25	0.00	1625	
					2	1.91	3.29	675	2	2.94	3.29	500	
5.745	-1.66	-5.11	1.77		2	2.22	4.05	675	2	3.27	4.05	500	
6.190	-1.63	-4.43	1.30		2	2.41	4.49	675	2	3.47	4.49	500	
					2	10.39	0.00	2107	2	10.38	0.00	1125	
6.855	-1.61	-3.57	1.28		2	11.58	0.00	2107	2	11.64	0.00	1125	
7.520	-1.58	-2.73	1.24		2	12.80	0.00	2107	2	12.89	0.00	1125	
8.226	-1.57	-1.89	1.16		2	14.10	0.00	2107	2	14.21	0.00	1125	
8.933	-1.56	-1.10	1.08		2	15.41	0.00	2107	2	15.54	0.00	1125	
9.639	-1.55	-0.37	0.99		2	16.73	0.00	2107	2	16.86	0.00	1125	
10.345	-1.54	0.30	0.90		2	18.05	0.00	2107	2	18.18	0.00	1125	
11.183	-1.53	1.01	0.79		2	19.61	0.00	2107	2	19.75	0.00	1125	
12.020	-1.52	1.62	0.67		2	21.17	0.00	2107	2	21.32	0.00	1125	
12.883	-1.50	2.12	0.51		2	22.76	0.00	2107	2	22.96	0.00	1125	
13.745	-1.47	2.48	0.31		2	24.33	0.00	2107	2	24.60	0.00	1125	
14.583	-1.44	2.63	0.05		2	25.84	0.00	2107	2	26.21	0.00	1125	
15.420	-1.40	2.53	-0.31		2	27.33	0.00	2107	2	27.82	0.00	1125	
16.283	-1.34	2.06	-0.80		2	28.85	0.00	2107	2	29.50	0.00	1125	
17.145	-1.28	1.10	-1.44		2	30.35	0.00	2107	2	31.19	0.00	1125	
17.618	-1.25	0.32	-1.86		2	31.17	0.00	2107	2	32.12	0.00	1125	
18.090	-1.21	-0.67	-2.33		2	31.99	0.00	2107	2	33.04	0.00	1125	
					2	11.31	11.59	2192	2	9.14	11.59	1625	
18.820	-1.16	-1.81	-0.82		2	11.51	12.32	2192	2	9.54	12.32	1625	
19.405	-1.12	-1.96	0.30		2	11.68	12.91	2192	2	9.85	12.91	1625	
19.990	-1.09	-1.49	1.33		2	11.86	13.49	2192	2	10.15	13.49	1625	
					2	36.33	0.00	3043	2	36.22	0.00	1625	
20.420	-1.06	-0.91	1.36		2	37.09	0.00	3043	2	37.09	0.00	1625	
20.983	-1.03	-0.15	1.32		2	38.09	0.00	3043	2	38.22	0.00	1625	
21.545	-1.00	0.56	1.21		2	39.09	0.00	3043	2	39.36	0.00	1625	
22.108	-0.97	1.19	1.02		2	40.08	0.00	3043	2	40.50	0.00	1625	
22.670	-0.94	1.69	0.74		2	41.08	0.00	3043	2	41.64	0.00	1625	
23.220	-0.90	2.00	0.39		2	42.04	0.00	3043	2	42.76	0.00	1625	
23.320	-0.89	2.04	0.31		2	42.21	0.00	3043	2	42.96	0.00	1625	
23.913	-0.85	2.08	-0.19		2	43.23	0.00	3043	2	44.18	0.00	1625	
24.505	-0.81	1.78	-0.81		2	44.25	0.00	3043	2	45.40	0.00	1625	
25.098	-0.76	1.08	-1.56		2	45.25	0.00	3043	2	46.62	0.00	1625	
25.690	-0.71	-0.10	-2.44		2	46.25	0.00	3043	2	47.85	0.00	1625	
					2	13.98	19.19	3204	2	12.35	19.19	2375	
26.440	-0.65	-1.51	-1.35		2	14.11	19.94	3204	2	12.83	19.94	2375	
27.190	-0.59	-2.19	-0.51		2	14.25	20.69	3204	2	13.29	20.69	2375	
27.940	-0.54	-2.33	0.10		2	14.42	21.44	3204	2	13.75	21.44	2375	
28.690	-0.49	-2.09	0.51		2	14.60	22.19	3204	2	14.18	22.19	2375	
29.440	-0.45	-1.61	0.74		2	14.80	22.94	3204	2	14.61	22.94	2375	

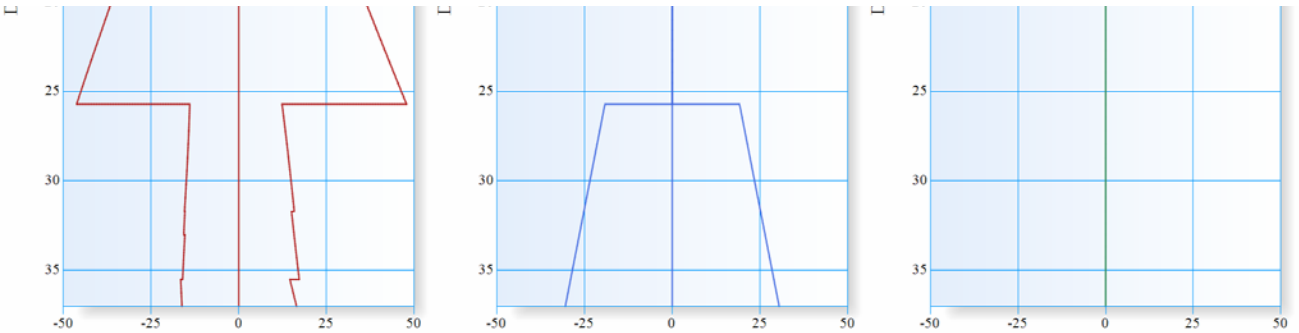
30.190	-0.42	-1.03	0.81		2	15.02	23.69	3204	2	15.02	23.69	2375	
30.940	-0.38	-0.44	0.74		2	15.24	24.44	3204	2	15.43	24.44	2375	
31.690	-0.35	0.04	0.53		2	15.47	25.19	3204	2	15.84	25.19	2375	
					2	15.37	25.19	4216	2	15.04	25.19	3125	
32.345	-0.32	0.44	0.68		2	15.53	25.85	4216	2	15.41	25.85	3125	
33.000	-0.29	0.89	0.69		2	15.69	26.50	4216	2	15.78	26.50	3125	
					2	15.37	26.50	3125	2	15.78	26.50	3125	
33.623	-0.26	1.23	0.38		2	15.55	27.12	3125	2	16.13	27.12	3125	
34.245	-0.23	1.33	-0.05		2	15.71	27.75	3125	2	16.50	27.75	3125	
34.868	-0.20	1.14	-0.60		2	15.87	28.37	3125	2	16.87	28.37	3125	
35.490	-0.16	0.55	-1.29		2	16.03	28.99	3125	2	17.25	28.99	3125	
					2	16.57	28.99	12500	2	14.59	28.99	12500	
36.245	-0.12	0.03	-0.22		2	16.39	29.75	12500	2	15.53	29.75	12500	
37.000	-0.07	0.00	0.00		2	16.21	30.50	12500	2	16.48	30.50	12500	
Max	-0.07	2.63	2.56		D_e = 2.5 (m)　D_w = 2.5 (m)				D_e = 0 (m)　D_w = 1.7 (m)				
Min	-2.47	-7.86	-4.41		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 2



計畫名稱：XDO Example 3

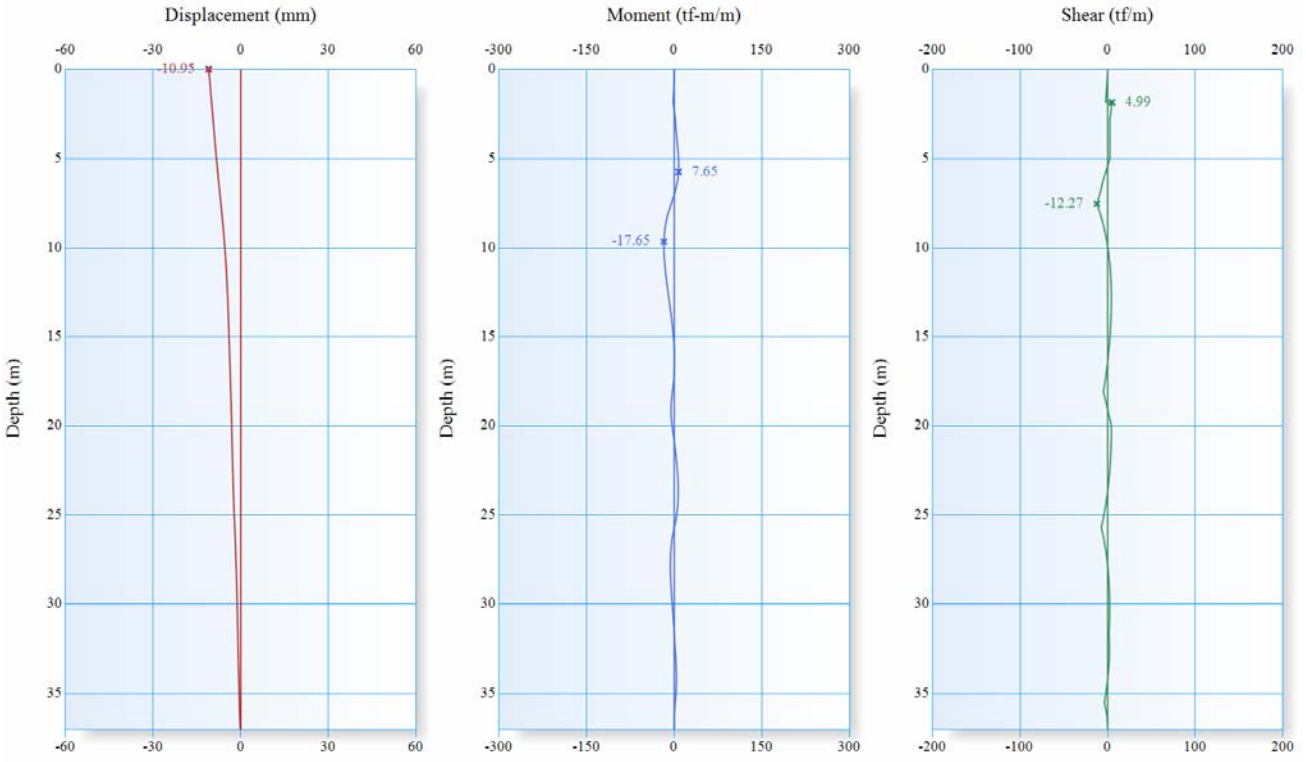
主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法



LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-1.80	0.00	0.00		0				1	0.75		1000	
0.100	-1.79	0.00	-0.11		0				2	1.48		1000	
0.900	-1.73	-0.61	-1.45		0				2	1.86		1000	
1.700	-1.68	-2.40	-3.09		0				2	2.24	0.00	1000	
1.850	-1.67	-2.89	-3.44		0				2	2.26	0.15	1000	30.00
			0.56		0				2	2.26	0.15	1000	
2.500	-1.63	-3.08	-1.25		0		0.00		2	2.36	0.80	1000	
					3	0.00	0.00	1349	2	2.36	0.80	1000	
2.790	-1.61	-3.55	-1.91		2	1.75	0.29	1349	2	2.40	1.09	1000	
					2	5.47	0.00	3043	2	3.40	0.00	1625	
3.340	-1.59	-4.29	-0.80		2	6.43	0.00	3043	2	4.44	0.00	1625	
3.890	-1.57	-4.43	0.28		2	7.41	0.00	3043	2	5.47	0.00	1625	
4.440	-1.56	-3.99	1.34		2	8.40	0.00	3043	2	6.50	0.00	1625	
4.990	-1.55	-2.96	2.39		2	9.42	0.00	3043	2	7.51	0.00	1625	
					2	1.80	3.29	675	2	3.02	3.29	500	
5.745	-1.55	-1.50	1.48		2	2.14	4.05	675	2	3.33	4.05	500	
6.190	-1.55	-0.96	0.96		2	2.35	4.49	675	2	3.51	4.49	500	
					2	10.21	0.00	2107	2	10.47	0.00	1125	
6.855	-1.56	-0.37	0.80		2	11.48	0.00	2107	2	11.69	0.00	1125	
7.520	-1.56	0.12	0.68		2	12.75	0.00	2107	2	12.92	0.00	1125	
8.226	-1.57	0.56	0.57		2	14.09	0.00	2107	2	14.22	0.00	1125	
8.933	-1.57	0.94	0.50		2	15.43	0.00	2107	2	15.52	0.00	1125	
9.639	-1.57	1.27	0.44		2	16.77	0.00	2107	2	16.83	0.00	1125	
10.345	-1.57	1.57	0.41		2	18.10	0.00	2107	2	18.15	0.00	1125	
11.183	-1.56	1.90	0.37		2	19.67	0.00	2107	2	19.71	0.00	1125	
12.020	-1.55	2.19	0.33		2	21.23	0.00	2107	2	21.29	0.00	1125	
12.883	-1.53	2.44	0.25		2	22.81	0.00	2107	2	22.93	0.00	1125	
13.745	-1.50	2.61	0.12		2	24.38	0.00	2107	2	24.57	0.00	1125	
14.583	-1.46	2.63	-0.09		2	25.88	0.00	2107	2	26.18	0.00	1125	
15.420	-1.41	2.44	-0.40		2	27.37	0.00	2107	2	27.81	0.00	1125	
16.283	-1.36	1.91	-0.85		2	28.88	0.00	2107	2	29.49	0.00	1125	
17.145	-1.29	0.92	-1.47		2	30.37	0.00	2107	2	31.18	0.00	1125	
17.618	-1.25	0.14	-1.87		2	31.19	0.00	2107	2	32.11	0.00	1125	
18.090	-1.22	-0.85	-2.33		2	32.00	0.00	2107	2	33.04	0.00	1125	
					2	11.33	11.59	2192	2	9.14	11.59	1625	
18.820	-1.16	-1.99	-0.81		2	11.52	12.32	2192	2	9.53	12.32	1625	
19.405	-1.12	-2.13	0.31		2	11.69	12.91	2192	2	9.84	12.91	1625	
19.990	-1.09	-1.64	1.35		2	11.86	13.49	2192	2	10.15	13.49	1625	
					2	36.34	0.00	3043	2	36.21	0.00	1625	
20.420	-1.06	-1.05	1.38		2	37.09	0.00	3043	2	37.09	0.00	1625	
20.983	-1.03	-0.28	1.34		2	38.09	0.00	3043	2	38.22	0.00	1625	

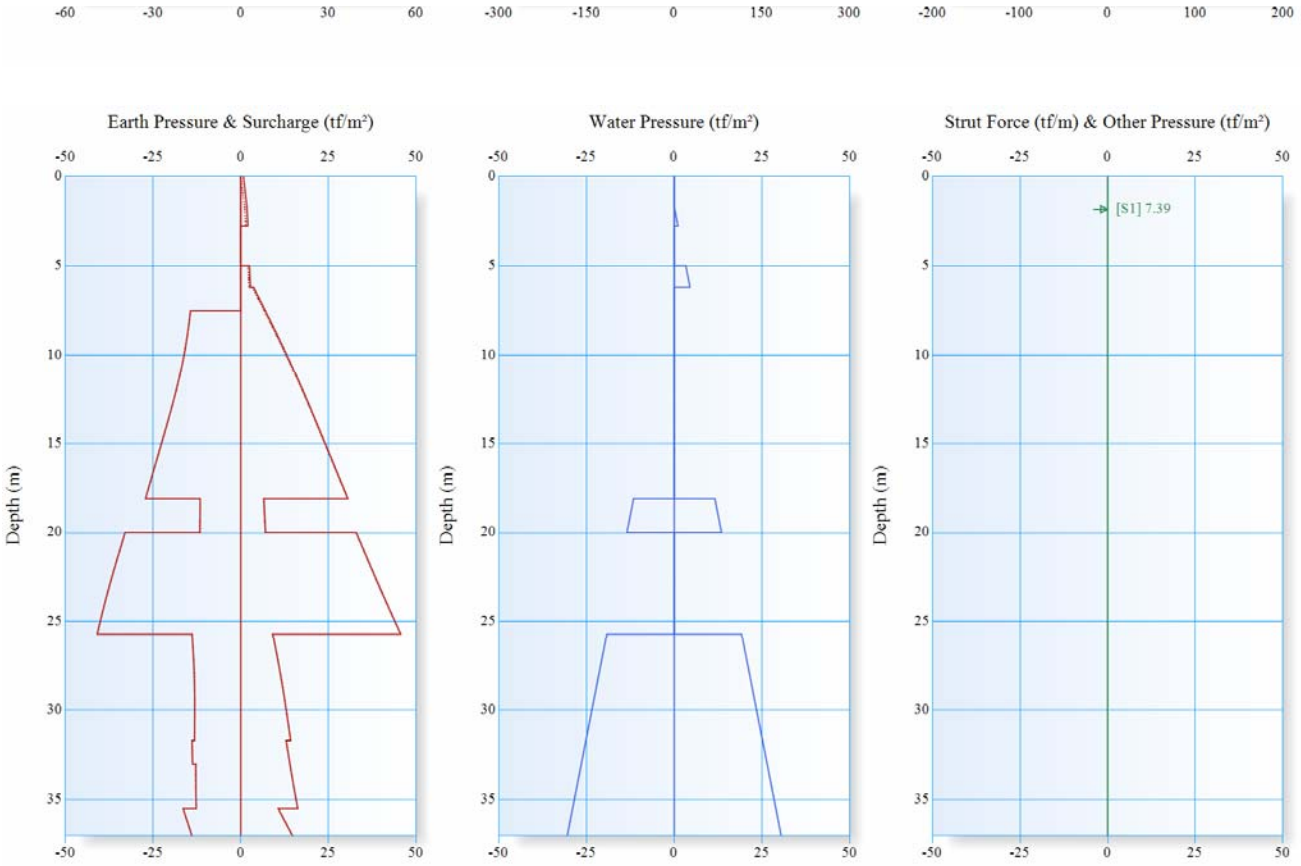
21.545	-1.00	0.45	1.23		2	39.09	0.00	3043	2	39.36	0.00	1625	
22.108	-0.97	1.09	1.04		2	40.08	0.00	3043	2	40.50	0.00	1625	
22.670	-0.94	1.60	0.76		2	41.07	0.00	3043	2	41.64	0.00	1625	
23.220	-0.90	1.92	0.40		2	42.03	0.00	3043	2	42.76	0.00	1625	
23.320	-0.89	1.96	0.33		2	42.21	0.00	3043	2	42.97	0.00	1625	
23.913	-0.85	2.01	-0.18		2	43.23	0.00	3043	2	44.18	0.00	1625	
24.505	-0.81	1.73	-0.80		2	44.24	0.00	3043	2	45.40	0.00	1625	
25.098	-0.76	1.04	-1.55		2	45.25	0.00	3043	2	46.62	0.00	1625	
25.690	-0.71	-0.14	-2.44		2	46.25	0.00	3043	2	47.85	0.00	1625	
					2	13.98	19.19	3204	2	12.35	19.19	2375	
26.440	-0.65	-1.54	-1.35		2	14.11	19.94	3204	2	12.83	19.94	2375	
27.190	-0.59	-2.22	-0.51		2	14.25	20.69	3204	2	13.29	20.69	2375	
27.940	-0.54	-2.35	0.10		2	14.42	21.44	3204	2	13.75	21.44	2375	
28.690	-0.49	-2.11	0.51		2	14.60	22.19	3204	2	14.19	22.19	2375	
29.440	-0.45	-1.63	0.74		2	14.80	22.94	3204	2	14.61	22.94	2375	
30.190	-0.42	-1.04	0.81		2	15.02	23.69	3204	2	15.02	23.69	2375	
30.940	-0.38	-0.45	0.73		2	15.24	24.44	3204	2	15.43	24.44	2375	
31.690	-0.35	0.03	0.53		2	15.47	25.19	3204	2	15.84	25.19	2375	
					2	15.37	25.19	4216	2	15.04	25.19	3125	
32.345	-0.32	0.43	0.67		2	15.53	25.85	4216	2	15.41	25.85	3125	
33.000	-0.29	0.88	0.68		2	15.69	26.50	4216	2	15.78	26.50	3125	
					2	15.37	26.50	3125	2	15.78	26.50	3125	
33.623	-0.26	1.22	0.37		2	15.55	27.12	3125	2	16.13	27.12	3125	
34.245	-0.23	1.33	-0.05		2	15.71	27.75	3125	2	16.50	27.75	3125	
34.868	-0.20	1.13	-0.61		2	15.87	28.37	3125	2	16.87	28.37	3125	
35.490	-0.16	0.55	-1.29		2	16.03	28.99	3125	2	17.25	28.99	3125	
					2	16.57	28.99	12500	2	14.59	28.99	12500	
36.245	-0.12	0.03	-0.22		2	16.39	29.75	12500	2	15.53	29.75	12500	
37.000	-0.07	0.00	0.00		2	16.21	30.50	12500	2	16.48	30.50	12500	
Max	-0.07	2.63	2.39		D_e = 2.5 (m) D_w = 2.5 (m)				D_e = 0 (m) D_w = 1.7 (m)				
Min	-1.80	-4.43	-3.44		[STATE] -1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 3



計畫名稱：XDO Example 3

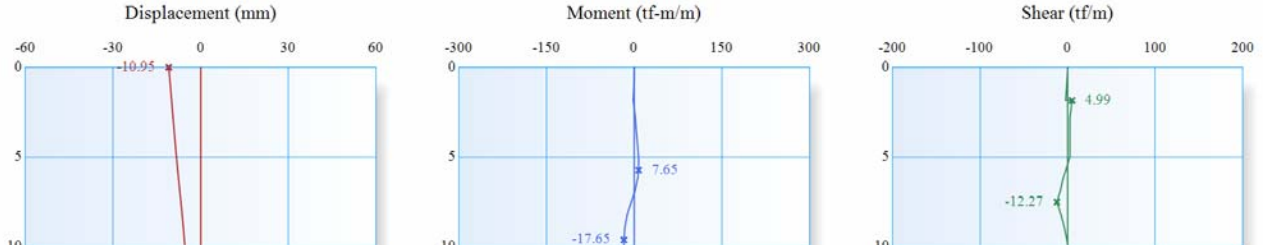
主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法



LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-10.95	0.00	0.00		0				1	0.75		1000	
0.100	-10.89	-0.01	-0.08		0				1	0.81		1000	
0.900	-10.48	-0.39	-0.91		0				1	1.28		1000	
1.700	-10.07	-1.59	-2.12		0				1	1.75	0.00	1000	
1.850	-9.99	-1.94	-2.40		0				1	1.79	0.15	1000	55.43
			4.99		0				1	1.79	0.15	1000	
2.500	-9.66	0.83	3.46		0				1	1.95	0.80	1000	
2.790	-9.51	1.71	2.61		0				1	2.03	1.09	1000	
					0				-1	0.00	0.00	1625	
3.340	-9.22	3.14	2.61		0				-1	0.00	0.00	1625	
3.890	-8.93	4.56	2.61		0				-1	0.00	0.00	1625	
4.440	-8.64	5.99	2.61		0				-1	0.00	0.00	1625	
4.990	-8.33	7.42	2.61		0				-1	0.00	0.00	1625	
					0				1	2.47	3.29	500	
5.745	-7.90	7.65	-2.09		0				1	2.64	4.05	500	
6.190	-7.63	6.03	-5.19		0				1	2.75	4.49	500	
					0				2	3.63	0.00	1125	
6.855	-7.22	1.64	-8.16		0				2	5.32	0.00	1125	
7.520	-6.81	-5.10	-12.27		0		0.00		2	7.02	0.00	1125	
					2	14.34	0.00	2107	2	7.02	0.00	1125	
8.226	-6.38	-12.06	-7.57		2	14.77	0.00	2107	2	8.80	0.00	1125	
8.933	-5.98	-16.04	-3.80		2	15.27	0.00	2107	2	10.56	0.00	1125	
9.639	-5.62	-17.65	-0.88		2	15.85	0.00	2107	2	12.28	0.00	1125	
10.345	-5.30	-17.48	1.29		2	16.51	0.00	2107	2	13.95	0.00	1125	
11.183	-4.98	-15.63	3.01		2	17.42	0.00	2107	2	15.87	0.00	1125	

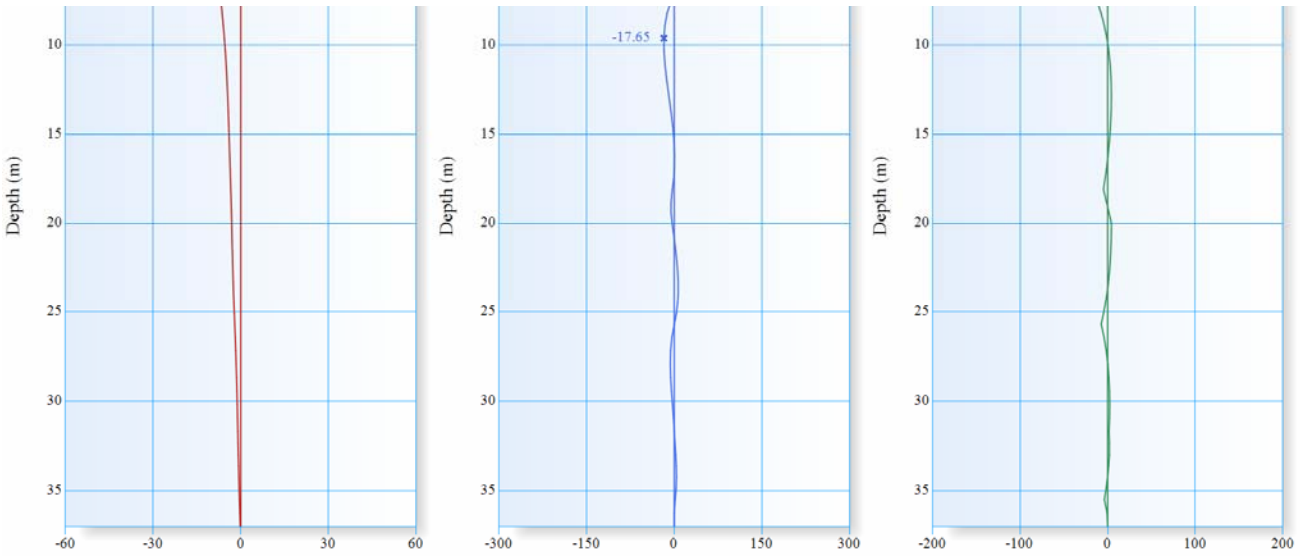
12.020	-4.71	-12.68	3.95		2	18.44	0.00	2107	2	17.73	0.00	1125	
12.883	-4.48	-9.11	4.25		2	19.58	0.00	2107	2	19.60	0.00	1125	
13.745	-4.28	-5.55	3.96		2	20.79	0.00	2107	2	21.44	0.00	1125	
14.583	-4.11	-2.54	3.18		2	22.01	0.00	2107	2	23.20	0.00	1125	
15.420	-3.95	-0.37	1.97		2	23.24	0.00	2107	2	24.96	0.00	1125	
16.283	-3.78	0.61	0.26		2	24.52	0.00	2107	2	26.76	0.00	1125	
17.145	-3.61	-0.09	-1.91		2	25.79	0.00	2107	2	28.57	0.00	1125	
17.618	-3.51	-1.32	-3.30		2	26.49	0.00	2107	2	29.57	0.00	1125	
18.090	-3.42	-3.24	-4.82		2	27.19	0.00	2107	2	30.56	0.00	1125	
					2	11.57	11.59	2192	1	6.59	11.59	1625	
18.820	-3.29	-5.46	-1.25		2	11.59	12.32	2192	1	6.77	12.32	1625	
19.405	-3.19	-5.39	1.54		2	11.63	12.91	2192	1	6.92	12.91	1625	
19.990	-3.10	-3.69	4.27		2	11.69	13.49	2192	1	7.06	13.49	1625	
					2	33.01	0.00	3043	2	32.94	0.00	1625	
20.420	-3.04	-1.87	4.23		2	33.65	0.00	3043	2	33.87	0.00	1625	
20.983	-2.96	0.45	4.01		2	34.51	0.00	3043	2	35.08	0.00	1625	
21.545	-2.88	2.58	3.58		2	35.36	0.00	3043	2	36.30	0.00	1625	
22.108	-2.80	4.42	2.95		2	36.20	0.00	3043	2	37.52	0.00	1625	
22.670	-2.71	5.84	2.09		2	37.03	0.00	3043	2	38.75	0.00	1625	
23.220	-2.62	6.70	1.02		2	37.80	0.00	3043	2	39.97	0.00	1625	
23.320	-2.60	6.79	0.80		2	37.94	0.00	3043	2	40.19	0.00	1625	
23.913	-2.48	6.82	-0.70		2	38.74	0.00	3043	2	41.53	0.00	1625	
24.505	-2.36	5.87	-2.53		2	39.50	0.00	3043	2	42.88	0.00	1625	
25.098	-2.22	3.72	-4.73		2	40.23	0.00	3043	2	44.25	0.00	1625	
25.690	-2.08	0.17	-7.31		2	40.94	0.00	3043	2	45.63	0.00	1625	
					2	13.91	19.19	3204	2	9.11	19.19	2375	
26.440	-1.90	-4.07	-4.09		2	13.66	19.94	3204	2	9.86	19.94	2375	
27.190	-1.73	-6.17	-1.60		2	13.45	20.69	3204	2	10.60	20.69	2375	
27.940	-1.57	-6.66	0.22		2	13.29	21.44	3204	2	11.29	21.44	2375	
28.690	-1.44	-6.02	1.44		2	13.19	22.19	3204	2	11.94	22.19	2375	
29.440	-1.32	-4.67	2.12		2	13.14	22.94	3204	2	12.55	22.94	2375	
30.190	-1.21	-2.97	2.35		2	13.13	23.69	3204	2	13.13	23.69	2375	
30.940	-1.12	-1.28	2.15		2	13.15	24.44	3204	2	13.69	24.44	2375	
31.690	-1.02	0.12	1.55		2	13.18	25.19	3204	2	14.24	25.19	2375	
					2	13.90	25.19	4216	2	12.94	25.19	3125	
32.345	-0.94	1.29	1.98		2	13.84	25.85	4216	2	13.47	25.85	3125	
33.000	-0.86	2.61	2.02		2	13.76	26.50	4216	2	14.02	26.50	3125	
					2	12.83	26.50	3125	2	14.02	26.50	3125	
33.623	-0.77	3.59	1.11		2	12.83	27.12	3125	2	14.55	27.12	3125	
34.245	-0.68	3.91	-0.13		2	12.81	27.75	3125	2	15.10	27.75	3125	
34.868	-0.58	3.33	-1.75		2	12.77	28.37	3125	2	15.67	28.37	3125	
35.490	-0.48	1.62	-3.77		2	12.70	28.99	3125	2	16.27	28.99	3125	
					2	16.46	28.99	12500	2	10.67	28.99	12500	
36.245	-0.35	0.10	-0.64		2	15.20	29.75	12500	2	12.70	29.75	12500	
37.000	-0.21	0.00	0.00		2	13.94	30.50	12500	2	14.73	30.50	12500	
Max	-0.21	7.65	4.99		D_e = 7.52 (m)　D_w = 7.52 (m)				D_e = 0 (m)　D_w = 1.7 (m)				
Min	-10.95	-17.65	-12.27		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

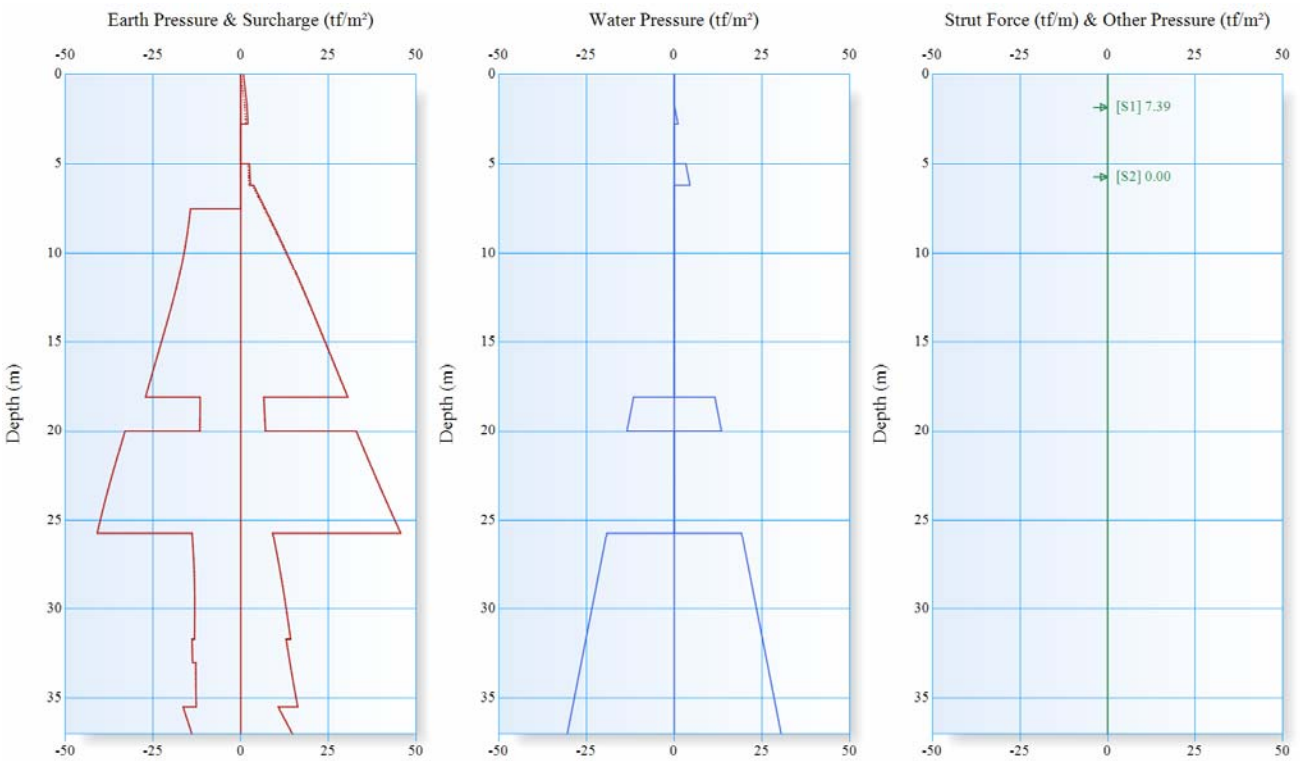
▼ PHASE 4



計畫名稱：XDO Example 3

主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法





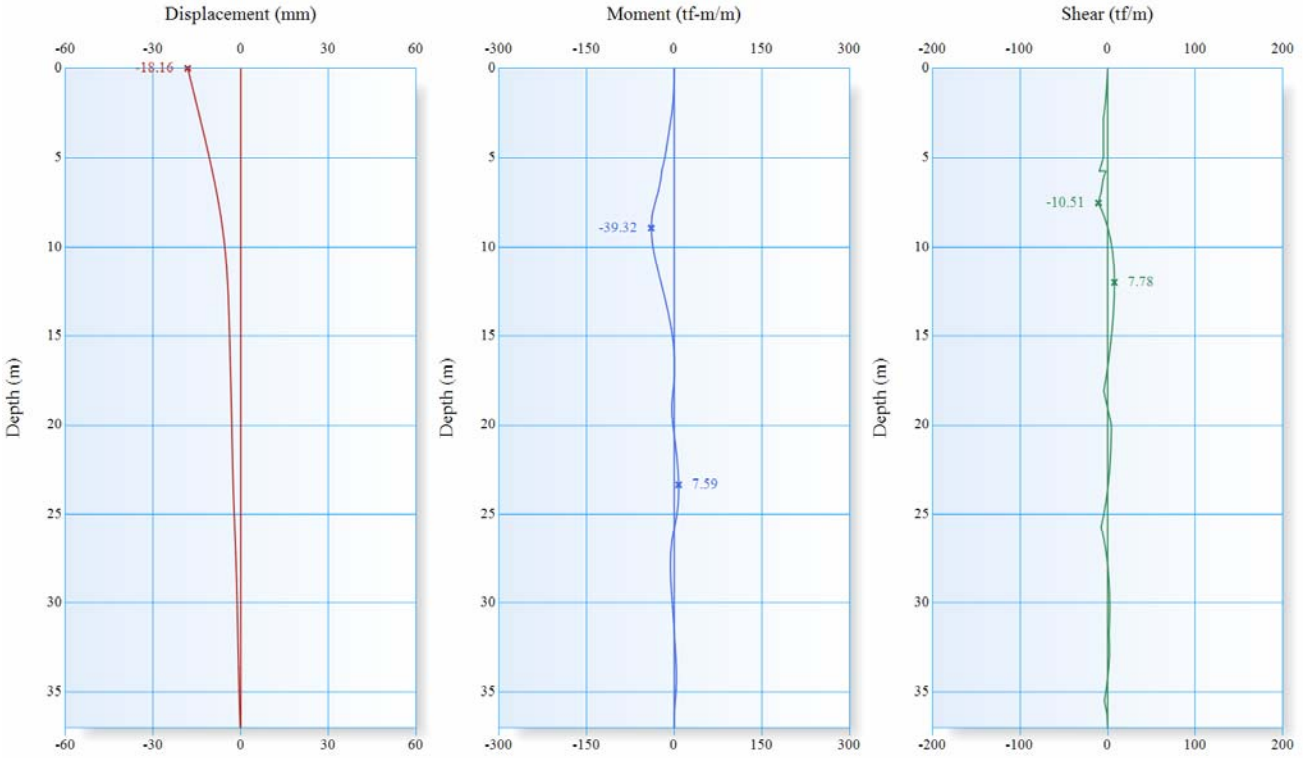
LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-10.95	0.00	0.00		0				1	0.75		1000	
0.100	-10.89	-0.01	-0.08		0				2	0.81		1000	
0.900	-10.48	-0.39	-0.91		0				2	1.28		1000	
1.700	-10.07	-1.59	-2.12		0				2	1.75	0.00	1000	
1.850	-9.99	-1.94	-2.40		0				2	1.79	0.15	1000	55.43
			4.99		0				2	1.79	0.15	1000	
2.500	-9.66	0.83	3.46		0				2	1.95	0.80	1000	
2.790	-9.51	1.71	2.61		0				2	2.03	1.09	1000	
					0				-1	0.00	0.00	1625	
3.340	-9.22	3.14	2.61		0				-1	0.00	0.00	1625	

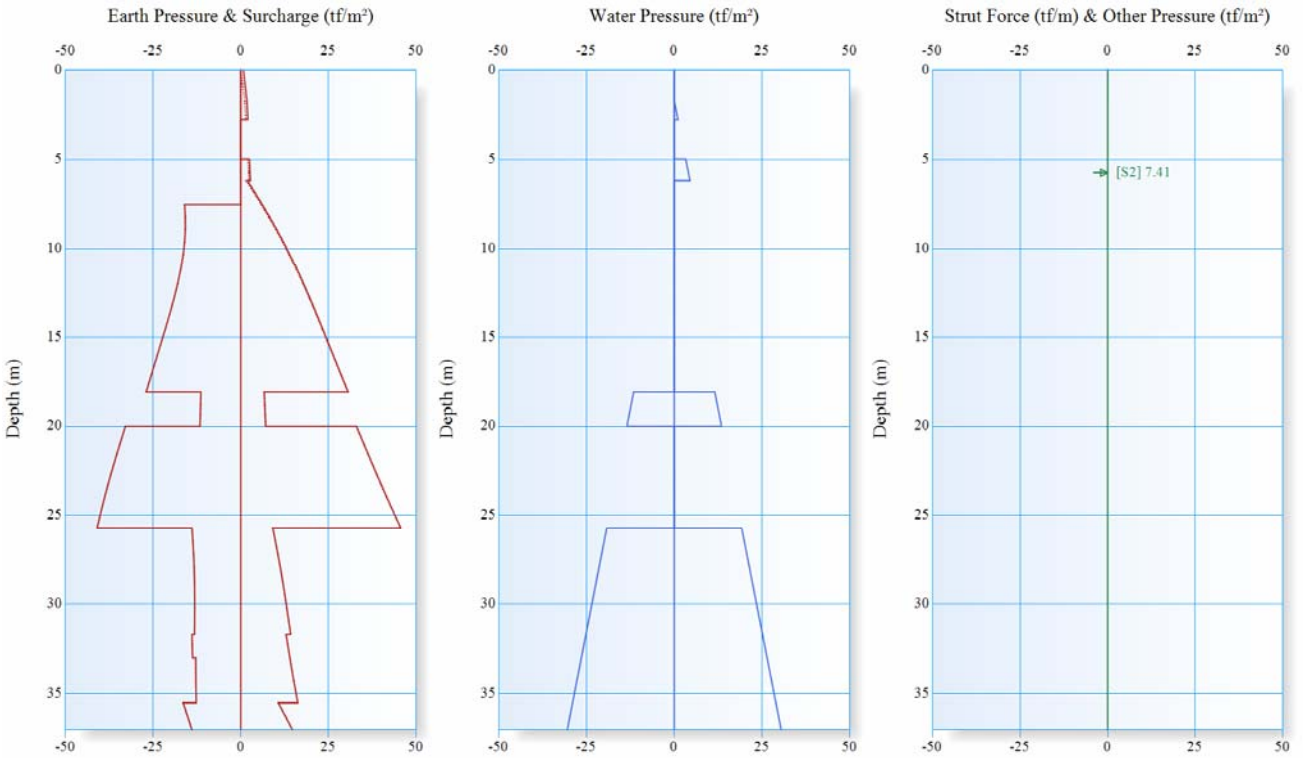
3.890	-8.93	4.56	2.61		0				-1	0.00	0.00	1625	
4.440	-8.64	5.99	2.61		0				-1	0.00	0.00	1625	
4.990	-8.33	7.42	2.61		0				-1	0.00	0.00	1625	
					0				2	2.47	3.29	500	
5.745	-7.90	7.65	-2.09		0				2	2.64	4.05	500	0.00
6.190	-7.63	6.03	-5.19		0				2	2.75	4.49	500	
					0				2	3.63	0.00	1125	
6.855	-7.22	1.64	-8.16		0				2	5.32	0.00	1125	
7.520	-6.81	-5.10	-12.27		0		0.00		2	7.02	0.00	1125	
					2	14.34	0.00	2107	2	7.02	0.00	1125	
8.226	-6.38	-12.06	-7.57		2	14.77	0.00	2107	2	8.80	0.00	1125	
8.933	-5.98	-16.04	-3.80		2	15.27	0.00	2107	2	10.56	0.00	1125	
9.639	-5.62	-17.65	-0.88		2	15.85	0.00	2107	2	12.28	0.00	1125	
10.345	-5.30	-17.48	1.29		2	16.51	0.00	2107	2	13.95	0.00	1125	
11.183	-4.98	-15.63	3.01		2	17.42	0.00	2107	2	15.87	0.00	1125	
12.020	-4.71	-12.68	3.95		2	18.44	0.00	2107	2	17.73	0.00	1125	
12.883	-4.48	-9.11	4.25		2	19.58	0.00	2107	2	19.60	0.00	1125	
13.745	-4.28	-5.55	3.96		2	20.79	0.00	2107	2	21.44	0.00	1125	
14.583	-4.11	-2.54	3.18		2	22.01	0.00	2107	2	23.20	0.00	1125	
15.420	-3.95	-0.37	1.97		2	23.24	0.00	2107	2	24.96	0.00	1125	
16.283	-3.78	0.61	0.26		2	24.52	0.00	2107	2	26.76	0.00	1125	
17.145	-3.61	-0.09	-1.91		2	25.79	0.00	2107	2	28.57	0.00	1125	
17.618	-3.51	-1.32	-3.30		2	26.49	0.00	2107	2	29.57	0.00	1125	
18.090	-3.42	-3.24	-4.82		2	27.19	0.00	2107	2	30.56	0.00	1125	
					2	11.57	11.59	2192	2	6.59	11.59	1625	
18.820	-3.29	-5.46	-1.25		2	11.59	12.32	2192	2	6.77	12.32	1625	
19.405	-3.19	-5.39	1.54		2	11.63	12.91	2192	2	6.92	12.91	1625	
19.990	-3.10	-3.70	4.27		2	11.69	13.49	2192	2	7.06	13.49	1625	
					2	33.01	0.00	3043	2	32.94	0.00	1625	
20.420	-3.04	-1.87	4.23		2	33.65	0.00	3043	2	33.87	0.00	1625	
20.983	-2.96	0.45	4.01		2	34.51	0.00	3043	2	35.08	0.00	1625	
21.545	-2.88	2.58	3.58		2	35.36	0.00	3043	2	36.30	0.00	1625	
22.108	-2.80	4.42	2.95		2	36.20	0.00	3043	2	37.52	0.00	1625	
22.670	-2.71	5.84	2.09		2	37.03	0.00	3043	2	38.75	0.00	1625	
23.220	-2.62	6.70	1.02		2	37.80	0.00	3043	2	39.97	0.00	1625	
23.320	-2.60	6.78	0.79		2	37.94	0.00	3043	2	40.19	0.00	1625	
23.913	-2.48	6.82	-0.70		2	38.74	0.00	3043	2	41.53	0.00	1625	
24.505	-2.36	5.87	-2.53		2	39.50	0.00	3043	2	42.88	0.00	1625	
25.098	-2.22	3.72	-4.73		2	40.23	0.00	3043	2	44.25	0.00	1625	
25.690	-2.08	0.17	-7.31		2	40.94	0.00	3043	2	45.63	0.00	1625	
					2	13.91	19.19	3204	2	9.11	19.19	2375	
26.440	-1.90	-4.07	-4.09		2	13.66	19.94	3204	2	9.86	19.94	2375	
27.190	-1.73	-6.17	-1.60		2	13.45	20.69	3204	2	10.60	20.69	2375	
27.940	-1.57	-6.66	0.22		2	13.29	21.44	3204	2	11.29	21.44	2375	
28.690	-1.44	-6.02	1.44		2	13.19	22.19	3204	2	11.94	22.19	2375	
29.440	-1.32	-4.67	2.12		2	13.14	22.94	3204	2	12.55	22.94	2375	
30.190	-1.21	-2.98	2.35		2	13.13	23.69	3204	2	13.13	23.69	2375	
30.940	-1.12	-1.28	2.15		2	13.15	24.44	3204	2	13.69	24.44	2375	
31.690	-1.02	0.12	1.55		2	13.18	25.19	3204	2	14.24	25.19	2375	
					2	13.90	25.19	4216	2	12.94	25.19	3125	
32.345	-0.94	1.29	1.98		2	13.84	25.85	4216	2	13.47	25.85	3125	
33.000	-0.86	2.61	2.02		2	13.76	26.50	4216	2	14.02	26.50	3125	
					2	12.83	26.50	3125	2	14.02	26.50	3125	
33.623	-0.77	3.59	1.11		2	12.83	27.12	3125	2	14.55	27.12	3125	
34.245	-0.68	3.90	-0.13		2	12.81	27.75	3125	2	15.10	27.75	3125	
34.868	-0.58	3.33	-1.75		2	12.77	28.37	3125	2	15.67	28.37	3125	

計畫名稱：XDO Example 3
主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

35.490	-0.48	1.62	-3.77		2	12.70	28.99	3125	2	16.27	28.99	3125	
					2	16.46	28.99	12500	2	10.67	28.99	12500	
36.245	-0.35	0.10	-0.64		2	15.20	29.75	12500	2	12.70	29.75	12500	
37.000	-0.21	0.00	0.00		2	13.94	30.50	12500	2	14.73	30.50	12500	
Max	-0.21	7.65	4.99		D_e = 7.52 (m)　D_w = 7.52 (m)				D_e = 0 (m)　D_w = 1.7 (m)				
Min	-10.95	-17.65	-12.27		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 5





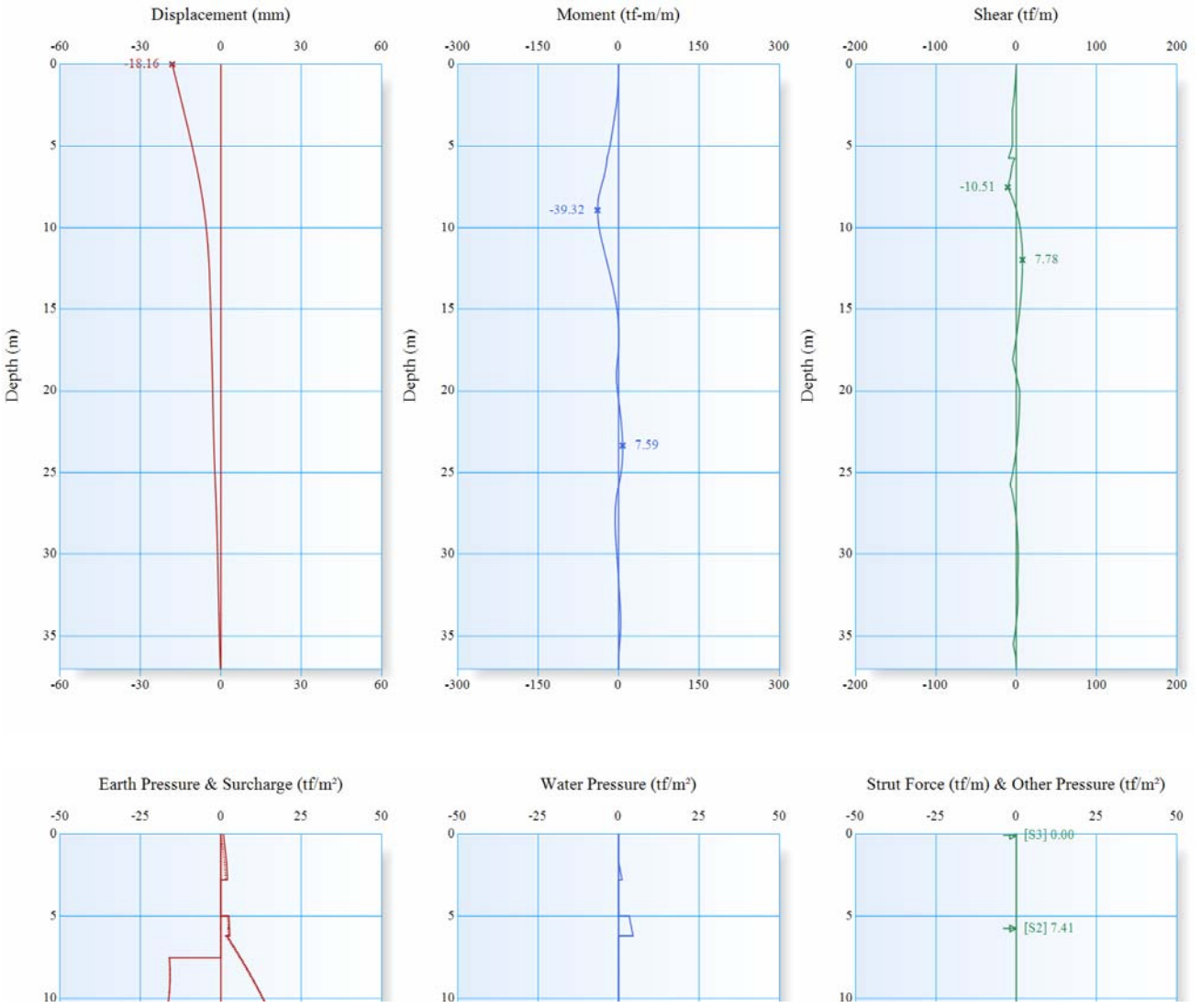
計畫名稱：XDO Example 3

主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-18.16	0.00	0.00		0				1	0.75		1000	
0.100	-18.01	-0.01	-0.08		0				1	0.81		1000	
0.900	-16.80	-0.41	-0.91		0				1	1.28		1000	
1.700	-15.59	-1.64	-2.12		0				1	1.75	0.00	1000	
1.850	-15.36	-1.99	-2.40		0				1	1.79	0.15	1000	-
2.500	-14.39	-4.04	-3.93		0				1	1.95	0.80	1000	
2.790	-13.95	-5.31	-4.78		0				1	2.03	1.09	1000	
					0				-1	0.00	0.00	1625	
3.340	-13.14	-7.97	-4.78		0				-1	0.00	0.00	1625	
3.890	-12.33	-10.62	-4.78		0				-1	0.00	0.00	1625	
4.440	-11.54	-13.27	-4.78		0				-1	0.00	0.00	1625	
4.990	-10.77	-15.92	-4.78		0				-1	0.00	0.00	1625	
					0				1	2.47	3.29	500	
5.745	-9.75	-21.29	-9.48		0				1	2.64	4.05	500	7.41
			-2.07		0				1	2.64	4.05	500	
6.190	-9.18	-22.92	-5.17		0				1	2.75	4.49	500	
					0				2	1.89	0.00	1125	
6.855	-8.36	-26.96	-7.14		0				2	4.03	0.00	1125	
7.520	-7.61	-32.78	-10.51		0		0.00		2	6.11	0.00	1125	
					2	16.03	0.00	2107	2	6.11	0.00	1125	
8.226	-6.88	-37.96	-4.33		2	15.83	0.00	2107	2	8.24	0.00	1125	
8.933	-6.25	-39.32	0.31		2	15.83	0.00	2107	2	10.26	0.00	1125	
9.639	-5.71	-37.89	3.63		2	16.03	0.00	2107	2	12.18	0.00	1125	
10.345	-5.26	-34.51	5.84		2	16.42	0.00	2107	2	14.00	0.00	1125	
11.183	-4.84	-28.97	7.31		2	17.11	0.00	2107	2	16.03	0.00	1125	
12.020	-4.51	-22.63	7.78		2	18.01	0.00	2107	2	17.96	0.00	1125	
12.883	-4.26	-16.04	7.47		2	19.11	0.00	2107	2	19.86	0.00	1125	
13.745	-4.06	-9.99	6.55		2	20.32	0.00	2107	2	21.69	0.00	1125	
14.583	-3.91	-5.08	5.20		2	21.58	0.00	2107	2	23.43	0.00	1125	
15.420	-3.77	-1.46	3.46		2	22.87	0.00	2107	2	25.16	0.00	1125	
16.283	-3.63	0.59	1.30		2	24.21	0.00	2107	2	26.93	0.00	1125	
17.145	-3.49	0.61	-1.23		2	25.55	0.00	2107	2	28.70	0.00	1125	
17.618	-3.42	-0.35	-2.78		2	26.28	0.00	2107	2	29.68	0.00	1125	
18.090	-3.34	-2.08	-4.44		2	27.02	0.00	2107	2	30.65	0.00	1125	
					2	11.39	11.59	2192	2	6.73	11.59	1625	
18.820	-3.23	-4.12	-1.07		2	11.46	12.32	2192	2	6.87	12.32	1625	
19.405	-3.15	-3.98	1.60		2	11.53	12.91	2192	2	6.99	12.91	1625	
19.990	-3.07	-2.30	4.25		2	11.62	13.49	2192	2	7.11	13.49	1625	
					2	32.91	0.00	3043	2	32.99	0.00	1625	
20.420	-3.02	-0.51	4.15		2	33.58	0.00	3043	2	33.91	0.00	1625	
20.983	-2.95	1.73	3.87		2	34.46	0.00	3043	2	35.11	0.00	1625	
21.545	-2.88	3.77	3.41		2	35.34	0.00	3043	2	36.31	0.00	1625	
22.108	-2.80	5.49	2.76		2	36.20	0.00	3043	2	37.52	0.00	1625	
22.670	-2.72	6.79	1.90		2	37.03	0.00	3043	2	38.75	0.00	1625	
23.220	-2.62	7.52	0.83		2	37.82	0.00	3043	2	39.96	0.00	1625	
23.320	-2.60	7.59	0.61		2	37.96	0.00	3043	2	40.19	0.00	1625	
23.913	-2.49	7.51	-0.87		2	38.76	0.00	3043	2	41.52	0.00	1625	
24.505	-2.36	6.44	-2.69		2	39.52	0.00	3043	2	42.87	0.00	1625	
25.098	-2.23	4.20	-4.86		2	40.26	0.00	3043	2	44.24	0.00	1625	
25.690	-2.08	0.55	-7.43		2	40.97	0.00	3043	2	45.62	0.00	1625	

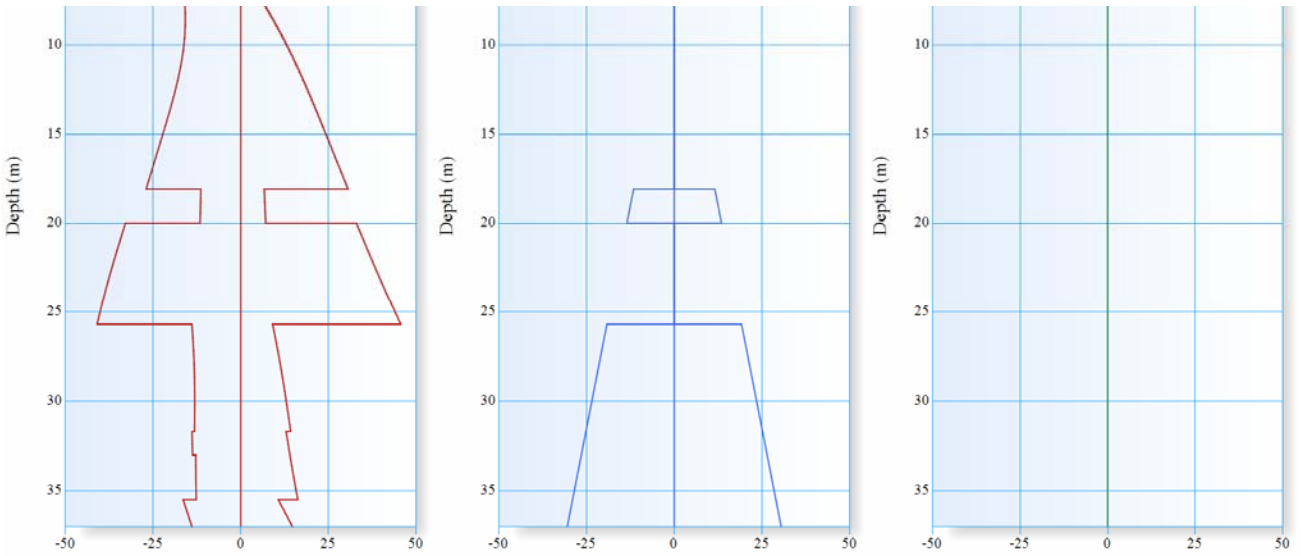
					2	13.93	19.19	3204	2	9.09	19.19	2375	
26.440	-1.90	-3.78	-4.17		2	13.68	19.94	3204	2	9.85	19.94	2375	
27.190	-1.73	-5.96	-1.65		2	13.47	20.69	3204	2	10.58	20.69	2375	
27.940	-1.58	-6.50	0.19		2	13.30	21.44	3204	2	11.28	21.44	2375	
28.690	-1.44	-5.89	1.42		2	13.20	22.19	3204	2	11.93	22.19	2375	
29.440	-1.32	-4.57	2.12		2	13.15	22.94	3204	2	12.54	22.94	2375	
30.190	-1.22	-2.89	2.35		2	13.14	23.69	3204	2	13.12	23.69	2375	
30.940	-1.12	-1.21	2.16		2	13.16	24.44	3204	2	13.68	24.44	2375	
31.690	-1.02	0.18	1.57		2	13.19	25.19	3204	2	14.24	25.19	2375	
					2	13.91	25.19	4216	2	12.94	25.19	3125	
32.345	-0.94	1.34	2.00		2	13.84	25.85	4216	2	13.47	25.85	3125	
33.000	-0.86	2.66	2.04		2	13.77	26.50	4216	2	14.02	26.50	3125	
					2	12.83	26.50	3125	2	14.02	26.50	3125	
33.623	-0.77	3.64	1.13		2	12.83	27.12	3125	2	14.55	27.12	3125	
34.245	-0.68	3.95	-0.12		2	12.81	27.75	3125	2	15.10	27.75	3125	
34.868	-0.58	3.36	-1.74		2	12.77	28.37	3125	2	15.67	28.37	3125	
35.490	-0.48	1.65	-3.75		2	12.70	28.99	3125	2	16.27	28.99	3125	
					2	16.45	28.99	12500	2	10.67	28.99	12500	
36.245	-0.34	0.12	-0.63		2	15.20	29.75	12500	2	12.70	29.75	12500	
37.000	-0.21	0.00	0.00		2	13.93	30.50	12500	2	14.74	30.50	12500	
Max	-0.21	7.59	7.78		D_e = 7.52 (m)　D_w = 7.52 (m)				D_e = 0 (m)　D_w = 1.7 (m)				
Min	-18.16	-39.32	-10.51		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 6



計畫名稱：XDO Example 3

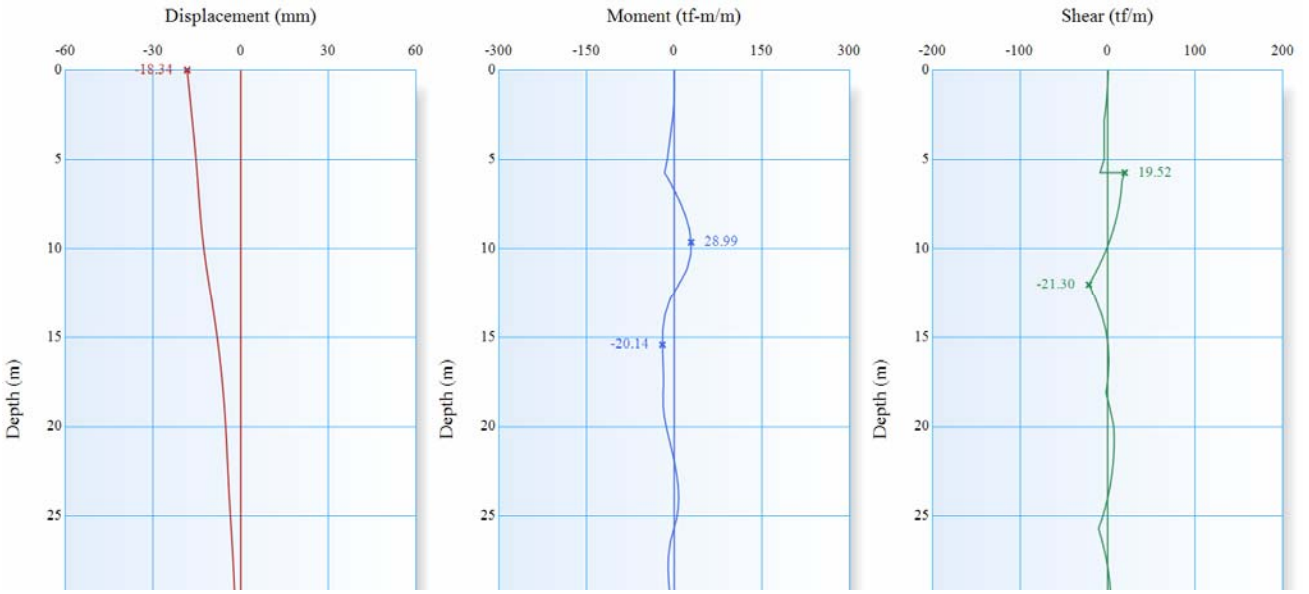
主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法



LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-18.16	0.00	0.00		0				1	0.75		1000	
0.100	-18.01	-0.01	-0.08		0				2	0.81		1000	0.00
0.900	-16.80	-0.41	-0.91		0				2	1.28		1000	
1.700	-15.59	-1.64	-2.12		0				2	1.75	0.00	1000	
1.850	-15.36	-1.99	-2.40		0				2	1.79	0.15	1000	-
2.500	-14.39	-4.04	-3.93		0				2	1.95	0.80	1000	
2.790	-13.95	-5.31	-4.78		0				2	2.03	1.09	1000	
					0				-1	0.00	0.00	1625	
3.340	-13.14	-7.97	-4.78		0				-1	0.00	0.00	1625	
3.890	-12.33	-10.62	-4.78		0				-1	0.00	0.00	1625	
4.440	-11.54	-13.27	-4.78		0				-1	0.00	0.00	1625	
4.990	-10.77	-15.92	-4.78		0				-1	0.00	0.00	1625	
					0				2	2.47	3.29	500	
5.745	-9.75	-21.29	-9.48		0				2	2.64	4.05	500	7.41
			-2.07		0				2	2.64	4.05	500	
6.190	-9.18	-22.92	-5.17		0				2	2.75	4.49	500	
					0				2	1.89	0.00	1125	
6.855	-8.36	-26.96	-7.14		0				2	4.03	0.00	1125	
7.520	-7.61	-32.78	-10.51		0		0.00		2	6.11	0.00	1125	
					2	16.03	0.00	2107	2	6.11	0.00	1125	
8.226	-6.88	-37.96	-4.33		2	15.83	0.00	2107	2	8.24	0.00	1125	
8.933	-6.25	-39.32	0.31		2	15.83	0.00	2107	2	10.26	0.00	1125	
9.639	-5.71	-37.89	3.63		2	16.03	0.00	2107	2	12.18	0.00	1125	
10.345	-5.26	-34.51	5.84		2	16.42	0.00	2107	2	14.00	0.00	1125	
11.183	-4.84	-28.97	7.31		2	17.11	0.00	2107	2	16.03	0.00	1125	
12.020	-4.51	-22.63	7.78		2	18.01	0.00	2107	2	17.96	0.00	1125	
12.883	-4.26	-16.04	7.47		2	19.11	0.00	2107	2	19.86	0.00	1125	
13.745	-4.06	-9.99	6.55		2	20.32	0.00	2107	2	21.69	0.00	1125	
14.583	-3.91	-5.08	5.20		2	21.58	0.00	2107	2	23.43	0.00	1125	
15.420	-3.77	-1.46	3.46		2	22.87	0.00	2107	2	25.16	0.00	1125	
16.283	-3.63	0.59	1.30		2	24.21	0.00	2107	2	26.93	0.00	1125	
17.145	-3.49	0.61	-1.23		2	25.55	0.00	2107	2	28.70	0.00	1125	
17.618	-3.42	-0.35	-2.78		2	26.28	0.00	2107	2	29.68	0.00	1125	
18.090	-3.34	-2.08	-4.44		2	27.02	0.00	2107	2	30.65	0.00	1125	
					2	11.39	11.59	2192	2	6.73	11.59	1625	

