

DREDGED MATERIAL CONTAINMENT AREA
SITING AND MANAGEMENT PRACTICES
FOR THE McCLELLAN-KERR ARKANSAS
NAVIGATION SYSTEM

By

BRETT ANDREW COWAN

Bachelor of Science in Civil Engineering
Oklahoma State University
Stillwater, OK
1999

Master of Science in Civil Engineering
Oklahoma State University
Stillwater, OK
2000

Submitted to the Faculty of the
Graduate College of
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF PHILOSOPHY
May, 2007

DREDGED MATERIAL CONTAINMENT AREA
SITING AND MANAGEMENT PRACTICES
FOR THE McCLELLAN-KERR ARKANSAS
NAVIGATION SYSTEM

Dissertation Approved:

Dr. Donald Snethen - Dissertation Adviser

Dr. Stephen Cross

Dr. Robert Hughes

Dr. William Warde

Dr. A. Gordon Emslie - Dean of the Graduate College

ACKNOWLEDGMENTS

I would like to thank the United States Army Corps of Engineers for allowing me to use federal resources and granting leave for my course work. I also would like to thank the National Science Foundation for funding my research.

There are a number of professors whom I would like to thank including Dr. Snethen, who has guided me throughout this project. Thanks for supporting me and pointing me toward success. I would also like to thank all of the professors who added to my engineering knowledge base, especially Dr. Cross whom was instrumental in my course work and provided me guidance for my future career in Civil Engineering. Dr. Warde provided a new outlook on engineering analysis by using statistics. And Dr. Hughes has been a part of my engineering career since before I even qualified as an engineer and I always appreciate his advice.

To my family, thanks for always pushing me. Thanks for providing me the skills to complete this degree and mostly thanks for putting up with me.

To my lovely wife, Debbie, thanks for supporting me when I had this crazy thought of going back to school and thanks for also marrying me.

TABLE OF CONTENTS

<u>CHAPTER</u>	<u>PAGE</u>
INTRODUCTION	1
General Project Description	1
Project Background Information	5
REVIEW OF LITERATURE	10
Research Methods	10
Existing Guidance	12
Dredged Material Properties	17
Beneficial Uses of Dredged Material	18
METHODOLOGY	20
DMCA Sizing	20
Geotechnical Properties	26
Linear Programming	27
USACE ADDAMS Model	29
MKARNS Case Study	30
Defining the Linear Model	31
Linear Model Example Problem	35
Establishing a Range of Consolidation Rates	40
FINDINGS	50
MKARNS Linear Solution	50
Project Management Solution	55
CONCLUSION	60
Linear Model Approximates the USACE Model	60
Recommendations	62
Final Thoughts on Analysis	65
REFERENCES	67
BIBLIOGRAPHY	72
APPENDIX A: GIS - Sample Map from USACE Feasibility Report.....	76

APPENDIX B: PSDDF Results for MKARNS Rates of Consolidation	78
ARKNAVCH	79
ARKNAVSC	115
APPENDIX C: Alternative PSDDF Results for Extended Disposal	152
CH	153
SC	189
APPENDIX D: Linear Model Results for MKARNS	226
DMCA #1	227
DMCA #2	228
DMCA #3	229
DMCA #4	230
DMCA #5	231
DMCA #6	232
DMCA #7	233
DMCA #8	234
DMCA #9	235
DMCA #10	236
DMCA #11	237
DMCA #12	238
DMCA #13	239
DMCA #14	240
DMCA #15	241
DMCA #16	242
DMCA #17	243
DMCA #18	244
DMCA #19	245
DMCA #20	246
DMCA #21	247
DMCA #22	248
DMCA #23	249
DMCA #24	250
DMCA #25	251
DMCA #26	252
DMCA #27	253
DMCA #28	254
DMCA #29	255
DMCA #30	256
DMCA #31	257
DMCA #32	258
DMCA #33	259
DMCA #34	260
DMCA #35	261
DMCA #36	262
DMCA #37	263

DMCA #38	264
DMCA #39	265
DMCA #40	266
DMCA #41	267
APPENDIX E: Input Values for MKARNS Linear Model	268
APPENDIX F: Project Management Solution for MKARNS Case Study.....	270

LIST OF TABLES

<u>TABLE</u>	<u>PAGE</u>
Table 1: DMCA Design Values based on Hydrographic Survey.....	21
Table 2: Appendix B Results for Rates of Consolidation based on PSDDF Example 2 Problem	42
Table 3: Appendix C Results for Rates of Consolidation based on PSDDF Example 2 Problem	43
Table 4: PSDDF Model Oedometer Data for SC (Houston-Galveston, Texas)	44
Table 5: Linear Model Input Values from MKARNS Case Study	51
Table 6: Linear Model Results for 41 DMCAs.....	53
Table 7: Computed [Dredged Material Volume In]	56
Table 8: Year 1 and 2 of Appendix F Results.....	58

LIST OF FIGURES

<u>FIGURE</u>	<u>PAGE</u>
Figure 1: MKARNS Geographical Boundaries	2
Figure 2: Area included in MKARNS Case Study.....	4
Figure 3: Typical DMCA Design (USACE, 1987)	13
Figure 4: ADDAMS modules (Schroeder, 2004).....	14
Figure 5: Three settlement components of PSDDF Model (USACE, 1987).....	15
Figure 6: DMCA Hydrological Cycle Processes (USACE, 1987).....	23
Figure 7: DMCA Capacity Design Flow Chart.....	25
Figure 8: Altered Settlement versus Time graph (USACE, 1987).....	28
Figure 9: Example Problem Graphical Solution	40
Figure 10: Coarse Grained Dredged Material from Gulf Region (Bartos, 1977)	46
Figure 11: USCS Soil Classification Chart (VDOT, 2003).....	47
Figure 12: Dredged Lift Management (USACE, 1987)	61

CHAPTER I

INTRODUCTION

General Project Description

The heart of the United States inland navigation system flows through the Mississippi River. This system continues inland through the White, Arkansas, and Verdigris Rivers to the Port of Catoosa in Oklahoma. Currently the existing channel depth for the Lower Mississippi River is a 12-ft. draft while the McClellan-Kerr Arkansas River Navigation System (MKARNS) operates on a 9-ft. draft for barge traffic. The three foot difference limits load capacity and size of barges to approximately 66% of maximum loads obtained on the Mississippi River.

The United States Army Corps of Engineers (USACE) has studied the feasibility of deepening the Navigation System from the Lower Mississippi River to the Port of Catoosa to allow larger barge traffic to carry raw materials into Oklahoma and Arkansas. The economics of bringing more raw materials into Oklahoma and Arkansas for manufacturing was essential for the congressional support for the project. Currently, the feasibility study has been completed and concluded the project was cost beneficial to the

United States, therefore construction began in 2006. Available funding will drive the project, and the project is currently estimated at 80 million dollars in construction costs alone.

The geographical boundaries of the MKARNS are shown on the map in Figure 1.



Figure 1: MKARNS Geographical Boundaries

The MKARNS includes 445 miles of channel improvements on the Arkansas River from the confluence of the White and Mississippi River to the Port of Catoosa, 15 miles east of Tulsa, Oklahoma, along the Verdigris River. It includes a series of 18 locks and dams. River flows on the MKARNS are controlled primarily by the USACE operation of 11 reservoirs in Oklahoma. These reservoirs are Keystone, Oologah, Pensacola, Hudson, Fort Gibson, Tenkiller Ferry, Eufaula, Kaw, Hulah, Copan, and Wister. The lakes provide flood control, water supply, hydropower, fish and wildlife, water quality, recreation, and other benefits. There are 10 major port facilities on the MKARNS, along with 71 companies with private port facilities. The economic impact of the MKARNS in 2005 was estimated to be 2.4 billion dollars providing approximately 12.9 million tons of raw materials to the region. Materials transported included coal, petroleum products, fertilizers, grain, sand and gravel, and iron and steel products. One barge equates to approximately 1500 tons, which is approximately 15 railroad cars or 60 semi-truck loads. This greatly reduces the cost per ton mile, and this is the driving force behind the deepening of the navigation channel as energy prices continue to escalate.

In order to deepen the existing channel to the required 12-ft. channel, several engineering problems needed to be addressed. First and foremost is where to dispose of the dredged material from the deepening process. Tentative siting of the estimated 41 Dredged Material Containment Areas (DMCAs) was accomplished by using Geographical Information Systems (GIS) data coordinated with existing aerial photography, project

maps, and a hydrographic survey to estimate quantities of dredged material for deepening the existing channel. This case study encompasses the area defined in Figure 2.

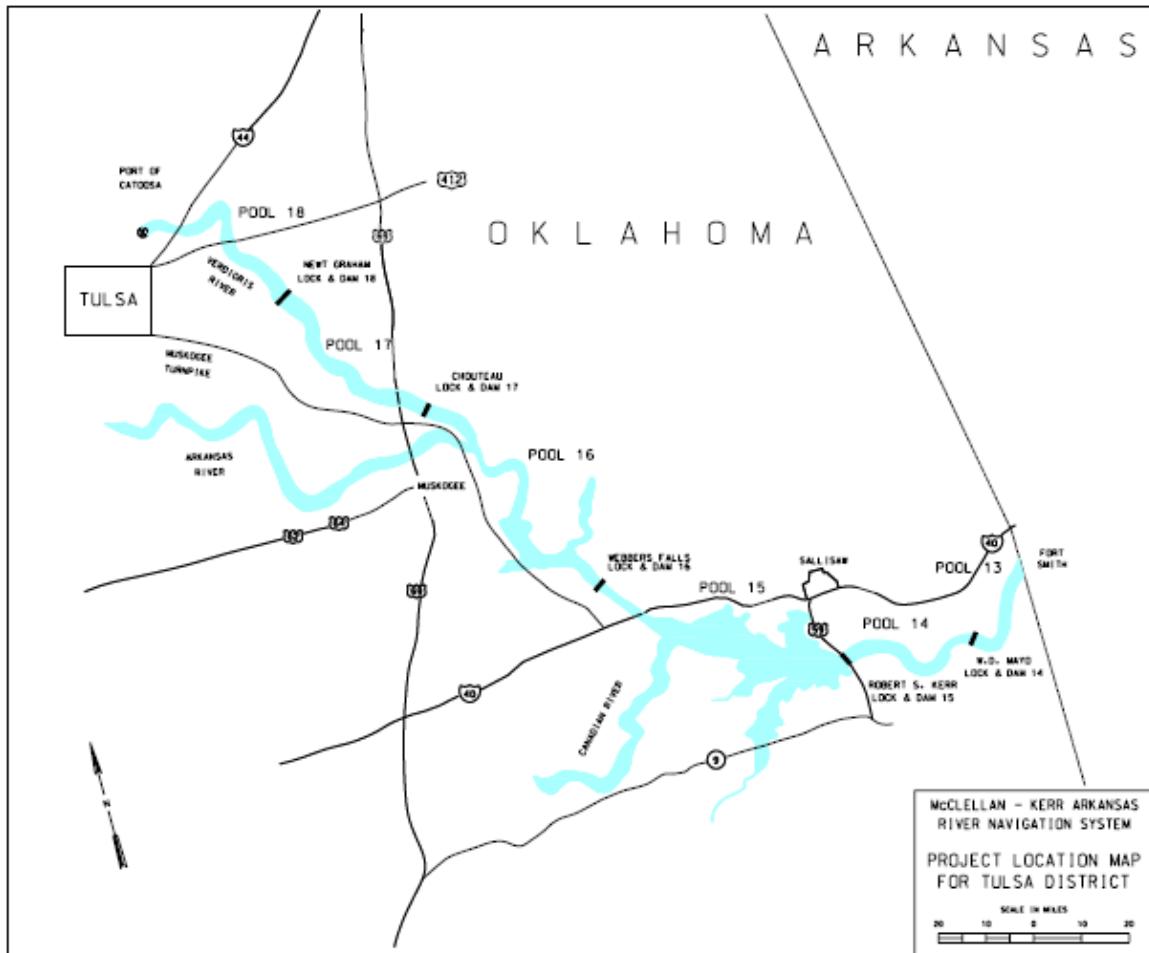


Figure 2: Area included in MKARNS Case Study

The next major obstacle was to determine the design of the DMCAs. First, sediment samples were taken along the MKARNS systems to see what disposal methods would be used according to sediment contamination regulations set by the USACE Engineering Manual EM 1110-2-5027. Contaminants were below allowable levels, so containment facilities would not require any contaminant monitoring. The preliminary design of the

DMCAs was largely based on past experience on the MKARNS instead of the sedimentation properties as called for in EM 1110-2-5027 since contaminants were not detected.

The third major design consideration was addressing all problem areas within the MKARNS which could potentially cause future dredging problems. A series of dikes were designed to help channel the existing river flow to reduce sedimentation in past problem areas.

Finally, a methodology for managing the project with seasonal dredging, limited government funding, and vast quantities of dredging with limited land for disposal needed to be addressed. This optimization of DMCA capacity is key to developing a dredged material disposal system that will last for a 50-year design life.

Project Background Information

Additional issues which were part of the overall MKARNS deepening project but are not addressed in the solution for this case study are described below.

Water Quality Issues - The MKARNS has negligible amounts of salt compared to coastal waters, however it should be noted that originally the USACE built the Great Salt Plains Lake and several other reservoirs which helped diminish the salt content in the water.

Since the salt content is currently negligible it will not be considered in any assumed values for sediment properties.

River Maintenance Structures - River maintenance structures, such as dikes and bank stabilization revetments, are required to reduce the maintenance dredging requirements for the navigation channel. These structures help direct the flow so that bottom scouring will occur in problem areas and reduce the need to dredge. For the feasibility study, it was assumed that these structures were required at five locations with a history of dredging problems.

Availability of DMCAs - Currently, DMCAs on the Oklahoma portion of the waterway are limited. The USACE Tulsa District is reviewing and updating a long-term dredged material disposal plan for the existing 9-ft. channel. Initial assessments show existing DMCAs are insufficient to accommodate maintaining a 9-ft. channel in the future. As part of the review, the USACE Tulsa District is requesting the Oklahoma Department of Environmental Quality (OKDEQ) for a consensus on in-stream disposal of dredged material on portions of the system. The OKDEQ considers portions of the waterway as impaired because of sediment load, and that in-stream disposal would further impair the water quality. As a result, the OKDEQ indicated that it would not concur with such disposal methods. Consequently, analysis for the feasibility study assumed that all Oklahoma disposal areas would be upland. Dredging to accommodate a 12-ft. draft depth will require acquisition of substantial amounts of land and related access.

Proposed Dredging – Historically the MKARNS has had some shoaling problem areas. Shoaling may be an issue in a number of areas with the deeper channel scenario. For the purposes of this analysis, three feet of dredging is assumed over the entire length of the system.

Environmental Impacts / Mitigation - For the deepening and widening of the channel, a detailed Environmental Impact Statement, required by the National Environmental Policy Act, was developed. Depending on the amount of land used for DMCAs, the USACE Tulsa District will acquire and develop wildlife habitat mitigation areas to replace lands lost to DMCAs to ensure no or minimal loss in habitat. An assessment of threatened and endangered species is currently underway for the MKARNS. The exact amount of mitigation for DMCAs will take considerable analysis and coordination with resource agencies. Information is being collected on the habitat value of lands that may be used for DMCAs and lands that are available for mitigation areas. Much of the area along the channel is wooded, while other areas are farmland. As a worst case scenario for the feasibility study, it was assumed that disposal areas are wooded, and mitigation lands will require extensive plantings to provide similar habitat. Assuming much of the land adjacent to the waterway contains bottomland hardwoods, it is likely that resource agencies will require plantings and reestablishment of turf in areas disturbed by construction operations as part of the overall mitigation.

Operations and Maintenance - The costs to operate and maintain a 12-ft. draft channel are expected to increase above the cost required to operate and maintain the current 9-ft.

draft channel. The nature of sedimentation, shoaling, and bank erosion with the new channel depth is uncertain at this point of the study. The feasibility study did not include an analysis of the operation and maintenance cost associated with the operations of a 12-ft. draft channel.

Calculations and Design Parameters - The estimated volumes include all excavation and dredging, including rock excavation. The DMCAs were designed to be rectangles with the length equaling two times the width. Once the actual construction begins the DMCAs will need to be further sized to meet the need of the existing land conditions. The embankments for the DMCAs' design were assumed to be an average height of 12-ft. with a top width of embankment of 10-ft. Once again this was assumed for the purpose of estimating and was based on past design experience within the MKARNS.

Most of the design can be viewed in the GIS project developed for the feasibility study; this will show the approximate size and location of the DMCAs and the proposed dike system. Currently the MKARNS GIS project is not available to the public but the feasibility study for the deepening has been completed. The Feasibility Study is available online at <http://www.swl.usace.army.mil/projmgmt/arkiverstudy.html>.

Considerations for siting the DMCAs were given to available National Wetlands Institute (NWI) data, archeological data, real estate costs, utility crossings, environmental habitat assessments to limit environmental impact, and a hydrological survey showing the dredging needs of the MKARNS.

Concerns for the DMCA design are the need for field verification of the proposed DMCAs. Although some field work was conducted, this will need to be further explored as the project progresses. The proposed DMCAs were modified using environmental impact criteria and may require further on-site investigation to limit the environmental impact. Another important design detail is that the DMCAs need to be approximately 1.5 miles or less from the dredging to keep dredging costs within the estimate based on previous dredging experience within the USACE Tulsa District. This was also addressed using GIS spatial analysis. A sample map from the GIS project from the USACE Feasibility Report can be seen in Appendix A. These DMCA areas were used in the following case study to develop a comprehensive project management solution for deepening the MKARNS and disposing of the sediments in an optimal time. These assumptions and the analysis that follow define the dredged material disposal operations for the projected 41 DMCAs. The dissertation plan was to develop an optimization equation to aid the USACE Tulsa District in completing the task of deepening the MKARNS.

CHAPTER II

REVIEW OF LITERATURE

Research Methods

USACE did a significant amount of dredged material research under the Dredged Material Research Program (DMRP). The DMRP was initiated in 1973. The DMRP was focused on national dredging issues such as dredging processes, regional dredging activities, and the associated environmental issues. Several technical reports were developed based on DMRP work but none developed a comprehensive management plan for optimizing a large disposal operation based solely on dredged material properties. A portion of the original DMRP research can be found in the list of references or in the bibliography. The DMRP no longer exists and the only comprehensive work being conducted in the field today is done by the Dredging Operations and Environmental Research (DOER) Program at the USACE Engineering Research and Development Center (ERDC). The DOER program is concentrated on environmental risk management analysis and computer simulations based on contaminated sediments. There is a yearly dredging conference, where technological advances in dredging are discussed, but most of this research also focuses on contaminated sediments during disposal.

Most of the literature research was accomplished using the Oklahoma State University library resources, specifically <http://www.library.okstate.edu/database/index.htm>. These databases show a nationwide library of journals and articles in various fields. Compendex and Engineering Village were the primary engineering databases used, although several others which include engineering fields such as Academic Search Elite and Proquest were also used. Another database derived from Proquest is the Digital Dissertations / Digital Abstracts which provided access to dissertations within the topic of dredged disposal, dredge maintenance, and geotechnical properties of dredged materials.

Keyword searches included:

Dredging;

Dredged Material;

Dredged Disposal;

Sediment Disposal;

Sediment Properties;

Soil Properties;

Geotechnical Properties of Dredged Material;

Sedimentation of Dredged Material;

GIS use with Dredging;

Dredging Operations;

Geotechnical Properties;

Dredging Sediments;

Consolidation of Dredged Material;

Dredge Management;
Disposal Siting;
Dredged Disposal Siting

- and all combinations of the words mentioned above. The literature's bibliographies were also reviewed and the literature tracked which contained pertinent information to the subject.

Oklahoma State University provides these databases and digital copies of information found on these search engine sites for doctoral students. The USACE Tulsa District provided access to government resources for researching engineering manuals and notes using the same keywords.

Existing Guidance

The DMRP research produced guidelines for sizing and managing a single DMCA, with much of the guidance scattered through several documents. Several design practices were established for dredged material disposal, but none are based on soil classification. Figure 3 shows the basic USACE design for a DMCA and the material segregation which occurs during disposal.

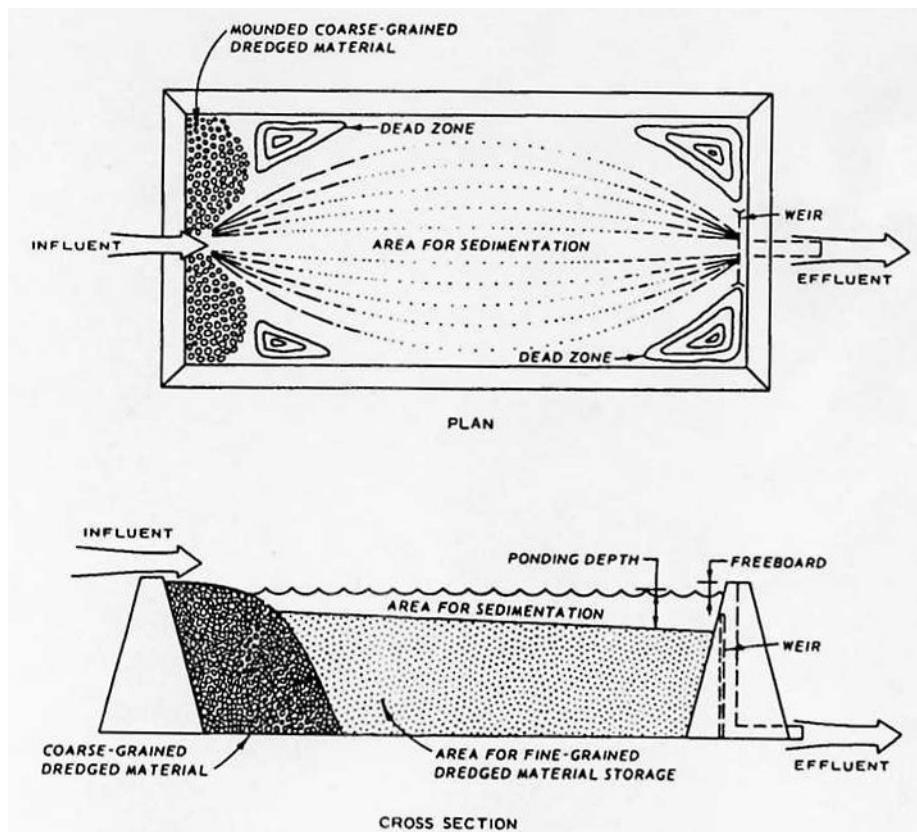


Figure 3: Typical DMCA Design (USACE, 1987)

USACE developed a computer software application to model dredged material. The overall software package is called the Automated Dredging and Disposal Alternatives Modeling System (ADDAMS); however several modules exist for various functions as shown in Figure 4.

