Geotechnical Engineering Report

Island Road Marsh Creation and Nourishment (TE-117) Phase II
Terrebonne Parish, Louisiana

for
State of Louisiana Coastal Protection and Restoration Authority

August 17, 2018

GeoEngineers
Earth Science + Technology

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File No. 16715-040-03

August 17, 2018

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1.0 INTRODUCTION

This report presents the results of GeoEngineers, Inc.'s (GeoEngineers) geotechnical engineering services for the Island Road Marsh Creation and Nourishment (TE-117) project (the Island Road project) located in Terrebonne Parish, Louisiana. Our services were completed under the January 4, 2018 amended task order (Task 1) under our Geotechnical Services Contract No. 4400010334 with the Coastal Protection and Restoration Authority (CPRA). The project site is located approximately 7 miles southeast of Montegut, Louisiana, immediately southwest of the Pointe-aux-Chênes marina located on LA Highway 665, east- northeast of the Isle de Jean Charles marina located on Island Road, and south of a dual pipeline canal servitude locally referred to as the "Twin Pipelines", as shown in Figure 1. Relevant site features are shown in Figures 2a and 2b.

All elevations described in this report, including figures and appendices, are referenced to the North American Vertical Datum of 1988 (NAVD 88), Geoid 12A. Report figures are located at the end of the report text. Appendices are organized as shown in the table of contents.

2.0 PROJECT UNDERSTANDING

The objective of the Island Road project is to create over 364 acres of marsh and nourish approximately 19 acres of additional marsh using sediments hydraulically dredged from the bottom of Lake Tambour, which is located approximately 5 miles south of the project site. Marsh creation areas will be contained using earthen containment dikes (ECDs).

3.0 PROJECT HISTORY

GeoEngineers was initially authorized in November 2014 to conduct a preliminary (Phase I) geotechnical study to determine the constructability of earthen containment dikes within four preselected cells located north of the Twin Pipelines. In addition, GeoEngineers was asked to evaluate alternate locations for construction of earthen containment dikes and marsh creation areas within a fifth large cell located south of the Twin Pipelines, called Cell E (refer to Figure 2a).

Eighteen cone penetration test (CPT) soundings and 7 soil borings were performed for our preliminary geotechnical study. Logs of our CPTs and soil borings along with laboratory test results were presented in our Geotechnical Data Report for the *Island Road Marsh Creation and Nourishment (TE-117)* project (File No. 16715-040-00) dated July 15, 2015. Refer to Figure 2a for the Phase I boring/CPT locations.

GeoEngineers also submitted our Phase I Geotechnical Engineering Services report for the TE-117 project on July 17, 2015, which presented our results and conclusions regarding slope stability, settlement and bearing capacity for earthen containment dikes (ECDs) at each boring/CPT location performed. Based on our slope stability analyses in our preliminary geotechnical study, two-lift construction was recommended for unreinforced ECDs with the first lift being constructed to elevation (El.) +2.5 feet (ft.). In addition, construction of containment dikes via barge-mounted equipment was also recommended based on our preliminary evaluation of stability of the berm into the borrow channel. Soil conditions within the original four marsh creation cells north of the Twin Pipelines appeared to contain more organic material within the top 5 to 10 feet than the borings/CPTs performed further south in Cell E. The thick near-surface organic

material north of the Twin Pipelines caused single-lift construction of the ECDs to be difficult. Subsequent to our final analyses, CPRA selected the marsh creation fill sites presented in Figure 2b based on the results of our preliminary geotechnical study. Borings and CPTs performed at four locations (C-12, C-13/B-4, C-14/B-5, and C-15) within Cell E were included in the final marsh creation sites for the TE-117 project. Of the four locations, analyses showed ECDs at three of the locations could be constructed to El. +4 ft. in a single lift. At the fourth location, ECDs could be constructed to El. +3 ft. in a single lift.

Following review of our July 17, 2015 Geotechnical Engineering Services report, CPRA authorized GeoEngineers to perform a second phase of field exploration within the final selected marsh creation fill sites in August 2016. Our Phase II field exploration included 19 CPTs and 9 soil borings. Details of our Phase II field exploration and laboratory testing were presented in GeoEngineers Geotechnical Investigation Data Report (GIDR) File No. 16715-040-03 dated February 1, 2017. CPRA also requested that GeoEngineers collect soil samples within the proposed borrow area located in Lake Tambour (Figure 2c). Details of our field exploration and laboratory testing within the borrow area were presented in GeoEngineers GIDR Addendum 1 File No. 16715-040-03 dated April 24, 2018.

Data collected within Cell E in our Phase I field exploration along with data collected during our Phase II field exploration and the borrow area were used to evaluate the ECD and marsh creation construction within the final selected marsh creation cells as discussed in the following sections of this report.

4.0 PURPOSE AND SCOPE OF SERVICES

The purpose of GeoEngineers services is to provide the necessary geotechnical investigation, analysis and recommendations to support successful implementation of the Island Road project. The results of our engineering analyses for the Island Road project are discussed herein. Discussions of our engineering calculations are provided at the end of this report. Laboratory data presented in our July 15, 2015 data report, our February 1, 2017 data report, and our April 24, 2018 data report along with input/output files for the analyses performed for our July 17, 2015 report and the analyses described herein were submitted electronically to CPRA.

5.0 SITE CONDITIONS

5.1. Site Geology

The surface geology at the Island Road marsh fill site is composed of Holocene deposits of the Lafourche delta lobe of the Mississippi River. Such deposits may consist of cyclically interbedded interdistributary peat and clay, natural levee silt and clay, distributary sand, and delta-front and pro-delta mud and clay. Pleistocene deposits in this area appear to dip from the southeast to the northwest between about 225 and 300 feet below the mudline as shown in Figure 3a.

The Island Road marsh fill area lies approximately 1 mile south of the Golden Meadow Fault as shown in Figure 3b.

5.2. Surface Conditions

5.2.1. Marsh Creation Area

As shown in Figure 2b, four marsh creation areas have been delineated by CPRA, as fill sites A, B, C, and D. At the time of our field exploration, the site surface within the marsh creation areas was a mix of degraded marsh and open water areas. Water depths were on the order of 1 foot to 5 feet during our field exploration. Water depths will vary based on the time of year, the direction of wind, and tidal fluctuations. A pipeline corridor, which runs in an east-west direction, is present to the north of the site with one of the pipelines crossing through marsh fill area A. A second pipeline was also noted on maps crossing through the proposed marsh fill area B from southeast to northwest; however, the magnetometer survey performed prior to our field exploration did not detect this pipeline. The identified and suspected pipeline locations are shown in Figure 2b.

5.2.2. Borrow Area

Water depths within the proposed Lake Tambour borrow area varied between about 5 feet and 7 feet at our sample locations during our field exploration. Water depths will vary based on the time of year, the direction of wind, and tidal fluctuations. Based on a review of existing oyster leases in the Lake Tambour area, there are many oyster leases within the proposed borrow area. The locations of our borrow area soil borings were selected to reduce the potential of encountering oysters during our field exploration. Oyster leases and borrow area soil boring locations are shown in Figure 2c.

5.3. Subsurface Conditions

Subsurface conditions discussed below are based on the soil borings and cone penetration test (CPT) soundings completed for this project and survey information provided by CPRA. No artifacts or material other than that noted on the soil boring logs included in our GIDR was observed by GeoEngineers during our field investigation, or during laboratory testing; however, GeoEngineers personnel are not trained in recognition of such items.

Subsurface cross-sections based on our soil borings for the marsh creation and borrow areas are shown in Figures 4 through 5. Although changes in soil conditions and undetected anomalies beyond the soil borings may exist, the generalized subsurface conditions can be described as follows.

5.3.1. Marsh Creation Area

Subsurface conditions for the marsh creation areas, including the containment dike alignment, can be generalized as follows. Emergent ground generally forms a “crust” that can support walking and airboat pressures without significant deflection. This crust is likely reinforced by the marsh grass roots at the ground surface. Below the water line, soils are generally very soft peat or organic clay to about El. -5 ft. From about El. -5 ft. to about El. -7 ft., the soil is generally a mix of very soft clay, silt, and organic soils. Within most of the site, between about El. -7 ft. and -12 ft., a silty sand zone is present. General areas of the site where the silty sand zone is believed to be present are presented in Figure 6. At some boring/CPT locations this zone was encountered at deeper depths. In other areas of the site, the silty sand zone was not as distinct; however, there were silt and sand lenses and layers observed within the very soft clay and silty clay at these depths. Below the silty sand zone, very soft to soft clay and silty clay were encountered to about El. -62 ft. A second silty sand zone was encountered at about El. -20 ft. to -25 ft. within the borings and CPTs

performed at locations C-14, C-29, C-31, C-32, C-37, B-5, and B-15, which may influence the rate of settlement in these areas.

Within the very soft to soft clay and silty clay soils below El. -12 ft., silt and sand lenses and layers were observed in samples in most of the soil borings with the exception of borings B-8, B-9, and B-10 located in the north to northwest portion of the proposed fill area.

5.3.2. Borrow Area

Within the borrow area, we generally encountered 2 ft. to 4 ft. of peat and organic clay soils at the surface. Our northernmost boring B-2 and our easternmost borings B-6 and B-7 consisted mostly of very soft to soft clay and silty clay soils to the completion depth of our borings at 20 ft. below the mudline. Within the interior of the borrow area a silty sand zone of various thicknesses (4 ft. to 10 ft.) was encountered between about El. -10 ft. and -20 ft. Lab testing on composite samples of each boring showed between 25 and 60 percent sand in our interior borrow soil borings. This high percentage of sand will influence marsh fill construction areas as discussed later in this report. Detailed soil boring logs were provided in our GIDR Addendum 1.

6.0 CONCLUSIONS AND RECOMMENDATIONS

GeoEngineers evaluated the provided survey information and the geotechnical data we collected to develop recommendations for the Island Road project design. Our analyses focused on containment of dredged fill, dredge fill properties, and settlement of the project features. Our results, conclusions, and recommendations are described below.

6.1. Earthen Containment Dikes

The existing mudline within the proposed marsh fill and containment dike area is quite variable. CPRA requested we evaluate the construction of ECDs using two assumed mudline elevations (El. +1.5 ft. and El. -3.5 ft.) to represent low and high mudline scenarios. As discussed in the previous description of subsurface conditions, we developed two soil design profiles to evaluate stability and bearing of the ECDs:

- Profile 1: Areas with a predominantly cohesive soil profile (No silty sand zone between El. -7 ft. and El. -12 ft.)
- Profile 2: Areas with the silty sand zone between El. -7 ft. and El. -12 ft.

Our design profiles including moisture content, shear strength, and unit weight versus elevation are presented in Figures 7a and 7b. Our selection of these two profiles was focused around determining the influence of the silty sand zone on ECD stability.

6.1.1. Stability

Stability of the ECDs for each profile was evaluated assuming mean low water conditions (MLW = El. - 0.02 ft.), which is a conservative assumption. It was assumed the ECD material would be dredged from a borrow channel adjacent to the ECD.

The results of our ECD stability analyses are summarized in Table 1 below for dikes built to El. +4 ft. with geometries as shown in Figure 8. A discussion of our approach to evaluating slope stability and the cases evaluated is presented in Appendix A.

TABLE 1: ECD STABILITY RESULTS

Profile	Mudline El. (ft)	Critical Slope Safety Factor				
		Case 1	Case 2	Case 3	Case 4	Case 5
1	+1.5	1.22	2.35	1.19	1.24	2.34
	-3.5	1.28	2.45	5.06	1.28	2.24
2	+1.5	2.48	1.82	1.27	2.47	1.81
	-3.5	1.27	2.00	2.12	1.24	1.91

Mudwaves are likely to occur during construction of ECDs if the material at the mudline is very soft and submerged. For our stability analyses we assumed material below the water surface with a shear strength less than 50 pounds per square foot (psf) would mudwave.

The critical slope safety factors presented in Table 1 meet or exceed 1.2. Therefore, it appears ECDs constructed in areas of the project site overlying soils of either Profile 1 or 2 may be constructed to El. +4 ft. using the ECD geometries shown in Figure 8.

6.1.2. Bearing Capacity

The bearing capacity was evaluated for the ECDs and results are summarized below in Table 2. For Profile 2 with the silty sand zone present, the contribution of the sand was neglected to be conservative.

TABLE 2: ECD BEARING CAPACITY

Soil Profile	Mudline Elv. (ft)	Factor of Safety
1	+1.5	1.52
	-3.5	3.02
2	+1.5	1.33
	-3.5	2.37

The computed factors of safety for bearing exceed the minimum acceptable factor of safety of 1.3.

6.1.3. Settlement

ECD settlement includes two components. One component is foundation soil settlement below the ECD, which includes consolidation and elastic compression (construction settlement). The other component is settlement within the fill itself, which is a combination of compaction due to the weight of the fill and desiccation-induced shrinkage settlement. These two components will combine with wind, rain and wave erosion to degrade the containment dike. As such, regular maintenance of the ECDs will be required through construction of the marsh fill platform.

6.1.3.1. Settlement Design Parameters

Since the majority of our soil borings and CPTs within the marsh fill area included the silty sand zone or silt and sand lenses within the clay between El. -7 ft. and El. -12 ft., we developed a consolidation profile including the silty sand zone to model settlement. As previously mentioned, we observed that in soil borings B-8, B-9, and B-10, fewer silt and sand lenses were observed in the clay soils below El. -12 ft. than in the

other soil borings. Therefore, we initially evaluated a second profile for drainage in the clay below El. -12 ft. However, we found very little difference in the time rate of settlement results using the two drainage profiles. Therefore, settlement analyses were evaluated using only one drainage profile.

6.1.3.2. Consolidation Settlement of Foundation Soils

Settlement vs. time estimates were based on consolidation tests and correlations with index test results. The peat in the top 2 to 5 ft. of the soil profile that doesn't mudwave out from under the ECD, is where most settlement will occur. Containment dike crown elevation vs. time plots are included, along with tabular results, in Appendix B. These plots include consolidation, shrinkage, and self-weight settlement, but not construction settlement.

6.1.3.3. Construction Settlement

GeoEngineers estimated construction settlement in clay and organic soils as approximately 20 percent of the total foundation consolidation settlement, based on our experience. Construction settlement will occur rapidly, as fill is placed, and will not manifest during routine construction surveys of the built ECD. Based on consolidation settlement of the foundation soils ranging from 0.4 to 0.5 foot, we expect construction settlement to be about 1 inch.

6.1.3.4. Shrinkage and Self-Weight Settlement of Fill Soils

ECD settlement will be influenced by desiccation of exposed soil above the average water level, and re-compression of fill after it is placed, especially when fill is excavated from a submerged (buoyant) condition and placed above water (total stress). Research conducted by GeoEngineers indicates peat and inorganic low-plasticity clay experience relatively little shrinkage when the embankment base is submerged (about 5 percent volume loss for exposed soil); however, peat fill compression may be significant. Inorganic high-plasticity clays experience moderate shrinkage (about 15 percent exposed soil volume loss) even with the embankment base submerged, and silty sands experience relatively little shrinkage (about 5 percent exposed soil volume loss). Because the available ECD borrow material is composed of peat, clay, and silty sand, we estimate shrinkage settlement and self-weight settlement combined will be about 20 percent of the fill height from the ECD crown to the mudline, in addition to ECD foundation settlement. We expect this settlement to occur within six months after construction. Settlement plots in Appendix B have incorporated fill shrinkage and self-weight settlement.

6.1.4. Mechanical Dredging Cut-to-Fill

ECD construction commonly involves removing material from a submerged condition within excavator reach of the ECD, placing it in the embankment footprint, then shaping it to meet embankment specifications. At the Island Road site, material in the top 10 ft. of the in-place borrow soil profile generally consists of peat with clay and sand. Material losses during construction, compaction and water drainage as the fill is placed and shaped, soil shrinkage and foundation settlement during construction results in more than one cubic yard of material excavated from the on-site borrow area for every cubic yard placed in the fill template. Due to the number of variables involved, calculating the cut-to-fill ratio for the ECD alignment is very difficult. To allow for adequate material quantities in project design and cost estimating, GeoEngineers recommends a cut-to-fill ratio of about 2 to 1 for the ECD alignment to account for material losses, construction settlement, mudwaving, and re-compression settlement and shrinkage.

6.2. Gap Closure

Based on survey information provided by CPRA, GeoEngineers identified one location at the south end of marsh creation cell C where the existing mudline is lower than El. -3.5 ft., as identified in Figure 2b. This is a significant gap in the cell C perimeter and will need to be addressed during containment dike construction.

The cell C gap has a low mudline elevation of about -11 ft. GeoEngineers evaluated two options to close this gap: 1.) a sheet pile structure supported by submerged sand fill berm and 2.) a submerged sand berm capped by borrow channel material. Results and recommendations are discussed below. Our analyses are presented in Appendix C.

6.2.1. Sheet Pile Structure

The water depth of the cell C gap prohibits the use of gap closures such as, hay bales, vertical timber mats, or aquatubes, that may be suitable for shallower locations. One difficulty with a gap this deep is that there is likely a significant amount of tidal water flowing through the gap. A sheet pile closure structure provides a relatively quick and robust structure to cut off the flow through the gap reducing the material loss during placement. For this gap closure alternative, GeoEngineers recommends embedding either PZ-22 or PZ-27 steel sheets through a low sand berm to provide lateral support for the sheets during hydraulic filling. Recommended gap closure geometry and sheet pile properties are shown in Figure 9.

The benefit of this closure alternative is the reduced footprint of the sand berm. However, once the marsh fill has consolidated, the top of the sheet pile will extend above the top of the marsh, which may not be desirable. If it is preferred to have the sheet pile embedded within a berm the next gap closure alternative may be better suited.

6.2.2. Sand Berm Capped with Borrow Material

Sand is easier to place and achieve good compaction underwater than in-situ borrow material. However, sand is easily erodible due to wave and wind action. Therefore, a gap closure option using the benefits of sand for a core and an on-site borrow material cap was evaluated. While the stability analyses show a sheet pile is not necessary, a sheet pile installed to a depth of about 4 feet penetration into clay below the sand berm will block water flow through the porous sand during construction, reducing potential for quick conditions and instability. The recommended design geometry is shown in Figure 9. Stability and bearing capacity results are presented in Appendix C. The stability factors of safety for the gap closure alternative of a sand berm capped with borrow material exceed the minimum required factor of safety of 1.2. The factor of safety for bearing capacity was above 2.0.

6.2.3. Re-alignment Gap Closure Alternative

Another option to closing this gap through the deeper channel is to re-align the cell C perimeter containment so that the dike is located in shallower water, where an ECD can be constructed. This may result in some loss of marsh creation area.

6.3. Marsh Creation Areas

6.3.1. Settlement

Freshly created marsh platforms constructed with hydraulically dredged/placed fill settle over time. Elevation changes in the marsh fill are driven by water draining, evaporating, or being drawn down due to

plant growth, along with foundation soil settlement due to the new load introduced by the marsh fill. GeoEngineers evaluated marsh fill and foundation settlement for target construction elevations ranging from El. +1.0 ft. to El. +3 ft. Mudline elevations within the project site vary between El. +1.5 ft. and El. - 3.5 ft. However, an evaluation of topographic survey data provided by CPRA, indicates about 84 percent of the proposed marsh creation area has mudline elevations between El. -3.0 ft. and El. 0.0 ft. (Figure 10). GeoEngineers completed settlement evaluations for mudlines elevations of 0.0 ft., -2.0 ft., and -3.0 ft. as shown in Appendix D. A detailed summary of our calculation approach is also included in Appendix D.

As GeoEngineers understands, the governing principle of marsh creation is to establish a marsh platform that will remain within the intertidal range (between mean high water and mean low water or between the 20 percent and 80 percent inundation levels) for as long as practical during the project life (20 years). CPRA provided the following design inundation levels to be used for the Island Road project:

TABLE 3: MARSH INUNDATION DESIGN 20 YEAR LEVELS (2040)

Percent Inundation	Marsh Elevation (NAVD88)
80	+0.61 ft.
20	+2.09 ft.

Our settlement analyses of the marsh fill were performed for marsh fill elevations of +3.0 ft., +2.5 ft., +2.0 ft., +1.5 ft., and +1.0 ft. as presented in the settlement versus time plots in Appendix D. Based on our marsh fill settlement results, one period of marsh fill placement will be required for areas of existing mudline of El. 0 ft. or higher. Our analyses performed for mudline elevations of El. -2 ft. and -3 ft. show that a second marsh fill period placed 60 days after filling the first lift is completed will be needed. However, the second fill period for these mudline elevations will not be sufficient to meet the 20-year design criteria for all marsh fill heights evaluated as shown in Appendix D.

6.3.2. Hydraulic Dredging Cut-to-Fill

Hydraulically dredged material cut-to-fill ratios have been reported between 1.0 (1-yard cut from the borrow for every 1 yard placed in the fill area) and 1.5 for marsh creation projects in Louisiana, depending on material type, containment scheme, and dredge/pipe/containment efficiencies. The material exiting the dredge pipe will initially be less dense than the in-place borrow material but, based on trends from construction projects elsewhere in coastal Louisiana, will return to or exceed borrow area densities early in the project life due to desiccation and plant-induced evapotranspiration. GeoEngineers recommends a cut-to-fill ratio of 1.2 for this site. While the fill areas are relatively small and will have shorter retention times, the borrow area has a high sand/silt content. Sand and silt will settle quickly once discharged from the pipe and there should be less losses through the fill area discharge weirs. This number can change with dredge size. In general, more retention time (i.e. a smaller dredge) will result in lower cut-to-fill ratios.

6.4. Borrow Area Side Slopes

CPRA requested we evaluate stability of side slopes within the proposed Lake Tambour borrow area. GeoEngineers performed a stability analysis for the borrow area using strength test results from borrow area samples. We understand dredge depths deeper than 15 feet are typically discouraged by the National Marine Fisheries Service. In addition, based on survey data, the average mudline elevation within the proposed borrow area appears to be about El. -4 to -5 ft. The assumed dredged borrow area cross-section and factors of safety are presented in Table 4. The critical failure surfaces for each case presented

below are included in Appendix E along with the assumed soil design parameters. The failure surface geometry is also shown.

TABLE 4: BORROW AREA ASSUMED GEOMETRY AND FACTORS OF SAFETY

Existing Mudline El. (ft)	Borrow Bottom El. (ft)	Borrow Side Slope (H:V)	Factor of Safety
-4.0	-19.0	2:1	1.02
-4.0	-19.0	3:1	1.26

7.0 CONSTRUCTION CONSIDERATIONS

7.1. General Considerations

Based on the expected site construction activities and evaluations completed for this project, the following are offered with respect to construction.

- Our evaluations are based on a limited number of investigations over a wide area. Our evaluations indicate generally similar conditions across the site. However, CPRA should expect localized areas during construction to require location-specific remedies. GeoEngineers offers our services during construction to address issues that may arise.
- As previously mentioned, we understand a pipeline crosses through marsh creation cell B near the north edge of the Island Road project site. We recommend taking precautions to mitigate impact to pipelines prior to construction. CPRA and the contractor should work closely with pipeline owners in the area and conduct a pre-construction survey to confirm pipeline and other obstruction locations.
- Water depth in the marsh creation area is variable. Construction equipment will need to both be acceptable to the land owner and able to perform the required tasks.
- Peat considerations
  - Peat used in constructing containment dikes may compress significantly under loading requiring more fill; however, it can be utilized and should not be wasted.
  - Energy diffusers or other such precautions are recommended to minimize scouring of the organic deposits during hydraulic fill placement. We understand scoured floating blocks of peat have blocked discharge weir boxes at sites with similar conditions. At these sites wire mesh fences placed in a wide arc in front of the discharge point were used to screen out these floating organic material blocks.
  - Peat is a weak, light-weight material; mud waves should be expected while placing fill in areas where the existing mudline is below the water surface.
  - Peat settlement during hydraulic fill placement will result in an initial fill thickness greater than the elevation difference between the target fill elevation and the pre-construction mudline elevation.
- Dewatering structures (weirs, drainage culverts) should be designed to allow retention of as much soil fill as practical. In general, placement of such structures away from the dredge discharge point is preferred.

7.2. Construction Sequencing

As described earlier a significant portion of the borrow material (25 to 65 percent) is sand. Larger soil particles, such as sand, will fall out of suspension more quickly than smaller soil particles, likely resulting in mounds of high sand concentration in the immediate vicinity of the dredge pipe discharge location. For sand fill projects, a low-ground-pressure bull-dozer would typically be used to spread the sand after discharge; however, this may not work at this location due to the other 75 to 35 percent of fill that is fines and weak underlying soil. Construction planning that includes moving the dredge pipe discharge location frequently may better distribute sand and result in less mounding. Locating discharge points within thicker fill areas, may also off-set additional settlement typically associated with greater fill depth. Sand and silt will tend to settle rapidly and have less consolidation after placement than clay. We recommend the contractor place fill in low areas first, then move to higher ground, both for ECDs and hydraulic fill. Lower areas will require more fill and are expected to settle more. Filling these areas first will allow some of the additional settlement to be realized and then mitigated by potentially placing additional fill in these areas during construction. Based on review of topographic data, there appear to be low areas at about El. -3.5 ft. on the west and east sides of fill site B, the north side of fill site C, and the west side of fill site A. We recommend beginning ECD construction at these locations. In addition, we recommend the hydraulic fill discharge be located at these deeper areas to benefit from sand fill in these lower fill areas.

7.3. Containment Dike Construction

- GeoEngineers recommends initially building the ECDs to about 2 feet above mean water level (about El. +2.5 ft.), then letting the dike section rest during construction of the remainder of the ECD to allow the fill to settle/gain strength and foundation soils to start adjusting under the load. We assumed the time between the first and second ECD lifts will be one week or greater. Based on our calculations, staged construction is not necessary for stability; however, soil borings are widely spaced and constructing in lifts is a simple and effective method to off-set risk associated with site variability. At CPRA's suggestion, GeoEngineers completed an evaluation considering gain in strength of the fill soils. We re-evaluated stability cases 1 and 4 (internal stability of the ECDs) for soil design Profiles 1 and 2 for low and high mudline conditions assuming two-lift construction. A discussion of our approach and the results of our stability analyses are presented in Appendix F.
- Where permissible, the contractor should build the ECD on emergent marsh. This provides a higher base elevation and the marsh vegetation is natural reinforcement, resulting in less fill and lower failure potential. From an engineering perspective, the contractor may use the top layer of marsh for dike fill (i.e. it is okay to use vegetation and roots as fill).
- When building ECDs sound construction practice includes excavating and placing soil as gently as practical in as intact a mass as practical.
- ECD fill should be maintained one foot above the level of the hydraulic marsh fill, plus any free water ponded on top of the marsh fill.
- Containment structure design recommendations are based on hydraulic fill retention during normal weather conditions. Exceptional weather, such as hurricane winds or storm surge, were not considered.
- ECD construction must the include construction/stability berm widths in Figure 8. Unless otherwise specified, we recommend the marsh buggies stay at least 2 ft. away from the ECD toe and as far away from the borrow slope as practical.

- Contractors are likely to excavate deeper for "better" soil to build ECDs, often plunging through the top few feet of weak soil. This may result in borrow channels that are deeper than necessary.

- In deeper water areas, it may be necessary to borrow from both sides of the ECD. Provided minimum construction/stability berm widths are maintained on both sides of the dike, this is acceptable.

8.0 LIMITATIONS

We have prepared this report for the exclusive use of CPRA in support of design of the proposed Island Road project located in Terrebonne Parish, Louisiana.

Within the limitations of scope, schedule and budget, our services have been executed in accordance with generally accepted practices in the field of geotechnical engineering in this area at the time this report was prepared. No warranty or other conditions, expressed or implied, should be understood.

Please refer to Appendix G titled "Report Limitations and Guidelines for Use" for additional information pertaining to use of this report.

FIGURES

GeoEngineers

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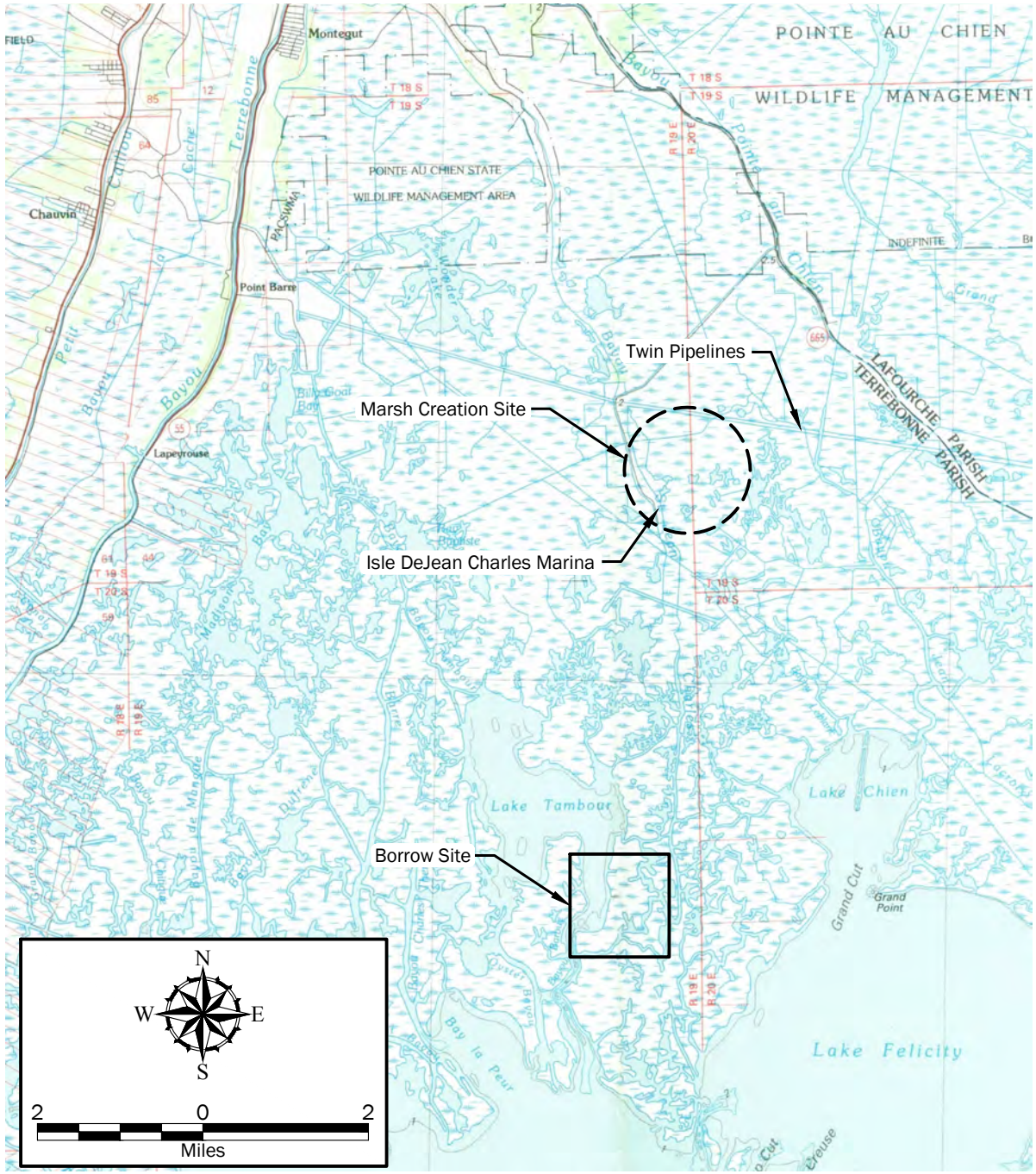


Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. Details of field exploration and lab testing for the marsh creation site were included in GeoEngineers File No. 16715-040-01, dated February 1, 2017

Data Source: Topograghic image was taken from USGS, Terrebonne Bay, Dated: 1983

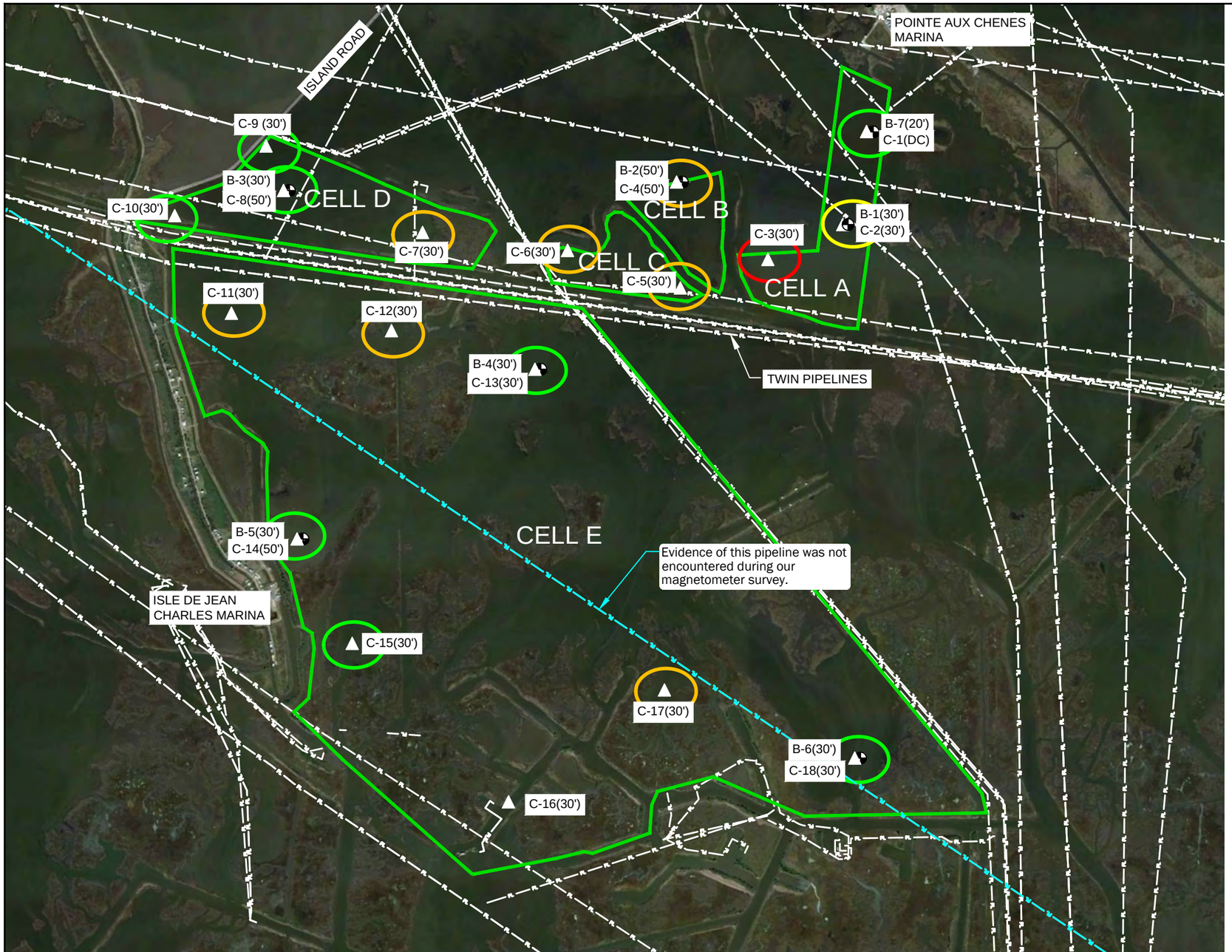
Projection: LA State Plane, South Zone, NAD83, US Foot

Vicinity Map

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure 1



LEGEND

- B-1 — Approximate Soil Boring Location
- C-1 — Approximate CPT Location
- Cell Location
- Pipeline

Maximum Crown Elevation - Single Lift

+4	+3.5
+3	+2.5

Notes:
1. GeoEngineers field crew followed T. Baker Smith representatives directions to access the exploration locations.
2. The locations of all features shown are approximate.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: 1. Aerial image was taken from Google Earth Pro., Licensed to GeoEngineers Inc., Imagery Dated: November 14, 2012
2. Cell locations were provided by CPRA, Base Map.dwg, St. Project # TE-117, Sheet 2-2, Dated July 2014
3. Soil Boring and CPT locations were staked and surveyed by Lonnie G. Harper & Associates, Dated February 23, 2015
4. Pipeline routes were provided by CPRA, Island Road Marsh Creation, State Project Number:TE-117, Sheet 2, Dated July 2014

N W E S

2000 0 2000
FEET

Phase I Site Plan
Marsh Creation Area

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure 2a

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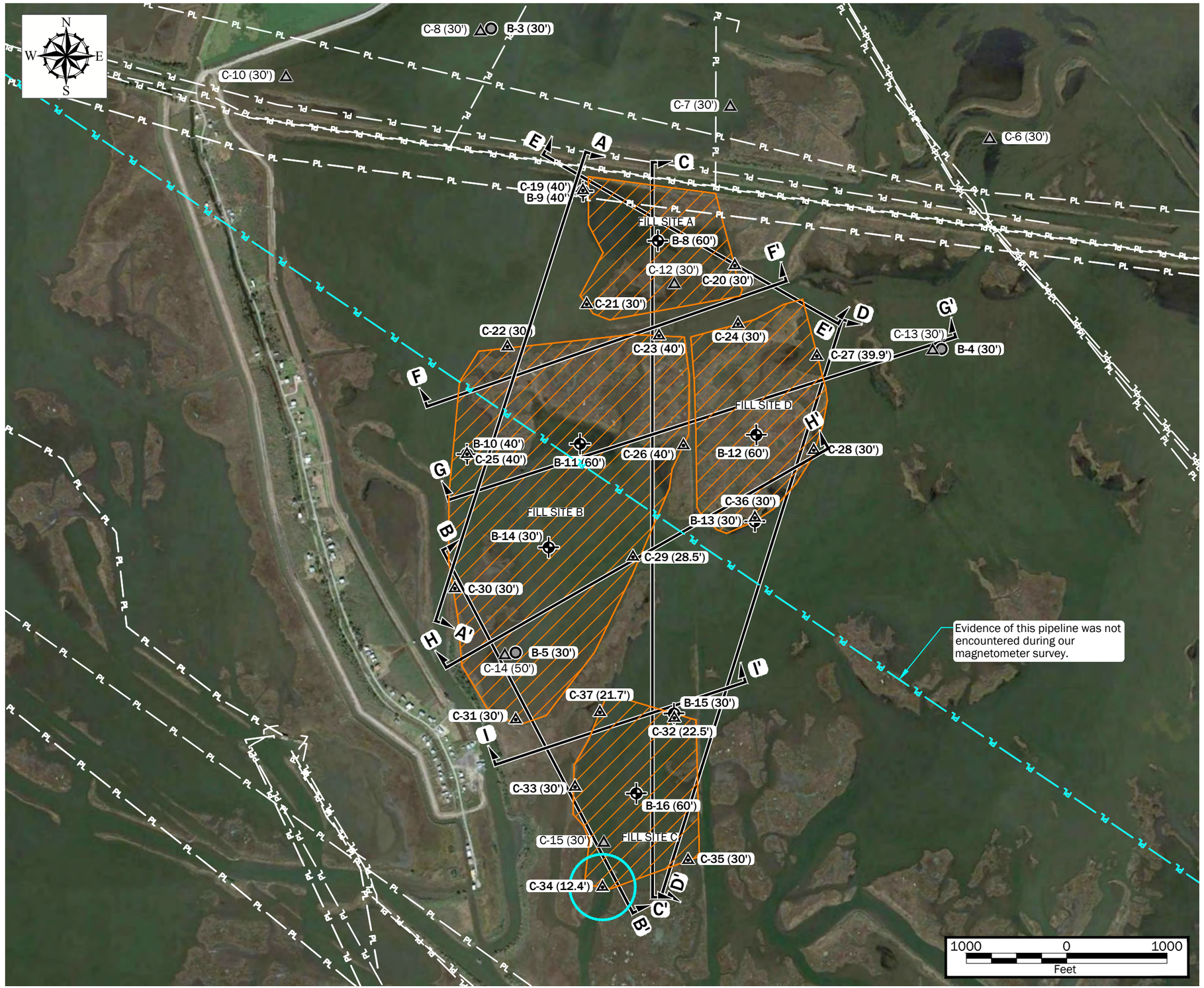

Legend

- B-8 — Phase II Boring Location
- C-19 — Phase II CPT Location
- B-1 — Phase I Boring Location
- C-1 — Phase I CPT Location
- Proposed Marsh Creation Area
- PL — Pipeline Locations
- A — A' Cross Section (refer to Figures 3a to 3c)
- Gap Closure

Notes:

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Data Source:

1. Aerial was taken from Google Earth Pro., Imagery Dated 1/25/2015
2. Pipeline routes were provided by CPRA, Island Road Marsh Creation, State Project Number: TE-117, Sheet 2, Dated July 2014
3. Refer to the July 15, 2015 Geotechnical Data Report, Island Road Marsh Creation and Nourishment (TE-117), Terrebonne Parish, Louisiana, for CPT and soil boring logs/data for B-3, B-4, B-5, C-6, C-7, C-8, C-13, C-14 and C-15

Phase II Site Plan
Marsh Creation Area

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure 2b

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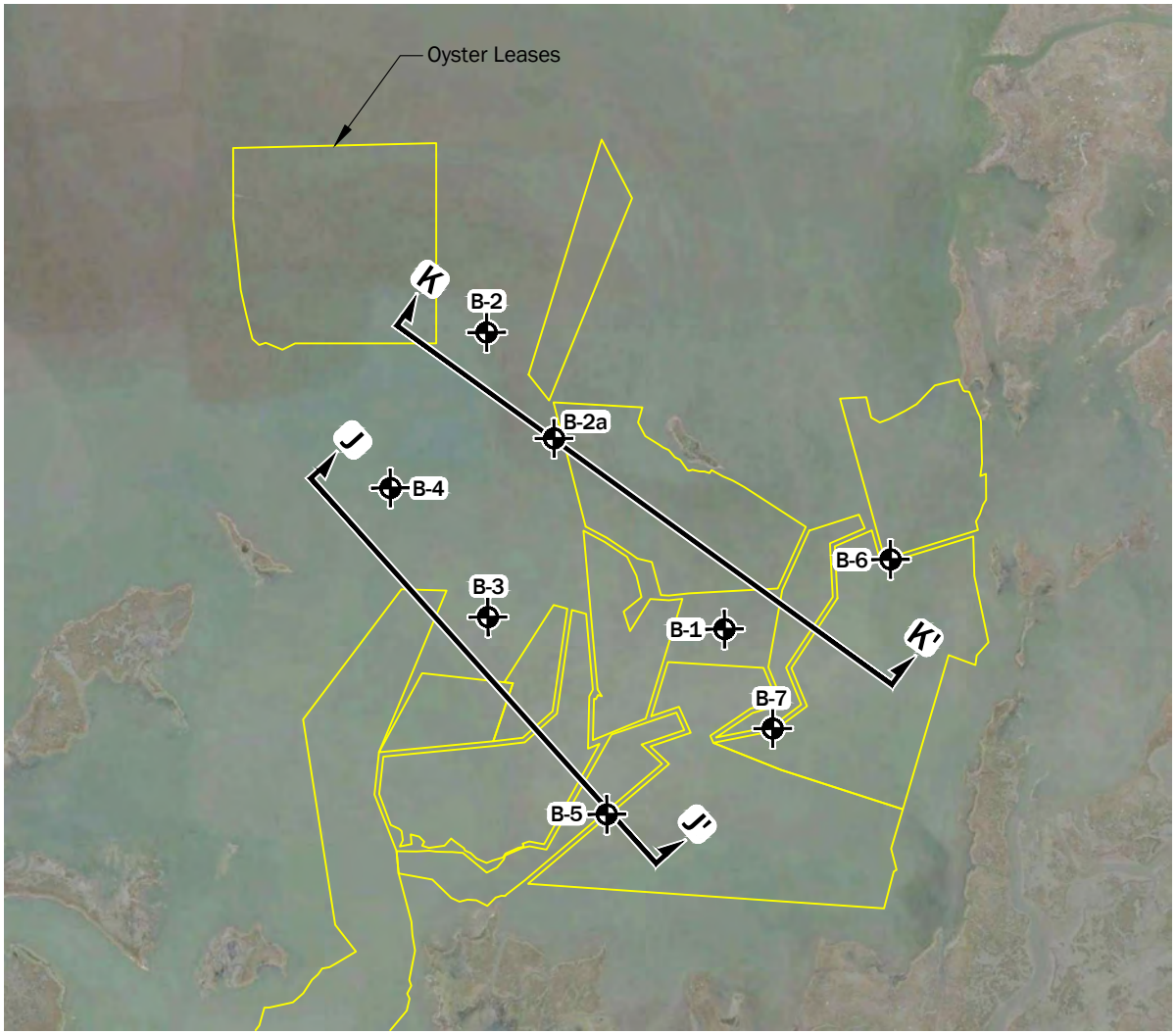

Legend

B-1 Boring by GeoEngineers, 2018

Oyster Leases

J J' Cross Section Location

Notes:

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Data Source:

1. Aerial was taken from Google Earth Pro, Imagery Dated: 1/25/2015
2. Oyster leases were taken from SONRIS, Date Downloaded: 5/18/2017

Projection: NAD83 Louisiana State Planes, Southern Zone, US Foot

N W E S

2000 0 2000

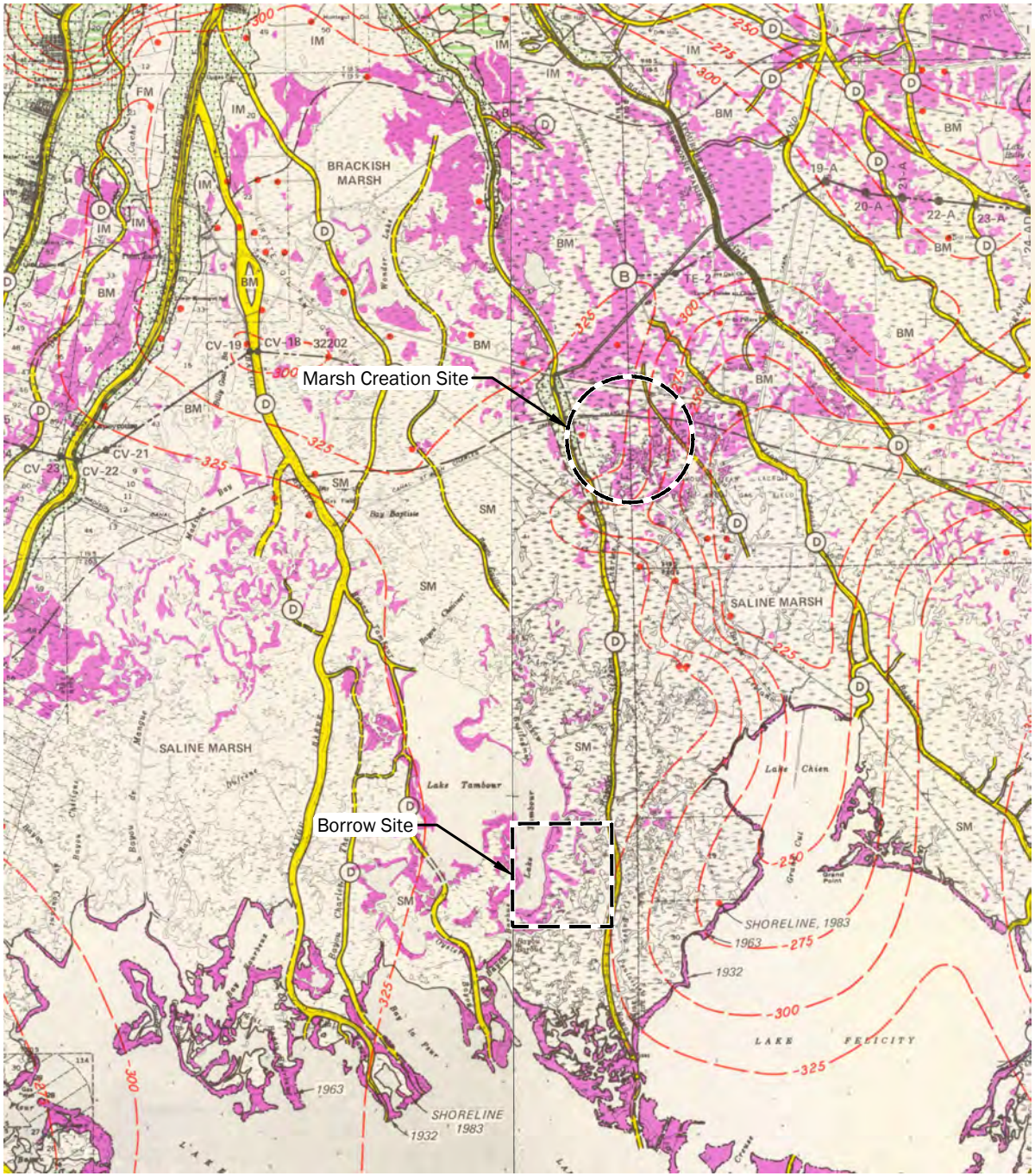
Feet

Site Plan
Borrow Area

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure 2c



Legend

- NATURAL LEVEE
- INTERDISTRIBUTARY
- ABANDONED DISTRIBUTARY
- CREVASSE CHANNEL
- LAND LOSS (1932–1983)
- INDEFINITE CONTACT
- -300 ELEVATION OF UPPER FINE-GRAINED PLEISTOCENE SURFACE IN FEET-MSL
- BORING USED TO CONTOUR UPPER FINE-GRAINED PLEISTOCENE SURFACE
- BORINGS USED ON CROSS SECTIONS

N W E S

2 0 2
Miles

Notes:

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Data Source: Geology map was taken from USACE, Quads: Dulac & Lake Felicity, Dated 1986

Projection: LA State Plane, South Zone, NAD83, US Foot

Geology Map
Marsh Creation Area

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure 3a

Legend

Hdl — **Deposits of the Lafourche delta lobe, Mississippi River**—deltaic deposits underlying the delta plain of the Lafourche delta lobe. They are composed of cyclically interbedded interdistributary peat and clay; natural levee silt and clay; distributary sand; and delta-front and prodelta mud and clay.

N W E S

2 0 2
Miles

Notes:

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Data Source: Geology map was taken from USACE, Quads: Dulac & Lake Felicity, Dated 1986

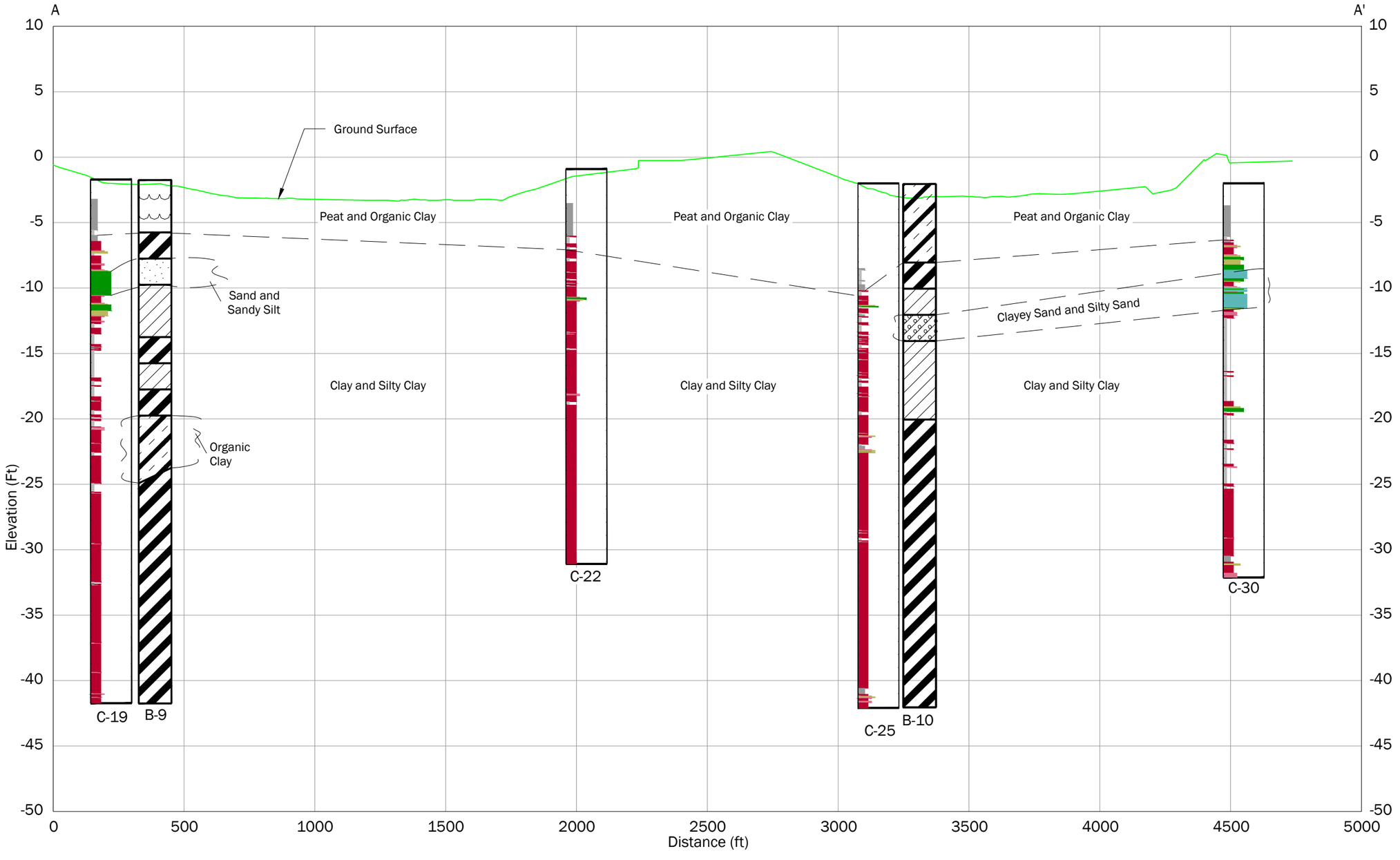
Projection: LA State Plane, South Zone, NAD83, US Foot

Geology Map
Marsh Creation Area Fault System

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure 3b



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Data Source:

1. Survey information was taken from CPRA, TE-117 Fill Site Survey, Dated: 9/12/2016
2. CPT and Boring Elevations were provided by Lonnie G. Harper & Associates Inc., Boring & CPT Locations, Project # 2016-53, Dated 7/25/2016

CPT Legend

- 1 - Sensitive, Fine Grained Soils
- 2 - Organic Soils, Peats
- 3 - Clay
- 4 - Clays & Silty Clays
- 5 - Clayey Silt & Silty Clays
- 6 - Sandy Silts & Clayey Silts
- 7 - Silty Sands & Sandy Silts
- 8 - Sands & Silty Sands
- 9 - Sands

Boring Legend

PT Peat; CH Clay; CL Silty Clay; SC-SM Silty Clayey Sand; ML Silt; SP Sand; SC Clayey Sand; OH Organic Clay; SM Silty Sand

Subsurface Profile A-A'
Marsh Creation Area

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure 4a

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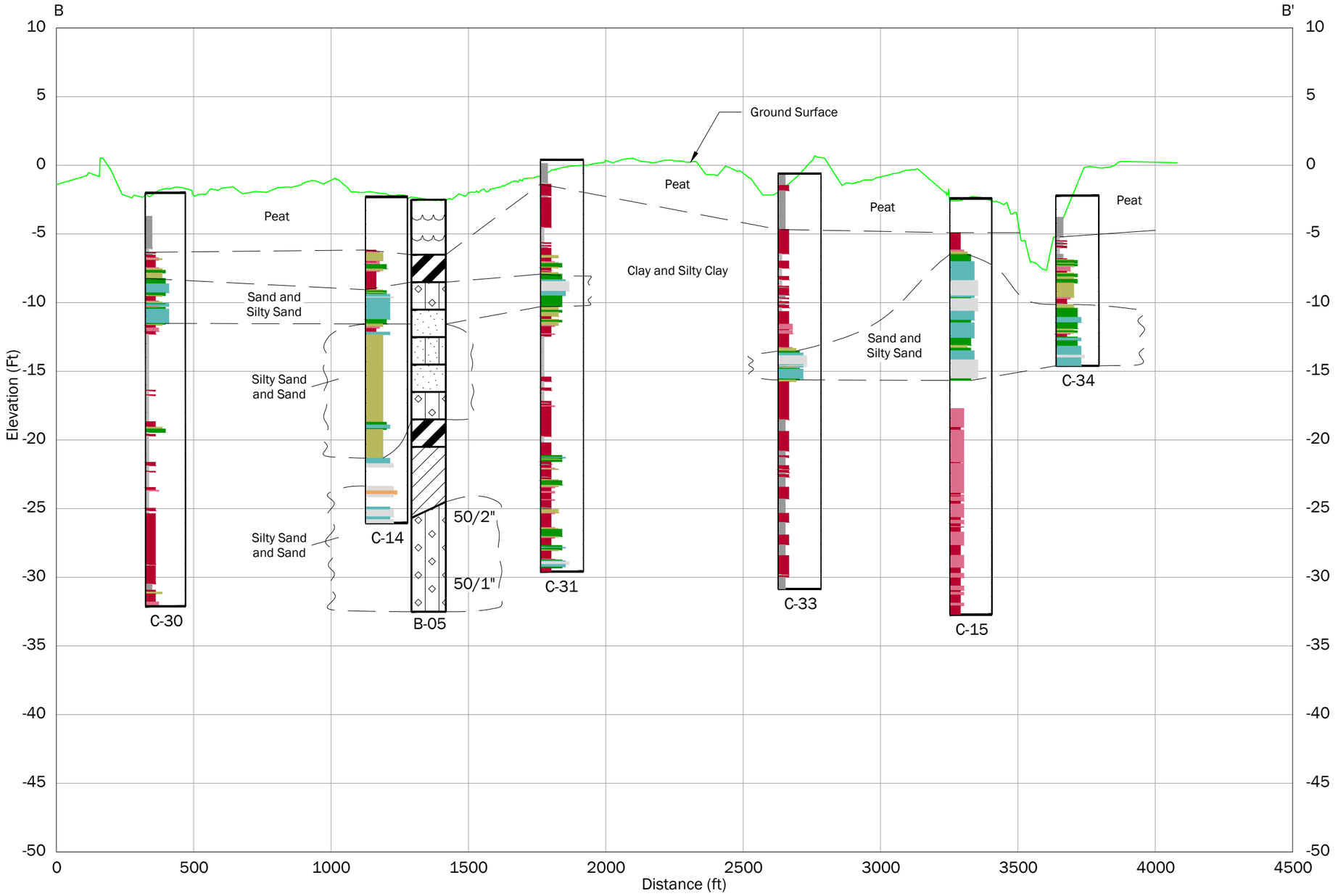

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CPT Legend

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- 7 - Silty Sands & Sandy Silts
- 8 - Sands & Silty Sands
- 9 - Sands

Boring Legend

- PT Peat
- CH Clay
- CL Silty Clay
- SC-SM Silty Clayey Sand
- ML Silt
- SP-SM Sand with Silt
- SP Sand
- SC Clayey Sand
- OH Organic Clay
- SM Silty Sand

Subsurface Profile B-B'
Marsh Creation Area

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure 4b

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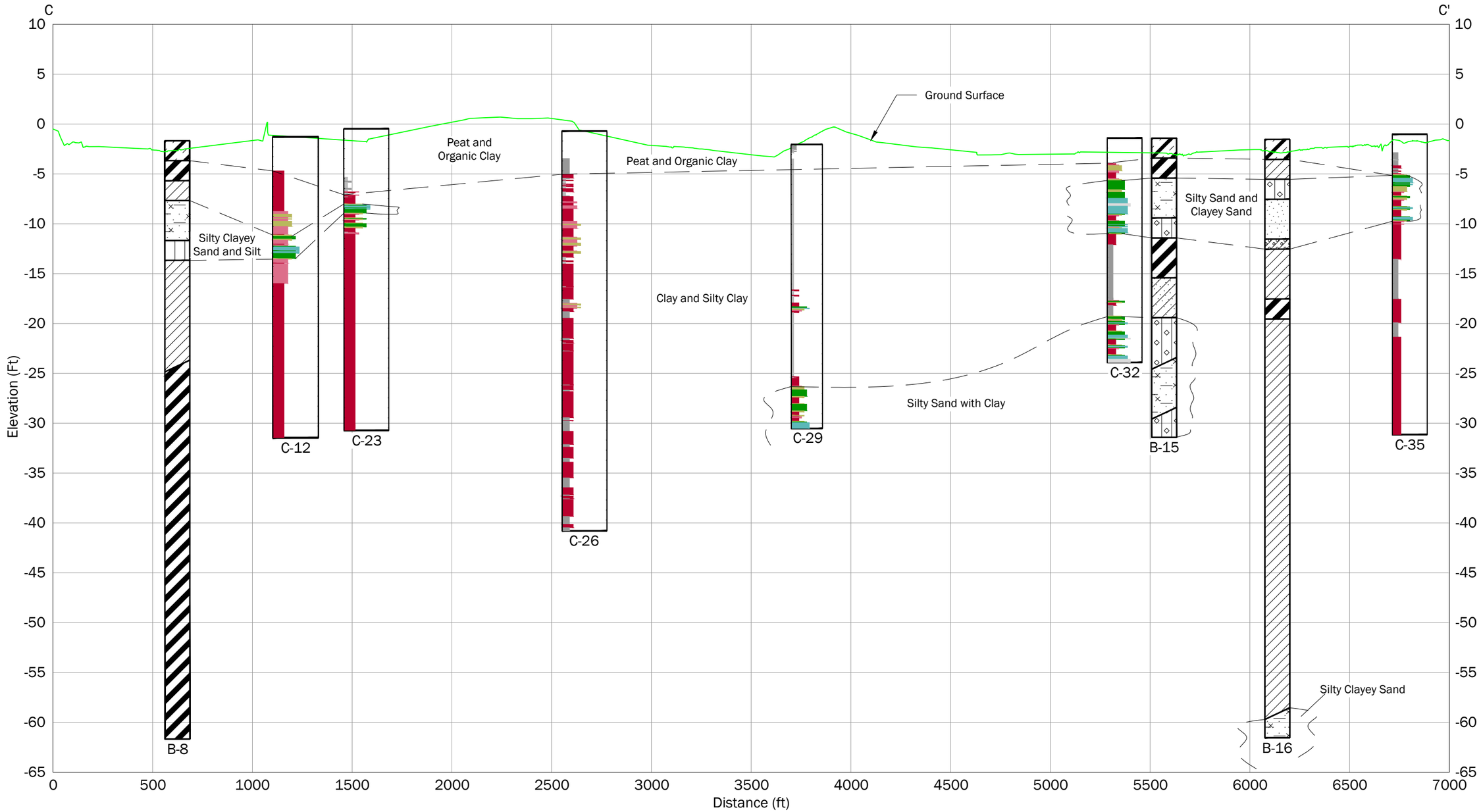

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Notes:

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Data Source:

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CPT Legend

- 1 - Sensitive, Fine Grained Soils
- 2 - Organic Soils, Peats
- 3 - Clay
- 4 - Clays & Silty Clays
- 5 - Clayey Silt & Silty Clays
- 6 - Sandy Silts & Clayey Silts
- 7 - Silty Sands & Sandy Silts
- 8 - Sands & Silty Sands
- 9 - Sands

Boring Legend

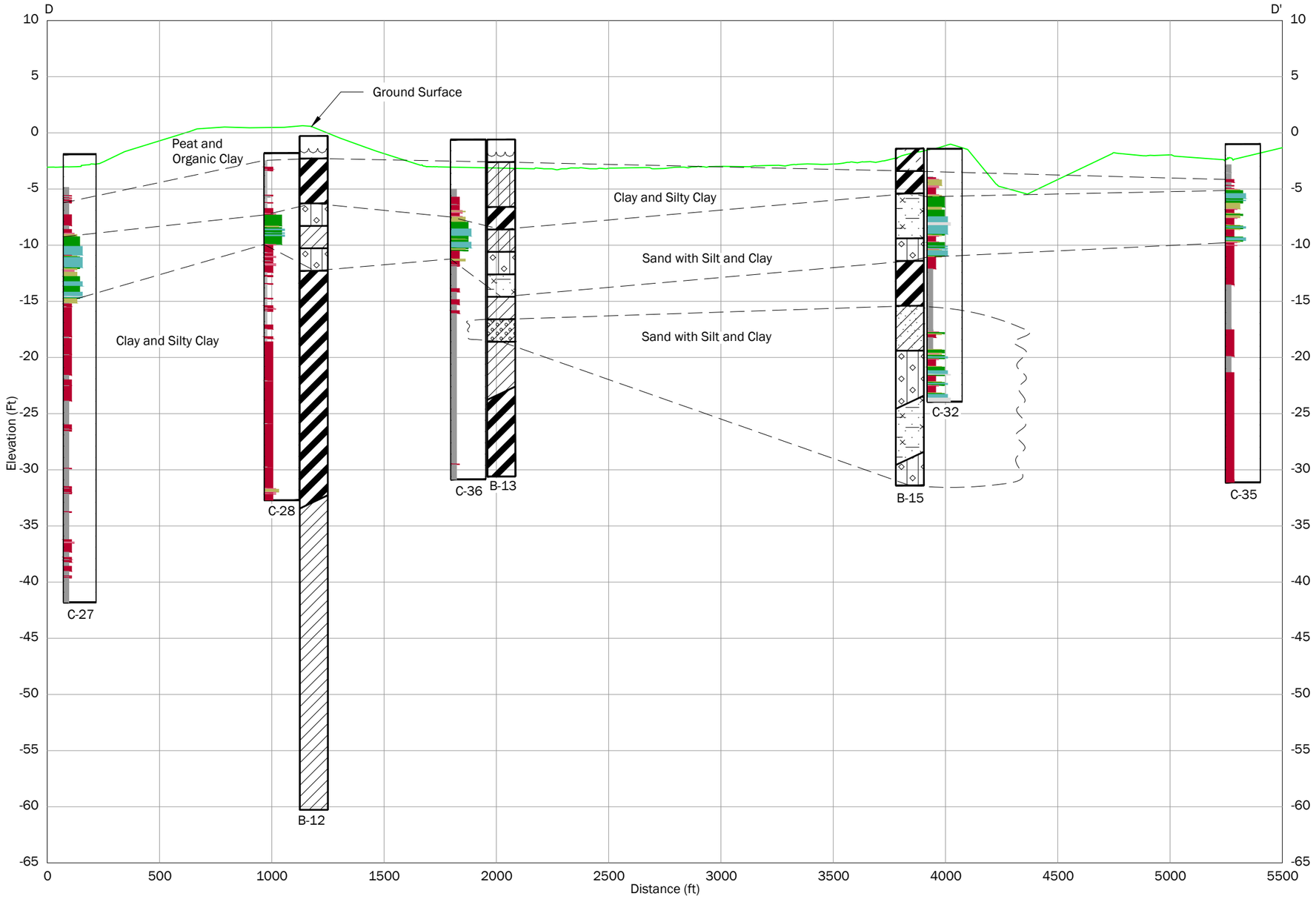
PT Peat; CH Clay; CL Silty Clay; SC-SM Silty Clayey Sand; ML Silt; SP Sand; SC Clayey Sand; OH Organic Clay; SM Silty Sand

Subsurface Profile C-C'
Marsh Creation Area

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure 4c



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- 8 - Sands & Silty Sands
- 9 - Sands

Boring Legend

PT Peat; CH Clay; CL Silty Clay; SC-SM Silty Clayey Sand; ML Silt; SP Sand; SC Clayey Sand; OH Organic Clay; SM Silty Sand

Subsurface Profile D-D'
Marsh Creation Area

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure 4d

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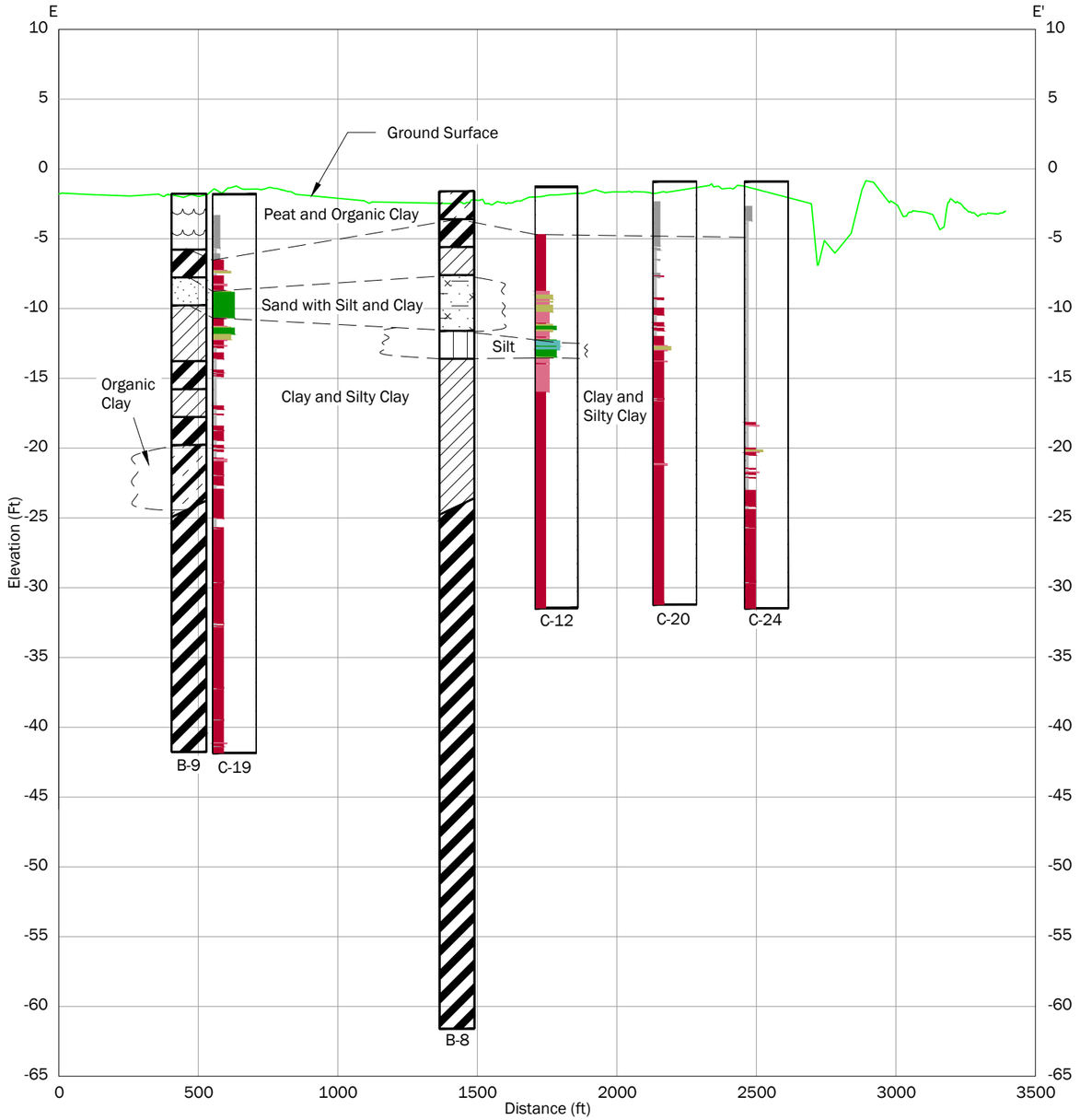

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2. CPT and Boring Elevations were provided by Lonnie G. Harper & Associates Inc., Boring & CPT Locations, Project # 2016-53, Dated 7/25/2016

CPT Legend

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- 7 - Silty Sands & Sandy Silts
- 8 - Sands & Silty Sands
- 9 - Sands

Boring Legend

PT Peat; CH Clay; CL Silty Clay; SC-SM Silty Clayey Sand; ML Silt; SP Sand; SC Clayey Sand; OH Organic Clay; SM Silty Sand

Subsurface Profile E-E'

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure 4e

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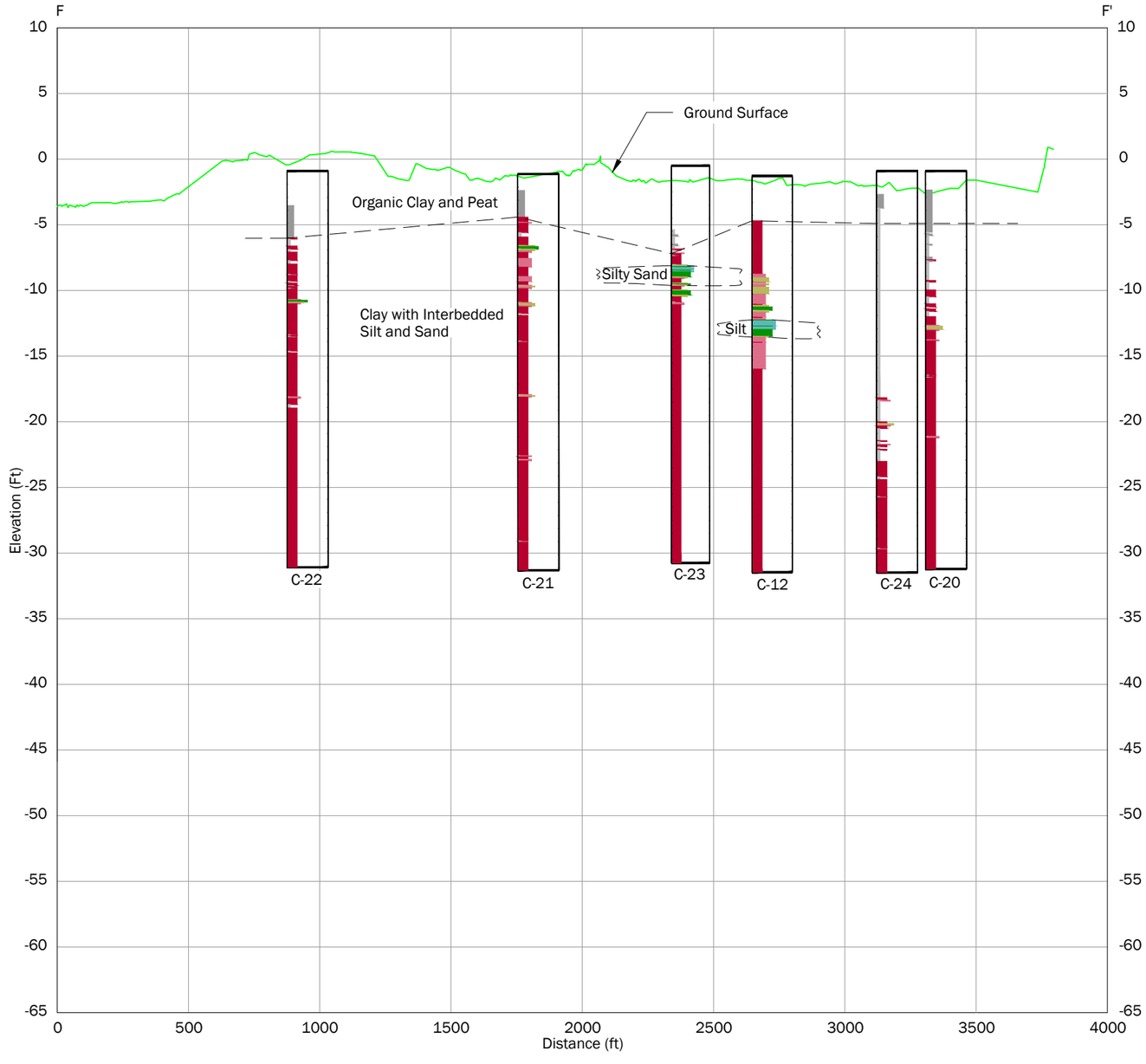

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2. CPT and Boring Elevations were provided by Lonnie G. Harper & Associates Inc., Boring & CPT Locations, Project # 2016-53, Dated 7/25/2016

CPT Legend

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- 3 - Clay
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- 5 - Clayey Silt & Silty Clays
- 6 - Sandy Silts & Clayey Silts
- 7 - Silty Sands & Sandy Silts
- 8 - Sands & Silty Sands
- 9 - Sands

Subsurface Profile F-F'

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure 4f

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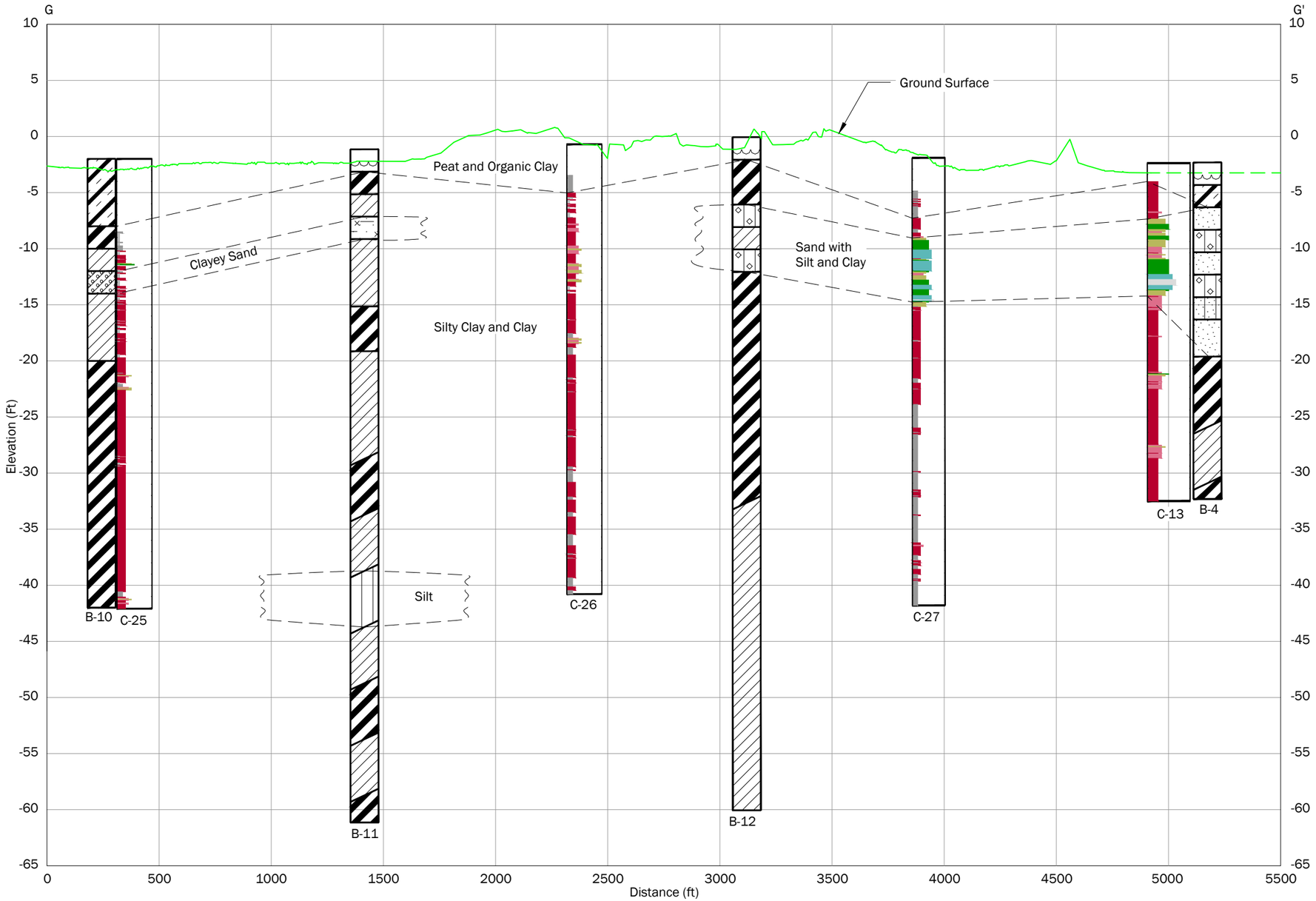

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CPT Legend

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- 7 - Silty Sands & Sandy Silts
- 8 - Sands & Silty Sands
- 9 - Sands

Boring Legend

PT Peat; CH Clay; CL Silty Clay; SC-SM Silty Clayey Sand; ML Silt; SP Sand; SC Clayey Sand; OH Organic Clay; SM Silty Sand

Subsurface Profile G-G'

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure 4g

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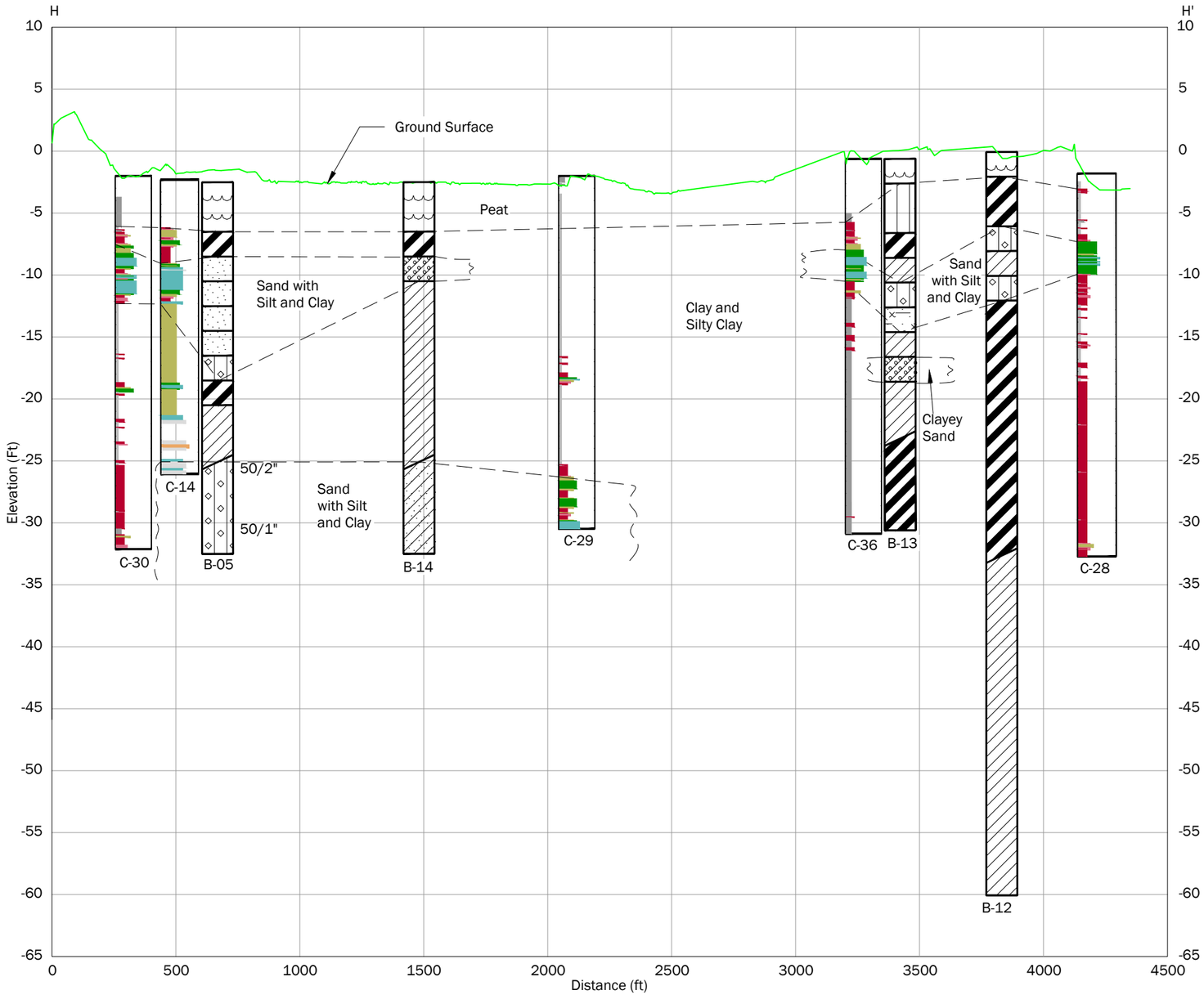

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CPT Legend

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- 7 - Silty Sands & Sandy Silts
- 8 - Sands & Silty Sands
- 9 - Sands

Boring Legend

PT Peat	CH Clay	CL Silty Clay	SC-SM Silty Clayey Sand	ML Silt
SP-SC Sand with Clay	SP Sand	SC Clayey Sand	OH Organic Clay	SM Silty Sand

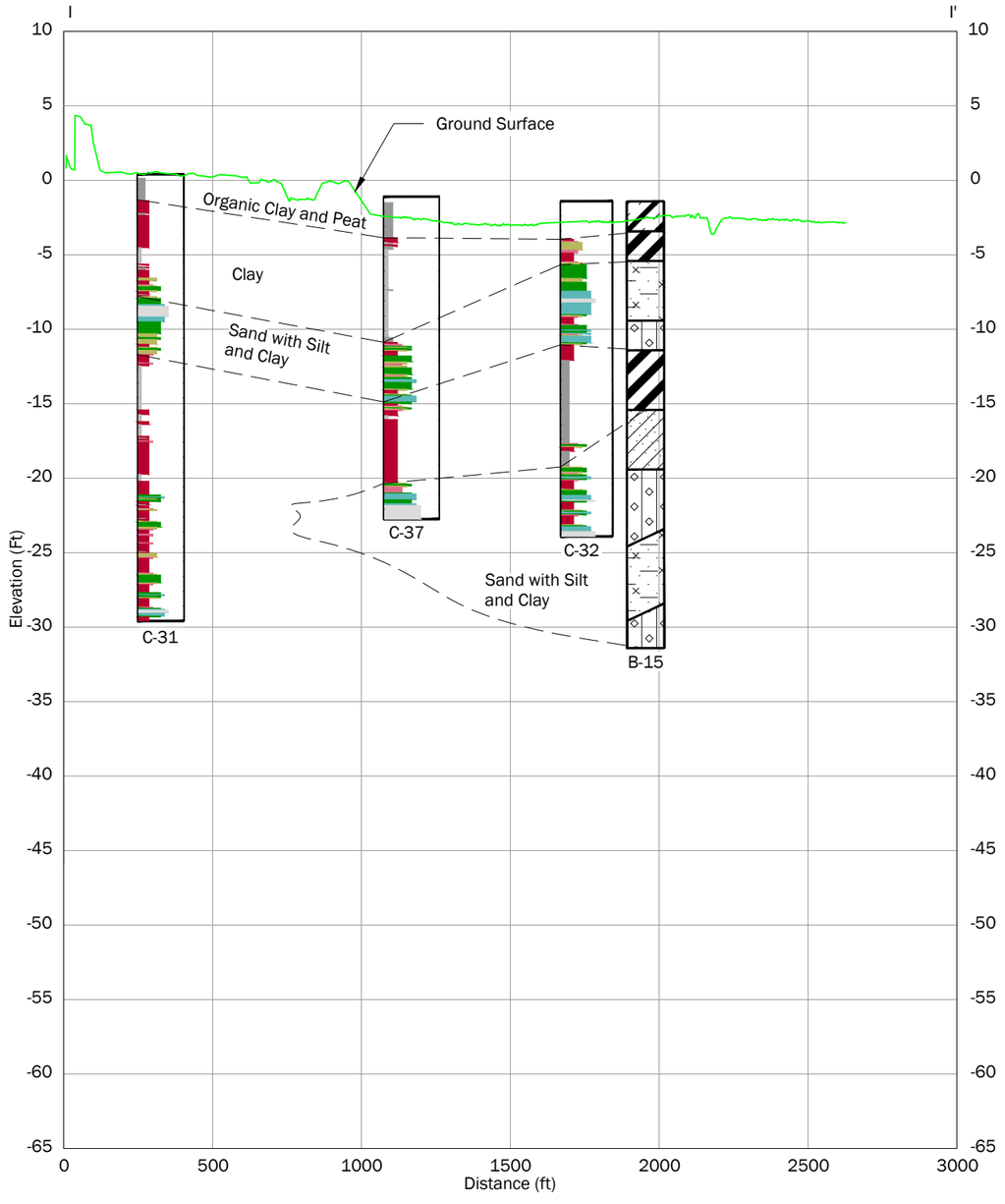
Subsurface Profile H-H'

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure 4h

P:\16\16715040\CAD\03\Geotech - Final\16715040003_F02b_BLP_Marsh Creation Area.dwg TAB:Section H-H' Date Exported: 08/15/18 - 11:39 by kcook



Notes:

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2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source:

1. Survey information was taken from CPRA, TE-117 Fill Site Survey, Dated: 9/12/2016
2. CPT and Boring Elevations were provided by Lonnie G. Harper & Associates Inc., Boring & CPT Locations, Project # 2016-53, Dated 7/25/2016

CPT Legend

- 1 - Sensitive, Fine Grained Soils
- 2 - Organic Soils, Peats
- 3 - Clay
- 4 - Clays & Silty Clays
- 5 - Clayey Silt & Silty Clays
- 6 - Sandy Silts & Clayey Silts
- 7 - Silty Sands & Sandy Silts
- 8 - Sands & Silty Sands
- 9 - Sands

Boring Legend

PT Peat; CH Clay; CL Silty Clay; SC-SM Silty Clayey Sand; ML Silt; SP Sand; SC Clayey Sand; OH Organic Clay; SM Silty Sand

Subsurface Profile I-I'

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

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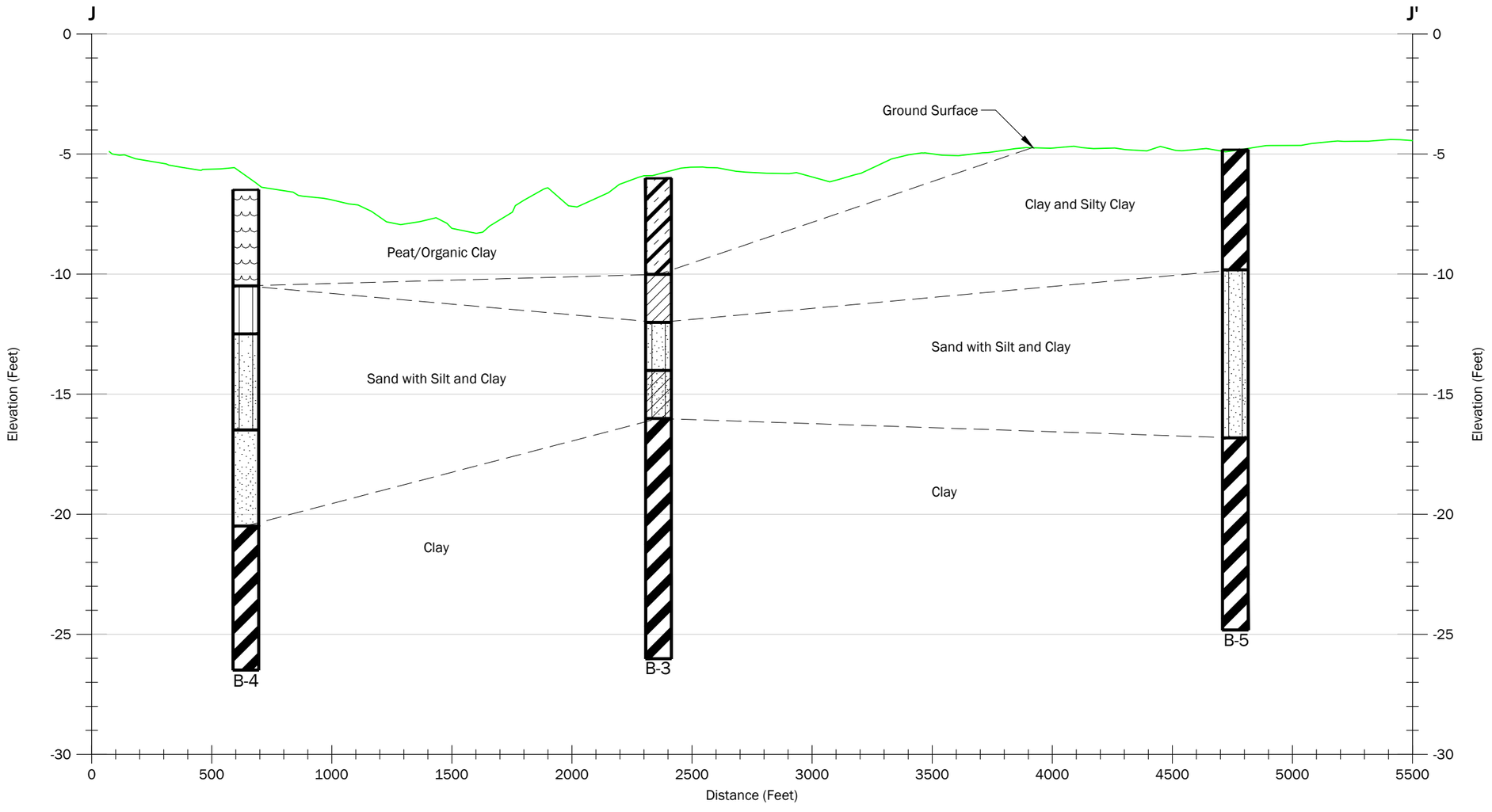
Figure 4i

P:\16\16715040\CAD\03\Geotech - Final\1671504003_F02a_BLP_Marsh Creation Area.dwg TAB:Section I-I' Date Exported: 05/21/18 - 13:00 by kcook



Notes:

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Data Source: Elevation data was taken from Fenstermaker, Dated 2/28/2017

Projection: NAD83 Louisiana State Planes, Southern Zone, US Foot

Legend

- Peat
- Silt
- Sand w/ Silt
- Sand
- Clay
- Silty Clay
- Organic Clay
- Silty Clayey Sand

500 0 500
Horizontal Scale in Feet

5 0 5
Vertical Scale in Feet
Vertical Exaggeration: 100X

Subsurface Profile J-J'
Borrow Area

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

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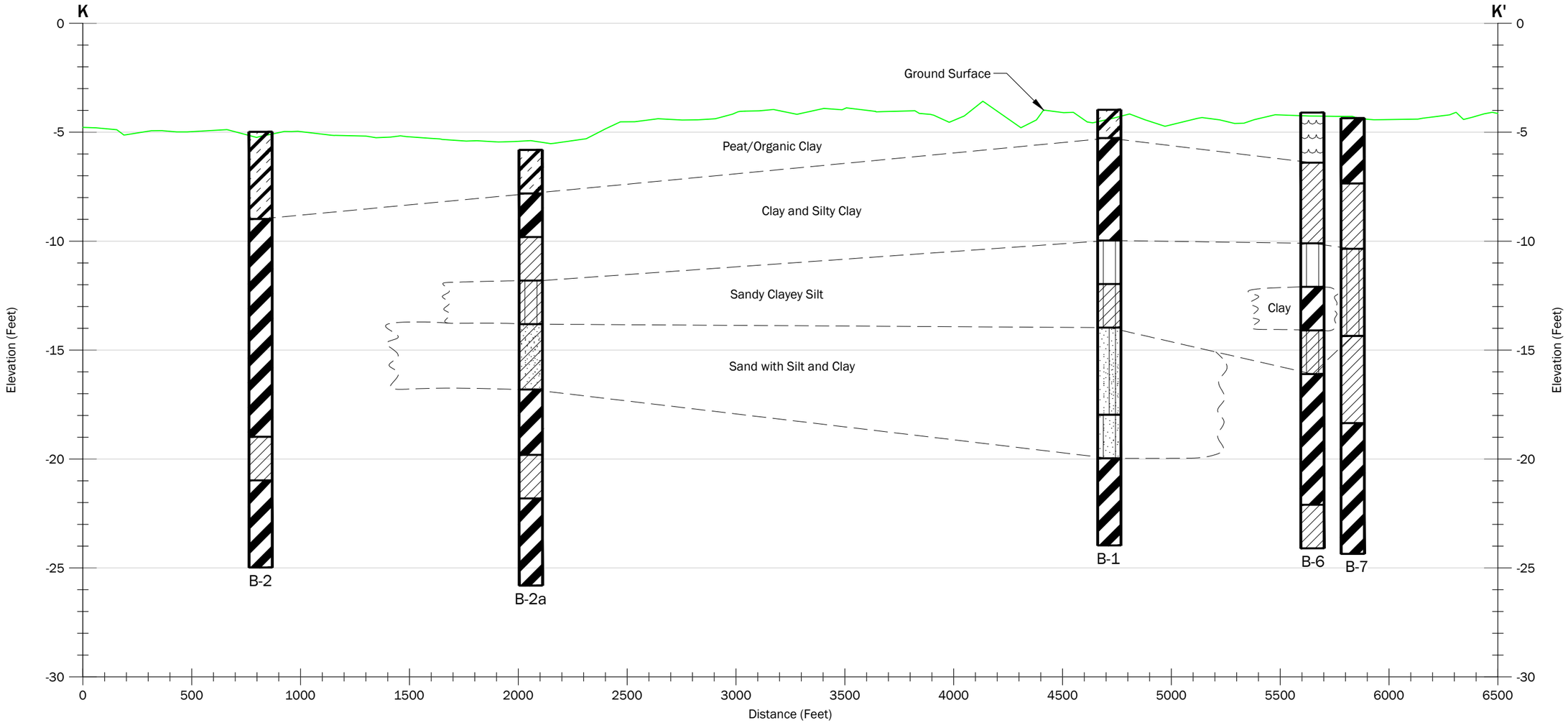
Figure 5a

P:\16\16715040\CAD\03\Geotech - Final\1671504003_F02c_BLP_Borrow Area.dwg TAB:F03 - Section AA Date Exported: 08/14/18 - 8:54 by kcook



Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: Elevation data was taken from Fenstermaker, Dated 2/28/2017

Projection: NAD83 Louisiana State Planes, Southern Zone, US Foot

Legend

- Peat
- Silt
- Sand w/ Silt
- Sand
- Silty Sand
- Sand w/ Clay
- Clay
- Silty Clay
- Organic Clay
- Silty Clayey Sand
- Sandy Clayey Silt

500 0 500
Horizontal Scale in Feet

5 0 5
Vertical Scale in Feet
Vertical Exaggeration: 100X

Subsurface Profile K-K'
Borrow Area

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

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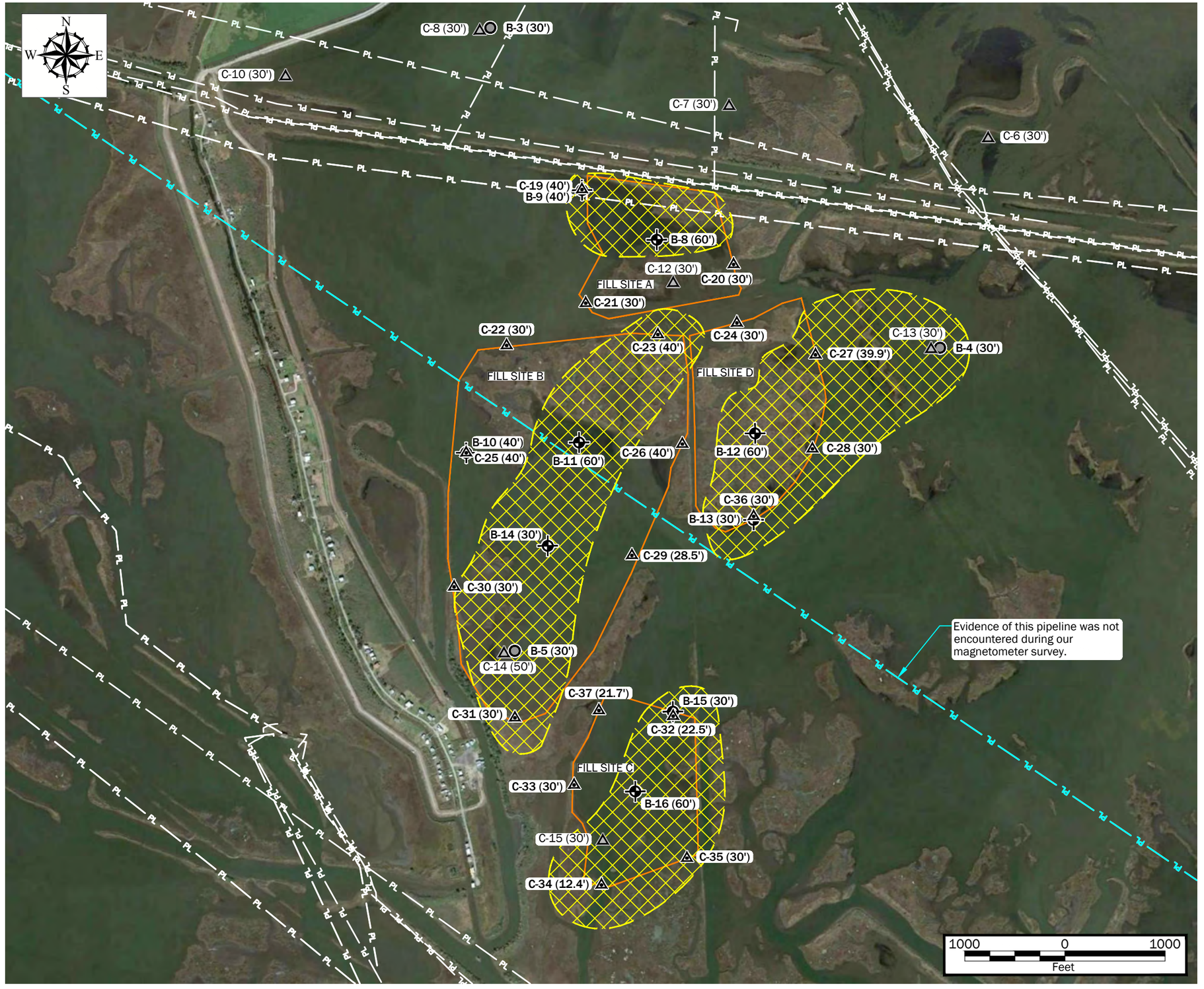
Figure 5b

P:\16\16715040\CAD\03\Geotech - Final\16715040003_F02c_BLP_Borrow Area.dwg TAB:F04 - Section BB Date Exported: 08/15/18 - 14:08 by kcook



Legend

- B-8 — Phase II Boring Location
- C-19 — Phase II CPT Location
- B-1 — Phase I Boring Location
- C-1 — Phase I CPT Location
- Proposed Marsh Creation Area
- Pipeline Locations
- Estimated Areas with Silty Sand Layer between El. -7 to -12

Notes:

1. The locations of all features shown are approximate.
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Data Source:

1. Aerial was taken from Google Earth Pro., Imagery Dated 1/25/2015
2. Pipeline routes were provided by CPRA, Island Road Marsh Creation, State Project Number: TE-117, Sheet 2, Dated July 2014

General Site Areas with Silty Sand Zone

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

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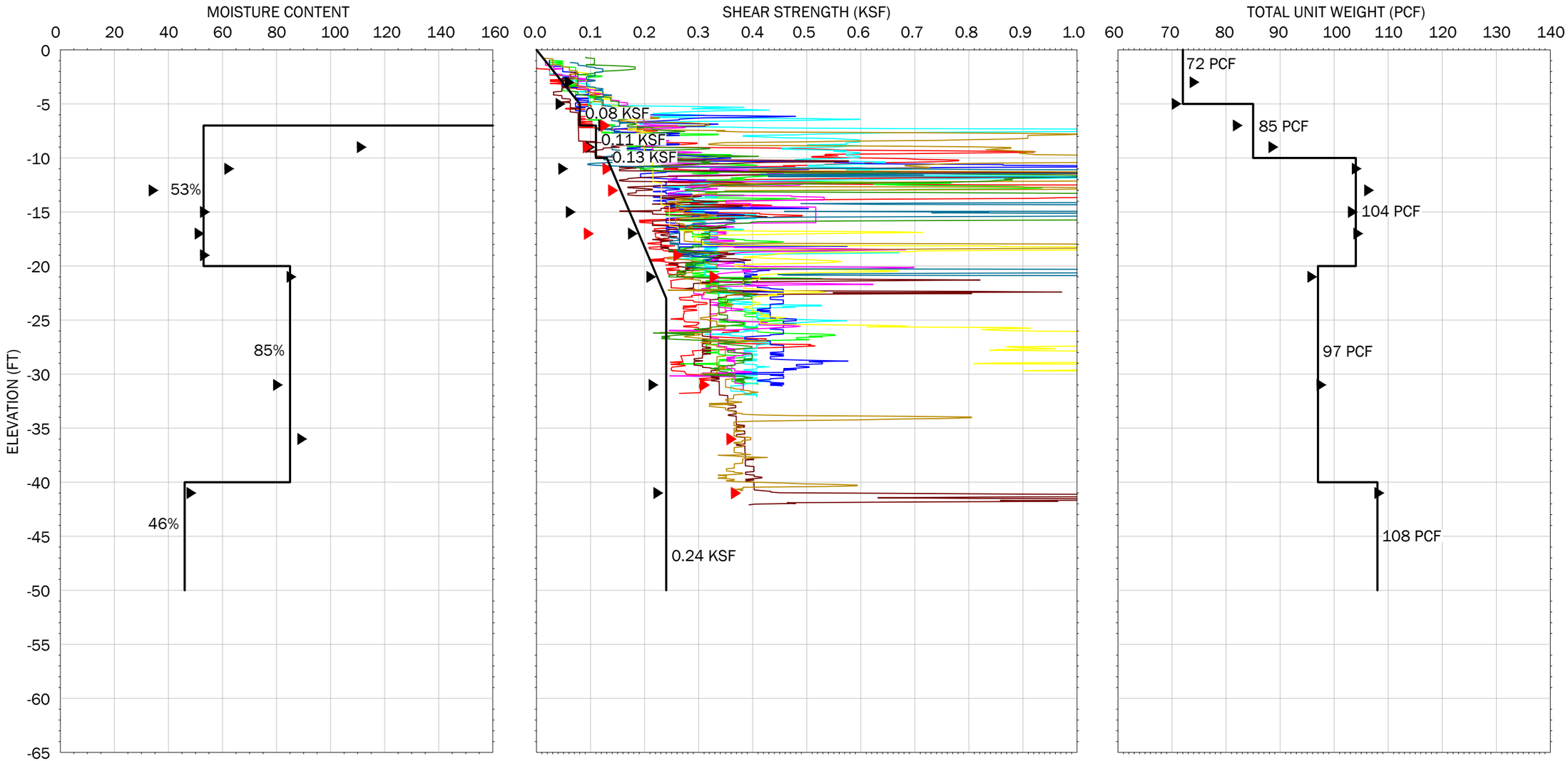
Figure 6

P:\16\16715040\CAD\03\Geotech - Final\16715040003_F06_Site Plan.dwg TAB:BoringLocationPlan Date Exported: 08/15/18 - 14:10 by kcook



Boring Legend

Compression Minivane

B-10

Design Profile

CPT Legend

C12
C20
C21
C22
C24
C25
C26
C29
C33
C37

Design Profiles
Profile 1

Island Road Marsh Creation & Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

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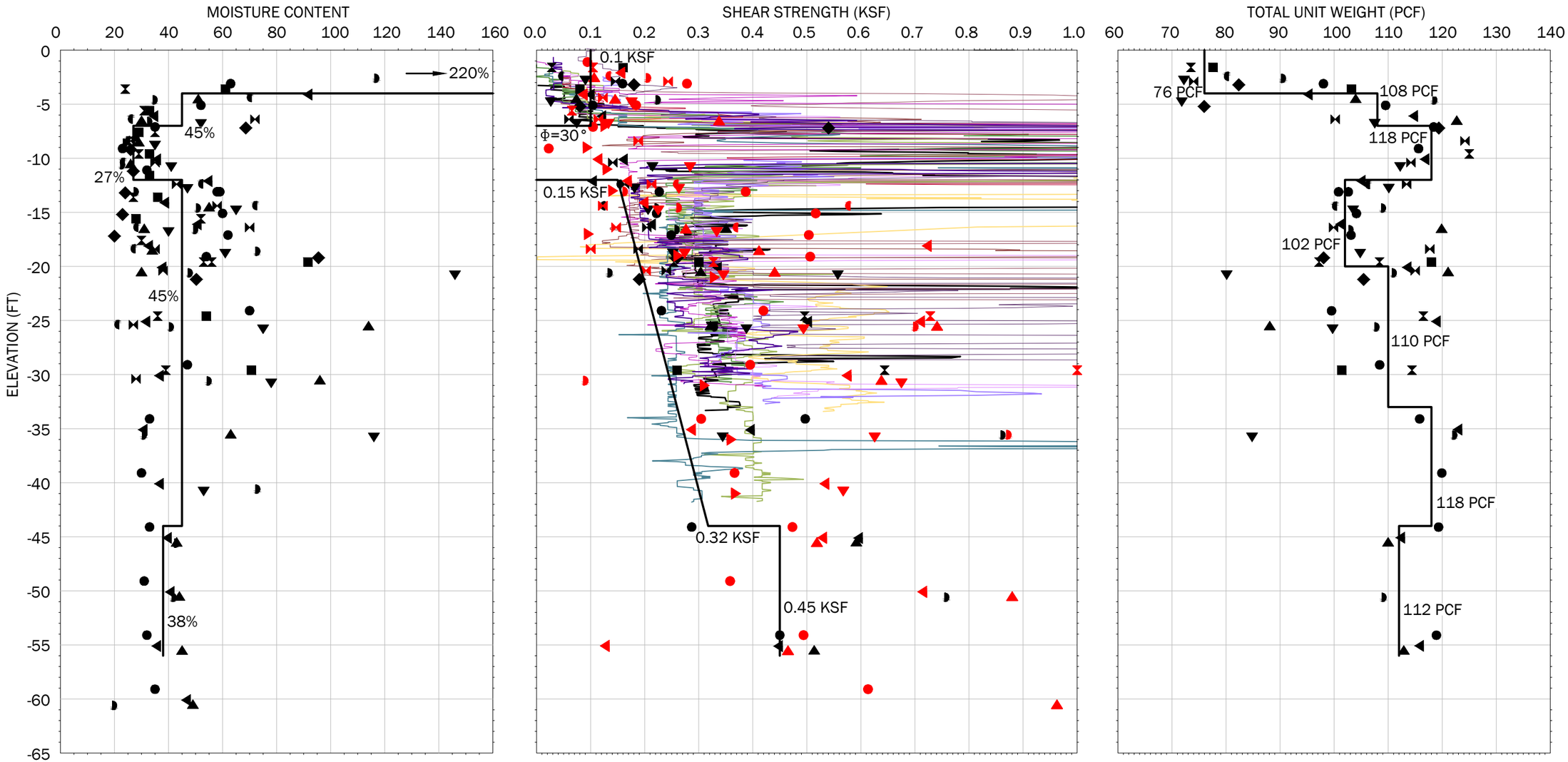
Figure 7a

P:\16\16715040\CAD\03\Geotech - Final\16715040003_F07ab_Design Profiles.dwg TAB:F07a - Profile 1 Date Exported: 08/08/18 - 16:42 by kcook



Boring Legend

Compression	Minivane
B-4	B-12
B-5	B-13
B-8	B-14
B-9	B-15
B-11	B-16

Design Profile

CPT Legend

C13	C28
C14	C30
C15	C31
C19	C32
C23	C34
C27	C35
	C36

Design Profiles
Profile 2

Island Road Marsh Creation & Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

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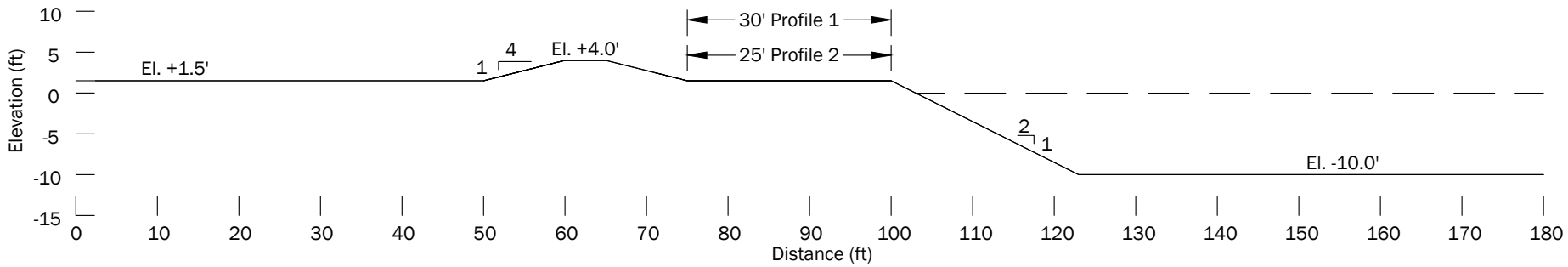
Figure 7b

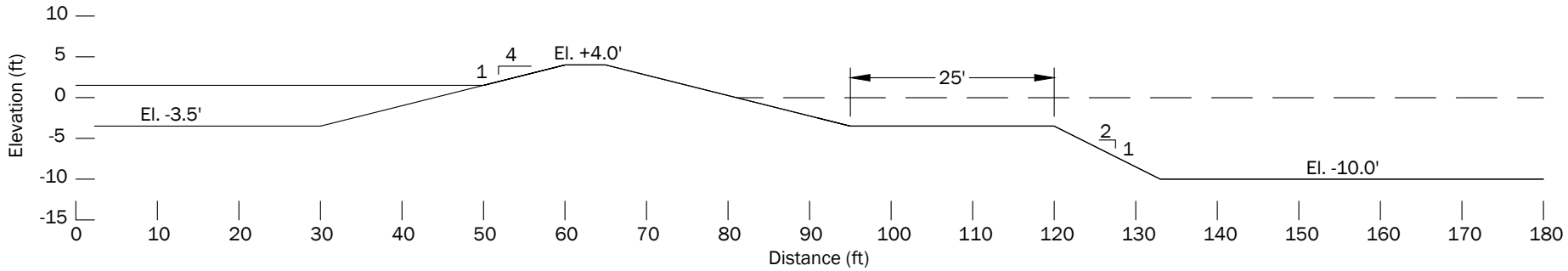
P:\16\16715040\CAD\03\Geotech - Final\16715040003_F07ab_Design Profiles.dwg TAB:F06b - Profile 2 Date Exported: 08/08/18 - 16:42 by kcook

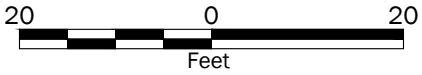
P:\16\16715040\CAD\03\Geotech - Final\1671504003_F08_ECD Design Sections.dwg TAB:F08 ECD Design Date Exported: 08/14/18 - 11:25 by kcook

High Mudline (El. +1.5 Ft.)



Low Mudline (El. -3.5 Ft.)





ECD Design Sections

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

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Figure 8

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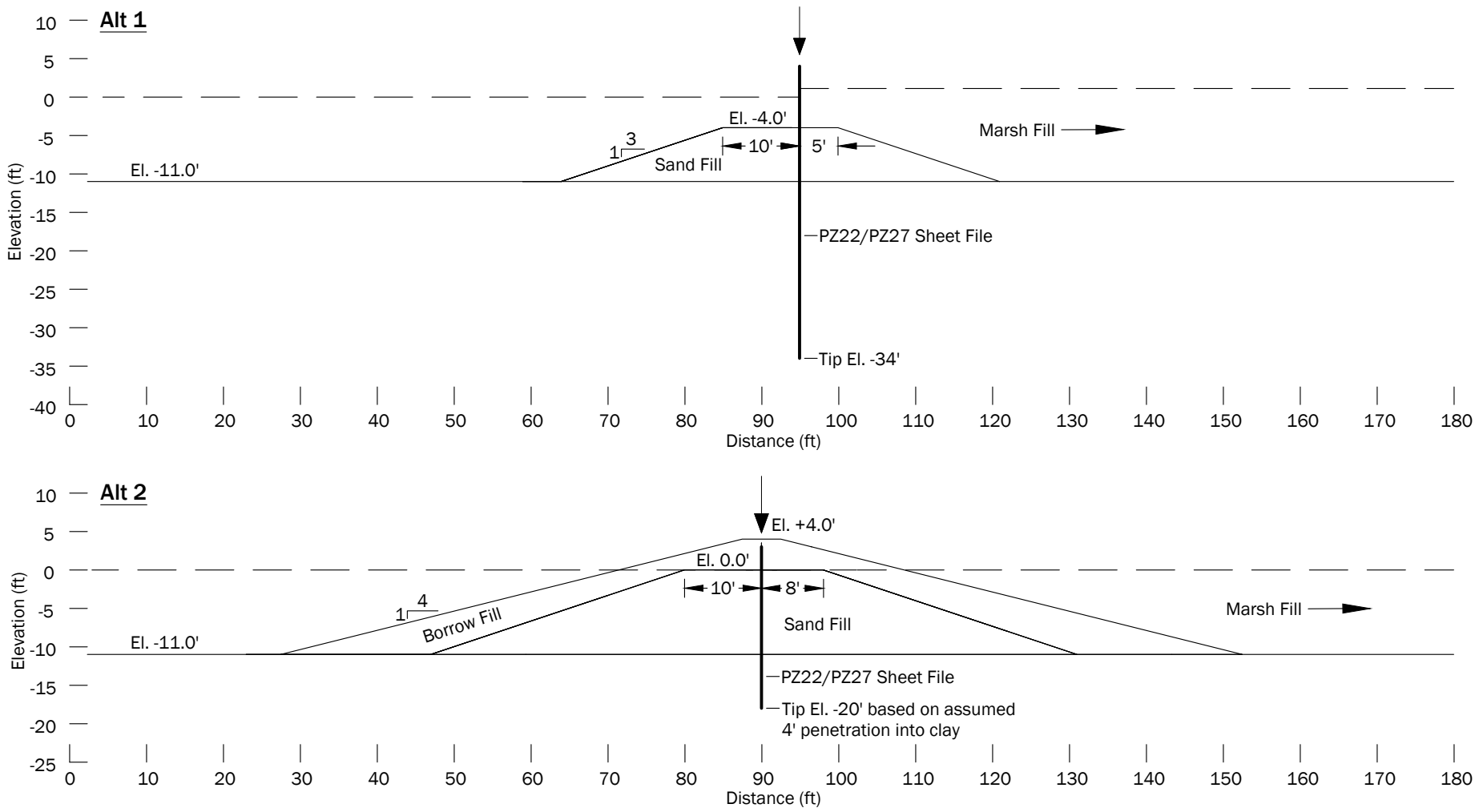


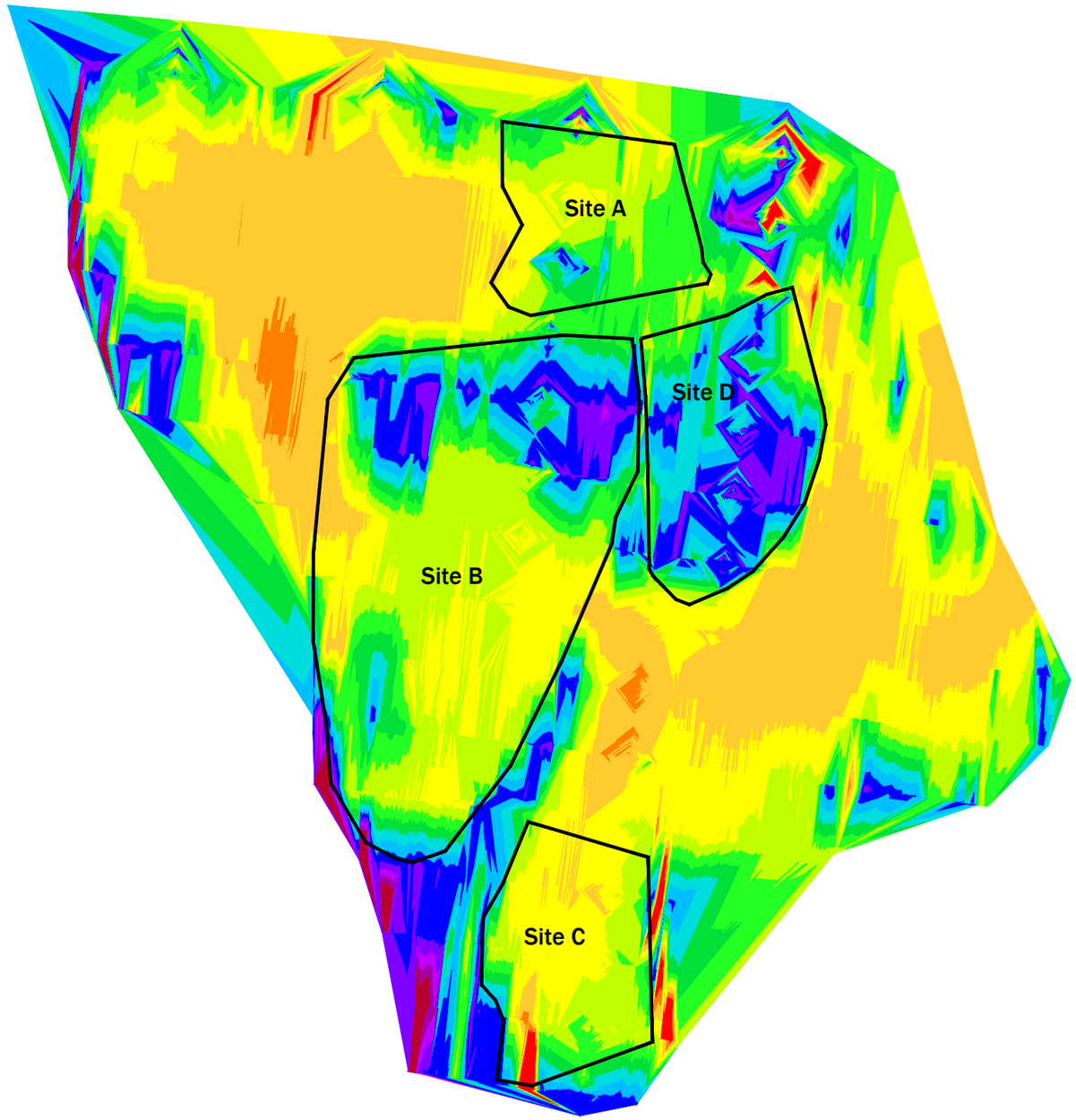
20 0 20
Feet

Gap Closure Alternative Design Sections

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure 9



Legend

ID	Minimum Elevation	Maximum Elevation	Color Scheme
1	-11.460'	-4.000'	
2	-4.000'	-3.500'	
3	-3.500'	-3.000'	
4	-3.000'	-2.500'	
5	-2.500'	-2.000'	
6	-2.000'	-1.500'	
7	-1.500'	-1.000'	
8	-1.000'	-0.500'	
9	-0.500'	0.000'	
10	0.000'	0.500'	
11	0.500'	1.000'	
12	1.000'	1.500'	
13	1.500'	2.000'	
14	2.000'	7.060'	

Site D — Outline of Proposed Marsh Creation Cell

Notes:

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Data Source: Elevation data was provided by T Baker Smith, Dated 2/29/2016

Projection: LA State Plane, South Zone, NAD83, US Foot

N W E S

1000 0 1000
Feet

Project Site Existing Mudline Elevations

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure 10

P:\16\16715040\CAD\03\Geotech - Final\16715040003_F10_Elevation Plan.dwg TAB:F10 - Elevation map Date Exported: 08/14/18 - 8:48 by kcook

APPENDICES

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APPENDIX A
Earthen Containment Dike (ECD) Slope Stability and Bearing Capacity

Calculation Checksheet

Project Number: 16715-040-03 **Project Title:** Island Road Marsh Creation and Nourishment (TE-117)

Client: CPRA

Location: Terrebonne Parish, Louisiana

Calculations Description: Slope stability of the containment dikes was computed for mudline elevations of +1.5 feet and -3.5 feet using optimized circular search parameters with Spencer's method in the GEO-SLOPE International Limited computer program SLOPE/W (GeoStudio 2016). Containment dike stability was evaluated using design Profiles 1 and 2. ECD crown elevation of +4 feet with a width of 5 feet and side slopes of 4H:1V were assumed. See attached for description of cases evaluated.