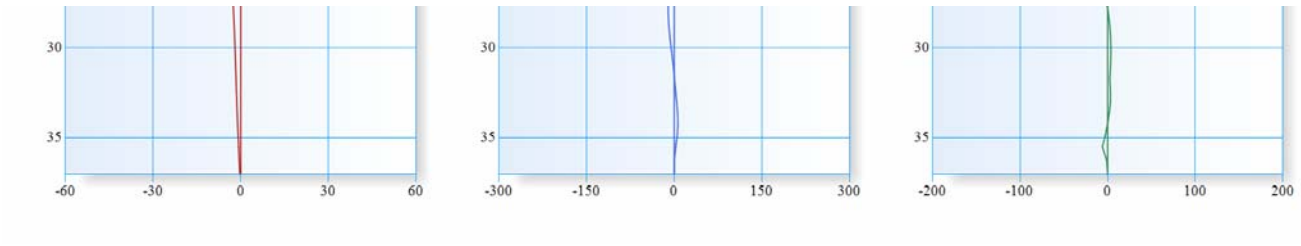
18.820	-3.23	-4.12	-1.07		2	11.46	12.32	2192	2	6.87	12.32	1625	
19.405	-3.15	-3.98	1.60		2	11.53	12.91	2192	2	6.99	12.91	1625	
19.990	-3.07	-2.30	4.25		2	11.62	13.49	2192	2	7.11	13.49	1625	
					2	32.91	0.00	3043	2	32.99	0.00	1625	
20.420	-3.02	-0.51	4.15		2	33.58	0.00	3043	2	33.91	0.00	1625	
20.983	-2.95	1.73	3.87		2	34.46	0.00	3043	2	35.11	0.00	1625	
21.545	-2.88	3.77	3.41		2	35.34	0.00	3043	2	36.31	0.00	1625	
22.108	-2.80	5.49	2.76		2	36.20	0.00	3043	2	37.52	0.00	1625	
22.670	-2.72	6.79	1.90		2	37.03	0.00	3043	2	38.75	0.00	1625	
23.220	-2.62	7.52	0.83		2	37.82	0.00	3043	2	39.96	0.00	1625	
23.320	-2.60	7.59	0.61		2	37.96	0.00	3043	2	40.19	0.00	1625	
23.913	-2.49	7.51	-0.87		2	38.76	0.00	3043	2	41.52	0.00	1625	
24.505	-2.36	6.44	-2.69		2	39.52	0.00	3043	2	42.87	0.00	1625	
25.098	-2.23	4.20	-4.86		2	40.26	0.00	3043	2	44.24	0.00	1625	
25.690	-2.08	0.55	-7.43		2	40.97	0.00	3043	2	45.62	0.00	1625	
					2	13.93	19.19	3204	2	9.09	19.19	2375	
26.440	-1.90	-3.78	-4.17		2	13.68	19.94	3204	2	9.85	19.94	2375	
27.190	-1.73	-5.96	-1.65		2	13.47	20.69	3204	2	10.58	20.69	2375	
27.940	-1.58	-6.50	0.19		2	13.30	21.44	3204	2	11.28	21.44	2375	
28.690	-1.44	-5.89	1.42		2	13.20	22.19	3204	2	11.93	22.19	2375	
29.440	-1.32	-4.57	2.12		2	13.15	22.94	3204	2	12.54	22.94	2375	
30.190	-1.22	-2.89	2.35		2	13.14	23.69	3204	2	13.12	23.69	2375	
30.940	-1.12	-1.21	2.16		2	13.16	24.44	3204	2	13.68	24.44	2375	
31.690	-1.02	0.18	1.57		2	13.19	25.19	3204	2	14.24	25.19	2375	
					2	13.91	25.19	4216	2	12.94	25.19	3125	
32.345	-0.94	1.34	2.00		2	13.84	25.85	4216	2	13.47	25.85	3125	
33.000	-0.86	2.66	2.04		2	13.77	26.50	4216	2	14.02	26.50	3125	
					2	12.83	26.50	3125	2	14.02	26.50	3125	
33.623	-0.77	3.64	1.13		2	12.83	27.12	3125	2	14.55	27.12	3125	
34.245	-0.68	3.95	-0.12		2	12.81	27.75	3125	2	15.10	27.75	3125	
34.868	-0.58	3.36	-1.74		2	12.77	28.37	3125	2	15.67	28.37	3125	
35.490	-0.48	1.65	-3.75		2	12.70	28.99	3125	2	16.27	28.99	3125	
					2	16.45	28.99	12500	2	10.67	28.99	12500	
36.245	-0.34	0.12	-0.63		2	15.20	29.75	12500	2	12.70	29.75	12500	
37.000	-0.21	0.00	0.00		2	13.93	30.50	12500	2	14.74	30.50	12500	
Max	-0.21	7.59	7.78		D_e = 7.52 (m)　D_w = 7.52 (m)				D_e = 0 (m)　D_w = 1.7 (m)				
Min	-18.16	-39.32	-10.51		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

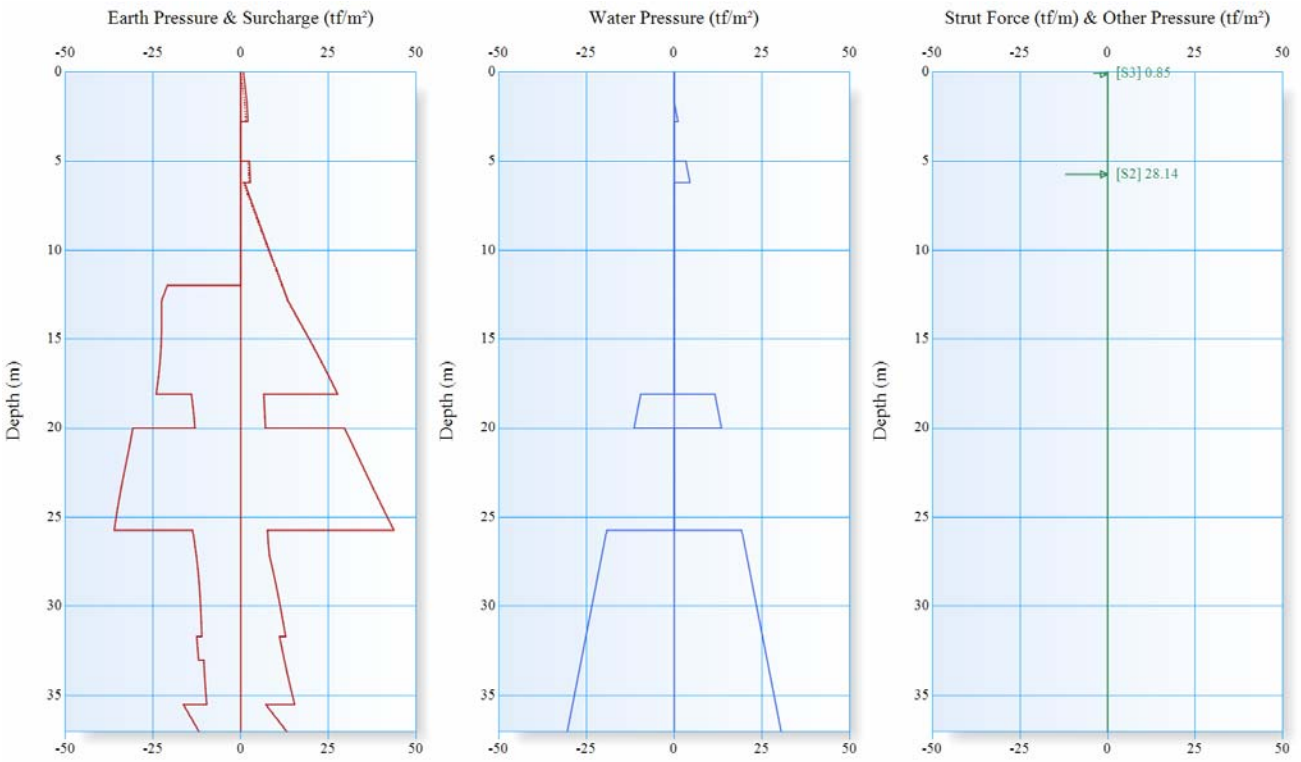
▼ PHASE 7



計畫名稱：XDO Example 3

主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法





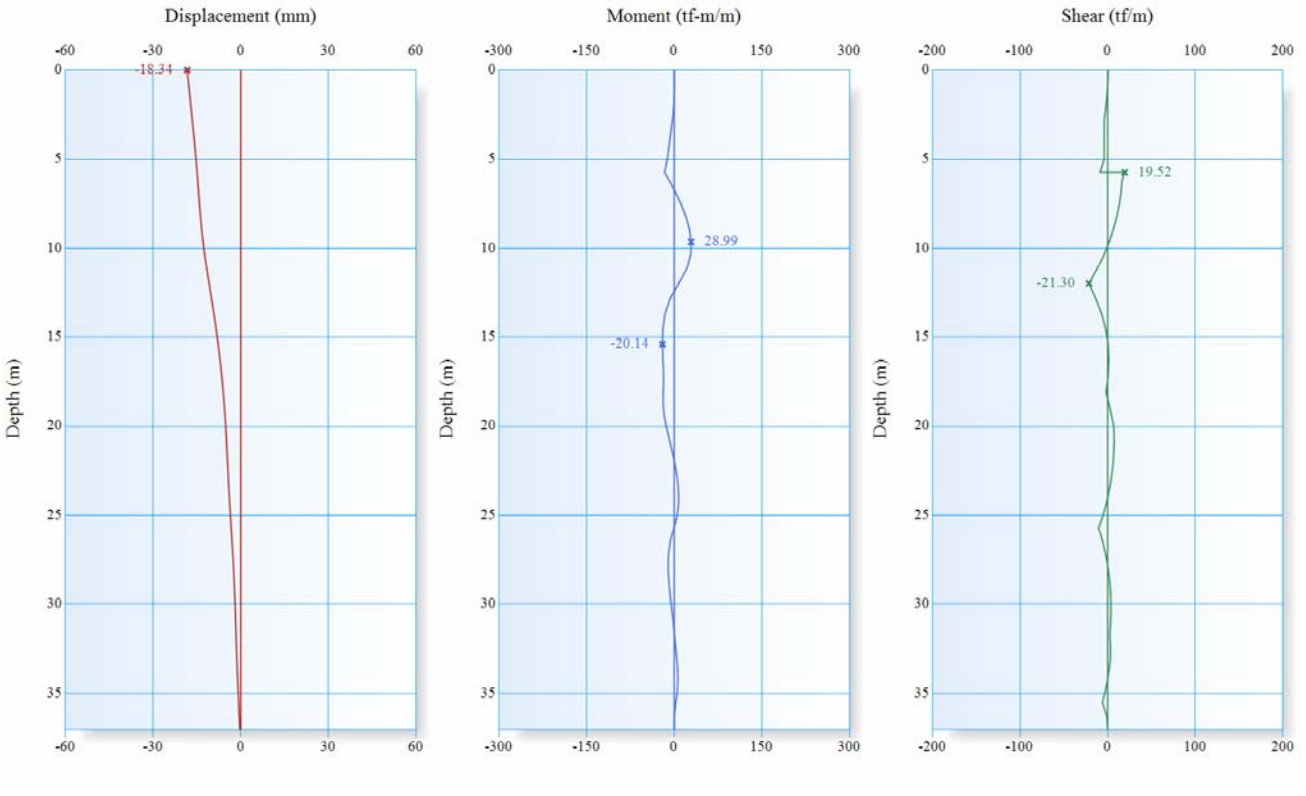
LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-18.34	0.00	0.00		0				1	0.75		1000	
0.100	-18.28	-0.01	-0.08		0				1	0.81		1000	0.85
			0.77		0				1	0.81		1000	
0.900	-17.78	0.27	-0.06		0				1	1.28		1000	
1.700	-17.29	-0.27	-1.27		0				1	1.75	0.00	1000	
1.850	-17.19	-0.49	-1.55		0				1	1.79	0.15	1000	-
2.500	-16.79	-1.99	-3.08		0				1	1.95	0.80	1000	
2.790	-16.61	-3.02	-3.93		0				1	2.03	1.09	1000	
					0				-1	0.00	0.00	1625	
3.340	-16.28	-5.20	-3.93		0				-1	0.00	0.00	1625	
3.890	-15.95	-7.38	-3.93		0				-1	0.00	0.00	1625	
4.440	-15.63	-9.56	-3.93		0				-1	0.00	0.00	1625	
4.990	-15.33	-11.75	-3.93		0				-1	0.00	0.00	1625	
					0				1	2.47	3.29	500	
5.745	-14.95	-16.47	-8.63		0				1	2.64	4.05	500	28.14
			19.52		0				1	2.64	4.05	500	
6.190	-14.74	-8.49	16.42		0				1	2.75	4.49	500	
					0				1	1.07	0.00	1125	
6.855	-14.44	2.08	15.30		0				1	2.30	0.00	1125	
7.520	-14.13	11.63	13.36		0				1	3.53	0.00	1125	

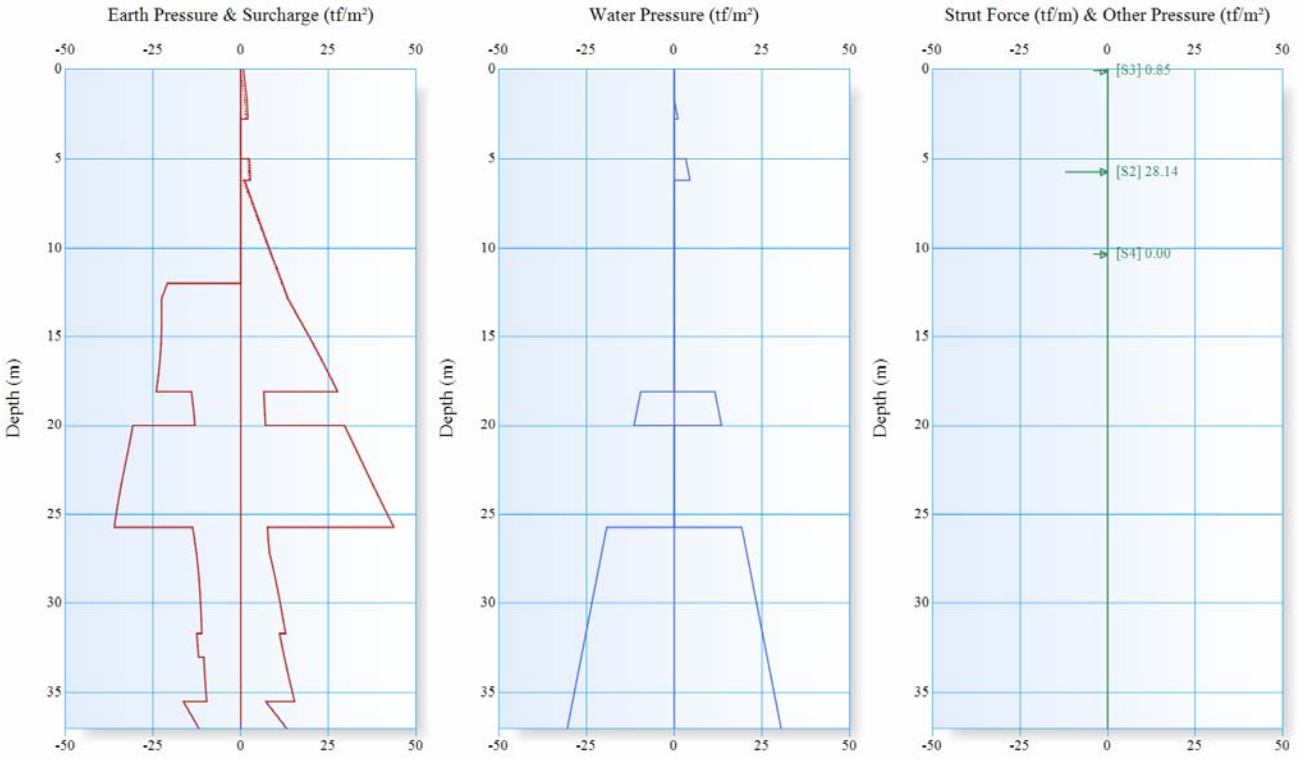
8.226	-13.78	20.04	10.41		0				1	4.83	0.00	1125	
8.933	-13.38	26.05	6.53		0				1	6.14	0.00	1125	
9.639	-12.91	28.99	1.73		0				1	7.45	0.00	1125	
10.345	-12.38	28.22	-4.00		0				1	8.77	0.00	1125	
11.183	-11.65	21.58	-12.00		0				1	10.33	0.00	1125	
12.020	-10.85	7.69	-21.30		0		0.00		1	11.89	0.00	1125	
					3	20.95	0.00	2107	1	11.89	0.00	1125	
12.883	-10.00	-7.35	-13.48		3	22.58	0.00	2107	1	13.50	0.00	1125	
13.745	-9.17	-15.94	-6.70		2	22.59	0.00	2107	2	15.94	0.00	1125	
14.583	-8.42	-19.54	-2.15		2	22.59	0.00	2107	2	18.35	0.00	1125	
15.420	-7.74	-20.14	0.48		2	22.73	0.00	2107	2	20.69	0.00	1125	
16.283	-7.11	-19.26	1.36		2	23.03	0.00	2107	2	23.02	0.00	1125	
17.145	-6.55	-18.34	0.59		2	23.48	0.00	2107	2	25.27	0.00	1125	
17.618	-6.27	-18.31	-0.47		2	23.78	0.00	2107	2	26.47	0.00	1125	
18.090	-6.01	-18.89	-1.94		2	24.13	0.00	2107	2	27.65	0.00	1125	
					2	14.10	9.56	2192	1	6.59	11.59	1625	
18.820	-5.65	-18.94	1.81		2	13.62	10.29	2192	1	6.77	12.32	1625	
19.405	-5.40	-17.10	4.50		2	13.32	10.88	2192	1	6.92	12.91	1625	
19.990	-5.17	-13.77	6.95		2	13.08	11.46	2192	1	7.06	13.49	1625	
					2	30.80	0.00	3043	2	29.58	0.00	1625	
20.420	-5.02	-10.71	7.32		2	31.18	0.00	3043	2	30.65	0.00	1625	
20.983	-4.84	-6.58	7.37		2	31.72	0.00	3043	2	32.03	0.00	1625	
21.545	-4.67	-2.55	6.97		2	32.29	0.00	3043	2	33.40	0.00	1625	
22.108	-4.50	1.13	6.12		2	32.87	0.00	3043	2	34.76	0.00	1625	
22.670	-4.33	4.21	4.83		2	33.45	0.00	3043	2	36.12	0.00	1625	
23.220	-4.16	6.40	3.14		2	34.00	0.00	3043	2	37.46	0.00	1625	
23.320	-4.13	6.69	2.79		2	34.10	0.00	3043	2	37.70	0.00	1625	
23.913	-3.94	7.63	0.38		2	34.65	0.00	3043	2	39.17	0.00	1625	
24.505	-3.73	6.98	-2.60		2	35.17	0.00	3043	2	40.65	0.00	1625	
25.098	-3.51	4.39	-6.16		2	35.64	0.00	3043	2	42.16	0.00	1625	
25.690	-3.28	-0.49	-10.34		2	36.10	0.00	3043	2	43.68	0.00	1625	
					2	13.77	19.19	3204	1	7.64	19.19	2375	
26.440	-2.99	-6.62	-6.04		2	13.18	19.94	3204	1	7.83	19.94	2375	
27.190	-2.73	-9.76	-2.37		2	12.66	20.69	3204	2	8.21	20.69	2375	
27.940	-2.49	-10.44	0.46		2	12.22	21.44	3204	2	9.11	21.44	2375	
28.690	-2.28	-9.36	2.35		2	11.88	22.19	3204	2	9.94	22.19	2375	
29.440	-2.09	-7.18	3.41		2	11.61	22.94	3204	2	10.71	22.94	2375	
30.190	-1.93	-4.49	3.74		2	11.42	23.69	3204	2	11.44	23.69	2375	
30.940	-1.77	-1.80	3.40		2	11.26	24.44	3204	2	12.13	24.44	2375	
31.690	-1.63	0.40	2.44		2	11.12	25.19	3204	2	12.81	25.19	2375	
					2	12.58	25.19	4216	2	11.06	25.19	3125	
32.345	-1.50	2.23	3.13		2	12.31	25.85	4216	2	11.74	25.85	3125	
33.000	-1.36	4.31	3.18		2	12.03	26.50	4216	2	12.43	26.50	3125	
					2	10.54	26.50	3125	2	12.43	26.50	3125	
33.623	-1.23	5.84	1.74		2	10.39	27.12	3125	2	13.12	27.12	3125	
34.245	-1.08	6.31	-0.24		2	10.20	27.75	3125	2	13.84	27.75	3125	
34.868	-0.93	5.36	-2.82		2	9.97	28.37	3125	2	14.60	28.37	3125	
35.490	-0.76	2.62	-6.02		2	9.72	28.99	3125	2	15.39	28.99	3125	
					2	16.36	28.99	12500	2	7.14	28.99	12500	
36.245	-0.55	0.17	-1.04		2	14.14	29.75	12500	2	10.14	29.75	12500	
37.000	-0.34	0.00	0.00		2	11.90	30.50	12500	2	13.15	30.50	12500	
Max	-0.34	28.99	19.52		D_e = 12.02 (m)		D_w = 12.02 (m)		D_e = 0 (m)		D_w = 1.7 (m)		
Min	-18.34	-20.14	-21.30		[STATE] -1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 8

計畫名稱：XDO Example 3

主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法



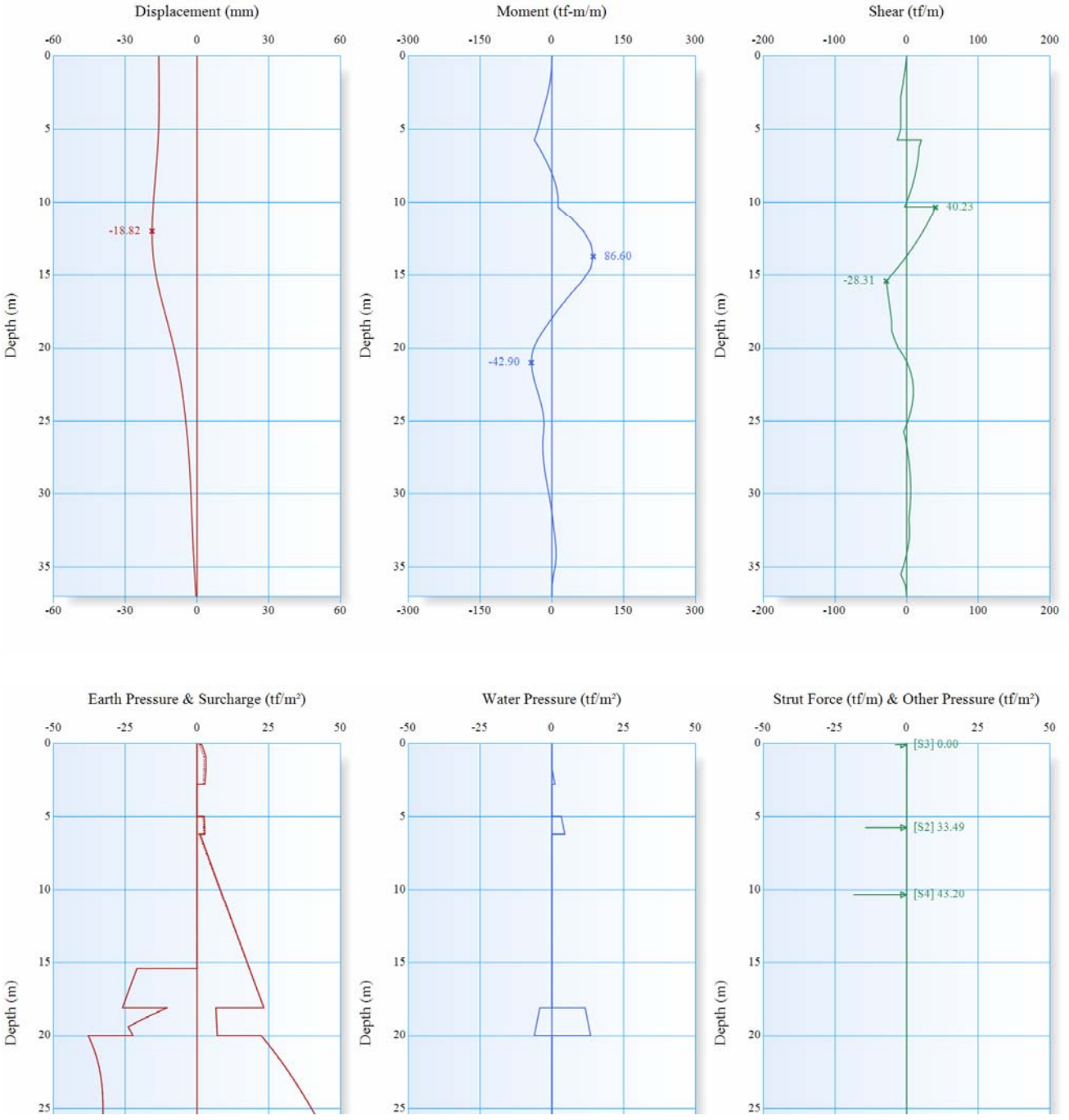


LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-18.34	0.00	0.00		0				1	0.75		1000	
0.100	-18.28	-0.01	-0.08		0				2	0.81		1000	0.85
			0.77		0				2	0.81		1000	

0.900	-17.78	0.27	-0.06		0				2	1.28		1000	
1.700	-17.29	-0.27	-1.27		0				2	1.75	0.00	1000	
1.850	-17.19	-0.49	-1.55		0				2	1.79	0.15	1000	-
2.500	-16.79	-1.99	-3.08		0				2	1.95	0.80	1000	
2.790	-16.61	-3.02	-3.93		0				2	2.03	1.09	1000	
					0				-1	0.00	0.00	1625	
3.340	-16.28	-5.20	-3.93		0				-1	0.00	0.00	1625	
3.890	-15.95	-7.38	-3.93		0				-1	0.00	0.00	1625	
4.440	-15.63	-9.56	-3.93		0				-1	0.00	0.00	1625	
4.990	-15.33	-11.75	-3.93		0				-1	0.00	0.00	1625	
					0				2	2.47	3.29	500	
5.745	-14.95	-16.47	-8.63		0				2	2.64	4.05	500	28.14
			19.52		0				2	2.64	4.05	500	
6.190	-14.74	-8.49	16.42		0				2	2.75	4.49	500	
					0				2	1.07	0.00	1125	
6.855	-14.44	2.08	15.30		0				2	2.30	0.00	1125	
7.520	-14.13	11.63	13.36		0				2	3.53	0.00	1125	
8.226	-13.78	20.04	10.41		0				2	4.83	0.00	1125	
8.933	-13.38	26.05	6.53		0				2	6.14	0.00	1125	
9.639	-12.91	28.99	1.73		0				2	7.45	0.00	1125	
10.345	-12.38	28.22	-4.00		0				2	8.77	0.00	1125	0.00
11.183	-11.65	21.58	-12.00		0				2	10.33	0.00	1125	
12.020	-10.85	7.69	-21.30		0		0.00		2	11.89	0.00	1125	
					2	20.95	0.00	2107	2	11.89	0.00	1125	
12.883	-10.00	-7.35	-13.48		2	22.58	0.00	2107	2	13.50	0.00	1125	
13.745	-9.17	-15.94	-6.70		2	22.59	0.00	2107	2	15.94	0.00	1125	
14.583	-8.42	-19.54	-2.15		2	22.59	0.00	2107	2	18.35	0.00	1125	
15.420	-7.74	-20.14	0.48		2	22.73	0.00	2107	2	20.69	0.00	1125	
16.283	-7.11	-19.26	1.36		2	23.03	0.00	2107	2	23.02	0.00	1125	
17.145	-6.55	-18.34	0.59		2	23.48	0.00	2107	2	25.27	0.00	1125	
17.618	-6.27	-18.31	-0.47		2	23.78	0.00	2107	2	26.47	0.00	1125	
18.090	-6.01	-18.89	-1.94		2	24.13	0.00	2107	2	27.65	0.00	1125	
					2	14.10	9.56	2192	2	6.59	11.59	1625	
18.820	-5.65	-18.94	1.81		2	13.62	10.29	2192	2	6.77	12.32	1625	
19.405	-5.40	-17.10	4.50		2	13.32	10.88	2192	2	6.92	12.91	1625	
19.990	-5.17	-13.77	6.95		2	13.08	11.46	2192	2	7.06	13.49	1625	
					2	30.80	0.00	3043	2	29.58	0.00	1625	
20.420	-5.02	-10.71	7.32		2	31.18	0.00	3043	2	30.65	0.00	1625	
20.983	-4.84	-6.58	7.37		2	31.72	0.00	3043	2	32.03	0.00	1625	
21.545	-4.67	-2.55	6.97		2	32.29	0.00	3043	2	33.40	0.00	1625	
22.108	-4.50	1.13	6.12		2	32.87	0.00	3043	2	34.76	0.00	1625	
22.670	-4.33	4.21	4.83		2	33.45	0.00	3043	2	36.12	0.00	1625	
23.220	-4.16	6.40	3.14		2	34.00	0.00	3043	2	37.46	0.00	1625	
23.320	-4.13	6.69	2.79		2	34.10	0.00	3043	2	37.70	0.00	1625	
23.913	-3.94	7.63	0.38		2	34.65	0.00	3043	2	39.17	0.00	1625	
24.505	-3.73	6.98	-2.60		2	35.17	0.00	3043	2	40.65	0.00	1625	
25.098	-3.51	4.39	-6.16		2	35.64	0.00	3043	2	42.16	0.00	1625	
25.690	-3.28	-0.49	-10.34		2	36.10	0.00	3043	2	43.68	0.00	1625	
					2	13.77	19.19	3204	2	7.64	19.19	2375	
26.440	-2.99	-6.62	-6.04		2	13.18	19.94	3204	2	7.83	19.94	2375	
27.190	-2.73	-9.76	-2.37		2	12.66	20.69	3204	2	8.21	20.69	2375	
27.940	-2.49	-10.44	0.46		2	12.22	21.44	3204	2	9.11	21.44	2375	
28.690	-2.28	-9.36	2.35		2	11.88	22.19	3204	2	9.94	22.19	2375	
29.440	-2.09	-7.18	3.41		2	11.61	22.94	3204	2	10.71	22.94	2375	
30.190	-1.93	-4.49	3.74		2	11.42	23.69	3204	2	11.44	23.69	2375	
30.940	-1.77	-1.80	3.40		2	11.26	24.44	3204	2	12.13	24.44	2375	

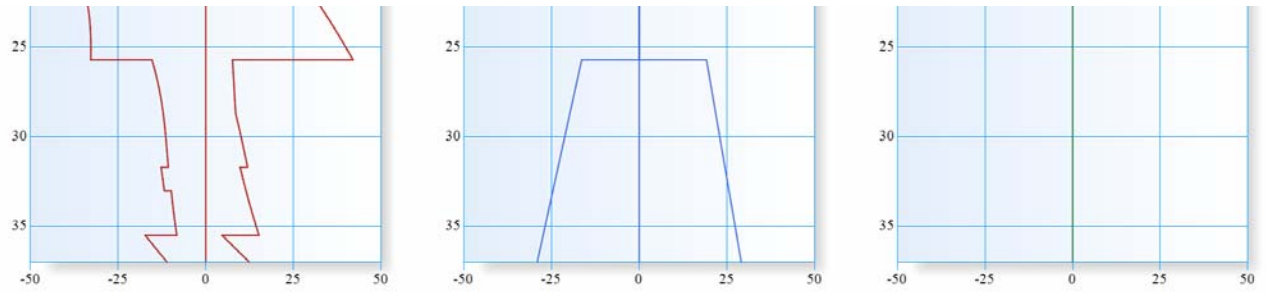
31.690	-1.63	0.40	2.44		2	11.12	25.19	3204	2	12.81	25.19	2375	
					2	12.58	25.19	4216	2	11.06	25.19	3125	
32.345	-1.50	2.23	3.13		2	12.31	25.85	4216	2	11.74	25.85	3125	
33.000	-1.36	4.31	3.18		2	12.03	26.50	4216	2	12.43	26.50	3125	
					2	10.54	26.50	3125	2	12.43	26.50	3125	
33.623	-1.23	5.84	1.74		2	10.39	27.12	3125	2	13.12	27.12	3125	
34.245	-1.08	6.31	-0.24		2	10.20	27.75	3125	2	13.84	27.75	3125	
34.868	-0.93	5.36	-2.82		2	9.97	28.37	3125	2	14.60	28.37	3125	
35.490	-0.76	2.62	-6.02		2	9.72	28.99	3125	2	15.39	28.99	3125	
					2	16.36	28.99	12500	2	7.14	28.99	12500	
36.245	-0.55	0.17	-1.04		2	14.14	29.75	12500	2	10.14	29.75	12500	
37.000	-0.34	0.00	0.00		2	11.90	30.50	12500	2	13.15	30.50	12500	
Max	-0.34	28.99	19.52		D_e = 12.02 (m) D_w = 12.02 (m)				D_e = 0 (m) D_w = 1.7 (m)				
Min	-18.34	-20.14	-21.30		[STATE] -1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 9



計畫名稱：XDO Example 3

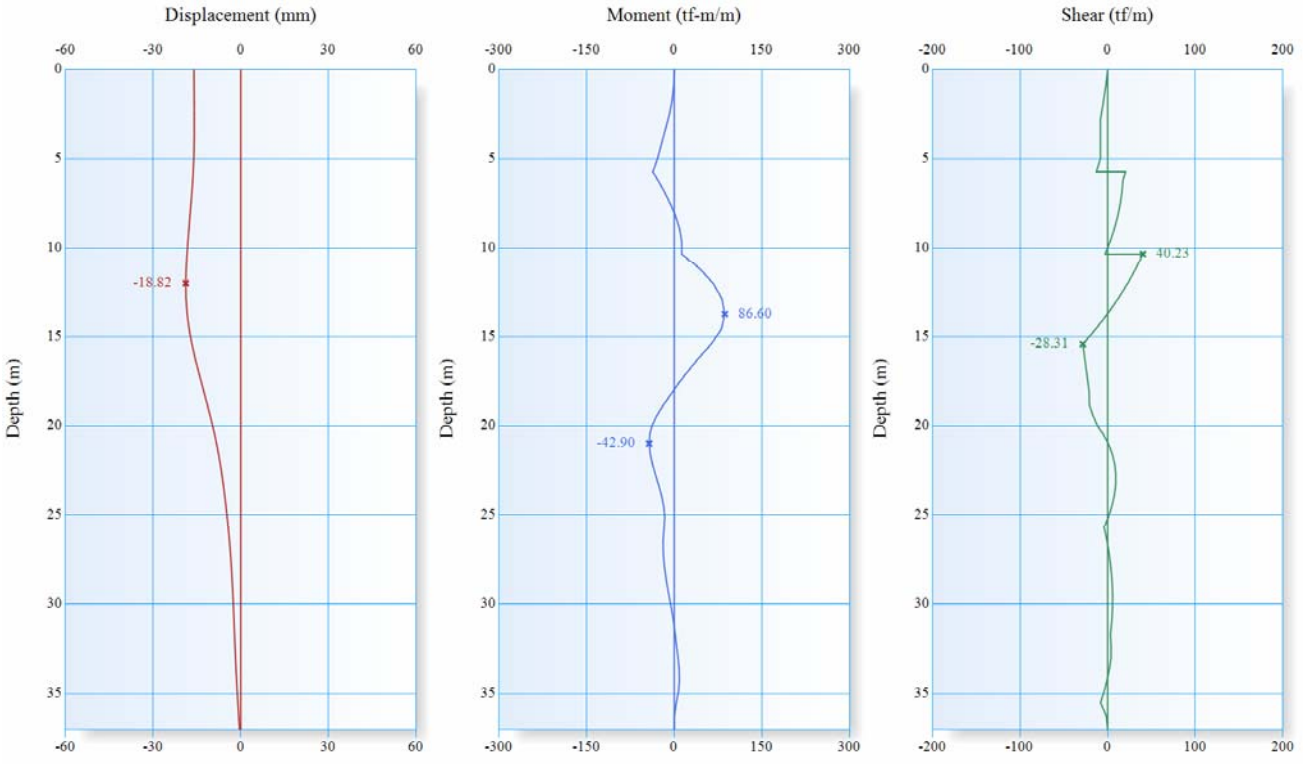
主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法



LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-16.04	0.00	0.00		0				1	0.75		1000	
0.100	-16.03	-0.01	-0.12		0				3	1.67		1000	0.00
0.900	-15.99	-0.82	-2.02		0				2	3.07		1000	
1.700	-15.95	-3.45	-4.48		0				2	3.09	0.00	1000	
1.850	-15.94	-4.16	-4.95		0				2	3.04	0.15	1000	-
2.500	-15.92	-8.11	-7.17		0				2	2.82	0.80	1000	
2.790	-15.92	-10.36	-8.25		0				2	2.72	1.09	1000	
					0				-1	0.00	0.00	1625	
3.340	-15.92	-14.91	-8.25		0				-1	0.00	0.00	1625	
3.890	-15.95	-19.47	-8.25		0				-1	0.00	0.00	1625	
4.440	-16.00	-24.03	-8.25		0				-1	0.00	0.00	1625	
4.990	-16.09	-28.58	-8.25		0				-1	0.00	0.00	1625	
					0				1	2.47	3.29	500	
5.745	-16.28	-36.57	-12.95		0				1	2.64	4.05	500	33.49
			20.54		0				1	2.64	4.05	500	
6.190	-16.44	-28.12	17.44		0				1	2.75	4.49	500	
					0				1	1.07	0.00	1125	
6.855	-16.73	-16.87	16.32		0				1	2.30	0.00	1125	
7.520	-17.05	-6.64	14.39		0				1	3.53	0.00	1125	
8.226	-17.41	2.50	11.43		0				1	4.83	0.00	1125	
8.933	-17.76	9.23	7.56		0				1	6.14	0.00	1125	
9.639	-18.09	12.90	2.75		0				1	7.45	0.00	1125	
10.345	-18.39	12.85	-2.97		0				1	8.77	0.00	1125	43.20
			40.23		0				1	8.77	0.00	1125	
11.183	-18.68	43.25	32.23		0				1	10.33	0.00	1125	
12.020	-18.82	66.41	22.93		0				1	11.89	0.00	1125	
12.883	-18.74	81.53	11.97		0				1	13.50	0.00	1125	
13.745	-18.35	86.60	-0.37		0				1	15.11	0.00	1125	
14.583	-17.68	80.78	-13.68		0				1	16.68	0.00	1125	
15.420	-16.73	63.25	-28.31		0		0.00		1	18.25	0.00	1125	
					3	20.95	0.00	2107	1	18.25	0.00	1125	
16.283	-15.53	39.81	-25.98		3	22.58	0.00	2107	1	19.87	0.00	1125	
17.145	-14.18	18.37	-23.64		3	24.21	0.00	2107	1	21.49	0.00	1125	
17.618	-13.41	7.49	-22.36		3	25.11	0.00	2107	1	22.38	0.00	1125	
18.090	-12.63	-2.79	-21.07		3	26.00	0.00	2107	1	23.26	0.00	1125	
					3	10.38	4.20	2192	1	6.59	11.59	1625	
18.820	-11.43	-18.46	-20.86		3	18.34	4.93	2192	1	6.77	12.32	1625	
19.405	-10.51	-29.66	-16.80		2	24.02	5.52	2192	1	6.92	12.91	1625	
19.990	-9.64	-37.95	-11.65		2	22.36	6.10	2192	1	7.06	13.49	1625	
					2	37.96	0.00	3043	2	22.32	0.00	1625	
20.420	-9.04	-41.62	-5.53		2	36.97	0.00	3043	2	24.13	0.00	1625	
20.983	-8.31	-42.90	0.73		2	35.84	0.00	3043	2	26.40	0.00	1625	

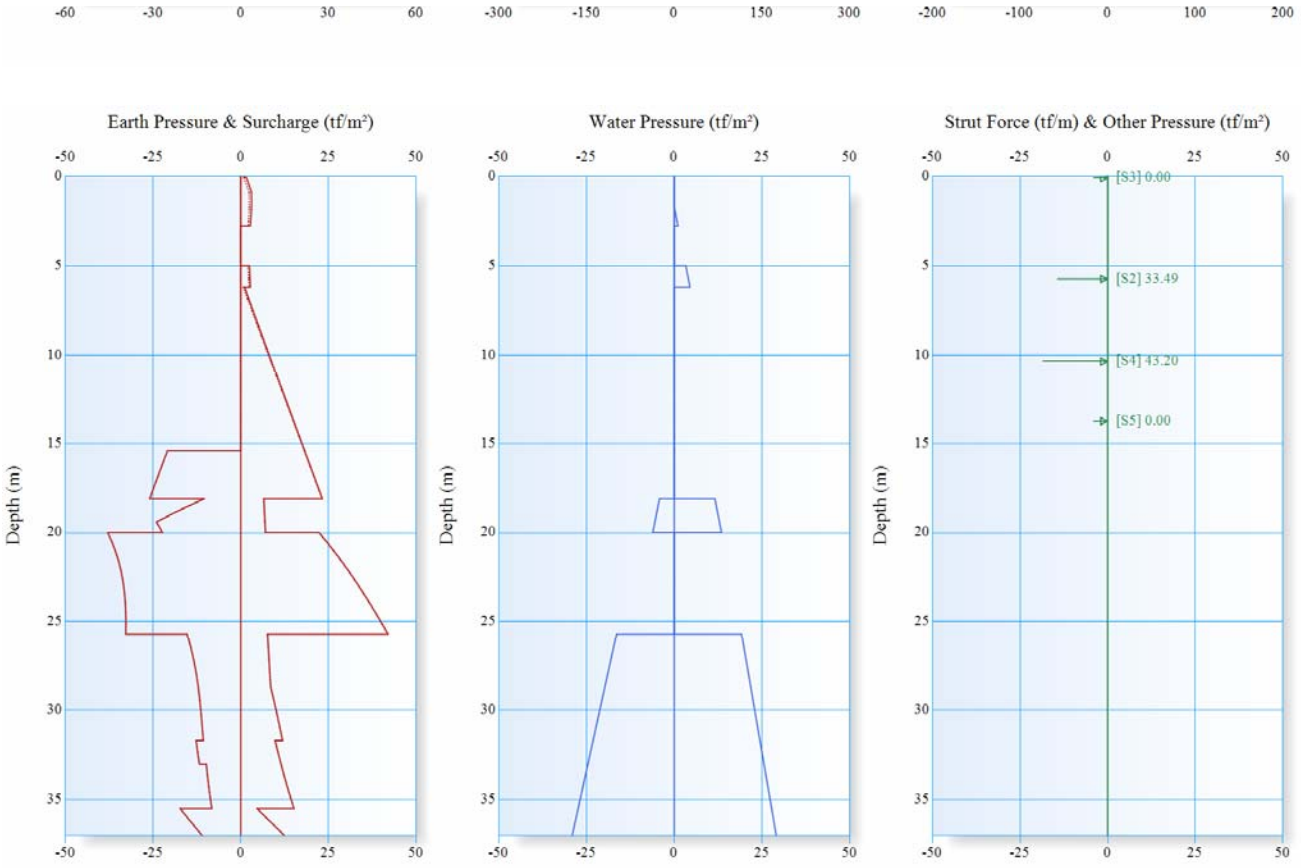
21.545	-7.65	-41.18	5.17		2	34.92	0.00	3043	2	28.56	0.00	1625	
22.108	-7.05	-37.43	7.96		2	34.19	0.00	3043	2	30.62	0.00	1625	
22.670	-6.51	-32.55	9.25		2	33.64	0.00	3043	2	32.58	0.00	1625	
23.220	-6.03	-27.43	9.22		2	33.25	0.00	3043	2	34.43	0.00	1625	
23.320	-5.95	-26.52	9.08		2	33.20	0.00	3043	2	34.75	0.00	1625	
23.913	-5.49	-21.56	7.52		2	32.94	0.00	3043	2	36.65	0.00	1625	
24.505	-5.06	-17.90	4.73		2	32.80	0.00	3043	2	38.48	0.00	1625	
25.098	-4.67	-16.22	0.82		2	32.76	0.00	3043	2	40.27	0.00	1625	
25.690	-4.31	-17.18	-4.14		2	32.80	0.00	3043	2	42.01	0.00	1625	
					2	15.34	16.41	3204	1	7.64	19.19	2375	
26.440	-3.89	-19.03	-0.86		2	14.29	17.25	3204	1	7.86	19.85	2375	
27.190	-3.52	-18.71	1.68		2	13.41	18.09	3204	1	8.07	20.51	2375	
27.940	-3.21	-16.73	3.59		2	12.70	18.94	3204	1	8.29	21.16	2375	
28.690	-2.94	-13.51	4.99		2	12.13	19.78	3204	2	8.53	21.82	2375	
29.440	-2.72	-9.46	5.72		2	11.68	20.62	3204	2	9.45	22.48	2375	
30.190	-2.51	-5.19	5.61		2	11.32	21.46	3204	2	10.30	23.14	2375	
30.940	-2.32	-1.29	4.76		2	11.01	22.31	3204	2	11.12	23.79	2375	
31.690	-2.14	1.71	3.20		2	10.70	23.15	3204	2	11.94	24.45	2375	
					2	12.74	23.15	4216	2	9.79	24.45	3125	
32.345	-1.97	4.06	3.92		2	12.29	23.88	4216	2	10.62	25.03	3125	
33.000	-1.80	6.63	3.87		2	11.81	24.62	4216	2	11.47	25.60	3125	
					2	9.84	24.62	3125	2	11.47	25.60	3125	
33.623	-1.62	8.44	1.93		2	9.52	25.32	3125	2	12.33	26.15	3125	
34.245	-1.43	8.84	-0.69		2	9.15	26.02	3125	2	13.23	26.69	3125	
34.868	-1.22	7.39	-4.03		2	8.73	26.72	3125	2	14.18	27.24	3125	
35.490	-1.00	3.61	-8.17		2	8.26	27.41	3125	2	15.18	27.79	3125	
					2	17.30	27.41	12500	2	4.65	27.79	12500	
36.245	-0.72	0.26	-1.48		2	14.16	28.26	12500	2	8.56	28.45	12500	
37.000	-0.44	0.00	0.00		2	11.01	29.11	12500	2	12.49	29.11	12500	
Max	-0.44	86.60	40.23		D_e = 15.42 (m)		D_w = 15.42 (m)		D_e = 0 (m)		D_w = 1.7 (m)		
Min	-18.82	-42.90	-28.31		[STATE] -1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 10



計畫名稱：XDO Example 3

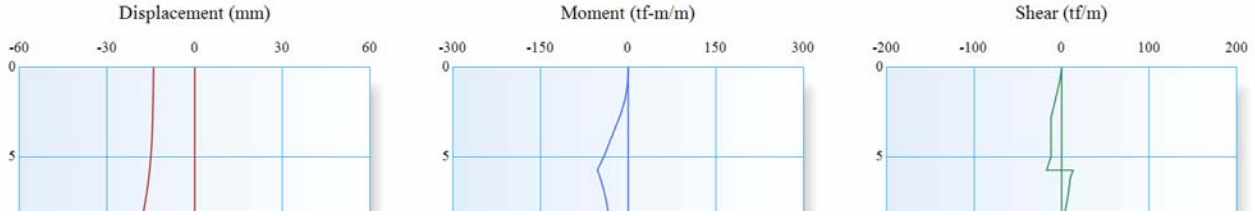
主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法



LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-16.04	0.00	0.00		0				1	0.75		1000	
0.100	-16.03	-0.01	-0.12		0				2	1.67		1000	0.00
0.900	-15.99	-0.82	-2.02		0				2	3.07		1000	
1.700	-15.95	-3.45	-4.48		0				2	3.09	0.00	1000	
1.850	-15.94	-4.16	-4.95		0				2	3.04	0.15	1000	-
2.500	-15.92	-8.11	-7.17		0				2	2.82	0.80	1000	
2.790	-15.92	-10.36	-8.25		0				2	2.72	1.09	1000	
					0				-1	0.00	0.00	1625	
3.340	-15.92	-14.91	-8.25		0				-1	0.00	0.00	1625	
3.890	-15.95	-19.47	-8.25		0				-1	0.00	0.00	1625	
4.440	-16.00	-24.03	-8.25		0				-1	0.00	0.00	1625	
4.990	-16.09	-28.58	-8.25		0				-1	0.00	0.00	1625	
					0				2	2.47	3.29	500	
5.745	-16.28	-36.57	-12.95		0				2	2.64	4.05	500	33.49
			20.54		0				2	2.64	4.05	500	
6.190	-16.44	-28.12	17.44		0				2	2.75	4.49	500	
					0				2	1.07	0.00	1125	
6.855	-16.73	-16.87	16.32		0				2	2.30	0.00	1125	
7.520	-17.05	-6.64	14.39		0				2	3.53	0.00	1125	
8.226	-17.41	2.50	11.43		0				2	4.83	0.00	1125	
8.933	-17.76	9.23	7.56		0				2	6.14	0.00	1125	
9.639	-18.09	12.90	2.75		0				2	7.45	0.00	1125	
10.345	-18.39	12.85	-2.97		0				2	8.77	0.00	1125	43.20
			40.23		0				2	8.77	0.00	1125	
11.183	-18.68	43.25	32.23		0				2	10.33	0.00	1125	

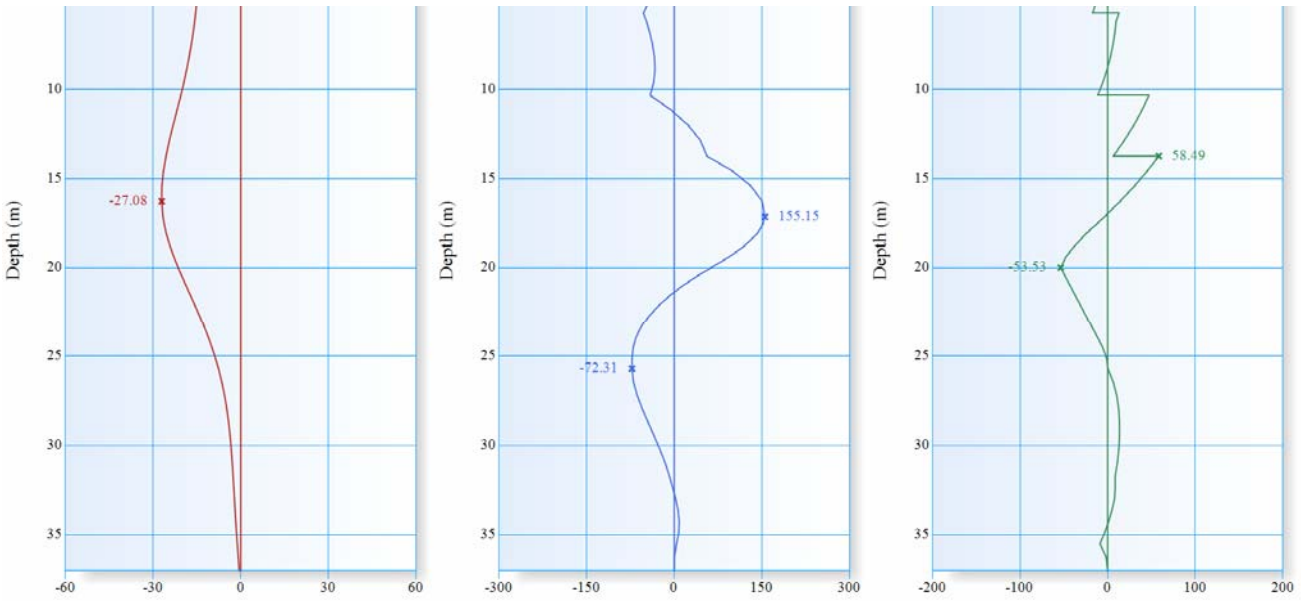
12.020	-18.82	66.41	22.93		0				2	11.89	0.00	1125	
12.883	-18.74	81.53	11.97		0				2	13.50	0.00	1125	
13.745	-18.35	86.60	-0.37		0				2	15.11	0.00	1125	0.00
14.583	-17.68	80.78	-13.68		0				2	16.68	0.00	1125	
15.420	-16.73	63.25	-28.31		0		0.00		2	18.25	0.00	1125	
					2	20.95	0.00	2107	2	18.25	0.00	1125	
16.283	-15.53	39.81	-25.98		2	22.58	0.00	2107	2	19.87	0.00	1125	
17.145	-14.18	18.38	-23.64		2	24.21	0.00	2107	2	21.49	0.00	1125	
17.618	-13.41	7.49	-22.36		2	25.11	0.00	2107	2	22.38	0.00	1125	
18.090	-12.63	-2.79	-21.07		2	26.00	0.00	2107	2	23.26	0.00	1125	
					2	10.38	4.20	2192	2	6.59	11.59	1625	
18.820	-11.43	-18.46	-20.86		2	18.34	4.93	2192	2	6.77	12.32	1625	
19.405	-10.51	-29.66	-16.80		2	24.02	5.52	2192	2	6.92	12.91	1625	
19.990	-9.64	-37.95	-11.65		2	22.36	6.10	2192	2	7.06	13.49	1625	
					2	37.96	0.00	3043	2	22.32	0.00	1625	
20.420	-9.04	-41.62	-5.53		2	36.97	0.00	3043	2	24.13	0.00	1625	
20.983	-8.31	-42.90	0.73		2	35.84	0.00	3043	2	26.40	0.00	1625	
21.545	-7.65	-41.18	5.17		2	34.92	0.00	3043	2	28.56	0.00	1625	
22.108	-7.05	-37.43	7.96		2	34.19	0.00	3043	2	30.62	0.00	1625	
22.670	-6.51	-32.55	9.25		2	33.64	0.00	3043	2	32.58	0.00	1625	
23.220	-6.03	-27.43	9.22		2	33.25	0.00	3043	2	34.43	0.00	1625	
23.320	-5.95	-26.52	9.08		2	33.20	0.00	3043	2	34.75	0.00	1625	
23.913	-5.49	-21.56	7.52		2	32.94	0.00	3043	2	36.65	0.00	1625	
24.505	-5.06	-17.90	4.73		2	32.80	0.00	3043	2	38.48	0.00	1625	
25.098	-4.67	-16.22	0.82		2	32.76	0.00	3043	2	40.27	0.00	1625	
25.690	-4.31	-17.18	-4.14		2	32.80	0.00	3043	2	42.01	0.00	1625	
					2	15.34	16.41	3204	2	7.64	19.19	2375	
26.440	-3.89	-19.03	-0.86		2	14.29	17.25	3204	2	7.86	19.85	2375	
27.190	-3.52	-18.71	1.68		2	13.41	18.09	3204	2	8.07	20.51	2375	
27.940	-3.21	-16.73	3.59		2	12.70	18.94	3204	2	8.29	21.16	2375	
28.690	-2.94	-13.51	4.99		2	12.13	19.78	3204	2	8.53	21.82	2375	
29.440	-2.72	-9.46	5.72		2	11.68	20.62	3204	2	9.45	22.48	2375	
30.190	-2.51	-5.19	5.61		2	11.32	21.46	3204	2	10.30	23.14	2375	
30.940	-2.32	-1.29	4.76		2	11.01	22.31	3204	2	11.12	23.79	2375	
31.690	-2.14	1.71	3.20		2	10.70	23.15	3204	2	11.94	24.45	2375	
					2	12.74	23.15	4216	2	9.79	24.45	3125	
32.345	-1.97	4.06	3.92		2	12.29	23.88	4216	2	10.62	25.03	3125	
33.000	-1.80	6.63	3.87		2	11.81	24.62	4216	2	11.47	25.60	3125	
					2	9.84	24.62	3125	2	11.47	25.60	3125	
33.623	-1.62	8.44	1.93		2	9.52	25.32	3125	2	12.33	26.15	3125	
34.245	-1.43	8.84	-0.69		2	9.15	26.02	3125	2	13.23	26.69	3125	
34.868	-1.22	7.39	-4.03		2	8.73	26.72	3125	2	14.18	27.24	3125	
35.490	-1.00	3.61	-8.17		2	8.26	27.41	3125	2	15.18	27.79	3125	
					2	17.30	27.41	12500	2	4.65	27.79	12500	
36.245	-0.72	0.26	-1.48		2	14.16	28.26	12500	2	8.56	28.45	12500	
37.000	-0.44	0.00	0.00		2	11.01	29.11	12500	2	12.49	29.11	12500	
Max	-0.44	86.60	40.23		D_e = 15.42 (m)		D_w = 15.42 (m)		D_e = 0 (m)		D_w = 1.7 (m)		
Min	-18.82	-42.90	-28.31		[STATE] -1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

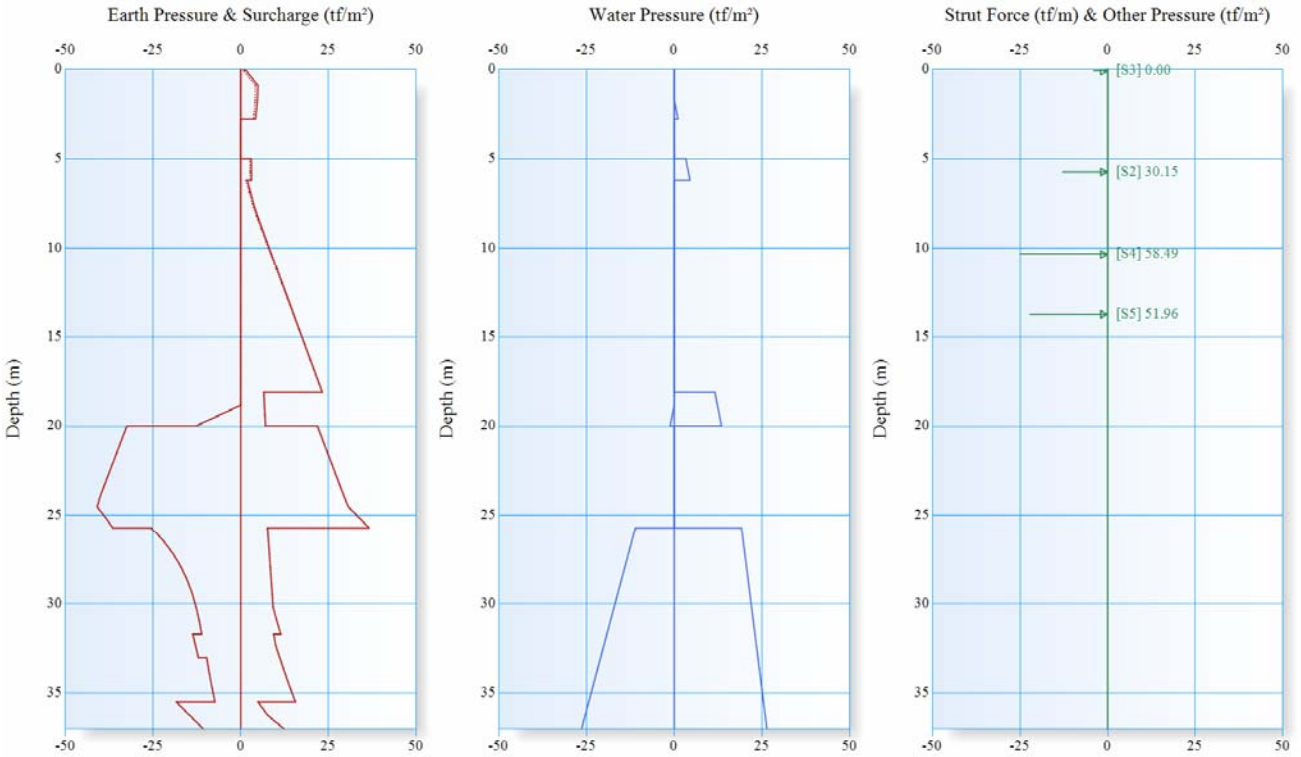
▼ PHASE 11



計畫名稱：XDO Example 3

主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法



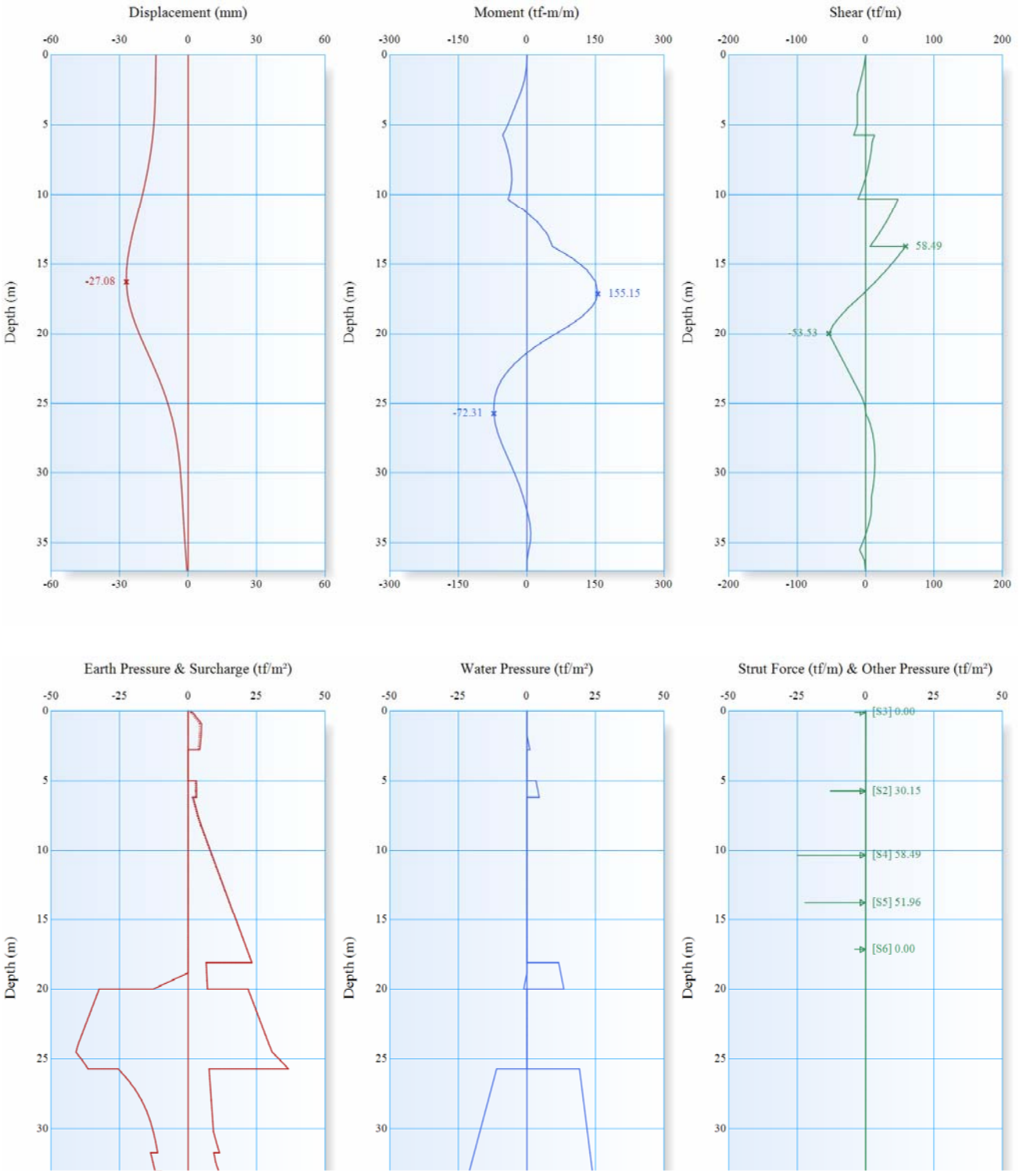


LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-14.09	0.00	0.00		0				1	0.75		1000	
0.100	-14.10	-0.01	-0.12		0				3	1.67		1000	0.00
0.900	-14.18	-1.01	-2.74		0				2	4.88		1000	
1.700	-14.26	-4.78	-6.61		0				2	4.78	0.00	1000	
1.850	-14.28	-5.83	-7.33		0				2	4.70	0.15	1000	-
2.500	-14.36	-11.66	-10.60		0				2	4.39	0.80	1000	
2.790	-14.40	-14.96	-12.12		0				2	4.24	1.09	1000	
					0				-1	0.00	0.00	1625	