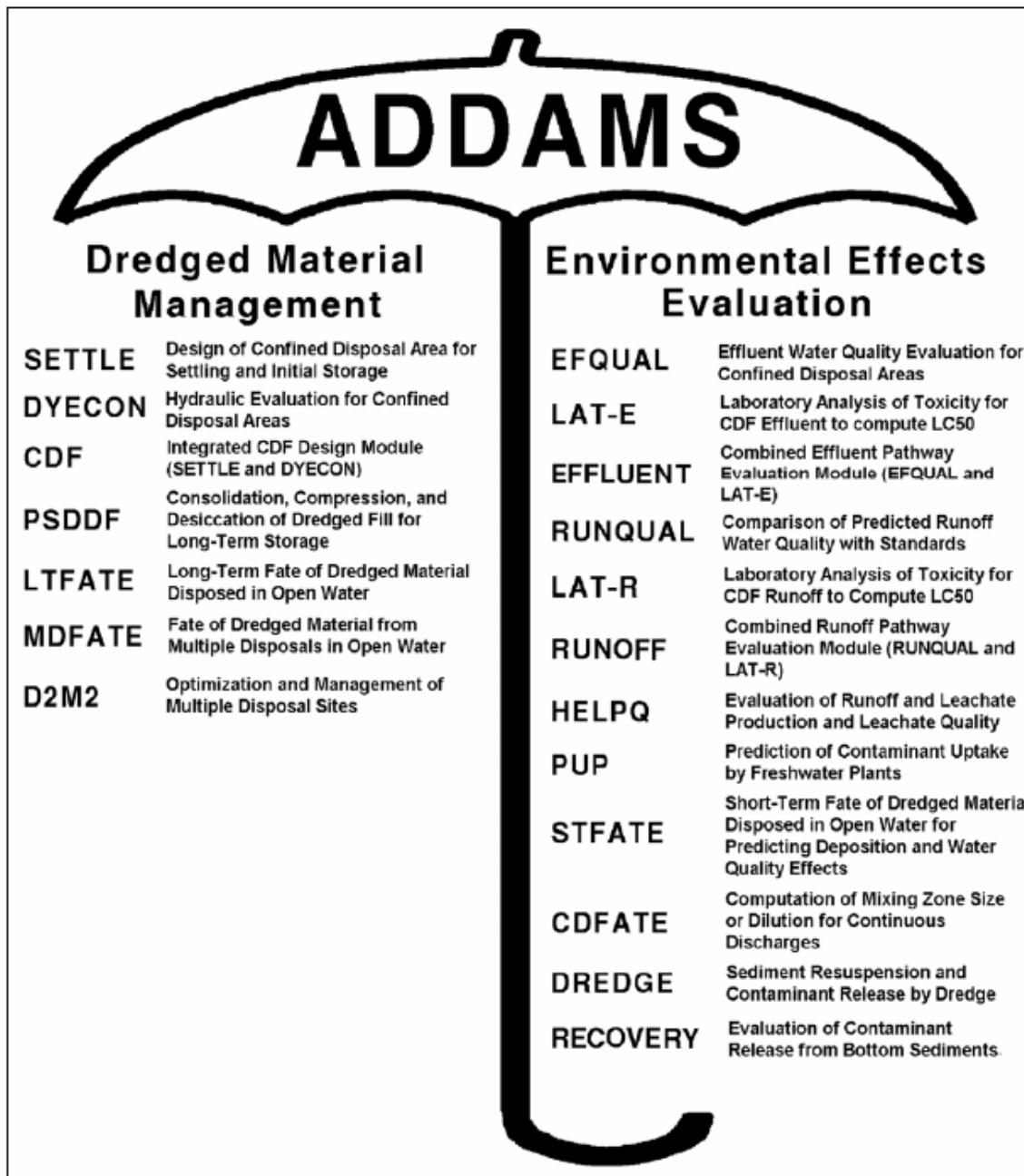


Figure 4: ADDAMS modules (Schroeder, 2004)

The Primary Consolidation, Secondary Compression, and Desiccation of Dredged Fill (PSDDF) module is a mathematical model developed to simulate the complex settlement processes occurring in dredged material (Starks, 1996). The PSDDF model is capable of

quantifying the processes displayed in Figure 5. This model was used to develop the rate of consolidation for the MKARNS case study.

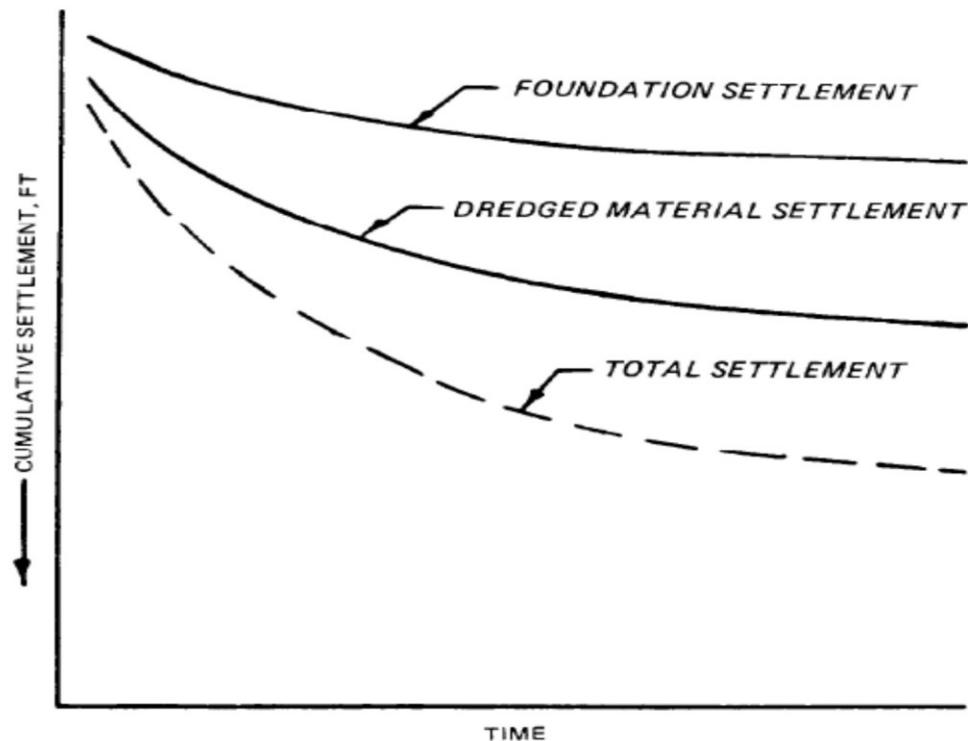


Figure 5: Three settlement components of PSDDF Model (USACE, 1987)

It should be noted that the D2M2 module from Figure 4 uses cost, disposal methods, and time data associated with disposal to optimize disposal operations along a navigation system. This would be appropriate if alternate DMCAs were being considered for specific sites along a navigation system, but the MKARNS case study had predefined DMCAs for the length of the navigation system with no redundancy provided for alternate DMCAs.

Additional research completed by USACE by Poindexter-Rollings developed guidance on disposal methods, equipment, and even management strategies for a single DMCA. Poindexter-Rollings' guidance established the minimal lift height of three feet used in the MKARNS case study (Poindexter-Rollings, 1989). This was used to define the second constraint for the linear model. She concluded that site management techniques such as trenching and establishing compartments within a DMCA can increase disposal capacity of individual DMCAs (Poindexter-Rollings, 1989). The DMRP also conducted studies using trenching and equipment management to dewater and densify dredged material (Haliburton, 1978). Site management and proper equipment selection can greatly increase storage capacity for an individual DMCA (Poindexter-Rollings, 1990).

Compartmentalizing a DMCA and adding wick drains can minimize the time of consolidation, but it will not increase the overall capacity of the DMCA (Fowler, 1996). There are also techniques available for increasing the capacity of the DMCA by increasing the height of embankments using geosynthetics or suitable material found in the DMCA (Koerner, 1988). As well, the use of vertical drains can potentially add capacity to the DMCAs by increasing the rate of consolidation (Fowler, 1996). These individual long-term site management practices are essential to maximizing the capacity of a DMCA (Poindexter-Rollings, 1984). The final management of the DMCA can further the design life of a DMCA and can be initiated at any time in the life of a DMCA (Kyzer, 1984).

Guidance was also given by Thomas that dredged material would assume a volume approximately 50 percent of its in-situ volume (Thomas, 1994). This guidance was utilized in the development of the third and final constraint for the proposed linear model. Additional guidance was also considered with deposited dredged material layers expected to settle to approximately one-third of the initial height after filling (Carrier, 1980). This amount of settlement was extreme based on the literature reviewed.

Dredged Material Properties

The literature review established many relationships between plastic limit, liquid limit, water content, and void ratio to define design criteria for DMCA. EM 1110-2-5027 requires significant sampling of dredged material. The in-situ water content, gradation, specific gravity, organic content, salinity, and settling column testing must all be performed before designing a DMCA (USACE, 1987). Summers did a comprehensive study using several of these mass sediment properties to provide a method to design DMCA (Summers, 1981). Summers' design method was based primarily on the Atterberg limits; however, specific gravity, gradation, water content, and organic matter were also required design parameters (Summers, 1981). Summers concluded that mass sediment properties were reasonably accurate for designing a DMCA.

In addition to Summer's work, a study conducted by Trim in Nova Scotia compared USACE predicted results to the actual results found in a DMCA design. The study concluded that the USACE design procedures were precise at sizing the DMCA;

however, the overall model of the DMCA was not accurate as the soil type varied during dredging operations (Trim, 1999). It was concluded that the existing models for settlement were difficult to simulate field conditions (Trim, 1999). Trim concluded that consolidation estimates can vary up to forty-percent (Trim, 1999). The study contended that the USACE design procedure was precise, but the overall accuracy varied with the dredged material properties.

The DMRP also conducted extensive research into dredged material properties around the United States to incorporate into a dredged material database used by the ADDAMS software. Unfortunately, the MKARNS was not completed at the time. Some basic data including general properties of dredged material were collected, but the complete testing program was never undertaken. Bartos defined the general soil classification along the MKARNS as clayey sand (Bartos, 1977). This corresponds to Tulsa District evaluations. In 2002, Cargill prepared a general guide for dredged material engineering properties and testing procedures (Cargill, 2002). However, this compilation was based on regional work along the Savanna River.

Beneficial Uses of Dredged Material

Guidance was available on the beneficial use of sediments from dredging operations. Elkins identified the potential use of dredged material with chemical processes to create inert ceramic granules to be used as construction material (Elkins, 1997). The beneficial use of dredged material as upland construction materials, environmental mitigation

material, or aquatic construction material is capable of increasing the capacity of the DMCA (Winfield, 1999). In a separate study conducted by USACE, dredged material was found to have beneficial use as manufactured topsoil, engineered soil products, building blocks for construction, or even flowable fill depending on the material properties (Lee, 2000).

CHAPTER III

METHODOLOGY

DMCA Sizing

Using resources such as land-use allocation maps, MKARNS navigation charts, aerial photography, GIS mapping, 20-yr disposal plan, quad maps, NWI data, archaeological data, turbidity data, hydrographic survey data, state and federal road and highway data, and floodplain data, available through the USACE Tulsa District, the MKARNS was analyzed for the proposed disposal management plan. The proposed disposal system includes constructing 41 DMCAAs, but current management plans are non-existent. Table 1 shows the volume of the 41 DMCAAs and the 3-ft. lift volumes based on the initial dredging volumes. The 41 DMCAAs are sequentially labeled starting with DMCA #1 near the Arkansas state border and then moving upstream to the Port of Catoosa. Table 1 also shows the estimated 3-ft. lift volumes based on the area calculation for an assumed 10-foot usable height of embankment. The area determined also uses an average width and length for the DMCA using the midpoint of the slope of the embankment.

DMCA #	Estimated Dredging Volume (yd³)	Design DMCA Capacity (yd³)	Area Based on 10' Depth (ft²)	3' Lift Volume (ft³)
1	162659.7	325319.4	878362.4	2635087.1
2	414105.9	828211.8	2236171.9	6708515.6
3	254917.5	509835.0	1376554.5	4129663.5
4	117639.3	235278.6	635252.2	1905756.7
5	123676.2	247352.4	667851.5	2003554.4
6	162865.1	325730.2	879471.5	2638414.6
7	105311.9	210623.8	568684.3	1706052.8
8	470726.1	941452.2	2541920.9	7625762.8
9	59645.6	119291.2	322086.2	966258.7
10	58287.2	116574.4	314750.9	944252.6
11	70186.7	140373.4	379008.2	1137024.5
12	70186.7	140373.4	379008.2	1137024.5
13	187089.8	374179.6	1010284.9	3030854.8
14	182721.5	365443.0	986696.1	2960088.3
15	24402.5	48805.0	131773.5	395320.5
16	122494.1	244988.2	661468.1	1984404.4
17	312202.8	624405.6	1685895.1	5057685.4
18	223249.3	446498.6	1205546.2	3616638.7
19	287629.8	575259.6	1553200.9	4659602.8
20	176627.0	353254.0	953785.8	2861357.4
21	113503.2	227006.4	612917.3	1838751.8
22	333972.5	667945.0	1803451.5	5410354.5
23	361430.3	722860.5	1951723.4	5855170.1
24	361430.3	722860.5	1951723.4	5855170.1
25	61859.3	123718.6	334040.2	1002120.7
26	282069.2	564138.4	1523173.7	4569521.0
27	175789.0	351578.0	949260.6	2847781.8
28	194571.7	389143.4	1050687.2	3152061.5
29	35525.6	71051.2	191838.2	575514.7
30	28635.7	57271.4	154632.8	463898.3
31	56328.4	112656.8	304173.4	912520.1
32	119214.4	238428.8	643757.8	1931273.3
33	140000.0	280000.0	756000.0	2268000.0
34	19529.6	39059.2	105459.8	316379.5
35	35879.5	71759.0	193749.3	581247.9
36	58954.8	117909.6	318355.9	955067.8
37	35548.8	71097.6	191963.5	575890.6
38	50931.6	101863.2	275030.6	825091.9
39	45838.1	91676.2	247525.7	742577.2
40	55668.5	111337.0	300609.9	901829.7
41	151028.9	302057.8	815556.1	2446668.2
Tot. Vol.	6304334.0	12608668.0	34043403.6	102130210.8

Table 1: DMCA Design Values based on Hydrographic Survey

A management system would save both time and money for the USACE Tulsa District.

With the use of System Analysis, a strategy was developed to optimize the disposal of sediments. The mass balance formula shown in Equation 1 is the general formula for the development of the first constraint placed on the linear model.

$$[\text{Dredged Material Volume In}] - [\text{Dredged Material Volume Recovered}] = [\text{Net Volume of DMCA Lift}]$$

- Eq. 1

The [Dredged Material Volume In] is a function of the rate of production (in cubic feet per hour) and time (in hours). The rate of production was obtained from a current Tulsa District dredging project. The [Dredged Material Volume Recovered] was the most complex portion of the equation and is a function of the geotechnical sediment properties. This includes the rate of sedimentation and primary consolidation of the dredged material. The final component, [Net Volume of DMCA Lift], is the 3' Lift Volume (ft^3) data in Table 1 using the original hydrographic survey and previously designed DMCAs. The optimization equation defined by the constraint provided in Equation 1 will need two variables per lift of dredged production, Time of Production and Time of Consolidation, defining all 41 DMCAs. This will be further defined later in the discussion.

Figure 6 shows the hydrological cycles occurring between dredged material and water. The water enters as precipitation (or enters with the dredged material in suspension) and then goes through infiltration, transpiration, evaporation or leaves the DMCA as surface water runoff. This interaction was taken into account by the rate of consolidation for a

DMCA over its yearly cycle. The PSDDF model directly uses weather data, but the linear model reduces this to a single linear rate utilizing the PSDDF's consolidation calculation and dividing by the time.

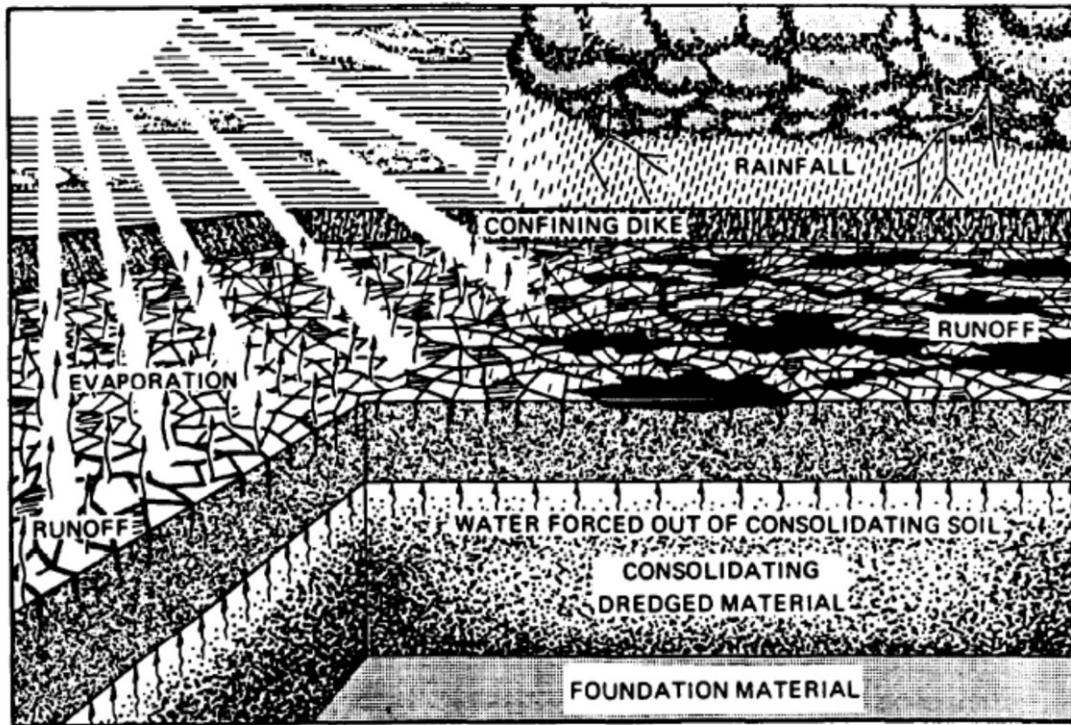


Figure 6: DMCA Hydrological Cycle Processes (USACE, 1987)

The ability to encompass the overall consolidation processes in dredging operations with this linear model is limited to sedimentation and primary consolidation. If additional parameters were included, then the equation would need to be modified. Sedimentation and consolidation are related to pore-water pressure, stress, precipitation, drainage path and permeability, but in terms of Equation 1, it is included in an overall rate of consolidation term to be defined later. The goal was to determine a management strategy for the entire MKARNS with a less extensive analysis.

The proposed DMCA capacity design flow chart shown in Figure 7 aided in determining the final optimization equation. This flow chart along with the optimization model was used to analyze the need for 41 DMCAs and the siting of the DMCAs with respect to the dredging operations.

The linear model analyzed the capacity of the DMCAs and provided an estimate of project life for the entire channel deepening operation. Several of the resources described in the literature review and the sediment properties of the dredged material were included in the overall management strategy and in the development of the optimization equation. Additionally, the previous work completed by the USACE in management practices for single containment areas were expanded to show an overall management strategy for the MKARNS case study. The dredged material sediment properties and basic soil relationships for settlement were essential to solving the optimization problem.

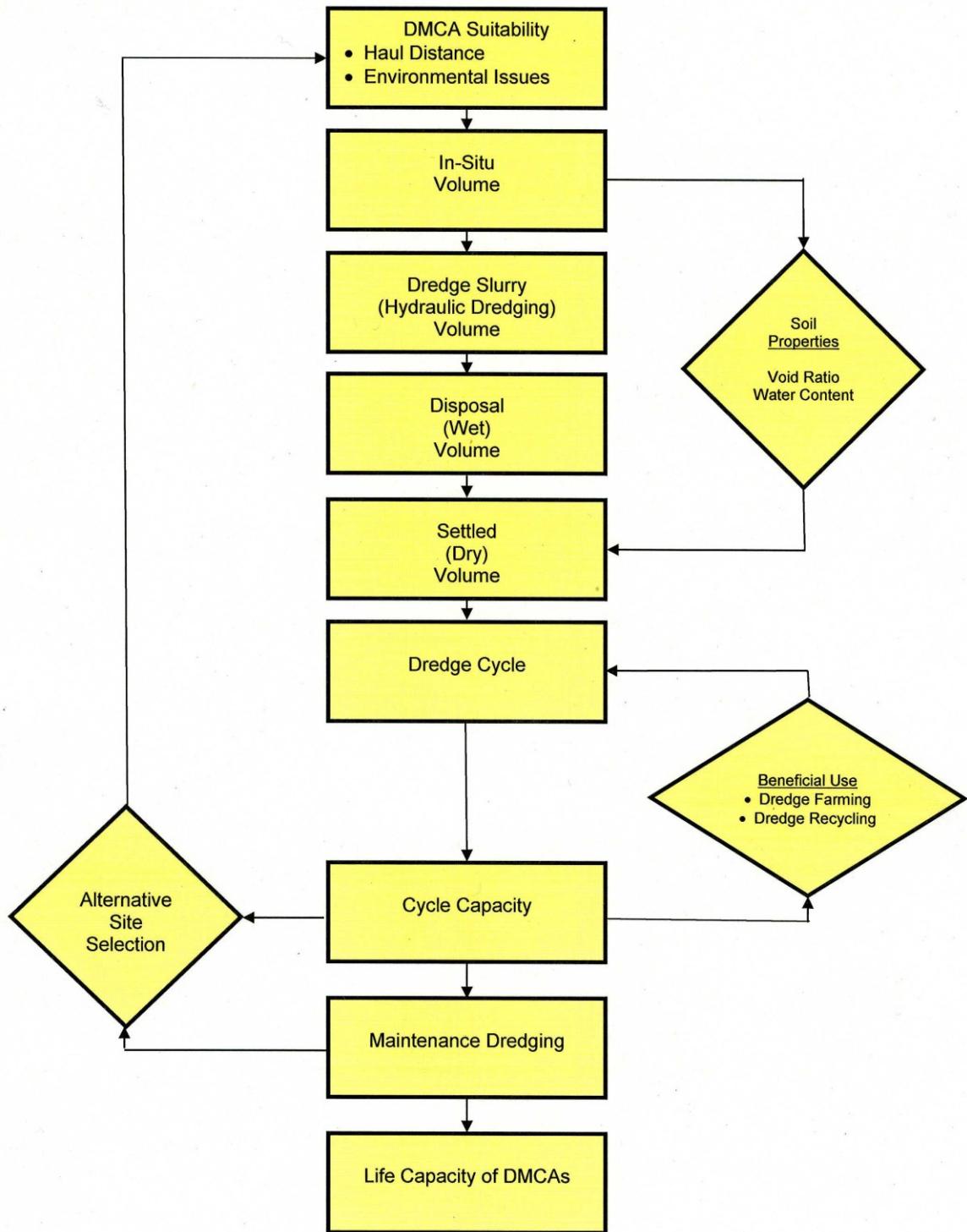


Figure 7: DMCA Capacity Design Flow Chart

Geotechnical Properties

The management of a DMCA is based on the geotechnical properties of the sediment. Sediments go through a series of processes after placement in the DMCA. The initial process is sedimentation as the solids settle out of the slurry and water is decanted off as runoff and evaporation takes place. The second process is consolidation. Consolidation consists of two stages. Primary consolidation is the first stage of consolidation which is the compression of the soil layer due to the soil's weight as the water is forced out of the soil matrix. The second stage of consolidation is secondary compression, which is composed of particle movement and deformation in the clay layers. This stage begins after the primary consolidation ceases, when the excess pore-water pressure approaches zero.

