

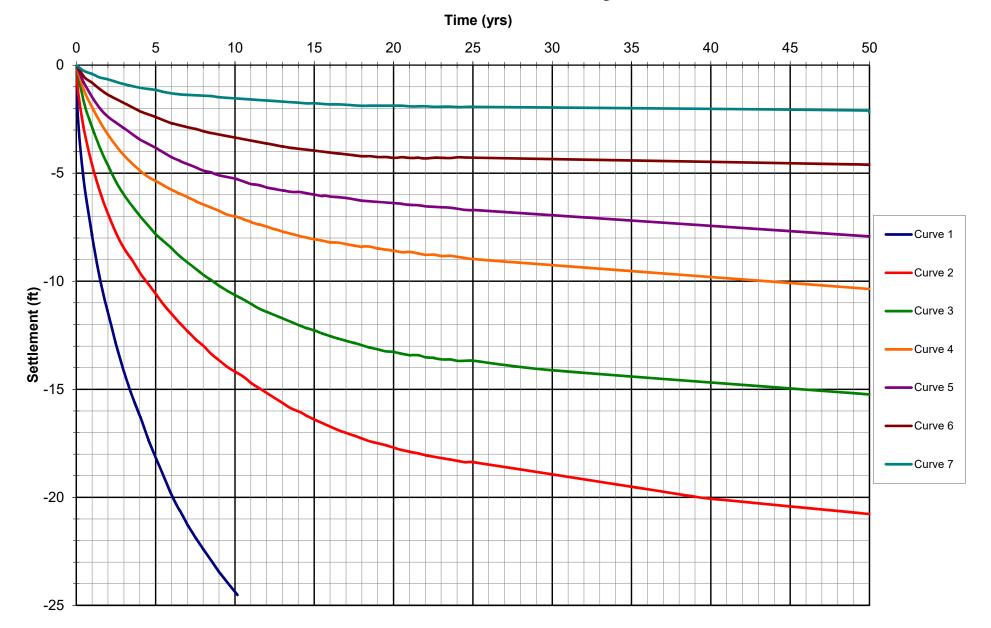
# Upper Barataria Basin, Louisiana Feasibility Report

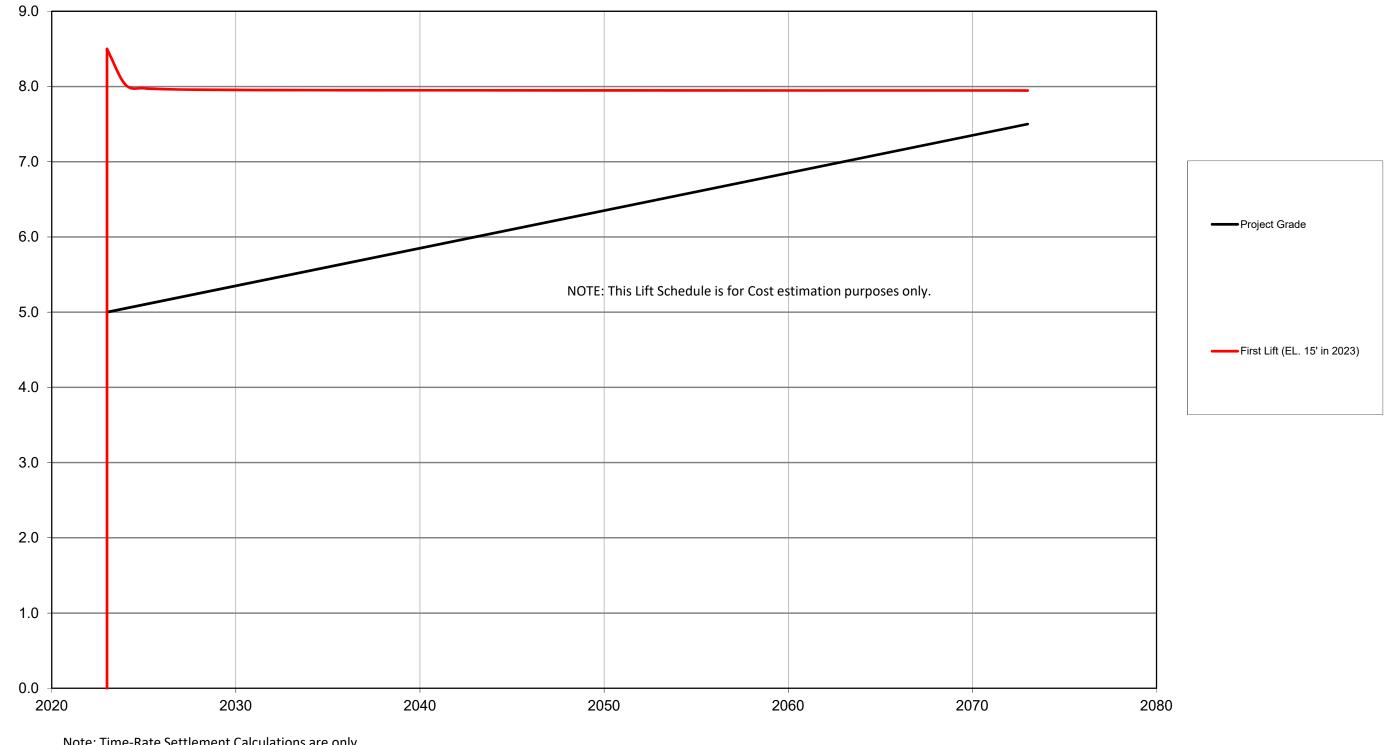


Appendix A: Annex 2 – Final Screening Phase: Geotechnical Drawings

December 2021

# Upper Barataria Basin, LA - Feasibilty Study Settlement - USACE Family of Curves



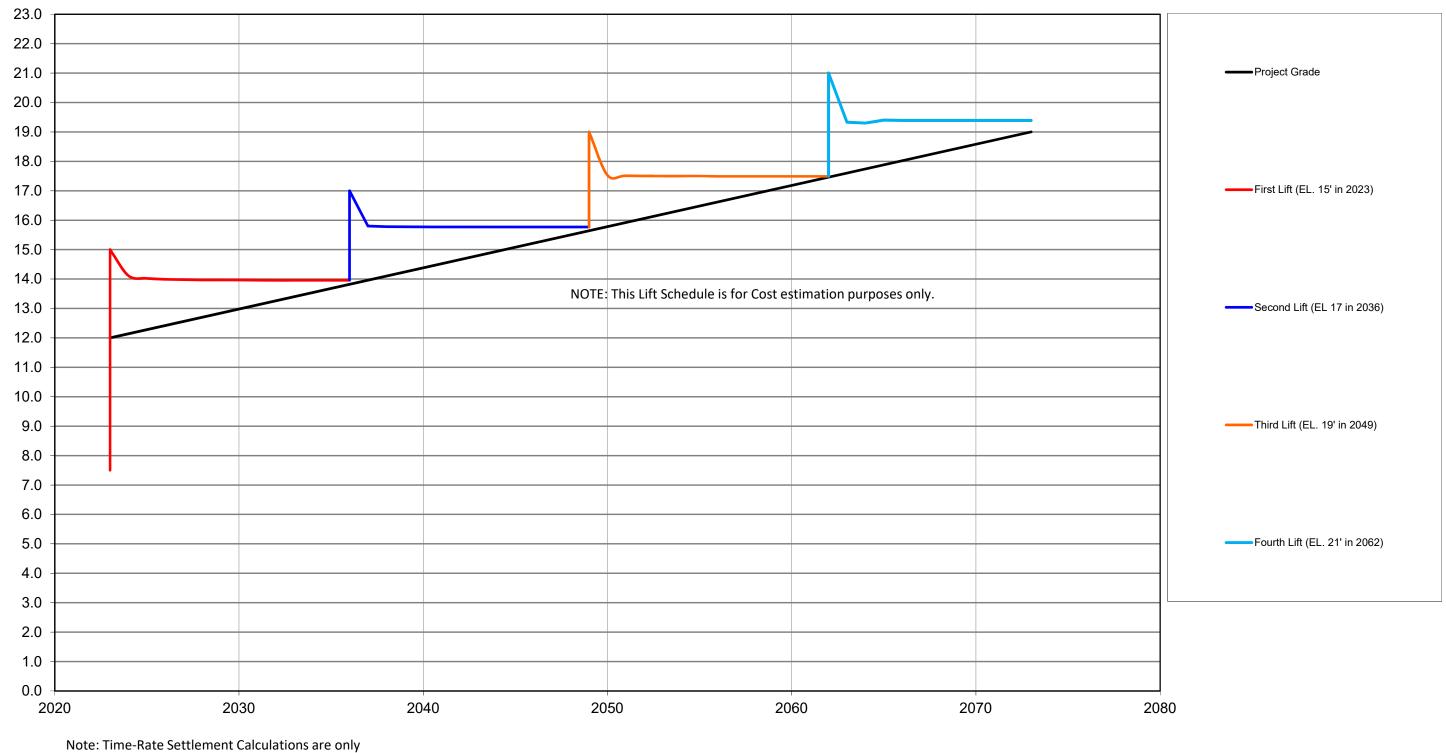


Note: Time-Rate Settlement Calculations are only an estimate. Time-Rate Settlement may vary from what is shown and is only developed for planning purposes.

Year

# Elevation (ft) NAVD 88

Upper Barataria Basin Lift Schedule for Alternatives 1, 3, and 5

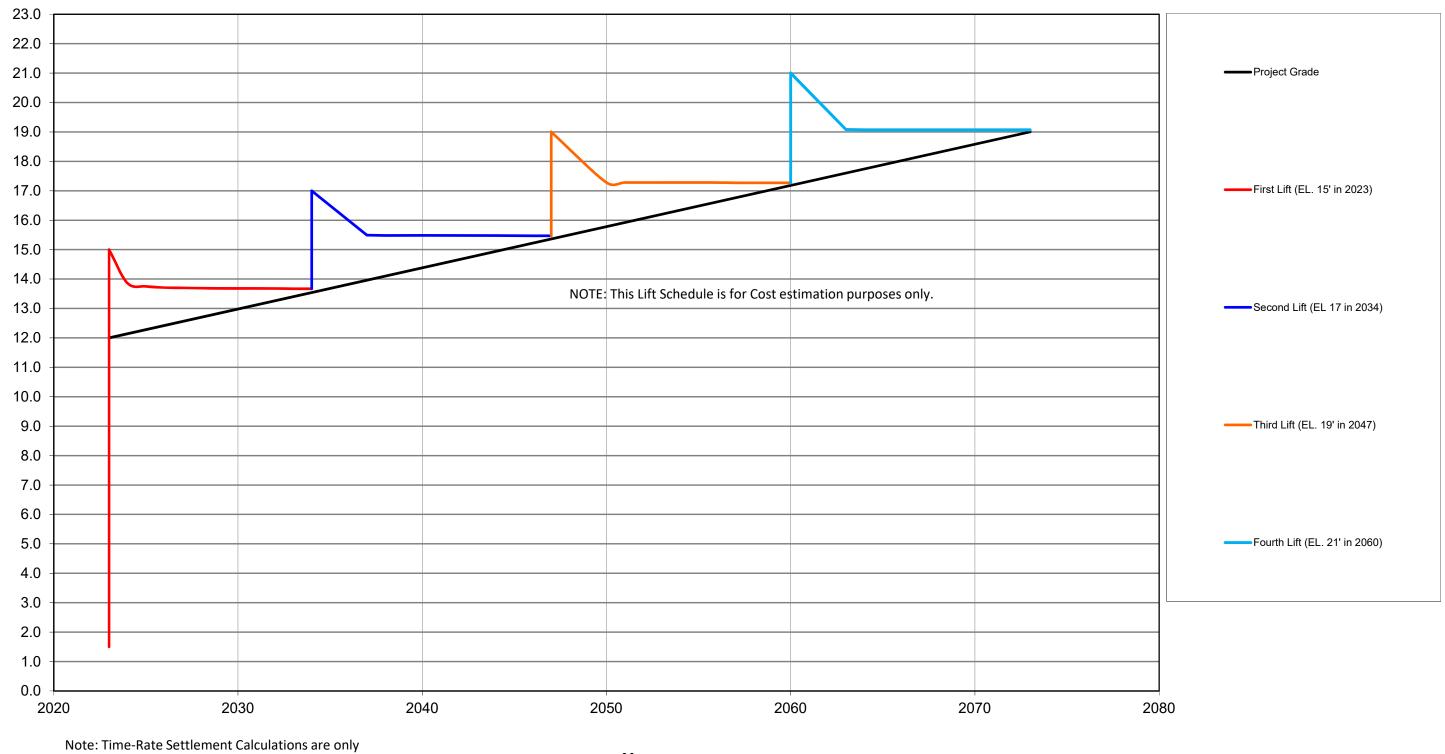


## Upper Barataria Basin Lift Schedule - Alternative 6 Reaches A, B and C

Note: Time-Rate Settlement Calculations are only an estimate. Time-Rate Settlement may vary from what is shown and is only developed for planning purposes.