3.340	-14.50	-21.65	-12.12		0				-1	0.00	0.00	1625	
3.890	-14.63	-28.33	-12.12		0				-1	0.00	0.00	1625	
4.440	-14.81	-35.01	-12.12		0				-1	0.00	0.00	1625	
4.990	-15.03	-41.70	-12.12		0				-1	0.00	0.00	1625	
					0				2	3.00	3.29	500	
5.745	-15.45	-52.74	-17.18		0				2	3.06	4.05	500	30.15
			12.97		0				2	3.06	4.05	500	
6.190	-15.76	-47.70	9.70		0				2	3.09	4.49	500	
					0				2	1.84	0.00	1125	
6.855	-16.30	-41.74	8.17		0				2	2.77	0.00	1125	
7.520	-16.94	-37.01	6.03		0				2	3.65	0.00	1125	
8.226	-17.71	-33.78	3.04		0				1	4.83	0.00	1125	
8.933	-18.56	-32.96	-0.84		0				1	6.14	0.00	1125	
9.639	-19.49	-35.22	-5.64		0				1	7.45	0.00	1125	
10.345	-20.51	-41.19	-11.37		0				1	8.77	0.00	1125	58.49
			47.12		0				1	8.77	0.00	1125	
11.183	-21.83	-5.01	39.12		0				1	10.33	0.00	1125	
12.020	-23.16	23.92	29.82		0				1	11.89	0.00	1125	
12.883	-24.45	44.99	18.87		0				1	13.50	0.00	1125	
13.745	-25.58	56.02	6.53		0				1	15.11	0.00	1125	51.96
			58.49		0				1	15.11	0.00	1125	
14.583	-26.46	99.50	45.17		0				1	16.68	0.00	1125	
15.420	-27.00	131.27	30.54		0				1	18.25	0.00	1125	
16.283	-27.08	150.60	14.10		0				1	19.87	0.00	1125	
17.145	-26.62	155.15	-3.73		0				1	21.49	0.00	1125	
17.618	-26.13	150.94	-14.10		0				1	22.38	0.00	1125	
18.090	-25.47	141.73	-24.88		0				1	23.26	0.00	1125	
					0				1	6.59	11.59	1625	
18.820	-24.15	118.62	-38.49		0		0.00		1	6.77	12.32	1625	
					3	0.00	0.00	2192	1	6.77	12.32	1625	
19.405	-22.87	93.18	-47.83		3	6.38	0.59	2192	1	6.92	12.91	1625	
19.990	-21.44	63.33	-53.53		3	12.77	1.17	2192	1	7.06	13.49	1625	
					3	32.50	0.00	3043	1	21.88	0.00	1625	
20.420	-20.31	41.29	-48.96		3	33.33	0.00	3043	1	22.71	0.00	1625	
20.983	-18.78	15.41	-42.99		3	34.43	0.00	3043	1	23.80	0.00	1625	
21.545	-17.23	-7.11	-37.02		3	35.52	0.00	3043	1	24.89	0.00	1625	
22.108	-15.69	-26.27	-31.04		3	36.61	0.00	3043	1	25.98	0.00	1625	
22.670	-14.19	-42.07	-25.07		3	37.70	0.00	3043	1	27.06	0.00	1625	
23.220	-12.79	-54.27	-19.22		3	38.77	0.00	3043	1	28.13	0.00	1625	
23.320	-12.55	-56.14	-18.16		3	38.96	0.00	3043	1	28.32	0.00	1625	
23.913	-11.15	-65.05	-11.86		3	40.11	0.00	3043	1	29.47	0.00	1625	
24.505	-9.86	-70.25	-5.67		2	40.97	0.00	3043	2	30.69	0.00	1625	
25.098	-8.69	-72.14	-1.20		2	38.56	0.00	3043	2	33.74	0.00	1625	
25.690	-7.65	-72.31	0.21		2	36.54	0.00	3043	2	36.58	0.00	1625	
					2	25.55	11.05	3204	1	7.64	19.19	2375	
26.440	-6.51	-69.72	6.34		2	22.10	12.07	3204	1	7.91	19.67	2375	
27.190	-5.56	-63.38	10.32		2	19.26	13.09	3204	1	8.17	20.15	2375	
27.940	-4.78	-54.71	12.59		2	16.99	14.11	3204	1	8.44	20.63	2375	
28.690	-4.16	-44.86	13.54		2	15.20	15.13	3204	1	8.70	21.11	2375	
29.440	-3.66	-34.69	13.51		2	13.80	16.15	3204	1	8.97	21.59	2375	
30.190	-3.26	-24.83	12.75		2	12.72	17.17	3204	1	9.23	22.07	2375	
30.940	-2.93	-15.82	11.17		2	11.85	18.19	3204	2	10.28	22.55	2375	
31.690	-2.64	-8.38	8.57		2	11.13	19.21	3204	2	11.42	23.03	2375	
					2	13.71	19.21	4216	1	9.37	23.03	3125	
32.345	-2.40	-2.74	8.59		2	12.89	20.10	4216	2	10.00	23.45	3125	
33.000	-2.17	2.67	7.83		2	12.10	20.99	4216	2	11.10	23.87	3125	

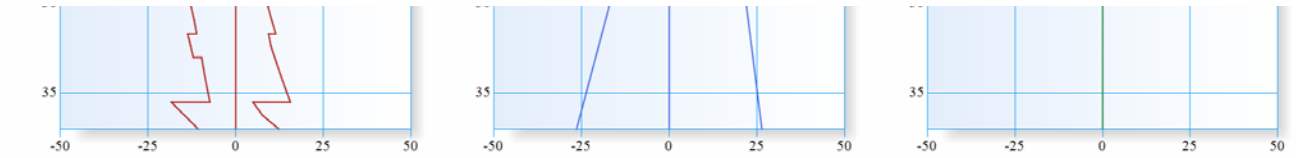
					2	9.73	20.99	3125	2	11.10	23.87	3125	
33.623	-1.95	6.63	4.83		2	9.20	21.84	3125	2	12.16	24.27	3125	
34.245	-1.72	8.49	1.09		2	8.64	22.68	3125	2	13.26	24.67	3125	
34.868	-1.47	7.79	-3.43		2	8.02	23.53	3125	2	14.41	25.06	3125	
35.490	-1.20	4.01	-8.80		2	7.36	24.38	3125	2	15.60	25.46	3125	
					2	18.41	24.38	12500	1	4.89	25.46	12500	
36.245	-0.87	0.30	-1.73		2	14.55	25.40	12500	2	7.72	25.95	12500	
37.000	-0.54	0.00	0.00		2	10.67	26.43	12500	2	12.37	26.43	12500	
Max	-0.54	155.15	58.49		D_e = 18.82 (m) D_w = 18.82 (m)				D_e = 0 (m) D_w = 1.7 (m)				
Min	-27.08	-72.31	-53.53		[STATE] -1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 12



計畫名稱：XDO Example 3

主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

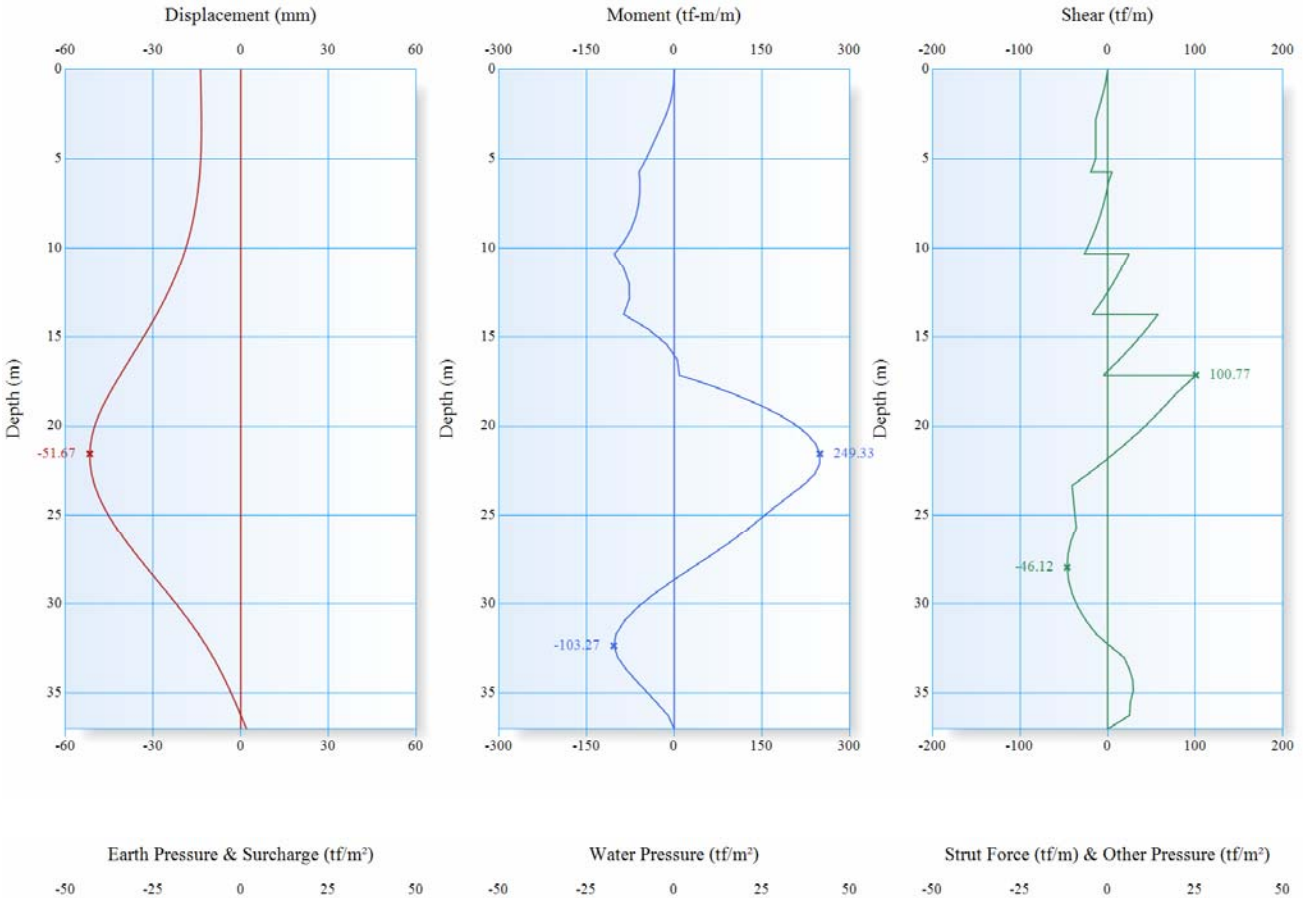


LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-14.09	0.00	0.00		0				1	0.75		1000	
0.100	-14.10	-0.01	-0.12		0				2	1.67		1000	0.00
0.900	-14.18	-1.01	-2.74		0				2	4.88		1000	
1.700	-14.26	-4.78	-6.61		0				2	4.78	0.00	1000	
1.850	-14.28	-5.83	-7.33		0				2	4.70	0.15	1000	-
2.500	-14.36	-11.66	-10.60		0				2	4.39	0.80	1000	
2.790	-14.40	-14.96	-12.12		0				2	4.24	1.09	1000	
					0				-1	0.00	0.00	1625	
3.340	-14.50	-21.65	-12.12		0				-1	0.00	0.00	1625	
3.890	-14.63	-28.33	-12.12		0				-1	0.00	0.00	1625	
4.440	-14.81	-35.01	-12.12		0				-1	0.00	0.00	1625	
4.990	-15.03	-41.70	-12.12		0				-1	0.00	0.00	1625	
					0				2	3.00	3.29	500	
5.745	-15.45	-52.74	-17.18		0				2	3.06	4.05	500	30.15
			12.97		0				2	3.06	4.05	500	
6.190	-15.76	-47.70	9.70		0				2	3.09	4.49	500	
					0				2	1.84	0.00	1125	
6.855	-16.30	-41.74	8.17		0				2	2.77	0.00	1125	
7.520	-16.94	-37.01	6.03		0				2	3.65	0.00	1125	
8.226	-17.71	-33.78	3.04		0				2	4.83	0.00	1125	
8.933	-18.56	-32.96	-0.84		0				2	6.14	0.00	1125	
9.639	-19.49	-35.22	-5.64		0				2	7.45	0.00	1125	
10.345	-20.51	-41.19	-11.37		0				2	8.77	0.00	1125	58.49
			47.12		0				2	8.77	0.00	1125	
11.183	-21.83	-5.01	39.12		0				2	10.33	0.00	1125	
12.020	-23.16	23.92	29.82		0				2	11.89	0.00	1125	
12.883	-24.45	44.99	18.87		0				2	13.50	0.00	1125	
13.745	-25.58	56.02	6.53		0				2	15.11	0.00	1125	51.96
			58.49		0				2	15.11	0.00	1125	
14.583	-26.46	99.50	45.17		0				2	16.68	0.00	1125	
15.420	-27.00	131.27	30.54		0				2	18.25	0.00	1125	
16.283	-27.08	150.60	14.10		0				2	19.87	0.00	1125	
17.145	-26.62	155.15	-3.73		0				2	21.49	0.00	1125	0.00
17.618	-26.13	150.94	-14.10		0				2	22.38	0.00	1125	
18.090	-25.47	141.73	-24.88		0				2	23.26	0.00	1125	
					0				2	6.59	11.59	1625	
18.820	-24.15	118.62	-38.49		0		0.00		2	6.77	12.32	1625	
					3	0.00	0.00	2192	2	6.77	12.32	1625	
19.405	-22.87	93.18	-47.83		2	6.38	0.59	2192	2	6.92	12.91	1625	
19.990	-21.44	63.33	-53.53		2	12.77	1.17	2192	2	7.06	13.49	1625	
					2	32.50	0.00	3043	2	21.88	0.00	1625	
20.420	-20.31	41.29	-48.96		2	33.33	0.00	3043	2	22.71	0.00	1625	
20.983	-18.78	15.41	-42.99		2	34.43	0.00	3043	2	23.80	0.00	1625	
21.545	-17.23	-7.11	-37.02		2	35.52	0.00	3043	2	24.89	0.00	1625	
22.108	-15.69	-26.27	-31.04		2	36.61	0.00	3043	2	25.98	0.00	1625	
22.670	-14.19	-42.07	-25.07		2	37.70	0.00	3043	2	27.06	0.00	1625	

計畫名稱：XDO Example 3
主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

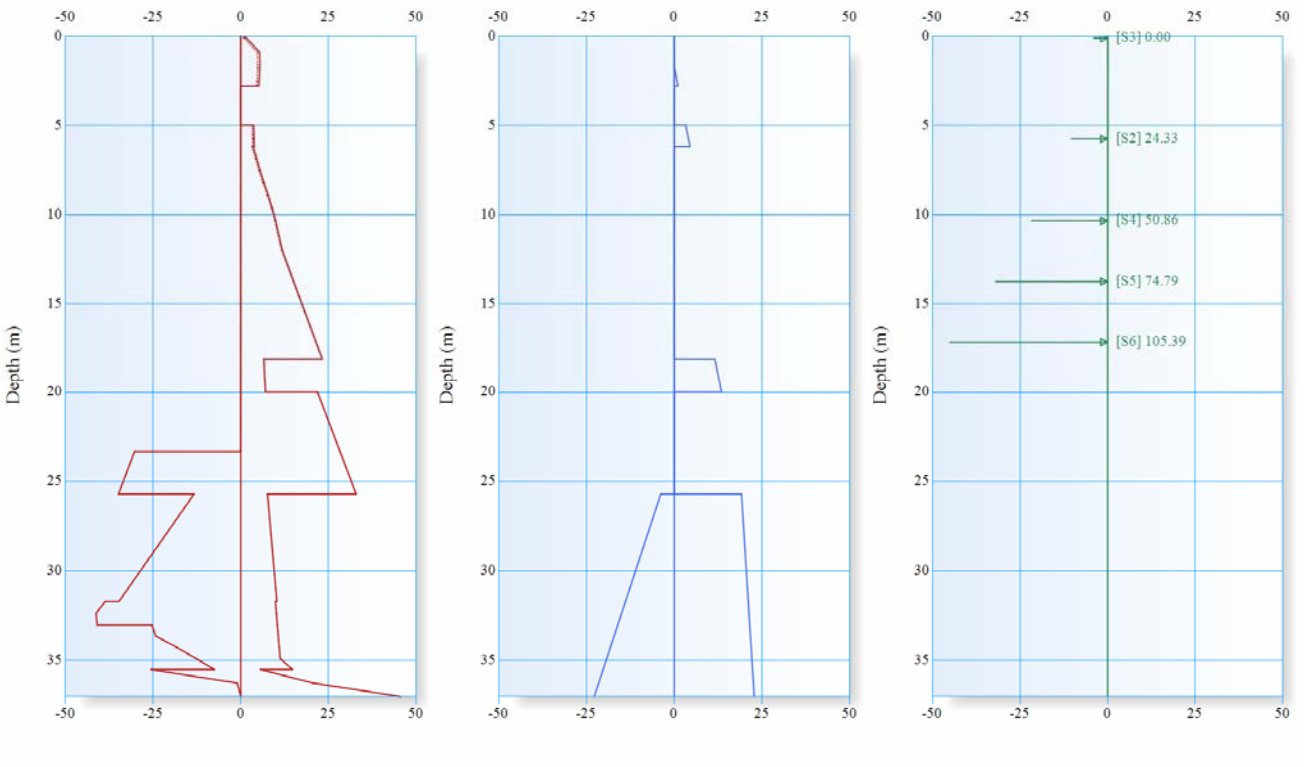
23.220	-12.79	-54.27	-19.22		2	38.77	0.00	3043	2	28.13	0.00	1625	
23.320	-12.55	-56.14	-18.16		2	38.96	0.00	3043	2	28.32	0.00	1625	
23.913	-11.15	-65.05	-11.86		2	40.11	0.00	3043	2	29.47	0.00	1625	
24.505	-9.86	-70.25	-5.67		2	40.97	0.00	3043	2	30.69	0.00	1625	
25.098	-8.69	-72.14	-1.20		2	38.56	0.00	3043	2	33.74	0.00	1625	
25.690	-7.65	-72.31	0.21		2	36.54	0.00	3043	2	36.58	0.00	1625	
					2	25.55	11.05	3204	2	7.64	19.19	2375	
26.440	-6.51	-69.72	6.34		2	22.10	12.07	3204	2	7.91	19.67	2375	
27.190	-5.56	-63.38	10.32		2	19.26	13.09	3204	2	8.17	20.15	2375	
27.940	-4.78	-54.71	12.59		2	16.99	14.11	3204	2	8.44	20.63	2375	
28.690	-4.16	-44.86	13.54		2	15.20	15.13	3204	2	8.70	21.11	2375	
29.440	-3.66	-34.69	13.51		2	13.80	16.15	3204	2	8.97	21.59	2375	
30.190	-3.26	-24.83	12.75		2	12.72	17.17	3204	2	9.23	22.07	2375	
30.940	-2.93	-15.82	11.17		2	11.85	18.19	3204	2	10.28	22.55	2375	
31.690	-2.64	-8.38	8.57		2	11.13	19.21	3204	2	11.42	23.03	2375	
					2	13.71	19.21	4216	2	9.37	23.03	3125	
32.345	-2.40	-2.74	8.59		2	12.89	20.10	4216	2	10.00	23.45	3125	
33.000	-2.17	2.67	7.83		2	12.10	20.99	4216	2	11.10	23.87	3125	
					2	9.73	20.99	3125	2	11.10	23.87	3125	
33.623	-1.95	6.63	4.83		2	9.20	21.84	3125	2	12.16	24.27	3125	
34.245	-1.72	8.49	1.09		2	8.64	22.68	3125	2	13.26	24.67	3125	
34.868	-1.47	7.79	-3.43		2	8.02	23.53	3125	2	14.41	25.06	3125	
35.490	-1.20	4.01	-8.80		2	7.36	24.38	3125	2	15.60	25.46	3125	
					2	18.41	24.38	12500	2	4.89	25.46	12500	
36.245	-0.87	0.30	-1.73		2	14.55	25.40	12500	2	7.72	25.95	12500	
37.000	-0.54	0.00	0.00		2	10.67	26.43	12500	2	12.37	26.43	12500	
Max	-0.54	155.15	58.49		D_e = 18.82 (m)　D_w = 18.82 (m)				D_e = 0 (m)　D_w = 1.7 (m)				
Min	-27.08	-72.31	-53.53		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

▼ PHASE 13



計畫名稱：XDO Example 3

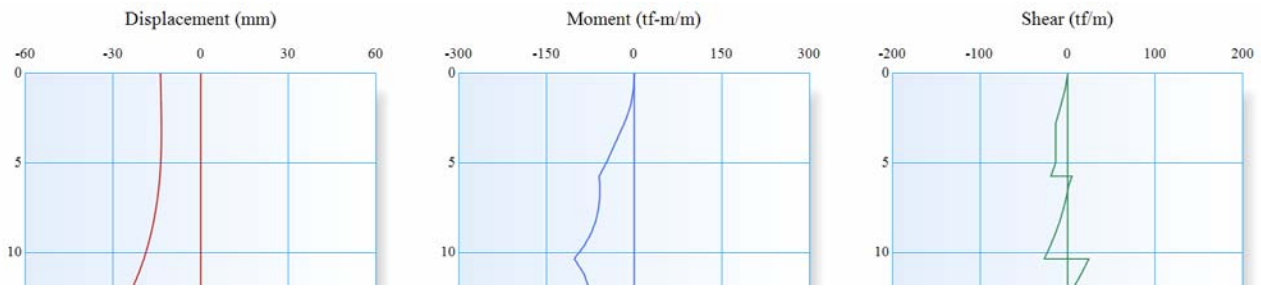
主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法



LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-13.77	0.00	0.00		0				1	0.75		1000	
0.100	-13.76	-0.03	-0.12		0				3	1.67		1000	0.00
0.900	-13.67	-1.24	-2.95		0				2	5.40		1000	
1.700	-13.58	-5.51	-7.28		0				2	5.46	0.00	1000	
1.850	-13.56	-6.70	-8.11		0				2	5.42	0.15	1000	-
2.500	-13.51	-13.33	-11.88		0				2	5.24	0.80	1000	
2.790	-13.49	-17.10	-13.66		0				2	5.15	1.09	1000	
					0				-1	0.00	0.00	1625	
3.340	-13.48	-24.74	-13.66		0				-1	0.00	0.00	1625	
3.890	-13.50	-32.38	-13.66		0				-1	0.00	0.00	1625	
4.440	-13.57	-40.01	-13.66		0				-1	0.00	0.00	1625	
4.990	-13.70	-47.65	-13.66		0				-1	0.00	0.00	1625	
					0				2	3.67	3.29	500	
5.745	-13.99	-60.20	-19.24		0				2	3.79	4.05	500	24.33
			5.09		0				2	3.79	4.05	500	
6.190	-14.23	-58.83	1.49		0				2	3.85	4.49	500	
					0				2	3.55	0.00	1125	
6.855	-14.71	-58.85	-1.21		0				2	4.57	0.00	1125	
7.520	-15.30	-60.89	-4.55		0				2	5.49	0.00	1125	
8.226	-16.08	-65.73	-8.84		0				2	6.67	0.00	1125	
8.933	-17.02	-73.89	-13.97		0				2	7.88	0.00	1125	
9.639	-18.13	-85.97	-19.92		0				2	8.99	0.00	1125	
10.345	-19.45	-102.52	-26.60		0				2	9.96	0.00	1125	50.86
			24.26		0				2	9.96	0.00	1125	
11.183	-21.32	-86.00	15.53		0				2	10.90	0.00	1125	
12.020	-23.48	-77.12	6.00		0				1	11.89	0.00	1125	
12.883	-25.98	-76.76	-4.94		0				1	13.50	0.00	1125	
13.745	-28.76	-86.44	-17.26		0				1	15.11	0.00	1125	74.79
			57.52		0				1	15.11	0.00	1125	

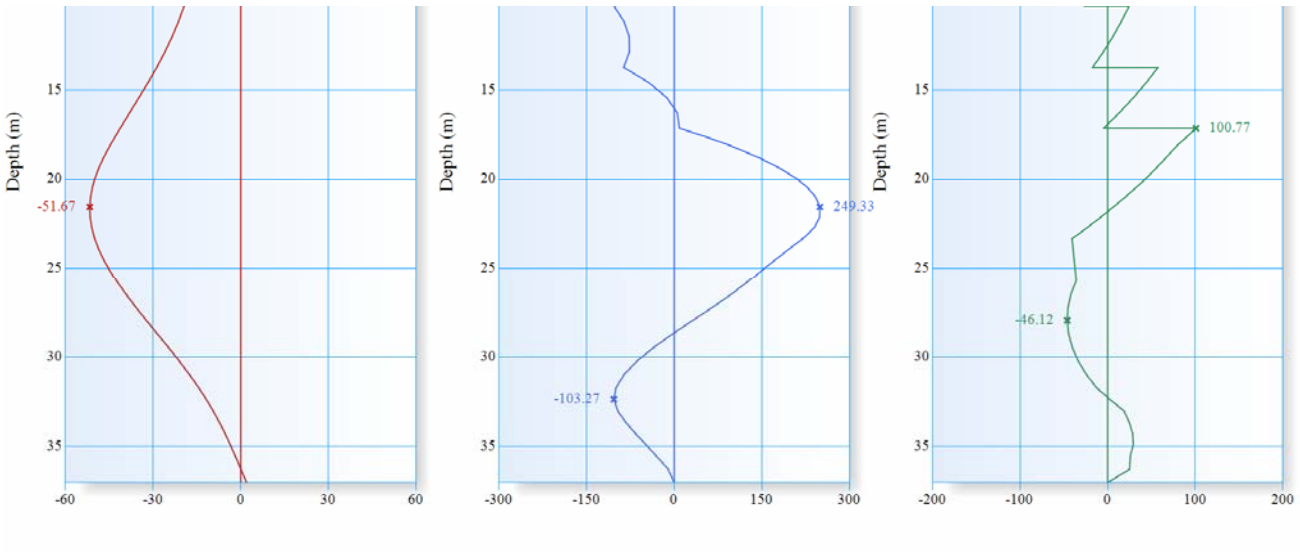
14.583	-31.71	-43.93	44.22		0				1	16.68	0.00	1125	
15.420	-34.82	-13.11	29.61		0				1	18.25	0.00	1125	
16.283	-38.06	5.25	13.19		0				1	19.87	0.00	1125	
17.145	-41.28	8.85	-4.62		0				1	21.49	0.00	1125	105.39
			100.77		0				1	21.49	0.00	1125	
17.618	-43.02	53.92	90.42		0				1	22.38	0.00	1125	
18.090	-44.70	94.01	79.65		0				1	23.26	0.00	1125	
					0				1	6.59	11.59	1625	
18.820	-47.07	147.06	66.05		0				1	6.77	12.32	1625	
19.405	-48.69	182.25	54.67		0				1	6.92	12.91	1625	
19.990	-50.00	210.67	42.87		0				1	7.06	13.49	1625	
					0				1	21.88	0.00	1625	
20.420	-50.74	226.96	33.29		0				1	22.71	0.00	1625	
20.983	-51.39	241.90	20.22		0				1	23.80	0.00	1625	
21.545	-51.67	249.33	6.54		0				1	24.89	0.00	1625	
22.108	-51.55	248.89	-7.75		0				1	25.98	0.00	1625	
22.670	-51.04	240.24	-22.65		0				1	27.06	0.00	1625	
23.220	-50.17	223.52	-37.81		0				1	28.13	0.00	1625	
23.320	-49.98	219.57	-40.62		0		0.00		1	28.32	0.00	1625	
					3	30.29	0.00	3043	1	28.32	0.00	1625	
23.913	-48.61	195.72	-39.42		3	31.44	0.00	3043	1	29.47	0.00	1625	
24.505	-46.91	172.59	-38.21		3	32.59	0.00	3043	1	30.61	0.00	1625	
25.098	-44.89	150.18	-36.99		3	33.74	0.00	3043	1	31.76	0.00	1625	
25.690	-42.62	128.48	-35.78		3	34.89	0.00	3043	1	32.91	0.00	1625	
					3	13.32	3.83	3204	1	7.64	19.19	2375	
26.440	-39.43	99.08	-41.75		3	16.00	5.09	3204	1	7.97	19.43	2375	
27.190	-35.95	66.14	-45.20		3	18.68	6.35	3204	1	8.30	19.67	2375	
27.940	-32.29	31.56	-46.12		3	21.36	7.61	3204	1	8.63	19.91	2375	
28.690	-28.54	-2.76	-44.52		3	24.04	8.87	3204	1	8.97	20.15	2375	
29.440	-24.80	-34.93	-40.39		3	26.72	10.13	3204	1	9.30	20.39	2375	
30.190	-21.15	-63.05	-33.73		3	29.40	11.39	3204	1	9.63	20.63	2375	
30.940	-17.67	-85.23	-24.54		3	32.07	12.65	3204	1	9.96	20.88	2375	
31.690	-14.43	-99.58	-12.83		3	34.75	13.90	3204	1	10.29	21.12	2375	
					3	38.66	13.90	4216	1	9.87	21.12	3125	
32.345	-11.82	-103.27	2.40		3	41.28	15.00	4216	1	10.15	21.33	3125	
33.000	-9.43	-96.49	18.78		2	40.98	16.10	4216	1	10.43	21.54	3125	
					3	25.34	16.10	3125	1	10.43	21.54	3125	
33.623	-7.35	-83.13	24.55		2	24.26	17.15	3125	1	10.70	21.74	3125	
34.245	-5.43	-66.59	28.50		2	18.33	18.19	3125	1	10.96	21.94	3125	
34.868	-3.63	-48.61	29.23		2	12.80	19.24	3125	1	11.23	22.14	3125	
35.490	-1.94	-31.32	25.96		2	7.56	20.28	3125	2	14.73	22.34	3125	
					2	25.62	20.28	12500	1	5.65	22.34	12500	
36.245	0.04	-10.43	24.96		2	1.02	21.55	12500	2	20.63	22.58	12500	
37.000	1.99	0.00	0.00		-1	0.00	22.82	12500	2	45.58	22.82	12500	
Max	1.99	249.33	100.77		D_e = 23.32 (m)		D_w = 23.32 (m)		D_e = 0 (m)		D_w = 1.7 (m)		
Min	-51.67	-103.27	-46.12		[STATE] -1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

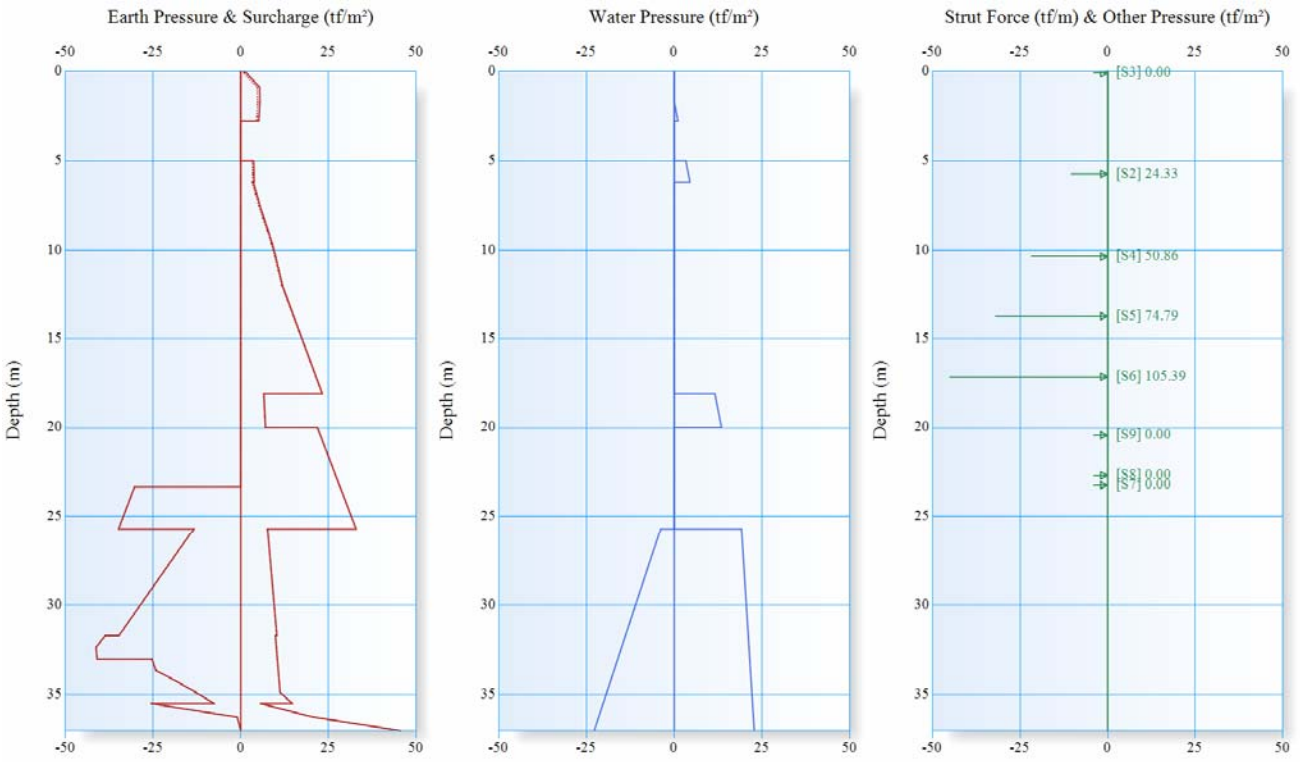
▼ PHASE 14



計畫名稱：XDO Example 3

主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法





LEVEL	WALL				SOIL 1				SOIL 2				STRUTS
	X	M	V	q	STATE	σ	u	k_h	STATE	σ	u	k_h	P_s
(m)	(mm)	(tf-m/m)	(tf/m)	(tf/m^2)		(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^3)	(tf)
0.000	-13.77	0.00	0.00		0				1	0.75		1000	
0.100	-13.76	-0.03	-0.12		0				2	1.67		1000	0.00
0.900	-13.67	-1.24	-2.95		0				2	5.40		1000	
1.700	-13.58	-5.51	-7.28		0				2	5.46	0.00	1000	
1.850	-13.56	-6.70	-8.11		0				2	5.42	0.15	1000	-
2.500	-13.51	-13.33	-11.88		0				2	5.24	0.80	1000	
2.790	-13.49	-17.10	-13.66		0				2	5.15	1.09	1000	
					0				-1	0.00	0.00	1625	
3.340	-13.48	-24.74	-13.66		0				-1	0.00	0.00	1625	
3.890	-13.50	-32.38	-13.66		0				-1	0.00	0.00	1625	
4.440	-13.57	-40.01	-13.66		0				-1	0.00	0.00	1625	

4.990	-13.70	-47.65	-13.66		0				-1	0.00	0.00	1625	
					0				2	3.67	3.29	500	
5.745	-13.99	-60.20	-19.24		0				2	3.79	4.05	500	24.33
			5.09		0				2	3.79	4.05	500	
6.190	-14.23	-58.83	1.49		0				2	3.85	4.49	500	
					0				2	3.55	0.00	1125	
6.855	-14.71	-58.85	-1.21		0				2	4.57	0.00	1125	
7.520	-15.30	-60.89	-4.55		0				2	5.49	0.00	1125	
8.226	-16.08	-65.73	-8.84		0				2	6.67	0.00	1125	
8.933	-17.02	-73.89	-13.97		0				2	7.88	0.00	1125	
9.639	-18.13	-85.97	-19.92		0				2	8.99	0.00	1125	
10.345	-19.45	-102.52	-26.60		0				2	9.96	0.00	1125	50.86
			24.26		0				2	9.96	0.00	1125	
11.183	-21.32	-86.00	15.53		0				2	10.90	0.00	1125	
12.020	-23.48	-77.12	6.00		0				2	11.89	0.00	1125	
12.883	-25.98	-76.76	-4.94		0				2	13.50	0.00	1125	
13.745	-28.76	-86.44	-17.26		0				2	15.11	0.00	1125	74.79
			57.52		0				2	15.11	0.00	1125	
14.583	-31.71	-43.93	44.22		0				2	16.68	0.00	1125	
15.420	-34.82	-13.11	29.61		0				2	18.25	0.00	1125	
16.283	-38.06	5.25	13.19		0				2	19.87	0.00	1125	
17.145	-41.28	8.85	-4.62		0				2	21.49	0.00	1125	105.39
			100.77		0				2	21.49	0.00	1125	
17.618	-43.02	53.92	90.42		0				2	22.38	0.00	1125	
18.090	-44.70	94.01	79.65		0				2	23.26	0.00	1125	
					0				2	6.59	11.59	1625	
18.820	-47.07	147.06	66.05		0				2	6.77	12.32	1625	
19.405	-48.69	182.25	54.67		0				2	6.92	12.91	1625	
19.990	-50.00	210.67	42.87		0				2	7.06	13.49	1625	
					0				2	21.88	0.00	1625	
20.420	-50.74	226.96	33.29		0				2	22.71	0.00	1625	0.00
20.983	-51.39	241.90	20.22		0				2	23.80	0.00	1625	
21.545	-51.67	249.33	6.54		0				2	24.89	0.00	1625	
22.108	-51.55	248.89	-7.75		0				2	25.98	0.00	1625	
22.670	-51.04	240.24	-22.65		0				2	27.06	0.00	1625	0.00
23.220	-50.17	223.52	-37.81		0				2	28.13	0.00	1625	0.00
23.320	-49.98	219.57	-40.62		0		0.00		2	28.32	0.00	1625	
					2	30.29	0.00	3043	2	28.32	0.00	1625	
23.913	-48.61	195.72	-39.42		2	31.44	0.00	3043	2	29.47	0.00	1625	
24.505	-46.91	172.59	-38.21		2	32.59	0.00	3043	2	30.61	0.00	1625	
25.098	-44.89	150.17	-36.99		2	33.74	0.00	3043	2	31.76	0.00	1625	
25.690	-42.62	128.48	-35.78		2	34.89	0.00	3043	2	32.91	0.00	1625	
					2	13.32	3.83	3204	2	7.64	19.19	2375	
26.440	-39.43	99.08	-41.75		2	16.00	5.09	3204	2	7.97	19.43	2375	
27.190	-35.95	66.14	-45.20		2	18.68	6.35	3204	2	8.30	19.67	2375	
27.940	-32.29	31.56	-46.12		2	21.36	7.61	3204	2	8.63	19.91	2375	
28.690	-28.54	-2.76	-44.52		2	24.04	8.87	3204	2	8.97	20.15	2375	
29.440	-24.80	-34.93	-40.39		2	26.72	10.13	3204	2	9.30	20.39	2375	
30.190	-21.15	-63.05	-33.73		2	29.40	11.39	3204	2	9.63	20.63	2375	
30.940	-17.67	-85.23	-24.54		2	32.07	12.65	3204	2	9.96	20.88	2375	
31.690	-14.43	-99.58	-12.83		2	34.75	13.90	3204	2	10.29	21.12	2375	
					2	38.66	13.90	4216	2	9.87	21.12	3125	
32.345	-11.82	-103.27	2.40		2	41.28	15.00	4216	2	10.15	21.33	3125	
33.000	-9.43	-96.49	18.78		2	40.98	16.10	4216	2	10.43	21.54	3125	
					2	25.34	16.10	3125	2	10.43	21.54	3125	
33.623	-7.35	-83.13	24.55		2	24.26	17.15	3125	2	10.70	21.74	3125	

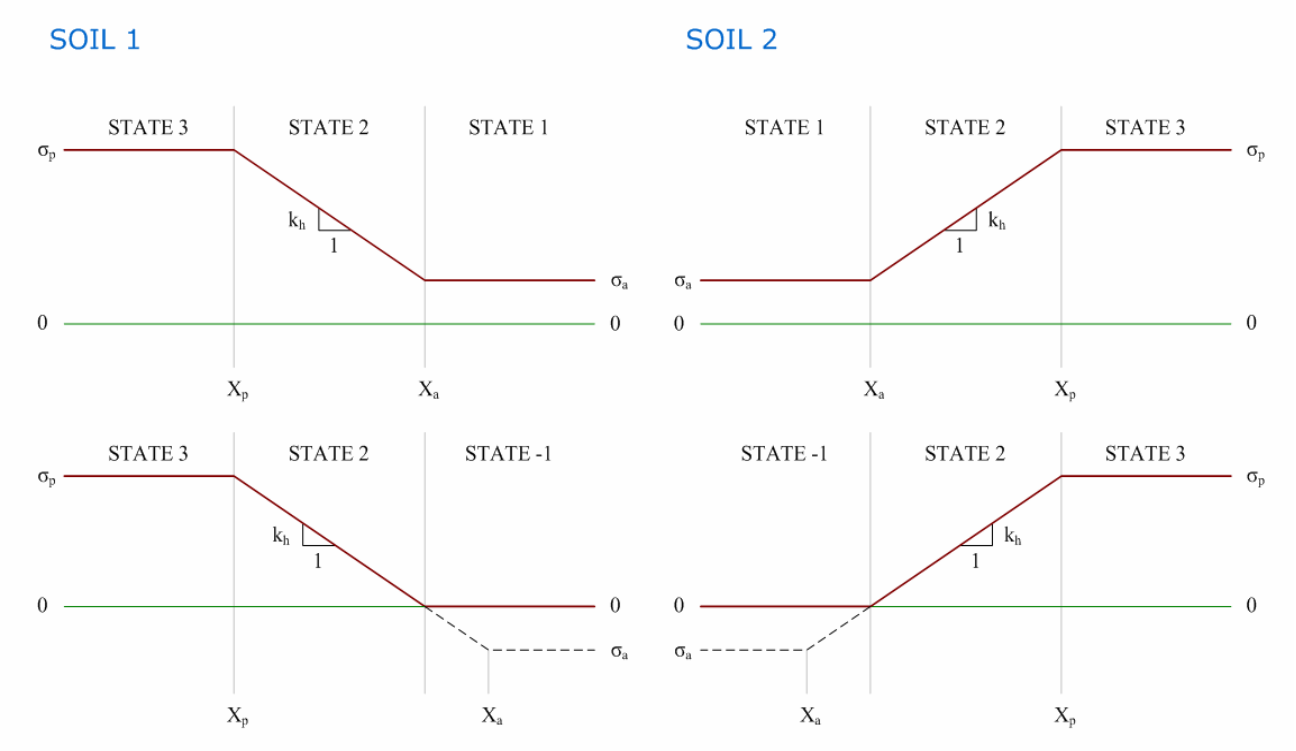
計畫名稱：XDO Example 3

主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

34.245	-5.43	-66.59	28.50		2	18.33	18.19	3125	2	10.96	21.94	3125	
34.868	-3.63	-48.61	29.23		2	12.80	19.24	3125	2	11.23	22.14	3125	
35.490	-1.94	-31.32	25.96		2	7.56	20.28	3125	2	14.73	22.34	3125	
					2	25.62	20.28	12500	2	5.65	22.34	12500	
36.245	0.04	-10.43	24.96		2	1.02	21.55	12500	2	20.63	22.58	12500	
37.000	1.99	0.00	0.00		-1	0.00	22.82	12500	2	45.58	22.82	12500	
Max	1.99	249.33	100.77		D_e = 23.32 (m)　D_w = 23.32 (m)				D_e = 0 (m)　D_w = 1.7 (m)				
Min	-51.67	-103.27	-46.12		[STATE]　-1 : 牆土分離 / 0 : 開挖 / 1 : 主動態 / 2 : 彈性態 / 3 : 被動態								

計畫名稱：XDO Example 3
主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

XDO 土壤彈簧應力與變位



▼ PHASE 1

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-2.47	0									1	0.75	0.00	0.75	-	-	0.75	0.75	1000
0.100	-2.46	0									1	0.81	0.07	0.74	-0.04	0.82	0.81	1.67	1000
0.900	-2.31	0									1	1.28	0.59	0.69	-0.37	7.41	1.28	9.07	1000
1.700	-2.17	0									1	1.75	1.11	0.64	-0.70	14.01	1.75	16.46	1000
1.850	-2.14	0									1	1.79	1.15	0.63	-0.73	14.61	1.79	17.13	1000
2.500	-2.03	0									1	1.95	1.36	0.59	-0.86	17.22	1.95	20.04	1000
		3	0.00	0.00	0.00	-	-	0.00	0.00	1349	1	1.95	1.36	0.59	-0.86	17.22	1.95	20.04	1000
2.790	-1.98	3	2.25	2.25	0.00	0.04	-1.56	0.09	2.25	1349	1	2.03	1.45	0.58	-0.92	18.38	2.03	21.33	1000
		2	6.60	6.60	0.00	9.95	-9.95	-29.72	30.85	3043	2	2.80	2.22	0.58	-9.91	9.91	-10.08	22.11	1625
3.340	-1.90	2	7.37	7.37	0.00	9.95	-9.95	-28.69	31.89	3043	2	3.93	3.39	0.54	-9.91	9.91	-9.08	23.12	1625
3.890	-1.82	2	8.18	8.18	0.00	9.95	-9.95	-27.65	32.92	3043	2	5.06	4.54	0.51	-9.91	9.91	-8.08	24.12	1625
4.440	-1.76	2	9.03	9.03	0.00	9.95	-9.95	-26.62	33.96	3043	2	6.16	5.68	0.48	-9.91	9.91	-7.07	25.12	1625
4.990	-1.71	2	9.91	9.91	0.00	9.95	-9.95	-25.59	34.99	3043	2	7.25	6.79	0.45	-9.91	9.91	-6.07	26.13	1625
		2	1.91	1.91	0.00	0.44	-17.72	0.45	12.71	675	2	2.94	2.48	0.45	-2.64	58.35	2.47	32.97	500
5.745	-1.66	2	2.22	2.22	0.00	0.64	-25.97	0.66	18.63	675	2	3.27	2.86	0.42	-2.92	64.45	2.64	36.33	500
6.190	-1.63	2	2.41	2.41	0.00	0.76	-30.83	0.79	22.11	675	2	3.47	3.08	0.39	-3.08	68.04	2.75	38.31	500
		2	10.39	10.39	0.00	9.94	-9.94	-14.01	27.90	2107	2	10.38	9.98	0.39	-9.91	9.91	1.07	23.36	1125
6.855	-1.61	2	11.58	11.58	0.00	9.94	-9.94	-12.75	29.15	2107	2	11.64	11.27	0.36	-9.91	9.91	2.30	24.59	1125
7.520	-1.58	2	12.80	12.80	0.00	9.94	-9.94	-11.49	30.41	2107	2	12.89	12.55	0.34	-9.91	9.91	3.53	25.82	1125
8.226	-1.57	2	14.10	14.10	0.00	9.94	-9.94	-10.16	31.75	2107	2	14.21	13.90	0.31	-9.91	9.91	4.83	27.12	1125
8.933	-1.56	2	15.41	15.41	0.00	9.94	-9.94	-8.82	33.08	2107	2	15.54	15.25	0.28	-9.91	9.91	6.14	28.43	1125
9.639	-1.55	2	16.73	16.73	0.00	9.94	-9.94	-7.49	34.42	2107	2	16.86	16.60	0.26	-9.91	9.91	7.45	29.74	1125
10.345	-1.54	2	18.05	18.05	0.00	9.94	-9.94	-6.15	35.75	2107	2	18.18	17.94	0.24	-9.91	9.91	8.77	31.06	1125
11.183	-1.53	2	19.61	19.61	0.00	9.94	-9.94	-4.57	37.33	2107	2	19.75	19.53	0.22	-9.91	9.91	10.33	32.62	1125
12.020	-1.52	2	21.17	21.17	0.00	9.94	-9.94	-2.99	38.92	2107	2	21.32	21.13	0.19	-9.91	9.91	11.89	34.18	1125

12.883	-1.50	2	22.76	22.76	0.00	9.94	-9.94	-1.36	40.55	2107	2	22.96	22.78	0.18	-9.91	9.91	13.50	35.79	1125
13.745	-1.47	2	24.33	24.33	0.00	9.94	-9.94	0.27	42.18	2107	2	24.60	24.44	0.16	-9.91	9.91	15.11	37.40	1125
14.583	-1.44	2	25.84	25.84	0.00	9.94	-9.94	1.86	43.76	2107	2	26.21	26.06	0.14	-9.91	9.91	16.68	38.97	1125
15.420	-1.40	2	27.33	27.33	0.00	9.94	-9.94	3.44	45.34	2107	2	27.82	27.69	0.13	-9.91	9.91	18.25	40.54	1125
16.283	-1.34	2	28.85	28.85	0.00	9.94	-9.94	5.07	46.97	2107	2	29.50	29.38	0.12	-9.91	9.91	19.87	42.16	1125
17.145	-1.28	2	30.35	30.35	0.00	9.94	-9.94	6.70	48.60	2107	2	31.19	31.08	0.11	-9.91	9.91	21.49	43.78	1125
17.618	-1.25	2	31.17	31.17	0.00	9.94	-9.94	7.59	49.50	2107	2	32.12	32.01	0.10	-9.91	9.91	22.38	44.66	1125
18.090	-1.21	2	31.99	31.99	0.00	9.94	-9.94	8.48	50.39	2107	2	33.04	32.95	0.10	-9.91	9.91	23.26	45.55	1125
		2	11.31	11.31	0.00	1.62	-95.88	5.10	218.83	2192	2	9.14	9.05	0.10	-2.78	87.04	6.59	152.56	1625
18.820	-1.16	2	11.51	11.51	0.00	1.68	-99.37	5.29	226.80	2192	2	9.54	9.45	0.09	-2.86	89.53	6.77	156.91	1625
19.405	-1.12	2	11.68	11.68	0.00	1.73	-102.17	5.44	233.18	2192	2	9.85	9.76	0.08	-2.93	91.52	6.92	160.40	1625
19.990	-1.09	2	11.86	11.86	0.00	1.77	-104.97	5.59	239.57	2192	2	10.15	10.08	0.08	-2.99	93.52	7.06	163.89	1625
		2	36.33	36.33	0.00	9.95	-9.95	2.74	63.32	3043	2	36.22	36.14	0.08	-9.91	9.91	21.88	54.08	1625
20.420	-1.06	2	37.09	37.09	0.00	9.95	-9.95	3.57	64.15	3043	2	37.09	37.01	0.07	-9.91	9.91	22.71	54.91	1625
20.983	-1.03	2	38.09	38.09	0.00	9.95	-9.95	4.66	65.24	3043	2	38.22	38.15	0.07	-9.91	9.91	23.80	56.00	1625
21.545	-1.00	2	39.09	39.09	0.00	9.95	-9.95	5.76	66.33	3043	2	39.36	39.29	0.07	-9.91	9.91	24.89	57.08	1625
22.108	-0.97	2	40.08	40.08	0.00	9.95	-9.95	6.85	67.42	3043	2	40.50	40.44	0.06	-9.91	9.91	25.98	58.17	1625
22.670	-0.94	2	41.08	41.08	0.00	9.95	-9.95	7.94	68.52	3043	2	41.64	41.58	0.06	-9.91	9.91	27.06	59.26	1625
23.220	-0.90	2	42.04	42.04	0.00	9.95	-9.95	9.01	69.58	3043	2	42.76	42.70	0.06	-9.91	9.91	28.13	60.32	1625
23.320	-0.89	2	42.21	42.21	0.00	9.95	-9.95	9.20	69.78	3043	2	42.96	42.91	0.06	-9.91	9.91	28.32	60.52	1625
23.913	-0.85	2	43.23	43.23	0.00	9.95	-9.95	10.35	70.93	3043	2	44.18	44.13	0.05	-9.91	9.91	29.47	61.66	1625
24.505	-0.81	2	44.25	44.25	0.00	9.95	-9.95	11.50	72.08	3043	2	45.40	45.35	0.05	-9.91	9.91	30.61	62.81	1625
25.098	-0.76	2	45.25	45.25	0.00	9.95	-9.95	12.65	73.22	3043	2	46.62	46.58	0.05	-9.91	9.91	31.76	63.96	1625
25.690	-0.71	2	46.25	46.25	0.00	9.95	-9.95	13.80	74.37	3043	2	47.85	47.81	0.04	-9.91	9.91	32.91	65.10	1625
		2	13.98	13.98	0.00	1.67	-103.57	6.36	343.54	3204	2	12.35	12.30	0.04	-2.69	87.95	7.64	222.92	2375
26.440	-0.65	2	14.11	14.11	0.00	1.71	-106.48	6.56	353.18	3204	2	12.83	12.78	0.04	-2.75	90.00	7.83	228.11	2375
27.190	-0.59	2	14.25	14.25	0.00	1.75	-109.38	6.75	362.83	3204	2	13.29	13.25	0.04	-2.81	92.05	8.02	233.30	2375
27.940	-0.54	2	14.42	14.42	0.00	1.80	-112.29	6.94	372.48	3204	2	13.75	13.71	0.04	-2.87	94.09	8.21	238.50	2375
28.690	-0.49	2	14.60	14.60	0.00	1.84	-115.20	7.14	382.13	3204	2	14.18	14.15	0.03	-2.92	96.14	8.41	243.69	2375
29.440	-0.45	2	14.80	14.80	0.00	1.88	-118.11	7.33	391.78	3204	2	14.61	14.58	0.03	-2.98	98.19	8.60	248.89	2375
30.190	-0.42	2	15.02	15.02	0.00	1.92	-121.02	7.52	401.43	3204	2	15.02	14.99	0.03	-3.04	100.24	8.79	254.08	2375
30.940	-0.38	2	15.24	15.24	0.00	1.97	-123.92	7.72	411.08	3204	2	15.43	15.40	0.03	-3.10	102.29	8.98	259.28	2375
31.690	-0.35	2	15.47	15.47	0.00	2.01	-126.83	7.91	420.72	3204	2	15.84	15.81	0.03	-3.16	104.34	9.17	264.47	2375
		2	15.37	15.37	0.00	1.49	-108.46	7.60	471.17	4216	2	15.04	15.02	0.03	-2.35	88.12	8.80	291.50	3125
32.345	-0.32	2	15.53	15.53	0.00	1.52	-110.63	7.76	480.61	4216	2	15.41	15.38	0.03	-2.39	89.63	8.96	296.51	3125
33.000	-0.29	2	15.69	15.69	0.00	1.55	-112.81	7.92	490.05	4216	2	15.78	15.76	0.02	-2.42	91.14	9.12	301.51	3125
		2	15.37	15.37	0.00	2.13	-79.17	7.81	261.86	3125	2	15.78	15.76	0.02	-2.42	91.14	9.12	301.51	3125
33.623	-0.26	2	15.55	15.55	0.00	2.16	-80.61	7.96	266.61	3125	2	16.13	16.11	0.02	-2.46	92.58	9.27	306.27	3125
34.245	-0.23	2	15.71	15.71	0.00	2.20	-82.04	8.12	271.37	3125	2	16.50	16.48	0.02	-2.50	94.02	9.43	311.03	3125
34.868	-0.20	2	15.87	15.87	0.00	2.23	-83.48	8.27	276.13	3125	2	16.87	16.85	0.02	-2.53	95.45	9.58	315.78	3125
35.490	-0.16	2	16.03	16.03	0.00	2.27	-84.92	8.43	280.88	3125	2	17.25	17.23	0.02	-2.57	96.89	9.73	320.54	3125
		2	16.57	16.57	0.00	0.94	-29.35	2.82	381.46	12500	2	14.59	14.57	0.02	-1.01	33.10	4.03	430.36	12500
36.245	-0.12	2	16.39	16.39	0.00	0.95	-30.05	3.04	390.54	12500	2	15.53	15.52	0.02	-1.02	33.80	4.25	439.45	12500
37.000	-0.07	2	16.21	16.21	0.00	0.96	-30.75	3.26	399.63	12500	2	16.48	16.47	0.02	-1.03	34.49	4.47	448.53	12500

▼ PHASE 2

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-1.80	0									1	0.75	0.00	0.75	-	-	0.75	0.75	1000
0.100	-1.79	0									2	1.48	0.73	0.74	-2.46	-1.59	0.81	1.67	1000
0.900	-1.73	0									2	1.86	1.17	0.69	-2.31	5.48	1.28	9.07	1000
1.700	-1.68	0									2	2.24	1.60	0.64	-2.17	12.54	1.75	16.46	1000
1.850	-1.67	0									2	2.26	1.63	0.63	-2.14	13.20	1.79	17.13	1000
2.500	-1.63	0									2	2.36	1.76	0.59	-2.03	16.05	1.95	20.04	1000
		3	0.00	0.00	0.00	-	-	0.00	0.00	1349	2	2.36	1.76	0.59	-2.03	16.05	1.95	20.04	1000

計畫名稱：XDO Example 3

主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

2.790	-1.61	2	1.75	1.75	0.00	-0.38	-1.98	0.09	2.25	1349	2	2.40	1.82	0.58	-1.98	17.32	2.03	21.33	1000
		2	5.47	5.47	0.00	9.95	-9.95	-29.72	30.85	3043	2	3.40	2.82	0.58	-9.91	9.91	-10.08	22.11	1625
3.340	-1.59	2	6.43	6.43	0.00	9.95	-9.95	-28.69	31.89	3043	2	4.44	3.90	0.54	-9.91	9.91	-9.08	23.12	1625
3.890	-1.57	2	7.41	7.41	0.00	9.95	-9.95	-27.65	32.92	3043	2	5.47	4.96	0.51	-9.91	9.91	-8.08	24.12	1625
4.440	-1.56	2	8.40	8.40	0.00	9.95	-9.95	-26.62	33.96	3043	2	6.50	6.01	0.48	-9.91	9.91	-7.07	25.12	1625
4.990	-1.55	2	9.42	9.42	0.00	9.95	-9.95	-25.59	34.99	3043	2	7.51	7.06	0.45	-9.91	9.91	-6.07	26.13	1625
		2	1.80	1.80	0.00	0.44	-17.72	0.45	12.71	675	2	3.02	2.56	0.45	-2.64	58.35	2.47	32.97	500
5.745	-1.55	2	2.14	2.14	0.00	0.64	-25.97	0.66	18.63	675	2	3.33	2.91	0.42	-2.92	64.45	2.64	36.33	500
6.190	-1.55	2	2.35	2.35	0.00	0.76	-30.83	0.79	22.11	675	2	3.51	3.12	0.39	-3.08	68.04	2.75	38.31	500
		2	10.21	10.21	0.00	9.94	-9.94	-14.01	27.90	2107	2	10.47	10.08	0.39	-9.91	9.91	1.07	23.36	1125
6.855	-1.56	2	11.48	11.48	0.00	9.94	-9.94	-12.75	29.15	2107	2	11.69	11.33	0.36	-9.91	9.91	2.30	24.59	1125
7.520	-1.56	2	12.75	12.75	0.00	9.94	-9.94	-11.49	30.41	2107	2	12.92	12.58	0.34	-9.91	9.91	3.53	25.82	1125
8.226	-1.57	2	14.09	14.09	0.00	9.94	-9.94	-10.16	31.75	2107	2	14.22	13.91	0.31	-9.91	9.91	4.83	27.12	1125
8.933	-1.57	2	15.43	15.43	0.00	9.94	-9.94	-8.82	33.08	2107	2	15.52	15.24	0.28	-9.91	9.91	6.14	28.43	1125
9.639	-1.57	2	16.77	16.77	0.00	9.94	-9.94	-7.49	34.42	2107	2	16.83	16.57	0.26	-9.91	9.91	7.45	29.74	1125
10.345	-1.57	2	18.10	18.10	0.00	9.94	-9.94	-6.15	35.75	2107	2	18.15	17.91	0.24	-9.91	9.91	8.77	31.06	1125
11.183	-1.56	2	19.67	19.67	0.00	9.94	-9.94	-4.57	37.33	2107	2	19.71	19.50	0.22	-9.91	9.91	10.33	32.62	1125
12.020	-1.55	2	21.23	21.23	0.00	9.94	-9.94	-2.99	38.92	2107	2	21.29	21.10	0.19	-9.91	9.91	11.89	34.18	1125
12.883	-1.53	2	22.81	22.81	0.00	9.94	-9.94	-1.36	40.55	2107	2	22.93	22.75	0.18	-9.91	9.91	13.50	35.79	1125
13.745	-1.50	2	24.38	24.38	0.00	9.94	-9.94	0.27	42.18	2107	2	24.57	24.41	0.16	-9.91	9.91	15.11	37.40	1125
14.583	-1.46	2	25.88	25.88	0.00	9.94	-9.94	1.86	43.76	2107	2	26.18	26.04	0.14	-9.91	9.91	16.68	38.97	1125
15.420	-1.41	2	27.37	27.37	0.00	9.94	-9.94	3.44	45.34	2107	2	27.81	27.68	0.13	-9.91	9.91	18.25	40.54	1125
16.283	-1.36	2	28.88	28.88	0.00	9.94	-9.94	5.07	46.97	2107	2	29.49	29.37	0.12	-9.91	9.91	19.87	42.16	1125
17.145	-1.29	2	30.37	30.37	0.00	9.94	-9.94	6.70	48.60	2107	2	31.18	31.07	0.11	-9.91	9.91	21.49	43.78	1125
17.618	-1.25	2	31.19	31.19	0.00	9.94	-9.94	7.59	49.50	2107	2	32.11	32.01	0.10	-9.91	9.91	22.38	44.66	1125
18.090	-1.22	2	32.00	32.00	0.00	9.94	-9.94	8.48	50.39	2107	2	33.04	32.94	0.10	-9.91	9.91	23.26	45.55	1125
		2	11.33	11.33	0.00	1.62	-95.88	5.10	218.83	2192	2	9.14	9.04	0.10	-2.78	87.04	6.59	152.56	1625
18.820	-1.16	2	11.52	11.52	0.00	1.68	-99.37	5.29	226.80	2192	2	9.53	9.44	0.09	-2.86	89.53	6.77	156.91	1625
19.405	-1.12	2	11.69	11.69	0.00	1.73	-102.17	5.44	233.18	2192	2	9.84	9.76	0.08	-2.93	91.52	6.92	160.40	1625
19.990	-1.09	2	11.86	11.86	0.00	1.77	-104.97	5.59	239.57	2192	2	10.15	10.07	0.08	-2.99	93.52	7.06	163.89	1625
		2	36.34	36.34	0.00	9.95	-9.95	2.74	63.32	3043	2	36.21	36.14	0.08	-9.91	9.91	21.88	54.08	1625
20.420	-1.06	2	37.09	37.09	0.00	9.95	-9.95	3.57	64.15	3043	2	37.09	37.01	0.07	-9.91	9.91	22.71	54.91	1625
20.983	-1.03	2	38.09	38.09	0.00	9.95	-9.95	4.66	65.24	3043	2	38.22	38.15	0.07	-9.91	9.91	23.80	56.00	1625
21.545	-1.00	2	39.09	39.09	0.00	9.95	-9.95	5.76	66.33	3043	2	39.36	39.29	0.07	-9.91	9.91	24.89	57.08	1625
22.108	-0.97	2	40.08	40.08	0.00	9.95	-9.95	6.85	67.42	3043	2	40.50	40.44	0.06	-9.91	9.91	25.98	58.17	1625
22.670	-0.94	2	41.07	41.07	0.00	9.95	-9.95	7.94	68.52	3043	2	41.64	41.58	0.06	-9.91	9.91	27.06	59.26	1625
23.220	-0.90	2	42.03	42.03	0.00	9.95	-9.95	9.01	69.58	3043	2	42.76	42.71	0.06	-9.91	9.91	28.13	60.32	1625
23.320	-0.89	2	42.21	42.21	0.00	9.95	-9.95	9.20	69.78	3043	2	42.97	42.91	0.06	-9.91	9.91	28.32	60.52	1625
23.913	-0.85	2	43.23	43.23	0.00	9.95	-9.95	10.35	70.93	3043	2	44.18	44.13	0.05	-9.91	9.91	29.47	61.66	1625
24.505	-0.81	2	44.24	44.24	0.00	9.95	-9.95	11.50	72.08	3043	2	45.40	45.35	0.05	-9.91	9.91	30.61	62.81	1625
25.098	-0.76	2	45.25	45.25	0.00	9.95	-9.95	12.65	73.22	3043	2	46.62	46.58	0.05	-9.91	9.91	31.76	63.96	1625
25.690	-0.71	2	46.25	46.25	0.00	9.95	-9.95	13.80	74.37	3043	2	47.85	47.81	0.04	-9.91	9.91	32.91	65.10	1625
		2	13.98	13.98	0.00	1.67	-103.57	6.36	343.54	3204	2	12.35	12.31	0.04	-2.69	87.95	7.64	222.92	2375
26.440	-0.65	2	14.11	14.11	0.00	1.71	-106.48	6.56	353.18	3204	2	12.83	12.79	0.04	-2.75	90.00	7.83	228.11	2375
27.190	-0.59	2	14.25	14.25	0.00	1.75	-109.38	6.75	362.83	3204	2	13.29	13.26	0.04	-2.81	92.05	8.02	233.30	2375
27.940	-0.54	2	14.42	14.42	0.00	1.80	-112.29	6.94	372.48	3204	2	13.75	13.71	0.04	-2.87	94.09	8.21	238.50	2375
28.690	-0.49	2	14.60	14.60	0.00	1.84	-115.20	7.14	382.13	3204	2	14.19	14.15	0.03	-2.92	96.14	8.41	243.69	2375
29.440	-0.45	2	14.80	14.80	0.00	1.88	-118.11	7.33	391.78	3204	2	14.61	14.58	0.03	-2.98	98.19	8.60	248.89	2375
30.190	-0.42	2	15.02	15.02	0.00	1.92	-121.02	7.52	401.43	3204	2	15.02	14.99	0.03	-3.04	100.24	8.79	254.08	2375
30.940	-0.38	2	15.24	15.24	0.00	1.97	-123.92	7.72	411.08	3204	2	15.43	15.40	0.03	-3.10	102.29	8.98	259.28	2375
31.690	-0.35	2	15.47	15.47	0.00	2.01	-126.83	7.91	420.72	3204	2	15.84	15.81	0.03	-3.16	104.34	9.17	264.47	2375
		2	15.37	15.37	0.00	1.49	-108.46	7.60	471.17	4216	2	15.04	15.02	0.03	-2.35	88.12	8.80	291.50	3125
32.345	-0.32	2	15.53	15.53	0.00	1.52	-110.63	7.76	480.61	4216	2	15.41	15.38	0.03	-2.39	89.63	8.96	296.51	3125
33.000	-0.29	2	15.69	15.69	0.00	1.55	-112.81	7.92	490.05	4216	2	15.78	15.75	0.02	-2.42	91.14	9.12	301.51	3125
		2	15.37	15.37	0.00	2.13	-79.17	7.81	261.86	3125	2	15.78	15.75	0.02	-2.42	91.14	9.12	301.51	3125
33.623	-0.26	2	15.55	15.55	0.00	2.16	-80.61	7.96	266.61	3125	2	16.13	16.11	0.02	-2.46	92.58	9.27	306.27	3125