The final process in the life of the sediments is desiccation. Desiccation is the drying or crust formation at the top of the dredged material layer. This creates a surcharge that can generate additional consolidation as the dredged material dries (Stark, 1996). Many of these processes are difficult to quantify for dredged material, and the settlement generated from the processes occurs rapidly at first then more slowly with time.

Primary consolidation takes several years and since the existing guidance on disposal lifts recommends three to five years before placement of another lift, the linear model was idealized for four years focusing on the initial sedimentation of the suspension and then

primary consolidation settlement. Secondary consolidation and desiccation were not considered in this case study.

Linear Programming

Most of the preliminary work for this dissertation topic was performed while working for the USACE Tulsa District as a Project Engineer on the Arkansas Navigation Deepening Feasibility Study. The use of System Analysis from Oklahoma State University graduate course work helped develop the management solution with a large scale dredging project for multiple DMCAs. Anderson's textbook on system analysis provided instruction for developing a "quantitative approach to decision making" using linear programming (Anderson, 2005).

Linear programming allows for the ability to apply mathematics, science, and engineering to design and conduct experiments while analyzing and interpreting data to solve complex engineering problems (Anderson, 2005). The solutions are defined by their assumptions and the constraints placed upon the model. The solution has flexibility; however, it defines both an optimal and a feasible solution for a specified case which should be noted as this project is studied (Anderson, 2005). Linear programming has been used to develop solutions for cost comparisons, production optimization, workload balancing, and civil engineering solutions for traffic control and earthwork balancing (Anderson, 2005).

By using a linear model, the overall sedimentation with primary consolidation settlement can be represented by a single linear approximation based on calculated settlement values from the PSDDF module. This is depicted in Figure 8 where “The Depth of Interface” corresponds to the thickness of a lift. The first constraint was developed using the principles of a mass balance. The rate of dredging production used for the [Dredged Material Volume In] was assumed to be 16,200 cubic feet per hour based on current USACE – Tulsa production rates. This rate is 24 hours per day and includes routine scheduled maintenance and downtime.

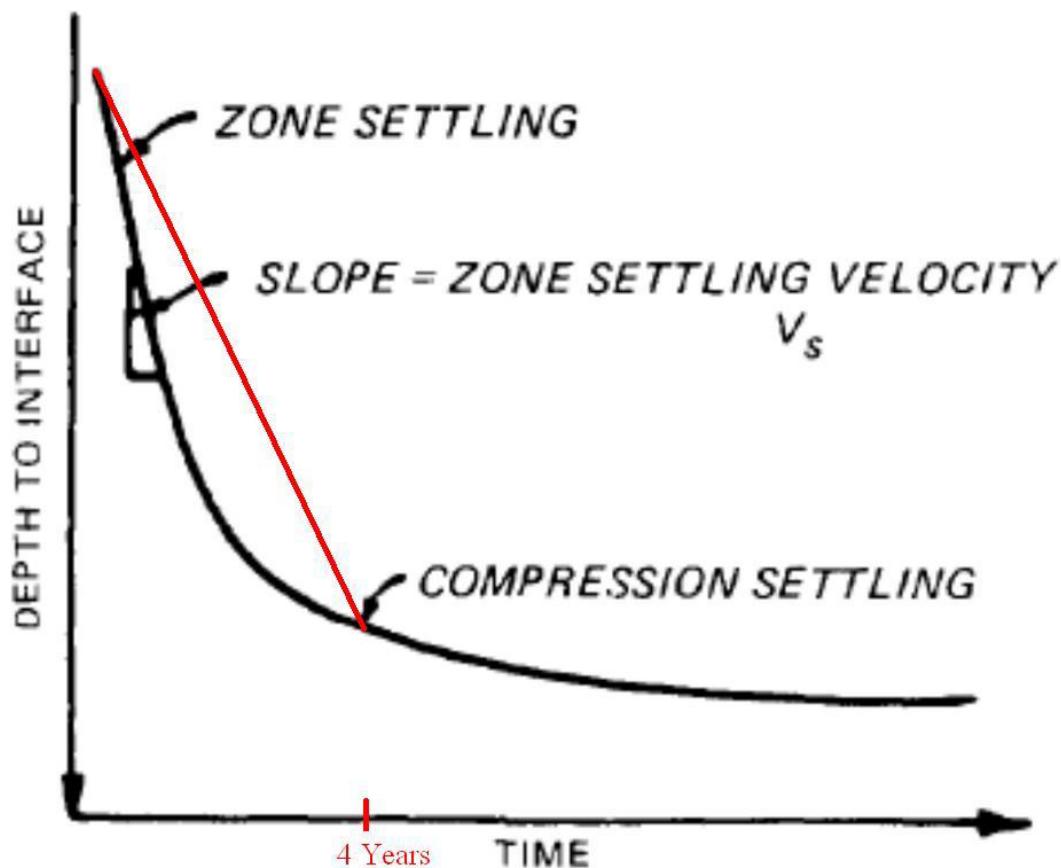


Figure 8: Altered Settlement versus Time graph (USACE, 1987)

The [Dredged Material Volume Recovered] rate was more difficult to determine. Using a case-study from the literature review, the total consolidation of 1.42 meters was estimated to take up to 10 years for 90 % consolidation (Trim, 1999). This represents 0.0012 ft. per day when reduced to a linear approximation by converting the 1.42 meters to feet and then dividing by 10 years times 365 days per year to correct the units. This value was used in the linear model as an estimate for the linear rate of consolidation for the example problem discussed later. It should be noted that using the same resource several consolidation rates were calculated with varying magnitudes of consolidation. To establish credible consolidation rates, the PSDDF module was utilized due to this inconsistency in established literature values.

USACE ADDAMS Model

Secondary compression is difficult to model precisely (Murthy, 2003). However, the PSDDF module uses finite strain consolidation theory for primary compression, the Ca/Cc (Ca is the secondary compression index and Cc is the compression index) concept for secondary compression, and an empirical desiccation model for managing the changes in elevation with time for a DMCA (Stark 1996). These values and the input for finite strain consolidation theory were obtained from one-dimensional oedometer tests performed in accordance with ASTM (1993) Standard D2435-80 by Starks (Starks, 1996).

It was interesting that even in the USACE document for the PSDDF module, it was noted that using such a “rigorous explanation” for the desiccation process was unwarranted because of the complexity of the interactions and the inability to model it properly (Stark 1996). Since the proposed linear model provided a snapshot of time, approximately four years, the PSDDF model was utilized for the primary consolidation only.

The inability to calculate soil interaction during stages of consolidation has led to many empirical relationships for calculating consolidation and designing DMCA. Estimates for typical consolidation can range from two to five years for primary consolidation but when samples were taken of the dredged material after several years the consolidation estimates based on Terzaghi’s theory for one-dimensional consolidation analysis vary as much as two times the original estimate (Trim, 1999). This leaves room for use of an empirical linear model which can estimate a realistic time of consolidation for a given soil classification.

MKARNS Case Study

This inability to model the entire dredged material disposal process supports the use of the linear model. Linear modeling provides a quantitative decision-making process to analyze a dredged material lift within a DMCA to determine an optimized solution based on the soil classification.

Using linear programming software, the developed linear model defines a feasible region where all constraints are satisfied. The feasible region defines the boundaries for determining a feasible solution. The optimal solution represents an extreme point of the feasible region and uses the feasible solution to solve the linear model (Anderson, 2005).

Software options for linear modeling include Management Scientist, Microsoft Excel's Premier Solver, LINDO (Linear Interactive Discrete Optimizer), and even a graphical solution can be constructed for some linear model solutions. The Management Scientist solution was used in this case study because of the course work completed by the author.

Defining the Linear Model

The model was defined as the total time to fill and then consolidate a lift within a specified DMCA. With linear modeling it is important to establish the optimization goal for the linear model equation. In this case study, the goal was to minimize the time to consolidate a single lift within each of the 41 DMCA's proposed along the MKARNS. The Time of Production in hours, T1, and Time of Consolidation in hours, T2, are the terms which will be optimized using the linear model. These variables are defined as Decision Variables according to the established Linear Model (Anderson, 2005):

- a) T1 – Time of Production (must be greater than zero).
- b) T2 – Time of Consolidation (must be greater than zero).

The linear model is defined as T1 + T2, which equates to the total time in hours from placement to consolidation for dredged material disposal.

With the optimization equation stated previously, [Dredged Material Volume In] equal to [Dredged Material Volume Recovered], Equation 2 was developed. This equation represents the first constraint for the linear model.

$$\text{(Rate of Production * T1)} - \text{(Rate of Consolidation * T2)} = \text{Lift Volume} - \text{Eq. 2}$$

Defining these terms and establishing constraints to optimize the solution was the next task:

- a) Rate of Production = 16,200 ft.³/hour.
- b) Linear Rate of Consolidation = 0.0012 ft./day = 0.00005 ft./hour.

The Linear Rate of Consolidation must be converted to more suitable units by multiplying the consolidation rate times the area for the entire DMCA, which can then be converted to a per hour basis in Equation 3. For the example below, an assumed area of 100,000 ft³ was used as an arbitrary value; this represents the low end of the 41 DMCA volumes presented in the case study but was used because of the simplicity of the mathematics. It should be noted that the rate of consolidation represents a decrease in elevation of the dredged material contained within the DMCA and is shown by the minus sign in Equation 2.

$$\text{Example Rate of Consolidation} = 0.00005 \text{ ft./hour} * 100,000 \text{ ft.}^2 = 5 \text{ ft.}^3/\text{hour} - \text{Eq. 3}$$

Finally, the [Net Volume of DMCA Lift] which is the area multiplied by a depth of three feet to meet the lower end of the USACE guidance previously defined in the literature review (Poindexter-Rollings, 1989). This is quantified in Equation 4 using the assumed 100,000 ft.² area. Table 1 will be utilized when the 41 DMCAAs are analyzed using the linear model.

$$\text{Example Volume} = 3 \text{ ft.} * 100,000 \text{ ft.}^2 = 300,000 \text{ ft.}^3 - \text{Eq. 4}$$

This linear model is defined by three constraints defined in the existing guidance. The first constraint equates to a single lift and its volume as defined in Equation 5:

$$(16,200 \text{ ft.}^3/\text{hour} * T1) - ((0.00005 \text{ ft./hour} * \text{DMCA area}) * T2) >= \text{Lift Volume.} - \text{Eq. 5}$$

Considering the example:

$$(16,200 \text{ ft.}^3/\text{hour} * T1) - ((5 \text{ ft.}^3/\text{hour}) * T2) >= 300,000 \text{ ft.}^3. - \text{Eq. 6}$$

Now the final two constraints need to be refined, T1 must be limited to the lift volume divided by the rate of production. This constraint was established to define the linear model by establishing that T1, the Rate of Production, needs to be greater than or equal to the three foot minimum lift volume as shown in Equation 7.

$$T1 \geq (3 \text{ ft.} * \text{DMCA Area}) / 16,200 \text{ ft.}^3/\text{hour} - \text{Eq. 7}$$

For the example problem this would be defined as the following:

$$T1 \geq (3 \text{ ft.} * 100,000 \text{ ft.}^2) / 16,200 \text{ ft.}^3/\text{hour} = 18.52 \text{ hours.} - \text{Eq. 8}$$

This means that T1 must be greater than or equal to approximately 18.52 hours for the example problem.

The final constraint defines T2. This is bound by Equation 9.

$$T2 \geq (0.5 * 3 \text{ ft.}) / (\text{Linear Rate of Consolidation}) - \text{Eq. 9}$$

This is once again defined in the example problem as:

$$T2 \geq (0.5 * 3 \text{ ft.}) / (0.00005 \text{ ft.}^3/\text{hour}) = 30,000 \text{ hours.} - \text{Eq. 10}$$

This means that T2 needs to be greater than or equal to 30,000 hours for the established example problem.

The second constraint is defined by the basic production limit that the lift must at least be filled to an acceptable minimal level. The third constraint is defined by a standard

practice defining that consolidation can be approximated to be 50% of the in-situ volume (Thomas, 1994). These two constraints along with the lift volume optimization constraint, described previously in Equation 2, define the decision variables and the linear model. Now, by establishing a minimization objective and using the Management Scientist software, the linear model can be solved for the example problem which will establish both a feasible and optimum solution.

Linear Model Example Problem

The example problem previously described is solved below using the Management Scientist software:

LINEAR PROGRAMMING PROBLEM

Minimize, $IT_1 + IT_2$

Subject To:

$$1) \ 16200T_1 - 5T_2 = 300000$$

$$2) \ IT_1 > 18.52$$

$$3) \ IT_2 > 30000$$

OPTIMAL SOLUTION

Objective Function Value = 30027.778

<i>Variable</i>	<i>Value</i>	<i>Reduced Costs</i>
<i>T1</i>	27.778	0.000
<i>T2</i>	30000.000	0.000

<i>Constraint</i>	<i>Slack/Surplus</i>	<i>Dual Prices</i>
<i>1</i>	0.000	0.000
<i>2</i>	9.258	0.000
<i>3</i>	0.000	-1.000

OBJECTIVE COEFFICIENT RANGES

<i>Variable</i>	<i>Lower Limit</i>	<i>Current Value</i>	<i>Upper Limit</i>
<i>T1</i>	-3240.000	1.000	No Upper Limit
<i>T2</i>	0.000	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

<i>Constraint</i>	<i>Lower Limit</i>	<i>Current Value</i>	<i>Upper Limit</i>
<i>1</i>	No Lower Limit	300000.000	No Upper Limit
<i>2</i>	No Lower Limit	18.520	27.778
<i>3</i>	4.800	30000.000	No Upper Limit.

The solution from the example problem provides some key information. First, the Optimal Solution is defined as approximately 30027.78 hours with the Feasible Solution being T1 equal to approximately 27.78 hours and T2 equal to 30000 hours. This means that the optimal solution which minimizes the T1 plus T2 is approximately 3.43 years (30027.78 hours converted to years) for the established Rates of Production and Consolidation. The Rate of Consolidation will be revisited later but for now the focus will be looking at the solution from the Management Scientist software.

Slack/Surplus on the Management Scientist solution above represents the fact that T2 is 9.258 hours greater than the 18.52 hours originally established for constraint 2. The dual price in the example solution establishes that for every unit the Right-Hand Side of constraint 2 is decreased then the optimum solution is decreased by 1 unit. Dual prices are more suitable for linear models associated with cost data. All of this can be calculated by using the established constraints and conducting a linear analysis based on established linear programming methodology, but the software can generate the solutions in a timely manner.

There are several other output values shown in the linear programming solution but most of them have little value to the dredging solution. The Objective Coefficient Ranges provide a range for each of the coefficients modifying the linear model. For the established linear model, $1T_1 + 1T_2$, the Objective Coefficients are equal to one and provide little insight into the management of DMCAs. The Right-Hand Side Ranges

gives a range for the right-hand side of the equations. None of the three constraints establish a restricting range for the solution, so the limits for the solution appear to be non-existent and do not provide any guidance for the case study.

However, the feasible solution reveals valuable data about the example problem. Using Equation 11, [Dredged Material Volume In] can be calculated.

[Dredged Material Volume In] = Rate of Production * Production Time (T1)

- Eq. 11

The [Dredged Material Volume In] for the example problem equates to approximately 450,000 ft.³ of dredged material:

*[Dredged Material Volume In] = 16,200 ft.³/hour * 27.78 hours = 450,000 ft.³.*

- Eq. 12

Previously calculated, the lift equaled 300,000 ft.³ for a 3 ft. depth, this means that the lift will need to be filled 1.5 times, or approximately 4.5 feet in depth, during dredging operations. This will become important as the DMCAs for the MKARNS will be analyzed using the same linear model.

The remainder of the solution from the above Management Scientist report gives data which establish ranges for the decision variable coefficients as well as the Right-Hand

Side values (the values located on the right-hand side of the established constraints).

None of the other data appear to provide anything that is critical to a dredging project other than the solution is accurate for a large range of values.

The optimal and feasible solutions are defined graphically in Figure 9. The only solution which meets the constraints and minimizes the linear model is represented by the circle overlapping the lines for constraint 1 and 3. The region contained by the three constraints and their corresponding arrows located in the top right is the feasible region. The feasible region characterizes all solutions which meet the constraints; however there is only one solution that meets the minimal T2. It is possible to have no feasible solution or even multiple solutions. The point in the middle of the circle where the lines intersect represents the optimal and feasible solutions demonstrated earlier. T1, labeled as constraint 2, needs to be greater than or equal to the 18.52 hours and T2, labeled as constraint 3, needs to be greater than the defined 30,000 hours. These two constraints with the established lift volume optimization constraint (labeled as Constraint 1) establish the optimal and feasible solution. The feasible solution defines the minimum value for T1 and T2, while the optimal solution defines the linear model results. The graphical method establishes the relationships that are defined in the Management Scientist software. This relationship will exist for all 41 DMCAs.

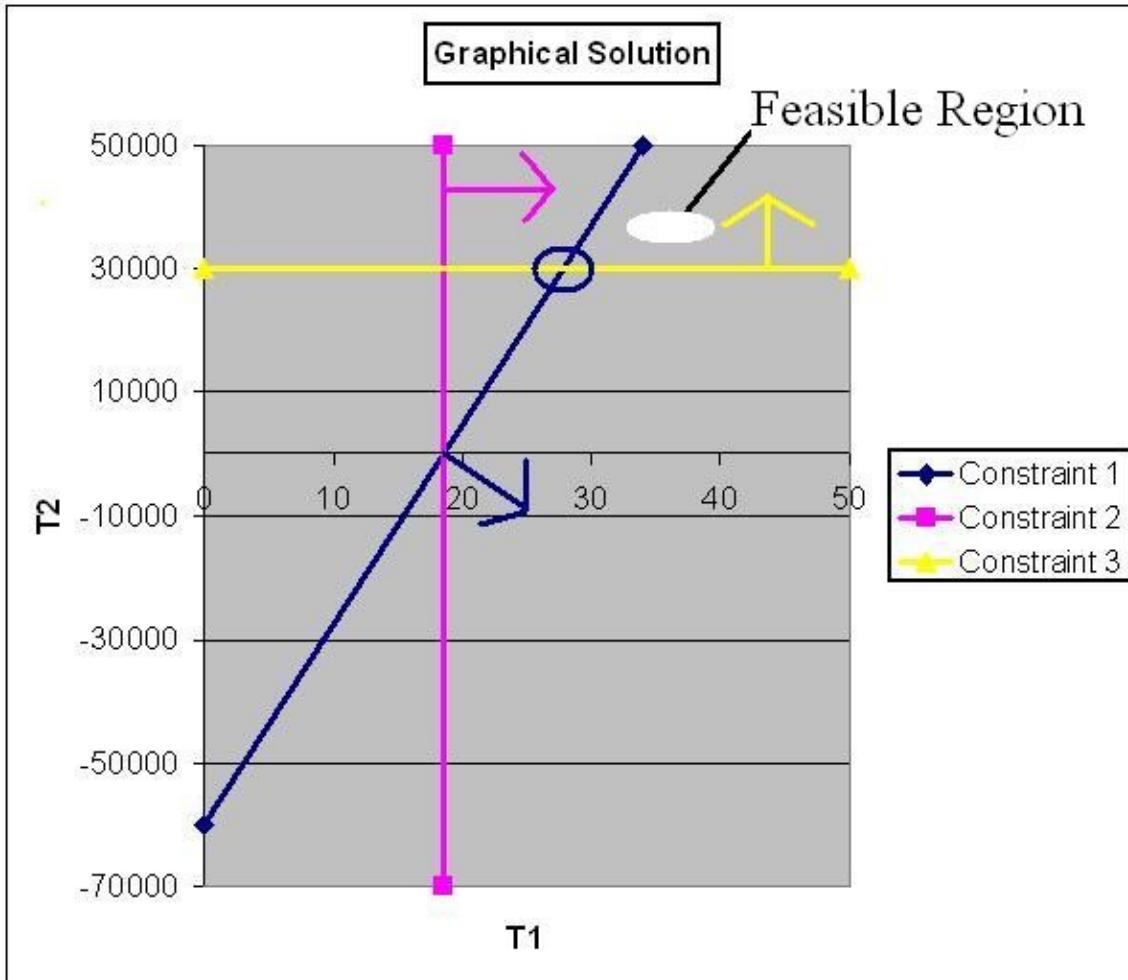


Figure 9: Example Problem Graphical Solution

Establishing a Range of Consolidation Rates

Currently there are 41 DMCA's projected for the MKARNS deepening project. Each of these must be analyzed to establish a solution for the entire navigation system. Before the linear analysis of each DMCA can be conducted, a realistic range of consolidation rates needs to be established. The initial rate of 0.0012 ft. per day was created using a

crude linear approximation from Trim's case study. The USACE PSDDF module was utilized to establish a more realistic range of rates for specific soil classifications.