Year

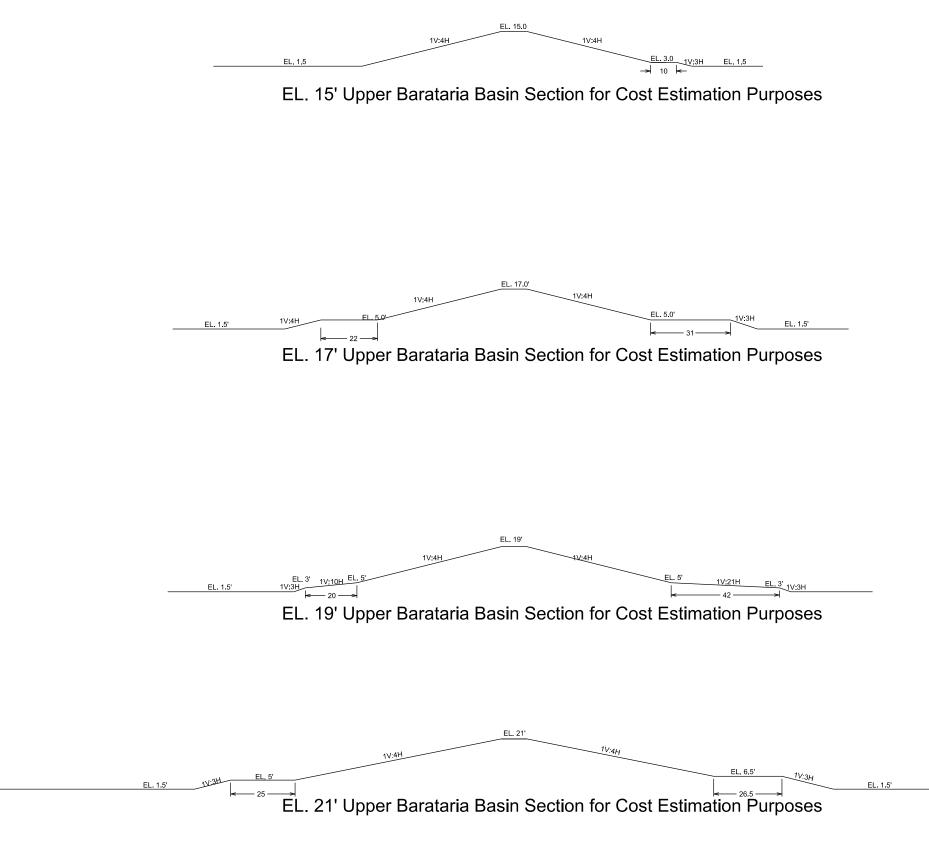
Elevation (ft) NAVD 88



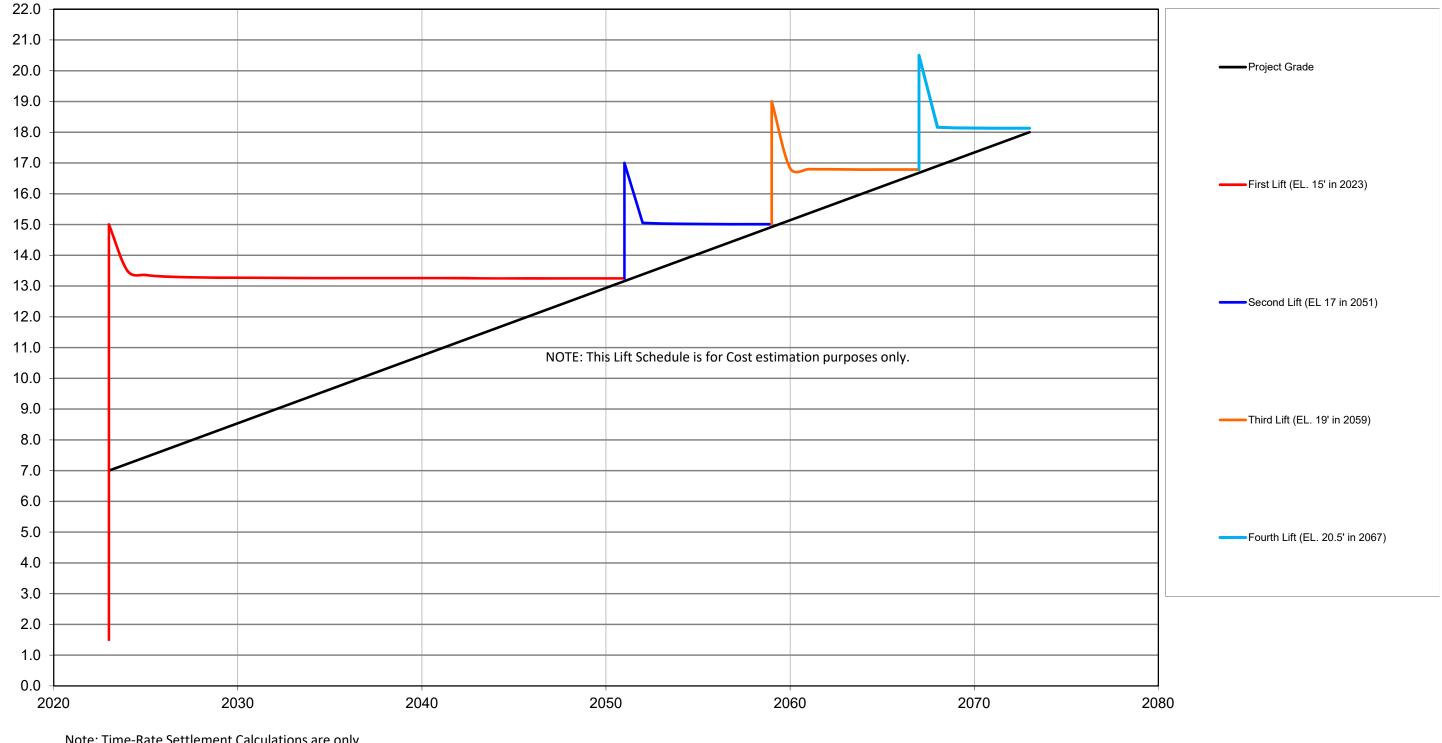
## Upper Barataria Basin Lift Schedule - Alternative 6 - Reaches D, E, F, G, H and K

Note: Time-Rate Settlement Calculations are only an estimate. Time-Rate Settlement may vary from what is shown and is only developed for planning purposes.

Year



Alternative 6 - Reaches A, B, C, D, E, F, G, H, and K

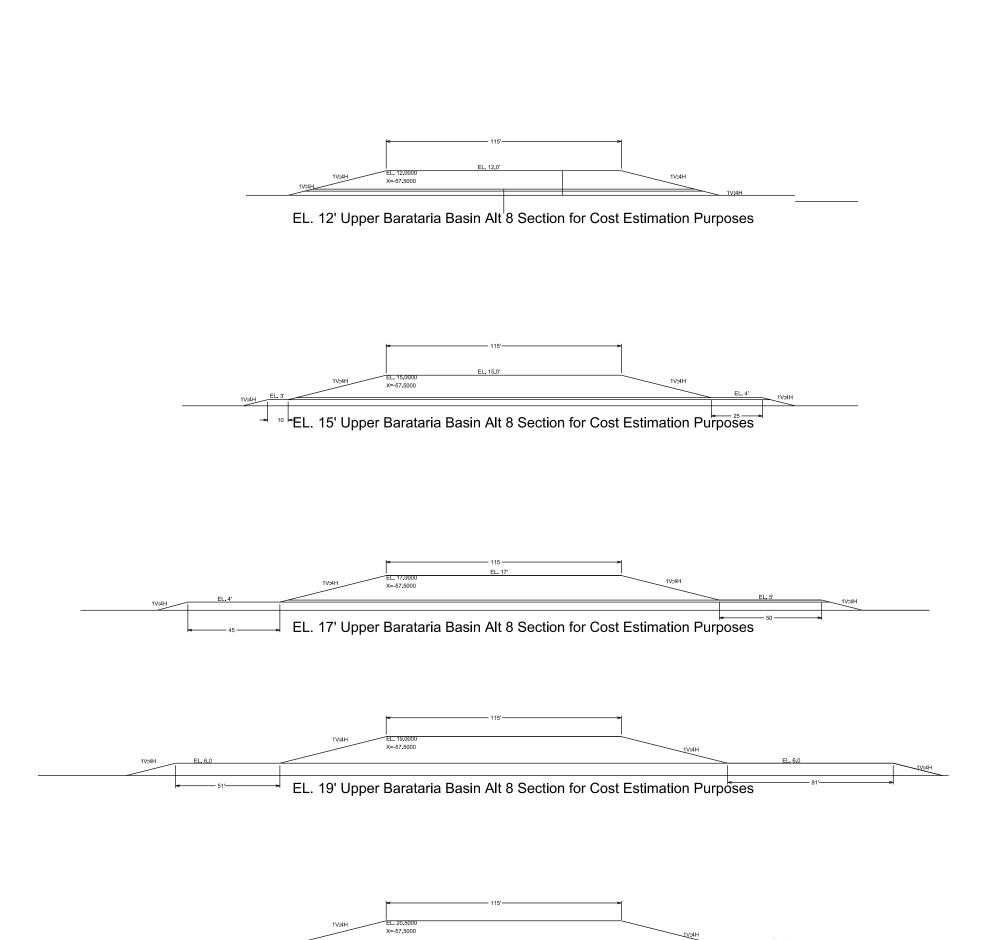


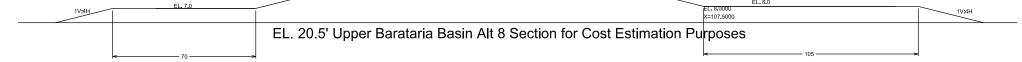
Note: Time-Rate Settlement Calculations are only an estimate. Time-Rate Settlement may vary from what is shown and is only developed for planning purposes.

Year

# Elevation (ft) NAVD 88

#### Upper Barataria Basin Lift Schedule For Alternative 8 - Highway

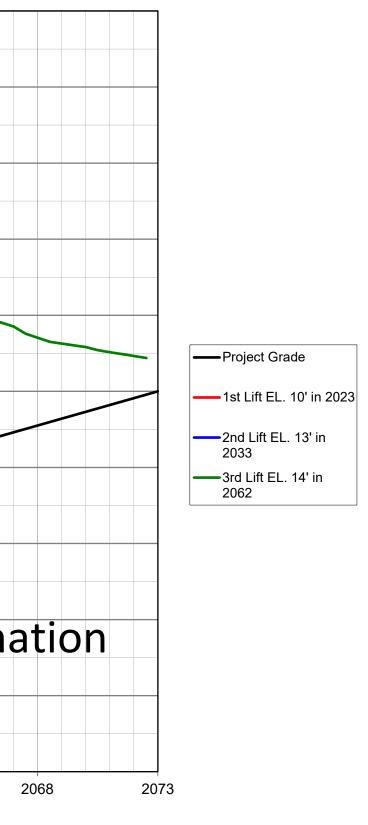




# Alternative 8 - Reaches G, H, and I

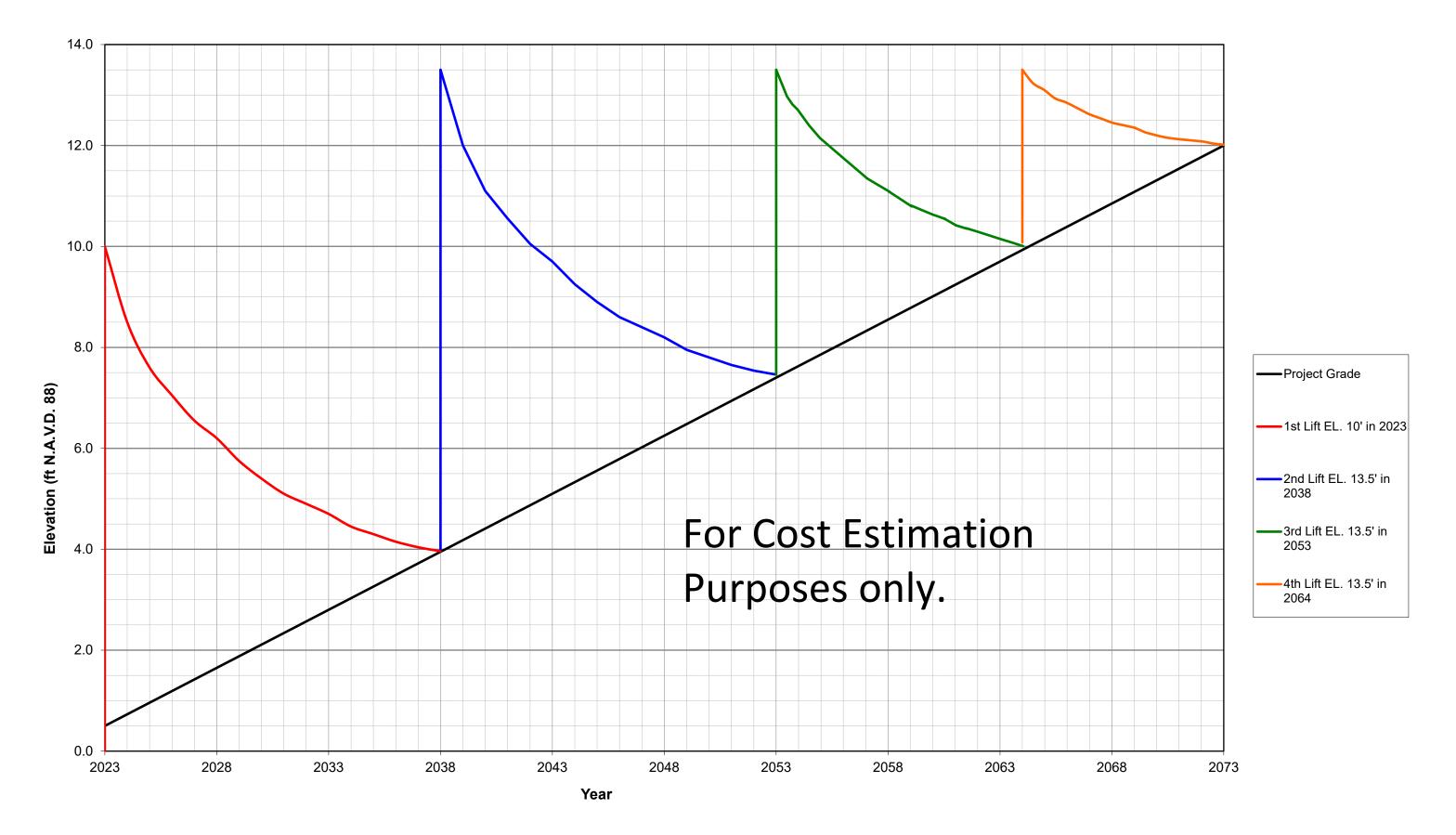
17.0 16.0 15.0 14.0 13.0 Elevation (ft N.A.V.D. 88) 12.0 11.0 10.0 9.0 This curve is for cost estimation purposes only. 8.0 7.0 2023 2028 2033 2038 2043 2048 2053 2058 2063 Year