34.245	-0.23	2	15.71	15.71	0.00	2.20	-82.04	8.12	271.37	3125	2	16.50	16.48	0.02	-2.50	94.02	9.43	311.03	3125
34.868	-0.20	2	15.87	15.87	0.00	2.23	-83.48	8.27	276.13	3125	2	16.87	16.85	0.02	-2.53	95.45	9.58	315.78	3125
35.490	-0.16	2	16.03	16.03	0.00	2.27	-84.92	8.43	280.88	3125	2	17.25	17.23	0.02	-2.57	96.89	9.73	320.54	3125
		2	16.57	16.57	0.00	0.94	-29.35	2.82	381.46	12500	2	14.59	14.57	0.02	-1.01	33.10	4.03	430.36	12500
36.245	-0.12	2	16.39	16.39	0.00	0.95	-30.05	3.04	390.54	12500	2	15.53	15.52	0.02	-1.02	33.80	4.25	439.45	12500
37.000	-0.07	2	16.21	16.21	0.00	0.96	-30.75	3.26	399.63	12500	2	16.48	16.47	0.02	-1.03	34.49	4.47	448.53	12500

▼ PHASE 3

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-10.95	0									1	0.75	0.00	0.75	-	-	0.75	0.75	1000
0.100	-10.89	0									1	0.81	0.07	0.74	-2.46	-1.59	0.81	1.67	1000
0.900	-10.48	0									1	1.28	0.59	0.69	-2.31	5.48	1.28	9.07	1000
1.700	-10.07	0									1	1.75	1.11	0.64	-2.17	12.54	1.75	16.46	1000
1.850	-9.99	0									1	1.79	1.15	0.63	-2.14	13.20	1.79	17.13	1000
2.500	-9.66	0									1	1.95	1.36	0.59	-2.03	16.05	1.95	20.04	1000
2.790	-9.51	0									1	2.03	1.45	0.58	-1.98	17.32	2.03	21.33	1000
		0									-1	0.00	0.00	0.00	-9.91	9.91	-10.08	22.11	1625
3.340	-9.22	0									-1	0.00	0.00	0.00	-9.91	9.91	-9.08	23.12	1625
3.890	-8.93	0									-1	0.00	0.00	0.00	-9.91	9.91	-8.08	24.12	1625
4.440	-8.64	0									-1	0.00	0.00	0.00	-9.91	9.91	-7.07	25.12	1625
4.990	-8.33	0									-1	0.00	0.00	0.00	-9.91	9.91	-6.07	26.13	1625
		0									1	2.47	2.02	0.45	-2.64	58.35	2.47	32.97	500
5.745	-7.90	0									1	2.64	2.23	0.42	-2.92	64.45	2.64	36.33	500
6.190	-7.63	0									1	2.75	2.35	0.39	-3.08	68.04	2.75	38.31	500
		0									2	3.63	3.24	0.39	-9.91	9.91	1.07	23.36	1125
6.855	-7.22	0									2	5.32	4.96	0.36	-9.91	9.91	2.30	24.59	1125
7.520	-6.81	0									2	7.02	6.68	0.34	-9.91	9.91	3.53	25.82	1125
		2	14.34	14.34	0.00	9.94	-9.94	-20.95	20.95	2107	2	7.02	6.68	0.34	-9.91	9.91	3.53	25.82	1125
8.226	-6.38	2	14.77	14.77	0.00	9.94	-9.94	-19.62	22.29	2107	2	8.80	8.49	0.31	-9.91	9.91	4.83	27.12	1125
8.933	-5.98	2	15.27	15.27	0.00	9.94	-9.94	-18.28	23.62	2107	2	10.56	10.28	0.28	-9.91	9.91	6.14	28.43	1125
9.639	-5.62	2	15.85	15.85	0.00	9.94	-9.94	-16.95	24.96	2107	2	12.28	12.02	0.26	-9.91	9.91	7.45	29.74	1125
10.345	-5.30	2	16.51	16.51	0.00	9.94	-9.94	-15.61	26.29	2107	2	13.95	13.71	0.24	-9.91	9.91	8.77	31.06	1125
11.183	-4.98	2	17.42	17.42	0.00	9.94	-9.94	-14.03	27.87	2107	2	15.87	15.65	0.22	-9.91	9.91	10.33	32.62	1125
12.020	-4.71	2	18.44	18.44	0.00	9.94	-9.94	-12.45	29.46	2107	2	17.73	17.54	0.19	-9.91	9.91	11.89	34.18	1125
12.883	-4.48	2	19.58	19.58	0.00	9.94	-9.94	-10.82	31.09	2107	2	19.60	19.43	0.18	-9.91	9.91	13.50	35.79	1125
13.745	-4.28	2	20.79	20.79	0.00	9.94	-9.94	-9.19	32.72	2107	2	21.44	21.28	0.16	-9.91	9.91	15.11	37.40	1125
14.583	-4.11	2	22.01	22.01	0.00	9.94	-9.94	-7.60	34.30	2107	2	23.20	23.06	0.14	-9.91	9.91	16.68	38.97	1125
15.420	-3.95	2	23.24	23.24	0.00	9.94	-9.94	-6.02	35.88	2107	2	24.96	24.83	0.13	-9.91	9.91	18.25	40.54	1125
16.283	-3.78	2	24.52	24.52	0.00	9.94	-9.94	-4.39	37.51	2107	2	26.76	26.65	0.12	-9.91	9.91	19.87	42.16	1125
17.145	-3.61	2	25.79	25.79	0.00	9.94	-9.94	-2.76	39.14	2107	2	28.57	28.47	0.11	-9.91	9.91	21.49	43.78	1125
17.618	-3.51	2	26.49	26.49	0.00	9.94	-9.94	-1.87	40.04	2107	2	29.57	29.47	0.10	-9.91	9.91	22.38	44.66	1125
18.090	-3.42	2	27.19	27.19	0.00	9.94	-9.94	-0.97	40.93	2107	2	30.56	30.46	0.10	-9.91	9.91	23.26	45.55	1125
		2	11.57	11.57	0.00	0.76	-45.06	2.40	102.85	2192	1	6.59	6.50	0.10	-2.78	87.04	6.59	152.56	1625
18.820	-3.29	2	11.59	11.59	0.00	0.82	-48.55	2.58	110.81	2192	1	6.77	6.68	0.09	-2.86	89.53	6.77	156.91	1625
19.405	-3.19	2	11.63	11.63	0.00	0.87	-51.35	2.73	117.20	2192	1	6.92	6.83	0.08	-2.93	91.52	6.92	160.40	1625
19.990	-3.10	2	11.69	11.69	0.00	0.92	-54.15	2.88	123.58	2192	1	7.06	6.98	0.08	-2.99	93.52	7.06	163.89	1625
		2	33.01	33.01	0.00	9.95	-9.95	-6.72	53.86	3043	2	32.94	32.86	0.08	-9.91	9.91	21.88	54.08	1625
20.420	-3.04	2	33.65	33.65	0.00	9.95	-9.95	-5.89	54.69	3043	2	33.87	33.80	0.07	-9.91	9.91	22.71	54.91	1625
20.983	-2.96	2	34.51	34.51	0.00	9.95	-9.95	-4.79	55.78	3043	2	35.08	35.01	0.07	-9.91	9.91	23.80	56.00	1625
21.545	-2.88	2	35.36	35.36	0.00	9.95	-9.95	-3.70	56.87	3043	2	36.30	36.23	0.07	-9.91	9.91	24.89	57.08	1625
22.108	-2.80	2	36.20	36.20	0.00	9.95	-9.95	-2.61	57.96	3043	2	37.52	37.46	0.06	-9.91	9.91	25.98	58.17	1625
22.670	-2.71	2	37.03	37.03	0.00	9.95	-9.95	-1.52	59.06	3043	2	38.75	38.69	0.06	-9.91	9.91	27.06	59.26	1625
23.220	-2.62	2	37.80	37.80	0.00	9.95	-9.95	-0.45	60.12	3043	2	39.97	39.91	0.06	-9.91	9.91	28.13	60.32	1625
23.320	-2.60	2	37.94	37.94	0.00	9.95	-9.95	-0.26	60.32	3043	2	40.19	40.14	0.06	-9.91	9.91	28.32	60.52	1625

23.913	-2.48	2	38.74	38.74	0.00	9.95	-9.95	0.89	61.47	3043	2	41.53	41.48	0.05	-9.91	9.91	29.47	61.66	1625
24.505	-2.36	2	39.50	39.50	0.00	9.95	-9.95	2.04	62.62	3043	2	42.88	42.83	0.05	-9.91	9.91	30.61	62.81	1625
25.098	-2.22	2	40.23	40.23	0.00	9.95	-9.95	3.19	63.77	3043	2	44.25	44.20	0.05	-9.91	9.91	31.76	63.96	1625
25.690	-2.08	2	40.94	40.94	0.00	9.95	-9.95	4.34	64.91	3043	2	45.63	45.59	0.04	-9.91	9.91	32.91	65.10	1625
		2	13.91	13.91	0.00	1.09	-64.55	3.76	214.08	3204	2	9.11	9.06	0.04	-2.69	87.95	7.64	222.92	2375
26.440	-1.90	2	13.66	13.66	0.00	1.13	-67.46	3.95	223.73	3204	2	9.86	9.82	0.04	-2.75	90.00	7.83	228.11	2375
27.190	-1.73	2	13.45	13.45	0.00	1.18	-70.37	4.15	233.37	3204	2	10.60	10.56	0.04	-2.81	92.05	8.02	233.30	2375
27.940	-1.57	2	13.29	13.29	0.00	1.22	-73.28	4.34	243.02	3204	2	11.29	11.25	0.04	-2.87	94.09	8.21	238.50	2375
28.690	-1.44	2	13.19	13.19	0.00	1.26	-76.18	4.54	252.67	3204	2	11.94	11.90	0.03	-2.92	96.14	8.41	243.69	2375
29.440	-1.32	2	13.14	13.14	0.00	1.31	-79.09	4.73	262.32	3204	2	12.55	12.52	0.03	-2.98	98.19	8.60	248.89	2375
30.190	-1.21	2	13.13	13.13	0.00	1.35	-82.00	4.92	271.97	3204	2	13.13	13.10	0.03	-3.04	100.24	8.79	254.08	2375
30.940	-1.12	2	13.15	13.15	0.00	1.39	-84.91	5.12	281.62	3204	2	13.69	13.66	0.03	-3.10	102.29	8.98	259.28	2375
31.690	-1.02	2	13.18	13.18	0.00	1.43	-87.82	5.31	291.27	3204	2	14.24	14.21	0.03	-3.16	104.34	9.17	264.47	2375
		2	13.90	13.90	0.00	1.06	-75.07	5.10	326.10	4216	2	12.94	12.91	0.03	-2.35	88.12	8.80	291.50	3125
32.345	-0.94	2	13.84	13.84	0.00	1.09	-77.25	5.26	335.54	4216	2	13.47	13.45	0.03	-2.39	89.63	8.96	296.51	3125
33.000	-0.86	2	13.76	13.76	0.00	1.12	-79.42	5.43	344.98	4216	2	14.02	13.99	0.02	-2.42	91.14	9.12	301.51	3125
		2	12.83	12.83	0.00	1.55	-55.94	5.31	184.95	3125	2	14.02	13.99	0.02	-2.42	91.14	9.12	301.51	3125
33.623	-0.77	2	12.83	12.83	0.00	1.58	-57.37	5.47	189.71	3125	2	14.55	14.52	0.02	-2.46	92.58	9.27	306.27	3125
34.245	-0.68	2	12.81	12.81	0.00	1.62	-58.81	5.62	194.47	3125	2	15.10	15.08	0.02	-2.50	94.02	9.43	311.03	3125
34.868	-0.58	2	12.77	12.77	0.00	1.66	-60.25	5.78	199.22	3125	2	15.67	15.65	0.02	-2.53	95.45	9.58	315.78	3125
35.490	-0.48	2	12.70	12.70	0.00	1.69	-61.69	5.93	203.98	3125	2	16.27	16.25	0.02	-2.57	96.89	9.73	320.54	3125
		2	16.46	16.46	0.00	0.80	-22.09	0.51	286.60	12500	2	10.67	10.65	0.02	-1.01	33.10	4.03	430.36	12500
36.245	-0.35	2	15.20	15.20	0.00	0.81	-22.78	0.73	295.69	12500	2	12.70	12.68	0.02	-1.02	33.80	4.25	439.45	12500
37.000	-0.21	2	13.94	13.94	0.00	0.83	-23.48	0.95	304.77	12500	2	14.73	14.72	0.02	-1.03	34.49	4.47	448.53	12500

▼ PHASE 4

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-10.95	0									1	0.75	0.00	0.75	-	-	0.75	0.75	1000
0.100	-10.89	0									2	0.81	0.07	0.74	-10.89	-10.03	0.81	1.67	1000
0.900	-10.48	0									2	1.28	0.59	0.69	-10.48	-2.69	1.28	9.07	1000
1.700	-10.07	0									2	1.75	1.11	0.64	-10.07	4.64	1.75	16.46	1000
1.850	-9.99	0									2	1.79	1.15	0.63	-9.99	5.35	1.79	17.13	1000
2.500	-9.66	0									2	1.95	1.36	0.59	-9.66	8.42	1.95	20.04	1000
2.790	-9.51	0									2	2.03	1.45	0.58	-9.51	9.80	2.03	21.33	1000
		0									-1	0.00	0.00	0.00	-9.91	9.91	-10.08	22.11	1625
3.340	-9.22	0									-1	0.00	0.00	0.00	-9.91	9.91	-9.08	23.12	1625
3.890	-8.93	0									-1	0.00	0.00	0.00	-9.91	9.91	-8.08	24.12	1625
4.440	-8.64	0									-1	0.00	0.00	0.00	-9.91	9.91	-7.07	25.12	1625
4.990	-8.33	0									-1	0.00	0.00	0.00	-9.91	9.91	-6.07	26.13	1625
		0									2	2.47	2.02	0.45	-8.33	52.66	2.47	32.97	500
5.745	-7.90	0									2	2.64	2.23	0.42	-7.90	59.47	2.64	36.33	500
6.190	-7.63	0									2	2.75	2.35	0.39	-7.63	63.49	2.75	38.31	500
		0									2	3.63	3.24	0.39	-9.91	9.91	1.07	23.36	1125
6.855	-7.22	0									2	5.32	4.96	0.36	-9.91	9.91	2.30	24.59	1125
7.520	-6.81	0									2	7.02	6.68	0.34	-9.91	9.91	3.53	25.82	1125
		2	14.34	14.34	0.00	9.94	-9.94	-20.95	20.95	2107	2	7.02	6.68	0.34	-9.91	9.91	3.53	25.82	1125
8.226	-6.38	2	14.77	14.77	0.00	9.94	-9.94	-19.62	22.29	2107	2	8.80	8.49	0.31	-9.91	9.91	4.83	27.12	1125
8.933	-5.98	2	15.27	15.27	0.00	9.94	-9.94	-18.28	23.62	2107	2	10.56	10.28	0.28	-9.91	9.91	6.14	28.43	1125
9.639	-5.62	2	15.85	15.85	0.00	9.94	-9.94	-16.95	24.96	2107	2	12.28	12.02	0.26	-9.91	9.91	7.45	29.74	1125
10.345	-5.30	2	16.51	16.51	0.00	9.94	-9.94	-15.61	26.29	2107	2	13.95	13.71	0.24	-9.91	9.91	8.77	31.06	1125
11.183	-4.98	2	17.42	17.42	0.00	9.94	-9.94	-14.03	27.87	2107	2	15.87	15.65	0.22	-9.91	9.91	10.33	32.62	1125
12.020	-4.71	2	18.44	18.44	0.00	9.94	-9.94	-12.45	29.46	2107	2	17.73	17.54	0.19	-9.91	9.91	11.89	34.18	1125
12.883	-4.48	2	19.58	19.58	0.00	9.94	-9.94	-10.82	31.09	2107	2	19.60	19.43	0.18	-9.91	9.91	13.50	35.79	1125
13.745	-4.28	2	20.79	20.79	0.00	9.94	-9.94	-9.19	32.72	2107	2	21.44	21.28	0.16	-9.91	9.91	15.11	37.40	1125

14.583	-4.11	2	22.01	22.01	0.00	9.94	-9.94	-7.60	34.30	2107	2	23.20	23.06	0.14	-9.91	9.91	16.68	38.97	1125
15.420	-3.95	2	23.24	23.24	0.00	9.94	-9.94	-6.02	35.88	2107	2	24.96	24.83	0.13	-9.91	9.91	18.25	40.54	1125
16.283	-3.78	2	24.52	24.52	0.00	9.94	-9.94	-4.39	37.51	2107	2	26.76	26.65	0.12	-9.91	9.91	19.87	42.16	1125
17.145	-3.61	2	25.79	25.79	0.00	9.94	-9.94	-2.76	39.14	2107	2	28.57	28.47	0.11	-9.91	9.91	21.49	43.78	1125
17.618	-3.51	2	26.49	26.49	0.00	9.94	-9.94	-1.87	40.04	2107	2	29.57	29.47	0.10	-9.91	9.91	22.38	44.66	1125
18.090	-3.42	2	27.19	27.19	0.00	9.94	-9.94	-0.97	40.93	2107	2	30.56	30.46	0.10	-9.91	9.91	23.26	45.55	1125
		2	11.57	11.57	0.00	0.76	-45.06	2.40	102.85	2192	2	6.59	6.50	0.10	-3.42	86.40	6.59	152.56	1625
18.820	-3.29	2	11.59	11.59	0.00	0.82	-48.55	2.58	110.81	2192	2	6.77	6.68	0.09	-3.29	89.10	6.77	156.91	1625
19.405	-3.19	2	11.63	11.63	0.00	0.87	-51.35	2.73	117.20	2192	2	6.92	6.83	0.08	-3.19	91.26	6.92	160.40	1625
19.990	-3.10	2	11.69	11.69	0.00	0.92	-54.15	2.88	123.58	2192	2	7.06	6.98	0.08	-3.10	93.41	7.06	163.89	1625
		2	33.01	33.01	0.00	9.95	-9.95	-6.72	53.86	3043	2	32.94	32.86	0.08	-9.91	9.91	21.88	54.08	1625
20.420	-3.04	2	33.65	33.65	0.00	9.95	-9.95	-5.89	54.69	3043	2	33.87	33.80	0.07	-9.91	9.91	22.71	54.91	1625
20.983	-2.96	2	34.51	34.51	0.00	9.95	-9.95	-4.79	55.78	3043	2	35.08	35.01	0.07	-9.91	9.91	23.80	56.00	1625
21.545	-2.88	2	35.36	35.36	0.00	9.95	-9.95	-3.70	56.87	3043	2	36.30	36.23	0.07	-9.91	9.91	24.89	57.08	1625
22.108	-2.80	2	36.20	36.20	0.00	9.95	-9.95	-2.61	57.96	3043	2	37.52	37.46	0.06	-9.91	9.91	25.98	58.17	1625
22.670	-2.71	2	37.03	37.03	0.00	9.95	-9.95	-1.52	59.06	3043	2	38.75	38.69	0.06	-9.91	9.91	27.06	59.26	1625
23.220	-2.62	2	37.80	37.80	0.00	9.95	-9.95	-0.45	60.12	3043	2	39.97	39.91	0.06	-9.91	9.91	28.13	60.32	1625
23.320	-2.60	2	37.94	37.94	0.00	9.95	-9.95	-0.26	60.32	3043	2	40.19	40.14	0.06	-9.91	9.91	28.32	60.52	1625
23.913	-2.48	2	38.74	38.74	0.00	9.95	-9.95	0.89	61.47	3043	2	41.53	41.48	0.05	-9.91	9.91	29.47	61.66	1625
24.505	-2.36	2	39.50	39.50	0.00	9.95	-9.95	2.04	62.62	3043	2	42.88	42.83	0.05	-9.91	9.91	30.61	62.81	1625
25.098	-2.22	2	40.23	40.23	0.00	9.95	-9.95	3.19	63.77	3043	2	44.25	44.20	0.05	-9.91	9.91	31.76	63.96	1625
25.690	-2.08	2	40.94	40.94	0.00	9.95	-9.95	4.34	64.91	3043	2	45.63	45.59	0.04	-9.91	9.91	32.91	65.10	1625
		2	13.91	13.91	0.00	1.09	-64.55	3.76	214.08	3204	2	9.11	9.06	0.04	-2.69	87.95	7.64	222.92	2375
26.440	-1.90	2	13.66	13.66	0.00	1.13	-67.46	3.95	223.73	3204	2	9.86	9.82	0.04	-2.75	90.00	7.83	228.11	2375
27.190	-1.73	2	13.45	13.45	0.00	1.18	-70.37	4.15	233.37	3204	2	10.60	10.56	0.04	-2.81	92.05	8.02	233.30	2375
27.940	-1.57	2	13.29	13.29	0.00	1.22	-73.28	4.34	243.02	3204	2	11.29	11.25	0.04	-2.87	94.09	8.21	238.50	2375
28.690	-1.44	2	13.19	13.19	0.00	1.26	-76.18	4.54	252.67	3204	2	11.94	11.90	0.03	-2.92	96.14	8.41	243.69	2375
29.440	-1.32	2	13.14	13.14	0.00	1.31	-79.09	4.73	262.32	3204	2	12.55	12.52	0.03	-2.98	98.19	8.60	248.89	2375
30.190	-1.21	2	13.13	13.13	0.00	1.35	-82.00	4.92	271.97	3204	2	13.13	13.10	0.03	-3.04	100.24	8.79	254.08	2375
30.940	-1.12	2	13.15	13.15	0.00	1.39	-84.91	5.12	281.62	3204	2	13.69	13.66	0.03	-3.10	102.29	8.98	259.28	2375
31.690	-1.02	2	13.18	13.18	0.00	1.43	-87.82	5.31	291.27	3204	2	14.24	14.21	0.03	-3.16	104.34	9.17	264.47	2375
		2	13.90	13.90	0.00	1.06	-75.07	5.10	326.10	4216	2	12.94	12.91	0.03	-2.35	88.12	8.80	291.50	3125
32.345	-0.94	2	13.84	13.84	0.00	1.09	-77.25	5.26	335.54	4216	2	13.47	13.45	0.03	-2.39	89.63	8.96	296.51	3125
33.000	-0.86	2	13.76	13.76	0.00	1.12	-79.42	5.43	344.98	4216	2	14.02	13.99	0.02	-2.42	91.14	9.12	301.51	3125
		2	12.83	12.83	0.00	1.55	-55.94	5.31	184.95	3125	2	14.02	13.99	0.02	-2.42	91.14	9.12	301.51	3125
33.623	-0.77	2	12.83	12.83	0.00	1.58	-57.37	5.47	189.71	3125	2	14.55	14.52	0.02	-2.46	92.58	9.27	306.27	3125
34.245	-0.68	2	12.81	12.81	0.00	1.62	-58.81	5.62	194.47	3125	2	15.10	15.08	0.02	-2.50	94.02	9.43	311.03	3125
34.868	-0.58	2	12.77	12.77	0.00	1.66	-60.25	5.78	199.22	3125	2	15.67	15.65	0.02	-2.53	95.45	9.58	315.78	3125
35.490	-0.48	2	12.70	12.70	0.00	1.69	-61.69	5.93	203.98	3125	2	16.27	16.25	0.02	-2.57	96.89	9.73	320.54	3125
		2	16.46	16.46	0.00	0.80	-22.09	0.51	286.60	12500	2	10.67	10.65	0.02	-1.01	33.10	4.03	430.36	12500
36.245	-0.35	2	15.20	15.20	0.00	0.81	-22.78	0.73	295.69	12500	2	12.70	12.68	0.02	-1.02	33.80	4.25	439.45	12500
37.000	-0.21	2	13.94	13.94	0.00	0.83	-23.48	0.95	304.77	12500	2	14.73	14.72	0.02	-1.03	34.49	4.47	448.53	12500

▼ PHASE 5

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-18.16	0									1	0.75	0.00	0.75	-	-	0.75	0.75	1000
0.100	-18.01	0									1	0.81	0.07	0.74	-10.89	-10.03	0.81	1.67	1000
0.900	-16.80	0									1	1.28	0.59	0.69	-10.48	-2.69	1.28	9.07	1000
1.700	-15.59	0									1	1.75	1.11	0.64	-10.07	4.64	1.75	16.46	1000
1.850	-15.36	0									1	1.79	1.15	0.63	-9.99	5.35	1.79	17.13	1000
2.500	-14.39	0									1	1.95	1.36	0.59	-9.66	8.42	1.95	20.04	1000
2.790	-13.95	0									1	2.03	1.45	0.58	-9.51	9.80	2.03	21.33	1000
		0									-1	0.00	0.00	0.00	-9.91	9.91	-10.08	22.11	1625
3.340	-13.14	0									-1	0.00	0.00	0.00	-9.91	9.91	-9.08	23.12	1625

計畫名稱：XDO Example 3

主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

3.890	-12.33	0									-1	0.00	0.00	0.00	-9.91	9.91	-8.08	24.12	1625
4.440	-11.54	0									-1	0.00	0.00	0.00	-9.91	9.91	-7.07	25.12	1625
4.990	-10.77	0									-1	0.00	0.00	0.00	-9.91	9.91	-6.07	26.13	1625
		0									1	2.47	2.02	0.45	-8.33	52.66	2.47	32.97	500
5.745	-9.75	0									1	2.64	2.23	0.42	-7.90	59.47	2.64	36.33	500
6.190	-9.18	0									1	2.75	2.35	0.39	-7.63	63.49	2.75	38.31	500
		0									2	1.89	1.49	0.39	-9.91	9.91	1.07	23.36	1125
6.855	-8.36	0									2	4.03	3.67	0.36	-9.91	9.91	2.30	24.59	1125
7.520	-7.61	0									2	6.11	5.78	0.34	-9.91	9.91	3.53	25.82	1125
		2	16.03	16.03	0.00	9.94	-9.94	-20.95	20.95	2107	2	6.11	5.78	0.34	-9.91	9.91	3.53	25.82	1125
8.226	-6.88	2	15.83	15.83	0.00	9.94	-9.94	-19.62	22.29	2107	2	8.24	7.93	0.31	-9.91	9.91	4.83	27.12	1125
8.933	-6.25	2	15.83	15.83	0.00	9.94	-9.94	-18.28	23.62	2107	2	10.26	9.98	0.28	-9.91	9.91	6.14	28.43	1125
9.639	-5.71	2	16.03	16.03	0.00	9.94	-9.94	-16.95	24.96	2107	2	12.18	11.92	0.26	-9.91	9.91	7.45	29.74	1125
10.345	-5.26	2	16.42	16.42	0.00	9.94	-9.94	-15.61	26.29	2107	2	14.00	13.76	0.24	-9.91	9.91	8.77	31.06	1125
11.183	-4.84	2	17.11	17.11	0.00	9.94	-9.94	-14.03	27.87	2107	2	16.03	15.82	0.22	-9.91	9.91	10.33	32.62	1125
12.020	-4.51	2	18.01	18.01	0.00	9.94	-9.94	-12.45	29.46	2107	2	17.96	17.76	0.19	-9.91	9.91	11.89	34.18	1125
12.883	-4.26	2	19.11	19.11	0.00	9.94	-9.94	-10.82	31.09	2107	2	19.86	19.68	0.18	-9.91	9.91	13.50	35.79	1125
13.745	-4.06	2	20.32	20.32	0.00	9.94	-9.94	-9.19	32.72	2107	2	21.69	21.53	0.16	-9.91	9.91	15.11	37.40	1125
14.583	-3.91	2	21.58	21.58	0.00	9.94	-9.94	-7.60	34.30	2107	2	23.43	23.29	0.14	-9.91	9.91	16.68	38.97	1125
15.420	-3.77	2	22.87	22.87	0.00	9.94	-9.94	-6.02	35.88	2107	2	25.16	25.03	0.13	-9.91	9.91	18.25	40.54	1125
16.283	-3.63	2	24.21	24.21	0.00	9.94	-9.94	-4.39	37.51	2107	2	26.93	26.81	0.12	-9.91	9.91	19.87	42.16	1125
17.145	-3.49	2	25.55	25.55	0.00	9.94	-9.94	-2.76	39.14	2107	2	28.70	28.60	0.11	-9.91	9.91	21.49	43.78	1125
17.618	-3.42	2	26.28	26.28	0.00	9.94	-9.94	-1.87	40.04	2107	2	29.68	29.57	0.10	-9.91	9.91	22.38	44.66	1125
18.090	-3.34	2	27.02	27.02	0.00	9.94	-9.94	-0.97	40.93	2107	2	30.65	30.55	0.10	-9.91	9.91	23.26	45.55	1125
		2	11.39	11.39	0.00	0.76	-45.06	2.40	102.85	2192	2	6.73	6.63	0.10	-3.42	86.40	6.59	152.56	1625
18.820	-3.23	2	11.46	11.46	0.00	0.82	-48.55	2.58	110.81	2192	2	6.87	6.78	0.09	-3.29	89.10	6.77	156.91	1625
19.405	-3.15	2	11.53	11.53	0.00	0.87	-51.35	2.73	117.20	2192	2	6.99	6.91	0.08	-3.19	91.26	6.92	160.40	1625
19.990	-3.07	2	11.62	11.62	0.00	0.92	-54.15	2.88	123.58	2192	2	7.11	7.03	0.08	-3.10	93.41	7.06	163.89	1625
		2	32.91	32.91	0.00	9.95	-9.95	-6.72	53.86	3043	2	32.99	32.91	0.08	-9.91	9.91	21.88	54.08	1625
20.420	-3.02	2	33.58	33.58	0.00	9.95	-9.95	-5.89	54.69	3043	2	33.91	33.84	0.07	-9.91	9.91	22.71	54.91	1625
20.983	-2.95	2	34.46	34.46	0.00	9.95	-9.95	-4.79	55.78	3043	2	35.11	35.04	0.07	-9.91	9.91	23.80	56.00	1625
21.545	-2.88	2	35.34	35.34	0.00	9.95	-9.95	-3.70	56.87	3043	2	36.31	36.24	0.07	-9.91	9.91	24.89	57.08	1625
22.108	-2.80	2	36.20	36.20	0.00	9.95	-9.95	-2.61	57.96	3043	2	37.52	37.46	0.06	-9.91	9.91	25.98	58.17	1625
22.670	-2.72	2	37.03	37.03	0.00	9.95	-9.95	-1.52	59.06	3043	2	38.75	38.69	0.06	-9.91	9.91	27.06	59.26	1625
23.220	-2.62	2	37.82	37.82	0.00	9.95	-9.95	-0.45	60.12	3043	2	39.96	39.91	0.06	-9.91	9.91	28.13	60.32	1625
23.320	-2.60	2	37.96	37.96	0.00	9.95	-9.95	-0.26	60.32	3043	2	40.19	40.13	0.06	-9.91	9.91	28.32	60.52	1625
23.913	-2.49	2	38.76	38.76	0.00	9.95	-9.95	0.89	61.47	3043	2	41.52	41.46	0.05	-9.91	9.91	29.47	61.66	1625
24.505	-2.36	2	39.52	39.52	0.00	9.95	-9.95	2.04	62.62	3043	2	42.87	42.82	0.05	-9.91	9.91	30.61	62.81	1625
25.098	-2.23	2	40.26	40.26	0.00	9.95	-9.95	3.19	63.77	3043	2	44.24	44.19	0.05	-9.91	9.91	31.76	63.96	1625
25.690	-2.08	2	40.97	40.97	0.00	9.95	-9.95	4.34	64.91	3043	2	45.62	45.57	0.04	-9.91	9.91	32.91	65.10	1625
		2	13.93	13.93	0.00	1.09	-64.55	3.76	214.08	3204	2	9.09	9.04	0.04	-2.69	87.95	7.64	222.92	2375
26.440	-1.90	2	13.68	13.68	0.00	1.13	-67.46	3.95	223.73	3204	2	9.85	9.80	0.04	-2.75	90.00	7.83	228.11	2375
27.190	-1.73	2	13.47	13.47	0.00	1.18	-70.37	4.15	233.37	3204	2	10.58	10.54	0.04	-2.81	92.05	8.02	233.30	2375
27.940	-1.58	2	13.30	13.30	0.00	1.22	-73.28	4.34	243.02	3204	2	11.28	11.24	0.04	-2.87	94.09	8.21	238.50	2375
28.690	-1.44	2	13.20	13.20	0.00	1.26	-76.18	4.54	252.67	3204	2	11.93	11.89	0.03	-2.92	96.14	8.41	243.69	2375
29.440	-1.32	2	13.15	13.15	0.00	1.31	-79.09	4.73	262.32	3204	2	12.54	12.51	0.03	-2.98	98.19	8.60	248.89	2375
30.190	-1.22	2	13.14	13.14	0.00	1.35	-82.00	4.92	271.97	3204	2	13.12	13.09	0.03	-3.04	100.24	8.79	254.08	2375
30.940	-1.12	2	13.16	13.16	0.00	1.39	-84.91	5.12	281.62	3204	2	13.68	13.66	0.03	-3.10	102.29	8.98	259.28	2375
31.690	-1.02	2	13.19	13.19	0.00	1.43	-87.82	5.31	291.27	3204	2	14.24	14.21	0.03	-3.16	104.34	9.17	264.47	2375
		2	13.91	13.91	0.00	1.06	-75.07	5.10	326.10	4216	2	12.94	12.91	0.03	-2.35	88.12	8.80	291.50	3125
32.345	-0.94	2	13.84	13.84	0.00	1.09	-77.25	5.26	335.54	4216	2	13.47	13.45	0.03	-2.39	89.63	8.96	296.51	3125
33.000	-0.86	2	13.77	13.77	0.00	1.12	-79.42	5.43	344.98	4216	2	14.02	13.99	0.02	-2.42	91.14	9.12	301.51	3125
		2	12.83	12.83	0.00	1.55	-55.94	5.31	184.95	3125	2	14.02	13.99	0.02	-2.42	91.14	9.12	301.51	3125
33.623	-0.77	2	12.83	12.83	0.00	1.58	-57.37	5.47	189.71	3125	2	14.55	14.52	0.02	-2.46	92.58	9.27	306.27	3125
34.245	-0.68	2	12.81	12.81	0.00	1.62	-58.81	5.62	194.47	3125	2	15.10	15.08	0.02	-2.50	94.02	9.43	311.03	3125
34.868	-0.58	2	12.77	12.77	0.00	1.66	-60.25	5.78	199.22	3125	2	15.67	15.65	0.02	-2.53	95.45	9.58	315.78	3125

35.490	-0.48	2	12.70	12.70	0.00	1.69	-61.69	5.93	203.98	3125	2	16.27	16.25	0.02	-2.57	96.89	9.73	320.54	3125
		2	16.45	16.45	0.00	0.80	-22.09	0.51	286.60	12500	2	10.67	10.65	0.02	-1.01	33.10	4.03	430.36	12500
36.245	-0.34	2	15.20	15.20	0.00	0.81	-22.78	0.73	295.69	12500	2	12.70	12.68	0.02	-1.02	33.80	4.25	439.45	12500
37.000	-0.21	2	13.93	13.93	0.00	0.83	-23.48	0.95	304.77	12500	2	14.74	14.72	0.02	-1.03	34.49	4.47	448.53	12500

▼ PHASE 6

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-18.16	0									1	0.75	0.00	0.75	-	-	0.75	0.75	1000
0.100	-18.01	0									2	0.81	0.07	0.74	-18.01	-17.15	0.81	1.67	1000
0.900	-16.80	0									2	1.28	0.59	0.69	-16.80	-9.01	1.28	9.07	1000
1.700	-15.59	0									2	1.75	1.11	0.64	-15.59	-0.88	1.75	16.46	1000
1.850	-15.36	0									2	1.79	1.15	0.63	-15.36	-0.02	1.79	17.13	1000
2.500	-14.39	0									2	1.95	1.36	0.59	-14.39	3.69	1.95	20.04	1000
2.790	-13.95	0									2	2.03	1.45	0.58	-13.95	5.35	2.03	21.33	1000
		0									-1	0.00	0.00	0.00	-9.91	9.91	-10.08	22.11	1625
3.340	-13.14	0									-1	0.00	0.00	0.00	-9.91	9.91	-9.08	23.12	1625
3.890	-12.33	0									-1	0.00	0.00	0.00	-9.91	9.91	-8.08	24.12	1625
4.440	-11.54	0									-1	0.00	0.00	0.00	-9.91	9.91	-7.07	25.12	1625
4.990	-10.77	0									-1	0.00	0.00	0.00	-9.91	9.91	-6.07	26.13	1625
		0									2	2.47	2.02	0.45	-10.77	50.22	2.47	32.97	500
5.745	-9.75	0									2	2.64	2.23	0.42	-9.75	57.61	2.64	36.33	500
6.190	-9.18	0									2	2.75	2.35	0.39	-9.18	61.94	2.75	38.31	500
		0									2	1.89	1.49	0.39	-9.91	9.91	1.07	23.36	1125
6.855	-8.36	0									2	4.03	3.67	0.36	-9.91	9.91	2.30	24.59	1125
7.520	-7.61	0									2	6.11	5.78	0.34	-9.91	9.91	3.53	25.82	1125
		2	16.03	16.03	0.00	9.94	-9.94	-20.95	20.95	2107	2	6.11	5.78	0.34	-9.91	9.91	3.53	25.82	1125
8.226	-6.88	2	15.83	15.83	0.00	9.94	-9.94	-19.62	22.29	2107	2	8.24	7.93	0.31	-9.91	9.91	4.83	27.12	1125
8.933	-6.25	2	15.83	15.83	0.00	9.94	-9.94	-18.28	23.62	2107	2	10.26	9.98	0.28	-9.91	9.91	6.14	28.43	1125
9.639	-5.71	2	16.03	16.03	0.00	9.94	-9.94	-16.95	24.96	2107	2	12.18	11.92	0.26	-9.91	9.91	7.45	29.74	1125
10.345	-5.26	2	16.42	16.42	0.00	9.94	-9.94	-15.61	26.29	2107	2	14.00	13.76	0.24	-9.91	9.91	8.77	31.06	1125
11.183	-4.84	2	17.11	17.11	0.00	9.94	-9.94	-14.03	27.87	2107	2	16.03	15.82	0.22	-9.91	9.91	10.33	32.62	1125
12.020	-4.51	2	18.01	18.01	0.00	9.94	-9.94	-12.45	29.46	2107	2	17.96	17.76	0.19	-9.91	9.91	11.89	34.18	1125
12.883	-4.26	2	19.11	19.11	0.00	9.94	-9.94	-10.82	31.09	2107	2	19.86	19.68	0.18	-9.91	9.91	13.50	35.79	1125
13.745	-4.06	2	20.32	20.32	0.00	9.94	-9.94	-9.19	32.72	2107	2	21.69	21.53	0.16	-9.91	9.91	15.11	37.40	1125
14.583	-3.91	2	21.58	21.58	0.00	9.94	-9.94	-7.60	34.30	2107	2	23.43	23.29	0.14	-9.91	9.91	16.68	38.97	1125
15.420	-3.77	2	22.87	22.87	0.00	9.94	-9.94	-6.02	35.88	2107	2	25.16	25.03	0.13	-9.91	9.91	18.25	40.54	1125
16.283	-3.63	2	24.21	24.21	0.00	9.94	-9.94	-4.39	37.51	2107	2	26.93	26.81	0.12	-9.91	9.91	19.87	42.16	1125
17.145	-3.49	2	25.55	25.55	0.00	9.94	-9.94	-2.76	39.14	2107	2	28.70	28.60	0.11	-9.91	9.91	21.49	43.78	1125
17.618	-3.42	2	26.28	26.28	0.00	9.94	-9.94	-1.87	40.04	2107	2	29.68	29.57	0.10	-9.91	9.91	22.38	44.66	1125
18.090	-3.34	2	27.02	27.02	0.00	9.94	-9.94	-0.97	40.93	2107	2	30.65	30.55	0.10	-9.91	9.91	23.26	45.55	1125
		2	11.39	11.39	0.00	0.76	-45.06	2.40	102.85	2192	2	6.73	6.63	0.10	-3.42	86.40	6.59	152.56	1625
18.820	-3.23	2	11.46	11.46	0.00	0.82	-48.55	2.58	110.81	2192	2	6.87	6.78	0.09	-3.29	89.10	6.77	156.91	1625
19.405	-3.15	2	11.53	11.53	0.00	0.87	-51.35	2.73	117.20	2192	2	6.99	6.91	0.08	-3.19	91.26	6.92	160.40	1625
19.990	-3.07	2	11.62	11.62	0.00	0.92	-54.15	2.88	123.58	2192	2	7.11	7.03	0.08	-3.10	93.41	7.06	163.89	1625
		2	32.91	32.91	0.00	9.95	-9.95	-6.72	53.86	3043	2	32.99	32.91	0.08	-9.91	9.91	21.88	54.08	1625
20.420	-3.02	2	33.58	33.58	0.00	9.95	-9.95	-5.89	54.69	3043	2	33.91	33.84	0.07	-9.91	9.91	22.71	54.91	1625
20.983	-2.95	2	34.46	34.46	0.00	9.95	-9.95	-4.79	55.78	3043	2	35.11	35.04	0.07	-9.91	9.91	23.80	56.00	1625
21.545	-2.88	2	35.34	35.34	0.00	9.95	-9.95	-3.70	56.87	3043	2	36.31	36.24	0.07	-9.91	9.91	24.89	57.08	1625
22.108	-2.80	2	36.20	36.20	0.00	9.95	-9.95	-2.61	57.96	3043	2	37.52	37.46	0.06	-9.91	9.91	25.98	58.17	1625
22.670	-2.72	2	37.03	37.03	0.00	9.95	-9.95	-1.52	59.06	3043	2	38.75	38.69	0.06	-9.91	9.91	27.06	59.26	1625
23.220	-2.62	2	37.82	37.82	0.00	9.95	-9.95	-0.45	60.12	3043	2	39.96	39.91	0.06	-9.91	9.91	28.13	60.32	1625
23.320	-2.60	2	37.96	37.96	0.00	9.95	-9.95	-0.26	60.32	3043	2	40.19	40.13	0.06	-9.91	9.91	28.32	60.52	1625
23.913	-2.49	2	38.76	38.76	0.00	9.95	-9.95	0.89	61.47	3043	2	41.52	41.46	0.05	-9.91	9.91	29.47	61.66	1625
24.505	-2.36	2	39.52	39.52	0.00	9.95	-9.95	2.04	62.62	3043	2	42.87	42.82	0.05	-9.91	9.91	30.61	62.81	1625

25.098	-2.23	2	40.26	40.26	0.00	9.95	-9.95	3.19	63.77	3043	2	44.24	44.19	0.05	-9.91	9.91	31.76	63.96	1625
25.690	-2.08	2	40.97	40.97	0.00	9.95	-9.95	4.34	64.91	3043	2	45.62	45.57	0.04	-9.91	9.91	32.91	65.10	1625
		2	13.93	13.93	0.00	1.09	-64.55	3.76	214.08	3204	2	9.09	9.04	0.04	-2.69	87.95	7.64	222.92	2375
26.440	-1.90	2	13.68	13.68	0.00	1.13	-67.46	3.95	223.73	3204	2	9.85	9.80	0.04	-2.75	90.00	7.83	228.11	2375
27.190	-1.73	2	13.47	13.47	0.00	1.18	-70.37	4.15	233.37	3204	2	10.58	10.54	0.04	-2.81	92.05	8.02	233.30	2375
27.940	-1.58	2	13.30	13.30	0.00	1.22	-73.28	4.34	243.02	3204	2	11.28	11.24	0.04	-2.87	94.09	8.21	238.50	2375
28.690	-1.44	2	13.20	13.20	0.00	1.26	-76.18	4.54	252.67	3204	2	11.93	11.89	0.03	-2.92	96.14	8.41	243.69	2375
29.440	-1.32	2	13.15	13.15	0.00	1.31	-79.09	4.73	262.32	3204	2	12.54	12.51	0.03	-2.98	98.19	8.60	248.89	2375
30.190	-1.22	2	13.14	13.14	0.00	1.35	-82.00	4.92	271.97	3204	2	13.12	13.09	0.03	-3.04	100.24	8.79	254.08	2375
30.940	-1.12	2	13.16	13.16	0.00	1.39	-84.91	5.12	281.62	3204	2	13.68	13.66	0.03	-3.10	102.29	8.98	259.28	2375
31.690	-1.02	2	13.19	13.19	0.00	1.43	-87.82	5.31	291.27	3204	2	14.24	14.21	0.03	-3.16	104.34	9.17	264.47	2375
		2	13.91	13.91	0.00	1.06	-75.07	5.10	326.10	4216	2	12.94	12.91	0.03	-2.35	88.12	8.80	291.50	3125
32.345	-0.94	2	13.84	13.84	0.00	1.09	-77.25	5.26	335.54	4216	2	13.47	13.45	0.03	-2.39	89.63	8.96	296.51	3125
33.000	-0.86	2	13.77	13.77	0.00	1.12	-79.42	5.43	344.98	4216	2	14.02	13.99	0.02	-2.42	91.14	9.12	301.51	3125
		2	12.83	12.83	0.00	1.55	-55.94	5.31	184.95	3125	2	14.02	13.99	0.02	-2.42	91.14	9.12	301.51	3125
33.623	-0.77	2	12.83	12.83	0.00	1.58	-57.37	5.47	189.71	3125	2	14.55	14.52	0.02	-2.46	92.58	9.27	306.27	3125
34.245	-0.68	2	12.81	12.81	0.00	1.62	-58.81	5.62	194.47	3125	2	15.10	15.08	0.02	-2.50	94.02	9.43	311.03	3125
34.868	-0.58	2	12.77	12.77	0.00	1.66	-60.25	5.78	199.22	3125	2	15.67	15.65	0.02	-2.53	95.45	9.58	315.78	3125
35.490	-0.48	2	12.70	12.70	0.00	1.69	-61.69	5.93	203.98	3125	2	16.27	16.25	0.02	-2.57	96.89	9.73	320.54	3125
		2	16.45	16.45	0.00	0.80	-22.09	0.51	286.60	12500	2	10.67	10.65	0.02	-1.01	33.10	4.03	430.36	12500
36.245	-0.34	2	15.20	15.20	0.00	0.81	-22.78	0.73	295.69	12500	2	12.70	12.68	0.02	-1.02	33.80	4.25	439.45	12500
37.000	-0.21	2	13.93	13.93	0.00	0.83	-23.48	0.95	304.77	12500	2	14.74	14.72	0.02	-1.03	34.49	4.47	448.53	12500

▼ PHASE 7

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-18.34	0									1	0.75	0.00	0.75	-	-	0.75	0.75	1000
0.100	-18.28	0									1	0.81	0.07	0.74	-18.01	-17.15	0.81	1.67	1000
0.900	-17.78	0									1	1.28	0.59	0.69	-16.80	-9.01	1.28	9.07	1000
1.700	-17.29	0									1	1.75	1.11	0.64	-15.59	-0.88	1.75	16.46	1000
1.850	-17.19	0									1	1.79	1.15	0.63	-15.36	-0.02	1.79	17.13	1000
2.500	-16.79	0									1	1.95	1.36	0.59	-14.39	3.69	1.95	20.04	1000
2.790	-16.61	0									1	2.03	1.45	0.58	-13.95	5.35	2.03	21.33	1000
		0									-1	0.00	0.00	0.00	-9.91	9.91	-10.08	22.11	1625
3.340	-16.28	0									-1	0.00	0.00	0.00	-9.91	9.91	-9.08	23.12	1625
3.890	-15.95	0									-1	0.00	0.00	0.00	-9.91	9.91	-8.08	24.12	1625
4.440	-15.63	0									-1	0.00	0.00	0.00	-9.91	9.91	-7.07	25.12	1625
4.990	-15.33	0									-1	0.00	0.00	0.00	-9.91	9.91	-6.07	26.13	1625
		0									1	2.47	2.02	0.45	-10.77	50.22	2.47	32.97	500
5.745	-14.95	0									1	2.64	2.23	0.42	-9.75	57.61	2.64	36.33	500
6.190	-14.74	0									1	2.75	2.35	0.39	-9.18	61.94	2.75	38.31	500
		0									1	1.07	0.68	0.39	-9.91	9.91	1.07	23.36	1125
6.855	-14.44	0									1	2.30	1.93	0.36	-9.91	9.91	2.30	24.59	1125
7.520	-14.13	0									1	3.53	3.19	0.34	-9.91	9.91	3.53	25.82	1125
8.226	-13.78	0									1	4.83	4.52	0.31	-9.91	9.91	4.83	27.12	1125
8.933	-13.38	0									1	6.14	5.86	0.28	-9.91	9.91	6.14	28.43	1125
9.639	-12.91	0									1	7.45	7.19	0.26	-9.91	9.91	7.45	29.74	1125
10.345	-12.38	0									1	8.77	8.53	0.24	-9.91	9.91	8.77	31.06	1125
11.183	-11.65	0									1	10.33	10.11	0.22	-9.91	9.91	10.33	32.62	1125
12.020	-10.85	0									1	11.89	11.69	0.19	-9.91	9.91	11.89	34.18	1125
		3	20.95	20.95	0.00	9.94	-9.94	-20.95	20.95	2107	1	11.89	11.69	0.19	-9.91	9.91	11.89	34.18	1125
12.883	-10.00	3	22.58	22.58	0.00	9.94	-9.94	-19.32	22.58	2107	1	13.50	13.32	0.18	-9.91	9.91	13.50	35.79	1125
13.745	-9.17	2	22.59	22.59	0.00	9.94	-9.94	-17.69	24.21	2107	2	15.94	15.78	0.16	-9.91	9.91	15.11	37.40	1125
14.583	-8.42	2	22.59	22.59	0.00	9.94	-9.94	-16.11	25.79	2107	2	18.35	18.21	0.14	-9.91	9.91	16.68	38.97	1125
15.420	-7.74	2	22.73	22.73	0.00	9.94	-9.94	-14.53	27.38	2107	2	20.69	20.56	0.13	-9.91	9.91	18.25	40.54	1125

16.283	-7.11	2	23.03	23.03	0.00	9.94	-9.94	-12.90	29.01	2107	2	23.02	22.90	0.12	-9.91	9.91	19.87	42.16	1125
17.145	-6.55	2	23.48	23.48	0.00	9.94	-9.94	-11.27	30.64	2107	2	25.27	25.16	0.11	-9.91	9.91	21.49	43.78	1125
17.618	-6.27	2	23.78	23.78	0.00	9.94	-9.94	-10.37	31.53	2107	2	26.47	26.37	0.10	-9.91	9.91	22.38	44.66	1125
18.090	-6.01	2	24.13	24.13	0.00	9.94	-9.94	-9.48	32.42	2107	2	27.65	27.55	0.10	-9.91	9.91	23.26	45.55	1125
		2	14.10	14.10	0.00	0.17	-10.27	0.55	23.45	2192	1	6.59	6.50	0.10	-3.42	86.40	6.59	152.56	1625
18.820	-5.65	2	13.62	13.62	0.00	0.23	-13.76	0.73	31.42	2192	1	6.77	6.68	0.09	-3.29	89.10	6.77	156.91	1625
19.405	-5.40	2	13.32	13.32	0.00	0.28	-16.56	0.88	37.80	2192	1	6.92	6.83	0.08	-3.19	91.26	6.92	160.40	1625
19.990	-5.17	2	13.08	13.08	0.00	0.33	-19.36	1.03	44.18	2192	1	7.06	6.98	0.08	-3.10	93.41	7.06	163.89	1625
		2	30.80	30.80	0.00	9.95	-9.95	-15.23	45.35	3043	2	29.58	29.50	0.08	-9.91	9.91	21.88	54.08	1625
20.420	-5.02	2	31.18	31.18	0.00	9.95	-9.95	-14.39	46.19	3043	2	30.65	30.58	0.07	-9.91	9.91	22.71	54.91	1625
20.983	-4.84	2	31.72	31.72	0.00	9.95	-9.95	-13.30	47.28	3043	2	32.03	31.96	0.07	-9.91	9.91	23.80	56.00	1625
21.545	-4.67	2	32.29	32.29	0.00	9.95	-9.95	-12.21	48.37	3043	2	33.40	33.33	0.07	-9.91	9.91	24.89	57.08	1625
22.108	-4.50	2	32.87	32.87	0.00	9.95	-9.95	-11.12	49.46	3043	2	34.76	34.69	0.06	-9.91	9.91	25.98	58.17	1625
22.670	-4.33	2	33.45	33.45	0.00	9.95	-9.95	-10.03	50.55	3043	2	36.12	36.06	0.06	-9.91	9.91	27.06	59.26	1625
23.220	-4.16	2	34.00	34.00	0.00	9.95	-9.95	-8.96	51.62	3043	2	37.46	37.40	0.06	-9.91	9.91	28.13	60.32	1625
23.320	-4.13	2	34.10	34.10	0.00	9.95	-9.95	-8.76	51.81	3043	2	37.70	37.65	0.06	-9.91	9.91	28.32	60.52	1625
23.913	-3.94	2	34.65	34.65	0.00	9.95	-9.95	-7.62	52.96	3043	2	39.17	39.12	0.05	-9.91	9.91	29.47	61.66	1625
24.505	-3.73	2	35.17	35.17	0.00	9.95	-9.95	-6.47	54.11	3043	2	40.65	40.60	0.05	-9.91	9.91	30.61	62.81	1625
25.098	-3.51	2	35.64	35.64	0.00	9.95	-9.95	-5.32	55.26	3043	2	42.16	42.11	0.05	-9.91	9.91	31.76	63.96	1625
25.690	-3.28	2	36.10	36.10	0.00	9.95	-9.95	-4.17	56.41	3043	2	43.68	43.63	0.04	-9.91	9.91	32.91	65.10	1625
		2	13.77	13.77	0.00	0.57	-29.47	1.42	97.68	3204	1	7.64	7.60	0.04	-2.69	87.95	7.64	222.92	2375
26.440	-2.99	2	13.18	13.18	0.00	0.62	-32.38	1.62	107.33	3204	1	7.83	7.79	0.04	-2.75	90.00	7.83	228.11	2375
27.190	-2.73	2	12.66	12.66	0.00	0.66	-35.29	1.81	116.97	3204	2	8.21	8.18	0.04	-2.81	92.05	8.02	233.30	2375
27.940	-2.49	2	12.22	12.22	0.00	0.70	-38.19	2.00	126.62	3204	2	9.11	9.08	0.04	-2.87	94.09	8.21	238.50	2375
28.690	-2.28	2	11.88	11.88	0.00	0.74	-41.10	2.20	136.27	3204	2	9.94	9.91	0.03	-2.92	96.14	8.41	243.69	2375
29.440	-2.09	2	11.61	11.61	0.00	0.79	-44.01	2.39	145.92	3204	2	10.71	10.68	0.03	-2.98	98.19	8.60	248.89	2375
30.190	-1.93	2	11.42	11.42	0.00	0.83	-46.92	2.58	155.57	3204	2	11.44	11.41	0.03	-3.04	100.24	8.79	254.08	2375
30.940	-1.77	2	11.26	11.26	0.00	0.87	-49.83	2.78	165.22	3204	2	12.13	12.10	0.03	-3.10	102.29	8.98	259.28	2375
31.690	-1.63	2	11.12	11.12	0.00	0.92	-52.73	2.97	174.87	3204	2	12.81	12.78	0.03	-3.16	104.34	9.17	264.47	2375
		2	12.58	12.58	0.00	0.68	-45.05	2.86	195.67	4216	2	11.06	11.03	0.03	-2.35	88.12	8.80	291.50	3125
32.345	-1.50	2	12.31	12.31	0.00	0.71	-47.23	3.02	205.11	4216	2	11.74	11.71	0.03	-2.39	89.63	8.96	296.51	3125
33.000	-1.36	2	12.03	12.03	0.00	0.73	-49.40	3.18	214.55	4216	2	12.43	12.41	0.02	-2.42	91.14	9.12	301.51	3125
		2	10.54	10.54	0.00	1.03	-35.05	3.07	115.81	3125	2	12.43	12.41	0.02	-2.42	91.14	9.12	301.51	3125
33.623	-1.23	2	10.39	10.39	0.00	1.06	-36.49	3.22	120.56	3125	2	13.12	13.10	0.02	-2.46	92.58	9.27	306.27	3125
34.245	-1.08	2	10.20	10.20	0.00	1.10	-37.92	3.38	125.32	3125	2	13.84	13.82	0.02	-2.50	94.02	9.43	311.03	3125
34.868	-0.93	2	9.97	9.97	0.00	1.14	-39.36	3.53	130.08	3125	2	14.60	14.58	0.02	-2.53	95.45	9.58	315.78	3125
35.490	-0.76	2	9.72	9.72	0.00	1.17	-40.80	3.68	134.84	3125	2	15.39	15.37	0.02	-2.57	96.89	9.73	320.54	3125
		2	16.36	16.36	0.00	0.68	-15.55	-1.57	201.31	12500	2	7.14	7.12	0.02	-1.01	33.10	4.03	430.36	12500
36.245	-0.55	2	14.14	14.14	0.00	0.69	-16.25	-1.35	210.40	12500	2	10.14	10.12	0.02	-1.02	33.80	4.25	439.45	12500
37.000	-0.34	2	11.90	11.90	0.00	0.70	-16.95	-1.13	219.48	12500	2	13.15	13.13	0.02	-1.03	34.49	4.47	448.53	12500

▼ PHASE 8

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-18.34	0									1	0.75	0.00	0.75	-	-	0.75	0.75	1000
0.100	-18.28	0									2	0.81	0.07	0.74	-18.28	-17.41	0.81	1.67	1000
0.900	-17.78	0									2	1.28	0.59	0.69	-17.78	-10.00	1.28	9.07	1000
1.700	-17.29	0									2	1.75	1.11	0.64	-17.29	-2.58	1.75	16.46	1000
1.850	-17.19	0									2	1.79	1.15	0.63	-17.19	-1.85	1.79	17.13	1000
2.500	-16.79	0									2	1.95	1.36	0.59	-16.79	1.29	1.95	20.04	1000
2.790	-16.61	0									2	2.03	1.45	0.58	-16.61	2.69	2.03	21.33	1000
		0									-1	0.00	0.00	0.00	-9.91	9.91	-10.08	22.11	1625
3.340	-16.28	0									-1	0.00	0.00	0.00	-9.91	9.91	-9.08	23.12	1625
3.890	-15.95	0									-1	0.00	0.00	0.00	-9.91	9.91	-8.08	24.12	1625
4.440	-15.63	0									-1	0.00	0.00	0.00	-9.91	9.91	-7.07	25.12	1625