The PSDDF module was run using a sample problem from the USACE program, EXAMPLE 2 in the existing PSDDF module (Example 2 is built into the available PSDDF software). By changing the dredged material parameters to the Houston - Galveston soils from the PSDDF database, the same typical dredging operation was run with a uniform dredged material classified as a clayey sand, SC, and high plasticity clay, CH, for 3 dredged disposal lifts (approximately 3 ft. per lift).

The CH (Houston-Galveston, TX) dredged material have the following values:

- 2.74 - specific gravity
- 75 - liquid limit
- 19 - plastic limit
- 56 - plasticity index
- 2.50 - initial void ratio

The SC (Houston-Galveston, TX) dredged material have these values:

- 2.71 - specific gravity
- 41 - liquid limit
- 18 - plastic limit
- 23 - plasticity index
- 1.71 - initial void ratio

This soil classification corresponds to an expected typical range of dredged material for the MKARNS. Appendix B shows the results of the two separate analyses; Table 2 shows the 1480 day results (i.e. 4 years).

By using the PSDDF settlement calculated for four years (approximately 1480 days), the Rate of Consolidation can be established as 0.0008 ft. per hour for a CH classified dredged material, labeled ARKNAVCH in Appendix B, and 0.0011 ft. per hour for an SC classified dredged material, labeled ARKNAVSC in Appendix B. This corresponds with what would be expected from consolidation tests. The SC classified dredged material would drain and consolidate more rapidly while the CH classified dredged material will retain water and drain slowly, which was shown in the PSDDF results.

PSDDF File Name	Total Settlement (ft)	Time (days)	Rate of Consolidation (ft/day)
ARKNAVCH	1.136	1480	0.00077
ARKNAVSC	1.571	1480	0.00106

Table 2: Appendix B Results for Rates of Consolidation based on PSDDF Example 2 Problem

The PSDDF model uses Class A Pan Evaporation data from the United States Weather Service. The PSDDF example uses data from Charleston, South Carolina which is comparable for monthly evaporation and precipitation data in northeastern Oklahoma. It also uses a foundation material that is typical of clay soils found in Oklahoma. The layered analysis assumes different values for what is presumed in the linear analysis with three repetitive dredged layers, 1 per year over 3 years. When the analysis was conducted for a single layer similar to the linear model analysis, the settlement rate was

extremely high because the PSDDF model indicated the idealized SC classified dredged material consolidated at an extremely high rate (100% consolidation within 180 days) and the idealized CH classified dredged material achieved little consolidation within the 1480 days, which disagrees with the literature reviewed. The ARKNAVSC and ARKNAVCH soil models shown in Appendix B provide a typical settlement rate based on accepted USACE software.

A layer configuration of uniform dredged material similar to the linear model with dredging operations separated by four years was examined in Appendix C using the PSDDF Example 2 problem again (labeled CH in Appendix C); maintaining all other parameters the same. The results were staggering with the time to reach 100 percent consolidation being over 20 years. In addition, an SC soil was modeled (labeled SC in Appendix C) with three SC layers placed with four year dredging cycles. The SC again drained within 180 days for each dredging cycle. Table 3 shows the results of the PSDDF simulations and concludes the dredged material is approximately equal over the 1480 days, 0.0003 ft./day, but this is not an accurate reflection of the soil's properties. The CH soil has just started to consolidate but the SC has completely drained. The 1480 snapshot is unable to differentiate the soils.

PSDDF File Name	Total Settlement (ft)	Time (days)	Rate of Consolidation (ft/day)
CH	0.391	1480	0.00026
SC	0.450	1480	0.00030

Table 3: Appendix C Results for Rates of Consolidation based on PSDDF Example 2 Problem

Besides idealizing the dredged materials using the database values, the initial void ratios for the Galveston dredged materials were low for typical dredged material. This does not correspond to the expectations from basic soils; however, Table 4 was generated from USACE research and represents the typical SC dredged material expected in the MKARNS.

	Void Ratio	Effective Stress (lb/ft²)	Permeability (ft./day)
1	1.71	0.00E+00	9.40E-01
2	1.7	1.00E+00	9.55E-03
3	1.69	2.00E+00	8.50E-03
4	1.52	1.60E+01	2.90E-03
5	1.45	3.20E+01	1.50E-03
6	1.36	6.40E+01	4.70E-04
7	1.2	2.56E+02	4.00E-05
8	1.1	5.12E+02	6.45E-06
9	1	1.02E+03	7.43E-07
10	0.87	3.00E+03	4.30E-08

Table 4: PSDDF Model Oedometer Data for SC (Houston-Galveston, Texas)

Another discussion point in the PSDDF model is the assumptions based on the underlying foundation soil. The foundation permeability of 0.001 ft. per day and a drainage path of 6 feet were also used from the existing Example 2 within the PSDDF model. Since none of the foundation settlement was used in the Rate of Consolidation it can be neglected, but the ability for the dredged lifts to freely drain does directly affect the Rate of Consolidation so this should be noted. Drainage path is essential to consolidation, and if the underlying foundation material is freely draining, then the drainage path will be half of the thicknesses of the dredged material lift thickness which is substantial in consolidation calculations.

Using the rate determined by the PSDDF with the established range for SC and CH dredged materials from Appendix B, the optimization of the 41 DMCAs was solved. The typical soil composition for the MKARNS, according to the geotechnical Dam Safety Section at the Tulsa District and the literature review, was a SC classification.

In statistical experimental design, sampling size is based on the variability of the population. Since dredged material is highly variable, the sample size needed for proper experimental design would be extremely large; and therefore cost prohibitive for most studies. The variability of dredged material can be seen in Figure 10. While dredged material is highly variable, the overall dredged material classification can be defended since such a large amount of material being dredged will counter the variability of the dredged material.

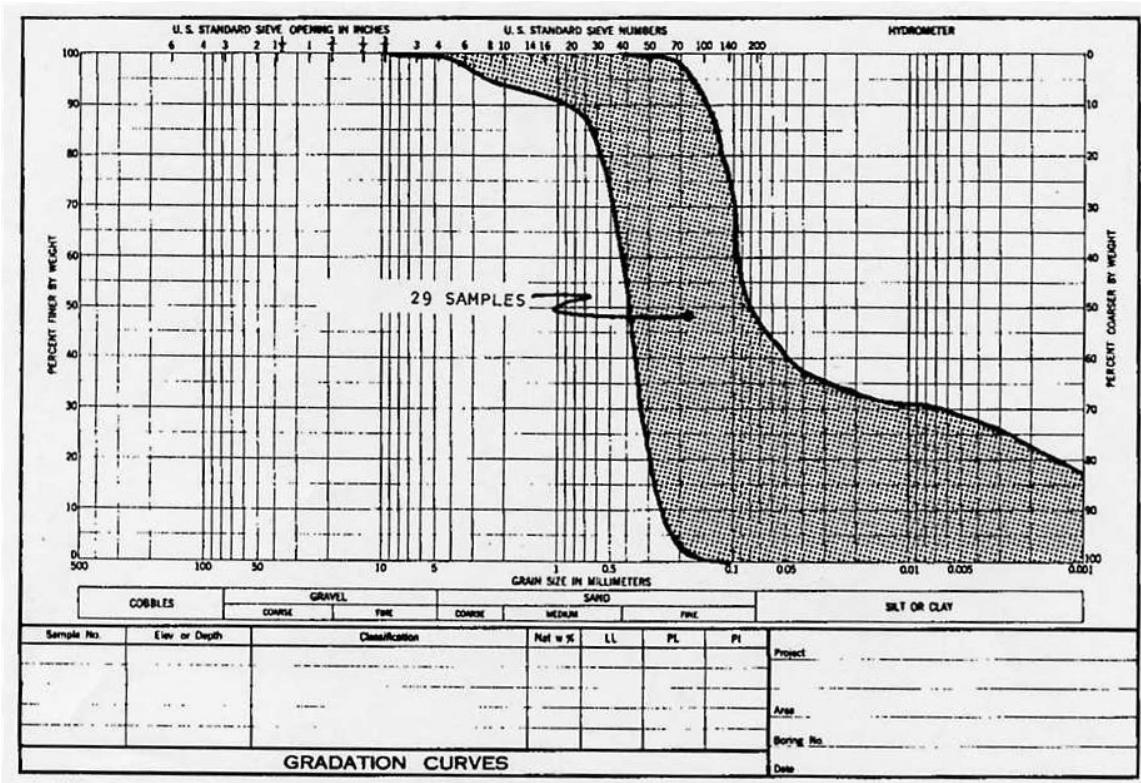


Figure 10: Coarse Grained Dredged Material from Gulf Region (Bartos, 1977)

Previous testing on the Verdigris section of the MKARNS yielded the following:

Liquid Limit – Non-Plastic to 50

Plastic Limit – Non-Plastic to 19

Effective Size D_{10} – 9 to 69 (Bartos, 1977).

The gradation from the Bartos testing corresponds to a SC or SM classification by following the USCS soil classification system shown in Figure 11. The grain size is typically more than 50% coarse with 50% or more of the coarse fraction larger than the No. 4 sieve. The fines are more than 12% and the only remaining difference between SC

and SM is the plasticity chart, the A-Line. The Tulsa District believes a SC dredged material is more likely but the Gulf Region research from Bartos showed more of a SM classification.

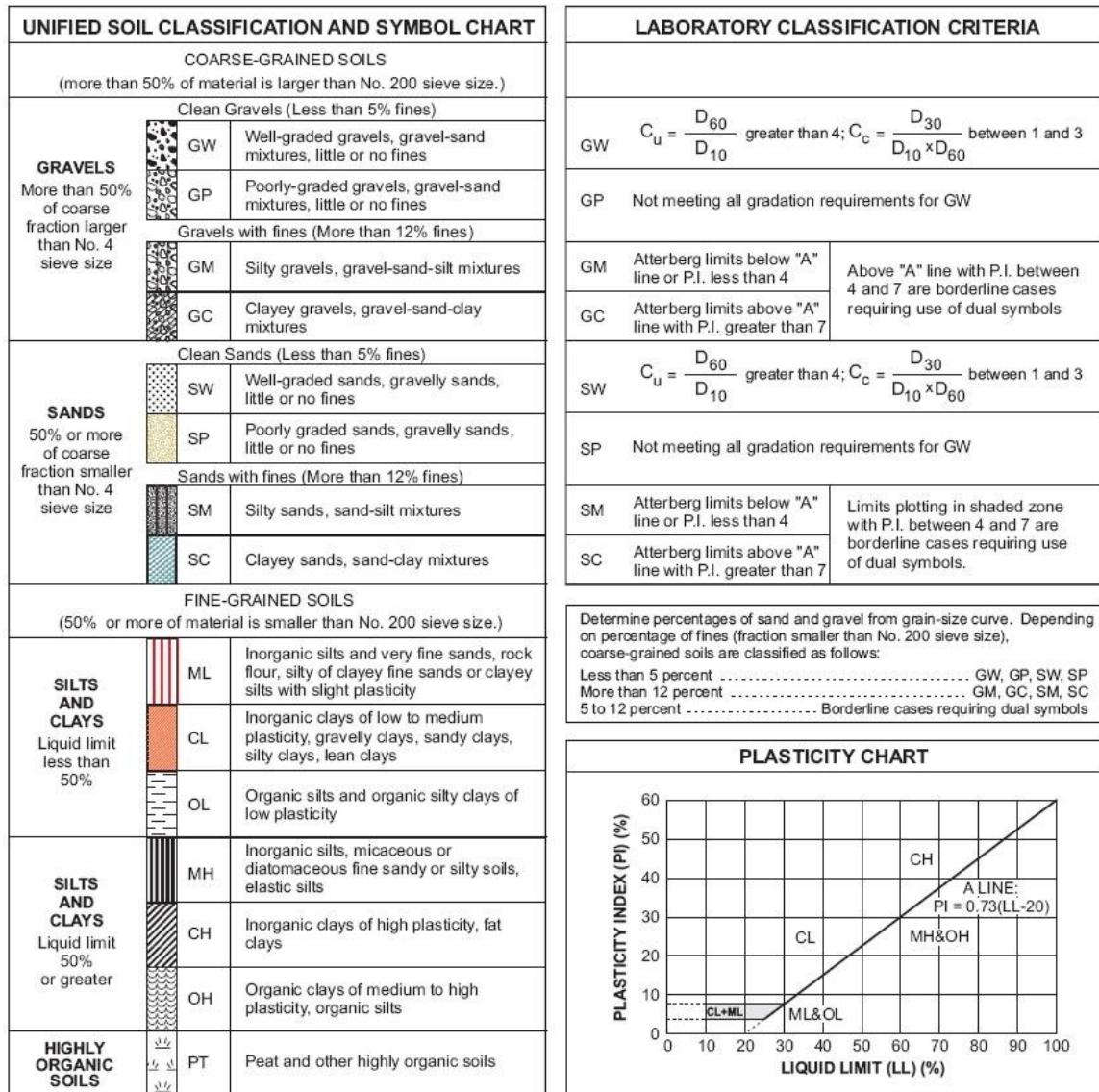


Figure 11: USCS Soil Classification Chart (VDOT, 2003)

Other technical literature supports the previous dredged material characterization; typical coarse grained dredged materials are approximately 69 percent sand with a liquid limit

below 50 and plastic limit below 20 percent (Cargill, 2002). The majority of the material found along the MKARNS consists of a similar mixed coarse grained soil.

No geotechnical testing has been conducted along the MKARNS since this case study was proposed and the original soil testing for the channel could not be located. A comprehensive dredged material testing operation was considered, but due to the highly variable material and expenses related to the quality and quantity of tests, along with the large area to be covered, dredged material testing was not feasible for this case study. The Tulsa District may pursue dredged material testing at a later date, but nothing is planned at this time.

Since the USCS soil classification allows a broad range of definable soil properties it was considered adequate for delineating the MKARNS dredged material properties for the linear model. The engineering properties and the soil classification of the dredged material are highly variable along any major river system but also exhibit extreme variability in the DMCA as the material is placed as depicted previously in Figure 3. The coarse grained soil particles fall out near the dredge pipe while the fine grained soil particles stay in suspension for a greater time period (Bartos, 1977). This causes a modeling problem for the DMCA and the corresponding dredging operations. This may also explain why the PSDDF model drains the SC soil so rapidly in Appendix C because the complex interactions occurring with the segregation of material during dredging operations are not incorporated in the model. Literature shows that the consolidation of dredged material in DMCAs is much more complex with consolidation represented by

years instead of months. By running the same linear analysis for the 41 DMCAAs and using the determined rate of 0.0011 ft. per day for an SC, an optimum input and output for each DMCA was determined.

CHAPTER IV

FINDINGS

MKARNS Linear Solution

The minimum time to fill and consolidate a 3-ft. dredged layer in the example problem was equal to 3.43 years. Table 5 shows the input values for the linear model simulations. Each of the 41 DMCAs were run using the same linear model with the results shown in Appendix D. Constraint 1 utilized the 3-ft. lift volumes provided in Table 1 and the established rates of production and consolidation to construct Equation 2 for each of the DMCAs. The input value for the Coefficient of T1 in Equation 2 is not shown in Table 5, but it is a constant of 16,200 ft.³/hour as stated previously.

DMCA #	Equation 2 Coefficient of T2	Right-Hand Side (RHS) Constraint 2	Right-Hand Side (RHS) Constraint 3
1	40.23	162.7	32751
2	102.42	414.1	32751
3	63.05	254.9	32751
4	29.09	117.6	32751
5	30.59	123.7	32751
6	40.28	162.9	32751
7	26.05	105.3	32751
8	116.42	470.7	32751
9	14.75	59.6	32751
10	14.42	58.3	32751
11	17.36	70.2	32751
12	17.36	70.2	32751
13	46.27	187.1	32751
14	45.19	182.7	32751
15	6.04	24.4	32751
16	30.30	122.5	32751
17	77.21	312.2	32751
18	55.21	223.2	32751
19	71.14	287.6	32751
20	43.68	176.6	32751
21	28.07	113.5	32751
22	82.60	334.0	32751
23	89.39	361.4	32751
24	89.39	361.4	32751
25	15.30	61.9	32751
26	69.76	282.1	32751
27	43.48	175.8	32751
28	48.12	194.6	32751
29	8.79	35.5	32751
30	7.08	28.6	32751
31	13.93	56.3	32751
32	29.48	119.2	32751
33	34.62	140.0	32751
34	4.83	19.5	32751
35	8.87	35.9	32751
36	14.58	59.0	32751
37	8.79	35.5	32751
38	12.60	50.9	32751
39	11.34	45.8	32751
40	13.77	55.7	32751
41	37.35	151.0	32751

Table 5: Linear Model Input Values from MKARNS Case Study

The Coefficient of T2, also in ft.^3/hour units, was calculated using the same methodology as Equation 3 and is shown in Table 5. The RHS of Constraint 2 (in hours) utilized Equation 7 for all 41 sites. The RHS of Constraint 3 remained constant at the established minimum value which is 32750 hours - using a rate of 0.0011 ft. per day (converted to 0.0000458ft./hour) and Equation 9. While the rate of consolidation does control the feasible solution, the [Dredged Material Volume Recovered] related to the overall depth of the DMCA was equal for all 41 DMCAAs. The results in Appendix D are compiled in Table 6.

DMCA #	Feasible T1 (hours)	Solution T2 (hours)	Optimal Solution T1 + T2 (hours)
1	244	32751	32995
2	621	32751	33372
3	382	32751	33133
4	176	32751	32927
5	186	32751	32937
6	244	32751	32995
7	158	32751	32909
8	706	32751	33457
9	89	32751	32840
10	87	32751	32838
11	105	32751	32856
12	105	32751	32856
13	281	32751	33032
14	274	32751	33025
15	37	32751	32788
16	184	32751	32935
17	468	32751	33219
18	335	32751	33086
19	431	32751	33182
20	265	32751	33016
21	170	32751	32921
22	501	32751	33252
23	542	32751	33293
24	542	32751	33293

25	93	32751	32844
26	423	32751	33174
27	264	32751	33015
28	292	32751	33043
29	53	32751	32804
30	43	32751	32794
31	84	32751	32835
32	179	32751	32930
33	210	32751	32961
34	29	32751	32780
35	54	32751	32805
36	88	32751	32839
37	53	32751	32804
38	76	32751	32827
39	69	32751	32820
40	84	32751	32835
41	227	32751	32978

Table 6: Linear Model Results for 41 DMCAs

The linear model showed that the lift was optimized when all 41 DMCA used 4.5-ft. lifts in Appendix D. The 41 DMCA were checked by taking the T1 values located in Appendix D and using Equation 11 to solve for the [Dredged Material Volume In]. This volume was then divided by the original 3-ft. lift volume in Table 1. Each of the 41 DMCA equated to producing a lift equal to 1.5 times the original 3-ft. lift's volume – a 4.5 ft. lift. Appendix E shows a complete summary of the calculated input values.

This remained true when DMCA #1 was analyzed for a CH classification using the determined consolidation rate of 0.0008 ft. per hour:

LINEAR PROGRAMMING PROBLEM

Minimize, IT1+IT2

Subject To:

- 1) $16200T1 - 29.25T2 > 2635087$
- 2) $T1 > 162.7$
- 3) $T2 > 45045$

OPTIMAL SOLUTION

Objective Function Value = 45288.991

<i>Variable</i>	<i>Value</i>	<i>Reduced Costs</i>
<i>T1</i>	243.991	0.000
<i>T2</i>	45045.000	0.000

<i>Constraint</i>	<i>Slack/Surplus</i>	<i>Dual Prices</i>
<i>1</i>	0.000	0.000
<i>2</i>	81.291	0.000
<i>3</i>	0.000	-1.002

OBJECTIVE COEFFICIENT RANGES

<i>Variable</i>	<i>Lower Limit</i>	<i>Current Value</i>	<i>Upper Limit</i>
<i>T1</i>	-553.846	1.000	No Upper Limit
<i>T2</i>	0.002	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

<i>Constraint</i>	<i>Lower Limit</i>	<i>Current Value</i>	<i>Upper Limit</i>
<i>1</i>	<i>No Lower Limit</i>	<i>2635087.000</i>	<i>No Upper Limit</i>
<i>2</i>	<i>No Lower Limit</i>	<i>162.700</i>	<i>243.991</i>
<i>3</i>	<i>22.325</i>	<i>45045.000</i>	<i>No Upper Limit.</i>

The time to consolidate for DMCA #1 changed for a CH soil, over five years for consolidation, but the depth of fill did not. It remained a 4.5-ft. lift for production. This means that the rate of consolidation can be refined to develop an optimized solution for all soil types. The solution was driven by the third constraint which can be seen in Figure 9. The minimal time of consolidation directly formulates the T2 value using constraint 3.

Project Management Solution

The [Dredged Material Volume In] values for the MKARNS are shown in Table 7. This can then be used to account for the management of 41 DMCAAs.

DMCA #	[Dredged Material Volume In] 4.5 ft. Linear Determined Lift (ft.^{^3})
1	1317543.6
2	3354257.8
3	2064831.8
4	952878.3
5	1001777.2
6	1319207.3
7	853026.4

8	3812881.4
9	483129.4
10	472126.3
11	568512.3
12	568512.3
13	1515427.4
14	1480044.2
15	197660.3
16	992202.2
17	2528842.7
18	1808319.3
19	2329801.4
20	1430678.7
21	919375.9
22	2705177.3
23	2927585.0
24	2927585.0
25	501060.3
26	2284760.5
27	1423890.9
28	1576030.8
29	287757.4
30	231949.2
31	456260.0
32	965636.6
33	1134000.0
34	158189.8
35	290624.0
36	477533.9
37	287945.3
38	412546.0
39	371288.6
40	450914.9
41	1223334.1

Table 7: Computed [Dredged Material Volume In]

Appendix F compiles the linear model data from all 41 DMCA's and then uses the rate of production and the linear model to optimize the DMCA's disposal capacity. The [Dredged Material Volume In] are used in Appendix F to estimate the total time to deepen the MKARNS. The most efficient method to dredge the MKARNS was to start at

the Arkansas state border and work towards the Port of Catoosa since dredging contractors actively operate near the coast. Dredging operations should be completed within a 140-day time frame from November to March in a calendar year to maximize settlement conditions. This corresponds to the literature reviewed and the PSDDF model which uses basic precipitation and weather data to determine the consolidation rate. The maximum consolidation should occur in the summer months and will be accomplished by having completed dredging operations by early Spring. Dredging operations will need to use this logic to complete the management solution efficiently.