Contents of Calculation Package: Description of stability methodology and cases evaluated, failure curves, and SLOPE/W output files.

Originator: ST **Checked by:** JSR **Date:** May 18, 2018

Checking Method (describe):

Checked input geometry, soil paramaters, failure surface search parameters.

APPENDIX A
CALCULATION APPROACH FOR SLOPE STABILITY AND BEARING CAPACITY OF CONTAINMENT DIKES

Containment dike slope stability was evaluated for the Island Road project using optimized circular search parameters with Spencer's method in the GEO-SLOPE International Limited computer program SLOPE/W (GeoStudio 2016). Bearing capacity of the containment dikes was also evaluated. Design considerations for the evaluations are described below.

1. Selected conservatively representative design profiles. For Island Road, two design profiles (Profiles 1 and 2, Figures 7a & 7b) were used in our stability and bearing analyses.
2. Used mean low water elevation of -0.02 ft., as provided by Coastal Protection and Restoration Authority (CPRA).
3. Used maximum and minimum governing mudline elevations provided by CPRA (El. +1.5 ft. and - 3.5 ft.).
4. Acceptable factor of safety for slope stability = 1.2.
5. Acceptable factor of safety for bearing capacity = 1.3.
6. Included a 0.5-ft. construction overbuild tolerance in the stability analyses and bearing capacity analyses.
7. The slope stability was evaluated for the following cases:
   - Case 1: Internal failure of the Earthen Containment Dike (ECD), no marsh fill placed.
   - Case 2: Global failure of the ECD into the borrow channel, no marsh fill placed.
   - Case 3: Failure of the borrow channel, no marsh fill placed, construction equipment modeled.
   - Case 4: Internal failure of the ECD, marsh fill placed.
   - Case 5: Global failure of the ECD into the exterior borrow channel, marsh fill placed.
8. For Case 3, the load of marsh excavation equipment on the bench between the containment dike toe and the top of the borrow channel was applied to the mudline. For the high mudline condition (El. +1.5 ft.), a load of 260 psf was applied at the mudline for each track width (4 ft.). For the low mudline condition (El. -3.5 ft.), a load of 42.8 psf was applied at the mudline for each track width. The equipment applied load for the low mudline case was computed by reducing the pressure from the tracks by the buoyant unit weight of water.
9. The bearing capacity of the containment dikes was evaluated using the method for bearing on a two-layer cohesive soil as outlined in Figure 11-5 of the Naval Facilities Engineering Command Design Manual 7.02 *Foundations and Earth Structures*. For Profile 2, the presence of sand was neglected to be conservative and the properties of the clay above the sand (above El. -7 ft.) were carried down to the bottom of the sand layer.
10. For the stability analyses evaluated using soil Profile 2, it was assumed the ECD fill will contain some sand as the design profile indicates. Therefore, a friction angle of 2 degrees was applied to the ECD material in our model to account for internal friction.

11. For Profile 1 using the high mudline case at El. +1.5 ft., the bench width between the toe of the containment dike and the top of the borrow channel was increased to 30 ft. for stability.

The values for unit weight within the containment dike material were based on weighted averages of the unit weight of the material within the depth of the proposed borrow channel for each profile. An assumed cohesion of 60 psf was used for the containment dikes based on our experience on similar projects and CPRA guidance (*Marsh Creation Design Guidelines - Marsh Creation Projects*, MCDG1.0, November 15, 2017).

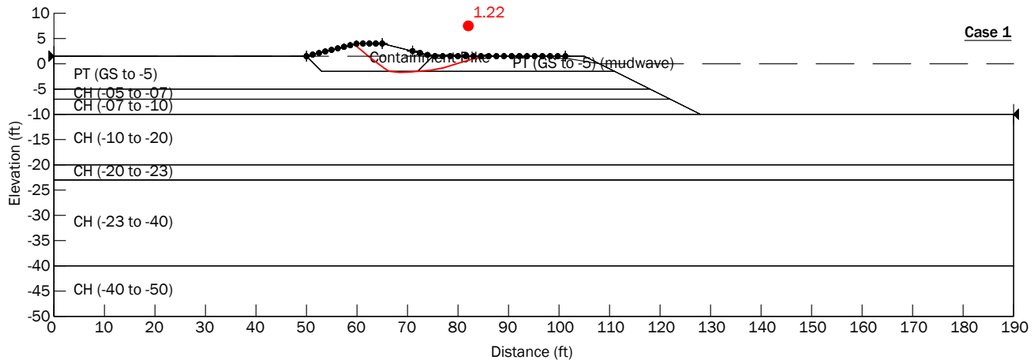
For competent foundation soils, the following geometry generally produces adequate stability:

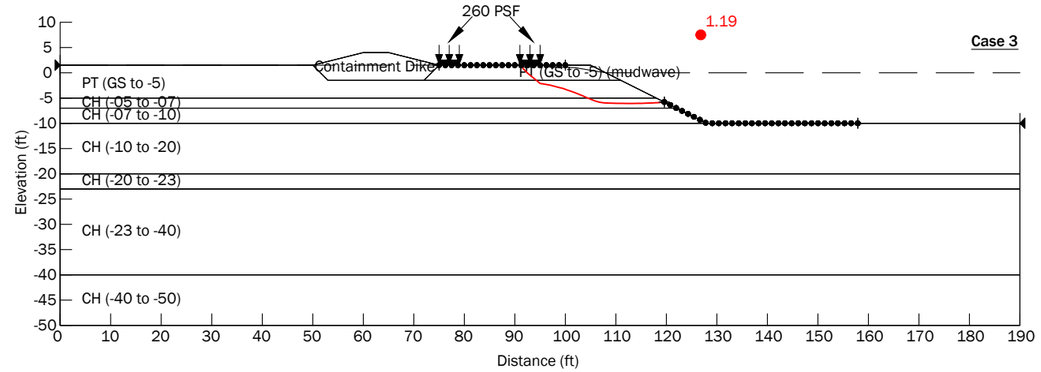
Island Road Containment Dike:

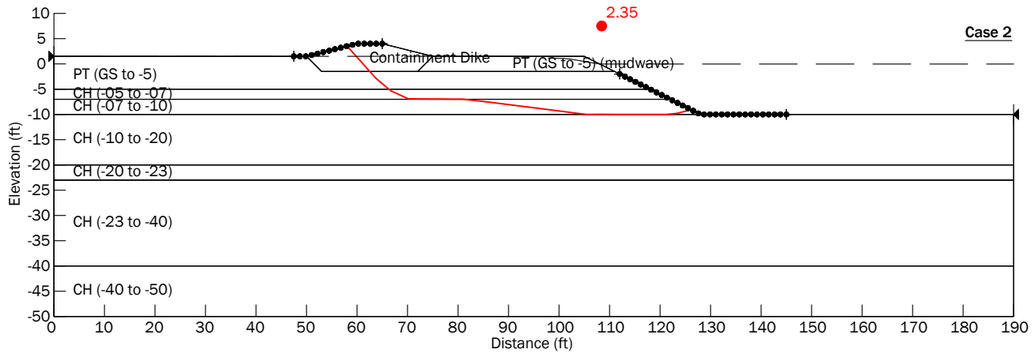
1. 4H:1V side slopes
2. Crown elevation of +4.0 ft.
3. Crown width of 5 ft.

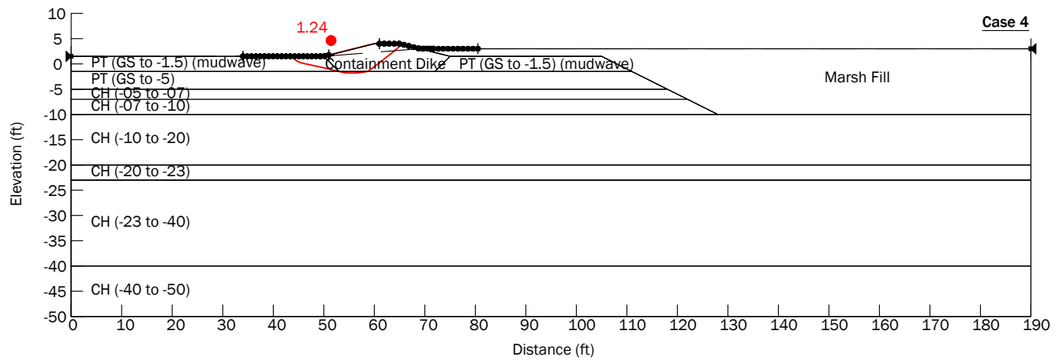
Our stability analyses for Cases 4 and 5 assumed marsh fill placed to El. +3 ft., which allows for 1 foot of freeboard between the top of the ECD and the average top of the placed marsh fill.

This appendix contains the stability analysis results, an example of our SLOPE/W output, and bearing capacity analysis spreadsheets. All calculation inputs and outputs were provided electronically.

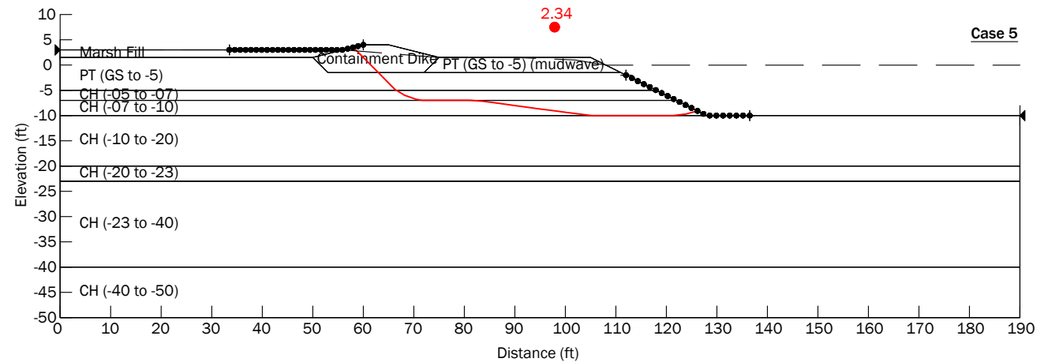








Name	Model	Unit Weight (pcf)	Cohesion	Phi (°)	Cohesion (psf)
PT (GS to -5)	Spatial Mohr-Coulomb	72	0 psf to 80 psf	0	
CH (-05 to -07)	Mohr-Coulomb	85		0	80
CH (-07 to -10)	Mohr-Coulomb	85		0	110
CH (-10 to -20)	Spatial Mohr-Coulomb	104	130 psf to 215 psf	0	
CH (-20 to -23)	Spatial Mohr-Coulomb	97	215 psf to 240 psf	0	
CH (-23 to -40)	Mohr-Coulomb	97		0	240
CH (-40 to -50)	Mohr-Coulomb	108		0	240
Containment Dike	Mohr-Coulomb	71		0	60
PT (GS to -5) (mudwave)	Mohr-Coulomb	72		0	0
Marsh Fill	Mohr-Coulomb	85		0	0



Containment Dike Slope Stability - Profile 1 - Mudline at +1.5 Ft.

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

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Figure A-1

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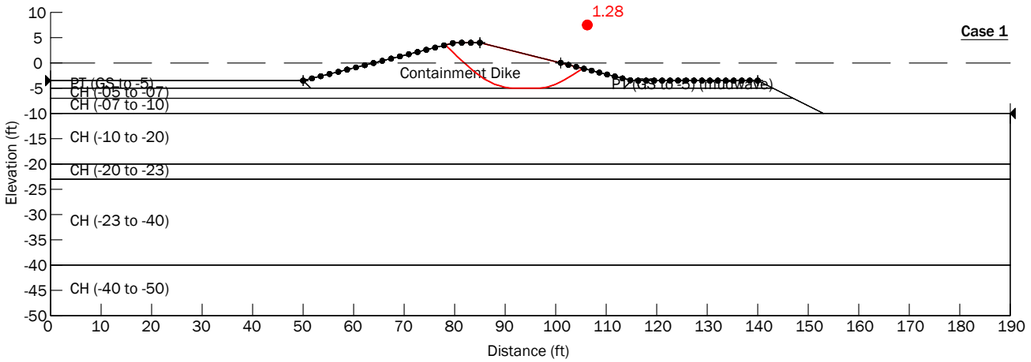

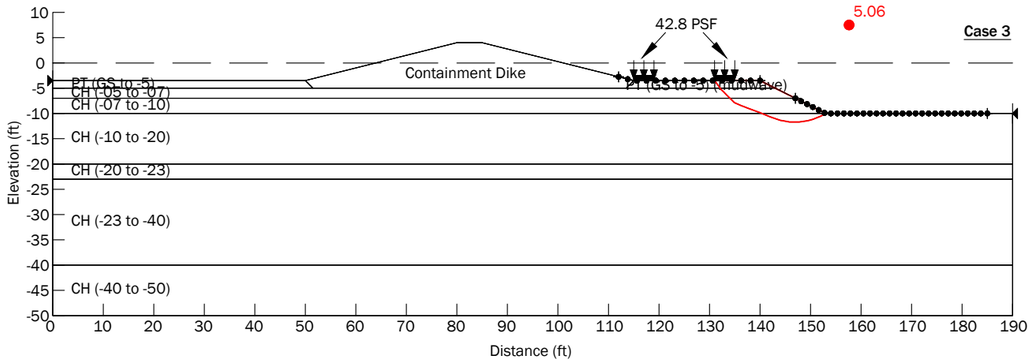

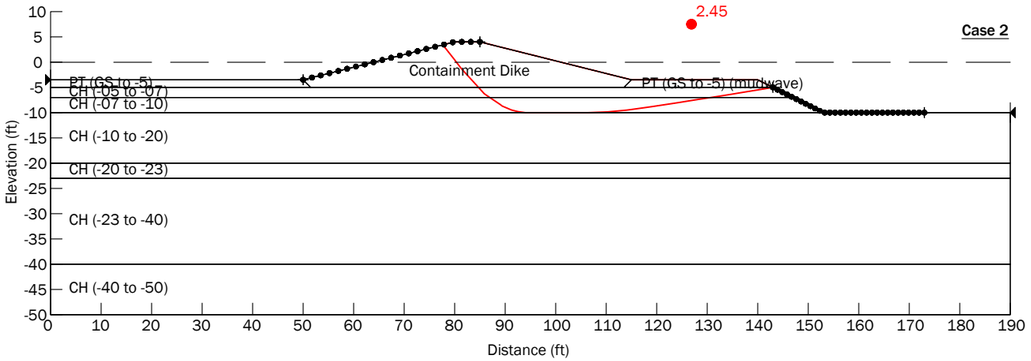

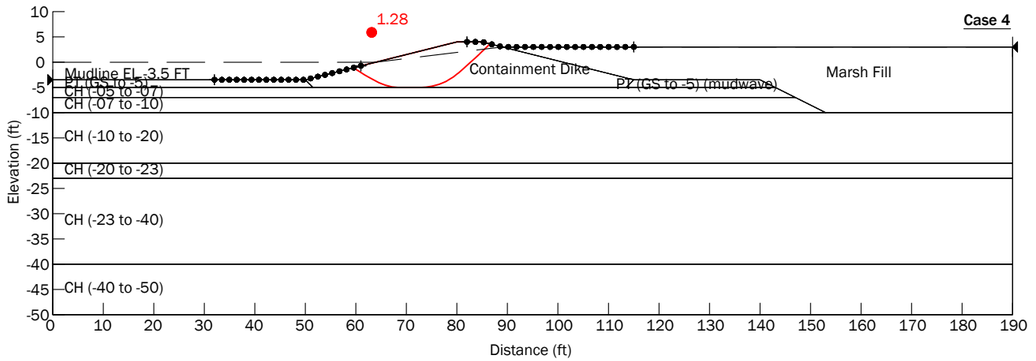

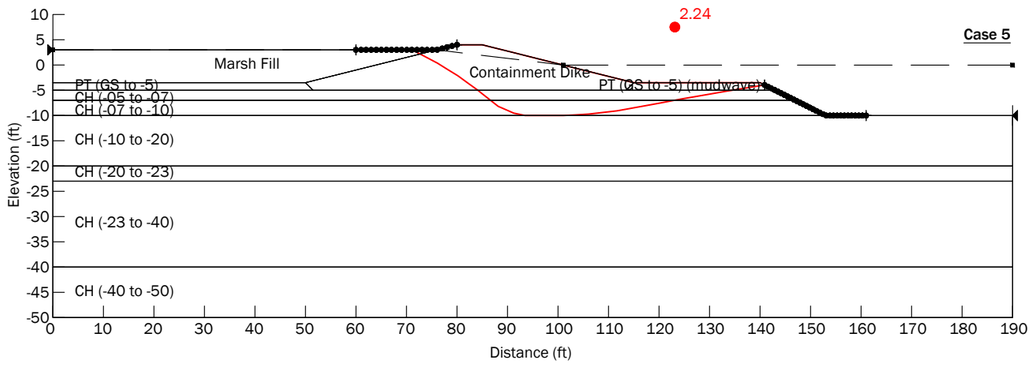

Name	Model	Unit Weight (pcf)	Cohesion	Phi (°)	Cohesion (psf)
PT (GS to -5)	Spatial Mohr-Coulomb	72	0 psf to 80 psf	0	
CH (-05 to -07)	Mohr-Coulomb	85		0	80
CH (-07 to -10)	Mohr-Coulomb	85		0	110
CH (-10 to -20)	Spatial Mohr-Coulomb	104	130 psf to 215 psf	0	
CH (-20 to -23)	Spatial Mohr-Coulomb	97	215 psf to 240 psf	0	
CH (-23 to -40)	Mohr-Coulomb	97		0	240
CH (-40 to -50)	Mohr-Coulomb	108		0	240
Containment Dike	Mohr-Coulomb	71		0	60
PT (GS to -5) (mudwave)	Mohr-Coulomb	72		0	0
Marsh Fill	Mohr-Coulomb	85		0	0

Containment Dike Slope Stability - Profile 1 - Mudline at -3.5 Ft.

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure A-2

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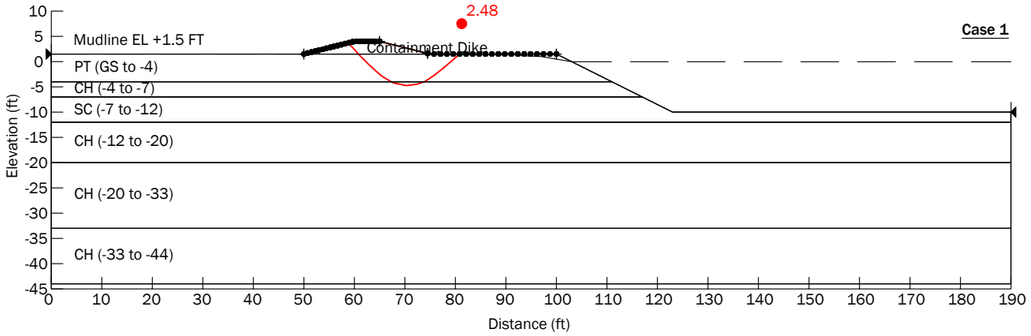
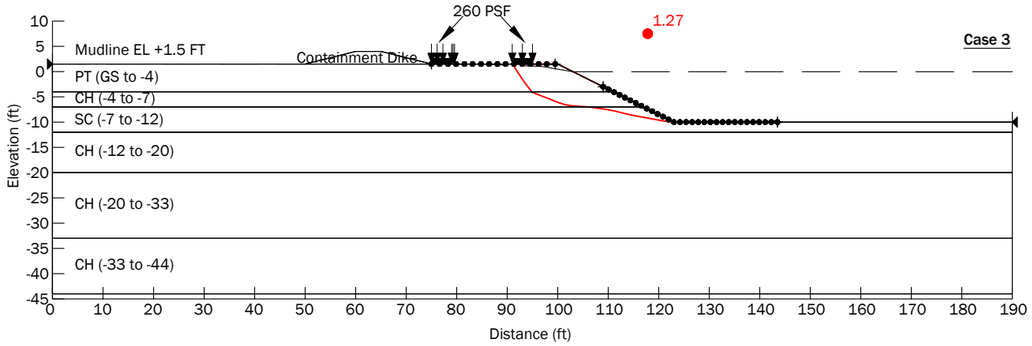
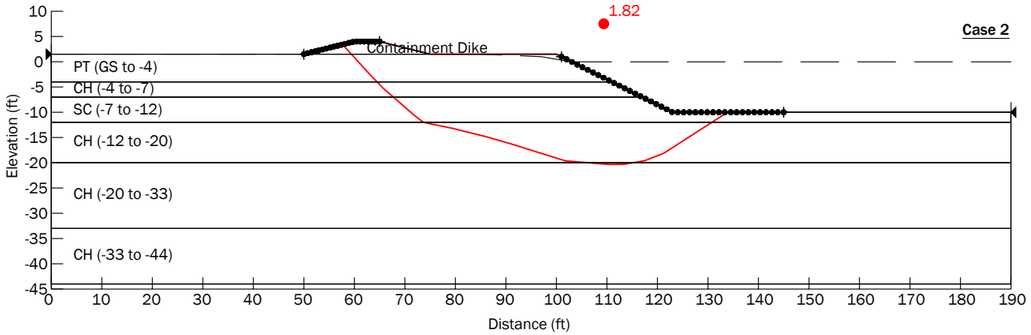
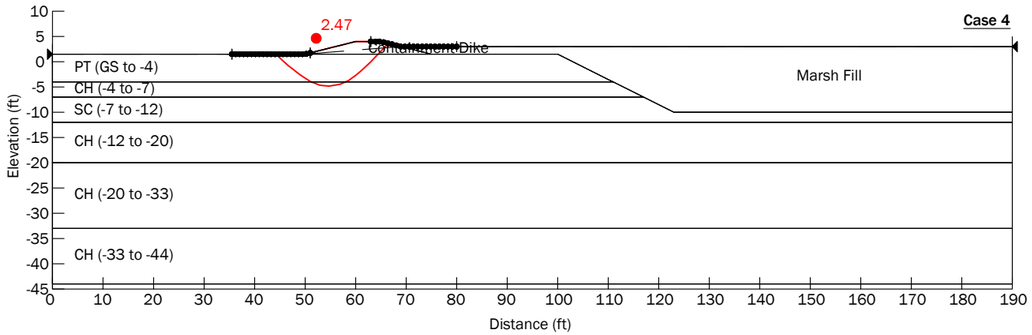
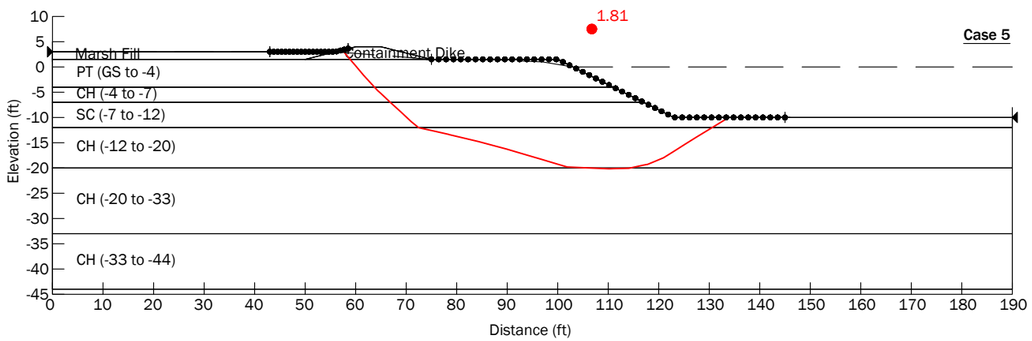








Name	Model	Unit Weight (pcf)	Cohesion	Phi (°)	Cohesion (psf)
PT (GS to -4)	Mohr-Coulomb	76	100	0	
CH (-4 to -7)	Mohr-Coulomb	108	100	0	
SC (-7 to -12)	Mohr-Coulomb	118	0	0	
CH (-12 to -20)	Spatial Mohr-Coulomb	102		0	150 psf to 190 psf
CH (-20 to -33)	Spatial Mohr-Coulomb	110		0	190 psf to 260 psf
CH (-33 to -44)	Mohr-Coulomb	118	260	0	
Containment Dike	Mohr-Coulomb	88	60	0	
Marsh Fill	Mohr-Coulomb	85		0	



Containment Dike Slope Stability - Profile 2 - Mudline at +1.5 Ft.

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure A-3

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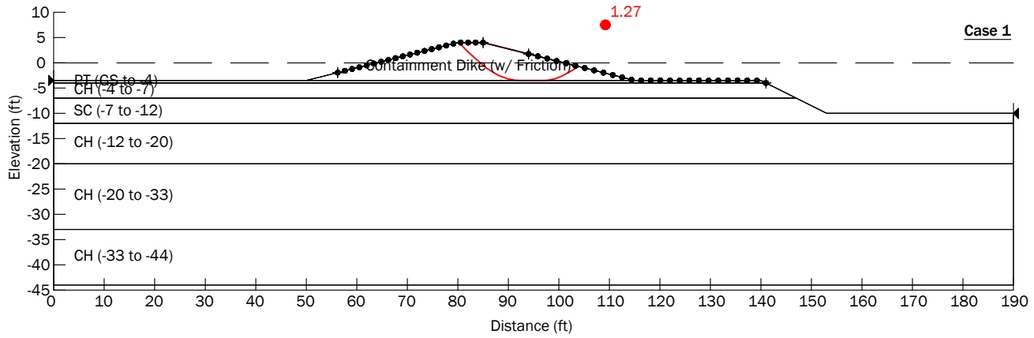
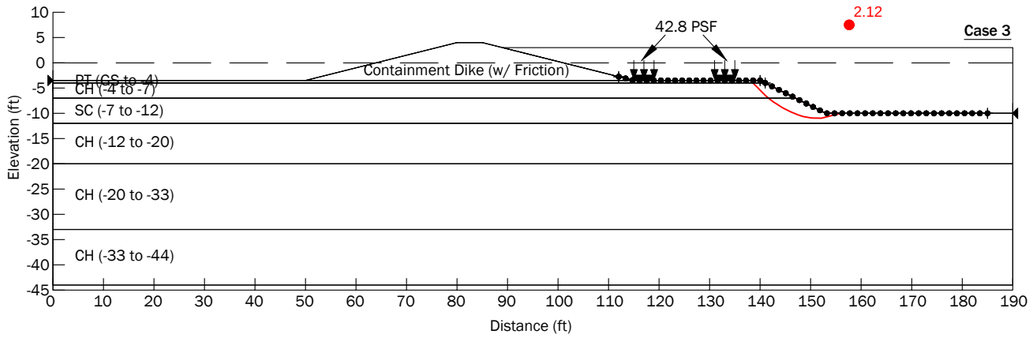
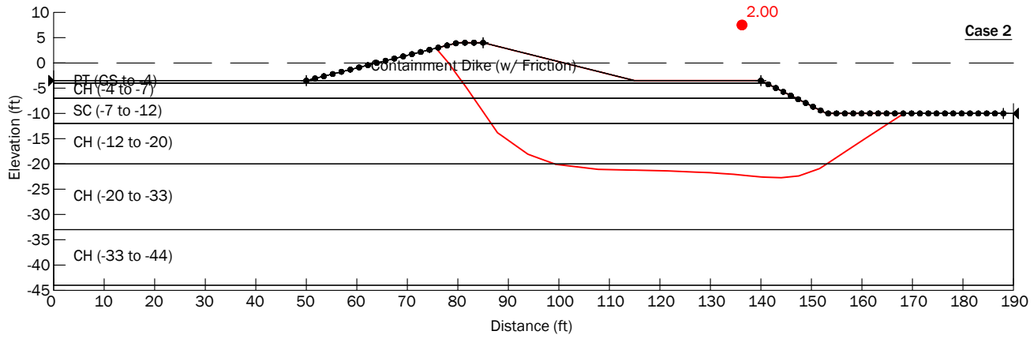
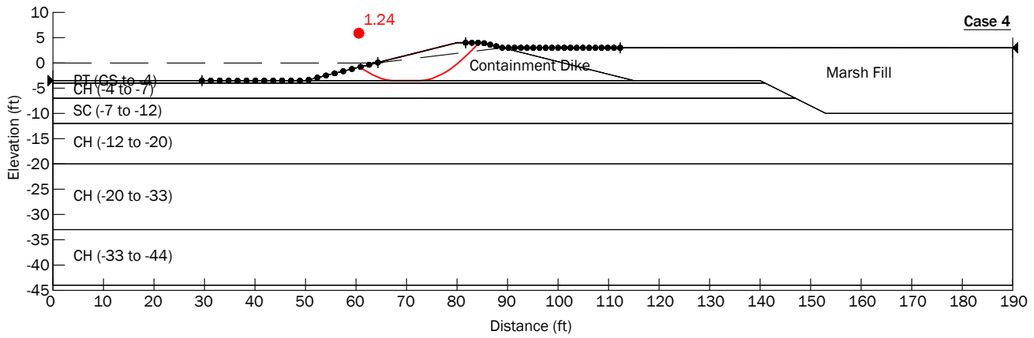
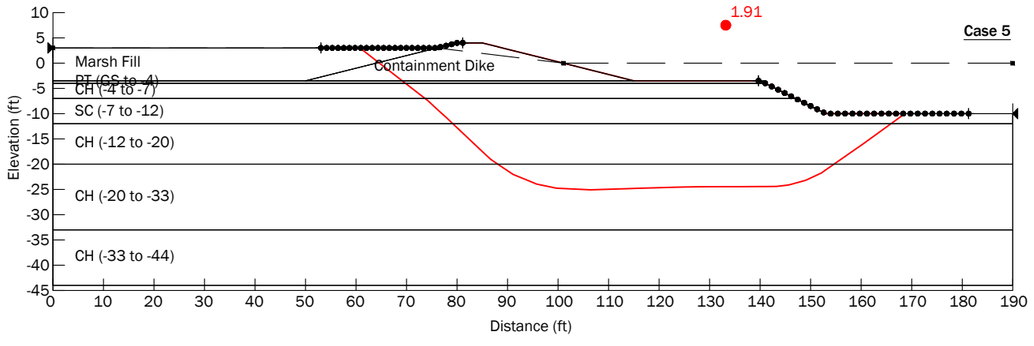








Name	Model	Unit Weight (pcf)	Cohesion	Phi (°)	Cohesion (psf)
PT (GS to -4)	Mohr-Coulomb	76	100	0	
CH (-4 to -7)	Mohr-Coulomb	108	100	0	
SC (-7 to -12)	Mohr-Coulomb	118	0	30	
CH (-12 to -20)	Spatial Mohr-Coulomb	102		0	150 psf to 190 psf
CH (-20 to -33)	Spatial Mohr-Coulomb	110		0	190 psf to 260 psf
CH (-33 to -44)	Mohr-Coulomb	118	260	0	
Containment Dike	Mohr-Coulomb	88	60	2	
Marsh Fill	Mohr-Coulomb	85		0	



Containment Dike Slope Stability - Profile 2 - Mudline at -3.5 Ft.

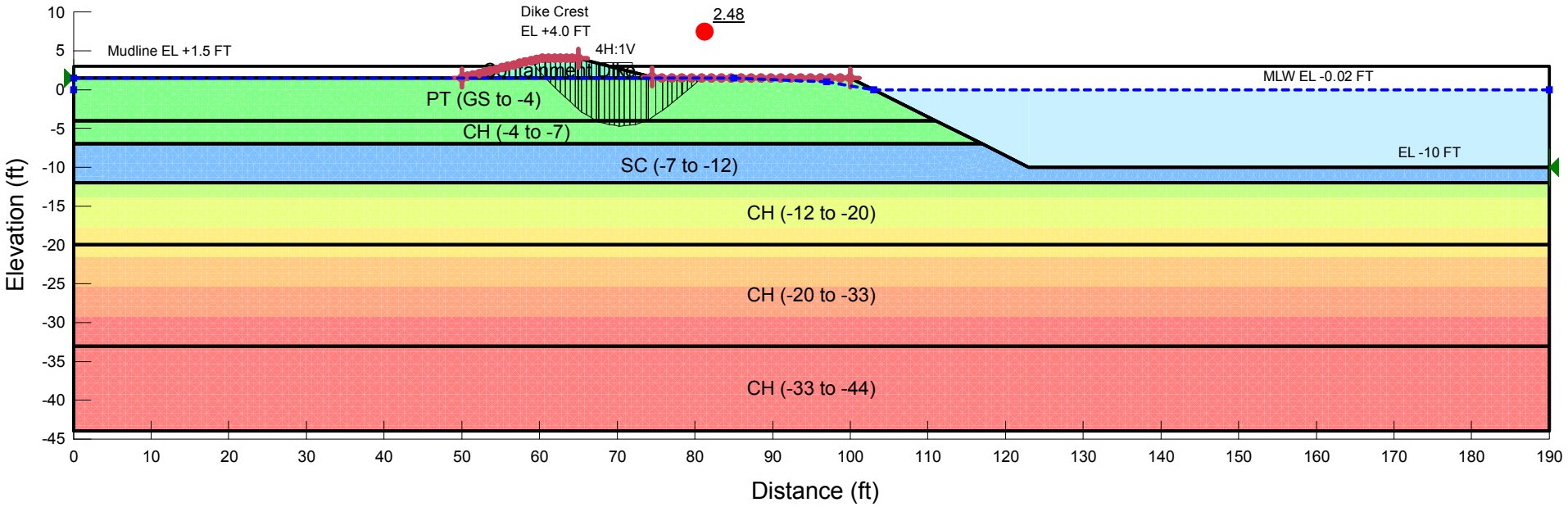
Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure A-4

P:\16\16715040\CAD\03\Geotech - Final\16715040003_FA03-4_SlopeW.dwg TAB:FA04 Date Exported: 05/21/18 - 16:17 by kcook

		(pcf)	(psf)	(°)	
PT (GS to -4)	Mohr-Coulomb	76	100	0	
CH (-4 to -7)	Mohr-Coulomb	108	100	0	
SC (-7 to -12)	Mohr-Coulomb	118	0	30	
CH (-12 to -20)	Spatial Mohr-Coulomb	102		0	150 psf to 190 psf
CH (-20 to -33)	Spatial Mohr-Coulomb	110		0	190 psf to 260 psf
CH (-33 to -44)	Mohr-Coulomb	118	260	0	
Containment Dike	Mohr-Coulomb	88	60	0	



Internal Stability

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File Information

File Version: 8.16
Title: Containment Dike Stability
Created By: Alicia R. Sellers
Last Edited By: Jennie Aguettant
Revision Number: 21
Date: 5/17/2018
Time: 1:55:39 PM
Tool Version: 8.16.1.13452
File Name: ML+1.5_Crest+4.0_Slope4-1 Sand_ARS.gsz
Directory: P:\16\16715040\03\Analyses\Containment Dike Slope Stability\No Mudwave\Profile 2 - w Sand\
Last Solved Date: 5/17/2018
Last Solved Time: 1:55:54 PM

Project Settings

Length(L) Units: Feet
Time(t) Units: Seconds
Force(F) Units: Pounds
Pressure(p) Units: psf
Strength Units: psf
Unit Weight of Water: 62.4 pcf
View: 2D
Element Thickness: 1

Analysis Settings

Internal Stability

Kind: SLOPE/W
Method: Spencer
Settings
- PWP Conditions Source: Piezometric Line
- Apply Phreatic Correction: No
- Use Staged Rapid Drawdown: No

Slip Surface
- Direction of movement: Left to Right
- Use Passive Mode: No
- Slip Surface Option: Entry and Exit
- Critical slip surfaces saved: 1
- Resisting Side Maximum Convex Angle: 1 °
- Driving Side Maximum Convex Angle: 5 °

- Optimize Critical Slip Surface Location: Yes
- Critical Slip Surface Optimizations
  - Maximum Iterations: 2,000
  - Convergence Tolerance: 1e-007
  - Starting Points: 8
  - Ending Points: 16
  - Complete Passes per Insertion: 1
- Tension Crack
  - Tension Crack Option: (none)

F of S Distribution
- F of S Calculation Option: Constant

Advanced
- Number of Slices: 30
- F of S Tolerance: 0.001
- Minimum Slip Surface Depth: 0.1 ft
- Search Method: Root Finder
- Tolerable difference between starting and converged F of S: 3
- Maximum iterations to calculate converged lambda: 20
- Max Absolute Lambda: 2

Materials

PT (GS to -4)

Model: Mohr-Coulomb
Unit Weight: 76 pcf
Cohesion': 100 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-4 to -7)

Model: Mohr-Coulomb
Unit Weight: 108 pcf
Cohesion': 100 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

SC (-7 to -12)

Model: Mohr-Coulomb
Unit Weight: 118 pcf
Cohesion': 0 psf
Phi': 30 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-12 to -20)

Model: Spatial Mohr-Coulomb
Unit Weight: 102 pcf
Cohesion Fn: 150 psf to 190 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-20 to -33)

Model: Spatial Mohr-Coulomb
Unit Weight: 110 pcf
Cohesion Fn: 190 psf to 260 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-33 to -44)

Model: Mohr-Coulomb
Unit Weight: 118 pcf
Cohesion': 260 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

Containment Dike

Model: Mohr-Coulomb
Unit Weight: 88 pcf
Cohesion': 60 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

Slip Surface Entry and Exit

Left Projection: Range
Left-Zone Left Coordinate: (50, 1.5) ft
Left-Zone Right Coordinate: (65, 4) ft
Left-Zone Increment: 20
Right Projection: Range
Right-Zone Left Coordinate: (74.5, 1.625) ft
Right-Zone Right Coordinate: (100, 1.5) ft
Right-Zone Increment: 20
Radius Increments: 4

Slip Surface Limits

Left Coordinate: (0, 1.5) ft
Right Coordinate: (190, -10) ft

Piezometric Lines

Piezometric Line 1

Coordinates

	X (ft)	Y (ft)
Coordinate 1	0	-0.02
Coordinate 2	0	1.5
Coordinate 3	85	1.5
Coordinate 4	97	1
Coordinate 5	103.04	-0.02
Coordinate 6	190	-0.02

Cohesion Functions

150 psf to 190 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
- Curve Fit to Data: 0 %
- Segment Curvature: 0 %

Y-Intercept: 150
Data Points: Y (ft), Cohesion (psf)
- Data Point: (-20, 192)
- Data Point: (-12, 150)

190 psf to 260 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
- Curve Fit to Data: 0 %
- Segment Curvature: 0 %

Y-Intercept: 192
Data Points: Y (ft), Cohesion (psf)
- Data Point: (-33, 260)
- Data Point: (-20, 192)

Points

	X (ft)	Y (ft)
Point 1	0	1.5
Point 2	50	1.5

Point 3	123	-10
Point 4	190	-12
Point 5	0	-3
Point 6	0	-4
Point 7	0	-12
Point 8	0	-20
Point 9	190	-20
Point 10	0	-44
Point 11	190	-44
Point 12	111	-4
Point 13	60	4
Point 14	65	4
Point 15	0	-33
Point 16	190	-33
Point 17	0	-7
Point 18	117	-7
Point 19	190	-10
Point 20	75	1.5
Point 21	100	1.5
Point 22	0	3
Point 23	56	3
Point 24	69	3
Point 25	190	3
Point 26	78.42857	1.5

Point 27	110.06667	-3.53333

Regions

	Material	Points	Area (ft²)
Region 1	PT (GS to -4)	1,5,6,12,27,21,26,20,2	580.25
Region 2	Containment Dike	2,23,13,14,24,20	37.5
Region 3	SC (-7 to -12)	17,7,4,19,3,18	740
Region 4	CH (-12 to -20)	4,9,8,7	1,520
Region 5	CH (-20 to -33)	8,15,16,9	2,470
Region 6	CH (-33 to -44)	10,11,16,15	2,090
Region 7	CH (-4 to -7)	6,17,18,12	342
Region 8		1,22,23,2	79.5
Region 9		24,20,26,21,27,12,18,3,19,25	1,079.7

Current Slip Surface

Slip Surface: 2,206
F of S: 2.48
Volume: 104.53379 ft³
Weight: 8,344.9937 lbs
Resisting Moment: 29,768.745 lbs-ft
Activating Moment: 11,989.968 lbs-ft
Resisting Force: 2,120.0197 lbs
Activating Force: 853.60739 lbs
F of S Rank (Analysis): 1 of 2,206 slip surfaces
F of S Rank (Query): 1 of 2,206 slip surfaces
Exit: (80.82119, 1.5) ft
Entry: (58.834067, 3.7085169) ft
Radius: 10.420882 ft
Center: (70.799954, 7.4681184) ft

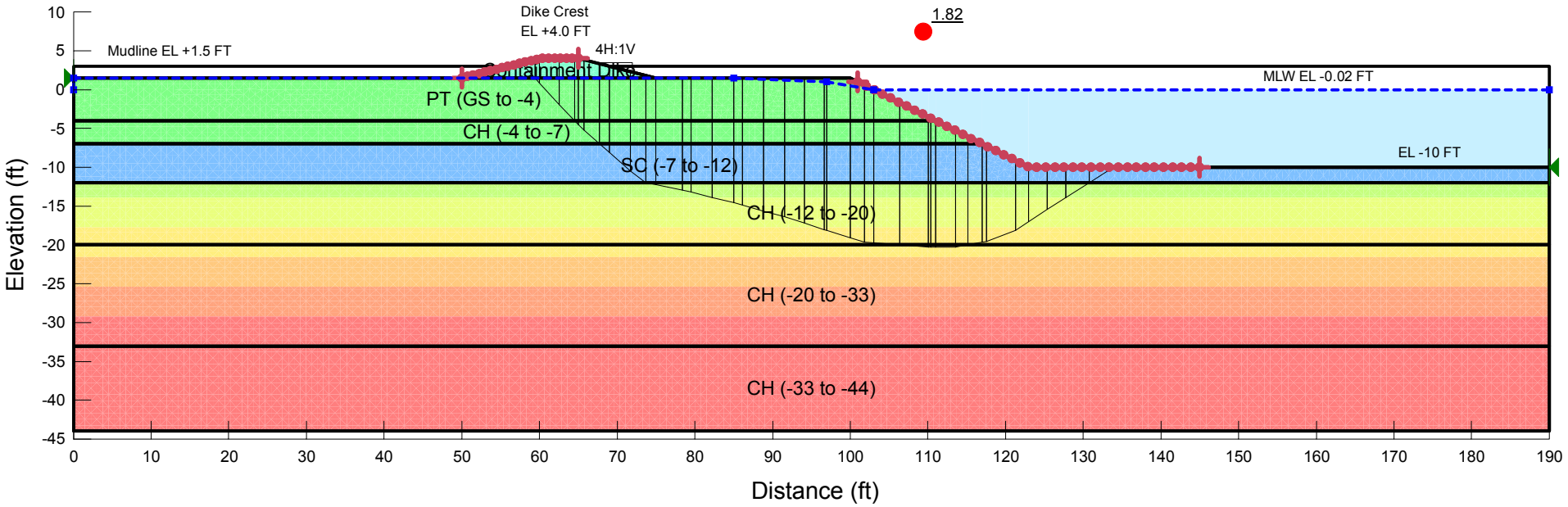
Slip Slices

	X (ft)	Y (ft)	PWP (psf)	Base Normal Stress (psf)	Frictional Strength (psf)	Cohesive Strength (psf)
Slice 1	59.125551	3.3793816	-117.27341	8.8970827	0	60
Slice 2	59.708517	2.7211112	-76.197339	75.349253	0	60
Slice 3	60.35079	1.995873	-30.942475	141.31353	0	60
Slice 4	60.751481	1.549885	-3.112824	182.38547	0	60
Slice 5	61.120575	1.1809083	19.91132	195.11425	0	100
	61.758961	0.542725	59.73396	240.98767	0	100

Slice 6						
Slice 7	62.397347	-0.095458333	99.5566	286.86108	0	100
Slice 8	63.027005	-0.70432333	137.54978	334.35628	0	100
Slice 9	63.647935	-1.28387	173.71349	376.16515	0	100
Slice 10	64.268865	-1.8634167	209.8772	417.97403	0	100
Slice 11	64.789665	-2.3279746	238.86562	457.95219	0	100
Slice 12	65.21817	-2.6840546	261.08501	479.20239	0	100
Slice 13	65.750589	-3.0544583	284.1982	510.10155	0	100
Slice 14	66.379087	-3.432675	307.79892	524.52167	0	100
Slice 15	67.007586	-3.8108917	331.39964	538.94179	0	100
Slice 16	67.486247	-4.09894	349.37386	552.98461	0	100
Slice 17	67.987995	-4.2684457	359.95101	588.08814	0	100
Slice 18	68.662665	-4.4095771	368.75761	588.48286	0	100
Slice 19	69.310402	-4.5450746	377.21265	588.86181	0	100
Slice 20	69.931207	-4.6749382	385.31614	589.22502	0	100
Slice 21	70.585267	-4.701405	386.96767	601.55165	0	100
Slice 22	71.27258	-4.624475	382.16724	577.97104	0	100
Slice 23	71.959893	-4.547545	377.36681	554.39043	0	100
Slice 24	72.680804	-4.38181	367.02494	536.52838	0	100
Slice 25	73.435313	-4.12727	351.14165	491.56952	0	100
Slice 26	73.894054	-3.97251	341.48462	465.1316	0	100
Slice 27	74.48777	-3.5979105	318.10961	445.61967	0	100
Slice 28	75.415905	-2.9689655	278.86345	384.16379	0	100
Slice 29	76.144255	-2.446275	246.24756	348.679	0	100

Slice 30	76.769145	-1.964565	216.18886	310.37668	0	100
Slice 31	77.394035	-1.465675	185.05812	273.92845	0	100
Slice 32	78.018925	-0.949605	152.85535	232.7583	0	100
Slice 33	78.37997	-0.64880626	134.08551	211.73553	0	100
Slice 34	78.715605	-0.35347689	115.65696	188.09837	0	100
Slice 35	79.289675	0.15165437	84.136767	147.66938	0	100
Slice 36	79.88783	0.678165	51.282504	105.55853	0	100
Slice 37	80.51007	1.226055	17.094168	61.705691	0	100

		(pcf)	(psf)	(°)	
PT (GS to -4)	Mohr-Coulomb	76	100	0	
CH (-4 to -7)	Mohr-Coulomb	108	100	0	
SC (-7 to -12)	Mohr-Coulomb	118	0	30	
CH (-12 to -20)	Spatial Mohr-Coulomb	102		0	150 psf to 190 psf
CH (-20 to -33)	Spatial Mohr-Coulomb	110		0	190 psf to 260 psf
CH (-33 to -44)	Mohr-Coulomb	118	260	0	
Containment Dike	Mohr-Coulomb	88	60	0	



Global Stability

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File Information

File Version: 8.16
Title: Containment Dike Stability
Created By: Alicia R. Sellers
Last Edited By: Alicia R. Sellers
Revision Number: 19
Date: 5/16/2018
Time: 10:57:36 AM
Tool Version: 8.16.1.13452
File Name: ML+1.5_Crest+4.0_Slope4-1 Sand_ARS.gsz
Directory: P:\16\16715040\03\Analyses\Containment Dike Slope Stability\No Mudwave\Profile 2 - w Sand\
Last Solved Date: 5/16/2018
Last Solved Time: 10:58:08 AM

Project Settings

Length(L) Units: Feet
Time(t) Units: Seconds
Force(F) Units: Pounds
Pressure(p) Units: psf
Strength Units: psf
Unit Weight of Water: 62.4 pcf
View: 2D
Element Thickness: 1

Analysis Settings

Global Stability

Kind: SLOPE/W
Method: Spencer
Settings
- PWP Conditions Source: Piezometric Line
- Apply Phreatic Correction: No
- Use Staged Rapid Drawdown: No

Slip Surface
- Direction of movement: Left to Right
- Use Passive Mode: No
- Slip Surface Option: Entry and Exit
- Critical slip surfaces saved: 1
- Resisting Side Maximum Convex Angle: 1 °
- Driving Side Maximum Convex Angle: 5 °

- Optimize Critical Slip Surface Location: Yes
- Critical Slip Surface Optimizations
  - Maximum Iterations: 2,000
  - Convergence Tolerance: 1e-007
  - Starting Points: 8
  - Ending Points: 16
  - Complete Passes per Insertion: 1
- Tension Crack
  - Tension Crack Option: (none)

F of S Distribution
- F of S Calculation Option: Constant

Advanced
- Number of Slices: 30
- F of S Tolerance: 0.001
- Minimum Slip Surface Depth: 0.1 ft
- Search Method: Root Finder
- Tolerable difference between starting and converged F of S: 3
- Maximum iterations to calculate converged lambda: 20
- Max Absolute Lambda: 2

Materials

PT (GS to -4)

Model: Mohr-Coulomb
Unit Weight: 76 pcf
Cohesion': 100 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-4 to -7)

Model: Mohr-Coulomb
Unit Weight: 108 pcf
Cohesion': 100 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

SC (-7 to -12)

Model: Mohr-Coulomb
Unit Weight: 118 pcf
Cohesion': 0 psf
Phi': 30 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-12 to -20)

Model: Spatial Mohr-Coulomb
Unit Weight: 102 pcf
Cohesion Fn: 150 psf to 190 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-20 to -33)

Model: Spatial Mohr-Coulomb
Unit Weight: 110 pcf
Cohesion Fn: 190 psf to 260 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-33 to -44)

Model: Mohr-Coulomb
Unit Weight: 118 pcf
Cohesion': 260 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

Containment Dike

Model: Mohr-Coulomb
Unit Weight: 88 pcf
Cohesion': 60 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

Slip Surface Entry and Exit

Left Projection: Range
Left-Zone Left Coordinate: (50, 1.5) ft
Left-Zone Right Coordinate: (65, 4) ft
Left-Zone Increment: 20
Right Projection: Range
Right-Zone Left Coordinate: (101, 1) ft
Right-Zone Right Coordinate: (145, -10) ft
Right-Zone Increment: 40
Radius Increments: 4

Slip Surface Limits

Left Coordinate: (0, 1.5) ft
Right Coordinate: (190, -10) ft

Piezometric Lines

Piezometric Line 1

Coordinates

	X (ft)	Y (ft)
Coordinate 1	0	-0.02
Coordinate 2	0	1.5
Coordinate 3	85	1.5
Coordinate 4	97	1
Coordinate 5	103.04	-0.02
Coordinate 6	190	-0.02

Cohesion Functions

150 psf to 190 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
- Curve Fit to Data: 0 %
- Segment Curvature: 0 %

Y-Intercept: 150
Data Points: Y (ft), Cohesion (psf)
- Data Point: (-20, 192)
- Data Point: (-12, 150)

190 psf to 260 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
- Curve Fit to Data: 0 %
- Segment Curvature: 0 %

Y-Intercept: 192
Data Points: Y (ft), Cohesion (psf)
- Data Point: (-33, 260)
- Data Point: (-20, 192)

Points

	X (ft)	Y (ft)
Point 1	0	1.5
Point 2	50	1.5

Point 3	123	-10
Point 4	190	-12
Point 5	0	-3
Point 6	0	-4
Point 7	0	-12
Point 8	0	-20
Point 9	190	-20
Point 10	0	-44
Point 11	190	-44
Point 12	111	-4
Point 13	60	4
Point 14	65	4
Point 15	0	-33
Point 16	190	-33
Point 17	0	-7
Point 18	117	-7
Point 19	190	-10
Point 20	75	1.5
Point 21	100	1.5
Point 22	0	3
Point 23	56	3
Point 24	69	3
Point 25	190	3
Point 26	78.42857	1.5

Point 27	110.06667	-3.53333

Regions

	Material	Points	Area (ft²)
Region 1	PT (GS to -4)	1,5,6,12,27,21,26,20,2	580.25
Region 2	Containment Dike	2,23,13,14,24,20	37.5
Region 3	SC (-7 to -12)	17,7,4,19,3,18	740
Region 4	CH (-12 to -20)	4,9,8,7	1,520
Region 5	CH (-20 to -33)	8,15,16,9	2,470
Region 6	CH (-33 to -44)	10,11,16,15	2,090
Region 7	CH (-4 to -7)	6,17,18,12	342
Region 8		1,22,23,2	79.5
Region 9		24,20,26,21,27,12,18,3,19,25	1,079.7

Current Slip Surface

Slip Surface: 4,306
F of S: 1.82
Volume: 962.55326 ft³
Weight: 96,772.589 lbs
Resisting Moment: 732,700.74 lbs-ft
Activating Moment: 403,334.81 lbs-ft
Resisting Force: 12,263.164 lbs
Activating Force: 6,748.7426 lbs
F of S Rank (Analysis): 1 of 4,306 slip surfaces
F of S Rank (Query): 1 of 4,306 slip surfaces
Exit: (133.89224, -10) ft
Entry: (57.67716, 3.4192899) ft
Radius: 34.874214 ft
Center: (104.05923, 34.689025) ft

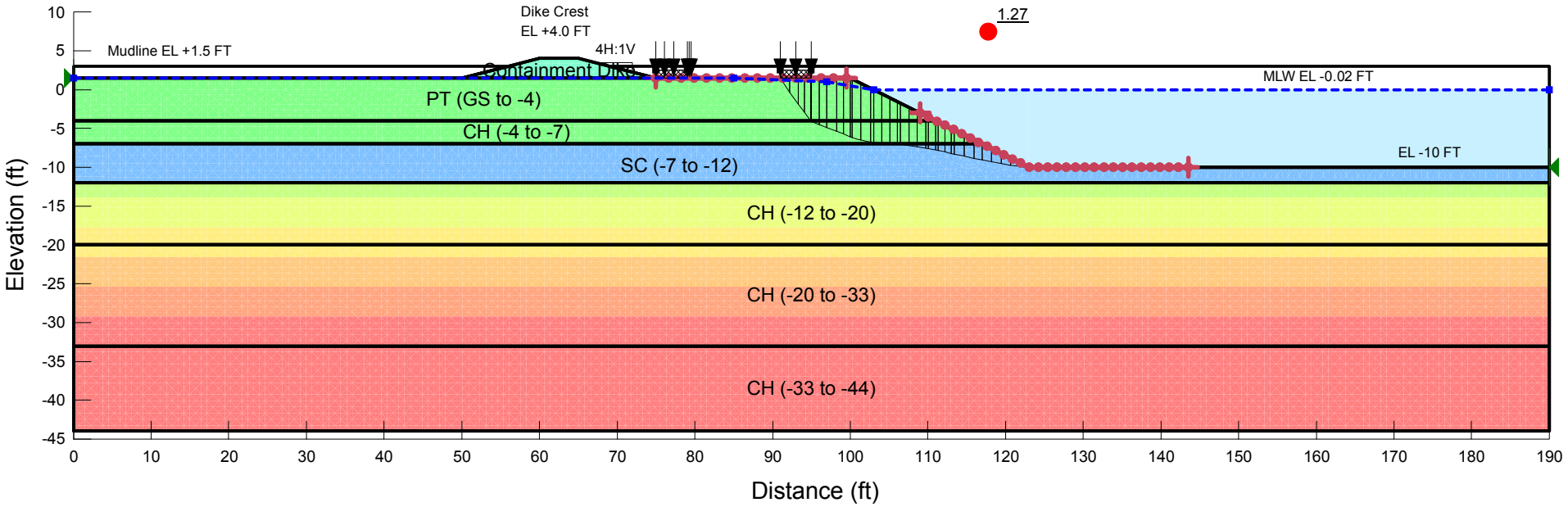
Slip Slices

	X (ft)	Y (ft)	PWP (psf)	Base Normal Stress (psf)	Frictional Strength (psf)	Cohesive Strength (psf)
Slice 1	58.547055	2.459645	-59.881846	65.034162	0	60
Slice 2	59.708475	1.1783971	20.068021	170.04553	0	100
Slice 3	61.281455	-0.55687289	128.34887	300.45252	0	100
Slice 4	63.539021	-2.98527	279.88085	479.3622	0	100
Slice 5	64.757566	-4.2520255	358.92639	578.07449	0	100
	65.35574	-4.8738655	397.72921	634.20773	0	100

Slice 6						
Slice 7	66.721352	-6.12184	475.60282	748.74996	0	100
Slice 8	68.365612	-7.5516484	564.82286	841.34557	159.65046	0
Slice 9	70.36898	-9.2937284	673.52865	986.48455	180.68517	0
Slice 10	72.70584	-11.239985	794.97506	1,159.1378	210.24943	0
Slice 11	74.33686	-12.132859	850.69042	1,332.4136	0	150.69751
Slice 12	76.714285	-12.624195	881.34977	1,367.3626	0	153.27702
Slice 13	78.96992	-13.090361	910.43851	1,414.1765	0	155.72439
Slice 14	80.883453	-13.543321	938.70321	1,452.7591	0	158.10243
Slice 15	83.627818	-14.225482	981.27008	1,521.0273	0	161.68378
Slice 16	85.56139	-14.706106	1,009.8014	1,569.1263	0	164.20706
Slice 17	87.484527	-15.237495	1,037.9599	1,615.3292	0	166.99685
Slice 18	90.208022	-16.021185	1,079.7811	1,693.5048	0	171.11122
Slice 19	92.836175	-16.81282	1,122.3459	1,767.1552	0	175.2673
Slice 20	95.368985	-17.6124	1,165.6544	1,846.7323	0	179.4651
Slice 21	96.817695	-18.069057	1,190.3832	1,892.9328	0	181.86255
Slice 22	98.5	-18.593827	1,206.8482	1,945.176	0	184.61759
Slice 23	100.90657	-19.344519	1,228.3316	1,986.0404	0	188.55873
Slice 24	102.42657	-19.677058	1,233.0646	2,011.1535	0	190.30455
Slice 25	104.72435	-19.863403	1,238.2283	1,996.8864	0	191.28286
Slice 26	108.23769	-20.148327	1,256.0076	2,006.1865	0	192.77586
Slice 27	110.2169	-20.308837	1,266.0234	2,012.0386	0	193.61545
Slice 28	110.68357	-20.316414	1,266.4962	2,030.8595	0	193.65509
Slice 29	112.27804	-20.293204	1,265.0479	1,998.3484	0	193.53368

Slice 30	114.33709	-20.1373	1,255.3195	1,970.4831	0	192.71818
Slice 31	116.05905	-19.834582	1,236.4299	1,899.8373	0	191.13156
Slice 32	117.26142	-19.623207	1,223.2401	1,849.9627	0	190.02184
Slice 33	119.39082	-18.8498	1,174.9795	1,754.6838	0	185.96145
Slice 34	122.1294	-17.560775	1,094.5444	1,591.8001	0	179.19407
Slice 35	124.19538	-16.228127	1,011.3871	1,406.078	0	172.19767
Slice 36	126.58614	-14.685982	915.1573	1,239.7795	0	164.10141
Slice 37	129.276	-12.957455	807.29719	1,052.7325	0	155.02664
Slice 38	132.33136	-11	685.152	792.24849	61.83219	0

		(pcf)	(psf)	(°)	
PT (GS to -4)	Mohr-Coulomb	76	100	0	
CH (-4 to -7)	Mohr-Coulomb	108	100	0	
SC (-7 to -12)	Mohr-Coulomb	118	0	30	
CH (-12 to -20)	Spatial Mohr-Coulomb	102		0	150 psf to 190 psf
CH (-20 to -33)	Spatial Mohr-Coulomb	110		0	190 psf to 260 psf
CH (-33 to -44)	Mohr-Coulomb	118	260	0	
Containment Dike	Mohr-Coulomb	88	60	0	



Excavation Stability

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File Information

File Version: 8.16
Title: Containment Dike Stability
Created By: Alicia R. Sellers
Last Edited By: Alicia R. Sellers
Revision Number: 19
Date: 5/16/2018
Time: 10:57:36 AM
Tool Version: 8.16.1.13452
File Name: ML+1.5_Crest+4.0_Slope4-1 Sand_ARS.gsz
Directory: P:\16\16715040\03\Analyses\Containment Dike Slope Stability\No Mudwave\Profile 2 - w Sand\
Last Solved Date: 5/16/2018
Last Solved Time: 10:57:52 AM

Project Settings

Length(L) Units: Feet
Time(t) Units: Seconds
Force(F) Units: Pounds
Pressure(p) Units: psf
Strength Units: psf
Unit Weight of Water: 62.4 pcf
View: 2D
Element Thickness: 1

Analysis Settings

Excavation Stability

Kind: SLOPE/W
Method: Spencer
Settings
- PWP Conditions Source: Piezometric Line
- Apply Phreatic Correction: No
- Use Staged Rapid Drawdown: No

Slip Surface
- Direction of movement: Left to Right
- Use Passive Mode: No
- Slip Surface Option: Entry and Exit
- Critical slip surfaces saved: 1
- Resisting Side Maximum Convex Angle: 1 °
- Driving Side Maximum Convex Angle: 5 °

- Optimize Critical Slip Surface Location: Yes
- Critical Slip Surface Optimizations
  - Maximum Iterations: 2,000
  - Convergence Tolerance: 1e-007
  - Starting Points: 8
  - Ending Points: 16
  - Complete Passes per Insertion: 1
- Tension Crack
  - Tension Crack Option: (none)

F of S Distribution
- F of S Calculation Option: Constant

Advanced
- Number of Slices: 30
- F of S Tolerance: 0.001
- Minimum Slip Surface Depth: 0.1 ft
- Search Method: Root Finder
- Tolerable difference between starting and converged F of S: 3
- Maximum iterations to calculate converged lambda: 20
- Max Absolute Lambda: 2

Materials

PT (GS to -4)

Model: Mohr-Coulomb
Unit Weight: 76 pcf
Cohesion': 100 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-4 to -7)

Model: Mohr-Coulomb
Unit Weight: 108 pcf
Cohesion': 100 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

SC (-7 to -12)

Model: Mohr-Coulomb
Unit Weight: 118 pcf
Cohesion': 0 psf
Phi': 30 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-12 to -20)

Model: Spatial Mohr-Coulomb
Unit Weight: 102 pcf
Cohesion Fn: 150 psf to 190 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-20 to -33)

Model: Spatial Mohr-Coulomb
Unit Weight: 110 pcf
Cohesion Fn: 190 psf to 260 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-33 to -44)

Model: Mohr-Coulomb
Unit Weight: 118 pcf
Cohesion': 260 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

Containment Dike

Model: Mohr-Coulomb
Unit Weight: 88 pcf
Cohesion': 60 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

Slip Surface Entry and Exit

Left Projection: Range
Left-Zone Left Coordinate: (75, 1.5) ft
Left-Zone Right Coordinate: (99.5, 1.5) ft
Left-Zone Increment: 15
Right Projection: Range
Right-Zone Left Coordinate: (109, -3) ft
Right-Zone Right Coordinate: (143.5, -10) ft
Right-Zone Increment: 30
Radius Increments: 4

Slip Surface Limits

Left Coordinate: (0, 1.5) ft
Right Coordinate: (190, -10) ft

Piezometric Lines

Piezometric Line 1

Coordinates

	X (ft)	Y (ft)
Coordinate 1	0	1.5
Coordinate 2	85	1.5
Coordinate 3	97	1
Coordinate 4	103.04	-0.02
Coordinate 5	190	-0.02

Surcharge Loads

Surcharge Load 1

Surcharge (Unit Weight): 260 pcf
Direction: Vertical

Coordinates

	X (ft)	Y (ft)
	91	2.5
	95	2.5

Surcharge Load 2

Surcharge (Unit Weight): 260 pcf
Direction: Vertical

Coordinates

	X (ft)	Y (ft)
	75	2.5
	79	2.5

Cohesion Functions

150 psf to 190 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
- Curve Fit to Data: 0 %

Segment Curvature: 0 %
Y-Intercept: 150
Data Points: Y (ft), Cohesion (psf)
Data Point: (-20, 192)
Data Point: (-12, 150)

190 psf to 260 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
Curve Fit to Data: 0 %
Segment Curvature: 0 %
Y-Intercept: 192
Data Points: Y (ft), Cohesion (psf)
Data Point: (-33, 260)
Data Point: (-20, 192)

Points

	X (ft)	Y (ft)
Point 1	0	1.5
Point 2	50	1.5
Point 3	123	-10
Point 4	190	-12
Point 5	0	-3
Point 6	0	-4
Point 7	0	-12
Point 8	0	-20
Point 9	190	-20
Point 10	0	-44
Point 11	190	-44
Point 12	111	-4
Point 13	60	4
Point 14	65	4
Point 15	0	-33
Point 16	190	-33
Point 17	0	-7
Point 18	117	-7
Point 19	190	-10
Point 20	75	1.5
Point 21	100	1.5
Point 22	0	3
Point 23	56	3
Point 24	69	3
Point 25	190	3
Point 26	78.42857	1.5
Point 27	110.06667	-3.53333

Regions

	Material	Points	Area (ft²)
Region 1	PT (GS to -4)	1,5,6,12,27,21,26,20,2	580.25
Region 2	Containment Dike	2,23,13,14,24,20	37.5
Region 3	SC (-7 to -12)	17,7,4,19,3,18	740
Region 4	CH (-12 to -20)	4,9,8,7	1,520
Region 5	CH (-20 to -33)	8,15,16,9	2,470
Region 6	CH (-33 to -44)	10,11,16,15	2,090
Region 7	CH (-4 to -7)	6,17,18,12	342
Region 8		1,22,23,2	79.5
Region 9		24,20,26,21,27,12,18,3,19,25	1,079.7

Current Slip Surface

Slip Surface: 2,481
F of S: 1.27
Volume: 131.73498 ft³
Weight: 12,175.422 lbs
Resisting Moment: 139,386.1 lbs-ft
Activating Moment: 109,852.93 lbs-ft
Resisting Force: 2,758.571 lbs
Activating Force: 2,174.7281 lbs
F of S Rank (Analysis): 1 of 2,481 slip surfaces
F of S Rank (Query): 1 of 2,481 slip surfaces
Exit: (122.99772, -9.9988592) ft
Entry: (91.016838, 1.5) ft
Radius: 16.835283 ft
Center: (121.53642, 35.317141) ft

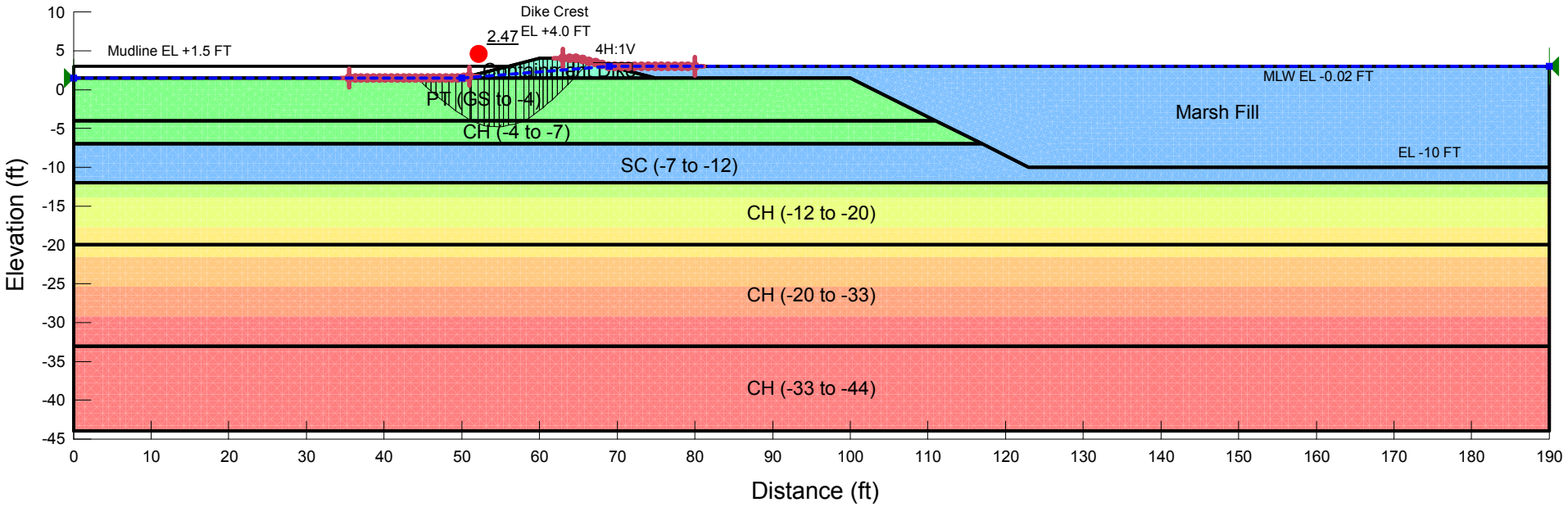
Slip Slices

	X (ft)	Y (ft)	PWP (psf)	Base Normal Stress (psf)	Frictional Strength (psf)	Cohesive Strength (psf)
Slice 1	91.102916	1.3710626	-7.8218889	136.41538	0	100
Slice 2	91.70895	0.46327644	47.248279	194.67948	0	100
Slice 3	92.748863	-1.0944212	141.74484	294.65661	0	100
Slice 4	93.670411	-2.4049525	221.12597	397.51205	0	100
Slice 5	94.473594	-3.4683175	285.39167	467.01681	0	100
Slice 6	94.915647	-4.05357	320.76208	506.745	0	100
Slice 7	94.978055	-4.1156288	324.47229	639.30626	0	100
	95.5	-4.317528	335.71375	411.92289	0	100

Slice 8						
Slice 9	96.5	-4.704349	357.25138	451.80334	0	100
Slice 10	97.62476	-5.1394297	376.51685	496.65927	0	100
Slice 11	98.68714	-5.5520839	391.07138	538.66441	0	100
Slice 12	99.56238	-5.8940517	403.18711	573.90449	0	100
Slice 13	100.10658	-6.1066778	410.72034	591.95136	0	100
Slice 14	100.79508	-6.33225	417.5408	601.10431	0	100
Slice 15	101.98695	-6.631185	423.63472	607.41936	0	100
Slice 16	102.81845	-6.762337	423.05646	607.73123	0	100
Slice 17	103.54657	-6.8154033	424.03316	602.61593	0	100
Slice 18	104.5597	-6.889242	428.6407	605.61706	0	100
Slice 19	105.57283	-6.9630807	433.24823	608.61818	0	100
Slice 20	106.28068	-7.01467	436.46741	610.88796	100.70175	0
Slice 21	107.02383	-7.1091983	442.36598	607.08717	95.101824	0
Slice 22	108.10757	-7.268915	452.3323	620.36509	97.013778	0
Slice 23	109.19131	-7.4286317	462.29862	633.64301	98.925731	0
Slice 24	109.89993	-7.5392954	469.20404	637.42075	97.119961	0
Slice 25	110.53333	-7.6563153	476.50608	647.81375	98.904527	0
Slice 26	111.17968	-7.7757249	483.95723	655.68281	99.145807	0
Slice 27	111.77735	-7.921755	493.06951	648.2636	89.601348	0
Slice 28	112.61332	-8.147425	507.15132	657.45718	86.779131	0
Slice 29	113.19528	-8.29662	516.46109	669.63777	88.436596	0
Slice 30	113.99934	-8.461205	526.73119	675.53424	85.91148	0
Slice 31	115.27955	-8.717655	542.73367	679.39375	78.900736	0

Slice 32	116.45983	-8.9470461	557.04768	683.897	73.236489	0
Slice 33	117.6079	-9.1620619	570.46466	682.70942	64.804542	0
Slice 34	118.8237	-9.3897611	584.67309	678.73369	54.305914	0
Slice 35	120.03949	-9.6174604	598.88153	674.75797	43.807286	0
Slice 36	121.10835	-9.7891	609.59184	674.63256	37.551276	0
Slice 37	122.03028	-9.90468	616.80403	664.58314	27.58528	0
Slice 38	122.74448	-9.9806646	621.54547	660.42909	22.449469	0

		(pcf)	(psf)	(°)	
PT (GS to -4)	Mohr-Coulomb	76	100	0	
CH (-4 to -7)	Mohr-Coulomb	108	100	0	
SC (-7 to -12)	Mohr-Coulomb	118	0	30	
CH (-12 to -20)	Spatial Mohr-Coulomb	102		0	150 psf to 190 psf
CH (-20 to -33)	Spatial Mohr-Coulomb	110		0	190 psf to 260 psf
CH (-33 to -44)	Mohr-Coulomb	118	260	0	
Containment Dike	Mohr-Coulomb	88	60	0	
Marsh Fill	Mohr-Coulomb	85	0	0	



Post Construction

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File Information

File Version: 8.16
Title: Containment Dike Stability
Created By: Alicia R. Sellers
Last Edited By: Alicia R. Sellers
Revision Number: 20
Date: 5/16/2018
Time: 3:37:18 PM
Tool Version: 8.16.1.13452
File Name: ML+1.5_Crest+4.0_Slope4-1 Sand_ARS.gsz
Directory: P:\16\16715040\03\Analyses\Containment Dike Slope Stability\No Mudwave\Profile 2 - w Sand\
Last Solved Date: 5/16/2018
Last Solved Time: 3:37:38 PM

Project Settings

Length(L) Units: Feet
Time(t) Units: Seconds
Force(F) Units: Pounds
Pressure(p) Units: psf
Strength Units: psf
Unit Weight of Water: 62.4 pcf
View: 2D
Element Thickness: 1

Analysis Settings

Post Construction

Kind: SLOPE/W
Method: Spencer
Settings
- PWP Conditions Source: Piezometric Line
- Apply Phreatic Correction: No
- Use Staged Rapid Drawdown: No

Slip Surface
- Direction of movement: Right to Left
- Use Passive Mode: No
- Slip Surface Option: Entry and Exit
- Critical slip surfaces saved: 1
- Resisting Side Maximum Convex Angle: 1 °
- Driving Side Maximum Convex Angle: 5 °

- Optimize Critical Slip Surface Location: Yes
- Critical Slip Surface Optimizations
  - Maximum Iterations: 2,000
  - Convergence Tolerance: 1e-007
  - Starting Points: 8
  - Ending Points: 16
  - Complete Passes per Insertion: 1
- Tension Crack
  - Tension Crack Option: (none)

F of S Distribution
- F of S Calculation Option: Constant

Advanced
- Number of Slices: 30
- F of S Tolerance: 0.001
- Minimum Slip Surface Depth: 0.1 ft
- Search Method: Root Finder
- Tolerable difference between starting and converged F of S: 3
- Maximum iterations to calculate converged lambda: 20
- Max Absolute Lambda: 2

Materials

PT (GS to -4)

Model: Mohr-Coulomb
Unit Weight: 76 pcf
Cohesion': 100 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-4 to -7)

Model: Mohr-Coulomb
Unit Weight: 108 pcf
Cohesion': 100 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

SC (-7 to -12)

Model: Mohr-Coulomb
Unit Weight: 118 pcf
Cohesion': 0 psf
Phi': 30 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-12 to -20)

Model: Spatial Mohr-Coulomb
Unit Weight: 102 pcf
Cohesion Fn: 150 psf to 190 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-20 to -33)

Model: Spatial Mohr-Coulomb
Unit Weight: 110 pcf
Cohesion Fn: 190 psf to 260 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-33 to -44)

Model: Mohr-Coulomb
Unit Weight: 118 pcf
Cohesion': 260 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

Containment Dike

Model: Mohr-Coulomb
Unit Weight: 88 pcf
Cohesion': 60 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

Marsh Fill

Model: Mohr-Coulomb
Unit Weight: 85 pcf
Cohesion': 0 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

Slip Surface Entry and Exit

Left Projection: Range
Left-Zone Left Coordinate: (35.5, 1.5) ft
Left-Zone Right Coordinate: (51, 1.75) ft

Left-Zone Increment: 20
Right Projection: Range
Right-Zone Left Coordinate: (63, 4) ft
Right-Zone Right Coordinate: (80, 3) ft
Right-Zone Increment: 20
Radius Increments: 4

Slip Surface Limits

Left Coordinate: (0, 1.5) ft
Right Coordinate: (190, 3) ft

Piezometric Lines

Piezometric Line 1

Coordinates

	X (ft)	Y (ft)
Coordinate 1	0	1.5
Coordinate 2	50	1.5
Coordinate 3	69	3
Coordinate 4	190	3

Cohesion Functions

150 psf to 190 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
- Curve Fit to Data: 0 %
- Segment Curvature: 0 %

Y-Intercept: 150
Data Points: Y (ft), Cohesion (psf)
- Data Point: (-20, 192)
- Data Point: (-12, 150)

190 psf to 260 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
- Curve Fit to Data: 0 %
- Segment Curvature: 0 %

Y-Intercept: 192
Data Points: Y (ft), Cohesion (psf)
- Data Point: (-33, 260)
- Data Point: (-20, 192)

Points

	X (ft)	Y (ft)
Point 1	0	1.5
Point 2	50	1.5
Point 3	123	-10
Point 4	190	-12
Point 5	0	-3
Point 6	0	-4
Point 7	0	-12
Point 8	0	-20
Point 9	190	-20
Point 10	0	-44
Point 11	190	-44
Point 12	111	-4
Point 13	60	4
Point 14	65	4
Point 15	0	-33
Point 16	190	-33
Point 17	0	-7
Point 18	117	-7
Point 19	190	-10
Point 20	75	1.5
Point 21	100	1.5
Point 22	0	3
Point 23	56	3
Point 24	69	3
Point 25	190	3
Point 26	78.42857	1.5
Point 27	110.06667	-3.53333

Regions

	Material	Points	Area (ft²)
Region 1	PT (GS to -4)	1,5,6,12,27,21,26,20,2	580.25
Region 2	Containment Dike	2,23,13,14,24,20	37.5
Region 3	SC (-7 to -12)	17,7,4,19,3,18	740
Region 4	CH (-12 to -20)	4,9,8,7	1,520
Region 5	CH (-20 to -33)	8,15,16,9	2,470
Region 6	CH (-33 to -44)	10,11,16,15	2,090
Region 7	CH (-4 to -7)	6,17,18,12	342
Region 8		1,22,23,2	79.5
Region 9	Marsh Fill	24,20,26,21,27,12,18,3,19,25	1,079.7

Current Slip Surface

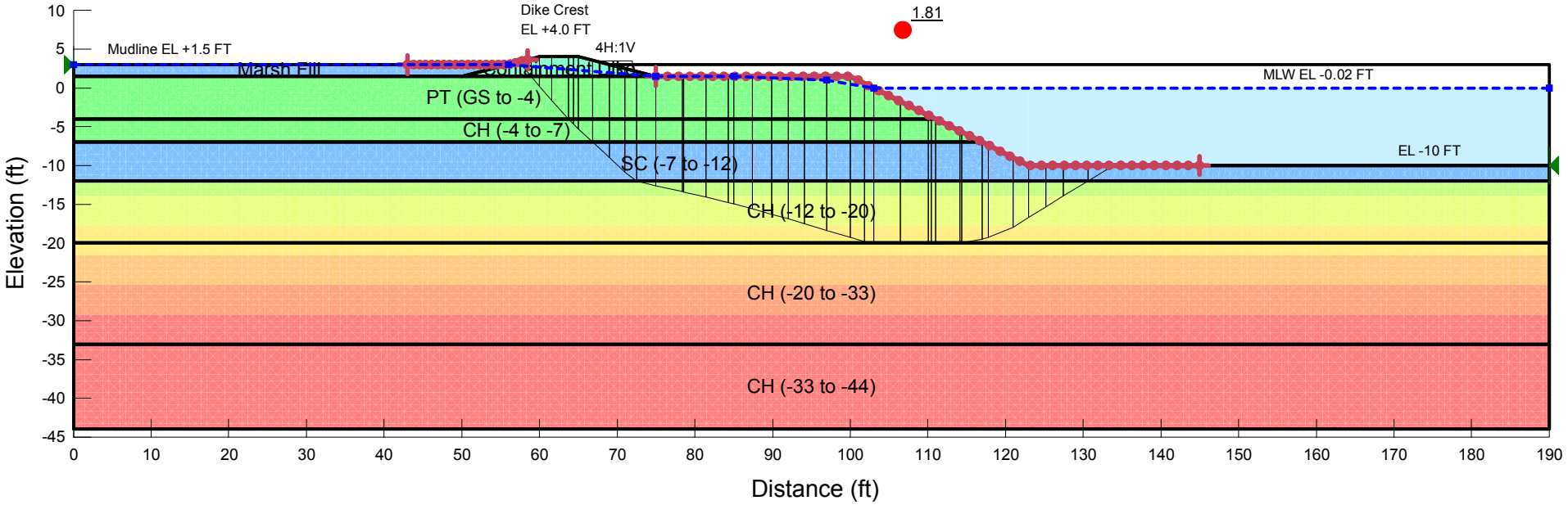
Slip Surface: 2,206
F of S: 2.47
Volume: 107.44558 ft³
Weight: 8,593.748 lbs
Resisting Moment: 30,289.494 lbs-ft
Activating Moment: 12,258.338 lbs-ft
Resisting Force: 2,138.8378 lbs
Activating Force: 865.63592 lbs
F of S Rank (Analysis): 1 of 2,206 slip surfaces
F of S Rank (Query): 1 of 2,206 slip surfaces
Exit: (44.287558, 1.5) ft
Entry: (66.49108, 3.62723) ft
Radius: 10.469885 ft
Center: (54.27153, 7.4633609) ft

Slip Slices

	X (ft)	Y (ft)	PWP (psf)	Base Normal Stress (psf)	Frictional Strength (psf)	Cohesive Strength (psf)
Slice 1	44.835369	0.942885	34.763976	90.729688	0	100
Slice 2	45.695993	0.10661	86.947536	151.58853	0	100
Slice 3	46.321618	-0.45171	121.7867	196.18914	0	100
Slice 4	47.058085	-1.06271	159.9131	238.86267	0	100
Slice 5	47.905395	-1.72639	201.32674	291.55055	0	100
Slice 6	48.78483	-2.394635	243.02522	341.81135	0	100
Slice 7	49.620305	-2.9824402	279.70427	383.49878	0	100
Slice 8	50.51625	-3.5756552	319.2641	442.05261	0	100
Slice 9	51.138062	-3.958735	346.23151	467.89038	0	100
Slice 10	51.661885	-4.1635025	361.58953	500.91212	0	100
Slice 11	52.498408	-4.4905075	386.11562	555.80105	0	100
Slice 12	53.227533	-4.6812383	401.60912	571.05427	0	100
Slice 13	53.84926	-4.735695	408.07004	590.70736	0	100
Slice 14	54.470987	-4.7901517	414.53096	610.36044	0	100
	55.086388	-4.7660356	416.05777	602.48091	0	100

Slice 15						
Slice 16	55.695462	-4.6633468	412.65049	604.76916	0	100
Slice 17	56.479135	-4.5312212	408.26647	607.71335	0	100
Slice 18	57.466571	-4.22522	394.03642	576.93609	0	100
Slice 19	58.288086	-3.86122	375.36986	560.53428	0	100
Slice 20	58.950975	-3.4619685	353.72216	524.79445	0	100
Slice 21	59.650325	-2.9410255	324.66054	501.53244	0	100
Slice 22	60.221	-2.515932	300.94603	477.87806	0	100
Slice 23	60.74632	-2.081315	276.41382	437.34209	0	100
Slice 24	61.35496	-1.541325	245.7168	398.1949	0	100
Slice 25	61.982815	-0.963725	212.76757	352.70274	0	100
Slice 26	62.629885	-0.348515	177.56614	308.24921	0	100
Slice 27	63.283007	0.2960575	140.5623	257.96085	0	100
Slice 28	63.942183	0.9699925	101.75606	209.44398	0	100
Slice 29	64.362495	1.40348	76.777033	176.26934	0	100
Slice 30	64.72661	1.7908534	54.398681	160.5877	0	60
Slice 31	65.305862	2.4071056	18.798119	102.96796	0	60
Slice 32	65.842862	2.9784072	-14.205672	44.280686	0	60
Slice 33	66.28254	3.42577	-39.955113	0.17257288	0	60

		(pcf)	(psf)	(°)	
PT (GS to -4)	Mohr-Coulomb	76	100	0	
CH (-4 to -7)	Mohr-Coulomb	108	100	0	
SC (-7 to -12)	Mohr-Coulomb	118	0	30	
CH (-12 to -20)	Spatial Mohr-Coulomb	102		0	150 psf to 190 psf
CH (-20 to -33)	Spatial Mohr-Coulomb	110		0	190 psf to 260 psf
CH (-33 to -44)	Mohr-Coulomb	118	260	0	
Containment Dike	Mohr-Coulomb	88	60	0	
Marsh Fill	Mohr-Coulomb	85	0	0	



Outside Borrow

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File Information

File Version: 8.16
Title: Containment Dike Stability
Created By: Alicia R. Sellers
Last Edited By: Alicia R. Sellers
Revision Number: 20
Date: 5/16/2018
Time: 3:37:18 PM
Tool Version: 8.16.1.13452
File Name: ML+1.5_Crest+4.0_Slope4-1 Sand_ARS.gsz
Directory: P:\16\16715040\03\Analyses\Containment Dike Slope Stability\No Mudwave\Profile 2 - w Sand\
Last Solved Date: 5/16/2018
Last Solved Time: 3:37:50 PM

Project Settings

Length(L) Units: Feet
Time(t) Units: Seconds
Force(F) Units: Pounds
Pressure(p) Units: psf
Strength Units: psf
Unit Weight of Water: 62.4 pcf
View: 2D
Element Thickness: 1

Analysis Settings

Outside Borrow

Kind: SLOPE/W
Method: Spencer
Settings
- PWP Conditions Source: Piezometric Line
- Apply Phreatic Correction: No
- Use Staged Rapid Drawdown: No

Slip Surface
- Direction of movement: Left to Right
- Use Passive Mode: No
- Slip Surface Option: Entry and Exit
- Critical slip surfaces saved: 1
- Resisting Side Maximum Convex Angle: 1 °
- Driving Side Maximum Convex Angle: 5 °

- Optimize Critical Slip Surface Location: Yes
- Critical Slip Surface Optimizations
  - Maximum Iterations: 2,000
  - Convergence Tolerance: 1e-007
  - Starting Points: 8
  - Ending Points: 16
  - Complete Passes per Insertion: 1
- Tension Crack
  - Tension Crack Option: (none)

F of S Distribution
- F of S Calculation Option: Constant

Advanced
- Number of Slices: 30
- F of S Tolerance: 0.001
- Minimum Slip Surface Depth: 0.1 ft
- Search Method: Root Finder
- Tolerable difference between starting and converged F of S: 3
- Maximum iterations to calculate converged lambda: 20
- Max Absolute Lambda: 2

Materials

PT (GS to -4)

Model: Mohr-Coulomb
Unit Weight: 76 pcf
Cohesion': 100 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-4 to -7)

Model: Mohr-Coulomb
Unit Weight: 108 pcf
Cohesion': 100 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

SC (-7 to -12)

Model: Mohr-Coulomb
Unit Weight: 118 pcf
Cohesion': 0 psf
Phi': 30 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-12 to -20)

Model: Spatial Mohr-Coulomb
Unit Weight: 102 pcf
Cohesion Fn: 150 psf to 190 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-20 to -33)

Model: Spatial Mohr-Coulomb
Unit Weight: 110 pcf
Cohesion Fn: 190 psf to 260 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-33 to -44)

Model: Mohr-Coulomb
Unit Weight: 118 pcf
Cohesion': 260 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

Containment Dike

Model: Mohr-Coulomb
Unit Weight: 88 pcf
Cohesion': 60 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

Marsh Fill

Model: Mohr-Coulomb
Unit Weight: 85 pcf
Cohesion': 0 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

Slip Surface Entry and Exit

Left Projection: Range
Left-Zone Left Coordinate: (43, 3) ft
Left-Zone Right Coordinate: (58.5, 3.625) ft

Left-Zone Increment: 20
Right Projection: Range
Right-Zone Left Coordinate: (75, 1.5) ft
Right-Zone Right Coordinate: (145, -10) ft
Right-Zone Increment: 50
Radius Increments: 4

Slip Surface Limits

Left Coordinate: (0, 3) ft
Right Coordinate: (190, -10) ft

Piezometric Lines

Piezometric Line 1

Coordinates

	X (ft)	Y (ft)
Coordinate 1	0	3
Coordinate 2	56	3
Coordinate 3	75	1.5
Coordinate 4	85	1.5
Coordinate 5	97	1
Coordinate 6	103.04	-0.02
Coordinate 7	190	-0.02

Cohesion Functions

150 psf to 190 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
- Curve Fit to Data: 0 %
- Segment Curvature: 0 %

Y-Intercept: 150
Data Points: Y (ft), Cohesion (psf)
- Data Point: (-20, 192)
- Data Point: (-12, 150)

190 psf to 260 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
- Curve Fit to Data: 0 %
- Segment Curvature: 0 %

Y-Intercept: 192
Data Points: Y (ft), Cohesion (psf)

Data Point: (-33, 260)
Data Point: (-20, 192)

Points

	X (ft)	Y (ft)
Point 1	0	1.5
Point 2	50	1.5
Point 3	123	-10
Point 4	190	-12
Point 5	0	-3
Point 6	0	-4
Point 7	0	-12
Point 8	0	-20
Point 9	190	-20
Point 10	0	-44
Point 11	190	-44
Point 12	111	-4
Point 13	60	4
Point 14	65	4
Point 15	0	-33
Point 16	190	-33
Point 17	0	-7
Point 18	117	-7
Point 19	190	-10
Point 20	75	1.5
Point 21	100	1.5
Point 22	0	3
Point 23	56	3
Point 24	69	3
Point 25	190	3
Point 26	78.42857	1.5
Point 27	110.06667	-3.53333

Regions

	Material	Points	Area (ft²)
Region 1	PT (GS to -4)	1,5,6,12,27,21,26,20,2	580.25
Region 2	Containment Dike	2,23,13,14,24,20	37.5
Region 3	SC (-7 to -12)	17,7,4,19,3,18	740
Region 4	CH (-12 to -20)	4,9,8,7	1,520
Region 5	CH (-20 to -33)	8,15,16,9	2,470
Region 6	CH (-33 to -44)	10,11,16,15	2,090
Region 7	CH (-4 to -7)	6,17,18,12	342

Region 8	Marsh Fill	1,22,23,2	79.5
Region 9		24,20,26,21,27,12,18,3,19,25	1,079.7

Current Slip Surface

Slip Surface: 5,356
F of S: 1.81
Volume: 979.64381 ft³
Weight: 98,495.727 lbs
Resisting Moment: 732,451.16 lbs-ft
Activating Moment: 405,728.08 lbs-ft
Resisting Force: 12,305.815 lbs
Activating Force: 6,814.7009 lbs
F of S Rank (Analysis): 1 of 5,356 slip surfaces
F of S Rank (Query): 1 of 5,356 slip surfaces
Exit: (133.87037, -10) ft
Entry: (57.350565, 3.3376412) ft
Radius: 34.989709 ft
Center: (102.86059, 34.454818) ft

Slip Slices

	X (ft)	Y (ft)	PWP (psf)	Base Normal Stress (psf)	Frictional Strength (psf)	Cohesive Strength (psf)
Slice 1	57.552223	3.0995885	-13.86106	-11.295381	-0	60
Slice 2	58.330569	2.1807679	39.638966	80.749061	0	60
Slice 3	59.453629	0.85502066	116.83305	182.85868	0	100
Slice 4	60.78636	-0.71823934	208.43901	306.47529	0	100
Slice 5	62.655065	-2.82326	330.58647	463.83662	0	100
Slice 6	64.03983	-4.328795	417.71007	581.77444	0	100
Slice 7	64.671125	-4.9621223	454.11973	660.25559	0	100
Slice 8	65.93595	-6.1333273	520.972	761.05612	0	100
Slice 9	67.93595	-7.9852914	626.68193	893.97928	154.32419	0
Slice 10	70.00822	-9.9041764	736.21169	1,052.9886	182.89125	0
Slice 11	71.748795	-11.43285	823.0263	1,193.7653	214.04625	0
	73.740575	-12.312279	868.09056	1,360.4058	0	151.63947

Slice 12						
Slice 13	76.714285	-12.983675	903.78133	1,400.3539	0	155.16429
Slice 14	78.49868	-13.386551	928.92077	1,440.7485	0	157.27939
Slice 15	79.994313	-13.74397	951.22373	1,474.2782	0	159.15584
Slice 16	82.845358	-14.42715	993.85416	1,542.6994	0	162.74254
Slice 17	84.63544	-14.865592	1,021.213	1,582.0383	0	165.04436
Slice 18	86.22159	-15.286984	1,044.3316	1,624.1504	0	167.25666
Slice 19	88.66477	-15.936061	1,078.4818	1,689.0166	0	170.66432
Slice 20	90.94173	-16.571358	1,112.2042	1,747.0638	0	173.99963
Slice 21	93.05247	-17.192873	1,145.4988	1,809.0282	0	177.26258
Slice 22	95.55392	-17.934139	1,185.2501	1,882.2812	0	181.15423
Slice 23	98.5	-18.811209	1,220.4128	1,969.7007	0	185.75885
Slice 24	100.93761	-19.536905	1,240.0093	2,006.9733	0	189.56875
Slice 25	102.45762	-19.839567	1,242.878	2,035.2586	0	191.15773
Slice 26	104.73445	-19.931547	1,242.4806	2,012.4857	0	191.64062
Slice 27	108.24778	-20.07348	1,251.3371	2,006.6725	0	192.38436
Slice 28	110.23871	-20.15391	1,256.356	2,003.6881	0	192.80507
Slice 29	110.70538	-20.152152	1,256.2463	2,015.8649	0	192.79587
Slice 30	112.55727	-20.097417	1,252.8308	1,973.8316	0	192.50957
Slice 31	114.23709	-20.025695	1,248.3554	1,967.5724	0	192.1344
Slice 32	115.67982	-19.72319	1,229.4791	1,903.8847	0	190.54675
Slice 33	117.4109	-19.360225	1,206.8301	1,825.6392	0	188.64118
Slice 34	119.39259	-18.63461	1,161.5517	1,735.5616	0	184.8317
Slice 35	121.98169	-17.352812	1,081.5675	1,570.9268	0	178.10226

Slice 36	124.10422	-16.013951	998.02254	1,380.6892	0	171.07324
Slice 37	126.31265	-14.620904	911.09639	1,230.6523	0	163.75974
Slice 38	128.99916	-12.96219	807.59266	1,048.6388	0	155.0515
Slice 39	132.22591	-11	685.152	788.95726	59.931994	0

Calculation Checksheet

Project Number: 16715-040-03 **Project Title:** Island Road Marsh Creation and Nourishment (TE-117)

Client: CPRA

Location: Terrebonne Parish, Louisiana

Calculations Description: Bearing Capacity of the containment dikes was computed for mudline elevations of +1.5 feet and -3.5 feet in accordance with the methodology discussed in the attached. The assumed dike geometry and applied pressures are also presented.

Contents of Calculation Package: Description of methodology, applied loading, assumed water conditions, and the factor of safety against bearing failure.

Originator: ST **Checked by:** JRR **Date:** May 18, 2018

Checking Method (describe):

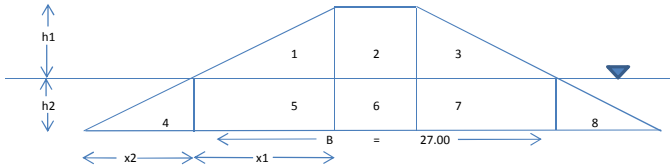
Checked dike geometry and applied loads. Checked subsurface conditions assumed and reasonableness of results.

FACTOR OF SAFETY AGAINST BEARING CAPACITY AND LATERAL SQUEEZE FOR UNREINFORCED DIKES USING NAVFAC DM 7; FIGURE 11-5, PAGE 7-11-6

PROFILE 1

Elevation at Bottom of Dike (ft.)	Elevation at Top of Dike (ft.)	Height of Dike (ft.)	Slope Inclination (H:V)		Width at Top of Dike (ft.)	Elevation of Water (ft.)	Full Width at Bottom of Dike (ft.)	h1 (ft.)	h2 (ft.)	x1 (ft.)	x2 (ft.)
-1.50	4.00	5.50	4.00	1.00	5.00	-0.02	49.00	4.02	1.48	16.08	5.92

*3 ft mudwave (surface layer C<50 psf)



Elevation = 4.00
Elevation = -0.02
Elevation = -1.50

Assumptions:
1. Unit weight of dike = 71 pcf
2. Water at EL. -0.02 feet
3. Mud line at EL +1.5 feet w/ mudwave to EL -1.5 ft
4. No reinforcement is used between the dike and the subsurface.
5. The effective width of the dike is equal to the width of the crown plus the width of one sloped side.
6. The factor of safety for bearing capacity must be greater or equal to 1.3. The factor of safety for lateral squeeze must be greater or equal to 1.3.

APPLIED STRESS

Total Unit Weight of Dike (pcf)	Buoyant Unit Weight of Dike (pcf)	Effective Width of Dike (B) (ft.)	Applied Stress (psf)
71.00	8.60	27.00	243

Zone	1	2	3	4	5	6	7	8	Total
Area (ft^2)	32	20	32	4	24	7	24	4	149
Applied Load (lb./ft.)	2295	1427	2295	38	205	64	205	38	6565

SUBSURFACE CONDITIONS

Soil Description		Elevation (ft.)				Cohesion (ksf)	Cohesion (psf)	Thickness (ft.)
PT		-1.50	-	-5.00		0.037	37.00	3.50
CH 1		-5.00	-	-7.00		0.080	80.00	2.00
CH 2		-7.00	-	-10.00		0.110	110.00	3.00
CH 3		-10.00	-	-20.00		0.130	130.00	10.00
CH 4		-20.00	-	-23.00		0.215	215.00	3.00
CH 5		-23.00	-	-40.00		0.240	240.00	17.00
							0.00	0.00

*linear cohesive strength (0-80 psf) at depth 3 ft (bottom mud wave)

T	B	T/B	C1	C2	C2/C1
3.50	27.00	0.13	37.00	80.00	2.2

BEARING CAPACITY RESULTS

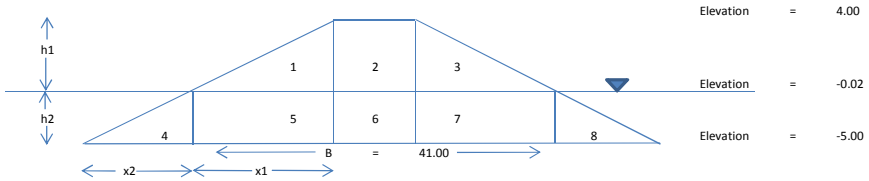
Depth of Soft Soil (ft.)	Effective Width of Dike (B) (ft.)	Nc Factor From NAVFAC DM-7 Figure 11-5	C1	Ultimate Bearing Capacity (psf)	Applied Stress (psf)	Factor of Safety
	27.00	10.00	37	370	243	1.52

FACTOR OF SAFETY AGAINST BEARING CAPACITY AND LATERAL SQUEEZE FOR UNREINFORCED DIKES USING NAVFAC DM 7; FIGURE 11-5, PAGE 7-11-6

PROFILE 1

Elevation at Bottom of Dike (ft.)	Elevation at Top of Dike (ft.)	Height of Dike (ft.)	Slope Inclination (H:V)		Width at Top of Dike (ft.)	Elevation of Water (ft.)	Full Width at Bottom of Dike (ft.)	h1 (ft.)	h2 (ft.)	x1 (ft.)	x2 (ft.)
-5.00	4.00	9.00	4.00	1.00	5.00	-0.02	77.00	4.02	4.98	16.08	19.92

*mudwave (surface layer C<50 psf)



Assumptions:
1. Unit weight of dike = 71 pcf
2. Water at EL. -0.02 feet
3. Mud line at EL -3.5 feet w/ mudwave to EL -5 ft (bottom of PT).
4. No reinforcement is used between the dike and the subsurface.
5. The effective width of the dike is equal to the width of the crown plus the width of one sloped side.
6. The factor of safety for bearing capacity must be greater or equal to 1.3. The factor of safety for lateral squeeze must be greater or equal to 1.3.

APPLIED STRESS

Total Unit Weight of Dike (pcf)	Buoyant Unit Weight of Dike (pcf)	Effective Width of Dike (B) (ft.)	Applied Stress (psf)
71.00	8.60	41.00	206

Zone	1	2	3	4	5	6	7	8	Total
Area (ft^2)	32	20	32	50	80	25	80	50	369
Applied Load (lb./ft.)	2295	1427	2295	427	689	214	689	427	8461

SUBSURFACE CONDITIONS

Soil Description		Elevation (ft.)				Cohesion (ksf)	Cohesion (psf)	Thickness (ft.)
CH 1		-5.00	-	-7.00		0.080	80.00	2.00
CH 2		-7.00	-	-10.00		0.110	110.00	3.00
CH 3		-10.00	-	-20.00		0.130	130.00	10.00
CH 4		-20.00	-	-23.00		0.215	215.00	3.00
CH 5		-23.00	-	-40.00		0.240	240.00	17.00
			-				0.00	0.00
							0.00	0.00

T	B	T/B	C1	C2	C2/C1
2.00	41.00	0.05	80.00	110.00	1.4

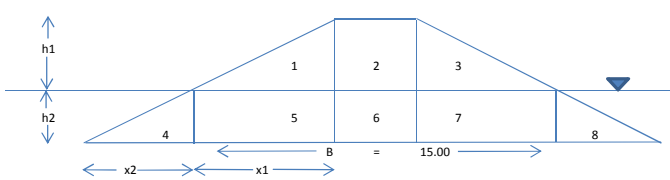
BEARING CAPACITY RESULTS

Depth of Soft Soil (ft.)	Effective Width of Dike (B) (ft.)	Nc Factor From NAVFAC DM-7 Figure 11-5	C1	Ultimate Bearing Capacity (psf)	Applied Stress (psf)	Factor of Safety
	41.00	7.80	80	624	206	3.02

FACTOR OF SAFETY AGAINST BEARING CAPACITY AND LATERAL SQUEEZE FOR UNREINFORCED DIKES USING NAVFAC DM 7; FIGURE 11-5, PAGE 7-11-6

PROFILE 2

Elevation at Bottom of Dike (ft.)	Elevation at Top of Dike (ft.)	Height of Dike (ft.)	Slope Inclination (H:V)		Width at Top of Dike (ft.)	Elevation of Water (ft.)	Full Width at Bottom of Dike (ft.)	h1 (ft.)	h2 (ft.)	x1 (ft.)	x2 (ft.)
1.50	4.00	2.50	4.00	1.00	5.00	-0.02	25.00	4.02	-1.52	16.08	-6.08



Assumptions:
1. Unit weight of dike = 88 pcf
2. Water at EL. -0.02 feet
3. Mud line at EL. +1.5 feet
4. No reinforcement is used between the dike and the subsurface.
5. The effective width of the dike is equal to the width of the crown plus the width of one sloped side.
6. The factor of safety for bearing capacity must be greater or equal to 1.3. The factor of safety for lateral squeeze must be greater or equal to 1.3.

APPLIED STRESS

Total Unit Weight of Dike (pcf)	Buoyant Unit Weight of Dike (pcf)	Effective Width of Dike (B) (ft.)	Applied Stress (psf)
88.00	25.60	15.00	417

Zone	1	2	3	4	5	6	7	8	Total
Area (ft^2)	32	20	32	5	-24	-8	-24	5	38
Applied Load (lb./ft.)	2844	1769	2844	118	-626	-195	-626	118	6248

SUBSURFACE CONDITIONS

Soil Description		Elevation (ft.)			Phi (deg)	Cohesion (ksf)	Cohesion (psf)	Thickness (ft.)
PT		1.50	-	-4.00		0.100	100.00	5.50
CH 1		-4.00	-	-7.00		0.100	100.00	3.00
SM		-7.00	-	-12.00	30		0.00	5.00
CH 2		-12.00	-	-20.00		0.170	170.00	8.00
CH 3		-20.00	-	-33.00		0.226	226.00	13.00
CH 4				-44.00			0.00	44.00
							0.00	0.00

T	B	T/B	C1	C2	C2/C1
13.50	15.00	0.90	100.00	170.00	1.7

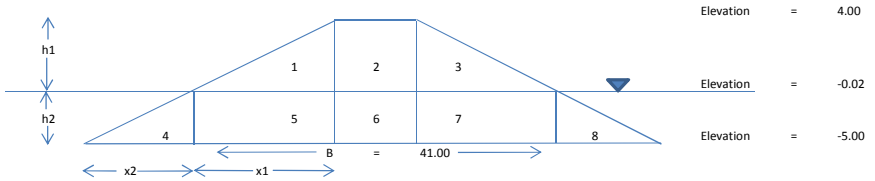
*Assumes soft clay layer 1 extends from mudline to El. -12 ft (ignoring the sand)

BEARING CAPACITY RESULTS

Depth of Soft Soil (ft.)	Effective Width of Dike (B) (ft.)	Nc Factor From NAVFAC DM-7 Figure 11-5	C1	Ultimate Bearing Capacity (psf)	Applied Stress (psf)	Factor of Safety
	15.00	5.53	100	553	417	1.33

FACTOR OF SAFETY AGAINST BEARING CAPACITY AND LATERAL SQUEEZE FOR UNREINFORCED DIKES USING NAVFAC DM 7; FIGURE 11-5, PAGE 7-11-6

PROFILE 2											
Elevation at Bottom of Dike (ft.)	Elevation at Top of Dike (ft.)	Height of Dike (ft.)	Slope Inclination (H:V)		Width at Top of Dike (ft.)	Elevation of Water (ft.)	Full Width at Bottom of Dike (ft.)	h1 (ft.)	h2 (ft.)	x1 (ft.)	x2 (ft.)
-5.00	4.00	9.00	4.00	1.00	5.00	-0.02	77.00	4.02	4.98	16.08	19.92



Assumptions:
1. Unit weight of dike = 88 pcf
2. Water at EL. -0.02 feet
3. Mud line at EL. -5 feet (bottom of the PT).
4. No reinforcement is used between the dike and the subsurface.
5. The effective width of the dike is equal to the width of the crown plus the width of one sloped side.
6. The factor of safety for bearing capacity must be greater or equal to 1.3. The factor of safety for lateral squeeze must be greater or equal to 1.3.

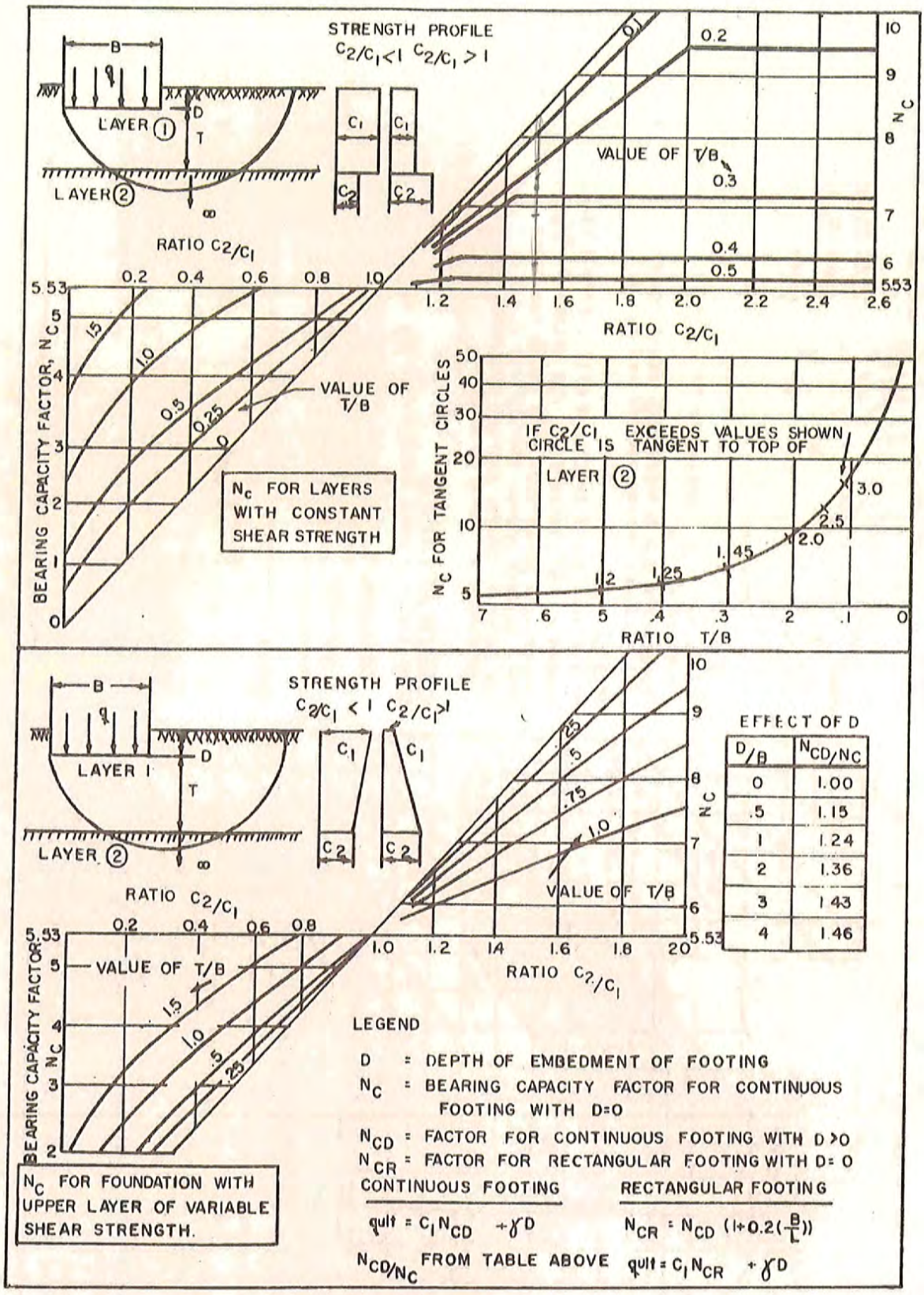
APPLIED STRESS									
Total Unit Weight of Dike (pcf)	Buoyant Unit Weight of Dike (pcf)	Effective Width of Dike (B) (ft.)	Applied Stress (psf)						
88.00	25.60	41.00	359						
Zone	1	2	3	4	5	6	7	8	Total
Area (ft^2)	32	20	32	50	80	25	80	50	369
Applied Load (lb./ft.)	2844	1769	2844	1270	2050	637	2050	1270	14734

SUBSURFACE CONDITIONS								
Soil Description		Elevation (ft.)			Phi (deg)	Cohesion		Thickness (ft.)
						(ksf)	(psf)	
PT		-5.00	-	-7.00		0.100	100.00	2.00
CH 1		-7.00	-	-12.00	30		0.00	5.00
SM		-12.00	-	-20.00		0.170	170.00	8.00
CH 2		-20.00	-	-33.00		0.226	226.00	13.00
CH 3		-33.00	-	-44.00			0.00	11.00
CH 4							0.00	0.00
							0.00	0.00

T	B	T/B	C1	C2	C2/C1
7.00	41.00	0.17	100.00	170.00	1.7

*Assumes soft clay layer 1 extends from mudline to El. -12 ft (ignoring the sand)

BEARING CAPACITY RESULTS						
Depth of Soft Soil (ft.)	Effective Width of Dike (B) (ft.)	Nc Factor From NAVFAC DM-7 Figure 11-5	C1	Ultimate Bearing Capacity (psf)	Applied Stress (psf)	Factor of Safety
	41.00	8.50	100	850	359	2.37



D/B	N_{CD}/N_C
0	1.00
.5	1.15
1	1.24
2	1.36
3	1.43
4	1.46

LEGEND

D = DEPTH OF EMBEDMENT OF FOOTING

N_C = BEARING CAPACITY FACTOR FOR CONTINUOUS FOOTING WITH D=0

N_{CD} = FACTOR FOR CONTINUOUS FOOTING WITH D>0

N_{CR} = FACTOR FOR RECTANGULAR FOOTING WITH D=0

CONTINUOUS FOOTING

$q_{ult} = C_1 N_{CD} + \gamma D$

N_{CD}/N_C FROM TABLE ABOVE

RECTANGULAR FOOTING

$N_{CR} = N_{CD}\,(1+0.2(\frac{B}{L}))$

$q_{ult} = C_1 N_{CR} + \gamma D$

FIGURE 11-5
Ultimate Bearing Capacity on Two Layer Cohesive Soil ($\phi = 0$)

project Island Road project no. 16715-040-03

by JEA date 5/17/18 sheet 1 of 1 checked by CLH

Fill Properties for Containment Dikes:

Assume mudline is at El. 0 ft.

Assume bottom of borrow channel is at El. -10 ft.

Profile 1:

0

$\gamma = 72$ pcf

-5

$\gamma = 85$ pcf

-10

$\gamma_{avg} = [(72)(5') + (85)(5')]/10'$ ✓ ✓

$\gamma_{avg} = 78.5$ pcf ✓

Assume a "fluff" factor for excavated and placed fill material of 10%.

$\gamma_{fill} = 0.90\ (78.5 \text{pcf})$

$\gamma_{fill} = 70.7$ pcf ⇒ use 71 pcf for Profile 1 ✓

Profile 2:

0

$\gamma = 76$ pcf

-4

$\gamma = 108$ pcf

-7

$\gamma = 118$ pcf

-10

$\gamma_{avg} = [(76)(4') + (108)(3') + (118)(3')]/10'$ ✓ ✓ ✓

$\gamma_{avg} = 98.2$ pcf ✓

Assume a "fluff" factor for excavated and placed fill material of 10%.

$\gamma_{fill} = 0.90\ (98.2 \text{ pcf})$

$\gamma_{fill} = 88.4$ pcf ⇒ use 88 pcf for Profile 2 ✓ ✓

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APPENDIX B
Earthen Containment Dike Settlement

Calculation Checksheet

Project No. 16715-040-03 Project Title: Island Road Marsh Creation (TE-117)

Deliverable Title: Containment Dike Settlement

Calculations Description: Settlement for the earthen containment dikes was calculated using SETANL, and time-rate settlement was calculated using the "ECD Settlement vs Time" spreadsheet. Settlement properties were obtained from the design soil profile and "Settlement Design Parameters" spreadsheet, and drainage properties were obtained from the "Drainage Properties" spreadsheet. The containment dike was broken up into multiple areas and loads to better represent the loads being applied by the embankment; these areas and loads were calculated in the "ECD Settlement vs Time" spreadsheet. The containment dike crown elevation was modeled to be at +4 ft, crown width at 5ft, side slopes at 4H:1V, and mudlines at +1.5ft (HML) and -4ft (LML). The unit weight of the dike material was assumed to be 88 pcf. The groundwater table was taken to be at the ground surface for the HML case and at El. +0.4ft for the LML case.

Originator: ARS Checked by: JGA 5/14/18 Date: 05/11/2018

Checking method (describe): SETANL input + output was checked. Applied loaded areas, soil consolidation properties were checked.

Comments: Settlement was only evaluated for Profile 2 parameters as results were found to be very similar for Profile 1.

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APPENDIX B
CALCULATION APPROACH FOR CONTAINMENT DIKE SETTLEMENT

1. Settlement parameters were developed for the Island Road marsh creation area. The following description explains how the parameters were developed.

    a. A total of eight consolidation tests were completed at various soil borings within the marsh creation area to represent various soil layers across the site.

    b. Graphs for each consolidation test were reconstructed to determine compression (Cc), recompression (Cr), and vertical consolidation (Cv) coefficients, initial void ratios (e_0), and maximum past pressures (Pc).

    c. Correlations presented in equations 1 through 4 (shown in the attached spreadsheets) were used to calculate specific gravity, e_0, Cc, and Cr for all soil layers.

    d. GeoEngineers developed correlations based on the analyses of the consolidation test results as follows:

    - Cv values were determined based on moisture content using a graphical correlation developed by GeoEngineers based on this and other coastal projects.
    - Dry unit weight vs. Cc: $Cc=7.15e^{-0.037\gamma d}$ was found to provide sufficient accuracy based on the test data for this project for all compressible soil types. Cc for each of the soil layers was determined based on the dry unit weight estimated during soil profile development. This correlation is based on a study performed by the University of Massachusetts Amherst using data from multiple coastal projects.
    - Cr was assumed to be 11 percent of the Cc value.

    e. For soil layers without a representative consolidation test, the above-mentioned correlations/calculation methods were used to estimate Cc, Cr, and Cv.

    f. Maximum past pressure (Pc) was obtained from the consolidation test curves for the soil layers with a representative consolidation test. Based on the consolidation tests, soils above El. -16 ft. were overconsolidated.

2. In this area, clay shear strength for a normally consolidated soil profile is approximately 22 percent of the effective overburden pressure. This relationship is shown as the C/P line on the shear strength profiles in Figures 7a and 7b.

3. Two profiles of drainage paths were initially considered based on review of our boring logs and the presence of silt and sand lenses and layers below El. -12 ft. in most of our soil borings and the lack thereof in others (Borings B-8, B-9, and B-10). Upon review of the settlement results using the two drainage path profiles, the difference was found to be insignificant. Therefore, only one drainage path profile was used for settlement analyses.

4. Based on our stability analysis for the Earthen Containment Dikes (ECDs), the following geometry was used for the settlement analysis:

    a. Dike fill elevation to +4.0 ft.

    b. Dike side slopes of 4H:1V

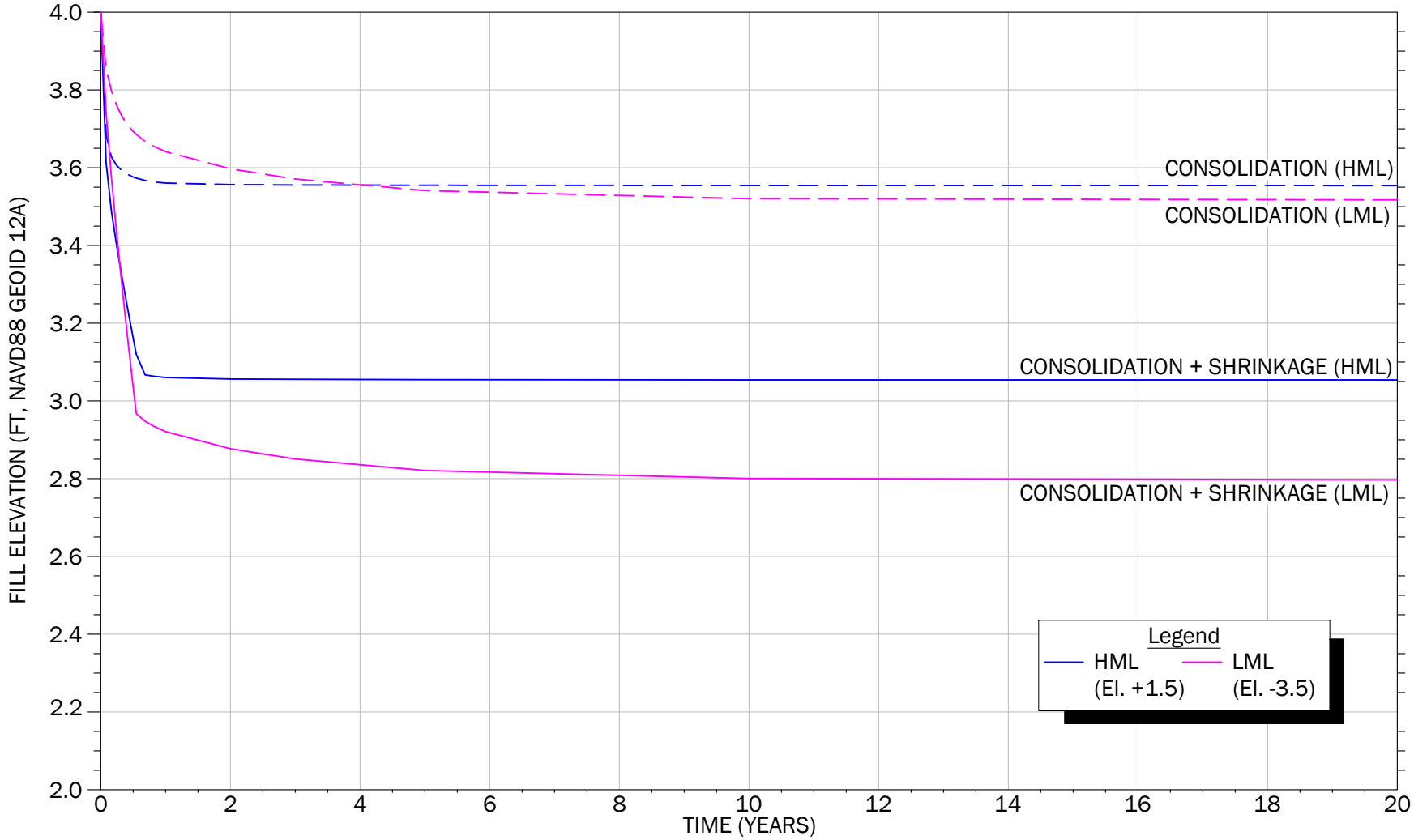
c. Unit weight of 71 pcf for Profile 1 dike fill material and 88 pcf for Profile 2 dike fill material. See calculation of average unit weight for the dike fill material included in Appendix A.

d. Water was assumed to be at the mean water level of El. +0.4 ft. based on measured data from the Coastwide Reference Monitoring System (CRMS) station CRMS3296.

5. Primary consolidation settlement for ECDs was calculated using one-dimensional consolidation theory and Boussinesq stress distribution in the SETANL computer program. Dike fill was assumed to have been placed instantaneously as a single lift at time of construction.

This appendix contains our settlement design parameters, reconstructed consolidation curves, results of containment dike settlement calculations, and an example of our settlement output files. All calculation input and output are available electronically.

P:\16\16715040\CAD\03\Geotech - Final\1671504003_FB01-2_SlopeW.dwg TAB:FB-2 Date Exported: 08/08/18 - 16:34 by kcook



FILL ELEVATION (FEET NAVD88)							
MUDLINE ELEV.	END OF CONSTRUCTION	6 MONTHS	1 YEAR	3 YEARS	5 YEARS	10 YEARS	20 YEARS
+1.5 FT	4 FT	3.6(3.2)	3.6(3.1)	3.6(3.1)	3.6(3.1)	3.6(3.1)	3.6(3.1)
-3.5 FT	4 FT	3.7(3.0)	3.6(2.9)	3.6(2.9)	3.5(2.8)	3.5(2.8)	3.5(2.8)

Elevations in parenthesis represent the fill elevation after consolidation and shrinkage settlement.