計畫名稱：XDO Example 3

主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

4.990	-15.33	0									-1	0.00	0.00	0.00	-9.91	9.91	-6.07	26.13	1625
		0									2	2.47	2.02	0.45	-15.33	45.66	2.47	32.97	500
5.745	-14.95	0									2	2.64	2.23	0.42	-14.95	52.42	2.64	36.33	500
6.190	-14.74	0									2	2.75	2.35	0.39	-14.74	56.38	2.75	38.31	500
		0									2	1.07	0.68	0.39	-14.74	5.08	1.07	23.36	1125
6.855	-14.44	0									2	2.30	1.93	0.36	-14.44	5.38	2.30	24.59	1125
7.520	-14.13	0									2	3.53	3.19	0.34	-14.13	5.68	3.53	25.82	1125
8.226	-13.78	0									2	4.83	4.52	0.31	-13.78	6.03	4.83	27.12	1125
8.933	-13.38	0									2	6.14	5.86	0.28	-13.38	6.43	6.14	28.43	1125
9.639	-12.91	0									2	7.45	7.19	0.26	-12.91	6.90	7.45	29.74	1125
10.345	-12.38	0									2	8.77	8.53	0.24	-12.38	7.44	8.77	31.06	1125
11.183	-11.65	0									2	10.33	10.11	0.22	-11.65	8.16	10.33	32.62	1125
12.020	-10.85	0									2	11.89	11.69	0.19	-10.85	8.96	11.89	34.18	1125
		2	20.95	20.95	0.00	9.04	-10.85	-20.95	20.95	2107	2	11.89	11.69	0.19	-10.85	8.96	11.89	34.18	1125
12.883	-10.00	2	22.58	22.58	0.00	9.89	-10.00	-19.32	22.58	2107	2	13.50	13.32	0.18	-10.00	9.81	13.50	35.79	1125
13.745	-9.17	2	22.59	22.59	0.00	9.94	-9.94	-17.69	24.21	2107	2	15.94	15.78	0.16	-9.91	9.91	15.11	37.40	1125
14.583	-8.42	2	22.59	22.59	0.00	9.94	-9.94	-16.11	25.79	2107	2	18.35	18.21	0.14	-9.91	9.91	16.68	38.97	1125
15.420	-7.74	2	22.73	22.73	0.00	9.94	-9.94	-14.53	27.38	2107	2	20.69	20.56	0.13	-9.91	9.91	18.25	40.54	1125
16.283	-7.11	2	23.03	23.03	0.00	9.94	-9.94	-12.90	29.01	2107	2	23.02	22.90	0.12	-9.91	9.91	19.87	42.16	1125
17.145	-6.55	2	23.48	23.48	0.00	9.94	-9.94	-11.27	30.64	2107	2	25.27	25.16	0.11	-9.91	9.91	21.49	43.78	1125
17.618	-6.27	2	23.78	23.78	0.00	9.94	-9.94	-10.37	31.53	2107	2	26.47	26.37	0.10	-9.91	9.91	22.38	44.66	1125
18.090	-6.01	2	24.13	24.13	0.00	9.94	-9.94	-9.48	32.42	2107	2	27.65	27.55	0.10	-9.91	9.91	23.26	45.55	1125
		2	14.10	14.10	0.00	0.17	-10.27	0.55	23.45	2192	2	6.59	6.50	0.10	-6.01	83.82	6.59	152.56	1625
18.820	-5.65	2	13.62	13.62	0.00	0.23	-13.76	0.73	31.42	2192	2	6.77	6.68	0.09	-5.65	86.74	6.77	156.91	1625
19.405	-5.40	2	13.32	13.32	0.00	0.28	-16.56	0.88	37.80	2192	2	6.92	6.83	0.08	-5.40	89.05	6.92	160.40	1625
19.990	-5.17	2	13.08	13.08	0.00	0.33	-19.36	1.03	44.18	2192	2	7.06	6.98	0.08	-5.17	91.34	7.06	163.89	1625
		2	30.80	30.80	0.00	9.95	-9.95	-15.23	45.35	3043	2	29.58	29.50	0.08	-9.91	9.91	21.88	54.08	1625
20.420	-5.02	2	31.18	31.18	0.00	9.95	-9.95	-14.39	46.19	3043	2	30.65	30.58	0.07	-9.91	9.91	22.71	54.91	1625
20.983	-4.84	2	31.72	31.72	0.00	9.95	-9.95	-13.30	47.28	3043	2	32.03	31.96	0.07	-9.91	9.91	23.80	56.00	1625
21.545	-4.67	2	32.29	32.29	0.00	9.95	-9.95	-12.21	48.37	3043	2	33.40	33.33	0.07	-9.91	9.91	24.89	57.08	1625
22.108	-4.50	2	32.87	32.87	0.00	9.95	-9.95	-11.12	49.46	3043	2	34.76	34.69	0.06	-9.91	9.91	25.98	58.17	1625
22.670	-4.33	2	33.45	33.45	0.00	9.95	-9.95	-10.03	50.55	3043	2	36.12	36.06	0.06	-9.91	9.91	27.06	59.26	1625
23.220	-4.16	2	34.00	34.00	0.00	9.95	-9.95	-8.96	51.62	3043	2	37.46	37.40	0.06	-9.91	9.91	28.13	60.32	1625
23.320	-4.13	2	34.10	34.10	0.00	9.95	-9.95	-8.76	51.81	3043	2	37.70	37.65	0.06	-9.91	9.91	28.32	60.52	1625
23.913	-3.94	2	34.65	34.65	0.00	9.95	-9.95	-7.62	52.96	3043	2	39.17	39.12	0.05	-9.91	9.91	29.47	61.66	1625
24.505	-3.73	2	35.17	35.17	0.00	9.95	-9.95	-6.47	54.11	3043	2	40.65	40.60	0.05	-9.91	9.91	30.61	62.81	1625
25.098	-3.51	2	35.64	35.64	0.00	9.95	-9.95	-5.32	55.26	3043	2	42.16	42.11	0.05	-9.91	9.91	31.76	63.96	1625
25.690	-3.28	2	36.10	36.10	0.00	9.95	-9.95	-4.17	56.41	3043	2	43.68	43.63	0.04	-9.91	9.91	32.91	65.10	1625
		2	13.77	13.77	0.00	0.57	-29.47	1.42	97.68	3204	2	7.64	7.60	0.04	-3.28	87.36	7.64	222.92	2375
26.440	-2.99	2	13.18	13.18	0.00	0.62	-32.38	1.62	107.33	3204	2	7.83	7.79	0.04	-2.99	89.75	7.83	228.11	2375
27.190	-2.73	2	12.66	12.66	0.00	0.66	-35.29	1.81	116.97	3204	2	8.21	8.18	0.04	-2.81	92.05	8.02	233.30	2375
27.940	-2.49	2	12.22	12.22	0.00	0.70	-38.19	2.00	126.62	3204	2	9.11	9.08	0.04	-2.87	94.09	8.21	238.50	2375
28.690	-2.28	2	11.88	11.88	0.00	0.74	-41.10	2.20	136.27	3204	2	9.94	9.91	0.03	-2.92	96.14	8.41	243.69	2375
29.440	-2.09	2	11.61	11.61	0.00	0.79	-44.01	2.39	145.92	3204	2	10.71	10.68	0.03	-2.98	98.19	8.60	248.89	2375
30.190	-1.93	2	11.42	11.42	0.00	0.83	-46.92	2.58	155.57	3204	2	11.44	11.41	0.03	-3.04	100.24	8.79	254.08	2375
30.940	-1.77	2	11.26	11.26	0.00	0.87	-49.83	2.78	165.22	3204	2	12.13	12.10	0.03	-3.10	102.29	8.98	259.28	2375
31.690	-1.63	2	11.12	11.12	0.00	0.92	-52.73	2.97	174.87	3204	2	12.81	12.78	0.03	-3.16	104.34	9.17	264.47	2375
		2	12.58	12.58	0.00	0.68	-45.05	2.86	195.67	4216	2	11.06	11.03	0.03	-2.35	88.12	8.80	291.50	3125
32.345	-1.50	2	12.31	12.31	0.00	0.71	-47.23	3.02	205.11	4216	2	11.74	11.71	0.03	-2.39	89.63	8.96	296.51	3125
33.000	-1.36	2	12.03	12.03	0.00	0.73	-49.40	3.18	214.55	4216	2	12.43	12.41	0.02	-2.42	91.14	9.12	301.51	3125
		2	10.54	10.54	0.00	1.03	-35.05	3.07	115.81	3125	2	12.43	12.41	0.02	-2.42	91.14	9.12	301.51	3125
33.623	-1.23	2	10.39	10.39	0.00	1.06	-36.49	3.22	120.56	3125	2	13.12	13.10	0.02	-2.46	92.58	9.27	306.27	3125
34.245	-1.08	2	10.20	10.20	0.00	1.10	-37.92	3.38	125.32	3125	2	13.84	13.82	0.02	-2.50	94.02	9.43	311.03	3125
34.868	-0.93	2	9.97	9.97	0.00	1.14	-39.36	3.53	130.08	3125	2	14.60	14.58	0.02	-2.53	95.45	9.58	315.78	3125
35.490	-0.76	2	9.72	9.72	0.00	1.17	-40.80	3.68	134.84	3125	2	15.39	15.37	0.02	-2.57	96.89	9.73	320.54	3125
		2	16.36	16.36	0.00	0.68	-15.55	-1.57	201.31	12500	2	7.14	7.12	0.02	-1.01	33.10	4.03	430.36	12500

36.245	-0.55	2	14.14	14.14	0.00	0.69	-16.25	-1.35	210.40	12500	2	10.14	10.12	0.02	-1.02	33.80	4.25	439.45	12500
37.000	-0.34	2	11.90	11.90	0.00	0.70	-16.95	-1.13	219.48	12500	2	13.15	13.13	0.02	-1.03	34.49	4.47	448.53	12500

▼ PHASE 9

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-16.04	0									1	0.75	0.00	0.75	-	-	0.75	0.75	1000
0.100	-16.03	0									3	1.67	0.93	0.74	-18.28	-17.41	0.81	1.67	1000
0.900	-15.99	0									2	3.07	2.38	0.69	-17.78	-10.00	1.28	9.07	1000
1.700	-15.95	0									2	3.09	2.44	0.64	-17.29	-2.58	1.75	16.46	1000
1.850	-15.94	0									2	3.04	2.40	0.63	-17.19	-1.85	1.79	17.13	1000
2.500	-15.92	0									2	2.82	2.23	0.59	-16.79	1.29	1.95	20.04	1000
2.790	-15.92	0									2	2.72	2.15	0.58	-16.61	2.69	2.03	21.33	1000
		0									-1	0.00	0.00	0.00	-9.91	9.91	-10.08	22.11	1625
3.340	-15.92	0									-1	0.00	0.00	0.00	-9.91	9.91	-9.08	23.12	1625
3.890	-15.95	0									-1	0.00	0.00	0.00	-9.91	9.91	-8.08	24.12	1625
4.440	-16.00	0									-1	0.00	0.00	0.00	-9.91	9.91	-7.07	25.12	1625
4.990	-16.09	0									-1	0.00	0.00	0.00	-9.91	9.91	-6.07	26.13	1625
		0									1	2.47	2.02	0.45	-15.33	45.66	2.47	32.97	500
5.745	-16.28	0									1	2.64	2.23	0.42	-14.95	52.42	2.64	36.33	500
6.190	-16.44	0									1	2.75	2.35	0.39	-14.74	56.38	2.75	38.31	500
		0									1	1.07	0.68	0.39	-14.74	5.08	1.07	23.36	1125
6.855	-16.73	0									1	2.30	1.93	0.36	-14.44	5.38	2.30	24.59	1125
7.520	-17.05	0									1	3.53	3.19	0.34	-14.13	5.68	3.53	25.82	1125
8.226	-17.41	0									1	4.83	4.52	0.31	-13.78	6.03	4.83	27.12	1125
8.933	-17.76	0									1	6.14	5.86	0.28	-13.38	6.43	6.14	28.43	1125
9.639	-18.09	0									1	7.45	7.19	0.26	-12.91	6.90	7.45	29.74	1125
10.345	-18.39	0									1	8.77	8.53	0.24	-12.38	7.44	8.77	31.06	1125
11.183	-18.68	0									1	10.33	10.11	0.22	-11.65	8.16	10.33	32.62	1125
12.020	-18.82	0									1	11.89	11.69	0.19	-10.85	8.96	11.89	34.18	1125
12.883	-18.74	0									1	13.50	13.32	0.18	-10.00	9.81	13.50	35.79	1125
13.745	-18.35	0									1	15.11	14.95	0.16	-9.91	9.91	15.11	37.40	1125
14.583	-17.68	0									1	16.68	16.54	0.14	-9.91	9.91	16.68	38.97	1125
15.420	-16.73	0									1	18.25	18.12	0.13	-9.91	9.91	18.25	40.54	1125
		3	20.95	20.95	0.00	9.94	-9.94	-20.95	20.95	2107	1	18.25	18.12	0.13	-9.91	9.91	18.25	40.54	1125
16.283	-15.53	3	22.58	22.58	0.00	9.94	-9.94	-19.32	22.58	2107	1	19.87	19.75	0.12	-9.91	9.91	19.87	42.16	1125
17.145	-14.18	3	24.21	24.21	0.00	9.94	-9.94	-17.69	24.21	2107	1	21.49	21.38	0.11	-9.91	9.91	21.49	43.78	1125
17.618	-13.41	3	25.11	25.11	0.00	9.94	-9.94	-16.80	25.11	2107	1	22.38	22.27	0.10	-9.91	9.91	22.38	44.66	1125
18.090	-12.63	3	26.00	26.00	0.00	9.94	-9.94	-15.91	26.00	2107	1	23.26	23.17	0.10	-9.91	9.91	23.26	45.55	1125
		3	10.38	10.38	0.00	-1.38	-6.01	0.24	10.38	2192	1	6.59	6.50	0.10	-6.01	83.82	6.59	152.56	1625
18.820	-11.43	3	18.34	18.34	0.00	0.14	-8.04	0.43	18.34	2192	1	6.77	6.68	0.09	-5.65	86.74	6.77	156.91	1625
19.405	-10.51	2	24.02	24.02	0.00	0.18	-10.83	0.58	24.73	2192	1	6.92	6.83	0.08	-5.40	89.05	6.92	160.40	1625
19.990	-9.64	2	22.36	22.36	0.00	0.23	-13.63	0.73	31.11	2192	1	7.06	6.98	0.08	-5.17	91.34	7.06	163.89	1625
		2	37.96	37.96	0.00	9.95	-9.95	-21.65	38.93	3043	2	22.32	22.24	0.08	-9.91	9.91	21.88	54.08	1625
20.420	-9.04	2	36.97	36.97	0.00	9.95	-9.95	-20.82	39.76	3043	2	24.13	24.05	0.07	-9.91	9.91	22.71	54.91	1625
20.983	-8.31	2	35.84	35.84	0.00	9.95	-9.95	-19.73	40.85	3043	2	26.40	26.33	0.07	-9.91	9.91	23.80	56.00	1625
21.545	-7.65	2	34.92	34.92	0.00	9.95	-9.95	-18.63	41.94	3043	2	28.56	28.50	0.07	-9.91	9.91	24.89	57.08	1625
22.108	-7.05	2	34.19	34.19	0.00	9.95	-9.95	-17.54	43.03	3043	2	30.62	30.56	0.06	-9.91	9.91	25.98	58.17	1625
22.670	-6.51	2	33.64	33.64	0.00	9.95	-9.95	-16.45	44.12	3043	2	32.58	32.53	0.06	-9.91	9.91	27.06	59.26	1625
23.220	-6.03	2	33.25	33.25	0.00	9.95	-9.95	-15.38	45.19	3043	2	34.43	34.37	0.06	-9.91	9.91	28.13	60.32	1625
23.320	-5.95	2	33.20	33.20	0.00	9.95	-9.95	-15.19	45.39	3043	2	34.75	34.70	0.06	-9.91	9.91	28.32	60.52	1625
23.913	-5.49	2	32.94	32.94	0.00	9.95	-9.95	-14.04	46.54	3043	2	36.65	36.60	0.05	-9.91	9.91	29.47	61.66	1625
24.505	-5.06	2	32.80	32.80	0.00	9.95	-9.95	-12.89	47.68	3043	2	38.48	38.43	0.05	-9.91	9.91	30.61	62.81	1625
25.098	-4.67	2	32.76	32.76	0.00	9.95	-9.95	-11.74	48.83	3043	2	40.27	40.22	0.05	-9.91	9.91	31.76	63.96	1625
25.690	-4.31	2	32.80	32.80	0.00	9.95	-9.95	-10.59	49.98	3043	2	42.01	41.96	0.04	-9.91	9.91	32.91	65.10	1625

		2	15.34	15.34	0.00	0.35	-14.43	0.42	47.78	3204	1	7.64	7.60	0.04	-3.28	87.36	7.64	222.92	2375
26.440	-3.89	2	14.29	14.29	0.00	0.39	-16.96	0.59	56.17	3204	1	7.86	7.82	0.04	-3.00	90.02	7.86	228.79	2375
27.190	-3.52	2	13.41	13.41	0.00	0.43	-19.49	0.76	64.55	3204	1	8.07	8.03	0.04	-2.82	92.58	8.07	234.66	2375
27.940	-3.21	2	12.70	12.70	0.00	0.46	-22.01	0.92	72.94	3204	1	8.29	8.25	0.04	-2.89	94.90	8.29	240.54	2375
28.690	-2.94	2	12.13	12.13	0.00	0.50	-24.54	1.09	81.33	3204	2	8.53	8.50	0.03	-2.96	97.21	8.51	246.41	2375
29.440	-2.72	2	11.68	11.68	0.00	0.54	-27.07	1.26	89.71	3204	2	9.45	9.42	0.03	-3.02	99.53	8.72	252.28	2375
30.190	-2.51	2	11.32	11.32	0.00	0.58	-29.60	1.43	98.10	3204	2	10.30	10.27	0.03	-3.09	101.85	8.94	258.16	2375
30.940	-2.32	2	11.01	11.01	0.00	0.61	-32.12	1.60	106.49	3204	2	11.12	11.10	0.03	-3.15	104.16	9.16	264.03	2375
31.690	-2.14	2	10.70	10.70	0.00	0.65	-34.65	1.77	114.88	3204	2	11.94	11.91	0.03	-3.22	106.48	9.38	269.91	2375
		2	12.74	12.74	0.00	0.48	-29.58	1.70	128.44	4216	2	9.79	9.76	0.03	-2.39	89.93	8.99	297.50	3125
32.345	-1.97	2	12.29	12.29	0.00	0.50	-31.47	1.84	136.65	4216	2	10.62	10.59	0.03	-2.44	91.64	9.17	303.16	3125
33.000	-1.80	2	11.81	11.81	0.00	0.53	-33.36	1.98	144.86	4216	2	11.47	11.45	0.02	-2.48	93.35	9.36	308.82	3125
		2	9.84	9.84	0.00	0.75	-23.89	1.87	78.86	3125	2	11.47	11.45	0.02	-2.48	93.35	9.36	308.82	3125
33.623	-1.62	2	9.52	9.52	0.00	0.78	-25.14	2.00	83.00	3125	2	12.33	12.31	0.02	-2.52	94.97	9.53	314.20	3125
34.245	-1.43	2	9.15	9.15	0.00	0.81	-26.39	2.14	87.13	3125	2	13.23	13.21	0.02	-2.56	96.60	9.70	319.57	3125
34.868	-1.22	2	8.73	8.73	0.00	0.84	-27.64	2.27	91.27	3125	2	14.18	14.16	0.02	-2.60	98.22	9.88	324.95	3125
35.490	-1.00	2	8.26	8.26	0.00	0.88	-28.88	2.40	95.40	3125	2	15.18	15.16	0.02	-2.64	99.85	10.05	330.33	3125
		2	17.30	17.30	0.00	0.60	-11.83	-2.75	152.67	12500	2	4.65	4.63	0.02	-1.03	34.02	4.32	442.44	12500
36.245	-0.72	2	14.16	14.16	0.00	0.62	-12.45	-2.55	160.83	12500	2	8.56	8.54	0.02	-1.04	34.79	4.56	452.46	12500
37.000	-0.44	2	11.01	11.01	0.00	0.63	-13.08	-2.35	168.98	12500	2	12.49	12.47	0.02	-1.05	35.56	4.80	462.47	12500

▼ PHASE 10

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-16.04	0									1	0.75	0.00	0.75	-	-	0.75	0.75	1000
0.100	-16.03	0									2	1.67	0.93	0.74	-16.90	-16.03	0.81	1.67	1000
0.900	-15.99	0									2	3.07	2.38	0.69	-17.78	-10.00	1.28	9.07	1000
1.700	-15.95	0									2	3.09	2.44	0.64	-17.29	-2.58	1.75	16.46	1000
1.850	-15.94	0									2	3.04	2.40	0.63	-17.19	-1.85	1.79	17.13	1000
2.500	-15.92	0									2	2.82	2.23	0.59	-16.79	1.29	1.95	20.04	1000
2.790	-15.92	0									2	2.72	2.15	0.58	-16.61	2.69	2.03	21.33	1000
		0									-1	0.00	0.00	0.00	-9.91	9.91	-10.08	22.11	1625
3.340	-15.92	0									-1	0.00	0.00	0.00	-9.91	9.91	-9.08	23.12	1625
3.890	-15.95	0									-1	0.00	0.00	0.00	-9.91	9.91	-8.08	24.12	1625
4.440	-16.00	0									-1	0.00	0.00	0.00	-9.91	9.91	-7.07	25.12	1625
4.990	-16.09	0									-1	0.00	0.00	0.00	-9.91	9.91	-6.07	26.13	1625
		0									2	2.47	2.02	0.45	-16.09	44.90	2.47	32.97	500
5.745	-16.28	0									2	2.64	2.23	0.42	-16.28	51.08	2.64	36.33	500
6.190	-16.44	0									2	2.75	2.35	0.39	-16.44	54.68	2.75	38.31	500
		0									2	1.07	0.68	0.39	-16.44	3.37	1.07	23.36	1125
6.855	-16.73	0									2	2.30	1.93	0.36	-16.73	3.09	2.30	24.59	1125
7.520	-17.05	0									2	3.53	3.19	0.34	-17.05	2.76	3.53	25.82	1125
8.226	-17.41	0									2	4.83	4.52	0.31	-17.41	2.41	4.83	27.12	1125
8.933	-17.76	0									2	6.14	5.86	0.28	-17.76	2.05	6.14	28.43	1125
9.639	-18.09	0									2	7.45	7.19	0.26	-18.09	1.72	7.45	29.74	1125
10.345	-18.39	0									2	8.77	8.53	0.24	-18.39	1.43	8.77	31.06	1125
11.183	-18.68	0									2	10.33	10.11	0.22	-18.68	1.13	10.33	32.62	1125
12.020	-18.82	0									2	11.89	11.69	0.19	-18.82	0.99	11.89	34.18	1125
12.883	-18.74	0									2	13.50	13.32	0.18	-18.74	1.08	13.50	35.79	1125
13.745	-18.35	0									2	15.11	14.95	0.16	-18.35	1.46	15.11	37.40	1125
14.583	-17.68	0									2	16.68	16.54	0.14	-17.68	2.13	16.68	38.97	1125
15.420	-16.73	0									2	18.25	18.12	0.13	-16.73	3.08	18.25	40.54	1125
		2	20.95	20.95	0.00	3.16	-16.73	-20.95	20.95	2107	2	18.25	18.12	0.13	-16.73	3.08	18.25	40.54	1125
16.283	-15.53	2	22.58	22.58	0.00	4.36	-15.53	-19.32	22.58	2107	2	19.87	19.75	0.12	-15.53	4.29	19.87	42.16	1125
17.145	-14.18	2	24.21	24.21	0.00	5.71	-14.18	-17.69	24.21	2107	2	21.49	21.38	0.11	-14.18	5.63	21.49	43.78	1125

17.618	-13.41	2	25.11	25.11	0.00	6.48	-13.41	-16.80	25.11	2107	2	22.38	22.27	0.10	-13.41	6.41	22.38	44.66	1125
18.090	-12.63	2	26.00	26.00	0.00	7.26	-12.63	-15.91	26.00	2107	2	23.26	23.17	0.10	-12.63	7.19	23.26	45.55	1125
		2	10.38	10.38	0.00	-8.00	-12.63	0.24	10.38	2192	2	6.59	6.50	0.10	-12.63	77.20	6.59	152.56	1625
18.820	-11.43	2	18.34	18.34	0.00	-3.26	-11.43	0.43	18.34	2192	2	6.77	6.68	0.09	-11.43	80.96	6.77	156.91	1625
19.405	-10.51	2	24.02	24.02	0.00	0.18	-10.83	0.58	24.73	2192	2	6.92	6.83	0.08	-10.51	83.94	6.92	160.40	1625
19.990	-9.64	2	22.36	22.36	0.00	0.23	-13.63	0.73	31.11	2192	2	7.06	6.98	0.08	-9.64	86.87	7.06	163.89	1625
		2	37.96	37.96	0.00	9.95	-9.95	-21.65	38.93	3043	2	22.32	22.24	0.08	-9.91	9.91	21.88	54.08	1625
20.420	-9.04	2	36.97	36.97	0.00	9.95	-9.95	-20.82	39.76	3043	2	24.13	24.05	0.07	-9.91	9.91	22.71	54.91	1625
20.983	-8.31	2	35.84	35.84	0.00	9.95	-9.95	-19.73	40.85	3043	2	26.40	26.33	0.07	-9.91	9.91	23.80	56.00	1625
21.545	-7.65	2	34.92	34.92	0.00	9.95	-9.95	-18.63	41.94	3043	2	28.56	28.50	0.07	-9.91	9.91	24.89	57.08	1625
22.108	-7.05	2	34.19	34.19	0.00	9.95	-9.95	-17.54	43.03	3043	2	30.62	30.56	0.06	-9.91	9.91	25.98	58.17	1625
22.670	-6.51	2	33.64	33.64	0.00	9.95	-9.95	-16.45	44.12	3043	2	32.58	32.53	0.06	-9.91	9.91	27.06	59.26	1625
23.220	-6.03	2	33.25	33.25	0.00	9.95	-9.95	-15.38	45.19	3043	2	34.43	34.37	0.06	-9.91	9.91	28.13	60.32	1625
23.320	-5.95	2	33.20	33.20	0.00	9.95	-9.95	-15.19	45.39	3043	2	34.75	34.70	0.06	-9.91	9.91	28.32	60.52	1625
23.913	-5.49	2	32.94	32.94	0.00	9.95	-9.95	-14.04	46.54	3043	2	36.65	36.60	0.05	-9.91	9.91	29.47	61.66	1625
24.505	-5.06	2	32.80	32.80	0.00	9.95	-9.95	-12.89	47.68	3043	2	38.48	38.43	0.05	-9.91	9.91	30.61	62.81	1625
25.098	-4.67	2	32.76	32.76	0.00	9.95	-9.95	-11.74	48.83	3043	2	40.27	40.22	0.05	-9.91	9.91	31.76	63.96	1625
25.690	-4.31	2	32.80	32.80	0.00	9.95	-9.95	-10.59	49.98	3043	2	42.01	41.96	0.04	-9.91	9.91	32.91	65.10	1625
		2	15.34	15.34	0.00	0.35	-14.43	0.42	47.78	3204	2	7.64	7.60	0.04	-4.31	86.34	7.64	222.92	2375
26.440	-3.89	2	14.29	14.29	0.00	0.39	-16.96	0.59	56.17	3204	2	7.86	7.82	0.04	-3.89	89.13	7.86	228.79	2375
27.190	-3.52	2	13.41	13.41	0.00	0.43	-19.49	0.76	64.55	3204	2	8.07	8.03	0.04	-3.52	91.88	8.07	234.66	2375
27.940	-3.21	2	12.70	12.70	0.00	0.46	-22.01	0.92	72.94	3204	2	8.29	8.25	0.04	-3.21	94.58	8.29	240.54	2375
28.690	-2.94	2	12.13	12.13	0.00	0.50	-24.54	1.09	81.33	3204	2	8.53	8.50	0.03	-2.96	97.21	8.51	246.41	2375
29.440	-2.72	2	11.68	11.68	0.00	0.54	-27.07	1.26	89.71	3204	2	9.45	9.42	0.03	-3.02	99.53	8.72	252.28	2375
30.190	-2.51	2	11.32	11.32	0.00	0.58	-29.60	1.43	98.10	3204	2	10.30	10.27	0.03	-3.09	101.85	8.94	258.16	2375
30.940	-2.32	2	11.01	11.01	0.00	0.61	-32.12	1.60	106.49	3204	2	11.12	11.10	0.03	-3.15	104.16	9.16	264.03	2375
31.690	-2.14	2	10.70	10.70	0.00	0.65	-34.65	1.77	114.88	3204	2	11.94	11.91	0.03	-3.22	106.48	9.38	269.91	2375
		2	12.74	12.74	0.00	0.48	-29.58	1.70	128.44	4216	2	9.79	9.76	0.03	-2.39	89.93	8.99	297.50	3125
32.345	-1.97	2	12.29	12.29	0.00	0.50	-31.47	1.84	136.65	4216	2	10.62	10.59	0.03	-2.44	91.64	9.17	303.16	3125
33.000	-1.80	2	11.81	11.81	0.00	0.53	-33.36	1.98	144.86	4216	2	11.47	11.45	0.02	-2.48	93.35	9.36	308.82	3125
		2	9.84	9.84	0.00	0.75	-23.89	1.87	78.86	3125	2	11.47	11.45	0.02	-2.48	93.35	9.36	308.82	3125
33.623	-1.62	2	9.52	9.52	0.00	0.78	-25.14	2.00	83.00	3125	2	12.33	12.31	0.02	-2.52	94.97	9.53	314.20	3125
34.245	-1.43	2	9.15	9.15	0.00	0.81	-26.39	2.14	87.13	3125	2	13.23	13.21	0.02	-2.56	96.60	9.70	319.57	3125
34.868	-1.22	2	8.73	8.73	0.00	0.84	-27.64	2.27	91.27	3125	2	14.18	14.16	0.02	-2.60	98.22	9.88	324.95	3125
35.490	-1.00	2	8.26	8.26	0.00	0.88	-28.88	2.40	95.40	3125	2	15.18	15.16	0.02	-2.64	99.85	10.05	330.33	3125
		2	17.30	17.30	0.00	0.60	-11.83	-2.75	152.67	12500	2	4.65	4.63	0.02	-1.03	34.02	4.32	442.44	12500
36.245	-0.72	2	14.16	14.16	0.00	0.62	-12.45	-2.55	160.83	12500	2	8.56	8.54	0.02	-1.04	34.79	4.56	452.46	12500
37.000	-0.44	2	11.01	11.01	0.00	0.63	-13.08	-2.35	168.98	12500	2	12.49	12.47	0.02	-1.05	35.56	4.80	462.47	12500

▼ PHASE 11

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-14.09	0									1	0.75	0.00	0.75	-	-	0.75	0.75	1000
0.100	-14.10	0									3	1.67	0.93	0.74	-16.90	-16.03	0.81	1.67	1000
0.900	-14.18	0									2	4.88	4.19	0.69	-17.78	-10.00	1.28	9.07	1000
1.700	-14.26	0									2	4.78	4.13	0.64	-17.29	-2.58	1.75	16.46	1000
1.850	-14.28	0									2	4.70	4.07	0.63	-17.19	-1.85	1.79	17.13	1000
2.500	-14.36	0									2	4.39	3.79	0.59	-16.79	1.29	1.95	20.04	1000
2.790	-14.40	0									2	4.24	3.66	0.58	-16.61	2.69	2.03	21.33	1000
		0									-1	0.00	0.00	0.00	-9.91	9.91	-10.08	22.11	1625
3.340	-14.50	0									-1	0.00	0.00	0.00	-9.91	9.91	-9.08	23.12	1625
3.890	-14.63	0									-1	0.00	0.00	0.00	-9.91	9.91	-8.08	24.12	1625
4.440	-14.81	0									-1	0.00	0.00	0.00	-9.91	9.91	-7.07	25.12	1625
4.990	-15.03	0									-1	0.00	0.00	0.00	-9.91	9.91	-6.07	26.13	1625
		0									2	3.00	2.55	0.45	-16.09	44.90	2.47	32.97	500

計畫名稱：XDO Example 3

主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

5.745	-15.45	0									2	3.06	2.65	0.42	-16.28	51.08	2.64	36.33	500
6.190	-15.76	0									2	3.09	2.70	0.39	-16.44	54.68	2.75	38.31	500
		0									2	1.84	1.45	0.39	-16.44	3.37	1.07	23.36	1125
6.855	-16.30	0									2	2.77	2.41	0.36	-16.73	3.09	2.30	24.59	1125
7.520	-16.94	0									2	3.65	3.31	0.34	-17.05	2.76	3.53	25.82	1125
8.226	-17.71	0									1	4.83	4.52	0.31	-17.41	2.41	4.83	27.12	1125
8.933	-18.56	0									1	6.14	5.86	0.28	-17.76	2.05	6.14	28.43	1125
9.639	-19.49	0									1	7.45	7.19	0.26	-18.09	1.72	7.45	29.74	1125
10.345	-20.51	0									1	8.77	8.53	0.24	-18.39	1.43	8.77	31.06	1125
11.183	-21.83	0									1	10.33	10.11	0.22	-18.68	1.13	10.33	32.62	1125
12.020	-23.16	0									1	11.89	11.69	0.19	-18.82	0.99	11.89	34.18	1125
12.883	-24.45	0									1	13.50	13.32	0.18	-18.74	1.08	13.50	35.79	1125
13.745	-25.58	0									1	15.11	14.95	0.16	-18.35	1.46	15.11	37.40	1125
14.583	-26.46	0									1	16.68	16.54	0.14	-17.68	2.13	16.68	38.97	1125
15.420	-27.00	0									1	18.25	18.12	0.13	-16.73	3.08	18.25	40.54	1125
16.283	-27.08	0									1	19.87	19.75	0.12	-15.53	4.29	19.87	42.16	1125
17.145	-26.62	0									1	21.49	21.38	0.11	-14.18	5.63	21.49	43.78	1125
17.618	-26.13	0									1	22.38	22.27	0.10	-13.41	6.41	22.38	44.66	1125
18.090	-25.47	0									1	23.26	23.17	0.10	-12.63	7.19	23.26	45.55	1125
		0									1	6.59	6.50	0.10	-12.63	77.20	6.59	152.56	1625
18.820	-24.15	0									1	6.77	6.68	0.09	-11.43	80.96	6.77	156.91	1625
		3	0.00	0.00	0.00	-	-	0.00	0.00	2192	1	6.77	6.68	0.09	-11.43	80.96	6.77	156.91	1625
19.405	-22.87	3	6.38	6.38	0.00	-7.67	-10.51	0.15	6.38	2192	1	6.92	6.83	0.08	-10.51	83.94	6.92	160.40	1625
19.990	-21.44	3	12.77	12.77	0.00	-3.95	-9.64	0.30	12.77	2192	1	7.06	6.98	0.08	-9.64	86.87	7.06	163.89	1625
		3	32.50	32.50	0.00	9.95	-9.95	-28.08	32.50	3043	1	21.88	21.80	0.08	-9.91	9.91	21.88	54.08	1625
20.420	-20.31	3	33.33	33.33	0.00	9.95	-9.95	-27.24	33.33	3043	1	22.71	22.64	0.07	-9.91	9.91	22.71	54.91	1625
20.983	-18.78	3	34.43	34.43	0.00	9.95	-9.95	-26.15	34.43	3043	1	23.80	23.73	0.07	-9.91	9.91	23.80	56.00	1625
21.545	-17.23	3	35.52	35.52	0.00	9.95	-9.95	-25.06	35.52	3043	1	24.89	24.82	0.07	-9.91	9.91	24.89	57.08	1625
22.108	-15.69	3	36.61	36.61	0.00	9.95	-9.95	-23.97	36.61	3043	1	25.98	25.91	0.06	-9.91	9.91	25.98	58.17	1625
22.670	-14.19	3	37.70	37.70	0.00	9.95	-9.95	-22.88	37.70	3043	1	27.06	27.00	0.06	-9.91	9.91	27.06	59.26	1625
23.220	-12.79	3	38.77	38.77	0.00	9.95	-9.95	-21.81	38.77	3043	1	28.13	28.07	0.06	-9.91	9.91	28.13	60.32	1625
23.320	-12.55	3	38.96	38.96	0.00	9.95	-9.95	-21.62	38.96	3043	1	28.32	28.27	0.06	-9.91	9.91	28.32	60.52	1625
23.913	-11.15	3	40.11	40.11	0.00	9.95	-9.95	-20.47	40.11	3043	1	29.47	29.41	0.05	-9.91	9.91	29.47	61.66	1625
24.505	-9.86	2	40.97	40.97	0.00	9.95	-9.95	-19.32	41.26	3043	2	30.69	30.64	0.05	-9.91	9.91	30.61	62.81	1625
25.098	-8.69	2	38.56	38.56	0.00	9.95	-9.95	-18.17	42.41	3043	2	33.74	33.69	0.05	-9.91	9.91	31.76	63.96	1625
25.690	-7.65	2	36.54	36.54	0.00	9.95	-9.95	-17.02	43.56	3043	2	36.58	36.53	0.04	-9.91	9.91	32.91	65.10	1625
		2	25.55	25.55	0.00	0.29	-10.03	0.13	33.19	3204	1	7.64	7.60	0.04	-4.31	86.34	7.64	222.92	2375
26.440	-6.51	2	22.10	22.10	0.00	0.31	-11.83	0.25	39.14	3204	1	7.91	7.86	0.04	-3.90	89.65	7.91	230.10	2375
27.190	-5.56	2	19.26	19.26	0.00	0.34	-13.62	0.37	45.10	3204	1	8.17	8.13	0.04	-3.55	92.91	8.17	237.28	2375
27.940	-4.78	2	16.99	16.99	0.00	0.37	-15.42	0.48	51.05	3204	1	8.44	8.40	0.04	-3.26	96.13	8.44	244.47	2375
28.690	-4.16	2	15.20	15.20	0.00	0.39	-17.21	0.60	57.01	3204	1	8.70	8.67	0.03	-3.01	99.28	8.70	251.65	2375
29.440	-3.66	2	13.80	13.80	0.00	0.42	-19.01	0.72	62.96	3204	1	8.97	8.94	0.03	-3.09	102.11	8.97	258.83	2375
30.190	-3.26	2	12.72	12.72	0.00	0.45	-20.80	0.84	68.92	3204	1	9.23	9.20	0.03	-3.17	104.95	9.23	266.02	2375
30.940	-2.93	2	11.85	11.85	0.00	0.47	-22.60	0.96	74.87	3204	2	10.28	10.25	0.03	-3.25	107.78	9.50	273.20	2375
31.690	-2.64	2	11.13	11.13	0.00	0.50	-24.39	1.08	80.83	3204	2	11.42	11.40	0.03	-3.33	110.61	9.77	280.39	2375
		2	13.71	13.71	0.00	0.37	-20.80	1.04	90.29	4216	1	9.37	9.34	0.03	-2.48	93.42	9.37	309.06	3125
32.345	-2.40	2	12.89	12.89	0.00	0.39	-22.14	1.14	96.12	4216	2	10.00	9.97	0.03	-2.53	95.51	9.59	315.98	3125
33.000	-2.17	2	12.10	12.10	0.00	0.40	-23.48	1.24	101.95	4216	2	11.10	11.08	0.02	-2.59	97.60	9.81	322.90	3125
		2	9.73	9.73	0.00	0.58	-17.02	1.13	56.11	3125	2	11.10	11.08	0.02	-2.59	97.60	9.81	322.90	3125
33.623	-1.95	2	9.20	9.20	0.00	0.60	-17.90	1.22	59.05	3125	2	12.16	12.14	0.02	-2.63	99.59	10.03	329.48	3125
34.245	-1.72	2	8.64	8.64	0.00	0.62	-18.79	1.32	61.98	3125	2	13.26	13.24	0.02	-2.68	101.58	10.24	336.05	3125
34.868	-1.47	2	8.02	8.02	0.00	0.65	-19.68	1.41	64.92	3125	2	14.41	14.39	0.02	-2.73	103.56	10.45	342.63	3125
35.490	-1.20	2	7.36	7.36	0.00	0.67	-20.56	1.51	67.86	3125	2	15.60	15.58	0.02	-2.78	105.55	10.66	349.21	3125
		2	18.41	18.41	0.00	0.56	-9.23	-3.58	118.70	12500	1	4.89	4.87	0.02	-1.06	35.81	4.89	465.73	12500
36.245	-0.87	2	14.55	14.55	0.00	0.56	-9.71	-3.42	125.06	12500	2	7.72	7.70	0.02	-1.08	36.71	5.17	477.54	12500
37.000	-0.54	2	10.67	10.67	0.00	0.57	-10.20	-3.27	131.42	12500	2	12.37	12.35	0.02	-1.09	37.62	5.46	489.35	12500

計畫名稱：XDO Example 3

主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

▼ PHASE 12

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-14.09	0									1	0.75	0.00	0.75	-	-	0.75	0.75	1000
0.100	-14.10	0									2	1.67	0.93	0.74	-14.97	-14.10	0.81	1.67	1000
0.900	-14.18	0									2	4.88	4.19	0.69	-17.78	-10.00	1.28	9.07	1000
1.700	-14.26	0									2	4.78	4.13	0.64	-17.29	-2.58	1.75	16.46	1000
1.850	-14.28	0									2	4.70	4.07	0.63	-17.19	-1.85	1.79	17.13	1000
2.500	-14.36	0									2	4.39	3.79	0.59	-16.79	1.29	1.95	20.04	1000
2.790	-14.40	0									2	4.24	3.66	0.58	-16.61	2.69	2.03	21.33	1000
		0									-1	0.00	0.00	0.00	-9.91	9.91	-10.08	22.11	1625
3.340	-14.50	0									-1	0.00	0.00	0.00	-9.91	9.91	-9.08	23.12	1625
3.890	-14.63	0									-1	0.00	0.00	0.00	-9.91	9.91	-8.08	24.12	1625
4.440	-14.81	0									-1	0.00	0.00	0.00	-9.91	9.91	-7.07	25.12	1625
4.990	-15.03	0									-1	0.00	0.00	0.00	-9.91	9.91	-6.07	26.13	1625
		0									2	3.00	2.55	0.45	-16.09	44.90	2.47	32.97	500
5.745	-15.45	0									2	3.06	2.65	0.42	-16.28	51.08	2.64	36.33	500
6.190	-15.76	0									2	3.09	2.70	0.39	-16.44	54.68	2.75	38.31	500
		0									2	1.84	1.45	0.39	-16.44	3.37	1.07	23.36	1125
6.855	-16.30	0									2	2.77	2.41	0.36	-16.73	3.09	2.30	24.59	1125
7.520	-16.94	0									2	3.65	3.31	0.34	-17.05	2.76	3.53	25.82	1125
8.226	-17.71	0									2	4.83	4.52	0.31	-17.71	2.10	4.83	27.12	1125
8.933	-18.56	0									2	6.14	5.86	0.28	-18.56	1.25	6.14	28.43	1125
9.639	-19.49	0									2	7.45	7.19	0.26	-19.49	0.32	7.45	29.74	1125
10.345	-20.51	0									2	8.77	8.53	0.24	-20.51	-0.70	8.77	31.06	1125
11.183	-21.83	0									2	10.33	10.11	0.22	-21.83	-2.01	10.33	32.62	1125
12.020	-23.16	0									2	11.89	11.69	0.19	-23.16	-3.35	11.89	34.18	1125
12.883	-24.45	0									2	13.50	13.32	0.18	-24.45	-4.64	13.50	35.79	1125
13.745	-25.58	0									2	15.11	14.95	0.16	-25.58	-5.77	15.11	37.40	1125
14.583	-26.46	0									2	16.68	16.54	0.14	-26.46	-6.65	16.68	38.97	1125
15.420	-27.00	0									2	18.25	18.12	0.13	-27.00	-7.18	18.25	40.54	1125
16.283	-27.08	0									2	19.87	19.75	0.12	-27.08	-7.27	19.87	42.16	1125
17.145	-26.62	0									2	21.49	21.38	0.11	-26.62	-6.81	21.49	43.78	1125
17.618	-26.13	0									2	22.38	22.27	0.10	-26.13	-6.31	22.38	44.66	1125
18.090	-25.47	0									2	23.26	23.17	0.10	-25.47	-5.66	23.26	45.55	1125
		0									2	6.59	6.50	0.10	-25.47	64.35	6.59	152.56	1625
18.820	-24.15	0									2	6.77	6.68	0.09	-24.15	68.24	6.77	156.91	1625
		3	0.00	0.00	0.00	-	-	0.00	0.00	2192	2	6.77	6.68	0.09	-24.15	68.24	6.77	156.91	1625
19.405	-22.87	2	6.38	6.38	0.00	-20.03	-22.87	0.15	6.38	2192	2	6.92	6.83	0.08	-22.87	71.58	6.92	160.40	1625
19.990	-21.44	2	12.77	12.77	0.00	-15.75	-21.44	0.30	12.77	2192	2	7.06	6.98	0.08	-21.44	75.07	7.06	163.89	1625
		2	32.50	32.50	0.00	-1.53	-21.44	-28.08	32.50	3043	2	21.88	21.80	0.08	-21.44	-1.62	21.88	54.08	1625
20.420	-20.31	2	33.33	33.33	0.00	-0.40	-20.31	-27.24	33.33	3043	2	22.71	22.64	0.07	-20.31	-0.50	22.71	54.91	1625
20.983	-18.78	2	34.43	34.43	0.00	1.12	-18.78	-26.15	34.43	3043	2	23.80	23.73	0.07	-18.78	1.03	23.80	56.00	1625
21.545	-17.23	2	35.52	35.52	0.00	2.67	-17.23	-25.06	35.52	3043	2	24.89	24.82	0.07	-17.23	2.58	24.89	57.08	1625
22.108	-15.69	2	36.61	36.61	0.00	4.21	-15.69	-23.97	36.61	3043	2	25.98	25.91	0.06	-15.69	4.12	25.98	58.17	1625
22.670	-14.19	2	37.70	37.70	0.00	5.71	-14.19	-22.88	37.70	3043	2	27.06	27.00	0.06	-14.19	5.62	27.06	59.26	1625
23.220	-12.79	2	38.77	38.77	0.00	7.11	-12.79	-21.81	38.77	3043	2	28.13	28.07	0.06	-12.79	7.02	28.13	60.32	1625
23.320	-12.55	2	38.96	38.96	0.00	7.36	-12.55	-21.62	38.96	3043	2	28.32	28.27	0.06	-12.55	7.27	28.32	60.52	1625
23.913	-11.15	2	40.11	40.11	0.00	8.76	-11.15	-20.47	40.11	3043	2	29.47	29.41	0.05	-11.15	8.67	29.47	61.66	1625
24.505	-9.86	2	40.97	40.97	0.00	9.95	-9.95	-19.32	41.26	3043	2	30.69	30.64	0.05	-9.91	9.91	30.61	62.81	1625
25.098	-8.69	2	38.56	38.56	0.00	9.95	-9.95	-18.17	42.41	3043	2	33.74	33.69	0.05	-9.91	9.91	31.76	63.96	1625
25.690	-7.65	2	36.54	36.54	0.00	9.95	-9.95	-17.02	43.56	3043	2	36.58	36.53	0.04	-9.91	9.91	32.91	65.10	1625
		2	25.55	25.55	0.00	0.29	-10.03	0.13	33.19	3204	2	7.64	7.60	0.04	-7.65	83.00	7.64	222.92	2375
26.440	-6.51	2	22.10	22.10	0.00	0.31	-11.83	0.25	39.14	3204	2	7.91	7.86	0.04	-6.51	87.05	7.91	230.10	2375

27.190	-5.56	2	19.26	19.26	0.00	0.34	-13.62	0.37	45.10	3204	2	8.17	8.13	0.04	-5.56	90.91	8.17	237.28	2375
27.940	-4.78	2	16.99	16.99	0.00	0.37	-15.42	0.48	51.05	3204	2	8.44	8.40	0.04	-4.78	94.60	8.44	244.47	2375
28.690	-4.16	2	15.20	15.20	0.00	0.39	-17.21	0.60	57.01	3204	2	8.70	8.67	0.03	-4.16	98.13	8.70	251.65	2375
29.440	-3.66	2	13.80	13.80	0.00	0.42	-19.01	0.72	62.96	3204	2	8.97	8.94	0.03	-3.66	101.54	8.97	258.83	2375
30.190	-3.26	2	12.72	12.72	0.00	0.45	-20.80	0.84	68.92	3204	2	9.23	9.20	0.03	-3.26	104.86	9.23	266.02	2375
30.940	-2.93	2	11.85	11.85	0.00	0.47	-22.60	0.96	74.87	3204	2	10.28	10.25	0.03	-3.25	107.78	9.50	273.20	2375
31.690	-2.64	2	11.13	11.13	0.00	0.50	-24.39	1.08	80.83	3204	2	11.42	11.40	0.03	-3.33	110.61	9.77	280.39	2375
		2	13.71	13.71	0.00	0.37	-20.80	1.04	90.29	4216	2	9.37	9.34	0.03	-2.64	93.27	9.37	309.06	3125
32.345	-2.40	2	12.89	12.89	0.00	0.39	-22.14	1.14	96.12	4216	2	10.00	9.97	0.03	-2.53	95.51	9.59	315.98	3125
33.000	-2.17	2	12.10	12.10	0.00	0.40	-23.48	1.24	101.95	4216	2	11.10	11.08	0.02	-2.59	97.60	9.81	322.90	3125
		2	9.73	9.73	0.00	0.58	-17.02	1.13	56.11	3125	2	11.10	11.08	0.02	-2.59	97.60	9.81	322.90	3125
33.623	-1.95	2	9.20	9.20	0.00	0.60	-17.90	1.22	59.05	3125	2	12.16	12.14	0.02	-2.63	99.59	10.03	329.48	3125
34.245	-1.72	2	8.64	8.64	0.00	0.62	-18.79	1.32	61.98	3125	2	13.26	13.24	0.02	-2.68	101.58	10.24	336.05	3125
34.868	-1.47	2	8.02	8.02	0.00	0.65	-19.68	1.41	64.92	3125	2	14.41	14.39	0.02	-2.73	103.56	10.45	342.63	3125
35.490	-1.20	2	7.36	7.36	0.00	0.67	-20.56	1.51	67.86	3125	2	15.60	15.58	0.02	-2.78	105.55	10.66	349.21	3125
		2	18.41	18.41	0.00	0.56	-9.23	-3.58	118.70	12500	2	4.89	4.87	0.02	-1.20	35.66	4.89	465.73	12500
36.245	-0.87	2	14.55	14.55	0.00	0.56	-9.71	-3.42	125.06	12500	2	7.72	7.70	0.02	-1.08	36.71	5.17	477.54	12500
37.000	-0.54	2	10.67	10.67	0.00	0.57	-10.20	-3.27	131.42	12500	2	12.37	12.35	0.02	-1.09	37.62	5.46	489.35	12500

▼ PHASE 13

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-13.77	0									1	0.75	0.00	0.75	-	-	0.75	0.75	1000
0.100	-13.76	0									3	1.67	0.93	0.74	-14.97	-14.10	0.81	1.67	1000
0.900	-13.67	0									2	5.40	4.70	0.69	-17.78	-10.00	1.28	9.07	1000
1.700	-13.58	0									2	5.46	4.82	0.64	-17.29	-2.58	1.75	16.46	1000
1.850	-13.56	0									2	5.42	4.79	0.63	-17.19	-1.85	1.79	17.13	1000
2.500	-13.51	0									2	5.24	4.65	0.59	-16.79	1.29	1.95	20.04	1000
2.790	-13.49	0									2	5.15	4.58	0.58	-16.61	2.69	2.03	21.33	1000
		0									-1	0.00	0.00	0.00	-9.91	9.91	-10.08	22.11	1625
3.340	-13.48	0									-1	0.00	0.00	0.00	-9.91	9.91	-9.08	23.12	1625
3.890	-13.50	0									-1	0.00	0.00	0.00	-9.91	9.91	-8.08	24.12	1625
4.440	-13.57	0									-1	0.00	0.00	0.00	-9.91	9.91	-7.07	25.12	1625
4.990	-13.70	0									-1	0.00	0.00	0.00	-9.91	9.91	-6.07	26.13	1625
		0									2	3.67	3.21	0.45	-16.09	44.90	2.47	32.97	500
5.745	-13.99	0									2	3.79	3.38	0.42	-16.28	51.08	2.64	36.33	500
6.190	-14.23	0									2	3.85	3.46	0.39	-16.44	54.68	2.75	38.31	500
		0									2	3.55	3.16	0.39	-16.44	3.37	1.07	23.36	1125
6.855	-14.71	0									2	4.57	4.21	0.36	-16.73	3.09	2.30	24.59	1125
7.520	-15.30	0									2	5.49	5.15	0.34	-17.05	2.76	3.53	25.82	1125
8.226	-16.08	0									2	6.67	6.36	0.31	-17.71	2.10	4.83	27.12	1125
8.933	-17.02	0									2	7.88	7.60	0.28	-18.56	1.25	6.14	28.43	1125
9.639	-18.13	0									2	8.99	8.73	0.26	-19.49	0.32	7.45	29.74	1125
10.345	-19.45	0									2	9.96	9.72	0.24	-20.51	-0.70	8.77	31.06	1125
11.183	-21.32	0									2	10.90	10.68	0.22	-21.83	-2.01	10.33	32.62	1125
12.020	-23.48	0									1	11.89	11.69	0.19	-23.16	-3.35	11.89	34.18	1125
12.883	-25.98	0									1	13.50	13.32	0.18	-24.45	-4.64	13.50	35.79	1125
13.745	-28.76	0									1	15.11	14.95	0.16	-25.58	-5.77	15.11	37.40	1125
14.583	-31.71	0									1	16.68	16.54	0.14	-26.46	-6.65	16.68	38.97	1125
15.420	-34.82	0									1	18.25	18.12	0.13	-27.00	-7.18	18.25	40.54	1125
16.283	-38.06	0									1	19.87	19.75	0.12	-27.08	-7.27	19.87	42.16	1125
17.145	-41.28	0									1	21.49	21.38	0.11	-26.62	-6.81	21.49	43.78	1125
17.618	-43.02	0									1	22.38	22.27	0.10	-26.13	-6.31	22.38	44.66	1125
18.090	-44.70	0									1	23.26	23.17	0.10	-25.47	-5.66	23.26	45.55	1125
		0									1	6.59	6.50	0.10	-25.47	64.35	6.59	152.56	1625

18.820	-47.07	0									1	6.77	6.68	0.09	-24.15	68.24	6.77	156.91	1625
19.405	-48.69	0									1	6.92	6.83	0.08	-22.87	71.58	6.92	160.40	1625
19.990	-50.00	0									1	7.06	6.98	0.08	-21.44	75.07	7.06	163.89	1625
		0									1	21.88	21.80	0.08	-21.44	-1.62	21.88	54.08	1625
20.420	-50.74	0									1	22.71	22.64	0.07	-20.31	-0.50	22.71	54.91	1625
20.983	-51.39	0									1	23.80	23.73	0.07	-18.78	1.03	23.80	56.00	1625
21.545	-51.67	0									1	24.89	24.82	0.07	-17.23	2.58	24.89	57.08	1625
22.108	-51.55	0									1	25.98	25.91	0.06	-15.69	4.12	25.98	58.17	1625
22.670	-51.04	0									1	27.06	27.00	0.06	-14.19	5.62	27.06	59.26	1625
23.220	-50.17	0									1	28.13	28.07	0.06	-12.79	7.02	28.13	60.32	1625
23.320	-49.98	0									1	28.32	28.27	0.06	-12.55	7.27	28.32	60.52	1625
		3	30.29	30.29	0.00	7.36	-12.55	-30.29	30.29	3043	1	28.32	28.27	0.06	-12.55	7.27	28.32	60.52	1625
23.913	-48.61	3	31.44	31.44	0.00	8.76	-11.15	-29.14	31.44	3043	1	29.47	29.41	0.05	-11.15	8.67	29.47	61.66	1625
24.505	-46.91	3	32.59	32.59	0.00	9.95	-9.95	-27.99	32.59	3043	1	30.61	30.56	0.05	-9.91	9.91	30.61	62.81	1625
25.098	-44.89	3	33.74	33.74	0.00	9.95	-9.95	-26.84	33.74	3043	1	31.76	31.71	0.05	-9.91	9.91	31.76	63.96	1625
25.690	-42.62	3	34.89	34.89	0.00	9.95	-9.95	-25.69	34.89	3043	1	32.91	32.86	0.04	-9.91	9.91	32.91	65.10	1625
		3	13.32	13.32	0.00	-3.40	-7.65	-0.27	13.32	3204	1	7.64	7.60	0.04	-7.65	83.00	7.64	222.92	2375
26.440	-39.43	3	16.00	16.00	0.00	-1.44	-6.51	-0.22	16.00	3204	1	7.97	7.93	0.04	-6.53	87.74	7.97	231.86	2375
27.190	-35.95	3	18.68	18.68	0.00	0.22	-5.66	-0.17	18.68	3204	1	8.30	8.26	0.04	-5.60	92.30	8.30	240.81	2375
27.940	-32.29	3	21.36	21.36	0.00	0.23	-6.47	-0.11	21.36	3204	1	8.63	8.60	0.04	-4.84	96.68	8.63	249.76	2375
28.690	-28.54	3	24.04	24.04	0.00	0.25	-7.28	-0.06	24.04	3204	1	8.97	8.93	0.03	-4.24	100.91	8.97	258.71	2375
29.440	-24.80	3	26.72	26.72	0.00	0.26	-8.08	0.00	26.72	3204	1	9.30	9.27	0.03	-3.76	105.02	9.30	267.66	2375
30.190	-21.15	3	29.40	29.40	0.00	0.27	-8.89	0.05	29.40	3204	1	9.63	9.60	0.03	-3.38	109.03	9.63	276.60	2375
30.940	-17.67	3	32.07	32.07	0.00	0.28	-9.70	0.10	32.07	3204	1	9.96	9.93	0.03	-3.39	112.65	9.96	285.55	2375
31.690	-14.43	3	34.75	34.75	0.00	0.29	-10.50	0.16	34.75	3204	1	10.29	10.27	0.03	-3.49	116.18	10.29	294.50	2375
		3	38.66	38.66	0.00	0.22	-8.92	0.15	38.66	4216	1	9.87	9.85	0.03	-2.75	97.97	9.87	324.63	3125
32.345	-11.82	3	41.28	41.28	0.00	0.22	-9.52	0.20	41.28	4216	1	10.15	10.13	0.03	-2.66	100.73	10.15	333.25	3125
33.000	-9.43	2	40.98	40.98	0.00	0.23	-10.12	0.24	43.90	4216	1	10.43	10.41	0.02	-2.73	103.33	10.43	341.87	3125
		3	25.34	25.34	0.00	0.35	-7.72	0.13	25.34	3125	1	10.43	10.41	0.02	-2.73	103.33	10.43	341.87	3125
33.623	-7.35	2	24.26	24.26	0.00	0.36	-8.12	0.17	26.66	3125	1	10.70	10.67	0.02	-2.79	105.81	10.70	350.06	3125
34.245	-5.43	2	18.33	18.33	0.00	0.37	-8.52	0.21	27.98	3125	1	10.96	10.94	0.02	-2.85	108.28	10.96	358.25	3125
34.868	-3.63	2	12.80	12.80	0.00	0.38	-8.92	0.26	29.30	3125	1	11.23	11.20	0.02	-2.91	110.76	11.23	366.45	3125
35.490	-1.94	2	7.56	7.56	0.00	0.39	-9.32	0.30	30.62	3125	2	14.73	14.72	0.02	-2.97	113.23	11.49	374.64	3125
		2	25.62	25.62	0.00	0.49	-5.71	-4.69	72.77	12500	1	5.65	5.63	0.02	-1.25	38.07	5.65	497.10	12500
36.245	0.04	2	1.02	1.02	0.00	0.49	-6.01	-4.60	76.72	12500	2	20.63	20.61	0.02	-1.13	39.30	5.99	511.32	12500
37.000	1.99	-1	0.00	0.00	0.00	0.50	-6.31	-4.50	80.66	12500	2	45.58	45.56	0.02	-1.15	40.39	6.34	525.55	12500

▼ PHASE 14

LEVEL	X	SOIL 1									SOIL 2								
		STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h	STATE	σ	σ_s	σ_q	X_a	X_p	σ_a	σ_p	k_h
(m)	(mm)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)		(tf/m^2)	(tf/m^2)	(tf/m^2)	(mm)	(mm)	(tf/m^2)	(tf/m^2)	(tf/m^3)
0.000	-13.77	0									1	0.75	0.00	0.75	-	-	0.75	0.75	1000
0.100	-13.76	0									2	1.67	0.93	0.74	-14.63	-13.76	0.81	1.67	1000
0.900	-13.67	0									2	5.40	4.70	0.69	-17.78	-10.00	1.28	9.07	1000
1.700	-13.58	0									2	5.46	4.82	0.64	-17.29	-2.58	1.75	16.46	1000
1.850	-13.56	0									2	5.42	4.79	0.63	-17.19	-1.85	1.79	17.13	1000
2.500	-13.51	0									2	5.24	4.65	0.59	-16.79	1.29	1.95	20.04	1000
2.790	-13.49	0									2	5.15	4.58	0.58	-16.61	2.69	2.03	21.33	1000
		0									-1	0.00	0.00	0.00	-9.91	9.91	-10.08	22.11	1625
3.340	-13.48	0									-1	0.00	0.00	0.00	-9.91	9.91	-9.08	23.12	1625
3.890	-13.50	0									-1	0.00	0.00	0.00	-9.91	9.91	-8.08	24.12	1625
4.440	-13.57	0									-1	0.00	0.00	0.00	-9.91	9.91	-7.07	25.12	1625
4.990	-13.70	0									-1	0.00	0.00	0.00	-9.91	9.91	-6.07	26.13	1625
		0									2	3.67	3.21	0.45	-16.09	44.90	2.47	32.97	500
5.745	-13.99	0									2	3.79	3.38	0.42	-16.28	51.08	2.64	36.33	500
6.190	-14.23	0									2	3.85	3.46	0.39	-16.44	54.68	2.75	38.31	500

計畫名稱：XDO Example 3

主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

		0									2	3.55	3.16	0.39	-16.44	3.37	1.07	23.36	1125
6.855	-14.71	0									2	4.57	4.21	0.36	-16.73	3.09	2.30	24.59	1125
7.520	-15.30	0									2	5.49	5.15	0.34	-17.05	2.76	3.53	25.82	1125
8.226	-16.08	0									2	6.67	6.36	0.31	-17.71	2.10	4.83	27.12	1125
8.933	-17.02	0									2	7.88	7.60	0.28	-18.56	1.25	6.14	28.43	1125
9.639	-18.13	0									2	8.99	8.73	0.26	-19.49	0.32	7.45	29.74	1125
10.345	-19.45	0									2	9.96	9.72	0.24	-20.51	-0.70	8.77	31.06	1125
11.183	-21.32	0									2	10.90	10.68	0.22	-21.83	-2.01	10.33	32.62	1125
12.020	-23.48	0									2	11.89	11.69	0.19	-23.48	-3.67	11.89	34.18	1125
12.883	-25.98	0									2	13.50	13.32	0.18	-25.98	-6.17	13.50	35.79	1125
13.745	-28.76	0									2	15.11	14.95	0.16	-28.76	-8.94	15.11	37.40	1125
14.583	-31.71	0									2	16.68	16.54	0.14	-31.71	-11.90	16.68	38.97	1125
15.420	-34.82	0									2	18.25	18.12	0.13	-34.82	-15.01	18.25	40.54	1125
16.283	-38.06	0									2	19.87	19.75	0.12	-38.06	-18.25	19.87	42.16	1125
17.145	-41.28	0									2	21.49	21.38	0.11	-41.28	-21.47	21.49	43.78	1125
17.618	-43.02	0									2	22.38	22.27	0.10	-43.02	-23.21	22.38	44.66	1125
18.090	-44.70	0									2	23.26	23.17	0.10	-44.70	-24.88	23.26	45.55	1125
		0									2	6.59	6.50	0.10	-44.70	45.13	6.59	152.56	1625
18.820	-47.07	0									2	6.77	6.68	0.09	-47.07	45.33	6.77	156.91	1625
19.405	-48.69	0									2	6.92	6.83	0.08	-48.69	45.76	6.92	160.40	1625
19.990	-50.00	0									2	7.06	6.98	0.08	-50.00	46.51	7.06	163.89	1625
		0									2	21.88	21.80	0.08	-50.00	-30.19	21.88	54.08	1625
20.420	-50.74	0									2	22.71	22.64	0.07	-50.74	-30.93	22.71	54.91	1625
20.983	-51.39	0									2	23.80	23.73	0.07	-51.39	-31.58	23.80	56.00	1625
21.545	-51.67	0									2	24.89	24.82	0.07	-51.67	-31.85	24.89	57.08	1625
22.108	-51.55	0									2	25.98	25.91	0.06	-51.55	-31.73	25.98	58.17	1625
22.670	-51.04	0									2	27.06	27.00	0.06	-51.04	-31.22	27.06	59.26	1625
23.220	-50.17	0									2	28.13	28.07	0.06	-50.17	-30.36	28.13	60.32	1625
23.320	-49.98	0									2	28.32	28.27	0.06	-49.98	-30.17	28.32	60.52	1625
		2	30.29	30.29	0.00	-30.07	-49.98	-30.29	30.29	3043	2	28.32	28.27	0.06	-49.98	-30.17	28.32	60.52	1625
23.913	-48.61	2	31.44	31.44	0.00	-28.71	-48.61	-29.14	31.44	3043	2	29.47	29.41	0.05	-48.61	-28.80	29.47	61.66	1625
24.505	-46.91	2	32.59	32.59	0.00	-27.00	-46.91	-27.99	32.59	3043	2	30.61	30.56	0.05	-46.91	-27.09	30.61	62.81	1625
25.098	-44.89	2	33.74	33.74	0.00	-24.99	-44.89	-26.84	33.74	3043	2	31.76	31.71	0.05	-44.89	-25.08	31.76	63.96	1625
25.690	-42.62	2	34.89	34.89	0.00	-22.71	-42.62	-25.69	34.89	3043	2	32.91	32.86	0.04	-42.62	-22.81	32.91	65.10	1625
		2	13.32	13.32	0.00	-38.38	-42.62	-0.27	13.32	3204	2	7.64	7.60	0.04	-42.62	48.02	7.64	222.92	2375
26.440	-39.43	2	16.00	16.00	0.00	-34.36	-39.43	-0.22	16.00	3204	2	7.97	7.93	0.04	-39.43	54.84	7.97	231.86	2375
27.190	-35.95	2	18.68	18.68	0.00	-30.07	-35.95	-0.17	18.68	3204	2	8.30	8.26	0.04	-35.95	61.95	8.30	240.81	2375
27.940	-32.29	2	21.36	21.36	0.00	-25.59	-32.29	-0.11	21.36	3204	2	8.63	8.60	0.04	-32.29	69.23	8.63	249.76	2375
28.690	-28.54	2	24.04	24.04	0.00	-21.02	-28.54	-0.06	24.04	3204	2	8.97	8.93	0.03	-28.54	76.61	8.97	258.71	2375
29.440	-24.80	2	26.72	26.72	0.00	-16.46	-24.80	0.00	26.72	3204	2	9.30	9.27	0.03	-24.80	83.99	9.30	267.66	2375
30.190	-21.15	2	29.40	29.40	0.00	-11.99	-21.15	0.05	29.40	3204	2	9.63	9.60	0.03	-21.15	91.26	9.63	276.60	2375
30.940	-17.67	2	32.07	32.07	0.00	-7.69	-17.67	0.10	32.07	3204	2	9.96	9.93	0.03	-17.67	98.37	9.96	285.55	2375
31.690	-14.43	2	34.75	34.75	0.00	-3.63	-14.43	0.16	34.75	3204	2	10.29	10.27	0.03	-14.43	105.24	10.29	294.50	2375
		2	38.66	38.66	0.00	-5.29	-14.43	0.15	38.66	4216	2	9.87	9.85	0.03	-14.43	86.29	9.87	324.63	3125
32.345	-11.82	2	41.28	41.28	0.00	-2.08	-11.82	0.20	41.28	4216	2	10.15	10.13	0.03	-11.82	91.57	10.15	333.25	3125
33.000	-9.43	2	40.98	40.98	0.00	0.23	-10.12	0.24	43.90	4216	2	10.43	10.41	0.02	-9.43	96.63	10.43	341.87	3125
		2	25.34	25.34	0.00	-1.36	-9.43	0.13	25.34	3125	2	10.43	10.41	0.02	-9.43	96.63	10.43	341.87	3125
33.623	-7.35	2	24.26	24.26	0.00	0.36	-8.12	0.17	26.66	3125	2	10.70	10.67	0.02	-7.35	101.25	10.70	350.06	3125
34.245	-5.43	2	18.33	18.33	0.00	0.37	-8.52	0.21	27.98	3125	2	10.96	10.94	0.02	-5.43	105.71	10.96	358.25	3125
34.868	-3.63	2	12.80	12.80	0.00	0.38	-8.92	0.26	29.30	3125	2	11.23	11.20	0.02	-3.63	110.04	11.23	366.45	3125
35.490	-1.94	2	7.56	7.56	0.00	0.39	-9.32	0.30	30.62	3125	2	14.73	14.72	0.02	-2.97	113.23	11.49	374.64	3125
		2	25.62	25.62	0.00	0.49	-5.71	-4.69	72.77	12500	2	5.65	5.63	0.02	-1.94	37.38	5.65	497.10	12500
36.245	0.04	2	1.02	1.02	0.00	0.49	-6.01	-4.60	76.72	12500	2	20.63	20.61	0.02	-1.13	39.30	5.99	511.32	12500
37.000	1.99	-1	0.00	0.00	0.00	0.50	-6.31	-4.50	80.66	12500	2	45.58	45.56	0.02	-1.15	40.39	6.34	525.55	12500