The [Dredged Material Volume In] values were used along with the rate of production to calculate a time of production for a single year of dredging. The dredged disposal operations in Appendix F were spaced by 4 years for simplicity, but at a minimum the disposal operations should maintain each of the 41 optimal solutions which range from 3.74 to 3.82 years after converting the optimal solutions in Table 6 from hours to years. This is balanced with the need to dredge as much as possible during each year. Table 8 shows the first two years of the results in Appendix F. Initially, the 140 days of dredging were executed in the first year, but this left a minor amount of dredging in year 2. This was then balanced, and the final results show approximately half of the system can be dredged in year 1 and half can be dredged in year 2. The time shown at the bottom of Table 8 is a maximum contract time for the year's total dredging operations. This time corresponds to the capacity of dredging above it.

DMCA #	Linear Det. Lift (ft.^3)	Dredging Year 1 (ft.^3)	Dredging Year 2 (ft.^3)
1	1317543.6	1317543.6	
2	3354257.8	3354257.8	
3	2064831.8	2064831.8	
4	952878.3	952878.3	
5	1001777.2	1001777.2	
6	1319207.3	1319207.3	
7	853026.4	853026.4	
8	3812881.4	3812881.4	
9	483129.4	483129.4	
10	472126.3	472126.3	
11	568512.3	568512.3	
12	568512.3	568512.3	
13	1515427.4	1515427.4	
14	1480044.2	1480044.2	
15	197660.3	197660.3	
16	992202.2	992202.2	
17	2528842.7	2528842.7	
18	1808319.3	1808319.3	
19	2329801.4	2329801.4	
20	1430678.7	1430678.7	
21	919375.9	919375.9	
22	2705177.3		2705177.3
23	2927585.0		2927585.0
24	2927585.0		2927585.0
25	501060.3		501060.3
26	2284760.5		2284760.5
27	1423890.9		1423890.9
28	1576030.8		1576030.8
29	287757.4		287757.4
30	231949.2		231949.2
31	456260.0		456260.0
32	965636.6		965636.6
33	1134000.0		1134000.0
34	158189.8		158189.8
35	290624.0		290624.0
36	477533.9		477533.9
37	287945.3		287945.3
38	412546.0		412546.0
39	371288.6		371288.6
40	450914.9		450914.9
41	1223334.1		1223334.1
	Tot. Vol.	29971036	21094069
	Capacity	34992000	34992000
	Time	90 day	90 day

Table 8: Year 1 and 2 of Appendix F Results

In year 9 and 10, the remaining capacity of the DMCAs can then be utilized which should equate to five feet of filling capacity since the original dredged volume was doubled to design the DMCAs in Table 1. This is verified at the end of Appendix F by summing the total dredged material production for all 41 DMCAs. The final lift is not modeled because it is unnecessary since dredging operations should be completed for the required deepening. Since the MKARNS does not currently have major annual dredging operations, it is expected that major future dredging operations will not be expected for 50 years; therefore the approximate design life is 50 years.

CHAPTER V

CONCLUSION

Linear Model Approximates the USACE Model

By reviewing the assumptions made and the approximate solution of the linear model, the linear solution follows the standard practices and the established dredged material properties. The linear model depicts the approximation for sedimentation and primary consolidation. By analyzing the solution, it resembles the time-settlement diagram shown in Figure 8, which establishes the state of the practice for designing a DMCA. The only difference between the linear and the PSDDF model is that the linear model depicts a straight line between the start of consolidation and the time for four years of consolidation.

In Figure 12, the life cycle of a DMCA is shown graphically. The linear model represents each stage between disposal lifts for a DMCA according to existing guidance and state of the practice operations. This figure depicts the USACE guidance for several lifts but also an individual lift - just as the linear model depicts. This depiction shows the linear models ability to capture the dredged material settlement processes within a DMCA.

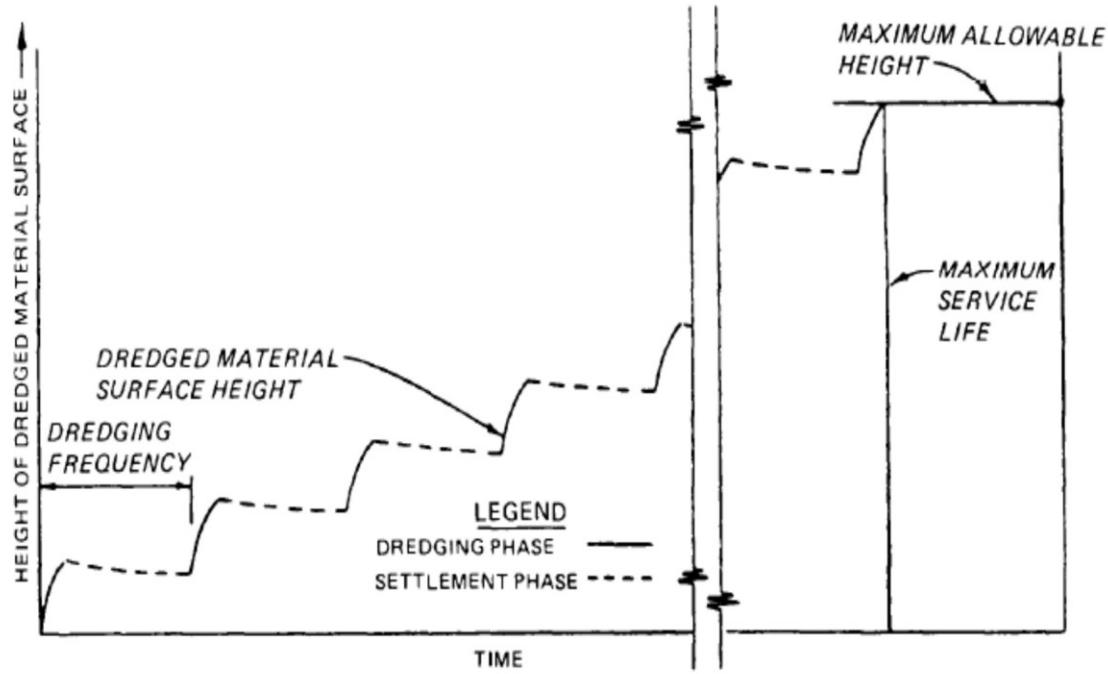


Figure 12: Dredged Lift Management (USACE, 1987)

The linear model shows a practical solution to the complex soil interactions which exist in the soil matrix from suspension to sedimentation and then to consolidation in DMCA. The solution can be cross referenced with past research, and a precise estimate of settlement can be determined based on the soil type.

The spreadsheet in Appendix F shows the final results of the analysis while maintaining existing constraints on DMCA management. With the existing linear analysis and the assumption that the dredged material will be constant with a USCS classification of SC, it will take the 41 DMCA approximately seven years to contain the dredged material from the deepening of the MKARNS. After approximately nine years the DMCA will be able to accept another lift if maintenance dredging is required. The required design life for the

DMCAs was 50 years. Since the MKARNS has only minor maintenance dredging operations it was assumed that it will be many years before the DMCAs will be required to accept more dredged material. A 50-year design life seems plausible after completing the case study.

The resulting solution was based on a simplified linear approach. The processes are extremely complex with many interactions from pore-water pressures to evaporation defining the dredged material from placement to consolidation. The results of the proposed linear solution show that the linear model represents a management tool for multiple DMCAs along a major navigation system.

Recommendations

For a navigation system, a family of curves could be established to depict the range of consolidation rates for various soil classifications. This would be similar to the family of curves for compaction established for engineering design along roadways. This would allow the linear model to be used for the management of multiple DMCAs along a navigation system.

The user guide for the PSDDF model explains that “such a rigorous explanation is felt not warranted because of the paucity of information available on the factors that actually control the process” (Stark, 1996). This realization of the difficulty of analysis for complex soil interactions and the highly variable dredged material explains why

engineering judgment is so important. The PSDDF model requires many input values and several mathematical models to describe the settlement process. The complexity of the model and the input values would require further investigation in developing the proposed rates of consolidation for SC and CH - and additional soil classifications.

Since the model uses some basic assumptions based on the literature reviewed, the linear model should be revisited to establish a more refined rate of consolidation for the MKARNS. Complete geotechnical classification testing at the end pipe of the dredging operations allowing a more refined solution as dredged material with a broader range of properties are encountered. It is recommended that future research study the rate of consolidation for existing MKARNS dredged disposal operations to check the established literature rates and the USCS soil classification associated with the rate. Monitoring of DMCA operations is also needed to refine the linear model - especially the linear rate of consolidation.

The ability to monitor a DMCA after dredging operations could also prevent disposal before the settlement processes have time to advance, which complicates consolidation. Since DMCA capacity is a valuable commodity as land prices increase, the 41 DMCAAs should be managed to guarantee that the site will have a useful life and that the engineering assumptions which align the linear model with the DMCAAs disposal life are monitored. In the case study, there was no beneficial use or management of the DMCA other than utilizing the dredged material and then using natural consolidation.

Additional techniques can be used to maximize the DMCA's life, such as the use of wick drains, geosynthetics, dredged material farming, dredged material trenching, or dredged material reuse. All of these can increase the life and capacity of the DMCA. Figure 7 can then be used with an adjusted linear model to determine the Time for Production and Consolidation, T₁ and T₂ respectively. It is recommended that a long-term management program be implemented after the completion of the dredging operations to maximize the life of the 41 DMCA along the MKARNS. Monitoring of the MKARNS would allow for the ultimate implementation of the management strategy and also improve the model's accuracy. This model was designed for the MKARNS but could be modified for other navigation systems although many assumptions would need to be altered, and project constraints would need to be reassessed. The utilization of the engineering properties and the model represents a distinct solution for a distinct problem.

It is also important to remember that since the dredged material along the MKARNS is not contaminated, DMCA design is based solely on the geotechnical properties of the dredged material, and the DMCA are not subject to the more stringent design requirements established by EM 1110-2-5027 (USACE 1987). Any deviations from the assumptions made based on the MKARNS and management of the DMCA could change the estimated life of the deepening operations and the model.

Final Thoughts on Analysis

Intelligent assumptions give a realistic solution to a complex problem. The ability to use the linear model to identify an optimal solution which mimics the complex engineering properties of consolidation and provides a linear relationship to solve a large and complex engineering problem is a breakthrough for DMCA management. The simplifications are based on a variable material; however, the ability to represent a soil from dredging to placement develops a model to manage the lifts within a DMCA.

Cost influences all projects, and alternatives can be weighted based on basic value engineering principles to optimize the management of the DMCA system to derive a cost effective management solution with consideration for time dependent operations. It is possible to use linear programming to develop a solution for DMCA selection based on cost management. This was not pursued for this case study because realistic cost data would be needed to evaluate the decisions. This would be a much more complex model comparable to the USACE D2M2 module, but it is theoretically possible. It is also possible that no feasible solution would be generated using a linear model.

Since the USACE is the primary agency involved in this project, then its culture and funding cycle should be incorporated into the overall planning of the project. Since the project conditions show a minimal time to proceed with dredging operations for a DMCA, then increasing the time of consolidation because of limited funding could be

seen as non-detrimental to the overall management of the DMCAs. Any decrease in time of consolidation would not be as acceptable since this would cause the constraints established for the model to be violated. The time of production could also be altered but the constraints would have to be modified to account for the change. The MKARNS deepening project has had limited funding since the case study began, so the ability to manage the DMCAs according to the linear model's solution could be compromised.

Finally, confined in-water disposal was allowed at several locations and this would lessen the amount of dredged material available and remove the need for all 41 DMCAs. The PSDDF model includes the ability to analyze in-water disposal, but at this time the linear model proposed in this paper only provides a rate of consolidation for inland disposal. The linear model could still be utilized; however, additional research into realistic linear rates of consolidation and the sizing constraints for confined in-water disposal would need to be analyzed.

REFERENCES

- Anderson, D.R.; Sweeney, D.J.; Williams, T.A. (2005) "An Introduction to Management Science: Quantitative Approaches to Decision Making." Eleventh Edition. Ohio: Thomson South-Western. ISBN: 0324202318.
- Bartos, M. J. (1977). "Classification and Engineering Properties of Dredged Material." Technical Report D-77-18. U.S. Army Engineer Research and Development Center, Vicksburg, MS.
- Cargill, K. W. and Iravani S. (2002). "Geotechnical Characterization of Dredged Material Containment Areas." Specialty Conference on Dredging and Dredged Material Disposal. Orlando, FL, USA, ASCE, Reston, VA, USA. 1387-1401.
- Carrier, W. D., III and Bromwell, L.G. (1980). "Geotechnical Analysis of Confined Soil Disposal." Dredging, Progress in Equipment and Methods, Proceedings of WODCON IX, 9th World Dredging Conference. Vancouver, BC, Can, Symcon Publ. Co., Long Beach, Calif., USA, 313-324.
- Elkins, B. V. and Thompson, T.K. (1997). "Recycling Dredge Materials for Beneficial Use." Geotechnical Special Publication. ASCE, New York, NY, USA. 161-176.

Fowler, Jack; Banks, Don; Stark, T. D. (1996). "Vertical Strip Drains to Increase Storage Capacity of Confined Dredged Material Disposal Facilities." E. E. o. D. T. Notes. U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

Haliburton, T.A. (1978). "Guidelines for Dewatering/Densifying Confined Dredged Material." Technical Report D-78-11. U.S. Army Engineer Research and Development Center, Vicksburg, MS.

Koerner, R.M. and Uibel, B.L. (1988). "Hydraulic Fill Embankments Utilizing Geosynthetics." Hydraulic Fill Structures. Ft. Collins, CO, USA, ASCE, New York, NY, USA. 634-662.

Kyzer, I. B. (1984). "Management of Dredged Material Disposal Areas." Dredging and Dredged Material Disposal, Proceeding of the Conference Dredging '84. Clearwater, FL, USA, ASCE, New York, NY, USA. 802-810.

Lee, C. R. (2000). "Reclamation and Beneficial Use of Contaminated Dredged Material: Implementation Guidance for Select Options." DOER Technical Notes Collection (TN DOER-C12). U.S. Army Engineer Research and Development Center, Vicksburg, MS.

Murthy, V.N.S. (2003). "Geotechnical Engineering: Principles and Practices of Soil Mechanics and Foundation Engineering." Tenth Edition. New York – Basel: Marcel Dekker, Inc. ISBN: 0824708733.

Poindexter, M. E. (1984). "Long-Term Management of Confined Disposal Areas." Dredging and Dredged Material Disposal, Proceeding of the Conference Dredging '84. Clearwater, FL, USA, ASCE, New York, NY, USA. 886-895.

Poindexter-Rollings, M. E. (1989). "Dredged Material Containment Area Management Practices for Increasing Storage Capacity." E. E. o. D. T. Notes. U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

Poindexter-Rollings, M. E. (1990). "Selecting Equipment for Use in Dredged Material Containment Areas." E. E. o. D. T. Notes. U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

Schroeder, P.R.; Palermo, M.R.; Myers, T.E.; Lloyd, C.M. (2004). "The Automated Dredging and Disposal Alternatives Modeling System (ADDAMS)." ERDC/TN EEDP-06-12. U.S. Army Engineer Research and Development Center, Vicksburg, MS.

Stark, T.D. (1996). "Program Documentation and User's Guide: PSDDF Primary Consolidation, Secondary Compression, and Desiccation of Dredged Fill." U.S. Army Engineer Research and Development Center. Vicksburg, MS.

Summers, R.M. (1981). "The Design of Dredged Spoil Containment Basins using Mass Sediment Properties." Ph.D. Dissertation, John Hopkins University. Baltimore, Maryland.

Thomas, R. F. (1994). "Dewatering and Crust Management of Confined Disposal Areas in Galveston Bay, Texas." Proceedings of the Second International Conference on Dredging and Dredged Material Placement. Lake Buena Vista, FL, USA, ASCE, New York, NY, USA. 1400-1405.

Trim, Denise M. (1999). "Containment Facility Design – A Comparison Study of Predicted Versus actual Results at Liverpool, Nova Scotia." Ph.D. Dissertation, University of Virginia. Charlottesville, Virginia.

USACE (1987). "Confined Disposal of Dredged Material - Engineering Manual (EM 1110-2-5027)." U.S. Army Engineer Research and Development Center, Vicksburg, MS.

(VDOT) Virginia Department of Transportation (2003). "Unified Soil Classification System (form5 5-23-03)." [Internet]. (Accessed 16 December 2006). Available from <http://matrix.vtrc.virginia.edu/DATA/GINT/vdotusc.PDF>.

Winfield, L.E., and Lee, C.R. (1999). "Dredged Material Characterization Tests for Beneficial Use Suitability." DOER Technical Notes Collection (TN DOER-C2). U.S. Army Engineer Research and Development Center, Vicksburg, MS.

www.wes.army.mil/el/dots/doer.

BIBLIOGRAPHY

- Banks, D. (1994). "The Dredging Research Program - Technical Area 2 - Material Properties Related to Navigation and Dredging." Proceedings of the Second International Conference on Dredging and Dredged Material Placement. Lake Buena Vista, FL, USA, ASCE, New York, NY, USA. 1554-1561.
- Bromwell, L. G.; Carrier, W.D.; Oxford, T.P. (1981). "Consolidation of Confined Dredged Materials." Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan. San Francisco, CA, USA. 1: 308-315.
- Burke, R. A. and McDonald, G.T. (1984). "Long-Term Planning for Dredged Material Disposal." Dredging and Dredged Material Disposal, Proceeding of the Conference Dredging '84. Clearwater, FL, USA, ASCE, New York, NY, USA. 999-1005.
- Burt, N. and Fletcher, C. (1999). "World Review of Dredging Research Part 6: Physical Properties of Dredged Material." Dredging and Port Construction. Series II. 26(7): 10-15.
- Carroll, S.; LaRosa, P.; Horvitz, G. (2004). "Design and Construction of a Nearshore Confined Disposal Facility." Port Development in the Changing World: Ports 2004. Houston, TX, USA. 287-296.

Collier, C.R. (1984). "Selection of Dredged Material Disposal Sites." Dredging and Dredged Material Disposal, Proceeding of the Conference Dredging '84. Clearwater, FL, USA, ASCE, New York, NY, USA. 684-692.

Engler, R. M.; Wright, T.; Lee, C.R.; Dillon, T. M. (1988). "Corps of Engineers Procedures and Policies on Dredging and Dredged Material Disposal (The Federal Standard)." E. E. o. D. T. Notes. U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

Ford, D. and Huff, R. (1994). "SPN-D2M2 User's Guide." U.S. Army Engineer Research and Development Center. Vicksburg, MS.

Francine, N. R. and Palermo M.R. (1984). "Management Strategy for Disposal of Dredged Material." Dredging and Dredged Material Disposal, Proceeding of the Conference Dredging '84. Clearwater, FL, USA, ASCE, New York, NY, USA. 12-23.

Horsfall, J. and Martin, K. (1994). "Design/Construction of a CFD over Dredged Sludge." Proceedings of the Second International Conference on Dredging and Dredged Material Placement. Lake Buena Vista, FL, USA, ASCE, New York, NY, USA. 1250-1259.

Klesch, W. L. (1984). "Need for Long-Term Planning for Dredged Material Containment Areas." Dredging and Dredged Material Disposal, Proceeding of the Conference Dredging '84. Clearwater, FL, USA, ASCE, New York, NY, USA. 674-683.

Krishnamohan, R. and Herbich, J.B. (1995). "Innovative Technologies for Dredging and Disposing Contaminated Dredged Material." Proceedings of the Ports '95 Conference on Port Engineering and Development for the 21st Century, Part 1 (of 2). Tampa, FL, USA. (1) 723-738.

Lacasse, S. M.; Lambe, T. W.; Marr, W. A.; Neff, T. L. (1977). "Void Ratio of Dredged Material." Geotechnical Practice for Disposal of Solid Waste Materials. 153-168.

Mathews, L.G.; Nocera, J.J.; Pierre, B.M.; Shea, T.J.; Thompson, S.E. (1997). "Using GIS to Identify and Characterize Sediments to be Dredged." Dredging and Management of Dredged Material: Proceedings of 3 sessions sponsored by the Soil Properties Committee of the Geo-Institute of the American Society of Civil Engineers held in conjunction with Geo-Logan '97. Logan, Utah. 87-104.

Moloney, L. J. and O'Bryan, M.K. (1984). "Construction of Monroe Harbor Confined Disposal Facility." Dredging and Dredged Material Disposal, Proceeding of the Conference Dredging '84. Clearwater, FL, USA, ASCE, New York, NY, USA. 793-801.

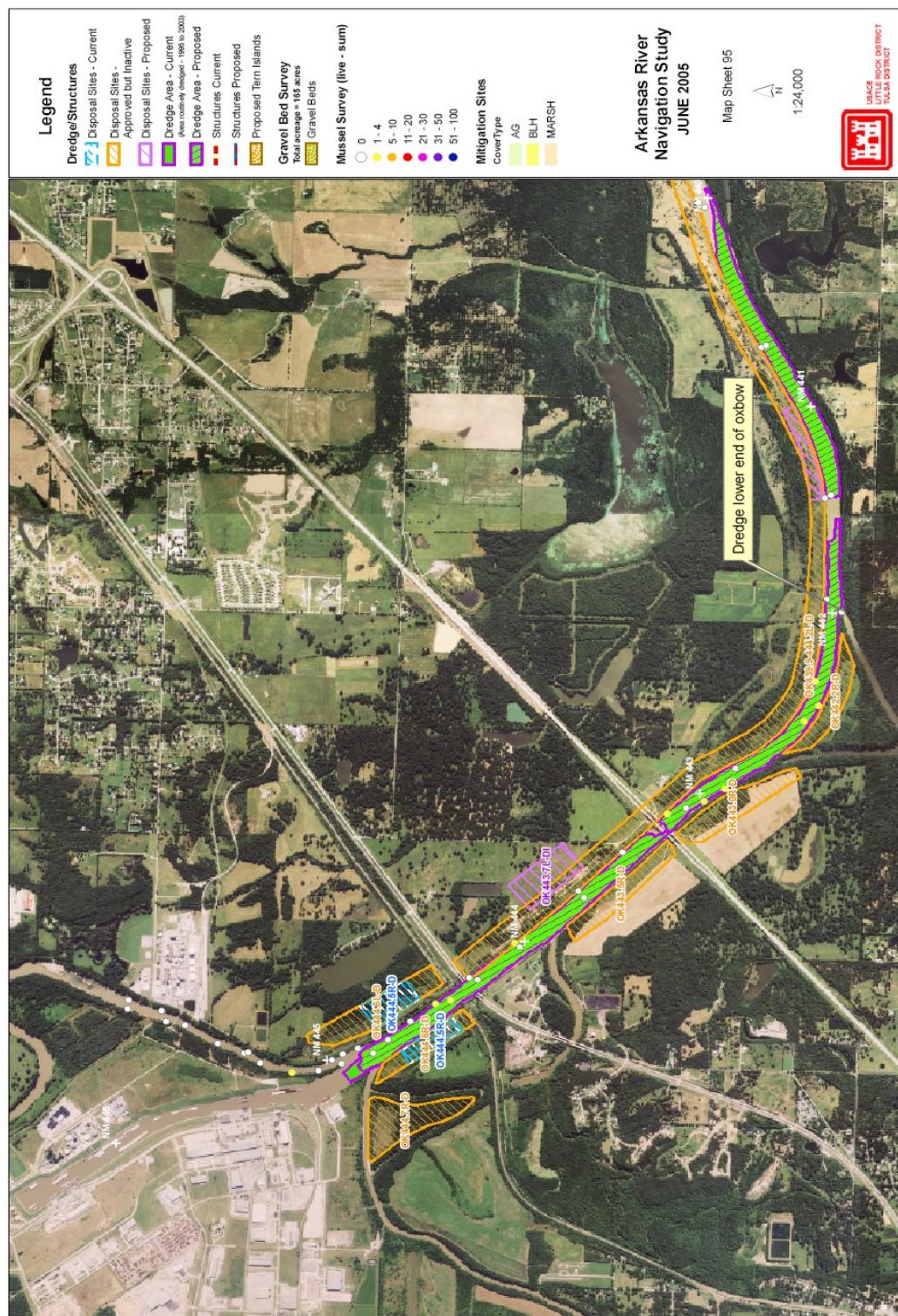
Montgomery, R. L. (1982). "Containment Area Sizing for Disposal of Dredged Material." Environmental International. 7(2): 151-161.