Alternative 10 Upper Barataria Basin Reaches A,B and C- Lift Schedule

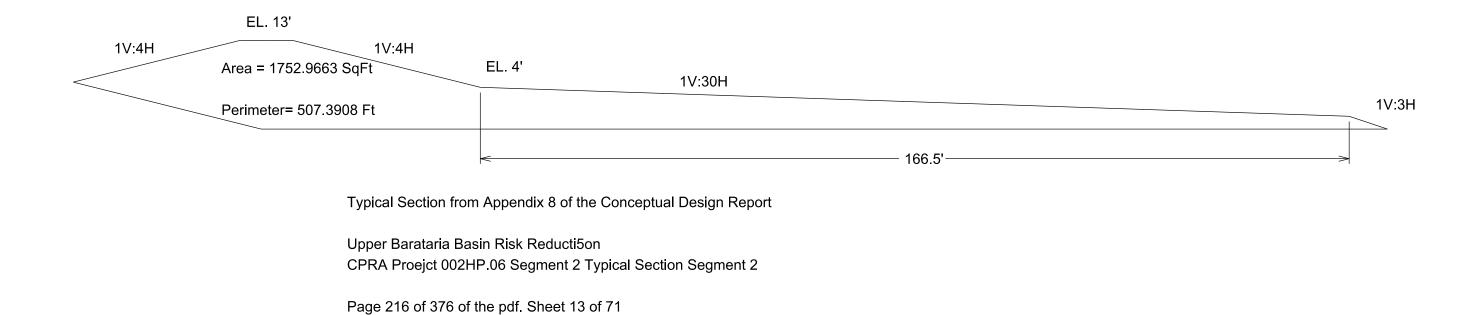


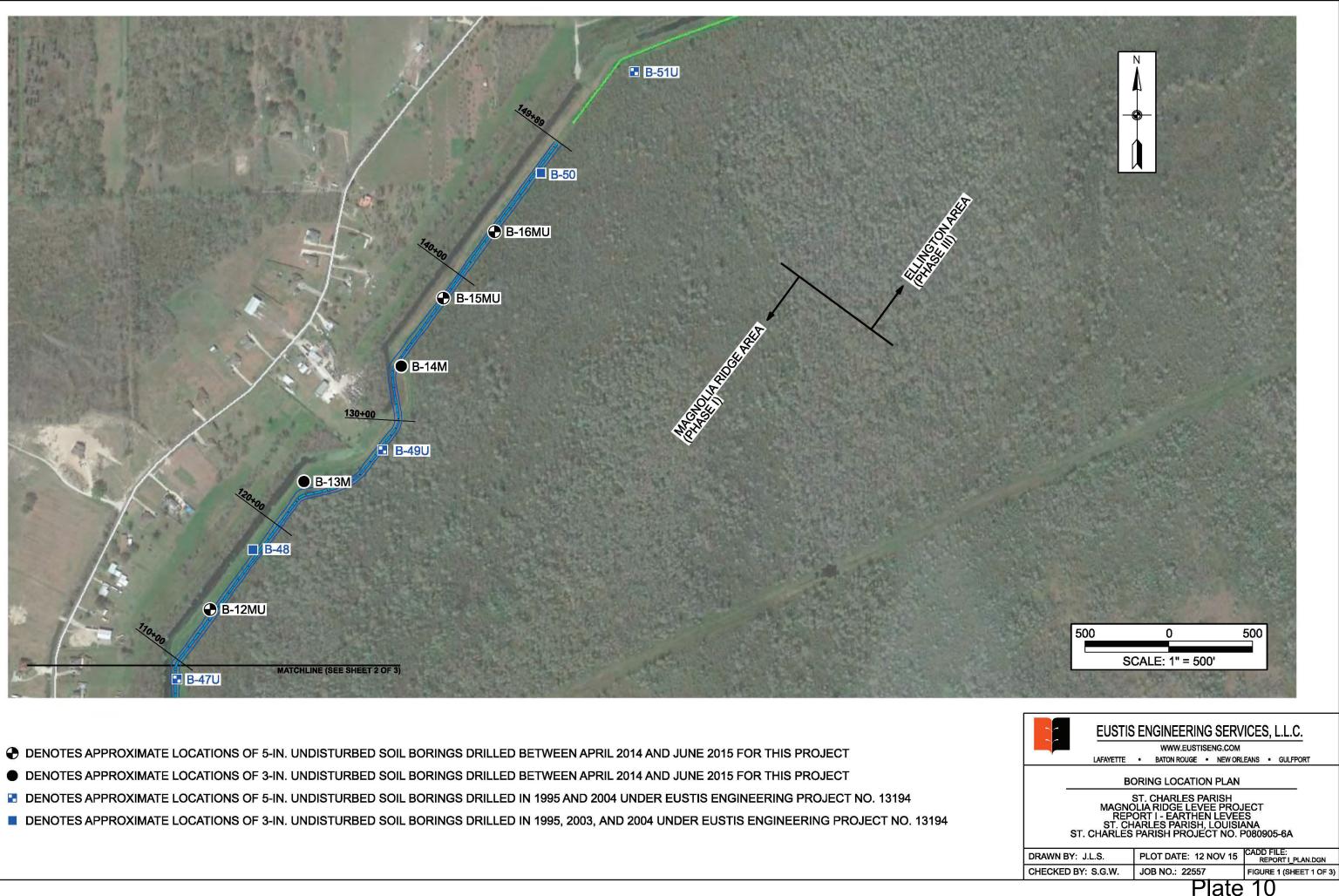
Alternative 10

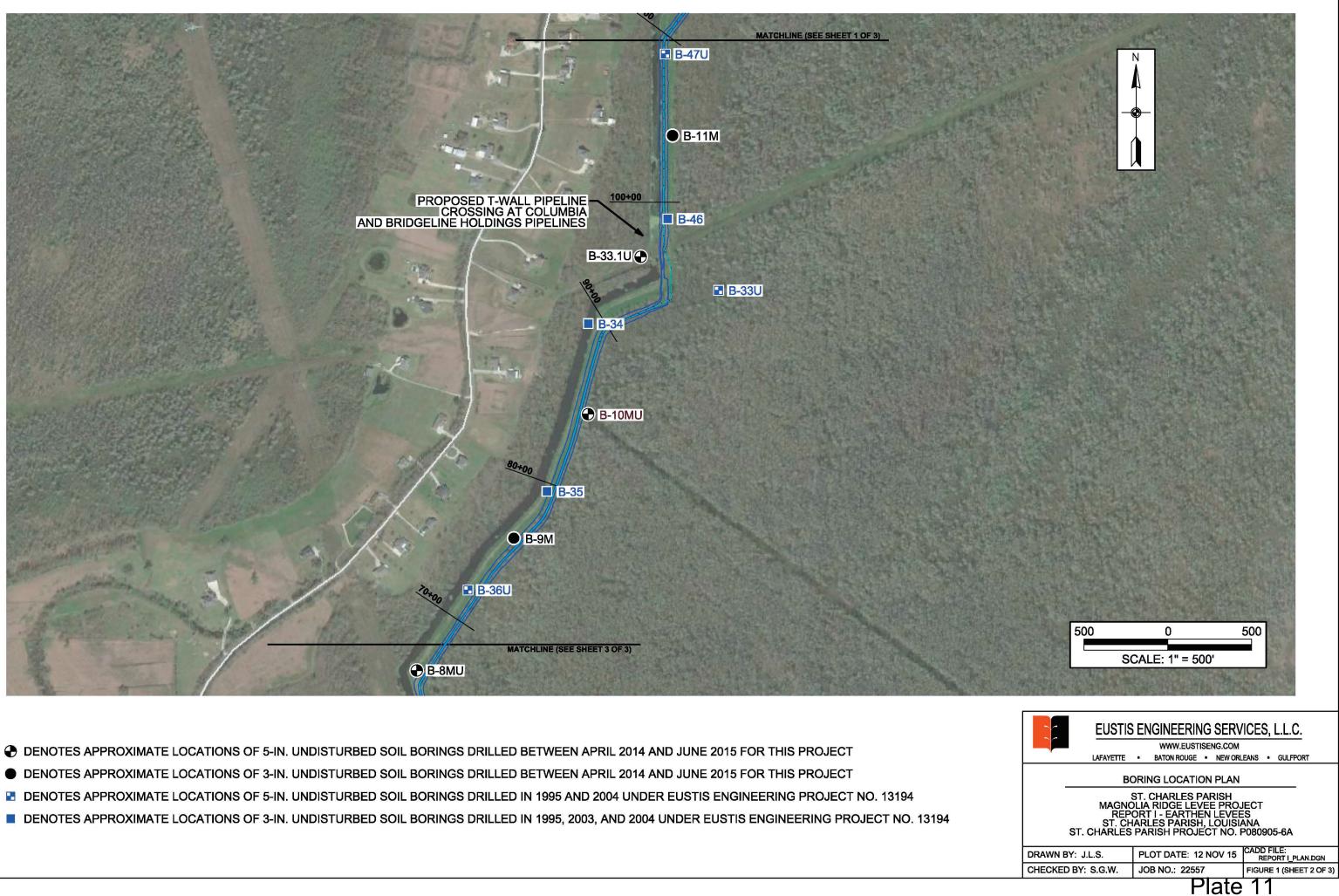
### Upper Barataria Basin Reaches D to F - Lift Schedule

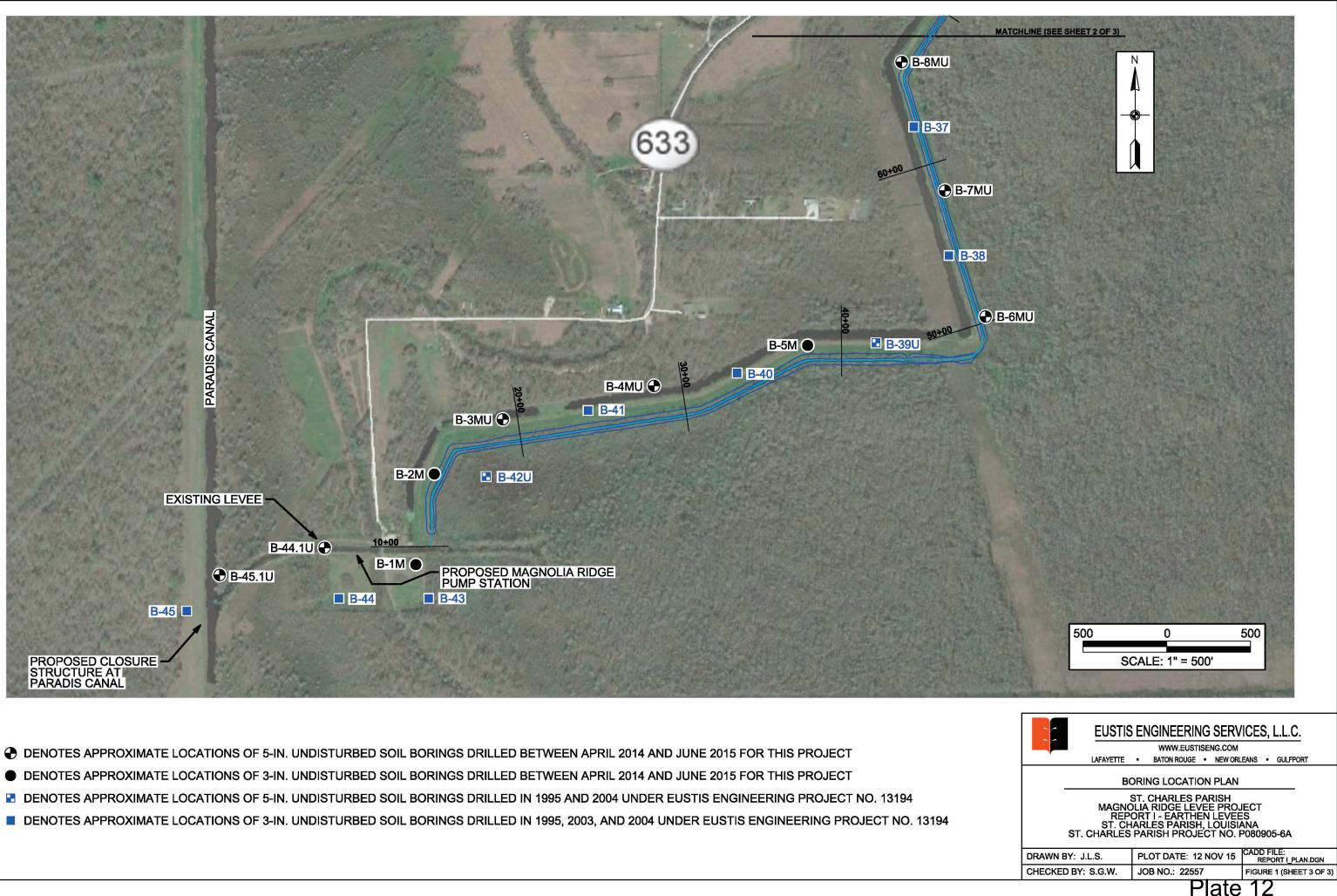


Typical Section used in the cost estimate to compare an alternative with a flood wall to a levee alternative