計畫名稱：XDO Example 3
主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

XDO 支撐彈簧應力與變位

▼ PHASE 2

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.850	2	7.50	0.00	30.00	3055	8.15	-1.67	-2.14	-1.67	4.00	30.00

▼ PHASE 3

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.850	2	7.50	0.00	30.00	3055	8.15	-1.67	-1.67	-9.99	7.39	55.43

▼ PHASE 4

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.850	2	7.50	0.00	30.00	3055	8.15	-1.67	-9.99	-9.99	7.39	55.43
2	5.745	2	1.00	0.00	0.00	3993	-7.90	-7.90	-7.90	-7.90	0.00	0.00

▼ PHASE 5

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.850	-	-	-	-	-	-	-	-	-	-	-
2	5.745	2	1.00	0.00	0.00	3993	-7.90	-7.90	-7.90	-9.75	7.41	7.41

▼ PHASE 6

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.850	-	-	-	-	-	-	-	-	-	-	-
2	5.745	2	1.00	0.00	0.00	3993	-7.90	-7.90	-9.75	-9.75	7.41	7.41
3	0.100	2	1.00	0.00	0.00	3195	-18.01	-18.01	-18.01	-18.01	0.00	0.00

▼ PHASE 7

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.850	-	-	-	-	-	-	-	-	-	-	-
2	5.745	2	1.00	0.00	0.00	3993	-7.90	-7.90	-9.75	-14.95	28.14	28.14
3	0.100	2	1.00	0.00	0.00	3195	-18.01	-18.01	-18.01	-18.28	0.85	0.85

▼ PHASE 8

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.850	-	-	-	-	-	-	-	-	-	-	-
2	5.745	2	1.00	0.00	0.00	3993	-7.90	-7.90	-14.95	-14.95	28.14	28.14
3	0.100	2	1.00	0.00	0.00	3195	-18.01	-18.01	-18.28	-18.28	0.85	0.85
4	10.345	2	1.00	0.00	0.00	7188	-12.38	-12.38	-12.38	-12.38	0.00	0.00

▼ PHASE 9

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.850	-	-	-	-	-	-	-	-	-	-	-
2	5.745	2	1.00	0.00	0.00	3993	-7.90	-7.90	-14.95	-16.28	33.49	33.49
3	0.100	2	1.00	0.00	0.00	3195	-18.01	-18.01	-18.28	-16.03	0.00	0.00
4	10.345	2	1.00	0.00	0.00	7188	-12.38	-12.38	-12.38	-18.39	43.20	43.20

▼ PHASE 10

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.850	-	-	-	-	-	-	-	-	-	-	-
2	5.745	2	1.00	0.00	0.00	3993	-7.90	-7.90	-16.28	-16.28	33.49	33.49
3	0.100	2	1.00	0.00	0.00	3195	-18.01	-18.01	-16.03	-16.03	0.00	0.00
4	10.345	2	1.00	0.00	0.00	7188	-12.38	-12.38	-18.39	-18.39	43.20	43.20
5	13.745	2	1.00	0.00	0.00	7188	-18.35	-18.35	-18.35	-18.35	0.00	0.00

▼ PHASE 11

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.850	-	-	-	-	-	-	-	-	-	-	-
2	5.745	2	1.00	0.00	0.00	3993	-7.90	-7.90	-16.28	-15.45	30.15	30.15
3	0.100	2	1.00	0.00	0.00	3195	-18.01	-18.01	-16.03	-14.10	0.00	0.00
4	10.345	2	1.00	0.00	0.00	7188	-12.38	-12.38	-18.39	-20.51	58.49	58.49
5	13.745	2	1.00	0.00	0.00	7188	-18.35	-18.35	-18.35	-25.58	51.96	51.96

▼ PHASE 12

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.850	-	-	-	-	-	-	-	-	-	-	-
2	5.745	2	1.00	0.00	0.00	3993	-7.90	-7.90	-15.45	-15.45	30.15	30.15
3	0.100	2	1.00	0.00	0.00	3195	-18.01	-18.01	-14.10	-14.10	0.00	0.00
4	10.345	2	1.00	0.00	0.00	7188	-12.38	-12.38	-20.51	-20.51	58.49	58.49
5	13.745	2	1.00	0.00	0.00	7188	-18.35	-18.35	-25.58	-25.58	51.96	51.96
6	17.145	2	1.00	0.00	0.00	7188	-26.62	-26.62	-26.62	-26.62	0.00	0.00

▼ PHASE 13

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.850	-	-	-	-	-	-	-	-	-	-	-
2	5.745	2	1.00	0.00	0.00	3993	-7.90	-7.90	-15.45	-13.99	24.33	24.33
3	0.100	2	1.00	0.00	0.00	3195	-18.01	-18.01	-14.10	-13.76	0.00	0.00
4	10.345	2	1.00	0.00	0.00	7188	-12.38	-12.38	-20.51	-19.45	50.86	50.86
5	13.745	2	1.00	0.00	0.00	7188	-18.35	-18.35	-25.58	-28.76	74.79	74.79
6	17.145	2	1.00	0.00	0.00	7188	-26.62	-26.62	-26.62	-41.28	105.39	105.39

▼ PHASE 14

NO	LEVEL	k	S	θ	P_{pr}	R	x_o	x_{pr}	x_i	x_f	$p_{s,n}$	P_s
	(m)		(m)	(deg.)	(tf)	(tf/m)	(mm)	(mm)	(mm)	(mm)	(tf/m)	(tf)
1	1.850	-	-	-	-	-	-	-	-	-	-	-
2	5.745	2	1.00	0.00	0.00	3993	-7.90	-7.90	-13.99	-13.99	24.33	24.33
3	0.100	2	1.00	0.00	0.00	3195	-18.01	-18.01	-13.76	-13.76	0.00	0.00
4	10.345	2	1.00	0.00	0.00	7188	-12.38	-12.38	-19.45	-19.45	50.86	50.86
5	13.745	2	1.00	0.00	0.00	7188	-18.35	-18.35	-28.76	-28.76	74.79	74.79
6	17.145	2	1.00	0.00	0.00	7188	-26.62	-26.62	-41.28	-41.28	105.39	105.39
7	23.220	2	1.00	0.00	0.00	2259	-50.17	-50.17	-50.17	-50.17	0.00	0.00
8	22.670	2	1.00	0.00	0.00	14375	-51.04	-51.04	-51.04	-51.04	0.00	0.00
9	20.420	2	1.00	0.00	0.00	3195	-50.74	-50.74	-50.74	-50.74	0.00	0.00

計畫名稱：XDO Example 3
主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

XDO 輸入指令

```
XDO *A*
*XDO SaSpCode:RIDO
*XDO khByDepth:Constant
*XDO KaKp:Coulomb
*XDO khD:N[125]
*XDO khU:Su[250]
*XDO Ana:D_E/U_T
*Retaining Wall Depth & Rigitity
0
37    202856
*Strata Properties
*Z UW UW' Ka Ko Kp c phi Da Dp kh khp Cv
0
2.79  1.95  0.95  0.334 0.546 4.771 0     27    0.67  0.67  1000  0     0
4.99  1.88  0.88  1     1     1     6.5   0     0.67  0.67  1625  0     0
6.19  1.87  0.87  0.321 0.531 5.172 0     28    0.67  0.67  500   0     0
18.09 1.89  0.89  1     1     1     4.5   0     0.67  0.67  1125  0     0
19.99 1.89  0.89  0.286 0.485 6.71  0     31    0.67  0.67  1625  0     0
25.69 1.94  0.94  1     1     1     6.5   0     0.67  0.67  1625  0     0
31.69 1.94  0.94  0.275 0.47  7.371 0.5   32    0.67  0.67  2375  0     0
35.49 1.94  0.94  0.264 0.455 8.13  0.5   33    0.67  0.67  3125  0     0
50    2.2   1.2   0.244 0.426 10.028 5     35    0.67  0.67  12500 0     0
*XDO SF,D,0,27,,,8
*XDO CL,U,,,6.5,,4
*XDO SM/ML1,D,0,28,,,4
*XDO CL,U,,,4.5,,4
*XDO SM/ML2,D,0,31,,,13
*XDO CL,U,,,6.5,,6
*XDO SM/ML3,D,0.5,32,,,19
*XDO SM,D,0.5,33,,,25
*XDO SS/SH,D,5,35,,,100
*Initial Water Table & Element Size
1.7   0.9
*Construction Stage
*PHASE 1
*Boussinesq Type Surcharge // Water Table and/or Water Pressure // Excavation
*Redefining the Stratum Properties
SUB(2) 0     0     15    1.5
EXC(1) 2.5
WAT(1) 2.5   0
WAT(1,1) 2.79  0.29  0
WAT(1,1) 4.99  0     3.29
WAT(1,1) 6.19  4.49  0
WAT(1,1) 18.09 0     11.59
WAT(1,1) 19.99 13.49 0
WAT(1,1) 25.69 0     19.19
WAT(1) 37    30.5
WAT(2) 1.7   0
WAT(2,1) 2.79  1.09  0
WAT(2,1) 4.99  0     3.29
WAT(2,1) 6.19  4.49  0
WAT(2,1) 18.09 0     11.59
WAT(2,1) 19.99 13.49 0
```

```
WAT(2,1) 25.69 0     19.19
WAT(2) 37    30.5
SOI(1) 2.5
2.79  1.95  0.95  0.334 0.546 8.171 0.00  27    0.67  0.67  1349
*XDO TyDU:D,cwc:0,B:Y
SOI(1) 2.79
4.99  1.88  0.88  1.000 1.000 1.000 12.23 0     0.67  0.67  3043
*XDO TyDU:U,cwc:0,B:Y
SOI(1) 4.99
6.19  1.87  0.87  0.321 0.531 9.005 0.00  28    0.67  0.67  675
*XDO TyDU:D,cwc:0,B:Y
SOI(1) 6.19
18.09 1.89  0.89  1.000 1.000 1.000 8.46  0     0.67  0.67  2107
*XDO TyDU:U,cwc:0,B:Y
SOI(1) 18.09
19.99 1.89  0.89  0.286 0.485 12.262 0.00  31    0.67  0.67  2192
*XDO TyDU:D,cwc:0,B:Y
SOI(1) 19.99
25.69 1.94  0.94  1.000 1.000 1.000 12.23 0     0.67  0.67  3043
*XDO TyDU:U,cwc:0,B:Y
SOI(1) 25.69
31.69 1.94  0.94  0.275 0.470 13.686 0.41  32    0.67  0.67  3204
*XDO TyDU:D,cwc:0,B:Y
SOI(1) 31.69
33    1.94  0.94  0.264 0.455 15.336 0.40  33    0.67  0.67  4216
*XDO TyDU:D,cwc:0,B:Y
CAL(0)
*PHASE 2
*1st Strut
STR(2) 1.85  7.5   0     30    3055
CAL(0)
*PHASE 3
*Water Table and/or Water Pressure // Excavation
EXC(1) 7.52
WAT(1) 7.52  0
WAT(1,1) 18.09 0     11.59
WAT(1,1) 19.99 13.49 0
WAT(1,1) 25.69 0     19.19
WAT(1) 37    30.5
WAT(2) 1.7   0
WAT(2,1) 2.79  1.09  0
WAT(2,1) 4.99  0     3.29
WAT(2,1) 6.19  4.49  0
WAT(2,1) 18.09 0     11.59
WAT(2,1) 19.99 13.49 0
WAT(2,1) 25.69 0     19.19
WAT(2) 37    30.5
CAL(0)
*PHASE 4
*2nd Strut
STR(2) 5.745 1     0     0     3993
CAL(0)
*PHASE 5
*Remove Strut
STR(0,1)
CAL(0)
```

```
*PHASE 6
*3rd Strut
STR(2) 0.1   1     0     0     3195
CAL(0)
*PHASE 7
*Water Table and/or Water Pressure // Excavation
EXC(1) 12.02
WAT(1) 12.02 0
WAT(1,1) 18.09 0     9.56
WAT(1,1) 19.99 11.46 0
WAT(1,1) 25.69 0     19.19
WAT(1) 37    30.5
WAT(2) 1.7   0
WAT(2,1) 2.79  1.09  0
WAT(2,1) 4.99  0     3.29
WAT(2,1) 6.19  4.49  0
WAT(2,1) 18.09 0     11.59
WAT(2,1) 19.99 13.49 0
WAT(2,1) 25.69 0     19.19
WAT(2) 37    30.5
CAL(0)
*PHASE 8
*4th Strut
STR(2) 10.345 1     0     0     7188
CAL(0)
*PHASE 9
*Water Table and/or Water Pressure // Excavation
EXC(1) 15.42
WAT(1) 15.42 0
WAT(1,1) 18.09 0     4.2
WAT(1,1) 19.99 6.1   0
WAT(1,1) 25.69 0     16.41
WAT(1) 37    29.11
WAT(2) 1.7   0
WAT(2,1) 2.79  1.09  0
WAT(2,1) 4.99  0     3.29
WAT(2,1) 6.19  4.49  0
WAT(2,1) 18.09 0     11.59
WAT(2,1) 19.99 13.49 0
WAT(2,1) 25.69 0     19.19
WAT(2) 37    29.11
CAL(0)
*PHASE 10
*5th Strut
STR(2) 13.745 1     0     0     7188
CAL(0)
*PHASE 11
*Water Table and/or Water Pressure // Excavation
EXC(1) 18.82
WAT(1) 18.82 0
WAT(1,1) 19.99 1.17  0
WAT(1,1) 25.69 0     11.05
WAT(1) 37    26.43
WAT(2) 1.7   0
WAT(2,1) 2.79  1.09  0
WAT(2,1) 4.99  0     3.29
```

```
WAT(2,1) 6.19  4.49  0
WAT(2,1) 18.09 0     11.59
WAT(2,1) 19.99 13.49 0
WAT(2,1) 25.69 0     19.19
WAT(2) 37    26.43
CAL(0)
*PHASE 12
*6th Strut
STR(2) 17.145 1     0     0     7188
CAL(0)
*PHASE 13
*Water Table and/or Water Pressure // Excavation
EXC(1) 23.32
WAT(1) 23.32 0
WAT(1,1) 25.69 0     3.83
WAT(1) 37    22.82
WAT(2) 1.7   0
WAT(2,1) 2.79  1.09  0
WAT(2,1) 4.99  0     3.29
WAT(2,1) 6.19  4.49  0
WAT(2,1) 18.09 0     11.59
WAT(2,1) 19.99 13.49 0
WAT(2,1) 25.69 0     19.19
WAT(2) 37    22.82
CAL(0)
*PHASE 14
*7th Strut / 8th Strut / 9th Strut
STR(2) 23.22 1     0     0     2259
STR(2) 22.67 1     0     0     14375
STR(2) 20.42 1     0     0     3195
CAL(0)
*End of Calculation
END
EVP
STA
STOP
*XDO GUI
*XDO ProjectName:
*XDO ProjectNo:
*XDO Designer:
*XDO Remark:
*XDO IsDefaultFileName:False
*XDO IsUserDefinedFileName:True
*XDO IsNoSubject:False
*XDO IsDefaultSubject:False
*XDO IsUserDefinedSubject:True
*XDO UserDefinedFileName:XDO_Ex3
*XDO UserDefinedProjectName:XDO Example 3
*XDO UserDefinedTitle:連續壁及內扶壁 + 逆打工法 + 總應力法
*XDO STR-1:型鋼,H300×300×10×15,,,,1,20400000,,0.01198,48,0.6,3055
*XDO STR-2:樓板/RC板,,280,0.25,,,,2509980,0.25,110,0.7,3993
*XDO STR-3:樓板/RC板,,280,0.2,,,,2509980,0.2,110,0.7,3195
*XDO STR-4:樓板/RC板,,280,0.45,,,,2509980,0.45,110,0.7,7188
*XDO STR-5:樓板/RC板,,280,0.45,,,,2509980,0.45,110,0.7,7188
*XDO STR-6:樓板/RC板,,280,0.45,,,,2509980,0.45,110,0.7,7188
*XDO STR-7:樓板/RC板,,140,0.2,,,,1774824,0.2,110,0.7,2259
```

計畫名稱：XDO Example 3
主　　題：連續壁及內扶壁 + 逆打工法 + 總應力法

```
*XDO STR-8:樓板/RC板,,280,0.9,,,,2509980,0.9,110,0.7,14375
*XDO STR-9:樓板/RC板,,280,0.2,,,,2509980,0.2,110,0.7,3195
*XDO WALL:連續壁,1,,,,280,,,,,2509980,20400000,,0.083333,0.6,125498,1
*XDO GWL:1.7,1.7,6.5,6.5
*XDO BTRS:Y,1,2.5,33,66,8,9
```

```
***** DATA FILE NAME : XDO_Ex3.RIO

      XDO *A*
      *XDO SaSpCode:RIDO
      *XDO khByDepth:Constant
      *XDO KaKp:Coulomb
      *XDO khD:N[125]
      *XDO khU:Su[250]
      *XDO Ana:D_E/U_T
      *Retaining Wall Depth & Rigitity
      : 0
 1 ...  0
      : 37    202856
 2 ...  37 202856
      *Strata Properties
      *Z UW UW' Ka Ko Kp c phi Da Dp kh khp Cv
      : 0
 3 ...  0
      : 2.79  1.95  0.95  0.334 0.546 4.771 0     27    0.67  0.67  1000  0     0
 4 ...  2.79 1.95 0.95 0.334 0.546 4.771 0 27 0.67 0.67 1000 0 0
      : 4.99  1.88  0.88  1     1     1     6.5   0     0.67  0.67  1625  0     0
 5 ...  4.99 1.88 0.88 1 1 1 6.5 0 0.67 0.67 1625 0 0
      : 6.19  1.87  0.87  0.321 0.531 5.172 0     28    0.67  0.67  500   0     0
 6 ...  6.19 1.87 0.87 0.321 0.531 5.172 0 28 0.67 0.67 500 0 0
      : 18.09 1.89  0.89  1     1     1     4.5   0     0.67  0.67  1125  0     0
 7 ...  18.09 1.89 0.89 1 1 1 4.5 0 0.67 0.67 1125 0 0
      : 19.99 1.89  0.89  0.286 0.485 6.71  0     31    0.67  0.67  1625  0     0
 8 ...  19.99 1.89 0.89 0.286 0.485 6.71 0 31 0.67 0.67 1625 0 0
      : 25.69 1.94  0.94  1     1     1     6.5   0     0.67  0.67  1625  0     0
 9 ...  25.69 1.94 0.94 1 1 1 6.5 0 0.67 0.67 1625 0 0
      : 31.69 1.94  0.94  0.275 0.47  7.371 0.5   32    0.67  0.67  2375  0     0
10 ...  31.69 1.94 0.94 0.275 0.47 7.371 0.5 32 0.67 0.67 2375 0 0
      : 35.49 1.94  0.94  0.264 0.455 8.13  0.5   33    0.67  0.67  3125  0     0
11 ...  35.49 1.94 0.94 0.264 0.455 8.13 0.5 33 0.67 0.67 3125 0 0
      : 50    2.2   1.2   0.244 0.426 10.028 5     35    0.67  0.67  12500 0
      + 0
12 ...  50 2.2 1.2 0.244 0.426 10.028 5 35 0.67 0.67 12500 0 0
      *XDO SF,D,0,27,,,8
      *XDO CL,U,,,6.5,,4
      *XDO SM/ML1,D,0,28,,,4
      *XDO CL,U,,,4.5,,4
      *XDO SM/ML2,D,0,31,,,13
      *XDO CL,U,,,6.5,,6
      *XDO SM/ML3,D,0.5,32,,,19
      *XDO SM,D,0.5,33,,,25
      *XDO SS/SH,D,5,35,,,100
      *Initial Water Table & Element Size
      : 1.7   0.9
13 ...  1.7 0.9
      *Construction Stage
      *PHASE 1
      *Boussinesq Type Surcharge // Water Table and/or Water Pressure // Excavation
      *Redefining the Stratum Properties
      : SUB(2) 0     0     15    1.5
14 ... SUB(2)  0 0 15 1.5
      : EXC(1) 2.5
15 ... EXC(1)  2.5
      : WAT(1) 2.5   0
16 ... WAT(1)  2.5 0
      : WAT(1,1) 2.79  0.29  0
17 ... WAT(1,1)  2.79 0.29 0
      : WAT(1,1) 4.99  0     3.29
18 ... WAT(1,1)  4.99 0 3.29
      : WAT(1,1) 6.19  4.49  0
19 ... WAT(1,1)  6.19 4.49 0
      : WAT(1,1) 18.09 0     11.59
20 ... WAT(1,1)  18.09 0 11.59
      : WAT(1,1) 19.99 13.49 0
21 ... WAT(1,1)  19.99 13.49 0
      : WAT(1,1) 25.69 0     19.19
22 ... WAT(1,1)  25.69 0 19.19
      : WAT(1) 37    30.5
23 ... WAT(1)  37 30.5
      : WAT(2) 1.7   0
24 ... WAT(2)  1.7 0
      : WAT(2,1) 2.79  1.09  0
25 ... WAT(2,1)  2.79 1.09 0
      : WAT(2,1) 4.99  0     3.29
26 ... WAT(2,1)  4.99 0 3.29
      : WAT(2,1) 6.19  4.49  0
27 ... WAT(2,1)  6.19 4.49 0
      : WAT(2,1) 18.09 0     11.59
28 ... WAT(2,1)  18.09 0 11.59
      : WAT(2,1) 19.99 13.49 0
29 ... WAT(2,1)  19.99 13.49 0
      : WAT(2,1) 25.69 0     19.19
30 ... WAT(2,1)  25.69 0 19.19
      : WAT(2) 37    30.5
31 ... WAT(2)  37 30.5
      : SOI(1) 2.5
32 ... SOI(1)  2.5
      : 2.79  1.95  0.95  0.334 0.546 8.171 0.00  27    0.67  0.67  1349  0     0
33 ...  2.79 1.95 0.95 0.334 0.546 8.171 0 27 0.67 0.67 1349 0 0
      *XDO TyDU:D,cwc:0,B:Y
      : SOI(1) 2.79
34 ... SOI(1)  2.79
```

```
       : 4.99  1.88  0.88  1.000 1.000 1.000 12.23 0     0.67  0.67  3043  0     0
35 ...  4.99 1.88 0.88 1 1 1 12.23 0 0.67 0.67 3043 0 0
       *XDO TyDU:U,cwc:0,B:Y
       : SOI(1) 4.99
36 ... SOI(1)  4.99
       : 6.19  1.87  0.87  0.321 0.531 9.005 0.00  28    0.67  0.67  675   0     0
37 ...  6.19 1.87 0.87 0.321 0.531 9.005 0 28 0.67 0.67 675 0 0
       *XDO TyDU:D,cwc:0,B:Y
       : SOI(1) 6.19
38 ... SOI(1)  6.19
       : 18.09 1.89  0.89  1.000 1.000 1.000 8.46  0     0.67  0.67  2107  0     0
39 ...  18.09 1.89 0.89 1 1 1 8.46 0 0.67 0.67 2107 0 0
       *XDO TyDU:U,cwc:0,B:Y
       : SOI(1) 18.09
40 ... SOI(1)  18.09
       : 19.99 1.89  0.89  0.286 0.485 12.262 0.00  31    0.67  0.67  2192  0
       + 0
41 ...  19.99 1.89 0.89 0.286 0.485 12.262 0 31 0.67 0.67 2192 0 0
       *XDO TyDU:D,cwc:0,B:Y
       : SOI(1) 19.99
42 ... SOI(1)  19.99
       : 25.69 1.94  0.94  1.000 1.000 1.000 12.23 0     0.67  0.67  3043  0     0
43 ...  25.69 1.94 0.94 1 1 1 12.23 0 0.67 0.67 3043 0 0
       *XDO TyDU:U,cwc:0,B:Y
       : SOI(1) 25.69
44 ... SOI(1)  25.69
       : 31.69 1.94  0.94  0.275 0.470 13.686 0.41  32    0.67  0.67  3204  0
       + 0
45 ...  31.69 1.94 0.94 0.275 0.47 13.686 0.41 32 0.67 0.67 3204 0 0
       *XDO TyDU:D,cwc:0,B:Y
       : SOI(1) 31.69
46 ... SOI(1)  31.69
       : 33    1.94  0.94  0.264 0.455 15.336 0.40  33    0.67  0.67  4216  0
       + 0
47 ...  33 1.94 0.94 0.264 0.455 15.336 0.4 33 0.67 0.67 4216 0 0
       *XDO TyDU:D,cwc:0,B:Y
       : CAL(0)
48 ... CAL(0)
       *PHASE 2
       *1st Strut
       : STR(2) 1.85  7.5   0     30    3055
49 ... STR(2)  1.85 7.5 0 30 3055
       : CAL(0)
50 ... CAL(0)
       *PHASE 3
       *Water Table and/or Water Pressure // Excavation
       : EXC(1) 7.52
51 ... EXC(1)  7.52
       : WAT(1) 7.52  0
52 ... WAT(1)  7.52 0
       : WAT(1,1) 18.09 0     11.59
53 ... WAT(1,1)  18.09 0 11.59
       : WAT(1,1) 19.99 13.49 0
54 ... WAT(1,1)  19.99 13.49 0
       : WAT(1,1) 25.69 0     19.19
55 ... WAT(1,1)  25.69 0 19.19
       : WAT(1) 37    30.5
56 ... WAT(1)  37 30.5
       : WAT(2) 1.7   0
57 ... WAT(2)  1.7 0
       : WAT(2,1) 2.79  1.09  0
58 ... WAT(2,1)  2.79 1.09 0
       : WAT(2,1) 4.99  0     3.29
59 ... WAT(2,1)  4.99 0 3.29
       : WAT(2,1) 6.19  4.49  0
60 ... WAT(2,1)  6.19 4.49 0
       : WAT(2,1) 18.09 0     11.59
61 ... WAT(2,1)  18.09 0 11.59
       : WAT(2,1) 19.99 13.49 0
62 ... WAT(2,1)  19.99 13.49 0
       : WAT(2,1) 25.69 0     19.19
63 ... WAT(2,1)  25.69 0 19.19
       : WAT(2) 37    30.5
64 ... WAT(2)  37 30.5
       : CAL(0)
65 ... CAL(0)
       *PHASE 4
       *2nd Strut
       : STR(2) 5.745 1     0     0     3993
66 ... STR(2)  5.745 1 0 0 3993
       : CAL(0)
67 ... CAL(0)
       *PHASE 5
       *Remove Strut
       : STR(0,1)
68 ... STR(0,1)
       : CAL(0)
69 ... CAL(0)
       *PHASE 6
       *3rd Strut
       : STR(2) 0.1   1     0     0     3195
70 ... STR(2)  0.1 1 0 0 3195
       : CAL(0)
71 ... CAL(0)
       *PHASE 7
       *Water Table and/or Water Pressure // Excavation
```

```
       : EXC(1) 12.02
 72 ... EXC(1)  12.02
       : WAT(1) 12.02 0
 73 ... WAT(1)  12.02 0
       : WAT(1,1) 18.09 0     9.56
 74 ... WAT(1,1)  18.09 0 9.56
       : WAT(1,1) 19.99 11.46 0
 75 ... WAT(1,1)  19.99 11.46 0
       : WAT(1,1) 25.69 0     19.19
 76 ... WAT(1,1)  25.69 0 19.19
       : WAT(1) 37    30.5
 77 ... WAT(1)  37 30.5
       : WAT(2) 1.7   0
 78 ... WAT(2)  1.7 0
       : WAT(2,1) 2.79  1.09  0
 79 ... WAT(2,1)  2.79 1.09 0
       : WAT(2,1) 4.99  0     3.29
 80 ... WAT(2,1)  4.99 0 3.29
       : WAT(2,1) 6.19  4.49  0
 81 ... WAT(2,1)  6.19 4.49 0
       : WAT(2,1) 18.09 0     11.59
 82 ... WAT(2,1)  18.09 0 11.59
       : WAT(2,1) 19.99 13.49 0
 83 ... WAT(2,1)  19.99 13.49 0
       : WAT(2,1) 25.69 0     19.19
 84 ... WAT(2,1)  25.69 0 19.19
       : WAT(2) 37    30.5
 85 ... WAT(2)  37 30.5
       : CAL(0)
 86 ... CAL(0)
       *PHASE 8
       *4th Strut
       : STR(2) 10.345 1     0     0     7188
 87 ... STR(2)  10.345 1 0 0 7188
       : CAL(0)
 88 ... CAL(0)
       *PHASE 9
       *Water Table and/or Water Pressure // Excavation
       : EXC(1) 15.42
 89 ... EXC(1)  15.42
       : WAT(1) 15.42 0
 90 ... WAT(1)  15.42 0
       : WAT(1,1) 18.09 0     4.2
 91 ... WAT(1,1)  18.09 0 4.2
       : WAT(1,1) 19.99 6.1   0
 92 ... WAT(1,1)  19.99 6.1 0
       : WAT(1,1) 25.69 0     16.41
 93 ... WAT(1,1)  25.69 0 16.41
       : WAT(1) 37    29.11
 94 ... WAT(1)  37 29.11
       : WAT(2) 1.7   0
 95 ... WAT(2)  1.7 0
       : WAT(2,1) 2.79  1.09  0
 96 ... WAT(2,1)  2.79 1.09 0
       : WAT(2,1) 4.99  0     3.29
 97 ... WAT(2,1)  4.99 0 3.29
       : WAT(2,1) 6.19  4.49  0
 98 ... WAT(2,1)  6.19 4.49 0
       : WAT(2,1) 18.09 0     11.59
 99 ... WAT(2,1)  18.09 0 11.59
       : WAT(2,1) 19.99 13.49 0
100 ... WAT(2,1)  19.99 13.49 0
       : WAT(2,1) 25.69 0     19.19
101 ... WAT(2,1)  25.69 0 19.19
       : WAT(2) 37    29.11
102 ... WAT(2)  37 29.11
       : CAL(0)
103 ... CAL(0)
       *PHASE 10
       *5th Strut
       : STR(2) 13.745 1     0     0     7188
104 ... STR(2)  13.745 1 0 0 7188
       : CAL(0)
105 ... CAL(0)
       *PHASE 11
       *Water Table and/or Water Pressure // Excavation
       : EXC(1) 18.82
106 ... EXC(1)  18.82
       : WAT(1) 18.82 0
107 ... WAT(1)  18.82 0
       : WAT(1,1) 19.99 1.17  0
108 ... WAT(1,1)  19.99 1.17 0
       : WAT(1,1) 25.69 0     11.05
109 ... WAT(1,1)  25.69 0 11.05
       : WAT(1) 37    26.43
110 ... WAT(1)  37 26.43
       : WAT(2) 1.7   0
111 ... WAT(2)  1.7 0
       : WAT(2,1) 2.79  1.09  0
112 ... WAT(2,1)  2.79 1.09 0
       : WAT(2,1) 4.99  0     3.29
113 ... WAT(2,1)  4.99 0 3.29
       : WAT(2,1) 6.19  4.49  0
114 ... WAT(2,1)  6.19 4.49 0
       : WAT(2,1) 18.09 0     11.59
115 ... WAT(2,1)  18.09 0 11.59
```

```
        : WAT(2,1) 19.99 13.49 0
116 ... WAT(2,1)  19.99 13.49 0
        : WAT(2,1) 25.69 0     19.19
117 ... WAT(2,1)  25.69 0 19.19
        : WAT(2) 37    26.43
118 ... WAT(2)  37 26.43
        : CAL(0)
119 ... CAL(0)
        *PHASE 12
        *6th Strut
        : STR(2) 17.145 1     0     0     7188
120 ... STR(2)  17.145 1 0 0 7188
        : CAL(0)
121 ... CAL(0)
        *PHASE 13
        *Water Table and/or Water Pressure // Excavation
        : EXC(1) 23.32
122 ... EXC(1)  23.32
        : WAT(1) 23.32 0
123 ... WAT(1)  23.32 0
        : WAT(1,1) 25.69 0     3.83
124 ... WAT(1,1)  25.69 0 3.83
        : WAT(1) 37    22.82
125 ... WAT(1)  37 22.82
        : WAT(2) 1.7   0
126 ... WAT(2)  1.7 0
        : WAT(2,1) 2.79  1.09  0
127 ... WAT(2,1)  2.79 1.09 0
        : WAT(2,1) 4.99  0     3.29
128 ... WAT(2,1)  4.99 0 3.29
        : WAT(2,1) 6.19  4.49  0
129 ... WAT(2,1)  6.19 4.49 0
        : WAT(2,1) 18.09 0     11.59
130 ... WAT(2,1)  18.09 0 11.59
        : WAT(2,1) 19.99 13.49 0
131 ... WAT(2,1)  19.99 13.49 0
        : WAT(2,1) 25.69 0     19.19
132 ... WAT(2,1)  25.69 0 19.19
        : WAT(2) 37    22.82
133 ... WAT(2)  37 22.82
        : CAL(0)
134 ... CAL(0)
        *PHASE 14
        *7th Strut / 8th Strut / 9th Strut
        : STR(2) 23.22 1     0     0     2259
135 ... STR(2)  23.22 1 0 0 2259
        : STR(2) 22.67 1     0     0     14375
136 ... STR(2)  22.67 1 0 0 14375
        : STR(2) 20.42 1     0     0     3195
137 ... STR(2)  20.42 1 0 0 3195
        : CAL(0)
138 ... CAL(0)
        *End of Calculation
        : END
139 ... END
        : EVP
140 ... EVP
        : STA
141 ... STA
        : STOP
142 ... STOP
```


==


```
*XDO SaSpCode:RIDO
*XDO khByDepth:Constant
*XDO KaKp:Coulomb
*XDO khD:N[125]
*XDO khU:Su[250]
*XDO Ana:D_E/U_T
*Retaining Wall Depth & Rigitity
```

** STARTING DATA **

* BOUSSINESQ SURCHARGES NOT FUNCTION OF STATE OF SOIL
FOR THIS OLD ADDITIVE MODEL THE SURCHARGES HAVE NO EFFECT ON THE WEIGHT OF THE SOIL

*** WALL DESCRIPTION :

	INERTIA PRODUCT EI	CYLINDRICAL RIGIDITY	DEAD WEIGHT
SECTION No 1 FROM 0.000 m TO 37.000 m :	202856. T.m2/m	0. T/m3	0.000 T/m2

```
*Strata Properties
*Z UW UW' Ka Ko Kp c phi Da Dp kh khp Cv
```

*** SOIL DESCRIPTION :

LAYER No 1 FROM 0.000 m TO 2.790 m :

```
             SATURATED UNIT WEIGHT              GH  =       1.950 T/m3
             SUBMERGED UNIT WEIGHT              GD  =       0.950 T/m3
             HOR. ACTIVE PRESSURE COEFFICIENT   KA  =       0.334
             HOR. AT REST PRESSURE COEFFICIENT  K0  =       0.546
             HOR. PASSIVE PRESSURE COEFFICIENT  KP  =       4.771
             COHESION                            C  =       0.000 T/m2
             ANGLE OF INTERNAL FRICTION        PHI  =      27.000 DEGREES
                      FOR ACTIVE  PRESS. DELTA/PHI  =       0.670
                      FOR PASSIVE PRESS. DELTA/PHI  =      -0.670
             ELASTIC REACTION COEFFICIENT (AT P=0)  =    1000.000 T/m3
             INCR. OF THIS COEFF. WITH PRESSURE     =       0.000 1/m
             WALL'S VERTICAL STRESS COEFFICIENT     =       0.125

    LAYER No  2 FROM   2.790 m  TO   4.990 m  :

             SATURATED UNIT WEIGHT              GH  =       1.880 T/m3
             SUBMERGED UNIT WEIGHT              GD  =       0.880 T/m3
             HOR. ACTIVE PRESSURE COEFFICIENT   KA  =       1.000
             HOR. AT REST PRESSURE COEFFICIENT  K0  =       1.000
             HOR. PASSIVE PRESSURE COEFFICIENT  KP  =       1.000
             COHESION                            C  =       6.500 T/m2
             ANGLE OF INTERNAL FRICTION        PHI  =       0.000 DEGREES
                FOR ACT. PR. (WALL TANG. STRESS)/C  =       0.670
                FOR PAS. PR. (WALL TANG. STRESS)/C  =      -0.670
               COH. : SUBSTR. EFFECT TO ACTIVE PR.  =     -16.075 T/m2
               COH. : ADDIT. EFFECT TO PASSIVE PR.  =      16.120 T/m2
             ELASTIC REACTION COEFFICIENT (AT P=0)  =    1625.000 T/m3
             INCR. OF THIS COEFF. WITH PRESSURE     =       0.000 1/m
             WALL'S VERTICAL STRESS COEFFICIENT     =       0.125
```


```
    LAYER No  3 FROM   4.990 m  TO   6.190 m  :

             SATURATED UNIT WEIGHT              GH  =       1.870 T/m3
             SUBMERGED UNIT WEIGHT              GD  =       0.870 T/m3
             HOR. ACTIVE PRESSURE COEFFICIENT   KA  =       0.321
             HOR. AT REST PRESSURE COEFFICIENT  K0  =       0.531
             HOR. PASSIVE PRESSURE COEFFICIENT  KP  =       5.172
             COHESION                            C  =       0.000 T/m2
             ANGLE OF INTERNAL FRICTION        PHI  =      28.000 DEGREES
                      FOR ACTIVE  PRESS. DELTA/PHI  =       0.670
                      FOR PASSIVE PRESS. DELTA/PHI  =      -0.670
             ELASTIC REACTION COEFFICIENT (AT P=0)  =     500.000 T/m3
             INCR. OF THIS COEFF. WITH PRESSURE     =       0.000 1/m
             WALL'S VERTICAL STRESS COEFFICIENT     =       0.125

    LAYER No  4 FROM   6.190 m  TO  18.090 m  :

             SATURATED UNIT WEIGHT              GH  =       1.890 T/m3
             SUBMERGED UNIT WEIGHT              GD  =       0.890 T/m3
             HOR. ACTIVE PRESSURE COEFFICIENT   KA  =       1.000
             HOR. AT REST PRESSURE COEFFICIENT  K0  =       1.000
             HOR. PASSIVE PRESSURE COEFFICIENT  KP  =       1.000
             COHESION                            C  =       4.500 T/m2
             ANGLE OF INTERNAL FRICTION        PHI  =       0.000 DEGREES
                FOR ACT. PR. (WALL TANG. STRESS)/C  =       0.670
                FOR PAS. PR. (WALL TANG. STRESS)/C  =      -0.670
               COH. : SUBSTR. EFFECT TO ACTIVE PR.  =     -11.129 T/m2
               COH. : ADDIT. EFFECT TO PASSIVE PR.  =      11.160 T/m2
             ELASTIC REACTION COEFFICIENT (AT P=0)  =    1125.000 T/m3
             INCR. OF THIS COEFF. WITH PRESSURE     =       0.000 1/m
             WALL'S VERTICAL STRESS COEFFICIENT     =       0.125

    LAYER No  5 FROM  18.090 m  TO  19.990 m  :

             SATURATED UNIT WEIGHT              GH  =       1.890 T/m3
             SUBMERGED UNIT WEIGHT              GD  =       0.890 T/m3
             HOR. ACTIVE PRESSURE COEFFICIENT   KA  =       0.286
             HOR. AT REST PRESSURE COEFFICIENT  K0  =       0.485
             HOR. PASSIVE PRESSURE COEFFICIENT  KP  =       6.710
             COHESION                            C  =       0.000 T/m2
             ANGLE OF INTERNAL FRICTION        PHI  =      31.000 DEGREES
                      FOR ACTIVE  PRESS. DELTA/PHI  =       0.670
                      FOR PASSIVE PRESS. DELTA/PHI  =      -0.670
             ELASTIC REACTION COEFFICIENT (AT P=0)  =    1625.000 T/m3
             INCR. OF THIS COEFF. WITH PRESSURE     =       0.000 1/m
             WALL'S VERTICAL STRESS COEFFICIENT     =       0.125

    LAYER No  6 FROM  19.990 m  TO  25.690 m  :

             SATURATED UNIT WEIGHT              GH  =       1.940 T/m3
             SUBMERGED UNIT WEIGHT              GD  =       0.940 T/m3
             HOR. ACTIVE PRESSURE COEFFICIENT   KA  =       1.000
             HOR. AT REST PRESSURE COEFFICIENT  K0  =       1.000
             HOR. PASSIVE PRESSURE COEFFICIENT  KP  =       1.000
             COHESION                            C  =       6.500 T/m2
             ANGLE OF INTERNAL FRICTION        PHI  =       0.000 DEGREES
                FOR ACT. PR. (WALL TANG. STRESS)/C  =       0.670
                FOR PAS. PR. (WALL TANG. STRESS)/C  =      -0.670
               COH. : SUBSTR. EFFECT TO ACTIVE PR.  =     -16.075 T/m2
               COH. : ADDIT. EFFECT TO PASSIVE PR.  =      16.120 T/m2
```

ELASTIC REACTION COEFFICIENT (AT P=0) = 1625.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE = 0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT = 0.125

LAYER No 7 FROM 25.690 m TO 31.690 m :

SATURATED UNIT WEIGHT	GH	=	1.940 T/m3
SUBMERGED UNIT WEIGHT	GD	=	0.940 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT	KA	=	0.275
HOR. AT REST PRESSURE COEFFICIENT	K0	=	0.470
HOR. PASSIVE PRESSURE COEFFICIENT	KP	=	7.371
COHESION	C	=	0.500 T/m2
ANGLE OF INTERNAL FRICTION	PHI	=	32.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI		=	0.670
FOR PASSIVE PRESS. DELTA/PHI		=	-0.670
COH. : SUBSTR. EFFECT TO ACTIVE PR.		=	-0.591 T/m2
COH. : ADDIT. EFFECT TO PASSIVE PR.		=	3.434 T/m2
ELASTIC REACTION COEFFICIENT (AT P=0)		=	2375.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE		=	0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT		=	0.125

LAYER No 8 FROM 31.690 m TO 35.490 m :

SATURATED UNIT WEIGHT	GH	=	1.940 T/m3
SUBMERGED UNIT WEIGHT	GD	=	0.940 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT	KA	=	0.264
HOR. AT REST PRESSURE COEFFICIENT	K0	=	0.455
HOR. PASSIVE PRESSURE COEFFICIENT	KP	=	8.130
COHESION	C	=	0.500 T/m2
ANGLE OF INTERNAL FRICTION	PHI	=	33.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI		=	0.670
FOR PASSIVE PRESS. DELTA/PHI		=	-0.670
COH. : SUBSTR. EFFECT TO ACTIVE PR.		=	-0.577 T/m2
COH. : ADDIT. EFFECT TO PASSIVE PR.		=	3.591 T/m2
ELASTIC REACTION COEFFICIENT (AT P=0)		=	3125.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE		=	0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT		=	0.125

LAYER No 9 FROM 35.490 m TO 50.000 m :

SATURATED UNIT WEIGHT	GH	=	2.200 T/m3
SUBMERGED UNIT WEIGHT	GD	=	1.200 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT	KA	=	0.244
HOR. AT REST PRESSURE COEFFICIENT	K0	=	0.426
HOR. PASSIVE PRESSURE COEFFICIENT	KP	=	10.028
COHESION	C	=	5.000 T/m2
ANGLE OF INTERNAL FRICTION	PHI	=	35.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI		=	0.670
FOR PASSIVE PRESS. DELTA/PHI		=	-0.670
COH. : SUBSTR. EFFECT TO ACTIVE PR.		=	-5.506 T/m2
COH. : ADDIT. EFFECT TO PASSIVE PR.		=	39.429 T/m2
ELASTIC REACTION COEFFICIENT (AT P=0)		=	12500.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE		=	0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT		=	0.125

*XDO SF,D,0,27,,,8
*XDO CL,U,,,6.5,,4
*XDO SM/ML1,D,0,28,,,4
*XDO CL,U,,,4.5,,4
*XDO SM/ML2,D,0,31,,,13
*XDO CL,U,,,6.5,,6
*XDO SM/ML3,D,0.5,32,,,19
*XDO SM,D,0.5,33,,,25
*XDO SS/SH,D,5,35,,,100
*Initial Water Table & Element Size

** PHASE No 1 **

*Construction Stage
*PHASE 1
*Boussinesq Type Surcharge // Water Table and/or Water Pressure // Excavation
*Redefining the Stratum Properties

* ADDING A BOUSSINESQ SURCHARGE ON SOIL 2
LEV. = 0.000 m A = 0.000 m B = 15.000 m Q = 1.500 T/m2

* EXCAVATION IN SOIL 1 TO LEVEL = 2.500 m

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 1 TO LEVEL = 2.500 m
WATER PRESSURE IN SOIL 1 TO LEVEL = 2.790 m PR. = 0.290 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 0.290 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 4.990 m PR. = 0.000 T/m2

PR. = 3.290 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -3.290 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 6.190 m PR. = 4.490 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 4.490 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 18.090 m PR. = 0.000 T/m2
PR. = 11.590 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -11.590 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 19.990 m PR. = 13.490 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 13.490 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 25.690 m PR. = 0.000 T/m2
PR. = 19.190 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -19.190 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 37.000 m PR. = 30.500 T/m2

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 2 TO LEVEL = 1.700 m
WATER PRESSURE IN SOIL 2 TO LEVEL = 2.790 m PR. = 1.090 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 1.090 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 4.990 m PR. = 0.000 T/m2
PR. = 3.290 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -3.290 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 6.190 m PR. = 4.490 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 4.490 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 18.090 m PR. = 0.000 T/m2
PR. = 11.590 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -11.590 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 19.990 m PR. = 13.490 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 13.490 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 25.690 m PR. = 0.000 T/m2
PR. = 19.190 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -19.190 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 37.000 m PR. = 30.500 T/m2

* MODIFICATION OF SOIL 1

LAYER No 10 FROM 2.500 m TO 2.790 m :

SATURATED UNIT WEIGHT GH = 1.950 T/m3
SUBMERGED UNIT WEIGHT GD = 0.950 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT KA = 0.334
HOR. AT REST PRESSURE COEFFICIENT K0 = 0.546
HOR. PASSIVE PRESSURE COEFFICIENT KP = 8.171
COHESION C = 0.000 T/m2
ANGLE OF INTERNAL FRICTION PHI = 27.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI = 0.670
FOR PASSIVE PRESS. DELTA/PHI = -0.670
ELASTIC REACTION COEFFICIENT (AT P=0) = 1349.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE = 0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT = 0.125

COEFFICIENT OF INITIAL HORIZONTAL PRESSURE KI = 0.546
(Applied at the beginning of the movement of the wall)

*XDO TyDU:D,cwc:0,B:Y

* MODIFICATION OF SOIL 1

LAYER No 11 FROM 2.790 m TO 4.990 m :

SATURATED UNIT WEIGHT GH = 1.880 T/m3
SUBMERGED UNIT WEIGHT GD = 0.880 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT KA = 1.000
HOR. AT REST PRESSURE COEFFICIENT K0 = 1.000
HOR. PASSIVE PRESSURE COEFFICIENT KP = 1.000
COHESION C = 12.230 T/m2
ANGLE OF INTERNAL FRICTION PHI = 0.000 DEGREES
FOR ACT. PR. (WALL TANG. STRESS)/C = 0.670
FOR PAS. PR. (WALL TANG. STRESS)/C = -0.670
COH. : SUBSTR. EFFECT TO ACTIVE PR. = -30.246 T/m2
COH. : ADDIT. EFFECT TO PASSIVE PR. = 30.331 T/m2
ELASTIC REACTION COEFFICIENT (AT P=0) = 3043.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE = 0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT = 0.125

COEFFICIENT OF INITIAL HORIZONTAL PRESSURE KI = 1.000
(Applied at the beginning of the movement of the wall)

*XDO TyDU:U,cwc:0,B:Y

* MODIFICATION OF SOIL 1

LAYER No 12 FROM 4.990 m TO 6.190 m :

SATURATED UNIT WEIGHT GH = 1.870 T/m3
SUBMERGED UNIT WEIGHT GD = 0.870 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT KA = 0.321
HOR. AT REST PRESSURE COEFFICIENT K0 = 0.531
HOR. PASSIVE PRESSURE COEFFICIENT KP = 9.005
COHESION C = 0.000 T/m2
ANGLE OF INTERNAL FRICTION PHI = 28.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI = 0.670
FOR PASSIVE PRESS. DELTA/PHI = -0.670
ELASTIC REACTION COEFFICIENT (AT P=0) = 675.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE = 0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT = 0.125

COEFFICIENT OF INITIAL HORIZONTAL PRESSURE KI = 0.531
(Applied at the beginning of the movement of the wall)

*XDO TyDU:D,cwc:0,B:Y

* MODIFICATION OF SOIL 1

LAYER No 13 FROM 6.190 m TO 18.090 m :

SATURATED UNIT WEIGHT GH = 1.890 T/m3
SUBMERGED UNIT WEIGHT GD = 0.890 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT KA = 1.000
HOR. AT REST PRESSURE COEFFICIENT K0 = 1.000
HOR. PASSIVE PRESSURE COEFFICIENT KP = 1.000
COHESION C = 8.460 T/m2
ANGLE OF INTERNAL FRICTION PHI = 0.000 DEGREES
FOR ACT. PR. (WALL TANG. STRESS)/C = 0.670
FOR PAS. PR. (WALL TANG. STRESS)/C = -0.670
COH. : SUBSTR. EFFECT TO ACTIVE PR. = -20.922 T/m2
COH. : ADDIT. EFFECT TO PASSIVE PR. = 20.981 T/m2
ELASTIC REACTION COEFFICIENT (AT P=0) = 2107.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE = 0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT = 0.125

COEFFICIENT OF INITIAL HORIZONTAL PRESSURE KI = 1.000
(Applied at the beginning of the movement of the wall)

*XDO TyDU:U,cwc:0,B:Y

* MODIFICATION OF SOIL 1

LAYER No 14 FROM 18.090 m TO 19.990 m :

SATURATED UNIT WEIGHT GH = 1.890 T/m3
SUBMERGED UNIT WEIGHT GD = 0.890 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT KA = 0.286
HOR. AT REST PRESSURE COEFFICIENT K0 = 0.485
HOR. PASSIVE PRESSURE COEFFICIENT KP = 12.262
COHESION C = 0.000 T/m2
ANGLE OF INTERNAL FRICTION PHI = 31.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI = 0.670
FOR PASSIVE PRESS. DELTA/PHI = -0.670
ELASTIC REACTION COEFFICIENT (AT P=0) = 2192.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE = 0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT = 0.125

COEFFICIENT OF INITIAL HORIZONTAL PRESSURE KI = 0.485
(Applied at the beginning of the movement of the wall)

*XDO TyDU:D,cwc:0,B:Y

* MODIFICATION OF SOIL 1

LAYER No 15 FROM 19.990 m TO 25.690 m :

SATURATED UNIT WEIGHT GH = 1.940 T/m3
SUBMERGED UNIT WEIGHT GD = 0.940 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT KA = 1.000
HOR. AT REST PRESSURE COEFFICIENT K0 = 1.000
HOR. PASSIVE PRESSURE COEFFICIENT KP = 1.000
COHESION C = 12.230 T/m2
ANGLE OF INTERNAL FRICTION PHI = 0.000 DEGREES
FOR ACT. PR. (WALL TANG. STRESS)/C = 0.670
FOR PAS. PR. (WALL TANG. STRESS)/C = -0.670
COH. : SUBSTR. EFFECT TO ACTIVE PR. = -30.246 T/m2
COH. : ADDIT. EFFECT TO PASSIVE PR. = 30.331 T/m2
ELASTIC REACTION COEFFICIENT (AT P=0) = 3043.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE = 0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT = 0.125

COEFFICIENT OF INITIAL HORIZONTAL PRESSURE KI = 1.000
(Applied at the beginning of the movement of the wall)

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*XDO TyDU:U,cwc:0,B:Y

* MODIFICATION OF SOIL 1

LAYER No 16 FROM 25.690 m TO 31.690 m :

SATURATED UNIT WEIGHT GH = 1.940 T/m3
SUBMERGED UNIT WEIGHT GD = 0.940 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT KA = 0.275
HOR. AT REST PRESSURE COEFFICIENT K0 = 0.470
HOR. PASSIVE PRESSURE COEFFICIENT KP = 13.686
COHESION C = 0.410 T/m2
ANGLE OF INTERNAL FRICTION PHI = 32.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI = 0.670
FOR PASSIVE PRESS. DELTA/PHI = -0.670
COH. : SUBSTR. EFFECT TO ACTIVE PR. = -0.485 T/m2
COH. : ADDIT. EFFECT TO PASSIVE PR. = 2.816 T/m2
ELASTIC REACTION COEFFICIENT (AT P=0) = 3204.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE = 0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT = 0.125

COEFFICIENT OF INITIAL HORIZONTAL PRESSURE KI = 0.470
(Applied at the beginning of the movement of the wall)

*XDO TyDU:D,cwc:0,B:Y

* MODIFICATION OF SOIL 1

LAYER No 17 FROM 31.690 m TO 33.000 m :

SATURATED UNIT WEIGHT GH = 1.940 T/m3
SUBMERGED UNIT WEIGHT GD = 0.940 T/m3
HOR. ACTIVE PRESSURE COEFFICIENT KA = 0.264
HOR. AT REST PRESSURE COEFFICIENT K0 = 0.455
HOR. PASSIVE PRESSURE COEFFICIENT KP = 15.336
COHESION C = 0.400 T/m2
ANGLE OF INTERNAL FRICTION PHI = 33.000 DEGREES
FOR ACTIVE PRESS. DELTA/PHI = 0.670
FOR PASSIVE PRESS. DELTA/PHI = -0.670
COH. : SUBSTR. EFFECT TO ACTIVE PR. = -0.462 T/m2
COH. : ADDIT. EFFECT TO PASSIVE PR. = 2.873 T/m2
ELASTIC REACTION COEFFICIENT (AT P=0) = 4216.000 T/m3
INCR. OF THIS COEFF. WITH PRESSURE = 0.000 1/m
WALL'S VERTICAL STRESS COEFFICIENT = 0.125

COEFFICIENT OF INITIAL HORIZONTAL PRESSURE KI = 0.455
(Applied at the beginning of the movement of the wall)

*XDO TyDU:D,cwc:0,B:Y

PHASE 1

	WALL						SOIL 1				SOIL 2				STRUTS/ ANCHORS	
							EXCAVATION: 2.50 m				EXCAVATION: 0.00 m					
							WATER LEVEL: 2.50 m				WATER LEVEL: 1.70 m					
							CAQUOT SURC.: 0.00 T/m2				CAQUOT SURC.: 0.00 T/m2					
LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	-2.47	0.18	0.00	0.00	0.00		0				1	0.75	0.75	1000		
0.100	-2.46	0.18	0.00	-0.08	0.01		0				1	0.81	0.74	1000		
0.900	-2.31	0.18	-0.38	-0.91	0.29		0				1	1.28	0.69	1000		
1.700	-2.17	0.18	-1.57	-2.12	0.68		0				1	1.75	0.64	1000		
1.850	-2.14	0.18	-1.90	-2.40	0.77	-0.15	0				1	1.79	0.63	1000		
2.500	-2.03	0.17	-3.93	-3.93	1.17	-0.80	0				1	1.95	0.59	1000		
							3	0.00		1349	1	1.95	0.59	1000		
2.790	-1.98	0.16	-5.16	-4.41	1.25	-0.80	3	2.25		1349	1	2.03	0.58	1000		
							2	6.59		3043	2	2.80	0.58	1625		
3.340	-1.90	0.14	-7.03	-2.42	1.25		2	7.37		3043	2	3.94	0.54	1625		
3.890	-1.82	0.12	-7.85	-0.62	1.25		2	8.18		3043	2	5.06	0.51	1625		
4.440	-1.76	0.10	-7.73	1.03	1.25		2	9.03		3043	2	6.16	0.48	1625		
4.990	-1.71	0.08	-6.74	2.55	1.25		2	9.91		3043	2	7.25	0.45	1625		
							2	1.90		675	2	2.94	0.45	500		
5.745	-1.66	0.06	-5.11	1.76	1.34		2	2.22		675	2	3.27	0.42	500		
6.190	-1.63	0.05	-4.43	1.29	1.38		2	2.41		675	2	3.47	0.39	500		
							2	10.39		2107	2	10.38	0.39	1125		
6.855	-1.60	0.04	-3.58	1.28	1.38		2	11.58		2107	2	11.64	0.36	1125		
7.520	-1.58	0.03	-2.74	1.23	1.38		2	12.80		2107	2	12.89	0.34	1125		
8.226	-1.57	0.02	-1.90	1.16	1.38		2	14.10		2107	2	14.21	0.31	1125		
8.932	-1.56	0.01	-1.11	1.07	1.38		2	15.41		2107	2	15.54	0.28	1125		
9.639	-1.55	0.01	-0.39	0.98	1.38		2	16.73		2107	2	16.86	0.26	1125		
10.345	-1.54	0.01	0.27	0.89	1.38		2	18.05		2107	2	18.18	0.24	1125		
11.183	-1.53	0.01	0.98	0.78	1.38		2	19.61		2107	2	19.75	0.22	1125		
12.020	-1.52	0.02	1.58	0.66	1.38		2	21.17		2107	2	21.32	0.19	1125		
12.882	-1.50	0.03	2.08	0.51	1.38		2	22.76		2107	2	22.96	0.18	1125		
13.745	-1.47	0.04	2.44	0.31	1.38		2	24.33		2107	2	24.60	0.16	1125		
14.583	-1.44	0.05	2.59	0.04	1.38		2	25.84		2107	2	26.20	0.14	1125		
15.420	-1.40	0.06	2.48	-0.31	1.38		2	27.33		2107	2	27.82	0.13	1125		

16.283	-1.34	0.07	2.01	-0.80	1.38		2	28.85	2107		2	29.50	0.12	1125		
17.145	-1.28	0.07	1.05	-1.44	1.38		2	30.36	2107		2	31.19	0.11	1125		
17.618	-1.25	0.07	0.27	-1.86	1.38		2	31.17	2107		2	32.11	0.10	1125		
18.090	-1.21	0.07	-0.71	-2.33	1.38		2	31.99	2107		2	33.04	0.10	1125		
							2	11.32	2192		2	9.14	0.10	1625		
18.820	-1.16	0.07	-1.86	-0.82	1.43		2	11.52	2192		2	9.54	0.09	1625		
19.405	-1.12	0.06	-2.00	0.30	1.47		2	11.68	2192		2	9.85	0.08	1625		
19.990	-1.09	0.06	-1.52	1.33	1.50		2	11.86	2192		2	10.15	0.08	1625		
							2	36.33	3043		2	36.22	0.08	1625		
20.420	-1.06	0.06	-0.94	1.36	1.50		2	37.09	3043		2	37.09	0.07	1625		
20.983	-1.03	0.05	-0.18	1.32	1.50		2	38.09	3043		2	38.22	0.07	1625		
21.545	-1.00	0.05	0.53	1.21	1.50		2	39.09	3043		2	39.36	0.07	1625		
22.108	-0.97	0.06	1.16	1.02	1.50		2	40.08	3043		2	40.50	0.06	1625		
22.670	-0.94	0.06	1.66	0.74	1.50		2	41.08	3043		2	41.64	0.06	1625		
23.220	-0.90	0.07	1.98	0.39	1.50		2	42.04	3043		2	42.76	0.06	1625		
23.320	-0.89	0.07	2.01	0.31	1.50		2	42.21	3043		2	42.96	0.06	1625		
23.913	-0.85	0.07	2.06	-0.19	1.50		2	43.23	3043		2	44.18	0.05	1625		
24.505	-0.81	0.08	1.77	-0.81	1.50		2	44.25	3043		2	45.40	0.05	1625		
25.097	-0.76	0.08	1.07	-1.56	1.50		2	45.25	3043		2	46.62	0.05	1625		
25.690	-0.71	0.08	-0.11	-2.44	1.50		2	46.25	3043		2	47.85	0.04	1625		
							2	13.98	3204		2	12.35	0.04	2375		
26.440	-0.65	0.08	-1.51	-1.35	1.51		2	14.11	3204		2	12.83	0.04	2375		
27.190	-0.59	0.07	-2.19	-0.51	1.52		2	14.25	3204		2	13.29	0.04	2375		
27.940	-0.54	0.07	-2.33	0.10	1.52		2	14.42	3204		2	13.75	0.04	2375		
28.690	-0.49	0.06	-2.09	0.51	1.52		2	14.60	3204		2	14.19	0.03	2375		
29.440	-0.45	0.05	-1.61	0.74	1.52		2	14.80	3204		2	14.61	0.03	2375		
30.190	-0.41	0.05	-1.02	0.81	1.53		2	15.02	3204		2	15.02	0.03	2375		
30.940	-0.38	0.04	-0.44	0.73	1.53		2	15.24	3204		2	15.43	0.03	2375		
m	mm rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3	T		

PHASE 1 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
31.690	-0.35	0.04	0.04	0.53	1.53		2	15.47		3204	2	15.84	0.03	2375		
							2	15.37		4216	2	15.04	0.03	3125		
32.345	-0.32	0.04	0.44	0.67	1.53		2	15.53		4216	2	15.41	0.03	3125		
33.000	-0.29	0.05	0.89	0.68	1.53		2	15.69		4216	2	15.78	0.02	3125		
							2	15.37		3125	2	15.78	0.02	3125		
33.623	-0.26	0.05	1.23	0.37	1.53		2	15.55		3125	2	16.13	0.02	3125		
34.245	-0.23	0.05	1.33	-0.05	1.53		2	15.71		3125	2	16.50	0.02	3125		
34.868	-0.20	0.06	1.14	-0.61	1.53		2	15.87		3125	2	16.87	0.02	3125		
35.490	-0.16	0.06	0.55	-1.30	1.53		2	16.03		3125	2	17.25	0.02	3125		
							2	16.57		12500	2	14.59	0.02	12500		
36.245	-0.12	0.06	0.03	-0.22	1.53		2	16.39		12500	2	15.53	0.02	12500		
37.000	-0.07	0.06	0.00	0.00	1.53		2	16.21		12500	2	16.48	0.02	12500		
m	mm rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3	T		

MAXIMUM DISPLACEMENT = -2.47 mm
MAXIMUM MOMENT = -7.85 m.T/m
VERTICAL REACTION IN FOOT = -1.53 T/m

CODIFICATION OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR., 2 = ELASTIC, 3 = PASSIVE PR.
OF SOIL :

(4 IT.)