Palermo, M. R. (1980). "Long-Term Storage Capacity of Dredged Material Containment Areas." Dredging, Progress in Equipment and Methods, Proceedings of WODCON IX, 9th World Dredging Conference. Vancouver, BC, Can, Symcon Publ. Co., Long Beach, Calif., USA. 301-312.

Stark, T. D.; Choi, H.; Schroeder, P.R. (2005). "Settlement of Dredged and Contaminated Material Placement Areas. I: Theory and Use of Primary Consolidation, Secondary Compression, and Desiccation of Dredged Fill." Journal of Waterway, Port, Coastal and Ocean Engineering. 131(2): 43-51.

Stark, T. D.; Choi, H.; Schroeder, P.R. (2005). "Settlement of Dredged and Contaminated Material Placement Areas. II: Primary Consolidation, Secondary Compression, and Desiccation of Dredged Fill Input Parameters." Journal of Waterway, Port, Coastal and Ocean Engineering. 131(2): 52-61.

**APPENDIX A: GIS - Sample Map from USACE Feasibility
Report**



**APPENDIX B: PSDDF Results for MKARNS Rates of
Consolidation**

ARKNAVCH

Consolidation and desiccation of soft layers---dredged fill

Problem ARKNAVCH

*****Soil data for compressible foundation*****

Material Type	Layer Thickness	Numbers of Sub-layers	Ca/Cc	Cr/Cc
---------------	-----------------	-----------------------	-------	-------

1	5.00	10	.040	.150
---	------	----	------	------

Material type : 1 Specific Gravity of Solids: 2.83

I	Void Ratio	Effective Stress	Permeability	PK	Beta	Dsde	Alpha
1	3.000	0.000E+00	1.21E-02	3.03E-03	4.20E-03	-8.40E+02	-2.54E-01
2	2.950	.420E+01	.111E-02	.282E-03	.384E-03	-.880E+02	-.248E-01
3	2.900	.880E+01	.103E-02	.264E-03	.349E-03	-.980E+02	-.259E-01
4	2.850	.140E+02	.949E-03	.247E-03	.311E-03	-.108E+03	-.266E-01
5	2.800	.196E+02	.885E-03	.233E-03	.270E-03	-.114E+03	-.266E-01
6	2.750	.254E+02	.823E-03	.220E-03	.272E-03	-.124E+03	-.272E-01
7	2.700	.320E+02	.762E-03	.206E-03	.278E-03	-.136E+03	-.280E-01
8	2.650	.390E+02	.700E-03	.192E-03	.283E-03	-.160E+03	-.307E-01
9	2.600	.480E+02	.639E-03	.178E-03	.287E-03	-.190E+03	-.337E-01
10	2.550	.580E+02	.579E-03	.163E-03	.282E-03	-.220E+03	-.359E-01
11	2.500	.700E+02	.523E-03	.149E-03	.274E-03	-.280E+03	-.418E-01
12	2.450	.860E+02	.468E-03	.136E-03	.248E-03	-.340E+03	-.461E-01
13	2.400	.104E+03	.423E-03	.125E-03	.213E-03	-.420E+03	-.523E-01
14	2.350	.128E+03	.383E-03	.114E-03	.198E-03	-.500E+03	-.572E-01
15	2.300	.154E+03	.346E-03	.105E-03	.191E-03	-.620E+03	-.649E-01
16	2.250	.190E+03	.310E-03	.953E-04	.192E-03	-.780E+03	-.743E-01
17	2.200	.232E+03	.274E-03	.855E-04	.175E-03	-.980E+03	-.838E-01
18	2.150	.288E+03	.245E-03	.777E-04	.158E-03	-.112E+04	-.870E-01
19	2.100	.344E+03	.216E-03	.697E-04	.140E-03	-.132E+04	-.920E-01
20	2.050	.420E+03	.194E-03	.637E-04	.125E-03	-.166E+04	-.106E+00
21	2.000	.510E+03	.171E-03	.571E-04	.125E-03	-.220E+04	-.126E+00
22	1.950	.640E+03	.151E-03	.513E-04	.114E-03	-.270E+04	-.138E+00
23	1.900	.780E+03	.133E-03	.457E-04	.102E-03	-.310E+04	-.142E+00
24	1.850	.950E+03	.117E-03	.411E-04	.876E-04	-.380E+04	-.156E+00
25	1.800	.116E+04	.103E-03	.369E-04	.833E-04	-.450E+04	-.166E+00
26	1.750	.140E+04	.900E-04	.327E-04	.834E-04	-.540E+04	-.177E+00
27	1.700	.170E+04	.772E-04	.286E-04	.773E-04	-.640E+04	-.183E+00
28	1.650	.204E+04	.662E-04	.250E-04	.616E-04	-.840E+04	-.210E+00
29	1.600	.254E+04	.583E-04	.224E-04	.495E-04	-.106E+05	-.238E+00
30	1.550	.310E+04	.511E-04	.200E-04	.486E-04	-.121E+05	-.243E+00
31	1.500	.375E+04	.439E-04	.176E-04	.465E-04	-.150E+05	-.264E+00
32	1.450	.460E+04	.377E-04	.154E-04	.425E-04	-.179E+05	-.276E+00
33	1.400	.554E+04	.320E-04	.133E-04	.376E-04	-.220E+05	-.293E+00
34	1.350	.680E+04	.274E-04	.116E-04	.318E-04	-.296E+05	-.345E+00
35	1.300	.850E+04	.233E-04	.101E-04	.281E-04	-.360E+05	-.365E+00
36	1.250	.104E+05	.199E-04	.883E-05	.262E-04	-.380E+05	-.336E+00

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

Material Type	Specific Gravity	Ca/Cc	Cr/Cc	Saturation Limit	Desication Limit
2	2.740	.040	.150	6.700	3.100
3	2.740	.040	.150	6.700	3.100

Material type : 2

I	Ratio	Void Stress	Effective eability	Perm-	k/1+e	PK	Beta	Dsde	Alpha
1	2.500	.000E+00	.200E-02	.571E-03	.472E-03	-.200E+02	-.114E-01		
2	2.450	.100E+01	.189E-02	.548E-03	.747E-03	-.250E+02	-.137E-01		
3	2.420	.200E+01	.175E-02	.512E-03	.878E-03	-.750E+02	-.384E-01		
4	2.250	.160E+02	.121E-02	.372E-03	.779E-03	-.111E+03	-.414E-01		
5	2.150	.320E+02	.949E-03	.301E-03	.660E-03	-.240E+03	-.723E-01		
6	2.050	.640E+02	.733E-03	.240E-03	.531E-03	-.574E+03	-.138E+00		
7	1.760	.256E+03	.260E-03	.942E-04	.412E-03	-.953E+03	-.898E-01		
8	1.580	.512E+03	.120E-03	.465E-04	.212E-03	-.206E+04	-.960E-01		
9	1.390	.102E+04	.376E-04	.157E-04	.972E-04	-.565E+04	-.890E-01		
10	1.140	.300E+04	.800E-05	.374E-05	.480E-04	-.792E+04	-.296E-01		

Material type : 3

I	Ratio	Void Stress	Effective eability	Perm-	k/1+e	PK	Beta	Dsde	Alpha
1	2.500	.000E+00	.200E-02	.571E-03	.472E-03	-.200E+02	-.114E-01		
2	2.450	.100E+01	.189E-02	.548E-03	.747E-03	-.250E+02	-.137E-01		
3	2.420	.200E+01	.175E-02	.512E-03	.878E-03	-.750E+02	-.384E-01		
4	2.250	.160E+02	.121E-02	.372E-03	.779E-03	-.111E+03	-.414E-01		
5	2.150	.320E+02	.949E-03	.301E-03	.660E-03	-.240E+03	-.723E-01		
6	2.050	.640E+02	.733E-03	.240E-03	.531E-03	-.574E+03	-.138E+00		
7	1.760	.256E+03	.260E-03	.942E-04	.412E-03	-.953E+03	-.898E-01		
8	1.580	.512E+03	.120E-03	.465E-04	.212E-03	-.206E+04	-.960E-01		
9	1.390	.102E+04	.376E-04	.157E-04	.972E-04	-.565E+04	-.890E-01		
10	1.140	.300E+04	.800E-05	.374E-05	.480E-04	-.792E+04	-.296E-01		

Summary of lifts and print detail

Time days	Material Type	Fill Height	# Sub-layers	Void ratio	Start Day	Dessic. Month	Print detail
0.	2	3.8	10	2.50	820.	4	1
180.					820.	4	1
300.	3	3.6	10	2.50	820.	4	1
500.					820.	4	1
730.	2	3.2	10	2.50	820.	4	1
820.					820.	4	1
850.					850.	5	1
910.					910.	7	1
970.					970.	9	1
1060.					1060.	12	1

1100.	1100.	12	1
1140.	1140.	12	1
1480.	1480.	6	1
1530.	1530.	6	1
1700.	1700.	6	1
2000.	2000.	6	1
2555.	2555.	6	1

Summary of monthly rainfall and evaporation potential

Month	Rainfall	Evaporation
1	.240	.180
2	.270	.230
3	.400	.360
4	.250	.360
5	.320	.570
6	.530	.490
7	.680	.670
8	.540	.570
9	.430	.410
10	.250	.330
11	.180	.210
12	.260	.160

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

tau	Lower layer Void ratio	Lower layer Permeability	drainage path Length
1.70	1.500	.10000E-02	z = 6.00

Summary of desiccation parameters

Parameter	Value
Surface Drainage Efficiency	1.00
maximum evaporation efficiency	.50
saturation at desiccation limit	.75
maximum crust thickness	.16
time to desic. after initial fill	820.00
month of initial desiccation	4
elevation of fixed water table	100.00
elevation of top of incompres. found.	100.00

*****Initial Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	5.00	1.42	3.00	3.00	2.37	1
4.44	4.44	1.28	2.83	2.83	2.34	1
3.91	3.91	1.14	2.70	2.70	2.31	1
3.39	3.39	.99	2.60	2.60	2.28	1
2.88	2.88	.85	2.52	2.52	2.26	1
2.39	2.39	.71	2.47	2.47	2.24	1
1.90	1.90	.57	2.42	2.42	2.22	1
1.42	1.42	.43	2.38	2.38	2.20	1
.94	.94	.28	2.35	2.35	2.19	1
.47	.47	.14	2.32	2.32	2.17	1
.00	.00	.00	2.29	2.29	2.16	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
5.00	355.00	.00	355.00	237.12	117.88	1
4.44	405.85	16.20	389.64	271.76	117.88	1
3.91	455.35	32.41	422.94	305.06	117.88	1
3.39	503.83	48.61	455.22	337.34	117.88	1
2.88	551.54	64.82	486.72	368.84	117.88	1
2.39	598.67	81.02	517.65	399.76	117.88	1
1.90	645.35	97.23	548.12	430.24	117.88	1
1.42	691.65	113.43	578.22	460.33	117.88	1
.94	737.63	129.64	608.00	490.12	117.88	1
.47	783.33	145.84	637.49	519.61	117.88	1
.00	828.78	162.04	666.73	548.85	117.88	1

Time = 0. Degree of Consolidation = 0.%

Total Settlement = .000

Settlement at End of Primary Consolidation = .388

Settlement caused by Primary Consolidation at time 0. = .000

Settlement caused by Secondary Compression at time 0. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
3.80	3.80	1.09	2.50	2.50	2.50	2
3.42	3.42	.98	2.50	2.50	2.30	2
3.04	3.04	.87	2.50	2.50	2.20	2
2.66	2.66	.76	2.50	2.50	2.14	2
2.28	2.28	.65	2.50	2.50	2.10	2
1.90	1.90	.54	2.50	2.50	2.07	2
1.52	1.52	.43	2.50	2.50	2.04	2
1.14	1.14	.33	2.50	2.50	2.02	2
.76	.76	.22	2.50	2.50	2.00	2
.38	.38	.11	2.50	2.50	1.99	2
.00	.00	.00	2.50	2.50	1.97	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
3.80	.00	.00	.00	.00	.00	2
3.42	35.50	.00	35.50	23.71	11.79	2
3.04	71.00	.00	71.00	47.42	23.58	2
2.66	106.50	.00	106.50	71.14	35.36	2
2.28	142.00	.00	142.00	94.85	47.15	2
1.90	177.50	.00	177.50	118.56	58.94	2
1.52	213.00	.00	213.00	142.27	70.73	2
1.14	248.50	.00	248.50	165.98	82.52	2
.76	284.00	.00	284.00	189.70	94.31	2
.38	319.50	.00	319.50	213.41	106.09	2
.00	355.00	.00	355.00	237.12	117.88	2

Time = 0. Degree of Consolidation = 0.%

Total Settlement = .000

Settlement at End of Primary Consolidation = .426

Settlement caused by Primary Consolidation at time 0. = .000

Settlement caused by Secondary Compression at time 0. = .000

***** Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.92	1.42	3.00	2.74	2.37	1
4.44	4.39	1.28	2.83	2.69	2.34	1
3.91	3.88	1.14	2.70	2.62	2.31	1
3.39	3.37	.99	2.60	2.56	2.28	1
2.88	2.86	.85	2.52	2.50	2.26	1
2.39	2.37	.71	2.47	2.45	2.24	1
1.90	1.89	.57	2.42	2.40	2.22	1
1.42	1.41	.43	2.38	2.36	2.20	1
.94	.93	.28	2.35	2.32	2.19	1
.47	.46	.14	2.32	2.28	2.17	1
.00	.00	.00	2.29	2.25	2.16	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.92	346.51	26.84	319.67	228.63	91.04	1
4.39	395.61	33.73	361.88	261.53	100.35	1
3.88	444.19	43.74	400.45	293.90	106.55	1
3.37	492.20	56.07	436.12	325.70	110.42	1
2.86	539.66	69.72	469.94	356.96	112.98	1
2.37	586.63	86.30	500.33	387.72	112.60	1
1.89	633.16	103.14	530.03	418.05	111.97	1
1.41	679.30	123.44	555.86	447.99	107.87	1
.93	725.08	143.72	581.35	477.56	103.79	1
.46	770.51	166.05	604.46	506.79	97.67	1
.00	815.64	190.22	625.42	535.71	89.71	1

Time = 181. Degree of Consolidation = 19.%

Total Settlement = .074

Settlement at End of Primary Consolidation = .388

Settlement caused by Primary Consolidation at time 181. = .074

Settlement caused by Secondary Compression at time 181. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
3.80	3.66	1.09	2.50	2.50	2.50	2
3.42	3.28	.98	2.50	2.50	2.30	2
3.04	2.90	.87	2.50	2.49	2.20	2
2.66	2.53	.76	2.50	2.46	2.14	2
2.28	2.15	.65	2.50	2.42	2.10	2
1.90	1.78	.54	2.50	2.39	2.07	2
1.52	1.42	.43	2.50	2.35	2.04	2
1.14	1.06	.33	2.50	2.31	2.02	2
.76	.70	.22	2.50	2.26	2.00	2
.38	.35	.11	2.50	2.22	1.99	2
.00	.00	.00	2.50	2.18	1.97	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
3.66	.00	.00	.00	.00	.00	2
3.28	35.48	.06	35.42	23.70	11.73	2
2.90	70.94	.24	70.70	47.37	23.34	2
2.53	106.29	.78	105.51	70.93	34.59	2
2.15	141.39	1.93	139.46	94.24	45.22	2
1.78	176.25	4.62	171.63	117.31	54.32	2
1.42	210.87	7.67	203.20	140.14	63.06	2
1.06	245.22	11.08	234.14	162.71	71.43	2
.70	279.28	14.80	264.49	184.98	79.51	2
.35	313.04	20.69	292.35	206.94	85.41	2
.00	346.51	26.84	319.67	228.63	91.04	2

Time = 181. Degree of Consolidation = 32.%

Total Settlement = .136

Settlement at End of Primary Consolidation = .426

Settlement caused by Primary Consolidation at time 181. = .136

Settlement caused by Secondary Compression at time 181. = .000

Surface Elevation = 108.59

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.88	1.42	3.00	2.67	2.37	1
4.44	4.36	1.28	2.83	2.62	2.34	1
3.91	3.85	1.14	2.70	2.57	2.31	1
3.39	3.35	.99	2.60	2.52	2.28	1
2.88	2.85	.85	2.52	2.47	2.26	1

2.39	2.36	.71	2.47	2.43	2.24	1
1.90	1.88	.57	2.42	2.38	2.22	1
1.42	1.40	.43	2.38	2.34	2.20	1
.94	.93	.28	2.35	2.31	2.19	1
.47	.46	.14	2.32	2.27	2.17	1
.00	.00	.00	2.29	2.24	2.16	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.88	341.20	36.86	304.35	223.32	81.03	1
4.36	389.68	43.81	345.88	255.60	90.28	1
3.85	437.76	53.18	384.58	287.47	97.11	1
3.35	485.38	64.52	420.86	318.89	101.98	1
2.85	532.56	78.45	454.11	349.86	104.25	1
2.36	579.32	94.08	485.24	380.41	104.83	1
1.88	625.68	111.37	514.31	410.57	103.74	1
1.40	671.68	130.92	540.76	440.36	100.40	1
.93	717.33	150.37	566.96	469.81	97.15	1
.46	762.66	173.64	589.02	498.94	90.09	1
.00	807.70	197.29	610.41	527.78	82.64	1

Time = 301. Degree of Consolidation = 30.0%

Total Settlement = .117

Settlement at End of Primary Consolidation = .388

Settlement caused by Primary Consolidation at time 301. = .117

Settlement caused by Secondary Compression at time 301. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
3.80	3.58	1.09	2.50	2.50	2.50	2
3.42	3.20	.98	2.50	2.43	2.30	2
3.04	2.83	.87	2.50	2.40	2.20	2
2.66	2.47	.76	2.50	2.37	2.14	2
2.28	2.10	.65	2.50	2.33	2.10	2
1.90	1.74	.54	2.50	2.30	2.07	2
1.52	1.39	.43	2.50	2.26	2.04	2
1.14	1.03	.33	2.50	2.22	2.02	2
.76	.69	.22	2.50	2.19	2.00	2
.38	.34	.11	2.50	2.16	1.99	2
.00	.00	.00	2.50	2.13	1.97	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
3.58	.00	.00	.00	.00	.00	2
3.20	35.23	1.61	33.63	23.45	10.18	2
2.83	70.15	3.82	66.33	46.58	19.75	2
2.47	104.86	6.32	98.54	69.50	29.05	2
2.10	139.35	9.07	130.28	92.20	38.08	2
1.74	173.61	12.10	161.50	114.67	46.84	2
1.39	207.60	15.37	192.23	136.87	55.36	2
1.03	241.33	20.85	220.48	158.81	61.67	2
.69	274.81	26.06	248.76	180.51	68.25	2
.34	308.10	30.58	277.52	202.00	75.52	2
.00	341.20	36.86	304.35	223.32	81.03	2

Time = 301. Degree of Consolidation = 52.%

Total Settlement = .221

Settlement at End of Primary Consolidation = .426

Settlement caused by Primary Consolidation at time 301. = .221

Settlement caused by Secondary Compression at time 301. = .000

Surface Elevation = 108.46

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.80	1.42	3.00	2.57	2.20	1
4.44	4.30	1.28	2.83	2.54	2.19	1
3.91	3.80	1.14	2.70	2.51	2.17	1
3.39	3.30	.99	2.60	2.46	2.16	1
2.88	2.81	.85	2.52	2.42	2.14	1
2.39	2.33	.71	2.47	2.38	2.13	1
1.90	1.85	.57	2.42	2.34	2.12	1
1.42	1.38	.43	2.38	2.30	2.10	1
.94	.92	.28	2.35	2.26	2.09	1
.47	.46	.14	2.32	2.23	2.08	1
.00	.00	.00	2.29	2.19	2.07	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.80	667.35	53.51	613.84	437.79	176.05	1
4.30	715.06	59.65	655.41	469.30	186.11	1
3.80	762.48	68.72	693.76	500.51	193.25	1
3.30	809.54	81.25	728.29	531.37	196.92	1
2.81	856.24	95.60	760.64	561.87	198.77	1
2.33	902.58	112.70	789.88	592.00	197.88	1
1.85	948.55	132.81	815.74	621.76	193.98	1
1.38	994.15	153.61	840.54	651.16	189.38	1
.92	1039.42	180.81	858.61	680.22	178.38	1
.46	1084.35	209.36	874.99	708.95	166.04	1
.00	1128.98	239.91	889.07	737.37	151.69	1