ECD Crown Elev. vs. Time

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

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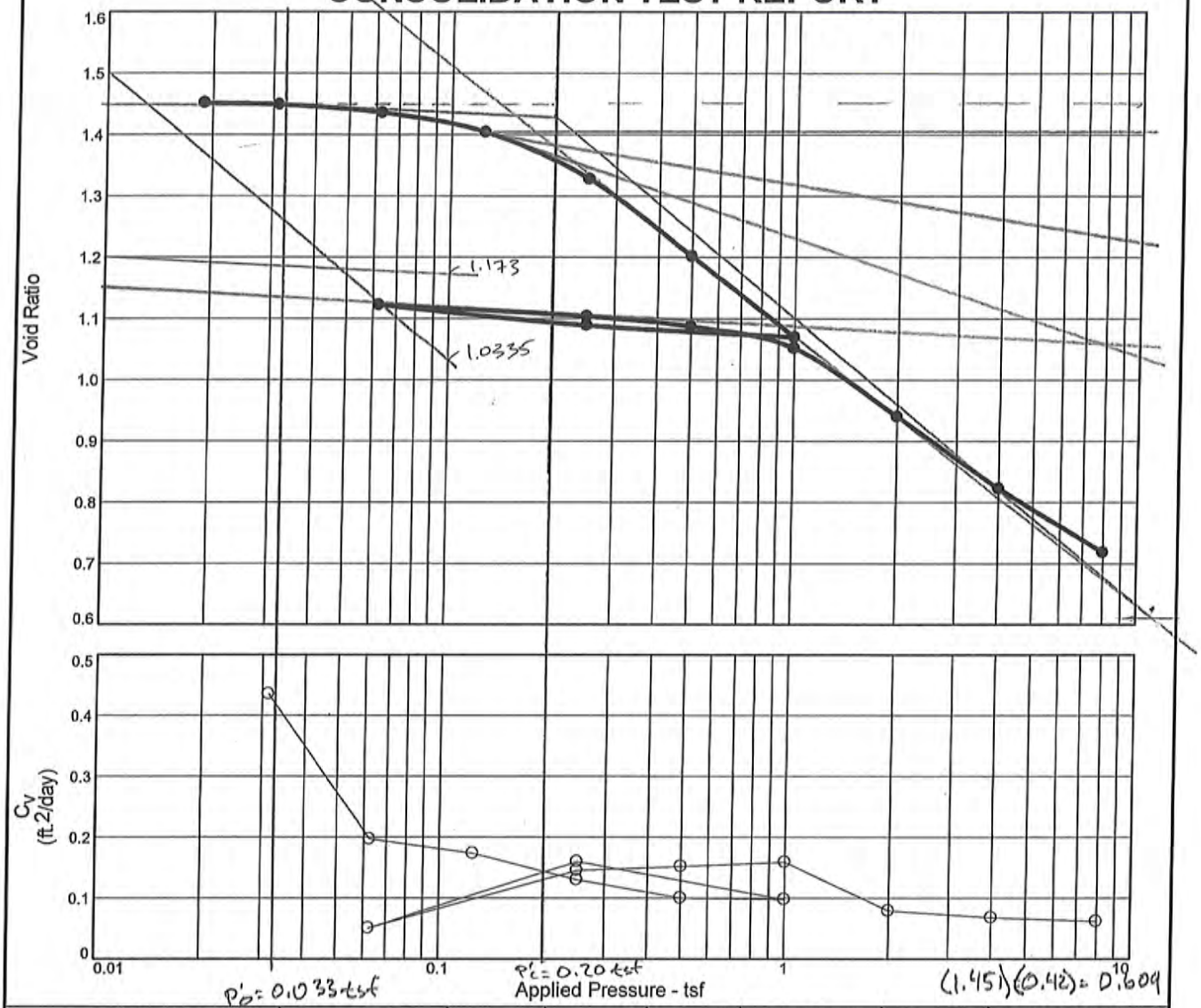
Figure B-1

CONSOLIDATION TEST REPORT



Natural Saturation	Natural Moisture	Dry Dens. (pcf)	LL	PI	Sp. Gr.	P_c (tsf)	C_c	Initial Void Ratio
103.1 %	55.9 %	68.2	55	35	2.677	0.2	0.43	1.451

MATERIAL DESCRIPTION	USCS	AASHTO
Very soft dark gray clay with organic matter	CH	

Project No. 16715-040-01 **Client:** CPRA

Project: Island Road Marsh Creation and Nourishment (TE-117)
Terrebonne Parish, LA

Source of Sample: B-8 **Depth:** 2'-4'

GEOENGINEERS

Remarks: P'_o= 0.033 tsf
Cv T90 P'_c= 0.20 tsf
OCR= 6.06
C_c= 0.467
C_r = 0.027
C_v @ P'_o= 0.421 ft²/day

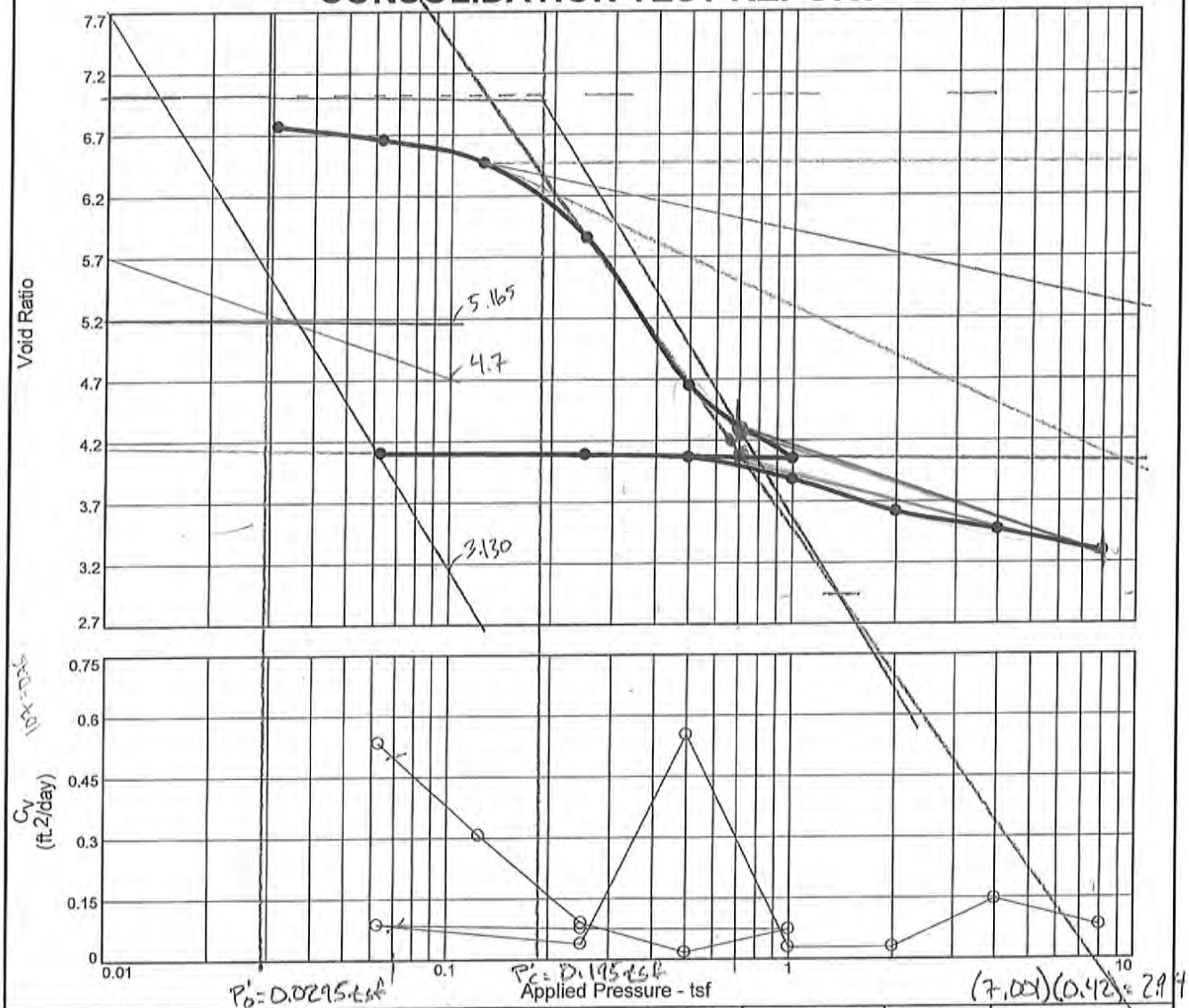
Figure

Tested By: SLC **Checked By:** JMP

C_c= 1.5 - 1.033 = 0.467

C_r= 1.2 - 1.173 = 0.027

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	P_c (tsf)	C_c	Initial Void Ratio
Saturation	Moisture							
102.7 %	282.0 %	19.9	213	169	2.550	0.2	4.07	7.001

MATERIAL DESCRIPTION	USCS	AASHTO
Very soft dark gray and black organic clay with peat pockets and lenses	(OH)	

Project No. 16715-040-01 **Client:** CPRA

Project: Island Road Marsh Creation and Nourishment (TE-117)
Terrebonne Parish, Louisiana

Source of Sample: B-10 **Depth:** 4' - 6'

GEOENGINEERS

Remarks: P'_o = 0.0295 tsf
Cv at t90 P'_c = 0.195 tsf
Organic Content = 6.1%
OCR = 6.61 C_v @ 0.07 tsf
C_c = 4.57 = 0.50 ft²/day
C_r = ~~0.35~~ 0.035 reload, 0.086 ft²/day

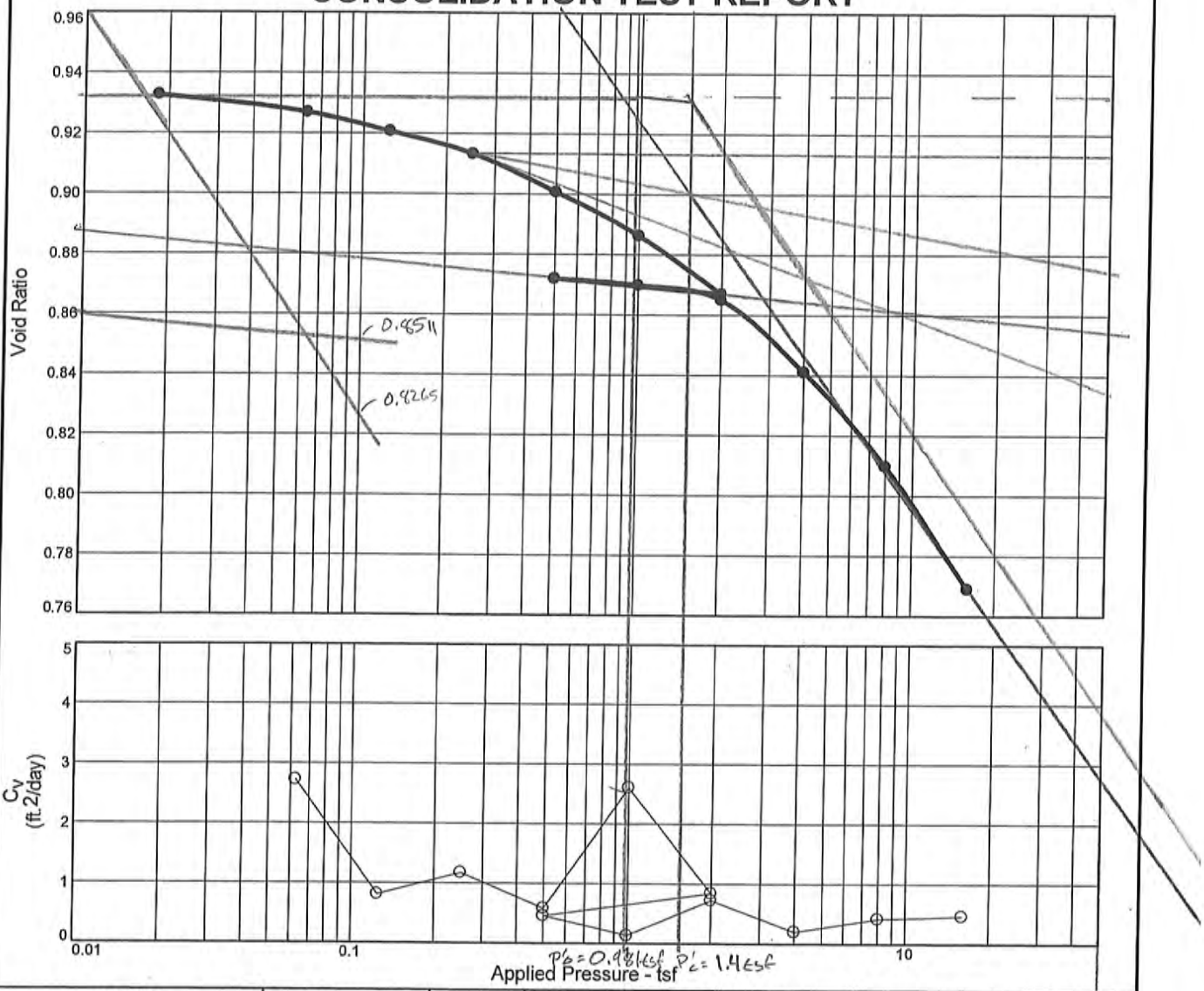
Figure

Tested By: SLC **Checked By:** KLA/JMP

$\frac{C_r}{C_c}$ = 0.008 JSR

C_c = 7.7 - 3.13 = 4.57 JSR
C_r = 5.2 - 5.165 = 0.035
C_α = 5.7 - 4.7 = 1.0

CONSOLIDATION TEST REPORT



Natural Saturation	Natural Moisture	Dry Dens. (pcf)	LL	PI	Sp. Gr.	P_c (tsf)	C_c	Initial Void Ratio
106.5 %	36.7 %	87.4	33	9	2.705	1.4	0.12	0.932

MATERIAL DESCRIPTION	USCS	AASHTO
Gray silt	(ML)	0.95 tsf

Project No. 16715-040-01 **Client:** CPRA

Project: Island Road Marsh Creation and Nourishment (TE-117)
Terrebonne Parish, LA

Source of Sample: B-11 **Depth:** 38' - 40'

GeoEngineers

Remarks: P'_o: ~~0.98 ksf~~
Cv at t90 P'_c: 1.4 tsf
OCR: ~~1.43~~ 1.47
C_c: 0.1335
C_r: 0.0088
C_v @ P'_o: 2.514 ft²/day
reload: 0.140 ft²/day

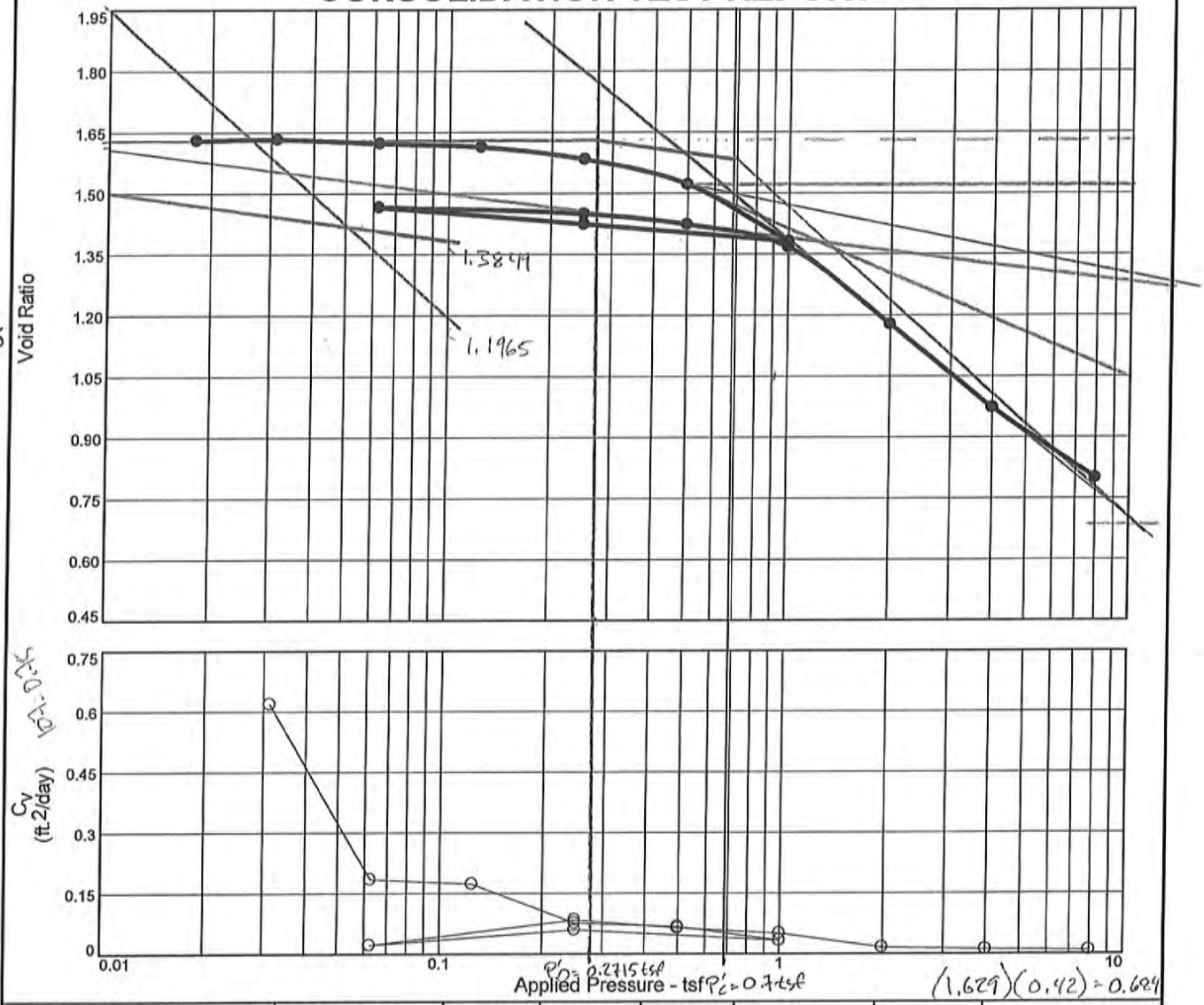
Figure

Tested By: SLC **Checked By:** KLA/JMP

C_c: 0.96 - 0.8265 = 0.1335

C_r: 0.86 - 0.8511 = 0.0088

CONSOLIDATION TEST REPORT



(1.629)(0.42) = 0.684

Natural Saturation	Natural Moisture	Dry Dens. (pcf)	LL	PI	Sp. Gr.	P_c (tsf)	C_c	Initial Void Ratio
96.9 %	57.6 %	65.1	85	60	2.744	0.7	0.68	1.629

MATERIAL DESCRIPTION	USCS	AASHTO
Very soft gray clay with shell fragments	CH	

Project No. 16715-040-01 **Client:** CPRA

Project: Island Road Marsh Creation and Nourishment (TE-117)
Terrebonne Parish, LA

Source of Sample: B-12 **Depth:** 12'-14'

GEOENGINEERS

Remarks: P'_o = 0.2715 tsf
Cv T90 P'_c = 0.70 tsf
OCR = 2.58
C_c = 0.7535
C_r = 0.1151
C_v @ P'_o = 0.10736 reload = 0.0771

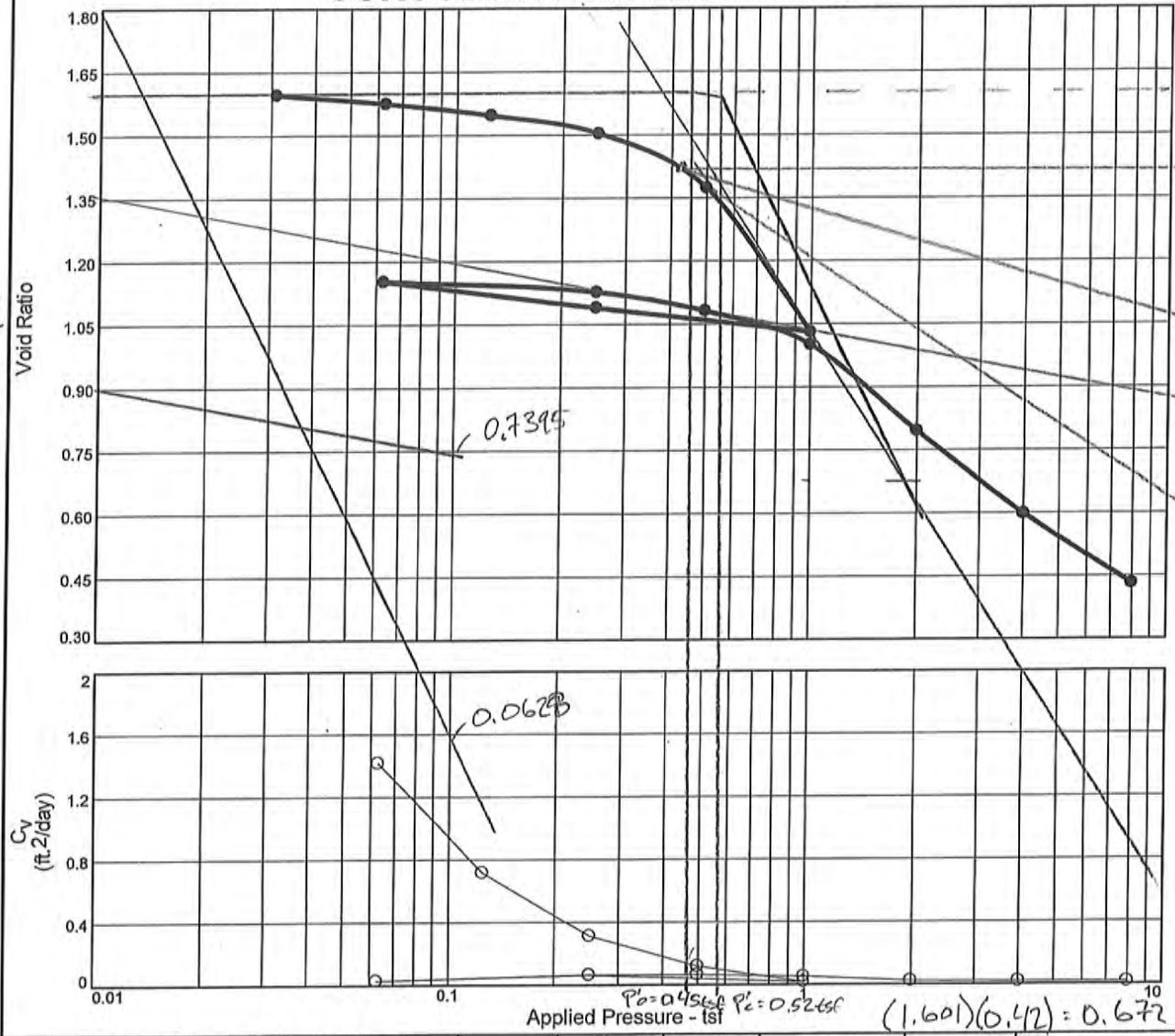
Figure

Tested By: SLC **Checked By:** JMP

C_c = 1.95 - 1.1965 = 0.7535

C_r = 1.50 - 1.3849 = 0.1151

CONSOLIDATION TEST REPORT



2.15 = ϕ.5

(1.601)(0.42) = 0.672

Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	P_c (tsf)	C_c	Initial Void Ratio
Saturation	Moisture							
90.5 %	55.6 %	62.5	47	26	2.604	0.5	1.16	1.601

MATERIAL DESCRIPTION	USCS	AASHTO
Soft gray clay with silt seams	(CL)	

Project No. 16715-040-01 **Client:** CPRA

Project: Island Road Marsh Creation and Nourishment (TE-117)
Terrebonne Parish, Louisiana

Source of Sample: B-13 **Depth:** 18' - 20'

GeoEngineers

Remarks: P'_o = 0.45tsf
Cv at T90 P'_c = 0.52tsf 0.54 KA
OCR = 1.16 Cv @ P'_o =
C_c = 1.7372 = 0.13086 ft²/dal
C_r = 0.1605 reload = 0.0561 ft²/day

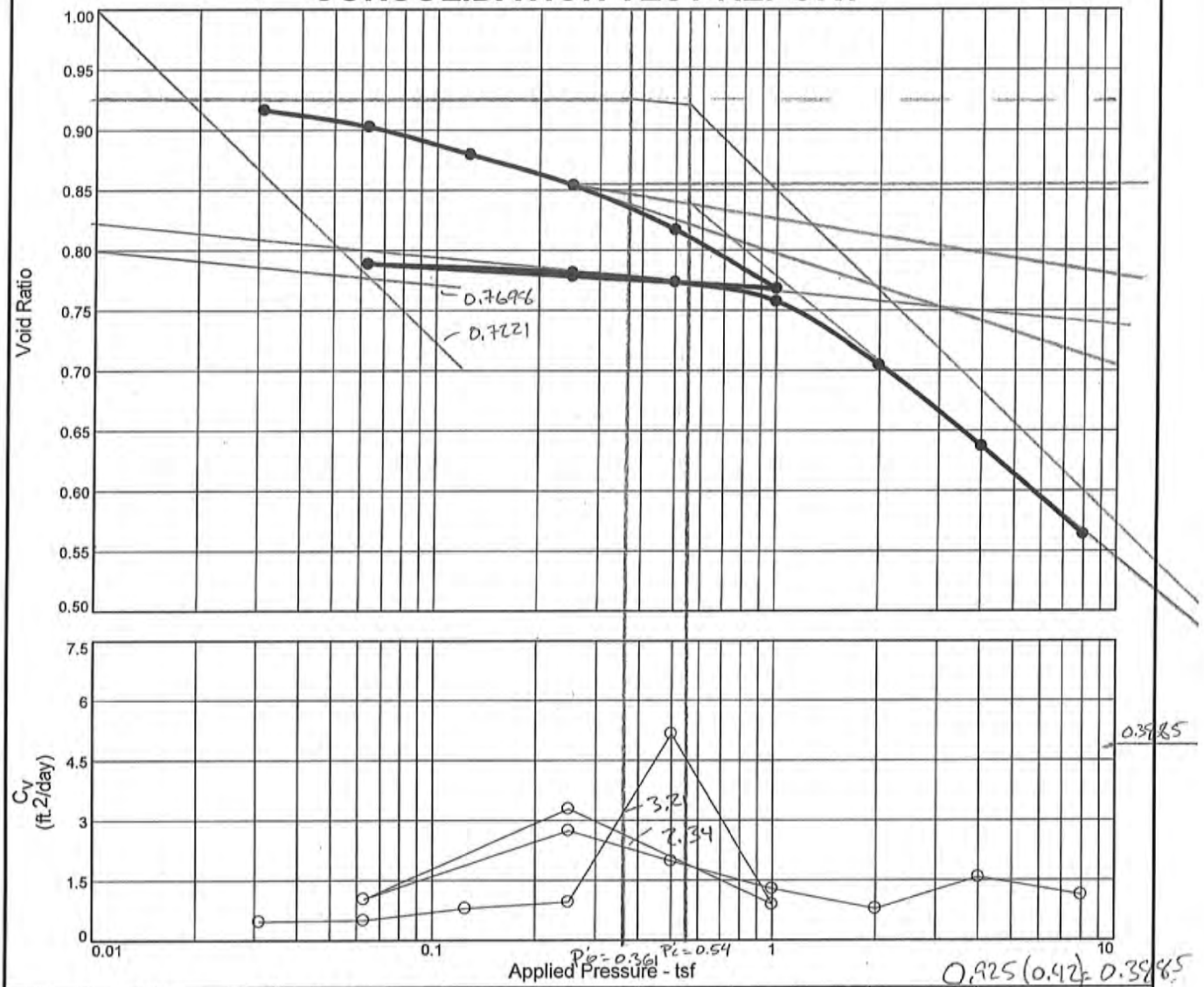
Figure

Tested By: SLC **Checked By:** KLA/JMP

C_c = 1.80 - 0.06276 =

C_r = 0.90 - 0.7395 =

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	P_c (tsf)	C_c	Initial Void Ratio
Saturation	Moisture							
111.3 %	39.2 %	85.3	38	20	2.630	0.5	0.23	0.925

MATERIAL DESCRIPTION	USCS	AASHTO
Very soft dark gray silty clay	(CL)	

Project No. 16715-040-01 **Client:** CPRA

Project: Island Road Marsh Creation and Nourishment (TE-117)
Terrebonne Parish, Louisiana

Source of Sample: B-14 **Depth:** 16' - 18'

GEOENGINEERS

Remarks: P'_o = ~~0.361 tsf~~ 0.326 tsf
Cv at t90 P'_c = 0.54 tsf
OCR = ~~1.50~~ 1.66 Cv@ P'_o
C_c = 0.278 = 3.21 ft²/day
C_r = 0.0302 reload = 2.34 ft²/day

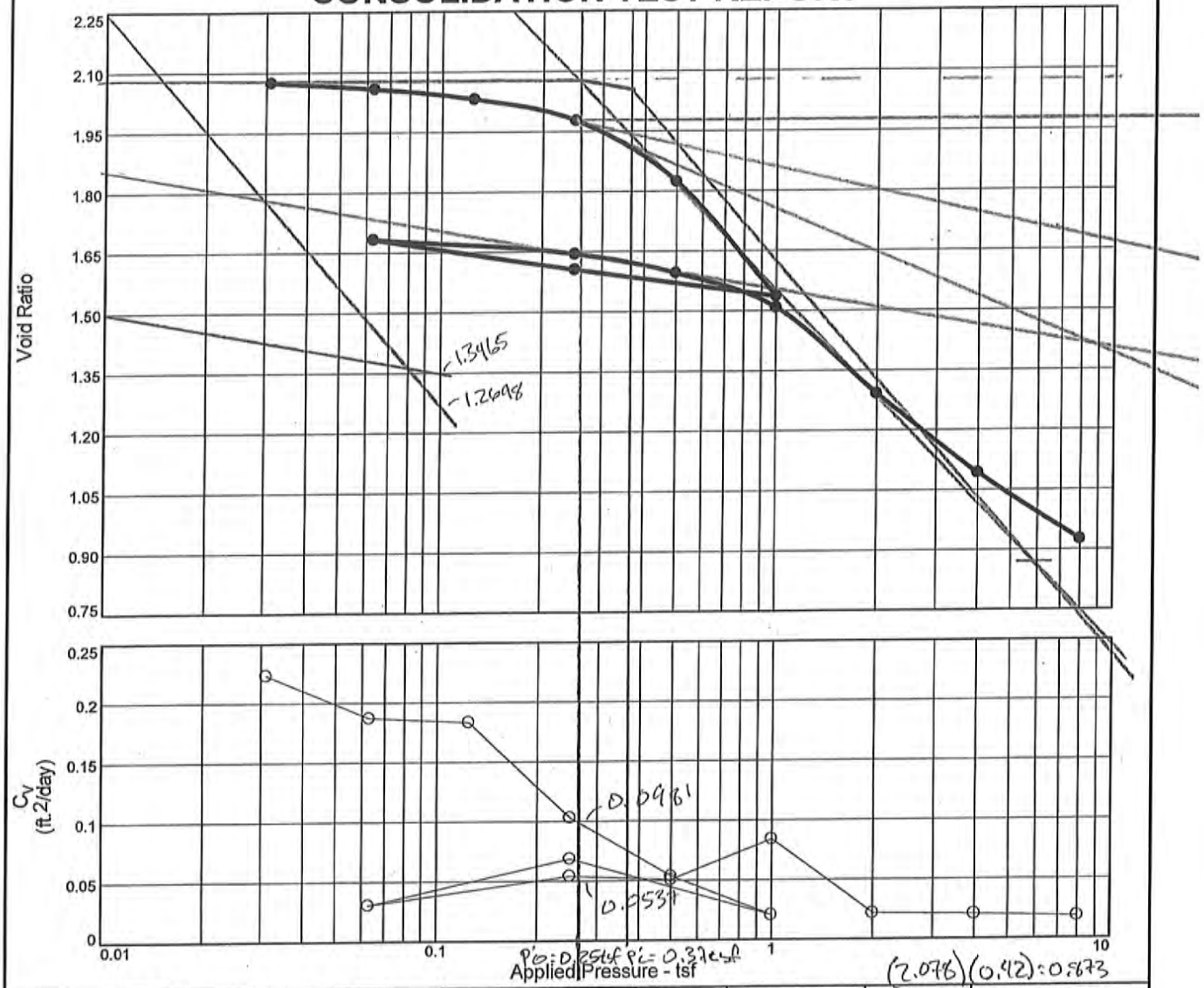
Figure

Tested By: SLC **Checked By:** KLA/JMP

C_c = 1.00 - 0.7221 = 0.2779

C_r = 0.80 - 0.7698 = 0.0302

CONSOLIDATION TEST REPORT



215 = 1.5

107 = 0.25

Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	P_c (tsf)	C_c	Initial Void Ratio
Saturation	Moisture							
112.6 %	87.0 %	54.5	81	59	2.688	0.4	0.94	2.078

MATERIAL DESCRIPTION	USCS	AASHTO
Very soft gray clay with silt lenses	(CH)	

Project No. 16715-040-01 **Client:** CPRA

Project: Island Road Marsh Creation and Nourishment (TE-117)
Terrebonne Parish, Louisiana

Source of Sample: B-15 **Depth:** 10' - 12'

GEOENGINEERS

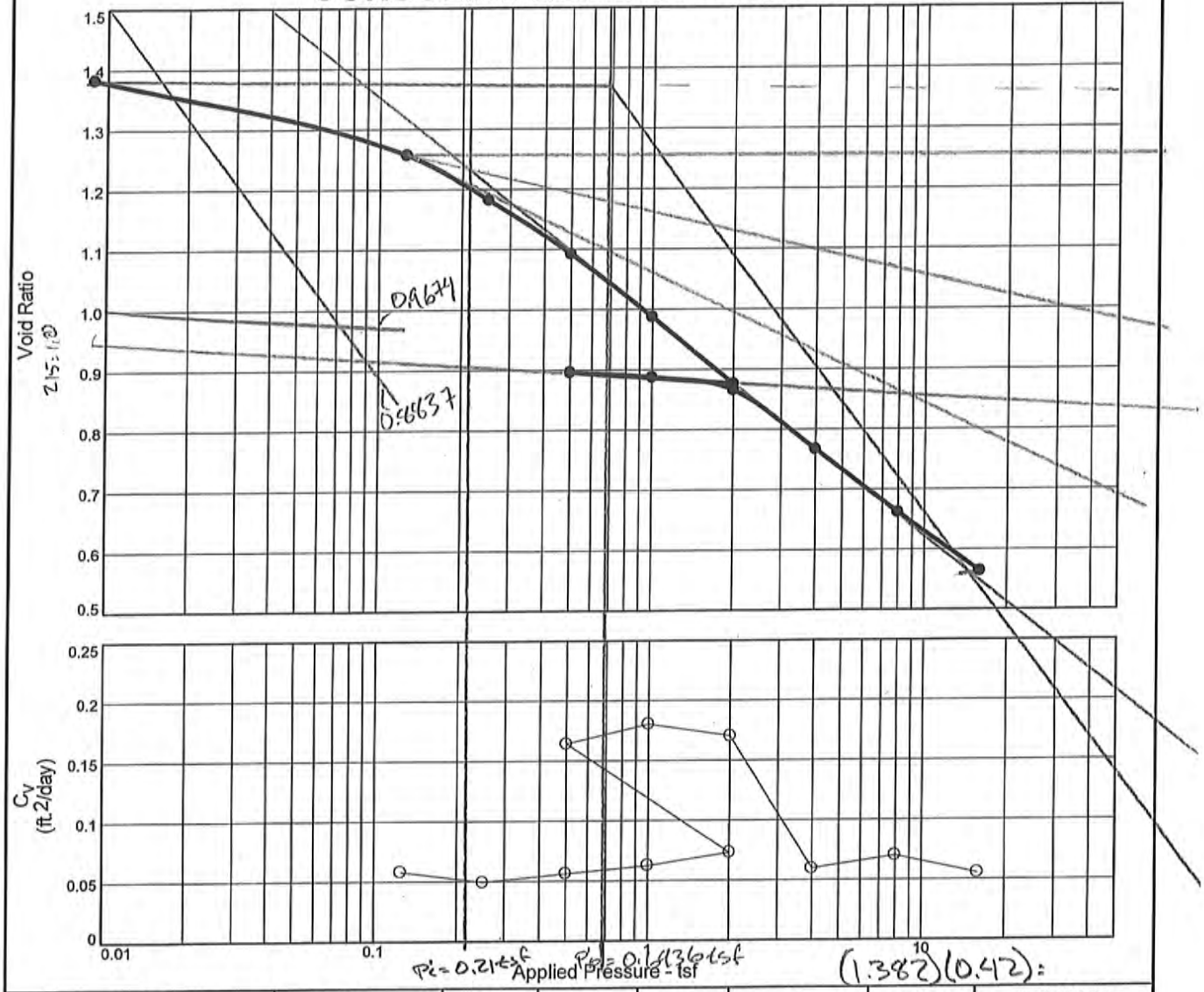
Remarks: P'_o = 0.25tsf
% Organic = 2.1 P'_c = 0.37tsf
Cv at t90 OCR = 1.48
C_c = 0.9802
C_r = 0.1535
C_v @ P'_o = 0.0981 ft²/day
reload = 0.0537

Figure

Tested By: SLC **Checked By:** KLA/JMP

C_c = 2.25 - 1.2698 = 0.9802
C_r = 1.5 - 1.3465 = 0.1535

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	P_c (tsf)	C_c	Initial Void Ratio
Saturation	Moisture							
104.0 %	55.3 %	68.2	49	29	2.601	0.2	0.36	1.382

MATERIAL DESCRIPTION	USCS	AASHTO
Very soft gray clay with silt and organic matter	(CL)	0.623tsf

Project No. 16715-040-01 **Client:** CPRA

Project: Island Road Marsh Creation and Nourishment (TE-117)
Terrebonne Parish, LA

Source of Sample: B-16 **Depth:** 28' - 30'

GEOENGINEERS

Remarks: P'_o = ~~0.6936tsf~~
Cv at t90 P'_c = 0.21tsf
$P'_o > P'_c$ ← treat as NC
C_c = 0.6163 Cv @ P'_o = 605841 ft²/day
C_r = 0.0326 reload
Figure = 0.1729 ft²/d

Tested By: SLC **Checked By:** KLA/JMP

C_c = 1.5 - 0.8837 = 0.6163
C_r = 1.0 - 0.9674 = 0.0326

CPRA/TE-117 Island Road Marsh Creation
Terrebonne Parish, Louisiana
SETTLEMENT PARAMETERS FOR MUDLINE EL +1.5 FT

SETANL INPUT

ELEV		COHESION	M.C	EQ. 1	UNIT WEIGHT WET	UNIT WEIGHT DRY	EQ. 2	Consol.	EQ. 3 Use MC	Consol.	EQ. 4	DESIGN PARAMETERS Adopted	Adopted	Adopted	Adopted	C_v[1]	C_v	Pc Consol	P_{avg}	P_t	Po	OCR^2	OCR	Adopted[3] OCR	Pc from OCR	P @ e0	ε @ e0	e @ Pc	ε @ Pc	Pc + 1 tsf	e @ Pc+1tsf	ε @ Pc+1tsf	Point 1		Point 2		Point 3	
FEET		KSF	%	S.G	PCF	PCF	e_0	C_c	C_c	C_r	C_r	C_c	Cc/ε	Cr	Cr/ε	ft^2/day	$\times 10^{-5} in^2$/sec	tsf	tsf	tsf	tsf		Consol	OCR	tsf	tsf	%		%	tsf		%	ε @ e0	P @ e0 (ksf)	ε @ Pc	Pc (ksf)	ε @ Pc+1 tsf (ksf)	Pc + 1 tsf (ksf)
1.5	-4.0	0.060	220	2.58	76	20	5.482	0.00	3.41	0.000	0.375	3.41	0.526	0.375	0.058	0.050	8.3	0.2	0.019	0.000	0.019	12.0	6.60	6.0	0.112	0.020	0	5.20	4.34	1.112	1.803	56.76	0	0.04	4.34	0.22	56.76	2.22
-4.0	-7.0	0.100	45	2.67	108	70	1.177		0.54		0.059	0.54	0.246	0.059	0.027	0.800	133.3	0.2	0.034	0.037	0.072	4.2		4.2	0.303	0.020	0	1.11	3.20	1.303	0.768	18.80	0	0.04	3.20	0.61	18.80	2.61
-7.0	-12.0	0.000	27	2.68	118	90	0.735		0.00		0.000	0.00	0.000	0.000	0.000	3.000	500.0		0.070	0.106	0.175	0.0		1.5	0.263	0.020	0	0.73	0.00	1.263	0.735	0.00	0	0.04	0.00	0.53	0.00	2.53
-12.0	-16.0	0.161	45	2.67	102	70	1.177	0.98	0.54	0.154	0.059	0.54	0.246	0.059	0.027	0.070	11.7	0.4	0.040	0.245	0.284	1.4	1.48	1.4	0.390	0.020	0	1.10	3.50	1.390	0.805	17.10	0	0.04	3.50	0.78	17.10	2.78
-16.0	-20.0	0.181	45	2.67	102	70	1.177	0.28	0.54	0.030	0.059	0.54	0.246	0.059	0.027	1.300	216.7	0.5	0.040	0.324	0.364	1.2	1.66	1.2	0.424	0.020	0	1.10	3.59	1.424	0.817	16.55	0	0.04	3.59	0.85	16.55	2.85
-20.0	-26.0	0.208	45	2.67	110	70	1.177	0.62	0.54	0.033	0.059	0.54	0.246	0.059	0.027	0.200	33.3	0.2	0.071	0.403	0.475	1.0	0.34	1.0	0.472	0.020	0	1.18	0.00	1.472	0.912	12.17	0	0.04	0.00	0.94	12.17	2.94
-26.0	-33.0	0.242	45	2.67	110	70	1.177	0.62	0.54	0.033	0.059	0.54	0.246	0.059	0.027	0.200	33.3	0.2	0.083	0.546	0.629	0.8	0.34	1.0	0.629	0.020	0	1.18	0.00	1.629	0.956	10.18	0	0.04	0.00	1.26	10.18	3.26
-33.0	-44.0	0.289	45	2.67	118	82	1.177	0.13	0.34	0.009	0.038	0.34	0.158	0.038	0.017	0.200	33.3	1.4	0.153	0.713	0.866	0.7	1.47	1.0	0.866	0.020	0	1.18	0.00	1.866	1.063	5.27	0	0.04	0.00	1.73	5.27	3.73
-44.0	-50.0	0.450	38	2.67	112	82	1.005		0.34		0.038	0.34	0.172	0.038	0.019	0.230	38.3		0.074	1.018	1.093	0.9		1.0	1.093	0.020	0	1.01	0.00	2.093	0.908	4.84	0	0.04	0.00	2.19	4.84	4.19
-50.0	-56.0	0.450	38	2.67	112	82	1.005		0.34		0.038	0.34	0.172	0.038	0.019	0.230	38.3		0.074	1.167	1.242	0.8		1.0	1.242	0.020	0	1.01	0.00	2.242	0.917	4.40	0	0.04	0.00	2.48	4.40	4.48

Equations:

EQ. 1 SG= -0.0005*MC+2.6893

EQ. 2 e_0 = 0.0246*MC+0.0703

EQ. 3 Cc = $7.15e^{-0.037Gamma\ D}$

EQ. 4 C_r= 0.11*C_c

Note:

[4] Cv values for materials were determined using the Cv vs MC curve developed by GeoEngineers based on data from coastal projects

[2] OCR = (c/(p' * 0.22))^(1/0.8) (Recommended practice for soft ground site characterization: Arthur Casagrande Lecture Figure 7.1)

[3] From Note 2, reviewing c/p line and consolidation test result; Assumed OCR =1 if OCR<1 from calculations

References:

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CPRA/TE-117 Island Road Marsh Creation
Terrebonne Parish, Louisiana
SETTLEMENT PARAMETERS FOR MUDLINE EL -3.5 FT

SETANL INPUT

ELEV		COHESION	M.C	EQ. 1	UNIT WEIGHT WET	UNIT WEIGHT DRY	EQ. 2	Consol.	EQ. 3 Use MC	Consol.	EQ. 4	DESIGN PARAMETERS Adopted	Adopted	Adopted	Adopted	C_v[1]	C_v	Pc Consol	P_{avg}	P_t	Po	OCR^2	OCR	Adopted[3]	Pc from OCR	P @ e0	ε @ e0	e @ Pc	ε @ Pc	Pc + 1 tsf	e @ Pc+1tsf	ε @ Pc+1tsf	Point 1		Point 2		Point 3	
FEET		KSF	%	S.G	PCF	PCF	e_0	C_c	C_c	C_r	C_r	C_c	Cc/ε	Cr	Cr/ε	ft^2/day	$\times 10^{-5} in^2$/sec	tsf	tsf	tsf	tsf		Consol	OCR	tsf	tsf	%		%	tsf		%	ε @ e0	P @ e0 (ksf)	ε @ Pc	Pc (ksf)	ε @ Pc+1 tsf (ksf)	Pc + 1 tsf (ksf)
-3.5	-4.0	0.060	220	2.58	76	20	5.482	0.00	3.41	0.000	0.375	3.41	0.526	0.375	0.058	0.050	8.3	0.2	0.002	0.000	0.002	240.1	6.60	6.0	0.200	0.020	0	5.11	5.79	1.200	2.452	46.74	0	0.04	5.79	0.40	46.74	2.40
-4.0	-7.0	0.100	45	2.67	108	70	1.177		0.54		0.059	0.54	0.246	0.059	0.027	0.800	133.3	0.2	0.034	0.003	0.038	9.5		9.5	0.356	0.020	0	1.10	3.39	1.356	0.792	17.69	0	0.04	3.39	0.71	17.69	2.71
-7.0	-12.0	0.000	27	2.68	118	90	0.735		0.00		0.000	0.00	0.000	0.000	0.000	3.000	500.0		0.070	0.072	0.141	0.0		1.5	0.212	0.020	0	0.73	0.00	1.212	0.735	0.00	0	0.04	0.00	0.42	0.00	2.42
-12.0	-16.0	0.161	45	2.67	102	70	1.177	0.98	0.54	0.154	0.059	0.54	0.246	0.059	0.027	0.070	11.7	0.4	0.040	0.211	0.250	1.6	1.48	1.6	0.402	0.020	0	1.10	3.53	1.402	0.810	16.89	0	0.04	3.53	0.80	16.89	2.80
-16.0	-20.0	0.181	45	2.67	102	70	1.177	0.28	0.54	0.030	0.059	0.54	0.246	0.059	0.027	1.300	216.7	0.5	0.040	0.290	0.330	1.3	1.66	1.3	0.435	0.020	0	1.10	3.62	1.435	0.820	16.40	0	0.04	3.62	0.87	16.40	2.87
-20.0	-26.0	0.208	45	2.67	110	70	1.177	0.62	0.54	0.033	0.059	0.54	0.246	0.059	0.027	0.200	33.3	0.2	0.071	0.369	0.441	1.1	0.34	1.1	0.481	0.020	0	1.18	0.00	1.481	0.915	12.03	0	0.04	0.00	0.96	12.03	2.96
-26.0	-33.0	0.242	45	2.67	110	70	1.177	0.62	0.54	0.033	0.059	0.54	0.246	0.059	0.027	0.200	33.3	0.2	0.083	0.512	0.595	0.9	0.34	1.0	0.595	0.020	0	1.18	0.00	1.595	0.948	10.55	0	0.04	0.00	1.19	10.55	3.19
-33.0	-44.0	0.289	45	2.67	118	82	1.177	0.13	0.34	0.009	0.038	0.34	0.158	0.038	0.017	0.200	33.3	1.4	0.153	0.679	0.832	0.7	1.47	1.0	0.832	0.020	0	1.18	0.00	1.832	1.059	5.42	0	0.04	0.00	1.66	5.42	3.66
-44.0	-50.0	0.450	38	2.67	112	82	1.005		0.34		0.038	0.34	0.172	0.038	0.019	0.230	38.3		0.074	0.984	1.059	1.0		1.0	1.059	0.020	0	1.01	0.00	2.059	0.906	4.96	0	0.04	0.00	2.12	4.96	4.12
-50.0	-56.0	0.450	38	2.67	112	82	1.005		0.34		0.038	0.34	0.172	0.038	0.019	0.230	38.3		0.074	1.133	1.208	0.8		1.0	1.208	0.020	0	1.01	0.00	2.208	0.915	4.50	0	0.04	0.00	2.42	4.50	4.42

Equations:

EQ. 1 SG= -0.0005*MC+2.6893

EQ. 2 e_0 = 0.0246*MC+0.0703

EQ. 3 Cc = $7.15e^{-0.037Gamma\ D}$

EQ. 4 C_r= 0.11*C_c

Note:

[4] Cv values for materials were determined using the Cv vs MC curve developed by GeoEngineers based on data from coastal projects

[2] OCR = (c/(p' * 0.22))^(1/0.8) (Recommended practice for soft ground site characterization: Arthur Casagrande Lecture Figure 7.1)

[3] From Note 2, reviewing c/p line and consolidation test result; Assumed OCR =1 if OCR<1 from calculations

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```
Island Road Marsh Creation (TE-117) 16715-040-03
Containment Dike Settlement, High Mudline El. +1.5ft
11,10,1,3,1
0,2.75,5.5,8.5,13.5,17.5,21.5,27.5,34.5,45.5,51.5,57.5
1,13.6,1,1
2,13.6,1,1
3,45.6,2,1
4,55.6,3,1
5,39.6,4,1
6,39.6,5,1
7,47.6,6,1
8,47.6,7,1
9,55.6,8,1
10,49.6,9,1
11,49.6,10,1
1,3
EL +1.5 to -4 ft
0,0.04,4.34,0.22,56.76,2.22
2,3
EL -4 to -7 ft
0,0.04,3.20,0.61,18.80,2.61
3,1
EL -7 to -12 ft
0
4,3
EL -12 to -16 ft
0,0.04,3.5,0.78,17.10,2.78
5,3
EL -16 to -20 ft
0,0.04,3.59,0.85,16.55,2.85
6,2
EL -20 to -26 ft
0,0.94,12.17,2.94
7,2
EL -26 to -33 ft
0,1.26,10.18,3.26
8,2
EL -33 to -44 ft
0,1.73,5.27,3.73
9,2
EL -44 to -50 ft
0,2.19,4.84,4.19
10,2
EL -50 to -56 ft
0,2.48,4.40,4.48
1,12.5,500,1
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'A2','RECT',12.5,500,5,1000,0,0.220,0,0
```

HML.dat

```
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5
```

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Containment Dike Settlement, High Mudline El. +1.5ft

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS = 11
NUMBER OF SOIL COMPRESSIBILITIES = 10
NUMBER OF SETTLEMENT POINTS = 1
NUMBER OF LOADED AREAS = 3
MODE (1 = U.S. GRAVITATIONAL UNITS
2 = SI ABSOLUTE UNITS) = 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.375	2.750	1.00	13.60	1	.019	.000
2	4.125	2.750	1.00	13.60	1	.056	.861
3	7.000	3.000	1.00	45.60	2	.143	1.498
4	11.000	5.000	1.00	55.60	3	.351	.000
5	15.500	4.000	1.00	39.60	4	.569	3.128
6	19.500	4.000	1.00	39.60	5	.727	3.407
7	24.500	6.000	1.00	47.60	6	.949	.104
8	31.000	7.000	1.00	47.60	7	1.259	.000
9	40.000	11.000	1.00	55.60	8	1.731	.004
10	48.500	6.000	1.00	49.60	9	2.186	.000
11	54.500	6.000	1.00	49.60	10	2.483	.010

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Containment Dike Settlement, High Mudline El. +1.5ft

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1

EL +1.5 to -4 ft

F % .00 4.34 56.76
P,KSF .04 .22 2.22
0 SOIL COMPRESSIBILITY NO. 2
EL -4 to -7 ft

F % .00 3.20 18.80
P,KSF .04 .61 2.61
0 SOIL COMPRESSIBILITY NO. 3
EL -7 to -12 ft

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
EL -12 to -16 ft

F % .00 3.50 17.10
P,KSF .04 .78 2.78
0 SOIL COMPRESSIBILITY NO. 5
EL -16 to -20 ft

F % .00 3.59 16.55
P,KSF .04 .85 2.85
0 SOIL COMPRESSIBILITY NO. 6
EL -20 to -26 ft

F % .00 12.17
P,KSF .94 2.94
0 SOIL COMPRESSIBILITY NO. 7
EL -26 to -33 ft

F % .00 10.18
P,KSF 1.26 3.26
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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Containment Dike Settlement, High Mudline El. +1.5ft

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
EL -33 to -44 ft

F % .00 5.27

P,KSF 1.73 3.73
0 SOIL COMPRESSIBILITY NO. 9
EL -44 to -50 ft

F % .00 4.84
P,KSF 2.19 4.19
0 SOIL COMPRESSIBILITY NO. 10
EL -50 to -56 ft

F % .00 4.40
P,KSF 2.48 4.48
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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Containment Dike Settlement, High Mudline El. +1.5ft

TABLE 4 - SETTLEMENT POINT DATA

0 POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	12.500	500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Containment Dike Settlement, High Mudline El. +1.5ft

TABLE 5 - LOADED AREA INFORMATION

0 AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	AREA SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	5.00	500.00	10.00	1000.00	.000	.110	.000	0
A2	RECT	12.50	500.00	5.00	1000.00	.000	.220	.000	0
A3	RECT	20.00	500.00	10.00	1000.00	.000	.110	.000	0

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Containment Dike Settlement, High Mudline El. +1.5ft

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT
POINT NO. 1

DEPTH,FT	STRESS,KSF
1.375	.212
4.125	.178
7.000	.151
11.000	.125
15.500	.104
19.500	.090
24.500	.076
31.000	.063
40.000	.050
48.500	.042
54.500	.037

Island Road Marsh Creation (TE-117) 16715-040-03
Containment Dike Settlement, High Mudline El. +1.5ft

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT
POINT NO. 1

LAYER	
1	1.794
2	1.637
3	.309
4	.000
5	.098
6	.068
7	.591
8	.426
9	.258
10	.091
11	.080
TOTAL SETTLE.	5.353

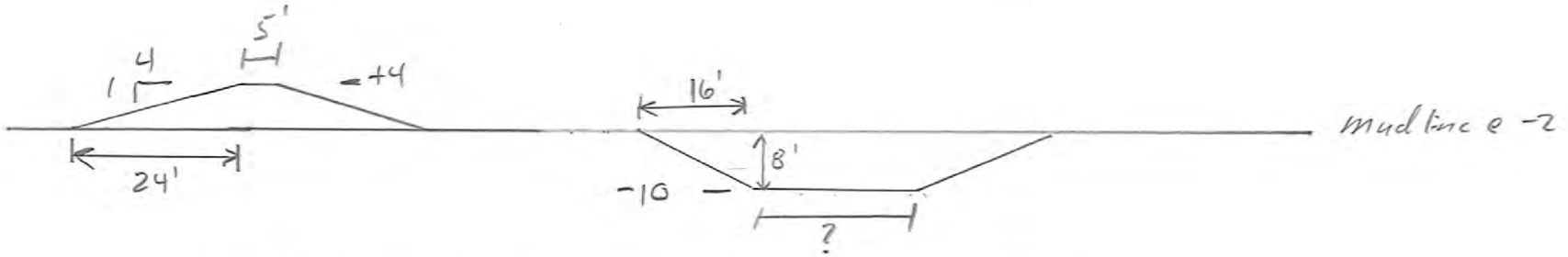
project Island Rd project no. 16715-

by D. Eley date May 16, 2019 sheet ___ of ___ checked by JGA 5/17/19

Peat ground to -5

Clay -5 to -7

Sand -7 to -10



USE RATIO OF 2x VOL DIKE = VOL BORROW

$2 \times [(24' + 5')(6')] = (16' + ?)(8')$ $\quad ? = 27.5'$

			Shrink & consol'
Peat volume $= \{[(16' - 6') \times 2] + 6' + 27.5'\} \times 3' =$	$160.5\ ft^2$	46%	30%
Clay volume $= [(6 \times 2) + 4 + 27.5'] \times 2' =$	$87\ ft^2$	25%	15%
Sand volume $= [6 + 27.5] \times 3 =$	$100.5\ ft^2$	29%	5%
	$348\ ft^2$		

check $(16 + 27.5)(8') = 348\ ft^2$ ✓

Weighted dikefill consol/shrink $0.46(30\%) + 0.25(15\%) + 0.29(5\%) = 19\%$

Use 20%

GeoEngineers
Earth Science + Technology

Calculation Checksheet

Project No. 16715-040-03 Project Title: Island Road Marsh Creation (TE-117)

Deliverable Title: Determination of Vertical and Horizontal Drainage Paths

Calculations Description: The shortest drainage paths, vertical or horizontal, were determined for each design soil profile (labeled as Profile 1 and Profile 2) and each design mudline case (El. +1.5ft and El. -3.5ft). C_h was taken to be $3*C_v$. The horizontal drainage path was assumed to be from the midpoint of the dike crest to the midpoint of the dike slope with a 1H:2V projection below the mudline.

Originator: ARS Checked by: JGA 5/14/18 Date: 05/08/2018

Checking method (describe): checked spreadsheet and soil Cv and drainage.

Comments: The Cv values for Profile 2 were ultimately used as the rate of settlement results were similar.

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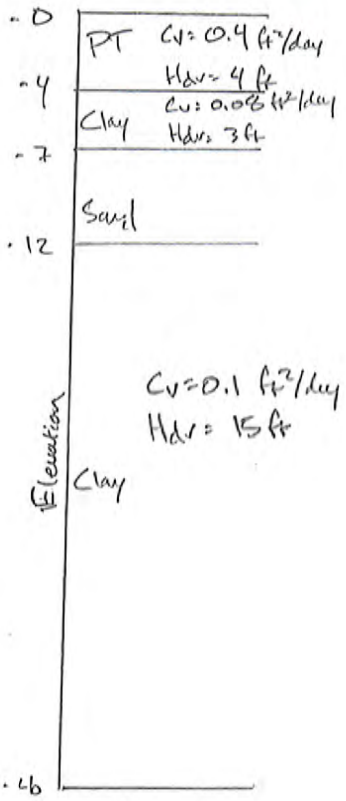
project TE-117 Island Road Marsh Creation project no. 16715-040-03

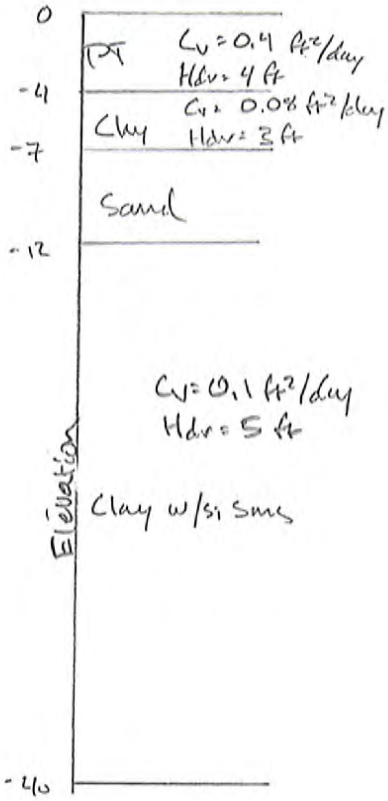
by CKH date 5/3/2018 sheet 1 of 2 checked by JSR

Drainage Distances

B-9, B-9, B-10



B-11, B-12, B-13, B-14, B-15, B-16



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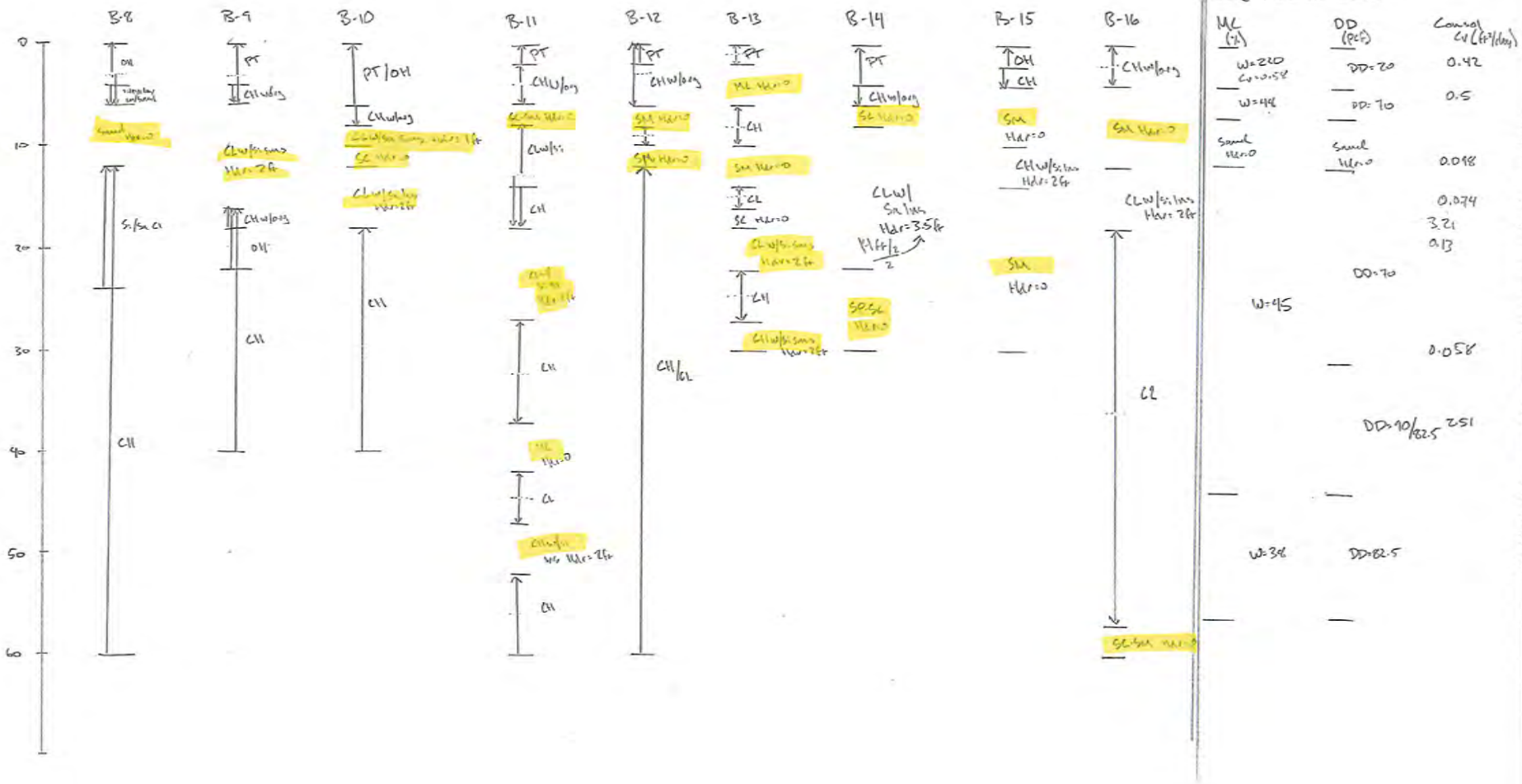
project TE-117 Island Road Marsh Restoration project no. 1675-040-02
by CKH date 5/3/2018 sheet 2 of 2 checked by

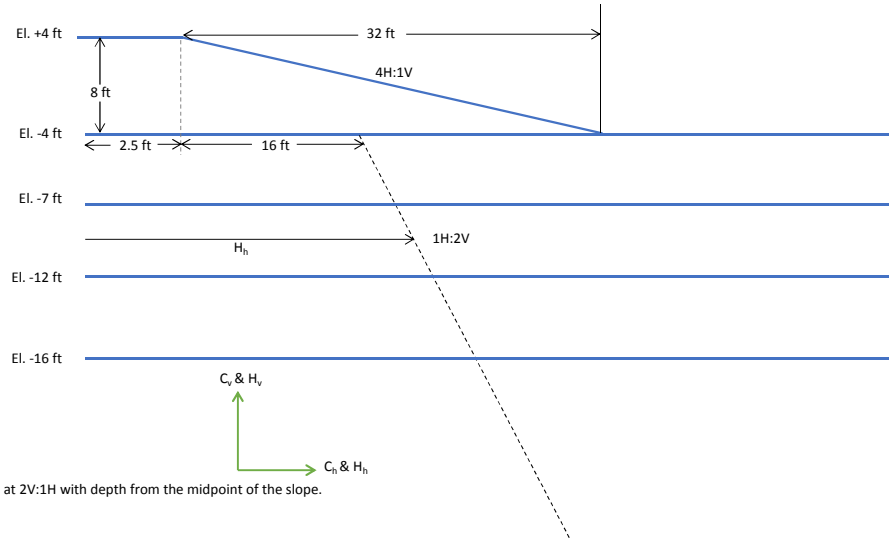


Project:	Island Road Marsh Creation (TE-117)
Project No.:	16715-040-03
Analysis:	Profile 1, Low Mudline

Crest El. (ft)	4
Crest Width (ft)	5
Mudline El. (ft)	-4
Side Slope	4

Soil Type	Soil Layer Boundaries		C_v (ft^2/day)	H_v (ft)	H'_v (ft)	C_h (ft^2/day)	H_h (ft)
CH	-4	-7	0.08	3	5.2	0.24	19.3
SM	-7	-12	-	-	-	-	-
CH	-12	-16	0.10	15	26.0	0.30	23.5
CH	-16	-20	0.10	15	26.0	0.30	25.5
CH	-20	-26	0.10	15	26.0	0.30	28.0
CH	-26	-33	0.10	15	26.0	0.30	31.3
CH	-33	-44	0.10	15	26.0	0.30	35.8
CH	-44	-50	0.10	15	26.0	0.30	40.0
CH	-50	-56	0.10	15	26.0	0.30	43.0

Drainage Values to Use	
C (ft^2/day)	H (ft)
0.08	3.00
-	-
0.30	23.50
0.30	25.50
0.10	15.00
0.10	15.00
0.10	15.00
0.10	15.00
0.10	15.00



*assumed PT from El. -3.5ft to El. -4.0ft would mudwave during during dike fill

H_v = vertical drainage distance

H_v' = transformed vertical drainage distance $H_v' = H_v\sqrt{(C_h/C_v)}$

H_h = horizontal drainage distance, measured from the center of the crown to a distance under the dike slope assuming the stress from the dike increases at 2V:1H with depth from the midpoint of the slope.

C_v = vertical coefficient of consolidation

C_h = horizontal coefficient of consolidation $C_h = 3C_v$

H = H_v or H_h based on the smaller of H_v' and H_h

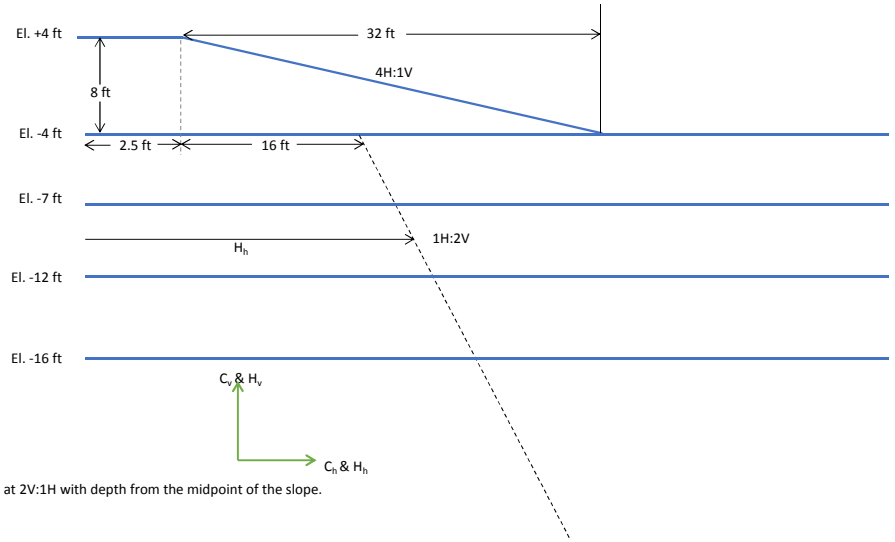
C = C_v or C_h based on the smaller of H_v' and H_h

Project:	Island Road Marsh Creation (TE-117)
Project No.:	16715-040-03
Analysis:	Profile 2, Low Mudline

Crest El. (ft)	4
Crest Width (ft)	5
Mudline El. (ft)	-4
Side Slope	4

Soil Type	Soil Layer Boundaries		C_v (ft^2/day)	H_v (ft)	H'_v (ft)	C_h (ft^2/day)	H_h (ft)
CH	-4	-7	0.08	3	5.2	0.24	19.3
SM	-7	-12	-	-	-	-	-
CH	-12	-16	0.10	5	8.7	0.30	23.5
CH	-16	-20	0.10	5	8.7	0.30	25.5
CH	-20	-26	0.10	5	8.7	0.30	28.0
CH	-26	-33	0.10	5	8.7	0.30	31.3
CH	-33	-44	0.10	5	8.7	0.30	35.8
CH	-44	-50	0.10	5	8.7	0.30	40.0
CH	-50	-56	0.10	5	8.7	0.30	43.0

Drainage Values to Use	
C (ft^2/day)	H (ft)
0.08	3.00
-	-
0.10	5.00
0.10	5.00
0.10	5.00
0.10	5.00
0.10	5.00
0.10	5.00
0.10	5.00



*assumed PT from El. -3.5ft to El. -4.0ft would mudwave during during dike fill

H_v = vertical drainage distance

H_v' = transformed vertical drainage distance $H_v' = H_v\sqrt{(C_h/C_v)}$

H_h = horizontal drainage distance, measured from the center of the crown to a distance under the dike slope assuming the stress from the dike increases at 2V:1H with depth from the midpoint of the slope.

C_v = vertical coefficient of consolidation

C_h = horizontal coefficient of consolidation $C_h = 3C_v$

H = H_v or H_h based on the smaller of H_v' and H_h

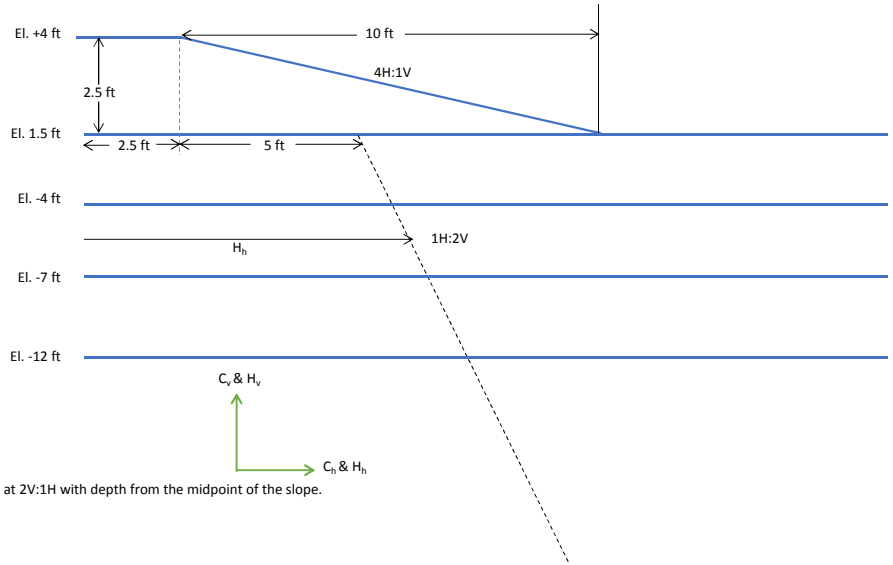
C = C_v or C_h based on the smaller of H_v' and H_h

Project:	Island Road Marsh Creation (TE-117)
Project No.:	16715-040-03
Analysis:	Profile 1, High Mudline

Crest El. (ft)	4
Crest Width (ft)	5
Mudline El. (ft)	1.5
Side Slope	4

Soil Type	Soil Layer Boundaries		C_v (ft^2/day)	H_v (ft)	H'_v (ft)	C_h (ft^2/day)	H_h (ft)
PT	1.5	-4	0.40	4	6.9	1.20	8.9
CH	-4	-7	0.08	3	5.2	0.24	11.0
SM	-7	-12	-	-	-	-	-
CH	-12	-16	0.10	15	26.0	0.30	15.3
CH	-16	-20	0.10	15	26.0	0.30	17.3
CH	-20	-26	0.10	15	26.0	0.30	19.8
CH	-26	-33	0.10	15	26.0	0.30	23.0
CH	-33	-44	0.10	15	26.0	0.30	27.5
CH	-44	-50	0.10	15	26.0	0.30	31.8
CH	-50	-56	0.10	15	26.0	0.30	34.8

Drainage Values to Use	
C (ft^2/day)	H (ft)
0.40	4.00
0.08	3.00
-	-
0.30	15.25
0.30	17.25
0.30	19.75
0.30	23.00
0.10	15.00
0.10	15.00
0.10	15.00



H_v = vertical drainage distance

H_v' = transformed vertical drainage distance $\quad H_v' = H_v\sqrt{(C_h/C_v)}$

H_h = horizontal drainage distance, measured from the center of the crown to a distance under the dike slope assuming the stress from the dike increases at 2V:1H with depth from the midpoint of the slope.

C_v = vertical coefficient of consolidation

C_h = horizontal coefficient of consolidation $\quad C_h = 3C_v$

H = H_v or H_h based on the smaller of H_v' and H_h

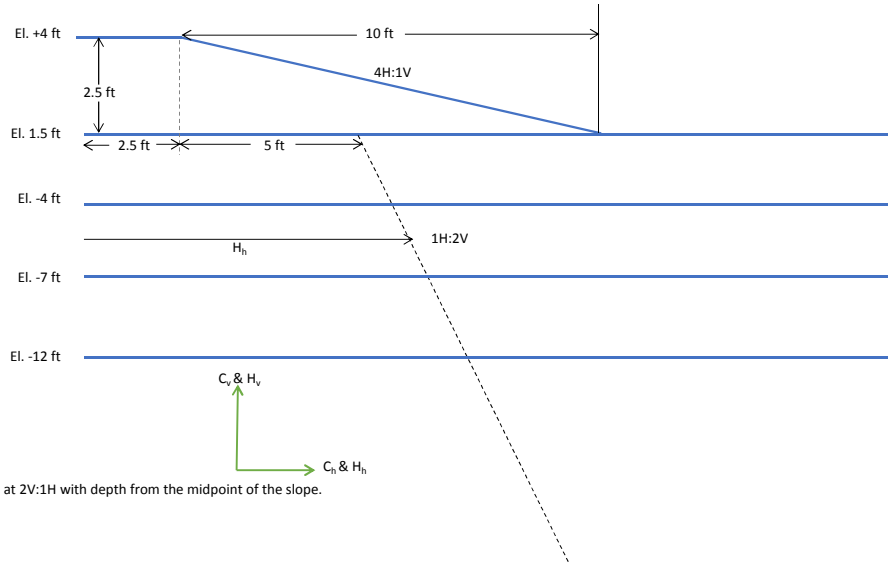
C = C_v or C_h based on the smaller of H_v' and H_h

Project:	Island Road Marsh Creation (TE-117)
Project No.:	16715-040-03
Analysis:	Profile 2, High Mudline

Crest El. (ft)	4
Crest Width (ft)	5
Mudline El. (ft)	1.5
Side Slope	4

Soil Type	Soil Layer Boundaries		C_v (ft^2/day)	H_v (ft)	H'_v (ft)	C_h (ft^2/day)	H_h (ft)
PT	1.5	-4	0.40	4	6.9	1.20	8.9
CH	-4	-7	0.08	3	5.2	0.24	11.0
SM	-7	-12	-	-	-	-	-
CH	-12	-16	0.10	5	8.7	0.30	15.3
CH	-16	-20	0.10	5	8.7	0.30	17.3
CH	-20	-26	0.10	5	8.7	0.30	19.8
CH	-26	-33	0.10	5	8.7	0.30	23.0
CH	-33	-44	0.10	5	8.7	0.30	27.5
CH	-44	-50	0.10	5	8.7	0.30	31.8
CH	-50	-56	0.10	5	8.7	0.30	34.8

Drainage Values to Use	
C (ft^2/day)	H (ft)
0.40	4.00
0.08	3.00
-	-
0.10	5.00
0.10	5.00
0.10	5.00
0.10	5.00
0.10	5.00
0.10	5.00
0.10	5.00



H_v = vertical drainage distance

H_v' = transformed vertical drainage distance $\quad H_v' = H_v\sqrt{(C_h/C_v)}$

H_h = horizontal drainage distance, measured from the center of the crown to a distance under the dike slope assuming the stress from the dike increases at 2V:1H with depth from the midpoint of the slope.

C_v = vertical coefficient of consolidation

C_h = horizontal coefficient of consolidation $\quad C_h = 3C_v$

H = H_v or H_h based on the smaller of H_v' and H_h

C = C_v or C_h based on the smaller of H_v' and H_h

APPENDIX C
Gap Closure Alternatives

Calculation Checksheet

Project Number: 16715-040-03 **Project Title:** Island Road Marsh Creation and Nourishment (TE-117)

Client: CPRA

Location: Terrebonne Parish, Louisiana

Calculations Description: Evaluation of the gap closure at the southern part of Cell C. A sheet pile analysis was performed using CWALSHT for a sheet pile installed through a sand berm. The sand berm was assumed to be installed from El. -4 ft. to El. -11 ft. The sheet pile was evaluated pre-marsh placement and post-marsh placement. Two closure options were evaluated: a sheet pile installed through a submerged sand berm and a sheet pile installed through a sand berm capped with dredged fill.

Contents of Calculation Package: Description of methodology for CWALSHT analyses, example of CWALSHT files, and a summary of results.

Originator: ARS **Checked by:** JSR **Date:** August 9, 2018

Checking Method (describe):

Checked CWALSHT input and output and selection of sheet size.

APPENDIX C
CALCULATION APPROACH FOR GAP CLOSURES

Based on survey data provided by CPRA, there is a gap along the perimeter of the proposed fill site C. The gap within the fill site C perimeter is located near CPT C-34 and has a low mudline elevation of about -11 ft. The depth of the gap in the perimeter of fill site C prohibits the use of other methods of gap closures such as, hay bales, vertical timber mats, or aquatubes. GeoEngineers evaluated two primary alternatives to address closing this gap: 1.) a sheet pile structure supported by a submerged sand fill berm and 2.) a submerged sand berm capped by on-site borrow material. Recommended geometry and sheet pile properties are shown in Figure 9. Sheet pile design and global stability results are included in this appendix. Parameters were evaluated as described below.

1. Considering this gap is localized to the fill site C perimeter, a design soil profile based on B- 16, C-15, C-33, and C-34 was developed to evaluate the gap closure alternatives. The soil parameters used in our analysis are presented in Figures C-1 and C-2.
2. The mudline within the gap was assumed to be El. -11 ft.
3. The two gap closure alternatives were evaluated as follows:
    a. Sheet Pile Structure
        i. Design strengths and unit weights were input in the U.S. Army Corps of Engineers computer program CWALSHT.
        ii. Wall and support berm geometry
            1. Wall top at El. +4.0 ft.
            2. Wall bottom at El. -31 ft.
            3. For the pre-marsh construction case, water was assumed at El. -0.02 ft. on the internal (marsh) side of the sheet pile wall and at El. +1.1 ft. on the external side of the sheet pile wall to evaluate a tide differential. For the post-marsh construction case, water was assumed at El. -0.02 ft. on the external side of the sheet pile and at El. +3 ft. on the marsh side of the sheet pile.
            4. The sand berm on the external side of the sheet pile was assumed to extend 10 ft. away from the sheet pile at El. -4 ft. and slope down to the mudline at a 3H:1V slope.
            5. The marsh was assumed at El. +3 ft. behind the sheet pile with water to El. +3 ft. and fill modeled as a distributed pressure varying from 0 psf at El. +3 ft. to 158.2 psf at El. -4 ft. at the top of the sand berm. In addition, a vertical distributed load of 316.4 psf was applied at El. -11 ft. (based on a marsh unit weight of 85 pcf).
        iii. Adhesion was assumed to be 0.5 the cohesion.
        iv. The angle of wall friction was assumed to be 0.5 the angle of internal friction.
        v. The sweep search method was used to complete the analysis.

vi. Design sheet pile length was determined by running the program for a cantilevered pile with a FOS of 1.5 for passive pressures and 1.0 for active pressures.

vii. Design bending moment and scaled deflection were determined by running the program with equal passive and active safety factors (1.0) for a cantilevered pile with a modulus of elasticity of 2.9 x 10^7 pounds per square inch (psi) (typical for A36 steel) and PZ-22 sheet pile section properties.

viii. Design maximum bending moment was used to compute the minimum section modulus required for sheet pile sections using the following equation:

$$S = \frac{M_{max}(lb - ft) \times 12\frac{in}{ft}}{\sigma_a\left(\frac{lb}{in^2}\right)}$$

Where S = section modulus (in^3 per foot of wall)

M_{max} = maximum bending moment in wall (program output)

σ_a = allowable steel stress (Assumed 25,000 psi – typical for A36 steel)

ix. Section modulus was then used to select a viable sheet pile section from a table of standard U.S. sheet pile sizes (Skyline Steel Chart was used, but the values are fairly consistent from one manufacturer to the next).

x. Maximum deflection was computed using the maximum scaled deflection and the moment of inertia from selected sheet pile section. Deflection at the crown elevation of the earthen support berm was determined and reported. Design deflection at the crown elevation was limited to less than 3 inches.

xi. Stability of the sand berm was evaluated using optimized circular search parameters with Spencer's method in the GEO-SLOPE International Limited computer program SLOPE/W (GeoStudio 2016). The geometry of the sand berm used in our stability analysis is as described above.

xii. Results are recorded in the report text and the figures and calculation packages in this appendix.

b. Sand Berm Capped with Borrow Material

i. Design strengths and unit weights were input into SLOPE/W. Spencer's method of force and moment equilibrium was used, along with slice optimization, to compute factors of safety.

ii. The sand berm was modeled with a crown at El. 0 ft., a width of 18 ft., and side slopes of 3H:1V.

iii. The borrow material cap was modeled with a 5-foot crown at El. +4 ft. and side slopes of 4H:1V.

iv. For stability, the sand berm was assumed to have a unit weight of 115 pcf and a friction angle of 25 degrees. The borrow material cap was assumed to have a unit weight of 88 pcf and a cohesion of 60 psf.

v. Stability was evaluated for the construction and post-construction conditions with and without a sheet pile.

vi. During construction water was assumed to be at El. -0.2 ft. Water was assumed to be at El. 0 ft. outside the marsh and El. +3 ft. within the marsh post construction.

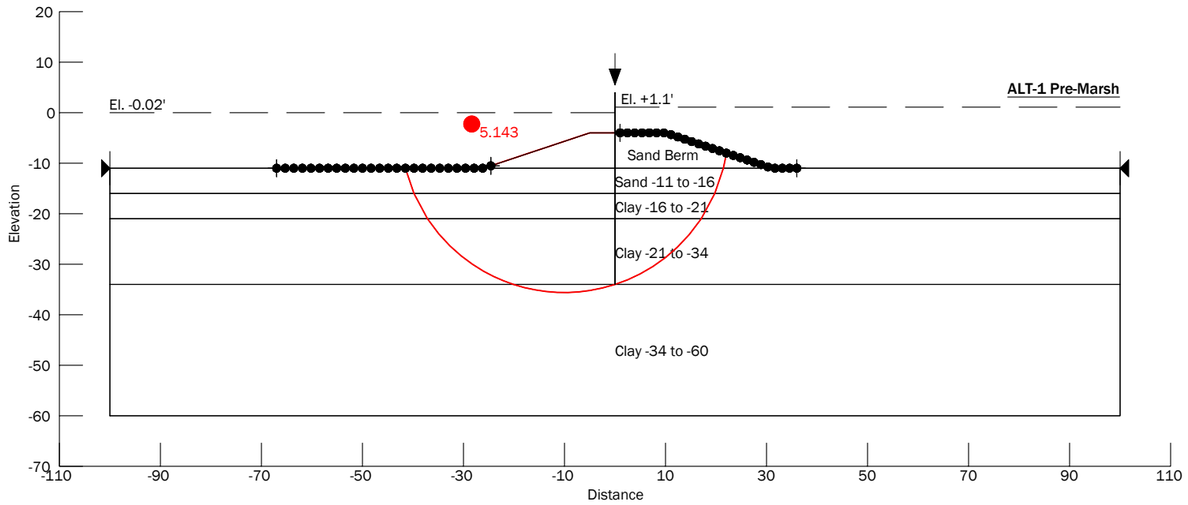
vii. Acceptable factor of safety for stability = 1.2.

viii. Bearing capacity was evaluated using the method for bearing on sand over soft clay as outlined in Chapter 4 of *Principles of Foundation Engineering*, 6th Edition by Das (2007).

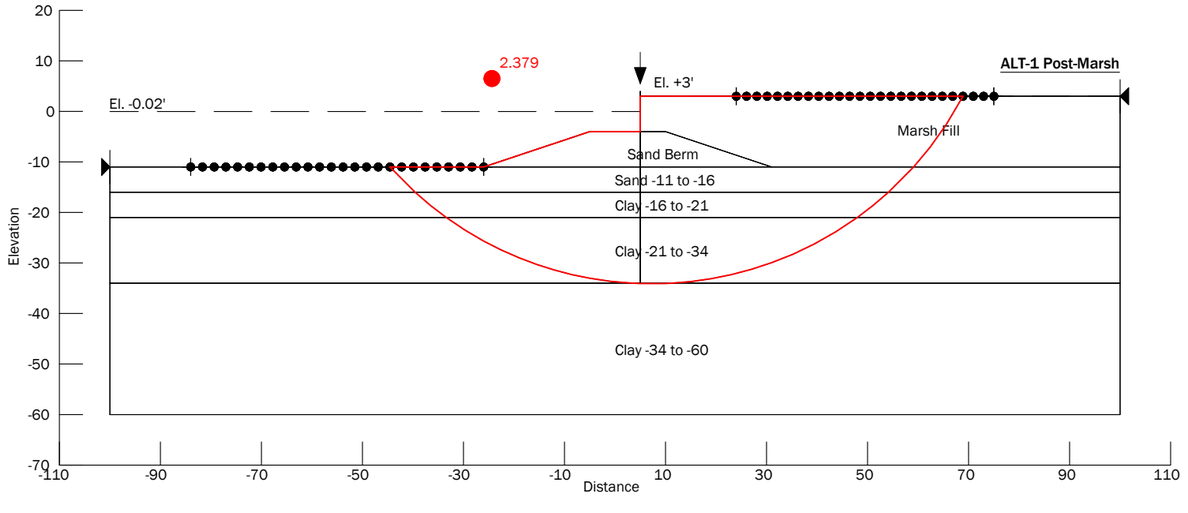
ix. For bearing capacity a weighted average unit weight was used to compute the applied pressure of the sand and borrow material berm on the mudline. See attached calculations.

x. Acceptable factor of safety for bearing capacity = 1.3.

This appendix contains the stability analysis results, bearing capacity analysis spreadsheets, and an example of the SLOPE/W output files. All calculation inputs and outputs were provided electronically.



Name	Model	Unit Weight (pcf)	Cohesion' (psf)	Phi' (°)
Sand -11 to -16	Mohr-Coulomb	115	0	25
Sand Berm	Mohr-Coulomb	115	0	25
Clay -16 to -21	Mohr-Coulomb	105	200	0
Clay -21 to -34	Mohr-Coulomb	110	200	0
Clay -34 to -60	Mohr-Coulomb	115	750	0
Marsh Fill	Mohr-Coulomb	85		



Sheet Pile with Earthen Support Global Stability

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure C-1

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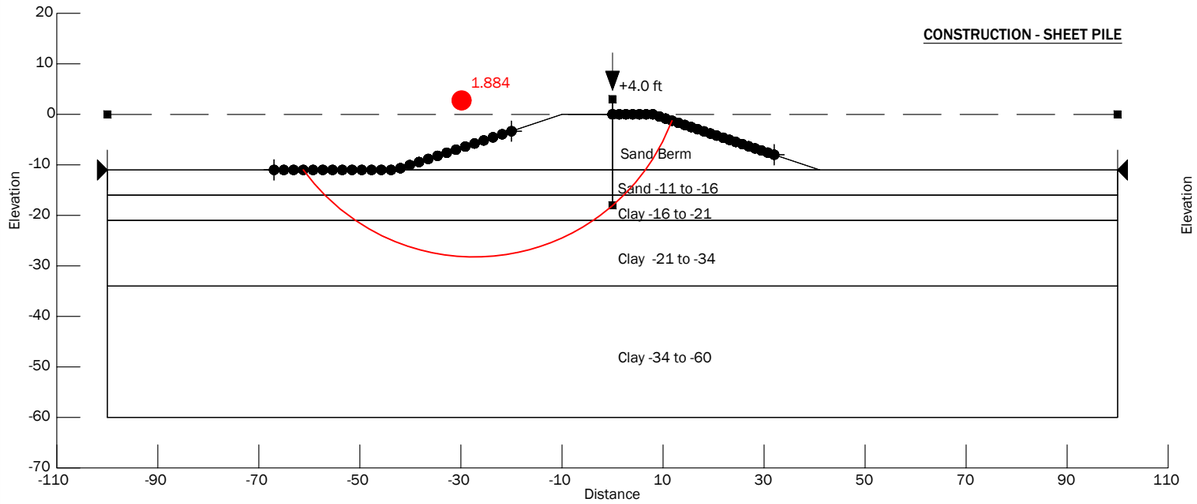

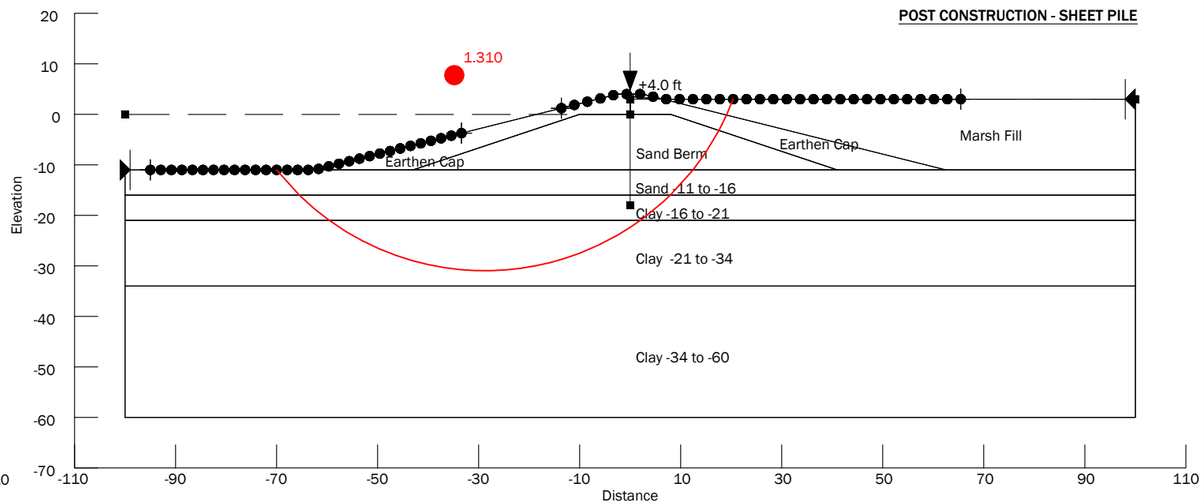

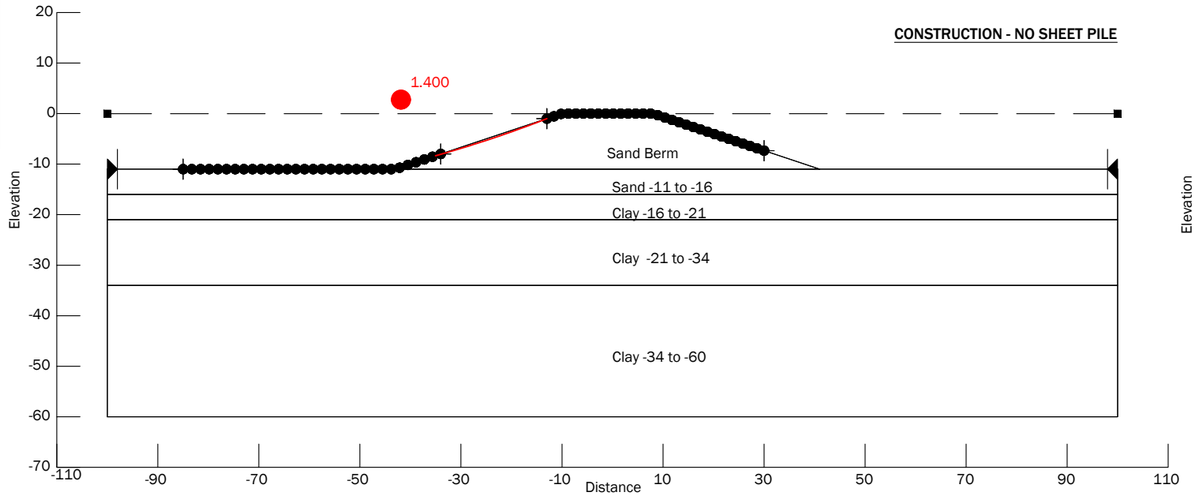

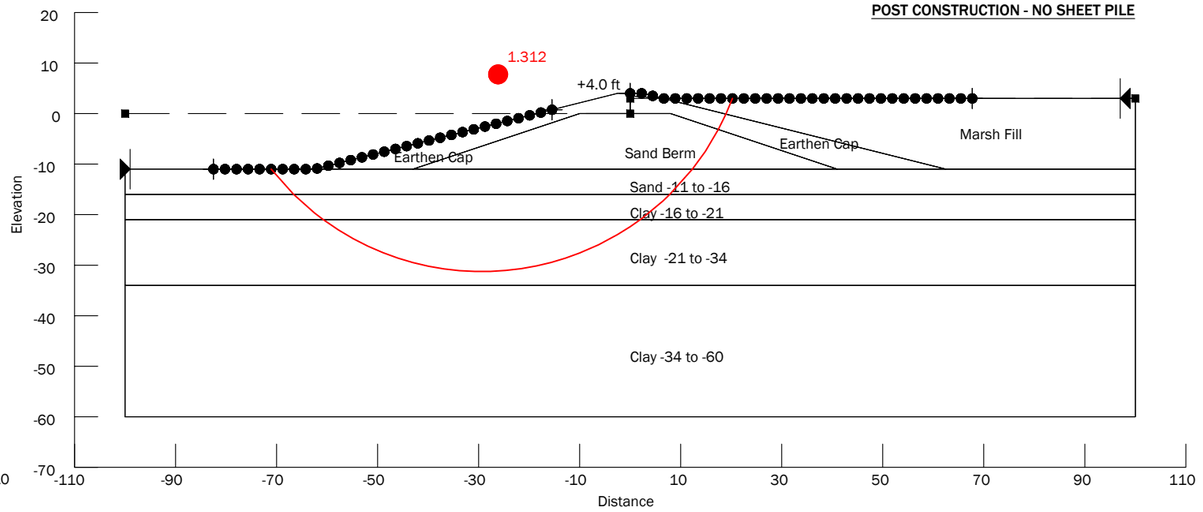

Name	Model	Unit Weight (pcf)	Cohesion' (psf)	Phi' (°)
Sand -11 to -16	Mohr-Coulomb	115	0	25
Sand Berm	Mohr-Coulomb	115	0	25
Clay -16 to -21	Mohr-Coulomb	105	200	0
Clay -21 to -34	Mohr-Coulomb	110	200	0
Clay -34 to -60	Mohr-Coulomb	115	750	0
Marsh Fill	Mohr-Coulomb	85	0	0
Earthen Cap	Mohr-Coulomb	88	60	

Sand Berm Capped with Borrow Material
Global Stability

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure C-2

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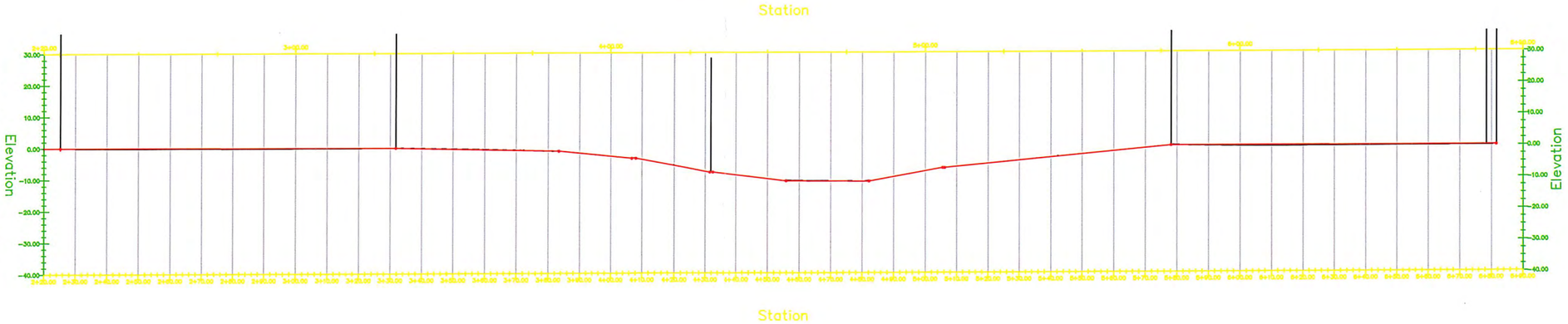
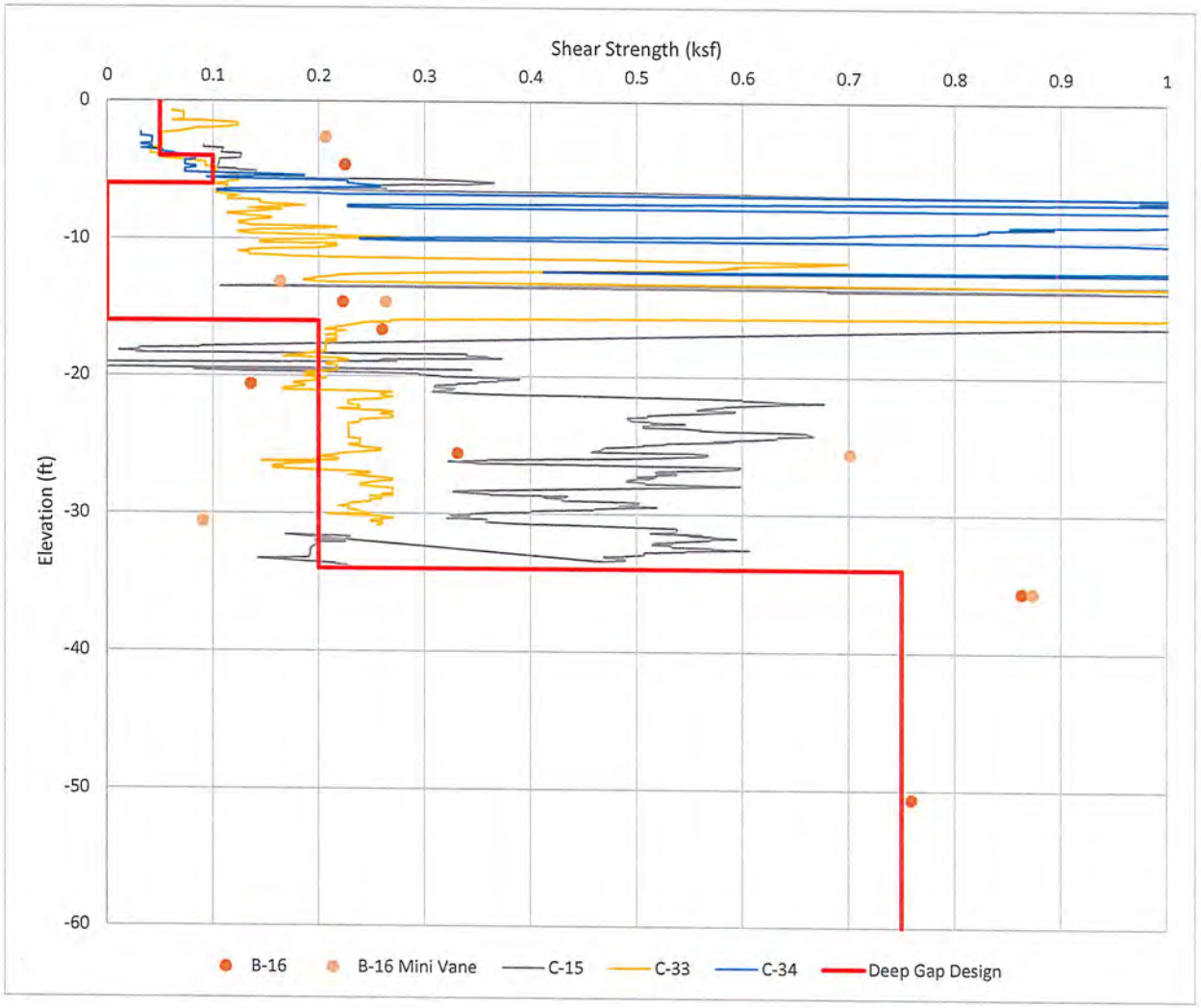
Profile View of Alignment – Cody 11–30–16

X	0.00 Y	0.05
X	106.61 Y	-0.04
X	158.21 Y	-1.12
X	181.65 Y	-3.47
X	182.91 Y	-3.46
X	206.34 Y	-7.95
X	207.29 Y	-7.94
X	230.71 Y	-10.75
X	256.96 Y	-10.89
X	280.37 Y	-6.67
X	281.01 Y	-6.67
X	352.97 Y	0.25
X	456.38 Y	0.13



Deep Gap Design

Elevation	Shear Strer	Unit Weight		
0	0.05	80	Peat	
-4	0.05	80		
-4	0.1	100	Clay	
-6	0.1	100		
-6	0	115	Sand	phi=25
-16	0	115		
-16	0.2	105	Clay	
-21	0.2	105		
-21	0.2	110	Silty Clay	
-34	0.2	110		
-34	0.75	115	Clay	
-60	0.75	115		



Soil Boring ID	Depth Interval (ft)	D2488 Visual Description	Test Type	D2216 Moisture %	D2166/D2850 Unit Weight (PCF) Wet	D2166/D2850 Unit Weight (PCF) Dry	D4318 Atterberg Limits LL	D4318 Atterberg Limits PL	D4318 Atterberg Limits PI	D422/D1140 /D6913 %<#200 Sieve	D2166/D2850 Shear Strength (KSF)	D2166/D2850 Remolded Strength (KSF)	D2166/D2850 Failure Strain %	D2166/D2850 Confining Pressure (PSI)	D2166/D2850 Type Failure	D4648 Mini Vane Shear Strength KSF	Comments
B-16	0.0 - 2.0	Very soft dark gray clay with organic matter (CH)	AL ORG FIB MV UDW	116.9	90.6	41.8	115	31	84							0.21	Organic Content = 7.8%; Fiber Content = 12.1%
B-16	2.0 - 4.0	Very soft dark gray silty clay (CL)	UU	34.8	118.6	88.0					0.23		8.1	5.0	B		
B-16	4.0 - 6.0	Dark gray silty sand (SM)	AL	33.2			20	20	NP								
B-16	6.0 - 8.0	Dark gray silty sand (SM)	-200	23.9						17							
B-16	8.0 - 10.0	Dark gray sand with silt (SP-SM)	SV	22.9						6							
B-16	11.0 - 12.0	Very soft gray silty clay (CL)	MV MC	28.1												0.16	
B-16	12.0 - 14.0	Very soft to soft dark gray clay with silt and shells (CL)	UU AL MV	51.1	109.1	72.2	49	20	29		0.22		11.3	5.0	B	0.26	
B-16	14.0 - 16.0	Soft dark gray silty clay with silt lenses (CL)	UU	49.6	103.1	68.9					0.26		4.1	5.0	MS		
B-16	16.0 - 18.0	Dark gray clay with shell fragments (CH)	AL UDW	72.9	99.2	57.4	84	25	59								
B-16	18.0 - 20.0	Very soft dark gray clay with silt and shell fragments (CL)	UU	47.5	111.1	75.4					0.14		14.6	5.0	MS		
B-16	23.0 - 25.0	Soft to medium dark gray silty clay with organic matter (CL)	UU MV	41.1	107.9	76.5					0.33		8.6	5.0	MS	0.70	
B-16	28.0 - 30.0	Very soft dark gray clay with silt and organic matter (CL)	AL CONS SG MV	55.3	105.9	68.2	49	20	29							0.09	Specific Gravity = 2.601
B-16	33.0 - 35.0	Medium dark gray silty clay (CL)	UU MV	31.2	122.3	93.2					0.86		14.6	7.7	MS	0.87	
B-16	38.0 - 40.0	Dark gray clay with silt, wood, calcareous nodules and shells (CL)	MC	72.8													
B-16	43.0 - 45.0	Dark gray silty clay (CL)	MC	43.0													
B-16	48.0 - 50.0	Medium dark gray silty clay with wood (CL)	UU AL	42.1	109.2	76.9	33	23	10		0.76		13.1	13.2	MS		
B-16	58.0 - 60.0	Dark gray silty, clayey sand with shell fragments (SC-SM)	-200	19.7						33							

Disclaimer: The results presented relate only to those samples tested.
Note: ASTM standard identification numbers shown above each test description.

Multiple Shear = MS Vertical Shear = VS Angle Shear = AS
Slickensided = SLS Bulge = B Crumble = C

Technical Responsibility:_____

Title:_____

Date:_____

Summary of Lab Results
Project No.: 16715-040-01

Island Road Marsh Creation and Nourishment (TE-117)
Terrebonne Parish, LA

GeoEngineers

Island Roads Marsh Creation Project (TE-117)
Terrebonne Parish, Louisiana (Montegut,Louisiana)

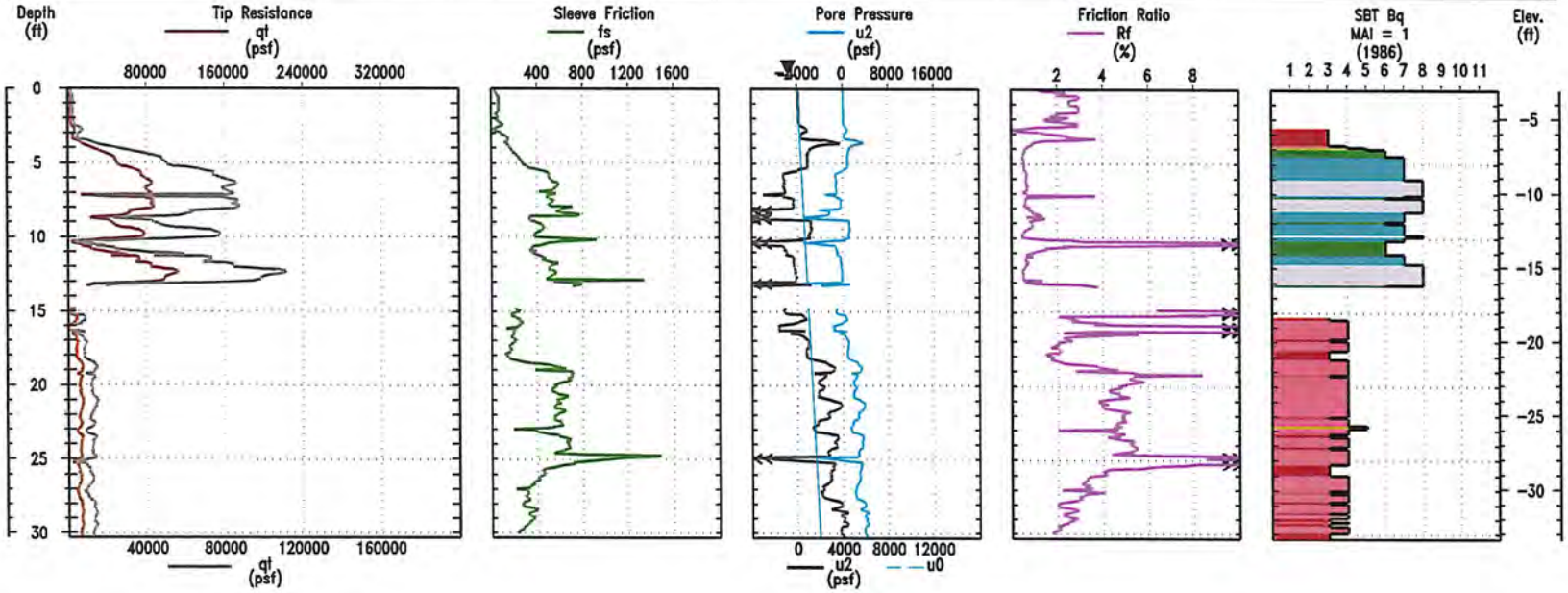
Cone Penetration Test

C-15

Project #: 16715-040-00
Date: Feb. 28, 2015

Latitude: N29°23'08.6"
Longitude: W90°28'43.5"

Elevation: -3.1
Filename: C-15.cpt



1 - Sensitive, Fine Grained Soils
2 - Organic Soils, Peats
3 - Clay
4 - Clays & Silty Clays
5 - Clayey Silt & Silty Clays
6 - Sandy Silts & Clayey Silts
7 - Silty Sands & Sandy Silts
8 - Sands & Silty Sands
9 - Sands

LOG OF CPT SOUNDING C-15	Island Road Marsh Creation and Nourishment (TE-117) Terrebonne Parish, Louisiana	GeoEngineers	Figure A-15

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Island Road Marsh Creation and Nourishment (TE-117)
Terrebonne Parish (Louisiana)

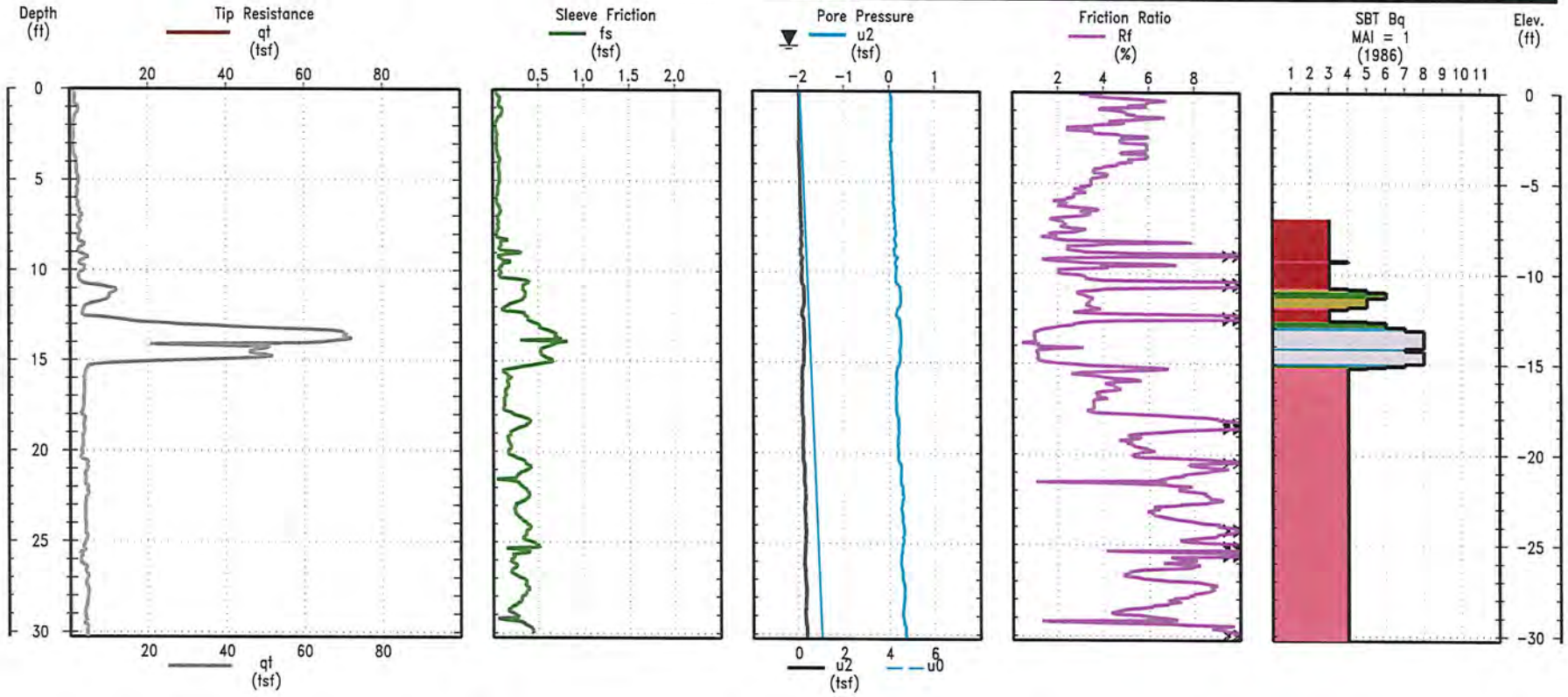
Cone Penetration Test

C-33

Project #: 16715-040-01
Date: Aug. 5, 2016

Latitude: 29.3875
Longitude: -90.4798333

Elevation: 0
Filename: C-33.cpt



1 - Sensitive, Fine Grained Soils
2 - Organic Soils, Peats
3 - Clay
4 - Clays & Silty Clays
5 - Clayey Silt & Silty Clays
6 - Sandy Silts & Clayey Silts
7 - Silty Sands & Sandy Silts
8 - Sands & Silty Sands
9 - Sands

CPT-33	Island Road Marsh Creation and Nourishment (TE-117) Phase II Terrebonne Parish, Louisiana	GeoEngineers	Figure A-15

P:\16\16715040\01\CAD\Working\CPTs\1671504001_fb-34_cpt_log_c-34bq.dxf TAB:8x11 Landscape Date Exported: 09/16/16 - 9:57 by kcook

Island Road Marsh Creation and Nourishment (TE-117)
Terrebonne Parish (Louisiana)

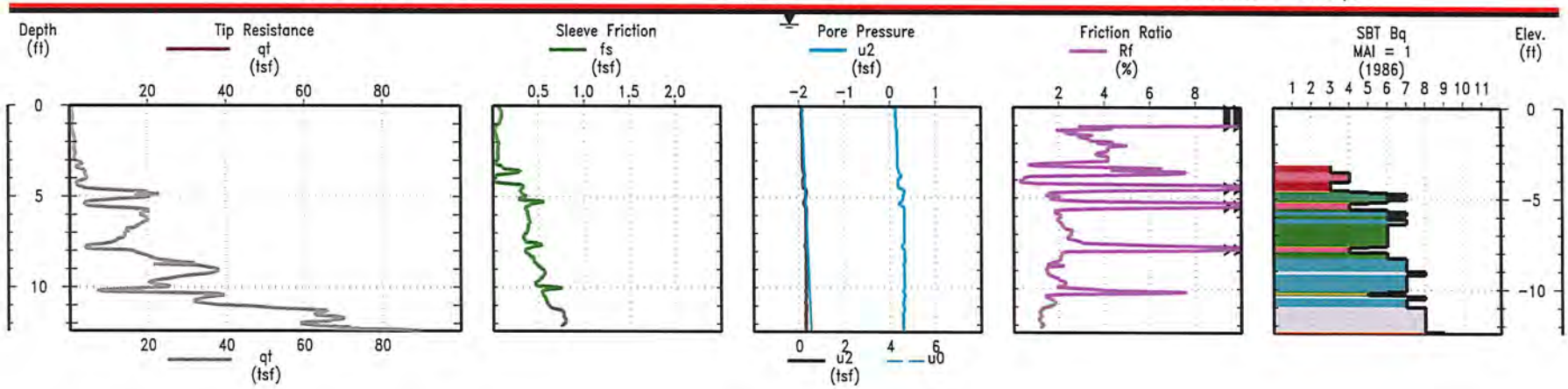
Cone Penetration Test

C-34a

Project #: 16715-040-01
Date: Aug. 5, 2016

Latitude: 29.38475
Longitude: -90.479

Elevation: 0
Filename: C-34a.cpt



1 - Sensitive, Fine Grained Soils
2 - Organic Soils, Peats
3 - Clay
4 - Clays & Silty Clays
5 - Clayey Silt & Silty Clays
6 - Sandy Silts & Clayey Silts
7 - Silty Sands & Sandy Silts
8 - Sands & Silty Sands
9 - Sands

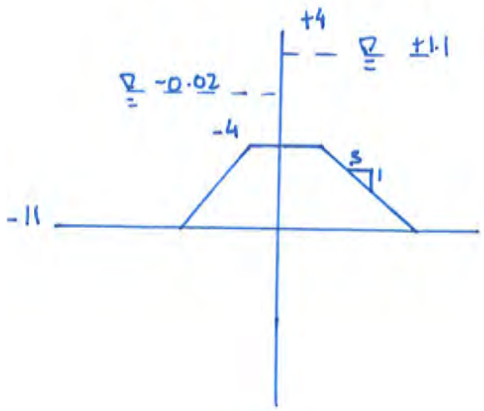
CPT-34a	Island Road Marsh Creation and Nourishment (TE-117) Phase II Terrebonne Parish, Louisiana	GeoEngineers	Figure A-16

project Island Road project no. 16715 040-03

by JEA date 5/21/18 sheet 1 of 1 checked by ARS

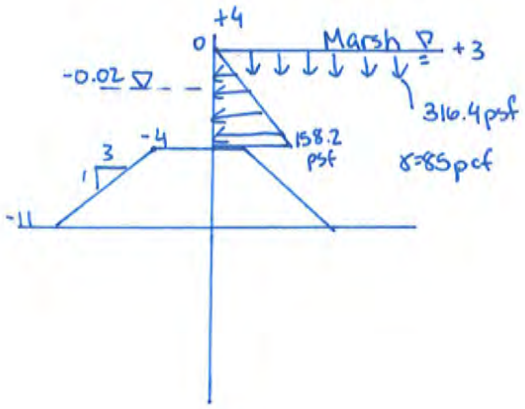
Gap Closure Analysis - Sheet Pile

Pre-Marsh Construction



NTS

Post-Marsh Construction



NTS

Assumed Fluid Pressures: Horizontal $(85-62.4)(7') = 158.2$ psf at El. -4' ✓

Vertical $(85-62.4)(14') = 316.4$ psf at El. -11' ✓

Yield Stress of Steel $F_y = 25{,}000$ psi

	CWALSHT Results	
	Pre-Marsh	Post-Marsh
Maximum Bending Moment M_{max} (FSA = FSP = 1.0)	1,332.4 ft-lb	14,236 ft-lb
Pile Penetration (FSP = 1.5, FSA = 1.0)	El. -13.23'	El. -33.49'
Scaled Deflection (FSA = FSP = 1.0)	1.1715e+08 lb·in³ at El. +4'	4.1850e+09 lb·in³ at El. +4'
Section Modulus (Req'd)	0.64 in³ ✓	6.83 in³ ✓

$$\text{Deflection} = \frac{\text{Scaled Deflection (Post Marsh)}}{(\text{Mod. of Elasticity})(\text{MOI})}$$

Assume Modulus of Elasticity = 29×10^6 psi

Moment of Inertia for PZ-22 = 84.38 in⁴ ⇒ Deflection = 1.71 inches ✓

PZ-27 = 184.20 in⁴ ⇒ Deflection = 0.78 inches ✓ at El. +4'

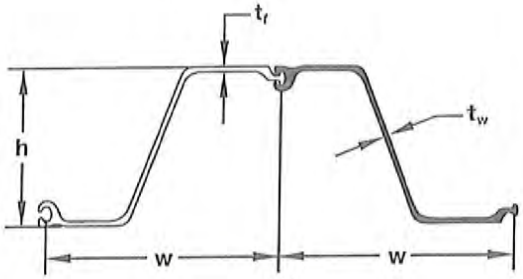
GeoEngineers
Earth Science + Technology

skylinesteelI
a NUCOR company

PZ/PS

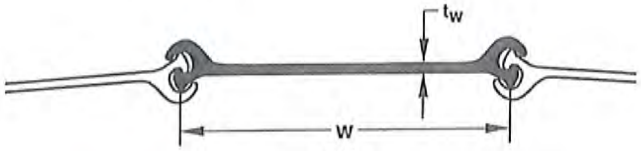
PZ/PS Hot Rolled Steel Sheet Pile

-33.6



PZ

SECTION	Width (w) in (mm)	Height (h) in (mm)	THICKNESS Flange (t_f) in (mm)	THICKNESS Wall (t_w) in (mm)	Cross Sectional Area in²/ft (cm²/m)	WEIGHT Pile lb/ft (kg/m)	WEIGHT Wall lb/ft² (kg/m²)	SECTION MODULUS Elastic in³/ft (cm³/m)	SECTION MODULUS Plastic in³/ft (cm³/m)	Moment of Inertia in⁴/ft (cm⁴/m)	COATING AREA Both Sides ft²/ft of single (m²/m)	COATING AREA Wall Surface ft²/ft² of wall (m²/m²)
PZ 22	22.0 559	9.0 229	0.375 9.50	0.375 9.50	6.47 136.9	40.3 60.0	22.0 107.4	18.1 973	21.79 1171.4	84.38 11500	4.48 1.37	1.22 1.22
PZ 27	18.0 457	12.0 305	0.375 9.50	0.375 9.50	7.94 168.1	40.5 60.3	27.0 131.8	30.2 1620	36.49 1961.9	184.20 25200	4.48 1.37	1.49 1.49
PZ 35	22.6 575	14.9 378	0.600 15.21	0.500 12.67	10.29 217.8	66.0 98.2	35.0 170.9	48.5 2608	57.17 3073.5	361.22 49300	5.37 1.64	1.42 1.42
PZ 40	19.7 500	16.1 409	0.600 15.21	0.500 12.67	11.77 249.1	65.6 97.6	40.0 195.3	60.7 3263	71.92 3866.7	490.85 67000	5.37 1.64	1.64 1.64



PS

SECTION	Width (w) in (mm)	Web (t_w) in (mm)	Maximum Interlock Strength k/in (kN/m)	Minimum Cell Diameter* ft (m)	Cross Sectional Area in²/ft (cm²/m)	WEIGHT Pile lb/ft (kg/m)	WEIGHT Wall lb/ft² (kg/m²)	Elastic Section Modulus in³/sheet (cm³/sheet)	Moment of Inertia in⁴/sheet (cm⁴/sheet)	COATING AREA Both Sides ft²/ft of single (m²/m)	COATING AREA Wall Surface ft²/ft² of wall (m²/m²)
PS 27.5	19.69 500	0.4 10.2	20 3500	30 9.14	8.09 171.2	45.1 67.1	27.5 134.3	3.3 54	5.3 221	3.65 1.11	1.11 1.11
PS 31	19.69 500	0.5 12.7	20 3500	30 9.14	9.12 193.0	50.9 75.7	31.0 151.4	3.3 54	5.3 221	3.65 1.11	1.11 1.11

* Minimum cell diameter cannot be guaranteed for piles over 65 feet (19.81 m) in length, or if piles are spliced. 58 Piles are needed to make a 30 foot diameter cell.