CANTILEVER WALL

RATIOS OF SECURITY ON THE EMBEDMENT (according to the simplified method, for FRANCE) : WITHOUT PARTIAL FACTOR
HIGHEST LEVEL WITH DIFFERENTIAL NIL PRESSURE ZA = 2.790 m
LEVEL OF APPLICATION OF THE CONCENTRATED FORCE ZB = 3.521 m
CONCENTRATED FORCE SIMULATING THE EFFECT OF THE MINIMAL EMBEDMENT = -18.682 T/m
Bottom of the wall at ZD = 37.000 m (ZA-ZD)/(ZA-ZB) = 46.792

FOR THE SUPPORTED ZONE : SINCE THE LEVEL OF EXCAVATION 2.500 m UNTIL THE LEVEL OF PIVOTING 4.990 m
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.252 = (18.39 T/m)/(72.85 T/m)
SIMPLY INDICATIVE

FOR THE SUPPORTED ZONE : SINCE THE LEVEL OF PIVOTING 4.990 m UNTIL THE LEVEL 37.000 m
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.157 = (688.43 T/m)/(4381.56 T/m)
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 6.81 T/m

** PHASE No 2 **

*PHASE 2
*1st Strut

* INSTALLATION OF A LINE OF STRUTS No 1
LEVEL = 1.850 m
SPACING = 7.500 m
INCLINATION = 0.000 DEGREES
PRELOAD = 30.000 T

STIFFNESS = 3055.000 T/m
EFFECTIVE LENGTH = 0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 2

PHASE 2

	WALL						SOIL 1 EXCAVATION: 2.50 m WATER LEVEL: 2.50 m CAQUOT SURC.: 0.00 T/m2			SOIL 2 EXCAVATION: 0.00 m WATER LEVEL: 1.70 m CAQUOT SURC.: 0.00 T/m2			STRUTS/ ANCHORS	
LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH. ELAST.	STATE	PRE.	SURCH.	ELAST.	No LOAD
0.000	-1.79	0.07	0.00	0.00			0			3	0.75	0.75	1000	
0.100	-1.79	0.07	0.00	-0.11	-0.01		0			2	1.48	0.74	1000	
0.900	-1.73	0.07	-0.61	-1.45	-0.08		0			2	1.86	0.69	1000	
1.700	-1.67	0.07	-2.40	-3.09	-0.08		0			2	2.24	0.64	1000	
1.850	-1.66	0.06	-2.89	-3.44	-0.08	-0.15	0			2	2.26	0.63	1000	
				0.56			0			2	2.26	0.63	1000	1 30.00
2.500	-1.63	0.05	-3.08	-1.25	-0.06	-0.80	0			2	2.36	0.59	1000	
							2	0.00	1349	2	2.36	0.59	1000	
2.790	-1.61	0.05	-3.55	-1.91	-0.08	-0.80	2	1.75	1349	2	2.40	0.58	1000	
							2	5.47	3043	2	3.40	0.58	1625	
3.340	-1.59	0.04	-4.30	-0.80	-0.08		2	6.43	3043	2	4.44	0.54	1625	
3.890	-1.57	0.03	-4.44	0.28	-0.08		2	7.41	3043	2	5.47	0.51	1625	
4.440	-1.56	0.02	-4.00	1.33	-0.08		2	8.40	3043	2	6.50	0.48	1625	
4.990	-1.55	0.01	-2.97	2.38	-0.08		2	9.42	3043	2	7.51	0.45	1625	
							2	1.80	675	2	3.02	0.45	500	
5.745	-1.55	0.00	-1.52	1.48	-0.01		2	2.14	675	2	3.33	0.42	500	
6.190	-1.55	0.00	-0.98	0.96	0.02		2	2.35	675	2	3.51	0.39	500	
							2	10.21	2107	2	10.47	0.39	1125	
6.855	-1.56	-0.01	-0.39	0.80	0.02		2	11.48	2107	2	11.69	0.36	1125	
7.520	-1.56	-0.01	0.09	0.67	0.02		2	12.75	2107	2	12.92	0.34	1125	
8.226	-1.57	-0.01	0.53	0.57	0.02		2	14.09	2107	2	14.22	0.31	1125	
8.932	-1.57	0.00	0.90	0.49	0.02		2	15.43	2107	2	15.52	0.28	1125	
9.639	-1.57	0.00	1.23	0.44	0.02		2	16.77	2107	2	16.83	0.26	1125	
10.345	-1.57	0.00	1.53	0.41	0.02		2	18.10	2107	2	18.15	0.24	1125	
11.183	-1.56	0.01	1.86	0.37	0.02		2	19.67	2107	2	19.71	0.22	1125	
12.020	-1.55	0.02	2.15	0.33	0.02		2	21.23	2107	2	21.29	0.19	1125	
12.882	-1.53	0.03	2.40	0.25	0.02		2	22.81	2107	2	22.93	0.18	1125	
13.745	-1.50	0.04	2.57	0.12	0.02		2	24.38	2107	2	24.57	0.16	1125	
14.583	-1.46	0.05	2.59	-0.08	0.02		2	25.88	2107	2	26.18	0.14	1125	
15.420	-1.41	0.06	2.40	-0.39	0.02		2	27.37	2107	2	27.81	0.13	1125	
16.283	-1.36	0.07	1.88	-0.85	0.02		2	28.88	2107	2	29.49	0.12	1125	
17.145	-1.29	0.08	0.90	-1.46	0.02		2	30.37	2107	2	31.18	0.11	1125	
17.618	-1.26	0.08	0.11	-1.87	0.02		2	31.19	2107	2	32.11	0.10	1125	
18.090	-1.22	0.08	-0.88	-2.33	0.02		2	32.00	2107	2	33.04	0.10	1125	
							2	11.33	2192	2	9.14	0.10	1625	
18.820	-1.16	0.07	-2.01	-0.80	0.08		2	11.52	2192	2	9.53	0.09	1625	
19.405	-1.12	0.07	-2.14	0.32	0.11		2	11.69	2192	2	9.84	0.08	1625	
19.990	-1.09	0.06	-1.65	1.36	0.15		2	11.86	2192	2	10.15	0.08	1625	
							2	36.34	3043	2	36.21	0.08	1625	
20.420	-1.06	0.06	-1.06	1.39	0.15		2	37.09	3043	2	37.09	0.07	1625	
20.983	-1.03	0.06	-0.28	1.35	0.15		2	38.09	3043	2	38.22	0.07	1625	
21.545	-1.00	0.06	0.45	1.24	0.15		2	39.09	3043	2	39.36	0.07	1625	
22.108	-0.97	0.06	1.09	1.04	0.15		2	40.08	3043	2	40.50	0.06	1625	
22.670	-0.94	0.06	1.61	0.77	0.15		2	41.07	3043	2	41.64	0.06	1625	
23.220	-0.90	0.07	1.93	0.41	0.15		2	42.03	3043	2	42.76	0.06	1625	
23.320	-0.89	0.07	1.97	0.34	0.15		2	42.21	3043	2	42.97	0.06	1625	
23.913	-0.85	0.07	2.03	-0.17	0.15		2	43.23	3043	2	44.18	0.05	1625	
24.505	-0.81	0.08	1.75	-0.80	0.15		2	44.24	3043	2	45.40	0.05	1625	
25.097	-0.76	0.08	1.06	-1.55	0.15		2	45.25	3043	2	46.62	0.05	1625	
25.690	-0.71	0.08	-0.11	-2.43	0.15		2	46.24	3043	2	47.85	0.04	1625	
							2	13.97	3204	2	12.35	0.04	2375	
26.440	-0.65	0.08	-1.51	-1.34	0.15		2	14.11	3204	2	12.83	0.04	2375	
27.190	-0.59	0.07	-2.19	-0.50	0.16		2	14.25	3204	2	13.29	0.04	2375	
27.940	-0.54	0.07	-2.33	0.11	0.16		2	14.41	3204	2	13.75	0.04	2375	
28.690	-0.49	0.06	-2.08	0.51	0.17		2	14.60	3204	2	14.19	0.03	2375	
29.440	-0.45	0.05	-1.60	0.74	0.17		2	14.80	3204	2	14.61	0.03	2375	
30.190	-0.41	0.05	-1.02	0.81	0.17		2	15.02	3204	2	15.03	0.03	2375	
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3	T/m2	T/m2	T/m3		T

PHASE 2 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH. ELAST.	STATE	PRE.	SURCH.	ELAST.	No LOAD
30.940	-0.38	0.04	-0.43	0.73	0.17		2	15.24	3204	2	15.43	0.03	2375	
31.690	-0.35	0.04	0.05	0.52	0.17		2	15.47	3204	2	15.84	0.03	2375	
							2	15.37	4216	2	15.04	0.03	3125	
32.345	-0.32	0.04	0.45	0.67	0.17		2	15.53	4216	2	15.41	0.03	3125	
33.000	-0.29	0.05	0.90	0.68	0.17		2	15.69	4216	2	15.78	0.02	3125	
							2	15.37	3125	2	15.78	0.02	3125	
33.623	-0.26	0.05	1.23	0.37	0.17		2	15.55	3125	2	16.13	0.02	3125	
34.245	-0.23	0.05	1.34	-0.05	0.17		2	15.71	3125	2	16.50	0.02	3125	
34.868	-0.20	0.06	1.14	-0.61	0.17		2	15.88	3125	2	16.87	0.02	3125	
35.490	-0.16	0.06	0.55	-1.30	0.17		2	16.03	3125	2	17.25	0.02	3125	
							2	16.57	12500	2	14.59	0.02	12500	

36.245	-0.12	0.06	0.03	-0.22	0.17	2	16.39	12500	2	15.53	0.02	12500	
37.000	-0.07	0.06	0.00	0.00	0.17	2	16.21	12500	2	16.48	0.02	12500	
m	mm rd/1000	m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3	T/m2	T/m2	T/m3		T

MAXIMUM DISPLACEMENT = -1.79 mm
MAXIMUM MOMENT = -4.44 m.T/m
VERTICAL REACTION IN FOOT = -0.17 T/m

CODIFICATION OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR., 2 = ELASTIC
CODIFICATION OF SOIL : 3 = PASSIVE PR.

(4 IT.)

CANTILEVER WALL

RATIOS OF SECURITY ON THE EMBEDMENT (according to the simplified method, for FRANCE) : WITHOUT PARTIAL FACTOR
HIGHEST LEVEL WITH DIFFERENTIAL NIL PRESSURE ZA = 2.790 m
LEVEL OF APPLICATION OF THE CONCENTRATED FORCE ZB = 3.521 m
CONCENTRATED FORCE SIMULATING THE EFFECT OF THE MINIMAL EMBEDMENT = -18.682 T/m
Bottom of the wall at ZD = 37.000 m (ZA-ZD)/(ZA-ZB) = 46.792

FOR THE SUPPORTED ZONE : SINCE THE LEVEL OF EXCAVATION 2.500 m UNTIL THE LEVEL OF PIVOTING 4.990 m
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.228 = (16.58 T/m)/(72.85 T/m)
SIMPLY INDICATIVE

FOR THE SUPPORTED ZONE : SINCE THE LEVEL OF PIVOTING 4.990 m UNTIL THE LEVEL 37.000 m
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.157 = (688.39 T/m)/(4381.56 T/m)
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 6.81 T/m

** PHASE No 3 **

*PHASE 3
*Water Table and/or Water Pressure // Excavation

* EXCAVATION IN SOIL 1 TO LEVEL = 7.520 m

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 1 TO LEVEL = 7.520 m
WATER PRESSURE IN SOIL 1 TO LEVEL = 18.090 m PR. = 0.000 T/m2
PR. = 11.590 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -11.590 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 19.990 m PR. = 13.490 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 13.490 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 25.690 m PR. = 0.000 T/m2
PR. = 19.190 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -19.190 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 37.000 m PR. = 30.500 T/m2

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 2 TO LEVEL = 1.700 m
WATER PRESSURE IN SOIL 2 TO LEVEL = 2.790 m PR. = 1.090 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 1.090 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 4.990 m PR. = 0.000 T/m2
PR. = 3.290 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -3.290 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 6.190 m PR. = 4.490 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 4.490 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 18.090 m PR. = 0.000 T/m2
PR. = 11.590 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -11.590 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 19.990 m PR. = 13.490 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 13.490 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 25.690 m PR. = 0.000 T/m2
PR. = 19.190 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -19.190 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 37.000 m PR. = 30.500 T/m2

PHASE 3

WALL	SOIL 1 EXCAVATION: 7.52 m, WATER LEVEL: 7.52 m, CAQUOT SURC.: 0.00 T/m2	SOIL 2 EXCAVATION: 0.00 m, WATER LEVEL: 1.70 m, CAQUOT SURC.: 0.00 T/m2	STRUTS/ ANCHORS

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	-10.95	0.52	0.00	0.00	0.00		0				1	0.75	0.75	1000		
0.100	-10.89	0.52	0.00	-0.08	0.01		0				1	0.81	0.74	1000		
0.900	-10.48	0.52	-0.38	-0.91	0.29		0				1	1.28	0.69	1000		
1.700	-10.07	0.51	-1.57	-2.12	0.68		0				1	1.75	0.64	1000		

1.850	-9.99	0.51	-1.90	-2.40	0.77	-0.15	0				1	1.79	0.63	1000		
				4.99			0				1	1.79	0.63	1000	1	55.43
2.500	-9.66	0.51	0.87	3.46	1.17	-0.80	0				1	1.95	0.59	1000		
2.790	-9.51	0.51	1.76	2.61	1.35	-1.09	0				1	2.03	0.58	1000		
							0				-1					
3.340	-9.22	0.52	3.19	2.61	1.35		0				-1					
3.890	-8.93	0.53	4.63	2.61	1.35		0				-1					
4.440	-8.64	0.55	6.07	2.61	1.35		0				-1					
4.990	-8.33	0.56	7.50	2.61	1.35		0				-1					
						-3.29	0				1	2.47	0.45	500		
5.745	-7.90	0.59	7.74	-2.09	2.01	-4.04	0				1	2.64	0.42	500		
6.190	-7.63	0.61	6.13	-5.19	2.42	-4.49	0				1	2.75	0.39	500		
							0				2	3.63	0.39	1125		
6.855	-7.22	0.62	1.76	-8.17	2.42		0				2	5.32	0.36	1125		
7.520	-6.80	0.62	-4.97	-12.27	2.42		0				2	7.02	0.34	1125		
							2	14.34		2107	2	7.02	0.34	1125		
8.226	-6.38	0.59	-11.93	-7.58	2.42		2	14.77		2107	2	8.80	0.31	1125		
8.932	-5.98	0.54	-15.90	-3.81	2.42		2	15.27		2107	2	10.56	0.28	1125		
9.639	-5.62	0.48	-17.51	-0.89	2.42		2	15.84		2107	2	12.28	0.26	1125		
10.345	-5.30	0.42	-17.33	1.27	2.42		2	16.51		2107	2	13.95	0.24	1125		
11.183	-4.98	0.35	-15.49	2.99	2.42		2	17.41		2107	2	15.87	0.22	1125		
12.020	-4.71	0.29	-12.54	3.93	2.42		2	18.43		2107	2	17.73	0.19	1125		
12.882	-4.48	0.25	-8.99	4.22	2.42		2	19.57		2107	2	19.60	0.18	1125		
13.745	-4.28	0.22	-5.44	3.92	2.42		2	20.79		2107	2	21.44	0.16	1125		
14.583	-4.11	0.20	-2.45	3.15	2.42		2	22.01		2107	2	23.20	0.14	1125		
15.420	-3.94	0.19	-0.29	1.93	2.42		2	23.24		2107	2	24.96	0.13	1125		
16.283	-3.78	0.20	0.67	0.22	2.42		2	24.52		2107	2	26.76	0.12	1125		
17.145	-3.61	0.20	-0.05	-1.95	2.42		2	25.79		2107	2	28.57	0.11	1125		
17.618	-3.51	0.20	-1.29	-3.34	2.42		2	26.49		2107	2	29.57	0.10	1125		
18.090	-3.42	0.19	-3.22	-4.86	2.42		2	27.19		2107	2	30.56	0.10	1125		
							2	11.57		2192	1	6.59	0.10	1625		
18.820	-3.29	0.17	-5.46	-1.29	4.27		2	11.59		2192	1	6.77	0.09	1625		
19.405	-3.19	0.16	-5.39	1.50	5.79		2	11.63		2192	1	6.92	0.08	1625		
19.990	-3.10	0.15	-3.71	4.23	7.34		2	11.69		2192	1	7.06	0.08	1625		
							2	33.01		3043	2	32.94	0.08	1625		
20.420	-3.04	0.14	-1.89	4.20	7.34		2	33.65		3043	2	33.87	0.07	1625		
20.983	-2.96	0.14	0.41	3.98	7.34		2	34.51		3043	2	35.08	0.07	1625		
21.545	-2.88	0.14	2.54	3.55	7.34		2	35.36		3043	2	36.30	0.07	1625		
22.108	-2.80	0.15	4.37	2.92	7.34		2	36.20		3043	2	37.52	0.06	1625		
22.670	-2.71	0.17	5.79	2.07	7.34		2	37.03		3043	2	38.75	0.06	1625		
23.220	-2.62	0.18	6.64	1.00	7.34		2	37.80		3043	2	39.97	0.06	1625		
23.320	-2.60	0.19	6.73	0.77	7.34		2	37.94		3043	2	40.19	0.06	1625		
23.913	-2.48	0.21	6.76	-0.72	7.34		2	38.74		3043	2	41.53	0.05	1625		
24.505	-2.36	0.22	5.81	-2.55	7.34		2	39.50		3043	2	42.88	0.05	1625		
25.097	-2.22	0.24	3.67	-4.74	7.34		2	40.23		3043	2	44.25	0.05	1625		
25.690	-2.08	0.24	0.11	-7.32	7.34		2	40.94		3043	2	45.63	0.04	1625		
							2	13.91		3204	2	9.11	0.04	2375		
26.440	-1.90	0.24	-4.12	-4.10	7.99		2	13.66		3204	2	9.86	0.04	2375		
27.190	-1.72	0.22	-6.22	-1.61	8.42		2	13.44		3204	2	10.60	0.04	2375		
27.940	-1.57	0.19	-6.70	0.21	8.70		2	13.28		3204	2	11.29	0.04	2375		
28.690	-1.44	0.17	-6.06	1.42	8.88		2	13.18		3204	2	11.94	0.03	2375		
29.440	-1.32	0.15	-4.70	2.11	9.00		2	13.14		3204	2	12.55	0.03	2375		
30.190	-1.21	0.13	-3.01	2.33	9.08		2	13.13		3204	2	13.13	0.03	2375		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2	T/m2		T/m2	T/m3	T/m2		T/m2	T/m3	T	

PHASE 3 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
30.940	-1.12	0.13	-1.31	2.13	9.14		2	13.15		3204	2	13.69	0.03	2375		
31.690	-1.02	0.12	0.09	1.53	9.17		2	13.18		3204	2	14.24	0.03	2375		
							2	13.90		4216	2	12.94	0.03	3125		
32.345	-0.94	0.13	1.26	1.97	9.24		2	13.84		4216	2	13.47	0.03	3125		
33.000	-0.86	0.13	2.58	2.00	9.29		2	13.76		4216	2	14.02	0.02	3125		
							2	12.83		3125	2	14.02	0.02	3125		
33.623	-0.77	0.14	3.56	1.10	9.32		2	12.83		3125	2	14.55	0.02	3125		
34.245	-0.68	0.15	3.88	-0.15	9.34		2	12.81		3125	2	15.10	0.02	3125		
34.868	-0.58	0.16	3.31	-1.76	9.35		2	12.77		3125	2	15.67	0.02	3125		
35.490	-0.48	0.17	1.60	-3.78	9.35		2	12.70		3125	2	16.27	0.02	3125		
							2	16.46		12500	2	10.67	0.02	12500		
36.245	-0.35	0.17	0.09	-0.65	9.40		2	15.20		12500	2	12.70	0.02	12500		
37.000	-0.21	0.17	0.00	0.00	9.41		2	13.94		12500	2	14.73	0.02	12500		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2	T/m2		T/m2	T/m3	T/m2		T/m2	T/m3	T	

MAXIMUM DISPLACEMENT = -10.95 mm
MAXIMUM MOMENT = -17.51 m.T/m
VERTICAL REACTION IN FOOT = -9.41 T/m

CODIFICATION :
OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR.
OF SOIL : 2 = ELASTIC, 3 = PASSIVE PR.

(4 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.159 = (597.20 T/m)/(3767.50 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.134 = (599.32 T/m)/(4469.90 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 5.68 T/m

** PHASE No 4 **

*PHASE 4
*2nd Strut

* INSTALLATION OF A LINE OF STRUTS No 2

LEVEL	=	5.745 m
SPACING	=	1.000 m
INCLINATION	=	0.000 DEGREES
PRELOAD	=	0.000 T
STIFFNESS	=	3993.000 T/m
EFFECTIVE LENGTH	=	0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 2

PHASE 4

WALL							SOIL 1 EXCAVATION: 7.52 m WATER LEVEL: 7.52 m CAQUOT SURC.: 0.00 T/m2			SOIL 2 EXCAVATION: 0.00 m WATER LEVEL: 1.70 m CAQUOT SURC.: 0.00 T/m2			STRUTS/ ANCHORS	
LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	-10.95	0.52	0.00	0.00	0.00		0				1	0.75	0.75	1000		
0.100	-10.89	0.52	0.00	-0.08	0.01		0				1	0.81	0.74	1000		
0.900	-10.48	0.52	-0.38	-0.91	0.29		0				1	1.28	0.69	1000		
1.700	-10.07	0.51	-1.57	-2.12	0.68		0				1	1.75	0.64	1000		
1.850	-9.99	0.51	-1.90	-2.40	0.77	-0.15	0				1	1.79	0.63	1000		
				4.99			0				1	1.79	0.63	1000	1	55.43
2.500	-9.66	0.51	0.87	3.46	1.17	-0.80	0				1	1.95	0.59	1000		
2.790	-9.51	0.51	1.76	2.61	1.35	-1.09	0				1	2.03	0.58	1000		
							0				-1					
3.340	-9.22	0.52	3.19	2.61	1.35		0				-1					
3.890	-8.93	0.53	4.63	2.61	1.35		0				-1					
4.440	-8.64	0.55	6.07	2.61	1.35		0				-1					
4.990	-8.33	0.56	7.50	2.61	1.35		0				-1					
						-3.29	0				1	2.47	0.45	500		
5.745	-7.90	0.59	7.74	-2.09	2.01	-4.04	0				1	2.64	0.42	500		
							0				1	2.64	0.42	500	2	0.00
6.190	-7.63	0.61	6.13	-5.19	2.42	-4.49	0				1	2.75	0.39	500		
							0				2	3.63	0.39	1125		
6.855	-7.22	0.62	1.76	-8.17	2.42		0				2	5.32	0.36	1125		
7.520	-6.80	0.62	-4.97	-12.27	2.42		0				2	7.02	0.34	1125		
							2	14.34		2107	2	7.02	0.34	1125		
8.226	-6.38	0.59	-11.93	-7.58	2.42		2	14.77		2107	2	8.80	0.31	1125		
8.932	-5.98	0.54	-15.90	-3.81	2.42		2	15.27		2107	2	10.56	0.28	1125		
9.639	-5.62	0.48	-17.51	-0.89	2.42		2	15.84		2107	2	12.28	0.26	1125		
10.345	-5.30	0.42	-17.33	1.27	2.42		2	16.51		2107	2	13.95	0.24	1125		
11.183	-4.98	0.35	-15.49	2.99	2.42		2	17.41		2107	2	15.87	0.22	1125		
12.020	-4.71	0.29	-12.54	3.93	2.42		2	18.43		2107	2	17.73	0.19	1125		
12.882	-4.48	0.25	-8.99	4.22	2.42		2	19.57		2107	2	19.60	0.18	1125		
13.745	-4.28	0.22	-5.44	3.92	2.42		2	20.79		2107	2	21.44	0.16	1125		
14.583	-4.11	0.20	-2.45	3.15	2.42		2	22.01		2107	2	23.20	0.14	1125		
15.420	-3.94	0.19	-0.29	1.93	2.42		2	23.24		2107	2	24.96	0.13	1125		
16.283	-3.78	0.20	0.67	0.22	2.42		2	24.52		2107	2	26.76	0.12	1125		
17.145	-3.61	0.20	-0.05	-1.95	2.42		2	25.79		2107	2	28.57	0.11	1125		
17.618	-3.51	0.20	-1.29	-3.34	2.42		2	26.49		2107	2	29.57	0.10	1125		
18.090	-3.42	0.19	-3.22	-4.86	2.42		2	27.19		2107	2	30.56	0.10	1125		
							2	11.57		2192	2	6.59	0.10	1625		
18.820	-3.29	0.17	-5.46	-1.29	4.27		2	11.59		2192	2	6.77	0.09	1625		
19.405	-3.19	0.16	-5.39	1.50	5.79		2	11.63		2192	2	6.92	0.08	1625		
19.990	-3.10	0.15	-3.71	4.23	7.34		2	11.69		2192	2	7.06	0.08	1625		
							2	33.01		3043	2	32.94	0.08	1625		
20.420	-3.04	0.14	-1.89	4.20	7.34		2	33.65		3043	2	33.87	0.07	1625		
20.983	-2.96	0.14	0.41	3.98	7.34		2	34.51		3043	2	35.08	0.07	1625		
21.545	-2.88	0.14	2.54	3.55	7.34		2	35.36		3043	2	36.30	0.07	1625		
22.108	-2.80	0.15	4.37	2.92	7.34		2	36.20		3043	2	37.52	0.06	1625		
22.670	-2.71	0.17	5.79	2.07	7.34		2	37.03		3043	2	38.75	0.06	1625		
23.220	-2.62	0.18	6.64	1.00	7.34		2	37.80		3043	2	39.97	0.06	1625		
23.320	-2.60	0.19	6.73	0.77	7.34		2	37.94		3043	2	40.19	0.06	1625		
23.913	-2.48	0.21	6.76	-0.72	7.34		2	38.74		3043	2	41.53	0.05	1625		
24.505	-2.36	0.22	5.81	-2.55	7.34		2	39.50		3043	2	42.88	0.05	1625		
25.097	-2.22	0.24	3.67	-4.74	7.34		2	40.23		3043	2	44.25	0.05	1625		
25.690	-2.08	0.24	0.11	-7.32	7.34		2	40.94		3043	2	45.63	0.04	1625		
							2	13.91		3204	2	9.11	0.04	2375		
26.440	-1.90	0.24	-4.12	-4.10	7.99		2	13.66		3204	2	9.86	0.04	2375		
27.190	-1.72	0.22	-6.22	-1.61	8.42		2	13.44		3204	2	10.60	0.04	2375		
27.940	-1.57	0.19	-6.70	0.21	8.70		2	13.28		3204	2	11.29	0.04	2375		
28.690	-1.44	0.17	-6.06	1.42	8.88		2	13.18		3204	2	11.94	0.03	2375		
29.440	-1.32	0.15	-4.70	2.11	9.00		2	13.14		3204	2	12.55	0.03	2375		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2	T/m2		T/m2	T/m3	T/m2		T/m2	T/m3	T	

PHASE 4 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
30.190	-1.21	0.13	-3.01	2.33	9.08		2	13.13		3204	2	13.13	0.03	2375		
30.940	-1.12	0.13	-1.31	2.13	9.14		2	13.15		3204	2	13.69	0.03	2375		
31.690	-1.02	0.12	0.09	1.53	9.17		2	13.18		3204	2	14.24	0.03	2375		
							2	13.90		4216	2	12.94	0.03	3125		
32.345	-0.94	0.13	1.26	1.97	9.24		2	13.84		4216	2	13.47	0.03	3125		
33.000	-0.86	0.13	2.58	2.00	9.29		2	13.76		4216	2	14.02	0.02	3125		
							2	12.83		3125	2	14.02	0.02	3125		
33.623	-0.77	0.14	3.56	1.10	9.32		2	12.83		3125	2	14.55	0.02	3125		
34.245	-0.68	0.15	3.88	-0.15	9.34		2	12.81		3125	2	15.10	0.02	3125		
34.868	-0.58	0.16	3.31	-1.76	9.35		2	12.77		3125	2	15.67	0.02	3125		
35.490	-0.48	0.17	1.60	-3.78	9.35		2	12.70		3125	2	16.27	0.02	3125		
							2	16.46		12500	2	10.67	0.02	12500		
36.245	-0.35	0.17	0.09	-0.65	9.40		2	15.20		12500	2	12.70	0.02	12500		
37.000	-0.21	0.17	0.00	0.00	9.41		2	13.94		12500	2	14.73	0.02	12500		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T

MAXIMUM DISPLACEMENT = -10.95 mm
MAXIMUM MOMENT = -17.51 m.T/m
VERTICAL REACTION IN FOOT = -9.41 T/m

CODIFICATION OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR., 2 = ELASTIC
OF SOIL : 3 = PASSIVE PR.

(4 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.159 = (597.20 T/m)/(3767.50 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.134 = (599.32 T/m)/(4469.90 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 5.68 T/m

** PHASE No 5 **

*PHASE 5
*Remove Strut

* REMOVAL LINE OF STRUTS No 1

PHASE 5

WALL

SOIL 1: EXCAVATION: 7.52 m; WATER LEVEL: 7.52 m; CAQUOT SURC.: 0.00 T/m2

SOIL 2: EXCAVATION: 0.00 m; WATER LEVEL: 1.70 m; CAQUOT SURC.: 0.00 T/m2

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	STRUTS/ ANCHORS No	LOAD
0.000	-18.16	1.51	0.00	0.00	0.00		0				1	0.75	0.75	1000		
0.100	-18.01	1.51	0.00	-0.08	0.01		0				1	0.81	0.74	1000		
0.900	-16.80	1.51	-0.38	-0.91	0.29		0				1	1.28	0.69	1000		
1.700	-15.59	1.51	-1.57	-2.12	0.68		0				1	1.75	0.64	1000		
1.850	-15.36	1.51	-1.90	-2.40	0.77	-0.15	0				1	1.79	0.63	1000		
2.500	-14.38	1.50	-3.93	-3.93	1.17	-0.80	0				1	1.95	0.59	1000		
2.790	-13.95	1.49	-5.19	-4.78	1.35	-1.09	0				1	2.03	0.58	1000		
							0				-1					
3.340	-13.13	1.48	-7.82	-4.78	1.35		0				-1					
3.890	-12.33	1.45	-10.45	-4.78	1.35		0				-1					
4.440	-11.54	1.42	-13.08	-4.78	1.35		0				-1					
4.990	-10.77	1.38	-15.70	-4.78	1.35		0				-1					
						-3.29	0				1	2.47	0.45	500		
5.745	-9.75	1.31	-21.04	-9.48	2.01	-4.04	0				1	2.64	0.42	500		
				-2.08			0				1	2.64	0.42	500	2	7.40
6.190	-9.17	1.27	-22.65	-5.18	2.42	-4.49	0				1	2.75	0.39	500		
							0				2	1.89	0.39	1125		
6.855	-8.36	1.19	-26.67	-7.15	2.42		0				2	4.04	0.36	1125		
7.520	-7.60	1.09	-32.47	-10.53	2.42		0				2	6.12	0.34	1125		
							2	16.02		2107	2	6.12	0.34	1125		
8.226	-6.87	0.97	-37.64	-4.36	2.42		2	15.82		2107	2	8.24	0.31	1125		
8.932	-6.24	0.83	-38.99	0.27	2.42		2	15.82		2107	2	10.27	0.28	1125		
9.639	-5.70	0.70	-37.56	3.58	2.42		2	16.02		2107	2	12.19	0.26	1125		
10.345	-5.25	0.57	-34.19	5.79	2.42		2	16.41		2107	2	14.00	0.24	1125		
11.183	-4.83	0.44	-28.66	7.24	2.42		2	17.10		2107	2	16.04	0.22	1125		
12.020	-4.51	0.34	-22.35	7.70	2.42		2	18.00		2107	2	17.96	0.19	1125		
12.882	-4.25	0.26	-15.79	7.38	2.42		2	19.10		2107	2	19.86	0.18	1125		
13.745	-4.06	0.20	-9.79	6.46	2.42		2	20.32		2107	2	21.69	0.16	1125		
14.583	-3.90	0.17	-4.92	5.10	2.42		2	21.57		2107	2	23.43	0.14	1125		
15.420	-3.77	0.16	-1.35	3.36	2.42		2	22.87		2107	2	25.16	0.13	1125		
16.283	-3.63	0.16	0.65	1.20	2.42		2	24.21		2107	2	26.93	0.12	1125		
17.145	-3.49	0.16	0.62	-1.33	2.42		2	25.55		2107	2	28.70	0.11	1125		
17.618	-3.42	0.16	-0.37	-2.88	2.42		2	26.28		2107	2	29.68	0.10	1125		
18.090	-3.34	0.16	-2.11	-4.54	2.42		2	27.01		2107	2	30.65	0.10	1125		
							2	11.39		2192	2	6.73	0.10	1625		
18.820	-3.23	0.15	-4.19	-1.16	4.09		2	11.46		2192	2	6.87	0.09	1625		

19.405	-3.15	0.13	-4.09	1.51	5.50		2	11.53	2192		2	6.99	0.08	1625		
19.990	-3.07	0.13	-2.43	4.15	6.97		2	11.62	2192		2	7.11	0.08	1625		
							2	32.91	3043		2	32.99	0.08	1625		
20.420	-3.02	0.12	-0.66	4.06	6.97		2	33.58	3043		2	33.91	0.07	1625		
20.983	-2.95	0.12	1.56	3.79	6.97		2	34.46	3043		2	35.11	0.07	1625		
21.545	-2.88	0.13	3.57	3.34	6.97		2	35.34	3043		2	36.31	0.07	1625		
22.108	-2.80	0.14	5.28	2.69	6.97		2	36.20	3043		2	37.52	0.06	1625		
22.670	-2.72	0.16	6.56	1.84	6.97		2	37.03	3043		2	38.75	0.06	1625		
23.220	-2.62	0.18	7.29	0.77	6.97		2	37.82	3043		2	39.96	0.06	1625		
23.320	-2.61	0.18	7.35	0.56	6.97		2	37.96	3043		2	40.18	0.06	1625		
23.913	-2.49	0.20	7.26	-0.92	6.97		2	38.76	3043		2	41.52	0.05	1625		
24.505	-2.36	0.22	6.20	-2.73	6.97		2	39.52	3043		2	42.87	0.05	1625		
25.097	-2.23	0.24	3.95	-4.90	6.97		2	40.26	3043		2	44.24	0.05	1625		
25.690	-2.08	0.24	0.31	-7.46	6.97		2	40.97	3043		2	45.62	0.04	1625		
							2	13.93	3204		2	9.09	0.04	2375		
26.440	-1.90	0.24	-4.01	-4.20	7.64		2	13.68	3204		2	9.85	0.04	2375		
27.190	-1.73	0.22	-6.18	-1.68	8.07		2	13.47	3204		2	10.58	0.04	2375		
27.940	-1.58	0.19	-6.71	0.16	8.35		2	13.30	3204		2	11.28	0.04	2375		
28.690	-1.44	0.17	-6.09	1.39	8.54		2	13.20	3204		2	11.93	0.03	2375		
29.440	-1.32	0.15	-4.75	2.09	8.66		2	13.15	3204		2	12.54	0.03	2375		
30.190	-1.22	0.13	-3.07	2.33	8.74		2	13.14	3204		2	13.12	0.03	2375		
m	mm rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T

PHASE 5 (CONTINUATION)

30.940	-1.12	0.13	-1.37	2.13	8.80		2	13.16	3204		2	13.68	0.03	2375		
31.690	-1.02	0.12	0.03	1.54	8.83		2	13.19	3204		2	14.24	0.03	2375		
							2	13.91	4216		2	12.94	0.03	3125		
32.345	-0.94	0.13	1.21	1.98	8.90		2	13.84	4216		2	13.47	0.03	3125		
33.000	-0.86	0.13	2.54	2.02	8.95		2	13.77	4216		2	14.02	0.02	3125		
							2	12.83	3125		2	14.02	0.02	3125		
33.623	-0.77	0.14	3.53	1.11	8.98		2	12.83	3125		2	14.55	0.02	3125		
34.245	-0.68	0.15	3.86	-0.13	9.00		2	12.81	3125		2	15.10	0.02	3125		
34.868	-0.58	0.16	3.29	-1.75	9.01		2	12.77	3125		2	15.67	0.02	3125		
35.490	-0.48	0.17	1.59	-3.77	9.01		2	12.70	3125		2	16.27	0.02	3125		
							2	16.45	12500		2	10.67	0.02	12500		
36.245	-0.34	0.17	0.09	-0.64	9.06		2	15.20	12500		2	12.70	0.02	12500		
37.000	-0.21	0.17	0.00	0.00	9.07		2	13.93	12500		2	14.73	0.02	12500		
m	mm rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T

MAXIMUM DISPLACEMENT = -18.16 mm
MAXIMUM MOMENT = -38.99 m.T/m
VERTICAL REACTION IN FOOT = -9.07 T/m

CODIFICATION OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR.
CODIFICATION OF SOIL : 2 = ELASTIC, 3 = PASSIVE PR.

(4 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.158 = (596.09 T/m)/(3767.50 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.134 = (598.22 T/m)/(4469.90 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 5.68 T/m

** PHASE No 6 **

*PHASE 6
*3rd Strut

* INSTALLATION OF A LINE OF STRUTS No 3

LEVEL	=	0.100 m
SPACING	=	1.000 m
INCLINATION	=	0.000 DEGREES
PRELOAD	=	0.000 T
STIFFNESS	=	3195.000 T/m
EFFECTIVE LENGTH	=	0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 2

PHASE 6

WALL | SOIL 1: EXCAVATION 7.52 m, WATER LEVEL 7.52 m, CAQUOT SURC. 0.00 T/m2 | SOIL 2: EXCAVATION 0.00 m, WATER LEVEL 1.70 m, CAQUOT SURC. 0.00 T/m2 | STRUTS/ANCHORS

0.000	-18.16	1.51	0.00	0.00	0.00		0				1	0.75	0.75	1000		

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.100	-18.01	1.51	0.00	-0.08	0.01		0				1	0.81	0.74	1000		
							0				1	0.81	0.74	1000	3	0.00
0.900	-16.80	1.51	-0.38	-0.91	0.29		0				1	1.28	0.69	1000		
1.700	-15.59	1.51	-1.57	-2.12	0.68		0				1	1.75	0.64	1000		
1.850	-15.36	1.51	-1.90	-2.40	0.77	-0.15	0				1	1.79	0.63	1000		
2.500	-14.38	1.50	-3.93	-3.93	1.17	-0.80	0				1	1.95	0.59	1000		
2.790	-13.95	1.49	-5.19	-4.78	1.35	-1.09	0				1	2.03	0.58	1000		
							0				-1					
3.340	-13.13	1.48	-7.82	-4.78	1.35		0				-1					
3.890	-12.33	1.45	-10.45	-4.78	1.35		0				-1					
4.440	-11.54	1.42	-13.08	-4.78	1.35		0				-1					
4.990	-10.77	1.38	-15.70	-4.78	1.35		0				-1					
						-3.29	0				1	2.47	0.45	500		
5.745	-9.75	1.31	-21.04	-9.48	2.01	-4.04	0				1	2.64	0.42	500		
				-2.08			0				1	2.64	0.42	500	2	7.40
6.190	-9.17	1.27	-22.65	-5.18	2.42	-4.49	0				1	2.75	0.39	500		
							0				2	1.89	0.39	1125		
6.855	-8.36	1.19	-26.67	-7.15	2.42		0				2	4.04	0.36	1125		
7.520	-7.60	1.09	-32.47	-10.53	2.42		0				2	6.12	0.34	1125		
							2	16.02		2107	2	6.12	0.34	1125		
8.226	-6.87	0.97	-37.64	-4.36	2.42		2	15.82		2107	2	8.24	0.31	1125		
8.932	-6.24	0.83	-38.99	0.27	2.42		2	15.82		2107	2	10.27	0.28	1125		
9.639	-5.70	0.70	-37.56	3.58	2.42		2	16.02		2107	2	12.19	0.26	1125		
10.345	-5.25	0.57	-34.19	5.79	2.42		2	16.41		2107	2	14.00	0.24	1125		
11.183	-4.83	0.44	-28.66	7.24	2.42		2	17.10		2107	2	16.04	0.22	1125		
12.020	-4.51	0.34	-22.35	7.70	2.42		2	18.00		2107	2	17.96	0.19	1125		
12.882	-4.25	0.26	-15.79	7.38	2.42		2	19.10		2107	2	19.86	0.18	1125		
13.745	-4.06	0.20	-9.79	6.46	2.42		2	20.32		2107	2	21.69	0.16	1125		
14.583	-3.90	0.17	-4.92	5.10	2.42		2	21.57		2107	2	23.43	0.14	1125		
15.420	-3.77	0.16	-1.35	3.36	2.42		2	22.87		2107	2	25.16	0.13	1125		
16.283	-3.63	0.16	0.65	1.20	2.42		2	24.21		2107	2	26.93	0.12	1125		
17.145	-3.49	0.16	0.62	-1.33	2.42		2	25.55		2107	2	28.70	0.11	1125		
17.618	-3.42	0.16	-0.37	-2.88	2.42		2	26.28		2107	2	29.68	0.10	1125		
18.090	-3.34	0.16	-2.11	-4.54	2.42		2	27.01		2107	2	30.65	0.10	1125		
							2	11.39		2192	2	6.73	0.10	1625		
18.820	-3.23	0.15	-4.19	-1.16	4.09		2	11.46		2192	2	6.87	0.09	1625		
19.405	-3.15	0.13	-4.09	1.51	5.50		2	11.53		2192	2	6.99	0.08	1625		
19.990	-3.07	0.13	-2.43	4.15	6.97		2	11.62		2192	2	7.11	0.08	1625		
							2	32.91		3043	2	32.99	0.08	1625		
20.420	-3.02	0.12	-0.66	4.06	6.97		2	33.58		3043	2	33.91	0.07	1625		
20.983	-2.95	0.12	1.56	3.79	6.97		2	34.46		3043	2	35.11	0.07	1625		
21.545	-2.88	0.13	3.57	3.34	6.97		2	35.34		3043	2	36.31	0.07	1625		
22.108	-2.80	0.14	5.28	2.69	6.97		2	36.20		3043	2	37.52	0.06	1625		
22.670	-2.72	0.16	6.56	1.84	6.97		2	37.03		3043	2	38.75	0.06	1625		
23.220	-2.62	0.18	7.29	0.77	6.97		2	37.82		3043	2	39.96	0.06	1625		
23.320	-2.61	0.18	7.35	0.56	6.97		2	37.96		3043	2	40.18	0.06	1625		
23.913	-2.49	0.20	7.26	-0.92	6.97		2	38.76		3043	2	41.52	0.05	1625		
24.505	-2.36	0.22	6.20	-2.73	6.97		2	39.52		3043	2	42.87	0.05	1625		
25.097	-2.23	0.24	3.95	-4.90	6.97		2	40.26		3043	2	44.24	0.05	1625		
25.690	-2.08	0.24	0.31	-7.46	6.97		2	40.97		3043	2	45.62	0.04	1625		
							2	13.93		3204	2	9.09	0.04	2375		
26.440	-1.90	0.24	-4.01	-4.20	7.64		2	13.68		3204	2	9.85	0.04	2375		
27.190	-1.73	0.22	-6.18	-1.68	8.07		2	13.47		3204	2	10.58	0.04	2375		
27.940	-1.58	0.19	-6.71	0.16	8.35		2	13.30		3204	2	11.28	0.04	2375		
28.690	-1.44	0.17	-6.09	1.39	8.54		2	13.20		3204	2	11.93	0.03	2375		
29.440	-1.32	0.15	-4.75	2.09	8.66		2	13.15		3204	2	12.54	0.03	2375		
30.190	-1.22	0.13	-3.07	2.33	8.74		2	13.14		3204	2	13.12	0.03	2375		
30.940	-1.12	0.13	-1.37	2.13	8.80		2	13.16		3204	2	13.68	0.03	2375		
31.690	-1.02	0.12	0.03	1.54	8.83		2	13.19		3204	2	14.24	0.03	2375		
							2	13.91		4216	2	12.94	0.03	3125		
32.345	-0.94	0.13	1.21	1.98	8.90		2	13.84		4216	2	13.47	0.03	3125		
33.000	-0.86	0.13	2.54	2.02	8.95		2	13.77		4216	2	14.02	0.02	3125		
							2	12.83		3125	2	14.02	0.02	3125		
33.623	-0.77	0.14	3.53	1.11	8.98		2	12.83		3125	2	14.55	0.02	3125		
34.245	-0.68	0.15	3.86	-0.13	9.00		2	12.81		3125	2	15.10	0.02	3125		
34.868	-0.58	0.16	3.29	-1.75	9.01		2	12.77		3125	2	15.67	0.02	3125		
35.490	-0.48	0.17	1.59	-3.77	9.01		2	12.70		3125	2	16.27	0.02	3125		
							2	16.45		12500	2	10.67	0.02	12500		
36.245	-0.34	0.17	0.09	-0.64	9.06		2	15.20		12500	2	12.70	0.02	12500		
37.000	-0.21	0.17	0.00	0.00	9.07		2	13.93		12500	2	14.73	0.02	12500		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2	T/m2		T/m2	T/m3	T/m2		T/m2	T/m3		T

MAXIMUM DISPLACEMENT = -18.16 mm
MAXIMUM MOMENT = -38.99 m.T/m
VERTICAL REACTION IN FOOT = -9.07 T/m

CODIFICATION OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR.
CODIFICATION OF SOIL : 2 = ELASTIC, 3 = PASSIVE PR.

(3 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.158 = (596.09 T/m)/(3767.50 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.134 = (598.22 T/m)/(4469.90 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

PHASE 6 (CONTINUATION)

** PHASE No 7 **

*PHASE 7
*Water Table and/or Water Pressure // Excavation

* EXCAVATION IN SOIL 1 TO LEVEL = 12.020 m

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 1 TO LEVEL = 12.020 m
WATER PRESSURE IN SOIL 1 TO LEVEL = 18.090 m PR. = 0.000 T/m2
PR. = 9.560 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -9.560 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 19.990 m PR. = 11.460 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 11.460 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 25.690 m PR. = 0.000 T/m2
PR. = 19.190 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -19.190 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 37.000 m PR. = 30.500 T/m2

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 2 TO LEVEL = 1.700 m
WATER PRESSURE IN SOIL 2 TO LEVEL = 2.790 m PR. = 1.090 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 1.090 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 4.990 m PR. = 0.000 T/m2
PR. = 3.290 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -3.290 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 6.190 m PR. = 4.490 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 4.490 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 18.090 m PR. = 0.000 T/m2
PR. = 11.590 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -11.590 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 19.990 m PR. = 13.490 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 13.490 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 25.690 m PR. = 0.000 T/m2
PR. = 19.190 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -19.190 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 37.000 m PR. = 30.500 T/m2

PHASE 7

	WALL	SOIL 1 EXCAVATION: 12.02 m WATER LEVEL: 12.02 m CAQUOT SURC.: 0.00 T/m2	SOIL 2 EXCAVATION: 0.00 m WATER LEVEL: 1.70 m CAQUOT SURC.: 0.00 T/m2	STRUTS/ ANCHORS

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	-18.34	0.62	0.00	0.00	0.00		0				1	0.75	0.75	1000		
0.100	-18.28	0.62	0.00	-0.08	0.01		0				1	0.81	0.74	1000		
				0.77			0				1	0.81	0.74	1000	3	0.85
0.900	-17.78	0.62	0.31	-0.06	0.29		0				1	1.28	0.69	1000		
1.700	-17.28	0.62	-0.20	-1.27	0.68		0				1	1.75	0.64	1000		
1.850	-17.19	0.62	-0.41	-1.55	0.77	-0.15	0				1	1.79	0.63	1000		
2.500	-16.79	0.62	-1.89	-3.07	1.17	-0.80	0				1	1.95	0.59	1000		
2.790	-16.61	0.61	-2.90	-3.93	1.35	-1.09	0				1	2.03	0.58	1000		
							0				-1					
3.340	-16.28	0.60	-5.06	-3.93	1.35		0				-1					
3.890	-15.95	0.59	-7.22	-3.93	1.35		0				-1					
4.440	-15.63	0.56	-9.38	-3.93	1.35		0				-1					
4.990	-15.33	0.54	-11.53	-3.93	1.35		0				-1					
						-3.29	0				1	2.47	0.45	500		
5.745	-14.94	0.48	-16.23	-8.63	2.01	-4.04	0				1	2.64	0.42	500		
				19.52			0				1	2.64	0.42	500	2	28.14
6.190	-14.73	0.46	-8.22	16.42	2.42	-4.49	0				1	2.75	0.39	500		
							0				1	1.09	0.39	1125		
6.855	-14.43	0.45	2.36	15.29	2.42		0				1	2.31	0.36	1125		
7.520	-14.13	0.47	11.93	13.34	2.42		0				1	3.54	0.34	1125		
8.226	-13.78	0.53	20.36	10.38	2.42		0				1	4.85	0.31	1125		
8.932	-13.38	0.61	26.37	6.49	2.42		0				1	6.16	0.28	1125		
9.639	-12.91	0.71	29.31	1.68	2.42		0				1	7.47	0.26	1125		
10.345	-12.37	0.81	28.52	-4.06	2.42		0				1	8.78	0.24	1125		
11.183	-11.65	0.92	21.85	-12.07	2.42		0				1	10.34	0.22	1125		
12.020	-10.85	0.98	7.93	-21.39	2.42		0				1	11.90	0.19	1125		
							3	20.98		2107	1	11.90	0.19	1125		
12.882	-10.00	0.98	-7.13	-13.55	2.42		3	22.61		2107	1	13.52	0.18	1125		
13.745	-9.17	0.93	-15.74	-6.77	2.42		2	22.58		2107	2	15.94	0.16	1125		
14.583	-8.42	0.86	-19.36	-2.22	2.42		2	22.58		2107	2	18.35	0.14	1125		
15.420	-7.74	0.77	-19.99	0.41	2.42		2	22.73		2107	2	20.69	0.13	1125		
16.283	-7.10	0.69	-19.13	1.29	2.42		2	23.03		2107	2	23.02	0.12	1125		
17.145	-6.54	0.61	-18.25	0.51	2.42		2	23.47		2107	2	25.27	0.11	1125		

17.618	-6.26	0.57	-18.24	-0.55	2.42		2	23.78	2107	2	26.47	0.10	1125						
18.090	-6.00	0.53	-18.83	-2.02	2.42		2	24.12	2107	2	27.65	0.10	1125						
						-2.03	2	14.09	2192	1	6.59	0.10	1625						
18.820	-5.65	0.46	-18.90	1.73	3.77	-2.03	2	13.62	2192	1	6.77	0.09	1625						
19.405	-5.39	0.41	-17.09	4.42	5.14	-2.03	2	13.32	2192	1	6.92	0.08	1625						
19.990	-5.17	0.36	-13.78	6.87	6.62	-2.03	2	13.08	2192	1	7.06	0.08	1625						
							2	30.79	3043	2	29.58	0.08	1625						
20.420	-5.02	0.33	-10.73	7.24	6.62		2	31.17	3043	2	30.65	0.07	1625						
20.983	-4.84	0.31	-6.63	7.29	6.62		2	31.71	3043	2	32.03	0.07	1625						
21.545	-4.67	0.30	-2.61	6.89	6.62		2	32.29	3043	2	33.40	0.07	1625						
22.108	-4.50	0.30	1.05	6.05	6.62		2	32.87	3043	2	34.76	0.06	1625						
22.670	-4.33	0.30	4.11	4.77	6.62		2	33.45	3043	2	36.12	0.06	1625						
23.220	-4.16	0.32	6.29	3.08	6.62		2	34.00	3043	2	37.46	0.06	1625						
23.320	-4.13	0.32	6.58	2.73	6.62		2	34.10	3043	2	37.70	0.06	1625						
23.913	-3.94	0.34	7.51	0.32	6.62		2	34.65	3043	2	39.17	0.05	1625						
24.505	-3.73	0.36	6.85	-2.64	6.62		2	35.16	3043	2	40.65	0.05	1625						
25.097	-3.51	0.38	4.26	-6.20	6.62		2	35.64	3043	2	42.16	0.05	1625						
25.690	-3.28	0.39	-0.62	-10.38	6.62		2	36.10	3043	2	43.68	0.04	1625						
							2	13.76	3204	1	7.64	0.04	2375						
26.440	-2.99	0.37	-6.76	-6.07	8.89		2	13.18	3204	1	7.83	0.04	2375						
27.190	-2.73	0.34	-9.89	-2.40	11.09		2	12.66	3204	2	8.22	0.04	2375						
27.940	-2.49	0.30	-10.57	0.43	12.83		2	12.22	3204	2	9.12	0.04	2375						
28.690	-2.28	0.26	-9.48	2.32	13.97		2	11.87	3204	2	9.95	0.03	2375						
29.440	-2.09	0.23	-7.30	3.38	14.73		2	11.61	3204	2	10.72	0.03	2375						
m	mm rd/1000		m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3	T/m2	T/m2	T/m3	T						

PHASE 7 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD			
30.190	-1.93	0.21	-4.60	3.70	15.24		2	11.42		3204	2	11.44	0.03	2375					
30.940	-1.77	0.20	-1.91	3.37	15.59		2	11.26		3204	2	12.13	0.03	2375					
31.690	-1.63	0.20	0.29	2.41	15.83		2	11.12		3204	2	12.81	0.03	2375					
							2	12.58		4216	2	11.06	0.03	3125					
32.345	-1.50	0.20	2.13	3.10	16.28		2	12.31		4216	2	11.74	0.03	3125					
33.000	-1.36	0.21	4.21	3.15	16.59		2	12.03		4216	2	12.43	0.02	3125					
							2	10.54		3125	2	12.43	0.02	3125					
33.623	-1.23	0.22	5.76	1.72	16.77		2	10.39		3125	2	13.12	0.02	3125					
34.245	-1.08	0.24	6.24	-0.27	16.89		2	10.20		3125	2	13.84	0.02	3125					
34.868	-0.93	0.26	5.30	-2.84	16.95		2	9.97		3125	2	14.60	0.02	3125					
35.490	-0.76	0.27	2.57	-6.04	16.99		2	9.72		3125	2	15.38	0.02	3125					
							2	16.37		12500	2	7.14	0.02	12500					
36.245	-0.55	0.28	0.14	-1.04	17.26		2	14.14		12500	2	10.13	0.02	12500					
37.000	-0.34	0.28	0.00	0.00	17.32		2	11.90		12500	2	13.14	0.02	12500					
m	mm rd/1000		m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3	T/m2	T/m2	T/m3	T						

MAXIMUM DISPLACEMENT = -18.34 mm
MAXIMUM MOMENT = 29.31 m.T/m
VERTICAL REACTION IN FOOT = -17.32 T/m

CODIFICATION :
OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR., 2 = ELASTIC
OF SOIL : 2 = ELASTIC, 3 = PASSIVE PR.

(7 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.220 = (490.67 T/m)/(2232.77 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.114 = (510.55 T/m)/(4469.90 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 5.68 T/m

** PHASE No 8 **

*PHASE 8
*4th Strut

* INSTALLATION OF A LINE OF STRUTS No 4

LEVEL	=	10.345 m
SPACING	=	1.000 m
INCLINATION	=	0.000 DEGREES
PRELOAD	=	0.000 T
STIFFNESS	=	7188.000 T/m
EFFECTIVE LENGTH	=	0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 2

PHASE 8

WALL	SOIL 1	SOIL 2	STRUTS/ ANCHORS
	EXCAVATION: 12.02 m	EXCAVATION: 0.00 m	
	WATER LEVEL: 12.02 m	WATER LEVEL: 1.70 m	
	CAQUOT SURC.: 0.00 T/m2	CAQUOT SURC.: 0.00 T/m2	

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE PRE.	SURCH.	ELAST.	STATE PRE.	SURCH.	ELAST.	No	LOAD
0.000	-18.34	0.62	0.00	0.00	0.00		0			3 0.75	0.75	1000		
0.100	-18.28	0.62	0.00	-0.08	0.01		0			2 0.81	0.74	1000		
				0.77			0			2 0.81	0.74	1000	3	0.85
0.900	-17.78	0.62	0.31	-0.06	0.29		0			1 1.28	0.69	1000		
1.700	-17.28	0.62	-0.20	-1.27	0.68		0			1 1.75	0.64	1000		
1.850	-17.19	0.62	-0.41	-1.55	0.77	-0.15	0			1 1.79	0.63	1000		
2.500	-16.79	0.62	-1.89	-3.07	1.17	-0.80	0			1 1.95	0.59	1000		
2.790	-16.61	0.61	-2.90	-3.93	1.35	-1.09	0			1 2.03	0.58	1000		
							0			-1				
3.340	-16.28	0.60	-5.06	-3.93	1.35		0			-1				
3.890	-15.95	0.59	-7.22	-3.93	1.35		0			-1				
4.440	-15.63	0.56	-9.38	-3.93	1.35		0			-1				
4.990	-15.33	0.54	-11.53	-3.93	1.35		0			-1				
						-3.29	0			1 2.47	0.45	500		
5.745	-14.94	0.48	-16.23	-8.63	2.01	-4.04	0			1 2.64	0.42	500		
				19.52			0			1 2.64	0.42	500	2	28.14
6.190	-14.73	0.46	-8.22	16.42	2.42	-4.49	0			1 2.75	0.39	500		
							0			1 1.09	0.39	1125		
6.855	-14.43	0.45	2.36	15.29	2.42		0			1 2.31	0.36	1125		
7.520	-14.13	0.47	11.93	13.34	2.42		0			1 3.54	0.34	1125		
8.226	-13.78	0.53	20.36	10.38	2.42		0			1 4.85	0.31	1125		
8.932	-13.38	0.61	26.37	6.49	2.42		0			1 6.16	0.28	1125		
9.639	-12.91	0.71	29.31	1.68	2.42		0			1 7.47	0.26	1125		
10.345	-12.37	0.81	28.52	-4.06	2.42		0			1 8.78	0.24	1125		
							0			1 8.78	0.24	1125	4	0.00
11.183	-11.65	0.92	21.85	-12.07	2.42		0			1 10.34	0.22	1125		
12.020	-10.85	0.98	7.93	-21.39	2.42		0			1 11.90	0.19	1125		
							3 20.98		2107	1 11.90	0.19	1125		
12.882	-10.00	0.98	-7.13	-13.55	2.42		3 22.61		2107	1 13.52	0.18	1125		
13.745	-9.17	0.93	-15.74	-6.77	2.42		2 22.58		2107	2 15.94	0.16	1125		
14.583	-8.42	0.86	-19.36	-2.22	2.42		2 22.58		2107	2 18.35	0.14	1125		
15.420	-7.74	0.77	-19.99	0.41	2.42		2 22.73		2107	2 20.69	0.13	1125		
16.283	-7.10	0.69	-19.13	1.29	2.42		2 23.03		2107	2 23.02	0.12	1125		
17.145	-6.54	0.61	-18.25	0.51	2.42		2 23.47		2107	2 25.27	0.11	1125		
17.618	-6.26	0.57	-18.24	-0.55	2.42		2 23.78		2107	2 26.47	0.10	1125		
18.090	-6.00	0.53	-18.83	-2.02	2.42		2 24.12		2107	2 27.65	0.10	1125		
						-2.03	2 14.09		2192	2 6.59	0.10	1625		
18.820	-5.65	0.46	-18.90	1.73	3.77	-2.03	2 13.62		2192	2 6.77	0.09	1625		
19.405	-5.39	0.41	-17.09	4.42	5.14	-2.03	2 13.32		2192	2 6.92	0.08	1625		
19.990	-5.17	0.36	-13.78	6.87	6.62	-2.03	2 13.08		2192	2 7.06	0.08	1625		
							2 30.79		3043	2 29.58	0.08	1625		
20.420	-5.02	0.33	-10.73	7.24	6.62		2 31.17		3043	2 30.65	0.07	1625		
20.983	-4.84	0.31	-6.63	7.29	6.62		2 31.71		3043	2 32.03	0.07	1625		
21.545	-4.67	0.30	-2.61	6.89	6.62		2 32.29		3043	2 33.40	0.07	1625		
22.108	-4.50	0.30	1.05	6.05	6.62		2 32.87		3043	2 34.76	0.06	1625		
22.670	-4.33	0.30	4.11	4.77	6.62		2 33.45		3043	2 36.12	0.06	1625		
23.220	-4.16	0.32	6.29	3.08	6.62		2 34.00		3043	2 37.46	0.06	1625		
23.320	-4.13	0.32	6.58	2.73	6.62		2 34.10		3043	2 37.70	0.06	1625		
23.913	-3.94	0.34	7.51	0.32	6.62		2 34.65		3043	2 39.17	0.05	1625		
24.505	-3.73	0.36	6.85	-2.64	6.62		2 35.16		3043	2 40.65	0.05	1625		
25.097	-3.51	0.38	4.26	-6.20	6.62		2 35.64		3043	2 42.16	0.05	1625		
25.690	-3.28	0.39	-0.62	-10.38	6.62		2 36.10		3043	2 43.68	0.04	1625		
							2 13.76		3204	2 7.64	0.04	2375		
26.440	-2.99	0.37	-6.76	-6.07	8.89		2 13.18		3204	2 7.83	0.04	2375		
27.190	-2.73	0.34	-9.89	-2.40	11.09		2 12.66		3204	2 8.22	0.04	2375		
27.940	-2.49	0.30	-10.57	0.43	12.83		2 12.22		3204	2 9.12	0.04	2375		
28.690	-2.28	0.26	-9.48	2.32	13.97		2 11.87		3204	2 9.95	0.03	2375		
m	mm rd/1000		m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3	T/m2	T/m2	T/m3		T

PHASE 8 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE PRE.	SURCH.	ELAST.	STATE PRE.	SURCH.	ELAST.	No	LOAD
29.440	-2.09	0.23	-7.30	3.38	14.73		2 11.61		3204	2 10.72	0.03	2375		
30.190	-1.93	0.21	-4.60	3.70	15.24		2 11.42		3204	2 11.44	0.03	2375		
30.940	-1.77	0.20	-1.91	3.37	15.59		2 11.26		3204	2 12.13	0.03	2375		
31.690	-1.63	0.20	0.29	2.41	15.83		2 11.12		3204	2 12.81	0.03	2375		
							2 12.58		4216	2 11.06	0.03	3125		
32.345	-1.50	0.20	2.13	3.10	16.28		2 12.31		4216	2 11.74	0.03	3125		
33.000	-1.36	0.21	4.21	3.15	16.59		2 12.03		4216	2 12.43	0.02	3125		
							2 10.54		3125	2 12.43	0.02	3125		
33.623	-1.23	0.22	5.76	1.72	16.77		2 10.39		3125	2 13.12	0.02	3125		
34.245	-1.08	0.24	6.24	-0.27	16.89		2 10.20		3125	2 13.84	0.02	3125		
34.868	-0.93	0.26	5.30	-2.84	16.95		2 9.97		3125	2 14.60	0.02	3125		
35.490	-0.76	0.27	2.57	-6.04	16.99		2 9.72		3125	2 15.38	0.02	3125		
							2 16.37		12500	2 7.14	0.02	12500		
36.245	-0.55	0.28	0.14	-1.04	17.26		2 14.14		12500	2 10.13	0.02	12500		
37.000	-0.34	0.28	0.00	0.00	17.32		2 11.90		12500	2 13.14	0.02	12500		
m	mm rd/1000		m.T/m	T/m	T/m	T/m2	T/m2	T/m2	T/m3	T/m2	T/m2	T/m3		T

MAXIMUM DISPLACEMENT = -18.34 mm
MAXIMUM MOMENT = 29.31 m.T/m
VERTICAL REACTION IN FOOT = -17.32 T/m

CODIFICATION :
OF STATE :
OF SOIL :

-1 = SEPARATION
0 = EXCAVATION
1 = ACTIVE PR.
2 = ELASTIC
3 = PASSIVE PR.