Time = 501. Degree of Consolidation = 35.%

Total Settlement = .195

Settlement at End of Primary Consolidation = .552

Settlement caused by Primary Consolidation at time 501. = .195

Settlement caused by Secondary Compression at time 501. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
7.40	7.02	2.11	2.50	2.50	2.50	3
7.04	6.66	2.01	2.50	2.50	2.31	3
6.68	6.30	1.91	2.50	2.50	2.21	3
6.32	5.94	1.81	2.50	2.49	2.15	3
5.96	5.58	1.70	2.50	2.48	2.11	3
5.60	5.22	1.60	2.50	2.46	2.08	3
5.24	4.87	1.50	2.50	2.43	2.05	3
4.88	4.52	1.39	2.50	2.41	2.03	3
4.52	4.17	1.29	2.50	2.39	2.01	3
4.16	3.82	1.19	2.50	2.36	1.99	3
3.80	3.47	1.09	2.50	2.34	1.98	3
3.80	3.47	1.09	2.50	2.34	1.98	2
3.42	3.11	.98	2.50	2.31	1.96	2
3.04	2.75	.87	2.50	2.28	1.94	2
2.66	2.40	.76	2.50	2.25	1.92	2
2.28	2.05	.65	2.50	2.22	1.91	2
1.90	1.70	.54	2.50	2.19	1.89	2
1.52	1.36	.43	2.50	2.17	1.87	2
1.14	1.01	.33	2.50	2.14	1.85	2
.76	.67	.22	2.50	2.12	1.84	2
.38	.34	.11	2.50	2.10	1.82	2
.00	.00	.00	2.50	2.08	1.80	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
7.02	.00	.00	.00	.00	.00	3
6.66	33.63	.02	33.61	22.46	11.15	3
6.30	67.25	.05	67.20	44.91	22.28	3
5.94	100.85	.15	100.69	67.34	33.35	3
5.58	134.40	.39	134.01	89.73	44.28	3
5.22	167.84	.88	166.96	112.00	54.96	3
4.87	201.09	1.70	199.40	134.09	65.31	3
4.52	234.20	2.96	231.24	156.03	75.21	3
4.17	267.18	4.68	262.50	177.84	84.67	3
3.82	300.02	6.58	293.44	199.51	93.93	3
3.47	332.70	8.65	324.04	221.02	103.02	3
3.47	332.70	8.65	324.04	221.02	103.02	2
3.11	367.02	10.92	356.10	243.55	112.55	2
2.75	401.14	13.37	387.77	265.89	121.88	2
2.40	435.06	15.99	419.06	288.02	131.05	2
2.05	468.76	20.90	447.86	309.93	137.93	2
1.70	502.26	25.32	476.94	331.64	145.30	2
1.36	535.59	29.42	506.17	353.18	152.99	2
1.01	568.74	34.46	534.28	374.55	159.74	2
.67	601.75	41.35	560.39	395.76	164.63	2
.34	634.61	47.63	586.98	416.84	170.14	2
.00	667.35	53.51	613.84	437.79	176.05	2

Time = 501. Degree of Consolidation = 36.%

Total Settlement = .384

Settlement at End of Primary Consolidation = 1.060

Settlement caused by Primary Consolidation at time 501. = .384

Settlement caused by Secondary Compression at time 501. = .000

Surface Elevation = 111.82

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.73	1.42	3.00	2.49	2.20	1
4.44	4.23	1.28	2.83	2.46	2.19	1
3.91	3.74	1.14	2.70	2.43	2.17	1
3.39	3.26	.99	2.60	2.40	2.16	1
2.88	2.78	.85	2.52	2.36	2.14	1
2.39	2.30	.71	2.47	2.33	2.13	1
1.90	1.83	.57	2.42	2.29	2.12	1
1.42	1.37	.43	2.38	2.26	2.10	1
.94	.91	.28	2.35	2.23	2.09	1
.47	.45	.14	2.32	2.20	2.08	1
.00	.00	.00	2.29	2.17	2.07	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.73	655.24	72.25	582.99	425.68	157.31	1
4.23	702.24	82.12	620.12	456.48	163.65	1
3.74	748.96	93.06	655.90	486.99	168.90	1
3.26	795.40	105.19	690.21	517.22	172.99	1
2.78	841.54	121.52	720.02	547.16	172.86	1
2.30	887.37	139.02	748.35	576.79	171.56	1
1.83	932.90	157.94	774.96	606.11	168.85	1
1.37	978.13	181.76	796.37	635.14	161.23	1
.91	1023.07	206.91	816.16	663.88	152.29	1
.45	1067.74	232.27	835.47	692.34	143.13	1
.00	1112.15	265.11	847.04	720.55	126.49	1

Time = 731. Degree of Consolidation = 49.%

Total Settlement = .270

Settlement at End of Primary Consolidation = .552

Settlement caused by Primary Consolidation at time 731. = .270

Settlement caused by Secondary Compression at time 731. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
7.40	6.82	2.11	2.50	2.50	2.50	3
7.04	6.47	2.01	2.50	2.44	2.31	3
6.68	6.11	1.91	2.50	2.41	2.21	3
6.32	5.76	1.81	2.50	2.39	2.15	3
5.96	5.42	1.70	2.50	2.37	2.11	3
5.60	5.07	1.60	2.50	2.35	2.08	3
5.24	4.73	1.50	2.50	2.32	2.05	3
4.88	4.39	1.39	2.50	2.30	2.03	3
4.52	4.05	1.29	2.50	2.27	2.01	3
4.16	3.71	1.19	2.50	2.24	1.99	3
3.80	3.38	1.09	2.50	2.22	1.98	3
3.80	3.38	1.09	2.50	2.22	1.98	2
3.42	3.03	.98	2.50	2.19	1.96	2
3.04	2.69	.87	2.50	2.17	1.94	2
2.66	2.35	.76	2.50	2.14	1.92	2
2.28	2.01	.65	2.50	2.13	1.91	2
1.90	1.67	.54	2.50	2.11	1.89	2
1.52	1.33	.43	2.50	2.09	1.87	2
1.14	1.00	.33	2.50	2.08	1.85	2

.76	.66	.22	2.50	2.06	1.84	2
.38	.33	.11	2.50	2.05	1.82	2
.00	.00	.00	2.50	2.04	1.80	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
6.82	.00	.00	.00	.00	.00	3
6.47	33.40	1.42	31.98	22.23	9.75	3
6.11	66.54	2.66	63.88	44.20	19.68	3
5.76	99.54	4.31	95.23	66.04	29.19	3
5.42	132.41	6.05	126.36	87.74	38.62	3
5.07	165.14	7.91	157.23	109.31	47.92	3
4.73	197.72	9.92	187.80	130.72	57.08	3
4.39	230.14	12.06	218.08	151.97	66.12	3
4.05	262.39	14.29	248.10	173.05	75.05	3
3.71	294.46	17.05	277.42	193.95	83.46	3
3.38	326.37	21.06	305.31	214.69	90.62	3
3.38	326.37	21.06	305.31	214.69	90.62	2
3.03	359.86	25.40	334.46	236.40	98.06	2
2.69	393.19	29.27	363.92	257.94	105.98	2
2.35	426.36	33.62	392.74	279.32	113.43	2
2.01	459.38	39.93	419.45	300.55	118.90	2
1.67	492.29	45.57	446.72	321.67	125.05	2
1.33	525.07	50.71	474.36	342.66	131.70	2
1.00	557.75	55.46	502.30	363.56	138.74	2
.66	590.34	59.88	530.46	384.35	146.11	2
.33	622.83	64.00	558.84	405.06	153.78	2
.00	655.24	72.25	582.99	425.68	157.31	2

Time = 731. Degree of Consolidation = 55.%

Total Settlement = .578

Settlement at End of Primary Consolidation = 1.060

Settlement caused by Primary Consolidation at time 731. = .578

Settlement caused by Secondary Compression at time 731. = .000

Surface Elevation = 111.55

***** Current Conditions in Compressible Foundation *****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.70	1.42	3.00	2.47	2.11	1
4.44	4.20	1.28	2.83	2.44	2.10	1
3.91	3.72	1.14	2.70	2.41	2.09	1
3.39	3.24	.99	2.60	2.38	2.08	1
2.88	2.76	.85	2.52	2.34	2.07	1
2.39	2.29	.71	2.47	2.31	2.06	1
1.90	1.82	.57	2.42	2.28	2.05	1
1.42	1.36	.43	2.38	2.24	2.04	1
.94	.90	.28	2.35	2.21	2.03	1
.47	.45	.14	2.32	2.17	2.02	1
.00	.00	.00	2.29	2.14	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.70	949.34	78.96	870.38	620.51	249.87	1

4.20	996.15	88.85	907.31	651.12	256.19	1
3.72	1042.70	100.32	942.38	681.46	260.92	1
3.24	1088.95	114.85	974.10	711.51	262.59	1
2.76	1134.92	131.35	1003.57	741.27	262.30	1
2.29	1180.57	149.18	1031.40	770.72	260.67	1
1.82	1225.93	171.91	1054.02	799.87	254.15	1
1.36	1270.99	197.30	1073.69	828.73	244.96	1
.90	1315.74	225.39	1090.35	857.28	233.07	1
.45	1360.20	260.85	1099.36	885.54	213.82	1
.00	1404.37	299.28	1105.09	913.49	191.60	1

Time = 821. Degree of Consolidation = 46.%

Total Settlement = .300

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 821. = .300

Settlement caused by Secondary Compression at time 821. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.94	3.03	2.50	2.50	2.50	2
10.28	9.62	2.94	2.50	2.50	2.32	2
9.96	9.30	2.85	2.50	2.50	2.23	2
9.64	8.98	2.75	2.50	2.50	2.16	2
9.32	8.66	2.66	2.50	2.50	2.13	2
9.00	8.34	2.57	2.50	2.50	2.09	2
8.68	8.02	2.48	2.50	2.49	2.06	2
8.36	7.71	2.39	2.50	2.48	2.04	2
8.04	7.39	2.30	2.50	2.45	2.03	2
7.72	7.07	2.21	2.50	2.43	2.01	2
7.40	6.76	2.11	2.50	2.41	2.00	2
7.40	6.76	2.11	2.50	2.41	2.00	3
7.04	6.41	2.01	2.50	2.39	1.98	3
6.68	6.06	1.91	2.50	2.38	1.96	3
6.32	5.72	1.81	2.50	2.36	1.95	3
5.96	5.37	1.70	2.50	2.33	1.93	3
5.60	5.03	1.60	2.50	2.31	1.91	3
5.24	4.69	1.50	2.50	2.28	1.90	3
4.88	4.36	1.39	2.50	2.26	1.88	3
4.52	4.02	1.29	2.50	2.23	1.86	3
4.16	3.69	1.19	2.50	2.21	1.84	3
3.80	3.36	1.09	2.50	2.19	1.83	3
3.80	3.36	1.09	2.50	2.19	1.83	2
3.42	3.02	.98	2.50	2.16	1.81	2
3.04	2.68	.87	2.50	2.14	1.79	2
2.66	2.34	.76	2.50	2.12	1.77	2
2.28	2.00	.65	2.50	2.11	1.76	2
1.90	1.66	.54	2.50	2.09	1.75	2
1.52	1.33	.43	2.50	2.08	1.74	2
1.14	.99	.33	2.50	2.06	1.73	2
.76	.66	.22	2.50	2.05	1.73	2
.38	.33	.11	2.50	2.04	1.72	2
.00	.00	.00	2.50	2.03	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.94	.00	.00	.00	.00	.00	2

9.62	29.89	.00	29.89	19.97	9.93	2
9.30	59.79	.00	59.79	39.94	19.85	2
8.98	89.68	.00	89.68	59.90	29.78	2
8.66	119.58	.01	119.56	79.87	39.69	2
8.34	149.46	.05	149.42	99.83	49.59	2
8.02	179.33	.15	179.19	119.77	59.41	2
7.71	209.16	.40	208.76	139.67	69.09	2
7.39	238.87	.92	237.95	159.45	78.50	2
7.07	268.43	1.72	266.71	179.09	87.62	2
6.76	297.86	2.85	295.01	198.59	96.42	2
6.76	297.86	2.85	295.01	198.59	96.42	3
6.41	330.86	4.15	326.71	220.42	106.29	3
6.06	363.75	5.64	358.11	242.15	115.97	3
5.72	396.52	7.32	389.20	263.75	125.45	3
5.37	429.16	9.16	420.00	285.22	134.78	3
5.03	461.64	11.12	450.52	306.53	143.99	3
4.69	493.97	13.19	480.78	327.69	153.08	3
4.36	526.13	15.36	510.77	348.69	162.09	3
4.02	558.12	18.88	539.25	369.51	169.73	3
3.69	589.96	22.65	567.31	390.18	177.13	3
3.36	621.65	26.11	595.54	410.70	184.84	3
3.36	621.65	26.11	595.54	410.70	184.84	2
3.02	654.95	29.85	625.09	432.21	192.88	2
2.68	688.09	34.48	653.62	453.57	200.05	2
2.34	721.11	40.46	680.64	474.79	205.85	2
2.00	754.00	45.79	708.21	495.90	212.31	2
1.66	786.78	50.64	736.14	516.89	219.25	2
1.33	819.47	55.14	764.33	537.79	226.54	2
.99	852.06	59.36	792.71	558.60	234.11	2
.66	884.57	63.34	821.23	579.32	241.91	2
.33	916.99	70.73	846.26	599.95	246.31	2
.00	949.34	78.96	870.38	620.51	249.87	2

Time = 821. Degree of Consolidation = 38.%

Total Settlement = .656

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 821. = .656

Settlement caused by Secondary Compression at time 821. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 114.64

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.69	1.42	3.00	2.46	2.11	1
4.44	4.20	1.28	2.83	2.43	2.10	1
3.91	3.71	1.14	2.70	2.40	2.09	1
3.39	3.23	.99	2.60	2.37	2.08	1
2.88	2.75	.85	2.52	2.34	2.07	1
2.39	2.28	.71	2.47	2.30	2.06	1
1.90	1.82	.57	2.42	2.27	2.05	1
1.42	1.36	.43	2.38	2.23	2.04	1
.94	.90	.28	2.35	2.20	2.03	1
.47	.45	.14	2.32	2.17	2.02	1
.00	.00	.00	2.29	2.14	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.69	947.76	81.57	866.19	618.93	247.26	1
4.20	994.51	91.53	902.98	649.47	253.51	1
3.71	1040.99	102.87	938.12	679.75	258.37	1
3.23	1087.18	118.23	968.95	709.74	259.21	1
2.75	1133.08	135.04	998.04	739.43	258.60	1
2.28	1178.68	152.88	1025.80	768.83	256.97	1
1.82	1223.97	176.98	1047.00	797.92	249.08	1
1.36	1268.97	202.97	1065.99	826.70	239.29	1
.90	1313.67	230.65	1083.02	855.20	227.82	1
.45	1358.07	267.17	1090.90	883.40	207.49	1
.00	1402.19	304.72	1097.47	911.31	186.16	1

Time = 852. Degree of Consolidation = 47%

Total Settlement = .310

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 852. = .310

Settlement caused by Secondary Compression at time 852. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.92	3.03	2.50	2.50	2.50	2
10.28	9.60	2.94	2.50	2.50	2.32	2
9.96	9.28	2.85	2.50	2.50	2.23	2
9.64	8.96	2.75	2.50	2.50	2.16	2
9.32	8.64	2.66	2.50	2.50	2.13	2
9.00	8.32	2.57	2.50	2.49	2.09	2
8.68	8.00	2.48	2.50	2.48	2.06	2
8.36	7.68	2.39	2.50	2.46	2.04	2
8.04	7.37	2.30	2.50	2.43	2.03	2
7.72	7.05	2.21	2.50	2.42	2.01	2
7.40	6.74	2.11	2.50	2.40	2.00	2
7.40	6.74	2.11	2.50	2.40	2.00	3
7.04	6.39	2.01	2.50	2.38	1.98	3
6.68	6.05	1.91	2.50	2.36	1.96	3
6.32	5.70	1.81	2.50	2.34	1.95	3
5.96	5.36	1.70	2.50	2.32	1.93	3
5.60	5.02	1.60	2.50	2.30	1.91	3
5.24	4.68	1.50	2.50	2.27	1.90	3
4.88	4.35	1.39	2.50	2.24	1.88	3
4.52	4.01	1.29	2.50	2.22	1.86	3
4.16	3.68	1.19	2.50	2.20	1.84	3
3.80	3.36	1.09	2.50	2.18	1.83	3
3.80	3.36	1.09	2.50	2.18	1.83	2
3.42	3.01	.98	2.50	2.16	1.81	2
3.04	2.67	.87	2.50	2.14	1.79	2
2.66	2.33	.76	2.50	2.12	1.77	2
2.28	1.99	.65	2.50	2.10	1.76	2
1.90	1.66	.54	2.50	2.09	1.75	2
1.52	1.32	.43	2.50	2.07	1.74	2
1.14	.99	.33	2.50	2.06	1.73	2
.76	.66	.22	2.50	2.05	1.73	2
.38	.33	.11	2.50	2.04	1.72	2
.00	.00	.00	2.50	2.02	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.92	.00	.00	.00	.00	.00	2
9.60	29.89	.00	29.89	19.97	9.93	2
9.28	59.79	.00	59.78	39.94	19.85	2
8.96	89.68	.02	89.66	59.90	29.76	2
8.64	119.57	.05	119.52	79.86	39.66	2
8.32	149.43	.15	149.29	99.80	49.49	2
8.00	179.26	.37	178.89	119.70	59.19	2
7.68	209.00	.81	208.19	139.51	68.68	2
7.37	238.58	1.52	237.06	159.17	77.89	2
7.05	268.05	2.25	265.80	178.71	87.09	2
6.74	297.43	3.55	293.88	198.16	95.72	2
6.74	297.43	3.55	293.88	198.16	95.72	3
6.39	330.37	5.05	325.31	219.93	105.38	3
6.05	363.19	6.66	356.53	241.58	114.94	3
5.70	395.88	8.39	387.49	263.10	124.39	3
5.36	428.42	10.24	418.19	284.48	133.70	3
5.02	460.82	12.21	448.61	305.72	142.90	3
4.68	493.07	14.29	478.77	326.79	151.98	3
4.35	525.14	16.86	508.29	347.70	160.59	3
4.01	557.06	20.79	536.27	368.44	167.82	3
3.68	588.82	24.34	564.48	389.04	175.44	3
3.36	620.44	27.63	592.82	409.50	183.32	3
3.36	620.44	27.63	592.82	409.50	183.32	2
3.01	653.68	31.19	622.49	430.95	191.54	2
2.67	686.78	36.78	650.00	452.25	197.75	2
2.33	719.74	42.42	677.32	473.43	203.89	2
1.99	752.60	47.52	705.08	494.50	210.59	2
1.66	785.35	52.20	733.15	515.46	217.69	2
1.32	818.00	56.56	761.44	536.33	225.12	2
.99	850.57	60.67	789.90	557.10	232.80	2
.66	883.05	65.22	817.83	577.79	240.03	2
.33	915.45	73.29	842.16	598.40	243.75	2
.00	947.76	81.57	866.19	618.93	247.26	2

Time = 852. Degree of Consolidation = 39.%

Total Settlement = .681

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 852. = .681

Settlement caused by Secondary Compression at time 852. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 114.61

***** Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.67	1.42	3.00	2.45	2.11	1
4.44	4.18	1.28	2.83	2.42	2.10	1
3.91	3.70	1.14	2.70	2.39	2.09	1
3.39	3.22	.99	2.60	2.36	2.08	1
2.88	2.74	.85	2.52	2.32	2.07	1
2.39	2.28	.71	2.47	2.29	2.06	1
1.90	1.81	.57	2.42	2.26	2.05	1
1.42	1.35	.43	2.38	2.22	2.04	1
.94	.90	.28	2.35	2.19	2.03	1

.47	.45	.14	2.32	2.16	2.02	1
.00	.00	.00	2.29	2.13	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.67	944.45	86.93	857.52	615.62	241.90	1
4.18	991.06	97.03	894.03	646.02	248.00	1
3.70	1037.41	109.43	927.98	676.17	251.81	1
3.22	1083.47	125.03	958.44	706.03	252.41	1
2.74	1129.25	142.27	986.98	735.60	251.38	1
2.28	1174.73	162.06	1012.67	764.87	247.79	1
1.81	1219.90	186.03	1033.88	793.85	240.03	1
1.35	1264.79	212.68	1052.11	822.53	229.58	1
.90	1309.39	241.96	1067.43	850.93	216.50	1
.45	1353.71	277.72	1075.99	879.04	196.95	1
.00	1397.75	313.73	1084.02	906.87	177.14	1

Time = 911. Degree of Consolidation = 50 %

Total Settlement = .328

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 911. = .328

Settlement caused by Secondary Compression at time 911. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.87	3.03	2.50	2.50	2.50	2
10.28	9.55	2.94	2.50	2.50	2.32	2
9.96	9.23	2.85	2.50	2.50	2.23	2
9.64	8.91	2.75	2.50	2.49	2.16	2
9.32	8.59	2.66	2.50	2.49	2.13	2
9.00	8.27	2.57	2.50	2.47	2.09	2
8.68	7.95	2.48	2.50	2.45	2.06	2
8.36	7.64	2.39	2.50	2.43	2.04	2
8.04	7.33	2.30	2.50	2.41	2.03	2
7.72	7.01	2.21	2.50	2.40	2.01	2
7.40	6.70	2.11	2.50	2.38	2.00	2
7.40	6.70	2.11	2.50	2.38	2.00	3
7.04	6.36	2.01	2.50	2.36	1.98	3
6.68	6.01	1.91	2.50	2.34	1.96	3
6.32	5.67	1.81	2.50	2.32	1.95	3
5.96	5.33	1.70	2.50	2.29	1.93	3
5.60	4.99	1.60	2.50	2.27	1.91	3
5.24	4.66	1.50	2.50	2.24	1.90	3
4.88	4.33	1.39	2.50	2.22	1.88	3
4.52	4.00	1.29	2.50	2.20	1.86	3
4.16	3.67	1.19	2.50	2.17	1.84	3
3.80	3.34	1.09	2.50	2.15	1.83	3
3.80	3.34	1.09	2.50	2.15	1.83	2
3.42	3.00	.98	2.50	2.13	1.81	2
3.04	2.66	.87	2.50	2.12	1.79	2
2.66	2.32	.76	2.50	2.11	1.77	2
2.28	1.99	.65	2.50	2.09	1.76	2
1.90	1.65	.54	2.50	2.08	1.75	2
1.52	1.32	.43	2.50	2.06	1.74	2
1.14	.99	.33	2.50	2.05	1.73	2
.76	.66	.22	2.50	2.04	1.73	2