```
'ISLAND ROAD MARSH CREATION (TE-117)
'GAP CLOSURE ANALYSIS
'PRE-CONSTRUCTION
'FS=1.0
CONTROL  CANTILEVER  DESIGN  1.00  1.00
WALL   4
SURFACE RIGHTSIDE   4    0   -4
                  10   -4
                  31   -11
                  100   -11
SURFACE LEFTSIDE   4    0   -4
                  5   -4
                  26   -11
                  100   -11
SOIL RIGHTSIDE  STRENGTHS   4
   115    115    25    0    12.5    0   -16   0
   105    105    0    200    0    100   -21   0
   110    110    0    200    0    100   -34   0
   115    115    0    750    0    375
SOIL LEFTSIDE  STRENGTHS   4
   115    115    25    0    12.5    0   -16   0
   105    105    0    200    0    100   -21   0
   110    110    0    200    0    100   -34   0
   115    115    0    750    0    375
WATER ELEVATIONS   62.4    1.1   -0.02
FINISHED
```

PROGRAM CWALSHT-DESIGN/ANALYSIS OF ANCHORED OR CANTILEVER SHEET PILE WALLS
BY CLASSICAL METHODS

DATE: 21-MAY-2018 TIME: 10:06:39

****
* INPUT DATA *
****

I.--HEADING
'ISLAND ROAD MARSH CREATION (TE-117)
'GAP CLOSURE ANALYSIS
'PRE-CONSTRUCTION
'FS=1.0

II.--CONTROL
CANTILEVER WALL DESIGN
FACTOR OF SAFETY FOR ACTIVE PRESSURES = 1.00
FACTOR OF SAFETY FOR PASSIVE PRESSURES = 1.00

III.--WALL DATA
ELEVATION AT TOP OF WALL = 4.00 FT.

IV.--SURFACE POINT DATA

IV.A.--RIGHTSIDE

DIST. FROM WALL (FT)	ELEVATION (FT)
0.00	-4.00
10.00	-4.00
31.00	-11.00
100.00	-11.00

IV.B.--LEFTSIDE

DIST. FROM WALL (FT)	ELEVATION (FT)
0.00	-4.00
5.00	-4.00
26.00	-11.00
100.00	-11.00

V.--SOIL LAYER DATA

V.A.--RIGHTSIDE
LEVEL 2 FACTOR OF SAFETY FOR ACTIVE PRESSURE = DEFAULT
LEVEL 2 FACTOR OF SAFETY FOR PASSIVE PRESSURE = DEFAULT

SAT.	MOIST	ANGLE OF INTERNAL	COH-	ANGLE OF WALL	ADH-	<--BOTTOM-->	<-SAFETY-> <-FACTOR->

WGHT. (PCF)	WGHT. (PCF)	FRICTION (DEG)	ESION (PSF)	FRICTION (DEG)	ESION (PSF)	ELEV. (FT)	SLOPE (FT/FT)	ACT.	PASS.
115.00	115.00	25.00	0.00	12.50	0.00	-16.00	0.00	DEF	DEF
105.00	105.00	0.00	200.00	0.00	100.00	-21.00	0.00	DEF	DEF
110.00	110.00	0.00	200.00	0.00	100.00	-34.00	0.00	DEF	DEF
115.00	115.00	0.00	750.00	0.00	375.00			DEF	DEF

V.B.--LEFTSIDE
LEVEL 2 FACTOR OF SAFETY FOR ACTIVE PRESSURE = DEFAULT
LEVEL 2 FACTOR OF SAFETY FOR PASSIVE PRESSURE = DEFAULT

SAT. WGHT. (PCF)	MOIST WGHT. (PCF)	ANGLE OF INTERNAL FRICTION (DEG)	COH-ESION (PSF)	ANGLE OF WALL FRICTION (DEG)	ADH-ESION (PSF)	<--BOTTOM--> ELEV. (FT)	SLOPE (FT/FT)	<-SAFETY-> <-FACTOR-> ACT.	PASS.
115.00	115.00	25.00	0.00	12.50	0.00	-16.00	0.00	DEF	DEF
105.00	105.00	0.00	200.00	0.00	100.00	-21.00	0.00	DEF	DEF
110.00	110.00	0.00	200.00	0.00	100.00	-34.00	0.00	DEF	DEF
115.00	115.00	0.00	750.00	0.00	375.00			DEF	DEF

VI.--WATER DATA
UNIT WEIGHT = 62.40 (PCF)
RIGHTSIDE ELEVATION = 1.10 (FT)
LEFTSIDE ELEVATION = -0.02 (FT)
NO SEEPAGE

VII.--VERTICAL SURCHARGE LOADS
NONE

VIII.--HORIZONTAL LOADS
NONE

PROGRAM CWALSHT-DESIGN/ANALYSIS OF ANCHORED OR CANTILEVER SHEET PILE WALLS
BY CLASSICAL METHODS
DATE: 21-MAY-2018 TIME: 10:06:41

****
* SOIL PRESSURES FOR *
* CANTILEVER WALL DESIGN *

I.--HEADING
'ISLAND ROAD MARSH CREATION (TE-117)
'GAP CLOSURE ANALYSIS
'PRE-CONSTRUCTION
'FS=1.0

II.--SOIL PRESSURES

RIGHTSIDE SOIL PRESSURES DETERMINED BY SWEEP SEARCH WEDGE METHOD.

LEFTSIDE SOIL PRESSURES DETERMINED BY SWEEP SEARCH WEDGE METHOD.

				<------NET------>			
	NET	<---LEFTSIDE--->		(SOIL + WATER)		<--RIGHTSIDE--->	
ELEV.	WATER	PASSIVE	ACTIVE	ACTIVE	PASSIVE	ACTIVE	PASSIVE
(FT)	(PSF)	(PSF)	(PSF)	(PSF)	(PSF)	(PSF)	(PSF)
4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.0	6.2	0.0	0.0	6.2	6.2	0.0	0.0
0.0	68.6	0.0	0.0	68.6	68.6	0.0	0.0
0.0	69.9	0.0	0.0	69.9	69.9	0.0	0.0
-1.0	69.9	0.0	0.0	69.9	69.9	0.0	0.0
-2.0	69.9	0.0	0.0	69.9	69.9	0.0	0.0
-3.0	69.9	0.0	0.0	69.9	69.9	0.0	0.0
-4.0	69.9	0.0	0.0	69.9	69.9	0.0	0.0
-4.4	69.9	77.9	8.0	0.0	139.8	8.0	77.9
-5.0	69.9	182.6	18.9	-93.8	233.6	18.9	182.6
-6.0	69.9	329.4	37.7	-221.8	397.3	37.7	365.2
-7.0	69.9	409.2	56.6	-282.8	561.1	56.6	547.7
-8.0	69.9	472.0	75.4	-326.7	697.4	75.4	703.0
-9.0	69.9	549.9	94.3	-385.8	745.3	94.3	769.7
-10.0	69.9	630.4	113.1	-447.4	758.0	113.1	801.2
-11.0	69.9	712.3	131.3	-510.5	805.8	132.0	867.2
-12.0	69.9	804.1	147.7	-583.4	864.0	150.8	941.9
-13.0	69.9	912.8	163.3	-673.3	933.8	169.7	1027.2
-14.0	69.9	1031.3	179.4	-772.9	1014.1	188.5	1123.6
-15.0	69.9	1142.5	195.2	-865.2	1119.7	207.4	1245.0
-16.0	69.9	631.2	46.2	-486.1	654.9	75.2	631.2
-17.0	69.9	673.8	6.5	-559.4	737.1	44.5	673.8
-18.0	69.9	716.4	143.5	-474.3	642.8	172.2	716.4
-19.0	69.9	761.7	180.9	-482.9	648.0	208.9	759.0
-20.0	69.9	868.4	219.4	-552.4	684.3	246.1	833.8
-21.0	69.9	952.0	257.9	-600.1	731.8	282.1	919.8
-22.0	69.9	1012.2	291.2	-619.9	763.4	322.3	984.8

-23.0	69.9	1076.6	322.4	-641.6	820.2	365.2	1072.8
-24.0	69.9	1153.5	353.6	-676.9	849.7	406.7	1133.4
-25.0	69.9	1208.1	385.0	-690.7	874.0	447.5	1189.1
-26.0	69.9	1273.8	416.5	-717.8	914.1	486.1	1260.7
-27.0	69.9	1334.1	448.1	-744.4	938.7	519.9	1317.0
-28.0	69.9	1390.9	479.9	-769.9	970.0	551.2	1380.0
-29.0	69.9	1448.8	511.8	-796.4	997.8	582.5	1439.7
-30.0	69.9	1485.6	543.7	-801.9	1019.1	613.9	1493.0
-31.0	69.9	1531.0	575.8	-815.9	1041.8	645.3	1547.7
-32.0	69.9	1578.5	607.9	-829.0	1060.4	679.6	1598.4
-33.0	69.9	1626.0	640.0	-841.0	1067.7	715.1	1637.8
-33.6+	69.9	3005.4	0.0	-2319.2	2207.6	346.1	2137.7
-33.6-	69.9	2465.1	0.0	-2319.2	2207.6	346.1	2137.7
-34.0	69.9	3005.4	0.0	-2826.9	2529.5	108.6	2459.6
-34.2+	69.9	3241.8	0.0	-3171.9	3013.3	0.0	3280.6

PROGRAM CWALSHT-DESIGN/ANALYSIS OF ANCHORED OR CANTILEVER SHEET PILE WALLS
BY CLASSICAL METHODS
DATE: 21-MAY-2018 TIME: 10:06:42

****
* SUMMARY OF RESULTS FOR *
* CANTILEVER WALL DESIGN *
****

I.--HEADING
'ISLAND ROAD MARSH CREATION (TE-117)
'GAP CLOSURE ANALYSIS
'PRE-CONSTRUCTION
'FS=1.0

II.--SUMMARY

RIGHTSIDE SOIL PRESSURES DETERMINED BY SWEEP SEARCH WEDGE METHOD.

LEFTSIDE SOIL PRESSURES DETERMINED BY SWEEP SEARCH WEDGE METHOD.

WALL BOTTOM ELEV. (FT) : -10.39
PENETRATION (FT) : 6.39

MAX. BEND. MOMENT (LB-FT) : 1.3324E+03
AT ELEVATION (FT) : -6.61

MAX. SCALED DEFL. (LB-IN^3): 1.1715E+08
AT ELEVATION (FT) : 4.00

NOTE: DIVIDE SCALED DEFLECTION MODULUS OF
ELLASTICITY IN PSI TIMES PILE MOMENT
OF INERTIA IN IN^4 TO OBTAIN DEFLECTION
IN INCHES.

PROGRAM CWALSHT-DESIGN/ANALYSIS OF ANCHOREDOR CANTILEVER SHEET PILE WALLS
BY CLASSICAL METHODS
DATE: 21-MAY-2018 TIME: 10:06:42

****
* COMPLETE OF RESULTS FOR *
* CANTILEVER WALL DESIGN *
****

I.--HEADING
'ISLAND ROAD MARSH CREATION (TE-117)
'GAP CLOSURE ANALYSIS
'PRE-CONSTRUCTION
'FS=1.0

II.--RESULTS

ELEVATION (FT)	BENDING MOMENT (LB-FT)	SHEAR (LB)	SCALED DEFLECTION (LB-IN^3)	NET PRESSURE (PSF)
4.00	0.0000E+00	0.	1.1715E+08	0.00
3.00	-3.8199E-11	0.	1.0543E+08	0.00
2.00	5.4570E-12	0.	9.3715E+07	0.00
1.10	3.5307E-11	0.	8.3167E+07	0.00
1.00	1.0400E-02	0.	8.1995E+07	6.24
0.00	1.3842E+01	38.	7.0277E+07	68.64
-0.02	1.4611E+01	39.	7.0043E+07	69.89
-1.00	8.6526E+01	108.	5.8592E+07	69.89
-2.00	2.2910E+02	178.	4.7067E+07	69.89
-3.00	4.4156E+02	247.	3.5947E+07	69.89
-4.00	7.2390E+02	317.	2.5600E+07	69.89
-4.43	8.6359E+02	332.	2.1535E+07	0.00

-5.00	1.0489E+03	305.	1.6513E+07	-93.84
-6.00	1.2859E+03	148.	9.2241E+06	-221.76
-7.00	1.3124E+03	-105.	4.1268E+06	-282.78
-8.00	1.0589E+03	-409.	1.2568E+06	-326.68
-8.21	9.6693E+02	-478.	9.0931E+05	-338.93
-9.00	5.2356E+02	-587.	1.7192E+05	65.74
-10.00	5.4755E+01	-266.	1.2600E+03	576.26
-10.39	0.0000E+00	0.	0.0000E+00	776.81

NOTE: DIVIDE SCALED DEFLECTION MODULUS OF ELLASTICITY IN PSI TIMES PILE MOMENT OF INERTIA IN IN^4 TO OBTAIN DEFLECTION IN INCHES.

III.--WATER AND SOIL PRESSURES

		<----------SOIL PRESSURES---------->			
	WATER	<----LEFTSIDE----->		<---RIGHTSIDE---->	
ELEVATION	PRESSURE	PASSIVE	ACTIVE	ACTIVE	PASSIVE
(FT)	(PSF)	(PSF)	(PSF)	(PSF)	(PSF)
4.00	0.	0.	0.	0.	0.
3.00	0.	0.	0.	0.	0.
2.00	0.	0.	0.	0.	0.
1.10	0.	0.	0.	0.	0.
1.00	6.	0.	0.	0.	0.
0.00	69.	0.	0.	0.	0.
-0.02	70.	0.	0.	0.	0.
-1.00	70.	0.	0.	0.	0.
-2.00	70.	0.	0.	0.	0.
-3.00	70.	0.	0.	0.	0.
-4.00	70.	0.	0.	0.	0.
-4.43	70.	78.	8.	8.	78.
-5.00	70.	183.	19.	19.	183.
-6.00	70.	329.	38.	38.	365.
-7.00	70.	409.	57.	57.	548.
-8.00	70.	472.	75.	75.	703.
-8.21	70.	488.	79.	79.	717.
-9.00	70.	550.	94.	94.	770.
-10.00	70.	630.	113.	113.	801.
-10.39	70.	712.	131.	132.	867.
-12.00	70.	804.	148.	151.	942.

Calculation Checksheet

Project Number: 16715-040-03 **Project Title:** Island Road Marsh Creation and Nourishment (TE-117)

Client: CPRA

Location: Terrebonne Parish, Louisiana

Calculations Description: Evaluation of the gap closure at the southern part of Cell C. Two closure options were evaluated: a sheet pile installed through a submerged sand berm and a sheet pile installed through a sand berm capped with dredged fill. Stability of the sand berm and dredged fill cap were evaluated using SLOPE/W with Spencer's method of analysis. In addition, bearing capacity was also evaluated.

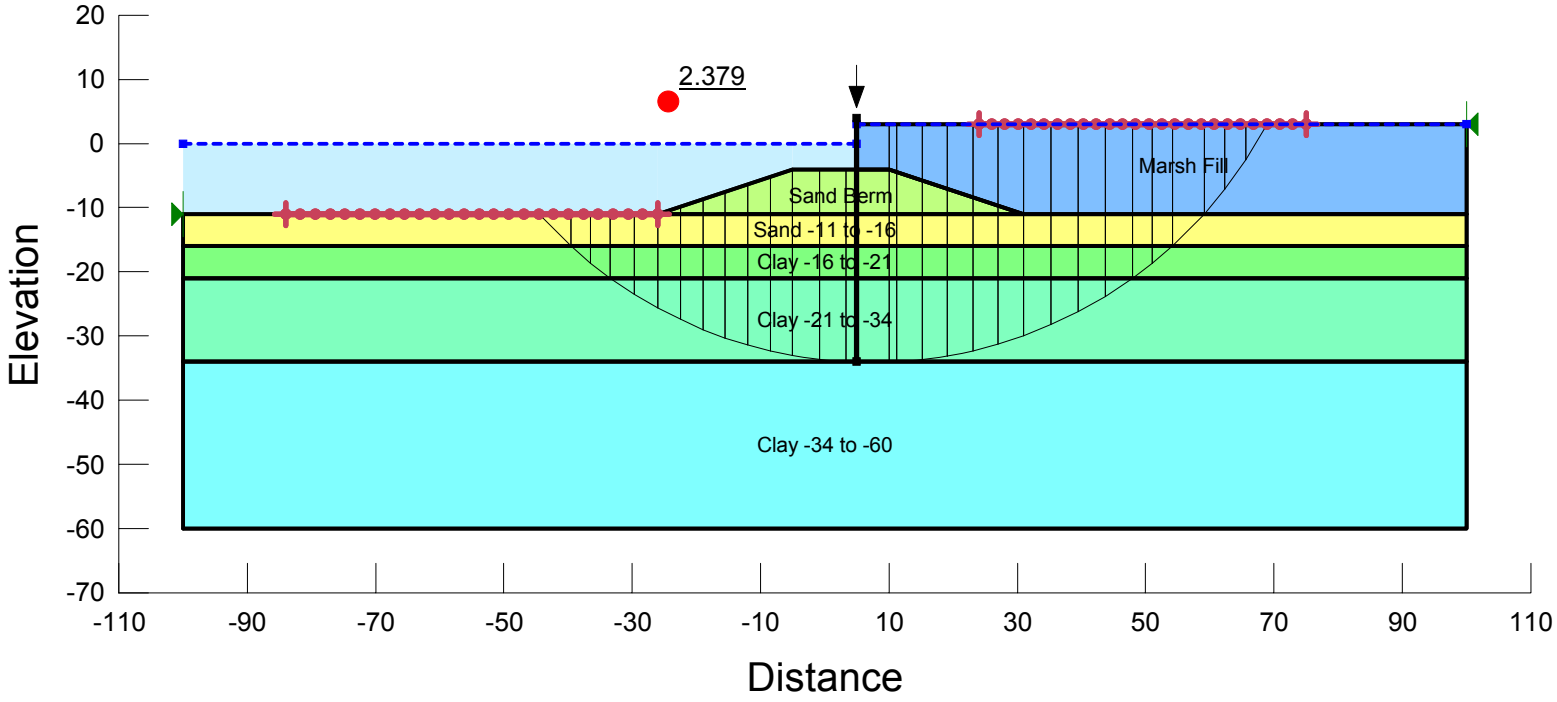
Contents of Calculation Package: Description of methodology for SLOPE/W analyses, example of CWALSHT files, and a summary of results.

Originator: CKH **Checked by:** JEA **Date:** August 9, 2018

Checking Method (describe):

Checked SLOPE/W input and output and that results appeared reasonable.

Color	Name	Model	Unit Weight (pcf)	Cohesion' (psf)	Phi' (°)
	Sand -11 to -16	Mohr-Coulomb	115	0	25
	Sand Berm	Mohr-Coulomb	115	0	25
	Clay -16 to -21	Mohr-Coulomb	105	200	0
	Clay -21 to -34	Mohr-Coulomb	110	200	0
	Clay -34 to -60	Mohr-Coulomb	115	750	0
	Marsh Fill	Mohr-Coulomb	85	0	0



Post-Construction

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File Information

File Version: 8.16
Created By: Cody K. Hatch
Last Edited By: Jennie Aguettant
Revision Number: 15
Date: 5/21/2018
Time: 1:28:55 PM
Tool Version: 8.16.1.13452
File Name: Global Stability_ALT.gsz
Directory: P:\16\16715040\03\Working\Electronic Files - CD\Engineering Report_August 17, 2018\Gap Closure\
Last Solved Date: 5/21/2018
Last Solved Time: 1:29:20 PM

Project Settings

Length(L) Units: Feet
Time(t) Units: Seconds
Force(F) Units: Pounds
Pressure(p) Units: psf
Strength Units: psf
Unit Weight of Water: 62.4 pcf
View: 2D
Element Thickness: 1

Analysis Settings

Post-Construction

Kind: SLOPE/W
Method: Spencer
Settings
  PWP Conditions Source: Piezometric Line
  Apply Phreatic Correction: No
  Use Staged Rapid Drawdown: No
Slip Surface
  Direction of movement: Right to Left
  Use Passive Mode: No
  Slip Surface Option: Entry and Exit
  Critical slip surfaces saved: 1
  Resisting Side Maximum Convex Angle: 1 °
  Driving Side Maximum Convex Angle: 5 °
  Optimize Critical Slip Surface Location: No

  Tension Crack
    Tension Crack Option: (none)
F of S Distribution
  F of S Calculation Option: Constant
Advanced
  Number of Slices: 30
  F of S Tolerance: 0.001
  Minimum Slip Surface Depth: 0.1 ft
  Search Method: Root Finder
  Tolerable difference between starting and converged F of S: 3
  Maximum iterations to calculate converged lambda: 20
  Max Absolute Lambda: 2

Materials

Sand -11 to -16

Model: Mohr-Coulomb
Unit Weight: 115 pcf
Cohesion': 0 psf
Phi': 25 °
Phi-B: 0 °
Pore Water Pressure
  Piezometric Line: 1

Sand Berm

Model: Mohr-Coulomb
Unit Weight: 115 pcf
Cohesion': 0 psf
Phi': 25 °
Phi-B: 0 °
Pore Water Pressure
  Piezometric Line: 1

Clay -16 to -21

Model: Mohr-Coulomb
Unit Weight: 105 pcf
Cohesion': 200 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
  Piezometric Line: 1

Clay -21 to -34

Model: Mohr-Coulomb
Unit Weight: 110 pcf
Cohesion': 200 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure

  Piezometric Line: 1

Clay -34 to -60

Model: Mohr-Coulomb
Unit Weight: 115 pcf
Cohesion': 750 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
  Piezometric Line: 1

Marsh Fill

Model: Mohr-Coulomb
Unit Weight: 85 pcf
Cohesion': 0 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
  Piezometric Line: 1

Slip Surface Entry and Exit

Left Projection: Range
Left-Zone Left Coordinate: (-84, -11) ft
Left-Zone Right Coordinate: (-26, -11) ft
Left-Zone Increment: 25
Right Projection: Range
Right-Zone Left Coordinate: (24, 3) ft
Right-Zone Right Coordinate: (75, 3) ft
Right-Zone Increment: 25
Radius Increments: 10

Slip Surface Limits

Left Coordinate: (-100, -11) ft
Right Coordinate: (100, 3) ft

Piezometric Lines

Piezometric Line 1

Coordinates

	X (ft)	Y (ft)
Coordinate 1	-100	-0.02
Coordinate 2	5	-0.02
Coordinate 3	5	3
Coordinate 4	100	3

Reinforcements

Reinforcement 1

Type: Pile
Outside Point: (5, 4) ft
Inside Point: (5, -34) ft
Slip Surface Intersection: () ft
Length: 38 ft
Direction: 90 °
Shear Force: 198,500 lbs
Shear Reduction Factor: 1
Pile Spacing: 1 ft
Shear Option: Parallel to Slip
Shear Force Applied: 198,500 lbs
Pullout Force: 0 lbs
Pullout Force per Length: 0 lbs/ft

Points

	X (ft)	Y (ft)
Point 1	-5	-4
Point 2	-26	-11
Point 3	-100	-11
Point 4	-100	-16
Point 5	-100	-21
Point 6	-100	-34
Point 7	-100	-60
Point 8	100	-11
Point 9	100	-16
Point 10	100	-21
Point 11	100	-34
Point 12	100	-60
Point 13	10	-4
Point 14	31	-11
Point 15	5	3
Point 16	100	3
Point 17	5	-4

Regions

	Material	Points	Area (ft²)
Region 1	Sand Berm	2,1,17,13,14	252
Region 2	Sand -11 to -16	3,2,14,8,9,4	1,000
Region 3	Clay -16 to -21	5,4,9,10	1,000
Region 4	Clay -21 to -34	6,5,10,11	2,600

Region 5	Clay -34 to -60	7,6,11,12	5,200
Region 6	Marsh Fill	15,16,8,14,13,17	1,221.5

Current Slip Surface

Slip Surface: 5,111
F of S: 2.379
Volume: 2,631.0803 ft³
Weight: 272,886.67 lbs
Resisting Moment: 1,861,911.6 lbs-ft
Activating Moment: 782,503.9 lbs-ft
Resisting Force: 24,387.986 lbs
Activating Force: 10,249.315 lbs
F of S Rank (Analysis): 1 of 7,436 slip surfaces
F of S Rank (Query): 1 of 7,436 slip surfaces
Exit: (-44.56, -11) ft
Entry: (68.88, 3) ft
Radius: 69.6837 ft
Center: (7.2764966, 35.57033) ft

Slip Slices

	X (ft)	Y (ft)	PWP (psf)	Base Normal Stress (psf)	Frictional Strength (psf)	Cohesive Strength (psf)
Slice 1	-42.074203	-13.5	841.152	1,055.6807	100.03638	0
Slice 2	-38.044495	-17.322884	1,079.6999	1,522.3305	0	200
Slice 3	-34.956673	-19.822884	1,235.6999	1,778.8082	0	200
Slice 4	-31.559572	-22.24484	1,386.83	2,032.0387	0	200
Slice 5	-27.853191	-24.572143	1,532.0537	2,279.4395	0	200
Slice 6	-24.25	-26.542845	1,655.0255	2,526.6414	0	200
Slice 7	-20.75	-28.200192	1,758.444	2,761.1537	0	200
Slice 8	-17.25	-29.627623	1,847.5157	2,969.7654	0	200
Slice 9	-13.75	-30.840023	1,923.1694	3,154.2181	0	200
Slice 10	-10.25	-31.849033	1,986.1316	3,315.8727	0	200
Slice 11	-6.75	-32.663705	2,036.9672	3,455.788	0	200
	-2.9242032	-33.330761	2,078.5915	3,544.6567	0	200

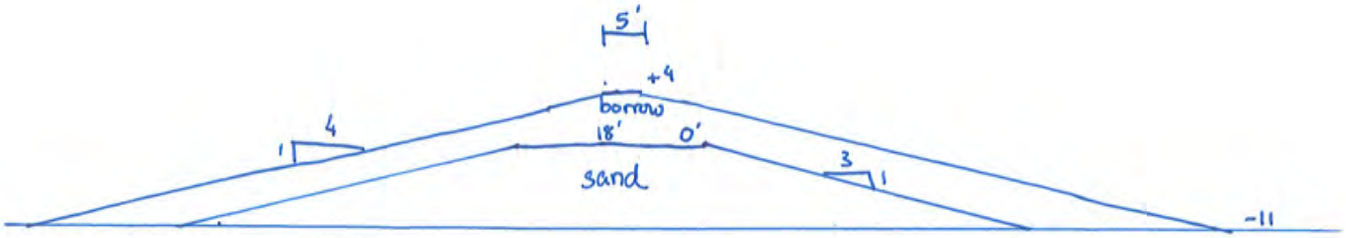
Slice 12						
Slice 13	1.2273904	-33.81904	2,109.0601	3,585.4164	0	200
Slice 14	4.1515936	-34.038087	2,122.7286	3,619.5183	0	750
Slice 15	7.5	-34.068151	2,313.0526	3,951.6428	0	750
Slice 16	10.624903	-34.030063	2,310.676	3,916.7265	0	750
Slice 17	13.224825	-33.830722	2,298.2371	3,862.8078	0	200
Slice 18	17.174864	-33.377906	2,269.9813	3,760.9247	0	200
Slice 19	21.124903	-32.693705	2,227.2872	3,633.8951	0	200
Slice 20	25.074942	-31.77104	2,169.7129	3,480.9877	0	200
Slice 21	29.024981	-30.5999	2,096.6338	3,301.1606	0	200
Slice 22	33.120719	-29.103301	2,003.246	3,105.0702	0	200
Slice 23	37.362158	-27.240033	1,886.978	2,888.1741	0	200
Slice 24	41.603597	-25.022799	1,748.6227	2,632.9276	0	200
Slice 25	45.845036	-22.410687	1,585.6269	2,335.0259	0	200
Slice 26	49.509666	-19.822884	1,424.1479	2,047.7837	0	200
Slice 27	52.597488	-17.322884	1,268.1479	1,778.7215	0	200
Slice 28	56.627196	-13.5	1,029.6	1,363.4861	155.69362	0
Slice 29	60.740828	-9.0494976	751.88865	980.81905	0	0
Slice 30	63.996497	-4.8126149	487.50717	631.33481	0	0
Slice 31	67.252166	0.23688269	172.41852	221.01473	0	0

project Island Road project no. 16715-040-03

by JEA date 5/16/18 sheet ____ of ____ checked by CKH

Gap Analysis - Alt 2 - Sand Berm Capped w/ Borrow Material

Unit Weight Calculation for Bearing Capacity Analysis



γ_{borrow} = 88pcf

γ_{sand} = 115 pcf

A_{Total} = (5')(15') + (2)(½)(60')(15') = 975 ft² ✓

A_{sand} = (18')(11') + (2)(½)(33')(11') = 561 ft² ✓

A_{borrow} = 975 - 561 = 414 ft² ✓

$\frac{A_{sand}}{A_{Total}} = \frac{561}{975} = 0.58$ ✓ $\quad\quad$ $\frac{A_{borrow}}{A_{Total}} = \frac{414}{975} = 0.42$ ✓

$\gamma_{average}$ = 88pcf (0.42) + 115pcf (0.58)

$\gamma_{average}$ = 103.5 pcf within gap closure ✓

GeoEngineers
Earth Science + Technology

Project: Island Rd

Project Id: 16715-040-03

Deliverable Title: Bearing Capacity for Gap Closure

direct input

	Containment Dike Foundation Bearing Capacity on Sand over Soft Clay																								
	Identifier	Crown Elevation (ft, NAVD 88)	Crown Width (ft)	Assumed Average Mudline Elevation	Water Elevation (ft, NAVD 88)	Assumed Fill Unit Weight (pcf)	Side Slopes (#H:1V)	Depth of First Layer, T (ft)	Equivalent Width of Dike, B (ft)	T/B	First Layer Cohesion, C1 (psf)	Second Layer Cohesion, C2 (psf)[10]	C2/C1	ϕ'	Dike Section Length, L (ft)	Bearing Capacity Factor, $N_{c(2)}$[3]	Bearing Capacity Factor, $N_{\gamma(1)}$[7]	Bearing Capacity Factor, $N_{q(1)}$[7]	q_2/q_1	K_s (See figure below)	Bearing Capacity of the Bottom Soil Layer, q_b (psf)	Bearing Capacity of the Top Soil Layer, q_t (psf)	Simplified Dike Pressure, psf	Weighted Average Dike Pressure, psf	Simplified Factor of Safety[11]	Weighted Dike pressure Factor of Safety[11]
Mudline EL-11.0	EL+4.0, 4-1, mud EL-11	4.0	5	-11	-0.02	103.5	4	5	65	0.08	Sand	200	#N/A	25	1000	20.70	10.9	10.7	0.296	2.00	4154	13993	849.8	675.9	4.87	6.12

Bearing Capacity in Layered Soils with Sand above Soft Clay from Das (2007)[4]
q_{ult}[8] = (1+0.2*B/L)*5.14*C_2 + γ'_1*H^2*(1+B/L)*(1+2D_f/H)*(K_s*tanϕ'_1/B) + γ'_1*D_f ≤ γ'_1*D_f*$N_{q(1)}$*$F_{qs(1)}$ + 0.5*γ'_1*B*$N_{\gamma'(1)}$*$F_{\gamma s(1)}$
Where,
Ks = fn(q2/q1) = [(c_2*$N_{c(2)}$)/(0.5*γ'_1*B*$N_{\gamma(1)}$), ϕ'_1]
F_{qs} = 1 + (B/L)*tanϕ' = 1 for cts load, and
$F_{\gamma s}$ = 1 - 0.4*(B/L) = 1 for cts load

Bearing Capacity Factors (Vesic)

ϕ'	N_c	N_γ	N_q
0	5.14	0.0	1.0
10	8.3	1.2	2.5
15	11.0	2.6	3.9
20	14.8	5.4	6.4
25	20.7	10.9	10.7
30	30.1	22.4	18.4
35	46.1	48.0	33.3
40	75.3	109.4	64.2

Notes:

1 Embankment geometries based on slope stability with dredged fill material

2 Bearing calculation based on NAVFAC DM-7 Figure 11-5

3 For profiles with surface sand layers, Nc of soft clay layer under sand per Vesic (1973). Otherwise, NAVFAC DM-7 Figure 11-5 (i.e., Group 2 - tangent circle curve used for T/B = 0.05).

4 *Principles of Foundation Engineering, 6th Ed.,* Section 4.3. Df is depth of foundation below soil surface = 0 ft. H = height of top soil layer

5 Water unit weight assumed to be ~64 pcf (salt water)

6 Effective unit weight of sand assumed as 56 pcf for bearing calculation

7 Bearing capacity factors based on Terzaghi's bearing capacity equations, as reported in the tables in Das, for Clay (ϕ = 0) and loose sand

8 B/L goes to 0 as L increases in length. Treat embankment as truly continuous, no shape factors included in analysis.

9 Punching shear calculation uses the method proposed by Meyerhof and Hanna (1978) and Meyerhoff (1974)

10 Second layer cohesion is weighted average below the top layer

11 Factor of safety for soft clay over stronger clay limited to Nc*c'2 = 5.14*C2/applied pressure

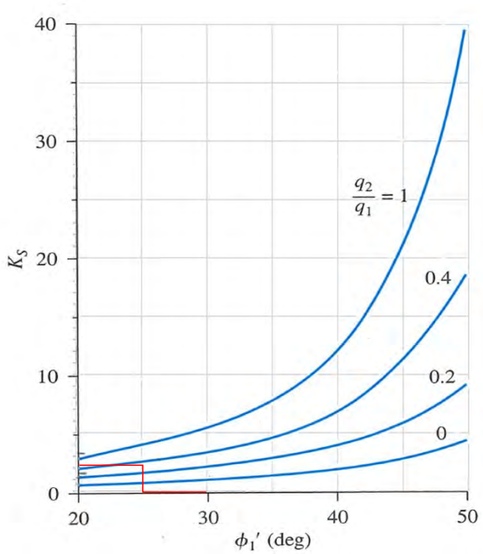


Figure 4.9 Meyerhof and Hanna's punching shear coefficient K_s

APPENDIX D
Marsh Creation Fill and Foundation Settlement

Calculation Checksheet

Project Number: 16715-040-03 (TE-117)

Project Title: Island Road Marsh Creation and Nourishment

Client: CPRA

Location: Terrebonne Parish, Louisiana

Calculations Description: The marsh creation settlement was calculated using Primary Consolidation, Secondary Compression, and Desiccation of Dredged Fill (PSDDF), and settlement theory with Bousinessq stress distribution. The same foundation settlement parameters were used for the entire marsh creation area. Marsh fill settlement was calculated using mudlines of +0.0 ft, -2.0 ft, and -3.0 ft North American Vertical Datum 1988 (NAVD88). Each mudline was analyzed using target fill heights of +1.0 ft NAVD88 and +3.0 ft NAVD88. Results were interpolated for fill heights of +1.5 ft, +2.0 ft, and +2.5 ft. The water elevation was +0.4 feet (mean water elevation) per project parameters. The marsh creation fill material was modelled using the composite sample of the all of the borrow area borings.

Contents of Calculation Package: Input Reconstructed Curves Spreadsheet, Settlement Adjustment Spreadsheets, PSDDF Output Files, SETANL Output Files

Originator: CKH **Checked by:** JEA **Date:** 8 August 2018

Checking Method (describe):

Checked PSDDF input parameters, SETANL files, spreadsheets and adjustments combining PSDDF w/ SETANL results.

APPENDIX D
CALCULATION APPROACH FOR MARSH FILL AND FOUNDATION SETTLEMENT

1. Settlement parameters and drainage considerations were developed as described in the calculation approach description for containment dike settlement in Appendix B.
2. For the marsh fill material, consolidation parameters were obtained from low-stress consolidation test results. For Island Road, we had information from four composite samples within the proposed borrow area (Composite Samples 1 through 4). Details of the low stress consolidation tests were presented in our GIDR Addendum. The results of Composite Sample 3 were used to model the marsh fill material. Composite Sample 3 was selected because it appeared to be most representative of all the borrow area borings.
3. Three mudlines were analyzed: Mudline El. 0.0 ft, -2.0 ft, and -3.0 ft. For each mudline, two fill heights were analyzed: El. +3.0 ft and +1.0 ft. Results were interpolated for fill heights at El. +1.5 ft, +2.0 ft, and +2.5 ft.
4. An external water level of El. +0.4 feet (mean water) was considered for the analysis.
5. Slurry fill settlement was modeled using the U.S. Army Corps of Engineers program "Primary consolidation, Secondary compression, and Desiccation of Dredged Fill" (PSDDF). Input parameters for PSDDF were taken from low-stress consolidation test results, published correlations and published climatological data (NOAA).
6. Foundation primary consolidation settlement was estimated using a one-dimensional consolidation program and Boussinesq load distribution.
7. Water level was assumed to mound under the slurry to 1.5 feet below the top of fill or the external water level, whichever was higher.

To account for the effects of progressive dredged fill densification and submergence below the waterline caused by settlement, we re-computed the effective vertical stress and corresponding settlement at various time intervals after fill placement. The typical steps at each time interval included the following:

8. Calculated settlement for the foundation soil beneath the fill based on the elapsed time and the effective stress calculated for the application of a single lift of fill and determined the new mudline elevation.
9. From PSDDF, determined the change in thickness of the dredged fill to calculate the fill density and the new fill surface elevation. The new fill surface elevation is influenced by both the foundation settlement and the change in fill thickness computed by PSDDF.
10. Re-computed the effective vertical stress based on the new fill surface and mudline elevations. The water elevation was assumed to be 1.5 ft. below the top of the marsh fill but no less than El. +0.4 ft. (assumed mean water level).
11. Used the new, lower effective stress to re-compute settlement.

This was repeated at post-construction days 15, 30, 60, 90, 180, 365 (1 year), 730 (2 years), 1095 (3 years), 1825 (5 years), 3650 (10 years), and 7300 (20 years). To model the settlement occurring within

the hydraulic fill during the construction period (30 days), we applied four 7-day lifts to the dredged fill during the construction period. We assumed that the dredged fill placed between 0 to 15 days is more consolidated than that placed in the later stage of construction. A unit weight was calculated using a specific gravity of 2.66 and using an average void ratio from the combination of each fill lift at the end of construction. This unit weight was used to compute the load from the marsh fill at the end of construction and estimate the time-rate settlement.

The sum of the dredged fill settlement and the underlying soil settlement was used to determine the total post-construction settlement at the surface of the dredged fill area at each of the above-noted time increments. Settlement of dredged fill evaluations were performed for scenarios with fill placed to a surface elevation of +1.0 ft. to +3.0 ft. at the end of construction.

This appendix contains an example of our PSDDF development sheets and adjusted settlement calculations, including time-rate, PSDDF, and foundation settlement analysis program output. All calculation inputs and outputs were provided electronically.

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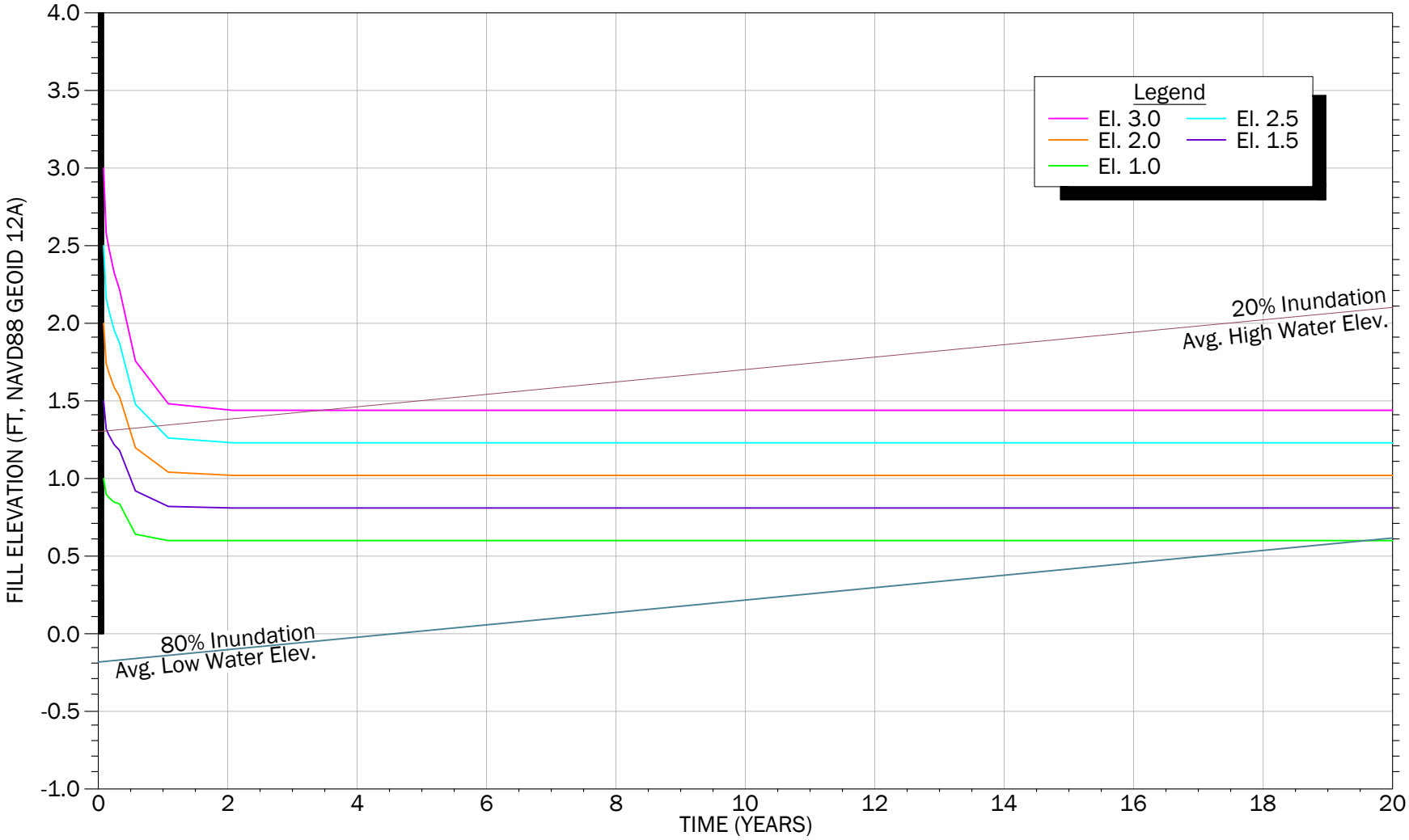

FILL ELEVATION (FEET NAVD88)							
INITIAL FILL PLACEMENT	END OF CONSTRUCTION	6 MONTHS	1 YEAR	3 YEARS	5 YEARS	10 YEARS	20 YEARS
3.0	3.0	1.9	1.5	1.4	1.4	1.4	1.4
2.5	2.5	1.6	1.3	1.2	1.2	1.2	1.2
2.0	2.0	1.3	1.0	1.0	1.0	1.0	1.0
1.5	1.5	1.0	0.8	0.8	0.8	0.8	0.8
1.0	1.0	0.7	0.6	0.6	0.6	0.6	0.6

Marsh Fill Elevation vs. Time
(Mudline El. 0 Ft.)

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

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Figure D-1

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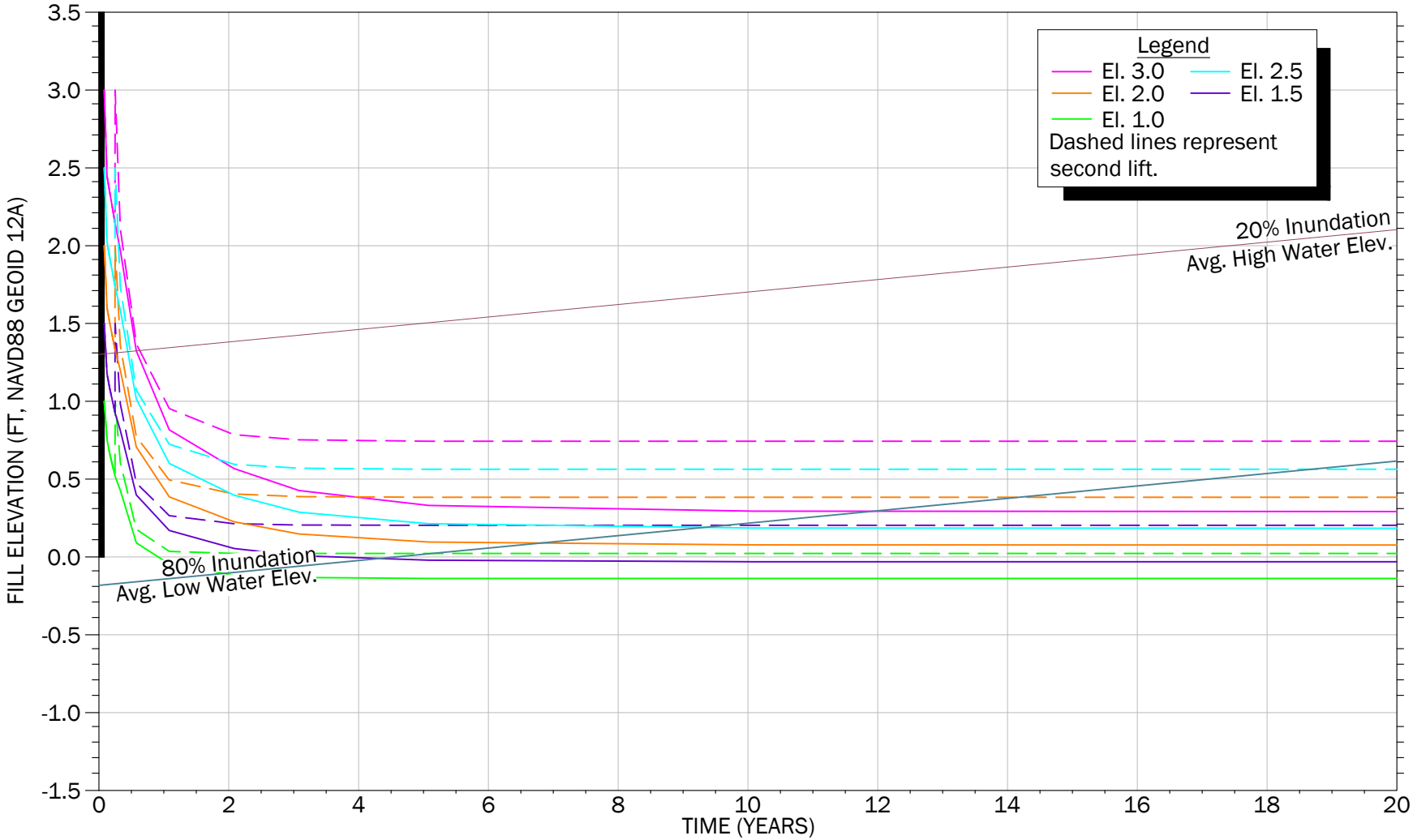

FILL ELEVATION, FEET NAVD88 (SECOND LIFT PRESENTED IN PARENTHESIS)							
INITIAL FILL PLACEMENT	END OF CONSTRUCTION	6 MONTHS	1 YEAR	3 YEARS	5 YEARS	10 YEARS	20 YEARS
3.0	3.0	1.5(1.6)	0.9(1.0)	0.4(0.8)	0.3(0.7)	0.3(0.7)	0.3(0.7)
2.5	2.5	1.2(1.3)	0.7(1.1)	0.3(0.6)	0.2(0.6)	0.2(0.6)	0.2(0.6)
2.0	2.0	0.8(0.9)	0.4(0.8)	0.2(0.4)	0.1(0.4)	0.1(0.4)	0.1(0.4)
1.5	1.5	0.5(0.6)	0.2(0.5)	0.0(0.2)	0.0(0.2)	0.0(0.2)	0.0(0.2)
1.0	1.0	0.2(0.3)	0.0(0.1)	-0.1(0.0)	-0.1(0.0)	-0.1(0.0)	-0.1(0.0)

SECOND LIFT WAS COMPLETED 60 DAYS AFTER END OF CONSTRUCTION OF FIRST LIFT

Marsh Fill Elevation vs. Time
(Mudline El. -2 Ft.)

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

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Figure D-2

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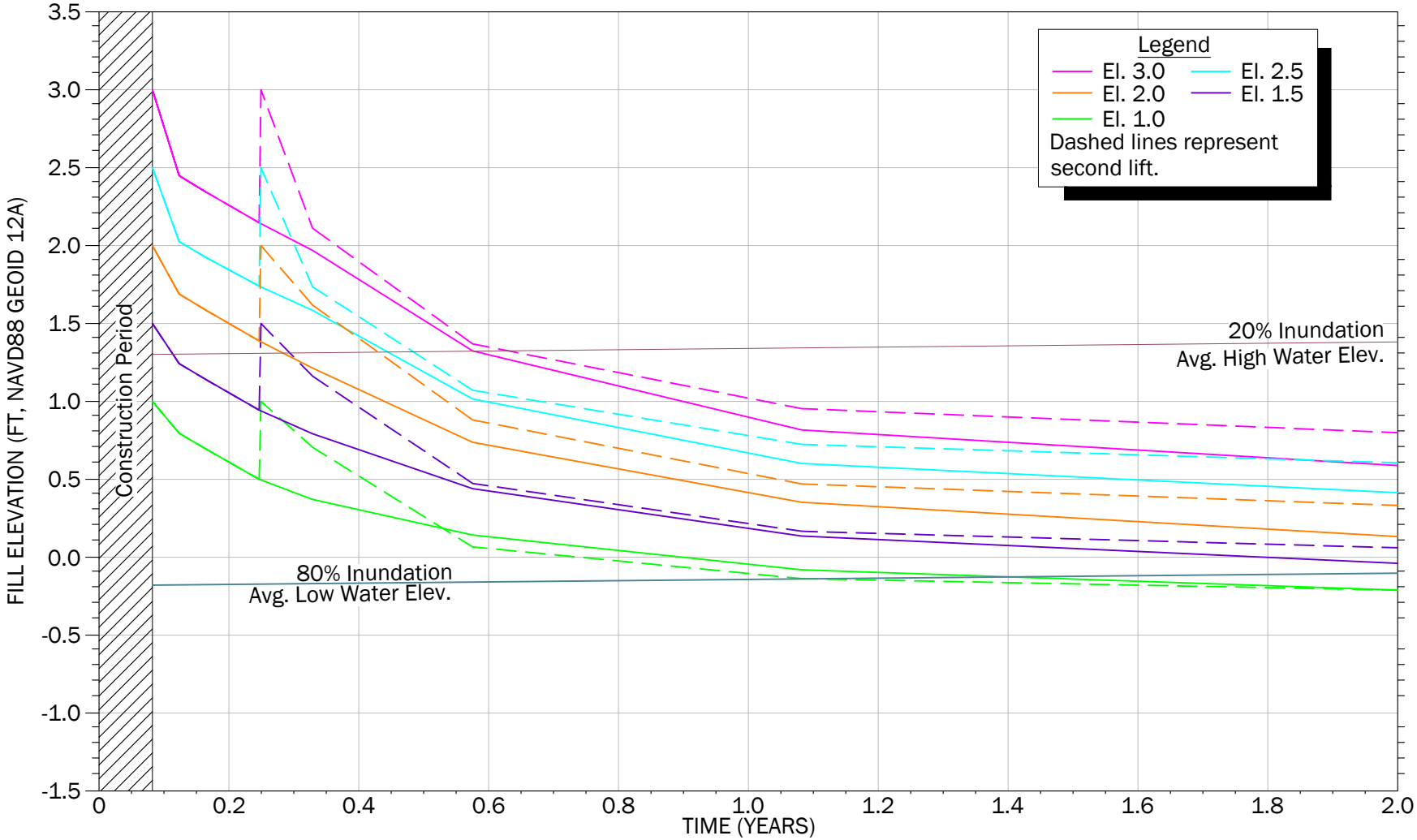

Marsh Fill Elevation vs. Time (First 2 Years)
(Mudline El. -2 Ft.)

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

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Figure D-3

NOTE:
SECOND LIFT WAS COMPLETED 60 DAYS AFTER END OF CONSTRUCTION OF FIRST LIFT.

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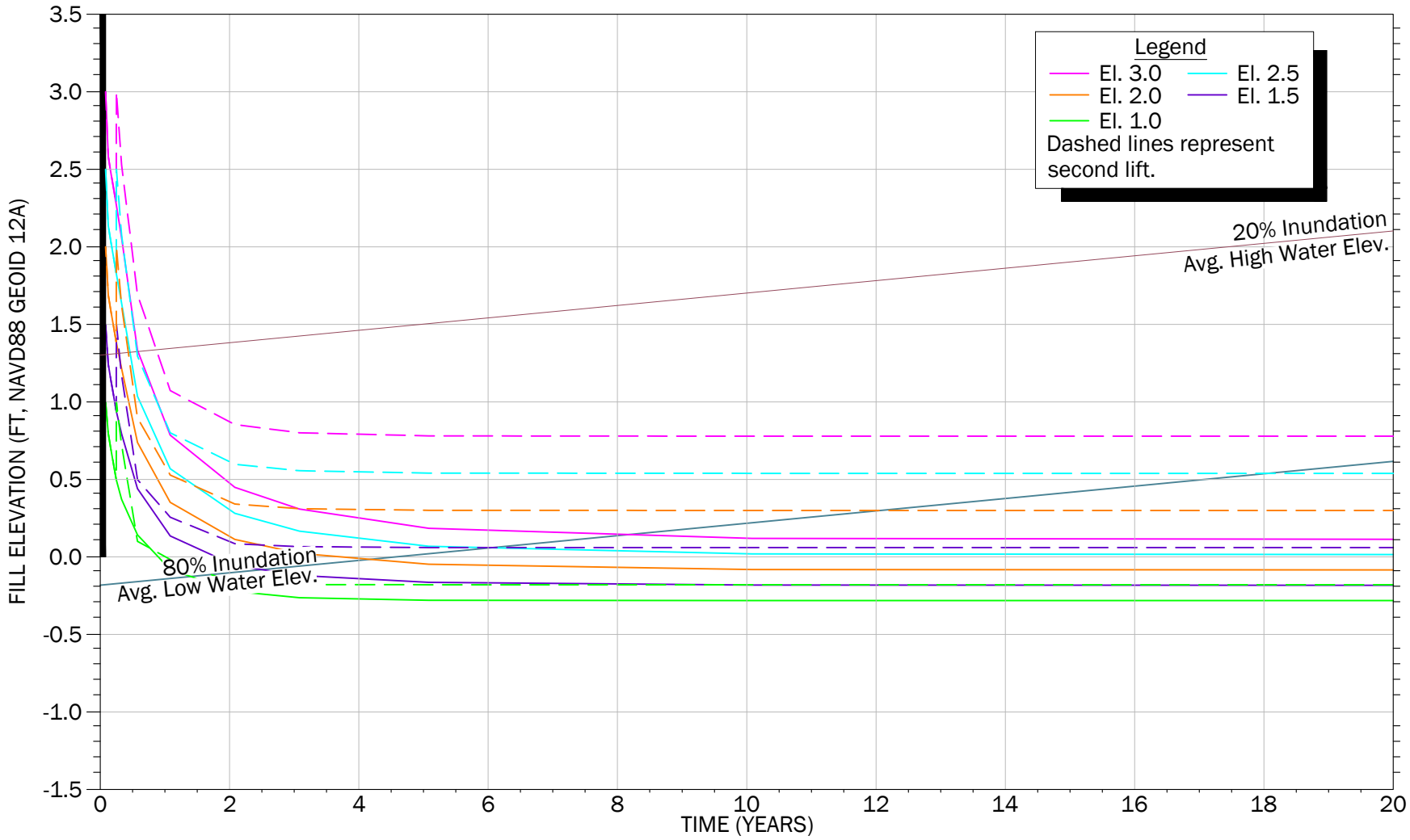

FILL ELEVATION, FEET NAVD88 (SECOND LIFT PRESENTED IN PARENTHESIS)							
INITIAL FILL PLACEMENT	END OF CONSTRUCTION	6 MONTHS	1 YEAR	3 YEARS	5 YEARS	10 YEARS	20 YEARS
3.0	3.0	1.5(1.9)	0.8(1.1)	0.3(0.8)	0.2(0.8)	0.1(0.8)	0.1(0.8)
2.5	2.5	1.2(1.5)	0.6(0.8)	0.2(0.6)	0.1(0.5)	0.0(0.5)	0.0(0.5)
2.0	2.0	0.9(1.1)	0.4(0.5)	0.0(0.3)	0.0(0.3)	-0.1(0.3)	-0.1(0.3)
1.5	1.5	0.5(0.7)	0.1(0.2)	-0.1(0.1)	-0.2(0.1)	-0.2(0.1)	-0.2(0.1)
1.0	1.0	0.2(0.3)	-0.1(0.0)	-0.3(-0.2)	-0.3(-0.2)	-0.3(-0.2)	-0.3(-0.2)

SECOND LIFT WAS COMPLETED 60 DAYS AFTER END OF CONSTRUCTION OF FIRST LIFT

Marsh Fill Elevation vs. Time
(Mudline El. -3 Ft.)

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

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Figure D-4

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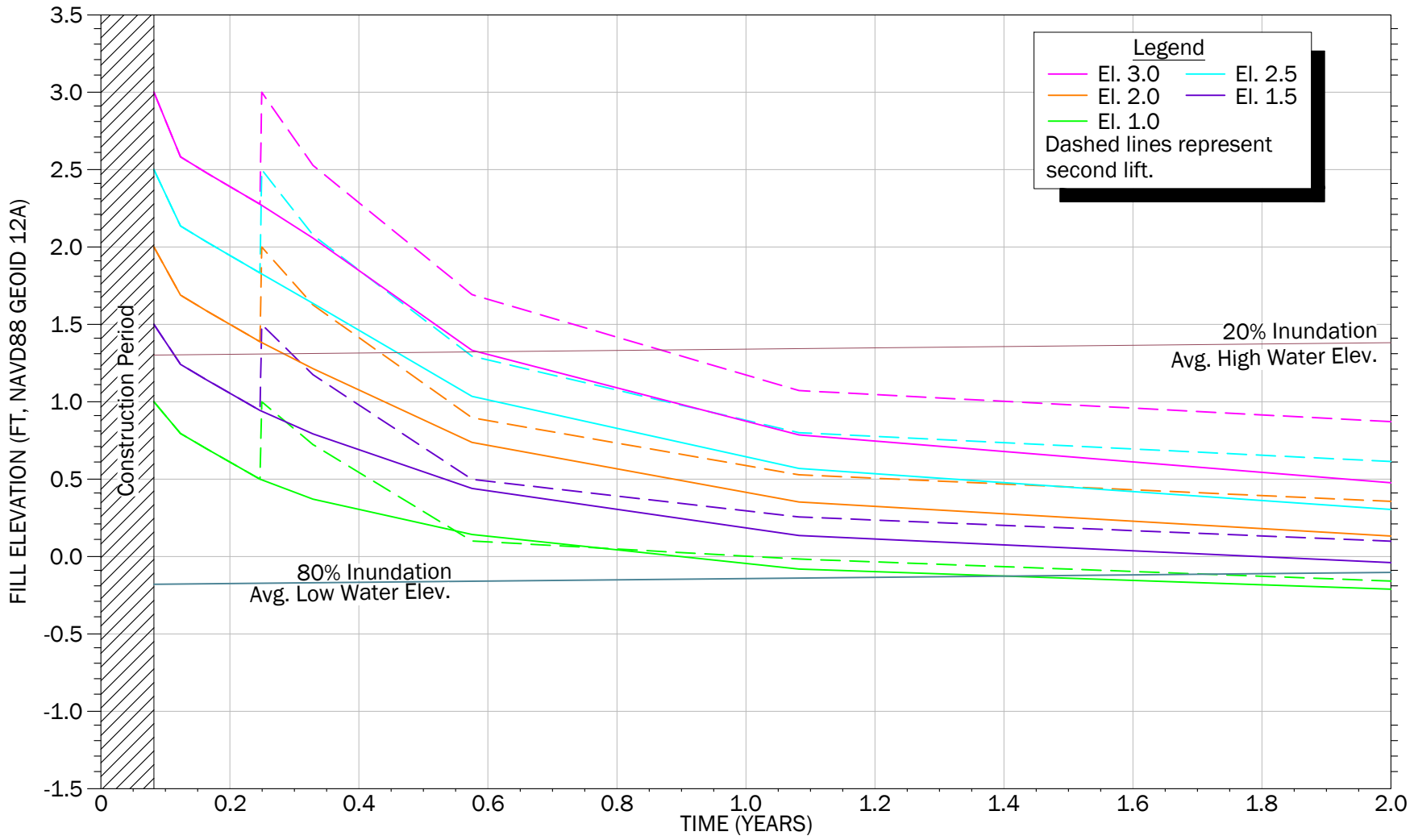

Marsh Fill Elevation vs. Time (First 2 Years)
(Mudline El. -3 Ft.)

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

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Figure D-5

NOTE:
SECOND LIFT WAS COMPLETED 60 DAYS AFTER END OF CONSTRUCTION OF FIRST LIFT.

CPRA/TE-117 Island Road Marsh Creation
Terrebonne Parish, Louisiana
SETTLEMENT PARAMETERS FOR MUDLINE EL 0.0 FT

				EQ. 1	UNIT WEIGHT		EQ. 2		EQ. 3		EQ. 4	DESIGN PARAMETERS						Pc																												SETANL INPUT		
ELEV		COHESION	M.C		WET	DRY		Consol.	Use MC	Consol.		Adopted	Adopted	Adopted	Adopted	C_v[1]	C_v	Consol	P_{avg}	P_1	Po	OCR^2	OCR	Adopted[3]	from OCR	P @ e0	ε @ e0	e @ Pc	ε @ Pc	Pc + 1 tsf	e @ Pc+1tsf	ε @ Pc+1tsf													NC/UC	OC	Adopted[3]
FEET		KSF	%	S.G	PCF	PCF	e_o	C_c	C_c	C_r	C_r	C_c	Cc ε	Cr	Cr ε	ft^2/day	$\times 10^{-5} in^2/sec$	tsf	tsf	tsf	tsf		OCR	Consol	tsf	tsf	%		%	tsf		%	Point 1		Point 2		Point 3							Slope	Slope	OCR
																																ε @ e0	P @ e0 (ksf)	ε @ Pc	Pc (ksf)	ε @ Pc+1 tsf (ksf)	Pc + 1 tsf (ksf)			
0.0	-4.0	0.060	220	2.58	76	20	5.482	0.00	3.41	0.000	0.375	3.41	0.526	0.375	0.058	0.050	8.3	0.2	0.014	0.000	0.014	17.8	6.60	6.0	0.082	0.020	0	5.25	3.54	1.082	1.424	62.60	0	0.04	3.54	0.16	62.60	2.16	-52.626	-5.789	6.0
-4.0	-7.0	0.100	45	2.67	108	70	1.177		0.54		0.059	0.54	0.246	0.059	0.027	0.800	133.3	0.2	0.034	0.027	0.061	5.1		5.1	0.315	0.020	0	1.11	3.25	1.315	0.774	18.53	0	0.04	3.25	0.63	18.53	2.63	-24.636	-2.710	5.1
-7.0	-12.0	0.000	27	2.68	118	90	0.735		0.00		0.000	0.00	0.000	0.000	0.000	3.000	500.0		0.070	0.096	0.165	0.0		1.5	0.248	0.020	0	0.73	0.00	1.248	0.735	0.00	0	0.04	0.00	0.50	0.00	2.50	0.000	0.000	1.5
-12.0	-16.0	0.161	45	2.67	102	70	1.177	0.98	0.54	0.154	0.059	0.54	0.246	0.059	0.027	0.070	11.7	0.4	0.040	0.235	0.274	1.4	1.48	1.4	0.393	0.020	0	1.10	3.51	1.393	0.806	17.04	0	0.04	3.51	0.79	17.04	2.79	-24.636	-2.710	1.4
-16.0	-20.0	0.181	45	2.67	102	70	1.177	0.28	0.54	0.030	0.059	0.54	0.246	0.059	0.027	1.300	216.7	0.5	0.040	0.314	0.353	1.2	1.66	1.2	0.427	0.020	0	1.10	3.60	1.427	0.818	16.51	0	0.04	3.60	0.85	16.51	2.85	-24.636	-2.710	1.2
-20.0	-26.0	0.208	45	2.67	110	70	1.177	0.62	0.54	0.033	0.059	0.54	0.246	0.059	0.027	0.200	33.3	0.2	0.071	0.393	0.464	1.0	0.34	1.0	0.475	0.020	0	1.18	0.00	1.475	0.913	12.13	0	0.04	0.00	0.95	12.13	2.95	-24.636	0.000	1.0
-26.0	-33.0	0.242	45	2.67	110	70	1.177	0.62	0.54	0.033	0.059	0.54	0.246	0.059	0.027	0.200	33.3	0.2	0.083	0.536	0.619	0.9	0.34	1.0	0.619	0.020	0	1.18	0.00	1.619	0.953	10.29	0	0.04	0.00	1.24	10.29	3.24	-24.636	0.000	1.0
-33.0	-44.0	0.289	45	2.67	118	82	1.177	0.13	0.34	0.009	0.038	0.34	0.158	0.038	0.017	0.200	33.3	1.4	0.153	0.702	0.855	0.7	1.47	1.0	0.855	0.020	0	1.18	0.00	1.855	1.062	5.31	0	0.04	0.00	1.71	5.31	3.71	-15.803	0.000	1.0
-44.0	-50.0	0.450	38	2.67	112	82	1.005		0.34		0.038	0.34	0.172	0.038	0.019	0.230	38.3		0.074	1.008	1.083	0.9		1.0	1.083	0.020	0	1.01	0.00	2.083	0.907	4.88	0	0.04	0.00	2.17	4.88	4.17	-17.160	0.000	1.0
-50.0	-56.0	0.450	38	2.67	112	82	1.005		0.34		0.038	0.34	0.172	0.038	0.019	0.230	38.3		0.074	1.157	1.231	0.8		1.0	1.231	0.020	0	1.01	0.00	2.231	0.916	4.43	0	0.04	0.00	2.46	4.43	4.46	-17.160	0.000	1.0

Equations:

EQ. 1 $SG = -0.0005*MC+2.6893$

EQ. 2 $e_o = 0.0246*MC+0.0703$

EQ. 3 $Cc = 7.15e^{0.037Gamma\ D}$

EQ. 4 $C_r = 0.11*C_c$

Note:

1 Cv values for materials were determined using the Cv vs MC curve developed by GeoEngineers based on data from coastal projects

2 OCR = (c/(p' * 0.22))^(1/0.8) (Recommended practice for soft ground site characterization: Arthur Casagrande Lecture Figure 7.1)

3 From Note 2, reviewing c/p line and consolidation test result; Assumed OCR =1 if OCR<1 from calculations

References:

"Foundation Design: Principles and Practices" Donald Coduto 1994

"NAVFAC DM-7.1 Soil Mechanics" 1982

"GeoEngineers" based on our experience with coastal soils

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"DRAFT Recommended Practice for Estimating Foundation Soil Consolidation Parameters from Index Properties for Louisiana Marsh Creation" UMASS 2018

CPRA/TE-117 Island Road Marsh Creation
Terrebonne Parish, Louisiana
SETTLEMENT PARAMETERS FOR MUDLINE EL -2.0 FT

SETANL INPUT

ELEV		COHESION	M.C	EQ. 1	UNIT WEIGHT		EQ. 2	EQ. 3		EQ. 4	DESIGN PARAMETERS						Pc						Pc																		
FEET		KSF	%	S.G	WET PCF	DRY PCF	e_o	Consol. C_c	Use MC C_c	Consol. C_r	C_r	Adopted C_c	Adopted $Cc\varepsilon$	Adopted Cr	Adopted $Cr\varepsilon$	C_v[1] ft^2/day	C_v $\times 10^{-5} in^2/sec$	Consol tsf	P_{avg} tsf	P_1 tsf	Po tsf	OCR[2]	OCR Consol	Adopted[3] OCR	from OCR tsf	P @ e0 tsf	ε @ e0 %	e @ Pc	ε @ Pc %	Pc + 1 tsf	e @ Pc+1tsf	ε @ Pc+1tsf %	Point 1 ε @ e0	Point 1 P @ e0 (ksf)	Point 2 ε @ Pc	Point 2 Pc (ksf)	Point 3 ε @ Pc+1 tsf (ksf)	Point 3 Pc + 1 tsf (ksf)	NC/UC Slope	OC Slope	Adopted[3] OCR
-2.0	-4.0	0.060	220	2.58	76	20	5.482	0.00	3.41	0.000	0.375	3.41	0.526	0.375	0.058	0.050	8.3	0.2	0.007	0.000	0.007	42.4	6.60	6.0	0.041	0.020	0	5.37	1.79	1.041	0.567	75.82	0	0.04	1.79	0.08	75.82	2.08	-52.626	-5.789	6.0
-4.0	-7.0	0.100	45	2.67	108	70	1.177		0.54		0.059	0.54	0.246	0.059	0.027	0.800	133.3	0.2	0.034	0.014	0.048	7.0		7.0	0.336	0.020	0	1.11	3.32	1.336	0.783	18.10	0	0.04	3.32	0.67	18.10	2.67	-24.636	-2.710	7.0
-7.0	-12.0	0.000	27	2.68	118	90	0.735		0.00		0.000	0.00	0.000	0.000	0.000	3.000	500.0		0.070	0.082	0.152	0.0		1.5	0.227	0.020	0	0.73	0.00	1.227	0.735	0.00	0	0.04	0.00	0.45	0.00	2.45	0.000	0.000	1.5
-12.0	-16.0	0.161	45	2.67	102	70	1.177	0.98	0.54	0.154	0.059	0.54	0.246	0.059	0.027	0.070	11.7	0.4	0.040	0.221	0.261	1.5	1.48	1.5	0.398	0.020	0	1.10	3.52	1.398	0.808	16.96	0	0.04	3.52	0.80	16.96	2.80	-24.636	-2.710	1.5
-16.0	-20.0	0.181	45	2.67	102	70	1.177	0.28	0.54	0.030	0.059	0.54	0.246	0.059	0.027	1.300	216.7	0.5	0.040	0.300	0.340	1.3	1.66	1.3	0.431	0.020	0	1.10	3.61	1.431	0.819	16.45	0	0.04	3.61	0.86	16.45	2.86	-24.636	-2.710	1.3
-20.0	-26.0	0.208	45	2.67	110	70	1.177	0.62	0.54	0.033	0.059	0.54	0.246	0.059	0.027	0.200	33.3	0.2	0.071	0.379	0.451	1.1	0.34	1.1	0.478	0.020	0	1.18	0.00	1.478	0.914	12.07	0	0.04	0.00	0.96	12.07	2.96	-24.636	0.000	1.1
-26.0	-33.0	0.242	45	2.67	110	70	1.177	0.62	0.54	0.033	0.059	0.54	0.246	0.059	0.027	0.200	33.3	0.2	0.083	0.522	0.606	0.9	0.34	1.0	0.606	0.020	0	1.18	0.00	1.606	0.950	10.43	0	0.04	0.00	1.21	10.43	3.21	-24.636	0.000	1.0
-33.0	-44.0	0.289	45	2.67	118	82	1.177	0.13	0.34	0.009	0.038	0.34	0.158	0.038	0.017	0.200	33.3	1.4	0.153	0.689	0.842	0.7	1.47	1.0	0.842	0.020	0	1.18	0.00	1.842	1.060	5.37	0	0.04	0.00	1.68	5.37	3.68	-15.803	0.000	1.0
-44.0	-50.0	0.450	38	2.67	112	82	1.005		0.34		0.038	0.34	0.172	0.038	0.019	0.230	38.3		0.074	0.995	1.069	0.9		1.0	1.069	0.020	0	1.01	0.00	2.069	0.906	4.92	0	0.04	0.00	2.14	4.92	4.14	-17.160	0.000	1.0
-50.0	-56.0	0.450	38	2.67	112	82	1.005		0.34		0.038	0.34	0.172	0.038	0.019	0.230	38.3		0.074	1.143	1.218	0.8		1.0	1.218	0.020	0	1.01	0.00	2.218	0.916	4.47	0	0.04	0.00	2.44	4.47	4.44	-17.160	0.000	1.0

Equations:

EQ. 1 SG= -0.0005*MC+2.6893

EQ. 2 e_o = 0.0246*MC+0.0703

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References:

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CPRA/TE-117 Island Road Marsh Creation
Terrebonne Parish, Louisiana
SETTLEMENT PARAMETERS FOR MUDLINE EL -3.0 FT

SETANL INPUT

| ELEV | | COHESION | M.C | EQ. 1 | UNIT WEIGHT | | EQ. 2 | EQ. 3 | | EQ. 4 | DESIGN PARAMETERS | | | | | | Pc | | | | | | Pc | | | | | |

Project: TE-117 Island Road Marsh Creation
GEI Project No.: 16715-040-03
Boring Id: Profile 2 Mudline +0.0

Initial Sequence of Lifts - 30 days

Initial Fill El	1.00	ft		
Initial Avg. Mudline El	0.00	ft		
Initial γ	85.37	pcf		
Initial Water El	0.400	ft		
Dewatered Water El	0.4	ft		
Initial stress	60.41	psf		
	0.060	ksf		
Settlement @ 15 days	1.007	inches	0.083894	feet

Construction period is 0 - 30 days

Ending Fill El	1.00	ft
Ending Mudline El	-0.08	ft
Ending γ	85.37	pcf
Fill Thickness	1.08	ft
Ending Stress:	62.34	psf
	0.062	ksf

Fill Material Properties

SG:	2.66
e0:	3.510
Vvi:	0.778
Vs:	0.222

Water Levels

MHW	
MW	0.4
MLW	
Mounding?	1.5

15 to 45 days			**45 to 60 days**			**60 to 90 days**			**90 to 120 days**			**120 to 210 days**		
Water Elevation	0.4	ft	**Water Elevation**	0.4	ft	**Water Elevation**	0.4	ft	**Water Elevation**	0.4	ft	**Water Elevation**	0.4	ft
Total Foundation Settlement:	0.131	ft	Total Foundation Settlement:	0.130	ft	Total Foundation Settlement:	0.141	ft	Total Foundation Settlement:	0.148	ft	Total Foundation Settlement:	0.164	ft
Ending Mudline El:	**-0.131**	**ft**	**Ending Mudline El:**	**-0.131**	**ft**	**Ending Mudline El:**	**-0.141**	**ft**	**Ending Mudline El:**	**-0.148**	**ft**	**Ending Mudline El:**	**-0.164**	**ft**
PSDDF Settlement:	0.053	ft	PSDDF Settlement:	0.075	ft	PSDDF Settlement:	0.095	ft	PSDDF Settlement:	0.099	ft	PSDDF Settlement:	0.279	ft
Ending Fill El:	**0.900**	**ft**	**Ending Fill El:**	**0.878**	**ft**	**Ending Fill El:**	**0.848**	**ft**	**Ending Fill El:**	**0.837**	**ft**	**Ending Fill El:**	**0.641**	**ft**
Ending Fill Thickness:	1.0	ft	Ending Fill Thickness:	1.0	ft	Ending Fill Thickness:	0.99	ft	Ending Fill Thickness:	0.985	ft	Ending Fill Thickness:	0.805	ft
Vv:	0.729		Vv:	0.709		Vv:	0.691		Vv:	0.687		Vv:	0.521	
e:	3.289		e:	3.198		e:	3.115		e:	3.098		e:	2.349	
MC:	1.237		MC:	1.202		MC:	1.171		MC:	1.165		MC:	0.883	
Ending γ:	86.549	pcf	Ending γ:	87.08	pcf	Ending γ:	87.57	pcf	Ending γ:	87.68	pcf	Ending γ:	93.33	pcf
Effective Stress:	56.068	psf	Effective Stress:	54.70	psf	Effective Stress:	52.84	psf	Effective Stress:	52.14	psf	Effective Stress:	39.93	psf
	0.056	ksf		0.055	ksf		0.053	ksf		0.052	ksf		0.040	ksf

210 to 395 days			**395 to 760 days**			**760 to 1125 days**			**1125 to 1855 days**			**1855 to 3680 days**		
Water Elevation	0.4	ft	**Water Elevation**	0.4	ft	**Water Elevation**	0.4	ft	**Water Elevation**	0.4	ft	**Water Elevation**	0.4	ft
Total Foundation Settlement:	0.133	ft	Total Foundation Settlement:	0.122	ft	Total Foundation Settlement:	0.122	ft	Total Foundation Settlement:	0.122	ft	Total Foundation Settlement:	0.122	ft
Ending Mudline El:	**-0.164**	**ft**	**Ending Mudline El:**	**-0.164**	**ft**	**Ending Mudline El:**	**-0.164**	**ft**	**Ending Mudline El:**	**-0.164**	**ft**	**Ending Mudline El:**	**-0.164**	**ft**
PSDDF Settlement:	0.32	ft	PSDDF Settlement:	0.32	ft	PSDDF Settlement:	0.32	ft	PSDDF Settlement:	0.32	ft	PSDDF Settlement:	0.32	ft
Ending Fill El:	**0.600**	**ft**	**Ending Fill El:**	**0.600**	**ft**	**Ending Fill El:**	**0.600**	**ft**	**Ending Fill El:**	**0.600**	**ft**	**Ending Fill El:**	**0.600**	**ft**
Ending Fill Thickness:	0.764	ft	Ending Fill Thickness:	0.764	ft	Ending Fill Thickness:	0.76	ft	Ending Fill Thickness:	0.764	ft	Ending Fill Thickness:	0.764	ft
Vv:	0.483		Vv:	0.483		Vv:	0.483		Vv:	0.483		Vv:	0.483	
e:	2.178		e:	2.178		e:	2.178		e:	2.178		e:	2.178	
MC:	0.819		MC:	0.819		MC:	0.819		MC:	0.819		MC:	0.819	
Ending γ:	94.99	pcf	Ending γ:	94.99	pcf	Ending γ:	94.99	pcf	Ending γ:	94.99	pcf	Ending γ:	94.99	pcf
Effective Stress:	37.37	psf	Effective Stress:	37.37	psf	Effective Stress:	37.37	psf	Effective Stress:	37.37	psf	Effective Stress:	37.37	psf
	0.037	ksf		0.037	ksf		0.037	ksf		0.037	ksf		0.037	ksf

3680 to 7330 days			**7330 to days**			**to days**			**to days**			**to days**		
Water Elevation	0.4	ft	**Water Elevation**	0.4	ft	**Water Elevation**	0.4	ft	**Water Elevation**	0.4	ft	**Water Elevation**	0.4	ft
Total Foundation Settlement:	0.122	ft	Total Foundation Settlement:	0.000	ft	Total Foundation Settlement:	0.000	ft	Total Foundation Settlement:	0.000	ft	Total Foundation Settlement:	0.000	ft
Ending Mudline El:	**-0.164**	**ft**	**Ending Mudline El:**	**-0.164**	**ft**	**Ending Mudline El:**	**-0.164**	**ft**	**Ending Mudline El:**	**-0.164**	**ft**	**Ending Mudline El:**	**-0.164**	**ft**
PSDDF Settlement:	0.32	ft	PSDDF Settlement:	0	ft	PSDDF Settlement:	0	ft	PSDDF Settlement:	0	ft	PSDDF Settlement:	0	ft
Ending Fill El:	**0.600**	**ft**	**Ending Fill El:**	**0.920**	**ft**	**Ending Fill El:**	**0.920**	**ft**	**Ending Fill El:**	**0.919988655**	**ft**	**Ending Fill El:**	**0.920**	**ft**
Ending Fill Thickness:	0.764	ft	Ending Fill Thickness:	1.084	ft	Ending Fill Thickness:	1.084	ft	Ending Fill Thickness:	1.084	ft	Ending Fill Thickness:	1.084	ft
Vv:	0.483		Vv:	0.778		Vv:	0.778		Vv:	0.778		Vv:	0.778	
e:	2.178		e:	3.510		e:	3.510		e:	3.510		e:	3.510	
MC:	0.819		MC:	1.320		MC:	1.320		MC:	1.320		MC:	1.320	
Ending γ:	94.99	pcf	Ending γ:	85.37	pcf	Ending γ:	85.37	pcf	Ending γ:	85.37	pcf	Ending γ:	85.37	pcf
Effective Stress:	37.37	psf	Effective Stress:	57.34	psf	Effective Stress:	57.34	psf	Effective Stress:	57.34	psf	Effective Stress:	57.34	psf
	0.037	ksf		0.057	ksf		0.057	ksf		0.057	ksf		0.057	ksf

Project: TE-117 Island Road Marsh Creation
GEI Project No.: 16715-040-03
Boring Id: Profile 2 Mudline +0.0
Mudline Elevation 0 feet
Initial Fill El = 1 ft

Example Calculation: Tv = 0.4*15/(4^2) =0.375
Layer 1 Time 15 days U (%) = 100-10^((1.781-0.375)/0.933) =67.866 > 60
Settlement with time = 0.679*0.374 = 0.254

$$T_v = \frac{c_v t}{H_{dr}^{\ 2}} = time\ factor$$

$$For\ U = 0\ to\ 60\%, \quad U\% = 100 * \left(4T_v/\pi\right)^{0.5}$$

$$For\ U > 60\%, \quad U\% = 100 - 10^{\left(\frac{1.781 - T_v}{0.933}\right)}$$

	Layer 1 Total Layer Sett @ (days)	Settlement (inches)		Layer 2 Total Layer Se (days)	Settlement (inches)		Layer 3 Total Layer Sc (days)	Settlement (inches)		Layer 4 Total Layer Sett @ (days)	Settlement (inches)		Layer 5 Total Layer Sett @ (days)	Settlement (inches)	
	15	0.374	(from SETANL)	15	0.555	(from SETANL)	15	0.171	(from SETANL)	15	0.000	(from SETANL)	15	0.061	(from SETANL)
	45	0.390		45	0.567		45	0.176		45	0.000		45	0.062	
	60	0.339		60	0.530		60	0.162		60	0.000		60	0.057	
	90	0.322		90	0.517		90	0.157		90	0.000		90	0.055	
	120	0.312		120	0.510		120	0.154		120	0.000		120	0.054	
	210	0.312		210	0.510		210	0.154		210	0.000		210	0.054	
	395	0.202		395	0.434		395	0.127		395	0.000		395	0.043	
	760	0.168		760	0.411		760	0.119		760	0.000		760	0.040	
	1125	0.168		1125	0.411		1125	0.119		1125	0.000		1125	0.040	
	1855	0.168		1855	0.411		1855	0.119		1855	0.000		1855	0.040	
	3680	0.168		3680	0.411		3680	0.119		3680	0.000		3680	0.040	
	7330	0.168		7330	0.411		7330	0.119		7330	0.000		7330	0.040	
	0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
	0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
	0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
	0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
	0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
	0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
	0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
Cv:	0.4	ft^2/day		0.08	ft^2/day		0.75	ft^2/day		0.1	ft^2/day		0.1	ft^2/day	
Hdr:	4	ft		3	ft		0.01	ft		5	ft		5	ft	

time, t (days)	Tv	U	Settlement with Time	Tv	U	Settlement with Time	Tv	U	Settlement with Time	Tv	U	Settlement with Time	Tv	U	Settlement with Time
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
15	0.38	67.9	0.254	0.13	41.2	0.229	112500.00	100.0	0.171	0.06	27.6	0.000	0.06	27.6	0.017
45	1.13	95.0	0.370	0.40	69.8	0.396	337500.00	100.0	0.176	0.18	47.9	0.000	0.18	47.9	0.030
60	1.50	98.0	0.332	0.53	78.3	0.415	450000.00	100.0	0.162	0.24	55.3	0.000	0.24	55.3	0.032
90	2.25	99.7	0.321	0.80	88.7	0.459	675000.00	100.0	0.157	0.36	66.7	0.000	0.36	66.7	0.037
120	3.00	100.0	0.312	1.07	94.2	0.480	900000.00	100.0	0.154	0.48	75.2	0.000	0.48	75.2	0.041
210	5.25	100.0	0.312	1.87	99.2	0.506	1575000.00	100.0	0.154	0.84	89.8	0.000	0.84	89.8	0.048
395	9.88	100.0	0.202	3.51	100.0	0.434	2962500.00	100.0	0.127	1.58	98.4	0.000	1.58	98.4	0.042
760	19.00	100.0	0.168	6.76	100.0	0.411	5700000.00	100.0	0.119	3.04	100.0	0.000	3.04	100.0	0.040
1125	28.13	100.0	0.168	10.00	100.0	0.411	8437500.00	100.0	0.119	4.50	100.0	0.000	4.50	100.0	0.040
1855	46.38	100.0	0.168	16.49	100.0	0.411	##########	100.0	0.119	7.42	100.0	0.000	7.42	100.0	0.040
3680	92.00	100.0	0.168	32.71	100.0	0.411	##########	100.0	0.119	14.72	100.0	0.000	14.72	100.0	0.040
7330	183.25	100.0	0.168	65.16	100.0	0.411	##########	100.0	0.119	29.32	100.0	0.000	29.32	100.0	0.040
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000

	Layer 6 Total Layer Sett @ (days)	Settlement (inches)		Layer 7 Total Layer Se (days)	Settlement (inches)		Layer 8 Total Layer Sc (days)	Settlement (inches)		Layer 9 Total Layer Sett @ (days)	Settlement (inches)		Layer 10 Total Layer Sett @ (days)	Settlement (inches)	
	15	0.048		15	0.309		15	0.413		15	0.312		15	0.135	
	45	0.049		45	0.324		45	0.427		45	0.322		45	0.140	
	60	0.045		60	0.277		60	0.385		60	0.292		60	0.125	
	90	0.043		90	0.262		90	0.371		90	0.281		90	0.121	
	120	0.042		120	0.254		120	0.364		120	0.276		120	0.118	
	210	0.042		210	0.254		210	0.364		210	0.276		210	0.118	
	395	0.034		395	0.167		395	0.287		395	0.220		395	0.091	
	760	0.031		760	0.143		760	0.266		760	0.204		760	0.084	
	1125	0.031		1125	0.143		1125	0.266		1125	0.204		1125	0.084	
	1855	0.031		1855	0.143		1855	0.266		1855	0.204		1855	0.084	
	3680	0.031		3680	0.143		3680	0.266		3680	0.204		3680	0.084	
	7330	0.031		7330	0.143		7330	0.266		7330	0.204		7330	0.084	
	0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
	0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
	0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
	0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
	0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
	0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
	0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
Cv:	0.1	ft^2/day		0.1	ft^2/day		0.1	ft^2/day		0.1	ft^2/day		0.1	ft^2/day	
Hdr:	5	ft		5	ft		5	ft		5	ft		5	ft	

time, t (days)	Tv	U	Settlement with Time	Tv	U	Settlement with Time	Tv	U	Settlement with Time	Tv	U	Settlement with Time	Tv	U	Settlement with Time
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
15	0.06	27.6	0.013	0.06	27.6	0.085	0.06	27.6	0.114	0.06	27.6	0.086	0.06	27.6	0.037
45	0.18	47.9	0.023	0.18	47.9	0.155	0.18	47.9	0.204	0.18	47.9	0.154	0.18	47.9	0.067
60	0.24	55.3	0.025	0.24	55.3	0.153	0.24	55.3	0.213	0.24	55.3	0.161	0.24	55.3	0.069
90	0.36	66.7	0.029	0.36	66.7	0.175	0.36	66.7	0.247	0.36	66.7	0.187	0.36	66.7	0.081
120	0.48	75.2	0.032	0.48	75.2	0.191	0.48	75.2	0.274	0.48	75.2	0.208	0.48	75.2	0.089
210	0.84	89.8	0.038	0.84	89.8	0.228	0.84	89.8	0.327	0.84	89.8	0.248	0.84	89.8	0.106
395	1.58	98.4	0.033	1.58	98.4	0.164	1.58	98.4	0.282	1.58	98.4	0.216	1.58	98.4	0.090
760	3.04	100.0	0.031	3.04	100.0	0.143	3.04	100.0	0.266	3.04	100.0	0.204	3.04	100.0	0.084
1125	4.50	100.0	0.031	4.50	100.0	0.143	4.50	100.0	0.266	4.50	100.0	0.204	4.50	100.0	0.084
1855	7.42	100.0	0.031	7.42	100.0	0.143	7.42	100.0	0.266	7.42	100.0	0.204	7.42	100.0	0.084
3680	14.72	100.0	0.031	14.72	100.0	0.143	14.72	100.0	0.266	14.72	100.0	0.204	14.72	100.0	0.084
7330	29.32	100.0	0.031	29.32	100.0	0.143	29.32	100.0	0.266	29.32	100.0	0.204	29.32	100.0	0.084
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000

PSDDF results: 30

Average Void Ratio at 30 days = 3.509899

PSDDF Time (days)	Total Settlement (feet)	Post construction Settlement
30	0.689	0
45	0.742	0.053
60	0.764	0.075
90	0.784	0.095
120	0.788	0.099
210	0.968	0.279
395	1.009	0.32
760	1.009	0.32
1125	1.009	0.32
1855	1.009	0.32
3680	1.009	0.32
7330	1.009	0.32

Project:	TE-117 Island Road Marsh Creation	
GEI Project No.:	16715-040-03	
Boring Id:	Profile 2 Mudline +0.0	
. Mudline Elevation:	0	feet
Initial Fill El:	1	feet
Waterline El:	0.4	feet
PSDDF delay:	0	days

Drainage Parameters

	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6	Layer 7	Layer 8	Layer 9	Layer 10	
Cv	0.4	0.08	0.75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	ft^2/day
Hdr	4	3	0.01	5	5	5	5	5	5	5	ft

Time (days)	**Settlement (inches)**										
(Real Time)	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6	Layer 7	Layer 8	Layer 9	Layer 10	Total
15	0.374	0.555	0.171	0	0.061	0.048	0.309	0.413	0.312	0.135	0.129
45	0.39	0.567	0.176	0	0.062	0.049	0.324	0.427	0.322	0.14	0.133
60	0.339	0.53	0.162	0	0.057	0.045	0.277	0.385	0.292	0.125	0.121
90	0.322	0.517	0.157	0	0.055	0.043	0.262	0.371	0.281	0.121	0.116
120	0.312	0.51	0.154	0	0.054	0.042	0.254	0.364	0.276	0.118	0.114
210	0.312	0.51	0.154	0	0.054	0.042	0.254	0.364	0.276	0.118	0.114
395	0.202	0.434	0.127	0	0.043	0.034	0.167	0.287	0.22	0.091	0.091
760	0.168	0.411	0.119	0	0.04	0.031	0.143	0.266	0.204	0.084	0.084
1125	0.168	0.411	0.119	0	0.04	0.031	0.143	0.266	0.204	0.084	0.084
1855	0.168	0.411	0.119	0	0.04	0.031	0.143	0.266	0.204	0.084	0.084
3680	0.168	0.411	0.119	0	0.04	0.031	0.143	0.266	0.204	0.084	0.084
7330	0.168	0.411	0.119	0	0.04	0.031	0.143	0.266	0.204	0.084	0.084

****
Consolidation and desiccation of soft layers---dredged fill
****

Problem Island Road Marsh Creation Profile 2 Mudline +0.0 Marsh Fill

**********Soil data for dredged fill**********

Material Type	Specific Gravity	Ca/Cc	Cr/Cc	Saturation Limit	Disication Limit	Max. Crust Depth	Saturation at DL
1	2.660	0.031	0.052	2.736	1.830	0.767	0.349

Material type : 1

I	Void Ratio	Effective Stress	Perm-eability	k/1+e PK	Beta	Dsde	Alpha
1	6.540	0.000E+00	0.342E+01	0.454E+00	0.185E+00-0.413E+00-0.187E+00		
2	4.120	0.100E+01	0.335E-01	0.654E-02	0.161E+00-0.717E+00-0.469E-02		
3	3.750	0.200E+01	0.167E-01	0.352E-02	0.586E-02-0.471E+01-0.165E-01		
4	3.270	0.500E+01	0.666E-02	0.156E-02	0.317E-02-0.952E+01-0.149E-01		
5	2.910	0.100E+02	0.332E-02	0.849E-03	0.149E-02-0.205E+02-0.174E-01		
6	2.540	0.200E+02	0.166E-02	0.469E-03	0.931E-03-0.345E+02-0.162E-01		
7	2.330	0.300E+02	0.103E-02	0.309E-03	0.581E-03-0.556E+02-0.172E-01		
8	2.180	0.400E+02	0.826E-03	0.260E-03	0.313E-03-0.962E+02-0.250E-01		
9	1.810	0.800E+02	0.412E-03	0.147E-03	0.241E-03-0.164E+03-0.241E-01		
10	1.450	0.160E+03	0.205E-03	0.837E-04	0.136E-03-0.333E+03-0.279E-01		
11	1.090	0.320E+03	0.102E-03	0.488E-04	0.740E-04-0.658E+03-0.321E-01		
12	0.720	0.640E+03	0.510E-04	0.297E-04	0.518E-04-0.865E+03-0.256E-01		

Summary of lifts and print detail

Time days	Material Type	Fill Height	# Sub-layers	Void ratio	Start Day	Dessic. Month	Print detail
0.	1	0.1	4	6.54	120.	5	1
8.	1	0.4	20	6.54	120.	5	1
15.	1	0.4	20	6.54	120.	5	1
22.	1	0.4	30	6.54	120.	5	1
29.	1	0.4	20	6.54	120.	5	1
30.					120.	5	1
45.					120.	5	1
60.					120.	5	1
90.					120.	5	1
120.					120.	5	1
210.					120.	5	1
395.					120.	5	1
760.					120.	5	1
1125.					120.	5	1
1855.					120.	5	1
3680.					120.	5	1
7330.					120.	5	1

Summary of monthly rainfall and evaporation potential

Month	Rainfall	Evaporation
1	0.430	0.190
2	0.400	0.280
3	0.390	0.400
4	0.270	0.540
5	0.260	0.600
6	0.430	0.640
7	0.630	0.560
8	0.530	0.530
9	0.510	0.460

10	0.370	0.440	
11	0.320	0.290	
12	0.440	0.210	

**********Calculation data**********

tau	Lower layer Void ratio	Lower layer Permeability	drainage path Length
.515E-03	4.990	0.10000E-04	z = 1.17

Summary of desiccation parameters

Parameter	Value
Surface Drainage Efficiency	0.80
maximum evaporation efficiency	0.75
time to desic. after initial fill	120.00
month of initial desiccation	5
elevation of fixed water table	0.40
elevation of top of incompres. found.	0.00

**********Initial Conditions in Dredged Fill**********

***** Coordinates ***** A	XI	Z	***** Void Ratios ***** Einitial	E	Eeop	Material
0.10	0.10	0.01	6.54	6.54	6.54	1
0.08	0.08	0.01	6.54	6.54	5.71	1
0.05	0.05	0.01	6.54	6.54	4.88	1

0.03	0.03	0.00	6.54	6.54	4.11	1
0.00	0.00	0.00	6.54	6.54	3.98	1

***** Stresses ***** XI	Total	Effective	***** Pore Pressures ***** Total	Static	Excess	Material
0.10	18.72	0.00	18.72	18.72	0.00	1
0.08	20.62	0.00	20.62	20.28	0.34	1
0.05	22.53	0.00	22.53	21.84	0.69	1
0.03	24.43	0.00	24.43	23.40	1.03	1
0.00	26.33	0.00	26.33	24.96	1.37	1

Time = 0. Degree of Consolidation = 0.%

Total Settlement = 0.000

Settlement at End of Primary Consolidation = 0.021

Settlement caused by Primary Consolidation at time 0. = 0.000

Settlement caused by Secondary Compression at time 0. = 0.000

**********Current Conditions in Dredged Fill**********

***** Coordinates ***** A	XI	Z	***** Void Ratios ***** Einitial	E	Eeop	Material
0.10	0.08	0.01	6.54	6.54	6.54	1
0.08	0.06	0.01	6.54	5.74	5.71	1
0.05	0.03	0.01	6.54	4.94	4.88	1
0.03	0.02	0.00	6.54	4.11	4.11	1
0.00	0.00	0.00	6.54	3.98	3.98	1

***** Stresses ***** XI	Total	Effective	***** Pore Pressures ***** Total	Static	Excess	Material
0.08	20.01	0.00	20.01	20.01	0.00	1
0.06	21.82	0.33	21.49	21.48	0.01	1
0.03	23.48	0.66	22.82	22.80	0.03	1
0.02	24.97	1.03	23.93	23.93	0.00	1
0.00	26.33	1.37	24.96	24.96	0.00	1

Time = 8. Degree of Consolidation = 99.%

Total Settlement = 0.021

Settlement at End of Primary Consolidation = 0.021

Settlement caused by Primary Consolidation at time 8. = 0.021

Settlement caused by Secondary Compression at time 8. = 0.000

Surface Elevation = 0.08

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
0.50	0.32	0.07	6.54	6.54	6.54	1
0.48	0.30	0.06	6.54	5.91	5.88	1
0.46	0.28	0.06	6.54	5.29	5.21	1
0.44	0.26	0.06	6.54	4.67	4.55	1
0.42	0.25	0.06	6.54	4.08	4.08	1
0.40	0.24	0.05	6.54	3.98	3.98	1
0.38	0.22	0.05	6.54	3.88	3.88	1
0.36	0.21	0.05	6.54	3.78	3.78	1
0.34	0.20	0.05	6.54	3.73	3.72	1
0.32	0.19	0.04	6.54	3.68	3.67	1
0.30	0.17	0.04	6.54	3.63	3.63	1
0.28	0.16	0.04	6.54	3.59	3.59	1
0.26	0.15	0.03	6.54	3.54	3.54	1
0.24	0.14	0.03	6.54	3.50	3.50	1
0.22	0.12	0.03	6.54	3.46	3.45	1
0.20	0.11	0.03	6.54	3.42	3.41	1
0.18	0.10	0.02	6.54	3.38	3.37	1
0.16	0.09	0.02	6.54	3.34	3.32	1
0.14	0.08	0.02	6.54	3.31	3.28	1
0.12	0.07	0.02	6.54	3.28	3.25	1
0.10	0.06	0.01	6.54	3.25	3.23	1
0.10	0.06	0.01	6.54	3.25	3.23	1
0.08	0.04	0.01	6.54	3.22	3.21	1
0.05	0.03	0.01	6.54	3.19	3.18	1
0.03	0.01	0.00	6.54	3.16	3.16	1

0.00	0.00	0.00	6.54	3.14	3.14	1

***** Stresses *****			***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
0.32	5.22	0.00	5.22	5.22	0.00	1
0.30	6.69	0.26	6.43	6.41	0.01	1
0.28	8.05	0.52	7.54	7.51	0.03	1
0.26	9.33	0.77	8.56	8.50	0.05	1
0.25	10.48	1.10	9.38	9.38	0.00	1
0.24	11.59	1.37	10.22	10.22	0.00	1
0.22	12.68	1.65	11.03	11.03	0.00	1
0.21	13.76	1.91	11.85	11.83	0.02	1
0.20	14.82	2.14	12.68	12.62	0.06	1
0.19	15.87	2.46	13.41	13.40	0.02	1
0.17	16.92	2.75	14.17	14.17	0.00	1
0.16	17.95	3.02	14.93	14.93	0.00	1
0.15	18.98	3.30	15.69	15.69	0.00	1
0.14	20.01	3.57	16.43	16.43	0.00	1
0.12	21.02	3.84	17.19	17.18	0.01	1
0.11	22.03	4.08	17.95	17.91	0.04	1
0.10	23.03	4.32	18.72	18.64	0.08	1
0.09	24.03	4.54	19.49	19.36	0.13	1
0.08	25.02	4.74	20.28	20.08	0.20	1
0.07	26.01	4.94	21.06	20.79	0.28	1
0.06	26.99	5.29	21.70	21.49	0.21	1
0.06	26.99	5.29	21.70	21.49	0.21	1
0.04	28.21	5.72	22.48	22.37	0.12	1
0.03	29.42	6.13	23.29	23.24	0.06	1
0.01	30.63	6.50	24.12	24.10	0.02	1
0.00	31.83	6.86	24.97	24.96	0.01	1

Time = 15. Degree of Consolidation = 99.%

Total Settlement = 0.184

Settlement at End of Primary Consolidation = 0.185

Settlement caused by Primary Consolidation at time 15. = 0.184

Settlement caused by Secondary Compression at time 15. = 0.000

Surface Elevation = 0.32

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
0.90	0.54	0.12	6.54	6.54	6.54	1
0.88	0.52	0.12	6.54	5.91	5.88	1
0.86	0.51	0.11	6.54	5.29	5.21	1
0.84	0.49	0.11	6.54	4.67	4.55	1
0.82	0.48	0.11	6.54	4.08	4.08	1
0.80	0.46	0.11	6.54	3.98	3.98	1
0.78	0.45	0.10	6.54	3.88	3.88	1
0.76	0.44	0.10	6.54	3.80	3.78	1
0.74	0.42	0.10	6.54	3.75	3.72	1
0.72	0.41	0.10	6.54	3.71	3.67	1
0.70	0.40	0.09	6.54	3.68	3.63	1
0.68	0.39	0.09	6.54	3.64	3.59	1
0.66	0.37	0.09	6.54	3.61	3.54	1
0.64	0.36	0.08	6.54	3.58	3.50	1
0.62	0.35	0.08	6.54	3.55	3.45	1
0.60	0.34	0.08	6.54	3.53	3.41	1
0.58	0.33	0.08	6.54	3.50	3.37	1
0.56	0.31	0.07	6.54	3.48	3.32	1
0.54	0.30	0.07	6.54	3.46	3.28	1
0.52	0.29	0.07	6.54	3.44	3.25	1
0.50	0.28	0.07	6.54	3.42	3.23	1
0.50	0.28	0.07	6.54	3.42	3.23	1
0.48	0.27	0.06	6.54	3.40	3.21	1
0.46	0.25	0.06	6.54	3.38	3.19	1
0.44	0.24	0.06	6.54	3.36	3.17	1
0.42	0.23	0.06	6.54	3.34	3.16	1
0.40	0.22	0.05	6.54	3.32	3.14	1
0.38	0.21	0.05	6.54	3.30	3.12	1
0.36	0.20	0.05	6.54	3.29	3.10	1
0.34	0.19	0.05	6.54	3.27	3.08	1
0.32	0.17	0.04	6.54	3.25	3.06	1
0.30	0.16	0.04	6.54	3.23	3.04	1
0.28	0.15	0.04	6.54	3.22	3.02	1
0.26	0.14	0.03	6.54	3.20	3.00	1
0.24	0.13	0.03	6.54	3.18	2.98	1
0.22	0.12	0.03	6.54	3.17	2.96	1
0.20	0.11	0.03	6.54	3.15	2.94	1
0.18	0.10	0.02	6.54	3.14	2.92	1
0.16	0.09	0.02	6.54	3.12	2.90	1
0.14	0.08	0.02	6.54	3.10	2.89	1
0.12	0.06	0.02	6.54	3.09	2.88	1

0.10	0.05	0.01	6.54	3.07	2.87	1
0.10	0.05	0.01	6.54	3.07	2.87	1
0.08	0.04	0.01	6.54	3.05	2.86	1
0.05	0.03	0.01	6.54	3.03	2.85	1
0.03	0.01	0.00	6.54	3.01	2.84	1
0.00	0.00	0.00	6.54	3.00	2.82	1

***** Stresses *****			***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
0.54	0.00	0.00	0.00	0.00	0.00	1
0.52	1.47	0.26	1.21	1.20	0.01	1
0.51	2.84	0.52	2.32	2.29	0.03	1
0.49	4.11	0.77	3.34	3.29	0.05	1
0.48	5.27	1.10	4.17	4.17	0.00	1
0.46	6.37	1.37	5.00	5.00	0.00	1
0.45	7.46	1.65	5.82	5.82	0.00	1
0.44	8.54	1.88	6.66	6.62	0.05	1
0.42	9.60	2.00	7.61	7.41	0.20	1
0.41	10.66	2.24	8.42	8.19	0.23	1
0.40	11.71	2.47	9.25	8.97	0.28	1
0.39	12.76	2.68	10.08	9.74	0.35	1
0.37	13.80	2.87	10.93	10.50	0.43	1
0.36	14.84	3.05	11.78	11.26	0.52	1
0.35	15.87	3.22	12.64	12.02	0.63	1
0.34	16.89	3.38	13.51	12.77	0.74	1
0.33	17.91	3.53	14.38	13.52	0.86	1
0.31	18.93	3.68	15.26	14.26	0.99	1
0.30	19.95	3.81	16.13	15.00	1.13	1
0.29	20.96	3.95	17.01	15.74	1.27	1
0.28	21.97	4.07	17.89	16.47	1.42	1
0.28	21.97	4.07	17.89	16.47	1.42	1
0.27	22.97	4.20	18.77	17.20	1.57	1
0.25	23.97	4.32	19.65	17.93	1.72	1
0.24	24.97	4.45	20.52	18.65	1.87	1
0.23	25.96	4.56	21.40	19.37	2.03	1
0.22	26.96	4.68	22.28	20.09	2.19	1
0.21	27.94	4.79	23.15	20.80	2.35	1
0.20	28.93	4.90	24.03	21.51	2.52	1
0.19	29.91	5.03	24.88	22.22	2.66	1
0.17	30.89	5.27	25.62	22.92	2.70	1
0.16	31.87	5.51	26.36	23.63	2.73	1
0.15	32.84	5.74	27.10	24.33	2.77	1
0.14	33.81	5.98	27.84	25.02	2.82	1
0.13	34.78	6.20	28.58	25.72	2.86	1
0.12	35.75	6.43	29.32	26.41	2.91	1
0.11	36.71	6.65	30.06	27.10	2.96	1

0.10	37.67	6.87	30.80	27.78	3.02	1
0.09	38.63	7.09	31.54	28.46	3.07	1
0.08	39.59	7.31	32.27	29.15	3.13	1
0.06	40.54	7.53	33.01	29.82	3.19	1
0.05	41.49	7.74	33.74	30.50	3.25	1
0.05	41.49	7.74	33.74	30.50	3.25	1
0.04	42.67	8.01	34.66	31.34	3.32	1
0.03	43.85	8.28	35.57	32.18	3.39	1
0.01	45.03	8.55	36.48	33.01	3.47	1
0.00	46.20	8.82	37.38	33.84	3.55	1

Time = 22. Degree of Consolidation = 95.%

Total Settlement = 0.358

Settlement at End of Primary Consolidation = 0.375

Settlement caused by Primary Consolidation at time 22. = 0.358

Settlement caused by Secondary Compression at time 22. = 0.000

Surface Elevation = 0.54

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
1.30	0.76	0.17	6.54	6.54	6.54	1
1.29	0.75	0.17	6.54	6.12	6.10	1
1.27	0.74	0.17	6.54	5.70	5.65	1
1.26	0.73	0.17	6.54	5.29	5.21	1
1.25	0.72	0.17	6.54	4.88	4.77	1
1.23	0.71	0.16	6.54	4.47	4.32	1
1.22	0.70	0.16	6.54	4.08	4.08	1
1.21	0.69	0.16	6.54	4.02	4.02	1
1.19	0.68	0.16	6.54	3.95	3.95	1
1.18	0.67	0.16	6.54	3.88	3.88	1
1.17	0.66	0.15	6.54	3.82	3.81	1
1.15	0.65	0.15	6.54	3.78	3.75	1
1.14	0.64	0.15	6.54	3.76	3.72	1
1.13	0.64	0.15	6.54	3.74	3.69	1
1.11	0.63	0.15	6.54	3.72	3.66	1

1.10	0.62	0.15	6.54	3.70	3.63	1
1.09	0.61	0.14	6.54	3.68	3.60	1
1.07	0.60	0.14	6.54	3.66	3.57	1
1.06	0.59	0.14	6.54	3.64	3.54	1
1.05	0.59	0.14	6.54	3.63	3.51	1
1.03	0.58	0.14	6.54	3.61	3.48	1
1.02	0.57	0.14	6.54	3.60	3.45	1
1.01	0.56	0.13	6.54	3.58	3.43	1
0.99	0.55	0.13	6.54	3.57	3.40	1
0.98	0.55	0.13	6.54	3.56	3.37	1
0.97	0.54	0.13	6.54	3.54	3.34	1
0.95	0.53	0.13	6.54	3.53	3.31	1
0.94	0.52	0.12	6.54	3.52	3.28	1
0.93	0.51	0.12	6.54	3.51	3.26	1
0.91	0.51	0.12	6.54	3.50	3.25	1
0.90	0.50	0.12	6.54	3.48	3.23	1
0.90	0.50	0.12	6.54	3.48	3.23	1
0.88	0.49	0.12	6.54	3.47	3.21	1
0.86	0.47	0.11	6.54	3.45	3.19	1
0.84	0.46	0.11	6.54	3.44	3.17	1
0.82	0.45	0.11	6.54	3.42	3.16	1
0.80	0.44	0.11	6.54	3.41	3.14	1
0.78	0.43	0.10	6.54	3.39	3.12	1
0.76	0.42	0.10	6.54	3.38	3.10	1
0.74	0.40	0.10	6.54	3.36	3.08	1
0.72	0.39	0.10	6.54	3.35	3.06	1
0.70	0.38	0.09	6.54	3.33	3.04	1
0.68	0.37	0.09	6.54	3.32	3.02	1
0.66	0.36	0.09	6.54	3.31	3.00	1
0.64	0.35	0.08	6.54	3.29	2.98	1
0.62	0.34	0.08	6.54	3.28	2.96	1
0.60	0.32	0.08	6.54	3.27	2.94	1
0.58	0.31	0.08	6.54	3.25	2.92	1
0.56	0.30	0.07	6.54	3.24	2.90	1
0.54	0.29	0.07	6.54	3.22	2.89	1
0.52	0.28	0.07	6.54	3.21	2.88	1
0.50	0.27	0.07	6.54	3.20	2.87	1
0.50	0.27	0.07	6.54	3.20	2.87	1
0.48	0.26	0.06	6.54	3.19	2.86	1
0.46	0.25	0.06	6.54	3.17	2.85	1
0.44	0.23	0.06	6.54	3.16	2.84	1
0.42	0.22	0.06	6.54	3.15	2.83	1
0.40	0.21	0.05	6.54	3.13	2.82	1
0.38	0.20	0.05	6.54	3.12	2.81	1
0.36	0.19	0.05	6.54	3.11	2.80	1
0.34	0.18	0.05	6.54	3.09	2.79	1
0.32	0.17	0.04	6.54	3.08	2.78	1
0.30	0.16	0.04	6.54	3.07	2.77	1

0.28	0.15	0.04	6.54	3.06	2.76	1
0.26	0.14	0.03	6.54	3.04	2.75	1
0.24	0.13	0.03	6.54	3.03	2.74	1
0.22	0.12	0.03	6.54	3.02	2.73	1
0.20	0.10	0.03	6.54	3.01	2.72	1
0.18	0.09	0.02	6.54	2.99	2.71	1
0.16	0.08	0.02	6.54	2.98	2.70	1
0.14	0.07	0.02	6.54	2.97	2.69	1
0.12	0.06	0.02	6.54	2.96	2.68	1
0.10	0.05	0.01	6.54	2.94	2.67	1
0.10	0.05	0.01	6.54	2.94	2.67	1
0.08	0.04	0.01	6.54	2.93	2.66	1
0.05	0.03	0.01	6.54	2.91	2.64	1
0.03	0.01	0.00	6.54	2.90	2.63	1
0.00	0.00	0.00	6.54	2.88	2.62	1

***** Stresses *****			***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
0.76	0.00	0.00	0.00	0.00	0.00	1
0.75	0.99	0.17	0.82	0.81	0.01	1
0.74	1.94	0.35	1.59	1.57	0.02	1
0.73	2.84	0.52	2.32	2.29	0.03	1
0.72	3.69	0.69	3.01	2.96	0.05	1
0.71	4.51	0.86	3.65	3.59	0.06	1
0.70	5.27	1.10	4.17	4.17	0.00	1
0.69	6.01	1.28	4.72	4.72	0.00	1
0.68	6.74	1.47	5.27	5.27	0.00	1
0.67	7.47	1.65	5.82	5.82	0.00	1
0.66	8.18	1.81	6.37	6.35	0.02	1
0.65	8.90	1.91	6.99	6.88	0.11	1
0.64	9.61	1.98	7.63	7.41	0.22	1
0.64	10.31	2.08	8.23	7.93	0.30	1
0.63	11.02	2.21	8.81	8.45	0.35	1
0.62	11.72	2.34	9.38	8.97	0.41	1
0.61	12.42	2.45	9.97	9.49	0.48	1
0.60	13.12	2.56	10.56	10.00	0.55	1
0.59	13.82	2.67	11.15	10.52	0.63	1
0.59	14.51	2.77	11.74	11.03	0.71	1
0.58	15.20	2.87	12.34	11.54	0.80	1
0.57	15.89	2.96	12.94	12.05	0.89	1
0.56	16.58	3.05	13.54	12.55	0.98	1
0.55	17.27	3.13	14.14	13.06	1.08	1
0.55	17.96	3.21	14.74	13.56	1.18	1
0.54	18.64	3.29	15.35	14.06	1.28	1
0.53	19.33	3.37	15.96	14.56	1.39	1
0.52	20.01	3.45	16.56	15.06	1.50	1

0.51	20.69	3.52	17.17	15.56	1.61	1
0.51	21.37	3.59	17.78	16.06	1.72	1
0.50	22.05	3.66	18.39	16.55	1.84	1
0.50	22.05	3.66	18.39	16.55	1.84	1
0.49	23.06	3.76	19.30	17.29	2.01	1
0.47	24.08	3.86	20.21	18.03	2.18	1
0.46	25.09	3.96	21.13	18.77	2.36	1
0.45	26.10	4.06	22.04	19.50	2.54	1
0.44	27.10	4.15	22.95	20.23	2.72	1
0.43	28.10	4.24	23.86	20.96	2.90	1
0.42	29.10	4.33	24.77	21.69	3.09	1
0.40	30.10	4.42	25.68	22.41	3.27	1
0.39	31.10	4.51	26.59	23.13	3.46	1
0.38	32.09	4.60	27.49	23.85	3.64	1
0.37	33.08	4.68	28.40	24.56	3.83	1
0.36	34.07	4.77	29.30	25.28	4.02	1
0.35	35.06	4.86	30.20	25.99	4.21	1
0.34	36.04	4.94	31.10	26.70	4.40	1
0.32	37.02	5.06	31.96	27.41	4.55	1
0.31	38.00	5.25	32.75	28.11	4.64	1
0.30	38.98	5.44	33.54	28.81	4.72	1
0.29	39.96	5.63	34.33	29.51	4.81	1
0.28	40.93	5.81	35.12	30.21	4.90	1
0.27	41.90	6.00	35.90	30.91	4.99	1
0.27	41.90	6.00	35.90	30.91	4.99	1
0.26	42.87	6.18	36.69	31.60	5.09	1
0.25	43.83	6.36	37.47	32.29	5.18	1
0.23	44.80	6.54	38.26	32.98	5.27	1
0.22	45.76	6.72	39.04	33.67	5.37	1
0.21	46.72	6.90	39.82	34.36	5.46	1
0.20	47.68	7.08	40.60	35.04	5.56	1
0.19	48.63	7.26	41.37	35.72	5.65	1
0.18	49.59	7.44	42.15	36.40	5.75	1
0.17	50.54	7.61	42.92	37.08	5.85	1
0.16	51.49	7.79	43.70	37.75	5.95	1
0.15	52.44	7.97	44.47	38.42	6.05	1
0.14	53.38	8.14	45.24	39.09	6.15	1
0.13	54.32	8.32	46.01	39.76	6.25	1
0.12	55.26	8.49	46.77	40.43	6.35	1
0.10	56.20	8.67	47.54	41.09	6.45	1
0.09	57.14	8.84	48.30	41.75	6.55	1
0.08	58.07	9.01	49.06	42.41	6.65	1
0.07	59.01	9.19	49.82	43.07	6.75	1
0.06	59.94	9.36	50.58	43.73	6.85	1
0.05	60.87	9.54	51.33	44.38	6.95	1
0.05	60.87	9.54	51.33	44.38	6.95	1
0.04	62.02	9.75	52.27	45.20	7.08	1
0.03	63.18	9.97	53.21	46.01	7.20	1

0.01	64.33	10.36	53.97	46.81	7.15	1
0.00	65.48	10.79	54.69	47.62	7.07	1

Time = 29. Degree of Consolidation = 93.%

Total Settlement = 0.537

Settlement at End of Primary Consolidation = 0.578

Settlement caused by Primary Consolidation at time 29. = 0.537

Settlement caused by Secondary Compression at time 29. = 0.000

Surface Elevation = 0.76

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
1.70	1.01	0.23	6.54	6.54	6.54	1
1.68	0.99	0.22	6.54	5.91	5.88	1
1.66	0.97	0.22	6.54	5.29	5.21	1
1.64	0.96	0.22	6.54	4.67	4.55	1
1.62	0.94	0.21	6.54	4.08	4.08	1
1.60	0.93	0.21	6.54	3.98	3.98	1
1.58	0.92	0.21	6.54	3.88	3.88	1
1.56	0.91	0.21	6.54	3.83	3.78	1
1.54	0.89	0.20	6.54	3.82	3.72	1
1.52	0.88	0.20	6.54	3.81	3.67	1
1.50	0.87	0.20	6.54	3.80	3.63	1
1.48	0.85	0.20	6.54	3.79	3.59	1
1.46	0.84	0.19	6.54	3.79	3.54	1
1.44	0.83	0.19	6.54	3.78	3.50	1
1.42	0.82	0.19	6.54	3.78	3.45	1
1.40	0.80	0.19	6.54	3.77	3.41	1
1.38	0.79	0.18	6.54	3.77	3.37	1
1.36	0.78	0.18	6.54	3.76	3.32	1
1.34	0.77	0.18	6.54	3.76	3.28	1
1.32	0.75	0.18	6.54	3.75	3.25	1
1.30	0.74	0.17	6.54	3.74	3.23	1
1.30	0.74	0.17	6.54	3.74	3.23	1
1.29	0.73	0.17	6.54	3.74	3.22	1

1.27	0.72	0.17	6.54	3.73	3.21	1
1.26	0.72	0.17	6.54	3.73	3.19	1
1.25	0.71	0.17	6.54	3.72	3.18	1
1.23	0.70	0.16	6.54	3.71	3.17	1
1.22	0.69	0.16	6.54	3.71	3.16	1
1.21	0.68	0.16	6.54	3.70	3.14	1
1.19	0.67	0.16	6.54	3.69	3.13	1
1.18	0.67	0.16	6.54	3.68	3.12	1
1.17	0.66	0.15	6.54	3.67	3.10	1
1.15	0.65	0.15	6.54	3.66	3.09	1
1.14	0.64	0.15	6.54	3.65	3.08	1
1.13	0.63	0.15	6.54	3.64	3.06	1
1.11	0.62	0.15	6.54	3.63	3.05	1
1.10	0.62	0.15	6.54	3.62	3.04	1
1.09	0.61	0.14	6.54	3.61	3.02	1
1.07	0.60	0.14	6.54	3.60	3.01	1
1.06	0.59	0.14	6.54	3.59	3.00	1
1.05	0.58	0.14	6.54	3.58	2.98	1
1.03	0.58	0.14	6.54	3.57	2.97	1
1.02	0.57	0.14	6.54	3.56	2.96	1
1.01	0.56	0.13	6.54	3.55	2.94	1
0.99	0.55	0.13	6.54	3.53	2.93	1
0.98	0.54	0.13	6.54	3.52	2.92	1
0.97	0.54	0.13	6.54	3.51	2.91	1
0.95	0.53	0.13	6.54	3.50	2.90	1
0.94	0.52	0.12	6.54	3.49	2.89	1
0.93	0.51	0.12	6.54	3.48	2.89	1
0.91	0.50	0.12	6.54	3.47	2.88	1
0.90	0.50	0.12	6.54	3.46	2.87	1
0.90	0.50	0.12	6.54	3.46	2.87	1
0.88	0.48	0.12	6.54	3.44	2.86	1
0.86	0.47	0.11	6.54	3.43	2.85	1
0.84	0.46	0.11	6.54	3.41	2.84	1
0.82	0.45	0.11	6.54	3.40	2.83	1
0.80	0.44	0.11	6.54	3.38	2.82	1
0.78	0.43	0.10	6.54	3.37	2.81	1
0.76	0.41	0.10	6.54	3.35	2.80	1
0.74	0.40	0.10	6.54	3.34	2.79	1
0.72	0.39	0.10	6.54	3.32	2.78	1
0.70	0.38	0.09	6.54	3.31	2.77	1
0.68	0.37	0.09	6.54	3.30	2.76	1
0.66	0.36	0.09	6.54	3.28	2.75	1
0.64	0.35	0.08	6.54	3.27	2.74	1
0.62	0.33	0.08	6.54	3.25	2.73	1
0.60	0.32	0.08	6.54	3.24	2.72	1
0.58	0.31	0.08	6.54	3.23	2.71	1
0.56	0.30	0.07	6.54	3.21	2.70	1
0.54	0.29	0.07	6.54	3.20	2.69	1

0.52	0.28	0.07	6.54	3.19	2.68	1
0.50	0.27	0.07	6.54	3.18	2.67	1
0.50	0.27	0.07	6.54	3.18	2.67	1
0.48	0.26	0.06	6.54	3.16	2.66	1
0.46	0.24	0.06	6.54	3.15	2.65	1
0.44	0.23	0.06	6.54	3.14	2.64	1
0.42	0.22	0.06	6.54	3.13	2.63	1
0.40	0.21	0.05	6.54	3.11	2.62	1
0.38	0.20	0.05	6.54	3.10	2.61	1
0.36	0.19	0.05	6.54	3.09	2.60	1
0.34	0.18	0.05	6.54	3.08	2.59	1
0.32	0.17	0.04	6.54	3.06	2.58	1
0.30	0.16	0.04	6.54	3.05	2.57	1
0.28	0.15	0.04	6.54	3.04	2.56	1
0.26	0.14	0.03	6.54	3.03	2.55	1
0.24	0.13	0.03	6.54	3.01	2.54	1
0.22	0.11	0.03	6.54	3.00	2.53	1
0.20	0.10	0.03	6.54	2.99	2.53	1
0.18	0.09	0.02	6.54	2.98	2.52	1
0.16	0.08	0.02	6.54	2.97	2.52	1
0.14	0.07	0.02	6.54	2.95	2.51	1
0.12	0.06	0.02	6.54	2.94	2.50	1
0.10	0.05	0.01	6.54	2.93	2.50	1
0.10	0.05	0.01	6.54	2.93	2.50	1
0.08	0.04	0.01	6.54	2.91	2.49	1
0.05	0.03	0.01	6.54	2.90	2.48	1
0.03	0.01	0.00	6.54	2.88	2.48	1
0.00	0.00	0.00	6.54	2.87	2.47	1

***** Stresses *****			***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
1.01	0.00	0.00	0.00	0.00	0.00	1
0.99	1.47	0.26	1.21	1.20	0.01	1
0.97	2.84	0.52	2.32	2.29	0.03	1
0.96	4.11	0.77	3.34	3.29	0.05	1
0.94	5.27	1.10	4.17	4.17	0.00	1
0.93	6.37	1.37	5.00	5.00	0.00	1
0.92	7.46	1.65	5.82	5.82	0.00	1
0.91	8.54	1.77	6.77	6.62	0.15	1
0.89	9.62	1.82	7.80	7.42	0.38	1
0.88	10.69	1.85	8.84	8.21	0.62	1
0.87	11.76	1.87	9.89	9.01	0.88	1
0.85	12.83	1.88	10.94	9.80	1.14	1
0.84	13.89	1.90	12.00	10.60	1.40	1
0.83	14.96	1.91	13.05	11.39	1.66	1
0.82	16.03	1.92	14.10	12.18	1.92	1

0.80	17.09	1.94	15.16	12.97	2.19	1
0.79	18.16	1.95	16.21	13.76	2.45	1
0.78	19.22	1.97	17.25	14.55	2.70	1
0.77	20.28	1.98	18.30	15.34	2.96	1
0.75	21.34	2.00	19.34	16.12	3.22	1
0.74	22.40	2.05	20.35	16.91	3.44	1
0.74	22.40	2.05	20.35	16.91	3.44	1
0.73	23.11	2.08	21.03	17.43	3.60	1
0.72	23.82	2.12	21.70	17.95	3.74	1
0.72	24.52	2.15	22.37	18.48	3.89	1
0.71	25.22	2.19	23.03	19.00	4.03	1
0.70	25.93	2.24	23.69	19.52	4.18	1
0.69	26.63	2.28	24.35	20.04	4.31	1
0.68	27.33	2.33	25.00	20.56	4.45	1
0.67	28.03	2.38	25.65	21.07	4.58	1
0.67	28.73	2.43	26.30	21.59	4.71	1
0.66	29.43	2.49	26.94	22.11	4.84	1
0.65	30.13	2.55	27.58	22.62	4.96	1
0.64	30.83	2.61	28.22	23.14	5.08	1
0.63	31.52	2.67	28.85	23.65	5.20	1
0.62	32.22	2.74	29.48	24.16	5.32	1
0.62	32.91	2.80	30.11	24.67	5.44	1
0.61	33.61	2.87	30.74	25.18	5.56	1
0.60	34.30	2.94	31.36	25.69	5.67	1
0.59	34.99	3.00	31.98	26.19	5.79	1
0.58	35.68	3.07	32.60	26.70	5.90	1
0.58	36.36	3.14	33.22	27.21	6.02	1
0.57	37.05	3.21	33.84	27.71	6.13	1
0.56	37.74	3.28	34.45	28.21	6.24	1
0.55	38.42	3.35	35.07	28.71	6.36	1
0.54	39.10	3.42	35.68	29.21	6.47	1
0.54	39.78	3.49	36.30	29.71	6.59	1
0.53	40.46	3.56	36.91	30.21	6.70	1
0.52	41.14	3.62	37.52	30.70	6.82	1
0.51	41.82	3.69	38.13	31.20	6.93	1
0.50	42.50	3.76	38.74	31.69	7.05	1
0.50	43.17	3.82	39.35	32.18	7.17	1
0.50	43.17	3.82	39.35	32.18	7.17	1
0.48	44.19	3.92	40.26	32.92	7.34	1
0.47	45.19	4.02	41.17	33.65	7.52	1
0.46	46.20	4.12	42.08	34.39	7.70	1
0.45	47.20	4.21	42.99	35.12	7.88	1
0.44	48.21	4.31	43.90	35.84	8.06	1
0.43	49.20	4.40	44.81	36.57	8.24	1
0.41	50.20	4.49	45.71	37.29	8.43	1
0.40	51.19	4.58	46.62	38.01	8.61	1
0.39	52.19	4.67	47.52	38.72	8.80	1
0.38	53.18	4.75	48.42	39.44	8.98	1

0.37	54.16	4.84	49.32	40.15	9.17	1
0.36	55.15	4.93	50.22	40.86	9.36	1
0.35	56.13	5.03	51.10	41.57	9.54	1
0.33	57.11	5.22	51.89	42.27	9.62	1
0.32	58.09	5.40	52.69	42.98	9.71	1
0.31	59.06	5.59	53.48	43.68	9.80	1
0.30	60.04	5.77	54.27	44.37	9.89	1
0.29	61.01	5.95	55.06	45.07	9.99	1
0.28	61.98	6.13	55.85	45.77	10.08	1
0.27	62.94	6.31	56.64	46.46	10.18	1
0.27	62.94	6.31	56.64	46.46	10.18	1
0.26	63.91	6.48	57.42	47.15	10.28	1
0.24	64.87	6.66	58.21	47.84	10.37	1
0.23	65.83	6.84	58.99	48.52	10.47	1
0.22	66.79	7.01	59.78	49.21	10.57	1
0.21	67.75	7.19	60.56	49.89	10.67	1
0.20	68.70	7.36	61.34	50.57	10.77	1
0.19	69.65	7.53	62.12	51.24	10.88	1
0.18	70.60	7.70	62.90	51.92	10.98	1
0.17	71.55	7.88	63.68	52.59	11.08	1
0.16	72.50	8.05	64.45	53.27	11.19	1
0.15	73.44	8.22	65.22	53.93	11.29	1
0.14	74.38	8.39	66.00	54.60	11.39	1
0.13	75.32	8.56	66.77	55.27	11.50	1
0.11	76.26	8.73	67.54	55.93	11.61	1
0.10	77.20	8.90	68.30	56.59	11.71	1
0.09	78.13	9.07	69.07	57.25	11.82	1
0.08	79.07	9.23	69.83	57.91	11.92	1
0.07	80.00	9.40	70.59	58.56	12.03	1
0.06	80.92	9.57	71.35	59.22	12.13	1
0.05	81.85	9.74	72.11	59.87	12.24	1
0.05	81.85	9.74	72.11	59.87	12.24	1
0.04	83.00	9.95	73.05	60.68	12.37	1
0.03	84.16	10.31	73.84	61.49	12.35	1
0.01	85.30	10.73	74.58	62.29	12.28	1
0.00	86.45	11.15	75.30	63.09	12.21	1

Time = 30. Degree of Consolidation = 87.%

Total Settlement = 0.689

Settlement at End of Primary Consolidation = 0.790

Settlement caused by Primary Consolidation at time 30. = 0.689

Settlement caused by Secondary Compression at time 30. = 0.000

Surface Elevation = 1.01

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
1.70	0.96	0.23	6.54	6.54	6.54	1
1.68	0.94	0.22	6.54	5.91	5.88	1
1.66	0.92	0.22	6.54	5.29	5.21	1
1.64	0.91	0.22	6.54	4.67	4.55	1
1.62	0.89	0.21	6.54	4.08	4.08	1
1.60	0.88	0.21	6.54	3.98	3.98	1
1.58	0.86	0.21	6.54	3.88	3.88	1
1.56	0.85	0.21	6.54	3.79	3.78	1
1.54	0.84	0.20	6.54	3.75	3.72	1
1.52	0.83	0.20	6.54	3.71	3.67	1
1.50	0.81	0.20	6.54	3.67	3.63	1
1.48	0.80	0.20	6.54	3.63	3.59	1
1.46	0.79	0.19	6.54	3.60	3.54	1
1.44	0.78	0.19	6.54	3.57	3.50	1
1.42	0.77	0.19	6.54	3.54	3.45	1
1.40	0.75	0.19	6.54	3.52	3.41	1
1.38	0.74	0.18	6.54	3.49	3.37	1
1.36	0.73	0.18	6.54	3.47	3.32	1
1.34	0.72	0.18	6.54	3.45	3.28	1
1.32	0.71	0.18	6.54	3.43	3.25	1
1.30	0.69	0.17	6.54	3.41	3.23	1
1.30	0.69	0.17	6.54	3.41	3.23	1
1.29	0.69	0.17	6.54	3.39	3.22	1
1.27	0.68	0.17	6.54	3.38	3.21	1
1.26	0.67	0.17	6.54	3.37	3.19	1
1.25	0.66	0.17	6.54	3.36	3.18	1
1.23	0.66	0.16	6.54	3.35	3.17	1
1.22	0.65	0.16	6.54	3.33	3.16	1
1.21	0.64	0.16	6.54	3.32	3.14	1
1.19	0.63	0.16	6.54	3.31	3.13	1
1.18	0.62	0.16	6.54	3.30	3.12	1
1.17	0.62	0.15	6.54	3.29	3.10	1
1.15	0.61	0.15	6.54	3.28	3.09	1
1.14	0.60	0.15	6.54	3.27	3.08	1
1.13	0.59	0.15	6.54	3.27	3.06	1
1.11	0.59	0.15	6.54	3.26	3.05	1
1.10	0.58	0.15	6.54	3.25	3.04	1

1.09	0.57	0.14	6.54	3.24	3.02	1
1.07	0.56	0.14	6.54	3.23	3.01	1
1.06	0.56	0.14	6.54	3.22	3.00	1
1.05	0.55	0.14	6.54	3.21	2.98	1
1.03	0.54	0.14	6.54	3.21	2.97	1
1.02	0.53	0.14	6.54	3.20	2.96	1
1.01	0.53	0.13	6.54	3.19	2.94	1
0.99	0.52	0.13	6.54	3.18	2.93	1
0.98	0.51	0.13	6.54	3.18	2.92	1
0.97	0.51	0.13	6.54	3.17	2.91	1
0.95	0.50	0.13	6.54	3.16	2.90	1
0.94	0.49	0.12	6.54	3.16	2.89	1
0.93	0.48	0.12	6.54	3.15	2.89	1
0.91	0.48	0.12	6.54	3.14	2.88	1
0.90	0.47	0.12	6.54	3.13	2.87	1
0.90	0.47	0.12	6.54	3.13	2.87	1
0.88	0.46	0.12	6.54	3.12	2.86	1
0.86	0.45	0.11	6.54	3.11	2.85	1
0.84	0.44	0.11	6.54	3.10	2.84	1
0.82	0.42	0.11	6.54	3.09	2.83	1
0.80	0.41	0.11	6.54	3.09	2.82	1
0.78	0.40	0.10	6.54	3.08	2.81	1
0.76	0.39	0.10	6.54	3.07	2.80	1
0.74	0.38	0.10	6.54	3.06	2.79	1
0.72	0.37	0.10	6.54	3.05	2.78	1
0.70	0.36	0.09	6.54	3.04	2.77	1
0.68	0.35	0.09	6.54	3.03	2.76	1
0.66	0.34	0.09	6.54	3.02	2.75	1
0.64	0.33	0.08	6.54	3.01	2.74	1
0.62	0.32	0.08	6.54	3.00	2.73	1
0.60	0.31	0.08	6.54	2.99	2.72	1
0.58	0.30	0.08	6.54	2.98	2.71	1
0.56	0.29	0.07	6.54	2.97	2.70	1
0.54	0.28	0.07	6.54	2.97	2.69	1
0.52	0.26	0.07	6.54	2.96	2.68	1
0.50	0.25	0.07	6.54	2.95	2.67	1
0.50	0.25	0.07	6.54	2.95	2.67	1
0.48	0.24	0.06	6.54	2.94	2.66	1
0.46	0.23	0.06	6.54	2.93	2.65	1
0.44	0.22	0.06	6.54	2.92	2.64	1
0.42	0.21	0.06	6.54	2.91	2.63	1
0.40	0.20	0.05	6.54	2.90	2.62	1
0.38	0.19	0.05	6.54	2.89	2.61	1
0.36	0.18	0.05	6.54	2.89	2.60	1
0.34	0.17	0.05	6.54	2.88	2.59	1
0.32	0.16	0.04	6.54	2.87	2.58	1
0.30	0.15	0.04	6.54	2.86	2.57	1
0.28	0.14	0.04	6.54	2.85	2.56	1

0.26	0.13	0.03	6.54	2.84	2.55	1
0.24	0.12	0.03	6.54	2.83	2.54	1
0.22	0.11	0.03	6.54	2.82	2.53	1
0.20	0.10	0.03	6.54	2.81	2.53	1
0.18	0.09	0.02	6.54	2.80	2.52	1
0.16	0.08	0.02	6.54	2.79	2.52	1
0.14	0.07	0.02	6.54	2.78	2.51	1
0.12	0.06	0.02	6.54	2.77	2.50	1
0.10	0.05	0.01	6.54	2.76	2.50	1
0.10	0.05	0.01	6.54	2.76	2.50	1
0.08	0.04	0.01	6.54	2.75	2.49	1
0.05	0.02	0.01	6.54	2.74	2.48	1
0.03	0.01	0.00	6.54	2.73	2.48	1
0.00	0.00	0.00	6.54	2.71	2.47	1

***** Stresses *****			***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
0.96	0.00	0.00	0.00	0.00	0.00	1
0.94	1.47	0.26	1.21	1.20	0.01	1
0.92	2.84	0.52	2.32	2.29	0.03	1
0.91	4.11	0.77	3.34	3.29	0.05	1
0.89	5.27	1.10	4.17	4.17	0.00	1
0.88	6.37	1.37	5.00	5.00	0.00	1
0.86	7.46	1.65	5.82	5.82	0.00	1
0.85	8.54	1.88	6.66	6.62	0.04	1
0.84	9.60	2.02	7.58	7.41	0.18	1
0.83	10.66	2.28	8.38	8.19	0.19	1
0.81	11.71	2.52	9.19	8.96	0.23	1
0.80	12.75	2.74	10.02	9.73	0.28	1
0.79	13.79	2.94	10.85	10.50	0.36	1
0.78	14.83	3.13	11.70	11.26	0.44	1
0.77	15.86	3.31	12.55	12.01	0.54	1
0.75	16.88	3.47	13.41	12.76	0.65	1
0.74	17.90	3.62	14.28	13.50	0.77	1
0.73	18.92	3.77	15.15	14.25	0.91	1
0.72	19.93	3.90	16.03	14.98	1.05	1
0.71	20.94	4.03	16.91	15.72	1.19	1
0.69	21.94	4.15	17.79	16.45	1.35	1
0.69	21.94	4.15	17.79	16.45	1.35	1
0.69	22.61	4.23	18.38	16.93	1.45	1
0.68	23.28	4.31	18.97	17.42	1.55	1
0.67	23.94	4.38	19.56	17.90	1.66	1
0.66	24.61	4.46	20.15	18.38	1.77	1
0.66	25.27	4.53	20.75	18.86	1.89	1
0.65	25.93	4.59	21.34	19.34	2.00	1
0.64	26.60	4.66	21.93	19.82	2.12	1

0.63	27.26	4.73	22.53	20.30	2.23	1
0.62	27.91	4.79	23.12	20.77	2.35	1
0.62	28.57	4.85	23.72	21.24	2.48	1
0.61	29.23	4.91	24.32	21.72	2.60	1
0.60	29.88	4.97	24.91	22.19	2.72	1
0.59	30.54	5.06	25.47	22.66	2.81	1
0.59	31.19	5.19	26.00	23.13	2.87	1
0.58	31.84	5.31	26.53	23.60	2.93	1
0.57	32.50	5.43	27.07	24.07	3.00	1
0.56	33.15	5.55	27.60	24.54	3.06	1
0.56	33.80	5.66	28.14	25.00	3.13	1
0.55	34.44	5.77	28.67	25.47	3.20	1
0.54	35.09	5.88	29.21	25.93	3.28	1
0.53	35.74	5.99	29.75	26.40	3.35	1
0.53	36.38	6.09	30.29	26.86	3.43	1
0.52	37.03	6.20	30.83	27.32	3.51	1
0.51	37.67	6.30	31.38	27.78	3.59	1