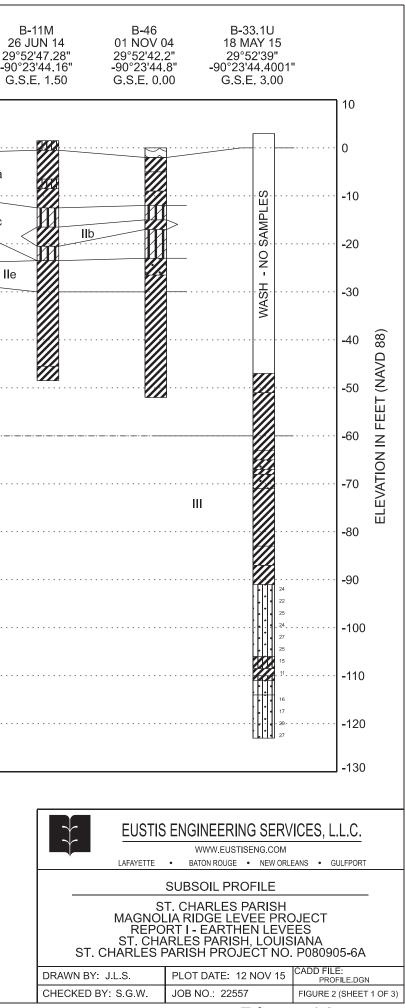


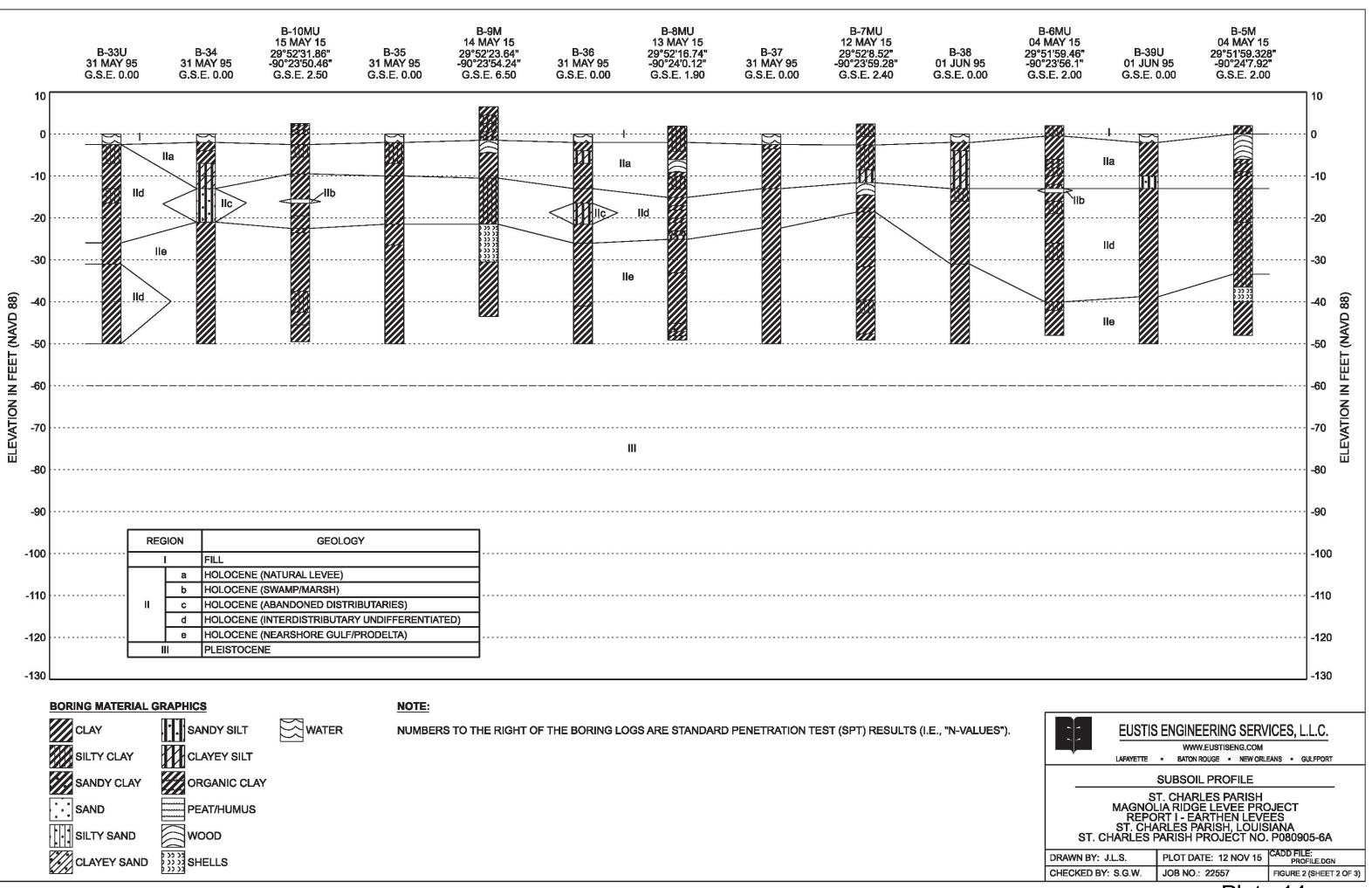


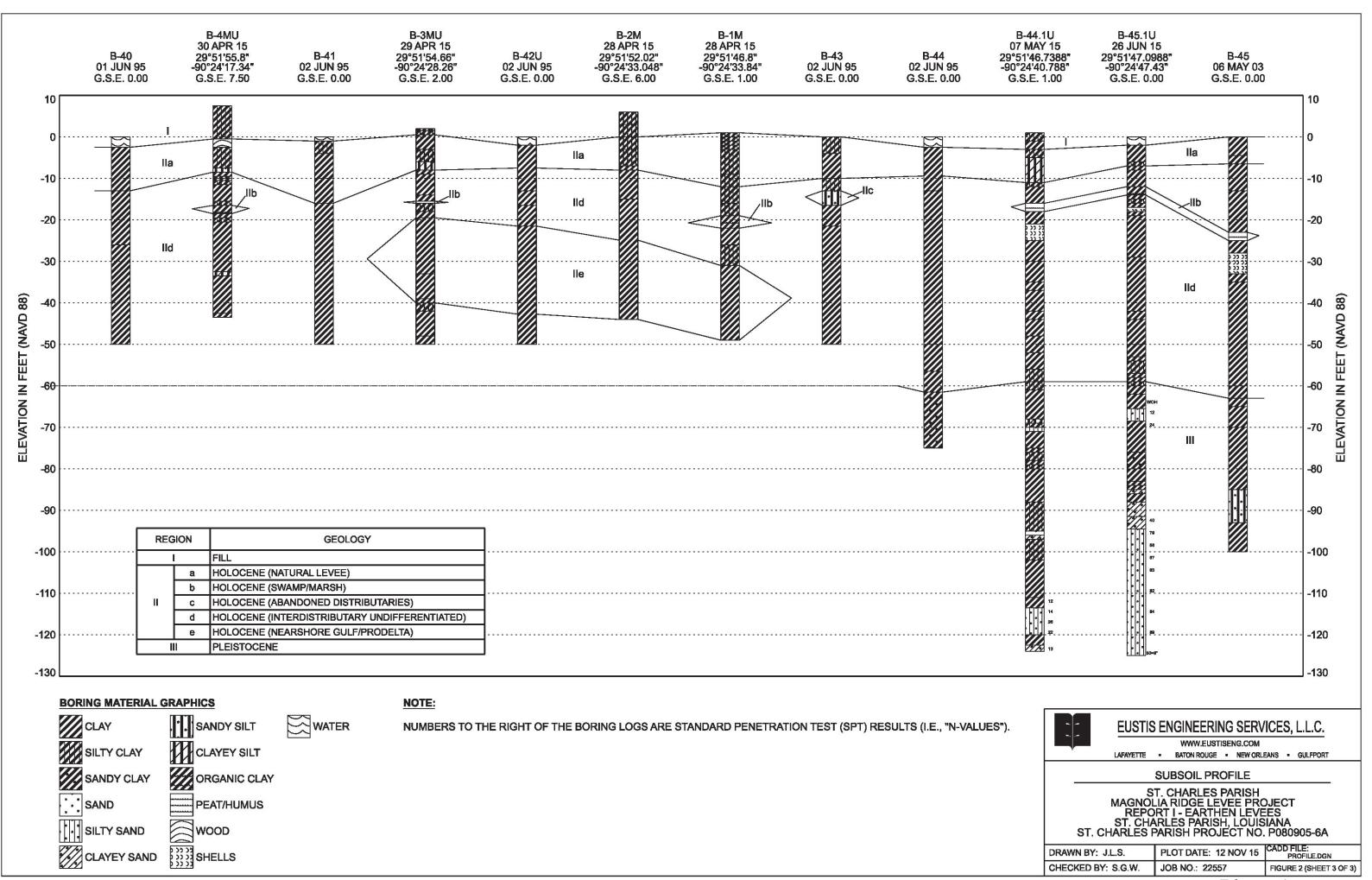


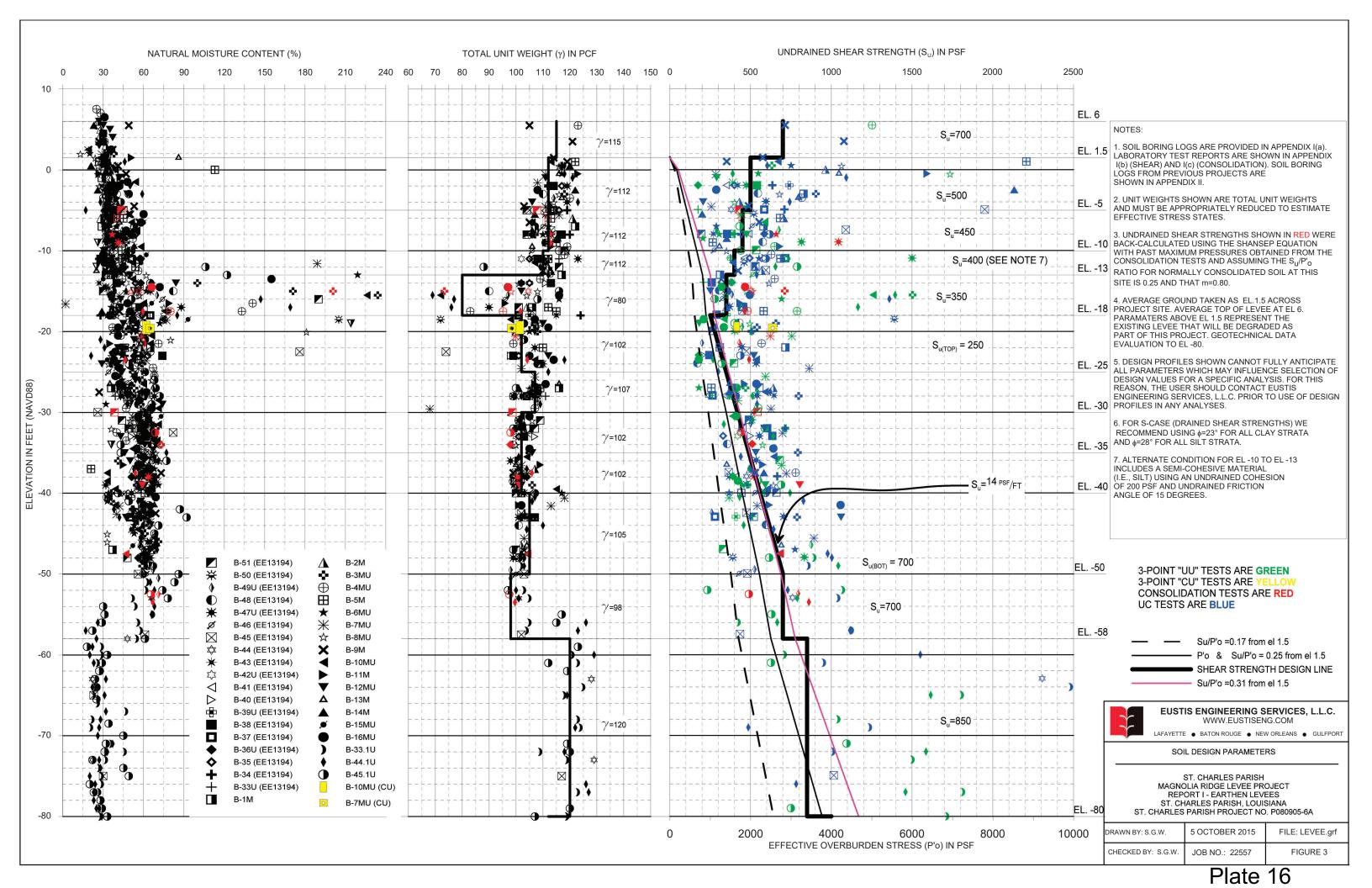


	B-51 04 NOV 04 29°53'28.98" -90°23'9.96" G.S.E. 0.00	02 N 29°5 -90°	3-50 NOV 04 53'25.8" °23'17" .E. 0.00	B-16MU 16 JUN 14 29°53'18.78" -90°23'22.26" G.S.E. 6.50	B-15MU 17 JUN 14 29°53'15.12" -90°23'25.92" G.S.E. 1.50	B-14M 18 JUN 14 29°33'28.8" -90°23'29.4" G.S.E. 5.50	B-49U 01 NOV 04 29°53'5.6" -90°23'30.4" G.S.E. 0.00	B-13M 19 JUN 14 29°53'4.02" -90°23'35.82" G.S.E. 1.50	B-48 29 OCT 04 29°52'59.6" -90°23'38.6" G.S.E. 0.00	B-12MU 25 JUN 14 29°52'56.58" -90°23'41.88" G.S.E. 6.00	B-47U 01 NOV 04 29°52'58.2" -90°23'43.9" G.S.E. 0.00
10 0 -10 -20 -30 -40 -50 -60 -70 -80 -80		IIa IIc IIb IIe IId					I Ila Ilc Ild Ild				I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
-90 -100		REGION	FILL	GEC	DLOGY						
-110		a b II c	HOLOCE HOLOCE HOLOCE	NE (NATURAL LEVEI NE (SWAMP/MARSH NE (ABANDONED DI	) STRIBUTARIES)						
-120		d e		NE (NEARSHORE G	ITARY UNDIFFERENT ULF/PRODELTA)	(IATED)					
-130											
	BORING MATERIA CLAY SILTY CLAY SANDY CLAY SAND SILTY SAND		SANDY SIL	.T CLAY	<u>NOTE:</u> R NUMB		IT OF THE BORING L	LOGS ARE STANDA	RD PENETRATION	TEST (SPT) RESUL	.TS (I.E., "N-VALUES").

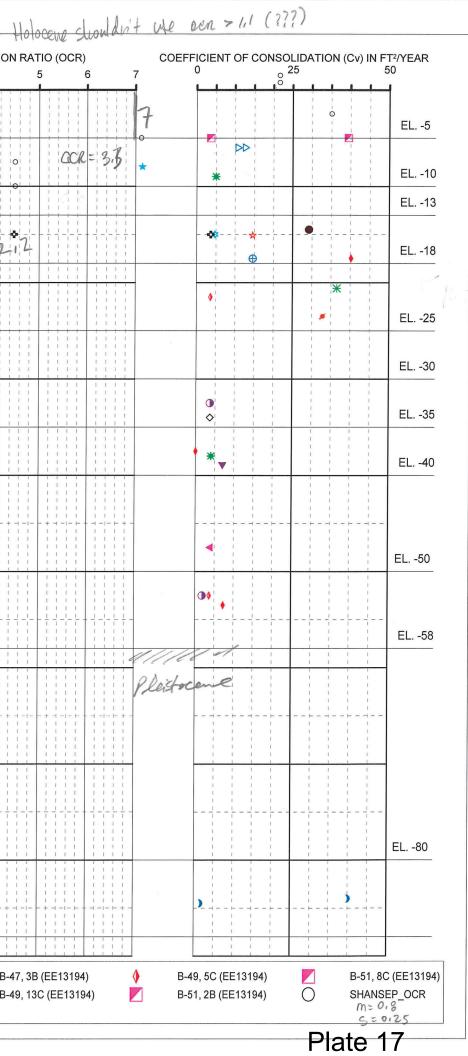








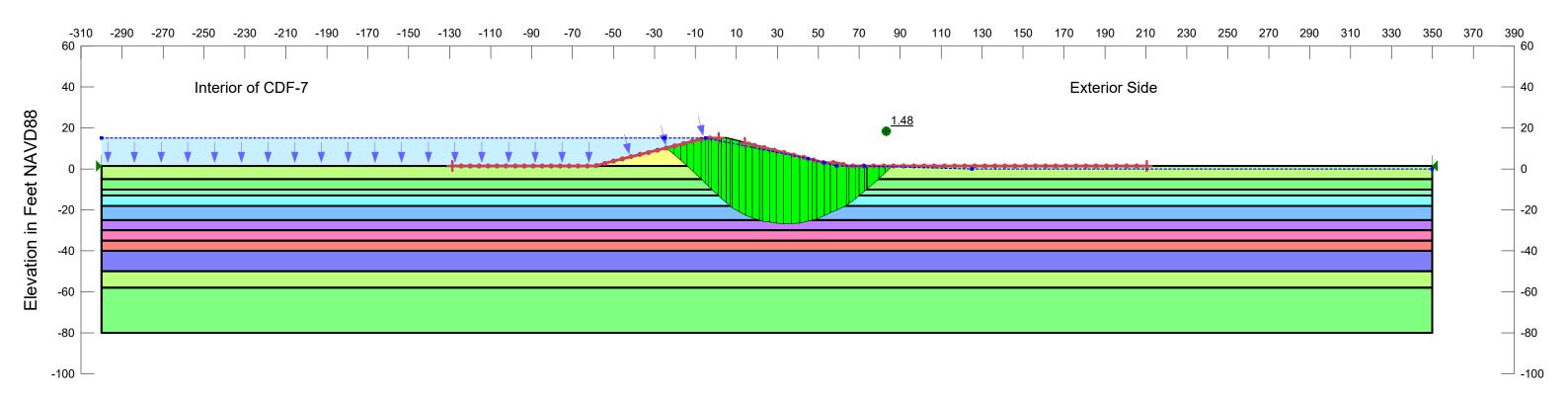
<u>-90</u>	B-3MU B-4MU	J, 6B	₩	B-7				B-12N	лU, 13В ЛU, 8В		B-3	3.1U, 10B 3.1U, 10B		B-44.1U, 1 B-44.1U, 1	1C (		B-45.1U, 13C B-35, 9 (EE13194)	↓ · · · · · · · · · · · · · · · · · · ·	B-44, 5 (EE13194) B-47, 10C (EE13194)	
				- + 14 + 4 + 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11 1111 11 1111 1+ + +1+			-1 + 1= 1 1 1	- + <b>2</b> -											
-80 •					$\begin{array}{c} 1 1 \\ 1 1 \\ 1 1 \end{array}$												16 //o		0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
-70 •													I         I         I         I           I         I         I         I         I           I         I         I         I         I           I         I         I         I         I           I         I         I         I         I           I         I         I         I         I           I         I         I         I         I           I         I         I         I         I           I         I         I         I         I           I         I         I         I         I	1         1         1           1         1         1           1         1         1           1         1         1           1         1         1           1         1         1           1         1         1           1         1         1			Q = 0.042			
												CRI	0,277					111 1111 111 111		2.2
-60 •				1         1           1         1				1 L L L L L						1 1 1 1 1 1 1						
											2 AN		0,47	<u>λ</u> ο 			0.285			
ELEVATION, FT													>\$24							+         -         -         +         -         -         +         -         -         +         -
FT NAVD 88		1 🖓					( EEE )										★ 6:9 75	I         I         I         I         I           I         I         I         I         I         I           I         I         I         I         I         I           I         I         I         I         I         I           I         I         I         I         I         I           I         I         I         I         I         I           I         I         I         I         I         I           I         I         I         I         I         I		e1         1
		0		1         1         1         1           1         1         1         1         1           1         1         1         1         1         1           1         1         1         1         1         1         1           1         1         1         1         1         1         1         1           1         1         1         1         1         1         1         1         1         1           1									0.32				•	1         1		1122
-30		· · · · · · · · · · · · · · · · · · ·																		$\begin{array}{cccccccccccccccccccccccccccccccccccc$
-20				I         I         I         I         I           I         I         I         I         I         I           I         I         I         I         I         I         I           I         I         I         I         I         I         I         I           I         I         I         I         I         I         I         I         I           I	11 111 11 111 11 111 11 111							i         i         i         i           i         i         i         i         i           i         i         i         i         i           i         i         i         i         i           i         i         i         i         i           i         i         i         i         i					0.050			1         1
			<ul> <li>↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓</li></ul>											0.533				0.135		*** 2-12-
-10 ·										*	*		CR=0	16		**	2R=0	205		
0 ·						1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1						1 I I I		î î î		35 J J J		LIL ILL		
	0 25	50 7	WAT	ER CONT 25 150			250 27	5 300 (	0 0.06		COMPRESS 0.18 0.24		0 (CR) 0.42 0.48	0.54 0.6			1PRESSION RATIO (F 5 0.08 0.1 0.12 0.14 (			CONSOLIDATION RATIO (OC 3 4 5



# Homogeneous CL and CH sedimentary clays of low to moderate sensitiv-ity $(l_p = 20\%-80\%)$ : $S = 0.20 + 0.05I_p$ , or simply S = 0.22. $m = 0.88(1 - C_s/C_q) \pm 0.06$ SD, or simply m = 0.8.