(5 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.220 = (490.67 T/m)/(2232.77 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.114 = (510.55 T/m)/(4469.90 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 5.68 T/m

** PHASE No 9 **

*PHASE 9
*Water Table and/or Water Pressure // Excavation

* EXCAVATION IN SOIL 1 TO LEVEL = 15.420 m

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 1 TO LEVEL = 15.420 m
WATER PRESSURE IN SOIL 1 TO LEVEL = 18.090 m PR. = 0.000 T/m2
PR. = 4.200 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -4.200 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 19.990 m PR. = 6.100 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 6.100 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 25.690 m PR. = 0.000 T/m2
PR. = 16.410 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -16.410 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 37.000 m PR. = 29.110 T/m2

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 2 TO LEVEL = 1.700 m
WATER PRESSURE IN SOIL 2 TO LEVEL = 2.790 m PR. = 1.090 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 1.090 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 4.990 m PR. = 0.000 T/m2
PR. = 3.290 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -3.290 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 6.190 m PR. = 4.490 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 4.490 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 18.090 m PR. = 0.000 T/m2
PR. = 11.590 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -11.590 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 19.990 m PR. = 13.490 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 13.490 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 25.690 m PR. = 0.000 T/m2
PR. = 19.190 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -19.190 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 37.000 m PR. = 29.110 T/m2

PHASE 9

WALL						SOIL 1 EXCAVATION: 15.42 m WATER LEVEL: 15.42 m CAQUOT SURC.: 0.00 T/m2			SOIL 2 EXCAVATION: 0.00 m WATER LEVEL: 1.70 m CAQUOT SURC.: 0.00 T/m2				STRUTS/ ANCHORS	
LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	-16.03	0.05	0.00	0.00			0				3	0.75	0.75	1000		
0.100	-16.02	0.05	-0.01	-0.12	-0.03		0				3	1.67	0.74	1000		
							0				3	1.67	0.74	1000	3	0.00
0.900	-15.98	0.05	-0.79	-2.02	-0.25		0				2	3.08	0.69	1000		
1.700	-15.94	0.04	-3.39	-4.49	-0.25		0				2	3.09	0.64	1000		
1.850	-15.93	0.04	-4.10	-4.96	-0.25	-0.15	0				2	3.04	0.63	1000		
2.500	-15.91	0.02	-8.03	-7.18	-0.25	-0.80	0				2	2.83	0.59	1000		
2.790	-15.91	0.01	-10.27	-8.26	-0.25	-1.09	0				2	2.73	0.58	1000		
							0				-1					
3.340	-15.91	-0.03	-14.82	-8.26	-0.25		0				-1					
3.890	-15.94	-0.07	-19.36	-8.26	-0.25		0				-1					
4.440	-15.99	-0.13	-23.91	-8.26	-0.25		0				-1					
4.990	-16.08	-0.20	-28.45	-8.26	-0.25		0				-1					
						-3.29	0				1	2.47	0.45	500		
5.745	-16.28	-0.32	-36.42	-12.96	0.41	-4.04	0				1	2.64	0.42	500		
				20.52			0				1	2.64	0.42	500	2	33.48
6.190	-16.44	-0.39	-27.97	17.42	0.81	-4.49	0				1	2.75	0.39	500		
							0				1	1.09	0.39	1125		
6.855	-16.73	-0.46	-16.72	16.29	0.81		0				1	2.31	0.36	1125		
7.520	-17.05	-0.50	-6.49	14.34	0.81		0				1	3.54	0.34	1125		
8.226	-17.41	-0.51	2.65	11.38	0.81		0				1	4.85	0.31	1125		
8.932	-17.76	-0.49	9.37	7.49	0.81		0				1	6.16	0.28	1125		
9.639	-18.09	-0.45	13.01	2.68	0.81		0				1	7.47	0.26	1125		
10.345	-18.39	-0.40	12.93	-3.06	0.81		0				1	8.78	0.24	1125		
				40.18			0				1	8.78	0.24	1125	4	43.24
11.183	-18.68	-0.28	43.32	32.17	0.81		0				1	10.34	0.22	1125		
12.020	-18.83	-0.05	66.46	22.86	0.81		0				1	11.90	0.19	1125		
12.882	-18.74	0.27	81.55	11.90	0.81		0				1	13.52	0.18	1125		

13.745	-18.36	0.63	86.58	-0.46	0.81		0				1	15.13	0.16	1125					
14.583	-17.69	0.98	80.71	-13.78	0.81		0				1	16.70	0.14	1125					
15.420	-16.74	1.28	63.12	-28.43	0.81		0				1	18.27	0.13	1125					
							3	20.98		2107	1	18.27	0.13	1125					
16.283	-15.53	1.49	39.62	-26.08	0.81		3	22.61		2107	1	19.88	0.12	1125					
17.145	-14.19	1.62	18.14	-23.72	0.81		3	24.24		2107	1	21.50	0.11	1125					
17.618	-13.41	1.65	7.24	-22.43	0.81		3	25.13		2107	1	22.39	0.10	1125					
18.090	-12.63	1.65	-3.05	-21.13	0.81		3	26.03		2107	1	23.28	0.10	1125					
						-7.39	3	10.38		2192	1	6.59	0.10	1625					
18.820	-11.44	1.61	-18.74	-20.92	-1.31	-7.39	3	18.34		2192	1	6.77	0.09	1625					
19.405	-10.51	1.54	-29.95	-16.85	-4.26	-7.39	2	24.03		2192	1	6.92	0.08	1625					
19.990	-9.64	1.44	-38.25	-11.69	-6.01	-7.39	2	22.36		2192	1	7.06	0.08	1625					
							2	37.97		3043	2	22.31	0.08	1625					
20.420	-9.04	1.36	-41.91	-5.56	-6.01		2	36.98		3043	2	24.12	0.07	1625					
20.983	-8.31	1.24	-43.19	0.71	-6.01		2	35.85		3043	2	26.40	0.07	1625					
21.545	-7.65	1.12	-41.46	5.16	-6.01		2	34.92		3043	2	28.56	0.07	1625					
22.108	-7.05	1.01	-37.70	7.95	-6.01		2	34.19		3043	2	30.62	0.06	1625					
22.670	-6.51	0.91	-32.80	9.25	-6.01		2	33.64		3043	2	32.59	0.06	1625					
23.220	-6.03	0.83	-27.66	9.22	-6.01		2	33.25		3043	2	34.43	0.06	1625					
23.320	-5.95	0.82	-26.75	9.08	-6.01		2	33.19		3043	2	34.75	0.06	1625					
23.913	-5.48	0.75	-21.77	7.52	-6.01		2	32.94		3043	2	36.65	0.05	1625					
24.505	-5.06	0.69	-18.08	4.73	-6.01		2	32.80		3043	2	38.49	0.05	1625					
25.097	-4.67	0.64	-16.39	0.81	-6.01		2	32.75		3043	2	40.27	0.05	1625					
25.690	-4.30	0.59	-17.32	-4.15	-6.01		2	32.79		3043	2	42.01	0.04	1625					
						-2.78	2	15.33		3204	1	7.64	0.04	2375					
26.440	-3.89	0.52	-19.15	-0.87	-3.80	-2.60	2	14.28		3204	1	7.86	0.04	2375					
27.190	-3.52	0.45	-18.81	1.67	-1.49	-2.41	2	13.40		3204	1	8.07	0.04	2375					
27.940	-3.21	0.38	-16.81	3.58	0.90	-2.23	2	12.69		3204	1	8.29	0.04	2375					
28.690	-2.94	0.33	-13.58	4.97	3.35	-2.04	2	12.12		3204	2	8.54	0.03	2375					
m	mm rd/1000		m.T/m	T/m	T/m	T/m2	T/m2		T/m2	T/m3	T/m2		T/m2	T/m3	T				

PHASE 9 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD			
29.440	-2.71	0.29	-9.52	5.69	5.41	-1.86	2	11.68		3204	2	9.45	0.03	2375					
30.190	-2.51	0.26	-5.25	5.58	6.83	-1.67	2	11.32		3204	2	10.31	0.03	2375					
30.940	-2.32	0.25	-1.34	4.72	7.80	-1.49	2	11.00		3204	2	11.13	0.03	2375					
31.690	-2.14	0.25	1.66	3.16	8.47	-1.31	2	10.70		3204	2	11.94	0.03	2375					
							2	12.74		4216	2	9.79	0.03	3125					
32.345	-1.97	0.26	4.00	3.88	9.76	-1.14	2	12.29		4216	2	10.62	0.03	3125					
33.000	-1.80	0.27	6.57	3.84	10.63	-0.98	2	11.81		4216	2	11.47	0.02	3125					
							2	9.84		3125	2	11.47	0.02	3125					
33.623	-1.62	0.30	8.39	1.89	11.17	-0.83	2	9.52		3125	2	12.33	0.02	3125					
34.245	-1.43	0.32	8.79	-0.72	11.49	-0.68	2	9.15		3125	2	13.23	0.02	3125					
34.868	-1.22	0.35	7.34	-4.06	11.67	-0.52	2	8.73		3125	2	14.18	0.02	3125					
35.490	-1.00	0.37	3.57	-8.19	11.76	-0.37	2	8.26		3125	2	15.18	0.02	3125					
							2	17.31		12500	2	4.64	0.02	12500					
36.245	-0.72	0.37	0.24	-1.50	12.57	-0.19	2	14.17		12500	2	8.55	0.02	12500					
37.000	-0.44	0.37	0.00	0.00	12.77		2	11.01		12500	2	12.48	0.02	12500					
m	mm rd/1000		m.T/m	T/m	T/m	T/m2	T/m2		T/m2	T/m3	T/m2		T/m2	T/m3	T				

MAXIMUM DISPLACEMENT = -18.83 mm
MAXIMUM MOMENT = 86.58 m.T/m
VERTICAL REACTION IN FOOT = -12.77 T/m

CODIFICATION :
OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR., 2 = ELASTIC, 3 = PASSIVE PR.
OF SOIL :

(6 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.289 = (428.65 T/m)/(1482.59 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.104 = (470.35 T/m)/(4535.85 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 5.68 T/m

** PHASE No 10 **

*PHASE 10
*5th Strut

* INSTALLATION OF A LINE OF STRUTS No 5

LEVEL	=	13.745 m
SPACING	=	1.000 m
INCLINATION	=	0.000 DEGREES
PRELOAD	=	0.000 T
STIFFNESS	=	7188.000 T/m
EFFECTIVE LENGTH	=	0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 2

PHASE 10

WALL	SOIL 1 — EXCAVATION: 15.42 m, WATER LEVEL: 15.42 m, CAQUOT SURC.: 0.00 T/m2	SOIL 2 — EXCAVATION: 0.00 m, WATER LEVEL: 1.70 m, CAQUOT SURC.: 0.00 T/m2	STRUTS/ ANCHORS

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	-16.03	0.05	0.00	0.00			0				1	0.75	0.75	1000		
0.100	-16.02	0.05	-0.01	-0.12	-0.03		0				2	1.67	0.74	1000		
							0				2	1.67	0.74	1000	3	0.00
0.900	-15.98	0.05	-0.79	-2.02	-0.25		0				2	3.08	0.69	1000		
1.700	-15.94	0.04	-3.39	-4.49	-0.25		0				2	3.09	0.64	1000		
1.850	-15.93	0.04	-4.10	-4.96	-0.25	-0.15	0				2	3.04	0.63	1000		
2.500	-15.91	0.02	-8.03	-7.18	-0.25	-0.80	0				2	2.83	0.59	1000		
2.790	-15.91	0.01	-10.27	-8.26	-0.25	-1.09	0				2	2.73	0.58	1000		
							0				-1					
3.340	-15.91	-0.03	-14.82	-8.26	-0.25		0				-1					
3.890	-15.94	-0.07	-19.36	-8.26	-0.25		0				-1					
4.440	-15.99	-0.13	-23.91	-8.26	-0.25		0				-1					
4.990	-16.08	-0.20	-28.45	-8.26	-0.25		0				-1					
						-3.29	0				1	2.47	0.45	500		
5.745	-16.28	-0.32	-36.42	-12.96	0.41	-4.04	0				1	2.64	0.42	500		
				20.52			0				1	2.64	0.42	500	2	33.48
6.190	-16.44	-0.39	-27.97	17.42	0.81	-4.49	0				1	2.75	0.39	500		
							0				1	1.09	0.39	1125		
6.855	-16.73	-0.46	-16.72	16.29	0.81		0				1	2.31	0.36	1125		
7.520	-17.05	-0.50	-6.49	14.34	0.81		0				1	3.54	0.34	1125		
8.226	-17.41	-0.51	2.65	11.38	0.81		0				1	4.85	0.31	1125		
8.932	-17.76	-0.49	9.37	7.49	0.81		0				1	6.16	0.28	1125		
9.639	-18.09	-0.45	13.01	2.68	0.81		0				1	7.47	0.26	1125		
10.345	-18.39	-0.40	12.93	-3.06	0.81		0				1	8.78	0.24	1125		
				40.18			0				1	8.78	0.24	1125	4	43.24
11.183	-18.68	-0.28	43.32	32.17	0.81		0				1	10.34	0.22	1125		
12.020	-18.83	-0.05	66.46	22.86	0.81		0				1	11.90	0.19	1125		
12.882	-18.74	0.27	81.55	11.90	0.81		0				1	13.52	0.18	1125		
13.745	-18.36	0.63	86.58	-0.46	0.81		0				2	15.13	0.16	1125		
							0				2	15.13	0.16	1125	5	0.00
14.583	-17.69	0.98	80.71	-13.78	0.81		0				2	16.70	0.14	1125		
15.420	-16.74	1.28	63.12	-28.43	0.81		0				2	18.27	0.13	1125		
							2	20.98		2107	2	18.27	0.13	1125		
16.283	-15.53	1.49	39.62	-26.08	0.81		2	22.61		2107	2	19.88	0.12	1125		
17.145	-14.19	1.62	18.14	-23.72	0.81		2	24.24		2107	2	21.50	0.11	1125		
17.618	-13.41	1.65	7.24	-22.43	0.81		2	25.13		2107	2	22.39	0.10	1125		
18.090	-12.63	1.65	-3.05	-21.13	0.81		2	26.03		2107	2	23.28	0.10	1125		
						-7.39	2	10.38		2192	2	6.59	0.10	1625		
18.820	-11.44	1.61	-18.74	-20.92	-1.31	-7.39	2	18.34		2192	2	6.77	0.09	1625		
19.405	-10.51	1.54	-29.95	-16.85	-4.26	-7.39	2	24.03		2192	2	6.92	0.08	1625		
19.990	-9.64	1.44	-38.25	-11.69	-6.01	-7.39	2	22.36		2192	2	7.06	0.08	1625		
							2	37.97		3043	2	22.31	0.08	1625		
20.420	-9.04	1.36	-41.91	-5.56	-6.01		2	36.98		3043	2	24.12	0.07	1625		
20.983	-8.31	1.24	-43.19	0.71	-6.01		2	35.85		3043	2	26.40	0.07	1625		
21.545	-7.65	1.12	-41.46	5.16	-6.01		2	34.92		3043	2	28.56	0.07	1625		
22.108	-7.05	1.01	-37.70	7.95	-6.01		2	34.19		3043	2	30.62	0.06	1625		
22.670	-6.51	0.91	-32.80	9.25	-6.01		2	33.64		3043	2	32.59	0.06	1625		
23.220	-6.03	0.83	-27.66	9.22	-6.01		2	33.25		3043	2	34.43	0.06	1625		
23.320	-5.95	0.82	-26.75	9.08	-6.01		2	33.19		3043	2	34.75	0.06	1625		
23.913	-5.48	0.75	-21.77	7.52	-6.01		2	32.94		3043	2	36.65	0.05	1625		
24.505	-5.06	0.69	-18.08	4.73	-6.01		2	32.80		3043	2	38.49	0.05	1625		
25.097	-4.67	0.64	-16.39	0.81	-6.01		2	32.75		3043	2	40.27	0.05	1625		
25.690	-4.30	0.59	-17.32	-4.15	-6.01		2	32.79		3043	2	42.01	0.04	1625		
						-2.78	2	15.33		3204	1	7.64	0.04	2375		
26.440	-3.89	0.52	-19.15	-0.87	-3.80	-2.60	2	14.28		3204	1	7.86	0.04	2375		
27.190	-3.52	0.45	-18.81	1.67	-1.49	-2.41	2	13.40		3204	1	8.07	0.04	2375		
27.940	-3.21	0.38	-16.81	3.58	0.90	-2.23	2	12.69		3204	1	8.29	0.04	2375		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T

PHASE 10 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
28.690	-2.94	0.33	-13.58	4.97	3.35	-2.04	2	12.12		3204	2	8.54	0.03	2375		
29.440	-2.71	0.29	-9.52	5.69	5.41	-1.86	2	11.68		3204	2	9.45	0.03	2375		
30.190	-2.51	0.26	-5.25	5.58	6.83	-1.67	2	11.32		3204	2	10.31	0.03	2375		
30.940	-2.32	0.25	-1.34	4.72	7.80	-1.49	2	11.00		3204	2	11.13	0.03	2375		
31.690	-2.14	0.25	1.66	3.16	8.47	-1.31	2	10.70		3204	2	11.94	0.03	2375		
							2	12.74		4216	2	9.79	0.03	3125		
32.345	-1.97	0.26	4.00	3.88	9.76	-1.14	2	12.29		4216	2	10.62	0.03	3125		
33.000	-1.80	0.27	6.57	3.84	10.63	-0.98	2	11.81		4216	2	11.47	0.02	3125		
							2	9.84		3125	2	11.47	0.02	3125		
33.623	-1.62	0.30	8.39	1.89	11.17	-0.83	2	9.52		3125	2	12.33	0.02	3125		
34.245	-1.43	0.32	8.79	-0.72	11.49	-0.68	2	9.15		3125	2	13.23	0.02	3125		
34.868	-1.22	0.35	7.34	-4.06	11.67	-0.52	2	8.73		3125	2	14.18	0.02	3125		
35.490	-1.00	0.37	3.57	-8.19	11.76	-0.37	2	8.26		3125	2	15.18	0.02	3125		
							2	17.31		12500	2	4.64	0.02	12500		
36.245	-0.72	0.37	0.24	-1.50	12.57	-0.19	2	14.17		12500	2	8.55	0.02	12500		
37.000	-0.44	0.37	0.00	0.00	12.77		2	11.01		12500	2	12.48	0.02	12500		
m	mm	rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T

			-1 = SEPARATION
	MAXIMUM DISPLACEMENT = -18.83 mm	CODIFICATION	0 = EXCAVATION
	MAXIMUM MOMENT = 86.58 m.T/m	OF STATE	1 = ACTIVE PR.
	VERTICAL REACTION IN FOOT = -12.77 T/m	OF SOIL	2 = ELASTIC
			3 = PASSIVE PR.

(4 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.289 = (428.65 T/m)/(1482.59 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.104 = (470.35 T/m)/(4535.85 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 5.68 T/m

** PHASE No 11 **

*PHASE 11
*Water Table and/or Water Pressure // Excavation

* EXCAVATION IN SOIL 1 TO LEVEL = 18.820 m

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 1 TO LEVEL = 18.820 m
WATER PRESSURE IN SOIL 1 TO LEVEL = 19.990 m PR. = 1.170 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 1.170 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 25.690 m PR. = 0.000 T/m2
PR. = 11.050 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -11.050 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 37.000 m PR. = 26.430 T/m2

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 2 TO LEVEL = 1.700 m
WATER PRESSURE IN SOIL 2 TO LEVEL = 2.790 m PR. = 1.090 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 1.090 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 4.990 m PR. = 0.000 T/m2
PR. = 3.290 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -3.290 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 6.190 m PR. = 4.490 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 4.490 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 18.090 m PR. = 0.000 T/m2
PR. = 11.590 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -11.590 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 19.990 m PR. = 13.490 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 13.490 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 25.690 m PR. = 0.000 T/m2
PR. = 19.190 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -19.190 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 37.000 m PR. = 26.430 T/m2

PHASE 11

WALL						SOIL 1				SOIL 2				STRUTS/ ANCHORS	
						EXCAVATION: 18.82 m				EXCAVATION: 0.00 m					
						WATER LEVEL: 18.82 m				WATER LEVEL: 1.70 m					
						CAQUOT SURC.: 0.00 T/m2				CAQUOT SURC.: 0.00 T/m2					
LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	-14.07	-0.10	0.00	0.00			0				3	0.75	0.75	1000		
0.100	-14.08	-0.10	-0.01	-0.12	-0.03		0				3	1.67	0.74	1000		
							0				3	1.67	0.74	1000	3	0.00
0.900	-14.16	-0.10	-0.98	-2.75	-0.29		0				2	4.90	0.69	1000		
1.700	-14.25	-0.11	-4.74	-6.62	-0.33		0				2	4.79	0.64	1000		
1.850	-14.26	-0.11	-5.78	-7.35	-0.34	-0.15	0				2	4.72	0.63	1000		
2.500	-14.35	-0.14	-11.61	-10.62	-0.34	-0.80	0				2	4.40	0.59	1000		
2.790	-14.39	-0.16	-14.91	-12.15	-0.34	-1.09	0				2	4.25	0.58	1000		
							0				-1					
3.340	-14.49	-0.21	-21.59	-12.15	-0.34		0				-1					
3.890	-14.62	-0.28	-28.27	-12.15	-0.34		0				-1					
4.440	-14.80	-0.36	-34.95	-12.15	-0.34		0				-1					
4.990	-15.03	-0.47	-41.63	-12.15	-0.34		0				-1					
						-3.29	0				2	3.00	0.45	500		
5.745	-15.44	-0.64	-52.67	-17.20	-0.21	-4.04	0				2	3.06	0.42	500		
				12.94			0				2	3.06	0.42	500	2	30.14
6.190	-15.75	-0.75	-47.63	9.67	-0.08	-4.49	0				2	3.09	0.39	500		
							0				2	1.86	0.39	1125		
6.855	-16.30	-0.90	-41.68	8.12	-0.08		0				2	2.79	0.36	1125		
7.520	-16.94	-1.03	-36.96	5.98	-0.08		0				2	3.66	0.34	1125		
8.226	-17.71	-1.15	-33.75	2.97	-0.08		0				1	4.85	0.31	1125		
8.932	-18.56	-1.26	-32.97	-0.91	-0.08		0				1	6.16	0.28	1125		
9.639	-19.50	-1.38	-35.26	-5.73	-0.08		0				1	7.47	0.26	1125		
10.345	-20.52	-1.51	-41.27	-11.46	-0.08		0				1	8.78	0.24	1125		

				47.09			0				1	8.78	0.24	1125	4	58.55	
11.183	-21.84	-1.61	-5.10	39.08	-0.08		0				1	10.34	0.22	1125			
12.020	-23.17	-1.57	23.82	29.76	-0.08		0				1	11.90	0.19	1125			
12.882	-24.46	-1.42	44.86	18.80	-0.08		0				1	13.52	0.18	1125			
13.745	-25.60	-1.20	55.85	6.45	-0.08		0				1	15.13	0.16	1125			
				58.47			0				1	15.13	0.16	1125	5	52.02	
14.583	-26.48	-0.87	99.33	45.14	-0.08		0				1	16.70	0.14	1125			
15.420	-27.02	-0.39	131.10	30.50	-0.08		0				1	18.27	0.13	1125			
16.283	-27.10	0.21	150.41	14.05	-0.08		0				1	19.88	0.12	1125			
17.145	-26.64	0.86	154.93	-3.80	-0.08		0				1	21.50	0.11	1125			
17.618	-26.15	1.22	150.70	-14.17	-0.08		0				1	22.39	0.10	1125			
18.090	-25.49	1.56	141.47	-24.96	-0.08		0				1	23.28	0.10	1125			
						-11.59	0				1	6.59	0.10	1625			
18.820	-24.17	2.03	118.33	-38.56	1.77	-12.32	0				1	6.77	0.09	1625			
							3	0.00		2192	1	6.77	0.09	1625			
19.405	-22.89	2.34	92.86	-47.91	2.58	-12.32	3	6.38		2192	1	6.92	0.08	1625			
19.990	-21.45	2.56	62.99	-53.60	2.01	-12.32	3	12.77		2192	1	7.06	0.08	1625			
							3	32.54		3043	1	21.91	0.08	1625			
20.420	-20.33	2.67	40.92	-49.03	2.01		3	33.38		3043	1	22.74	0.07	1625			
20.983	-18.80	2.75	15.03	-43.04	2.01		3	34.47		3043	1	23.82	0.07	1625			
21.545	-17.24	2.76	-7.50	-37.05	2.01		3	35.56		3043	1	24.91	0.07	1625			
22.108	-15.70	2.71	-26.66	-31.06	2.01		3	36.65		3043	1	26.00	0.06	1625			
22.670	-14.20	2.62	-42.44	-25.07	2.01		3	37.74		3043	1	27.09	0.06	1625			
23.220	-12.80	2.48	-54.62	-19.21	2.01		3	38.81		3043	1	28.15	0.06	1625			
23.320	-12.55	2.46	-56.49	-18.14	2.01		3	39.00		3043	1	28.34	0.06	1625			
23.913	-11.15	2.28	-65.36	-11.82	2.01		3	40.15		3043	1	29.49	0.05	1625			
24.505	-9.86	2.08	-70.52	-5.62	2.01		2	40.97		3043	2	30.69	0.05	1625			
25.097	-8.69	1.87	-72.37	-1.15	2.01		2	38.56		3043	2	33.74	0.05	1625			
25.690	-7.64	1.66	-72.49	0.26	2.01		2	36.53		3043	2	36.58	0.04	1625			
						-8.14	2	25.54		3204	1	7.64	0.04	2375			
26.440	-6.50	1.39	-69.84	6.39	2.12	-7.60	2	22.08		3204	1	7.91	0.04	2375			
27.190	-5.55	1.14	-63.44	10.36	3.78	-7.06	2	19.24		3204	1	8.17	0.04	2375			
27.940	-4.78	0.93	-54.73	12.62	5.97	-6.52	2	16.97		3204	1	8.44	0.04	2375			
m	mm rd/1000		m.T/m	T/m	T/m	T/m2	T/m2		T/m2	T/m3	T/m2		T/m2	T/m3	T		

PHASE 11 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
28.690	-4.16	0.74	-44.84	13.56	8.40	-5.98	2	15.18		3204	1	8.70	0.03	2375		
29.440	-3.66	0.59	-34.64	13.51	10.96	-5.44	2	13.79		3204	1	8.97	0.03	2375		
30.190	-3.26	0.48	-24.76	12.74	13.62	-4.90	2	12.70		3204	1	9.23	0.03	2375		
30.940	-2.92	0.41	-15.74	11.15	15.88	-4.36	2	11.84		3204	2	10.29	0.03	2375		
31.690	-2.63	0.37	-8.29	8.54	17.35	-3.82	2	11.11		3204	2	11.43	0.03	2375		
							2	13.69		4216	1	9.37	0.03	3125		
32.345	-2.40	0.35	-2.66	8.55	19.62	-3.35	2	12.88		4216	2	10.01	0.03	3125		
33.000	-2.17	0.35	2.73	7.77	21.29	-2.88	2	12.10		4216	2	11.10	0.02	3125		
							2	9.73		3125	2	11.10	0.02	3125		
33.623	-1.95	0.36	6.68	4.77	22.29	-2.43	2	9.20		3125	2	12.16	0.02	3125		
34.245	-1.72	0.39	8.52	1.04	22.89	-1.98	2	8.64		3125	2	13.26	0.02	3125		
34.868	-1.47	0.41	7.80	-3.49	23.21	-1.53	2	8.02		3125	2	14.41	0.02	3125		
35.490	-1.20	0.43	4.01	-8.85	23.37	-1.09	2	7.36		3125	2	15.60	0.02	3125		
							2	18.42		12500	1	4.89	0.02	12500		
36.245	-0.87	0.44	0.29	-1.77	24.53	-0.54	2	14.57		12500	2	7.70	0.02	12500		
37.000	-0.54	0.44	0.00	0.00	24.95		2	10.70		12500	2	12.34	0.02	12500		
m	mm rd/1000		m.T/m	T/m	T/m	T/m2	T/m2		T/m2	T/m3	T/m2		T/m2	T/m3	T		

MAXIMUM DISPLACEMENT = -27.10 mm
MAXIMUM MOMENT = 154.93 m.T/m
VERTICAL REACTION IN FOOT = -24.95 T/m

CODIFICATION OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR., 2 = ELASTIC, 3 = PASSIVE PR.
OF SOIL :

(6 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.365 = (377.76 T/m)/(1035.62 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.095 = (444.04 T/m)/(4662.99 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 5.68 T/m

** PHASE No 12 **

*PHASE 12
*6th Strut

* INSTALLATION OF A LINE OF STRUTS No 6

LEVEL	=	17.145 m
SPACING	=	1.000 m
INCLINATION	=	0.000 DEGREES
PRELOAD	=	0.000 T
STIFFNESS	=	7188.000 T/m
EFFECTIVE LENGTH	=	0.000 m

PHASE 12

	WALL	SOIL 1 (EXCAVATION: 18.82 m, WATER LEVEL: 18.82 m, CAQUOT SURC.: 0.00 T/m2)			SOIL 2 (EXCAVATION: 0.00 m, WATER LEVEL: 1.70 m, CAQUOT SURC.: 0.00 T/m2)			STRUTS/ ANCHORS	
LEVEL	DISPL. ROTAT. MOMENT SH.FO. VERT.EF SH.LOAD	STATE	PRE.	SURCH. ELAST.	STATE	PRE.	SURCH. ELAST.	No	LOAD
0.000	-14.07 -0.10 0.00 0.00	0			1	0.75	0.75 1000		
0.100	-14.08 -0.10 -0.01 -0.12 -0.03	0			2	1.67	0.74 1000		
		0			2	1.67	0.74 1000	3	0.00
0.900	-14.16 -0.10 -0.98 -2.75 -0.29	0			2	4.90	0.69 1000		
1.700	-14.25 -0.11 -4.74 -6.62 -0.33	0			2	4.79	0.64 1000		
1.850	-14.26 -0.11 -5.78 -7.35 -0.34 -0.15	0			2	4.72	0.63 1000		
2.500	-14.35 -0.14 -11.61 -10.62 -0.34 -0.80	0			2	4.40	0.59 1000		
2.790	-14.39 -0.16 -14.91 -12.15 -0.34 -1.09	0			2	4.25	0.58 1000		
		0			-1				
3.340	-14.49 -0.21 -21.59 -12.15 -0.34	0			-1				
3.890	-14.62 -0.28 -28.27 -12.15 -0.34	0			-1				
4.440	-14.80 -0.36 -34.95 -12.15 -0.34	0			-1				
4.990	-15.03 -0.47 -41.63 -12.15 -0.34	0			-1				
	-3.29	0			2	3.00	0.45 500		
5.745	-15.44 -0.64 -52.67 -17.20 -0.21 -4.04	0			2	3.06	0.42 500		
	12.94	0			2	3.06	0.42 500	2	30.14
6.190	-15.75 -0.75 -47.63 9.67 -0.08 -4.49	0			2	3.09	0.39 500		
		0			2	1.86	0.39 1125		
6.855	-16.30 -0.90 -41.68 8.12 -0.08	0			2	2.79	0.36 1125		
7.520	-16.94 -1.03 -36.96 5.98 -0.08	0			2	3.66	0.34 1125		
8.226	-17.71 -1.15 -33.75 2.97 -0.08	0			1	4.85	0.31 1125		
8.932	-18.56 -1.26 -32.97 -0.91 -0.08	0			1	6.16	0.28 1125		
9.639	-19.50 -1.38 -35.26 -5.73 -0.08	0			1	7.47	0.26 1125		
10.345	-20.52 -1.51 -41.27 -11.46 -0.08	0			1	8.78	0.24 1125		
	47.09	0			1	8.78	0.24 1125	4	58.55
11.183	-21.84 -1.61 -5.10 39.08 -0.08	0			1	10.34	0.22 1125		
12.020	-23.17 -1.57 23.82 29.76 -0.08	0			1	11.90	0.19 1125		
12.882	-24.46 -1.42 44.86 18.80 -0.08	0			1	13.52	0.18 1125		
13.745	-25.60 -1.20 55.85 6.45 -0.08	0			2	15.13	0.16 1125		
	58.47	0			2	15.13	0.16 1125	5	52.02
14.583	-26.48 -0.87 99.33 45.14 -0.08	0			2	16.70	0.14 1125		
15.420	-27.02 -0.39 131.10 30.50 -0.08	0			2	18.27	0.13 1125		
16.283	-27.10 0.21 150.41 14.05 -0.08	0			2	19.88	0.12 1125		
17.145	-26.64 0.86 154.93 -3.80 -0.08	0			2	21.50	0.11 1125		
		0			2	21.50	0.11 1125	6	0.00
17.618	-26.15 1.22 150.70 -14.17 -0.08	0			2	22.39	0.10 1125		
18.090	-25.49 1.56 141.47 -24.96 -0.08	0			2	23.28	0.10 1125		
	-11.59	0			2	6.59	0.10 1625		
18.820	-24.17 2.03 118.33 -38.56 1.77 -12.32	0			2	6.77	0.09 1625		
		2	0.00	2192	2	6.77	0.09 1625		
19.405	-22.89 2.34 92.86 -47.91 2.58 -12.32	2	6.38	2192	2	6.92	0.08 1625		
19.990	-21.45 2.56 62.99 -53.60 2.01 -12.32	2	12.77	2192	2	7.06	0.08 1625		
		2	32.54	3043	2	21.91	0.08 1625		
20.420	-20.33 2.67 40.92 -49.03 2.01	2	33.38	3043	2	22.74	0.07 1625		
20.983	-18.80 2.75 15.03 -43.04 2.01	2	34.47	3043	2	23.82	0.07 1625		
21.545	-17.24 2.76 -7.50 -37.05 2.01	2	35.56	3043	2	24.91	0.07 1625		
22.108	-15.70 2.71 -26.66 -31.06 2.01	2	36.65	3043	2	26.00	0.06 1625		
22.670	-14.20 2.62 -42.44 -25.07 2.01	2	37.74	3043	2	27.09	0.06 1625		
23.220	-12.80 2.48 -54.62 -19.21 2.01	2	38.81	3043	2	28.15	0.06 1625		
23.320	-12.55 2.46 -56.49 -18.14 2.01	2	39.00	3043	2	28.34	0.06 1625		
23.913	-11.15 2.28 -65.36 -11.82 2.01	2	40.15	3043	2	29.49	0.05 1625		
24.505	-9.86 2.08 -70.52 -5.62 2.01	2	40.97	3043	2	30.69	0.05 1625		
25.097	-8.69 1.87 -72.37 -1.15 2.01	2	38.56	3043	2	33.74	0.05 1625		
25.690	-7.64 1.66 -72.49 0.26 2.01	2	36.53	3043	2	36.58	0.04 1625		
	-8.14	2	25.54	3204	2	7.64	0.04 2375		
26.440	-6.50 1.39 -69.84 6.39 2.12 -7.60	2	22.08	3204	1	7.91	0.04 2375		
27.190	-5.55 1.14 -63.44 10.36 3.78 -7.06	2	19.24	3204	1	8.17	0.04 2375		
m	mm rd/1000 m.T/m T/m T/m T/m2		T/m2	T/m2 T/m3		T/m2	T/m2 T/m3		T

PHASE 12 (CONTINUATION)

LEVEL	DISPL. ROTAT. MOMENT SH.FO. VERT.EF SH.LOAD	STATE	PRE.	SURCH. ELAST.	STATE	PRE.	SURCH. ELAST.	No	LOAD
27.940	-4.78 0.93 -54.73 12.62 5.97 -6.52	2	16.97	3204	1	8.44	0.04 2375		
28.690	-4.16 0.74 -44.84 13.56 8.40 -5.98	2	15.18	3204	1	8.70	0.03 2375		
29.440	-3.66 0.59 -34.64 13.51 10.96 -5.44	2	13.79	3204	1	8.97	0.03 2375		
30.190	-3.26 0.48 -24.76 12.74 13.62 -4.90	2	12.70	3204	1	9.23	0.03 2375		
30.940	-2.92 0.41 -15.74 11.15 15.88 -4.36	2	11.84	3204	2	10.29	0.03 2375		
31.690	-2.63 0.37 -8.29 8.54 17.35 -3.82	2	11.11	3204	2	11.43	0.03 2375		
		2	13.69	4216	1	9.37	0.03 3125		
32.345	-2.40 0.35 -2.66 8.55 19.62 -3.35	2	12.88	4216	2	10.01	0.03 3125		
33.000	-2.17 0.35 2.73 7.77 21.29 -2.88	2	12.10	4216	2	11.10	0.02 3125		
		2	9.73	3125	2	11.10	0.02 3125		
33.623	-1.95 0.36 6.68 4.77 22.29 -2.43	2	9.20	3125	2	12.16	0.02 3125		
34.245	-1.72 0.39 8.52 1.04 22.89 -1.98	2	8.64	3125	2	13.26	0.02 3125		
34.868	-1.47 0.41 7.80 -3.49 23.21 -1.53	2	8.02	3125	2	14.41	0.02 3125		
35.490	-1.20 0.43 4.01 -8.85 23.37 -1.09	2	7.36	3125	2	15.60	0.02 3125		

								2	18.42		12500	1	4.89	0.02	12500		
36.245	-0.87	0.44	0.29	-1.77	24.53	-0.54		2	14.57		12500	2	7.70	0.02	12500		
37.000	-0.54	0.44	0.00	0.00	24.95			2	10.70		12500	2	12.34	0.02	12500		
m	mm rd/1000		m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T	

MAXIMUM DISPLACEMENT = -27.10 mm
MAXIMUM MOMENT = 154.93 m.T/m
VERTICAL REACTION IN FOOT = -24.95 T/m

CODIFICATION OF STATE OF SOIL :
-1 = SEPARATION
0 = EXCAVATION
1 = ACTIVE PR.
2 = ELASTIC
3 = PASSIVE PR.

(4 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.365 = (377.76 T/m)/(1035.62 T/m)
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.095 = (444.04 T/m)/(4662.99 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 5.68 T/m

** PHASE No 13 **

*PHASE 13
*Water Table and/or Water Pressure // Excavation

* EXCAVATION IN SOIL 1 TO LEVEL = 23.320 m

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 1 TO LEVEL = 23.320 m
WATER PRESSURE IN SOIL 1 TO LEVEL = 25.690 m PR. = 0.000 T/m2
PR. = 3.830 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -3.830 T/m2
WATER PRESSURE IN SOIL 1 TO LEVEL = 37.000 m PR. = 22.820 T/m2

* DISPLACEMENT OF GROUNDWATER TABLE IN SOIL 2 TO LEVEL = 1.700 m
WATER PRESSURE IN SOIL 2 TO LEVEL = 2.790 m PR. = 1.090 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 1.090 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 4.990 m PR. = 0.000 T/m2
PR. = 3.290 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -3.290 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 6.190 m PR. = 4.490 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 4.490 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 18.090 m PR. = 0.000 T/m2
PR. = 11.590 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -11.590 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 19.990 m PR. = 13.490 T/m2
PR. = 0.000 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF 13.490 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 25.690 m PR. = 0.000 T/m2
PR. = 19.190 T/m2
THE DISCONTINUITY HAS AN EFFECT ON THE WEIGHT OF THE SOIL OF -19.190 T/m2
WATER PRESSURE IN SOIL 2 TO LEVEL = 37.000 m PR. = 22.820 T/m2

PHASE 13

	WALL						SOIL 1			SOIL 2				
							EXCAVATION: 23.32 m			EXCAVATION: 0.00 m			STRUTS/	
							WATER LEVEL: 23.32 m			WATER LEVEL: 1.70 m			ANCHORS	
							CAQUOT SURC.: 0.00 T/m2			CAQUOT SURC.: 0.00 T/m2				
LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH. ELAST.	STATE	PRE.	SURCH. ELAST.	No	LOAD
0.000	-13.76	0.12	0.00	0.00			0			3	0.75	0.75 1000		
0.100	-13.75	0.12	-0.01	-0.12	-0.03		0			3	1.67	0.74 1000		
							0			3	1.67	0.74 1000	3	0.00
0.900	-13.66	0.11	-1.04	-2.95	-0.32		0			2	5.40	0.69 1000		
1.700	-13.57	0.10	-5.13	-7.30	-0.41		0			2	5.47	0.64 1000		
1.850	-13.55	0.10	-6.29	-8.13	-0.41	-0.15	0			2	5.43	0.63 1000		
2.500	-13.50	0.07	-12.79	-11.91	-0.41	-0.80	0			2	5.25	0.59 1000		
2.790	-13.48	0.05	-16.50	-13.69	-0.41	-1.09	0			2	5.16	0.58 1000		
							0			-1				
3.340	-13.47	-0.01	-24.03	-13.69	-0.41		0			-1				
3.890	-13.49	-0.08	-31.56	-13.69	-0.41		0			-1				
4.440	-13.56	-0.18	-39.09	-13.69	-0.41		0			-1				
4.990	-13.69	-0.29	-46.62	-13.69	-0.41		0			-1				
						-3.29	0			2	3.67	0.45 500		
5.745	-13.98	-0.49	-59.02	-19.28	-0.41	-4.04	0			2	3.79	0.42 500		
				5.02			0			2	3.79	0.42 500	2	24.30
6.190	-14.23	-0.62	-57.58	1.42	-0.41	-4.49	0			2	3.85	0.39 500		
							0			2	3.57	0.39 1125		
6.855	-14.70	-0.80	-57.50	-1.29	-0.41		0			2	4.59	0.36 1125		
7.520	-15.30	-1.00	-59.44	-4.65	-0.41		0			2	5.51	0.34 1125		
8.226	-16.08	-1.21	-64.20	-8.96	-0.41		0			2	6.69	0.31 1125		

8.932	-17.01	-1.45	-72.29	-14.11	-0.41		0				2	7.90	0.28	1125					
9.639	-18.13	-1.72	-84.32	-20.08	-0.41		0				2	9.01	0.26	1125					
10.345	-19.45	-2.04	-100.83	-26.79	-0.41		0				2	9.98	0.24	1125					
				24.10			0				2	9.98	0.24	1125	4	50.89			
11.183	-21.32	-2.42	-84.26	15.35	-0.41		0				2	10.92	0.22	1125					
12.020	-23.49	-2.75	-75.35	5.79	-0.41		0				1	11.90	0.19	1125					
12.882	-25.99	-3.06	-74.99	-5.17	-0.41		0				1	13.52	0.18	1125					
13.745	-28.78	-3.40	-84.68	-17.53	-0.41		0				1	15.13	0.16	1125					
				57.35			0				1	15.13	0.16	1125	5	74.88			
14.583	-31.74	-3.66	-42.14	44.03	-0.41		0				1	16.70	0.14	1125					
15.420	-34.86	-3.76	-11.30	29.39	-0.41		0				1	18.27	0.13	1125					
16.283	-38.11	-3.77	7.05	12.93	-0.41		0				1	19.88	0.12	1125					
17.145	-41.34	-3.72	10.60	-4.92	-0.41		0				1	21.50	0.11	1125					
				100.73			0				1	21.50	0.11	1125	6	105.64			
17.618	-43.08	-3.64	55.76	90.36	-0.41		0				1	22.39	0.10	1125					
18.090	-44.77	-3.47	95.92	79.57	-0.41		0				1	23.28	0.10	1125					
						-11.59	0				1	6.59	0.10	1625					
18.820	-47.15	-3.02	149.08	65.96	1.44	-12.32	0				1	6.77	0.09	1625					
19.405	-48.78	-2.54	184.36	54.58	2.96	-12.90	0				1	6.92	0.08	1625					
19.990	-50.10	-1.97	212.86	42.77	4.51	-13.49	0				1	7.06	0.08	1625					
							0				1	21.91	0.08	1625					
20.420	-50.85	-1.50	229.20	33.17	4.51		0				1	22.74	0.07	1625					
20.983	-51.50	-0.84	244.20	20.08	4.51		0				1	23.82	0.07	1625					
21.545	-51.78	-0.15	251.67	6.37	4.51		0				1	24.91	0.07	1625					
22.108	-51.67	0.55	251.25	-7.95	4.51		0				1	26.00	0.06	1625					
22.670	-51.17	1.24	242.61	-22.88	4.51		0				1	27.09	0.06	1625					
23.220	-50.31	1.87	225.88	-38.07	4.51		0				1	28.15	0.06	1625					
23.320	-50.12	1.98	221.93	-40.89	4.51		0				1	28.34	0.06	1625					
							3	30.33		3043	1	28.34	0.06	1625					
23.913	-48.76	2.60	198.05	-39.71	4.51		3	31.48		3043	1	29.49	0.05	1625					
24.505	-47.05	3.14	174.87	-38.53	4.51		3	32.63		3043	1	30.64	0.05	1625					
25.097	-45.05	3.62	152.39	-37.35	4.51		3	33.78		3043	1	31.78	0.05	1625					
25.690	-42.78	4.03	130.61	-36.17	4.51		3	34.93		3043	1	32.93	0.04	1625					
						-15.36	3	13.32		3204	1	7.64	0.04	2375					
26.440	-39.59	4.46	101.08	-42.16	2.49	-14.34	3	16.00		3204	1	7.97	0.04	2375					
27.190	-36.11	4.78	68.00	-45.63	-0.22	-13.32	3	18.68		3204	1	8.30	0.04	2375					
m	mm rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T				

PHASE 13 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
27.940	-32.45	4.96	33.26	-46.58	-3.62	-12.30	3	21.36		3204	1	8.63	0.04	2375		
28.690	-28.70	5.02	-1.24	-45.00	-7.72	-11.29	3	24.04		3204	1	8.97	0.03	2375		
29.440	-24.95	4.96	-33.61	-40.90	-12.50	-10.27	3	26.72		3204	1	9.30	0.03	2375		
30.190	-21.30	4.78	-61.96	-34.27	-17.98	-9.25	3	29.40		3204	1	9.63	0.03	2375		
30.940	-17.81	4.51	-84.39	-25.12	-24.14	-8.23	3	32.07		3204	1	9.96	0.03	2375		
31.690	-14.56	4.16	-99.01	-13.45	-31.00	-7.21	3	34.75		3204	1	10.29	0.03	2375		
							3	38.66		4216	1	9.87	0.03	3125		
32.345	-11.94	3.83	-102.96	1.74	-38.97	-6.32	3	41.28		4216	1	10.15	0.03	3125		
33.000	-9.53	3.51	-96.45	18.23	-46.32	-5.43	2	41.40		4216	1	10.43	0.02	3125		
							3	25.34		3125	1	10.43	0.02	3125		
33.623	-7.43	3.23	-83.28	24.05	-49.22	-4.59	2	24.52		3125	1	10.70	0.02	3125		
34.245	-5.50	3.00	-66.87	28.12	-49.46	-3.74	2	18.54		3125	1	10.96	0.02	3125		
34.868	-3.69	2.82	-48.94	28.96	-47.38	-2.90	2	12.96		3125	1	11.23	0.02	3125		
35.490	-1.97	2.70	-31.65	25.79	-45.80	-2.05	2	7.66		3125	2	14.63	0.02	3125		
							2	26.02		12500	1	5.65	0.02	12500		
36.245	0.04	2.62	-10.64	24.99	-45.04	-1.03	2	1.13		12500	2	20.52	0.02	12500		
37.000	2.01	2.61	0.00	0.00	-45.04		-1				2	45.78	0.02	12500		
m	mm rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T				

MAXIMUM DISPLACEMENT = -51.78 mm
MAXIMUM MOMENT = 251.67 m.T/m
VERTICAL REACTION IN FOOT = 45.04 T/m

CODIFICATION OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR., 2 = ELASTIC, 3 = PASSIVE PR.
OF SOIL :

(8 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.717 = (330.64 T/m)/(461.16 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.097 = (470.40 T/m)/(4834.25 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 5.68 T/m

** PHASE No 14 **

*PHASE 14
*7th Strut / 8th Strut / 9th Strut

* INSTALLATION OF A LINE OF STRUTS No 7 LEVEL = 23.220 m
SPACING = 1.000 m

INCLINATION = 0.000 DEGREES
PRELOAD = 0.000 T
STIFFNESS = 2259.000 T/m
EFFECTIVE LENGTH = 0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 2

* INSTALLATION OF A LINE OF STRUTS No 8
LEVEL = 22.670 m
SPACING = 1.000 m
INCLINATION = 0.000 DEGREES
PRELOAD = 0.000 T
STIFFNESS = 14375.000 T/m
EFFECTIVE LENGTH = 0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 2

* INSTALLATION OF A LINE OF STRUTS No 9
LEVEL = 20.420 m
SPACING = 1.000 m
INCLINATION = 0.000 DEGREES
PRELOAD = 0.000 T
STIFFNESS = 3195.000 T/m
EFFECTIVE LENGTH = 0.000 m

UNILATERAL CONNECTION : WALL FREE TO DISPLACE TOWARD SOIL 2

PHASE 14

	WALL						SOIL 1 EXCAVATION: 23.32 m WATER LEVEL: 23.32 m CAQUOT SURC.: 0.00 T/m2				SOIL 2 EXCAVATION: 0.00 m WATER LEVEL: 1.70 m CAQUOT SURC.: 0.00 T/m2				STRUTS/ ANCHORS	
LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
0.000	-13.76	0.12	0.00	0.00			0				3	0.75	0.75	1000		
0.100	-13.75	0.12	-0.01	-0.12	-0.03		0				3	1.67	0.74	1000		
							0				3	1.67	0.74	1000	3	0.00
0.900	-13.66	0.11	-1.04	-2.95	-0.32		0				2	5.40	0.69	1000		
1.700	-13.57	0.10	-5.13	-7.30	-0.41		0				2	5.47	0.64	1000		
1.850	-13.55	0.10	-6.29	-8.13	-0.41	-0.15	0				2	5.43	0.63	1000		
2.500	-13.50	0.07	-12.79	-11.91	-0.41	-0.80	0				2	5.25	0.59	1000		
2.790	-13.48	0.05	-16.50	-13.69	-0.41	-1.09	0				2	5.16	0.58	1000		
							0				-1					
3.340	-13.47	-0.01	-24.03	-13.69	-0.41		0				-1					
3.890	-13.49	-0.08	-31.56	-13.69	-0.41		0				-1					
4.440	-13.56	-0.18	-39.09	-13.69	-0.41		0				-1					
4.990	-13.69	-0.29	-46.62	-13.69	-0.41		0				-1					
						-3.29	0				2	3.67	0.45	500		
5.745	-13.98	-0.49	-59.02	-19.28	-0.41	-4.04	0				2	3.79	0.42	500		
				5.02			0				2	3.79	0.42	500	2	24.30
6.190	-14.23	-0.62	-57.58	1.42	-0.41	-4.49	0				2	3.85	0.39	500		
							0				2	3.57	0.39	1125		
6.855	-14.70	-0.80	-57.50	-1.29	-0.41		0				2	4.59	0.36	1125		
7.520	-15.30	-1.00	-59.44	-4.65	-0.41		0				2	5.51	0.34	1125		
8.226	-16.08	-1.21	-64.20	-8.96	-0.41		0				2	6.69	0.31	1125		
8.932	-17.01	-1.45	-72.29	-14.11	-0.41		0				2	7.90	0.28	1125		
9.639	-18.13	-1.72	-84.32	-20.08	-0.41		0				2	9.01	0.26	1125		
10.345	-19.45	-2.04	-100.83	-26.79	-0.41		0				2	9.98	0.24	1125		
				24.10			0				2	9.98	0.24	1125	4	50.89
11.183	-21.32	-2.42	-84.26	15.35	-0.41		0				2	10.92	0.22	1125		
12.020	-23.49	-2.75	-75.35	5.79	-0.41		0				1	11.90	0.19	1125		
12.882	-25.99	-3.06	-74.99	-5.17	-0.41		0				1	13.52	0.18	1125		
13.745	-28.78	-3.40	-84.68	-17.53	-0.41		0				1	15.13	0.16	1125		
				57.35			0				1	15.13	0.16	1125	5	74.88
14.583	-31.74	-3.66	-42.14	44.03	-0.41		0				1	16.70	0.14	1125		
15.420	-34.86	-3.76	-11.30	29.39	-0.41		0				2	18.27	0.13	1125		
16.283	-38.11	-3.77	7.05	12.93	-0.41		0				2	19.88	0.12	1125		
17.145	-41.34	-3.72	10.60	-4.92	-0.41		0				2	21.50	0.11	1125		
				100.73			0				2	21.50	0.11	1125	6	105.64
17.618	-43.08	-3.64	55.76	90.36	-0.41		0				2	22.39	0.10	1125		
18.090	-44.77	-3.47	95.92	79.57	-0.41		0				2	23.28	0.10	1125		
						-11.59	0				2	6.59	0.10	1625		
18.820	-47.15	-3.02	149.08	65.96	1.44	-12.32	0				2	6.77	0.09	1625		
19.405	-48.78	-2.54	184.36	54.58	2.96	-12.90	0				2	6.92	0.08	1625		
19.990	-50.10	-1.97	212.86	42.77	4.51	-13.49	0				2	7.06	0.08	1625		
							0				2	21.91	0.08	1625		
20.420	-50.85	-1.50	229.20	33.17	4.51		0				2	22.74	0.07	1625		
							0				2	22.74	0.07	1625	9	0.00
20.983	-51.50	-0.84	244.20	20.08	4.51		0				2	23.82	0.07	1625		
21.545	-51.78	-0.15	251.67	6.37	4.51		0				2	24.91	0.07	1625		
22.108	-51.67	0.55	251.25	-7.95	4.51		0				2	26.00	0.06	1625		
22.670	-51.17	1.24	242.61	-22.88	4.51		0				2	27.09	0.06	1625		
							0				2	27.09	0.06	1625	8	0.00
23.220	-50.31	1.87	225.88	-38.07	4.51		0				2	28.15	0.06	1625		
							0				2	28.15	0.06	1625	7	0.00
23.320	-50.12	1.98	221.93	-40.89	4.51		0				2	28.34	0.06	1625		
							2	30.33		3043	2	28.34	0.06	1625		
23.913	-48.76	2.60	198.05	-39.71	4.51		2	31.48		3043	2	29.49	0.05	1625		
24.505	-47.05	3.14	174.87	-38.53	4.51		2	32.63		3043	2	30.64	0.05	1625		
25.097	-45.05	3.62	152.39	-37.35	4.51		2	33.78		3043	2	31.78	0.05	1625		
25.690	-42.78	4.03	130.61	-36.17	4.51		2	34.93		3043	2	32.93	0.04	1625		

PHASE 14 (CONTINUATION)

LEVEL	DISPL.	ROTAT.	MOMENT	SH.FO.	VERT.EF	SH.LOAD	STATE	PRE.	SURCH.	ELAST.	STATE	PRE.	SURCH.	ELAST.	No	LOAD
						-15.36	2	13.32		3204	2	7.64	0.04	2375		
26.440	-39.59	4.46	101.08	-42.16	2.49	-14.34	2	16.00		3204	2	7.97	0.04	2375		
27.190	-36.11	4.78	68.00	-45.63	-0.22	-13.32	2	18.68		3204	2	8.30	0.04	2375		
27.940	-32.45	4.96	33.26	-46.58	-3.62	-12.30	2	21.36		3204	2	8.63	0.04	2375		
28.690	-28.70	5.02	-1.24	-45.00	-7.72	-11.29	2	24.04		3204	2	8.97	0.03	2375		
29.440	-24.95	4.96	-33.61	-40.90	-12.50	-10.27	3	26.72		3204	1	9.30	0.03	2375		
30.190	-21.30	4.78	-61.96	-34.27	-17.98	-9.25	3	29.40		3204	1	9.63	0.03	2375		
30.940	-17.81	4.51	-84.39	-25.12	-24.14	-8.23	3	32.07		3204	1	9.96	0.03	2375		
31.690	-14.56	4.16	-99.01	-13.45	-31.00	-7.21	3	34.75		3204	1	10.29	0.03	2375		
							3	38.66		4216	1	9.87	0.03	3125		
32.345	-11.94	3.83	-102.96	1.74	-38.97	-6.32	3	41.28		4216	1	10.15	0.03	3125		
33.000	-9.53	3.51	-96.45	18.23	-46.32	-5.43	2	41.40		4216	1	10.43	0.02	3125		
							3	25.34		3125	1	10.43	0.02	3125		
33.623	-7.43	3.23	-83.28	24.05	-49.22	-4.59	2	24.52		3125	1	10.70	0.02	3125		
34.245	-5.50	3.00	-66.87	28.12	-49.46	-3.74	2	18.54		3125	1	10.96	0.02	3125		
34.868	-3.69	2.82	-48.94	28.96	-47.38	-2.90	2	12.96		3125	1	11.23	0.02	3125		
35.490	-1.97	2.70	-31.65	25.79	-45.80	-2.05	2	7.66		3125	2	14.63	0.02	3125		
							2	26.02		12500	1	5.65	0.02	12500		
36.245	0.04	2.62	-10.64	24.99	-45.04	-1.03	2	1.13		12500	2	20.52	0.02	12500		
37.000	2.01	2.61	0.00	0.00	-45.04		-1				2	45.78	0.02	12500		
m	mm rd/1000	m.T/m	T/m	T/m	T/m2		T/m2	T/m2	T/m3		T/m2	T/m2	T/m3		T	

MAXIMUM DISPLACEMENT = -51.78 mm
MAXIMUM MOMENT = 251.67 m.T/m
VERTICAL REACTION IN FOOT = 45.04 T/m

CODIFICATION OF STATE : -1 = SEPARATION, 0 = EXCAVATION, 1 = ACTIVE PR., 2 = ELASTIC
CODIFICATION OF SOIL : 1 = ACTIVE PR., 2 = ELASTIC, 3 = PASSIVE PR.

(4 IT.)

(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 1 = 0.717 = (330.64 T/m)/(461.16 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE
(EFFECTIVE REACTION)/(PASSIVE REACTION) RATIO FOR SOIL No 2 = 0.097 = (470.40 T/m)/(4834.25 T/m) WITHOUT INTEREST
WITHOUT INTEREST BECAUSE IN WHOLE OR IN PART THE SOIL PRESSURE < THE AT REST SOIL PRESSURE

INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 1 = 0.00 T/m
INTEGRATED HORIZONTAL EFFECT OF SURCHARGES ON THE SOIL 2 = 5.68 T/m

*** END OF CALCULUS

ENVELOPE CURVES FROM PHASE 1 TO PHASE 14

LEVEL	MINI MOMENT	MAXI MOMENT	MINI SH.FO.	MAXI SH.FO.
0.000	0.00	0.00	0.00	0.00
0.100	-0.01	0.00	-0.12	0.00
	-0.01	0.00	-0.12	0.77
0.900	-1.04	0.31	-2.95	0.00
1.700	-5.13	0.00	-7.30	0.00
1.850	-6.29	0.00	-8.13	0.00
	-6.29	0.00	-8.13	4.99
2.500	-12.79	0.87	-11.91	3.46
2.790	-16.50	1.76	-13.69	2.61
3.340	-24.03	3.19	-13.69	2.61
3.890	-31.56	4.63	-13.69	2.61
4.440	-39.09	6.07	-13.69	2.61
4.990	-46.62	7.50	-13.69	2.61
5.745	-59.02	7.74	-19.28	1.76
	-59.02	7.74	-2.09	20.52
6.190	-57.58	6.13	-5.19	17.42
6.855	-57.50	2.36	-8.17	16.29
7.520	-59.44	11.93	-12.27	14.34
8.226	-64.20	20.36	-8.96	11.38
8.932	-72.29	26.37	-14.11	7.49
9.639	-84.32	29.31	-20.08	3.58
10.345	-100.83	28.52	-26.79	5.79
	-100.83	28.52	-4.06	47.09
11.183	-84.26	43.32	-12.07	39.08
12.020	-75.35	66.46	-21.39	29.76
12.882	-74.99	81.55	-13.55	18.80
13.745	-84.68	86.58	-17.53	6.46
	-84.68	86.58	-6.77	58.47
14.583	-42.14	99.33	-13.78	45.14

15.420	-19.99	131.10	-28.43	30.50
16.283	-19.13	150.41	-26.08	14.05
17.145	-18.25	154.93	-23.72	0.51
	-18.25	154.93	-23.72	100.73
17.618	-18.24	150.70	-22.43	90.36
18.090	-18.83	141.47	-24.96	79.57
18.820	-18.90	149.08	-38.56	65.96
19.405	-29.95	184.36	-47.91	54.58
19.990	-38.25	212.86	-53.60	42.77
20.420	-41.91	229.20	-49.03	33.17
20.983	-43.19	244.20	-43.04	20.08
21.545	-41.46	251.67	-37.05	6.89
22.108	-37.70	251.25	-31.06	7.95
22.670	-42.44	242.61	-25.07	9.25
23.220	-54.62	225.88	-38.07	9.22
23.320	-56.49	221.93	-40.89	9.08
23.913	-65.36	198.05	-39.71	7.52
24.505	-70.52	174.87	-38.53	4.73
25.097	-72.37	152.39	-37.35	0.81
25.690	-72.49	130.61	-36.17	0.26
26.440	-69.84	101.08	-42.16	6.39
27.190	-63.44	68.00	-45.63	10.36
27.940	-54.73	33.26	-46.58	12.62
28.690	-44.84	0.00	-45.00	13.56
29.440	-34.64	0.00	-40.90	13.51
30.190	-61.96	0.00	-34.27	12.74
30.940	-84.39	0.00	-25.12	11.15
31.690	-99.01	1.66	-13.45	8.54

32.345	-102.96	4.00	0.00	8.55
33.000	-96.45	6.57	0.00	18.23
33.623	-83.28	8.39	0.00	24.05
34.245	-66.87	8.79	-0.72	28.12
34.868	-48.94	7.80	-4.06	28.96
35.490	-31.65	4.01	-8.85	25.79
36.245	-10.64	0.29	-1.77	24.99
37.000	0.00	0.00	0.00	0.00
m	m.T/m	m.T/m	T/m	T/m

SOIL 1 MAXIMUM (EFFECTIVE REACTION)/(PASSIVE REACTION) IN PHASE No 11 = 0.365 IN FINAL PHASE No 14 NOT APPLICABLE
SOIL 2 MAXIMUM (EFFECTIVE REACTION)/(PASSIVE REACTION) IN PHASE No 1 = 0.157 IN FINAL PHASE No 14 NOT APPLICABLE

ENVELOPE CURVES FROM PHASE 1 TO PHASE 14

(the totality of the phases)

LEVEL	MINI MOMENT	MAXI MOMENT	MINI SH.FO.	MAXI SH.FO.
0.000	0.00	0.00	0.00	0.00
0.100	-0.01	0.00	-0.12	0.00
	-0.01	0.00	-0.12	0.77
0.900	-1.04	0.31	-2.95	0.00
1.700	-5.13	0.00	-7.30	0.00
1.850	-6.29	0.00	-8.13	0.00
	-6.29	0.00	-8.13	4.99
2.500	-12.79	0.87	-11.91	3.46
2.790	-16.50	1.76	-13.69	2.61
3.340	-24.03	3.19	-13.69	2.61
3.890	-31.56	4.63	-13.69	2.61
4.440	-39.09	6.07	-13.69	2.61
4.990	-46.62	7.50	-13.69	2.61
5.745	-59.02	7.74	-19.28	1.76
	-59.02	7.74	-2.09	20.52
6.190	-57.58	6.13	-5.19	17.42
6.855	-57.50	2.36	-8.17	16.29
7.520	-59.44	11.93	-12.27	14.34
8.226	-64.20	20.36	-8.96	11.38
8.932	-72.29	26.37	-14.11	7.49
9.639	-84.32	29.31	-20.08	3.58
10.345	-100.83	28.52	-26.79	5.79
	-100.83	28.52	-4.06	47.09
11.183	-84.26	43.32	-12.07	39.08
12.020	-75.35	66.46	-21.39	29.76
12.882	-74.99	81.55	-13.55	18.80
13.745	-84.68	86.58	-17.53	6.46
	-84.68	86.58	-6.77	58.47
14.583	-42.14	99.33	-13.78	45.14
15.420	-19.99	131.10	-28.43	30.50
16.283	-19.13	150.41	-26.08	14.05
17.145	-18.25	154.93	-23.72	0.51
	-18.25	154.93	-23.72	100.73

17.618	-18.24	150.70	-22.43	90.36
18.090	-18.83	141.47	-24.96	79.57
18.820	-18.90	149.08	-38.56	65.96
19.405	-29.95	184.36	-47.91	54.58
19.990	-38.25	212.86	-53.60	42.77
20.420	-41.91	229.20	-49.03	33.17
20.983	-43.19	244.20	-43.04	20.08
21.545	-41.46	251.67	-37.05	6.89
22.108	-37.70	251.25	-31.06	7.95
22.670	-42.44	242.61	-25.07	9.25
23.220	-54.62	225.88	-38.07	9.22
23.320	-56.49	221.93	-40.89	9.08
23.913	-65.36	198.05	-39.71	7.52
24.505	-70.52	174.87	-38.53	4.73
25.097	-72.37	152.39	-37.35	0.81
25.690	-72.49	130.61	-36.17	0.26
26.440	-69.84	101.08	-42.16	6.39
27.190	-63.44	68.00	-45.63	10.36
27.940	-54.73	33.26	-46.58	12.62
28.690	-44.84	0.00	-45.00	13.56
29.440	-34.64	0.00	-40.90	13.51
30.190	-61.96	0.00	-34.27	12.74
30.940	-84.39	0.00	-25.12	11.15
31.690	-99.01	1.66	-13.45	8.54

32.345	-102.96	4.00	0.00	8.55
33.000	-96.45	6.57	0.00	18.23
33.623	-83.28	8.39	0.00	24.05
34.245	-66.87	8.79	-0.72	28.12
34.868	-48.94	7.80	-4.06	28.96
35.490	-31.65	4.01	-8.85	25.79
36.245	-10.64	0.29	-1.77	24.99
37.000	0.00	0.00	0.00	0.00
m	m.T/m	m.T/m	T/m	T/m

SOIL 1 MAXIMUM (EFFECTIVE REACTION)/(PASSIVE REACTION) IN PHASE No 11 = 0.365 IN FINAL PHASE No 14 NOT APPLICABLE
SOIL 2 MAXIMUM (EFFECTIVE REACTION)/(PASSIVE REACTION) IN PHASE No 1 = 0.157 IN FINAL PHASE No 14 NOT APPLICABLE

IN WHAT FOLLOWS THE NUMBERS OF PHASE ARE THE ONES PHASES OF CALCULUS

FOR THE WORKING PHASES :

MAXIMUM DISPLACEMENT IN PHASE No 13 = -51.78 mm IN FINAL PHASE No 14 = -51.78 mm
MAXIMUM MOMENT IN PHASE No 13 = 251.67 m.T/m IN FINAL PHASE No 14 = 251.67 m.T/m

STRUT/ANCHOR		PRELOAD		MAXIMUM		FINAL STATE	
NUMBER	LEVEL	PHASE	FORCE	PHASE	FORCE	PHASE	FORCE	GLIDING
1	1.85	2	30.00	4	55.43	5	REMOVED	
2	5.74	4	0.00	9	33.48	14	24.30	0.00
3	0.10	6	0.00	8	0.85	14	0.85	0.00
4	10.35	8	0.00	11	58.55	14	50.89	0.00
5	13.74	10	0.00	14	74.88	14	74.88	0.00
6	17.15	12	0.00	13	105.64	14	105.64	0.00
m		T		T		T		mm