0.51	38.32	6.40	31.92	28.24	3.68	1
0.50	38.96	6.50	32.46	28.70	3.76	1
0.49	39.60	6.60	33.01	29.16	3.85	1
0.48	40.24	6.69	33.55	29.62	3.93	1
0.48	40.88	6.79	34.10	30.08	4.02	1
0.47	41.52	6.88	34.64	30.53	4.11	1
0.47	41.52	6.88	34.64	30.53	4.11	1
0.46	42.48	7.02	35.46	31.22	4.24	1
0.45	43.44	7.16	36.28	31.90	4.38	1
0.44	44.39	7.30	37.09	32.58	4.52	1
0.42	45.35	7.43	37.91	33.26	4.65	1
0.41	46.30	7.57	38.73	33.93	4.80	1
0.40	47.25	7.70	39.55	34.61	4.94	1
0.39	48.20	7.83	40.37	35.28	5.08	1
0.38	49.14	7.96	41.18	35.96	5.23	1
0.37	50.09	8.09	42.00	36.63	5.37	1
0.36	51.03	8.22	42.81	37.30	5.52	1
0.35	51.98	8.35	43.63	37.96	5.66	1
0.34	52.92	8.47	44.44	38.63	5.81	1
0.33	53.86	8.60	45.26	39.29	5.96	1
0.32	54.79	8.73	46.07	39.96	6.11	1
0.31	55.73	8.85	46.88	40.62	6.26	1
0.30	56.67	8.98	47.69	41.28	6.41	1
0.29	57.60	9.10	48.50	41.94	6.56	1
0.28	58.53	9.22	49.31	42.60	6.71	1
0.26	59.46	9.35	50.11	43.25	6.86	1
0.25	60.39	9.47	50.92	43.90	7.01	1
0.25	60.39	9.47	50.92	43.90	7.01	1
0.24	61.32	9.60	51.72	44.56	7.16	1
0.23	62.24	9.72	52.52	45.21	7.31	1
0.22	63.17	9.84	53.32	45.86	7.47	1

0.21	64.09	9.97	54.12	46.51	7.62	1
0.20	65.01	10.18	54.83	47.15	7.68	1
0.19	65.93	10.42	55.51	47.80	7.71	1
0.18	66.85	10.67	56.19	48.44	7.74	1
0.17	67.77	10.91	56.86	49.09	7.77	1
0.16	68.68	11.16	57.53	49.73	7.80	1
0.15	69.60	11.41	58.19	50.37	7.83	1
0.14	70.51	11.66	58.85	51.00	7.85	1
0.13	71.42	11.91	59.51	51.64	7.87	1
0.12	72.33	12.16	60.17	52.27	7.90	1
0.11	73.24	12.41	60.82	52.91	7.92	1
0.10	74.15	12.67	61.48	53.54	7.94	1
0.09	75.05	12.93	62.12	54.17	7.96	1
0.08	75.95	13.18	62.77	54.80	7.97	1
0.07	76.86	13.44	63.41	55.42	7.99	1
0.06	77.76	13.70	64.05	56.05	8.00	1
0.05	78.65	13.96	64.69	56.67	8.02	1
0.05	78.65	13.96	64.69	56.67	8.02	1
0.04	79.77	14.29	65.48	57.45	8.03	1
0.02	80.89	14.62	66.27	58.23	8.05	1
0.01	82.01	14.95	67.06	59.00	8.06	1
0.00	83.12	15.28	67.84	59.77	8.07	1

Time = 45. Degree of Consolidation = 94.%

Total Settlement = 0.742

Settlement at End of Primary Consolidation = 0.790

Settlement caused by Primary Consolidation at time 45. = 0.742

Settlement caused by Secondary Compression at time 45. = 0.000

Surface Elevation = 0.96

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
1.70	0.94	0.23	6.54	6.54	6.54	1
1.68	0.92	0.22	6.54	5.91	5.88	1
1.66	0.90	0.22	6.54	5.29	5.21	1

1.64	0.88	0.22	6.54	4.67	4.55	1
1.62	0.87	0.21	6.54	4.08	4.08	1
1.60	0.86	0.21	6.54	3.98	3.98	1
1.58	0.84	0.21	6.54	3.88	3.88	1
1.56	0.83	0.21	6.54	3.79	3.78	1
1.54	0.82	0.20	6.54	3.73	3.72	1
1.52	0.80	0.20	6.54	3.68	3.67	1
1.50	0.79	0.20	6.54	3.63	3.63	1
1.48	0.78	0.20	6.54	3.59	3.59	1
1.46	0.77	0.19	6.54	3.55	3.54	1
1.44	0.76	0.19	6.54	3.52	3.50	1
1.42	0.74	0.19	6.54	3.48	3.45	1
1.40	0.73	0.19	6.54	3.45	3.41	1
1.38	0.72	0.18	6.54	3.42	3.37	1
1.36	0.71	0.18	6.54	3.39	3.32	1
1.34	0.70	0.18	6.54	3.37	3.28	1
1.32	0.69	0.18	6.54	3.34	3.25	1
1.30	0.67	0.17	6.54	3.32	3.23	1
1.30	0.67	0.17	6.54	3.32	3.23	1
1.29	0.67	0.17	6.54	3.30	3.22	1
1.27	0.66	0.17	6.54	3.29	3.21	1
1.26	0.65	0.17	6.54	3.27	3.19	1
1.25	0.64	0.17	6.54	3.26	3.18	1
1.23	0.64	0.16	6.54	3.25	3.17	1
1.22	0.63	0.16	6.54	3.23	3.16	1
1.21	0.62	0.16	6.54	3.22	3.14	1
1.19	0.61	0.16	6.54	3.21	3.13	1
1.18	0.61	0.16	6.54	3.20	3.12	1
1.17	0.60	0.15	6.54	3.18	3.10	1
1.15	0.59	0.15	6.54	3.17	3.09	1
1.14	0.58	0.15	6.54	3.16	3.08	1
1.13	0.58	0.15	6.54	3.15	3.06	1
1.11	0.57	0.15	6.54	3.14	3.05	1
1.10	0.56	0.15	6.54	3.13	3.04	1
1.09	0.56	0.14	6.54	3.12	3.02	1
1.07	0.55	0.14	6.54	3.11	3.01	1
1.06	0.54	0.14	6.54	3.11	3.00	1
1.05	0.53	0.14	6.54	3.10	2.98	1
1.03	0.53	0.14	6.54	3.09	2.97	1
1.02	0.52	0.14	6.54	3.08	2.96	1
1.01	0.51	0.13	6.54	3.07	2.94	1
0.99	0.50	0.13	6.54	3.06	2.93	1
0.98	0.50	0.13	6.54	3.06	2.92	1
0.97	0.49	0.13	6.54	3.05	2.91	1
0.95	0.48	0.13	6.54	3.04	2.90	1
0.94	0.48	0.12	6.54	3.03	2.89	1
0.93	0.47	0.12	6.54	3.03	2.89	1
0.91	0.46	0.12	6.54	3.02	2.88	1

0.90	0.45	0.12	6.54	3.01	2.87	1
0.90	0.45	0.12	6.54	3.01	2.87	1
0.88	0.44	0.12	6.54	3.00	2.86	1
0.86	0.43	0.11	6.54	2.99	2.85	1
0.84	0.42	0.11	6.54	2.98	2.84	1
0.82	0.41	0.11	6.54	2.97	2.83	1
0.80	0.40	0.11	6.54	2.96	2.82	1
0.78	0.39	0.10	6.54	2.95	2.81	1
0.76	0.38	0.10	6.54	2.94	2.80	1
0.74	0.37	0.10	6.54	2.93	2.79	1
0.72	0.36	0.10	6.54	2.92	2.78	1
0.70	0.35	0.09	6.54	2.91	2.77	1
0.68	0.34	0.09	6.54	2.91	2.76	1
0.66	0.33	0.09	6.54	2.90	2.75	1
0.64	0.32	0.08	6.54	2.89	2.74	1
0.62	0.31	0.08	6.54	2.88	2.73	1
0.60	0.30	0.08	6.54	2.87	2.72	1
0.58	0.29	0.08	6.54	2.86	2.71	1
0.56	0.28	0.07	6.54	2.85	2.70	1
0.54	0.27	0.07	6.54	2.84	2.69	1
0.52	0.26	0.07	6.54	2.84	2.68	1
0.50	0.25	0.07	6.54	2.83	2.67	1
0.50	0.25	0.07	6.54	2.83	2.67	1
0.48	0.24	0.06	6.54	2.82	2.66	1
0.46	0.23	0.06	6.54	2.81	2.65	1
0.44	0.22	0.06	6.54	2.80	2.64	1
0.42	0.21	0.06	6.54	2.79	2.63	1
0.40	0.20	0.05	6.54	2.78	2.62	1
0.38	0.19	0.05	6.54	2.78	2.61	1
0.36	0.18	0.05	6.54	2.77	2.60	1
0.34	0.17	0.05	6.54	2.76	2.59	1
0.32	0.16	0.04	6.54	2.75	2.58	1
0.30	0.15	0.04	6.54	2.74	2.57	1
0.28	0.14	0.04	6.54	2.73	2.56	1
0.26	0.13	0.03	6.54	2.72	2.55	1
0.24	0.12	0.03	6.54	2.72	2.54	1
0.22	0.11	0.03	6.54	2.71	2.53	1
0.20	0.10	0.03	6.54	2.70	2.53	1
0.18	0.09	0.02	6.54	2.69	2.52	1
0.16	0.08	0.02	6.54	2.68	2.52	1
0.14	0.07	0.02	6.54	2.67	2.51	1
0.12	0.06	0.02	6.54	2.66	2.50	1
0.10	0.05	0.01	6.54	2.66	2.50	1
0.10	0.05	0.01	6.54	2.66	2.50	1
0.08	0.04	0.01	6.54	2.64	2.49	1
0.05	0.02	0.01	6.54	2.63	2.48	1
0.03	0.01	0.00	6.54	2.62	2.48	1
0.00	0.00	0.00	6.54	2.61	2.47	1

	***** Stresses *****		***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
0.94	0.00	0.00	0.00	0.00	0.00	1
0.92	1.47	0.26	1.21	1.20	0.01	1
0.90	2.84	0.52	2.32	2.29	0.03	1
0.88	4.11	0.77	3.34	3.29	0.05	1
0.87	5.27	1.10	4.17	4.17	0.00	1
0.86	6.37	1.37	5.00	5.00	0.00	1
0.84	7.46	1.65	5.82	5.82	0.00	1
0.83	8.54	1.90	6.64	6.62	0.02	1
0.82	9.60	2.13	7.47	7.40	0.07	1
0.80	10.65	2.44	8.22	8.18	0.04	1
0.79	11.70	2.72	8.98	8.95	0.03	1
0.78	12.74	2.99	9.75	9.72	0.04	1
0.77	13.77	3.23	10.54	10.47	0.07	1
0.76	14.79	3.46	11.34	11.22	0.11	1
0.74	15.81	3.67	12.14	11.97	0.18	1
0.73	16.83	3.87	12.96	12.71	0.25	1
0.72	17.84	4.05	13.78	13.44	0.34	1
0.71	18.84	4.23	14.61	14.17	0.44	1
0.70	19.84	4.39	15.45	14.90	0.55	1
0.69	20.84	4.55	16.29	15.62	0.67	1
0.67	21.83	4.70	17.13	16.33	0.80	1
0.67	21.83	4.70	17.13	16.33	0.80	1
0.67	22.49	4.79	17.69	16.81	0.88	1
0.66	23.14	4.89	18.26	17.28	0.97	1
0.65	23.80	4.98	18.82	17.76	1.06	1
0.64	24.45	5.15	19.30	18.23	1.08	1
0.64	25.11	5.34	19.77	18.70	1.07	1
0.63	25.76	5.52	20.23	19.16	1.07	1
0.62	26.41	5.70	20.71	19.63	1.08	1
0.61	27.05	5.86	21.19	20.09	1.10	1
0.61	27.70	6.03	21.67	20.56	1.12	1
0.60	28.35	6.18	22.16	21.02	1.14	1
0.59	28.99	6.34	22.66	21.48	1.17	1
0.58	29.63	6.48	23.15	21.94	1.21	1
0.58	30.28	6.63	23.65	22.40	1.25	1
0.57	30.92	6.76	24.15	22.86	1.30	1
0.56	31.56	6.90	24.66	23.31	1.34	1
0.56	32.20	7.03	25.17	23.77	1.40	1
0.55	32.83	7.16	25.68	24.22	1.45	1
0.54	33.47	7.28	26.19	24.68	1.51	1
0.53	34.11	7.40	26.70	25.13	1.57	1
0.53	34.74	7.52	27.22	25.58	1.64	1
0.52	35.37	7.64	27.74	26.03	1.70	1

0.51	36.01	7.75	28.26	26.48	1.77	1
0.50	36.64	7.86	28.78	26.93	1.85	1
0.50	37.27	7.97	29.30	27.38	1.92	1
0.49	37.90	8.08	29.82	27.83	2.00	1
0.48	38.53	8.18	30.35	28.27	2.08	1
0.48	39.16	8.28	30.87	28.72	2.16	1
0.47	39.79	8.39	31.40	29.16	2.24	1
0.46	40.41	8.48	31.93	29.61	2.32	1
0.45	41.04	8.58	32.46	30.05	2.41	1
0.45	41.04	8.58	32.46	30.05	2.41	1
0.44	41.98	8.73	33.25	30.71	2.54	1
0.43	42.91	8.87	34.04	31.37	2.67	1
0.42	43.85	9.01	34.84	32.03	2.80	1
0.41	44.78	9.15	35.63	32.69	2.94	1
0.40	45.71	9.29	36.43	33.35	3.08	1
0.39	46.64	9.42	37.22	34.00	3.22	1
0.38	47.57	9.55	38.02	34.66	3.36	1
0.37	48.50	9.68	38.82	35.31	3.51	1
0.36	49.42	9.81	39.62	35.96	3.66	1
0.35	50.35	9.93	40.42	36.61	3.81	1
0.34	51.27	10.11	41.16	37.26	3.90	1
0.33	52.19	10.35	41.84	37.90	3.94	1
0.32	53.11	10.59	42.52	38.55	3.97	1
0.31	54.03	10.83	43.20	39.19	4.01	1
0.30	54.94	11.06	43.88	39.83	4.05	1
0.29	55.86	11.30	44.56	40.47	4.09	1
0.28	56.77	11.53	45.24	41.11	4.13	1
0.27	57.68	11.77	45.91	41.75	4.17	1
0.26	58.59	12.00	46.59	42.38	4.21	1
0.25	59.50	12.24	47.26	43.02	4.25	1
0.25	59.50	12.24	47.26	43.02	4.25	1
0.24	60.41	12.47	47.94	43.65	4.29	1
0.23	61.31	12.70	48.61	44.28	4.33	1
0.22	62.22	12.94	49.28	44.91	4.37	1
0.21	63.12	13.17	49.95	45.54	4.42	1
0.20	64.02	13.40	50.62	46.16	4.46	1
0.19	64.92	13.63	51.29	46.79	4.50	1
0.18	65.82	13.86	51.96	47.41	4.54	1
0.17	66.72	14.10	52.62	48.04	4.59	1
0.16	67.62	14.33	53.29	48.66	4.63	1
0.15	68.51	14.56	53.95	49.28	4.67	1
0.14	69.40	14.79	54.61	49.90	4.72	1
0.13	70.30	15.02	55.27	50.51	4.76	1
0.12	71.19	15.25	55.93	51.13	4.80	1
0.11	72.08	15.49	56.59	51.74	4.85	1
0.10	72.96	15.72	57.25	52.36	4.89	1
0.09	73.85	15.95	57.90	52.97	4.93	1
0.08	74.73	16.18	58.55	53.58	4.98	1

0.07	75.62	16.41	59.20	54.19	5.02	1
0.06	76.50	16.65	59.85	54.79	5.06	1
0.05	77.38	16.88	60.50	55.40	5.10	1
0.05	77.38	16.88	60.50	55.40	5.10	1
0.04	78.48	17.17	61.31	56.16	5.15	1
0.02	79.58	17.46	62.12	56.91	5.21	1
0.01	80.67	17.75	62.92	57.66	5.26	1
0.00	81.76	18.04	63.72	58.41	5.31	1

Time = 60. Degree of Consolidation = 97.%

Total Settlement = 0.764

Settlement at End of Primary Consolidation = 0.790

Settlement caused by Primary Consolidation at time 60. = 0.764

Settlement caused by Secondary Compression at time 60. = 0.000

Surface Elevation = 0.94

**********Current Conditions in Dredged Fill**********

	***** Coordinates *****		***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
1.70	0.92	0.23	6.54	6.54	6.54	1
1.68	0.90	0.22	6.54	5.91	5.88	1
1.66	0.88	0.22	6.54	5.29	5.21	1
1.64	0.86	0.22	6.54	4.67	4.55	1
1.62	0.85	0.21	6.54	4.08	4.08	1
1.60	0.84	0.21	6.54	3.98	3.98	1
1.58	0.82	0.21	6.54	3.88	3.88	1
1.56	0.81	0.21	6.54	3.78	3.78	1
1.54	0.80	0.20	6.54	3.73	3.72	1
1.52	0.78	0.20	6.54	3.68	3.67	1
1.50	0.77	0.20	6.54	3.63	3.63	1
1.48	0.76	0.20	6.54	3.59	3.59	1
1.46	0.75	0.19	6.54	3.54	3.54	1
1.44	0.74	0.19	6.54	3.50	3.50	1
1.42	0.72	0.19	6.54	3.46	3.45	1
1.40	0.71	0.19	6.54	3.42	3.41	1
1.38	0.70	0.18	6.54	3.38	3.37	1

1.36	0.69	0.18	6.54	3.34	3.32	1
1.34	0.68	0.18	6.54	3.31	3.28	1
1.32	0.67	0.18	6.54	3.28	3.25	1
1.30	0.65	0.17	6.54	3.25	3.23	1
1.30	0.65	0.17	6.54	3.25	3.23	1
1.29	0.65	0.17	6.54	3.23	3.22	1
1.27	0.64	0.17	6.54	3.21	3.21	1
1.26	0.63	0.17	6.54	3.20	3.19	1
1.25	0.63	0.17	6.54	3.18	3.18	1
1.23	0.62	0.16	6.54	3.17	3.17	1
1.22	0.61	0.16	6.54	3.16	3.16	1
1.21	0.60	0.16	6.54	3.14	3.14	1
1.19	0.60	0.16	6.54	3.13	3.13	1
1.18	0.59	0.16	6.54	3.12	3.12	1
1.17	0.58	0.15	6.54	3.10	3.10	1
1.15	0.57	0.15	6.54	3.09	3.09	1
1.14	0.57	0.15	6.54	3.08	3.08	1
1.13	0.56	0.15	6.54	3.07	3.06	1
1.11	0.55	0.15	6.54	3.05	3.05	1
1.10	0.55	0.15	6.54	3.04	3.04	1
1.09	0.54	0.14	6.54	3.03	3.02	1
1.07	0.53	0.14	6.54	3.02	3.01	1
1.06	0.52	0.14	6.54	3.01	3.00	1
1.05	0.52	0.14	6.54	3.00	2.98	1
1.03	0.51	0.14	6.54	2.99	2.97	1
1.02	0.50	0.14	6.54	2.98	2.96	1
1.01	0.50	0.13	6.54	2.97	2.94	1
0.99	0.49	0.13	6.54	2.96	2.93	1
0.98	0.48	0.13	6.54	2.95	2.92	1
0.97	0.47	0.13	6.54	2.94	2.91	1
0.95	0.47	0.13	6.54	2.94	2.90	1
0.94	0.46	0.12	6.54	2.93	2.89	1
0.93	0.45	0.12	6.54	2.92	2.89	1
0.91	0.45	0.12	6.54	2.91	2.88	1
0.90	0.44	0.12	6.54	2.90	2.87	1
0.90	0.44	0.12	6.54	2.90	2.87	1
0.88	0.43	0.12	6.54	2.89	2.86	1
0.86	0.42	0.11	6.54	2.88	2.85	1
0.84	0.41	0.11	6.54	2.87	2.84	1
0.82	0.40	0.11	6.54	2.86	2.83	1
0.80	0.39	0.11	6.54	2.85	2.82	1
0.78	0.38	0.10	6.54	2.84	2.81	1
0.76	0.37	0.10	6.54	2.83	2.80	1
0.74	0.36	0.10	6.54	2.82	2.79	1
0.72	0.35	0.10	6.54	2.81	2.78	1
0.70	0.34	0.09	6.54	2.80	2.77	1
0.68	0.33	0.09	6.54	2.79	2.76	1
0.66	0.32	0.09	6.54	2.78	2.75	1

0.64	0.31	0.08	6.54	2.77	2.74	1
0.62	0.30	0.08	6.54	2.76	2.73	1
0.60	0.29	0.08	6.54	2.75	2.72	1
0.58	0.28	0.08	6.54	2.74	2.71	1
0.56	0.27	0.07	6.54	2.73	2.70	1
0.54	0.26	0.07	6.54	2.72	2.69	1
0.52	0.25	0.07	6.54	2.71	2.68	1
0.50	0.24	0.07	6.54	2.70	2.67	1
0.50	0.24	0.07	6.54	2.70	2.67	1
0.48	0.23	0.06	6.54	2.69	2.66	1
0.46	0.22	0.06	6.54	2.68	2.65	1
0.44	0.21	0.06	6.54	2.68	2.64	1
0.42	0.20	0.06	6.54	2.67	2.63	1
0.40	0.19	0.05	6.54	2.66	2.62	1
0.38	0.18	0.05	6.54	2.65	2.61	1
0.36	0.17	0.05	6.54	2.64	2.60	1
0.34	0.16	0.05	6.54	2.63	2.59	1
0.32	0.15	0.04	6.54	2.62	2.58	1
0.30	0.14	0.04	6.54	2.62	2.57	1
0.28	0.13	0.04	6.54	2.61	2.56	1
0.26	0.12	0.03	6.54	2.60	2.55	1
0.24	0.11	0.03	6.54	2.59	2.54	1
0.22	0.10	0.03	6.54	2.58	2.53	1
0.20	0.09	0.03	6.54	2.57	2.53	1
0.18	0.08	0.02	6.54	2.57	2.52	1
0.16	0.07	0.02	6.54	2.56	2.52	1
0.14	0.07	0.02	6.54	2.55	2.51	1
0.12	0.06	0.02	6.54	2.54	2.50	1
0.10	0.05	0.01	6.54	2.53	2.50	1
0.10	0.05	0.01	6.54	2.53	2.50	1
0.08	0.03	0.01	6.54	2.52	2.49	1
0.05	0.02	0.01	6.54	2.51	2.48	1
0.03	0.01	0.00	6.54	2.51	2.48	1
0.00	0.00	0.00	6.54	2.50	2.47	1

	***** Stresses *****		***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
0.92	0.00	0.00	0.00	0.00	0.00	1
0.90	1.47	0.26	1.21	1.20	0.01	1
0.88	2.84	0.52	2.32	2.29	0.03	1
0.86	4.11	0.77	3.34	3.29	0.05	1
0.85	5.27	1.10	4.17	4.17	0.00	1
0.84	6.37	1.37	5.00	5.00	0.00	1
0.82	7.46	1.65	5.82	5.82	0.00	1
0.81	8.54	1.91	6.63	6.62	0.02	1
0.80	9.60	2.14	7.46	7.40	0.06	1

0.78	10.65	2.46	8.20	8.18	0.02	1
0.77	11.70	2.75	8.95	8.95	0.00	1
0.76	12.74	3.02	9.71	9.71	0.00	1
0.75	13.77	3.30	10.47	10.47	0.00	1
0.74	14.79	3.57	11.22	11.22	0.00	1
0.72	15.80	3.84	11.97	11.96	0.01	1
0.71	16.81	4.09	12.72	12.69	0.03	1
0.70	17.82	4.32	13.49	13.42	0.07	1
0.69	18.81	4.55	14.27	14.14	0.13	1
0.68	19.80	4.75	15.05	14.86	0.19	1
0.67	20.79	4.95	15.84	15.57	0.27	1
0.65	21.77	5.31	16.46	16.27	0.19	1
0.65	21.77	5.31	16.46	16.27	0.19	1
0.65	22.42	5.54	16.88	16.74	0.13	1
0.64	23.07	5.77	17.30	17.21	0.09	1
0.63	23.72	5.99	17.73	17.67	0.06	1
0.63	24.36	6.20	18.16	18.13	0.03	1
0.62	25.01	6.40	18.61	18.60	0.01	1
0.61	25.65	6.59	19.06	19.05	0.00	1
0.60	26.29	6.78	19.51	19.51	0.00	1
0.60	26.93	6.96	19.97	19.97	0.00	1
0.59	27.57	7.14	20.42	20.42	0.00	1
0.58	28.20	7.33	20.88	20.88	0.00	1
0.57	28.84	7.50	21.33	21.33	0.01	1
0.57	29.47	7.68	21.80	21.78	0.02	1
0.56	30.11	7.84	22.26	22.23	0.03	1
0.55	30.74	8.00	22.73	22.68	0.06	1
0.55	31.37	8.16	23.20	23.12	0.08	1
0.54	31.99	8.31	23.68	23.57	0.11	1
0.53	32.62	8.46	24.16	24.01	0.15	1
0.52	33.25	8.61	24.64	24.46	0.19	1
0.52	33.87	8.75	25.13	24.90	0.23	1
0.51	34.50	8.89	25.61	25.34	0.27	1
0.50	35.12	9.02	26.10	25.78	0.32	1
0.50	35.74	9.15	26.59	26.22	0.37	1
0.49	36.36	9.28	27.08	26.65	0.43	1
0.48	36.98	9.40	27.58	27.09	0.49	1
0.47	37.60	9.53	28.08	27.53	0.55	1
0.47	38.22	9.65	28.57	27.96	0.61	1
0.46	38.84	9.76	29.07	28.40	0.68	1
0.45	39.45	9.88	29.57	28.83	0.74	1
0.45	40.07	9.99	30.08	29.26	0.81	1
0.44	40.68	10.20	30.48	29.69	0.79	1
0.44	40.68	10.20	30.48	29.69	0.79	1
0.43	41.60	10.51	31.09	30.34	0.75	1
0.42	42.52	10.82	31.70	30.98	0.72	1
0.41	43.44	11.12	32.31	31.62	0.69	1
0.40	44.35	11.42	32.93	32.26	0.67	1

0.39	45.26	11.71	33.55	32.90	0.65	1
0.38	46.17	12.00	34.18	33.53	0.64	1
0.37	47.08	12.28	34.80	34.17	0.64	1
0.36	47.99	12.55	35.43	34.80	0.63	1
0.35	48.89	12.83	36.07	35.43	0.64	1
0.34	49.80	13.10	36.70	36.06	0.64	1
0.33	50.70	13.36	37.34	36.69	0.65	1
0.32	51.60	13.62	37.98	37.31	0.67	1
0.31	52.50	13.88	38.62	37.94	0.68	1
0.30	53.40	14.13	39.26	38.56	0.70	1
0.29	54.29	14.39	39.91	39.18	0.72	1
0.28	55.19	14.64	40.55	39.80	0.75	1
0.27	56.08	14.88	41.20	40.42	0.78	1
0.26	56.97	15.13	41.84	41.04	0.81	1
0.25	57.86	15.37	42.49	41.65	0.84	1
0.24	58.75	15.61	43.14	42.26	0.87	1
0.24	58.75	15.61	43.14	42.26	0.87	1
0.23	59.64	15.85	43.78	42.88	0.91	1
0.22	60.52	16.09	44.43	43.49	0.94	1
0.21	61.41	16.33	45.07	44.10	0.98	1
0.20	62.29	16.57	45.72	44.70	1.02	1
0.19	63.17	16.80	46.37	45.31	1.06	1
0.18	64.05	17.04	47.01	45.91	1.10	1
0.17	64.93	17.27	47.66	46.52	1.14	1
0.16	65.80	17.50	48.30	47.12	1.18	1
0.15	66.68	17.73	48.95	47.72	1.23	1
0.14	67.55	17.96	49.59	48.32	1.27	1
0.13	68.42	18.19	50.23	48.92	1.32	1
0.12	69.30	18.42	50.88	49.51	1.36	1
0.11	70.17	18.65	51.52	50.11	1.41	1
0.10	71.03	18.87	52.16	50.70	1.46	1
0.09	71.90	19.10	52.81	51.29	1.51	1
0.08	72.77	19.32	53.45	51.88	1.56	1
0.07	73.63	19.54	54.09	52.47	1.62	1
0.07	74.49	19.76	54.74	53.06	1.67	1
0.06	75.35	19.97	55.38	53.65	1.73	1
0.05	76.21	20.33	55.88	54.23	1.65	1
0.05	76.21	20.33	55.88	54.23	1.65	1
0.03	77.29	20.78	56.51	54.96	1.55	1
0.02	78.36	21.22	57.14	55.69	1.45	1
0.01	79.43	21.65	57.78	56.42	1.36	1
0.00	80.50	22.07	58.42	57.14	1.28	1

Time = 90. Degree of Consolidation = 99.%

Total Settlement = 0.784

Settlement at End of Primary Consolidation = 0.790

Settlement caused by Primary Consolidation at time 90. = 0.784

Settlement caused by Secondary Compression at time 90. = 0.000

Surface Elevation = 0.92

**********Current Conditions in Dredged Fill**********

	***** Coordinates *****		***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
1.70	0.91	0.23	6.54	6.54	6.54	1
1.68	0.89	0.22	6.54	5.91	5.88	1
1.66	0.88	0.22	6.54	5.29	5.21	1
1.64	0.86	0.22	6.54	4.67	4.55	1
1.62	0.85	0.21	6.54	4.08	4.08	1
1.60	0.83	0.21	6.54	3.98	3.98	1
1.58	0.82	0.21	6.54	3.88	3.88	1
1.56	0.81	0.21	6.54	3.78	3.78	1
1.54	0.79	0.20	6.54	3.73	3.72	1
1.52	0.78	0.20	6.54	3.68	3.67	1
1.50	0.77	0.20	6.54	3.63	3.63	1
1.48	0.76	0.20	6.54	3.59	3.59	1
1.46	0.74	0.19	6.54	3.54	3.54	1
1.44	0.73	0.19	6.54	3.50	3.50	1
1.42	0.72	0.19	6.54	3.46	3.45	1
1.40	0.71	0.19	6.54	3.42	3.41	1
1.38	0.70	0.18	6.54	3.38	3.37	1
1.36	0.69	0.18	6.54	3.34	3.32	1
1.34	0.67	0.18	6.54	3.31	3.28	1
1.32	0.66	0.18	6.54	3.28	3.25	1
1.30	0.65	0.17	6.54	3.25	3.23	1
1.30	0.65	0.17	6.54	3.25	3.23	1
1.29	0.64	0.17	6.54	3.23	3.22	1
1.27	0.64	0.17	6.54	3.21	3.21	1
1.26	0.63	0.17	6.54	3.20	3.19	1
1.25	0.62	0.17	6.54	3.18	3.18	1
1.23	0.61	0.16	6.54	3.17	3.17	1
1.22	0.61	0.16	6.54	3.16	3.16	1
1.21	0.60	0.16	6.54	3.14	3.14	1
1.19	0.59	0.16	6.54	3.13	3.13	1
1.18	0.59	0.16	6.54	3.12	3.12	1

1.17	0.58	0.15	6.54	3.10	3.10	1
1.15	0.57	0.15	6.54	3.09	3.09	1
1.14	0.56	0.15	6.54	3.08	3.08	1
1.13	0.56	0.15	6.54	3.06	3.06	1
1.11	0.55	0.15	6.54	3.05	3.05	1
1.10	0.54	0.15	6.54	3.04	3.04	1
1.09	0.53	0.14	6.54	3.03	3.02	1
1.07	0.53	0.14	6.54	3.02	3.01	1
1.06	0.52	0.14	6.54	3.00	3.00	1
1.05	0.51	0.14	6.54	2.99	2.98	1
1.03	0.51	0.14	6.54	2.98	2.97	1
1.02	0.50	0.14	6.54	2.97	2.96	1
1.01	0.49	0.13	6.54	2.96	2.94	1
0.99	0.49	0.13	6.54	2.95	2.93	1
0.98	0.48	0.13	6.54	2.94	2.92	1
0.97	0.47	0.13	6.54	2.93	2.91	1
0.95	0.46	0.13	6.54	2.93	2.90	1
0.94	0.46	0.12	6.54	2.92	2.89	1
0.93	0.45	0.12	6.54	2.91	2.89	1
0.91	0.44	0.12	6.54	2.90	2.88	1
0.90	0.44	0.12	6.54	2.89	2.87	1
0.90	0.44	0.12	6.54	2.89	2.87	1
0.88	0.43	0.12	6.54	2.88	2.86	1
0.86	0.42	0.11	6.54	2.86	2.85	1
0.84	0.41	0.11	6.54	2.85	2.84	1
0.82	0.40	0.11	6.54	2.84	2.83	1
0.80	0.39	0.11	6.54	2.83	2.82	1
0.78	0.38	0.10	6.54	2.82	2.81	1
0.76	0.37	0.10	6.54	2.81	2.80	1
0.74	0.36	0.10	6.54	2.79	2.79	1
0.72	0.35	0.10	6.54	2.78	2.78	1
0.70	0.34	0.09	6.54	2.77	2.77	1
0.68	0.33	0.09	6.54	2.76	2.76	1
0.66	0.32	0.09	6.54	2.75	2.75	1
0.64	0.31	0.08	6.54	2.74	2.74	1
0.62	0.30	0.08	6.54	2.73	2.73	1
0.60	0.29	0.08	6.54	2.72	2.72	1
0.58	0.28	0.08	6.54	2.71	2.71	1
0.56	0.27	0.07	6.54	2.70	2.70	1
0.54	0.26	0.07	6.54	2.69	2.69	1
0.52	0.25	0.07	6.54	2.68	2.68	1
0.50	0.24	0.07	6.54	2.67	2.67	1
0.50	0.24	0.07	6.54	2.67	2.67	1
0.48	0.23	0.06	6.54	2.66	2.66	1
0.46	0.22	0.06	6.54	2.65	2.65	1
0.44	0.21	0.06	6.54	2.64	2.64	1
0.42	0.20	0.06	6.54	2.63	2.63	1
0.40	0.19	0.05	6.54	2.63	2.62	1

0.38	0.18	0.05	6.54	2.62	2.61	1
0.36	0.17	0.05	6.54	2.61	2.60	1
0.34	0.16	0.05	6.54	2.60	2.59	1
0.32	0.15	0.04	6.54	2.59	2.58	1
0.30	0.14	0.04	6.54	2.58	2.57	1
0.28	0.13	0.04	6.54	2.58	2.56	1
0.26	0.12	0.03	6.54	2.57	2.55	1
0.24	0.11	0.03	6.54	2.56	2.54	1
0.22	0.10	0.03	6.54	2.55	2.53	1
0.20	0.09	0.03	6.54	2.54	2.53	1
0.18	0.08	0.02	6.54	2.54	2.52	1
0.16	0.07	0.02	6.54	2.53	2.52	1
0.14	0.06	0.02	6.54	2.52	2.51	1
0.12	0.06	0.02	6.54	2.51	2.50	1
0.10	0.05	0.01	6.54	2.51	2.50	1
0.10	0.05	0.01	6.54	2.51	2.50	1
0.08	0.03	0.01	6.54	2.50	2.49	1
0.05	0.02	0.01	6.54	2.49	2.48	1
0.03	0.01	0.00	6.54	2.48	2.48	1
0.00	0.00	0.00	6.54	2.47	2.47	1

	***** Stresses *****		***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
0.91	0.00	0.00	0.00	0.00	0.00	1
0.89	1.47	0.26	1.21	1.20	0.01	1
0.88	2.84	0.52	2.32	2.29	0.03	1
0.86	4.11	0.77	3.34	3.29	0.05	1
0.85	5.27	1.10	4.17	4.17	0.00	1
0.83	6.37	1.37	5.00	5.00	0.00	1
0.82	7.46	1.65	5.82	5.82	0.00	1
0.81	8.54	1.91	6.63	6.62	0.02	1
0.79	9.60	2.14	7.46	7.40	0.06	1
0.78	10.65	2.46	8.20	8.18	0.02	1
0.77	11.70	2.75	8.95	8.95	0.00	1
0.76	12.74	3.02	9.71	9.71	0.00	1
0.74	13.77	3.30	10.47	10.47	0.00	1
0.73	14.79	3.57	11.22	11.22	0.00	1
0.72	15.80	3.84	11.97	11.96	0.01	1
0.71	16.81	4.09	12.72	12.69	0.03	1
0.70	17.82	4.32	13.49	13.42	0.07	1
0.69	18.81	4.55	14.27	14.14	0.13	1
0.67	19.80	4.75	15.05	14.86	0.19	1
0.66	20.79	4.95	15.84	15.57	0.27	1
0.65	21.77	5.31	16.46	16.27	0.19	1
0.65	21.77	5.31	16.46	16.27	0.19	1
0.64	22.42	5.54	16.88	16.74	0.13	1

0.64	23.07	5.77	17.30	17.21	0.09	1
0.63	23.72	5.99	17.73	17.67	0.06	1
0.62	24.36	6.20	18.16	18.13	0.03	1
0.61	25.01	6.40	18.61	18.60	0.01	1
0.61	25.65	6.59	19.06	19.05	0.00	1
0.60	26.29	6.78	19.51	19.51	0.00	1
0.59	26.93	6.96	19.97	19.97	0.00	1
0.59	27.57	7.14	20.42	20.42	0.00	1
0.58	28.20	7.33	20.88	20.88	0.00	1
0.57	28.84	7.51	21.33	21.33	0.00	1
0.56	29.47	7.69	21.78	21.78	0.00	1
0.56	30.10	7.87	22.23	22.23	0.01	1
0.55	30.74	8.04	22.69	22.68	0.02	1
0.54	31.37	8.21	23.16	23.12	0.03	1
0.53	31.99	8.37	23.62	23.57	0.05	1
0.53	32.62	8.53	24.09	24.01	0.08	1
0.52	33.25	8.68	24.56	24.45	0.11	1
0.51	33.87	8.83	25.04	24.89	0.14	1
0.51	34.49	8.98	25.51	25.34	0.18	1
0.50	35.12	9.12	25.99	25.77	0.22	1
0.49	35.74	9.26	26.48	26.21	0.26	1
0.49	36.36	9.40	26.96	26.65	0.31	1
0.48	36.98	9.53	27.45	27.08	0.36	1
0.47	37.59	9.66	27.93	27.52	0.41	1
0.46	38.21	9.79	28.42	27.95	0.47	1
0.46	38.83	9.91	28.91	28.39	0.53	1
0.45	39.44	10.07	29.37	28.82	0.56	1
0.44	40.05	10.30	29.75	29.25	0.50	1
0.44	40.67	10.54	30.13	29.68	0.45	1
0.44	40.67	10.54	30.13	29.68	0.45	1
0.43	41.59	10.88	30.70	30.32	0.38	1
0.42	42.50	11.22	31.28	30.96	0.32	1
0.41	43.41	11.56	31.86	31.60	0.26	1
0.40	44.33	11.88	32.44	32.24	0.20	1
0.39	45.24	12.21	33.03	32.87	0.16	1
0.38	46.14	12.52	33.62	33.50	0.12	1
0.37	47.05	12.83	34.22	34.13	0.09	1
0.36	47.95	13.13	34.82	34.76	0.06	1
0.35	48.85	13.43	35.43	35.39	0.04	1
0.34	49.75	13.72	36.03	36.02	0.02	1
0.33	50.65	14.01	36.65	36.64	0.01	1
0.32	51.55	14.29	37.26	37.26	0.00	1
0.31	52.44	14.56	37.88	37.88	0.00	1
0.30	53.34	14.84	38.50	38.50	0.00	1
0.29	54.23	15.11	39.12	39.12	0.00	1
0.28	55.12	15.39	39.73	39.73	0.00	1
0.27	56.01	15.66	40.35	40.34	0.01	1
0.26	56.89	15.92	40.97	40.96	0.02	1

0.25	57.78	16.18	41.60	41.57	0.03	1
0.24	58.66	16.44	42.22	42.17	0.05	1
0.24	58.66	16.44	42.22	42.17	0.05	1
0.23	59.54	16.69	42.85	42.78	0.07	1
0.22	60.42	16.94	43.48	43.39	0.09	1
0.21	61.30	17.19	44.11	43.99	0.12	1
0.20	62.18	17.44	44.74	44.59	0.15	1
0.19	63.05	17.68	45.38	45.19	0.18	1
0.18	63.93	17.91	46.01	45.79	0.22	1
0.17	64.80	18.15	46.65	46.39	0.26	1
0.16	65.67	18.38	47.30	46.99	0.31	1
0.15	66.54	18.60	47.94	47.58	0.36	1
0.14	67.41	18.83	48.59	48.18	0.41	1
0.13	68.28	19.05	49.23	48.77	0.46	1
0.12	69.14	19.26	49.88	49.36	0.52	1
0.11	70.01	19.48	50.53	49.95	0.58	1
0.10	70.87	19.69	51.18	50.54	0.65	1
0.09	71.73	19.89	51.84	51.13	0.71	1
0.08	72.59	20.18	52.42	51.71	0.71	1
0.07	73.45	20.53	52.92	52.30	0.62	1
0.06	74.31	20.88	53.43	52.88	0.55	1
0.06	75.17	21.23	53.94	53.46	0.48	1
0.05	76.02	21.56	54.46	54.04	0.42	1
0.05	76.02	21.56	54.46	54.04	0.42	1
0.03	77.09	21.99	55.11	54.77	0.34	1
0.02	78.16	22.40	55.76	55.49	0.26	1
0.01	79.22	22.81	56.41	56.21	0.20	1
0.00	80.29	23.21	57.08	56.93	0.14	1

Time = 120. Degree of Consolidation = 100.%

Total Settlement = 0.788

Settlement at End of Primary Consolidation = 0.790

Settlement caused by Primary Consolidation at time 120. = 0.788

Settlement caused by Secondary Compression at time 120. = 0.000

Settlement Due to Desiccation = 0.000

Surface Elevation = 0.91

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
1.70	0.73	0.23	6.54	1.83	1.83	1
1.68	0.72	0.22	6.54	1.83	1.83	1
1.66	0.72	0.22	6.54	1.83	1.83	1
1.64	0.71	0.22	6.54	1.83	1.83	1
1.62	0.70	0.21	6.54	1.83	1.83	1
1.60	0.69	0.21	6.54	1.83	1.83	1
1.58	0.69	0.21	6.54	1.83	1.83	1
1.56	0.68	0.21	6.54	1.83	1.83	1
1.54	0.67	0.20	6.54	1.83	1.83	1
1.52	0.66	0.20	6.54	1.83	1.83	1
1.50	0.66	0.20	6.54	1.83	1.83	1
1.48	0.65	0.20	6.54	1.83	1.83	1
1.46	0.64	0.19	6.54	1.83	1.83	1
1.44	0.63	0.19	6.54	1.83	1.83	1
1.42	0.63	0.19	6.54	1.83	1.83	1
1.40	0.62	0.19	6.54	1.83	1.83	1
1.38	0.61	0.18	6.54	1.83	1.83	1
1.36	0.60	0.18	6.54	1.83	1.83	1
1.34	0.60	0.18	6.54	1.83	1.83	1
1.32	0.59	0.18	6.54	1.83	1.83	1
1.30	0.58	0.17	6.54	1.83	1.83	1
1.30	0.58	0.17	6.54	1.83	1.83	1
1.29	0.58	0.17	6.54	1.83	1.83	1
1.27	0.57	0.17	6.54	1.83	1.83	1
1.26	0.57	0.17	6.54	1.83	1.83	1
1.25	0.56	0.17	6.54	1.83	1.83	1
1.23	0.56	0.16	6.54	1.83	1.83	1
1.22	0.55	0.16	6.54	1.83	1.83	1
1.21	0.55	0.16	6.54	1.83	1.83	1
1.19	0.54	0.16	6.54	1.83	1.83	1
1.18	0.54	0.16	6.54	1.83	1.83	1
1.17	0.53	0.15	6.54	1.83	1.83	1
1.15	0.53	0.15	6.54	1.83	1.83	1
1.14	0.52	0.15	6.54	1.83	1.83	1
1.13	0.52	0.15	6.54	1.83	1.83	1
1.11	0.51	0.15	6.54	1.83	1.83	1
1.10	0.51	0.15	6.54	1.83	1.83	1
1.09	0.50	0.14	6.54	1.83	1.83	1
1.07	0.50	0.14	6.54	1.83	1.83	1
1.06	0.49	0.14	6.54	1.83	1.83	1
1.05	0.49	0.14	6.54	1.83	1.83	1
1.03	0.48	0.14	6.54	2.42	2.65	1
1.02	0.48	0.14	6.54	2.70	2.65	1

1.01	0.47	0.13	6.54	2.69	2.64	1
0.99	0.46	0.13	6.54	2.69	2.63	1
0.98	0.46	0.13	6.54	2.68	2.63	1
0.97	0.45	0.13	6.54	2.68	2.62	1
0.95	0.44	0.13	6.54	2.67	2.61	1
0.94	0.44	0.12	6.54	2.67	2.61	1
0.93	0.43	0.12	6.54	2.66	2.60	1
0.91	0.42	0.12	6.54	2.65	2.59	1
0.90	0.42	0.12	6.54	2.65	2.59	1
0.90	0.42	0.12	6.54	2.65	2.58	1
0.88	0.41	0.12	6.54	2.64	2.57	1
0.86	0.40	0.11	6.54	2.63	2.57	1
0.84	0.39	0.11	6.54	2.62	2.56	1
0.82	0.38	0.11	6.54	2.62	2.55	1
0.80	0.37	0.11	6.54	2.61	2.55	1
0.78	0.36	0.10	6.54	2.60	2.54	1
0.76	0.35	0.10	6.54	2.59	2.54	1
0.74	0.34	0.10	6.54	2.59	2.53	1
0.72	0.33	0.10	6.54	2.58	2.53	1
0.70	0.32	0.09	6.54	2.57	2.52	1
0.68	0.31	0.09	6.54	2.56	2.52	1
0.66	0.30	0.09	6.54	2.56	2.52	1
0.64	0.29	0.08	6.54	2.55	2.51	1
0.62	0.28	0.08	6.54	2.54	2.51	1
0.60	0.27	0.08	6.54	2.54	2.50	1
0.58	0.26	0.08	6.54	2.53	2.50	1
0.56	0.26	0.07	6.54	2.52	2.50	1
0.54	0.25	0.07	6.54	2.52	2.49	1
0.52	0.24	0.07	6.54	2.51	2.49	1
0.50	0.23	0.07	6.54	2.50	2.49	1
0.50	0.23	0.07	6.54	2.50	2.48	1
0.48	0.22	0.06	6.54	2.50	2.48	1
0.46	0.21	0.06	6.54	2.49	2.47	1
0.44	0.20	0.06	6.54	2.49	2.47	1
0.42	0.19	0.06	6.54	2.48	2.46	1
0.40	0.18	0.05	6.54	2.47	2.45	1
0.38	0.17	0.05	6.54	2.47	2.45	1
0.36	0.16	0.05	6.54	2.46	2.44	1
0.34	0.15	0.05	6.54	2.45	2.44	1
0.32	0.14	0.04	6.54	2.45	2.43	1
0.30	0.14	0.04	6.54	2.44	2.43	1
0.28	0.13	0.04	6.54	2.44	2.42	1
0.26	0.12	0.03	6.54	2.43	2.41	1
0.24	0.11	0.03	6.54	2.43	2.41	1
0.22	0.10	0.03	6.54	2.42	2.40	1
0.20	0.09	0.03	6.54	2.41	2.40	1
0.18	0.08	0.02	6.54	2.41	2.39	1
0.16	0.07	0.02	6.54	2.40	2.39	1

0.14	0.06	0.02	6.54	2.40	2.38	1
0.12	0.05	0.02	6.54	2.39	2.37	1
0.10	0.04	0.01	6.54	2.39	2.37	1
0.10	0.04	0.01	6.54	2.39	2.37	1
0.08	0.03	0.01	6.54	2.38	2.36	1
0.05	0.02	0.01	6.54	2.37	2.36	1
0.03	0.01	0.00	6.54	2.37	2.35	1
0.00	0.00	0.00	6.54	2.36	2.35	1

***** Stresses *****			***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
0.73	0.00	0.00	0.00	0.00	0.00	1
0.72	0.55	0.55	0.00	0.00	0.00	1
0.72	1.09	1.09	0.00	0.00	0.00	1
0.71	1.64	1.64	0.00	0.00	0.00	1
0.70	2.18	2.18	0.00	0.00	0.00	1
0.69	2.73	2.73	0.00	0.00	0.00	1
0.69	3.28	3.28	0.00	0.00	0.00	1
0.68	3.82	3.82	0.00	0.00	0.00	1
0.67	4.37	4.37	0.00	0.00	0.00	1
0.66	4.91	4.91	0.00	0.00	0.00	1
0.66	5.46	5.46	0.00	0.00	0.00	1
0.65	6.01	6.01	0.00	0.00	0.00	1
0.64	6.55	6.55	0.00	0.00	0.00	1
0.63	7.10	7.10	0.00	0.00	0.00	1
0.63	7.64	7.64	0.00	0.00	0.00	1
0.62	8.19	8.19	0.00	0.00	0.00	1
0.61	8.74	8.74	0.00	0.00	0.00	1
0.60	9.28	9.28	0.00	0.00	0.00	1
0.60	9.83	9.83	0.00	0.00	0.00	1
0.59	10.37	10.37	0.00	0.00	0.00	1
0.58	10.92	10.92	0.00	0.00	0.00	1
0.58	11.47	11.47	0.00	0.00	0.00	1
0.58	12.11	12.11	0.00	0.00	0.00	1
0.57	12.75	12.75	0.00	0.00	0.00	1
0.57	13.30	13.30	0.00	0.00	0.00	1
0.56	13.85	13.85	0.00	0.00	0.00	1
0.56	14.39	14.39	0.00	0.00	0.00	1
0.55	14.94	14.94	0.00	0.00	0.00	1
0.55	15.48	15.48	0.00	0.00	0.00	1
0.54	16.03	16.03	0.00	0.00	0.00	1
0.54	16.58	16.58	0.00	0.00	0.00	1
0.53	17.12	17.12	0.00	0.00	0.00	1
0.53	17.67	17.67	0.00	0.00	0.00	1
0.52	18.21	18.21	0.00	0.00	0.00	1
0.52	18.76	18.76	0.00	0.00	0.00	1

0.51	19.31	19.31	0.00	0.00	0.00	1
0.51	19.85	19.85	0.00	0.00	0.00	1
0.50	20.40	20.40	0.00	0.00	0.00	1
0.50	20.94	20.94	0.00	0.00	0.00	1
0.49	21.49	21.49	0.00	0.00	0.00	1
0.49	22.04	22.04	0.00	0.00	0.00	1
0.48	34.49	15.51	25.51	25.34	16.33	1
0.48	35.12	15.67	25.99	25.77	16.35	1
0.47	35.74	15.83	26.48	26.21	16.37	1
0.46	36.36	15.99	26.96	26.65	16.39	1
0.46	36.98	16.15	27.45	27.08	16.42	1
0.45	37.59	16.30	27.93	27.52	16.45	1
0.44	38.21	16.46	28.42	27.95	16.48	1
0.44	38.83	16.61	28.91	28.39	16.51	1
0.43	39.44	16.76	29.37	28.82	16.54	1
0.42	40.05	16.91	29.75	29.25	16.58	1
0.42	40.67	17.06	30.13	29.68	16.61	1
0.42	40.67	10.54	30.13	29.68	16.61	1
0.41	41.59	17.28	30.70	30.32	16.67	1
0.40	42.50	17.49	31.28	30.96	16.72	1
0.39	43.41	17.71	31.86	31.60	16.78	1
0.38	44.33	17.92	32.44	32.24	16.85	1
0.37	45.24	18.13	33.03	32.87	16.91	1
0.36	46.14	18.34	33.62	33.50	16.98	1
0.35	47.05	18.54	34.22	34.13	17.05	1
0.34	47.95	18.74	34.82	34.76	17.13	1
0.33	48.85	18.94	35.43	35.39	17.20	1
0.32	49.75	19.13	36.03	36.02	17.28	1
0.31	50.65	19.33	36.65	36.64	17.36	1
0.30	51.55	19.52	37.26	37.26	17.44	1
0.29	52.44	19.71	37.88	37.88	17.53	1
0.28	53.34	19.90	38.50	38.50	17.62	1
0.27	54.23	20.14	39.12	39.12	17.65	1
0.26	55.12	20.47	39.73	39.73	17.60	1
0.26	56.01	20.78	40.35	40.34	17.56	1
0.25	56.89	21.10	40.97	40.96	17.52	1
0.24	57.78	21.41	41.60	41.57	17.48	1
0.23	58.66	21.71	42.22	42.17	17.45	1
0.23	58.66	16.44	42.22	42.17	17.45	1
0.22	59.54	22.02	42.85	42.78	17.42	1
0.21	60.42	22.32	43.48	43.39	17.39	1
0.20	61.30	22.62	44.11	43.99	17.37	1
0.19	62.18	22.91	44.74	44.59	17.35	1
0.18	63.05	23.21	45.38	45.19	17.33	1
0.17	63.93	23.50	46.01	45.79	17.32	1
0.16	64.80	23.78	46.65	46.39	17.30	1
0.15	65.67	24.07	47.30	46.99	17.30	1
0.14	66.54	24.35	47.94	47.58	17.29	1

0.14	67.41	24.62	48.59	48.18	17.29	1
0.13	68.28	24.90	49.23	48.77	17.28	1
0.12	69.14	25.17	49.88	49.36	17.29	1
0.11	70.01	25.44	50.53	49.95	17.29	1
0.10	70.87	25.71	51.18	50.54	17.30	1
0.09	71.73	25.98	51.84	51.13	17.30	1
0.08	72.59	26.24	52.42	51.71	17.31	1
0.07	31.79	26.51	5.29	25.59	-20.30	1
0.06	32.49	26.77	5.72	26.15	-20.43	1
0.05	33.18	27.02	6.15	26.72	-20.57	1
0.04	33.86	27.28	6.58	27.28	-20.69	1
0.04	34.16	27.28	6.88	27.28	-20.40	1
0.03	34.94	27.60	7.34	27.98	-20.63	1
0.02	35.73	27.92	7.81	28.68	-20.87	1
0.01	36.51	28.24	8.28	29.37	-21.09	1
0.00	37.30	28.55	8.75	30.07	0.00	1

Time = 210. Degree of Consolidation = 80.%

Total Settlement = 0.968

Settlement at End of Primary Consolidation = 0.972

Settlement caused by Primary Consolidation at time 210. = 0.781

Settlement caused by Secondary Compression at time 210. = 0.000

Settlement Due to Desiccation = 0.187

Surface Elevation = 0.73

**********Current Conditions in Dredged Fill**********

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
1.70	0.69	0.23	6.54	1.83	1.83	1
1.68	0.68	0.22	6.54	1.83	1.83	1
1.66	0.68	0.22	6.54	1.83	1.83	1
1.64	0.67	0.22	6.54	1.83	1.83	1
1.62	0.66	0.21	6.54	1.83	1.83	1
1.60	0.65	0.21	6.54	1.83	1.83	1
1.58	0.65	0.21	6.54	1.83	1.83	1

1.56	0.64	0.21	6.54	1.83	1.83	1
1.54	0.63	0.20	6.54	1.83	1.83	1
1.52	0.62	0.20	6.54	1.83	1.83	1
1.50	0.62	0.20	6.54	1.83	1.83	1
1.48	0.61	0.20	6.54	1.83	1.83	1
1.46	0.60	0.19	6.54	1.83	1.83	1
1.44	0.59	0.19	6.54	1.83	1.83	1
1.42	0.59	0.19	6.54	1.83	1.83	1
1.40	0.58	0.19	6.54	1.83	1.83	1
1.38	0.57	0.18	6.54	1.83	1.83	1
1.36	0.56	0.18	6.54	1.83	1.83	1
1.34	0.56	0.18	6.54	1.83	1.83	1
1.32	0.55	0.18	6.54	1.83	1.83	1
1.30	0.54	0.17	6.54	2.88	1.83	1
1.30	0.54	0.17	6.54	2.88	1.83	1
1.29	0.53	0.17	6.54	1.83	1.83	1
1.27	0.53	0.17	6.54	1.83	1.83	1
1.26	0.52	0.17	6.54	1.83	1.83	1
1.25	0.52	0.17	6.54	1.83	1.83	1
1.23	0.51	0.16	6.54	1.83	1.83	1
1.22	0.51	0.16	6.54	1.83	1.83	1
1.21	0.50	0.16	6.54	1.83	1.83	1
1.19	0.50	0.16	6.54	1.83	1.83	1
1.18	0.49	0.16	6.54	1.83	1.83	1
1.17	0.49	0.15	6.54	1.83	1.83	1
1.15	0.48	0.15	6.54	1.83	1.83	1
1.14	0.48	0.15	6.54	1.83	1.83	1
1.13	0.47	0.15	6.54	1.83	1.83	1
1.11	0.47	0.15	6.54	1.83	1.83	1
1.10	0.46	0.15	6.54	1.83	1.83	1
1.09	0.46	0.14	6.54	1.83	1.83	1
1.07	0.45	0.14	6.54	1.83	1.83	1
1.06	0.45	0.14	6.54	1.83	1.83	1
1.05	0.44	0.14	6.54	1.83	1.83	1
1.03	0.44	0.14	6.54	1.83	1.83	1
1.02	0.43	0.14	6.54	1.83	1.83	1
1.01	0.43	0.13	6.54	1.83	1.83	1
0.99	0.42	0.13	6.54	1.83	1.83	1
0.98	0.42	0.13	6.54	1.83	1.83	1
0.97	0.41	0.13	6.54	1.83	1.83	1
0.95	0.41	0.13	6.54	1.83	1.83	1
0.94	0.40	0.12	6.54	1.83	1.83	1
0.93	0.40	0.12	6.54	1.83	1.83	1
0.91	0.39	0.12	6.54	1.83	1.83	1
0.90	0.39	0.12	6.54	2.37	1.83	1
0.90	0.39	0.12	6.54	2.37	1.83	1
0.88	0.38	0.12	6.54	1.83	1.83	1
0.86	0.37	0.11	6.54	1.83	1.83	1

0.84	0.37	0.11	6.54	1.83	1.83	1
0.82	0.36	0.11	6.54	1.83	1.83	1
0.80	0.35	0.11	6.54	1.83	1.83	1
0.78	0.34	0.10	6.54	1.83	1.83	1
0.76	0.34	0.10	6.54	1.83	1.83	1
0.74	0.33	0.10	6.54	1.83	1.83	1
0.72	0.32	0.10	6.54	1.83	1.83	1
0.70	0.31	0.09	6.54	1.83	1.83	1
0.68	0.31	0.09	6.54	1.83	1.83	1
0.66	0.30	0.09	6.54	1.83	1.83	1
0.64	0.29	0.08	6.54	2.46	2.46	1
0.62	0.28	0.08	6.54	2.46	2.46	1
0.60	0.27	0.08	6.54	2.46	2.46	1
0.58	0.26	0.08	6.54	2.45	2.45	1
0.56	0.25	0.07	6.54	2.45	2.45	1
0.54	0.24	0.07	6.54	2.45	2.44	1
0.52	0.23	0.07	6.54	2.44	2.44	1
0.50	0.23	0.07	6.54	2.44	2.44	1
0.50	0.23	0.07	6.54	2.44	2.43	1
0.48	0.22	0.06	6.54	2.44	2.43	1
0.46	0.21	0.06	6.54	2.44	2.42	1
0.44	0.20	0.06	6.54	2.43	2.42	1
0.42	0.19	0.06	6.54	2.43	2.42	1
0.40	0.18	0.05	6.54	2.43	2.41	1
0.38	0.17	0.05	6.54	2.42	2.41	1
0.36	0.16	0.05	6.54	2.42	2.41	1
0.34	0.15	0.05	6.54	2.42	2.40	1
0.32	0.14	0.04	6.54	2.42	2.40	1
0.30	0.13	0.04	6.54	2.41	2.39	1
0.28	0.13	0.04	6.54	2.41	2.39	1
0.26	0.12	0.03	6.54	2.41	2.39	1
0.24	0.11	0.03	6.54	2.40	2.38	1
0.22	0.10	0.03	6.54	2.40	2.38	1
0.20	0.09	0.03	6.54	2.40	2.37	1
0.18	0.08	0.02	6.54	2.40	2.37	1
0.16	0.07	0.02	6.54	2.39	2.37	1
0.14	0.06	0.02	6.54	2.39	2.36	1
0.12	0.05	0.02	6.54	2.39	2.36	1
0.10	0.04	0.01	6.54	2.39	2.36	1
0.10	0.04	0.01	6.54	2.39	2.35	1
0.08	0.03	0.01	6.54	2.38	2.35	1
0.05	0.02	0.01	6.54	2.37	2.35	1
0.03	0.01	0.00	6.54	2.37	2.34	1
0.00	0.00	0.00	6.54	2.36	2.34	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
0.69	0.00	0.00	0.00	0.00	0.00	1
0.68	0.55	0.55	0.00	0.00	0.00	1
0.68	1.09	1.09	0.00	0.00	0.00	1
0.67	1.64	1.64	0.00	0.00	0.00	1
0.66	2.18	2.18	0.00	0.00	0.00	1
0.65	2.73	2.73	0.00	0.00	0.00	1
0.65	3.28	3.28	0.00	0.00	0.00	1
0.64	3.82	3.82	0.00	0.00	0.00	1
0.63	4.37	4.37	0.00	0.00	0.00	1
0.62	4.91	4.91	0.00	0.00	0.00	1
0.62	5.46	5.46	0.00	0.00	0.00	1
0.61	6.01	6.01	0.00	0.00	0.00	1
0.60	6.55	6.55	0.00	0.00	0.00	1
0.59	7.10	7.10	0.00	0.00	0.00	1
0.59	7.64	7.64	0.00	0.00	0.00	1
0.58	8.19	8.19	0.00	0.00	0.00	1
0.57	8.74	8.74	0.00	0.00	0.00	1
0.56	9.28	9.28	0.00	0.00	0.00	1
0.56	9.83	9.83	0.00	0.00	0.00	1
0.55	10.37	10.37	0.00	0.00	0.00	1
0.54	10.92	10.92	0.00	0.00	0.00	1
0.54	11.47	11.47	0.00	0.00	0.00	1
0.53	12.11	12.11	0.00	0.00	0.00	1
0.53	12.75	12.75	0.00	0.00	0.00	1
0.52	13.30	13.30	0.00	0.00	0.00	1
0.52	13.85	13.85	0.00	0.00	0.00	1
0.51	14.39	14.39	0.00	0.00	0.00	1
0.51	14.94	14.94	0.00	0.00	0.00	1
0.50	15.48	15.48	0.00	0.00	0.00	1
0.50	16.03	16.03	0.00	0.00	0.00	1
0.49	16.58	16.58	0.00	0.00	0.00	1
0.49	17.12	17.12	0.00	0.00	0.00	1
0.48	17.67	17.67	0.00	0.00	0.00	1
0.48	18.21	18.21	0.00	0.00	0.00	1
0.47	18.76	18.76	0.00	0.00	0.00	1
0.47	19.31	19.31	0.00	0.00	0.00	1
0.46	19.85	19.85	0.00	0.00	0.00	1
0.46	20.40	20.40	0.00	0.00	0.00	1
0.45	20.94	20.94	0.00	0.00	0.00	1
0.45	21.49	21.49	0.00	0.00	0.00	1
0.44	22.04	22.04	0.00	0.00	0.00	1
0.44	22.58	22.58	0.00	0.00	0.00	1
0.43	23.13	23.13	0.00	0.00	0.00	1
0.43	23.67	23.67	0.00	0.00	0.00	1
0.42	24.22	24.22	0.00	0.00	0.00	1
0.42	24.77	24.77	0.00	0.00	0.00	1
0.41	25.31	25.31	0.00	0.00	0.00	1

0.41	25.86	25.86	0.00	0.00	0.00	1
0.40	26.40	26.40	0.00	0.00	0.00	1
0.40	26.95	26.95	0.00	0.00	0.00	1
0.39	27.50	27.50	0.00	0.00	0.00	1
0.39	28.04	28.04	0.00	0.00	0.00	1
0.39	28.59	28.59	0.00	0.00	0.00	1
0.38	29.23	29.23	0.00	0.00	0.00	1
0.37	29.88	29.88	0.00	0.00	0.00	1
0.37	30.42	30.42	0.00	0.00	0.00	1
0.36	30.97	30.97	0.00	0.00	0.00	1
0.35	31.52	31.52	0.00	0.00	0.00	1
0.34	32.06	32.06	0.00	0.00	0.00	1
0.34	32.61	32.61	0.00	0.00	0.00	1
0.33	33.15	33.15	0.00	0.00	0.00	1
0.32	33.70	33.70	0.00	0.00	0.00	1
0.31	34.25	34.25	0.00	0.00	0.00	1
0.31	34.79	34.79	0.00	0.00	0.00	1
0.30	35.34	35.34	0.00	0.00	0.00	1
0.29	52.44	23.09	37.88	37.88	27.49	1
0.28	53.34	23.81	38.50	38.50	27.04	1
0.27	54.23	23.97	39.12	39.12	27.16	1
0.26	55.12	24.12	39.73	39.73	27.29	1
0.25	56.01	24.27	40.35	40.34	27.41	1
0.24	56.89	24.42	40.97	40.96	27.53	1
0.23	57.78	24.57	41.60	41.57	27.66	1
0.23	58.66	24.71	42.22	42.17	27.79	1
0.23	58.66	16.44	42.22	42.17	27.79	1
0.22	59.54	24.86	42.85	42.78	27.92	1
0.21	60.42	25.00	43.48	43.39	28.05	1
0.20	61.30	25.14	44.11	43.99	28.19	1
0.19	62.18	25.28	44.74	44.59	28.32	1
0.18	63.05	25.42	45.38	45.19	28.46	1
0.17	63.93	25.55	46.01	45.79	28.60	1
0.16	64.80	25.69	46.65	46.39	28.74	1
0.15	65.67	25.82	47.30	46.99	28.88	1
0.14	66.54	25.95	47.94	47.58	29.03	1
0.13	67.41	26.08	48.59	48.18	29.17	1
0.13	68.28	26.20	49.23	48.77	29.32	1
0.12	69.14	26.33	49.88	49.36	29.47	1
0.11	70.01	26.45	50.53	49.95	29.62	1
0.10	70.87	26.58	51.18	50.54	29.77	1
0.09	71.73	26.70	51.84	51.13	29.93	1
0.08	25.45	26.82	-1.37	13.05	-14.42	1
0.07	26.14	26.94	-0.79	13.61	-14.41	1
0.06	26.83	27.05	-0.22	14.18	-14.40	1
0.05	27.52	27.17	0.35	14.74	-14.38	1
0.04	28.21	27.28	0.93	15.30	-14.37	1
0.04	28.50	27.28	1.22	15.30	-14.08	1

0.03	29.29	27.61	1.68	16.00	-14.32	1
0.02	30.07	27.93	2.14	16.70	-14.56	1
0.01	30.86	28.25	2.61	17.39	-14.79	1
0.00	31.64	28.57	3.07	18.09	0.00	1

Time = 395. Degree of Consolidation = 74.%

Total Settlement = 1.009

Settlement at End of Primary Consolidation = 1.013

Settlement caused by Primary Consolidation at time 395. = 0.749

Settlement caused by Secondary Compression at time 395. = 0.000

Settlement Due to Desiccation = 0.260

Surface Elevation = 0.69

**********Current Conditions in Dredged Fill**********

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
1.70	0.69	0.23	6.54	1.83	1.83	1
1.68	0.68	0.22	6.54	1.83	1.83	1
1.66	0.68	0.22	6.54	1.83	1.83	1
1.64	0.67	0.22	6.54	1.83	1.83	1
1.62	0.66	0.21	6.54	1.83	1.83	1
1.60	0.65	0.21	6.54	1.83	1.83	1
1.58	0.65	0.21	6.54	1.83	1.83	1
1.56	0.64	0.21	6.54	1.83	1.83	1
1.54	0.63	0.20	6.54	1.83	1.83	1
1.52	0.62	0.20	6.54	1.83	1.83	1
1.50	0.62	0.20	6.54	1.83	1.83	1
1.48	0.61	0.20	6.54	1.83	1.83	1
1.46	0.60	0.19	6.54	1.83	1.83	1
1.44	0.59	0.19	6.54	1.83	1.83	1
1.42	0.59	0.19	6.54	1.83	1.83	1
1.40	0.58	0.19	6.54	1.83	1.83	1
1.38	0.57	0.18	6.54	1.83	1.83	1
1.36	0.56	0.18	6.54	1.83	1.83	1
1.34	0.56	0.18	6.54	1.83	1.83	1

1.32	0.55	0.18	6.54	1.83	1.83	1
1.30	0.54	0.17	6.54	2.88	1.83	1
1.30	0.54	0.17	6.54	2.88	1.83	1
1.29	0.53	0.17	6.54	1.83	1.83	1
1.27	0.53	0.17	6.54	1.83	1.83	1
1.26	0.52	0.17	6.54	1.83	1.83	1
1.25	0.52	0.17	6.54	1.83	1.83	1
1.23	0.51	0.16	6.54	1.83	1.83	1
1.22	0.51	0.16	6.54	1.83	1.83	1
1.21	0.50	0.16	6.54	1.83	1.83	1
1.19	0.50	0.16	6.54	1.83	1.83	1
1.18	0.49	0.16	6.54	1.83	1.83	1
1.17	0.49	0.15	6.54	1.83	1.83	1
1.15	0.48	0.15	6.54	1.83	1.83	1
1.14	0.48	0.15	6.54	1.83	1.83	1
1.13	0.47	0.15	6.54	1.83	1.83	1
1.11	0.47	0.15	6.54	1.83	1.83	1
1.10	0.46	0.15	6.54	1.83	1.83	1
1.09	0.46	0.14	6.54	1.83	1.83	1
1.07	0.45	0.14	6.54	1.83	1.83	1
1.06	0.45	0.14	6.54	1.83	1.83	1
1.05	0.44	0.14	6.54	1.83	1.83	1
1.03	0.44	0.14	6.54	1.83	1.83	1
1.02	0.43	0.14	6.54	1.83	1.83	1
1.01	0.43	0.13	6.54	1.83	1.83	1
0.99	0.42	0.13	6.54	1.83	1.83	1
0.98	0.42	0.13	6.54	1.83	1.83	1
0.97	0.41	0.13	6.54	1.83	1.83	1
0.95	0.41	0.13	6.54	1.83	1.83	1
0.94	0.40	0.12	6.54	1.83	1.83	1
0.93	0.40	0.12	6.54	1.83	1.83	1
0.91	0.39	0.12	6.54	1.83	1.83	1
0.90	0.39	0.12	6.54	2.37	1.83	1
0.90	0.39	0.12	6.54	2.37	1.83	1
0.88	0.38	0.12	6.54	1.83	1.83	1
0.86	0.37	0.11	6.54	1.83	1.83	1
0.84	0.37	0.11	6.54	1.83	1.83	1
0.82	0.36	0.11	6.54	1.83	1.83	1
0.80	0.35	0.11	6.54	1.83	1.83	1
0.78	0.34	0.10	6.54	1.83	1.83	1
0.76	0.34	0.10	6.54	1.83	1.83	1
0.74	0.33	0.10	6.54	1.83	1.83	1
0.72	0.32	0.10	6.54	1.83	1.83	1
0.70	0.31	0.09	6.54	1.83	1.83	1
0.68	0.31	0.09	6.54	1.83	1.83	1
0.66	0.30	0.09	6.54	1.83	1.83	1
0.64	0.29	0.08	6.54	2.46	2.46	1
0.62	0.28	0.08	6.54	2.46	2.46	1

0.60	0.27	0.08	6.54	2.46	2.46	1
0.58	0.26	0.08	6.54	2.45	2.45	1
0.56	0.25	0.07	6.54	2.45	2.45	1
0.54	0.24	0.07	6.54	2.45	2.44	1
0.52	0.23	0.07	6.54	2.44	2.44	1
0.50	0.23	0.07	6.54	2.44	2.44	1
0.50	0.23	0.07	6.54	2.44	2.43	1
0.48	0.22	0.06	6.54	2.44	2.43	1
0.46	0.21	0.06	6.54	2.44	2.42	1
0.44	0.20	0.06	6.54	2.43	2.42	1
0.42	0.19	0.06	6.54	2.43	2.42	1
0.40	0.18	0.05	6.54	2.43	2.41	1
0.38	0.17	0.05	6.54	2.42	2.41	1
0.36	0.16	0.05	6.54	2.42	2.41	1
0.34	0.15	0.05	6.54	2.42	2.40	1
0.32	0.14	0.04	6.54	2.42	2.40	1
0.30	0.13	0.04	6.54	2.41	2.39	1
0.28	0.13	0.04	6.54	2.41	2.39	1
0.26	0.12	0.03	6.54	2.41	2.39	1
0.24	0.11	0.03	6.54	2.40	2.38	1
0.22	0.10	0.03	6.54	2.40	2.38	1
0.20	0.09	0.03	6.54	2.40	2.37	1
0.18	0.08	0.02	6.54	2.40	2.37	1
0.16	0.07	0.02	6.54	2.39	2.37	1
0.14	0.06	0.02	6.54	2.39	2.36	1
0.12	0.05	0.02	6.54	2.39	2.36	1
0.10	0.04	0.01	6.54	2.39	2.36	1
0.10	0.04	0.01	6.54	2.39	2.35	1
0.08	0.03	0.01	6.54	2.38	2.35	1
0.05	0.02	0.01	6.54	2.37	2.35	1
0.03	0.01	0.00	6.54	2.37	2.34	1
0.00	0.00	0.00	6.54	2.36	2.34	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
0.69	0.00	0.00	0.00	0.00	0.00	1
0.68	0.55	0.55	0.00	0.00	0.00	1
0.68	1.09	1.09	0.00	0.00	0.00	1
0.67	1.64	1.64	0.00	0.00	0.00	1
0.66	2.18	2.18	0.00	0.00	0.00	1
0.65	2.73	2.73	0.00	0.00	0.00	1
0.65	3.28	3.28	0.00	0.00	0.00	1
0.64	3.82	3.82	0.00	0.00	0.00	1
0.63	4.37	4.37	0.00	0.00	0.00	1
0.62	4.91	4.91	0.00	0.00	0.00	1
0.62	5.46	5.46	0.00	0.00	0.00	1

0.61	6.01	6.01	0.00	0.00	0.00	1
0.60	6.55	6.55	0.00	0.00	0.00	1
0.59	7.10	7.10	0.00	0.00	0.00	1
0.59	7.64	7.64	0.00	0.00	0.00	1
0.58	8.19	8.19	0.00	0.00	0.00	1
0.57	8.74	8.74	0.00	0.00	0.00	1
0.56	9.28	9.28	0.00	0.00	0.00	1
0.56	9.83	9.83	0.00	0.00	0.00	1
0.55	10.37	10.37	0.00	0.00	0.00	1
0.54	10.92	10.92	0.00	0.00	0.00	1
0.54	11.47	11.47	0.00	0.00	0.00	1
0.53	12.11	12.11	0.00	0.00	0.00	1
0.53	12.75	12.75	0.00	0.00	0.00	1
0.52	13.30	13.30	0.00	0.00	0.00	1
0.52	13.85	13.85	0.00	0.00	0.00	1
0.51	14.39	14.39	0.00	0.00	0.00	1
0.51	14.94	14.94	0.00	0.00	0.00	1
0.50	15.48	15.48	0.00	0.00	0.00	1
0.50	16.03	16.03	0.00	0.00	0.00	1
0.49	16.58	16.58	0.00	0.00	0.00	1
0.49	17.12	17.12	0.00	0.00	0.00	1
0.48	17.67	17.67	0.00	0.00	0.00	1
0.48	18.21	18.21	0.00	0.00	0.00	1
0.47	18.76	18.76	0.00	0.00	0.00	1
0.47	19.31	19.31	0.00	0.00	0.00	1
0.46	19.85	19.85	0.00	0.00	0.00	1
0.46	20.40	20.40	0.00	0.00	0.00	1
0.45	20.94	20.94	0.00	0.00	0.00	1
0.45	21.49	21.49	0.00	0.00	0.00	1
0.44	22.04	22.04	0.00	0.00	0.00	1
0.44	22.58	22.58	0.00	0.00	0.00	1
0.43	23.13	23.13	0.00	0.00	0.00	1
0.43	23.67	23.67	0.00	0.00	0.00	1
0.42	24.22	24.22	0.00	0.00	0.00	1
0.42	24.77	24.77	0.00	0.00	0.00	1
0.41	25.31	25.31	0.00	0.00	0.00	1
0.41	25.86	25.86	0.00	0.00	0.00	1
0.40	26.40	26.40	0.00	0.00	0.00	1
0.40	26.95	26.95	0.00	0.00	0.00	1
0.39	27.50	27.50	0.00	0.00	0.00	1
0.39	28.04	28.04	0.00	0.00	0.00	1
0.39	28.59	28.59	0.00	0.00	0.00	1
0.38	29.23	29.23	0.00	0.00	0.00	1
0.37	29.88	29.88	0.00	0.00	0.00	1
0.37	30.42	30.42	0.00	0.00	0.00	1
0.36	30.97	30.97	0.00	0.00	0.00	1
0.35	31.52	31.52	0.00	0.00	0.00	1
0.34	32.06	32.06	0.00	0.00	0.00	1

0.34	32.61	32.61	0.00	0.00	0.00	1
0.33	33.15	33.15	0.00	0.00	0.00	1
0.32	33.70	33.70	0.00	0.00	0.00	1
0.31	34.25	34.25	0.00	0.00	0.00	1
0.31	34.79	34.79	0.00	0.00	0.00	1
0.30	35.34	35.34	0.00	0.00	0.00	1
0.29	52.44	23.09	37.88	37.88	27.49	1
0.28	53.34	23.81	38.50	38.50	27.04	1
0.27	54.23	23.97	39.12	39.12	27.16	1
0.26	55.12	24.12	39.73	39.73	27.29	1
0.25	56.01	24.27	40.35	40.34	27.41	1
0.24	56.89	24.42	40.97	40.96	27.53	1
0.23	57.78	24.57	41.60	41.57	27.66	1
0.23	58.66	24.71	42.22	42.17	27.79	1
0.23	58.66	16.44	42.22	42.17	27.79	1
0.22	59.54	24.86	42.85	42.78	27.92	1
0.21	60.42	25.00	43.48	43.39	28.05	1
0.20	61.30	25.14	44.11	43.99	28.19	1
0.19	62.18	25.28	44.74	44.59	28.32	1
0.18	63.05	25.42	45.38	45.19	28.46	1
0.17	63.93	25.55	46.01	45.79	28.60	1
0.16	64.80	25.69	46.65	46.39	28.74	1
0.15	65.67	25.82	47.30	46.99	28.88	1
0.14	66.54	25.95	47.94	47.58	29.03	1
0.13	67.41	26.08	48.59	48.18	29.17	1
0.13	68.28	26.20	49.23	48.77	29.32	1
0.12	69.14	26.33	49.88	49.36	29.47	1
0.11	70.01	26.45	50.53	49.95	29.62	1
0.10	70.87	26.58	51.18	50.54	29.77	1
0.09	25.05	26.70	-1.64	12.49	-14.13	1
0.08	25.74	26.82	-1.07	13.05	-14.12	1
0.07	26.43	26.94	-0.50	13.61	-14.11	1
0.06	27.12	27.05	0.07	14.18	-14.10	1
0.05	27.81	27.17	0.65	14.74	-14.09	1
0.04	28.50	27.28	1.22	15.30	-14.08	1
0.04	28.80	27.28	1.51	15.30	-13.78	1
0.03	29.58	27.61	1.97	16.00	-14.03	1
0.02	30.37	27.93	2.43	16.70	-14.26	1
0.01	31.15	28.25	2.90	17.39	-14.49	1
0.00	31.93	28.57	3.37	18.09	0.00	1

Time = 760. Degree of Consolidation = 74.%

Total Settlement = 1.009

Settlement at End of Primary Consolidation = 1.013

Settlement caused by Primary Consolidation at time 760. = 0.749

Settlement caused by Secondary Compression at time 760. = 0.000

Settlement Due to Desiccation = 0.260

Surface Elevation = 0.69

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
1.70	0.69	0.23	6.54	1.83	1.83	1
1.68	0.68	0.22	6.54	1.83	1.83	1
1.66	0.68	0.22	6.54	1.83	1.83	1
1.64	0.67	0.22	6.54	1.83	1.83	1
1.62	0.66	0.21	6.54	1.83	1.83	1
1.60	0.65	0.21	6.54	1.83	1.83	1
1.58	0.65	0.21	6.54	1.83	1.83	1
1.56	0.64	0.21	6.54	1.83	1.83	1
1.54	0.63	0.20	6.54	1.83	1.83	1
1.52	0.62	0.20	6.54	1.83	1.83	1
1.50	0.62	0.20	6.54	1.83	1.83	1
1.48	0.61	0.20	6.54	1.83	1.83	1
1.46	0.60	0.19	6.54	1.83	1.83	1
1.44	0.59	0.19	6.54	1.83	1.83	1
1.42	0.59	0.19	6.54	1.83	1.83	1
1.40	0.58	0.19	6.54	1.83	1.83	1
1.38	0.57	0.18	6.54	1.83	1.83	1
1.36	0.56	0.18	6.54	1.83	1.83	1
1.34	0.56	0.18	6.54	1.83	1.83	1
1.32	0.55	0.18	6.54	1.83	1.83	1
1.30	0.54	0.17	6.54	2.88	1.83	1
1.30	0.54	0.17	6.54	2.88	1.83	1
1.29	0.53	0.17	6.54	1.83	1.83	1
1.27	0.53	0.17	6.54	1.83	1.83	1
1.26	0.52	0.17	6.54	1.83	1.83	1
1.25	0.52	0.17	6.54	1.83	1.83	1
1.23	0.51	0.16	6.54	1.83	1.83	1
1.22	0.51	0.16	6.54	1.83	1.83	1
1.21	0.50	0.16	6.54	1.83	1.83	1
1.19	0.50	0.16	6.54	1.83	1.83	1
1.18	0.49	0.16	6.54	1.83	1.83	1

1.17	0.49	0.15	6.54	1.83	1.83	1
1.15	0.48	0.15	6.54	1.83	1.83	1
1.14	0.48	0.15	6.54	1.83	1.83	1
1.13	0.47	0.15	6.54	1.83	1.83	1
1.11	0.47	0.15	6.54	1.83	1.83	1
1.10	0.46	0.15	6.54	1.83	1.83	1
1.09	0.46	0.14	6.54	1.83	1.83	1
1.07	0.45	0.14	6.54	1.83	1.83	1
1.06	0.45	0.14	6.54	1.83	1.83	1
1.05	0.44	0.14	6.54	1.83	1.83	1
1.03	0.44	0.14	6.54	1.83	1.83	1
1.02	0.43	0.14	6.54	1.83	1.83	1
1.01	0.43	0.13	6.54	1.83	1.83	1
0.99	0.42	0.13	6.54	1.83	1.83	1
0.98	0.42	0.13	6.54	1.83	1.83	1
0.97	0.41	0.13	6.54	1.83	1.83	1
0.95	0.41	0.13	6.54	1.83	1.83	1
0.94	0.40	0.12	6.54	1.83	1.83	1
0.93	0.40	0.12	6.54	1.83	1.83	1
0.91	0.39	0.12	6.54	1.83	1.83	1
0.90	0.39	0.12	6.54	2.37	1.83	1
0.90	0.39	0.12	6.54	2.37	1.83	1
0.88	0.38	0.12	6.54	1.83	1.83	1
0.86	0.37	0.11	6.54	1.83	1.83	1
0.84	0.37	0.11	6.54	1.83	1.83	1
0.82	0.36	0.11	6.54	1.83	1.83	1
0.80	0.35	0.11	6.54	1.83	1.83	1
0.78	0.34	0.10	6.54	1.83	1.83	1
0.76	0.34	0.10	6.54	1.83	1.83	1
0.74	0.33	0.10	6.54	1.83	1.83	1
0.72	0.32	0.10	6.54	1.83	1.83	1
0.70	0.31	0.09	6.54	1.83	1.83	1
0.68	0.31	0.09	6.54	1.83	1.83	1
0.66	0.30	0.09	6.54	1.83	1.83	1
0.64	0.29	0.08	6.54	2.46	2.46	1
0.62	0.28	0.08	6.54	2.46	2.46	1
0.60	0.27	0.08	6.54	2.46	2.46	1
0.58	0.26	0.08	6.54	2.45	2.45	1
0.56	0.25	0.07	6.54	2.45	2.45	1
0.54	0.24	0.07	6.54	2.45	2.44	1
0.52	0.23	0.07	6.54	2.44	2.44	1
0.50	0.23	0.07	6.54	2.44	2.44	1
0.50	0.23	0.07	6.54	2.44	2.43	1
0.48	0.22	0.06	6.54	2.44	2.43	1
0.46	0.21	0.06	6.54	2.44	2.42	1
0.44	0.20	0.06	6.54	2.43	2.42	1
0.42	0.19	0.06	6.54	2.43	2.42	1
0.40	0.18	0.05	6.54	2.43	2.41	1

0.38	0.17	0.05	6.54	2.42	2.41	1
0.36	0.16	0.05	6.54	2.42	2.41	1
0.34	0.15	0.05	6.54	2.42	2.40	1
0.32	0.14	0.04	6.54	2.42	2.40	1
0.30	0.13	0.04	6.54	2.41	2.39	1
0.28	0.13	0.04	6.54	2.41	2.39	1
0.26	0.12	0.03	6.54	2.41	2.39	1
0.24	0.11	0.03	6.54	2.40	2.38	1
0.22	0.10	0.03	6.54	2.40	2.38	1
0.20	0.09	0.03	6.54	2.40	2.37	1
0.18	0.08	0.02	6.54	2.40	2.37	1
0.16	0.07	0.02	6.54	2.39	2.37	1
0.14	0.06	0.02	6.54	2.39	2.36	1
0.12	0.05	0.02	6.54	2.39	2.36	1
0.10	0.04	0.01	6.54	2.39	2.36	1
0.10	0.04	0.01	6.54	2.39	2.35	1
0.08	0.03	0.01	6.54	2.38	2.35	1
0.05	0.02	0.01	6.54	2.37	2.35	1
0.03	0.01	0.00	6.54	2.37	2.34	1
0.00	0.00	0.00	6.54	2.36	2.34	1

***** Stresses *****			***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
0.69	0.00	0.00	0.00	0.00	0.00	1
0.68	0.55	0.55	0.00	0.00	0.00	1
0.68	1.09	1.09	0.00	0.00	0.00	1
0.67	1.64	1.64	0.00	0.00	0.00	1
0.66	2.18	2.18	0.00	0.00	0.00	1
0.65	2.73	2.73	0.00	0.00	0.00	1
0.65	3.28	3.28	0.00	0.00	0.00	1
0.64	3.82	3.82	0.00	0.00	0.00	1
0.63	4.37	4.37	0.00	0.00	0.00	1
0.62	4.91	4.91	0.00	0.00	0.00	1
0.62	5.46	5.46	0.00	0.00	0.00	1
0.61	6.01	6.01	0.00	0.00	0.00	1
0.60	6.55	6.55	0.00	0.00	0.00	1
0.59	7.10	7.10	0.00	0.00	0.00	1
0.59	7.64	7.64	0.00	0.00	0.00	1
0.58	8.19	8.19	0.00	0.00	0.00	1
0.57	8.74	8.74	0.00	0.00	0.00	1
0.56	9.28	9.28	0.00	0.00	0.00	1
0.56	9.83	9.83	0.00	0.00	0.00	1
0.55	10.37	10.37	0.00	0.00	0.00	1
0.54	10.92	10.92	0.00	0.00	0.00	1
0.54	11.47	11.47	0.00	0.00	0.00	1
0.53	12.11	12.11	0.00	0.00	0.00	1

0.53	12.75	12.75	0.00	0.00	0.00	1
0.52	13.30	13.30	0.00	0.00	0.00	1
0.52	13.85	13.85	0.00	0.00	0.00	1
0.51	14.39	14.39	0.00	0.00	0.00	1
0.51	14.94	14.94	0.00	0.00	0.00	1
0.50	15.48	15.48	0.00	0.00	0.00	1
0.50	16.03	16.03	0.00	0.00	0.00	1
0.49	16.58	16.58	0.00	0.00	0.00	1
0.49	17.12	17.12	0.00	0.00	0.00	1
0.48	17.67	17.67	0.00	0.00	0.00	1
0.48	18.21	18.21	0.00	0.00	0.00	1
0.47	18.76	18.76	0.00	0.00	0.00	1
0.47	19.31	19.31	0.00	0.00	0.00	1
0.46	19.85	19.85	0.00	0.00	0.00	1
0.46	20.40	20.40	0.00	0.00	0.00	1
0.45	20.94	20.94	0.00	0.00	0.00	1
0.45	21.49	21.49	0.00	0.00	0.00	1
0.44	22.04	22.04	0.00	0.00	0.00	1
0.44	22.58	22.58	0.00	0.00	0.00	1
0.43	23.13	23.13	0.00	0.00	0.00	1
0.43	23.67	23.67	0.00	0.00	0.00	1
0.42	24.22	24.22	0.00	0.00	0.00	1
0.42	24.77	24.77	0.00	0.00	0.00	1
0.41	25.31	25.31	0.00	0.00	0.00	1
0.41	25.86	25.86	0.00	0.00	0.00	1
0.40	26.40	26.40	0.00	0.00	0.00	1
0.40	26.95	26.95	0.00	0.00	0.00	1
0.39	27.50	27.50	0.00	0.00	0.00	1
0.39	28.04	28.04	0.00	0.00	0.00	1
0.39	28.59	28.59	0.00	0.00	0.00	1
0.38	29.23	29.23	0.00	0.00	0.00	1
0.37	29.88	29.88	0.00	0.00	0.00	1
0.37	30.42	30.42	0.00	0.00	0.00	1
0.36	30.97	30.97	0.00	0.00	0.00	1
0.35	31.52	31.52	0.00	0.00	0.00	1
0.34	32.06	32.06	0.00	0.00	0.00	1
0.34	32.61	32.61	0.00	0.00	0.00	1
0.33	33.15	33.15	0.00	0.00	0.00	1
0.32	33.70	33.70	0.00	0.00	0.00	1
0.31	34.25	34.25	0.00	0.00	0.00	1
0.31	34.79	34.79	0.00	0.00	0.00	1
0.30	35.34	35.34	0.00	0.00	0.00	1
0.29	52.44	23.09	37.88	37.88	27.49	1
0.28	53.34	23.81	38.50	38.50	27.04	1
0.27	54.23	23.97	39.12	39.12	27.16	1
0.26	55.12	24.12	39.73	39.73	27.29	1
0.25	56.01	24.27	40.35	40.34	27.41	1
0.24	56.89	24.42	40.97	40.96	27.53	1

0.23	57.78	24.57	41.60	41.57	27.66	1
0.23	58.66	24.71	42.22	42.17	27.79	1
0.23	58.66	16.44	42.22	42.17	27.79	1
0.22	59.54	24.86	42.85	42.78	27.92	1
0.21	60.42	25.00	43.48	43.39	28.05	1
0.20	61.30	25.14	44.11	43.99	28.19	1
0.19	62.18	25.28	44.74	44.59	28.32	1
0.18	63.05	25.42	45.38	45.19	28.46	1
0.17	63.93	25.55	46.01	45.79	28.60	1
0.16	64.80	25.69	46.65	46.39	28.74	1
0.15	65.67	25.82	47.30	46.99	28.88	1
0.14	66.54	25.95	47.94	47.58	29.03	1
0.13	67.41	26.08	48.59	48.18	29.17	1
0.13	68.28	26.20	49.23	48.77	29.32	1
0.12	69.14	26.33	49.88	49.36	29.47	1
0.11	70.01	26.45	50.53	49.95	29.62	1
0.10	24.66	26.58	-1.92	11.93	-13.85	1
0.09	25.35	26.70	-1.35	12.49	-13.84	1
0.08	26.04	26.82	-0.78	13.05	-13.83	1
0.07	26.73	26.94	-0.21	13.61	-13.82	1
0.06	27.42	27.05	0.37	14.18	-13.81	1
0.05	28.11	27.17	0.94	14.74	-13.80	1
0.04	28.80	27.28	1.51	15.30	-13.78	1
0.04	29.09	27.28	1.81	15.30	-13.49	1
0.03	29.88	27.61	2.27	16.00	-13.73	1
0.02	30.66	27.93	2.73	16.70	-13.97	1
0.01	31.44	28.25	3.19	17.39	-14.20	1
0.00	32.23	28.57	3.66	18.09	0.00	1

Time = 1125. Degree of Consolidation = 74.%

Total Settlement = 1.009

Settlement at End of Primary Consolidation = 1.013

Settlement caused by Primary Consolidation at time 1125. = 0.749

Settlement caused by Secondary Compression at time 1125. = 0.000

Settlement Due to Desiccation = 0.260

Surface Elevation = 0.69

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
1.70	0.69	0.23	6.54	1.83	1.83	1
1.68	0.68	0.22	6.54	1.83	1.83	1
1.66	0.68	0.22	6.54	1.83	1.83	1
1.64	0.67	0.22	6.54	1.83	1.83	1
1.62	0.66	0.21	6.54	1.83	1.83	1
1.60	0.65	0.21	6.54	1.83	1.83	1
1.58	0.65	0.21	6.54	1.83	1.83	1
1.56	0.64	0.21	6.54	1.83	1.83	1
1.54	0.63	0.20	6.54	1.83	1.83	1
1.52	0.62	0.20	6.54	1.83	1.83	1
1.50	0.62	0.20	6.54	1.83	1.83	1
1.48	0.61	0.20	6.54	1.83	1.83	1
1.46	0.60	0.19	6.54	1.83	1.83	1
1.44	0.59	0.19	6.54	1.83	1.83	1
1.42	0.59	0.19	6.54	1.83	1.83	1
1.40	0.58	0.19	6.54	1.83	1.83	1
1.38	0.57	0.18	6.54	1.83	1.83	1
1.36	0.56	0.18	6.54	1.83	1.83	1
1.34	0.56	0.18	6.54	1.83	1.83	1
1.32	0.55	0.18	6.54	1.83	1.83	1
1.30	0.54	0.17	6.54	2.88	1.83	1
1.30	0.54	0.17	6.54	2.88	1.83	1
1.29	0.53	0.17	6.54	1.83	1.83	1
1.27	0.53	0.17	6.54	1.83	1.83	1
1.26	0.52	0.17	6.54	1.83	1.83	1
1.25	0.52	0.17	6.54	1.83	1.83	1
1.23	0.51	0.16	6.54	1.83	1.83	1
1.22	0.51	0.16	6.54	1.83	1.83	1
1.21	0.50	0.16	6.54	1.83	1.83	1
1.19	0.50	0.16	6.54	1.83	1.83	1
1.18	0.49	0.16	6.54	1.83	1.83	1
1.17	0.49	0.15	6.54	1.83	1.83	1
1.15	0.48	0.15	6.54	1.83	1.83	1
1.14	0.48	0.15	6.54	1.83	1.83	1
1.13	0.47	0.15	6.54	1.83	1.83	1
1.11	0.47	0.15	6.54	1.83	1.83	1
1.10	0.46	0.15	6.54	1.83	1.83	1
1.09	0.46	0.14	6.54	1.83	1.83	1
1.07	0.45	0.14	6.54	1.83	1.83	1
1.06	0.45	0.14	6.54	1.83	1.83	1
1.05	0.44	0.14	6.54	1.83	1.83	1
1.03	0.44	0.14	6.54	1.83	1.83	1
1.02	0.43	0.14	6.54	1.83	1.83	1

1.01	0.43	0.13	6.54	1.83	1.83	1
0.99	0.42	0.13	6.54	1.83	1.83	1
0.98	0.42	0.13	6.54	1.83	1.83	1
0.97	0.41	0.13	6.54	1.83	1.83	1
0.95	0.41	0.13	6.54	1.83	1.83	1
0.94	0.40	0.12	6.54	1.83	1.83	1
0.93	0.40	0.12	6.54	1.83	1.83	1
0.91	0.39	0.12	6.54	1.83	1.83	1
0.90	0.39	0.12	6.54	2.37	1.83	1
0.90	0.39	0.12	6.54	2.37	1.83	1
0.88	0.38	0.12	6.54	1.83	1.83	1
0.86	0.37	0.11	6.54	1.83	1.83	1
0.84	0.37	0.11	6.54	1.83	1.83	1
0.82	0.36	0.11	6.54	1.83	1.83	1
0.80	0.35	0.11	6.54	1.83	1.83	1
0.78	0.34	0.10	6.54	1.83	1.83	1
0.76	0.34	0.10	6.54	1.83	1.83	1
0.74	0.33	0.10	6.54	1.83	1.83	1
0.72	0.32	0.10	6.54	1.83	1.83	1
0.70	0.31	0.09	6.54	1.83	1.83	1
0.68	0.31	0.09	6.54	1.83	1.83	1
0.66	0.30	0.09	6.54	1.83	1.83	1
0.64	0.29	0.08	6.54	2.46	2.46	1
0.62	0.28	0.08	6.54	2.46	2.46	1
0.60	0.27	0.08	6.54	2.46	2.46	1
0.58	0.26	0.08	6.54	2.45	2.45	1
0.56	0.25	0.07	6.54	2.45	2.45	1
0.54	0.24	0.07	6.54	2.45	2.44	1
0.52	0.23	0.07	6.54	2.44	2.44	1
0.50	0.23	0.07	6.54	2.44	2.44	1
0.50	0.23	0.07	6.54	2.44	2.43	1
0.48	0.22	0.06	6.54	2.44	2.43	1
0.46	0.21	0.06	6.54	2.44	2.42	1
0.44	0.20	0.06	6.54	2.43	2.42	1
0.42	0.19	0.06	6.54	2.43	2.42	1
0.40	0.18	0.05	6.54	2.43	2.41	1
0.38	0.17	0.05	6.54	2.42	2.41	1
0.36	0.16	0.05	6.54	2.42	2.41	1
0.34	0.15	0.05	6.54	2.42	2.40	1
0.32	0.14	0.04	6.54	2.42	2.40	1
0.30	0.13	0.04	6.54	2.41	2.39	1
0.28	0.13	0.04	6.54	2.41	2.39	1
0.26	0.12	0.03	6.54	2.41	2.39	1
0.24	0.11	0.03	6.54	2.40	2.38	1
0.22	0.10	0.03	6.54	2.40	2.38	1
0.20	0.09	0.03	6.54	2.40	2.37	1
0.18	0.08	0.02	6.54	2.40	2.37	1
0.16	0.07	0.02	6.54	2.39	2.37	1

0.14	0.06	0.02	6.54	2.39	2.36	1
0.12	0.05	0.02	6.54	2.39	2.36	1
0.10	0.04	0.01	6.54	2.39	2.36	1
0.10	0.04	0.01	6.54	2.39	2.35	1
0.08	0.03	0.01	6.54	2.38	2.35	1
0.05	0.02	0.01	6.54	2.37	2.35	1
0.03	0.01	0.00	6.54	2.37	2.34	1
0.00	0.00	0.00	6.54	2.36	2.34	1

	***** Stresses *****		***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
0.69	0.00	0.00	0.00	0.00	0.00	1
0.68	0.55	0.55	0.00	0.00	0.00	1
0.68	1.09	1.09	0.00	0.00	0.00	1
0.67	1.64	1.64	0.00	0.00	0.00	1
0.66	2.18	2.18	0.00	0.00	0.00	1
0.65	2.73	2.73	0.00	0.00	0.00	1
0.65	3.28	3.28	0.00	0.00	0.00	1
0.64	3.82	3.82	0.00	0.00	0.00	1
0.63	4.37	4.37	0.00	0.00	0.00	1
0.62	4.91	4.91	0.00	0.00	0.00	1
0.62	5.46	5.46	0.00	0.00	0.00	1
0.61	6.01	6.01	0.00	0.00	0.00	1
0.60	6.55	6.55	0.00	0.00	0.00	1
0.59	7.10	7.10	0.00	0.00	0.00	1
0.59	7.64	7.64	0.00	0.00	0.00	1
0.58	8.19	8.19	0.00	0.00	0.00	1
0.57	8.74	8.74	0.00	0.00	0.00	1
0.56	9.28	9.28	0.00	0.00	0.00	1
0.56	9.83	9.83	0.00	0.00	0.00	1
0.55	10.37	10.37	0.00	0.00	0.00	1
0.54	10.92	10.92	0.00	0.00	0.00	1
0.54	11.47	11.47	0.00	0.00	0.00	1
0.53	12.11	12.11	0.00	0.00	0.00	1
0.53	12.75	12.75	0.00	0.00	0.00	1
0.52	13.30	13.30	0.00	0.00	0.00	1
0.52	13.85	13.85	0.00	0.00	0.00	1
0.51	14.39	14.39	0.00	0.00	0.00	1
0.51	14.94	14.94	0.00	0.00	0.00	1
0.50	15.48	15.48	0.00	0.00	0.00	1
0.50	16.03	16.03	0.00	0.00	0.00	1
0.49	16.58	16.58	0.00	0.00	0.00	1
0.49	17.12	17.12	0.00	0.00	0.00	1
0.48	17.67	17.67	0.00	0.00	0.00	1
0.48	18.21	18.21	0.00	0.00	0.00	1
0.47	18.76	18.76	0.00	0.00	0.00	1

0.47	19.31	19.31	0.00	0.00	0.00	1
0.46	19.85	19.85	0.00	0.00	0.00	1
0.46	20.40	20.40	0.00	0.00	0.00	1
0.45	20.94	20.94	0.00	0.00	0.00	1
0.45	21.49	21.49	0.00	0.00	0.00	1
0.44	22.04	22.04	0.00	0.00	0.00	1
0.44	22.58	22.58	0.00	0.00	0.00	1
0.43	23.13	23.13	0.00	0.00	0.00	1
0.43	23.67	23.67	0.00	0.00	0.00	1
0.42	24.22	24.22	0.00	0.00	0.00	1
0.42	24.77	24.77	0.00	0.00	0.00	1
0.41	25.31	25.31	0.00	0.00	0.00	1
0.41	25.86	25.86	0.00	0.00	0.00	1
0.40	26.40	26.40	0.00	0.00	0.00	1
0.40	26.95	26.95	0.00	0.00	0.00	1
0.39	27.50	27.50	0.00	0.00	0.00	1
0.39	28.04	28.04	0.00	0.00	0.00	1
0.39	28.59	28.59	0.00	0.00	0.00	1
0.38	29.23	29.23	0.00	0.00	0.00	1
0.37	29.88	29.88	0.00	0.00	0.00	1
0.37	30.42	30.42	0.00	0.00	0.00	1
0.36	30.97	30.97	0.00	0.00	0.00	1
0.35	31.52	31.52	0.00	0.00	0.00	1
0.34	32.06	32.06	0.00	0.00	0.00	1
0.34	32.61	32.61	0.00	0.00	0.00	1
0.33	33.15	33.15	0.00	0.00	0.00	1
0.32	33.70	33.70	0.00	0.00	0.00	1
0.31	34.25	34.25	0.00	0.00	0.00	1
0.31	34.79	34.79	0.00	0.00	0.00	1
0.30	35.34	35.34	0.00	0.00	0.00	1
0.29	52.44	23.09	37.88	37.88	27.49	1
0.28	53.34	23.81	38.50	38.50	27.04	1
0.27	54.23	23.97	39.12	39.12	27.16	1
0.26	55.12	24.12	39.73	39.73	27.29	1
0.25	56.01	24.27	40.35	40.34	27.41	1
0.24	56.89	24.42	40.97	40.96	27.53	1
0.23	57.78	24.57	41.60	41.57	27.66	1
0.23	58.66	24.71	42.22	42.17	27.79	1
0.23	58.66	16.44	42.22	42.17	27.79	1
0.22	59.54	24.86	42.85	42.78	27.92	1
0.21	60.42	25.00	43.48	43.39	28.05	1
0.20	61.30	25.14	44.11	43.99	28.19	1
0.19	62.18	25.28	44.74	44.59	28.32	1
0.18	63.05	25.42	45.38	45.19	28.46	1
0.17	63.93	25.55	46.01	45.79	28.60	1
0.16	64.80	25.69	46.65	46.39	28.74	1
0.15	65.67	25.82	47.30	46.99	28.88	1
0.14	66.54	25.95	47.94	47.58	29.03	1

0.13	67.41	26.08	48.59	48.18	29.17	1
0.13	68.28	26.20	49.23	48.77	29.32	1
0.12	69.14	26.33	49.88	49.36	29.47	1
0.11	24.26	26.45	-2.19	11.36	-13.56	1
0.10	24.95	26.58	-1.63	11.93	-13.55	1
0.09	25.64	26.70	-1.06	12.49	-13.55	1
0.08	26.33	26.82	-0.49	13.05	-13.54	1
0.07	27.02	26.94	0.09	13.61	-13.53	1
0.06	27.71	27.05	0.66	14.18	-13.52	1
0.05	28.40	27.17	1.23	14.74	-13.50	1
0.04	29.09	27.28	1.81	15.30	-13.49	1
0.04	29.38	27.28	2.10	15.30	-13.20	1
0.03	30.17	27.61	2.56	16.00	-13.44	1
0.02	30.95	27.93	3.02	16.70	-13.67	1
0.01	31.74	28.25	3.49	17.39	-13.91	1
0.00	32.52	28.57	3.96	18.09	0.00	1

Time = 1855. Degree of Consolidation = 74.%

Total Settlement = 1.009

Settlement at End of Primary Consolidation = 1.013

Settlement caused by Primary Consolidation at time 1855. = 0.749

Settlement caused by Secondary Compression at time 1855. = 0.000

Settlement Due to Desiccation = 0.260

Surface Elevation = 0.69

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
1.70	0.69	0.23	6.54	1.83	1.83	1
1.68	0.68	0.22	6.54	1.83	1.83	1
1.66	0.68	0.22	6.54	1.83	1.83	1
1.64	0.67	0.22	6.54	1.83	1.83	1
1.62	0.66	0.21	6.54	1.83	1.83	1
1.60	0.65	0.21	6.54	1.83	1.83	1
1.58	0.65	0.21	6.54	1.83	1.83	1

1.56	0.64	0.21	6.54	1.83	1.83	1
1.54	0.63	0.20	6.54	1.83	1.83	1
1.52	0.62	0.20	6.54	1.83	1.83	1
1.50	0.62	0.20	6.54	1.83	1.83	1
1.48	0.61	0.20	6.54	1.83	1.83	1
1.46	0.60	0.19	6.54	1.83	1.83	1
1.44	0.59	0.19	6.54	1.83	1.83	1
1.42	0.59	0.19	6.54	1.83	1.83	1
1.40	0.58	0.19	6.54	1.83	1.83	1
1.38	0.57	0.18	6.54	1.83	1.83	1
1.36	0.56	0.18	6.54	1.83	1.83	1
1.34	0.56	0.18	6.54	1.83	1.83	1
1.32	0.55	0.18	6.54	1.83	1.83	1
1.30	0.54	0.17	6.54	2.88	1.83	1
1.30	0.54	0.17	6.54	2.88	1.83	1
1.29	0.53	0.17	6.54	1.83	1.83	1
1.27	0.53	0.17	6.54	1.83	1.83	1
1.26	0.52	0.17	6.54	1.83	1.83	1
1.25	0.52	0.17	6.54	1.83	1.83	1
1.23	0.51	0.16	6.54	1.83	1.83	1
1.22	0.51	0.16	6.54	1.83	1.83	1
1.21	0.50	0.16	6.54	1.83	1.83	1
1.19	0.50	0.16	6.54	1.83	1.83	1
1.18	0.49	0.16	6.54	1.83	1.83	1
1.17	0.49	0.15	6.54	1.83	1.83	1
1.15	0.48	0.15	6.54	1.83	1.83	1
1.14	0.48	0.15	6.54	1.83	1.83	1
1.13	0.47	0.15	6.54	1.83	1.83	1
1.11	0.47	0.15	6.54	1.83	1.83	1
1.10	0.46	0.15	6.54	1.83	1.83	1
1.09	0.46	0.14	6.54	1.83	1.83	1
1.07	0.45	0.14	6.54	1.83	1.83	1
1.06	0.45	0.14	6.54	1.83	1.83	1
1.05	0.44	0.14	6.54	1.83	1.83	1
1.03	0.44	0.14	6.54	1.83	1.83	1
1.02	0.43	0.14	6.54	1.83	1.83	1
1.01	0.43	0.13	6.54	1.83	1.83	1
0.99	0.42	0.13	6.54	1.83	1.83	1
0.98	0.42	0.13	6.54	1.83	1.83	1
0.97	0.41	0.13	6.54	1.83	1.83	1
0.95	0.41	0.13	6.54	1.83	1.83	1
0.94	0.40	0.12	6.54	1.83	1.83	1
0.93	0.40	0.12	6.54	1.83	1.83	1
0.91	0.39	0.12	6.54	1.83	1.83	1
0.90	0.39	0.12	6.54	2.37	1.83	1
0.90	0.39	0.12	6.54	2.37	1.83	1
0.88	0.38	0.12	6.54	1.83	1.83	1
0.86	0.37	0.11	6.54	1.83	1.83	1

0.84	0.37	0.11	6.54	1.83	1.83	1
0.82	0.36	0.11	6.54	1.83	1.83	1
0.80	0.35	0.11	6.54	1.83	1.83	1
0.78	0.34	0.10	6.54	1.83	1.83	1
0.76	0.34	0.10	6.54	1.83	1.83	1
0.74	0.33	0.10	6.54	1.83	1.83	1
0.72	0.32	0.10	6.54	1.83	1.83	1
0.70	0.31	0.09	6.54	1.83	1.83	1
0.68	0.31	0.09	6.54	1.83	1.83	1
0.66	0.30	0.09	6.54	1.83	1.83	1
0.64	0.29	0.08	6.54	2.46	2.46	1
0.62	0.28	0.08	6.54	2.46	2.46	1
0.60	0.27	0.08	6.54	2.46	2.46	1
0.58	0.26	0.08	6.54	2.45	2.45	1
0.56	0.25	0.07	6.54	2.45	2.45	1
0.54	0.24	0.07	6.54	2.45	2.44	1
0.52	0.23	0.07	6.54	2.44	2.44	1
0.50	0.23	0.07	6.54	2.44	2.44	1
0.50	0.23	0.07	6.54	2.44	2.43	1
0.48	0.22	0.06	6.54	2.44	2.43	1
0.46	0.21	0.06	6.54	2.44	2.42	1
0.44	0.20	0.06	6.54	2.43	2.42	1
0.42	0.19	0.06	6.54	2.43	2.42	1
0.40	0.18	0.05	6.54	2.43	2.41	1
0.38	0.17	0.05	6.54	2.42	2.41	1
0.36	0.16	0.05	6.54	2.42	2.41	1
0.34	0.15	0.05	6.54	2.42	2.40	1
0.32	0.14	0.04	6.54	2.42	2.40	1
0.30	0.13	0.04	6.54	2.41	2.39	1
0.28	0.13	0.04	6.54	2.41	2.39	1
0.26	0.12	0.03	6.54	2.41	2.39	1
0.24	0.11	0.03	6.54	2.40	2.38	1
0.22	0.10	0.03	6.54	2.40	2.38	1
0.20	0.09	0.03	6.54	2.40	2.37	1
0.18	0.08	0.02	6.54	2.40	2.37	1
0.16	0.07	0.02	6.54	2.39	2.37	1
0.14	0.06	0.02	6.54	2.39	2.36	1
0.12	0.05	0.02	6.54	2.39	2.36	1
0.10	0.04	0.01	6.54	2.39	2.36	1
0.10	0.04	0.01	6.54	2.39	2.35	1
0.08	0.03	0.01	6.54	2.38	2.35	1
0.05	0.02	0.01	6.54	2.37	2.35	1
0.03	0.01	0.00	6.54	2.37	2.34	1
0.00	0.00	0.00	6.54	2.36	2.34	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
0.69	0.00	0.00	0.00	0.00	0.00	1
0.68	0.55	0.55	0.00	0.00	0.00	1
0.68	1.09	1.09	0.00	0.00	0.00	1
0.67	1.64	1.64	0.00	0.00	0.00	1
0.66	2.18	2.18	0.00	0.00	0.00	1
0.65	2.73	2.73	0.00	0.00	0.00	1
0.65	3.28	3.28	0.00	0.00	0.00	1
0.64	3.82	3.82	0.00	0.00	0.00	1
0.63	4.37	4.37	0.00	0.00	0.00	1
0.62	4.91	4.91	0.00	0.00	0.00	1
0.62	5.46	5.46	0.00	0.00	0.00	1
0.61	6.01	6.01	0.00	0.00	0.00	1
0.60	6.55	6.55	0.00	0.00	0.00	1
0.59	7.10	7.10	0.00	0.00	0.00	1
0.59	7.64	7.64	0.00	0.00	0.00	1
0.58	8.19	8.19	0.00	0.00	0.00	1
0.57	8.74	8.74	0.00	0.00	0.00	1
0.56	9.28	9.28	0.00	0.00	0.00	1
0.56	9.83	9.83	0.00	0.00	0.00	1
0.55	10.37	10.37	0.00	0.00	0.00	1
0.54	10.92	10.92	0.00	0.00	0.00	1
0.54	11.47	11.47	0.00	0.00	0.00	1
0.53	12.11	12.11	0.00	0.00	0.00	1
0.53	12.75	12.75	0.00	0.00	0.00	1
0.52	13.30	13.30	0.00	0.00	0.00	1
0.52	13.85	13.85	0.00	0.00	0.00	1
0.51	14.39	14.39	0.00	0.00	0.00	1
0.51	14.94	14.94	0.00	0.00	0.00	1
0.50	15.48	15.48	0.00	0.00	0.00	1
0.50	16.03	16.03	0.00	0.00	0.00	1
0.49	16.58	16.58	0.00	0.00	0.00	1
0.49	17.12	17.12	0.00	0.00	0.00	1
0.48	17.67	17.67	0.00	0.00	0.00	1
0.48	18.21	18.21	0.00	0.00	0.00	1
0.47	18.76	18.76	0.00	0.00	0.00	1
0.47	19.31	19.31	0.00	0.00	0.00	1
0.46	19.85	19.85	0.00	0.00	0.00	1
0.46	20.40	20.40	0.00	0.00	0.00	1
0.45	20.94	20.94	0.00	0.00	0.00	1
0.45	21.49	21.49	0.00	0.00	0.00	1
0.44	22.04	22.04	0.00	0.00	0.00	1
0.44	22.58	22.58	0.00	0.00	0.00	1
0.43	23.13	23.13	0.00	0.00	0.00	1
0.43	23.67	23.67	0.00	0.00	0.00	1
0.42	24.22	24.22	0.00	0.00	0.00	1
0.42	24.77	24.77	0.00	0.00	0.00	1
0.41	25.31	25.31	0.00	0.00	0.00	1

0.41	25.86	25.86	0.00	0.00	0.00	1
0.40	26.40	26.40	0.00	0.00	0.00	1
0.40	26.95	26.95	0.00	0.00	0.00	1
0.39	27.50	27.50	0.00	0.00	0.00	1
0.39	28.04	28.04	0.00	0.00	0.00	1
0.39	28.59	28.59	0.00	0.00	0.00	1
0.38	29.23	29.23	0.00	0.00	0.00	1
0.37	29.88	29.88	0.00	0.00	0.00	1
0.37	30.42	30.42	0.00	0.00	0.00	1
0.36	30.97	30.97	0.00	0.00	0.00	1
0.35	31.52	31.52	0.00	0.00	0.00	1
0.34	32.06	32.06	0.00	0.00	0.00	1
0.34	32.61	32.61	0.00	0.00	0.00	1
0.33	33.15	33.15	0.00	0.00	0.00	1
0.32	33.70	33.70	0.00	0.00	0.00	1
0.31	34.25	34.25	0.00	0.00	0.00	1
0.31	34.79	34.79	0.00	0.00	0.00	1
0.30	35.34	35.34	0.00	0.00	0.00	1
0.29	52.44	23.09	37.88	37.88	27.49	1
0.28	53.34	23.81	38.50	38.50	27.04	1
0.27	54.23	23.97	39.12	39.12	27.16	1
0.26	55.12	24.12	39.73	39.73	27.29	1
0.25	56.01	24.27	40.35	40.34	27.41	1
0.24	56.89	24.42	40.97	40.96	27.53	1
0.23	57.78	24.57	41.60	41.57	27.66	1
0.23	58.66	24.71	42.22	42.17	27.79	1
0.23	58.66	16.44	42.22	42.17	27.79	1
0.22	59.54	24.86	42.85	42.78	27.92	1
0.21	60.42	25.00	43.48	43.39	28.05	1
0.20	61.30	25.14	44.11	43.99	28.19	1
0.19	62.18	25.28	44.74	44.59	28.32	1
0.18	63.05	25.42	45.38	45.19	28.46	1
0.17	63.93	25.55	46.01	45.79	28.60	1
0.16	64.80	25.69	46.65	46.39	28.74	1
0.15	65.67	25.82	47.30	46.99	28.88	1
0.14	66.54	25.95	47.94	47.58	29.03	1
0.13	67.41	26.08	48.59	48.18	29.17	1
0.13	68.28	26.20	49.23	48.77	29.32	1
0.12	23.86	26.33	-2.47	10.80	-13.27	1
0.11	24.55	26.45	-1.90	11.36	-13.26	1
0.10	25.24	26.58	-1.33	11.93	-13.26	1
0.09	25.93	26.70	-0.76	12.49	-13.25	1
0.08	26.62	26.82	-0.19	13.05	-13.24	1
0.07	27.31	26.94	0.38	13.61	-13.23	1
0.06	28.00	27.05	0.95	14.18	-13.22	1
0.05	28.69	27.17	1.53	14.74	-13.21	1
0.04	29.38	27.28	2.10	15.30	-13.20	1
0.04	29.68	27.28	2.39	15.30	-12.90	1

0.03	30.46	27.61	2.85	16.00	-13.14	1
0.02	31.25	27.93	3.31	16.70	-13.38	1
0.01	32.03	28.25	3.78	17.39	-13.61	1
0.00	32.81	28.57	4.25	18.09	0.00	1

Time = 3680. Degree of Consolidation = 74.%

Total Settlement = 1.009

Settlement at End of Primary Consolidation = 1.013

Settlement caused by Primary Consolidation at time 3680. = 0.749

Settlement caused by Secondary Compression at time 3680. = 0.000

Settlement Due to Desiccation = 0.260

Surface Elevation = 0.69

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
1.70	0.69	0.23	6.54	1.83	1.83	1
1.68	0.68	0.22	6.54	1.83	1.83	1
1.66	0.68	0.22	6.54	1.83	1.83	1
1.64	0.67	0.22	6.54	1.83	1.83	1
1.62	0.66	0.21	6.54	1.83	1.83	1
1.60	0.65	0.21	6.54	1.83	1.83	1
1.58	0.65	0.21	6.54	1.83	1.83	1
1.56	0.64	0.21	6.54	1.83	1.83	1
1.54	0.63	0.20	6.54	1.83	1.83	1
1.52	0.62	0.20	6.54	1.83	1.83	1
1.50	0.62	0.20	6.54	1.83	1.83	1
1.48	0.61	0.20	6.54	1.83	1.83	1
1.46	0.60	0.19	6.54	1.83	1.83	1
1.44	0.59	0.19	6.54	1.83	1.83	1
1.42	0.59	0.19	6.54	1.83	1.83	1
1.40	0.58	0.19	6.54	1.83	1.83	1
1.38	0.57	0.18	6.54	1.83	1.83	1
1.36	0.56	0.18	6.54	1.83	1.83	1
1.34	0.56	0.18	6.54	1.83	1.83	1

1.32	0.55	0.18	6.54	1.83	1.83	1
1.30	0.54	0.17	6.54	2.88	1.83	1
1.30	0.54	0.17	6.54	2.88	1.83	1
1.29	0.53	0.17	6.54	1.83	1.83	1
1.27	0.53	0.17	6.54	1.83	1.83	1
1.26	0.52	0.17	6.54	1.83	1.83	1
1.25	0.52	0.17	6.54	1.83	1.83	1
1.23	0.51	0.16	6.54	1.83	1.83	1
1.22	0.51	0.16	6.54	1.83	1.83	1
1.21	0.50	0.16	6.54	1.83	1.83	1
1.19	0.50	0.16	6.54	1.83	1.83	1
1.18	0.49	0.16	6.54	1.83	1.83	1
1.17	0.49	0.15	6.54	1.83	1.83	1
1.15	0.48	0.15	6.54	1.83	1.83	1
1.14	0.48	0.15	6.54	1.83	1.83	1
1.13	0.47	0.15	6.54	1.83	1.83	1
1.11	0.47	0.15	6.54	1.83	1.83	1
1.10	0.46	0.15	6.54	1.83	1.83	1
1.09	0.46	0.14	6.54	1.83	1.83	1
1.07	0.45	0.14	6.54	1.83	1.83	1
1.06	0.45	0.14	6.54	1.83	1.83	1
1.05	0.44	0.14	6.54	1.83	1.83	1
1.03	0.44	0.14	6.54	1.83	1.83	1
1.02	0.43	0.14	6.54	1.83	1.83	1
1.01	0.43	0.13	6.54	1.83	1.83	1
0.99	0.42	0.13	6.54	1.83	1.83	1
0.98	0.42	0.13	6.54	1.83	1.83	1
0.97	0.41	0.13	6.54	1.83	1.83	1
0.95	0.41	0.13	6.54	1.83	1.83	1
0.94	0.40	0.12	6.54	1.83	1.83	1
0.93	0.40	0.12	6.54	1.83	1.83	1
0.91	0.39	0.12	6.54	1.83	1.83	1
0.90	0.39	0.12	6.54	2.37	1.83	1
0.90	0.39	0.12	6.54	2.37	1.83	1
0.88	0.38	0.12	6.54	1.83	1.83	1
0.86	0.37	0.11	6.54	1.83	1.83	1
0.84	0.37	0.11	6.54	1.83	1.83	1
0.82	0.36	0.11	6.54	1.83	1.83	1
0.80	0.35	0.11	6.54	1.83	1.83	1
0.78	0.34	0.10	6.54	1.83	1.83	1
0.76	0.34	0.10	6.54	1.83	1.83	1
0.74	0.33	0.10	6.54	1.83	1.83	1
0.72	0.32	0.10	6.54	1.83	1.83	1
0.70	0.31	0.09	6.54	1.83	1.83	1
0.68	0.31	0.09	6.54	1.83	1.83	1
0.66	0.30	0.09	6.54	1.83	1.83	1
0.64	0.29	0.08	6.54	2.46	2.46	1
0.62	0.28	0.08	6.54	2.46	2.46	1

0.60	0.27	0.08	6.54	2.46	2.46	1
0.58	0.26	0.08	6.54	2.45	2.45	1
0.56	0.25	0.07	6.54	2.45	2.45	1
0.54	0.24	0.07	6.54	2.45	2.44	1
0.52	0.23	0.07	6.54	2.44	2.44	1
0.50	0.23	0.07	6.54	2.44	2.44	1
0.50	0.23	0.07	6.54	2.44	2.43	1
0.48	0.22	0.06	6.54	2.44	2.43	1
0.46	0.21	0.06	6.54	2.44	2.42	1
0.44	0.20	0.06	6.54	2.43	2.42	1
0.42	0.19	0.06	6.54	2.43	2.42	1
0.40	0.18	0.05	6.54	2.43	2.41	1
0.38	0.17	0.05	6.54	2.42	2.41	1
0.36	0.16	0.05	6.54	2.42	2.41	1
0.34	0.15	0.05	6.54	2.42	2.40	1
0.32	0.14	0.04	6.54	2.42	2.40	1
0.30	0.13	0.04	6.54	2.41	2.39	1
0.28	0.13	0.04	6.54	2.41	2.39	1
0.26	0.12	0.03	6.54	2.41	2.39	1
0.24	0.11	0.03	6.54	2.40	2.38	1
0.22	0.10	0.03	6.54	2.40	2.38	1
0.20	0.09	0.03	6.54	2.40	2.37	1
0.18	0.08	0.02	6.54	2.40	2.37	1
0.16	0.07	0.02	6.54	2.39	2.37	1
0.14	0.06	0.02	6.54	2.39	2.36	1
0.12	0.05	0.02	6.54	2.39	2.36	1
0.10	0.04	0.01	6.54	2.39	2.36	1
0.10	0.04	0.01	6.54	2.39	2.35	1
0.08	0.03	0.01	6.54	2.38	2.35	1
0.05	0.02	0.01	6.54	2.37	2.35	1
0.03	0.01	0.00	6.54	2.37	2.34	1
0.00	0.00	0.00	6.54	2.36	2.34	1

***** Stresses *****			***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
0.69	0.00	0.00	0.00	0.00	0.00	1
0.68	0.55	0.55	0.00	0.00	0.00	1
0.68	1.09	1.09	0.00	0.00	0.00	1
0.67	1.64	1.64	0.00	0.00	0.00	1
0.66	2.18	2.18	0.00	0.00	0.00	1
0.65	2.73	2.73	0.00	0.00	0.00	1
0.65	3.28	3.28	0.00	0.00	0.00	1
0.64	3.82	3.82	0.00	0.00	0.00	1
0.63	4.37	4.37	0.00	0.00	0.00	1
0.62	4.91	4.91	0.00	0.00	0.00	1
0.62	5.46	5.46	0.00	0.00	0.00	1

0.61	6.01	6.01	0.00	0.00	0.00	1
0.60	6.55	6.55	0.00	0.00	0.00	1
0.59	7.10	7.10	0.00	0.00	0.00	1
0.59	7.64	7.64	0.00	0.00	0.00	1
0.58	8.19	8.19	0.00	0.00	0.00	1
0.57	8.74	8.74	0.00	0.00	0.00	1
0.56	9.28	9.28	0.00	0.00	0.00	1
0.56	9.83	9.83	0.00	0.00	0.00	1
0.55	10.37	10.37	0.00	0.00	0.00	1
0.54	10.92	10.92	0.00	0.00	0.00	1
0.54	11.47	11.47	0.00	0.00	0.00	1
0.53	12.11	12.11	0.00	0.00	0.00	1
0.53	12.75	12.75	0.00	0.00	0.00	1
0.52	13.30	13.30	0.00	0.00	0.00	1
0.52	13.85	13.85	0.00	0.00	0.00	1
0.51	14.39	14.39	0.00	0.00	0.00	1
0.51	14.94	14.94	0.00	0.00	0.00	1
0.50	15.48	15.48	0.00	0.00	0.00	1
0.50	16.03	16.03	0.00	0.00	0.00	1
0.49	16.58	16.58	0.00	0.00	0.00	1
0.49	17.12	17.12	0.00	0.00	0.00	1
0.48	17.67	17.67	0.00	0.00	0.00	1
0.48	18.21	18.21	0.00	0.00	0.00	1
0.47	18.76	18.76	0.00	0.00	0.00	1
0.47	19.31	19.31	0.00	0.00	0.00	1
0.46	19.85	19.85	0.00	0.00	0.00	1
0.46	20.40	20.40	0.00	0.00	0.00	1
0.45	20.94	20.94	0.00	0.00	0.00	1
0.45	21.49	21.49	0.00	0.00	0.00	1
0.44	22.04	22.04	0.00	0.00	0.00	1
0.44	22.58	22.58	0.00	0.00	0.00	1
0.43	23.13	23.13	0.00	0.00	0.00	1
0.43	23.67	23.67	0.00	0.00	0.00	1
0.42	24.22	24.22	0.00	0.00	0.00	1
0.42	24.77	24.77	0.00	0.00	0.00	1
0.41	25.31	25.31	0.00	0.00	0.00	1
0.41	25.86	25.86	0.00	0.00	0.00	1
0.40	26.40	26.40	0.00	0.00	0.00	1
0.40	26.95	26.95	0.00	0.00	0.00	1
0.39	27.50	27.50	0.00	0.00	0.00	1
0.39	28.04	28.04	0.00	0.00	0.00	1
0.39	28.59	28.59	0.00	0.00	0.00	1
0.38	29.23	29.23	0.00	0.00	0.00	1
0.37	29.88	29.88	0.00	0.00	0.00	1
0.37	30.42	30.42	0.00	0.00	0.00	1
0.36	30.97	30.97	0.00	0.00	0.00	1
0.35	31.52	31.52	0.00	0.00	0.00	1
0.34	32.06	32.06	0.00	0.00	0.00	1

0.34	32.61	32.61	0.00	0.00	0.00	1
0.33	33.15	33.15	0.00	0.00	0.00	1
0.32	33.70	33.70	0.00	0.00	0.00	1
0.31	34.25	34.25	0.00	0.00	0.00	1
0.31	34.79	34.79	0.00	0.00	0.00	1
0.30	35.34	35.34	0.00	0.00	0.00	1
0.29	52.44	23.09	37.88	37.88	27.49	1
0.28	53.34	23.81	38.50	38.50	27.04	1
0.27	54.23	23.97	39.12	39.12	27.16	1
0.26	55.12	24.12	39.73	39.73	27.29	1
0.25	56.01	24.27	40.35	40.34	27.41	1
0.24	56.89	24.42	40.97	40.96	27.53	1
0.23	57.78	24.57	41.60	41.57	27.66	1
0.23	58.66	24.71	42.22	42.17	27.79	1
0.23	58.66	16.44	42.22	42.17	27.79	1
0.22	59.54	24.86	42.85	42.78	27.92	1
0.21	60.42	25.00	43.48	43.39	28.05	1
0.20	61.30	25.14	44.11	43.99	28.19	1
0.19	62.18	25.28	44.74	44.59	28.32	1
0.18	63.05	25.42	45.38	45.19	28.46	1
0.17	63.93	25.55	46.01	45.79	28.60	1
0.16	64.80	25.69	46.65	46.39	28.74	1
0.15	65.67	25.82	47.30	46.99	28.88	1
0.14	66.54	25.95	47.94	47.58	29.03	1
0.13	67.41	26.08	48.59	48.18	29.17	1
0.13	23.46	26.20	-2.74	10.24	-12.98	1
0.12	24.15	26.33	-2.18	10.80	-12.98	1
0.11	24.85	26.45	-1.61	11.36	-12.97	1
0.10	25.54	26.58	-1.04	11.93	-12.97	1
0.09	26.23	26.70	-0.47	12.49	-12.96	1
0.08	26.92	26.82	0.10	13.05	-12.95	1
0.07	27.61	26.94	0.67	13.61	-12.94	1
0.06	28.30	27.05	1.25	14.18	-12.93	1
0.05	28.99	27.17	1.82	14.74	-12.92	1
0.04	29.68	27.28	2.39	15.30	-12.90	1
0.04	29.97	27.28	2.69	15.30	-12.61	1
0.03	30.76	27.61	3.15	16.00	-12.85	1
0.02	31.54	27.93	3.61	16.70	-13.09	1
0.01	32.33	28.25	4.07	17.39	-13.32	1
0.00	33.11	28.57	4.54	18.09	0.00	1

Time = 7330. Degree of Consolidation = 74.%

Total Settlement = 1.009

Settlement at End of Primary Consolidation = 1.013

Settlement caused by Primary Consolidation at time 7330. = 0.749

Settlement caused by Secondary Compression at time 7330. = 0.000

Settlement Due to Desiccation = 0.260

Surface Elevation = 0.69

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 0 to 30 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS = 11
NUMBER OF SOIL COMPRESSIBILITIES = 10
NUMBER OF SETTLEMENT POINTS = 1
NUMBER OF LOADED AREAS = 1
MODE (1 = U.S. GRAVITATIONAL UNITS
2 = SI ABSOLUTE UNITS) = 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000
8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002
10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 0 to 30 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1

Elevation 0 to -4 feet

F % .00 3.54 62.60
P,KSF .04 .16 2.16
0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F % .00 3.25 18.53
P,KSF .04 .63 2.63
0 SOIL COMPRESSIBILITY NO. 3
Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F % .00 3.51 17.04
P,KSF .04 .79 2.79
0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F % .00 3.60 16.51
P,KSF .04 .85 2.85
0 SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

F % .00 12.13
P,KSF .95 2.95
0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F % .00 10.29
P,KSF 1.24 3.24
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 0 to 30 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F % .00 5.31

P,KSF 1.71 3.71
0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F % .00 4.88
P,KSF 2.17 4.17
0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F % .00 4.43
P,KSF 2.46 4.46
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 0 to 30 days

TABLE 4 - SETTLEMENT POINT DATA

POINT NO.	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 0 to 30 days

TABLE 5 - LOADED AREA INFORMATION

AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.060	.000	0

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03

Sand Profile MC Foundation Settlement 0 to 30 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT
POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.060
3.000	.060
5.500	.060
9.500	.060
14.000	.060
18.000	.060
23.000	.060
29.500	.060
38.500	.060
47.000	.060
53.000	.060

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 0 to 30 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT
POINT NO. 1

LAYER