		EE 22557 Magnolia Ridge Consolidation Test Su	mmary						1								Sedimentary depositive the A-line, but excloses $S = 0.25$ , with r	$2_a/C_a) \pm 0.06$ SD, or simply ts of silts and organic soils (A uding peats) and clays with nominal SD = 0.05. $C_a/C_a) \pm 0.06$ SD, or simply	atterberg limits plot below shells:	$\sigma_{w}$	0.8 = m 0.25 = S		
No.	Boring	Sample	Boring El. (feet)	Sample Depth (feet)	Sample El. (feet)	USCS	w%	Cc	Cs	ео	CR	RR Based on Consol Test	Theoretical RR=.15*CR	Dry Unit Weigh (pcf)	t Moist Unit Weight, (pcf)	Approximate P'o (Psf)	Approximate P'o (tsf)	Approximate P'c (tsf)	OCR = P' <sub>c</sub> /P' <sub>o</sub>	S <sub>u</sub> = P'o*S*(P'	VR C <sub>v</sub> (s	q.ft/year)	-Remarks- Shen fest PSF
1	B12MU	13B	6.0	45.0	-39.0	СН	59.1	0.911	0.202	1.674	0.341	0.076	0.051	63.6	101.2	2005.0	1.00	1.81	1.81	804	45	7.00	591
2	B15MU	8B	1.5	25.0	-23.5	СН	46.3	0.628	0.075	1.674	0.235	0.028	0.035	71.2	104.2	1042.0	0.52	1.15	2.21	491 (	,6	32.85	268
3	B16MU	7B	6.5	21.0	-14.5	СН	66.0	0.968	0.171	1.925	0.331	0.059	0.050	58.5	97.1	960.6	0.48	1.10	2.29	466 -	3	29.20	320
4	B3MU	6B	2.0	17.0	-15.0	ОН	200.8	3.279	0.858	5.268	0.523	0.137	0.078	24.4	73.4	856.2	0.43	1.92	4.48	711	8	3.65	1503
5	B4MU	9B	7.5	25,0	-17.5	ОН	79.9	0.989	0.240	2.126	0.316	0.077	0.047	52.9	95.2	1363.0	0.68	1.05	1.54	482 -	291 :	14.60	788
6	B6MU	-√ 4C	2.0	10.0	-8.0	CL	36.7	0.264	0.026	1.044	0.129	0.012	0.019	82.5	112.8	546.0	0.27	1.95	7.14	658 3	65 3	65.00	306/205
7	B7MU	8C	2.4	23.0	-20.6	СН	58.6	0.807	0.134	1.680	0.301	0.050	0.045	62.9	99.8	1030.0	0.52	1.55	3.01	622 7	19	36.50	CU=381; UU=755
8	B8MU	6C	1.9	17.0	-15.1	СН	50.4	0.549	0.168	1.602	0.211	0.064	0.032	65.3	98.2	912.2	0.46	1.25	2.74	511	29.	14.60	475
9	B10MU	14C	2.5	50.0	-47.5	СН	46.9	0.779	0.170	1.405	0.324	0.071	0.049	71.1	104.4	2181.0	1.09	1.45	1.33	685	32	3.65	679
10	B33.1U	~ 10B 3'xest	3.0	87.0	-84.0	СН	42.4	0.598	0.234	1.159	0.277	0.108	0.042	78.7	112.1	4205.2	2.10	6.60	3.14	2625	/ 4	40.15	1561 /1346 (UC)
11	B33.1U	¥ 10B BAD	3.0	87.5	-84.5	СН	41.7	0.153	0.116	1.142	0.071	0.054	0.011	79.3	112.4	4205.2	2.10	2.08 FAP	0.99	1042 2	29	1.83	10-1561 : 1846= 06
12	B44.1U	6C	1.0	18.5	-17.5	ОН	59.6	0.749	0.189	1.548	0.294	0.074	0.044	63.7	101.7	985.6	0.49	1.08	2.19	462	40 4	40.15	1165
13	B44.1U	11C	1.0	38.5	-37.5	СН	53.9	0.558	0.144	1.466	0.226	0.058	0.034	68.8	105.9	1881.0	0.94	1.10	1.17	533 -	29	0.00	492
14	B44.1U	15C	1.0	54.5	-53.5	СН	66.8	1.103	0.242	1.866	0.385	0.084	0.058	59.7	99.6	2526.5	1.26	1.86	1.47	861	22 -	<b>7:30</b> 3,65	1460
15	B45.1U	8C	0.0	32.5	-32.5	СН	68.6	0.908	0.220	1.922	0.311	0.075	0.047	58.1	98.0	1356.0	0.68	0.94	1.39	440 <sup>1</sup>	10	3.65	288
16	B45.1U	A 13C	0.0	52.5	-52.5	СН	65.5	0.806	0.149	1.904	0.278	0.051	0.042	58.9	97.5	2108.0	1.05	0.96 3AD	0.91 BAD	489 /	VIA -	1.83—	232
24	B35	9	0.0	34.0	-34.0	СН	73.0	0.950		2.023	0.314	0.025	0.047	56.6	97.9	1513.0	0.76	1.10	1.45	510	F.3	3.65	
25	B40	2	0.0	6.0	-6.0	СН	40.6	0.320		1.134	0.150	0.012	0.022	79.6	111.9	301.0	0.15	1.40	9.30	448	18 1	10.95	
26	B44	5	0.0	15.0	-15.0	СН	56.5	0.570		1.562	0.222	0.012	0.033	66.8	104.5	715.0	0.36	1.30	3.64		9	4.75	
27	B47	3B	0.0	9.0	-9.0	СН	41.4	0.380		1.130	0.178	0.050	0.027	79.7	112.7	441.0	0.79	2.66	3.35	1044 2	estimate a state of the period of the	5.00	
28	B47	10C	0.0	38.0	-38.0	СН	63.7	0.970		1.781	0.349	0.060	0.052	61.5	100.7	1587.0	0.47	1.27	2.68	521	1	4.00	
29	B49	5C	0.0	21.5	-21.5	СН	60.7	0.980		1.679	0.366	0.030	0.055	63.4	101.9	948.0	0.47	1.00	2.11	431	21	3.65	
30	B49	13C	0.0	52.5	-52.5	СН	71.1	1.250		1.980	0.419	0.060	0.063	57.4	98.2	2166.5	1.08	1.75	1.62	795 4	0	3.65	
31	B51	2B	0.0	5.0	-5.0	СН	43.5	0.370		1.276	0.163	0.050	0.024	75.2	107.9	245.0	0.12	1.40	11.43	430	ĥa	3.65	
32	B51	8C	0.0	30.0	-30.0	CL	38.4	0.360		1.084	0.173	0.010	0.026	71.3	98.7	1325.0	0.66	1.23	1.86	543 9	13 14	46.00	





Gains in Strength from additional loadings were added for this stability analysis

This analysis should only be used for the cost estimate.

**GENERAL NOTES** 

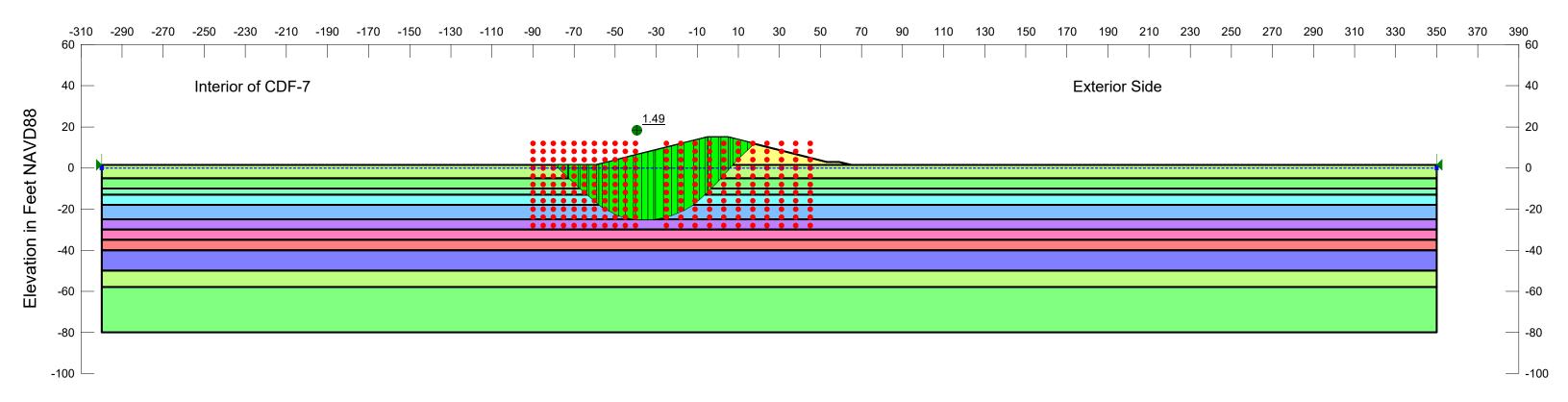
CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL15W07242019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\Alt 6 for Cost\Alt 6 Stability Analysis for Cost\ US Army Corps of Engineers® New Orleans District Upper Barataria Basin Stability Analysis for Cost Estimate Alternative 6

Construction Grade - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

This analysis should only be used for the cost estimate.

**GENERAL NOTES** 

CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

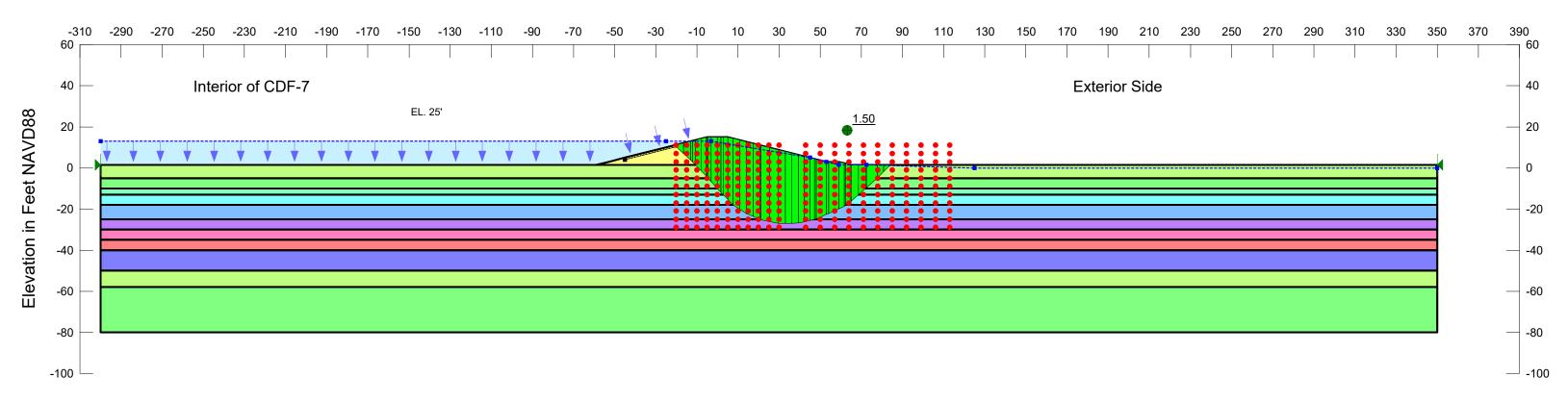
SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL15W07242019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\Alt 6 for Cost\Alt 6 Stability Analysis for Cost\



Low Water Level - Block Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

This analysis should only be used for the cost estimate.

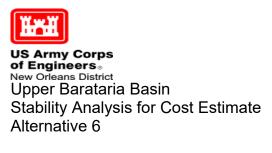
GENERAL NOTES

CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

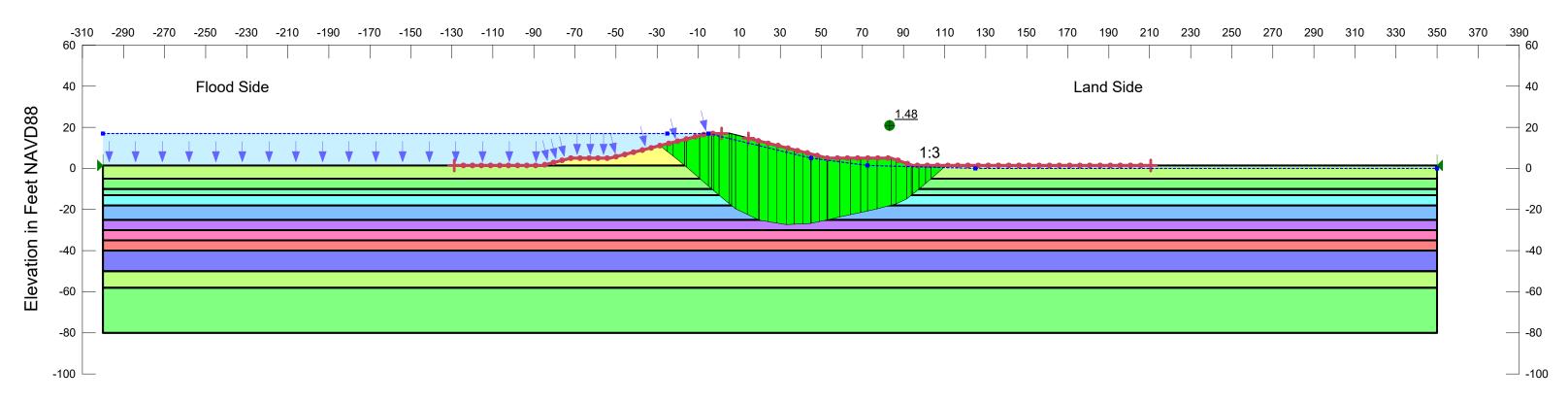
SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL15W07242019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\Alt 6 for Cost\Alt 6 Stability Analysis for Cost\