```
          1         .374

          2         .555

          3         .171

          4         .000

          5         .061

          6         .048

          7         .309

          8         .413

          9         .312

         10         .135

         11         .129

 TOTAL SETTLE.    2.505
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS


 Island Road Marsh Creation (TE-117) 16715-040-03
 Sand Profile MC Foundation Settlement 30 to 45 days


 TABLE 1 - PROBLEM CONTROL DATA

      NUMBER OF SOIL LAYERS              =  11
      NUMBER OF SOIL COMPRESSIBILITIES   =  10
      NUMBER OF SETTLEMENT POINTS        =   1
      NUMBER OF LOADED AREAS             =   1
      MODE (1 = U.S. GRAVITATIONAL UNITS
            2 = SI ABSOLUTE UNITS)       =   1



 TABLE 2 - SOIL AND LAYER INFORMATION

 SOIL  DEPTH TO   LAYER   LAYER    UNIT   SOIL OVERBURDEN INIT VERTICAL
 LAYER  CENTER  THICKNESS THICK.  WEIGHT  COMP  PRESSURE   STRAIN (F0)
  NO.     FT        FT    FACTOR LB/FT**3  NO.    KSF           %
```



```
          1     1.000     2.000   1.00     13.60   1      .014        .000
          2     3.000     2.000   1.00     13.60   1      .041        .051
          3     5.500     3.000   1.00     45.60   2      .123       1.322
          4     9.500     5.000   1.00     55.60   3      .330        .000
          5    14.000     4.000   1.00     39.60   4      .548       3.081
          6    18.000     4.000   1.00     39.60   5      .707       3.383
          7    23.000     6.000   1.00     47.60   6      .929        .000
          8    29.500     7.000   1.00     47.60   7     1.238        .000
          9    38.500    11.000   1.00     55.60   8     1.711        .002
         10    47.000     6.000   1.00     49.60   9     2.165        .000
         11    53.000     6.000   1.00     49.60  10     2.463        .008
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS


 Island Road Marsh Creation (TE-117) 16715-040-03
 Sand Profile MC Foundation Settlement 30 to 45 days


 TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0       SOIL COMPRESSIBILITY NO.  1
                Elevation 0 to -4 feet

        F  %       .00    3.54   62.60
        P,KSF      .04     .16    2.16
0       SOIL COMPRESSIBILITY NO.  2
                Elevation -4 to -7 feet

        F  %       .00    3.25   18.53
        P,KSF      .04     .63    2.63
0       SOIL COMPRESSIBILITY NO.  3
                Elevation -7 to -12 feet

              THE SLOPE OF THE F(%)-LOG P CURVE IS   .000 %

0       SOIL COMPRESSIBILITY NO.  4
                Elevation -12 to -16 feet

        F  %       .00    3.51   17.04
        P,KSF      .04     .79    2.79
0       SOIL COMPRESSIBILITY NO.  5
                Elevation -16 to -20 feet

        F  %       .00    3.60   16.51
        P,KSF      .04     .85    2.85
0       SOIL COMPRESSIBILITY NO.  6
```



```
                Elevation -20 to -26 feet

        F  %       .00   12.13
        P,KSF      .95    2.95
0       SOIL COMPRESSIBILITY NO.  7
                Elevation -26 to -33 feet

        F  %       .00   10.29
        P,KSF     1.24    3.24
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS


 Island Road Marsh Creation (TE-117) 16715-040-03
 Sand Profile MC Foundation Settlement 30 to 45 days


 TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0       SOIL COMPRESSIBILITY NO.  8
                Elevation -33 to -44 feet

        F  %       .00    5.31
        P,KSF     1.71    3.71
0       SOIL COMPRESSIBILITY NO.  9
                Elevation -44 to -50 feet

        F  %       .00    4.88
        P,KSF     2.17    4.17
0       SOIL COMPRESSIBILITY NO. 10
                Elevation -50 to -56 feet

        F  %       .00    4.43
        P,KSF     2.46    4.46
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS


 Island Road Marsh Creation (TE-117) 16715-040-03
 Sand Profile MC Foundation Settlement 30 to 45 days


 TABLE 4 - SETTLEMENT POINT DATA

0       POINT   POINT COORDINATES   LAYER    POINT   POINT COORDINATES   LAYER
         NO,       X         Y      NO.*     NO,       X         Y      NO.*
                   FT        FT                         FT        FT
```



```
          1    2500.000   2500.000    1

             * NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS


 Island Road Marsh Creation (TE-117) 16715-040-03
 Sand Profile MC Foundation Settlement 30 to 45 days


 TABLE 5 - LOADED AREA INFORMATION

0                CENTER COORD    AREA DIMEN.   AREA   APPLIED   AREA   PRNT
 AREA SHAPE   X       Y     XLEN   YLEN   SLOPE  PRESSURE  ELEV.  FLAG
                FT      FT     FT     FT             KSF     FT

 A1   RECT 2500.00 2500.005000.005000.00    .000     .062    .000   0
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS


 Island Road Marsh Creation (TE-117) 16715-040-03
 Sand Profile MC Foundation Settlement 30 to 45 days


 TABLE 7 - AVERAGE STRESS INCREASE


 SETTLEMENT
  POINT NO.         1

   DEPTH,FT                    STRESS,KSF

      1.000         .062

      3.000         .062

      5.500         .062

      9.500         .062

     14.000         .062

     18.000         .062

     23.000         .062
```

```
   29.500         .062

   38.500         .062

   47.000         .062

   53.000         .062
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS


        Island Road Marsh Creation (TE-117) 16715-040-03
        Sand Profile MC Foundation Settlement 30 to 45 days


        TABLE 8 - COMPUTED SETTLEMENT IN INCHES


        SETTLEMENT
         POINT NO.         1

             LAYER

                1         .390

                2         .567

                3         .176

                4         .000

                5         .062

                6         .049

                7         .324

                8         .427

                9         .322

               10         .140

               11         .133

        TOTAL SETTLE.    2.590
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS
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        Island Road Marsh Creation (TE-117) 16715-040-03
        Sand Profile MC Foundation Settlement 45 to 60 days


        TABLE 1 - PROBLEM CONTROL DATA

             NUMBER OF SOIL LAYERS             =  11
             NUMBER OF SOIL COMPRESSIBILITIES  =  10
             NUMBER OF SETTLEMENT POINTS       =   1
             NUMBER OF LOADED AREAS            =   1
             MODE (1 = U.S. GRAVITATIONAL UNITS
                   2 = SI ABSOLUTE UNITS)      =   1



        TABLE 2 - SOIL AND LAYER INFORMATION

        SOIL  DEPTH TO   LAYER   LAYER    UNIT   SOIL OVERBURDEN INIT VERTICAL
        LAYER  CENTER  THICKNESS THICK.  WEIGHT  COMP  PRESSURE   STRAIN (F0)
         NO.     FT        FT    FACTOR LB/FT**3  NO.    KSF          %

          1    1.000     2.000   1.00     13.60   1      .014        .000
          2    3.000     2.000   1.00     13.60   1      .041        .051
          3    5.500     3.000   1.00     45.60   2      .123       1.322
          4    9.500     5.000   1.00     55.60   3      .330        .000
          5   14.000     4.000   1.00     39.60   4      .548       3.081
          6   18.000     4.000   1.00     39.60   5      .707       3.383
          7   23.000     6.000   1.00     47.60   6      .929        .000
          8   29.500     7.000   1.00     47.60   7     1.238        .000
          9   38.500    11.000   1.00     55.60   8     1.711        .002
         10   47.000     6.000   1.00     49.60   9     2.165        .000
         11   53.000     6.000   1.00     49.60  10     2.463        .008
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS


        Island Road Marsh Creation (TE-117) 16715-040-03
        Sand Profile MC Foundation Settlement 45 to 60 days


        TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0       SOIL COMPRESSIBILITY NO.  1
                  Elevation 0 to -4 feet
```



```
        F  %       .00    3.54   62.60
        P,KSF      .04     .16    2.16
0       SOIL COMPRESSIBILITY NO.  2
                  Elevation -4 to -7 feet

        F  %       .00    3.25   18.53
        P,KSF      .04     .63    2.63
0       SOIL COMPRESSIBILITY NO.  3
                  Elevation -7 to -12 feet

               THE SLOPE OF THE F(%)-LOG P CURVE IS   .000 %

0       SOIL COMPRESSIBILITY NO.  4
                  Elevation -12 to -16 feet

        F  %       .00    3.51   17.04
        P,KSF      .04     .79    2.79
0       SOIL COMPRESSIBILITY NO.  5
                  Elevation -16 to -20 feet

        F  %       .00    3.60   16.51
        P,KSF      .04     .85    2.85
0       SOIL COMPRESSIBILITY NO.  6
                  Elevation -20 to -26 feet

        F  %       .00   12.13
        P,KSF      .95    2.95
0       SOIL COMPRESSIBILITY NO.  7
                  Elevation -26 to -33 feet

        F  %       .00   10.29
        P,KSF     1.24    3.24
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS


        Island Road Marsh Creation (TE-117) 16715-040-03
        Sand Profile MC Foundation Settlement 45 to 60 days


        TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0       SOIL COMPRESSIBILITY NO.  8
                  Elevation -33 to -44 feet

        F  %       .00    5.31
        P,KSF     1.71    3.71
0       SOIL COMPRESSIBILITY NO.  9
```



```
                  Elevation -44 to -50 feet

        F  %       .00    4.88
        P,KSF     2.17    4.17
0       SOIL COMPRESSIBILITY NO. 10
                  Elevation -50 to -56 feet

        F  %       .00    4.43
        P,KSF     2.46    4.46
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS


        Island Road Marsh Creation (TE-117) 16715-040-03
        Sand Profile MC Foundation Settlement 45 to 60 days


        TABLE 4 - SETTLEMENT POINT DATA

0       POINT   POINT COORDINATES   LAYER    POINT   POINT COORDINATES   LAYER
         NO,       X          Y      NO.*     NO,       X          Y      NO.*
                   FT         FT                         FT         FT

          1    2500.000   2500.000    1

            * NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS


        Island Road Marsh Creation (TE-117) 16715-040-03
        Sand Profile MC Foundation Settlement 45 to 60 days


        TABLE 5 - LOADED AREA INFORMATION

0                CENTER COORD    AREA DIMEN.   AREA   APPLIED   AREA   PRNT
        AREA SHAPE   X       Y     XLEN   YLEN   SLOPE  PRESSURE  ELEV.  FLAG
                     FT      FT     FT     FT              KSF     FT

        A1   RECT 2500.00 2500.005000.005000.00    .000     .056    .000   0
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS


        Island Road Marsh Creation (TE-117) 16715-040-03
        Sand Profile MC Foundation Settlement 45 to 60 days
```

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT
POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.056
3.000	.056
5.500	.056
9.500	.056
14.000	.056
18.000	.056
23.000	.056
29.500	.056
38.500	.056
47.000	.056
53.000	.056

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 45 to 60 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT
POINT NO. 1

LAYER	
1	.339

2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000
8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002
10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 60 to 90 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1
Elevation 0 to -4 feet

F % .00 3.54 62.60
P,KSF .04 .16 2.16
0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F % .00 3.25 18.53
P,KSF .04 .63 2.63
0 SOIL COMPRESSIBILITY NO. 3
Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F % .00 3.51 17.04
P,KSF .04 .79 2.79
0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F % .00 3.60 16.51
P,KSF .04 .85 2.85
0 SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

2 .530

3 .162

4 .000

5 .057

6 .045

7 .277

8 .385

9 .292

10 .125

11 .121

TOTAL SETTLE. 2.332
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 60 to 90 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS = 11
NUMBER OF SOIL COMPRESSIBILITIES = 10
NUMBER OF SETTLEMENT POINTS = 1
NUMBER OF LOADED AREAS = 1
MODE (1 = U.S. GRAVITATIONAL UNITS
2 = SI ABSOLUTE UNITS) = 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000

F % .00 12.13
P,KSF .95 2.95
0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F % .00 10.29
P,KSF 1.24 3.24
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 60 to 90 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F % .00 5.31
P,KSF 1.71 3.71
0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F % .00 4.88
P,KSF 2.17 4.17
0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F % .00 4.43
P,KSF 2.46 4.46
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 60 to 90 days

TABLE 4 - SETTLEMENT POINT DATA

POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 60 to 90 days

TABLE 5 - LOADED AREA INFORMATION

AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.054	.000	0

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 60 to 90 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.054
3.000	.054
5.500	.054
9.500	.054
14.000	.054
18.000	.054
23.000	.054
29.500	.054

38.500	.054
47.000	.054
53.000	.054

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 60 to 90 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT POINT NO. 1

LAYER	
1	.322
2	.517
3	.157
4	.000
5	.055
6	.043
7	.262
8	.371
9	.281
10	.121
11	.116

TOTAL SETTLE. 2.244

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 90 to 120 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS	= 11
NUMBER OF SOIL COMPRESSIBILITIES	= 10
NUMBER OF SETTLEMENT POINTS	= 1
NUMBER OF LOADED AREAS	= 1
MODE (1 = U.S. GRAVITATIONAL UNITS 2 = SI ABSOLUTE UNITS)	= 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000
8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002
10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 90 to 120 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

SOIL COMPRESSIBILITY NO. 1
Elevation 0 to -4 feet

F %	.00	3.54	62.60
P,KSF	.04	.16	2.16

SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F %	.00	3.25	18.53
P,KSF	.04	.63	2.63

SOIL COMPRESSIBILITY NO. 3
Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F %	.00	3.51	17.04
P,KSF	.04	.79	2.79

SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F %	.00	3.60	16.51
P,KSF	.04	.85	2.85

SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

F %	.00	12.13
P,KSF	.95	2.95

SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F %	.00	10.29	
P,KSF	1.24	3.24	

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 90 to 120 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F %	.00	5.31
P,KSF	1.71	3.71

SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

```
        F  %       .00    4.88
        P,KSF     2.17    4.17
0       SOIL COMPRESSIBILITY NO. 10
                  Elevation -50 to -56 feet

        F  %       .00    4.43
        P,KSF     2.46    4.46
```


Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 90 to 120 days

TABLE 4 - SETTLEMENT POINT DATA

POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 90 to 120 days

TABLE 5 - LOADED AREA INFORMATION

AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.053	.000	0

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 90 to 120 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.053
3.000	.053
5.500	.053
9.500	.053
14.000	.053
18.000	.053
23.000	.053
29.500	.053
38.500	.053
47.000	.053
53.000	.053

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 90 to 120 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT POINT NO. 1

LAYER	
1	.312
2	.510
3	.154
4	.000
5	.054
6	.042
7	.254
8	.364
9	.276
10	.118
11	.114

TOTAL SETTLE. 2.200

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 120 to 210 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS	= 11
NUMBER OF SOIL COMPRESSIBILITIES	= 10
NUMBER OF SETTLEMENT POINTS	= 1
NUMBER OF LOADED AREAS	= 1
MODE (1 = U.S. GRAVITATIONAL UNITS 2 = SI ABSOLUTE UNITS)	= 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322

4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000
8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002
10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 120 to 210 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

```
0       SOIL COMPRESSIBILITY NO.  1
                  Elevation 0 to -4 feet

        F  %       .00    3.54   62.60
        P,KSF      .04     .16    2.16
0       SOIL COMPRESSIBILITY NO.  2
                  Elevation -4 to -7 feet

        F  %       .00    3.25   18.53
        P,KSF      .04     .63    2.63
0       SOIL COMPRESSIBILITY NO.  3
                  Elevation -7 to -12 feet

              THE SLOPE OF THE F(%)-LOG P CURVE IS   .000 %

0       SOIL COMPRESSIBILITY NO.  4
                  Elevation -12 to -16 feet

        F  %       .00    3.51   17.04
        P,KSF      .04     .79    2.79
0       SOIL COMPRESSIBILITY NO.  5
                  Elevation -16 to -20 feet

        F  %       .00    3.60   16.51
        P,KSF      .04     .85    2.85
0       SOIL COMPRESSIBILITY NO.  6
                  Elevation -20 to -26 feet

        F  %       .00   12.13
        P,KSF      .95    2.95
```

0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F % .00 10.29
P,KSF 1.24 3.24

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 120 to 210 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F % .00 5.31
P,KSF 1.71 3.71

0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F % .00 4.88
P,KSF 2.17 4.17

0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F % .00 4.43
P,KSF 2.46 4.46

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 120 to 210 days

TABLE 4 - SETTLEMENT POINT DATA

0 POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 120 to 210 days

TABLE 5 - LOADED AREA INFORMATION

0 AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	AREA SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.053	.000	0

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 120 to 210 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT
POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.053
3.000	.053
5.500	.053
9.500	.053
14.000	.053
18.000	.053
23.000	.053
29.500	.053
38.500	.053

47.000	.053
53.000	.053

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 120 to 210 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT
POINT NO. 1

LAYER	
1	.312
2	.510
3	.154
4	.000
5	.054
6	.042
7	.254
8	.364
9	.276
10	.118
11	.114

TOTAL SETTLE. 2.200

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 210 to 395 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS	= 11
NUMBER OF SOIL COMPRESSIBILITIES	= 10
NUMBER OF SETTLEMENT POINTS	= 1
NUMBER OF LOADED AREAS	= 1
MODE (1 = U.S. GRAVITATIONAL UNITS 2 = SI ABSOLUTE UNITS)	= 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000
8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002
10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 210 to 395 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1
Elevation 0 to -4 feet

F % .00 3.54 62.60
P,KSF .04 .16 2.16

0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F % .00 3.25 18.53
P,KSF .04 .63 2.63
0 SOIL COMPRESSIBILITY NO. 3
Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F % .00 3.51 17.04
P,KSF .04 .79 2.79
0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F % .00 3.60 16.51
P,KSF .04 .85 2.85
0 SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

F % .00 12.13
P,KSF .95 2.95
0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F % .00 10.29
P,KSF 1.24 3.24
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 210 to 395 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F % .00 5.31
P,KSF 1.71 3.71
0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F % .00 4.88
P,KSF 2.17 4.17

0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F % .00 4.43
P,KSF 2.46 4.46
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 210 to 395 days

TABLE 4 - SETTLEMENT POINT DATA

0 POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 210 to 395 days

TABLE 5 - LOADED AREA INFORMATION

0 AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	AREA SLOPE	APPLIED PRESSURE KSF	ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.042	.000	0

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 210 to 395 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT
POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.042
3.000	.042
5.500	.042
9.500	.042
14.000	.042
18.000	.042
23.000	.042
29.500	.042
38.500	.042
47.000	.042
53.000	.042

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 210 to 395 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT
POINT NO. 1

LAYER	
1	.202
2	.434
3	.127

4	.000
5	.043
6	.034
7	.167
8	.287
9	.220
10	.091
11	.091

TOTAL SETTLE. 1.695
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 395 to 760 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS = 11
NUMBER OF SOIL COMPRESSIBILITIES = 10
NUMBER OF SETTLEMENT POINTS = 1
NUMBER OF LOADED AREAS = 1
MODE (1 = U.S. GRAVITATIONAL UNITS
2 = SI ABSOLUTE UNITS) = 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081

	6	18.000	4.000	1.00	39.60	5	.707	3.383
	7	23.000	6.000	1.00	47.60	6	.929	.000
	8	29.500	7.000	1.00	47.60	7	1.238	.000
	9	38.500	11.000	1.00	55.60	8	1.711	.002
	10	47.000	6.000	1.00	49.60	9	2.165	.000
	11	53.000	6.000	1.00	49.60	10	2.463	.008

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 395 to 760 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1
Elevation 0 to -4 feet

F %	.00	3.54	62.60
P,KSF	.04	.16	2.16

0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F %	.00	3.25	18.53
P,KSF	.04	.63	2.63

0 SOIL COMPRESSIBILITY NO. 3
Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F %	.00	3.51	17.04
P,KSF	.04	.79	2.79

0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F %	.00	3.60	16.51
P,KSF	.04	.85	2.85

0 SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

F %	.00	12.13
P,KSF	.95	2.95

0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F %	.00	10.29
P,KSF	1.24	3.24

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 395 to 760 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F %	.00	5.31	
P,KSF	1.71	3.71	

0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F %	.00	4.88	
P,KSF	2.17	4.17	

0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F %	.00	4.43	
P,KSF	2.46	4.46	

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 395 to 760 days

TABLE 4 - SETTLEMENT POINT DATA

0	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
	1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 395 to 760 days

TABLE 5 - LOADED AREA INFORMATION

0 AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	AREA SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.039	.000	0

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 395 to 760 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT
POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.039
3.000	.039
5.500	.039
9.500	.039
14.000	.039
18.000	.039
23.000	.039
29.500	.039
38.500	.039
47.000	.039

53.000	.039

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 395 to 760 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT
POINT NO. 1

LAYER	
1	.168
2	.411
3	.119
4	.000
5	.040
6	.031
7	.143
8	.266
9	.204
10	.084
11	.084
TOTAL SETTLE.	1.551

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 760 to 1125 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS = 11
NUMBER OF SOIL COMPRESSIBILITIES = 10
NUMBER OF SETTLEMENT POINTS = 1
NUMBER OF LOADED AREAS = 1
MODE (1 = U.S. GRAVITATIONAL UNITS
2 = SI ABSOLUTE UNITS) = 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000
8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002
10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 760 to 1125 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1
Elevation 0 to -4 feet

F % .00 3.54 62.60
P,KSF .04 .16 2.16
0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F % .00 3.25 18.53

F % .00 4.43
P,KSF 2.46 4.46
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 760 to 1125 days

TABLE 4 - SETTLEMENT POINT DATA

POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 760 to 1125 days

TABLE 5 - LOADED AREA INFORMATION

AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	AREA SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.039	.000	0

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 760 to 1125 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT
POINT NO. 1

P,KSF .04 .63 2.63
0 SOIL COMPRESSIBILITY NO. 3
Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F % .00 3.51 17.04
P,KSF .04 .79 2.79
0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F % .00 3.60 16.51
P,KSF .04 .85 2.85
0 SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

F % .00 12.13
P,KSF .95 2.95
0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F % .00 10.29
P,KSF 1.24 3.24
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 760 to 1125 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F % .00 5.31
P,KSF 1.71 3.71
0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F % .00 4.88
P,KSF 2.17 4.17
0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

DEPTH,FT	STRESS,KSF
1.000	.039
3.000	.039
5.500	.039
9.500	.039
14.000	.039
18.000	.039
23.000	.039
29.500	.039
38.500	.039
47.000	.039
53.000	.039

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 760 to 1125 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT
POINT NO. 1

LAYER	
1	.168
2	.411
3	.119
4	.000

	5	.040
	6	.031
	7	.143
	8	.266
	9	.204
	10	.084
	11	.084

TOTAL SETTLE. 1.551

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1125 to 1855 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS = 11
NUMBER OF SOIL COMPRESSIBILITIES = 10
NUMBER OF SETTLEMENT POINTS = 1
NUMBER OF LOADED AREAS = 1
MODE (1 = U.S. GRAVITATIONAL UNITS
2 = SI ABSOLUTE UNITS) = 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000

8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002
10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1125 to 1855 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1
Elevation 0 to -4 feet

F % .00 3.54 62.60
P,KSF .04 .16 2.16

0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F % .00 3.25 18.53
P,KSF .04 .63 2.63

0 SOIL COMPRESSIBILITY NO. 3
Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F % .00 3.51 17.04
P,KSF .04 .79 2.79

0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F % .00 3.60 16.51
P,KSF .04 .85 2.85

0 SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

F % .00 12.13
P,KSF .95 2.95

0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F % .00 10.29

P,KSF 1.24 3.24

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1125 to 1855 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F % .00 5.31
P,KSF 1.71 3.71

0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F % .00 4.88
P,KSF 2.17 4.17

0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F % .00 4.43
P,KSF 2.46 4.46

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1125 to 1855 days

TABLE 4 - SETTLEMENT POINT DATA

0 POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03

Sand Profile MC Foundation Settlement 1125 to 1855 days

TABLE 5 - LOADED AREA INFORMATION

0 AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	AREA SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.039	.000	0

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1125 to 1855 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.039
3.000	.039
5.500	.039
9.500	.039
14.000	.039
18.000	.039
23.000	.039
29.500	.039
38.500	.039
47.000	.039
53.000	.039

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1125 to 1855 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT POINT NO.	1
LAYER	
1	.168
2	.411
3	.119
4	.000
5	.040
6	.031
7	.143
8	.266
9	.204
10	.084
11	.084
TOTAL SETTLE.	1.551

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La

FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1855 to 3680 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS	= 11
NUMBER OF SOIL COMPRESSIBILITIES	= 10
NUMBER OF SETTLEMENT POINTS	= 1
NUMBER OF LOADED AREAS	= 1
MODE (1 = U.S. GRAVITATIONAL UNITS 2 = SI ABSOLUTE UNITS)	= 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000
8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002
10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1855 to 3680 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1
Elevation 0 to -4 feet

F %	.00	3.54	62.60
P,KSF	.04	.16	2.16

0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F %	.00	3.25	18.53
P,KSF	.04	.63	2.63

0 SOIL COMPRESSIBILITY NO. 3

Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F %	.00	3.51	17.04
P,KSF	.04	.79	2.79

0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F %	.00	3.60	16.51
P,KSF	.04	.85	2.85

0 SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

F %	.00	12.13
P,KSF	.95	2.95

0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F %	.00	10.29
P,KSF	1.24	3.24

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1855 to 3680 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F %	.00	5.31
P,KSF	1.71	3.71

0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F %	.00	4.88
P,KSF	2.17	4.17

0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F %	.00	4.43

P,KSF	2.46	4.46

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1855 to 3680 days

TABLE 4 - SETTLEMENT POINT DATA

POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La

FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1855 to 3680 days

TABLE 5 - LOADED AREA INFORMATION

AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	AREA SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.039	.000	0

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La

FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1855 to 3680 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT POINT NO.	1
DEPTH,FT	STRESS,KSF

1.000	.039
3.000	.039
5.500	.039
9.500	.039
14.000	.039
18.000	.039
23.000	.039
29.500	.039
38.500	.039
47.000	.039
53.000	.039

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1855 to 3680 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT
POINT NO. 1

LAYER	
1	.168
2	.411
3	.119
4	.000
5	.040

6	.031						
7	.143						
8	.266						
9	.204						
10	.084						
11	.084						

TOTAL SETTLE. 1.551

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 3680 to 7330 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS = 11
NUMBER OF SOIL COMPRESSIBILITIES = 10
NUMBER OF SETTLEMENT POINTS = 1
NUMBER OF LOADED AREAS = 1
MODE (1 = U.S. GRAVITATIONAL UNITS
2 = SI ABSOLUTE UNITS) = 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000
8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002

10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 3680 to 7330 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1
Elevation 0 to -4 feet

F %	.00	3.54	62.60
P,KSF	.04	.16	2.16

0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F %	.00	3.25	18.53
P,KSF	.04	.63	2.63

0 SOIL COMPRESSIBILITY NO. 3
Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F %	.00	3.51	17.04
P,KSF	.04	.79	2.79

0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F %	.00	3.60	16.51
P,KSF	.04	.85	2.85

0 SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

F %	.00	12.13
P,KSF	.95	2.95

0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F %	.00	10.29
P,KSF	1.24	3.24

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 3680 to 7330 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F %	.00	5.31
P,KSF	1.71	3.71

0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F %	.00	4.88
P,KSF	2.17	4.17

0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F %	.00	4.43
P,KSF	2.46	4.46

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 3680 to 7330 days

TABLE 4 - SETTLEMENT POINT DATA

POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 3680 to 7330 days

TABLE 5 - LOADED AREA INFORMATION

0

AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.039	.000	0

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 3680 to 7330 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.039
3.000	.039
5.500	.039
9.500	.039
14.000	.039
18.000	.039
23.000	.039
29.500	.039
38.500	.039
47.000	.039
53.000	.039

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 3680 to 7330 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT POINT NO. 1

LAYER	
1	.168
2	.411
3	.119
4	.000
5	.040
6	.031
7	.143
8	.266
9	.204
10	.084
11	.084
TOTAL SETTLE.	1.551

Project: TE-117 Island Road Marsh Creation
GEI Project No.: 16715-040-03
Boring Id: Profile 2 Mudline +0.0

Initial Sequence of Lifts - 30 days

Initial Fill El	3.00	ft
Initial Avg. Mudline El	0.00	ft
Initial γ	84.80	pcf
Initial Water El	0.400	ft
Dewatered Water El	0.4	ft
Initial stress	229.44	psf
	0.229	ksf
Settlement @ 15 days	5.613	inches

0.467781 feet

Construction period is 0 - 30 days

Ending Fill El	3.00	ft
Ending Mudline El	-0.47	ft
Ending γ	84.80	pcf
Fill Thickness	3.47	ft
Ending Stress:	239.92	psf
	0.240	ksf

Fill Material Properties

SG:	2.66
e0:	3.624
Vvi:	0.784
Vs:	0.216

Water Levels

MHW	
MW	0.4
MLW	
Mounding?	1.5

15 to 45 days

Water Elevation	1.1	ft
Total Foundation Settlement:	0.767	ft
Ending Mudline El:	**-0.767**	**ft**
PSDDF Settlement:	0.121	ft
Ending Fill El:	**2.580**	**ft**
Ending Fill Thickness:	3.3	ft
Vv:	0.749	
e:	3.463	
MC:	1.302	
Ending γ:	85.611	pcf
Effective Stress:	170.006	psf
	0.170	ksf

45 to 60 days

Water Elevation	1.0	ft
Total Foundation Settlement:	0.496	ft
Ending Mudline El:	**-0.767**	**ft**
PSDDF Settlement:	0.217	ft
Ending Fill El:	**2.484**	**ft**
Ending Fill Thickness:	3.3	ft
Vv:	0.721	
e:	3.335	
MC:	1.254	
Ending γ:	86.30	pcf
Effective Stress:	170.26	psf
	0.170	ksf

60 to 90 days

Water Elevation	0.8	ft
Total Foundation Settlement:	0.562	ft
Ending Mudline El:	**-0.767**	**ft**
PSDDF Settlement:	0.375	ft
Ending Fill El:	**2.326**	**ft**
Ending Fill Thickness:	3.09	ft
Vv:	0.676	
e:	3.124	
MC:	1.174	
Ending γ:	87.52	pcf
Effective Stress:	172.88	psf
	0.173	ksf

90 to 120 days

Water Elevation	0.7	ft
Total Foundation Settlement:	0.614	ft
Ending Mudline El:	**-0.767**	**ft**
PSDDF Settlement:	0.482	ft
Ending Fill El:	**2.219**	**ft**
Ending Fill Thickness:	2.986	ft
Vv:	0.645	
e:	2.981	
MC:	1.121	
Ending γ:	88.42	pcf
Effective Stress:	172.44	psf
	0.172	ksf

120 to 210 days

Water Elevation	0.4	ft
Total Foundation Settlement:	0.674	ft
Ending Mudline El:	**-0.767**	**ft**
PSDDF Settlement:	0.944	ft
Ending Fill El:	**1.757**	**ft**
Ending Fill Thickness:	2.524	ft
Vv:	0.512	
e:	2.365	
MC:	0.889	
Ending γ:	93.18	pcf
Effective Stress:	162.33	psf
	0.162	ksf

210 to 395 days

Water Elevation	0.4	ft
Total Foundation Settlement:	0.633	ft
Ending Mudline El:	**-0.767**	**ft**
PSDDF Settlement:	1.219	ft
Ending Fill El:	**1.482**	**ft**
Ending Fill Thickness:	2.249	ft
Vv:	0.432	
e:	1.999	
MC:	0.751	
Ending γ:	96.94	pcf
Effective Stress:	145.17	psf
	0.145	ksf

395 to 760 days

Water Elevation	0.4	ft
Total Foundation Settlement:	0.512	ft
Ending Mudline El:	**-0.767**	**ft**
PSDDF Settlement:	1.261	ft
Ending Fill El:	**1.440**	**ft**
Ending Fill Thickness:	2.207	ft
Vv:	0.420	
e:	1.943	
MC:	0.730	
Ending γ:	97.60	pcf
Effective Stress:	142.55	psf
	0.143	ksf

760 to 1125 days

Water Elevation	0.4	ft
Total Foundation Settlement:	0.497	ft
Ending Mudline El:	**-0.767**	**ft**
PSDDF Settlement:	1.261	ft
Ending Fill El:	**1.440**	**ft**
Ending Fill Thickness:	2.21	ft
Vv:	0.420	
e:	1.943	
MC:	0.730	
Ending γ:	97.60	pcf
Effective Stress:	142.55	psf
	0.143	ksf

1125 to 1855 days

Water Elevation	0.4	ft
Total Foundation Settlement:	0.497	ft
Ending Mudline El:	**-0.767**	**ft**
PSDDF Settlement:	1.261	ft
Ending Fill El:	**1.440**	**ft**
Ending Fill Thickness:	2.207	ft
Vv:	0.420	
e:	1.943	
MC:	0.730	
Ending γ:	97.60	pcf
Effective Stress:	142.55	psf
	0.143	ksf

1855 to 3680 days

Water Elevation	0.4	ft
Total Foundation Settlement:	0.497	ft
Ending Mudline El:	**-0.767**	**ft**
PSDDF Settlement:	1.261	ft
Ending Fill El:	**1.440**	**ft**
Ending Fill Thickness:	2.207	ft
Vv:	0.420	
e:	1.943	
MC:	0.730	
Ending γ:	97.60	pcf
Effective Stress:	142.55	psf
	0.143	ksf

3680 to 7330 days

Water Elevation	0.4	ft
Total Foundation Settlement:	0.497	ft
Ending Mudline El:	**-0.767**	**ft**
PSDDF Settlement:	1.261	ft
Ending Fill El:	**1.440**	**ft**
Ending Fill Thickness:	2.207	ft
Vv:	0.420	
e:	1.943	
MC:	0.730	
Ending γ:	97.60	pcf
Effective Stress:	142.55	psf
	0.143	ksf

7330 to days

Water Elevation	1.2	ft
Total Foundation Settlement:	0.000	ft
Ending Mudline El:	**-0.767**	**ft**
PSDDF Settlement:	0	ft
Ending Fill El:	**2.701**	**ft**
Ending Fill Thickness:	3.468	ft
Vv:	0.784	
e:	3.624	
MC:	1.362	
Ending γ:	84.80	pcf
Effective Stress:	171.32	psf
	0.171	ksf

to days

Water Elevation	1.2	ft
Total Foundation Settlement:	0.000	ft
Ending Mudline El:	**-0.767**	**ft**
PSDDF Settlement:	0	ft
Ending Fill El:	**2.701**	**ft**
Ending Fill Thickness:	3.468	ft
Vv:	0.784	
e:	3.624	
MC:	1.362	
Ending γ:	84.80	pcf
Effective Stress:	171.32	psf
	0.171	ksf

to days

Water Elevation	1.2	ft
Total Foundation Settlement:	0.000	ft
Ending Mudline El:	**-0.767**	**ft**
PSDDF Settlement:	0	ft
Ending Fill El:	**2.700540396**	**ft**
Ending Fill Thickness:	3.468	ft
Vv:	0.784	
e:	3.624	
MC:	1.362	
Ending γ:	84.80	pcf
Effective Stress:	171.32	psf
	0.171	ksf

to days

Water Elevation	1.2	ft
Total Foundation Settlement:	0.000	ft
Ending Mudline El:	**-0.767**	**ft**
PSDDF Settlement:	0	ft
Ending Fill El:	**2.701**	**ft**
Ending Fill Thickness:	3.468	ft
Vv:	0.784	
e:	3.624	
MC:	1.362	
Ending γ:	84.80	pcf
Effective Stress:	171.32	psf
	0.171	ksf

Project: TE-117 Island Road Marsh Creation
GEI Project No.: 16715-040-03
Boring Id: Profile 2 Mudline +0.0
Mudline Elevation 0 feet
Initial Fill El = 3 ft

Example Calculation: Tv = 0.4*15/(4^2) =0.375
Layer 1 Time 15 days U (%) = 100-10^((1.781-0.375)/0.933) =67.866 > 60
Settlement with time = 0.679*3.116 = 2.115

$$T_v = \frac{c_v t}{H_{dr}^{\ 2}} = time\ factor$$

$$For\ U = 0\ to\ 60\%, \qquad U\% = 100 * \left(4T_v/\pi\right)^{0.5}$$

$$For\ U > 60\%, \qquad U\% = 100 - 10^{\left(\frac{1.781 - T_v}{0.933}\right)}$$

Layer 1 Total Layer Sett @ (days)	Settlement (inches)		Layer 2 Total Layer Se (days)	Settlement (inches)		Layer 3 Total Layer Sc (days)	Settlement (inches)		Layer 4 Total Layer Sett @ (days)	Settlement (inches)		Layer 5 Total Layer Sett @ (days)	Settlement (inches)	
15	3.116	(from SETANL)	15	3.685	(from SETANL)	15	0.453	(from SETANL)	15	0.000	(from SETANL)	15	0.203	(from SETANL)
45	3.379		45	3.922		45	0.467		45	0.000		45	0.212	
60	1.599		60	2.340		60	0.374		60	0.000		60	0.157	
90	1.628		90	2.366		90	0.375		90	0.000		90	0.158	
120	1.687		120	2.417		120	0.378		120	0.000		120	0.160	
210	1.687		210	2.417		210	0.378		210	0.000		210	0.160	
395	1.387		395	2.156		395	0.363		395	0.000		395	0.152	
760	0.848		760	1.682		760	0.337		760	0.000		760	0.138	
1125	0.836		1125	1.593		1125	0.332		1125	0.000		1125	0.135	
1855	0.836		1855	1.593		1855	0.332		1855	0.000		1855	0.135	
3680	0.836		3680	1.593		3680	0.332		3680	0.000		3680	0.135	
7330	0.836		7330	1.593		7330	0.332		7330	0.000		7330	0.135	
0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
Cv:	0.4	ft^2/day	Cv:	0.08	ft^2/day	Cv:	0.75	ft^2/day	Cv:	0.1	ft^2/day	Cv:	0.1	ft^2/day
Hdr:	4	ft	Hdr:	3	ft	Hdr:	0.01	ft	Hdr:	5	ft	Hdr:	5	ft

time, t (days)	Tv	U	Settlement with Time	Tv	U	Settlement with Time	Tv	U	Settlement with Time	Tv	U	Settlement with Time	Tv	U	Settlement with Time
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
15	0.38	67.9	2.115	0.13	41.2	1.518	112500.00	100.0	0.453	0.06	27.6	0.000	0.06	27.6	0.056
45	1.13	95.0	3.208	0.40	69.8	2.737	337500.00	100.0	0.467	0.18	47.9	0.000	0.18	47.9	0.101
60	1.50	98.0	1.567	0.53	78.3	1.831	450000.00	100.0	0.374	0.24	55.3	0.000	0.24	55.3	0.087
90	2.25	99.7	1.623	0.80	88.7	2.100	675000.00	100.0	0.375	0.36	66.7	0.000	0.36	66.7	0.105
120	3.00	100.0	1.686	1.07	94.2	2.276	900000.00	100.0	0.378	0.48	75.2	0.000	0.48	75.2	0.120
210	5.25	100.0	1.687	1.87	99.2	2.397	1575000.00	100.0	0.378	0.84	89.8	0.000	0.84	89.8	0.144
395	9.88	100.0	1.387	3.51	100.0	2.156	2962500.00	100.0	0.363	1.58	98.4	0.000	1.58	98.4	0.150
760	19.00	100.0	0.848	6.76	100.0	1.682	5700000.00	100.0	0.337	3.04	100.0	0.000	3.04	100.0	0.138
1125	28.13	100.0	0.836	10.00	100.0	1.593	8437500.00	100.0	0.332	4.50	100.0	0.000	4.50	100.0	0.135
1855	46.38	100.0	0.836	16.49	100.0	1.593	##########	100.0	0.332	7.42	100.0	0.000	7.42	100.0	0.135
3680	92.00	100.0	0.836	32.71	100.0	1.593	##########	100.0	0.332	14.72	100.0	0.000	14.72	100.0	0.135
7330	183.25	100.0	0.836	65.16	100.0	1.593	##########	100.0	0.332	29.32	100.0	0.000	29.32	100.0	0.135
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000

Layer 6 Total Layer Sett @ (days)	Settlement (inches)		Layer 7 Total Layer Se (days)	Settlement (inches)		Layer 8 Total Layer Sc (days)	Settlement (inches)		Layer 9 Total Layer Sett @ (days)	Settlement (inches)		Layer 10 Total Layer Sett @ (days)	Settlement (inches)	
15	0.618		15	1.525		15	1.514		15	1.137		15	0.529	
45	0.685		45	1.604		45	1.587		45	1.193		45	0.556	
60	0.273		60	1.122		60	1.145		60	0.857		60	0.395	
90	0.279		90	1.129		90	1.151		90	0.862		90	0.397	
120	0.291		120	1.143		120	1.164		120	0.872		120	0.402	
210	0.291		210	1.143		210	1.164		210	0.872		210	0.402	
395	0.230		395	1.072		395	1.100		395	0.824		395	0.379	
760	0.125		760	0.951		760	0.990		760	0.741		760	0.339	
1125	0.108		1125	0.930		1125	0.971		1125	0.727		1125	0.332	
1855	0.108		1855	0.930		1855	0.971		1855	0.727		1855	0.332	
3680	0.108		3680	0.930		3680	0.971		3680	0.727		3680	0.332	
7330	0.108		7330	0.930		7330	0.971		7330	0.727		7330	0.332	
0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
0	0.000		0	0.000		0	0.000		0	0.000		0	0.000	
Cv:	0.1	ft^2/day	Cv:	0.1	ft^2/day	Cv:	0.1	ft^2/day	Cv:	0.1	ft^2/day	Cv:	0.1	ft^2/day
Hdr:	5	ft	Hdr:	5	ft	Hdr:	5	ft	Hdr:	5	ft	Hdr:	5	ft

time, t (days)	Tv	U	Settlement with Time	Tv	U	Settlement with Time	Tv	U	Settlement with Time	Tv	U	Settlement with Time	Tv	U	Settlement with Time
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
15	0.06	27.6	0.171	0.06	27.6	0.422	0.06	27.6	0.418	0.06	27.6	0.314	0.06	27.6	0.146
45	0.18	47.9	0.328	0.18	47.9	0.768	0.18	47.9	0.760	0.18	47.9	0.571	0.18	47.9	0.266
60	0.24	55.3	0.151	0.24	55.3	0.620	0.24	55.3	0.633	0.24	55.3	0.474	0.24	55.3	0.218
90	0.36	66.7	0.186	0.36	66.7	0.753	0.36	66.7	0.767	0.36	66.7	0.575	0.36	66.7	0.265
120	0.48	75.2	0.219	0.48	75.2	0.860	0.48	75.2	0.875	0.48	75.2	0.656	0.48	75.2	0.302
210	0.84	89.8	0.261	0.84	89.8	1.026	0.84	89.8	1.045	0.84	89.8	0.783	0.84	89.8	0.361
395	1.58	98.4	0.226	1.58	98.4	1.054	1.58	98.4	1.082	1.58	98.4	0.810	1.58	98.4	0.373
760	3.04	100.0	0.125	3.04	100.0	0.951	3.04	100.0	0.990	3.04	100.0	0.741	3.04	100.0	0.339
1125	4.50	100.0	0.108	4.50	100.0	0.930	4.50	100.0	0.971	4.50	100.0	0.727	4.50	100.0	0.332
1855	7.42	100.0	0.108	7.42	100.0	0.930	7.42	100.0	0.971	7.42	100.0	0.727	7.42	100.0	0.332
3680	14.72	100.0	0.108	14.72	100.0	0.930	14.72	100.0	0.971	14.72	100.0	0.727	14.72	100.0	0.332
7330	29.32	100.0	0.108	29.32	100.0	0.930	29.32	100.0	0.971	29.32	100.0	0.727	29.32	100.0	0.332
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000
0	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0	0.000

PSDDF results: 30

Average Void Ratio at 30 days = 3.62404

PSDDF Time (days)	Total Settlement (feet)	Post construction Settlement
30	2.205	0
45	2.326	0.121
60	2.422	0.217
90	2.58	0.375
120	2.687	0.482
210	3.149	0.944
395	3.424	1.219
760	3.466	1.261
1125	3.466	1.261
1855	3.466	1.261
3680	3.466	1.261
7330	3.466	1.261

Project:	TE-117 Island Road Marsh Creation	
GEI Project No.:	16715-040-03	
Boring Id:	Profile 2 Mudline +0.0	
. Mudline Elevation:	0	feet
Initial Fill El:	3	feet
Waterline El:	0.4	feet
PSDDF delay:	0	days

Drainage Parameters

	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6	Layer 7	Layer 8	Layer 9	Layer 10	
Cv	0.4	0.08	0.75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	ft^2/day
Hdr	4	3	0.01	5	5	5	5	5	5	5	ft

Time (days)	**Settlement (inches)**										
(Real Time)	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6	Layer 7	Layer 8	Layer 9	Layer 10	Total
15	3.116	3.685	0.453	0	0.203	0.618	1.525	1.514	1.137	0.529	0.477
45	3.379	3.922	0.467	0	0.212	0.685	1.604	1.587	1.193	0.556	0.501
60	1.599	2.34	0.374	0	0.157	0.273	1.122	1.145	0.857	0.395	0.358
90	1.628	2.366	0.375	0	0.158	0.279	1.129	1.151	0.862	0.397	0.36
120	1.687	2.417	0.378	0	0.16	0.291	1.143	1.164	0.872	0.402	0.364
210	1.687	2.417	0.378	0	0.16	0.291	1.143	1.164	0.872	0.402	0.364
395	1.387	2.156	0.363	0	0.152	0.23	1.072	1.1	0.824	0.379	0.344
760	0.848	1.682	0.337	0	0.138	0.125	0.951	0.99	0.741	0.339	0.309
1125	0.836	1.593	0.332	0	0.135	0.108	0.93	0.971	0.727	0.332	0.303
1855	0.836	1.593	0.332	0	0.135	0.108	0.93	0.971	0.727	0.332	0.303
3680	0.836	1.593	0.332	0	0.135	0.108	0.93	0.971	0.727	0.332	0.303
7330	0.836	1.593	0.332	0	0.135	0.108	0.93	0.971	0.727	0.332	0.303

****
Consolidation and desiccation of soft layers---dredged fill
****

Problem Island Road Marsh Creation Profile 2 Mudline +0.0 Marsh Fill

**********Soil data for dredged fill**********

Material Type	Specific Gravity	Ca/Cc	Cr/Cc	Saturation Limit	Disication Limit	Max. Crust Depth	Saturation at DL
1	2.660	0.031	0.052	2.736	1.830	0.767	0.349

Material type : 1

I	Void Ratio	Effective Stress	Perm-eability	k/1+e PK	Beta	Dsde	Alpha
1	6.540	0.000E+00	0.342E+01	0.454E+00	0.185E+00-0.413E+00-0.187E+00		
2	4.120	0.100E+01	0.335E-01	0.654E-02	0.161E+00-0.717E+00-0.469E-02		
3	3.750	0.200E+01	0.167E-01	0.352E-02	0.586E-02-0.471E+01-0.165E-01		
4	3.270	0.500E+01	0.666E-02	0.156E-02	0.317E-02-0.952E+01-0.149E-01		
5	2.910	0.100E+02	0.332E-02	0.849E-03	0.149E-02-0.205E+02-0.174E-01		
6	2.540	0.200E+02	0.166E-02	0.469E-03	0.931E-03-0.345E+02-0.162E-01		
7	2.330	0.300E+02	0.103E-02	0.309E-03	0.581E-03-0.556E+02-0.172E-01		
8	2.180	0.400E+02	0.826E-03	0.260E-03	0.313E-03-0.962E+02-0.250E-01		
9	1.810	0.800E+02	0.412E-03	0.147E-03	0.241E-03-0.164E+03-0.241E-01		
10	1.450	0.160E+03	0.205E-03	0.837E-04	0.136E-03-0.333E+03-0.279E-01		
11	1.090	0.320E+03	0.102E-03	0.488E-04	0.740E-04-0.658E+03-0.321E-01		
12	0.720	0.640E+03	0.510E-04	0.297E-04	0.518E-04-0.865E+03-0.256E-01		

Summary of lifts and print detail

Time days	Material Type	Fill Height	# Sub-layers	Void ratio	Start Day	Dessic. Month	Print detail
0.	1	0.1	4	6.54	120.	5	1
8.	1	1.4	20	6.54	120.	5	1
15.	1	1.4	20	6.54	120.	5	1
22.	1	1.4	30	6.54	120.	5	1
29.	1	1.4	20	6.54	120.	5	1
30.					120.	5	1
45.					120.	5	1
60.					120.	5	1
90.					120.	5	1
120.					120.	5	1
210.					120.	5	1
395.					120.	5	1
760.					120.	5	1
1125.					120.	5	1
1855.					120.	5	1
3680.					120.	5	1
7330.					120.	5	1

Summary of monthly rainfall and evaporation potential

Month	Rainfall	Evaporation
1	0.430	0.190
2	0.400	0.280
3	0.390	0.400
4	0.270	0.540
5	0.260	0.600
6	0.430	0.640
7	0.630	0.560
8	0.530	0.530
9	0.510	0.460

10	0.370	0.440
11	0.320	0.290
12	0.440	0.210

**********Calculation data**********

tau	Lower layer Void ratio	Lower layer Permeability	drainage path Length
.181E-02	4.990	0.10000E-04	z = 1.17

Summary of desiccation parameters

Parameter	Value
Surface Drainage Efficiency	0.80
maximum evaporation efficiency	0.75
time to desic. after initial fill	120.00
month of initial desiccation	5
elevation of fixed water table	0.40
elevation of top of incompres. found.	-0.50

**********Initial Conditions in Dredged Fill**********

***** Coordinates ***** A	XI	Z	***** Void Ratios ***** Einitial	E	Eeop	Material
0.10	0.10	0.01	6.54	6.54	6.54	1
0.08	0.08	0.01	6.54	6.54	5.71	1
0.05	0.05	0.01	6.54	6.54	4.88	1

0.03	0.03	0.00	6.54	6.54	4.11	1
0.00	0.00	0.00	6.54	6.54	3.98	1

***** Stresses ***** XI	Total	Effective	***** Pore Pressures ***** Total	Static	Excess	Material
0.10	49.92	0.00	49.92	49.92	0.00	1
0.08	51.82	0.00	51.82	51.48	0.34	1
0.05	53.73	0.00	53.73	53.04	0.69	1
0.03	55.63	0.00	55.63	54.60	1.03	1
0.00	57.53	0.00	57.53	56.16	1.37	1

Time = 0. Degree of Consolidation = 0.%

Total Settlement = 0.000

Settlement at End of Primary Consolidation = 0.021

Settlement caused by Primary Consolidation at time 0. = 0.000

Settlement caused by Secondary Compression at time 0. = 0.000

**********Current Conditions in Dredged Fill**********

***** Coordinates ***** A	XI	Z	***** Void Ratios ***** Einitial	E	Eeop	Material
0.10	0.08	0.01	6.54	6.54	6.54	1
0.08	0.06	0.01	6.54	5.74	5.71	1
0.05	0.03	0.01	6.54	4.94	4.88	1
0.03	0.02	0.00	6.54	4.11	4.11	1
0.00	0.00	0.00	6.54	3.98	3.98	1

***** Stresses ***** XI	Total	Effective	***** Pore Pressures ***** Total	Static	Excess	Material
0.08	51.21	0.00	51.21	51.21	0.00	1
0.06	53.02	0.33	52.69	52.68	0.01	1
0.03	54.68	0.66	54.02	54.00	0.03	1
0.02	56.17	1.03	55.13	55.13	0.00	1
0.00	57.53	1.37	56.16	56.16	0.00	1

Time = 8. Degree of Consolidation = 99.%

Total Settlement = 0.021

Settlement at End of Primary Consolidation = 0.021

Settlement caused by Primary Consolidation at time 8. = 0.021

Settlement caused by Secondary Compression at time 8. = 0.000

Surface Elevation = -0.42

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
1.50	0.92	0.20	6.54	6.54	6.54	1
1.43	0.86	0.19	6.54	4.21	4.21	1
1.36	0.82	0.18	6.54	3.80	3.78	1
1.29	0.77	0.17	6.54	3.77	3.61	1
1.22	0.73	0.16	6.54	3.75	3.45	1
1.15	0.68	0.15	6.54	3.74	3.30	1
1.08	0.64	0.14	6.54	3.73	3.21	1
1.01	0.60	0.13	6.54	3.71	3.15	1
0.94	0.55	0.12	6.54	3.69	3.08	1
0.87	0.51	0.12	6.54	3.67	3.01	1
0.80	0.47	0.11	6.54	3.65	2.94	1
0.73	0.42	0.10	6.54	3.61	2.89	1
0.66	0.38	0.09	6.54	3.58	2.85	1
0.59	0.34	0.08	6.54	3.54	2.82	1
0.52	0.30	0.07	6.54	3.50	2.78	1
0.45	0.25	0.06	6.54	3.45	2.75	1
0.38	0.21	0.05	6.54	3.39	2.71	1
0.31	0.17	0.04	6.54	3.34	2.68	1
0.24	0.13	0.03	6.54	3.28	2.64	1
0.17	0.09	0.02	6.54	3.22	2.60	1
0.10	0.05	0.01	6.54	3.15	2.57	1
0.10	0.05	0.01	6.54	3.15	2.57	1
0.08	0.04	0.01	6.54	3.13	2.56	1
0.05	0.03	0.01	6.54	3.11	2.54	1
0.03	0.01	0.00	6.54	3.09	2.53	1

0.00	0.00	0.00	6.54	3.07	2.53	1

	***** Stresses *****		***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
0.92	0.00	0.00	0.00	0.00	0.00	1
0.86	4.50	0.96	3.54	3.54	0.00	1
0.82	8.33	1.88	6.46	6.41	0.05	1
0.77	12.06	1.96	10.11	9.18	0.93	1
0.73	15.78	1.99	13.79	11.93	1.85	1
0.68	19.49	2.06	17.43	14.68	2.75	1
0.64	23.20	2.14	21.05	17.43	3.63	1
0.60	26.89	2.24	24.65	20.16	4.49	1
0.55	30.58	2.35	28.22	22.88	5.34	1
0.51	34.25	2.49	31.76	25.60	6.16	1
0.47	37.91	2.65	35.26	28.30	6.96	1
0.42	41.56	2.84	38.71	30.98	7.73	1
0.38	45.18	3.06	42.12	33.64	8.48	1
0.34	48.79	3.31	45.47	36.28	9.19	1
0.30	52.36	3.59	48.77	38.90	9.87	1
0.25	55.92	3.90	52.02	41.49	10.53	1
0.21	59.44	4.23	55.21	44.05	11.16	1
0.17	62.93	4.58	58.35	46.58	11.77	1
0.13	66.39	4.96	61.43	49.08	12.35	1
0.09	69.81	5.76	64.05	51.54	12.51	1
0.05	73.19	6.62	66.58	53.96	12.62	1
0.05	73.19	6.62	66.58	53.96	12.62	1
0.04	74.39	6.92	67.47	54.82	12.65	1
0.03	75.59	7.23	68.36	55.67	12.69	1
0.01	76.78	7.53	69.25	56.52	12.73	1
0.00	77.97	7.84	70.13	57.36	12.77	1

Time = 15. Degree of Consolidation = 85.%

Total Settlement = 0.581

Settlement at End of Primary Consolidation = 0.685

Settlement caused by Primary Consolidation at time 15. = 0.581

Settlement caused by Secondary Compression at time 15. = 0.000

Surface Elevation = 0.42

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
2.90	1.76	0.38	6.54	6.54	6.54	1
2.83	1.70	0.38	6.54	4.21	4.21	1
2.76	1.66	0.37	6.54	3.80	3.78	1
2.69	1.61	0.36	6.54	3.78	3.61	1
2.62	1.57	0.35	6.54	3.77	3.45	1
2.55	1.52	0.34	6.54	3.77	3.30	1
2.48	1.48	0.33	6.54	3.77	3.21	1
2.41	1.43	0.32	6.54	3.76	3.15	1
2.34	1.39	0.31	6.54	3.76	3.08	1
2.27	1.35	0.30	6.54	3.76	3.01	1
2.20	1.30	0.29	6.54	3.76	2.94	1
2.13	1.26	0.28	6.54	3.75	2.89	1
2.06	1.21	0.27	6.54	3.75	2.85	1
1.99	1.17	0.26	6.54	3.74	2.82	1
1.92	1.13	0.25	6.54	3.73	2.78	1
1.85	1.08	0.25	6.54	3.73	2.75	1
1.78	1.04	0.24	6.54	3.72	2.71	1
1.71	0.99	0.23	6.54	3.70	2.68	1
1.64	0.95	0.22	6.54	3.69	2.64	1
1.57	0.91	0.21	6.54	3.68	2.60	1
1.50	0.86	0.20	6.54	3.66	2.57	1
1.50	0.86	0.20	6.54	3.66	2.57	1
1.43	0.82	0.19	6.54	3.64	2.54	1
1.36	0.78	0.18	6.54	3.62	2.52	1
1.29	0.74	0.17	6.54	3.60	2.50	1
1.22	0.69	0.16	6.54	3.58	2.48	1
1.15	0.65	0.15	6.54	3.56	2.46	1
1.08	0.61	0.14	6.54	3.53	2.43	1
1.01	0.57	0.13	6.54	3.50	2.41	1
0.94	0.52	0.12	6.54	3.47	2.39	1
0.87	0.48	0.12	6.54	3.44	2.37	1
0.80	0.44	0.11	6.54	3.40	2.35	1
0.73	0.40	0.10	6.54	3.36	2.33	1
0.66	0.36	0.09	6.54	3.33	2.32	1
0.59	0.32	0.08	6.54	3.29	2.30	1
0.52	0.28	0.07	6.54	3.24	2.29	1
0.45	0.24	0.06	6.54	3.20	2.28	1
0.38	0.20	0.05	6.54	3.16	2.26	1
0.31	0.16	0.04	6.54	3.11	2.25	1
0.24	0.13	0.03	6.54	3.07	2.23	1
0.17	0.09	0.02	6.54	3.02	2.22	1

0.10	0.05	0.01	6.54	2.98	2.20	1
0.10	0.05	0.01	6.54	2.98	2.20	1
0.08	0.04	0.01	6.54	2.96	2.20	1
0.05	0.03	0.01	6.54	2.94	2.19	1
0.03	0.01	0.00	6.54	2.93	2.19	1
0.00	0.00	0.00	6.54	2.91	2.18	1

	***** Stresses *****		***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
1.76	0.00	0.00	0.00	0.00	0.00	1
1.70	4.50	0.96	3.54	3.54	0.00	1
1.66	8.33	1.87	6.46	6.41	0.05	1
1.61	12.07	1.92	10.14	9.18	0.96	1
1.57	15.79	1.94	13.86	11.95	1.91	1
1.52	19.52	1.95	17.57	14.71	2.86	1
1.48	23.24	1.96	21.29	17.47	3.81	1
1.43	26.97	1.96	25.00	20.23	4.77	1
1.39	30.69	1.97	28.72	22.99	5.72	1
1.35	34.41	1.98	32.43	25.75	6.68	1
1.30	38.12	1.99	36.14	28.51	7.63	1
1.26	41.84	2.00	39.84	31.26	8.58	1
1.21	45.55	2.02	43.53	34.01	9.52	1
1.17	49.26	2.05	47.21	36.76	10.45	1
1.13	52.97	2.10	50.87	39.50	11.37	1
1.08	56.67	2.15	54.52	42.24	12.27	1
1.04	60.37	2.21	58.15	44.98	13.17	1
0.99	64.06	2.28	61.77	47.71	14.06	1
0.95	67.74	2.36	65.38	50.43	14.94	1
0.91	71.42	2.46	68.96	53.14	15.81	1
0.86	75.08	2.56	72.52	55.85	16.67	1
0.86	75.08	2.56	72.52	55.85	16.67	1
0.82	78.74	2.66	76.07	58.54	17.53	1
0.78	82.38	2.78	79.60	61.23	18.37	1
0.74	86.02	2.91	83.11	63.90	19.20	1
0.69	89.64	3.06	86.58	66.56	20.02	1
0.65	93.25	3.22	90.03	69.21	20.82	1
0.61	96.84	3.39	93.46	71.84	21.62	1
0.57	100.42	3.57	96.85	74.45	22.40	1
0.52	103.98	3.76	100.22	77.05	23.16	1
0.48	107.52	3.97	103.55	79.63	23.92	1
0.44	111.04	4.18	106.86	82.19	24.67	1
0.40	114.54	4.41	110.13	84.73	25.40	1
0.36	118.02	4.65	113.37	87.25	26.12	1
0.32	121.47	4.90	116.57	89.74	26.83	1
0.28	124.91	5.37	119.54	92.21	27.33	1
0.24	128.31	5.97	122.35	94.66	27.69	1

0.20	131.70	6.57	125.12	97.08	28.05	1
0.16	135.05	7.19	127.87	99.47	28.39	1
0.13	138.38	7.81	130.58	101.84	28.73	1
0.09	141.69	8.44	133.25	104.19	29.07	1
0.05	144.97	9.08	135.89	106.50	29.39	1
0.05	144.97	9.08	135.89	106.50	29.39	1
0.04	146.13	9.31	136.83	107.32	29.50	1
0.03	147.29	9.53	137.76	108.14	29.62	1
0.01	148.45	9.76	138.69	108.96	29.73	1
0.00	149.61	10.00	139.61	109.77	29.84	1

Time = 22. Degree of Consolidation = 78.%

Total Settlement = 1.141

Settlement at End of Primary Consolidation = 1.465

Settlement caused by Primary Consolidation at time 22. = 1.141

Settlement caused by Secondary Compression at time 22. = 0.000

Surface Elevation = 1.26

**********Current Conditions in Dredged Fill**********

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
4.30	2.60	0.57	6.54	6.54	6.54	1
4.25	2.56	0.56	6.54	5.12	4.99	1
4.21	2.52	0.56	6.54	4.02	4.02	1
4.16	2.49	0.55	6.54	3.81	3.78	1
4.11	2.46	0.55	6.54	3.79	3.66	1
4.07	2.44	0.54	6.54	3.78	3.56	1
4.02	2.41	0.53	6.54	3.78	3.45	1
3.97	2.38	0.53	6.54	3.78	3.35	1
3.93	2.35	0.52	6.54	3.77	3.26	1
3.88	2.32	0.51	6.54	3.77	3.21	1
3.83	2.29	0.51	6.54	3.77	3.17	1
3.79	2.26	0.50	6.54	3.77	3.12	1
3.74	2.23	0.50	6.54	3.77	3.08	1
3.69	2.20	0.49	6.54	3.77	3.03	1
3.65	2.17	0.48	6.54	3.77	2.98	1

3.60	2.14	0.48	6.54	3.77	2.94	1
3.55	2.11	0.47	6.54	3.77	2.90	1
3.51	2.08	0.47	6.54	3.77	2.88	1
3.46	2.05	0.46	6.54	3.76	2.85	1
3.41	2.02	0.45	6.54	3.76	2.83	1
3.37	1.99	0.45	6.54	3.76	2.81	1
3.32	1.96	0.44	6.54	3.76	2.78	1
3.27	1.93	0.43	6.54	3.76	2.76	1
3.23	1.90	0.43	6.54	3.76	2.73	1
3.18	1.87	0.42	6.54	3.76	2.71	1
3.13	1.84	0.42	6.54	3.76	2.69	1
3.09	1.82	0.41	6.54	3.75	2.66	1
3.04	1.79	0.40	6.54	3.75	2.64	1
2.99	1.76	0.40	6.54	3.75	2.62	1
2.95	1.73	0.39	6.54	3.75	2.59	1
2.90	1.70	0.38	6.54	3.75	2.57	1
2.90	1.70	0.38	6.54	3.75	2.57	1
2.83	1.65	0.38	6.54	3.74	2.54	1
2.76	1.61	0.37	6.54	3.74	2.52	1
2.69	1.57	0.36	6.54	3.74	2.50	1
2.62	1.52	0.35	6.54	3.73	2.48	1
2.55	1.48	0.34	6.54	3.72	2.46	1
2.48	1.43	0.33	6.54	3.72	2.43	1
2.41	1.39	0.32	6.54	3.71	2.41	1
2.34	1.35	0.31	6.54	3.70	2.39	1
2.27	1.30	0.30	6.54	3.69	2.37	1
2.20	1.26	0.29	6.54	3.68	2.35	1
2.13	1.22	0.28	6.54	3.67	2.33	1
2.06	1.17	0.27	6.54	3.65	2.32	1
1.99	1.13	0.26	6.54	3.64	2.30	1
1.92	1.09	0.25	6.54	3.62	2.29	1
1.85	1.04	0.25	6.54	3.61	2.28	1
1.78	1.00	0.24	6.54	3.59	2.26	1
1.71	0.96	0.23	6.54	3.57	2.25	1
1.64	0.92	0.22	6.54	3.55	2.23	1
1.57	0.87	0.21	6.54	3.53	2.22	1
1.50	0.83	0.20	6.54	3.51	2.20	1
1.50	0.83	0.20	6.54	3.51	2.20	1
1.43	0.79	0.19	6.54	3.48	2.19	1
1.36	0.75	0.18	6.54	3.46	2.18	1
1.29	0.71	0.17	6.54	3.43	2.17	1
1.22	0.67	0.16	6.54	3.41	2.16	1
1.15	0.63	0.15	6.54	3.38	2.15	1
1.08	0.59	0.14	6.54	3.35	2.14	1
1.01	0.55	0.13	6.54	3.32	2.13	1
0.94	0.51	0.12	6.54	3.29	2.12	1
0.87	0.47	0.12	6.54	3.26	2.11	1
0.80	0.43	0.11	6.54	3.22	2.11	1

0.73	0.39	0.10	6.54	3.19	2.10	1
0.66	0.35	0.09	6.54	3.16	2.09	1
0.59	0.31	0.08	6.54	3.12	2.08	1
0.52	0.27	0.07	6.54	3.08	2.07	1
0.45	0.23	0.06	6.54	3.05	2.06	1
0.38	0.20	0.05	6.54	3.01	2.05	1
0.31	0.16	0.04	6.54	2.97	2.04	1
0.24	0.12	0.03	6.54	2.93	2.03	1
0.17	0.09	0.02	6.54	2.89	2.03	1
0.10	0.05	0.01	6.54	2.86	2.02	1
0.10	0.05	0.01	6.54	2.86	2.02	1
0.08	0.04	0.01	6.54	2.84	2.01	1
0.05	0.03	0.01	6.54	2.83	2.01	1
0.03	0.01	0.00	6.54	2.81	2.01	1
0.00	0.00	0.00	6.54	2.80	2.00	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
2.60	0.00	0.00	0.00	0.00	0.00	1
2.56	3.30	0.59	2.71	2.66	0.05	1
2.52	6.05	1.28	4.77	4.77	0.00	1
2.49	8.58	1.84	6.74	6.65	0.09	1
2.46	11.07	1.89	9.18	8.51	0.67	1
2.44	13.56	1.91	11.65	10.36	1.29	1
2.41	16.05	1.92	14.13	12.20	1.92	1
2.38	18.53	1.93	16.61	14.05	2.56	1
2.35	21.02	1.93	19.09	15.89	3.20	1
2.32	23.51	1.94	21.57	17.74	3.83	1
2.29	25.99	1.94	24.05	19.58	4.47	1
2.26	28.47	1.94	26.53	21.42	5.11	1
2.23	30.96	1.94	29.01	23.26	5.75	1
2.20	33.44	1.95	31.49	25.11	6.39	1
2.17	35.92	1.95	33.97	26.95	7.03	1
2.14	38.41	1.95	36.45	28.79	7.66	1
2.11	40.89	1.96	38.93	30.63	8.30	1
2.08	43.37	1.96	41.41	32.47	8.94	1
2.05	45.85	1.96	43.89	34.31	9.58	1
2.02	48.33	1.96	46.37	36.15	10.22	1
1.99	50.81	1.97	48.85	37.99	10.86	1
1.96	53.29	1.97	51.32	39.83	11.49	1
1.93	55.77	1.97	53.80	41.67	12.13	1
1.90	58.25	1.98	56.28	43.51	12.77	1
1.87	60.73	1.98	58.75	45.34	13.41	1
1.84	63.21	1.98	61.23	47.18	14.04	1
1.82	65.69	1.99	63.70	49.02	14.68	1
1.79	68.16	1.99	66.17	50.85	15.32	1

1.76	70.64	2.00	68.64	52.69	15.95	1
1.73	73.12	2.00	71.11	54.52	16.59	1
1.70	75.59	2.02	73.57	56.36	17.22	1
1.70	75.59	2.02	73.57	56.36	17.22	1
1.65	79.30	2.04	77.27	59.11	18.16	1
1.61	83.01	2.06	80.95	61.85	19.10	1
1.57	86.72	2.09	84.63	64.60	20.03	1
1.52	90.42	2.12	88.30	67.34	20.96	1
1.48	94.12	2.16	91.96	70.08	21.88	1
1.43	97.82	2.21	95.61	72.81	22.80	1
1.39	101.51	2.26	99.25	75.54	23.71	1
1.35	105.20	2.32	102.88	78.27	24.61	1
1.30	108.88	2.38	106.50	80.99	25.51	1
1.26	112.55	2.45	110.10	83.70	26.40	1
1.22	116.22	2.53	113.69	86.41	27.28	1
1.17	119.88	2.61	117.27	89.11	28.16	1
1.13	123.53	2.70	120.83	91.80	29.03	1
1.09	127.18	2.80	124.38	94.48	29.90	1
1.04	130.81	2.90	127.91	97.15	30.76	1
1.00	134.44	3.01	131.42	99.82	31.61	1
0.96	138.05	3.13	134.92	102.47	32.45	1
0.92	141.65	3.26	138.40	105.11	33.29	1
0.87	145.24	3.39	141.85	107.74	34.11	1
0.83	148.82	3.53	145.29	110.36	34.94	1
0.83	148.82	3.53	145.29	110.36	34.94	1
0.79	152.39	3.67	148.72	112.96	35.76	1
0.75	155.94	3.82	152.12	115.55	36.57	1
0.71	159.48	3.97	155.51	118.13	37.38	1
0.67	163.00	4.13	158.87	120.69	38.18	1
0.63	166.51	4.31	162.20	123.23	38.97	1
0.59	170.00	4.48	165.52	125.76	39.75	1
0.55	173.47	4.67	168.80	128.28	40.53	1
0.51	176.93	4.87	172.06	130.77	41.29	1
0.47	180.37	5.16	175.21	133.25	41.96	1
0.43	183.79	5.63	178.16	135.71	42.45	1
0.39	187.19	6.11	181.08	138.14	42.94	1
0.35	190.57	6.60	183.97	140.56	43.41	1
0.31	193.92	7.09	186.83	142.96	43.87	1
0.27	197.26	7.60	189.66	145.33	44.33	1
0.23	200.58	8.11	192.46	147.69	44.78	1
0.20	203.87	8.63	195.24	150.02	45.22	1
0.16	207.15	9.16	197.99	152.33	45.66	1
0.12	210.40	9.68	200.71	154.62	46.09	1
0.09	213.63	10.41	203.21	156.89	46.33	1
0.05	216.83	11.45	205.38	159.13	46.25	1
0.05	216.83	11.45	205.38	159.13	46.25	1
0.04	217.97	11.82	206.15	159.93	46.22	1
0.03	219.11	12.20	206.91	160.72	46.19	1

0.01	220.24	12.57	207.67	161.51	46.16	1
0.00	221.37	12.95	208.43	162.30	46.13	1

Time = 29. Degree of Consolidation = 74.%

Total Settlement = 1.699

Settlement at End of Primary Consolidation = 2.288

Settlement caused by Primary Consolidation at time 29. = 1.699

Settlement caused by Secondary Compression at time 29. = 0.000

Surface Elevation = 2.10

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
5.70	3.50	0.76	6.54	6.54	6.54	1
5.63	3.44	0.75	6.54	4.21	4.21	1
5.56	3.39	0.74	6.54	3.92	3.78	1
5.49	3.35	0.73	6.54	4.06	3.61	1
5.42	3.30	0.72	6.54	3.90	3.45	1
5.35	3.25	0.71	6.54	3.97	3.30	1
5.28	3.21	0.70	6.54	3.92	3.21	1
5.21	3.16	0.69	6.54	3.92	3.15	1
5.14	3.12	0.68	6.54	3.91	3.08	1
5.07	3.07	0.67	6.54	3.90	3.01	1
5.00	3.03	0.66	6.54	3.89	2.94	1
4.93	2.98	0.65	6.54	3.88	2.89	1
4.86	2.93	0.64	6.54	3.87	2.85	1
4.79	2.89	0.64	6.54	3.86	2.82	1
4.72	2.84	0.63	6.54	3.84	2.78	1
4.65	2.80	0.62	6.54	3.83	2.75	1
4.58	2.75	0.61	6.54	3.82	2.71	1
4.51	2.71	0.60	6.54	3.81	2.68	1
4.44	2.67	0.59	6.54	3.81	2.64	1
4.37	2.62	0.58	6.54	3.80	2.60	1
4.30	2.58	0.57	6.54	3.79	2.57	1
4.30	2.58	0.57	6.54	3.79	2.57	1
4.25	2.55	0.56	6.54	3.79	2.54	1

4.21	2.52	0.56	6.54	3.78	2.53	1
4.16	2.49	0.55	6.54	3.78	2.52	1
4.11	2.46	0.55	6.54	3.78	2.50	1
4.07	2.43	0.54	6.54	3.78	2.49	1
4.02	2.40	0.53	6.54	3.77	2.48	1
3.97	2.37	0.53	6.54	3.77	2.46	1
3.93	2.34	0.52	6.54	3.77	2.45	1
3.88	2.31	0.51	6.54	3.77	2.43	1
3.83	2.28	0.51	6.54	3.77	2.42	1
3.79	2.25	0.50	6.54	3.77	2.41	1
3.74	2.22	0.50	6.54	3.77	2.39	1
3.69	2.19	0.49	6.54	3.77	2.38	1
3.65	2.16	0.48	6.54	3.77	2.37	1
3.60	2.13	0.48	6.54	3.76	2.35	1
3.55	2.10	0.47	6.54	3.76	2.34	1
3.51	2.07	0.47	6.54	3.76	2.33	1
3.46	2.04	0.46	6.54	3.76	2.32	1
3.41	2.02	0.45	6.54	3.76	2.31	1
3.37	1.99	0.45	6.54	3.76	2.30	1
3.32	1.96	0.44	6.54	3.76	2.29	1
3.27	1.93	0.43	6.54	3.76	2.28	1
3.23	1.90	0.43	6.54	3.76	2.27	1
3.18	1.87	0.42	6.54	3.75	2.26	1
3.13	1.84	0.42	6.54	3.75	2.25	1
3.09	1.81	0.41	6.54	3.75	2.24	1
3.04	1.78	0.40	6.54	3.75	2.23	1
2.99	1.75	0.40	6.54	3.75	2.22	1
2.95	1.72	0.39	6.54	3.74	2.21	1
2.90	1.69	0.38	6.54	3.74	2.20	1
2.90	1.69	0.38	6.54	3.74	2.20	1
2.83	1.65	0.38	6.54	3.74	2.19	1
2.76	1.60	0.37	6.54	3.73	2.18	1
2.69	1.56	0.36	6.54	3.73	2.17	1
2.62	1.52	0.35	6.54	3.72	2.16	1
2.55	1.47	0.34	6.54	3.71	2.15	1
2.48	1.43	0.33	6.54	3.71	2.14	1
2.41	1.38	0.32	6.54	3.70	2.13	1
2.34	1.34	0.31	6.54	3.69	2.12	1
2.27	1.30	0.30	6.54	3.68	2.11	1
2.20	1.25	0.29	6.54	3.66	2.11	1
2.13	1.21	0.28	6.54	3.65	2.10	1
2.06	1.17	0.27	6.54	3.64	2.09	1
1.99	1.12	0.26	6.54	3.62	2.08	1
1.92	1.08	0.25	6.54	3.60	2.07	1
1.85	1.04	0.25	6.54	3.59	2.06	1
1.78	1.00	0.24	6.54	3.57	2.05	1
1.71	0.95	0.23	6.54	3.55	2.04	1
1.64	0.91	0.22	6.54	3.53	2.03	1

1.57	0.87	0.21	6.54	3.51	2.03	1
1.50	0.83	0.20	6.54	3.48	2.02	1
1.50	0.83	0.20	6.54	3.48	2.02	1
1.43	0.79	0.19	6.54	3.46	2.01	1
1.36	0.75	0.18	6.54	3.44	2.00	1
1.29	0.70	0.17	6.54	3.41	1.99	1
1.22	0.66	0.16	6.54	3.39	1.98	1
1.15	0.62	0.15	6.54	3.36	1.97	1
1.08	0.58	0.14	6.54	3.33	1.96	1
1.01	0.54	0.13	6.54	3.30	1.95	1
0.94	0.50	0.12	6.54	3.27	1.95	1
0.87	0.46	0.12	6.54	3.24	1.94	1
0.80	0.42	0.11	6.54	3.20	1.93	1
0.73	0.39	0.10	6.54	3.17	1.92	1
0.66	0.35	0.09	6.54	3.14	1.91	1
0.59	0.31	0.08	6.54	3.10	1.90	1
0.52	0.27	0.07	6.54	3.07	1.89	1
0.45	0.23	0.06	6.54	3.03	1.88	1
0.38	0.20	0.05	6.54	2.99	1.87	1
0.31	0.16	0.04	6.54	2.96	1.87	1
0.24	0.12	0.03	6.54	2.92	1.86	1
0.17	0.09	0.02	6.54	2.88	1.85	1
0.10	0.05	0.01	6.54	2.85	1.84	1
0.10	0.05	0.01	6.54	2.85	1.84	1
0.08	0.04	0.01	6.54	2.83	1.84	1
0.05	0.03	0.01	6.54	2.82	1.83	1
0.03	0.01	0.00	6.54	2.80	1.83	1
0.00	0.00	0.00	6.54	2.79	1.83	1

***** Stresses *****			***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
3.50	0.00	0.00	0.00	0.00	0.00	1
3.44	4.50	0.96	3.54	3.54	0.00	1
3.39	8.36	1.54	6.82	6.43	0.38	1
3.35	12.26	1.16	11.09	9.37	1.72	1
3.30	16.08	1.59	14.49	12.24	2.26	1
3.25	19.92	1.41	18.51	15.11	3.40	1
3.21	23.74	1.53	22.21	17.97	4.24	1
3.16	27.56	1.54	26.02	20.83	5.20	1
3.12	31.37	1.57	29.79	23.67	6.12	1
3.07	35.17	1.60	33.57	26.51	7.05	1
3.03	38.96	1.63	37.33	29.35	7.99	1
2.98	42.75	1.66	41.10	32.18	8.92	1
2.93	46.54	1.69	44.85	35.00	9.85	1
2.89	50.31	1.72	48.60	37.81	10.79	1
2.84	54.09	1.74	52.34	40.62	11.72	1

2.80	57.85	1.77	56.08	43.43	12.65	1
2.75	61.61	1.80	59.81	46.22	13.59	1
2.71	65.36	1.83	63.54	49.02	14.52	1
2.67	69.11	1.85	67.26	51.80	15.46	1
2.62	72.85	1.87	70.98	54.58	16.40	1
2.58	76.59	1.89	74.70	57.36	17.34	1
2.58	76.59	1.89	74.70	57.36	17.34	1
2.55	79.08	1.90	77.18	59.21	17.97	1
2.52	81.57	1.91	79.66	61.06	18.60	1
2.49	84.06	1.92	82.14	62.90	19.24	1
2.46	86.55	1.93	84.62	64.75	19.87	1
2.43	89.03	1.93	87.10	66.59	20.51	1
2.40	91.52	1.94	89.58	68.44	21.14	1
2.37	94.00	1.94	92.06	70.28	21.78	1
2.34	96.49	1.94	94.54	72.12	22.42	1
2.31	98.97	1.95	97.02	73.97	23.06	1
2.28	101.45	1.95	99.50	75.81	23.70	1
2.25	103.94	1.95	101.98	77.65	24.33	1
2.22	106.42	1.95	104.46	79.49	24.97	1
2.19	108.90	1.96	106.94	81.33	25.61	1
2.16	111.38	1.96	109.42	83.17	26.25	1
2.13	113.86	1.96	111.90	85.01	26.89	1
2.10	116.34	1.96	114.38	86.85	27.53	1
2.07	118.82	1.97	116.86	88.69	28.16	1
2.04	121.30	1.97	119.33	90.53	28.80	1
2.02	123.78	1.97	121.81	92.37	29.44	1
1.99	126.26	1.98	124.29	94.21	30.08	1
1.96	128.74	1.98	126.76	96.04	30.72	1
1.93	131.22	1.98	129.24	97.88	31.35	1
1.90	133.70	1.99	131.71	99.72	31.99	1
1.87	136.17	1.99	134.18	101.56	32.63	1
1.84	138.65	1.99	136.66	103.39	33.27	1
1.81	141.13	2.00	139.13	105.23	33.90	1
1.78	143.60	2.01	141.59	107.06	34.53	1
1.75	146.08	2.02	144.06	108.89	35.16	1
1.72	148.55	2.04	146.52	110.73	35.79	1
1.69	151.02	2.05	148.97	112.56	36.41	1
1.69	151.02	2.05	148.97	112.56	36.41	1
1.65	154.73	2.08	152.66	115.30	37.35	1
1.60	158.44	2.11	156.33	118.05	38.28	1
1.56	162.14	2.14	160.00	120.79	39.21	1
1.52	165.84	2.18	163.66	123.52	40.13	1
1.47	169.53	2.23	167.31	126.26	41.05	1
1.43	173.22	2.28	170.94	128.99	41.96	1
1.38	176.91	2.33	174.57	131.71	42.86	1
1.34	180.59	2.40	178.19	134.43	43.76	1
1.30	184.26	2.47	181.79	137.14	44.65	1
1.25	187.93	2.54	185.38	139.84	45.54	1

1.21	191.59	2.63	188.96	142.54	46.42	1
1.17	195.24	2.71	192.52	145.23	47.29	1
1.12	198.88	2.81	196.07	147.91	48.16	1
1.08	202.51	2.91	199.60	150.58	49.02	1
1.04	206.14	3.02	203.12	153.25	49.87	1
1.00	209.75	3.13	206.62	155.90	50.72	1
0.95	213.35	3.26	210.10	158.54	51.56	1
0.91	216.94	3.38	213.56	161.17	52.39	1
0.87	220.52	3.52	217.01	163.79	53.22	1
0.83	224.09	3.66	220.43	166.39	54.04	1
0.83	224.09	3.66	220.43	166.39	54.04	1
0.79	227.64	3.80	223.84	168.98	54.86	1
0.75	231.18	3.95	227.23	171.56	55.67	1
0.70	234.71	4.11	230.60	174.12	56.48	1
0.66	238.22	4.27	233.95	176.67	57.28	1
0.62	241.71	4.44	237.27	179.21	58.07	1
0.58	245.19	4.62	240.57	181.72	58.85	1
0.54	248.65	4.81	243.85	184.22	59.62	1
0.50	252.10	5.01	247.09	186.71	60.38	1
0.46	255.52	5.46	250.06	189.17	60.89	1
0.42	258.93	5.92	253.01	191.62	61.39	1
0.39	262.32	6.39	255.93	194.04	61.89	1
0.35	265.69	6.87	258.82	196.45	62.37	1
0.31	269.03	7.35	261.68	198.83	62.85	1
0.27	272.36	7.85	264.51	201.20	63.32	1
0.23	275.67	8.34	267.32	203.54	63.78	1
0.20	278.95	8.85	270.11	205.87	64.24	1
0.16	282.22	9.35	272.87	208.17	64.70	1
0.12	285.46	9.86	275.60	210.45	65.15	1
0.09	288.68	10.72	277.96	212.71	65.25	1
0.05	291.88	11.74	280.14	214.95	65.19	1
0.05	291.88	11.74	280.14	214.95	65.19	1
0.04	293.02	12.10	280.91	215.74	65.17	1
0.03	294.15	12.47	281.68	216.53	65.15	1
0.01	295.29	12.84	282.45	217.32	65.12	1
0.00	296.42	13.21	283.21	218.11	65.10	1

Time = 30. Degree of Consolidation = 70.%

Total Settlement = 2.205

Settlement at End of Primary Consolidation = 3.150

Settlement caused by Primary Consolidation at time 30. = 2.205

Settlement caused by Secondary Compression at time 30. = 0.000

Surface Elevation = 3.00

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
5.70	3.37	0.76	6.54	6.54	6.54	1
5.63	3.32	0.75	6.54	4.21	4.21	1
5.56	3.27	0.74	6.54	3.80	3.78	1
5.49	3.23	0.73	6.54	3.77	3.61	1
5.42	3.18	0.72	6.54	3.77	3.45	1
5.35	3.14	0.71	6.54	3.76	3.30	1
5.28	3.09	0.70	6.54	3.76	3.21	1
5.21	3.05	0.69	6.54	3.76	3.15	1
5.14	3.01	0.68	6.54	3.76	3.08	1
5.07	2.96	0.67	6.54	3.76	3.01	1
5.00	2.92	0.66	6.54	3.75	2.94	1
4.93	2.87	0.65	6.54	3.75	2.89	1
4.86	2.83	0.64	6.54	3.75	2.85	1
4.79	2.79	0.64	6.54	3.75	2.82	1
4.72	2.74	0.63	6.54	3.75	2.78	1
4.65	2.70	0.62	6.54	3.75	2.75	1
4.58	2.65	0.61	6.54	3.75	2.71	1
4.51	2.61	0.60	6.54	3.74	2.68	1
4.44	2.56	0.59	6.54	3.74	2.64	1
4.37	2.52	0.58	6.54	3.74	2.60	1
4.30	2.48	0.57	6.54	3.74	2.57	1
4.30	2.48	0.57	6.54	3.74	2.57	1
4.25	2.45	0.56	6.54	3.73	2.54	1
4.21	2.42	0.56	6.54	3.73	2.53	1
4.16	2.39	0.55	6.54	3.73	2.52	1
4.11	2.36	0.55	6.54	3.73	2.50	1
4.07	2.33	0.54	6.54	3.72	2.49	1
4.02	2.30	0.53	6.54	3.72	2.48	1
3.97	2.27	0.53	6.54	3.72	2.46	1
3.93	2.24	0.52	6.54	3.71	2.45	1
3.88	2.21	0.51	6.54	3.71	2.43	1
3.83	2.18	0.51	6.54	3.71	2.42	1
3.79	2.16	0.50	6.54	3.70	2.41	1
3.74	2.13	0.50	6.54	3.70	2.39	1
3.69	2.10	0.49	6.54	3.69	2.38	1
3.65	2.07	0.48	6.54	3.69	2.37	1
3.60	2.04	0.48	6.54	3.68	2.35	1

3.55	2.01	0.47	6.54	3.68	2.34	1
3.51	1.98	0.47	6.54	3.67	2.33	1
3.46	1.95	0.46	6.54	3.67	2.32	1
3.41	1.92	0.45	6.54	3.66	2.31	1
3.37	1.89	0.45	6.54	3.66	2.30	1
3.32	1.87	0.44	6.54	3.65	2.29	1
3.27	1.84	0.43	6.54	3.64	2.28	1
3.23	1.81	0.43	6.54	3.64	2.27	1
3.18	1.78	0.42	6.54	3.63	2.26	1
3.13	1.75	0.42	6.54	3.62	2.25	1
3.09	1.72	0.41	6.54	3.61	2.24	1
3.04	1.69	0.40	6.54	3.61	2.23	1
2.99	1.67	0.40	6.54	3.60	2.22	1
2.95	1.64	0.39	6.54	3.59	2.21	1
2.90	1.61	0.38	6.54	3.58	2.20	1
2.90	1.61	0.38	6.54	3.58	2.20	1
2.83	1.57	0.38	6.54	3.57	2.19	1
2.76	1.52	0.37	6.54	3.56	2.18	1
2.69	1.48	0.36	6.54	3.54	2.17	1
2.62	1.44	0.35	6.54	3.53	2.16	1
2.55	1.40	0.34	6.54	3.51	2.15	1
2.48	1.36	0.33	6.54	3.50	2.14	1
2.41	1.31	0.32	6.54	3.48	2.13	1
2.34	1.27	0.31	6.54	3.46	2.12	1
2.27	1.23	0.30	6.54	3.45	2.11	1
2.20	1.19	0.29	6.54	3.43	2.11	1
2.13	1.15	0.28	6.54	3.41	2.10	1
2.06	1.11	0.27	6.54	3.39	2.09	1
1.99	1.07	0.26	6.54	3.37	2.08	1
1.92	1.03	0.25	6.54	3.35	2.07	1
1.85	0.99	0.25	6.54	3.33	2.06	1
1.78	0.95	0.24	6.54	3.31	2.05	1
1.71	0.91	0.23	6.54	3.29	2.04	1
1.64	0.87	0.22	6.54	3.27	2.03	1
1.57	0.83	0.21	6.54	3.25	2.03	1
1.50	0.79	0.20	6.54	3.22	2.02	1
1.50	0.79	0.20	6.54	3.22	2.02	1
1.43	0.75	0.19	6.54	3.20	2.01	1
1.36	0.71	0.18	6.54	3.18	2.00	1
1.29	0.67	0.17	6.54	3.16	1.99	1
1.22	0.63	0.16	6.54	3.13	1.98	1
1.15	0.59	0.15	6.54	3.11	1.97	1
1.08	0.56	0.14	6.54	3.09	1.96	1
1.01	0.52	0.13	6.54	3.06	1.95	1
0.94	0.48	0.12	6.54	3.04	1.95	1
0.87	0.44	0.12	6.54	3.01	1.94	1
0.80	0.41	0.11	6.54	2.99	1.93	1
0.73	0.37	0.10	6.54	2.96	1.92	1

0.66	0.33	0.09	6.54	2.94	1.91	1
0.59	0.30	0.08	6.54	2.91	1.90	1
0.52	0.26	0.07	6.54	2.88	1.89	1
0.45	0.22	0.06	6.54	2.86	1.88	1
0.38	0.19	0.05	6.54	2.83	1.87	1
0.31	0.15	0.04	6.54	2.80	1.87	1
0.24	0.12	0.03	6.54	2.77	1.86	1
0.17	0.08	0.02	6.54	2.74	1.85	1
0.10	0.05	0.01	6.54	2.71	1.84	1
0.10	0.05	0.01	6.54	2.71	1.84	1
0.08	0.04	0.01	6.54	2.69	1.84	1
0.05	0.02	0.01	6.54	2.68	1.83	1
0.03	0.01	0.00	6.54	2.67	1.83	1
0.00	0.00	0.00	6.54	2.66	1.83	1

***** Stresses *****			***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
3.37	0.00	0.00	0.00	0.00	0.00	1
3.32	4.50	0.96	3.54	3.54	0.00	1
3.27	8.33	1.87	6.46	6.41	0.05	1
3.23	12.06	1.94	10.13	9.18	0.95	1
3.18	15.79	1.96	13.83	11.94	1.89	1
3.14	19.51	1.97	17.54	14.70	2.84	1
3.09	23.23	1.97	21.26	17.46	3.80	1
3.05	26.95	1.98	24.97	20.22	4.75	1
3.01	30.67	1.98	28.69	22.97	5.71	1
2.96	34.38	1.98	32.40	25.73	6.67	1
2.92	38.10	1.99	36.11	28.48	7.63	1
2.87	41.82	1.99	39.83	31.24	8.59	1
2.83	45.53	1.99	43.54	33.99	9.55	1
2.79	49.25	2.00	47.25	36.74	10.50	1
2.74	52.96	2.00	50.96	39.50	11.46	1
2.70	56.67	2.01	54.66	42.25	12.41	1
2.65	60.38	2.02	58.36	45.00	13.36	1
2.61	64.09	2.04	62.06	47.75	14.31	1
2.56	67.80	2.05	65.75	50.49	15.26	1
2.52	71.51	2.07	69.44	53.24	16.20	1
2.48	75.22	2.09	73.13	55.98	17.14	1
2.48	75.22	2.09	73.13	55.98	17.14	1
2.45	77.69	2.10	75.58	57.81	17.77	1
2.42	80.16	2.12	78.04	59.64	18.40	1
2.39	82.62	2.13	80.49	61.47	19.02	1
2.36	85.09	2.15	82.94	63.29	19.65	1
2.33	87.56	2.17	85.39	65.12	20.27	1
2.30	90.02	2.19	87.83	66.94	20.89	1
2.27	92.48	2.21	90.28	68.76	21.51	1

2.24	94.95	2.23	92.72	70.58	22.13	1
2.21	97.41	2.25	95.16	72.40	22.75	1
2.18	99.87	2.28	97.59	74.22	23.37	1
2.16	102.32	2.30	100.02	76.04	23.98	1
2.13	104.78	2.33	102.45	77.85	24.60	1
2.10	107.23	2.36	104.88	79.67	25.21	1
2.07	109.69	2.39	107.30	81.48	25.82	1
2.04	112.14	2.42	109.72	83.29	26.43	1
2.01	114.59	2.45	112.14	85.10	27.04	1
1.98	117.03	2.48	114.55	86.90	27.65	1
1.95	119.48	2.52	116.96	88.71	28.25	1
1.92	121.92	2.56	119.37	90.51	28.86	1
1.89	124.36	2.59	121.77	92.31	29.46	1
1.87	126.80	2.63	124.17	94.10	30.06	1
1.84	129.23	2.67	126.56	95.90	30.66	1
1.81	131.67	2.72	128.95	97.69	31.26	1
1.78	134.10	2.76	131.34	99.48	31.86	1
1.75	136.52	2.80	133.72	101.26	32.46	1
1.72	138.95	2.85	136.10	103.05	33.05	1
1.69	141.37	2.90	138.47	104.83	33.64	1
1.67	143.79	2.95	140.84	106.60	34.24	1
1.64	146.20	3.00	143.20	108.38	34.83	1
1.61	148.62	3.05	145.56	110.15	35.41	1
1.61	148.62	3.05	145.56	110.15	35.41	1
1.57	152.23	3.13	149.10	112.80	36.30	1
1.52	155.83	3.21	152.62	115.44	37.18	1
1.48	159.43	3.30	156.13	118.08	38.05	1
1.44	163.02	3.39	159.63	120.71	38.92	1
1.40	166.60	3.48	163.12	123.32	39.79	1
1.36	170.17	3.58	166.59	125.93	40.66	1
1.31	173.73	3.68	170.05	128.53	41.52	1
1.27	177.29	3.78	173.50	131.13	42.38	1
1.23	180.83	3.89	176.94	133.71	43.23	1
1.19	184.36	4.00	180.36	136.28	44.08	1
1.15	187.88	4.12	183.77	138.84	44.93	1
1.11	191.40	4.23	187.16	141.39	45.77	1
1.07	194.90	4.36	190.54	143.93	46.61	1
1.03	198.39	4.48	193.90	146.46	47.45	1
0.99	201.86	4.61	197.25	148.97	48.28	1
0.95	205.33	4.74	200.59	151.48	49.11	1
0.91	208.78	4.88	203.90	153.97	49.94	1
0.87	212.22	5.03	207.19	156.45	50.75	1
0.83	215.65	5.33	210.32	158.91	51.40	1
0.79	219.06	5.64	213.42	161.37	52.06	1
0.79	219.06	5.64	213.42	161.37	52.06	1
0.75	222.47	5.95	216.52	163.81	52.71	1
0.71	225.86	6.26	219.60	166.23	53.37	1
0.67	229.23	6.57	222.66	168.65	54.01	1

0.63	232.60	6.89	225.71	171.05	54.66	1
0.59	235.95	7.21	228.73	173.44	55.30	1
0.56	239.28	7.54	231.74	175.81	55.93	1
0.52	242.60	7.87	234.73	178.17	56.56	1
0.48	245.91	8.21	237.70	180.52	57.18	1
0.44	249.21	8.56	240.65	182.85	57.80	1
0.41	252.49	8.91	243.58	185.17	58.41	1
0.37	255.75	9.26	246.49	187.47	59.01	1
0.33	259.00	9.62	249.38	189.76	59.62	1
0.30	262.24	9.99	252.25	192.04	60.21	1
0.26	265.46	10.71	254.74	194.29	60.45	1
0.22	268.66	11.47	257.19	196.53	60.66	1
0.19	271.85	12.24	259.61	198.76	60.84	1
0.15	275.02	13.04	261.98	200.97	61.01	1
0.12	278.17	13.85	264.32	203.16	61.16	1
0.08	281.30	14.68	266.62	205.33	61.29	1
0.05	284.42	15.53	268.89	207.49	61.40	1
0.05	284.42	15.53	268.89	207.49	61.40	1
0.04	285.53	15.83	269.70	208.26	61.44	1
0.02	286.64	16.14	270.50	209.02	61.48	1
0.01	287.74	16.45	271.30	209.78	61.52	1
0.00	288.84	16.76	272.09	210.54	61.55	1

Time = 45. Degree of Consolidation = 74.%

Total Settlement = 2.326

Settlement at End of Primary Consolidation = 3.150

Settlement caused by Primary Consolidation at time 45. = 2.326

Settlement caused by Secondary Compression at time 45. = 0.000

Surface Elevation = 2.87

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
5.70	3.28	0.76	6.54	6.54	6.54	1
5.63	3.22	0.75	6.54	4.21	4.21	1
5.56	3.18	0.74	6.54	3.79	3.78	1

5.49	3.13	0.73	6.54	3.76	3.61	1
5.42	3.09	0.72	6.54	3.75	3.45	1
5.35	3.04	0.71	6.54	3.74	3.30	1
5.28	3.00	0.70	6.54	3.73	3.21	1
5.21	2.95	0.69	6.54	3.72	3.15	1
5.14	2.91	0.68	6.54	3.71	3.08	1
5.07	2.87	0.67	6.54	3.71	3.01	1
5.00	2.82	0.66	6.54	3.70	2.94	1
4.93	2.78	0.65	6.54	3.69	2.89	1
4.86	2.74	0.64	6.54	3.69	2.85	1
4.79	2.69	0.64	6.54	3.68	2.82	1
4.72	2.65	0.63	6.54	3.67	2.78	1
4.65	2.61	0.62	6.54	3.67	2.75	1
4.58	2.56	0.61	6.54	3.66	2.71	1
4.51	2.52	0.60	6.54	3.65	2.68	1
4.44	2.48	0.59	6.54	3.65	2.64	1
4.37	2.43	0.58	6.54	3.64	2.60	1
4.30	2.39	0.57	6.54	3.63	2.57	1
4.30	2.39	0.57	6.54	3.63	2.57	1
4.25	2.36	0.56	6.54	3.62	2.54	1
4.21	2.33	0.56	6.54	3.62	2.53	1
4.16	2.30	0.55	6.54	3.61	2.52	1
4.11	2.28	0.55	6.54	3.61	2.50	1
4.07	2.25	0.54	6.54	3.60	2.49	1
4.02	2.22	0.53	6.54	3.59	2.48	1
3.97	2.19	0.53	6.54	3.59	2.46	1
3.93	2.16	0.52	6.54	3.58	2.45	1
3.88	2.13	0.51	6.54	3.57	2.43	1
3.83	2.11	0.51	6.54	3.57	2.42	1
3.79	2.08	0.50	6.54	3.56	2.41	1
3.74	2.05	0.50	6.54	3.55	2.39	1
3.69	2.02	0.49	6.54	3.55	2.38	1
3.65	1.99	0.48	6.54	3.54	2.37	1
3.60	1.96	0.48	6.54	3.53	2.35	1
3.55	1.94	0.47	6.54	3.52	2.34	1
3.51	1.91	0.47	6.54	3.52	2.33	1
3.46	1.88	0.46	6.54	3.51	2.32	1
3.41	1.85	0.45	6.54	3.50	2.31	1
3.37	1.83	0.45	6.54	3.49	2.30	1
3.32	1.80	0.44	6.54	3.48	2.29	1
3.27	1.77	0.43	6.54	3.48	2.28	1
3.23	1.74	0.43	6.54	3.47	2.27	1
3.18	1.71	0.42	6.54	3.46	2.26	1
3.13	1.69	0.42	6.54	3.45	2.25	1
3.09	1.66	0.41	6.54	3.44	2.24	1
3.04	1.63	0.40	6.54	3.43	2.23	1
2.99	1.60	0.40	6.54	3.42	2.22	1
2.95	1.58	0.39	6.54	3.41	2.21	1

2.90	1.55	0.38	6.54	3.40	2.20	1
2.90	1.55	0.38	6.54	3.40	2.20	1
2.83	1.51	0.38	6.54	3.39	2.19	1
2.76	1.47	0.37	6.54	3.37	2.18	1
2.69	1.43	0.36	6.54	3.36	2.17	1
2.62	1.39	0.35	6.54	3.34	2.16	1
2.55	1.35	0.34	6.54	3.33	2.15	1
2.48	1.31	0.33	6.54	3.31	2.14	1
2.41	1.27	0.32	6.54	3.30	2.13	1
2.34	1.23	0.31	6.54	3.28	2.12	1
2.27	1.19	0.30	6.54	3.26	2.11	1
2.20	1.15	0.29	6.54	3.25	2.11	1
2.13	1.11	0.28	6.54	3.23	2.10	1
2.06	1.07	0.27	6.54	3.21	2.09	1
1.99	1.03	0.26	6.54	3.19	2.08	1
1.92	0.99	0.25	6.54	3.18	2.07	1
1.85	0.95	0.25	6.54	3.16	2.06	1
1.78	0.91	0.24	6.54	3.14	2.05	1
1.71	0.88	0.23	6.54	3.12	2.04	1
1.64	0.84	0.22	6.54	3.10	2.03	1
1.57	0.80	0.21	6.54	3.08	2.03	1
1.50	0.76	0.20	6.54	3.06	2.02	1
1.50	0.76	0.20	6.54	3.06	2.02	1
1.43	0.72	0.19	6.54	3.04	2.01	1
1.36	0.69	0.18	6.54	3.03	2.00	1
1.29	0.65	0.17	6.54	3.01	1.99	1
1.22	0.61	0.16	6.54	2.99	1.98	1
1.15	0.58	0.15	6.54	2.97	1.97	1
1.08	0.54	0.14	6.54	2.94	1.96	1
1.01	0.50	0.13	6.54	2.92	1.95	1
0.94	0.47	0.12	6.54	2.90	1.95	1
0.87	0.43	0.12	6.54	2.88	1.94	1
0.80	0.39	0.11	6.54	2.86	1.93	1
0.73	0.36	0.10	6.54	2.84	1.92	1
0.66	0.32	0.09	6.54	2.81	1.91	1
0.59	0.29	0.08	6.54	2.79	1.90	1
0.52	0.25	0.07	6.54	2.76	1.89	1
0.45	0.22	0.06	6.54	2.74	1.88	1
0.38	0.18	0.05	6.54	2.71	1.87	1
0.31	0.15	0.04	6.54	2.68	1.87	1
0.24	0.11	0.03	6.54	2.66	1.86	1
0.17	0.08	0.02	6.54	2.63	1.85	1
0.10	0.05	0.01	6.54	2.60	1.84	1
0.10	0.05	0.01	6.54	2.60	1.84	1
0.08	0.04	0.01	6.54	2.59	1.84	1
0.05	0.02	0.01	6.54	2.58	1.83	1
0.03	0.01	0.00	6.54	2.57	1.83	1
0.00	0.00	0.00	6.54	2.56	1.83	1

XI	Total	Effective	Total	Static	Excess	Material
	***** Stresses *****		***** Pore Pressures *****			
3.28	0.00	0.00	0.00	0.00	0.00	1
3.22	4.50	0.96	3.54	3.54	0.00	1
3.18	8.33	1.88	6.45	6.41	0.04	1
3.13	12.06	1.97	10.09	9.18	0.92	1
3.09	15.78	2.02	13.76	11.93	1.83	1
3.04	19.48	2.09	17.39	14.68	2.72	1
3.00	23.19	2.15	21.04	17.42	3.62	1
2.95	26.88	2.20	24.69	20.15	4.54	1
2.91	30.58	2.24	28.34	22.88	5.45	1
2.87	34.27	2.28	31.99	25.61	6.38	1
2.82	37.95	2.32	35.64	28.34	7.30	1
2.78	41.63	2.35	39.28	31.06	8.23	1
2.74	45.31	2.39	42.92	33.77	9.15	1
2.69	48.99	2.43	46.56	36.49	10.07	1
2.65	52.66	2.47	50.19	39.20	10.99	1
2.61	56.33	2.51	53.82	41.90	11.91	1
2.56	59.99	2.56	57.44	44.61	12.83	1
2.52	63.65	2.60	61.05	47.30	13.75	1
2.48	67.31	2.65	64.66	50.00	14.66	1
2.43	70.96	2.70	68.26	52.69	15.57	1
2.39	74.60	2.75	71.85	55.37	16.48	1
2.39	74.60	2.75	71.85	55.37	16.48	1
2.36	77.03	2.78	74.25	57.16	17.09	1
2.33	79.46	2.82	76.64	58.94	17.70	1
2.30	81.88	2.86	79.03	60.73	18.30	1
2.28	84.30	2.89	81.41	62.51	18.90	1
2.25	86.72	2.93	83.79	64.28	19.51	1
2.22	89.14	2.97	86.17	66.06	20.11	1
2.19	91.55	3.01	88.54	67.83	20.71	1
2.16	93.97	3.05	90.91	69.60	21.31	1
2.13	96.38	3.09	93.28	71.37	21.91	1
2.11	98.78	3.14	95.65	73.14	22.51	1
2.08	101.19	3.18	98.01	74.90	23.10	1
2.05	103.59	3.23	100.36	76.66	23.70	1
2.02	105.99	3.27	102.72	78.42	24.30	1
1.99	108.38	3.32	105.07	80.17	24.89	1
1.96	110.77	3.36	107.41	81.92	25.49	1
1.94	113.16	3.41	109.75	83.67	26.08	1
1.91	115.55	3.46	112.09	85.42	26.67	1
1.88	117.94	3.51	114.42	87.16	27.26	1
1.85	120.32	3.56	116.76	88.90	27.85	1
1.83	122.69	3.61	119.08	90.64	28.44	1
1.80	125.07	3.66	121.40	92.37	29.03	1

1.77	127.44	3.72	123.72	94.10	29.62	1
1.74	129.81	3.77	126.04	95.83	30.21	1
1.71	132.17	3.82	128.35	97.55	30.80	1
1.69	134.53	3.88	130.65	99.27	31.38	1
1.66	136.89	3.94	132.95	100.99	31.97	1
1.63	139.24	3.99	135.25	102.70	32.55	1
1.60	141.60	4.05	137.55	104.41	33.13	1
1.58	143.94	4.11	139.83	106.12	33.72	1
1.55	146.29	4.17	142.12	107.82	34.30	1
1.55	146.29	4.17	142.12	107.82	34.30	1
1.51	149.79	4.26	145.54	110.37	35.17	1
1.47	153.29	4.35	148.95	112.90	36.04	1
1.43	156.79	4.44	152.35	115.43	36.91	1
1.39	160.27	4.54	155.73	117.96	37.78	1
1.35	163.74	4.63	159.11	120.47	38.64	1
1.31	167.21	4.73	162.48	122.97	39.50	1
1.27	170.66	4.83	165.83	125.47	40.36	1
1.23	174.11	4.94	169.17	127.95	41.22	1
1.19	177.55	5.10	172.45	130.42	42.03	1
1.15	180.97	5.34	175.64	132.89	42.75	1
1.11	184.39	5.58	178.81	135.34	43.47	1
1.07	187.79	5.82	181.97	137.79	44.19	1
1.03	191.19	6.07	185.12	140.22	44.90	1
0.99	194.58	6.32	188.26	142.65	45.61	1
0.95	197.95	6.57	191.38	145.06	46.32	1
0.91	201.32	6.82	194.49	147.46	47.03	1
0.88	204.67	7.08	197.59	149.85	47.74	1
0.84	208.01	7.34	200.67	152.24	48.44	1
0.80	211.34	7.60	203.74	154.61	49.14	1
0.76	214.67	7.87	206.80	156.97	49.83	1
0.76	214.67	7.87	206.80	156.97	49.83	1
0.72	217.98	8.13	209.85	159.32	50.53	1
0.69	221.28	8.40	212.88	161.65	51.22	1
0.65	224.56	8.67	215.89	163.98	51.91	1
0.61	227.84	8.95	218.89	166.29	52.60	1
0.58	231.10	9.23	221.88	168.60	53.28	1
0.54	234.36	9.51	224.84	170.89	53.95	1
0.50	237.60	9.80	227.79	173.17	54.63	1
0.47	240.83	10.19	230.63	175.43	55.20	1
0.43	244.04	10.79	233.26	177.69	55.57	1
0.39	247.25	11.39	235.85	179.93	55.92	1
0.36	250.44	12.02	238.42	182.16	56.26	1
0.32	253.61	12.66	240.95	184.37	56.58	1
0.29	256.78	13.32	243.46	186.58	56.88	1
0.25	259.92	13.99	245.93	188.76	57.17	1
0.22	263.06	14.68	248.38	190.93	57.44	1
0.18	266.18	15.38	250.79	193.09	57.70	1
0.15	269.28	16.10	253.18	195.23	57.95	1

0.11	272.37	16.83	255.54	197.36	58.18	1
0.08	275.44	17.57	257.87	199.47	58.40	1
0.05	278.50	18.33	260.17	201.57	58.60	1
0.05	278.50	18.33	260.17	201.57	58.60	1
0.04	279.59	18.60	260.98	202.31	58.67	1
0.02	280.67	18.87	261.80	203.05	58.75	1
0.01	281.75	19.15	262.61	203.79	58.82	1
0.00	282.84	19.42	263.41	204.53	58.88	1

Time = 60. Degree of Consolidation = 77.%

Total Settlement = 2.422

Settlement at End of Primary Consolidation = 3.150

Settlement caused by Primary Consolidation at time 60. = 2.422

Settlement caused by Secondary Compression at time 60. = 0.000

Surface Elevation = 2.78

**********Current Conditions in Dredged Fill**********

A	XI	Z	Einitial	E	Eeop	Material
	***** Coordinates *****		***** Void Ratios *****			
5.70	3.12	0.76	6.54	6.54	6.54	1
5.63	3.06	0.75	6.54	4.21	4.21	1
5.56	3.02	0.74	6.54	3.78	3.78	1
5.49	2.97	0.73	6.54	3.70	3.61	1
5.42	2.93	0.72	6.54	3.65	3.45	1
5.35	2.89	0.71	6.54	3.61	3.30	1
5.28	2.84	0.70	6.54	3.57	3.21	1
5.21	2.80	0.69	6.54	3.55	3.15	1
5.14	2.76	0.68	6.54	3.53	3.08	1
5.07	2.72	0.67	6.54	3.51	3.01	1
5.00	2.68	0.66	6.54	3.49	2.94	1
4.93	2.63	0.65	6.54	3.48	2.89	1
4.86	2.59	0.64	6.54	3.47	2.85	1
4.79	2.55	0.64	6.54	3.45	2.82	1
4.72	2.51	0.63	6.54	3.44	2.78	1
4.65	2.47	0.62	6.54	3.43	2.75	1
4.58	2.43	0.61	6.54	3.42	2.71	1

4.51	2.39	0.60	6.54	3.41	2.68	1
4.44	2.35	0.59	6.54	3.40	2.64	1
4.37	2.30	0.58	6.54	3.39	2.60	1
4.30	2.26	0.57	6.54	3.38	2.57	1
4.30	2.26	0.57	6.54	3.38	2.57	1
4.25	2.24	0.56	6.54	3.37	2.54	1
4.21	2.21	0.56	6.54	3.37	2.53	1
4.16	2.18	0.55	6.54	3.36	2.52	1
4.11	2.16	0.55	6.54	3.35	2.50	1
4.07	2.13	0.54	6.54	3.35	2.49	1
4.02	2.10	0.53	6.54	3.34	2.48	1
3.97	2.08	0.53	6.54	3.33	2.46	1
3.93	2.05	0.52	6.54	3.32	2.45	1
3.88	2.02	0.51	6.54	3.32	2.43	1
3.83	2.00	0.51	6.54	3.31	2.42	1
3.79	1.97	0.50	6.54	3.30	2.41	1
3.74	1.94	0.50	6.54	3.29	2.39	1
3.69	1.92	0.49	6.54	3.29	2.38	1
3.65	1.89	0.48	6.54	3.28	2.37	1
3.60	1.86	0.48	6.54	3.27	2.35	1
3.55	1.84	0.47	6.54	3.26	2.34	1
3.51	1.81	0.47	6.54	3.25	2.33	1
3.46	1.78	0.46	6.54	3.25	2.32	1
3.41	1.76	0.45	6.54	3.24	2.31	1
3.37	1.73	0.45	6.54	3.23	2.30	1
3.32	1.70	0.44	6.54	3.22	2.29	1
3.27	1.68	0.43	6.54	3.21	2.28	1
3.23	1.65	0.43	6.54	3.21	2.27	1
3.18	1.63	0.42	6.54	3.20	2.26	1
3.13	1.60	0.42	6.54	3.19	2.25	1
3.09	1.57	0.41	6.54	3.18	2.24	1
3.04	1.55	0.40	6.54	3.17	2.23	1
2.99	1.52	0.40	6.54	3.16	2.22	1
2.95	1.50	0.39	6.54	3.16	2.21	1
2.90	1.47	0.38	6.54	3.15	2.20	1
2.90	1.47	0.38	6.54	3.15	2.20	1
2.83	1.43	0.38	6.54	3.13	2.19	1
2.76	1.39	0.37	6.54	3.12	2.18	1
2.69	1.36	0.36	6.54	3.11	2.17	1
2.62	1.32	0.35	6.54	3.10	2.16	1
2.55	1.28	0.34	6.54	3.08	2.15	1
2.48	1.24	0.33	6.54	3.07	2.14	1
2.41	1.21	0.32	6.54	3.05	2.13	1
2.34	1.17	0.31	6.54	3.04	2.12	1
2.27	1.13	0.30	6.54	3.03	2.11	1
2.20	1.09	0.29	6.54	3.01	2.11	1
2.13	1.06	0.28	6.54	3.00	2.10	1
2.06	1.02	0.27	6.54	2.98	2.09	1

1.99	0.98	0.26	6.54	2.97	2.08	1
1.92	0.94	0.25	6.54	2.95	2.07	1
1.85	0.91	0.25	6.54	2.94	2.06	1
1.78	0.87	0.24	6.54	2.92	2.05	1
1.71	0.84	0.23	6.54	2.91	2.04	1
1.64	0.80	0.22	6.54	2.89	2.03	1
1.57	0.76	0.21	6.54	2.87	2.03	1
1.50	0.73	0.20	6.54	2.86	2.02	1
1.50	0.73	0.20	6.54	2.86	2.02	1
1.43	0.69	0.19	6.54	2.84	2.01	1
1.36	0.66	0.18	6.54	2.82	2.00	1
1.29	0.62	0.17	6.54	2.81	1.99	1
1.22	0.59	0.16	6.54	2.79	1.98	1
1.15	0.55	0.15	6.54	2.77	1.97	1
1.08	0.52	0.14	6.54	2.75	1.96	1
1.01	0.48	0.13	6.54	2.73	1.95	1
0.94	0.45	0.12	6.54	2.71	1.95	1
0.87	0.41	0.12	6.54	2.70	1.94	1
0.80	0.38	0.11	6.54	2.68	1.93	1
0.73	0.34	0.10	6.54	2.66	1.92	1
0.66	0.31	0.09	6.54	2.63	1.91	1
0.59	0.28	0.08	6.54	2.61	1.90	1
0.52	0.24	0.07	6.54	2.59	1.89	1
0.45	0.21	0.06	6.54	2.57	1.88	1
0.38	0.18	0.05	6.54	2.55	1.87	1
0.31	0.14	0.04	6.54	2.53	1.87	1
0.24	0.11	0.03	6.54	2.51	1.86	1
0.17	0.08	0.02	6.54	2.49	1.85	1
0.10	0.05	0.01	6.54	2.46	1.84	1
0.10	0.05	0.01	6.54	2.46	1.84	1
0.08	0.03	0.01	6.54	2.46	1.84	1
0.05	0.02	0.01	6.54	2.45	1.83	1
0.03	0.01	0.00	6.54	2.44	1.83	1
0.00	0.00	0.00	6.54	2.43	1.83	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
3.12	0.00	0.00	0.00	0.00	0.00	1
3.06	4.50	0.96	3.54	3.54	0.00	1
3.02	8.33	1.91	6.42	6.41	0.01	1
2.97	12.04	2.29	9.75	9.15	0.60	1
2.93	15.71	2.64	13.07	11.86	1.21	1
2.89	19.35	2.90	16.44	14.54	1.90	1
2.84	22.97	3.11	19.86	17.20	2.66	1
2.80	26.57	3.27	23.30	19.84	3.46	1
2.76	30.16	3.40	26.76	22.47	4.29	1

2.72	33.74	3.51	30.23	25.08	5.14	1
2.68	37.31	3.61	33.70	27.69	6.01	1
2.63	40.87	3.69	37.17	30.29	6.88	1
2.59	44.42	3.77	40.65	32.88	7.77	1
2.55	47.97	3.84	44.12	35.46	8.66	1
2.51	51.51	3.91	47.59	38.04	9.55	1
2.47	55.04	3.98	51.06	40.61	10.44	1
2.43	58.56	4.05	54.52	43.18	11.34	1
2.39	62.09	4.11	57.97	45.74	12.24	1
2.35	65.60	4.18	61.42	48.29	13.13	1
2.30	69.11	4.24	64.87	50.84	14.03	1
2.26	72.61	4.31	68.30	53.38	14.93	1
2.26	72.61	4.31	68.30	53.38	14.93	1
2.24	74.94	4.35	70.59	55.07	15.52	1
2.21	77.27	4.39	72.88	56.76	16.12	1
2.18	79.60	4.44	75.16	58.44	16.72	1
2.16	81.92	4.48	77.44	60.12	17.31	1
2.13	84.24	4.53	79.71	61.80	17.91	1
2.10	86.56	4.57	81.99	63.48	18.51	1
2.08	88.88	4.62	84.26	65.15	19.10	1
2.05	91.19	4.66	86.52	66.83	19.70	1
2.02	93.50	4.71	88.79	68.49	20.29	1
2.00	95.80	4.76	91.05	70.16	20.89	1
1.97	98.11	4.80	93.31	71.82	21.48	1
1.94	100.41	4.85	95.56	73.48	22.08	1
1.92	102.71	4.90	97.81	75.14	22.67	1
1.89	105.00	4.95	100.06	76.79	23.26	1
1.86	107.29	5.00	102.30	78.44	23.85	1
1.84	109.58	5.10	104.48	80.09	24.39	1
1.81	111.87	5.21	106.66	81.74	24.92	1
1.78	114.15	5.32	108.83	83.38	25.45	1
1.76	116.43	5.43	111.00	85.02	25.98	1
1.73	118.71	5.54	113.16	86.65	26.51	1
1.70	120.98	5.66	115.33	88.29	27.04	1
1.68	123.25	5.77	117.48	89.91	27.57	1
1.65	125.52	5.88	119.64	91.54	28.10	1
1.63	127.78	6.00	121.79	93.16	28.62	1
1.60	130.04	6.11	123.93	94.78	29.15	1
1.57	132.30	6.23	126.07	96.40	29.67	1
1.55	134.56	6.35	128.21	98.01	30.20	1
1.52	136.81	6.46	130.35	99.62	30.72	1
1.50	139.06	6.58	132.48	101.23	31.24	1
1.47	141.30	6.70	134.60	102.83	31.77	1
1.47	141.30	6.70	134.60	102.83	31.77	1
1.43	144.66	6.88	137.78	105.23	32.55	1
1.39	148.01	7.06	140.96	107.62	33.33	1
1.36	151.36	7.24	144.12	110.01	34.11	1
1.32	154.70	7.42	147.27	112.38	34.89	1

1.28	158.03	7.61	150.42	114.75	35.66	1
1.24	161.35	7.80	153.55	117.11	36.44	1
1.21	164.66	7.99	156.67	119.47	37.21	1
1.17	167.97	8.19	159.79	121.81	37.97	1
1.13	171.27	8.38	162.89	124.15	38.74	1
1.09	174.56	8.58	165.98	126.48	39.50	1
1.06	177.84	8.78	169.06	128.80	40.26	1
1.02	181.12	8.98	172.13	131.11	41.02	1
0.98	184.38	9.19	175.19	133.41	41.78	1
0.94	187.64	9.40	178.24	135.71	42.53	1
0.91	190.88	9.61	181.28	137.99	43.28	1
0.87	194.12	9.82	184.30	140.27	44.03	1
0.84	197.35	10.08	187.28	142.54	44.74	1
0.80	200.57	10.51	190.07	144.80	45.27	1
0.76	203.78	10.95	192.84	147.05	45.79	1
0.73	206.99	11.40	195.59	149.29	46.30	1
0.73	206.99	11.40	195.59	149.29	46.30	1
0.69	210.18	11.85	198.33	151.52	46.81	1
0.66	213.36	12.31	201.05	153.74	47.31	1
0.62	216.53	12.78	203.75	155.95	47.80	1
0.59	219.69	13.26	206.43	158.15	48.28	1
0.55	222.85	13.76	209.09	160.34	48.75	1
0.52	225.99	14.26	211.73	162.52	49.21	1
0.48	229.12	14.76	214.35	164.69	49.67	1
0.45	232.24	15.28	216.95	166.84	50.11	1
0.41	235.34	15.81	219.53	168.99	50.54	1
0.38	238.44	16.35	222.09	171.12	50.97	1
0.34	241.52	16.89	224.64	173.25	51.39	1
0.31	244.60	17.44	227.16	175.36	51.80	1
0.28	247.66	18.00	229.66	177.46	52.20	1
0.24	250.71	18.56	232.15	179.55	52.60	1
0.21	253.75	19.13	234.61	181.62	52.99	1
0.18	256.77	19.71	237.06	183.68	53.37	1
0.14	259.78	20.52	239.27	185.74	53.53	1
0.11	262.78	21.54	241.24	187.77	53.47	1
0.08	265.77	22.56	243.21	189.80	53.41	1
0.05	268.75	23.58	245.16	191.81	53.35	1
0.05	268.75	23.58	245.16	191.81	53.35	1
0.03	269.80	23.95	245.86	192.53	53.33	1
0.02	270.86	24.31	246.55	193.24	53.31	1
0.01	271.92	24.68	247.24	193.96	53.29	1
0.00	272.97	25.04	247.93	194.67	53.27	1

Time = 90. Degree of Consolidation = 82.%

Total Settlement = 2.580

Settlement at End of Primary Consolidation = 3.150

Settlement caused by Primary Consolidation at time 90. = 2.580

Settlement caused by Secondary Compression at time 90. = 0.000

Surface Elevation = 2.62

**********Current Conditions in Dredged Fill**********

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.70	3.01	0.76	6.54	6.54	6.54	1
5.63	2.96	0.75	6.54	4.21	4.21	1
5.56	2.91	0.74	6.54	3.78	3.78	1
5.49	2.87	0.73	6.54	3.66	3.61	1
5.42	2.82	0.72	6.54	3.57	3.45	1
5.35	2.78	0.71	6.54	3.51	3.30	1
5.28	2.74	0.70	6.54	3.46	3.21	1
5.21	2.70	0.69	6.54	3.42	3.15	1
5.14	2.66	0.68	6.54	3.38	3.08	1
5.07	2.62	0.67	6.54	3.36	3.01	1
5.00	2.58	0.66	6.54	3.33	2.94	1
4.93	2.54	0.65	6.54	3.31	2.89	1
4.86	2.50	0.64	6.54	3.30	2.85	1
4.79	2.46	0.64	6.54	3.28	2.82	1
4.72	2.42	0.63	6.54	3.27	2.78	1
4.65	2.38	0.62	6.54	3.25	2.75	1
4.58	2.34	0.61	6.54	3.24	2.71	1
4.51	2.30	0.60	6.54	3.23	2.68	1
4.44	2.26	0.59	6.54	3.22	2.64	1
4.37	2.22	0.58	6.54	3.21	2.60	1
4.30	2.18	0.57	6.54	3.20	2.57	1
4.30	2.18	0.57	6.54	3.20	2.57	1
4.25	2.16	0.56	6.54	3.19	2.54	1
4.21	2.13	0.56	6.54	3.18	2.53	1
4.16	2.10	0.55	6.54	3.18	2.52	1
4.11	2.08	0.55	6.54	3.17	2.50	1
4.07	2.05	0.54	6.54	3.16	2.49	1
4.02	2.03	0.53	6.54	3.16	2.48	1
3.97	2.00	0.53	6.54	3.15	2.46	1
3.93	1.98	0.52	6.54	3.14	2.45	1
3.88	1.95	0.51	6.54	3.14	2.43	1

3.83	1.92	0.51	6.54	3.13	2.42	1
3.79	1.90	0.50	6.54	3.12	2.41	1
3.74	1.87	0.50	6.54	3.12	2.39	1
3.69	1.85	0.49	6.54	3.11	2.38	1
3.65	1.82	0.48	6.54	3.10	2.37	1
3.60	1.80	0.48	6.54	3.10	2.35	1
3.55	1.77	0.47	6.54	3.09	2.34	1
3.51	1.75	0.47	6.54	3.08	2.33	1
3.46	1.72	0.46	6.54	3.08	2.32	1
3.41	1.70	0.45	6.54	3.07	2.31	1
3.37	1.67	0.45	6.54	3.06	2.30	1
3.32	1.65	0.44	6.54	3.05	2.29	1
3.27	1.62	0.43	6.54	3.05	2.28	1
3.23	1.60	0.43	6.54	3.04	2.27	1
3.18	1.57	0.42	6.54	3.03	2.26	1
3.13	1.55	0.42	6.54	3.03	2.25	1
3.09	1.52	0.41	6.54	3.02	2.24	1
3.04	1.50	0.40	6.54	3.01	2.23	1
2.99	1.47	0.40	6.54	3.00	2.22	1
2.95	1.45	0.39	6.54	3.00	2.21	1
2.90	1.42	0.38	6.54	2.99	2.20	1
2.90	1.42	0.38	6.54	2.99	2.20	1
2.83	1.38	0.38	6.54	2.98	2.19	1
2.76	1.35	0.37	6.54	2.97	2.18	1
2.69	1.31	0.36	6.54	2.95	2.17	1
2.62	1.27	0.35	6.54	2.94	2.16	1
2.55	1.24	0.34	6.54	2.93	2.15	1
2.48	1.20	0.33	6.54	2.92	2.14	1
2.41	1.17	0.32	6.54	2.91	2.13	1
2.34	1.13	0.31	6.54	2.89	2.12	1
2.27	1.09	0.30	6.54	2.88	2.11	1
2.20	1.06	0.29	6.54	2.87	2.11	1
2.13	1.02	0.28	6.54	2.85	2.10	1
2.06	0.99	0.27	6.54	2.84	2.09	1
1.99	0.95	0.26	6.54	2.83	2.08	1
1.92	0.91	0.25	6.54	2.81	2.07	1
1.85	0.88	0.25	6.54	2.80	2.06	1
1.78	0.84	0.24	6.54	2.78	2.05	1
1.71	0.81	0.23	6.54	2.77	2.04	1
1.64	0.77	0.22	6.54	2.75	2.03	1
1.57	0.74	0.21	6.54	2.74	2.03	1
1.50	0.70	0.20	6.54	2.72	2.02	1
1.50	0.70	0.20	6.54	2.72	2.02	1
1.43	0.67	0.19	6.54	2.71	2.01	1
1.36	0.64	0.18	6.54	2.69	2.00	1
1.29	0.60	0.17	6.54	2.67	1.99	1
1.22	0.57	0.16	6.54	2.66	1.98	1
1.15	0.53	0.15	6.54	2.64	1.97	1

1.08	0.50	0.14	6.54	2.63	1.96	1
1.01	0.47	0.13	6.54	2.61	1.95	1
0.94	0.43	0.12	6.54	2.59	1.95	1
0.87	0.40	0.12	6.54	2.57	1.94	1
0.80	0.37	0.11	6.54	2.56	1.93	1
0.73	0.33	0.10	6.54	2.54	1.92	1
0.66	0.30	0.09	6.54	2.52	1.91	1
0.59	0.27	0.08	6.54	2.50	1.90	1
0.52	0.24	0.07	6.54	2.49	1.89	1
0.45	0.20	0.06	6.54	2.47	1.88	1
0.38	0.17	0.05	6.54	2.45	1.87	1
0.31	0.14	0.04	6.54	2.43	1.87	1
0.24	0.11	0.03	6.54	2.41	1.86	1
0.17	0.08	0.02	6.54	2.40	1.85	1
0.10	0.04	0.01	6.54	2.38	1.84	1
0.10	0.04	0.01	6.54	2.38	1.84	1
0.08	0.03	0.01	6.54	2.37	1.84	1
0.05	0.02	0.01	6.54	2.36	1.83	1
0.03	0.01	0.00	6.54	2.36	1.83	1
0.00	0.00	0.00	6.54	2.35	1.83	1

	***** Stresses *****		***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
3.01	0.00	0.00	0.00	0.00	0.00	1
2.96	4.49	0.96	3.53	3.53	0.00	1
2.91	8.33	1.92	6.41	6.41	0.00	1
2.87	12.02	2.57	9.46	9.14	0.32	1
2.82	15.66	3.10	12.55	11.81	0.74	1
2.78	19.25	3.51	15.74	14.44	1.30	1
2.74	22.81	3.83	18.98	17.04	1.94	1
2.70	26.34	4.08	22.25	19.61	2.65	1
2.66	29.85	4.29	25.56	22.15	3.40	1
2.62	33.34	4.46	28.88	24.69	4.20	1
2.58	36.82	4.60	32.22	27.20	5.02	1
2.54	40.29	4.72	35.56	29.71	5.85	1
2.50	43.74	4.83	38.91	32.20	6.71	1
2.46	47.19	4.93	42.26	34.69	7.57	1
2.42	50.63	5.04	45.59	37.16	8.43	1
2.38	54.06	5.22	48.84	39.63	9.21	1
2.34	57.48	5.39	52.09	42.09	10.00	1
2.30	60.89	5.55	55.35	44.55	10.80	1
2.26	64.30	5.70	58.60	46.99	11.61	1
2.22	67.71	5.85	61.86	49.44	12.42	1
2.18	71.10	5.99	65.11	51.87	13.24	1
2.18	71.10	5.99	65.11	51.87	13.24	1
2.16	73.37	6.09	67.27	53.49	13.78	1

2.13	75.62	6.19	69.44	55.11	14.33	1
2.10	77.88	6.28	71.60	56.72	14.87	1
2.08	80.13	6.38	73.75	58.34	15.42	1
2.05	82.38	6.47	75.91	59.94	15.97	1
2.03	84.63	6.57	78.07	61.55	16.51	1
2.00	86.88	6.66	80.22	63.16	17.06	1
1.98	89.12	6.75	82.37	64.76	17.61	1
1.95	91.36	6.85	84.51	66.36	18.15	1
1.92	93.60	6.94	86.65	67.95	18.70	1
1.90	95.83	7.04	88.80	69.55	19.25	1
1.87	98.06	7.13	90.93	71.14	19.80	1
1.85	100.29	7.23	93.07	72.73	20.34	1
1.82	102.52	7.32	95.20	74.31	20.89	1
1.80	104.75	7.42	97.33	75.90	21.43	1
1.77	106.97	7.51	99.45	77.48	21.98	1
1.75	109.19	7.61	101.58	79.05	22.52	1
1.72	111.40	7.71	103.70	80.63	23.07	1
1.70	113.62	7.80	105.81	82.20	23.61	1
1.67	115.83	7.90	107.93	83.77	24.15	1
1.65	118.03	8.00	110.04	85.34	24.70	1
1.62	120.24	8.10	112.14	86.90	25.24	1
1.60	122.44	8.20	114.25	88.46	25.78	1
1.57	124.64	8.30	116.35	90.02	26.32	1
1.55	126.84	8.40	118.44	91.58	26.86	1
1.52	129.03	8.50	120.53	93.13	27.40	1
1.50	131.23	8.60	122.62	94.68	27.94	1
1.47	133.41	8.70	124.71	96.23	28.48	1
1.45	135.60	8.81	126.79	97.78	29.02	1
1.42	137.78	8.91	128.87	99.32	29.55	1
1.42	137.78	8.91	128.87	99.32	29.55	1
1.38	141.05	9.07	131.98	101.62	30.36	1
1.35	144.31	9.23	135.09	103.92	31.16	1
1.31	147.57	9.39	138.18	106.22	31.96	1
1.27	150.82	9.55	141.27	108.51	32.76	1
1.24	154.06	9.72	144.34	110.79	33.56	1
1.20	157.30	9.88	147.41	113.06	34.35	1
1.17	160.52	10.11	150.42	115.33	35.09	1
1.13	163.74	10.45	153.30	117.59	35.71	1
1.09	166.96	10.79	156.16	119.84	36.33	1
1.06	170.16	11.15	159.01	122.08	36.93	1
1.02	173.36	11.51	161.85	124.32	37.53	1
0.99	176.55	11.88	164.67	126.55	38.13	1
0.95	179.74	12.26	167.48	128.77	38.71	1
0.91	182.91	12.64	170.27	130.98	39.29	1
0.88	186.08	13.03	173.04	133.18	39.86	1
0.84	189.23	13.43	175.81	135.38	40.43	1
0.81	192.38	13.83	178.55	137.57	40.98	1
0.77	195.52	14.24	181.28	139.75	41.54	1

0.74	198.65	14.66	184.00	141.92	42.08	1
0.70	201.78	15.08	186.70	144.08	42.62	1
0.70	201.78	15.08	186.70	144.08	42.62	1
0.67	204.89	15.50	189.39	146.23	43.16	1
0.64	207.99	15.93	192.07	148.37	43.70	1
0.60	211.09	16.36	194.73	150.50	44.22	1
0.57	214.17	16.80	197.38	152.63	44.75	1
0.53	217.25	17.24	200.01	154.74	45.26	1
0.50	220.32	17.70	202.62	156.85	45.77	1
0.47	223.37	18.15	205.22	158.94	46.28	1
0.43	226.42	18.61	207.81	161.03	46.78	1
0.40	229.46	19.08	210.38	163.10	47.27	1
0.37	232.49	19.55	212.93	165.17	47.76	1
0.33	235.50	20.06	215.45	167.23	48.22	1
0.30	238.51	20.90	217.61	169.27	48.34	1
0.27	241.51	21.75	219.75	171.30	48.45	1
0.24	244.49	22.60	221.89	173.33	48.56	1
0.20	247.47	23.45	224.02	175.34	48.67	1
0.17	250.43	24.30	226.13	177.35	48.78	1
0.14	253.39	25.16	228.23	179.34	48.89	1
0.11	256.33	26.01	230.32	181.32	49.00	1
0.08	259.27	26.87	232.40	183.29	49.10	1
0.04	262.19	27.73	234.46	185.26	49.21	1
0.04	262.19	27.73	234.46	185.26	49.21	1
0.03	263.23	28.03	235.20	185.96	49.24	1
0.02	264.27	28.34	235.93	186.65	49.28	1
0.01	265.31	28.65	236.66	187.35	49.32	1
0.00	266.35	28.95	237.39	188.04	49.35	1

Time = 120. Degree of Consolidation = 85.%

Total Settlement = 2.687

Settlement at End of Primary Consolidation = 3.150

Settlement caused by Primary Consolidation at time 120. = 2.687

Settlement caused by Secondary Compression at time 120. = 0.000

Settlement Due to Desiccation = 0.000

Surface Elevation = 2.51

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
5.70	2.55	0.76	6.54	1.83	1.83	1
5.63	2.52	0.75	6.54	1.83	1.83	1
5.56	2.50	0.74	6.54	1.83	1.83	1
5.49	2.47	0.73	6.54	1.83	1.83	1
5.42	2.45	0.72	6.54	1.83	1.83	1
5.35	2.42	0.71	6.54	1.83	1.83	1
5.28	2.39	0.70	6.54	1.83	1.83	1
5.21	2.37	0.69	6.54	1.83	1.83	1
5.14	2.34	0.68	6.54	1.83	1.83	1
5.07	2.31	0.67	6.54	1.83	1.83	1
5.00	2.29	0.66	6.54	1.83	1.83	1
4.93	2.26	0.65	6.54	1.83	1.83	1
4.86	2.24	0.64	6.54	1.83	1.83	1
4.79	2.21	0.64	6.54	1.83	1.83	1
4.72	2.18	0.63	6.54	1.83	1.83	1
4.65	2.16	0.62	6.54	1.83	1.83	1
4.58	2.13	0.61	6.54	2.19	2.32	1
4.51	2.10	0.60	6.54	2.42	2.30	1
4.44	2.07	0.59	6.54	2.45	2.29	1
4.37	2.03	0.58	6.54	2.48	2.27	1
4.30	2.00	0.57	6.54	2.50	2.26	1
4.30	2.00	0.57	6.54	2.50	2.26	1
4.25	1.98	0.56	6.54	2.52	2.25	1
4.21	1.96	0.56	6.54	2.54	2.24	1
4.16	1.94	0.55	6.54	2.56	2.23	1
4.11	1.91	0.55	6.54	2.57	2.22	1
4.07	1.89	0.54	6.54	2.59	2.21	1
4.02	1.87	0.53	6.54	2.60	2.20	1
3.97	1.85	0.53	6.54	2.61	2.19	1
3.93	1.83	0.52	6.54	2.62	2.18	1
3.88	1.80	0.51	6.54	2.63	2.18	1
3.83	1.78	0.51	6.54	2.64	2.17	1
3.79	1.76	0.50	6.54	2.65	2.16	1
3.74	1.74	0.50	6.54	2.66	2.16	1
3.69	1.71	0.49	6.54	2.66	2.15	1
3.65	1.69	0.48	6.54	2.67	2.15	1
3.60	1.67	0.48	6.54	2.67	2.14	1
3.55	1.64	0.47	6.54	2.68	2.13	1
3.51	1.62	0.47	6.54	2.68	2.13	1
3.46	1.60	0.46	6.54	2.68	2.12	1
3.41	1.58	0.45	6.54	2.68	2.12	1
3.37	1.55	0.45	6.54	2.68	2.11	1
3.32	1.53	0.44	6.54	2.68	2.10	1

3.27	1.51	0.43	6.54	2.68	2.10	1
3.23	1.49	0.43	6.54	2.68	2.09	1
3.18	1.46	0.42	6.54	2.68	2.09	1
3.13	1.44	0.42	6.54	2.68	2.08	1
3.09	1.42	0.41	6.54	2.68	2.07	1
3.04	1.39	0.40	6.54	2.67	2.07	1
2.99	1.37	0.40	6.54	2.67	2.06	1
2.95	1.35	0.39	6.54	2.67	2.06	1
2.90	1.33	0.38	6.54	2.66	2.05	1
2.90	1.33	0.38	6.54	2.66	2.05	1
2.83	1.29	0.38	6.54	2.66	2.04	1
2.76	1.26	0.37	6.54	2.65	2.03	1
2.69	1.22	0.36	6.54	2.64	2.02	1
2.62	1.19	0.35	6.54	2.64	2.02	1
2.55	1.16	0.34	6.54	2.63	2.01	1
2.48	1.12	0.33	6.54	2.62	2.00	1
2.41	1.09	0.32	6.54	2.61	1.99	1
2.34	1.06	0.31	6.54	2.60	1.98	1
2.27	1.02	0.30	6.54	2.59	1.97	1
2.20	0.99	0.29	6.54	2.58	1.96	1
2.13	0.96	0.28	6.54	2.57	1.95	1
2.06	0.92	0.27	6.54	2.56	1.94	1
1.99	0.89	0.26	6.54	2.54	1.94	1
1.92	0.86	0.25	6.54	2.53	1.93	1
1.85	0.82	0.25	6.54	2.52	1.92	1
1.78	0.79	0.24	6.54	2.51	1.91	1
1.71	0.76	0.23	6.54	2.50	1.90	1
1.64	0.73	0.22	6.54	2.49	1.89	1
1.57	0.69	0.21	6.54	2.47	1.88	1
1.50	0.66	0.20	6.54	2.46	1.87	1
1.50	0.66	0.20	6.54	2.46	1.87	1
1.43	0.63	0.19	6.54	2.45	1.86	1
1.36	0.60	0.18	6.54	2.44	1.86	1
1.29	0.57	0.17	6.54	2.43	1.85	1
1.22	0.53	0.16	6.54	2.41	1.84	1
1.15	0.50	0.15	6.54	2.40	1.83	1
1.08	0.47	0.14	6.54	2.39	1.82	1
1.01	0.44	0.13	6.54	2.38	1.81	1
0.94	0.41	0.12	6.54	2.36	1.81	1
0.87	0.38	0.12	6.54	2.35	1.80	1
0.80	0.35	0.11	6.54	2.34	1.80	1
0.73	0.32	0.10	6.54	2.32	1.79	1
0.66	0.29	0.09	6.54	2.31	1.79	1
0.59	0.25	0.08	6.54	2.30	1.78	1
0.52	0.22	0.07	6.54	2.29	1.78	1
0.45	0.19	0.06	6.54	2.28	1.78	1
0.38	0.16	0.05	6.54	2.26	1.77	1
0.31	0.13	0.04	6.54	2.25	1.77	1

0.24	0.10	0.03	6.54	2.24	1.76	1
0.17	0.07	0.02	6.54	2.23	1.76	1
0.10	0.04	0.01	6.54	2.22	1.75	1
0.10	0.04	0.01	6.54	2.22	1.75	1
0.08	0.03	0.01	6.54	2.22	1.75	1
0.05	0.02	0.01	6.54	2.21	1.75	1
0.03	0.01	0.00	6.54	2.21	1.75	1
0.00	0.00	0.00	6.54	2.20	1.75	1

***** Stresses *****			***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
2.55	0.00	0.00	0.00	0.00	0.00	1
2.52	1.91	1.91	0.00	0.00	0.00	1
2.50	3.82	3.82	0.00	0.00	0.00	1
2.47	5.73	5.73	0.00	0.00	0.00	1
2.45	7.64	7.64	0.00	0.00	0.00	1
2.42	9.55	9.55	0.00	0.00	0.00	1
2.39	11.47	11.47	0.00	0.00	0.00	1
2.37	13.38	13.38	0.00	0.00	0.00	1
2.34	15.29	15.29	0.00	0.00	0.00	1
2.31	17.20	17.20	0.00	0.00	0.00	1
2.29	19.11	19.11	0.00	0.00	0.00	1
2.26	21.02	21.02	0.00	0.00	0.00	1
2.24	22.93	22.93	0.00	0.00	0.00	1
2.21	24.84	24.84	0.00	0.00	0.00	1
2.18	26.75	26.75	0.00	0.00	0.00	1
2.16	28.66	28.66	0.00	0.00	0.00	1
2.13	30.88	30.88	0.00	0.00	0.00	1
2.10	33.78	25.92	7.86	1.93	5.92	1
2.07	36.73	24.44	12.28	3.92	8.36	1
2.03	39.69	23.04	16.65	5.92	10.73	1
2.00	42.68	21.72	20.96	7.95	13.01	1
2.00	42.68	21.72	20.96	7.95	13.01	1
1.98	44.67	20.84	23.83	9.30	14.53	1
1.96	46.68	20.00	26.68	10.67	16.01	1
1.94	48.69	19.55	29.14	12.04	17.10	1
1.91	50.71	19.14	31.57	13.41	18.16	1
1.89	52.73	18.75	33.98	14.80	19.18	1
1.87	54.76	18.39	36.37	16.18	20.18	1
1.85	56.79	18.06	38.73	17.58	21.15	1
1.83	58.83	17.76	41.07	18.97	22.10	1
1.80	60.87	17.49	43.38	20.37	23.01	1
1.78	62.92	17.24	45.68	21.78	23.90	1
1.76	64.97	17.02	47.95	23.19	24.76	1
1.74	67.02	16.83	50.19	24.60	25.59	1
1.71	69.08	16.66	52.42	26.01	26.40	1

1.69	71.13	16.52	54.62	27.43	27.19	1
1.67	73.19	16.39	56.80	28.85	27.95	1
1.64	75.25	16.29	58.96	30.27	28.70	1
1.62	77.32	16.21	61.10	31.69	29.42	1
1.60	79.38	16.15	63.23	33.11	30.12	1
1.58	81.44	16.11	65.33	34.53	30.80	1
1.55	83.51	16.09	67.42	35.95	31.46	1
1.53	85.57	16.08	69.49	37.38	32.11	1
1.51	87.63	16.09	71.54	38.80	32.74	1
1.49	89.70	16.12	73.58	40.22	33.36	1
1.46	91.76	16.16	75.60	41.65	33.96	1
1.44	93.82	16.21	77.61	43.07	34.54	1
1.42	95.89	16.28	79.61	44.49	35.12	1
1.39	97.95	16.36	81.59	45.91	35.68	1
1.37	100.01	16.45	83.56	47.33	36.23	1
1.35	102.06	16.55	85.52	48.74	36.77	1
1.33	104.12	16.66	87.46	50.16	37.30	1
1.33	104.12	16.66	87.46	50.16	37.30	1
1.29	107.20	16.82	90.38	52.28	38.10	1
1.26	110.28	17.01	93.28	54.40	38.88	1
1.22	113.36	17.21	96.15	56.51	39.64	1
1.19	116.43	17.43	99.00	58.62	40.38	1
1.16	119.49	17.66	101.84	60.72	41.11	1
1.12	122.55	17.90	104.65	62.82	41.83	1
1.09	125.61	18.16	107.45	64.91	42.54	1
1.06	128.66	18.42	110.24	67.00	43.24	1
1.02	131.70	18.69	113.01	69.08	43.92	1
0.99	134.74	18.98	115.76	71.16	44.60	1
0.96	137.77	19.27	118.50	73.23	45.27	1
0.92	140.79	19.56	121.23	75.29	45.94	1
0.89	143.81	19.87	123.94	77.35	46.60	1
0.86	146.82	20.31	126.51	79.40	47.11	1
0.82	149.83	20.86	128.97	81.44	47.52	1
0.79	152.83	21.42	131.41	83.48	47.93	1
0.76	155.82	21.98	133.84	85.51	48.33	1
0.73	158.80	22.55	136.25	87.53	48.72	1
0.69	161.78	23.12	138.66	89.55	49.11	1
0.66	164.75	23.70	141.05	91.56	49.50	1
0.66	164.75	23.70	141.05	91.56	49.50	1
0.63	167.72	24.28	143.44	93.56	49.88	1
0.60	170.67	24.86	145.82	95.55	50.26	1
0.57	173.62	25.44	148.18	97.54	50.64	1
0.53	176.57	26.03	150.53	99.52	51.01	1
0.50	179.50	26.63	152.88	101.50	51.38	1
0.47	182.43	27.22	155.21	103.46	51.74	1
0.44	185.35	27.82	157.53	105.42	52.10	1
0.41	188.26	28.43	159.83	107.37	52.46	1
0.38	191.17	29.04	162.13	109.32	52.81	1

0.35	194.07	29.65	164.41	111.26	53.16	1
0.32	196.96	30.38	166.58	113.19	53.40	1
0.29	199.84	31.22	168.62	115.11	53.51	1
0.25	202.72	32.05	170.67	117.02	53.65	1
0.22	205.59	32.86	172.73	118.93	53.80	1
0.19	208.45	33.65	174.81	120.83	53.97	1
0.16	211.31	34.42	176.89	122.73	54.16	1
0.13	214.16	35.18	178.97	124.61	54.36	1
0.10	217.00	35.93	181.07	126.49	54.57	1
0.07	219.84	36.67	183.16	128.37	54.80	1
0.04	222.66	37.40	185.27	130.24	55.03	1
0.04	222.66	37.40	185.27	130.24	55.03	1
0.03	223.67	37.66	186.01	130.90	55.11	1
0.02	224.68	37.92	186.76	131.57	55.20	1
0.01	225.69	38.18	187.51	132.23	55.28	1
0.00	226.70	38.43	188.26	132.89	55.37	1

Time = 210. Degree of Consolidation = 84.%

Total Settlement = 3.149

Settlement at End of Primary Consolidation = 3.465

Settlement caused by Primary Consolidation at time 210. = 2.908

Settlement caused by Secondary Compression at time 210. = 0.000

Settlement Due to Desiccation = 0.241

Surface Elevation = 2.05

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
5.70	2.28	0.76	6.54	1.83	1.83	1
5.63	2.25	0.75	6.54	1.83	1.83	1
5.56	2.22	0.74	6.54	1.83	1.83	1
5.49	2.20	0.73	6.54	1.83	1.83	1
5.42	2.17	0.72	6.54	1.83	1.83	1
5.35	2.14	0.71	6.54	1.83	1.83	1
5.28	2.12	0.70	6.54	1.83	1.83	1

5.21	2.09	0.69	6.54	1.83	1.83	1
5.14	2.07	0.68	6.54	1.83	1.83	1
5.07	2.04	0.67	6.54	1.83	1.83	1
5.00	2.01	0.66	6.54	1.83	1.83	1
4.93	1.99	0.65	6.54	1.83	1.83	1
4.86	1.96	0.64	6.54	1.83	1.83	1
4.79	1.93	0.64	6.54	1.83	1.83	1
4.72	1.91	0.63	6.54	1.83	1.83	1
4.65	1.88	0.62	6.54	1.83	1.83	1
4.58	1.86	0.61	6.54	1.83	1.83	1
4.51	1.83	0.60	6.54	1.83	1.83	1
4.44	1.80	0.59	6.54	1.83	1.83	1
4.37	1.78	0.58	6.54	1.83	1.83	1
4.30	1.75	0.57	6.54	2.21	1.83	1
4.30	1.75	0.57	6.54	2.21	1.83	1
4.25	1.73	0.56	6.54	1.83	1.83	1
4.21	1.71	0.56	6.54	1.83	1.83	1
4.16	1.70	0.55	6.54	1.83	1.83	1
4.11	1.68	0.55	6.54	1.83	1.83	1
4.07	1.66	0.54	6.54	1.83	1.83	1
4.02	1.64	0.53	6.54	1.83	1.83	1
3.97	1.63	0.53	6.54	1.83	1.83	1
3.93	1.61	0.52	6.54	1.83	1.83	1
3.88	1.59	0.51	6.54	2.10	2.10	1
3.83	1.57	0.51	6.54	2.10	2.09	1
3.79	1.55	0.50	6.54	2.10	2.09	1
3.74	1.53	0.50	6.54	2.10	2.08	1
3.69	1.51	0.49	6.54	2.10	2.07	1
3.65	1.49	0.48	6.54	2.11	2.07	1
3.60	1.47	0.48	6.54	2.11	2.06	1
3.55	1.45	0.47	6.54	2.11	2.06	1
3.51	1.44	0.47	6.54	2.11	2.05	1
3.46	1.42	0.46	6.54	2.11	2.05	1
3.41	1.40	0.45	6.54	2.11	2.04	1
3.37	1.38	0.45	6.54	2.11	2.03	1
3.32	1.36	0.44	6.54	2.11	2.03	1
3.27	1.34	0.43	6.54	2.11	2.02	1
3.23	1.32	0.43	6.54	2.11	2.02	1
3.18	1.30	0.42	6.54	2.12	2.01	1
3.13	1.28	0.42	6.54	2.12	2.00	1
3.09	1.26	0.41	6.54	2.12	2.00	1
3.04	1.24	0.40	6.54	2.12	1.99	1
2.99	1.22	0.40	6.54	2.12	1.99	1
2.95	1.20	0.39	6.54	2.12	1.98	1
2.90	1.19	0.38	6.54	2.12	1.97	1
2.90	1.19	0.38	6.54	2.12	1.97	1
2.83	1.16	0.38	6.54	2.12	1.96	1
2.76	1.13	0.37	6.54	2.12	1.96	1

2.69	1.10	0.36	6.54	2.12	1.95	1
2.62	1.07	0.35	6.54	2.12	1.94	1
2.55	1.04	0.34	6.54	2.12	1.94	1
2.48	1.01	0.33	6.54	2.12	1.93	1
2.41	0.98	0.32	6.54	2.12	1.93	1
2.34	0.95	0.31	6.54	2.12	1.92	1
2.27	0.92	0.30	6.54	2.12	1.92	1
2.20	0.90	0.29	6.54	2.12	1.91	1
2.13	0.87	0.28	6.54	2.12	1.90	1
2.06	0.84	0.27	6.54	2.12	1.89	1
1.99	0.81	0.26	6.54	2.11	1.88	1
1.92	0.78	0.25	6.54	2.11	1.88	1
1.85	0.75	0.25	6.54	2.11	1.87	1
1.78	0.72	0.24	6.54	2.11	1.86	1
1.71	0.69	0.23	6.54	2.11	1.85	1
1.64	0.66	0.22	6.54	2.10	1.84	1
1.57	0.64	0.21	6.54	2.10	1.83	1
1.50	0.61	0.20	6.54	2.10	1.82	1
1.50	0.61	0.20	6.54	2.10	1.81	1
1.43	0.58	0.19	6.54	2.09	1.81	1
1.36	0.55	0.18	6.54	2.09	1.80	1
1.29	0.52	0.17	6.54	2.09	1.80	1
1.22	0.49	0.16	6.54	2.08	1.79	1
1.15	0.46	0.15	6.54	2.08	1.79	1
1.08	0.43	0.14	6.54	2.08	1.79	1
1.01	0.41	0.13	6.54	2.07	1.78	1
0.94	0.38	0.12	6.54	2.07	1.78	1
0.87	0.35	0.12	6.54	2.06	1.78	1
0.80	0.32	0.11	6.54	2.06	1.77	1
0.73	0.29	0.10	6.54	2.05	1.77	1
0.66	0.26	0.09	6.54	2.05	1.76	1
0.59	0.24	0.08	6.54	2.04	1.76	1
0.52	0.21	0.07	6.54	2.03	1.76	1
0.45	0.18	0.06	6.54	2.03	1.75	1
0.38	0.15	0.05	6.54	2.02	1.75	1
0.31	0.12	0.04	6.54	2.02	1.74	1
0.24	0.10	0.03	6.54	2.01	1.74	1
0.17	0.07	0.02	6.54	2.00	1.73	1
0.10	0.04	0.01	6.54	1.99	1.73	1
0.10	0.04	0.01	6.54	1.99	1.73	1
0.08	0.03	0.01	6.54	1.99	1.72	1
0.05	0.02	0.01	6.54	1.99	1.72	1
0.03	0.01	0.00	6.54	1.99	1.71	1
0.00	0.00	0.00	6.54	1.98	1.71	1

***** Stresses *****		***** Pore Pressures *****				
XI	Total	Effective	Total	Static	Excess	Material
2.28	0.00	0.00	0.00	0.00	0.00	1
2.25	1.91	1.91	0.00	0.00	0.00	1
2.22	3.82	3.82	0.00	0.00	0.00	1
2.20	5.73	5.73	0.00	0.00	0.00	1
2.17	7.64	7.64	0.00	0.00	0.00	1
2.14	9.55	9.55	0.00	0.00	0.00	1
2.12	11.47	11.47	0.00	0.00	0.00	1
2.09	13.38	13.38	0.00	0.00	0.00	1
2.07	15.29	15.29	0.00	0.00	0.00	1
2.04	17.20	17.20	0.00	0.00	0.00	1
2.01	19.11	19.11	0.00	0.00	0.00	1
1.99	21.02	21.02	0.00	0.00	0.00	1
1.96	22.93	22.93	0.00	0.00	0.00	1
1.93	24.84	24.84	0.00	0.00	0.00	1
1.91	26.75	26.75	0.00	0.00	0.00	1
1.88	28.66	28.66	0.00	0.00	0.00	1
1.86	30.58	30.58	0.00	0.00	0.00	1
1.83	32.49	32.49	0.00	0.00	0.00	1
1.80	34.40	34.40	0.00	0.00	0.00	1
1.78	36.31	36.31	0.00	0.00	0.00	1
1.75	38.22	38.22	0.00	0.00	0.00	1
1.75	40.13	40.13	0.00	0.00	0.00	1
1.73	42.39	42.39	0.00	0.00	0.00	1
1.71	44.64	44.64	0.00	0.00	0.00	1
1.70	46.55	46.55	0.00	0.00	0.00	1
1.68	48.46	48.46	0.00	0.00	0.00	1
1.66	50.37	50.37	0.00	0.00	0.00	1
1.64	52.29	52.29	0.00	0.00	0.00	1
1.63	54.20	54.20	0.00	0.00	0.00	1
1.61	56.11	56.11	0.00	0.00	0.00	1
1.59	60.87	17.49	43.38	20.37	50.56	1
1.57	62.92	48.67	45.68	21.78	20.02	1
1.55	64.97	48.52	47.95	23.19	20.81	1
1.53	67.02	48.38	50.19	24.60	21.59	1
1.51	69.08	48.24	52.42	26.01	22.37	1
1.49	71.13	48.10	54.62	27.43	23.15	1
1.47	73.19	47.97	56.80	28.85	23.93	1
1.45	75.25	47.84	58.96	30.27	24.70	1
1.44	77.32	47.71	61.10	31.69	25.47	1
1.42	79.38	47.58	63.23	33.11	26.23	1
1.40	81.44	47.47	65.33	34.53	26.99	1
1.38	83.51	47.35	67.42	35.95	27.75	1
1.36	85.57	47.24	69.49	37.38	28.50	1
1.34	87.63	47.14	71.54	38.80	29.24	1
1.32	89.70	47.04	73.58	40.22	29.98	1
1.30	91.76	46.94	75.60	41.65	30.72	1
1.28	93.82	46.86	77.61	43.07	31.45	1

1.26	95.89	46.77	79.61	44.49	32.17	1
1.24	97.95	46.70	81.59	45.91	32.89	1
1.22	100.01	46.63	83.56	47.33	33.59	1
1.20	102.06	46.57	85.52	48.74	34.30	1
1.19	104.12	46.52	87.46	50.16	34.99	1
1.19	104.12	16.66	87.46	50.16	34.99	1
1.16	107.20	46.44	90.38	52.28	36.03	1
1.13	110.28	46.38	93.28	54.40	37.06	1
1.10	113.36	46.33	96.15	56.51	38.06	1
1.07	116.43	46.31	99.00	58.62	39.05	1
1.04	119.49	46.30	101.84	60.72	40.01	1
1.01	122.55	46.32	104.65	62.82	40.96	1
0.98	125.61	46.36	107.45	64.91	41.88	1
0.95	128.66	46.41	110.24	67.00	42.79	1
0.92	131.70	46.49	113.01	69.08	43.67	1
0.90	134.74	46.60	115.76	71.16	44.53	1
0.87	137.77	46.72	118.50	73.23	45.37	1
0.84	140.79	46.87	121.23	75.29	46.18	1
0.81	143.81	47.04	123.94	77.35	46.97	1
0.78	146.82	47.23	126.51	79.40	47.74	1
0.75	149.83	47.45	128.97	81.44	48.49	1
0.72	152.83	47.69	131.41	83.48	49.21	1
0.69	155.82	47.95	133.84	85.51	49.91	1
0.66	158.80	48.24	136.25	87.53	50.58	1
0.64	161.78	48.55	138.66	89.55	51.23	1
0.61	164.75	48.89	141.05	91.56	51.85	1
0.61	164.75	23.70	141.05	91.56	51.85	1
0.58	167.72	49.22	143.44	93.56	52.48	1
0.55	170.67	49.58	145.82	95.55	53.08	1
0.52	173.62	49.97	148.18	97.54	53.66	1
0.49	176.57	50.38	150.53	99.52	54.21	1
0.46	179.50	50.81	152.88	101.50	54.74	1
0.43	182.43	51.26	155.21	103.46	55.25	1
0.41	185.35	51.74	157.53	105.42	55.73	1
0.38	188.26	52.25	159.83	107.37	56.19	1
0.35	191.17	52.77	162.13	109.32	56.62	1
0.32	194.07	53.32	164.41	111.26	57.03	1
0.29	196.96	53.90	166.58	113.19	57.42	1
0.26	199.84	54.49	168.62	115.11	57.79	1
0.24	202.72	55.11	170.67	117.02	58.13	1
0.21	205.59	55.75	172.73	118.93	58.46	1
0.18	208.45	56.41	174.81	120.83	58.76	1
0.15	103.78	57.09	46.69	89.73	-43.04	1
0.12	105.98	57.80	48.18	91.48	-43.30	1
0.10	108.17	58.52	49.65	93.22	-43.57	1
0.07	110.36	59.27	51.10	94.96	-43.87	1
0.04	112.55	60.03	52.52	96.70	-44.19	1
0.04	113.58	60.03	53.54	96.70	-43.16	1

0.03	115.01	60.31	54.71	97.32	-42.61	1
0.02	116.45	60.58	55.87	97.94	-42.07	1
0.01	117.89	60.86	57.03	98.56	-41.53	1
0.00	119.33	61.14	58.19	99.18	0.00	1

Time = 395. Degree of Consolidation = 87.%

Total Settlement = 3.424

Settlement at End of Primary Consolidation = 3.532

Settlement caused by Primary Consolidation at time 395. = 3.082

Settlement caused by Secondary Compression at time 395. = 0.000

Settlement Due to Desiccation = 0.343

Surface Elevation = 1.78

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
5.70	2.23	0.76	6.54	1.83	1.83	1
5.63	2.21	0.75	6.54	1.83	1.83	1
5.56	2.18	0.74	6.54	1.83	1.83	1
5.49	2.16	0.73	6.54	1.83	1.83	1
5.42	2.13	0.72	6.54	1.83	1.83	1
5.35	2.10	0.71	6.54	1.83	1.83	1
5.28	2.08	0.70	6.54	1.83	1.83	1
5.21	2.05	0.69	6.54	1.83	1.83	1
5.14	2.02	0.68	6.54	1.83	1.83	1
5.07	2.00	0.67	6.54	1.83	1.83	1
5.00	1.97	0.66	6.54	1.83	1.83	1
4.93	1.95	0.65	6.54	1.83	1.83	1
4.86	1.92	0.64	6.54	1.83	1.83	1
4.79	1.89	0.64	6.54	1.83	1.83	1
4.72	1.87	0.63	6.54	1.83	1.83	1
4.65	1.84	0.62	6.54	1.83	1.83	1
4.58	1.81	0.61	6.54	1.83	1.83	1
4.51	1.79	0.60	6.54	1.83	1.83	1
4.44	1.76	0.59	6.54	1.83	1.83	1

4.37	1.74	0.58	6.54	1.83	1.83	1
4.30	1.71	0.57	6.54	2.21	1.83	1
4.30	1.71	0.57	6.54	2.21	1.83	1
4.25	1.69	0.56	6.54	1.83	1.83	1
4.21	1.67	0.56	6.54	1.83	1.83	1
4.16	1.65	0.55	6.54	1.83	1.83	1
4.11	1.64	0.55	6.54	1.83	1.83	1
4.07	1.62	0.54	6.54	1.83	1.83	1
4.02	1.60	0.53	6.54	1.83	1.83	1
3.97	1.58	0.53	6.54	1.83	1.83	1
3.93	1.57	0.52	6.54	1.83	1.83	1
3.88	1.55	0.51	6.54	1.83	1.83	1
3.83	1.53	0.51	6.54	1.83	1.83	1
3.79	1.51	0.50	6.54	1.83	1.83	1
3.74	1.50	0.50	6.54	1.83	1.83	1
3.69	1.48	0.49	6.54	1.83	1.83	1
3.65	1.46	0.48	6.54	2.05	2.05	1
3.60	1.44	0.48	6.54	2.05	2.05	1
3.55	1.42	0.47	6.54	2.05	2.04	1
3.51	1.40	0.47	6.54	2.05	2.04	1
3.46	1.39	0.46	6.54	2.05	2.03	1
3.41	1.37	0.45	6.54	2.05	2.03	1
3.37	1.35	0.45	6.54	2.05	2.02	1
3.32	1.33	0.44	6.54	2.05	2.01	1
3.27	1.31	0.43	6.54	2.05	2.01	1
3.23	1.29	0.43	6.54	2.05	2.00	1
3.18	1.27	0.42	6.54	2.04	2.00	1
3.13	1.25	0.42	6.54	2.04	1.99	1
3.09	1.23	0.41	6.54	2.04	1.98	1
3.04	1.22	0.40	6.54	2.04	1.98	1
2.99	1.20	0.40	6.54	2.04	1.97	1
2.95	1.18	0.39	6.54	2.04	1.97	1
2.90	1.16	0.38	6.54	2.04	1.96	1
2.90	1.16	0.38	6.54	2.04	1.95	1
2.83	1.13	0.38	6.54	2.04	1.95	1
2.76	1.10	0.37	6.54	2.04	1.94	1
2.69	1.07	0.36	6.54	2.04	1.94	1
2.62	1.05	0.35	6.54	2.03	1.93	1
2.55	1.02	0.34	6.54	2.03	1.92	1
2.48	0.99	0.33	6.54	2.03	1.92	1
2.41	0.96	0.32	6.54	2.03	1.91	1
2.34	0.93	0.31	6.54	2.03	1.91	1
2.27	0.91	0.30	6.54	2.03	1.90	1
2.20	0.88	0.29	6.54	2.03	1.89	1
2.13	0.85	0.28	6.54	2.03	1.89	1
2.06	0.82	0.27	6.54	2.02	1.88	1
1.99	0.79	0.26	6.54	2.02	1.88	1
1.92	0.77	0.25	6.54	2.02	1.88	1

1.85	0.74	0.25	6.54	2.02	1.87	1
1.78	0.71	0.24	6.54	2.02	1.86	1
1.71	0.68	0.23	6.54	2.02	1.85	1
1.64	0.65	0.22	6.54	2.02	1.84	1
1.57	0.63	0.21	6.54	2.02	1.83	1
1.50	0.60	0.20	6.54	2.01	1.82	1
1.50	0.60	0.20	6.54	2.01	1.81	1
1.43	0.57	0.19	6.54	2.01	1.81	1
1.36	0.54	0.18	6.54	2.01	1.80	1
1.29	0.51	0.17	6.54	2.01	1.80	1
1.22	0.49	0.16	6.54	2.01	1.79	1
1.15	0.46	0.15	6.54	2.01	1.79	1
1.08	0.43	0.14	6.54	2.01	1.79	1
1.01	0.40	0.13	6.54	2.01	1.78	1
0.94	0.37	0.12	6.54	2.01	1.78	1
0.87	0.35	0.12	6.54	2.01	1.77	1
0.80	0.32	0.11	6.54	2.00	1.77	1
0.73	0.29	0.10	6.54	2.00	1.76	1
0.66	0.26	0.09	6.54	2.00	1.76	1
0.59	0.23	0.08	6.54	2.00	1.76	1
0.52	0.21	0.07	6.54	2.00	1.76	1
0.45	0.18	0.06	6.54	2.00	1.75	1
0.38	0.15	0.05	6.54	2.00	1.75	1
0.31	0.12	0.04	6.54	2.00	1.74	1
0.24	0.10	0.03	6.54	2.00	1.74	1
0.17	0.07	0.02	6.54	2.00	1.73	1
0.10	0.04	0.01	6.54	1.99	1.73	1
0.10	0.04	0.01	6.54	1.99	1.73	1
0.08	0.03	0.01	6.54	1.99	1.72	1
0.05	0.02	0.01	6.54	1.99	1.72	1
0.03	0.01	0.00	6.54	1.99	1.71	1
0.00	0.00	0.00	6.54	1.98	1.71	1

***** Stresses *****			***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
2.23	0.00	0.00	0.00	0.00	0.00	1
2.21	1.91	1.91	0.00	0.00	0.00	1
2.18	3.82	3.82	0.00	0.00	0.00	1
2.16	5.73	5.73	0.00	0.00	0.00	1
2.13	7.64	7.64	0.00	0.00	0.00	1
2.10	9.55	9.55	0.00	0.00	0.00	1
2.08	11.47	11.47	0.00	0.00	0.00	1
2.05	13.38	13.38	0.00	0.00	0.00	1
2.02	15.29	15.29	0.00	0.00	0.00	1
2.00	17.20	17.20	0.00	0.00	0.00	1
1.97	19.11	19.11	0.00	0.00	0.00	1

1.95	21.02	21.02	0.00	0.00	0.00	1
1.92	22.93	22.93	0.00	0.00	0.00	1
1.89	24.84	24.84	0.00	0.00	0.00	1
1.87	26.75	26.75	0.00	0.00	0.00	1
1.84	28.66	28.66	0.00	0.00	0.00	1
1.81	30.58	30.58	0.00	0.00	0.00	1
1.79	32.49	32.49	0.00	0.00	0.00	1
1.76	34.40	34.40	0.00	0.00	0.00	1
1.74	36.31	36.31	0.00	0.00	0.00	1
1.71	38.22	38.22	0.00	0.00	0.00	1
1.71	40.13	40.13	0.00	0.00	0.00	1
1.69	42.39	42.39	0.00	0.00	0.00	1
1.67	44.64	44.64	0.00	0.00	0.00	1
1.65	46.55	46.55	0.00	0.00	0.00	1
1.64	48.46	48.46	0.00	0.00	0.00	1
1.62	50.37	50.37	0.00	0.00	0.00	1
1.60	52.29	52.29	0.00	0.00	0.00	1
1.58	54.20	54.20	0.00	0.00	0.00	1
1.57	56.11	56.11	0.00	0.00	0.00	1
1.55	58.02	58.02	0.00	0.00	0.00	1
1.53	59.93	59.93	0.00	0.00	0.00	1
1.51	61.84	61.84	0.00	0.00	0.00	1
1.50	63.75	63.75	0.00	0.00	0.00	1
1.48	65.66	65.66	0.00	0.00	0.00	1
1.46	71.13	48.25	54.62	27.43	32.54	1
1.44	73.19	53.66	56.80	28.85	27.78	1
1.42	75.25	53.76	58.96	30.27	28.31	1
1.40	77.32	53.87	61.10	31.69	28.85	1
1.39	79.38	53.98	63.23	33.11	29.38	1
1.37	81.44	54.08	65.33	34.53	29.91	1
1.35	83.51	54.19	67.42	35.95	30.45	1
1.33	85.57	54.29	69.49	37.38	30.99	1
1.31	87.63	54.40	71.54	38.80	31.52	1
1.29	89.70	54.50	73.58	40.22	32.06	1
1.27	91.76	54.60	75.60	41.65	32.60	1
1.25	93.82	54.70	77.61	43.07	33.14	1
1.23	95.89	54.81	79.61	44.49	33.68	1
1.22	97.95	54.91	81.59	45.91	34.22	1
1.20	100.01	55.00	83.56	47.33	34.76	1
1.18	102.06	55.10	85.52	48.74	35.31	1
1.16	104.12	55.20	87.46	50.16	35.85	1
1.16	104.12	16.66	87.46	50.16	35.85	1
1.13	107.20	55.35	90.38	52.28	36.67	1
1.10	110.28	55.49	93.28	54.40	37.48	1
1.07	113.36	55.64	96.15	56.51	38.30	1
1.05	116.43	55.78	99.00	58.62	39.12	1
1.02	119.49	55.92	101.84	60.72	39.94	1
0.99	122.55	56.06	104.65	62.82	40.76	1

0.96	125.61	56.20	107.45	64.91	41.59	1
0.93	128.66	56.33	110.24	67.00	42.41	1
0.91	131.70	56.47	113.01	69.08	43.24	1
0.88	134.74	56.60	115.76	71.16	44.07	1
0.85	137.77	56.73	118.50	73.23	44.90	1
0.82	140.79	56.86	121.23	75.29	45.73	1
0.79	143.81	56.99	123.94	77.35	46.56	1
0.77	146.82	57.12	126.51	79.40	47.40	1
0.74	149.83	57.25	128.97	81.44	48.23	1
0.71	152.83	57.37	131.41	83.48	49.07	1
0.68	155.82	57.49	133.84	85.51	49.91	1
0.65	158.80	57.62	136.25	87.53	50.74	1
0.63	161.78	57.74	138.66	89.55	51.58	1
0.60	164.75	57.86	141.05	91.56	52.43	1
0.60	164.75	23.70	141.05	91.56	52.43	1
0.57	167.72	57.98	143.44	93.56	53.27	1
0.54	170.67	58.10	145.82	95.55	54.11	1
0.51	173.62	58.21	148.18	97.54	54.96	1
0.49	176.57	58.33	150.53	99.52	55.80	1
0.46	179.50	58.45	152.88	101.50	56.65	1
0.43	182.43	58.56	155.21	103.46	57.50	1
0.40	185.35	58.67	157.53	105.42	58.34	1
0.37	188.26	58.78	159.83	107.37	59.19	1
0.35	191.17	58.89	162.13	109.32	60.05	1
0.32	194.07	59.00	164.41	111.26	60.90	1
0.29	196.96	59.11	166.58	113.19	61.75	1
0.26	199.84	59.22	168.62	115.11	62.61	1
0.23	202.72	59.32	170.67	117.02	63.46	1
0.21	205.59	59.43	172.73	118.93	64.32	1
0.18	98.43	59.53	38.89	80.02	-41.13	1
0.15	100.61	59.63	40.98	81.76	-40.78	1
0.12	102.80	59.74	43.06	83.50	-40.44	1
0.10	104.98	59.84	45.15	85.23	-40.09	1
0.07	107.16	59.93	47.23	86.97	-39.74	1
0.04	109.35	60.03	49.31	88.70	-39.39	1
0.04	110.37	60.03	50.34	88.70	-38.36	1
0.03	111.81	60.32	51.50	89.32	-37.83	1
0.02	113.25	60.60	52.65	89.94	-37.29	1
0.01	114.69	60.88	53.81	90.56	-36.75	1
0.00	116.13	61.16	54.97	91.18	0.00	1

Time = 760. Degree of Consolidation = 87.%

Total Settlement = 3.466

Settlement at End of Primary Consolidation = 3.543

Settlement caused by Primary Consolidation at time 760. = 3.097

Settlement caused by Secondary Compression at time 760. = 0.000

Settlement Due to Desiccation = 0.369

Surface Elevation = 1.73

**********Current Conditions in Dredged Fill**********

***** Coordinates *****			***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
5.70	2.23	0.76	6.54	1.83	1.83	1
5.63	2.21	0.75	6.54	1.83	1.83	1
5.56	2.18	0.74	6.54	1.83	1.83	1
5.49	2.16	0.73	6.54	1.83	1.83	1
5.42	2.13	0.72	6.54	1.83	1.83	1
5.35	2.10	0.71	6.54	1.83	1.83	1
5.28	2.08	0.70	6.54	1.83	1.83	1
5.21	2.05	0.69	6.54	1.83	1.83	1
5.14	2.02	0.68	6.54	1.83	1.83	1
5.07	2.00	0.67	6.54	1.83	1.83	1
5.00	1.97	0.66	6.54	1.83	1.83	1
4.93	1.95	0.65	6.54	1.83	1.83	1
4.86	1.92	0.64	6.54	1.83	1.83	1
4.79	1.89	0.64	6.54	1.83	1.83	1
4.72	1.87	0.63	6.54	1.83	1.83	1
4.65	1.84	0.62	6.54	1.83	1.83	1
4.58	1.81	0.61	6.54	1.83	1.83	1
4.51	1.79	0.60	6.54	1.83	1.83	1
4.44	1.76	0.59	6.54	1.83	1.83	1
4.37	1.74	0.58	6.54	1.83	1.83	1
4.30	1.71	0.57	6.54	2.21	1.83	1
4.30	1.71	0.57	6.54	2.21	1.83	1
4.25	1.69	0.56	6.54	1.83	1.83	1
4.21	1.67	0.56	6.54	1.83	1.83	1
4.16	1.65	0.55	6.54	1.83	1.83	1
4.11	1.64	0.55	6.54	1.83	1.83	1
4.07	1.62	0.54	6.54	1.83	1.83	1
4.02	1.60	0.53	6.54	1.83	1.83	1
3.97	1.58	0.53	6.54	1.83	1.83	1
3.93	1.57	0.52	6.54	1.83	1.83	1
3.88	1.55	0.51	6.54	1.83	1.83	1

3.83	1.53	0.51	6.54	1.83	1.83	1
3.79	1.51	0.50	6.54	1.83	1.83	1
3.74	1.50	0.50	6.54	1.83	1.83	1
3.69	1.48	0.49	6.54	1.83	1.83	1
3.65	1.46	0.48	6.54	2.05	2.05	1
3.60	1.44	0.48	6.54	2.05	2.05	1
3.55	1.42	0.47	6.54	2.05	2.04	1
3.51	1.40	0.47	6.54	2.05	2.04	1
3.46	1.39	0.46	6.54	2.05	2.03	1
3.41	1.37	0.45	6.54	2.05	2.03	1
3.37	1.35	0.45	6.54	2.05	2.02	1
3.32	1.33	0.44	6.54	2.05	2.01	1
3.27	1.31	0.43	6.54	2.05	2.01	1
3.23	1.29	0.43	6.54	2.05	2.00	1
3.18	1.27	0.42	6.54	2.04	2.00	1
3.13	1.25	0.42	6.54	2.04	1.99	1
3.09	1.23	0.41	6.54	2.04	1.98	1
3.04	1.22	0.40	6.54	2.04	1.98	1
2.99	1.20	0.40	6.54	2.04	1.97	1
2.95	1.18	0.39	6.54	2.04	1.97	1
2.90	1.16	0.38	6.54	2.04	1.96	1
2.90	1.16	0.38	6.54	2.04	1.95	1
2.83	1.13	0.38	6.54	2.04	1.95	1
2.76	1.10	0.37	6.54	2.04	1.94	1
2.69	1.07	0.36	6.54	2.04	1.94	1
2.62	1.05	0.35	6.54	2.03	1.93	1
2.55	1.02	0.34	6.54	2.03	1.92	1
2.48	0.99	0.33	6.54	2.03	1.92	1
2.41	0.96	0.32	6.54	2.03	1.91	1
2.34	0.93	0.31	6.54	2.03	1.91	1
2.27	0.91	0.30	6.54	2.03	1.90	1
2.20	0.88	0.29	6.54	2.03	1.89	1
2.13	0.85	0.28	6.54	2.03	1.89	1
2.06	0.82	0.27	6.54	2.02	1.88	1
1.99	0.79	0.26	6.54	2.02	1.88	1
1.92	0.77	0.25	6.54	2.02	1.88	1
1.85	0.74	0.25	6.54	2.02	1.87	1
1.78	0.71	0.24	6.54	2.02	1.86	1
1.71	0.68	0.23	6.54	2.02	1.85	1
1.64	0.65	0.22	6.54	2.02	1.84	1
1.57	0.63	0.21	6.54	2.02	1.83	1
1.50	0.60	0.20	6.54	2.01	1.82	1
1.50	0.60	0.20	6.54	2.01	1.81	1
1.43	0.57	0.19	6.54	2.01	1.81	1
1.36	0.54	0.18	6.54	2.01	1.80	1
1.29	0.51	0.17	6.54	2.01	1.80	1
1.22	0.49	0.16	6.54	2.01	1.79	1
1.15	0.46	0.15	6.54	2.01	1.79	1

1.08	0.43	0.14	6.54	2.01	1.79	1
1.01	0.40	0.13	6.54	2.01	1.78	1
0.94	0.37	0.12	6.54	2.01	1.78	1
0.87	0.35	0.12	6.54	2.01	1.77	1
0.80	0.32	0.11	6.54	2.00	1.77	1
0.73	0.29	0.10	6.54	2.00	1.76	1
0.66	0.26	0.09	6.54	2.00	1.76	1
0.59	0.23	0.08	6.54	2.00	1.76	1
0.52	0.21	0.07	6.54	2.00	1.76	1
0.45	0.18	0.06	6.54	2.00	1.75	1
0.38	0.15	0.05	6.54	2.00	1.75	1
0.31	0.12	0.04	6.54	2.00	1.74	1
0.24	0.10	0.03	6.54	2.00	1.74	1
0.17	0.07	0.02	6.54	2.00	1.73	1
0.10	0.04	0.01	6.54	1.99	1.73	1
0.10	0.04	0.01	6.54	1.99	1.73	1
0.08	0.03	0.01	6.54	1.99	1.72	1
0.05	0.02	0.01	6.54	1.99	1.72	1
0.03	0.01	0.00	6.54	1.99	1.71	1
0.00	0.00	0.00	6.54	1.98	1.71	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
2.23	0.00	0.00	0.00	0.00	0.00	1
2.21	1.91	1.91	0.00	0.00	0.00	1
2.18	3.82	3.82	0.00	0.00	0.00	1
2.16	5.73	5.73	0.00	0.00	0.00	1
2.13	7.64	7.64	0.00	0.00	0.00	1
2.10	9.55	9.55	0.00	0.00	0.00	1
2.08	11.47	11.47	0.00	0.00	0.00	1
2.05	13.38	13.38	0.00	0.00	0.00	1
2.02	15.29	15.29	0.00	0.00	0.00	1
2.00	17.20	17.20	0.00	0.00	0.00	1
1.97	19.11	19.11	0.00	0.00	0.00	1
1.95	21.02	21.02	0.00	0.00	0.00	1
1.92	22.93	22.93	0.00	0.00	0.00	1
1.89	24.84	24.84	0.00	0.00	0.00	1
1.87	26.75	26.75	0.00	0.00	0.00	1
1.84	28.66	28.66	0.00	0.00	0.00	1
1.81	30.58	30.58	0.00	0.00	0.00	1
1.79	32.49	32.49	0.00	0.00	0.00	1
1.76	34.40	34.40	0.00	0.00	0.00	1
1.74	36.31	36.31	0.00	0.00	0.00	1
1.71	38.22	38.22	0.00	0.00	0.00	1
1.71	40.13	40.13	0.00	0.00	0.00	1
1.69	42.39	42.39	0.00	0.00	0.00	1

1.67	44.64	44.64	0.00	0.00	0.00	1
1.65	46.55	46.55	0.00	0.00	0.00	1
1.64	48.46	48.46	0.00	0.00	0.00	1
1.62	50.37	50.37	0.00	0.00	0.00	1
1.60	52.29	52.29	0.00	0.00	0.00	1
1.58	54.20	54.20	0.00	0.00	0.00	1
1.57	56.11	56.11	0.00	0.00	0.00	1
1.55	58.02	58.02	0.00	0.00	0.00	1
1.53	59.93	59.93	0.00	0.00	0.00	1
1.51	61.84	61.84	0.00	0.00	0.00	1
1.50	63.75	63.75	0.00	0.00	0.00	1
1.48	65.66	65.66	0.00	0.00	0.00	1
1.46	71.13	48.25	54.62	27.43	32.54	1
1.44	73.19	53.66	56.80	28.85	27.78	1
1.42	75.25	53.77	58.96	30.27	28.31	1
1.40	77.32	53.87	61.10	31.69	28.84	1
1.39	79.38	53.98	63.23	33.11	29.38	1
1.37	81.44	54.09	65.33	34.53	29.91	1
1.35	83.51	54.19	67.42	35.95	30.45	1
1.33	85.57	54.30	69.49	37.38	30.98	1
1.31	87.63	54.40	71.54	38.80	31.52	1
1.29	89.70	54.51	73.58	40.22	32.06	1
1.27	91.76	54.61	75.60	41.65	32.60	1
1.25	93.82	54.71	77.61	43.07	33.14	1
1.23	95.89	54.81	79.61	44.49	33.68	1
1.22	97.95	54.91	81.59	45.91	34.22	1
1.20	100.01	55.01	83.56	47.33	34.76	1
1.18	102.06	55.11	85.52	48.74	35.30	1
1.16	104.12	55.21	87.46	50.16	35.84	1
1.16	104.12	16.66	87.46	50.16	35.84	1
1.13	107.20	55.36	90.38	52.28	36.66	1
1.10	110.28	55.50	93.28	54.40	37.47	1
1.07	113.36	55.65	96.15	56.51	38.29	1
1.05	116.43	55.79	99.00	58.62	39.11	1
1.02	119.49	55.93	101.84	60.72	39.93	1
0.99	122.55	56.07	104.65	62.82	40.75	1
0.96	125.61	56.21	107.45	64.91	41.58	1
0.93	128.66	56.34	110.24	67.00	42.40	1
0.91	131.70	56.48	113.01	69.08	43.23	1
0.88	134.74	56.61	115.76	71.16	44.06	1
0.85	137.77	56.74	118.50	73.23	44.89	1
0.82	140.79	56.87	121.23	75.29	45.72	1
0.79	143.81	57.00	123.94	77.35	46.55	1
0.77	146.82	57.13	126.51	79.40	47.38	1
0.74	149.83	57.26	128.97	81.44	48.22	1
0.71	152.83	57.38	131.41	83.48	49.06	1
0.68	155.82	57.51	133.84	85.51	49.89	1
0.65	158.80	57.63	136.25	87.53	50.73	1

0.63	161.78	57.75	138.66	89.55	51.57	1
0.60	164.75	57.87	141.05	91.56	52.42	1
0.60	164.75	23.70	141.05	91.56	52.42	1
0.57	167.72	57.99	143.44	93.56	53.26	1
0.54	170.67	58.11	145.82	95.55	54.10	1
0.51	173.62	58.22	148.18	97.54	54.95	1
0.49	176.57	58.34	150.53	99.52	55.79	1
0.46	179.50	58.45	152.88	101.50	56.64	1
0.43	182.43	58.57	155.21	103.46	57.49	1
0.40	185.35	58.68	157.53	105.42	58.34	1
0.37	188.26	58.79	159.83	107.37	59.19	1
0.35	191.17	58.90	162.13	109.32	60.04	1
0.32	194.07	59.01	164.41	111.26	60.89	1
0.29	196.96	59.12	166.58	113.19	61.75	1
0.26	199.84	59.22	168.62	115.11	62.60	1
0.23	202.72	59.33	170.67	117.02	63.46	1
0.21	97.27	59.43	37.83	78.28	-40.45	1
0.18	99.45	59.53	39.92	80.02	-40.11	1
0.15	101.64	59.64	42.00	81.76	-39.76	1
0.12	103.82	59.74	44.08	83.50	-39.41	1
0.10	106.01	59.84	46.17	85.23	-39.06	1
0.07	108.19	59.94	48.25	86.97	-38.71	1
0.04	110.37	60.03	50.34	88.70	-38.36	1
0.04	111.40	60.03	51.37	88.70	-37.34	1
0.03	112.84	60.32	52.52	89.32	-36.80	1
0.02	114.28	60.60	53.68	89.94	-36.26	1
0.01	115.72	60.88	54.83	90.56	-35.72	1
0.00	117.16	61.16	55.99	91.18	0.00	1

Time = 1125. Degree of Consolidation = 87.%

Total Settlement = 3.466

Settlement at End of Primary Consolidation = 3.543

Settlement caused by Primary Consolidation at time 1125. = 3.097

Settlement caused by Secondary Compression at time 1125. = 0.000

Settlement Due to Desiccation = 0.369

Surface Elevation = 1.73

**********Current Conditions in Dredged Fill**********

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.70	2.23	0.76	6.54	1.83	1.83	1
5.63	2.21	0.75	6.54	1.83	1.83	1
5.56	2.18	0.74	6.54	1.83	1.83	1
5.49	2.16	0.73	6.54	1.83	1.83	1
5.42	2.13	0.72	6.54	1.83	1.83	1
5.35	2.10	0.71	6.54	1.83	1.83	1
5.28	2.08	0.70	6.54	1.83	1.83	1
5.21	2.05	0.69	6.54	1.83	1.83	1
5.14	2.02	0.68	6.54	1.83	1.83	1
5.07	2.00	0.67	6.54	1.83	1.83	1
5.00	1.97	0.66	6.54	1.83	1.83	1
4.93	1.95	0.65	6.54	1.83	1.83	1
4.86	1.92	0.64	6.54	1.83	1.83	1
4.79	1.89	0.64	6.54	1.83	1.83	1
4.72	1.87	0.63	6.54	1.83	1.83	1
4.65	1.84	0.62	6.54	1.83	1.83	1
4.58	1.81	0.61	6.54	1.83	1.83	1
4.51	1.79	0.60	6.54	1.83	1.83	1
4.44	1.76	0.59	6.54	1.83	1.83	1
4.37	1.74	0.58	6.54	1.83	1.83	1
4.30	1.71	0.57	6.54	2.21	1.83	1
4.30	1.71	0.57	6.54	2.21	1.83	1
4.25	1.69	0.56	6.54	1.83	1.83	1
4.21	1.67	0.56	6.54	1.83	1.83	1
4.16	1.65	0.55	6.54	1.83	1.83	1
4.11	1.64	0.55	6.54	1.83	1.83	1
4.07	1.62	0.54	6.54	1.83	1.83	1
4.02	1.60	0.53	6.54	1.83	1.83	1
3.97	1.58	0.53	6.54	1.83	1.83	1
3.93	1.57	0.52	6.54	1.83	1.83	1
3.88	1.55	0.51	6.54	1.83	1.83	1
3.83	1.53	0.51	6.54	1.83	1.83	1
3.79	1.51	0.50	6.54	1.83	1.83	1
3.74	1.50	0.50	6.54	1.83	1.83	1
3.69	1.48	0.49	6.54	1.83	1.83	1
3.65	1.46	0.48	6.54	2.05	2.05	1
3.60	1.44	0.48	6.54	2.05	2.05	1
3.55	1.42	0.47	6.54	2.05	2.04	1
3.51	1.40	0.47	6.54	2.05	2.04	1
3.46	1.39	0.46	6.54	2.05	2.03	1
3.41	1.37	0.45	6.54	2.05	2.03	1
3.37	1.35	0.45	6.54	2.05	2.02	1
3.32	1.33	0.44	6.54	2.05	2.01	1

3.27	1.31	0.43	6.54	2.05	2.01	1
3.23	1.29	0.43	6.54	2.05	2.00	1
3.18	1.27	0.42	6.54	2.04	2.00	1
3.13	1.25	0.42	6.54	2.04	1.99	1
3.09	1.23	0.41	6.54	2.04	1.98	1
3.04	1.22	0.40	6.54	2.04	1.98	1
2.99	1.20	0.40	6.54	2.04	1.97	1
2.95	1.18	0.39	6.54	2.04	1.97	1
2.90	1.16	0.38	6.54	2.04	1.96	1
2.90	1.16	0.38	6.54	2.04	1.95	1
2.83	1.13	0.38	6.54	2.04	1.95	1
2.76	1.10	0.37	6.54	2.04	1.94	1
2.69	1.07	0.36	6.54	2.04	1.94	1
2.62	1.05	0.35	6.54	2.03	1.93	1
2.55	1.02	0.34	6.54	2.03	1.92	1
2.48	0.99	0.33	6.54	2.03	1.92	1
2.41	0.96	0.32	6.54	2.03	1.91	1
2.34	0.93	0.31	6.54	2.03	1.91	1
2.27	0.91	0.30	6.54	2.03	1.90	1
2.20	0.88	0.29	6.54	2.03	1.89	1
2.13	0.85	0.28	6.54	2.03	1.89	1
2.06	0.82	0.27	6.54	2.02	1.88	1
1.99	0.79	0.26	6.54	2.02	1.88	1
1.92	0.77	0.25	6.54	2.02	1.88	1
1.85	0.74	0.25	6.54	2.02	1.87	1
1.78	0.71	0.24	6.54	2.02	1.86	1
1.71	0.68	0.23	6.54	2.02	1.85	1
1.64	0.65	0.22	6.54	2.02	1.84	1
1.57	0.63	0.21	6.54	2.02	1.83	1
1.50	0.60	0.20	6.54	2.01	1.82	1
1.50	0.60	0.20	6.54	2.01	1.81	1
1.43	0.57	0.19	6.54	2.01	1.81	1
1.36	0.54	0.18	6.54	2.01	1.80	1
1.29	0.51	0.17	6.54	2.01	1.80	1
1.22	0.49	0.16	6.54	2.01	1.79	1
1.15	0.46	0.15	6.54	2.01	1.79	1
1.08	0.43	0.14	6.54	2.01	1.79	1
1.01	0.40	0.13	6.54	2.01	1.78	1
0.94	0.37	0.12	6.54	2.01	1.78	1
0.87	0.35	0.12	6.54	2.01	1.77	1
0.80	0.32	0.11	6.54	2.00	1.77	1
0.73	0.29	0.10	6.54	2.00	1.76	1
0.66	0.26	0.09	6.54	2.00	1.76	1
0.59	0.23	0.08	6.54	2.00	1.76	1
0.52	0.21	0.07	6.54	2.00	1.76	1
0.45	0.18	0.06	6.54	2.00	1.75	1
0.38	0.15	0.05	6.54	2.00	1.75	1
0.31	0.12	0.04	6.54	2.00	1.74	1

0.24	0.10	0.03	6.54	2.00	1.74	1
0.17	0.07	0.02	6.54	2.00	1.73	1
0.10	0.04	0.01	6.54	1.99	1.73	1
0.10	0.04	0.01	6.54	1.99	1.73	1
0.08	0.03	0.01	6.54	1.99	1.72	1
0.05	0.02	0.01	6.54	1.99	1.72	1
0.03	0.01	0.00	6.54	1.99	1.71	1
0.00	0.00	0.00	6.54	1.98	1.71	1

	***** Stresses *****		***** Pore Pressures *****			
XI	Total	Effective	Total	Static	Excess	Material
2.23	0.00	0.00	0.00	0.00	0.00	1
2.21	1.91	1.91	0.00	0.00	0.00	1
2.18	3.82	3.82	0.00	0.00	0.00	1
2.16	5.73	5.73	0.00	0.00	0.00	1
2.13	7.64	7.64	0.00	0.00	0.00	1
2.10	9.55	9.55	0.00	0.00	0.00	1
2.08	11.47	11.47	0.00	0.00	0.00	1
2.05	13.38	13.38	0.00	0.00	0.00	1
2.02	15.29	15.29	0.00	0.00	0.00	1
2.00	17.20	17.20	0.00	0.00	0.00	1
1.97	19.11	19.11	0.00	0.00	0.00	1
1.95	21.02	21.02	0.00	0.00	0.00	1
1.92	22.93	22.93	0.00	0.00	0.00	1
1.89	24.84	24.84	0.00	0.00	0.00	1
1.87	26.75	26.75	0.00	0.00	0.00	1
1.84	28.66	28.66	0.00	0.00	0.00	1
1.81	30.58	30.58	0.00	0.00	0.00	1
1.79	32.49	32.49	0.00	0.00	0.00	1
1.76	34.40	34.40	0.00	0.00	0.00	1
1.74	36.31	36.31	0.00	0.00	0.00	1
1.71	38.22	38.22	0.00	0.00	0.00	1
1.71	40.13	40.13	0.00	0.00	0.00	1
1.69	42.39	42.39	0.00	0.00	0.00	1
1.67	44.64	44.64	0.00	0.00	0.00	1
1.65	46.55	46.55	0.00	0.00	0.00	1
1.64	48.46	48.46	0.00	0.00	0.00	1
1.62	50.37	50.37	0.00	0.00	0.00	1
1.60	52.29	52.29	0.00	0.00	0.00	1
1.58	54.20	54.20	0.00	0.00	0.00	1
1.57	56.11	56.11	0.00	0.00	0.00	1
1.55	58.02	58.02	0.00	0.00	0.00	1
1.53	59.93	59.93	0.00	0.00	0.00	1
1.51	61.84	61.84	0.00	0.00	0.00	1
1.50	63.75	63.75	0.00	0.00	0.00	1
1.48	65.66	65.66	0.00	0.00	0.00	1

1.46	71.13	48.25	54.62	27.43	32.54	1
1.44	73.19	53.66	56.80	28.85	27.78	1
1.42	75.25	53.77	58.96	30.27	28.31	1
1.40	77.32	53.87	61.10	31.69	28.84	1
1.39	79.38	53.98	63.23	33.11	29.38	1
1.37	81.44	54.09	65.33	34.53	29.91	1
1.35	83.51	54.19	67.42	35.95	30.45	1
1.33	85.57	54.30	69.49	37.38	30.98	1
1.31	87.63	54.40	71.54	38.80	31.52	1
1.29	89.70	54.51	73.58	40.22	32.06	1
1.27	91.76	54.61	75.60	41.65	32.60	1
1.25	93.82	54.71	77.61	43.07	33.14	1
1.23	95.89	54.81	79.61	44.49	33.68	1
1.22	97.95	54.91	81.59	45.91	34.22	1
1.20	100.01	55.01	83.56	47.33	34.76	1
1.18	102.06	55.11	85.52	48.74	35.30	1
1.16	104.12	55.21	87.46	50.16	35.84	1
1.16	104.12	16.66	87.46	50.16	35.84	1
1.13	107.20	55.36	90.38	52.28	36.66	1
1.10	110.28	55.50	93.28	54.40	37.47	1
1.07	113.36	55.65	96.15	56.51	38.29	1
1.05	116.43	55.79	99.00	58.62	39.11	1
1.02	119.49	55.93	101.84	60.72	39.93	1
0.99	122.55	56.07	104.65	62.82	40.75	1
0.96	125.61	56.21	107.45	64.91	41.58	1
0.93	128.66	56.34	110.24	67.00	42.40	1
0.91	131.70	56.48	113.01	69.08	43.23	1
0.88	134.74	56.61	115.76	71.16	44.06	1
0.85	137.77	56.74	118.50	73.23	44.89	1
0.82	140.79	56.87	121.23	75.29	45.72	1
0.79	143.81	57.00	123.94	77.35	46.55	1
0.77	146.82	57.13	126.51	79.40	47.38	1
0.74	149.83	57.26	128.97	81.44	48.22	1
0.71	152.83	57.38	131.41	83.48	49.06	1
0.68	155.82	57.51	133.84	85.51	49.89	1
0.65	158.80	57.63	136.25	87.53	50.73	1
0.63	161.78	57.75	138.66	89.55	51.57	1
0.60	164.75	57.87	141.05	91.56	52.42	1
0.60	164.75	23.70	141.05	91.56	52.42	1
0.57	167.72	57.99	143.44	93.56	53.26	1
0.54	170.67	58.11	145.82	95.55	54.10	1
0.51	173.62	58.22	148.18	97.54	54.95	1
0.49	176.57	58.34	150.53	99.52	55.79	1
0.46	179.50	58.45	152.88	101.50	56.64	1
0.43	182.43	58.57	155.21	103.46	57.49	1
0.40	185.35	58.68	157.53	105.42	58.34	1
0.37	188.26	58.79	159.83	107.37	59.19	1
0.35	191.17	58.90	162.13	109.32	60.04	1

0.32	194.07	59.01	164.41	111.26	60.89	1
0.29	196.96	59.12	166.58	113.19	61.75	1
0.26	199.84	59.22	168.62	115.11	62.60	1
0.23	96.11	59.33	36.78	76.55	-39.77	1
0.21	98.29	59.43	38.86	78.28	-39.42	1
0.18	100.48	59.53	40.94	80.02	-39.08	1
0.15	102.66	59.64	43.03	81.76	-38.73	1
0.12	104.85	59.74	45.11	83.50	-38.38	1
0.10	107.03	59.84	47.20	85.23	-38.04	1
0.07	109.22	59.94	49.28	86.97	-37.69	1
0.04	111.40	60.03	51.37	88.70	-37.34	1
0.04	112.43	60.03	52.39	88.70	-36.31	1
0.03	113.87	60.32	53.55	89.32	-35.77	1
0.02	115.31	60.60	54.71	89.94	-35.24	1
0.01	116.74	60.88	55.86	90.56	-34.70	1
0.00	118.18	61.16	57.02	91.18	0.00	1

Time = 1855. Degree of Consolidation = 87.%

Total Settlement = 3.466

Settlement at End of Primary Consolidation = 3.543

Settlement caused by Primary Consolidation at time 1855. = 3.097

Settlement caused by Secondary Compression at time 1855. = 0.000

Settlement Due to Desiccation = 0.369

Surface Elevation = 1.73

**********Current Conditions in Dredged Fill**********

	***** Coordinates *****		***** Void Ratios *****			
A	XI	Z	Einitial	E	Eeop	Material
5.70	2.23	0.76	6.54	1.83	1.83	1
5.63	2.21	0.75	6.54	1.83	1.83	1
5.56	2.18	0.74	6.54	1.83	1.83	1
5.49	2.16	0.73	6.54	1.83	1.83	1
5.42	2.13	0.72	6.54	1.83	1.83	1
5.35	2.10	0.71	6.54	1.83	1.83	1
5.28	2.08	0.70	6.54	1.83	1.83	1

5.21	2.05	0.69	6.54	1.83	1.83	1
5.14	2.02	0.68	6.54	1.83	1.83	1
5.07	2.00	0.67	6.54	1.83	1.83	1
5.00	1.97	0.66	6.54	1.83	1.83	1
4.93	1.95	0.65	6.54	1.83	1.83	1
4.86	1.92	0.64	6.54	1.83	1.83	1
4.79	1.89	0.64	6.54	1.83	1.83	1
4.72	1.87	0.63	6.54	1.83	1.83	1
4.65	1.84	0.62	6.54	1.83	1.83	1
4.58	1.81	0.61	6.54	1.83	1.83	1
4.51	1.79	0.60	6.54	1.83	1.83	1
4.44	1.76	0.59	6.54	1.83	1.83	1
4.37	1.74	0.58	6.54	1.83	1.83	1
4.30	1.71	0.57	6.54	2.21	1.83	1
4.30	1.71	0.57	6.54	2.21	1.83	1
4.25	1.69	0.56	6.54	1.83	1.83	1
4.21	1.67	0.56	6.54	1.83	1.83	1
4.16	1.65	0.55	6.54	1.83	1.83	1
4.11	1.64	0.55	6.54	1.83	1.83	1
4.07	1.62	0.54	6.54	1.83	1.83	1
4.02	1.60	0.53	6.54	1.83	1.83	1
3.97	1.58	0.53	6.54	1.83	1.83	1
3.93	1.57	0.52	6.54	1.83	1.83	1
3.88	1.55	0.51	6.54	1.83	1.83	1
3.83	1.53	0.51	6.54	1.83	1.83	1
3.79	1.51	0.50	6.54	1.83	1.83	1
3.74	1.50	0.50	6.54	1.83	1.83	1
3.69	1.48	0.49	6.54	1.83	1.83	1
3.65	1.46	0.48	6.54	2.05	2.05	1
3.60	1.44	0.48	6.54	2.05	2.05	1
3.55	1.42	0.47	6.54	2.05	2.04	1
3.51	1.40	0.47	6.54	2.05	2.04	1
3.46	1.39	0.46	6.54	2.05	2.03	1
3.41	1.37	0.45	6.54	2.05	2.03	1
3.37	1.35	0.45	6.54	2.05	2.02	1
3.32	1.33	0.44	6.54	2.05	2.01	1
3.27	1.31	0.43	6.54	2.05	2.01	1
3.23	1.29	0.43	6.54	2.05	2.00	1
3.18	1.27	0.42	6.54	2.04	2.00	1
3.13	1.25	0.42	6.54	2.04	1.99	1
3.09	1.23	0.41	6.54	2.04	1.98	1
3.04	1.22	0.40	6.54	2.04	1.98	1
2.99	1.20	0.40	6.54	2.04	1.97	1
2.95	1.18	0.39	6.54	2.04	1.97	1
2.90	1.16	0.38	6.54	2.04	1.96	1
2.90	1.16	0.38	6.54	2.04	1.95	1
2.83	1.13	0.38	6.54	2.04	1.95	1
2.76	1.10	0.37	6.54	2.04	1.94	1

2.69	1.07	0.36	6.54	2.04	1.94	1
2.62	1.05	0.35	6.54	2.03	1.93	1
2.55	1.02	0.34	6.54	2.03	1.92	1
2.48	0.99	0.33	6.54	2.03	1.92	1
2.41	0.96	0.32	6.54	2.03	1.91	1
2.34	0.93	0.31	6.54	2.03	1.91	1
2.27	0.91	0.30	6.54	2.03	1.90	1
2.20	0.88	0.29	6.54	2.03	1.89	1
2.13	0.85	0.28	6.54	2.03	1.89	1
2.06	0.82	0.27	6.54	2.02	1.88	1
1.99	0.79	0.26	6.54	2.02	1.88	1
1.92	0.77	0.25	6.54	2.02	1.88	1
1.85	0.74	0.25	6.54	2.02	1.87	1
1.78	0.71	0.24	6.54	2.02	1.86	1
1.71	0.68	0.23	6.54	2.02	1.85	1
1.64	0.65	0.22	6.54	2.02	1.84	1
1.57	0.63	0.21	6.54	2.02	1.83	1
1.50	0.60	0.20	6.54	2.01	1.82	1
1.50	0.60	0.20	6.54	2.01	1.81	1
1.43	0.57	0.19	6.54	2.01	1.81	1
1.36	0.54	0.18	6.54	2.01	1.80	1
1.29	0.51	0.17	6.54	2.01	1.80	1
1.22	0.49	0.16	6.54	2.01	1.79	1
1.15	0.46	0.15	6.54	2.01	1.79	1
1.08	0.43	0.14	6.54	2.01	1.79	1
1.01	0.40	0.13	6.54	2.01	1.78	1
0.94	0.37	0.12	6.54	2.01	1.78	1
0.87	0.35	0.12	6.54	2.01	1.77	1
0.80	0.32	0.11	6.54	2.00	1.77	1
0.73	0.29	0.10	6.54	2.00	1.76	1
0.66	0.26	0.09	6.54	2.00	1.76	1
0.59	0.23	0.08	6.54	2.00	1.76	1
0.52	0.21	0.07	6.54	2.00	1.76	1
0.45	0.18	0.06	6.54	2.00	1.75	1
0.38	0.15	0.05	6.54	2.00	1.75	1
0.31	0.12	0.04	6.54	2.00	1.74	1
0.24	0.10	0.03	6.54	2.00	1.74	1
0.17	0.07	0.02	6.54	2.00	1.73	1
0.10	0.04	0.01	6.54	1.99	1.73	1
0.10	0.04	0.01	6.54	1.99	1.73	1
0.08	0.03	0.01	6.54	1.99	1.72	1
0.05	0.02	0.01	6.54	1.99	1.72	1
0.03	0.01	0.00	6.54	1.99	1.71	1
0.00	0.00	0.00	6.54	1.98	1.71	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
2.23	0.00	0.00	0.00	0.00	0.00	1
2.21	1.91	1.91	0.00	0.00	0.00	1
2.18	3.82	3.82	0.00	0.00	0.00	1
2.16	5.73	5.73	0.00	0.00	0.00	1
2.13	7.64	7.64	0.00	0.00	0.00	1
2.10	9.55	9.55	0.00	0.00	0.00	1
2.08	11.47	11.47	0.00	0.00	0.00	1
2.05	13.38	13.38	0.00	0.00	0.00	1
2.02	15.29	15.29	0.00	0.00	0.00	1
2.00	17.20	17.20	0.00	0.00	0.00	1
1.97	19.11	19.11	0.00	0.00	0.00	1
1.95	21.02	21.02	0.00	0.00	0.00	1
1.92	22.93	22.93	0.00	0.00	0.00	1
1.89	24.84	24.84	0.00	0.00	0.00	1
1.87	26.75	26.75	0.00	0.00	0.00	1
1.84	28.66	28.66	0.00	0.00	0.00	1
1.81	30.58	30.58	0.00	0.00	0.00	1
1.79	32.49	32.49	0.00	0.00	0.00	1
1.76	34.40	34.40	0.00	0.00	0.00	1
1.74	36.31	36.31	0.00	0.00	0.00	1
1.71	38.22	38.22	0.00	0.00	0.00	1
1.71	40.13	40.13	0.00	0.00	0.00	1
1.69	42.39	42.39	0.00	0.00	0.00	1
1.67	44.64	44.64	0.00	0.00	0.00	1
1.65	46.55	46.55	0.00	0.00	0.00	1
1.64	48.46	48.46	0.00	0.00	0.00	1
1.62	50.37	50.37	0.00	0.00	0.00	1
1.60	52.29	52.29	0.00	0.00	0.00	1
1.58	54.20	54.20	0.00	0.00	0.00	1
1.57	56.11	56.11	0.00	0.00	0.00	1
1.55	58.02	58.02	0.00	0.00	0.00	1
1.53	59.93	59.93	0.00	0.00	0.00	1
1.51	61.84	61.84	0.00	0.00	0.00	1
1.50	63.75	63.75	0.00	0.00	0.00	1
1.48	65.66	65.66	0.00	0.00	0.00	1
1.46	71.13	48.25	54.62	27.43	32.54	1
1.44	73.19	53.66	56.80	28.85	27.78	1
1.42	75.25	53.77	58.96	30.27	28.31	1
1.40	77.32	53.87	61.10	31.69	28.84	1
1.39	79.38	53.98	63.23	33.11	29.38	1
1.37	81.44	54.09	65.33	34.53	29.91	1
1.35	83.51	54.19	67.42	35.95	30.45	1
1.33	85.57	54.30	69.49	37.38	30.98	1
1.31	87.63	54.40	71.54	38.80	31.52	1
1.29	89.70	54.51	73.58	40.22	32.06	1
1.27	91.76	54.61	75.60	41.65	32.60	1
1.25	93.82	54.71	77.61	43.07	33.14	1

1.23	95.89	54.81	79.61	44.49	33.68	1
1.22	97.95	54.91	81.59	45.91	34.22	1
1.20	100.01	55.01	83.56	47.33	34.76	1
1.18	102.06	55.11	85.52	48.74	35.30	1
1.16	104.12	55.21	87.46	50.16	35.84	1
1.16	104.12	16.66	87.46	50.16	35.84	1
1.13	107.20	55.36	90.38	52.28	36.66	1
1.10	110.28	55.50	93.28	54.40	37.47	1
1.07	113.36	55.65	96.15	56.51	38.29	1
1.05	116.43	55.79	99.00	58.62	39.11	1
1.02	119.49	55.93	101.84	60.72	39.93	1
0.99	122.55	56.07	104.65	62.82	40.75	1
0.96	125.61	56.21	107.45	64.91	41.58	1
0.93	128.66	56.34	110.24	67.00	42.40	1
0.91	131.70	56.48	113.01	69.08	43.23	1
0.88	134.74	56.61	115.76	71.16	44.06	1
0.85	137.77	56.74	118.50	73.23	44.89	1
0.82	140.79	56.87	121.23	75.29	45.72	1
0.79	143.81	57.00	123.94	77.35	46.55	1
0.77	146.82	57.13	126.51	79.40	47.38	1
0.74	149.83	57.26	128.97	81.44	48.22	1
0.71	152.83	57.38	131.41	83.48	49.06	1
0.68	155.82	57.51	133.84	85.51	49.89	1
0.65	158.80	57.63	136.25	87.53	50.73	1
0.63	161.78	57.75	138.66	89.55	51.57	1
0.60	164.75	57.87	141.05	91.56	52.42	1
0.60	164.75	23.70	141.05	91.56	52.42	1
0.57	167.72	57.99	143.44	93.56	53.26	1
0.54	170.67	58.11	145.82	95.55	54.10	1
0.51	173.62	58.22	148.18	97.54	54.95	1
0.49	176.57	58.34	150.53	99.52	55.79	1
0.46	179.50	58.45	152.88	101.50	56.64	1
0.43	182.43	58.57	155.21	103.46	57.49	1
0.40	185.35	58.68	157.53	105.42	58.34	1
0.37	188.26	58.79	159.83	107.37	59.19	1
0.35	191.17	58.90	162.13	109.32	60.04	1
0.32	194.07	59.01	164.41	111.26	60.89	1
0.29	196.96	59.12	166.58	113.19	61.75	1
0.26	94.95	59.22	35.72	74.81	-39.08	1
0.23	97.13	59.33	37.81	76.55	-38.74	1
0.21	99.32	59.43	39.89	78.28	-38.40	1
0.18	101.51	59.53	41.97	80.02	-38.05	1
0.15	103.69	59.64	44.06	81.76	-37.70	1
0.12	105.88	59.74	46.14	83.50	-37.36	1
0.10	108.06	59.84	48.22	85.23	-37.01	1
0.07	110.24	59.94	50.31	86.97	-36.66	1
0.04	112.43	60.03	52.39	88.70	-36.31	1
0.04	113.45	60.03	53.42	88.70	-35.28	1

0.03	114.89	60.32	54.58	89.32	-34.74	1
0.02	116.33	60.60	55.73	89.94	-34.21	1
0.01	117.77	60.88	56.89	90.56	-33.67	1
0.00	119.21	61.16	58.05	91.18	0.00	1

Time = 3680. Degree of Consolidation = 87.%

Total Settlement = 3.466

Settlement at End of Primary Consolidation = 3.543

Settlement caused by Primary Consolidation at time 3680. = 3.097

Settlement caused by Secondary Compression at time 3680. = 0.000

Settlement Due to Desiccation = 0.369

Surface Elevation = 1.73

**********Current Conditions in Dredged Fill**********

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.70	2.23	0.76	6.54	1.83	1.83	1
5.63	2.21	0.75	6.54	1.83	1.83	1
5.56	2.18	0.74	6.54	1.83	1.83	1
5.49	2.16	0.73	6.54	1.83	1.83	1
5.42	2.13	0.72	6.54	1.83	1.83	1
5.35	2.10	0.71	6.54	1.83	1.83	1
5.28	2.08	0.70	6.54	1.83	1.83	1
5.21	2.05	0.69	6.54	1.83	1.83	1
5.14	2.02	0.68	6.54	1.83	1.83	1
5.07	2.00	0.67	6.54	1.83	1.83	1
5.00	1.97	0.66	6.54	1.83	1.83	1
4.93	1.95	0.65	6.54	1.83	1.83	1
4.86	1.92	0.64	6.54	1.83	1.83	1
4.79	1.89	0.64	6.54	1.83	1.83	1
4.72	1.87	0.63	6.54	1.83	1.83	1
4.65	1.84	0.62	6.54	1.83	1.83	1
4.58	1.81	0.61	6.54	1.83	1.83	1
4.51	1.79	0.60	6.54	1.83	1.83	1
4.44	1.76	0.59	6.54	1.83	1.83	1

4.37	1.74	0.58	6.54	1.83	1.83	1
4.30	1.71	0.57	6.54	2.21	1.83	1
4.30	1.71	0.57	6.54	2.21	1.83	1
4.25	1.69	0.56	6.54	1.83	1.83	1
4.21	1.67	0.56	6.54	1.83	1.83	1
4.16	1.65	0.55	6.54	1.83	1.83	1
4.11	1.64	0.55	6.54	1.83	1.83	1
4.07	1.62	0.54	6.54	1.83	1.83	1
4.02	1.60	0.53	6.54	1.83	1.83	1
3.97	1.58	0.53	6.54	1.83	1.83	1
3.93	1.57	0.52	6.54	1.83	1.83	1
3.88	1.55	0.51	6.54	1.83	1.83	1
3.83	1.53	0.51	6.54	1.83	1.83	1
3.79	1.51	0.50	6.54	1.83	1.83	1
3.74	1.50	0.50	6.54	1.83	1.83	1
3.69	1.48	0.49	6.54	1.83	1.83	1
3.65	1.46	0.48	6.54	2.05	2.05	1
3.60	1.44	0.48	6.54	2.05	2.05	1
3.55	1.42	0.47	6.54	2.05	2.04	1
3.51	1.40	0.47	6.54	2.05	2.04	1
3.46	1.39	0.46	6.54	2.05	2.03	1
3.41	1.37	0.45	6.54	2.05	2.03	1
3.37	1.35	0.45	6.54	2.05	2.02	1
3.32	1.33	0.44	6.54	2.05	2.01	1
3.27	1.31	0.43	6.54	2.05	2.01	1
3.23	1.29	0.43	6.54	2.05	2.00	1
3.18	1.27	0.42	6.54	2.04	2.00	1
3.13	1.25	0.42	6.54	2.04	1.99	1
3.09	1.23	0.41	6.54	2.04	1.98	1
3.04	1.22	0.40	6.54	2.04	1.98	1
2.99	1.20	0.40	6.54	2.04	1.97	1
2.95	1.18	0.39	6.54	2.04	1.97	1
2.90	1.16	0.38	6.54	2.04	1.96	1
2.90	1.16	0.38	6.54	2.04	1.95	1
2.83	1.13	0.38	6.54	2.04	1.95	1
2.76	1.10	0.37	6.54	2.04	1.94	1
2.69	1.07	0.36	6.54	2.04	1.94	1
2.62	1.05	0.35	6.54	2.03	1.93	1
2.55	1.02	0.34	6.54	2.03	1.92	1
2.48	0.99	0.33	6.54	2.03	1.92	1
2.41	0.96	0.32	6.54	2.03	1.91	1
2.34	0.93	0.31	6.54	2.03	1.91	1
2.27	0.91	0.30	6.54	2.03	1.90	1
2.20	0.88	0.29	6.54	2.03	1.89	1
2.13	0.85	0.28	6.54	2.03	1.89	1
2.06	0.82	0.27	6.54	2.02	1.88	1
1.99	0.79	0.26	6.54	2.02	1.88	1
1.92	0.77	0.25	6.54	2.02	1.88	1

1.85	0.74	0.25	6.54	2.02	1.87	1
1.78	0.71	0.24	6.54	2.02	1.86	1
1.71	0.68	0.23	6.54	2.02	1.85	1
1.64	0.65	0.22	6.54	2.02	1.84	1
1.57	0.63	0.21	6.54	2.02	1.83	1
1.50	0.60	0.20	6.54	2.01	1.82	1
1.50	0.60	0.20	6.54	2.01	1.81	1
1.43	0.57	0.19	6.54	2.01	1.81	1
1.36	0.54	0.18	6.54	2.01	1.80	1
1.29	0.51	0.17	6.54	2.01	1.80	1
1.22	0.49	0.16	6.54	2.01	1.79	1
1.15	0.46	0.15	6.54	2.01	1.79	1
1.08	0.43	0.14	6.54	2.01	1.79	1
1.01	0.40	0.13	6.54	2.01	1.78	1
0.94	0.37	0.12	6.54	2.01	1.78	1
0.87	0.35	0.12	6.54	2.01	1.77	1
0.80	0.32	0.11	6.54	2.00	1.77	1
0.73	0.29	0.10	6.54	2.00	1.76	1
0.66	0.26	0.09	6.54	2.00	1.76	1
0.59	0.23	0.08	6.54	2.00	1.76	1
0.52	0.21	0.07	6.54	2.00	1.76	1
0.45	0.18	0.06	6.54	2.00	1.75	1
0.38	0.15	0.05	6.54	2.00	1.75	1
0.31	0.12	0.04	6.54	2.00	1.74	1
0.24	0.10	0.03	6.54	2.00	1.74	1
0.17	0.07	0.02	6.54	2.00	1.73	1
0.10	0.04	0.01	6.54	1.99	1.73	1
0.10	0.04	0.01	6.54	1.99	1.73	1
0.08	0.03	0.01	6.54	1.99	1.72	1
0.05	0.02	0.01	6.54	1.99	1.72	1
0.03	0.01	0.00	6.54	1.99	1.71	1
0.00	0.00	0.00	6.54	1.98	1.71	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
2.23	0.00	0.00	0.00	0.00	0.00	1
2.21	1.91	1.91	0.00	0.00	0.00	1
2.18	3.82	3.82	0.00	0.00	0.00	1
2.16	5.73	5.73	0.00	0.00	0.00	1
2.13	7.64	7.64	0.00	0.00	0.00	1
2.10	9.55	9.55	0.00	0.00	0.00	1
2.08	11.47	11.47	0.00	0.00	0.00	1
2.05	13.38	13.38	0.00	0.00	0.00	1
2.02	15.29	15.29	0.00	0.00	0.00	1
2.00	17.20	17.20	0.00	0.00	0.00	1
1.97	19.11	19.11	0.00	0.00	0.00	1

1.95	21.02	21.02	0.00	0.00	0.00	1
1.92	22.93	22.93	0.00	0.00	0.00	1
1.89	24.84	24.84	0.00	0.00	0.00	1
1.87	26.75	26.75	0.00	0.00	0.00	1
1.84	28.66	28.66	0.00	0.00	0.00	1
1.81	30.58	30.58	0.00	0.00	0.00	1
1.79	32.49	32.49	0.00	0.00	0.00	1
1.76	34.40	34.40	0.00	0.00	0.00	1
1.74	36.31	36.31	0.00	0.00	0.00	1
1.71	38.22	38.22	0.00	0.00	0.00	1
1.71	40.13	40.13	0.00	0.00	0.00	1
1.69	42.39	42.39	0.00	0.00	0.00	1
1.67	44.64	44.64	0.00	0.00	0.00	1
1.65	46.55	46.55	0.00	0.00	0.00	1
1.64	48.46	48.46	0.00	0.00	0.00	1
1.62	50.37	50.37	0.00	0.00	0.00	1
1.60	52.29	52.29	0.00	0.00	0.00	1
1.58	54.20	54.20	0.00	0.00	0.00	1
1.57	56.11	56.11	0.00	0.00	0.00	1
1.55	58.02	58.02	0.00	0.00	0.00	1
1.53	59.93	59.93	0.00	0.00	0.00	1
1.51	61.84	61.84	0.00	0.00	0.00	1
1.50	63.75	63.75	0.00	0.00	0.00	1
1.48	65.66	65.66	0.00	0.00	0.00	1
1.46	71.13	48.25	54.62	27.43	32.54	1
1.44	73.19	53.66	56.80	28.85	27.78	1
1.42	75.25	53.77	58.96	30.27	28.31	1
1.40	77.32	53.87	61.10	31.69	28.84	1
1.39	79.38	53.98	63.23	33.11	29.38	1
1.37	81.44	54.09	65.33	34.53	29.91	1
1.35	83.51	54.19	67.42	35.95	30.45	1
1.33	85.57	54.30	69.49	37.38	30.98	1
1.31	87.63	54.40	71.54	38.80	31.52	1
1.29	89.70	54.51	73.58	40.22	32.06	1
1.27	91.76	54.61	75.60	41.65	32.60	1
1.25	93.82	54.71	77.61	43.07	33.14	1
1.23	95.89	54.81	79.61	44.49	33.68	1
1.22	97.95	54.91	81.59	45.91	34.22	1
1.20	100.01	55.01	83.56	47.33	34.76	1
1.18	102.06	55.11	85.52	48.74	35.30	1
1.16	104.12	55.21	87.46	50.16	35.84	1
1.16	104.12	16.66	87.46	50.16	35.84	1
1.13	107.20	55.36	90.38	52.28	36.66	1
1.10	110.28	55.50	93.28	54.40	37.47	1
1.07	113.36	55.65	96.15	56.51	38.29	1
1.05	116.43	55.79	99.00	58.62	39.11	1
1.02	119.49	55.93	101.84	60.72	39.93	1
0.99	122.55	56.07	104.65	62.82	40.75	1

0.96	125.61	56.21	107.45	64.91	41.58	1
0.93	128.66	56.34	110.24	67.00	42.40	1
0.91	131.70	56.48	113.01	69.08	43.23	1
0.88	134.74	56.61	115.76	71.16	44.06	1
0.85	137.77	56.74	118.50	73.23	44.89	1
0.82	140.79	56.87	121.23	75.29	45.72	1
0.79	143.81	57.00	123.94	77.35	46.55	1
0.77	146.82	57.13	126.51	79.40	47.38	1
0.74	149.83	57.26	128.97	81.44	48.22	1
0.71	152.83	57.38	131.41	83.48	49.06	1
0.68	155.82	57.51	133.84	85.51	49.89	1
0.65	158.80	57.63	136.25	87.53	50.73	1
0.63	161.78	57.75	138.66	89.55	51.57	1
0.60	164.75	57.87	141.05	91.56	52.42	1
0.60	164.75	23.70	141.05	91.56	52.42	1
0.57	167.72	57.99	143.44	93.56	53.26	1
0.54	170.67	58.11	145.82	95.55	54.10	1
0.51	173.62	58.22	148.18	97.54	54.95	1
0.49	176.57	58.34	150.53	99.52	55.79	1
0.46	179.50	58.45	152.88	101.50	56.64	1
0.43	182.43	58.57	155.21	103.46	57.49	1
0.40	185.35	58.68	157.53	105.42	58.34	1
0.37	188.26	58.79	159.83	107.37	59.19	1
0.35	191.17	58.90	162.13	109.32	60.04	1
0.32	194.07	59.01	164.41	111.26	60.89	1
0.29	93.79	59.12	34.67	73.07	-38.40	1
0.26	95.97	59.22	36.75	74.81	-38.06	1
0.23	98.16	59.33	38.83	76.55	-37.71	1
0.21	100.35	59.43	40.92	78.28	-37.37	1
0.18	102.53	59.53	43.00	80.02	-37.02	1
0.15	104.72	59.64	45.08	81.76	-36.68	1
0.12	106.90	59.74	47.17	83.50	-36.33	1
0.10	109.09	59.84	49.25	85.23	-35.98	1
0.07	111.27	59.94	51.34	86.97	-35.63	1
0.04	113.45	60.03	53.42	88.70	-35.28	1
0.04	114.48	60.03	54.45	88.70	-34.25	1
0.03	115.92	60.32	55.60	89.32	-33.72	1
0.02	117.36	60.60	56.76	89.94	-33.18	1
0.01	118.80	60.88	57.92	90.56	-32.64	1
0.00	120.24	61.16	59.07	91.18	0.00	1

Time = 7330. Degree of Consolidation = 87.%

Total Settlement = 3.466

Settlement at End of Primary Consolidation = 3.543

Settlement caused by Primary Consolidation at time 7330. = 3.097

Settlement caused by Secondary Compression at time 7330. = 0.000

Settlement Due to Desiccation = 0.369

Surface Elevation = 1.73

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 0 to 30 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS = 11
NUMBER OF SOIL COMPRESSIBILITIES = 10
NUMBER OF SETTLEMENT POINTS = 1
NUMBER OF LOADED AREAS = 1
MODE (1 = U.S. GRAVITATIONAL UNITS
2 = SI ABSOLUTE UNITS) = 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000
8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002
10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 0 to 30 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1

Elevation 0 to -4 feet

F % .00 3.54 62.60
P,KSF .04 .16 2.16
0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F % .00 3.25 18.53
P,KSF .04 .63 2.63
0 SOIL COMPRESSIBILITY NO. 3
Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F % .00 3.51 17.04
P,KSF .04 .79 2.79
0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F % .00 3.60 16.51
P,KSF .04 .85 2.85
0 SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

F % .00 12.13
P,KSF .95 2.95
0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F % .00 10.29
P,KSF 1.24 3.24
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 0 to 30 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F % .00 5.31

P,KSF 1.71 3.71
0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F % .00 4.88
P,KSF 2.17 4.17
0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F % .00 4.43
P,KSF 2.46 4.46
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 0 to 30 days

TABLE 4 - SETTLEMENT POINT DATA

POINT NO.	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 0 to 30 days

TABLE 5 - LOADED AREA INFORMATION

AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.229	.000	0

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03

Sand Profile MC Foundation Settlement 0 to 30 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT
POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.229
3.000	.229
5.500	.229
9.500	.229
14.000	.229
18.000	.229
23.000	.229
29.500	.229
38.500	.229
47.000	.229
53.000	.229

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 0 to 30 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT
POINT NO. 1

LAYER

	1	3.116
	2	3.685
	3	.453
	4	.000
	5	.203
	6	.618
	7	1.525
	8	1.514
	9	1.137
	10	.529
	11	.477

TOTAL SETTLE. 13.257

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 30 to 45 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS = 11
NUMBER OF SOIL COMPRESSIBILITIES = 10
NUMBER OF SETTLEMENT POINTS = 1
NUMBER OF LOADED AREAS = 1
MODE (1 = U.S. GRAVITATIONAL UNITS
2 = SI ABSOLUTE UNITS) = 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %

1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000
8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002
10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 30 to 45 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1
Elevation 0 to -4 feet

F %	.00	3.54	62.60
P,KSF	.04	.16	2.16

0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F %	.00	3.25	18.53
P,KSF	.04	.63	2.63

0 SOIL COMPRESSIBILITY NO. 3
Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F %	.00	3.51	17.04
P,KSF	.04	.79	2.79

0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F %	.00	3.60	16.51
P,KSF	.04	.85	2.85

0 SOIL COMPRESSIBILITY NO. 6

Elevation -20 to -26 feet

F %	.00	12.13
P,KSF	.95	2.95

0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F %	.00	10.29
P,KSF	1.24	3.24

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 30 to 45 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F %	.00	5.31
P,KSF	1.71	3.71

0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F %	.00	4.88
P,KSF	2.17	4.17

0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F %	.00	4.43
P,KSF	2.46	4.46

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 30 to 45 days

TABLE 4 - SETTLEMENT POINT DATA

0 POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*

1	2500.000	2500.000	1

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 30 to 45 days

TABLE 5 - LOADED AREA INFORMATION

0 AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	AREA SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.241	.000	0

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 30 to 45 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.241
3.000	.241
5.500	.241
9.500	.241
14.000	.241
18.000	.241
23.000	.241