Still Water Level - Block Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

**GENERAL NOTES** 

CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

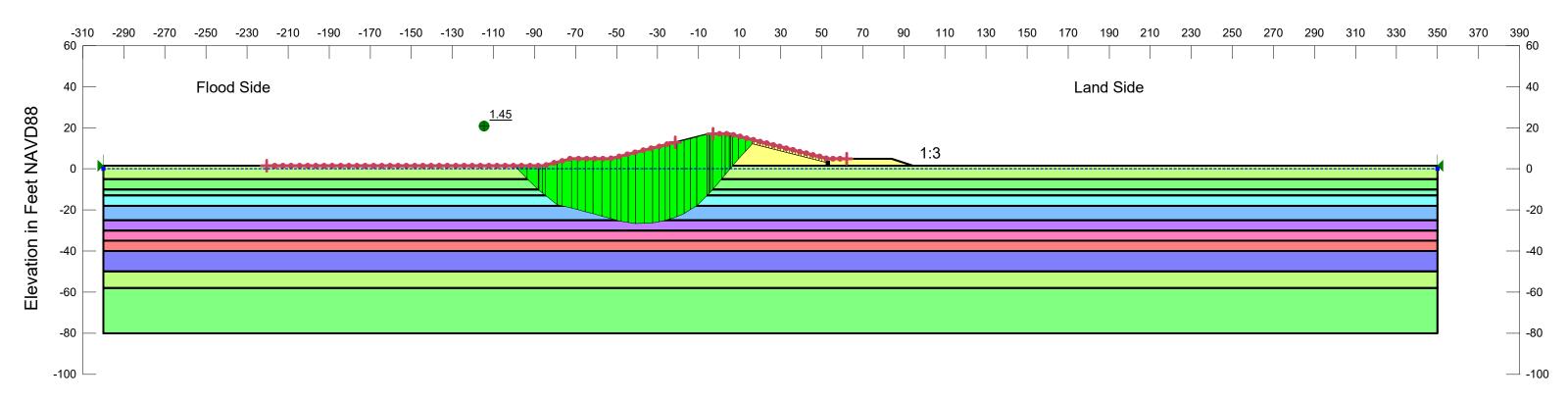
SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL17W07242019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\Alt 6 for Cost\Alt 6 Stability Analysis for Cost\



Top of Levee - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

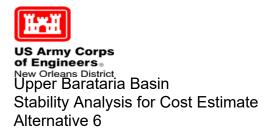
**GENERAL NOTES** 

CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

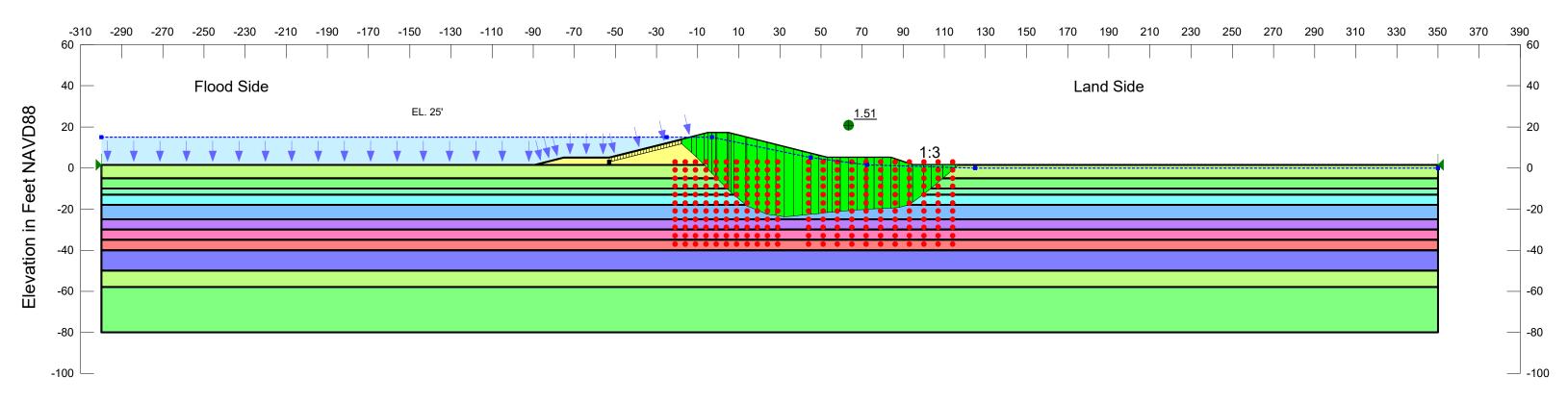
SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL17W07242019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\Alt 6 for Cost\Alt 6 Stability Analysis for Cost\



Low Water Level - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

GENERAL NOTES

CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

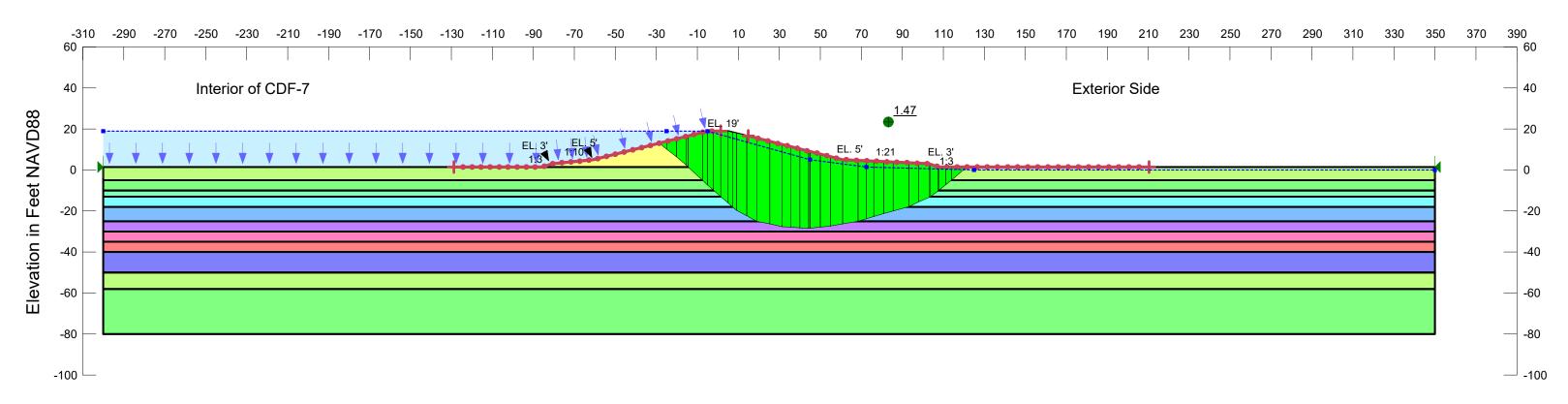
SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL17W07242019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\Alt 6 for Cost\Alt 6 Stability Analysis for Cost\



Still Water Level - Block Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

**GENERAL NOTES** 

CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

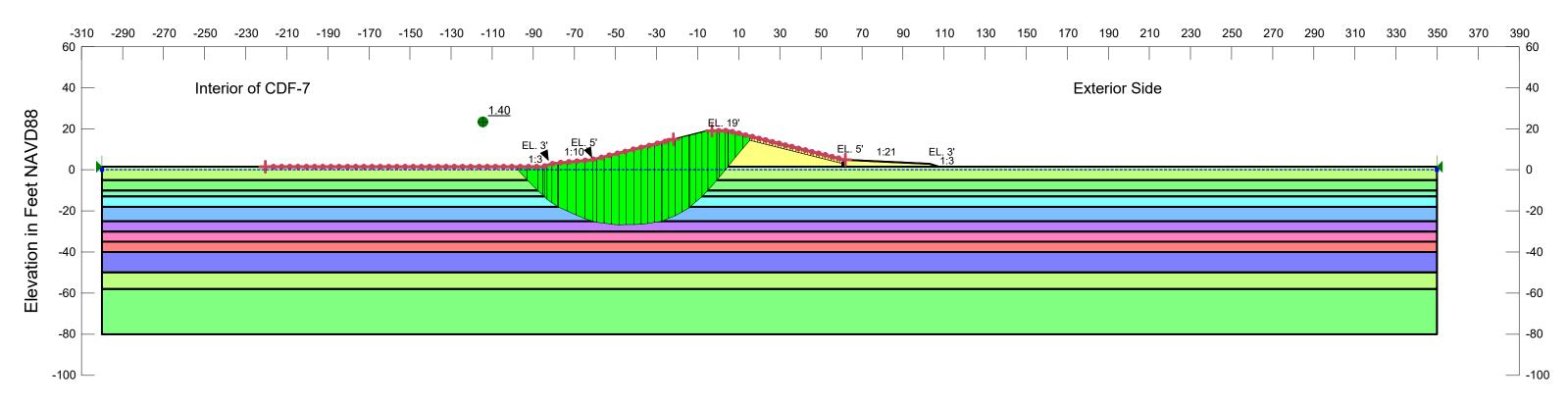
SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL19W07242019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\Alt 6 for Cost\Alt 6 Stability Analysis for Cost\



Top of Levee - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

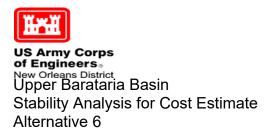
GENERAL NOTES

CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

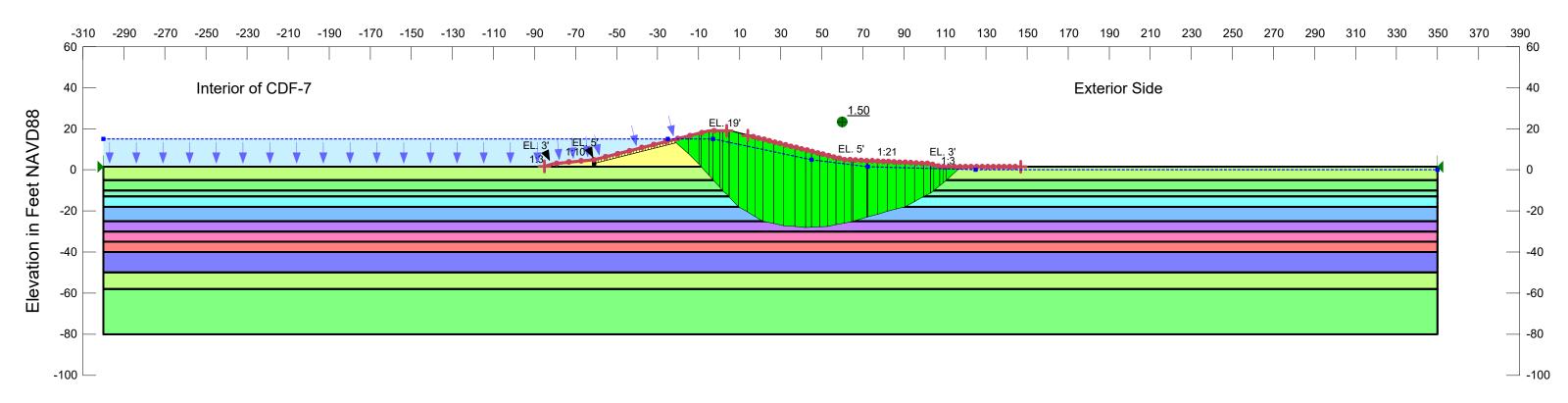
SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL19W07242019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\Alt 6 for Cost\Alt 6 Stability Analysis for Cost\



Low Water Level - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

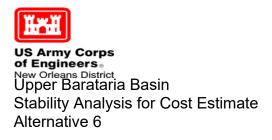
**GENERAL NOTES** 

CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

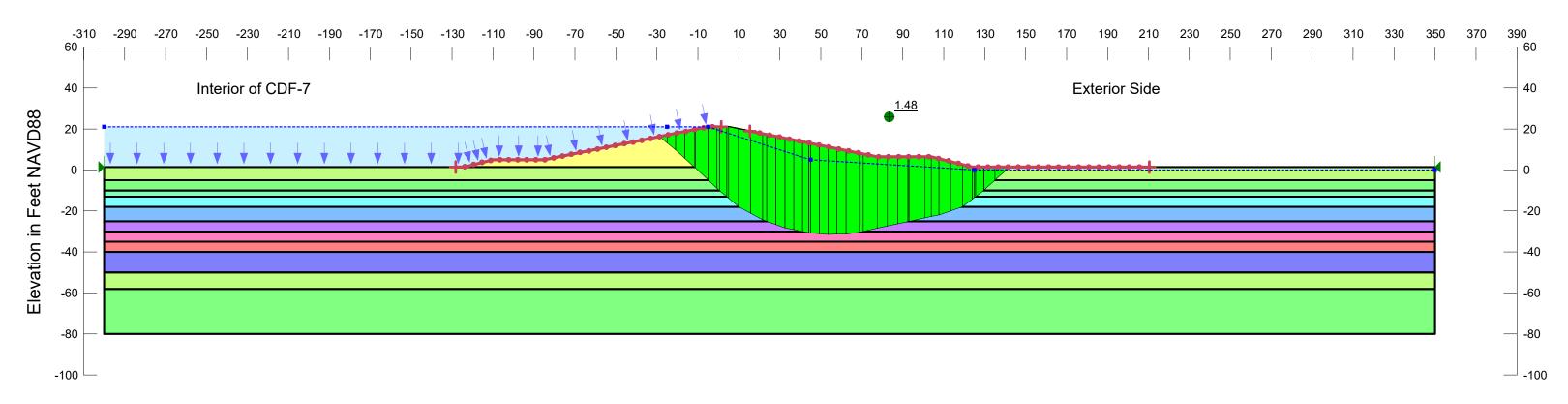
SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL19W07242019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\Alt 6 for Cost\Alt 6 Stability Analysis for Cost\



Still Water Level - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

**GENERAL NOTES** 

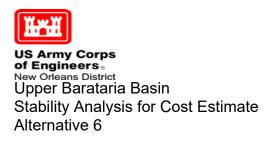
CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

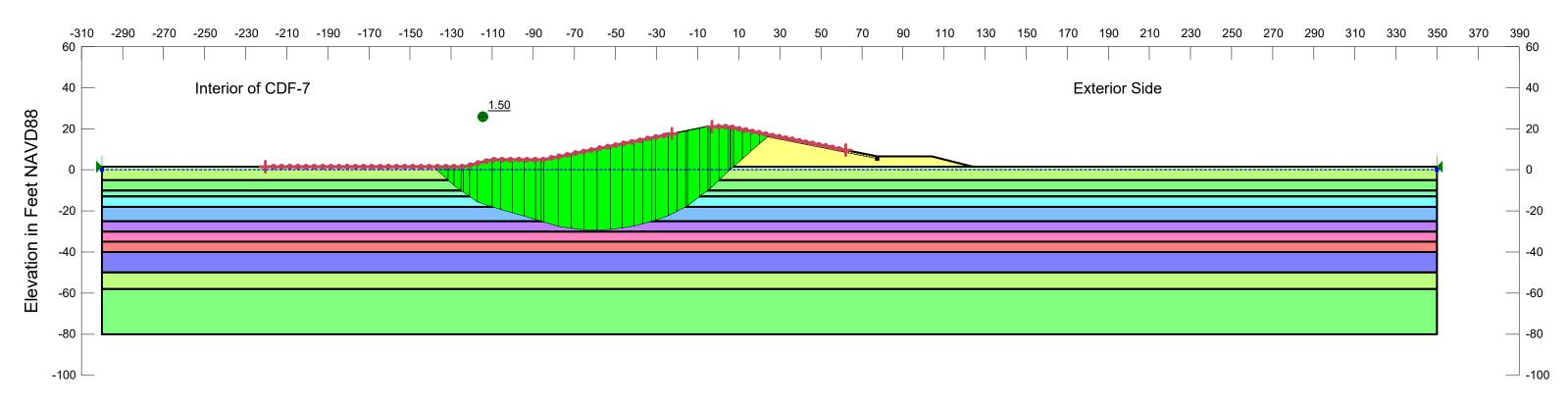
Note: Using Design Shearline for Levee Reach 2 [Soil Boring B-2 and CPT Probe B-7] On page 29/113 of Appendix 4-Geotechnical Investigations Figure 2.2. from the LBLD -Upper Barataria RRP Conceptual Report This design is only for cost estimating purposes. A more detailed design will be

 File Name: UBBFootPrintMagnolia2007VersionEL21WStrengthGain07232019.gsz
 completed at a later time.

 Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\Alt 6 for Cost\Alt 6 Stability Analysis for Cost\



Top of Levee - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

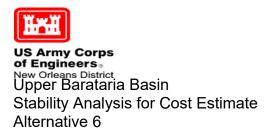
**GENERAL NOTES** 

CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

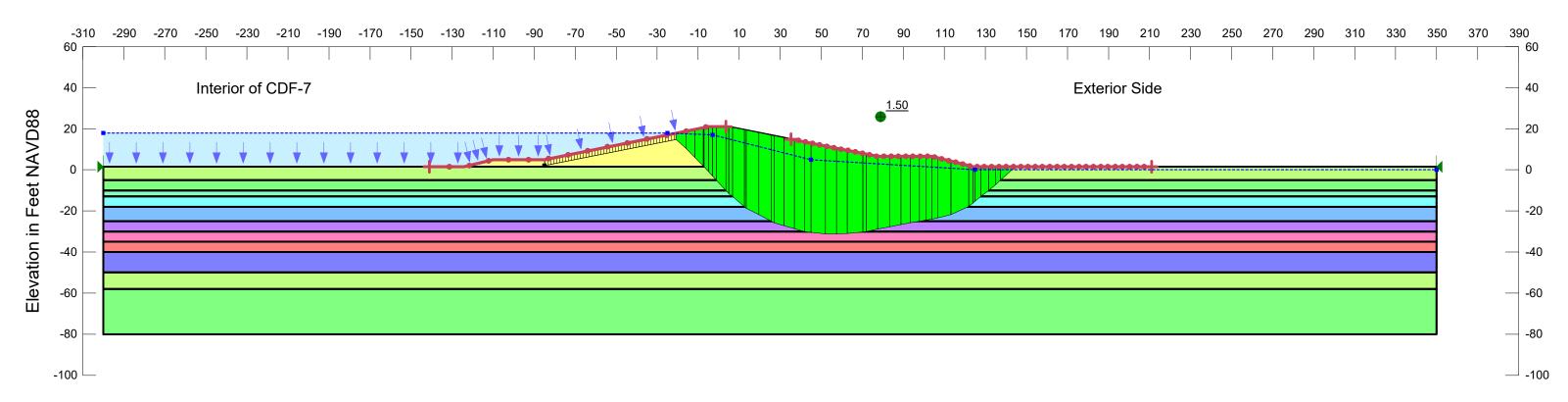
SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

Note: Using Design Shearline for Levee Reach 2 [Soil Boring B-2 and CPT Probe B-7] On page 29/113 of Appendix 4-Geotechnical Investigations Figure 2.2. from the LBLD -Upper Barataria RRP Conceptual Report This design is only for cost estimating purposes. A more detailed design will be

File Name: UBBFootPrintMagnolia2007VersionEL21WStrengthGain07232019.gsz Completed at a later time. Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\Alt 6 for Cost\Alt 6 Stability Analysis for Cost\



Low Water Level - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

**GENERAL NOTES** 

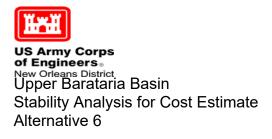
CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

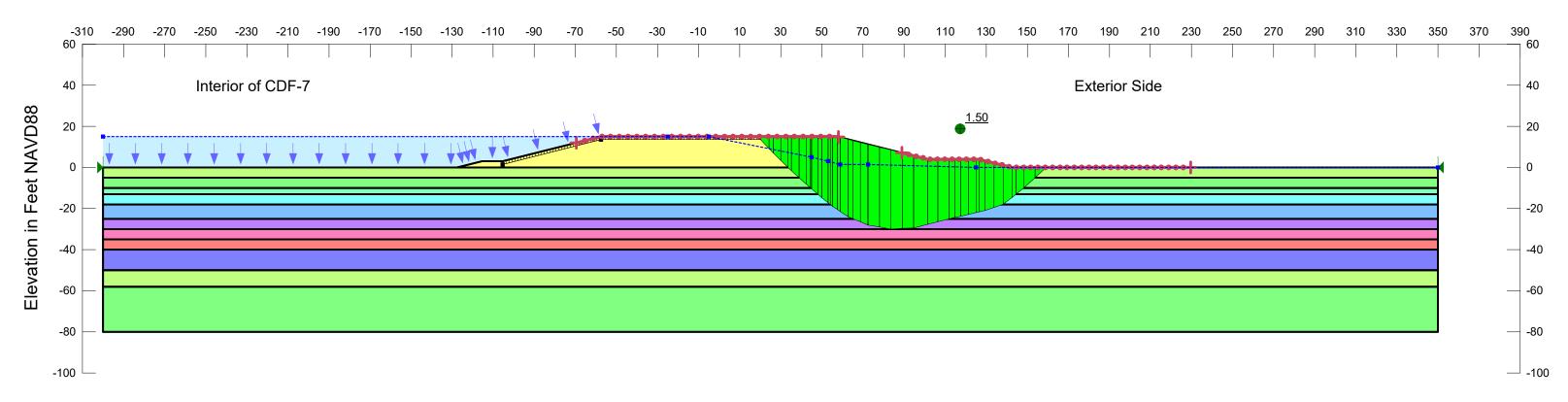
Note: Using Design Shearline for Levee Reach 2 [Soil Boring B-2 and CPT Probe B-7] On page 29/113 of Appendix 4-Geotechnical Investigations Figure 2.2. from the LBLD -Upper Barataria RRP Conceptual Report

This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL21WStrengthGain07232019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\Alt 6 for Cost\Alt



Still Water Level - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

**GENERAL NOTES** 

CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

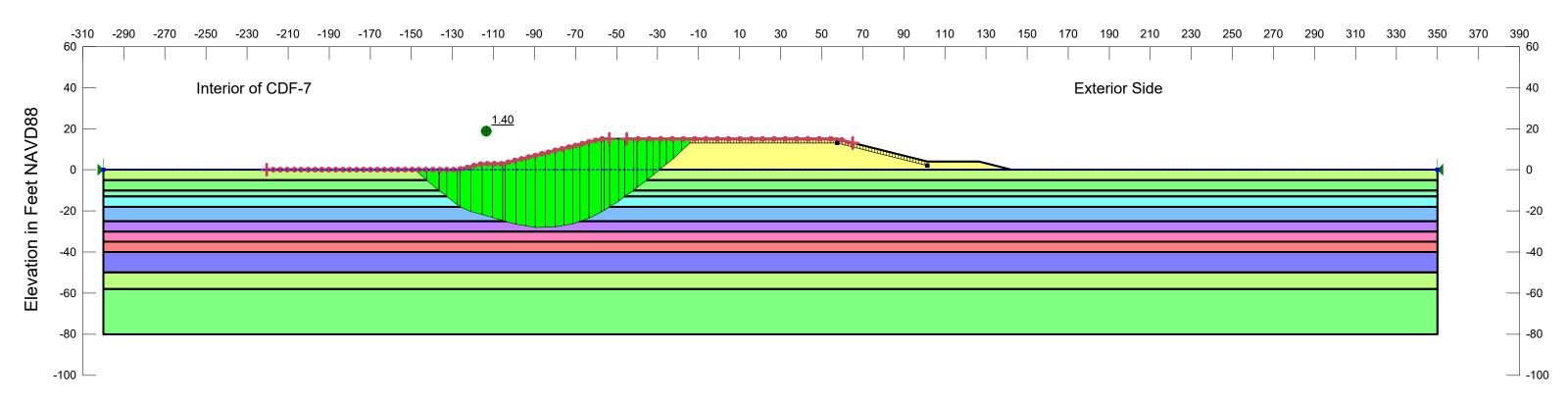
SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL15W07242019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\



Top of Levee - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

**GENERAL NOTES** 

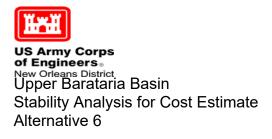
CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

THE VALUES INDICATED FOR THESE LOCATIONS.

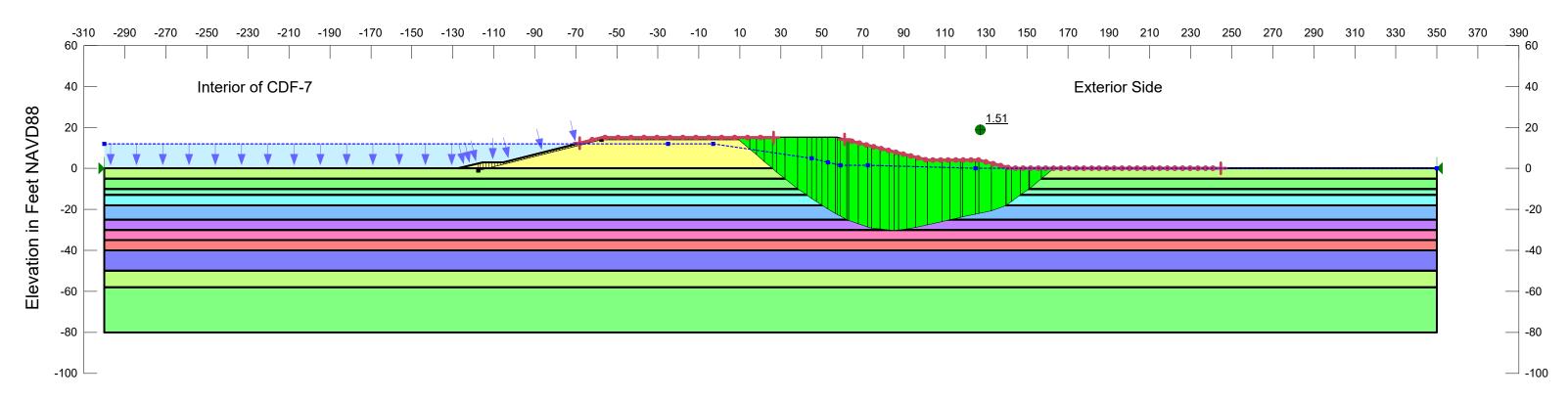
SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL15W07242019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\



Low Water Level - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

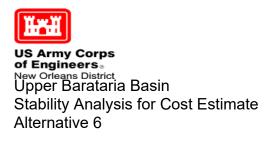
**GENERAL NOTES** 

CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

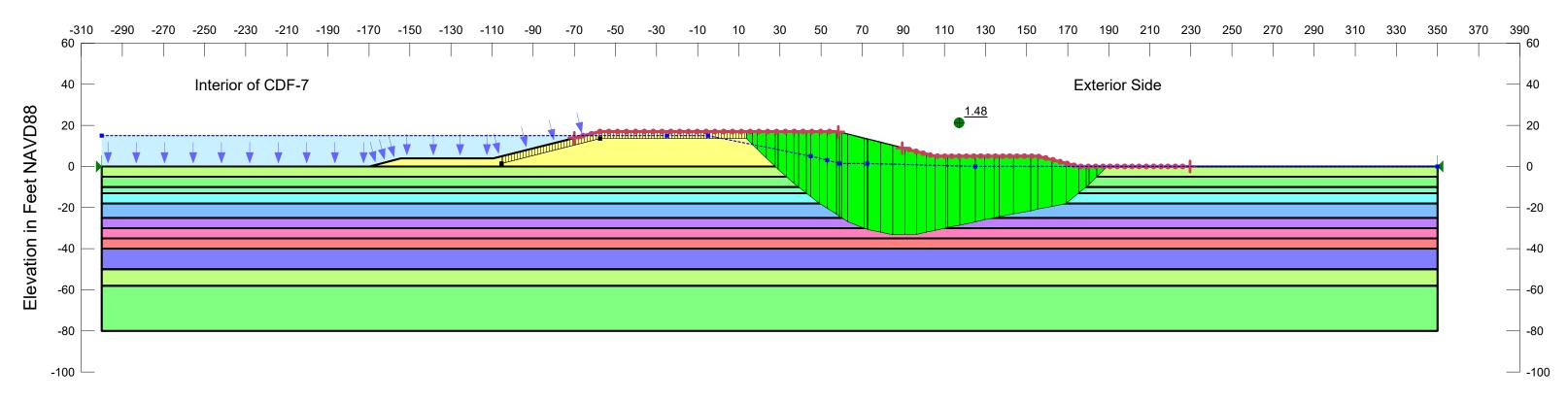
SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL15W07242019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\



Still Water Level - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

**GENERAL NOTES** 

CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

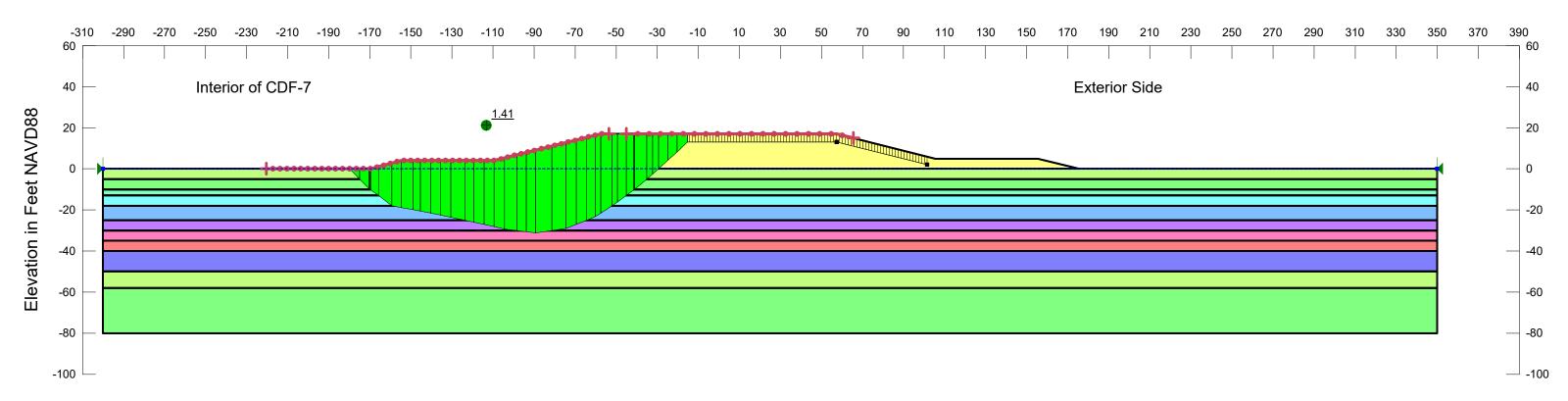
SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL17W08022019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\



Top of Levee - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

**GENERAL NOTES** 

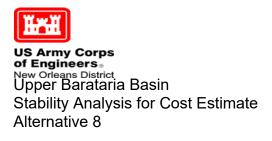
CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN

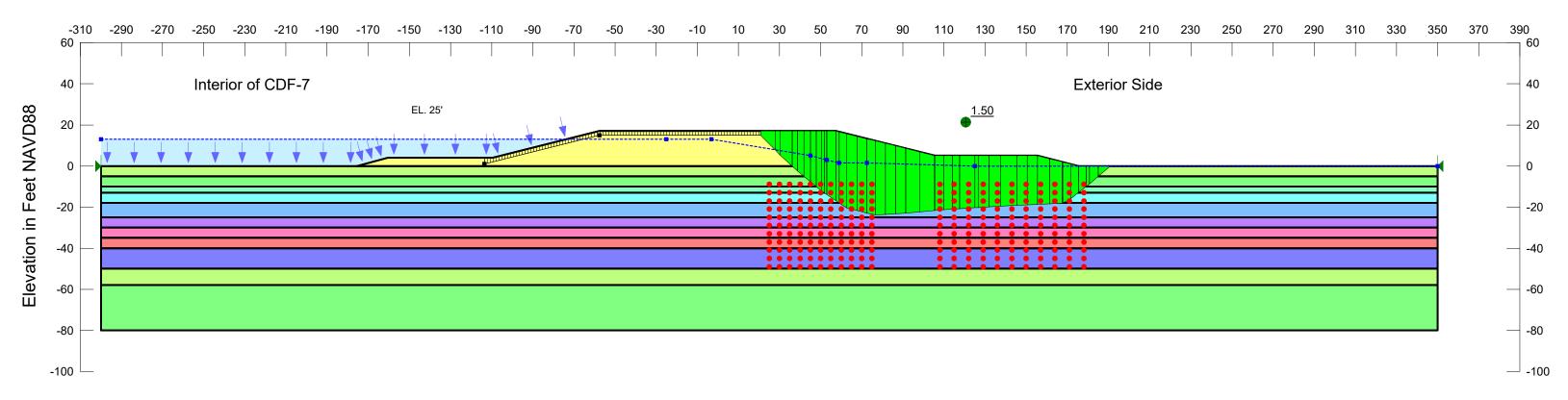
THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL17W08022019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\



Low Water Level - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

GENERAL NOTES

CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

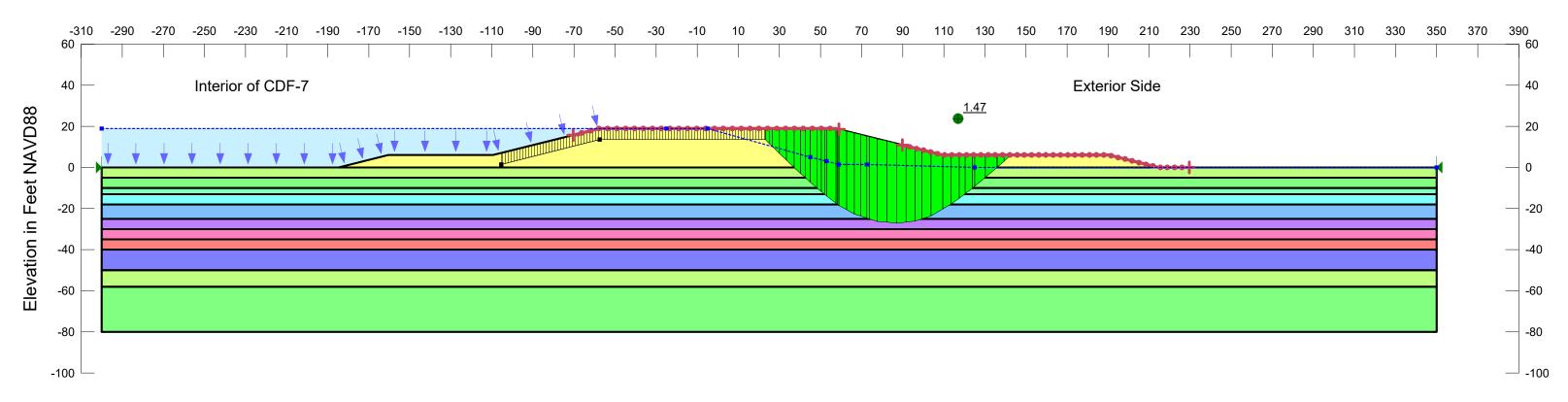
SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL17W08022019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\



Still Water Level - Block Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

**GENERAL NOTES** 

CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

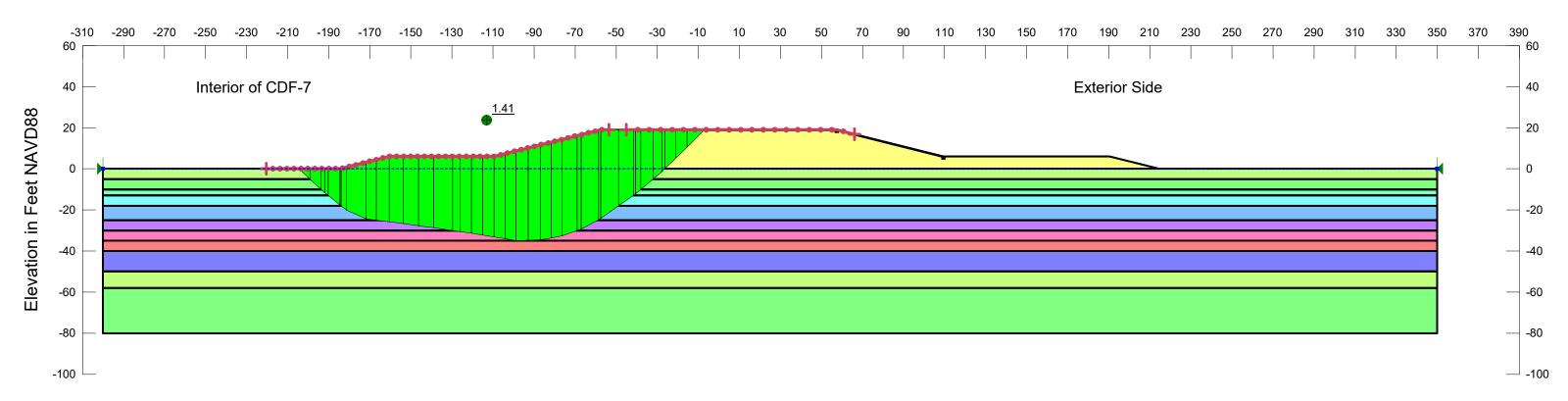
SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL19W08022019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\



Top of Levee - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

**GENERAL NOTES** 

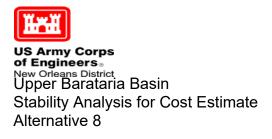
CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN

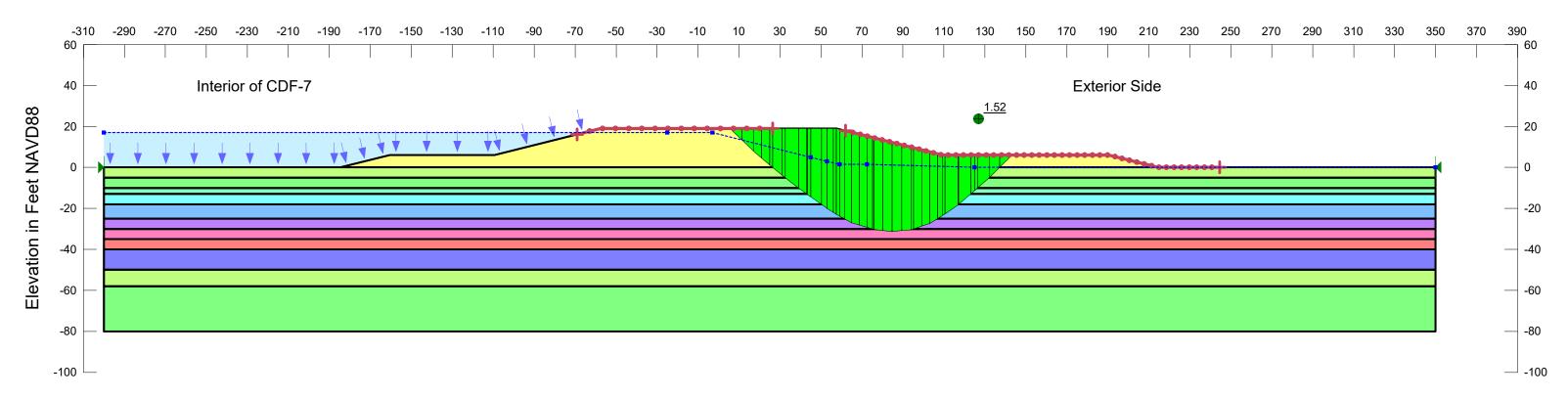
THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL19W08022019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\



Low Water Level - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

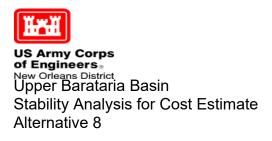
**GENERAL NOTES** 

CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

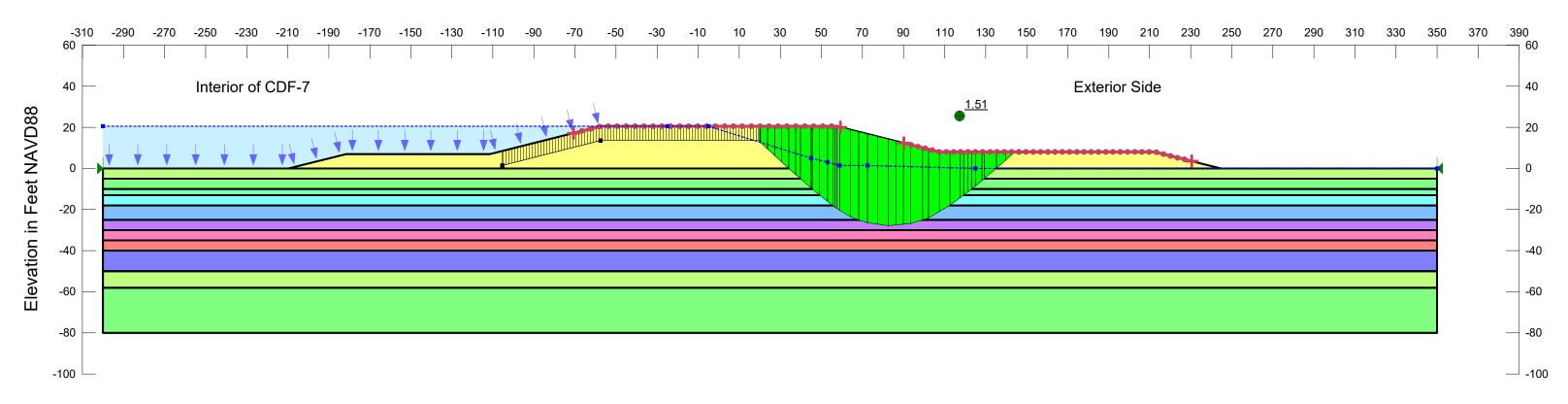
SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL19W08022019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\



Still Water Level - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

**GENERAL NOTES** 

CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

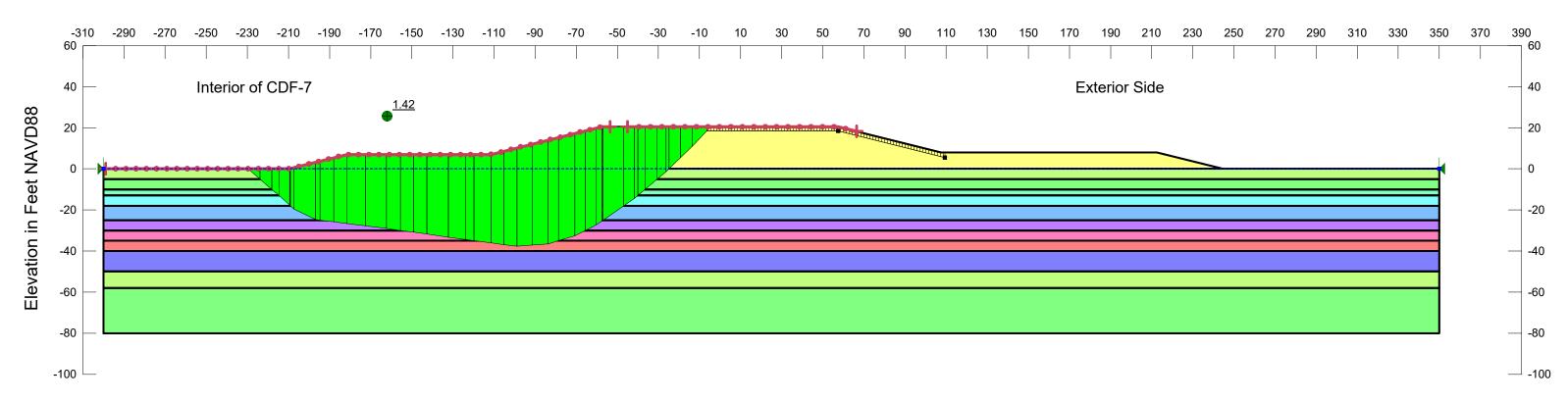
SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL205W08062019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\



Top of Levee - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

**GENERAL NOTES** 

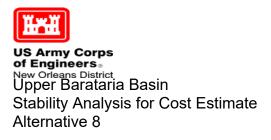
CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

THE VALUES INDICATED FOR THESE LOCATIONS.

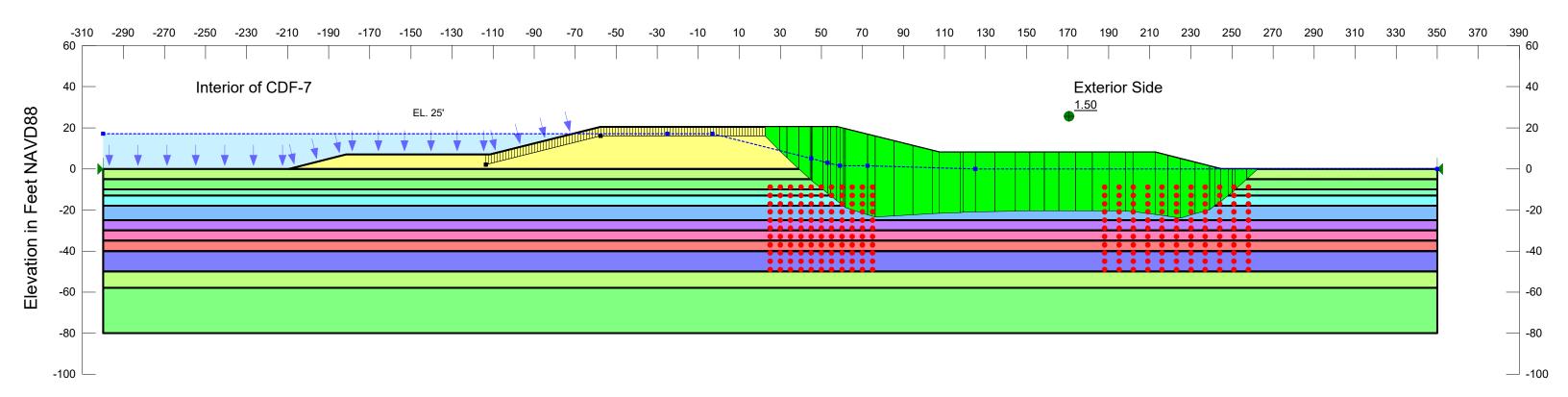
SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL205W08062019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\



Low Water Level - Entry Exit Slip Surface Louisiana



Gains in Strength from additional loadings were added for this stability analysis

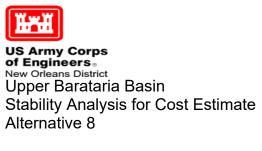
GENERAL NOTES

CLASSIFICATION STRATIFICATION SHEAR STRENGTHS AND UNIT WEIGHTS OF THE SOIL WERE BASED ON THE RESULTS OF UNDISTURBED BORINGS. SEE BORING DATA PLATES.

SHEAR STRENGTHS BETWEEN VERTICALS WERE ASSUMED TO VARY LINEARLY BETWEEN THE VALUES INDICATED FOR THESE LOCATIONS.

Note: This design is only for cost estimating purposes. A more detailed design will be completed at a later time.

File Name: UBBFootPrintMagnolia2007VersionEL205W08062019.gsz Directory: G:\F&MHOME\Danton\Barataria Basin\Upper Barataria Basin\Project Footprints\



Still Water Level - Block Slip Surface Louisiana