```
   29.500         .241

   38.500         .241

   47.000         .241

   53.000         .241
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS


        Island Road Marsh Creation (TE-117) 16715-040-03
        Sand Profile MC Foundation Settlement 30 to 45 days


        TABLE 8 - COMPUTED SETTLEMENT IN INCHES


        SETTLEMENT
         POINT NO.         1

             LAYER

                1        3.379

                2        3.922

                3         .467

                4         .000

                5         .212

                6         .685

                7        1.604

                8        1.587

                9        1.193

               10         .556

               11         .501

        TOTAL SETTLE.   14.107
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS
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        Island Road Marsh Creation (TE-117) 16715-040-03
        Sand Profile MC Foundation Settlement 45 to 60 days


        TABLE 1 - PROBLEM CONTROL DATA

             NUMBER OF SOIL LAYERS             =  11
             NUMBER OF SOIL COMPRESSIBILITIES  =  10
             NUMBER OF SETTLEMENT POINTS       =   1
             NUMBER OF LOADED AREAS            =   1
             MODE (1 = U.S. GRAVITATIONAL UNITS
                   2 = SI ABSOLUTE UNITS)      =   1



        TABLE 2 - SOIL AND LAYER INFORMATION

        SOIL  DEPTH TO   LAYER   LAYER    UNIT   SOIL OVERBURDEN INIT VERTICAL
        LAYER  CENTER  THICKNESS THICK.  WEIGHT  COMP  PRESSURE   STRAIN (F0)
         NO.     FT        FT    FACTOR LB/FT**3  NO.    KSF          %

          1    1.000     2.000   1.00     13.60   1      .014        .000
          2    3.000     2.000   1.00     13.60   1      .041        .051
          3    5.500     3.000   1.00     45.60   2      .123       1.322
          4    9.500     5.000   1.00     55.60   3      .330        .000
          5   14.000     4.000   1.00     39.60   4      .548       3.081
          6   18.000     4.000   1.00     39.60   5      .707       3.383
          7   23.000     6.000   1.00     47.60   6      .929        .000
          8   29.500     7.000   1.00     47.60   7     1.238        .000
          9   38.500    11.000   1.00     55.60   8     1.711        .002
         10   47.000     6.000   1.00     49.60   9     2.165        .000
         11   53.000     6.000   1.00     49.60  10     2.463        .008
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS


        Island Road Marsh Creation (TE-117) 16715-040-03
        Sand Profile MC Foundation Settlement 45 to 60 days


        TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0       SOIL COMPRESSIBILITY NO.  1
                  Elevation 0 to -4 feet
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        F  %       .00    3.54   62.60
        P,KSF      .04     .16    2.16
0       SOIL COMPRESSIBILITY NO.  2
                  Elevation -4 to -7 feet

        F  %       .00    3.25   18.53
        P,KSF      .04     .63    2.63
0       SOIL COMPRESSIBILITY NO.  3
                  Elevation -7 to -12 feet

               THE SLOPE OF THE F(%)-LOG P CURVE IS   .000 %

0       SOIL COMPRESSIBILITY NO.  4
                  Elevation -12 to -16 feet

        F  %       .00    3.51   17.04
        P,KSF      .04     .79    2.79
0       SOIL COMPRESSIBILITY NO.  5
                  Elevation -16 to -20 feet

        F  %       .00    3.60   16.51
        P,KSF      .04     .85    2.85
0       SOIL COMPRESSIBILITY NO.  6
                  Elevation -20 to -26 feet

        F  %       .00   12.13
        P,KSF      .95    2.95
0       SOIL COMPRESSIBILITY NO.  7
                  Elevation -26 to -33 feet

        F  %       .00   10.29
        P,KSF     1.24    3.24
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                        FOUNDATION SETTLEMENT ANALYSIS


        Island Road Marsh Creation (TE-117) 16715-040-03
        Sand Profile MC Foundation Settlement 45 to 60 days


        TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0       SOIL COMPRESSIBILITY NO.  8
                  Elevation -33 to -44 feet

        F  %       .00    5.31
        P,KSF     1.71    3.71
0       SOIL COMPRESSIBILITY NO.  9
```



```
                  Elevation -44 to -50 feet

        F  %       .00    4.88
        P,KSF     2.17    4.17
0       SOIL COMPRESSIBILITY NO. 10
                  Elevation -50 to -56 feet

        F  %       .00    4.43
        P,KSF     2.46    4.46
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS


        Island Road Marsh Creation (TE-117) 16715-040-03
        Sand Profile MC Foundation Settlement 45 to 60 days


        TABLE 4 - SETTLEMENT POINT DATA

0       POINT   POINT COORDINATES   LAYER    POINT   POINT COORDINATES   LAYER
         NO,       X          Y      NO.*     NO,       X          Y      NO.*
                   FT         FT                         FT         FT

          1    2500.000   2500.000    1

            * NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS


        Island Road Marsh Creation (TE-117) 16715-040-03
        Sand Profile MC Foundation Settlement 45 to 60 days


        TABLE 5 - LOADED AREA INFORMATION

0                CENTER COORD    AREA DIMEN.   AREA   APPLIED   AREA   PRNT
        AREA SHAPE   X       Y     XLEN   YLEN   SLOPE  PRESSURE  ELEV.  FLAG
                     FT      FT     FT     FT             KSF     FT

        A1   RECT 2500.00 2500.005000.005000.00    .000     .170    .000   0
1            Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
                        FOUNDATION SETTLEMENT ANALYSIS


        Island Road Marsh Creation (TE-117) 16715-040-03
        Sand Profile MC Foundation Settlement 45 to 60 days
```

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT
POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.170
3.000	.170
5.500	.170
9.500	.170
14.000	.170
18.000	.170
23.000	.170
29.500	.170
38.500	.170
47.000	.170
53.000	.170

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 45 to 60 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT
POINT NO. 1

LAYER	
1	1.599

2	2.340						
3	.374						
4	.000						
5	.157						
6	.273						
7	1.122						
8	1.145						
9	.857						
10	.395						
11	.358						

TOTAL SETTLE. 8.619

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 60 to 90 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS	= 11
NUMBER OF SOIL COMPRESSIBILITIES	= 10
NUMBER OF SETTLEMENT POINTS	= 1
NUMBER OF LOADED AREAS	= 1
MODE (1 = U.S. GRAVITATIONAL UNITS 2 = SI ABSOLUTE UNITS)	= 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000

2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000
8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002
10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 60 to 90 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1
Elevation 0 to -4 feet

F %	.00	3.54	62.60
P,KSF	.04	.16	2.16

0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F %	.00	3.25	18.53
P,KSF	.04	.63	2.63

0 SOIL COMPRESSIBILITY NO. 3
Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F %	.00	3.51	17.04
P,KSF	.04	.79	2.79

0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F %	.00	3.60	16.51
P,KSF	.04	.85	2.85

0 SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

F %	.00	12.13	
P,KSF	.95	2.95	

0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F %	.00	10.29	
P,KSF	1.24	3.24	

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 60 to 90 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F %	.00	5.31	
P,KSF	1.71	3.71	

0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F %	.00	4.88	
P,KSF	2.17	4.17	

0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F %	.00	4.43	
P,KSF	2.46	4.46	

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 60 to 90 days

TABLE 4 - SETTLEMENT POINT DATA

POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 60 to 90 days

TABLE 5 - LOADED AREA INFORMATION

AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.171	.000	0

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 60 to 90 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.171
3.000	.171
5.500	.171
9.500	.171
14.000	.171
18.000	.171
23.000	.171
29.500	.171

38.500	.171
47.000	.171
53.000	.171

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 60 to 90 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT POINT NO. 1

LAYER	
1	1.628
2	2.366
3	.375
4	.000
5	.158
6	.279
7	1.129
8	1.151
9	.862
10	.397
11	.360

TOTAL SETTLE. 8.705

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 90 to 120 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS	= 11
NUMBER OF SOIL COMPRESSIBILITIES	= 10
NUMBER OF SETTLEMENT POINTS	= 1
NUMBER OF LOADED AREAS	= 1
MODE (1 = U.S. GRAVITATIONAL UNITS 2 = SI ABSOLUTE UNITS)	= 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000
8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002
10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 90 to 120 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1
Elevation 0 to -4 feet

F %	.00	3.54	62.60
P,KSF	.04	.16	2.16

0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F %	.00	3.25	18.53
P,KSF	.04	.63	2.63

0 SOIL COMPRESSIBILITY NO. 3
Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F %	.00	3.51	17.04
P,KSF	.04	.79	2.79

0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F %	.00	3.60	16.51
P,KSF	.04	.85	2.85

0 SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

F %	.00	12.13
P,KSF	.95	2.95

0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F %	.00	10.29
P,KSF	1.24	3.24

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 90 to 120 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F %	.00	5.31
P,KSF	1.71	3.71

0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F % .00 4.88
P,KSF 2.17 4.17
0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F % .00 4.43
P,KSF 2.46 4.46
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 90 to 120 days

TABLE 4 - SETTLEMENT POINT DATA

0 POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 90 to 120 days

TABLE 5 - LOADED AREA INFORMATION

0 AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	AREA SLOPE	APPLIED PRESSURE KSF	ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.173	.000	0

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 90 to 120 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT
POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.173
3.000	.173
5.500	.173
9.500	.173
14.000	.173
18.000	.173
23.000	.173
29.500	.173
38.500	.173
47.000	.173
53.000	.173

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 90 to 120 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT
POINT NO. 1

LAYER	
1	1.687
2	2.417

3	.378		
4	.000		
5	.160		
6	.291		
7	1.143		
8	1.164		
9	.872		
10	.402		
11	.364		

TOTAL SETTLE. 8.877

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 120 to 210 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS	= 11
NUMBER OF SOIL COMPRESSIBILITIES	= 10
NUMBER OF SETTLEMENT POINTS	= 1
NUMBER OF LOADED AREAS	= 1
MODE (1 = U.S. GRAVITATIONAL UNITS 2 = SI ABSOLUTE UNITS)	= 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322

4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000
8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002
10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 120 to 210 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1
Elevation 0 to -4 feet

F % .00 3.54 62.60
P,KSF .04 .16 2.16
0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F % .00 3.25 18.53
P,KSF .04 .63 2.63
0 SOIL COMPRESSIBILITY NO. 3
Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F % .00 3.51 17.04
P,KSF .04 .79 2.79
0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F % .00 3.60 16.51
P,KSF .04 .85 2.85
0 SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

F % .00 12.13
P,KSF .95 2.95

0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F % .00 10.29
P,KSF 1.24 3.24

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 120 to 210 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F % .00 5.31
P,KSF 1.71 3.71

0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F % .00 4.88
P,KSF 2.17 4.17

0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F % .00 4.43
P,KSF 2.46 4.46

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 120 to 210 days

TABLE 4 - SETTLEMENT POINT DATA

0 POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 120 to 210 days

TABLE 5 - LOADED AREA INFORMATION

0 AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	AREA SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.173	.000	0

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 120 to 210 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.173
3.000	.173
5.500	.173
9.500	.173
14.000	.173
18.000	.173
23.000	.173
29.500	.173
38.500	.173

47.000	.173
53.000	.173

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 120 to 210 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT POINT NO. 1

LAYER	
1	1.687
2	2.417
3	.378
4	.000
5	.160
6	.291
7	1.143
8	1.164
9	.872
10	.402
11	.364

TOTAL SETTLE. 8.877

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 210 to 395 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS	= 11
NUMBER OF SOIL COMPRESSIBILITIES	= 10
NUMBER OF SETTLEMENT POINTS	= 1
NUMBER OF LOADED AREAS	= 1
MODE (1 = U.S. GRAVITATIONAL UNITS 2 = SI ABSOLUTE UNITS)	= 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000
8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002
10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 210 to 395 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1
Elevation 0 to -4 feet

F % .00 3.54 62.60
P,KSF .04 .16 2.16

0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F % .00 3.25 18.53
P,KSF .04 .63 2.63
0 SOIL COMPRESSIBILITY NO. 3
Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F % .00 3.51 17.04
P,KSF .04 .79 2.79
0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F % .00 3.60 16.51
P,KSF .04 .85 2.85
0 SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

F % .00 12.13
P,KSF .95 2.95
0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F % .00 10.29
P,KSF 1.24 3.24
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 210 to 395 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F % .00 5.31
P,KSF 1.71 3.71
0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F % .00 4.88
P,KSF 2.17 4.17

0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F % .00 4.43
P,KSF 2.46 4.46
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 210 to 395 days

TABLE 4 - SETTLEMENT POINT DATA

0 POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 210 to 395 days

TABLE 5 - LOADED AREA INFORMATION

0 AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	AREA SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.163	.000	0

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 210 to 395 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT
POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.163
3.000	.163
5.500	.163
9.500	.163
14.000	.163
18.000	.163
23.000	.163
29.500	.163
38.500	.163
47.000	.163
53.000	.163

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 210 to 395 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT
POINT NO. 1

LAYER	
1	1.387
2	2.156
3	.363

4	.000
5	.152
6	.230
7	1.072
8	1.100
9	.824
10	.379
11	.344

TOTAL SETTLE. 8.006
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 395 to 760 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS	= 11
NUMBER OF SOIL COMPRESSIBILITIES	= 10
NUMBER OF SETTLEMENT POINTS	= 1
NUMBER OF LOADED AREAS	= 1
MODE (1 = U.S. GRAVITATIONAL UNITS 2 = SI ABSOLUTE UNITS)	= 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081

6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000
8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002
10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 395 to 760 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1
Elevation 0 to -4 feet

F % .00 3.54 62.60
P,KSF .04 .16 2.16
0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F % .00 3.25 18.53
P,KSF .04 .63 2.63
0 SOIL COMPRESSIBILITY NO. 3
Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F % .00 3.51 17.04
P,KSF .04 .79 2.79
0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F % .00 3.60 16.51
P,KSF .04 .85 2.85
0 SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

F % .00 12.13
P,KSF .95 2.95
0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F % .00 10.29
P,KSF 1.24 3.24
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 395 to 760 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F % .00 5.31
P,KSF 1.71 3.71
0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F % .00 4.88
P,KSF 2.17 4.17
0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F % .00 4.43
P,KSF 2.46 4.46
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 395 to 760 days

TABLE 4 - SETTLEMENT POINT DATA

0 POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 395 to 760 days

TABLE 5 - LOADED AREA INFORMATION

0 AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	AREA SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.146	.000	0

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 395 to 760 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT
POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.146
3.000	.146
5.500	.146
9.500	.146
14.000	.146
18.000	.146
23.000	.146
29.500	.146
38.500	.146
47.000	.146

53.000 .146
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 395 to 760 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT
POINT NO. 1

LAYER	
1	.848
2	1.682
3	.337
4	.000
5	.138
6	.125
7	.951
8	.990
9	.741
10	.339
11	.309

TOTAL SETTLE. 6.460
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 760 to 1125 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS = 11
NUMBER OF SOIL COMPRESSIBILITIES = 10
NUMBER OF SETTLEMENT POINTS = 1
NUMBER OF LOADED AREAS = 1
MODE (1 = U.S. GRAVITATIONAL UNITS
2 = SI ABSOLUTE UNITS) = 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000
8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002
10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 760 to 1125 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1
Elevation 0 to -4 feet

F % .00 3.54 62.60
P,KSF .04 .16 2.16
0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F % .00 3.25 18.53

P,KSF .04 .63 2.63
0 SOIL COMPRESSIBILITY NO. 3
Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F % .00 3.51 17.04
P,KSF .04 .79 2.79
0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F % .00 3.60 16.51
P,KSF .04 .85 2.85
0 SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

F % .00 12.13
P,KSF .95 2.95
0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F % .00 10.29
P,KSF 1.24 3.24
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 760 to 1125 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F % .00 5.31
P,KSF 1.71 3.71
0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F % .00 4.88
P,KSF 2.17 4.17
0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F % .00 4.43
P,KSF 2.46 4.46
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 760 to 1125 days

TABLE 4 - SETTLEMENT POINT DATA

POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 760 to 1125 days

TABLE 5 - LOADED AREA INFORMATION

AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	AREA SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.143	.000	0

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 760 to 1125 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT
POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.143
3.000	.143
5.500	.143
9.500	.143
14.000	.143
18.000	.143
23.000	.143
29.500	.143
38.500	.143
47.000	.143
53.000	.143

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 760 to 1125 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT
POINT NO. 1

LAYER	
1	.836
2	1.593
3	.332
4	.000

	5	.135
	6	.108
	7	.930
	8	.971
	9	.727
	10	.332
	11	.303

TOTAL SETTLE. 6.266

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1125 to 1855 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS = 11
NUMBER OF SOIL COMPRESSIBILITIES = 10
NUMBER OF SETTLEMENT POINTS = 1
NUMBER OF LOADED AREAS = 1
MODE (1 = U.S. GRAVITATIONAL UNITS
2 = SI ABSOLUTE UNITS) = 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000

8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002
10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1125 to 1855 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1
Elevation 0 to -4 feet

F %	.00	3.54	62.60
P,KSF	.04	.16	2.16

0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F %	.00	3.25	18.53
P,KSF	.04	.63	2.63

0 SOIL COMPRESSIBILITY NO. 3
Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F %	.00	3.51	17.04
P,KSF	.04	.79	2.79

0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F %	.00	3.60	16.51
P,KSF	.04	.85	2.85

0 SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

F %	.00	12.13
P,KSF	.95	2.95

0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F % .00 10.29

P,KSF 1.24 3.24

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1125 to 1855 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F %	.00	5.31
P,KSF	1.71	3.71

0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F %	.00	4.88
P,KSF	2.17	4.17

0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F %	.00	4.43
P,KSF	2.46	4.46

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1125 to 1855 days

TABLE 4 - SETTLEMENT POINT DATA

POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03

Sand Profile MC Foundation Settlement 1125 to 1855 days

TABLE 5 - LOADED AREA INFORMATION

AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	AREA SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.143	.000	0

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1125 to 1855 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.143
3.000	.143
5.500	.143
9.500	.143
14.000	.143
18.000	.143
23.000	.143
29.500	.143
38.500	.143
47.000	.143
53.000	.143

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La

FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1125 to 1855 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT POINT NO.	1
LAYER	
1	.836
2	1.593
3	.332
4	.000
5	.135
6	.108
7	.930
8	.971
9	.727
10	.332
11	.303
TOTAL SETTLE.	6.266

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1855 to 3680 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS	= 11
NUMBER OF SOIL COMPRESSIBILITIES	= 10
NUMBER OF SETTLEMENT POINTS	= 1
NUMBER OF LOADED AREAS	= 1
MODE (1 = U.S. GRAVITATIONAL UNITS 2 = SI ABSOLUTE UNITS)	= 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000
8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002
10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1855 to 3680 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1
Elevation 0 to -4 feet

F %	.00	3.54	62.60
P,KSF	.04	.16	2.16

0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F %	.00	3.25	18.53
P,KSF	.04	.63	2.63

0 SOIL COMPRESSIBILITY NO. 3

Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F %	.00	3.51	17.04
P,KSF	.04	.79	2.79

0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F %	.00	3.60	16.51
P,KSF	.04	.85	2.85

0 SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

F %	.00	12.13
P,KSF	.95	2.95

0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F %	.00	10.29
P,KSF	1.24	3.24

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1855 to 3680 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F %	.00	5.31
P,KSF	1.71	3.71

0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F %	.00	4.88
P,KSF	2.17	4.17

0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F %	.00	4.43

P,KSF	2.46	4.46

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1855 to 3680 days

TABLE 4 - SETTLEMENT POINT DATA

POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1855 to 3680 days

TABLE 5 - LOADED AREA INFORMATION

AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	AREA SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.143	.000	0

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1855 to 3680 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT POINT NO.	1
DEPTH,FT	STRESS,KSF

1.000 .143

3.000 .143

5.500 .143

9.500 .143

14.000 .143

18.000 .143

23.000 .143

29.500 .143

38.500 .143

47.000 .143

53.000 .143

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 1855 to 3680 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT
POINT NO. 1

LAYER

1 .836

2 1.593

3 .332

4 .000

5 .135

6 .108

7 .930

8 .971

9 .727

10 .332

11 .303

TOTAL SETTLE. 6.266

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 3680 to 7330 days

TABLE 1 - PROBLEM CONTROL DATA

NUMBER OF SOIL LAYERS = 11
NUMBER OF SOIL COMPRESSIBILITIES = 10
NUMBER OF SETTLEMENT POINTS = 1
NUMBER OF LOADED AREAS = 1
MODE (1 = U.S. GRAVITATIONAL UNITS
2 = SI ABSOLUTE UNITS) = 1

TABLE 2 - SOIL AND LAYER INFORMATION

SOIL LAYER NO.	DEPTH TO CENTER FT	LAYER THICKNESS FT	LAYER THICK. FACTOR	UNIT WEIGHT LB/FT**3	SOIL COMP NO.	OVERBURDEN PRESSURE KSF	INIT VERTICAL STRAIN (F0) %
1	1.000	2.000	1.00	13.60	1	.014	.000
2	3.000	2.000	1.00	13.60	1	.041	.051
3	5.500	3.000	1.00	45.60	2	.123	1.322
4	9.500	5.000	1.00	55.60	3	.330	.000
5	14.000	4.000	1.00	39.60	4	.548	3.081
6	18.000	4.000	1.00	39.60	5	.707	3.383
7	23.000	6.000	1.00	47.60	6	.929	.000
8	29.500	7.000	1.00	47.60	7	1.238	.000
9	38.500	11.000	1.00	55.60	8	1.711	.002

10	47.000	6.000	1.00	49.60	9	2.165	.000
11	53.000	6.000	1.00	49.60	10	2.463	.008

1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 3680 to 7330 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE

0 SOIL COMPRESSIBILITY NO. 1
Elevation 0 to -4 feet

F % .00 3.54 62.60
P,KSF .04 .16 2.16
0 SOIL COMPRESSIBILITY NO. 2
Elevation -4 to -7 feet

F % .00 3.25 18.53
P,KSF .04 .63 2.63
0 SOIL COMPRESSIBILITY NO. 3
Elevation -7 to -12 feet

THE SLOPE OF THE F(%)-LOG P CURVE IS .000 %

0 SOIL COMPRESSIBILITY NO. 4
Elevation -12 to -16 feet

F % .00 3.51 17.04
P,KSF .04 .79 2.79
0 SOIL COMPRESSIBILITY NO. 5
Elevation -16 to -20 feet

F % .00 3.60 16.51
P,KSF .04 .85 2.85
0 SOIL COMPRESSIBILITY NO. 6
Elevation -20 to -26 feet

F % .00 12.13
P,KSF .95 2.95
0 SOIL COMPRESSIBILITY NO. 7
Elevation -26 to -33 feet

F % .00 10.29
P,KSF 1.24 3.24
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 3680 to 7330 days

TABLE 3 - SOIL COMPRESSIBILITY DATA AND SOURCE(CONT)

0 SOIL COMPRESSIBILITY NO. 8
Elevation -33 to -44 feet

F % .00 5.31
P,KSF 1.71 3.71
0 SOIL COMPRESSIBILITY NO. 9
Elevation -44 to -50 feet

F % .00 4.88
P,KSF 2.17 4.17
0 SOIL COMPRESSIBILITY NO. 10
Elevation -50 to -56 feet

F % .00 4.43
P,KSF 2.46 4.46
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 3680 to 7330 days

TABLE 4 - SETTLEMENT POINT DATA

0 POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*	POINT NO,	POINT COORDINATES X FT	Y FT	LAYER NO.*
1	2500.000	2500.000	1				

* NUMBER OF SOIL LAYER AT WHICH SETTLEMENT COMPUTATION BEGINS
1 Louis J. Capozzoli & Assoc. Geotechnical Engineers Baton Rouge, La
FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 3680 to 7330 days

TABLE 5 - LOADED AREA INFORMATION

0

AREA	SHAPE	CENTER COORD X FT	Y FT	AREA DIMEN. XLEN FT	YLEN FT	SLOPE	APPLIED PRESSURE KSF	AREA ELEV. FT	PRNT FLAG
A1	RECT	2500.00	2500.00	5000.00	5000.00	.000	.143	.000	0

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 3680 to 7330 days

TABLE 7 - AVERAGE STRESS INCREASE

SETTLEMENT POINT NO. 1

DEPTH,FT	STRESS,KSF
1.000	.143
3.000	.143
5.500	.143
9.500	.143
14.000	.143
18.000	.143
23.000	.143
29.500	.143
38.500	.143
47.000	.143
53.000	.143

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FOUNDATION SETTLEMENT ANALYSIS

Island Road Marsh Creation (TE-117) 16715-040-03
Sand Profile MC Foundation Settlement 3680 to 7330 days

TABLE 8 - COMPUTED SETTLEMENT IN INCHES

SETTLEMENT POINT NO. 1

LAYER	
1	.836
2	1.593
3	.332
4	.000
5	.135
6	.108
7	.930
8	.971
9	.727
10	.332
11	.303
TOTAL SETTLE.	6.266

APPENDIX E
Borrow Area Stability

Calculation Checksheet

Project Number: 16715-040-03 **Project Title:** Island Road Marsh Creation and Nourishment (TE-117)

Client: CPRA

Location: Terrebonne Parish, Louisiana

Calculations Description: Slope stability of the borrow area in Lake Tambour was computed using optimized circular search parameters with Spencer's method in the GEO-SLOPE International Limited computer program SLOPE/W (GeoStudio 2016). See attached for description of cases evaluated.

Contents of Calculation Package: Description of stability methodology, assumed geometry, soil parameters used, cases evaluated, failure curves, and SLOPE/W output files.

Originator: JEA **Checked by:** CKH **Date:** August 9, 2018

Checking Method (describe):

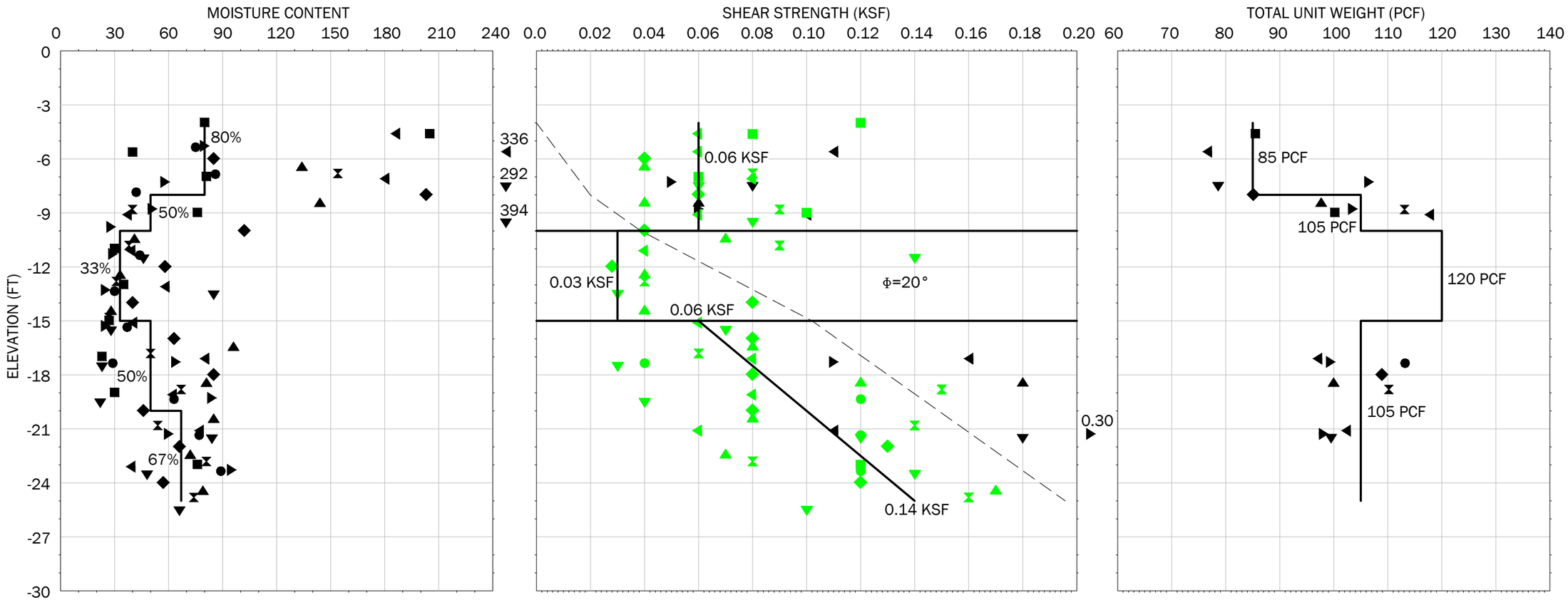
Checked Design Profile, Program inputs, geometry, results

APPENDIX E
CALCULATION APPROACH FOR BORROW AREA SLOPE STABILITY

Slope stability of the dredged borrow area in Lake Tambour was evaluated as described in the calculation approach for slope stability of containment dikes in Appendix A. Design considerations for the borrow area evaluation is described below.

1. Design strength and unit weight parameters were based on the laboratory test data obtained from samples collected within the proposed borrow area. The design parameters are included in Figure E-1.
2. Used mean low water elevation of -0.02 ft., as provided by CPRA.
3. Mudline was assumed to be at El. -4 ft. within Lake Tambour.
4. It was assumed dredge depths would be limited to 15 ft. (El. -19 ft.).
5. Acceptable factor of safety for slope stability = 1.2.
6. The slope stability was evaluated for the following cases:
    - Dredge slope of 2H:1V.
    - Dredge slope of 3H:1V.

Dredge slopes of 3H:1V appear to provide stable borrow area side slopes. This appendix contains the borrow area design parameters, stability analysis results, and an example of the SLOPE/W output. All calculation inputs and outputs were provided electronically.



Legend

Compression Test Torvane Test

B-1	B-4
B-2	B-5
B-2a	B-6
B-3	B-7

Design Profile

C/P Line

Borrow Area Design Profiles

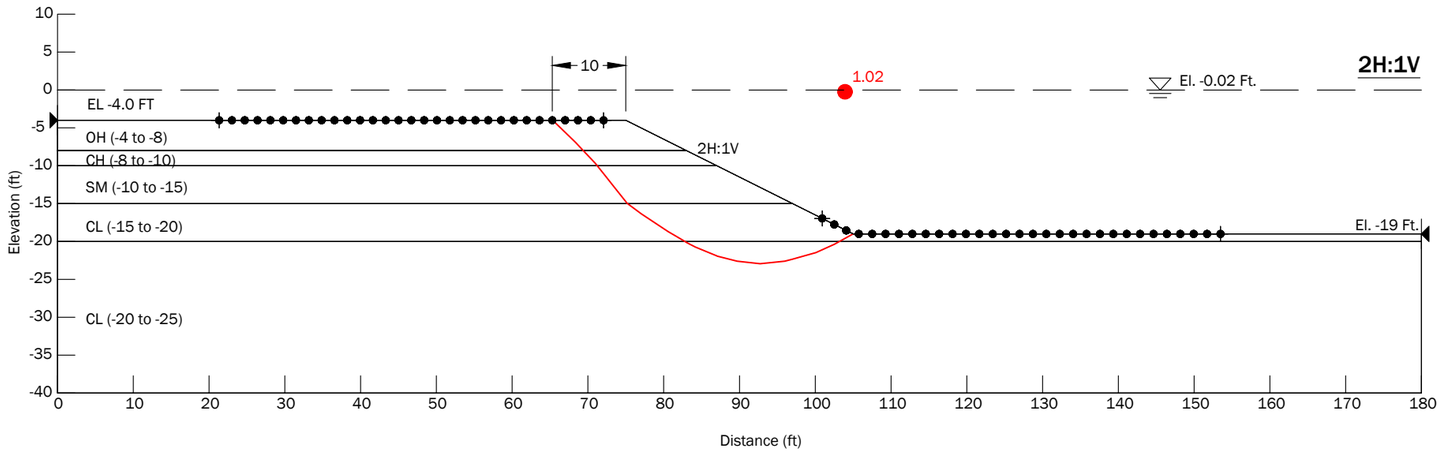
Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

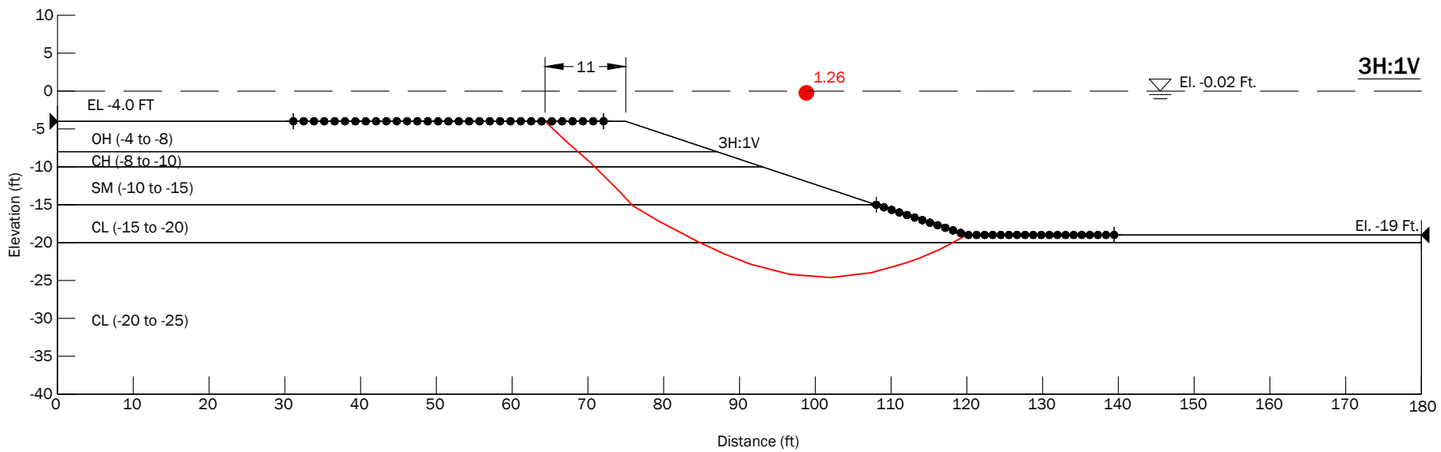
GeoEngineers

Figure E-1

P:\16\16715040\CAD\03\Geotech - Final\16715040003_FE01_Lab Graphs.dwg TAB:Lab Graphs Date Exported: 08/13/18 - 12:44 by kcook

Name	Model	Unit Weight (pcf)	Cohesion' (psf)	Phi' (°)	Cohesion Fn	Cohesion Spatial Fn
OH (-4 to -8)	Mohr-Coulomb	85	60	0		
CH (-8 to -10)	Mohr-Coulomb	105	60	0		
SM (-10 to -15)	Mohr-Coulomb	120	30	20		
CL (-15 to -20)	Spatial Mohr-Coulomb	105		0	60 psf to 100 psf	
CL (-20 to -25)	Spatial Mohr-Coulomb	105		0		100 psf to 140 psf





Borrow Area Slope Stability

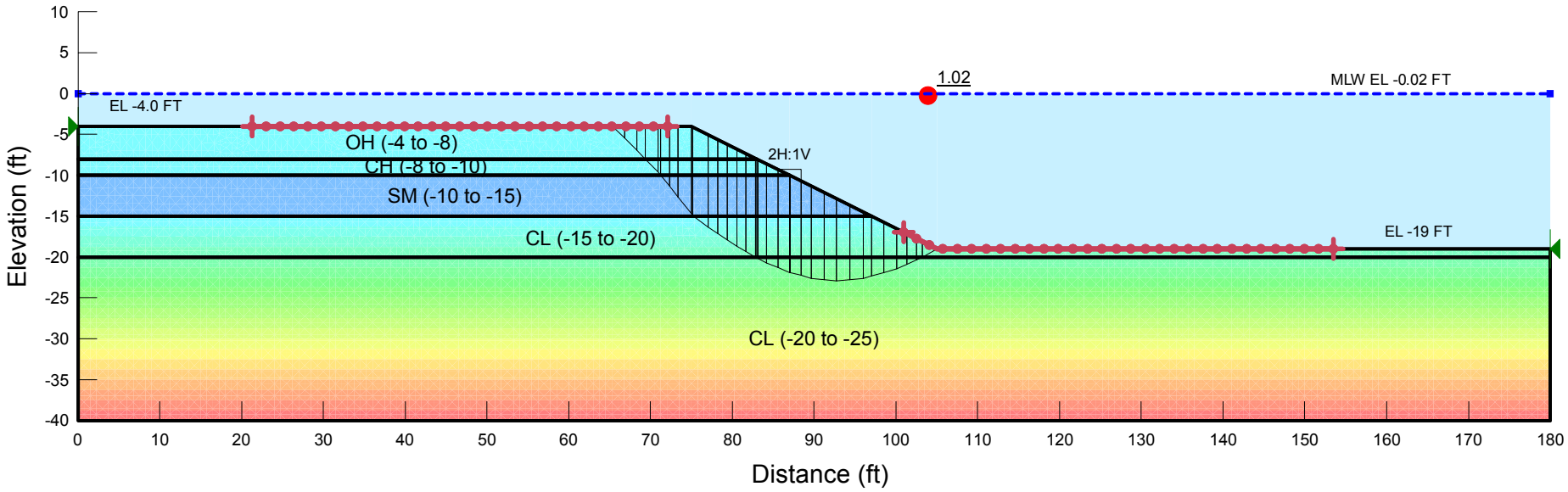
Island Road Marsh Creation and Nourishment (TE-117)
Phase II
Terrebonne Parish, Louisiana

GeoEngineers

Figure E-2

P:\16\16715040\CAD\03\Geotech - Final\16715040003_FE02_Borrow Area SS.dwg TAB:F08 - SS Date Exported: 08/13/18 - 12:48 by kcook

Name	Model	Unit Weight (pcf)	Cohesion' (psf)	Phi' (°)	Cohesion Fn	Cohesion Spatial Fn
OH (-4 to -8)	Mohr-Coulomb	85	60	0		
CH (-8 to -10)	Mohr-Coulomb	105	60	0		
SM (-10 to -15)	Mohr-Coulomb	120	30	20		
CL (-15 to -20)	Spatial Mohr-Coulomb	105		0	60 psf to 100 psf	
CL (-20 to -25)	Spatial Mohr-Coulomb	105		0		100 psf to 140 psf



2H:1V

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File Information

File Version: 8.16
Title: Borrow Area Stability
Created By: Alicia R. Sellers
Last Edited By: Jennie Aguettant
Revision Number: 46
Date: 5/17/2018
Time: 11:26:09 AM
Tool Version: 8.16.1.13452
File Name: Borrow Area Stability_2H1V.gsz
Directory: P:\16\16715040\03\Analyses\Borrow Area Slope Stability\
Last Solved Date: 5/17/2018
Last Solved Time: 11:26:34 AM

Project Settings

Length(L) Units: Feet
Time(t) Units: Seconds
Force(F) Units: Pounds
Pressure(p) Units: psf
Strength Units: psf
Unit Weight of Water: 62.4 pcf
View: 2D
Element Thickness: 1

Analysis Settings

2H:1V

Kind: SLOPE/W
Method: Spencer
Settings
PWP Conditions Source: Piezometric Line
Apply Phreatic Correction: No
Use Staged Rapid Drawdown: No
Slip Surface
Direction of movement: Left to Right
Use Passive Mode: No
Slip Surface Option: Entry and Exit
Critical slip surfaces saved: 1
Resisting Side Maximum Convex Angle: 1 °
Driving Side Maximum Convex Angle: 5 °
Optimize Critical Slip Surface Location: Yes

Critical Slip Surface Optimizations
Maximum Iterations: 2,000
Convergence Tolerance: 1e-007
Starting Points: 8
Ending Points: 16
Complete Passes per Insertion: 1
Tension Crack
Tension Crack Option: (none)
F of S Distribution
F of S Calculation Option: Constant
Advanced
Number of Slices: 30
F of S Tolerance: 0.001
Minimum Slip Surface Depth: 0.1 ft
Search Method: Root Finder
Tolerable difference between starting and converged F of S: 3
Maximum iterations to calculate converged lambda: 20
Max Absolute Lambda: 2

Materials

OH (-4 to -8)

Model: Mohr-Coulomb
Unit Weight: 85 pcf
Cohesion': 60 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

CH (-8 to -10)

Model: Mohr-Coulomb
Unit Weight: 105 pcf
Cohesion': 60 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

SM (-10 to -15)

Model: Mohr-Coulomb
Unit Weight: 120 pcf
Cohesion': 30 psf
Phi': 20 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

CL (-15 to -20)

Model: Spatial Mohr-Coulomb
Unit Weight: 105 pcf
Cohesion Fn: 60 psf to 100 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

CL (-20 to -25)

Model: Spatial Mohr-Coulomb
Unit Weight: 105 pcf
Cohesion Spatial Fn: 100 psf to 140 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

Slip Surface Entry and Exit

Left Projection: Range
Left-Zone Left Coordinate: (21.32007, -4) ft
Left-Zone Right Coordinate: (72.06, -4) ft
Left-Zone Increment: 30
Right Projection: Range
Right-Zone Left Coordinate: (100.92, -16.96) ft
Right-Zone Right Coordinate: (153.48, -19) ft
Right-Zone Increment: 30
Radius Increments: 4

Slip Surface Limits

Left Coordinate: (0, -4) ft
Right Coordinate: (180, -19) ft

Piezometric Lines

Piezometric Line 1

Coordinates

	X (ft)	Y (ft)
Coordinate 1	0	-0.02
Coordinate 2	180	-0.02

Cohesion Functions

60 psf to 100 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
Curve Fit to Data: 0 %
Segment Curvature: 100 %
Y-Intercept: 60
Data Points: Y (ft), Cohesion (psf)
Data Point: (-20, 100)
Data Point: (-15, 60)

Spatial Functions

100 psf to 140 psf

Model: Linear Interpolation
Limit Range By: Parameter
Data Points: X (ft), Y (ft), Cohesion (psf)
Data Point: (0, -20, 100)
Data Point: (180, -20, 100)
Data Point: (0, -25, 140)
Data Point: (180, -25, 140)

Points

	X (ft)	Y (ft)
Point 1	0	-4
Point 2	75	-4
Point 3	105	-19
Point 4	180	-19
Point 5	0	-8
Point 6	83	-8
Point 7	0	-10
Point 8	87	-10
Point 9	0	-15
Point 10	97	-15
Point 11	0	-20
Point 12	180	-20
Point 13	0	-40
Point 14	180	-40

Regions

	Material	Points	Area (ft²)
Region 1	OH (-4 to -8)	5,1,2,6	316
Region 2	CH (-8 to -10)	5,7,8,6	170
Region 3	SM (-10 to -15)	7,9,10,8	460
Region 4	CL (-15 to -20)	9,11,12,4,3,10	584

Region 5	CL (-20 to -25)	11,13,14,12	3,600

Current Slip Surface

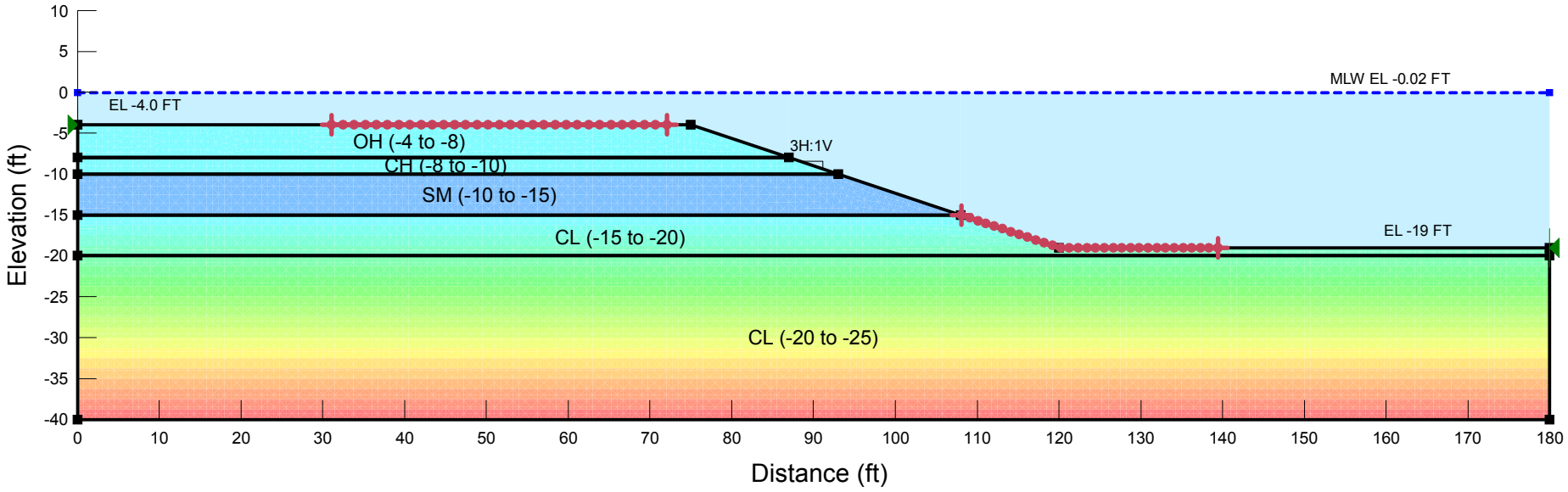
Slip Surface: 4,806
F of S: 1.02
Volume: 321.85671 ft³
Weight: 34,274.137 lbs
Resisting Moment: 113,232.32 lbs-ft
Activating Moment: 111,271.39 lbs-ft
Resisting Force: 3,860.8926 lbs
Activating Force: 3,794.1187 lbs
F of S Rank (Analysis): 1 of 4,806 slip surfaces
F of S Rank (Query): 1 of 4,806 slip surfaces
Exit: (104.99723, -18.998617) ft
Entry: (65.344558, -4) ft
Radius: 23.355949 ft
Center: (93.050422, 2.9318788) ft

Slip Slices

	X (ft)	Y (ft)	PWP (psf)	Base Normal Stress (psf)	Frictional Strength (psf)	Cohesive Strength (psf)
Slice 1	66.093643	-4.7251175	293.59933	249.05119	-0	60
Slice 2	67.591814	-6.1753525	384.094	369.82759	-0	60
Slice 3	68.862189	-7.450235	463.64666	470.14731	0	60
Slice 4	70.156704	-8.815465	548.83702	599.58951	0	60
Slice 5	71.077744	-9.815465	611.23702	688.32605	0	60
Slice 6	71.760656	-10.66803	664.43707	773.78095	39.797917	30
Slice 7	72.830852	-12.00409	747.80722	908.15441	58.361604	30
Slice 8	74.182975	-13.701973	853.75511	1,077.8264	81.555284	30
Slice 9	75.081815	-14.834953	924.45306	1,192.8197	97.677476	30
Slice 10	76.10397	-15.64163	974.78971	1,387.1605	0	65.13304
Slice 11	77.635382	-16.737247	1,043.1562	1,486.8726	0	73.897973
Slice 12	78.817525	-17.52138	1,092.0861	1,551.3733	0	80.17104
Slice 13	79.999668	-18.305513	1,141.016	1,615.8741	0	86.444107

Slice 14	81.146837	-19.023185	1,185.7987	1,683.9042	0	92.18548
Slice 15	82.259031	-19.674395	1,226.4342	1,736.539	0	97.39516
Slice 16	82.907564	-20.054123	1,250.1293	1,767.2311	0	100.43298
Slice 17	83.07106	-20.149853	1,256.1028	1,774.2667	0	101.19882
Slice 18	83.65574	-20.462075	1,275.5855	1,801.2953	0	103.6966
Slice 19	84.87702	-21.025098	1,310.7181	1,848.6012	0	108.20079
Slice 20	86.29234	-21.609915	1,347.2107	1,878.2692	0	112.87932
Slice 21	87.031675	-21.915412	1,366.2737	1,893.5318	0	115.32329
Slice 22	87.719538	-22.093638	1,377.395	1,917.039	0	116.7491
Slice 23	89.031913	-22.423913	1,398.0041	1,913.7778	0	119.3913
Slice 24	90.447968	-22.672082	1,413.4899	1,921.8453	0	121.37666
Slice 25	91.967703	-22.838148	1,423.8524	1,895.9651	0	122.70518
Slice 26	93.541038	-22.841313	1,424.0499	1,884.8825	0	122.7305
Slice 27	95.167973	-22.681578	1,414.0824	1,821.5131	0	121.45262
Slice 28	96.49072	-22.461644	1,400.3586	1,788.025	0	119.69315
Slice 29	97.773438	-22.108861	1,378.3449	1,719.0418	0	116.87089
Slice 30	99.320313	-21.683427	1,351.7978	1,640.4858	0	113.46742
Slice 31	100.70317	-21.19476	1,321.305	1,583.8484	0	109.55808
Slice 32	101.92201	-20.64286	1,286.8665	1,497.4525	0	105.14288
Slice 33	102.86203	-20.183455	1,258.1996	1,440.5573	0	101.46764
Slice 34	104.09494	-19.499308	1,215.5088	1,338.5661	0	95.994466

Name	Model	Unit Weight (pcf)	Cohesion' (psf)	Phi' (°)	Cohesion Fn	Cohesion Spatial Fn
OH (-4 to -8)	Mohr-Coulomb	85	60	0		
CH (-8 to -10)	Mohr-Coulomb	105	60	0		
SM (-10 to -15)	Mohr-Coulomb	120	30	20		
CL (-15 to -20)	Spatial Mohr-Coulomb	105		0	60 psf to 100 psf	
CL (-20 to -25)	Spatial Mohr-Coulomb	105		0		100 psf to 140 psf



3H:1V

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File Information

File Version: 8.16
Title: Borrow Area Stability
Created By: Alicia R. Sellers
Last Edited By: Jennie Aguettant
Revision Number: 47
Date: 5/18/2018
Time: 5:19:27 PM
Tool Version: 8.16.1.13452
File Name: Borrow Area Stability_3H1V.gsz
Directory: P:\16\16715040\03\Analyses\Borrow Area Slope Stability\

Project Settings

Length(L) Units: Feet
Time(t) Units: Seconds
Force(F) Units: Pounds
Pressure(p) Units: psf
Strength Units: psf
Unit Weight of Water: 62.4 pcf
View: 2D
Element Thickness: 1

Analysis Settings

3H:1V

Kind: SLOPE/W
Method: Spencer
Settings
PWP Conditions Source: Piezometric Line
Apply Phreatic Correction: No
Use Staged Rapid Drawdown: No
Slip Surface
Direction of movement: Left to Right
Use Passive Mode: No
Slip Surface Option: Entry and Exit
Critical slip surfaces saved: 1
Resisting Side Maximum Convex Angle: 1 °
Driving Side Maximum Convex Angle: 5 °
Optimize Critical Slip Surface Location: Yes
Critical Slip Surface Optimizations
Maximum Iterations: 2,000

Convergence Tolerance: 1e-007
Starting Points: 8
Ending Points: 16
Complete Passes per Insertion: 1
Tension Crack
Tension Crack Option: (none)
F of S Distribution
F of S Calculation Option: Constant
Advanced
Number of Slices: 30
F of S Tolerance: 0.001
Minimum Slip Surface Depth: 0.1 ft
Search Method: Root Finder
Tolerable difference between starting and converged F of S: 3
Maximum iterations to calculate converged lambda: 20
Max Absolute Lambda: 2

Materials

OH (-4 to -8)

Model: Mohr-Coulomb
Unit Weight: 85 pcf
Cohesion': 60 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

CH (-8 to -10)

Model: Mohr-Coulomb
Unit Weight: 105 pcf
Cohesion': 60 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

SM (-10 to -15)

Model: Mohr-Coulomb
Unit Weight: 120 pcf
Cohesion': 30 psf
Phi': 20 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

CL (-15 to -20)

Model: Spatial Mohr-Coulomb
Unit Weight: 105 pcf

Cohesion Fn: 60 psf to 100 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

CL (-20 to -25)

Model: Spatial Mohr-Coulomb
Unit Weight: 105 pcf
Cohesion Spatial Fn: 100 psf to 140 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

Slip Surface Entry and Exit

Left Projection: Range
Left-Zone Left Coordinate: (31.11, -4) ft
Left-Zone Right Coordinate: (72.06, -4) ft
Left-Zone Increment: 30
Right Projection: Range
Right-Zone Left Coordinate: (108.05, -15.01667) ft
Right-Zone Right Coordinate: (139.44, -19) ft
Right-Zone Increment: 30
Radius Increments: 4

Slip Surface Limits

Left Coordinate: (0, -4) ft
Right Coordinate: (180, -19) ft

Piezometric Lines

Piezometric Line 1

Coordinates

	X (ft)	Y (ft)
Coordinate 1	0	-0.02
Coordinate 2	180	-0.02

Cohesion Functions

60 psf to 100 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y

Curve Fit to Data: 0 %
Segment Curvature: 100 %
Y-Intercept: 60
Data Points: Y (ft), Cohesion (psf)
Data Point: (-20, 100)
Data Point: (-15, 60)

Spatial Functions

100 psf to 140 psf

Model: Linear Interpolation
Limit Range By: Parameter
Data Points: X (ft), Y (ft), Cohesion (psf)
Data Point: (0, -20, 100)
Data Point: (180, -20, 100)
Data Point: (0, -25, 140)
Data Point: (180, -25, 140)

Points

	X (ft)	Y (ft)
Point 1	0	-4
Point 2	75	-4
Point 3	120	-19
Point 4	180	-19
Point 5	0	-8
Point 6	87	-8
Point 7	0	-10
Point 8	93	-10
Point 9	0	-15
Point 10	108	-15
Point 11	0	-20
Point 12	180	-20
Point 13	0	-40
Point 14	180	-40

Regions

	Material	Points	Area (ft²)
Region 1	OH (-4 to -8)	5,1,2,6	324
Region 2	CH (-8 to -10)	5,7,8,6	180
Region 3	SM (-10 to -15)	7,9,10,8	502.5
Region 4	CL (-15 to -20)	9,11,12,4,3,10	636
Region 5	CL (-20 to -25)	11,13,14,12	3,600

APPENDIX F
Two-Lift Construction of ECDs

Calculation Checksheet

Project Number: 16715-040-03 **Project Title:** Island Road Marsh Creation and Nourishment (TE-117)

Client: CPRA

Location: Terrebonne Parish, Louisiana

Calculations Description: Slope stability of the containment dikes using two-stage construction was evaluated for mudline elevations of +1.5 feet and -3.5 feet using optimized circular search parameters with Spencer's method in the GEO-SLOPE International Limited computer program SLOPE/W (GeoStudio 2016). Containment dike stability was evaluated using design Profiles 1 and 2. Two-stage construction of the containment dikes was evaluated assuming the first lift would construct the dikes to El. +2.5 ft. and the second lift would bring the dike to final grade at El. +4 ft. See attached for description of cases evaluated.

Contents of Calculation Package: Description of stability methodology and cases evaluated, failure curves, and SLOPE/W output files.

Originator: CKH **Checked by:** GEQ **Date:** August 9, 2018

Checking Method (describe):

Checked input parameters including geometry and soil parameters. Compared results with original one-lift analyses to check for reasonableness of results.

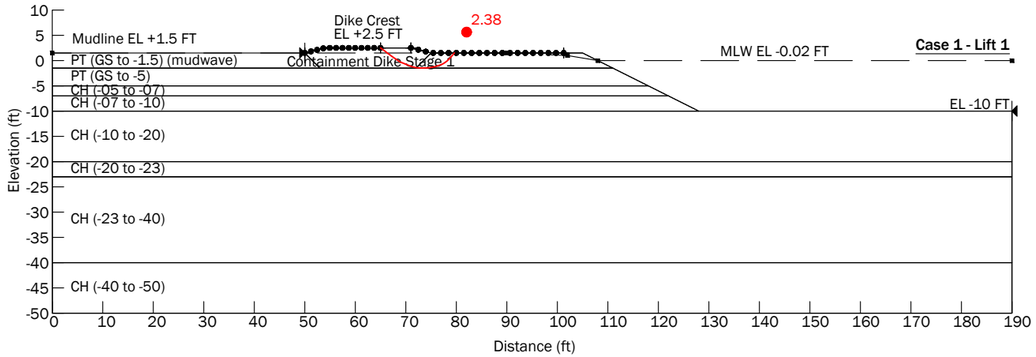
APPENDIX F
CALCULATION APPROACH FOR TWO-LIFT CONSTRUCTION OF EARTHEN CONTAINMENT DIKES

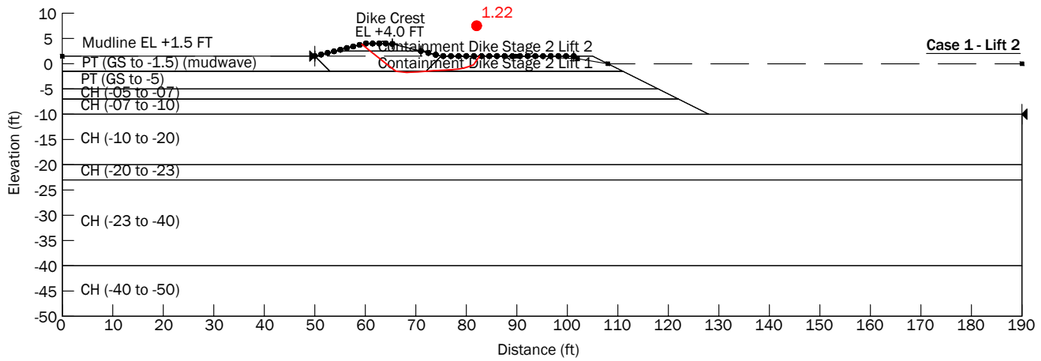
Although stability calculations do not suggest two-lift construction of earthen containment dikes is necessary, we have included an evaluation of slope stability assuming two-lift construction. Containment dike slope stability was evaluated using optimized circular search parameters with Spencer's method in the GEO-SLOPE International Limited computer program SLOPE/W (GeoStudio 2016). The internal stability condition (Cases 1 and 4 as described in Appendix A) were evaluated assuming two-stage construction with the ECDs initially being constructed to El. +2.5 ft., and later being brought to final grade of El. +4.0 ft. Strength gain in soil beneath the ECD fill was not evaluated because the critical failure surfaces were predominantly in the fill section. Design considerations for the evaluations are described below.

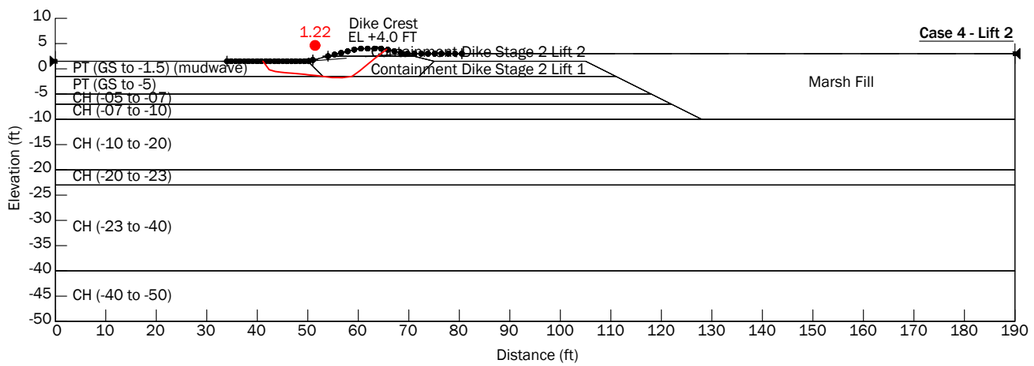
1. Used mean low water elevation of -0.02 ft., as provided by CPRA.
2. Used maximum and minimum governing mudline elevations provided by CPRA (El. +1.5 ft. and - 3.5 ft.).
3. Acceptable factor of safety for slope stability = 1.2.
4. Included a 0.5-ft. construction overbuild tolerance in the stability analyses.
5. The slope stability was evaluated for the following cases:
   - Case 1: Internal failure of the ECD, no marsh fill placed.
   - Case 4: Internal failure of the ECD, marsh fill placed.
6. For the stability analyses evaluated using soil Profile 2, it was assumed the ECD fill will contain some sand as the design profile indicates. Therefore, a friction angle of 2 degrees was applied to the ECD material in our model to account for internal friction.
7. As most of the failure surfaces for cases 1 and 4 assuming one-lift construction were within the containment dike (see Appendix A), we did not account for gains in shear strength within the foundation soils below the containment dike due to the application of the first lift. However, we did account for gain in strength and unit weight of about 5 to 10% within the first lift of containment dike material for our stability analyses. Therefore, for Profile 1, the first lift containment dike material had an adjusted strength of 65 psf and a unit weight of 75 pcf (versus 60 psf and 71 pcf at time of placement) and for Profile 2, the first lift containment dike material had an adjusted strength of 65 psf and a unit weight of 95 pcf (versus 60 psf and 88 pcf at time of placement).

The assumed ECD geometry was the same as that used in our initial slope stability analyses as described in Appendix A. For the first lift, it was assumed the ECD would be constructed to El. +2.5 ft. and the final lift would be constructed to El. +4.0 ft.

This appendix contains the stability analysis results and an example of our SLOPE/W output. All calculation inputs and outputs were provided electronically.







Name	Model	Unit Weight (pcf)	Cohesion	Phi (°)	Cohesion (psf)
PT (GS to -1.5) (mudwave)	Mohr-Coulomb	72	0	0	
PT (GS to -5)	Spatial Mohr-Coulomb	72	0	0	0 psf to 80 psf
CH (-05 to -07)	Mohr-Coulomb	85		0	
CH (-07 to -10)	Mohr-Coulomb	85	110	0	
CH (-10 to -20)	Spatial Mohr-Coulomb	104		0	130 psf to 215 psf
CH (-20 to -23)	Spatial Mohr-Coulomb	97		0	215 psf to 240 psf
CH (-23 to -40)	Mohr-Coulomb	97	240	0	
CH (-40 to -50)	Mohr-Coulomb	108	240	0	
Containment Dike Stage 1	Mohr-Coulomb	71	60	0	
Containment Dike Stage 2 Lift 1	Mohr-Coulomb	75	65	0	
Containment Dike Stage 2 Lift 2	Mohr-Coulomb	71	60	0	
Marsh Fill	Mohr-Coulomb	85	0	0	

Containment Dike Two-Lift Construction - Profile 1 - Lift - Mudline at +1.5 ft.

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Figure F-1

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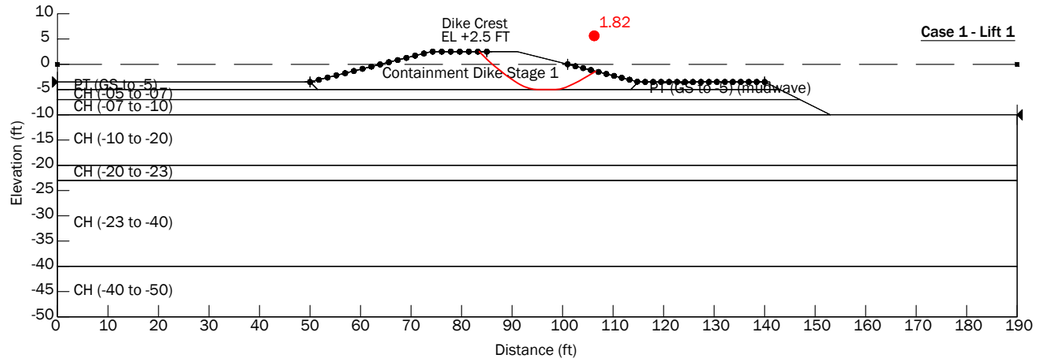

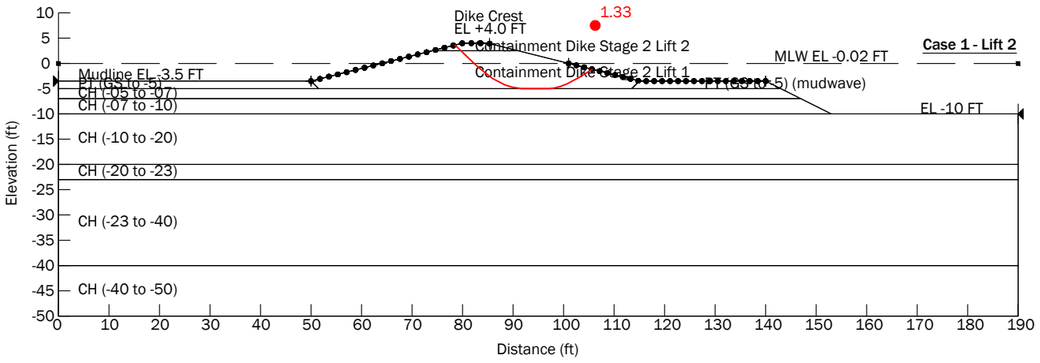

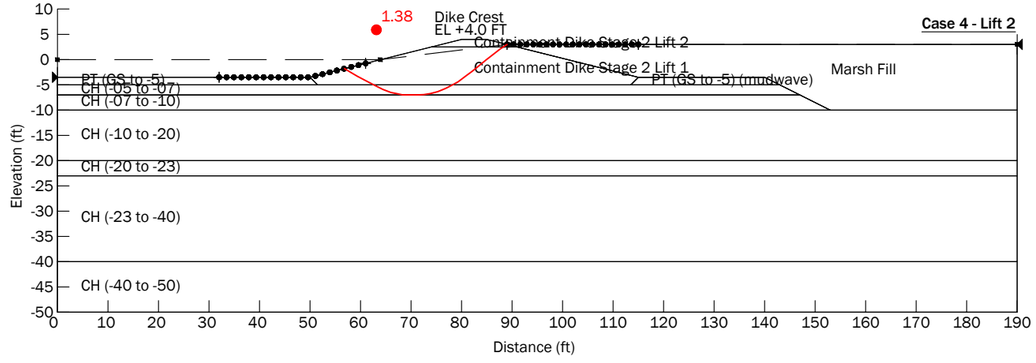

Name	Model	Unit Weight (pcf)	Cohesion	Phi (°)	Cohesion (psf)
PT (GS to -1.5) (mudwave)	Mohr-Coulomb	72	0	0	
PT (GS to -5)	Spatial Mohr-Coulomb	72	0	0	0 psf to 80 psf
CH (-05 to -07)	Mohr-Coulomb	85	80	0	
CH (-07 to -10)	Mohr-Coulomb	85	110	0	
CH (-10 to -20)	Spatial Mohr-Coulomb	104		0	130 psf to 215 psf
CH (-20 to -23)	Spatial Mohr-Coulomb	97		0	215 psf to 240 psf
CH (-23 to -40)	Mohr-Coulomb	97	240	0	
CH (-40 to -50)	Mohr-Coulomb	108	240	0	
Containment Dike Stage 1	Mohr-Coulomb	71	60	0	
Containment Dike Stage 2 Lift 1	Mohr-Coulomb	75	65	0	
Containment Dike Stage 2 Lift 2	Mohr-Coulomb	71	60	0	
Marsh Fill	Mohr-Coulomb	85	0	0	

Containment Dike Two-Lift Construction - Profile 1 - Mudline at -3.5 ft.

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
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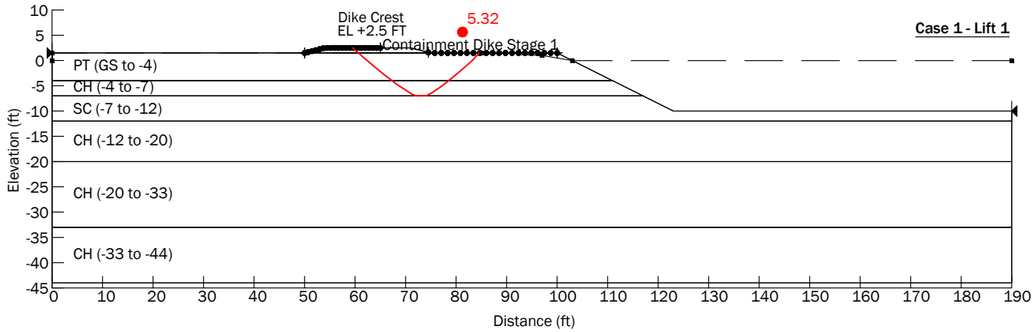
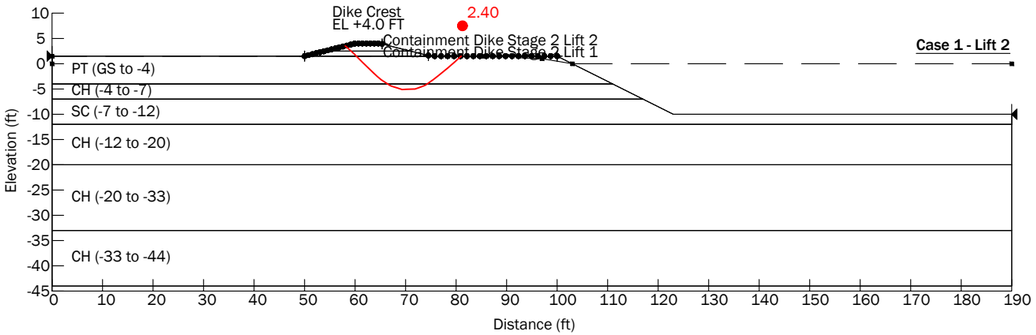
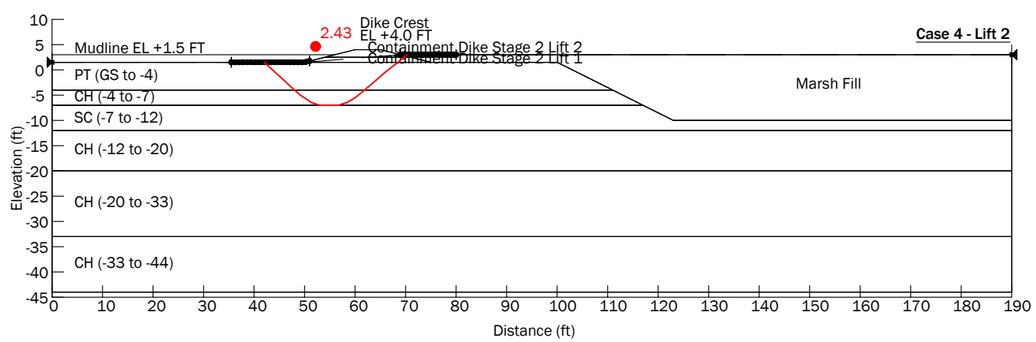
Figure F-2

P:\16\16715040\CAD\03\Geotech - Final\16715040003_FF02-04_SlopeW.dwg TAB:FF02 Date Exported: 08/13/18 - 13:10 by kcook







Name	Model	Unit Weight (pcf)	Cohesion	Phi (°)	Cohesion (psf)
PT (GS to -4)	Mohr-Coulomb	76	100	0	
CH (-4 to -7)	Mohr-Coulomb	108	100	0	
SC (-7 to -12)	Mohr-Coulomb	118	0	30	
CH (-12 to -20)	Spatial Mohr-Coulomb	102		0	150 psf to 190 psf
CH (-20 to -33)	Spatial Mohr-Coulomb	110		0	190 psf to 260 psf
CH (-33 to -44)	Mohr-Coulomb	118	260	0	
Marsh Fill	Mohr-Coulomb	85	0	0	
Containment Dike Stage 1	Mohr-Coulomb	88	60	0	
Containment Dike Stage 2 Lift 1	Mohr-Coulomb	95	65	0	
Containment Dike Stage 2 Lift 2	Mohr-Coulomb	88	60	0	

Containment Dike Two-Lift Construction - Profile 2 - Mudline at +1.5 ft.

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
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Figure F-3

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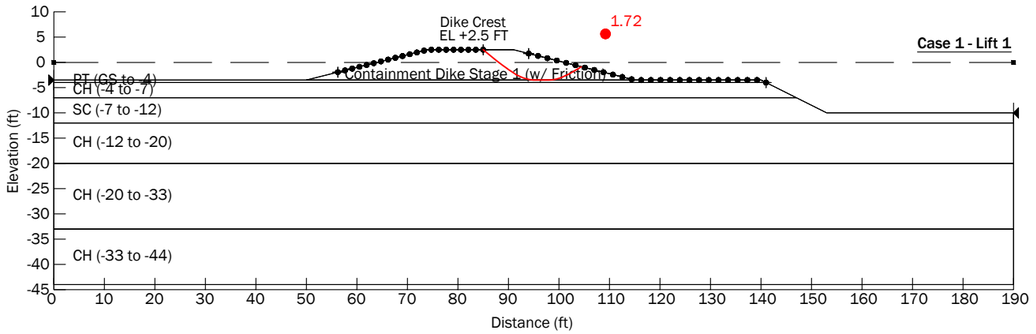

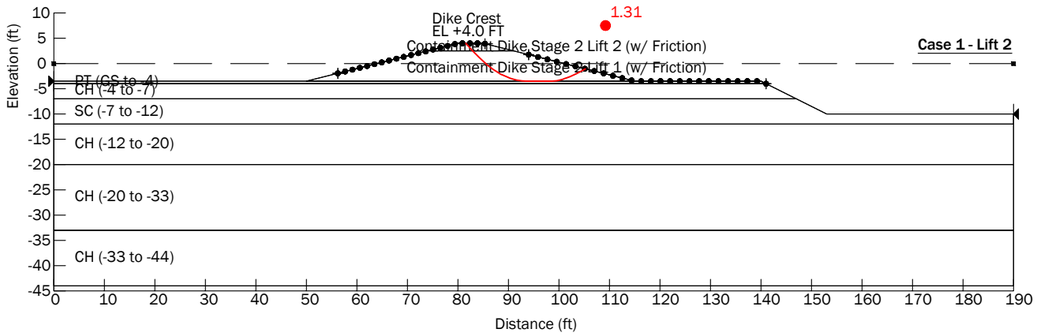

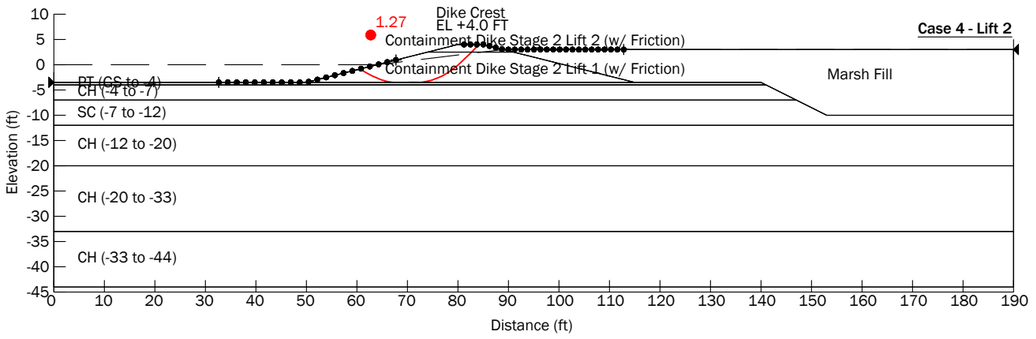

Name	Model	Unit Weight (pcf)	Cohesion	Phi (°)	Cohesion (psf)
PT (GS to -4)	Mohr-Coulomb	76	100	0	
CH (-4 to -7)	Mohr-Coulomb	108	100	0	
SC (-7 to -12)	Mohr-Coulomb	118	0	30	
CH (-12 to -20)	Spatial Mohr-Coulomb	102		0	150 psf to 190 psf
CH (-20 to -33)	Spatial Mohr-Coulomb	110		0	190 psf to 260 psf
CH (-33 to -44)	Mohr-Coulomb	118	260	0	
Marsh Fill	Mohr-Coulomb	85	0	0	
Containment Dike Stage 1 (w/ Friction)	Mohr-Coulomb	88	60	2	
Containment Dike Stage 2 Lift 1 (w/ Friction)	Mohr-Coulomb	95	65	2	
Containment Dike Stage 2 Lift 2 (w/ Friction)	Mohr-Coulomb	88	60	2	

Containment Dike Two-Lift Construction - Profile 2 - Mudline at -3.5 ft.

Island Road Marsh Creation and Nourishment (TE-117)
Phase II
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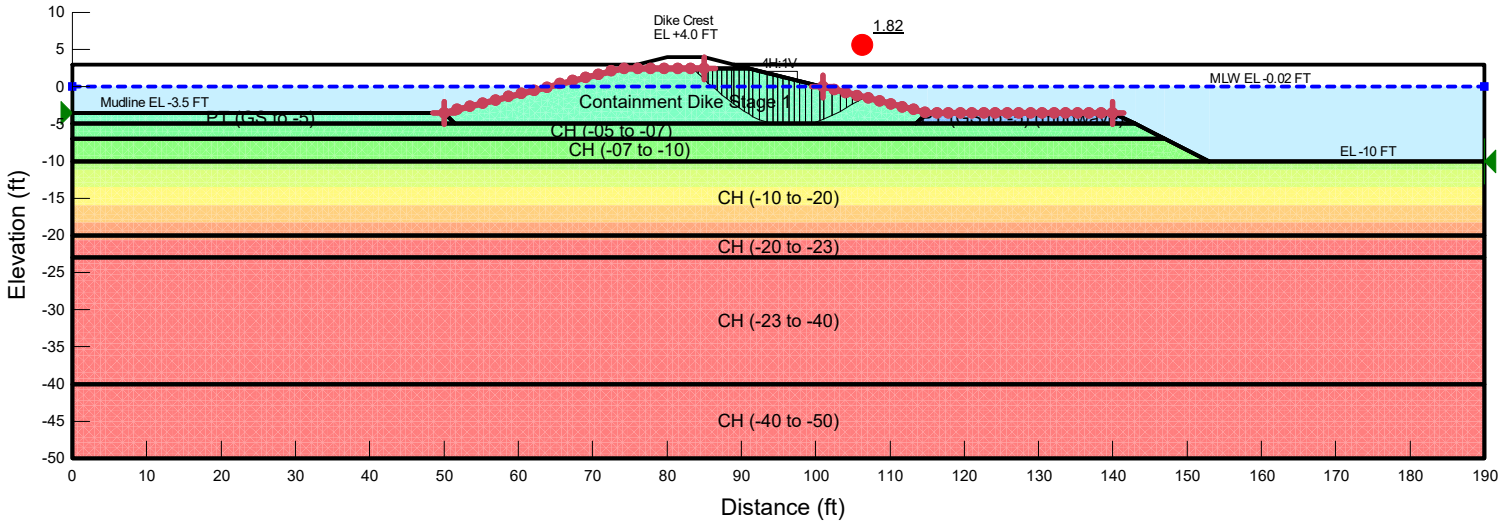
Figure F-4

P:\16\16715040\CAD\03\Geotech - Final\16715040003_FF02-04_SlopeW.dwg TAB:FF04 Date Exported: 08/13/18 - 13:14 by kcook

Name	Model	Unit Weight (pcf)	Cohesion Fn	Phi' (°)	Cohesion' (psf)
PT (GS to -5)	Spatial Mohr-Coulomb	72	0 psf to 80 psf	0	
CH (-05 to -07)	Mohr-Coulomb	85		0	80
CH (-07 to -10)	Mohr-Coulomb	85		0	110
CH (-10 to -20)	Spatial Mohr-Coulomb	104	130 psf to 215 psf	0	
CH (-20 to -23)	Spatial Mohr-Coulomb	97	215 psf to 240 psf	0	
CH (-23 to -40)	Mohr-Coulomb	97		0	240
CH (-40 to -50)	Mohr-Coulomb	108		0	240
Containment Dike Stage 1	Mohr-Coulomb	71		0	60
PT (GS to -5) (mudwave)	Mohr-Coulomb	72		0	0



Internal Stability Stage 1

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File Information

File Version: 8.16
Title: Containment Dike Stability
Created By: Alicia R. Sellers
Last Edited By: Cody K. Hatch
Revision Number: 44
Date: 7/18/2018
Time: 4:33:21 PM
Tool Version: 8.16.1.13452
File Name: ML-3.5_Crest+4.0_Slope4-1 NoSand_Staged.gsz
Directory: P:\16\16715040\03\Analyses\Calculation Packages\Containment Dike Stability\Staged\
Last Solved Date: 7/18/2018
Last Solved Time: 4:33:32 PM

Project Settings

Length(L) Units: Feet
Time(t) Units: Seconds
Force(F) Units: Pounds
Pressure(p) Units: psf
Strength Units: psf
Unit Weight of Water: 62.4 pcf
View: 2D
Element Thickness: 1

Analysis Settings

Internal Stability Stage 1

Kind: SLOPE/W
Method: Spencer
Settings
- PWP Conditions Source: Piezometric Line
- Apply Phreatic Correction: No
- Use Staged Rapid Drawdown: No

Slip Surface
- Direction of movement: Left to Right
- Use Passive Mode: No
- Slip Surface Option: Entry and Exit
- Critical slip surfaces saved: 1
- Resisting Side Maximum Convex Angle: 1 °
- Driving Side Maximum Convex Angle: 5 °
- Optimize Critical Slip Surface Location: Yes

Critical Slip Surface Optimizations
- Maximum Iterations: 2,000
- Convergence Tolerance: 1e-007
- Starting Points: 8
- Ending Points: 16
- Complete Passes per Insertion: 1

Tension Crack
- Tension Crack Option: (none)

F of S Distribution
- F of S Calculation Option: Constant

Advanced
- Number of Slices: 30
- F of S Tolerance: 0.001
- Minimum Slip Surface Depth: 0.1 ft
- Search Method: Root Finder
- Tolerable difference between starting and converged F of S: 3
- Maximum iterations to calculate converged lambda: 20
- Max Absolute Lambda: 2

Materials

PT (GS to -5)

Model: Spatial Mohr-Coulomb
Unit Weight: 72 pcf
Cohesion Fn: 0 psf to 80 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-05 to -07)

Model: Mohr-Coulomb
Unit Weight: 85 pcf
Cohesion': 80 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-07 to -10)

Model: Mohr-Coulomb
Unit Weight: 85 pcf
Cohesion': 110 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-10 to -20)

Model: Spatial Mohr-Coulomb
Unit Weight: 104 pcf
Cohesion Fn: 130 psf to 215 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-20 to -23)

Model: Spatial Mohr-Coulomb
Unit Weight: 97 pcf
Cohesion Fn: 215 psf to 240 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-23 to -40)

Model: Mohr-Coulomb
Unit Weight: 97 pcf
Cohesion': 240 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-40 to -50)

Model: Mohr-Coulomb
Unit Weight: 108 pcf
Cohesion': 240 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

Containment Dike Stage 1

Model: Mohr-Coulomb
Unit Weight: 71 pcf
Cohesion': 60 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

PT (GS to -5) (mudwave)

Model: Mohr-Coulomb
Unit Weight: 72 pcf
Cohesion': 0 psf
Phi': 0 °
Phi-B: 0 °

Pore Water Pressure
- Piezometric Line: 1

Slip Surface Entry and Exit

Left Projection: Range
Left-Zone Left Coordinate: (50, -3.5) ft
Left-Zone Right Coordinate: (85, 2.5) ft
Left-Zone Increment: 20
Right Projection: Range
Right-Zone Left Coordinate: (101, 0) ft
Right-Zone Right Coordinate: (140, -3.5) ft
Right-Zone Increment: 25
Radius Increments: 4

Slip Surface Limits

Left Coordinate: (0, -3.5) ft
Right Coordinate: (190, -10) ft

Piezometric Lines

Piezometric Line 1

Coordinates

	X (ft)	Y (ft)
Coordinate 1	0	-0.02
Coordinate 2	190	-0.02

Cohesion Functions

0 psf to 80 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
- Curve Fit to Data: 100 %
- Segment Curvature: 100 %

Y-Intercept: 18.461538
Data Points: Y (ft), Cohesion (psf)
- Data Point: (-5, 80)
- Data Point: (1.5, 0)

130 psf to 215 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
- Curve Fit to Data: 0 %
- Segment Curvature: 0 %

Y-Intercept: 130
Data Points: Y (ft), Cohesion (psf)
Data Point: (-20, 214.6)
Data Point: (-10, 130)

215 psf to 240 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
Curve Fit to Data: 0 %
Segment Curvature: 0 %
Y-Intercept: 214.6
Data Points: Y (ft), Cohesion (psf)
Data Point: (-23, 240)
Data Point: (-20, 214.6)

Points

	X (ft)	Y (ft)
Point 1	0	-3.5
Point 2	50	-3.5
Point 3	51.5	-5
Point 4	153	-10
Point 5	190	-10
Point 6	0	-5
Point 7	0	-10
Point 8	0	-20
Point 9	190	-20
Point 10	0	-40
Point 11	190	-40
Point 12	0	-50
Point 13	190	-50
Point 14	146	-6.5
Point 15	80	4
Point 16	85	4
Point 17	0	-23
Point 18	190	-23
Point 19	0	-7
Point 20	147	-7
Point 21	115	-3.5
Point 22	143	-5
Point 23	140	-3.5
Point 24	113.5	-5
Point 25	89	3
Point 26	190	3
Point 27	0	3
Point 28	76	3

Point 29	74	2.5
Point 30	91	2.5

Regions

	Material	Points	Area (ft²)
Region 1	PT (GS to -5)	1,2,3,6	76.125
Region 2	Containment Dike Stage 1	2,29,30,21,24,3	341.25
Region 3	CH (-07 to -10)	19,7,4,20	450
Region 4	CH (-10 to -20)	4,5,9,8,7	1,900
Region 5	CH (-20 to -23)	8,17,18,9	570
Region 6	CH (-40 to -50)	11,13,12,10	1,900
Region 7	CH (-23 to -40)	10,11,18,17	3,230
Region 8	CH (-05 to -07)	6,19,20,14,22,24,3	290
Region 9	PT (GS to -5) (mudwave)	21,24,22,23	40.875
Region 10		25,26,5,4,20,14,22,23,21,30	854.75
Region 11		27,28,29,2,1	409.5
Region 12		29,28,15,16,25,30	16.5

Current Slip Surface

Slip Surface: 2,731
F of S: 1.82
Volume: 97.757665 ft³
Weight: 6,940.7942 lbs
Resisting Moment: 26,430.723 lbs-ft
Activating Moment: 14,554.035 lbs-ft
Resisting Force: 1,383.0129 lbs
Activating Force: 761.47439 lbs
F of S Rank (Analysis): 1 of 2,731 slip surfaces
F of S Rank (Query): 1 of 2,731 slip surfaces
Exit: (106.5562, -1.3890506) ft
Entry: (83.505987, 2.5) ft
Radius: 10.866433 ft
Center: (97.124052, 12.095571) ft

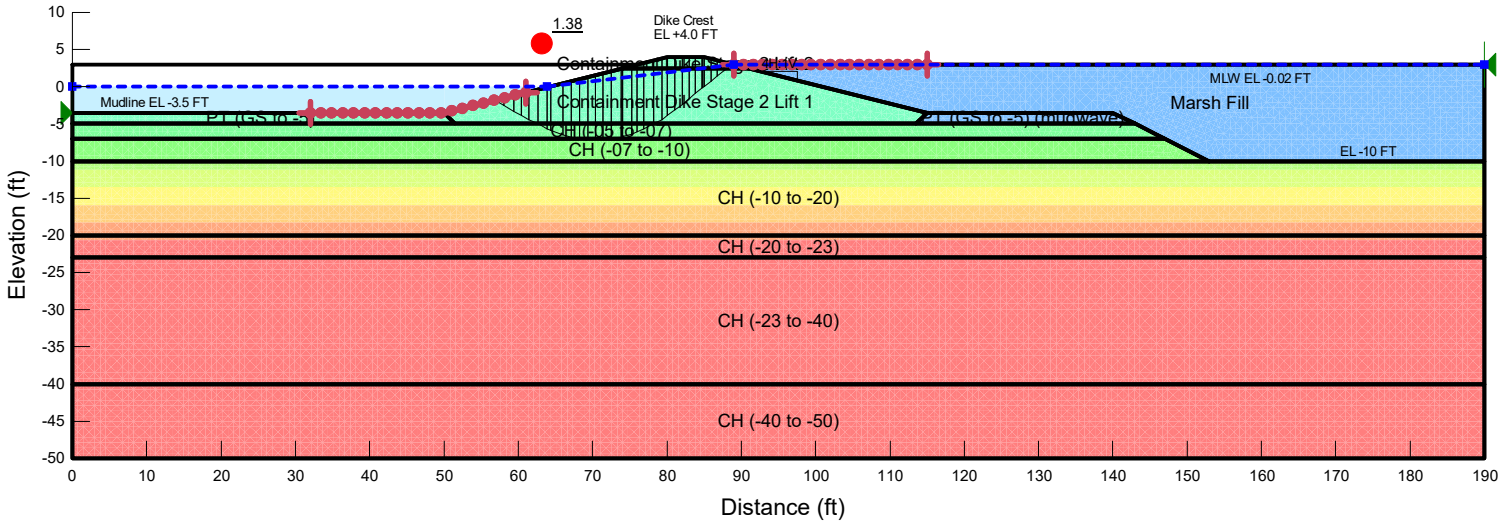
Slip Slices

	X (ft)	Y (ft)	PWP (psf)	Base Normal Stress (psf)	Frictional Strength (psf)	Cohesive Strength (psf)
Slice 1	83.87949	2.1286317	-134.07462	-4.2359365	-0	60
Slice 2	84.626497	1.3858952	-87.727863	45.518297	0	60
Slice 3	85.26792	0.74813849	-47.931842	88.240174	0	60

Slice 4	85.833673	0.230875	-15.6546	128.73792	0	60
Slice 5	86.430448	-0.27181	15.712944	162.70498	0	60
Slice 6	87.056298	-0.78636	47.820864	199.12901	0	60
Slice 7	87.710115	-1.31184	80.610816	234.71518	0	60
Slice 8	88.363932	-1.83732	113.40077	270.30133	0	60
Slice 9	88.84542	-2.2074509	136.49694	300.68388	0	60
Slice 10	89.352497	-2.5597314	158.47924	324.69108	0	60
Slice 11	90.057492	-3.0495105	189.04145	358.06854	0	60
Slice 12	90.704995	-3.4768015	215.70442	391.34023	0	60
Slice 13	91.26757	-3.8246415	237.40963	410.57121	0	60
Slice 14	91.97068	-4.208485	261.36146	431.46248	0	60
Slice 15	92.91927	-4.59933	285.75019	451.72482	0	60
Slice 16	93.85134	-4.85598	301.76515	461.42707	0	60
Slice 17	94.592325	-4.969975	308.87844	462.95754	0	60
Slice 18	95.285898	-4.999764	310.73727	458.39717	0	60
Slice 19	96.029114	-4.999772	310.73777	445.20566	0	60
Slice 20	96.77233	-4.99978	310.73827	432.01416	0	60
Slice 21	97.515546	-4.999788	310.73877	418.82265	0	60
Slice 22	98.258762	-4.999796	310.73927	405.63114	0	60
Slice 23	99.03264	-4.959255	308.20951	394.74355	0	60
Slice 24	100.00287	-4.758045	295.65401	373.21516	0	60
Slice 25	100.82541	-4.480833	278.35598	347.94655	0	60
Slice 26	101.62538	-4.114618	255.50416	315.48672	0	60
Slice 27	102.74171	-3.578	222.0192	276.39753	0	60

Slice 28	103.71809	-3.0533001	189.27792	240.15779	0	60
Slice 29	104.52898	-2.5778002	159.60673	203.5513	0	60
Slice 30	105.33987	-2.1023003	129.93554	166.94481	0	60
Slice 31	106.15076	-1.6268005	100.26435	130.33832	0	60

Name	Model	Unit Weight (pcf)	Cohesion Fn	Phi' (°)	Cohesion' (psf)
PT (GS to -5)	Spatial Mohr-Coulomb	72	0 psf to 80 psf	0	
CH (-05 to -07)	Mohr-Coulomb	85		0	80
CH (-07 to -10)	Mohr-Coulomb	85		0	110
CH (-10 to -20)	Spatial Mohr-Coulomb	104	130 psf to 215 psf	0	
CH (-20 to -23)	Spatial Mohr-Coulomb	97	215 psf to 240 psf	0	
CH (-23 to -40)	Mohr-Coulomb	97		0	240
CH (-40 to -50)	Mohr-Coulomb	108		0	240
PT (GS to -5) (mudwave)	Mohr-Coulomb	72		0	0
Marsh Fill	Mohr-Coulomb	85		0	0
Containment Dike Stage 2 Lift 1	Mohr-Coulomb	75		0	65
Containment Dike Stage 2 Lift 2	Mohr-Coulomb	71		0	60



Internal Stability Stage 2

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File Information

File Version: 8.16
Title: Containment Dike Stability
Created By: Alicia R. Sellers
Last Edited By: Cody K. Hatch
Revision Number: 44
Date: 7/18/2018
Time: 4:33:21 PM
Tool Version: 8.16.1.13452
File Name: ML-3.5_Crest+4.0_Slope4-1 NoSand_Staged.gsz
Directory: P:\16\16715040\03\Analyses\Calculation Packages\Containment Dike Stability\Staged\
Last Solved Date: 7/18/2018
Last Solved Time: 4:33:36 PM

Project Settings

Length(L) Units: Feet
Time(t) Units: Seconds
Force(F) Units: Pounds
Pressure(p) Units: psf
Strength Units: psf
Unit Weight of Water: 62.4 pcf
View: 2D
Element Thickness: 1

Analysis Settings

Internal Stability Stage 2

Kind: SLOPE/W
Method: Spencer
Settings
- PWP Conditions Source: Piezometric Line
- Apply Phreatic Correction: No
- Use Staged Rapid Drawdown: No

Slip Surface
- Direction of movement: Left to Right
- Use Passive Mode: No
- Slip Surface Option: Entry and Exit
- Critical slip surfaces saved: 1
- Resisting Side Maximum Convex Angle: 1 °
- Driving Side Maximum Convex Angle: 5 °
- Optimize Critical Slip Surface Location: Yes

Critical Slip Surface Optimizations
- Maximum Iterations: 2,000
- Convergence Tolerance: 1e-007
- Starting Points: 8
- Ending Points: 16
- Complete Passes per Insertion: 1

Tension Crack
- Tension Crack Option: (none)

F of S Distribution
- F of S Calculation Option: Constant

Advanced
- Number of Slices: 30
- F of S Tolerance: 0.001
- Minimum Slip Surface Depth: 0.1 ft
- Search Method: Root Finder
- Tolerable difference between starting and converged F of S: 3
- Maximum iterations to calculate converged lambda: 20
- Max Absolute Lambda: 2

Materials

PT (GS to -5)

Model: Spatial Mohr-Coulomb
Unit Weight: 72 pcf
Cohesion Fn: 0 psf to 80 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-05 to -07)

Model: Mohr-Coulomb
Unit Weight: 85 pcf
Cohesion': 80 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-07 to -10)

Model: Mohr-Coulomb
Unit Weight: 85 pcf
Cohesion': 110 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-10 to -20)

Model: Spatial Mohr-Coulomb
Unit Weight: 104 pcf
Cohesion Fn: 130 psf to 215 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-20 to -23)

Model: Spatial Mohr-Coulomb
Unit Weight: 97 pcf
Cohesion Fn: 215 psf to 240 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-23 to -40)

Model: Mohr-Coulomb
Unit Weight: 97 pcf
Cohesion': 240 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

CH (-40 to -50)

Model: Mohr-Coulomb
Unit Weight: 108 pcf
Cohesion': 240 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

PT (GS to -5) (mudwave)

Model: Mohr-Coulomb
Unit Weight: 72 pcf
Cohesion': 0 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

Containment Dike Stage 2 Lift 1

Model: Mohr-Coulomb
Unit Weight: 75 pcf
Cohesion': 65 psf
Phi': 0 °
Phi-B: 0 °

Pore Water Pressure
- Piezometric Line: 1

Containment Dike Stage 2 Lift 2

Model: Mohr-Coulomb
Unit Weight: 71 pcf
Cohesion': 60 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
- Piezometric Line: 1

Slip Surface Entry and Exit

Left Projection: Range
Left-Zone Left Coordinate: (50, -3.5) ft
Left-Zone Right Coordinate: (85.35294, 3.91176) ft
Left-Zone Increment: 20
Right Projection: Range
Right-Zone Left Coordinate: (101, 0) ft
Right-Zone Right Coordinate: (140, -3.5) ft
Right-Zone Increment: 25
Radius Increments: 4

Slip Surface Limits

Left Coordinate: (0, -3.5) ft
Right Coordinate: (190, -10) ft

Piezometric Lines

Piezometric Line 1

Coordinates

	X (ft)	Y (ft)
Coordinate 1	0	-0.02
Coordinate 2	190	-0.02

Cohesion Functions

0 psf to 80 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
- Curve Fit to Data: 100 %
- Segment Curvature: 100 %

Y-Intercept: 18.461538

Data Points: Y (ft), Cohesion (psf)
Data Point: (-5, 80)
Data Point: (1.5, 0)

130 psf to 215 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
Curve Fit to Data: 0 %
Segment Curvature: 0 %
Y-Intercept: 130
Data Points: Y (ft), Cohesion (psf)
Data Point: (-20, 214.6)
Data Point: (-10, 130)

215 psf to 240 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
Curve Fit to Data: 0 %
Segment Curvature: 0 %
Y-Intercept: 214.6
Data Points: Y (ft), Cohesion (psf)
Data Point: (-23, 240)
Data Point: (-20, 214.6)

Points

	X (ft)	Y (ft)
Point 1	0	-3.5
Point 2	50	-3.5
Point 3	51.5	-5
Point 4	153	-10
Point 5	190	-10
Point 6	0	-5
Point 7	0	-10
Point 8	0	-20
Point 9	190	-20
Point 10	0	-40
Point 11	190	-40
Point 12	0	-50
Point 13	190	-50
Point 14	146	-6.5
Point 15	80	4
Point 16	85	4
Point 17	0	-23
Point 18	190	-23
Point 19	0	-7
Point 20	147	-7

Point 21	115	-3.5
Point 22	143	-5
Point 23	140	-3.5
Point 24	113.5	-5
Point 25	89	3
Point 26	190	3
Point 27	0	3
Point 28	76	3
Point 29	74	2.5
Point 30	91	2.5

Regions

	Material	Points	Area (ft²)
Region 1	PT (GS to -5)	1,2,3,6	76.125
Region 2	Containment Dike Stage 2 Lift 1	2,29,30,21,24,3	341.25
Region 3	CH (-07 to -10)	19,7,4,20	450
Region 4	CH (-10 to -20)	4,5,9,8,7	1,900
Region 5	CH (-20 to -23)	8,17,18,9	570
Region 6	CH (-40 to -50)	11,13,12,10	1,900
Region 7	CH (-23 to -40)	10,11,18,17	3,230
Region 8	CH (-05 to -07)	6,19,20,14,22,24,3	290
Region 9	PT (GS to -5) (mudwave)	21,24,22,23	40.875
Region 10		25,26,5,4,20,14,22,23,21,30	854.75
Region 11		27,28,29,2,1	409.5
Region 12	Containment Dike Stage 2 Lift 2	29,28,15,16,25,30	16.5

Current Slip Surface

Slip Surface: 2,731
F of S: 1.33
Volume: 134.9796 ft³
Weight: 10,070.209 lbs
Resisting Moment: 38,781.804 lbs-ft
Activating Moment: 29,256.769 lbs-ft
Resisting Force: 1,761.2572 lbs

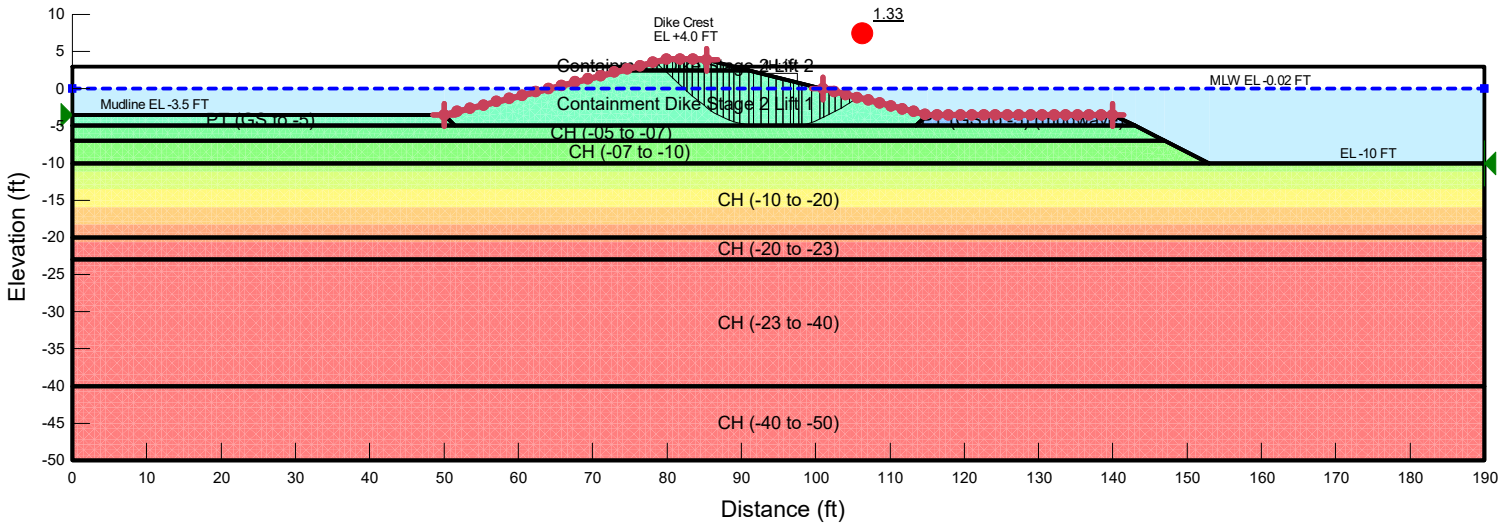
Activating Force: 1,328.0953 lbs
F of S Rank (Analysis): 1 of 2,731 slip surfaces
F of S Rank (Query): 1 of 2,731 slip surfaces
Exit: (105.65851, -1.164628) ft
Entry: (78.469375, 3.6173439) ft
Radius: 12.794271 ft
Center: (94.16118, 14.561268) ft

Slip Slices

	X (ft)	Y (ft)	PWP (psf)	Base Normal Stress (psf)	Frictional Strength (psf)	Cohesive Strength (psf)
Slice 1	78.694768	3.4196519	-214.63428	-16.614359	-0	60
Slice 2	79.298437	2.86098	-179.77315	26.879742	0	60
Slice 3	79.838357	2.3457488	-147.62272	67.138606	0	65
Slice 4	80.386245	1.8229146	-114.99787	106.08406	0	65
Slice 5	81.158734	1.0857488	-68.998724	157.25105	0	65
Slice 6	81.931223	0.34858293	-22.999575	208.41804	0	65
Slice 7	82.495724	-0.190105	10.614552	245.80859	0	65
Slice 8	83.051802	-0.6780175	41.060292	287.34574	0	65
Slice 9	83.807447	-1.3136325	80.722668	331.85728	0	65
Slice 10	84.592635	-1.9445321	120.0908	381.54295	0	65
Slice 11	85.47866	-2.6255121	162.58395	421.52691	0	65
Slice 12	86.365192	-3.20394	198.67786	468.48009	0	65
Slice 13	87.180935	-3.62502	224.95325	484.86778	0	65
Slice 14	87.996678	-4.0461	251.22864	501.25548	0	65
Slice 15	88.702275	-4.3499083	270.18628	529.30835	0	65
Slice 16	89.40065	-4.5686883	283.83815	533.21735	0	65
Slice 17	90.40065	-4.7916497	297.75094	546.17986	0	65
Slice 18	91.336795	-4.9438597	307.24885	540.7172	0	65
	92.169208	-4.998754	310.67425	544.59247	0	65

Slice 19						
Slice 20	93.160444	-4.999022	310.69097	526.02731	0	65
Slice 21	94.15168	-4.99929	310.7077	507.46217	0	65
Slice 22	95.142916	-4.999558	310.72442	488.89701	0	65
Slice 23	96.134152	-4.999826	310.74114	470.33186	0	65
Slice 24	96.848775	-4.994175	310.38852	458.8509	0	65
Slice 25	97.38168	-4.96062	308.29469	451.73468	0	65
Slice 26	97.930055	-4.897065	304.32886	442.15365	0	65
Slice 27	98.7978	-4.69862	291.94589	419.51005	0	65
Slice 28	100.02884	-4.303315	267.27886	376.54294	0	65
Slice 29	100.8533	-3.9505619	245.26706	344.56143	0	65
Slice 30	101.46735	-3.6252314	224.96644	313.4263	0	65
Slice 31	102.24205	-3.2147869	199.3547	278.91461	0	65
Slice 32	103.01675	-2.8043423	173.74296	244.40291	0	65
Slice 33	103.9677	-2.240497	138.55901	204.71942	0	65
Slice 34	105.09491	-1.523251	93.802861	144.51339	0	65

Name	Model	Unit Weight (pcf)	Cohesion Fn	Phi' (°)	Cohesion' (psf)
PT (GS to -5)	Spatial Mohr-Coulomb	72	0 psf to 80 psf	0	
CH (-05 to -07)	Mohr-Coulomb	85		0	80
CH (-07 to -10)	Mohr-Coulomb	85		0	110
CH (-10 to -20)	Spatial Mohr-Coulomb	104	130 psf to 215 psf	0	
CH (-20 to -23)	Spatial Mohr-Coulomb	97	215 psf to 240 psf	0	
CH (-23 to -40)	Mohr-Coulomb	97		0	240
CH (-40 to -50)	Mohr-Coulomb	108		0	240
PT (GS to -5) (mudwave)	Mohr-Coulomb	72		0	0
Containment Dike Stage 2 Lift 1	Mohr-Coulomb	75		0	65
Containment Dike Stage 2 Lift 2	Mohr-Coulomb	71		0	60



Post Construction Stability

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File Information

File Version: 8.16
Title: Containment Dike Stability
Created By: Alicia R. Sellers
Last Edited By: Cody K. Hatch
Revision Number: 44
Date: 7/18/2018
Time: 4:33:21 PM
Tool Version: 8.16.1.13452
File Name: ML-3.5_Crest+4.0_Slope4-1 NoSand_Staged.gsz
Directory: P:\16\16715040\03\Analyses\Calculation Packages\Containment Dike Stability\Staged\
Last Solved Date: 7/18/2018
Last Solved Time: 4:33:34 PM

Project Settings

Length(L) Units: Feet
Time(t) Units: Seconds
Force(F) Units: Pounds
Pressure(p) Units: psf
Strength Units: psf
Unit Weight of Water: 62.4 pcf
View: 2D
Element Thickness: 1

Analysis Settings

Post Construction Stability

Kind: SLOPE/W
Method: Spencer
Settings
PWP Conditions Source: Piezometric Line
Apply Phreatic Correction: No
Use Staged Rapid Drawdown: No
Slip Surface
Direction of movement: Right to Left
Use Passive Mode: No
Slip Surface Option: Entry and Exit
Critical slip surfaces saved: 1
Resisting Side Maximum Convex Angle: 1 °
Driving Side Maximum Convex Angle: 5 °
Optimize Critical Slip Surface Location: Yes

Critical Slip Surface Optimizations
Maximum Iterations: 2,000
Convergence Tolerance: 1e-007
Starting Points: 8
Ending Points: 16
Complete Passes per Insertion: 1
Tension Crack
Tension Crack Option: (none)
F of S Distribution
F of S Calculation Option: Constant
Advanced
Number of Slices: 30
F of S Tolerance: 0.001
Minimum Slip Surface Depth: 0.1 ft
Search Method: Root Finder
Tolerable difference between starting and converged F of S: 3
Maximum iterations to calculate converged lambda: 20
Max Absolute Lambda: 2

Materials

PT (GS to -5)

Model: Spatial Mohr-Coulomb
Unit Weight: 72 pcf
Cohesion Fn: 0 psf to 80 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

CH (-05 to -07)

Model: Mohr-Coulomb
Unit Weight: 85 pcf
Cohesion': 80 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

CH (-07 to -10)

Model: Mohr-Coulomb
Unit Weight: 85 pcf
Cohesion': 110 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

CH (-10 to -20)

Model: Spatial Mohr-Coulomb
Unit Weight: 104 pcf
Cohesion Fn: 130 psf to 215 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

CH (-20 to -23)

Model: Spatial Mohr-Coulomb
Unit Weight: 97 pcf
Cohesion Fn: 215 psf to 240 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

CH (-23 to -40)

Model: Mohr-Coulomb
Unit Weight: 97 pcf
Cohesion': 240 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

CH (-40 to -50)

Model: Mohr-Coulomb
Unit Weight: 108 pcf
Cohesion': 240 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

PT (GS to -5) (mudwave)

Model: Mohr-Coulomb
Unit Weight: 72 pcf
Cohesion': 0 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

Marsh Fill

Model: Mohr-Coulomb
Unit Weight: 85 pcf
Cohesion': 0 psf
Phi': 0 °
Phi-B: 0 °

Pore Water Pressure
Piezometric Line: 1

Containment Dike Stage 2 Lift 1

Model: Mohr-Coulomb
Unit Weight: 75 pcf
Cohesion': 65 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

Containment Dike Stage 2 Lift 2

Model: Mohr-Coulomb
Unit Weight: 71 pcf
Cohesion': 60 psf
Phi': 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

Slip Surface Entry and Exit

Left Projection: Range
Left-Zone Left Coordinate: (32, -3.5) ft
Left-Zone Right Coordinate: (61, -0.75) ft
Left-Zone Increment: 20
Right Projection: Range
Right-Zone Left Coordinate: (89, 3) ft
Right-Zone Right Coordinate: (115, 3) ft
Right-Zone Increment: 20
Radius Increments: 4

Slip Surface Limits

Left Coordinate: (0, -3.5) ft
Right Coordinate: (190, 3) ft

Piezometric Lines

Piezometric Line 1

Coordinates

	X (ft)	Y (ft)
Coordinate 1	0	-0.02
Coordinate 2	63.92	-0.02
Coordinate 3	89	3

Coordinate 4	190	3

Cohesion Functions

0 psf to 80 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
Curve Fit to Data: 100 %
Segment Curvature: 100 %
Y-Intercept: 18.461538
Data Points: Y (ft), Cohesion (psf)
Data Point: (-5, 80)
Data Point: (1.5, 0)

130 psf to 215 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
Curve Fit to Data: 0 %
Segment Curvature: 0 %
Y-Intercept: 130
Data Points: Y (ft), Cohesion (psf)
Data Point: (-20, 214.6)
Data Point: (-10, 130)

215 psf to 240 psf

Model: Spline Data Point Function
Function: Cohesion vs. Y
Curve Fit to Data: 0 %
Segment Curvature: 0 %
Y-Intercept: 214.6
Data Points: Y (ft), Cohesion (psf)
Data Point: (-23, 240)
Data Point: (-20, 214.6)

Points

	X (ft)	Y (ft)
Point 1	0	-3.5
Point 2	50	-3.5
Point 3	51.5	-5
Point 4	153	-10
Point 5	190	-10
Point 6	0	-5
Point 7	0	-10
Point 8	0	-20
Point 9	190	-20

Point 10	0	-40
Point 11	190	-40
Point 12	0	-50
Point 13	190	-50
Point 14	146	-6.5
Point 15	80	4
Point 16	85	4
Point 17	0	-23
Point 18	190	-23
Point 19	0	-7
Point 20	147	-7
Point 21	115	-3.5
Point 22	143	-5
Point 23	140	-3.5
Point 24	113.5	-5
Point 25	89	3
Point 26	190	3
Point 27	0	3
Point 28	76	3
Point 29	74	2.5
Point 30	91	2.5

Regions

	Material	Points	Area (ft²)
Region 1	PT (GS to -5)	1,2,3,6	76.125
Region 2	Containment Dike Stage 2 Lift 1	2,29,30,21,24,3	341.25
Region 3	CH (-07 to -10)	19,7,4,20	450
Region 4	CH (-10 to -20)	4,5,9,8,7	1,900
Region 5	CH (-20 to -23)	8,17,18,9	570
Region 6	CH (-40 to -50)	11,13,12,10	1,900
Region 7	CH (-23 to -40)	10,11,18,17	3,230
Region 8	CH (-05 to -07)	6,19,20,14,22,24,3	290
Region 9	PT (GS to -5) (mudwave)	21,24,22,23	40.875
Region 10	Marsh Fill	25,26,5,4,20,14,22,23,21,30	854.75
Region 11		27,28,29,2,1	409.5
Region 12	Containment Dike Stage 2 Lift 2	29,28,15,16,25,30	16.5

Current Slip Surface

Slip Surface: 2,206
F of S: 1.38
Volume: 190.93913 ft³
Weight: 14,475.623 lbs
Resisting Moment: 57,608.183 lbs-ft
Activating Moment: 41,798.609 lbs-ft
Resisting Force: 2,320.8996 lbs
Activating Force: 1,683.8838 lbs
F of S Rank (Analysis): 1 of 2,206 slip surfaces
F of S Rank (Query): 1 of 2,206 slip surfaces
Exit: (56.826601, -1.7933499) ft
Entry: (89, 3) ft
Radius: 14.805197 ft
Center: (70.589309, 15.837287) ft

Slip Slices

	X (ft)	Y (ft)	PWP (psf)	Base Normal Stress (psf)	Frictional Strength (psf)	Cohesive Strength (psf)
Slice 1	57.46374	-2.1742449	134.42488	183.04569	0	65
Slice 2	58.73802	-2.936035	181.96058	246.67178	0	65
Slice 3	59.89838	-3.5916775	222.87268	296.34254	0	65
Slice 4	60.94482	-4.1411725	257.16116	342.35567	0	65
Slice 5	62.047456	-4.70796	292.5287	388.21259	0	65
Slice 6	63.273436	-5.3258847	331.08721	449.95224	0	80

Slice 7	64.17347	-5.7795247	361.29889	496.88449	0	80
Slice 8	65.206235	-6.207415	395.75931	542.6121	0	80
Slice 9	66.560425	-6.6271875	432.12832	586.90087	0	80
Slice 10	67.710215	-6.8664625	455.69846	629.4615	0	80
Slice 11	68.804163	-6.98823	471.51655	638.86311	0	80
Slice 12	69.84227	-6.99249	479.58258	658.69581	0	80
Slice 13	70.880377	-6.99675	487.6486	678.5285	0	80
Slice 14	71.95947	-6.96617	493.84859	689.30835	0	80
Slice 15	73.161275	-6.835615	494.73217	690.4147	0	80
Slice 16	73.90152	-6.7115147	492.55042	681.39516	0	80
Slice 17	74.617765	-6.5205597	486.0166	678.04278	0	80
Slice 18	75.617765	-6.2036021	473.75232	655.19386	0	80
Slice 19	76.445245	-5.8739871	459.40193	642.25069	0	80
Slice 20	77.537646	-5.348315	434.80815	603.66236	0	80
Slice 21	78.736626	-4.702995	403.54917	579.09504	0	65
Slice 22	79.644225	-4.1430262	375.42671	537.32662	0	65
Slice 23	80.51349	-3.5005268	341.86629	497.6516	0	65
Slice 24	81.54047	-2.7414556	302.21685	443.70892	0	65
Slice 25	82.501817	-1.9944217	262.82537	384.75693	0	65
Slice 26	83.39753	-1.259425	223.69186	332.82538	0	65
Slice 27	84.293243	-0.52442833	184.55834	280.89382	0	65
Slice 28	84.794391	-0.11573231	162.82127	254.98303	0	65
Slice 29	84.923841	-0.01565846	157.54934	247.88848	0	65
Slice 30	85.450937	0.39182308	136.08302	211.43495	0	65

Slice 31	86.35281	1.0890338	99.353632	146.87574	0	65
Slice 32	87.254683	1.7862446	62.624244	82.316536	0	65
Slice 33	87.978777	2.317425	34.919334	37.455402	0	65
Slice 34	88.625967	2.75	12.78956	-1.377443	-0	60

APPENDIX G
Report Limitations and Guidelines for Use

APPENDIX G
REPORT LIMITATIONS AND GUIDELINES FOR USE

This appendix provides information to help you manage your risks with respect to the use of this report.

Geotechnical Services Are Performed for Specific Purposes, Persons and Projects

This report has been prepared for the CPRA and their authorized agents and regulatory agencies. The information contained herein is not applicable to other sites.

GeoEngineers structures our services to meet the specific needs of our clients. No parties other than the CPRA may rely on the product of our services unless we agree to such reliance in advance and in writing. This is to provide our firm with reasonable protection against open-ended liability claims by third parties with whom there would otherwise be no contractual limits to their actions. Within the limitations of scope, schedule and budget, our services have been executed in accordance with our Agreement with the Client and generally accepted geotechnical practices in this area at the time this report was prepared. Use of this report is not recommended for any purpose or project except the one originally contemplated.

A Geotechnical Engineering or Geologic Report Is Based on a Unique Set of Project-Specific Factors

This report has been prepared for the Island Road Marsh Creation and Nourishment (TE-117) project in Terrebonne Parish, Louisiana. GeoEngineers considered a number of unique, project-specific factors when establishing the scope of services for this project and report. Unless GeoEngineers specifically indicates otherwise, it is important not to rely on this report if it was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

For example, changes that can affect the applicability of this report include those that affect:

- the function of the proposed structure;
- elevation, configuration, location, orientation or weight of the proposed structure;
- composition of the design team; or
- project ownership.

If important changes are made after the date of this report, we recommend that GeoEngineers be given the opportunity to review our interpretations and recommendations. Based on that review, we can provide written modifications or confirmation, as appropriate.

Subsurface Conditions Can Change

This geotechnical or geologic report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by man-made events such as construction on or adjacent to the site, or by natural events such as floods, earthquakes, slope

instability or groundwater fluctuations. If more than a few months have passed since issuance of our report or work product, or if any of the described events may have occurred, please contact GeoEngineers before applying this report for its intended purpose so that we may evaluate whether changed conditions affect the continued reliability or applicability of our conclusions and recommendations.

Most Geotechnical and Geologic Findings Are Professional Opinions

Our interpretations of subsurface conditions are based on field observations from widely spaced sampling locations at the site. Site exploration identifies the specific subsurface conditions only at those points where subsurface tests are conducted or samples are taken. GeoEngineers reviewed field and laboratory data and then applied our professional judgment to render an informed opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ, sometimes significantly, from those indicated in this report. Our report, conclusions and interpretations should not be construed as a warranty of the subsurface conditions.

Geotechnical Engineering Report Recommendations Are Not Final

The construction recommendations included in this report are preliminary and should not be considered final. GeoEngineers' recommendations can be finalized only by observing actual subsurface conditions revealed during construction. GeoEngineers is unable to assume responsibility for the recommendations in this report without performing construction observation.

We recommend that you allow sufficient monitoring, testing and consultation during construction by GeoEngineers to confirm that the conditions encountered are consistent with those indicated by the explorations, to provide recommendations for design changes if the conditions revealed during the work differ from those anticipated, and to evaluate whether earthwork activities are completed in accordance with our recommendations. Retaining GeoEngineers for construction observation for this project is the most effective method of managing the risks associated with unanticipated conditions.

A Geotechnical Engineering or Geologic Report Could Be Subject to Misinterpretation

Misinterpretation of this report by members of the design team or by contractors can result in costly problems. GeoEngineers can help reduce the risks of misinterpretation by conferring with appropriate members of the design team after submitting the report, reviewing pertinent elements of the design team's plans and specifications, participating in pre-bid and preconstruction conferences, and providing construction observation.

Do Not Redraw the Exploration Logs

Geotechnical engineers and geologists prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. The logs included in a geotechnical engineering or geologic report should never be redrawn for inclusion in architectural or other design drawings. Photographic or electronic reproduction is acceptable, but separating logs from the report can create a risk of misinterpretation.

Give Contractors a Complete Report and Guidance

To help prevent costly problems associated with unanticipated subsurface conditions, we recommend giving contractors the complete geotechnical engineering or geologic report but preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report's accuracy is limited. In addition,

encourage them to confer with GeoEngineers and/or to conduct additional study to obtain the specific types of information they need or prefer.

Contractors Are Responsible for Site Safety on Their Own Construction Projects

Our geotechnical recommendations are not intended to direct the contractor's procedures, methods, schedule or management of the work site. The contractor is solely responsible for job site safety and for managing construction operations to minimize risks to on-site personnel and adjacent properties.

Read These Provisions Closely

It is important to recognize that the geoscience practices (geotechnical engineering, geology and environmental science) are less exact than other engineering and natural science disciplines. Without this understanding, there may be expectations that could lead to disappointments, claims and disputes. GeoEngineers includes these explanatory "limitations" provisions in our reports to help reduce such risks. Please confer with GeoEngineers if you need to know more how these "Report Limitations and Guidelines for Use" apply to your project or site.

Biological Pollutants

GeoEngineers' Scope of Work specifically excludes the investigation, detection, prevention or assessment of the presence of Biological Pollutants. Accordingly, this report does not include any interpretations, recommendations, findings or conclusions regarding the detecting, assessing, preventing or abating of Biological Pollutants, and no conclusions or inferences should be drawn regarding Biological Pollutants as they may relate to this project. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria and viruses, and/or any of their byproducts.

A Client that desires these specialized services is advised to obtain them from a consultant who offers services in this specialized field.

GeoEngineers