.38	.33	.11	2.50	2.03	1.72	2
.00	.00	.00	2.50	2.02	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.87	.00	.00	.00	.00	.00	2
9.55	29.89	.02	29.88	19.97	9.91	2
9.23	59.78	.05	59.73	39.93	19.81	2
8.91	89.65	.12	89.53	59.87	29.66	2
8.59	119.49	.28	119.22	79.79	39.43	2
8.27	149.28	.59	148.69	99.64	49.05	2
7.95	178.93	1.12	177.81	119.37	58.44	2
7.64	208.46	1.77	206.69	138.97	67.72	2
7.33	237.90	2.69	235.21	158.48	76.73	2
7.01	267.24	3.95	263.30	177.90	85.40	2
6.70	296.50	5.30	291.20	197.23	93.97	2
6.70	296.50	5.30	291.20	197.23	93.97	3
6.36	329.30	6.88	322.42	218.86	103.56	3
6.01	361.97	8.58	353.40	240.37	113.03	3
5.67	394.51	10.39	384.12	261.74	122.39	3
5.33	426.90	12.30	414.60	282.96	131.64	3
4.99	459.14	14.33	444.81	304.03	140.78	3
4.66	491.21	16.88	474.33	324.94	149.40	3
4.33	523.12	20.88	502.24	345.68	156.56	3
4.00	554.88	24.69	530.19	366.27	163.92	3
3.67	586.48	28.49	557.99	386.70	171.29	3
3.34	617.93	32.53	585.40	406.98	178.42	3
3.34	617.93	32.53	585.40	406.98	178.42	2
3.00	651.00	36.96	614.04	428.27	185.77	2
2.66	683.98	41.64	642.33	449.45	192.88	2
2.32	716.85	46.33	670.52	470.54	199.98	2
1.99	749.63	50.86	698.77	491.53	207.24	2
1.65	782.31	55.18	727.14	512.42	214.71	2
1.32	814.91	59.29	755.62	533.23	222.39	2
.99	847.42	63.21	784.21	553.95	230.25	2
.66	879.85	70.37	809.48	574.59	234.89	2
.33	912.19	78.53	833.66	595.15	238.51	2
.00	944.45	86.93	857.52	615.62	241.90	2

Time = 911. Degree of Consolidation = 42.%

Total Settlement = .734

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 911. = .734

Settlement caused by Secondary Compression at time 911. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 114.54

***** Current Conditions in Compressible Foundation *****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.65	1.42	3.00	2.43	2.11	1
4.44	4.17	1.28	2.83	2.40	2.10	1
3.91	3.68	1.14	2.70	2.37	2.09	1
3.39	3.21	.99	2.60	2.34	2.08	1
2.88	2.74	.85	2.52	2.31	2.07	1

2.39	2.27	.71	2.47	2.28	2.06	1
1.90	1.81	.57	2.42	2.24	2.05	1
1.42	1.35	.43	2.38	2.21	2.04	1
.94	.89	.28	2.35	2.18	2.03	1
.47	.44	.14	2.32	2.15	2.02	1
.00	.00	.00	2.29	2.12	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.65	941.11	92.36	848.76	612.28	236.47	1
4.17	987.59	102.36	885.23	642.55	242.67	1
3.68	1033.81	116.40	917.41	672.57	244.84	1
3.21	1079.75	132.14	947.61	702.31	245.31	1
2.74	1125.40	149.25	976.15	731.75	244.40	1
2.27	1170.76	171.01	999.75	760.91	238.84	1
1.81	1215.84	194.85	1020.99	789.78	231.21	1
1.35	1260.63	221.17	1039.46	818.37	221.09	1
.89	1305.14	252.12	1053.02	846.68	206.34	1
.44	1349.39	286.80	1062.59	874.72	187.87	1
.00	1393.36	321.50	1071.86	902.48	169.37	1

Time = 971. Degree of Consolidation = 53.%

Total Settlement = .345

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 971. = .345

Settlement caused by Secondary Compression at time 971. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.81	3.03	2.50	2.50	2.50	2
10.28	9.49	2.94	2.50	2.50	2.32	2
9.96	9.17	2.85	2.50	2.49	2.23	2
9.64	8.85	2.75	2.50	2.48	2.16	2
9.32	8.54	2.66	2.50	2.46	2.13	2
9.00	8.22	2.57	2.50	2.44	2.09	2
8.68	7.91	2.48	2.50	2.42	2.06	2
8.36	7.60	2.39	2.50	2.41	2.04	2
8.04	7.29	2.30	2.50	2.39	2.03	2
7.72	6.98	2.21	2.50	2.38	2.01	2
7.40	6.67	2.11	2.50	2.36	2.00	2
7.40	6.67	2.11	2.50	2.36	2.00	3
7.04	6.32	2.01	2.50	2.34	1.98	3
6.68	5.98	1.91	2.50	2.32	1.96	3
6.32	5.64	1.81	2.50	2.29	1.95	3
5.96	5.30	1.70	2.50	2.27	1.93	3
5.60	4.97	1.60	2.50	2.24	1.91	3
5.24	4.64	1.50	2.50	2.22	1.90	3
4.88	4.31	1.39	2.50	2.19	1.88	3
4.52	3.98	1.29	2.50	2.17	1.86	3
4.16	3.66	1.19	2.50	2.15	1.84	3
3.80	3.33	1.09	2.50	2.14	1.83	3
3.80	3.33	1.09	2.50	2.14	1.83	2
3.42	2.99	.98	2.50	2.12	1.81	2
3.04	2.65	.87	2.50	2.11	1.79	2
2.66	2.32	.76	2.50	2.09	1.77	2
2.28	1.98	.65	2.50	2.08	1.76	2

1.90	1.65	.54	2.50	2.07	1.75	2
1.52	1.32	.43	2.50	2.06	1.74	2
1.14	.99	.33	2.50	2.04	1.73	2
.76	.66	.22	2.50	2.03	1.73	2
.38	.33	.11	2.50	2.02	1.72	2
.00	.00	.00	2.50	2.01	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.81	.00	.00	.00	.00	.00	2
9.49	29.88	.08	29.80	19.96	9.85	2
9.17	59.74	.20	59.54	39.89	19.65	2
8.85	89.55	.43	89.12	59.77	29.35	2
8.54	119.27	.82	118.45	79.56	38.89	2
8.22	148.86	1.44	147.43	99.23	48.20	2
7.91	178.35	1.97	176.38	118.79	57.59	2
7.60	207.75	3.11	204.64	138.27	66.38	2
7.29	237.07	4.36	232.71	157.66	75.06	2
6.98	266.30	5.69	260.61	176.96	83.65	2
6.67	295.44	7.12	288.32	196.17	92.15	2
6.67	295.44	7.12	288.32	196.17	92.15	3
6.32	328.09	8.78	319.31	217.65	101.66	3
5.98	360.61	10.56	350.05	239.01	111.04	3
5.64	392.99	12.48	380.51	260.22	120.29	3
5.30	425.21	14.54	410.67	281.27	129.40	3
4.97	457.27	17.35	439.92	302.16	137.76	3
4.64	489.16	21.33	467.83	322.89	144.94	3
4.31	520.90	24.96	495.94	343.46	152.48	3
3.98	552.50	28.31	524.19	363.89	160.30	3
3.66	583.97	31.40	552.58	384.19	168.38	3
3.33	615.32	36.27	579.05	404.38	174.67	3
3.33	615.32	36.27	579.05	404.38	174.67	2
2.99	648.31	41.48	606.82	425.57	181.25	2
2.65	681.19	46.14	635.04	446.66	188.38	2
2.32	713.97	50.47	663.50	467.66	195.84	2
1.98	746.66	54.56	692.10	488.56	203.54	2
1.65	779.27	58.48	720.79	509.38	211.41	2
1.32	811.80	62.25	749.55	530.12	219.42	2
.99	844.25	68.07	776.18	550.78	225.39	2
.66	876.62	75.90	800.72	571.37	229.36	2
.33	908.91	83.99	824.91	591.87	233.05	2
.00	941.11	92.36	848.76	612.28	236.47	2

Time = 971. Degree of Consolidation = 45.%

Total Settlement = .788

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 971. = .788

Settlement caused by Secondary Compression at time 971. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 114.47

***** Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.63	1.42	3.00	2.40	2.11	1

4.44	4.14	1.28	2.83	2.38	2.10	1
3.91	3.67	1.14	2.70	2.35	2.09	1
3.39	3.19	.99	2.60	2.32	2.08	1
2.88	2.72	.85	2.52	2.29	2.07	1
2.39	2.26	.71	2.47	2.26	2.06	1
1.90	1.80	.57	2.42	2.23	2.05	1
1.42	1.34	.43	2.38	2.20	2.04	1
.94	.89	.28	2.35	2.17	2.03	1
.47	.44	.14	2.32	2.14	2.02	1
.00	.00	.00	2.29	2.11	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.63	936.50	102.22	834.28	607.67	226.61	1
4.14	982.76	113.27	869.48	637.72	231.76	1
3.67	1028.77	126.98	901.79	667.53	234.26	1
3.19	1074.52	142.80	931.73	697.08	234.65	1
2.72	1120.00	160.95	959.05	726.35	232.70	1
2.26	1165.20	183.28	981.93	755.35	226.58	1
1.80	1210.13	207.66	1002.48	784.08	218.40	1
1.34	1254.80	232.68	1022.12	812.54	209.58	1
.89	1299.20	265.59	1033.62	840.74	192.88	1
.44	1343.35	298.71	1044.64	868.68	175.96	1
.00	1387.23	331.68	1055.55	896.36	159.20	1

Time = 1061. Degree of Consolidation = 56.%

Total Settlement = .369

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 1061. = .369

Settlement caused by Secondary Compression at time 1061. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.74	3.03	2.50	2.50	2.50	2
10.28	9.42	2.94	2.50	2.48	2.32	2
9.96	9.10	2.85	2.50	2.46	2.23	2
9.64	8.79	2.75	2.50	2.43	2.16	2
9.32	8.47	2.66	2.50	2.42	2.13	2
9.00	8.16	2.57	2.50	2.41	2.09	2
8.68	7.85	2.48	2.50	2.39	2.06	2
8.36	7.54	2.39	2.50	2.38	2.04	2
8.04	7.23	2.30	2.50	2.36	2.03	2
7.72	6.93	2.21	2.50	2.34	2.01	2
7.40	6.62	2.11	2.50	2.32	2.00	2
7.40	6.62	2.11	2.50	2.32	2.00	3
7.04	6.28	2.01	2.50	2.30	1.98	3
6.68	5.94	1.91	2.50	2.28	1.96	3
6.32	5.61	1.81	2.50	2.25	1.95	3
5.96	5.27	1.70	2.50	2.23	1.93	3
5.60	4.94	1.60	2.50	2.21	1.91	3
5.24	4.61	1.50	2.50	2.19	1.90	3
4.88	4.29	1.39	2.50	2.17	1.88	3
4.52	3.96	1.29	2.50	2.15	1.86	3
4.16	3.64	1.19	2.50	2.14	1.84	3
3.80	3.32	1.09	2.50	2.12	1.83	3
3.80	3.32	1.09	2.50	2.12	1.83	2

3.42	2.98	.98	2.50	2.11	1.81	2
3.04	2.64	.87	2.50	2.09	1.79	2
2.66	2.31	.76	2.50	2.08	1.77	2
2.28	1.97	.65	2.50	2.07	1.76	2
1.90	1.64	.54	2.50	2.05	1.75	2
1.52	1.31	.43	2.50	2.04	1.74	2
1.14	.98	.33	2.50	2.03	1.73	2
.76	.65	.22	2.50	2.02	1.73	2
.38	.33	.11	2.50	2.01	1.72	2
.00	.00	.00	2.50	1.99	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.74	.00	.00	.00	.00	.00	2
9.42	29.83	.44	29.40	19.91	9.49	2
9.10	59.54	.90	58.64	39.68	18.96	2
8.79	89.11	1.52	87.59	59.33	28.26	2
8.47	118.59	2.04	116.55	78.88	37.67	2
8.16	147.99	3.17	144.82	98.35	46.47	2
7.85	177.30	4.36	172.94	117.74	55.20	2
7.54	206.54	5.64	200.89	137.05	63.85	2
7.23	235.67	7.01	228.66	156.26	72.40	2
6.93	264.72	8.47	256.25	175.37	80.87	2
6.62	293.65	10.01	283.64	194.38	89.26	2
6.62	293.65	10.01	283.64	194.38	89.26	3
6.28	326.08	11.81	314.27	215.64	98.63	3
5.94	358.36	13.71	344.65	236.75	107.90	3
5.61	390.49	15.71	374.78	257.71	117.06	3
5.27	422.46	19.23	403.23	278.52	124.71	3
4.94	454.29	22.68	431.60	299.18	132.42	3
4.61	485.98	25.85	460.13	319.71	140.42	3
4.29	517.55	28.80	488.76	340.11	148.65	3
3.96	549.01	31.57	517.45	360.40	157.05	3
3.64	580.36	36.22	544.14	380.58	163.56	3
3.32	611.62	40.85	570.77	400.67	170.10	3
3.32	611.62	40.85	570.77	400.67	170.10	2
2.98	644.50	45.84	598.66	421.77	176.90	2
2.64	677.29	50.41	626.88	442.77	184.11	2
2.31	709.99	54.67	655.31	463.67	191.64	2
1.97	742.59	58.69	683.90	484.49	199.41	2
1.64	775.11	62.51	712.60	505.23	207.38	2
1.31	807.56	68.68	738.88	525.88	213.00	2
.98	839.92	76.58	763.34	546.46	216.88	2
.65	872.20	84.78	787.42	566.95	220.47	2
.33	904.40	93.31	811.09	587.36	223.73	2
.00	936.50	102.22	834.28	607.67	226.61	2

Time = 1061. Degree of Consolidation = 49.%

Total Settlement = .862

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 1061. = .862

Settlement caused by Secondary Compression at time 1061. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 114.37

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.62	1.42	3.00	2.39	2.11	1
4.44	4.14	1.28	2.83	2.37	2.10	1
3.91	3.66	1.14	2.70	2.34	2.09	1
3.39	3.19	.99	2.60	2.31	2.08	1
2.88	2.72	.85	2.52	2.28	2.07	1
2.39	2.26	.71	2.47	2.25	2.06	1
1.90	1.80	.57	2.42	2.22	2.05	1
1.42	1.34	.43	2.38	2.19	2.04	1
.94	.89	.28	2.35	2.17	2.03	1
.47	.44	.14	2.32	2.14	2.02	1
.00	.00	.00	2.29	2.11	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.62	934.54	107.00	827.54	605.71	221.83	1
4.14	980.70	118.57	862.13	635.66	226.47	1
3.66	1026.62	132.11	894.51	665.38	229.13	1
3.19	1072.29	147.43	924.85	694.84	230.01	1
2.72	1117.69	166.62	951.07	724.04	227.03	1
2.26	1162.83	188.26	974.57	752.98	221.59	1
1.80	1207.70	212.75	994.95	781.64	213.31	1
1.34	1252.31	238.70	1013.61	810.05	203.56	1
.89	1296.67	270.98	1025.70	838.21	187.49	1
.44	1340.78	303.43	1037.35	866.11	171.24	1
.00	1384.63	335.70	1048.92	893.75	155.17	1

Time = 1100. Degree of Consolidation = 58.%

Total Settlement = .380

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 1100. = .380

Settlement caused by Secondary Compression at time 1100. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.71	3.03	2.50	2.50	2.50	2
10.28	9.39	2.94	2.50	2.46	2.32	2
9.96	9.07	2.85	2.50	2.44	2.23	2
9.64	8.76	2.75	2.50	2.42	2.16	2
9.32	8.45	2.66	2.50	2.41	2.13	2
9.00	8.14	2.57	2.50	2.39	2.09	2
8.68	7.83	2.48	2.50	2.38	2.06	2
8.36	7.52	2.39	2.50	2.36	2.04	2
8.04	7.21	2.30	2.50	2.34	2.03	2
7.72	6.91	2.21	2.50	2.33	2.01	2
7.40	6.60	2.11	2.50	2.31	2.00	2
7.40	6.60	2.11	2.50	2.31	2.00	3
7.04	6.27	2.01	2.50	2.29	1.98	3
6.68	5.93	1.91	2.50	2.26	1.96	3
6.32	5.59	1.81	2.50	2.24	1.95	3
5.96	5.26	1.70	2.50	2.22	1.93	3
5.60	4.93	1.60	2.50	2.20	1.91	3
5.24	4.60	1.50	2.50	2.18	1.90	3
4.88	4.28	1.39	2.50	2.16	1.88	3

4.52	3.95	1.29	2.50	2.14	1.86	3
4.16	3.63	1.19	2.50	2.13	1.84	3
3.80	3.31	1.09	2.50	2.12	1.83	3
3.80	3.31	1.09	2.50	2.12	1.83	2
3.42	2.97	.98	2.50	2.10	1.81	2
3.04	2.64	.87	2.50	2.09	1.79	2
2.66	2.30	.76	2.50	2.07	1.77	2
2.28	1.97	.65	2.50	2.06	1.76	2
1.90	1.64	.54	2.50	2.05	1.75	2
1.52	1.31	.43	2.50	2.04	1.74	2
1.14	.98	.33	2.50	2.02	1.73	2
.76	.65	.22	2.50	2.01	1.73	2
.38	.32	.11	2.50	2.00	1.72	2
.00	.00	.00	2.50	1.99	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.71	.00	.00	.00	.00	.00	2
9.39	29.78	.76	29.02	19.85	9.17	2
9.07	59.38	1.43	57.95	39.53	18.42	2
8.76	88.87	1.96	86.91	59.09	27.82	2
8.45	118.28	3.03	115.25	78.57	36.68	2
8.14	147.61	4.20	143.41	97.97	45.44	2
7.83	176.85	5.45	171.40	117.29	54.12	2
7.52	206.00	6.78	199.23	136.51	62.71	2
7.21	235.06	8.19	226.87	155.65	71.22	2
6.91	264.02	9.69	254.33	174.68	79.66	2
6.60	292.87	11.26	281.61	193.60	88.01	2
6.60	292.87	11.26	281.61	193.60	88.01	3
6.27	325.20	13.09	312.11	214.76	97.35	3
5.93	357.38	15.01	342.37	235.77	106.59	3
5.59	389.41	17.84	371.56	256.63	114.93	3
5.26	421.29	21.35	399.94	277.35	122.59	3
4.93	453.04	24.55	428.49	297.93	130.56	3
4.60	484.66	27.52	457.14	318.38	138.75	3
4.28	516.17	30.33	485.84	338.72	147.12	3
3.95	547.57	33.91	513.66	358.96	154.70	3
3.63	578.87	38.73	540.13	379.09	161.05	3
3.31	610.07	43.15	566.92	399.12	167.80	3
3.31	610.07	43.15	566.92	399.12	167.80	2
2.97	642.91	47.93	594.99	420.18	174.81	2
2.64	675.66	52.35	623.30	441.13	182.17	2
2.30	708.31	56.52	651.79	462.00	189.79	2
1.97	740.88	60.47	680.41	482.78	197.63	2
1.64	773.36	64.55	708.81	503.48	205.33	2
1.31	805.77	72.41	733.36	524.09	209.27	2
.98	838.09	80.55	757.54	544.63	212.91	2
.65	870.33	89.01	781.32	565.08	216.24	2
.32	902.48	97.82	804.67	585.44	219.23	2
.00	934.54	107.00	827.54	605.71	221.83	2

Time = 1100. Degree of Consolidation = 51.%

Total Settlement = .893

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 1100. = .893

Settlement caused by Secondary Compression at time 1100. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 114.33

*****Current Conditions in Compressible Foundation*****

***** Coordinates *****

***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.61	1.42	3.00	2.38	2.11	1
4.44	4.13	1.28	2.83	2.36	2.10	1
3.91	3.65	1.14	2.70	2.33	2.09	1
3.39	3.18	.99	2.60	2.30	2.08	1
2.88	2.71	.85	2.52	2.27	2.07	1
2.39	2.25	.71	2.47	2.25	2.06	1
1.90	1.79	.57	2.42	2.22	2.05	1
1.42	1.34	.43	2.38	2.19	2.04	1
.94	.89	.28	2.35	2.16	2.03	1
.47	.44	.14	2.32	2.13	2.02	1
.00	.00	.00	2.29	2.10	2.01	1

***** Stresses *****

***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.61	932.57	111.62	820.95	603.74	217.21	1
4.13	978.64	123.39	855.24	633.60	221.64	1
3.65	1024.47	137.18	887.29	663.23	224.06	1
3.18	1070.06	152.08	917.97	692.61	225.36	1
2.71	1115.39	172.37	943.02	721.74	221.28	1
2.25	1160.46	193.85	966.61	750.60	216.00	1
1.79	1205.27	217.87	987.40	779.22	208.18	1
1.34	1249.84	244.76	1005.08	807.57	197.50	1
.89	1294.15	276.39	1017.75	835.68	182.07	1
.44	1338.21	308.18	1030.04	863.54	166.49	1
.00	1382.03	339.76	1042.26	891.15	151.11	1

Time = 1141. Degree of Consolidation = 59.%

Total Settlement = .390

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 1141. = .390

Settlement caused by Secondary Compression at time 1141. = .000

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

***** Coordinates *****

***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.68	3.03	2.50	2.50	2.50	2
10.28	9.36	2.94	2.50	2.45	2.32	2
9.96	9.04	2.85	2.50	2.42	2.23	2
9.64	8.73	2.75	2.50	2.41	2.16	2
9.32	8.42	2.66	2.50	2.40	2.13	2
9.00	8.11	2.57	2.50	2.38	2.09	2
8.68	7.80	2.48	2.50	2.36	2.06	2
8.36	7.50	2.39	2.50	2.35	2.04	2
8.04	7.19	2.30	2.50	2.33	2.03	2
7.72	6.89	2.21	2.50	2.31	2.01	2
7.40	6.59	2.11	2.50	2.29	2.00	2
7.40	6.59	2.11	2.50	2.29	2.00	3
7.04	6.25	2.01	2.50	2.27	1.98	3
6.68	5.91	1.91	2.50	2.25	1.96	3
6.32	5.58	1.81	2.50	2.22	1.95	3

5.96	5.25	1.70	2.50	2.20	1.93	3
5.60	4.92	1.60	2.50	2.19	1.91	3
5.24	4.59	1.50	2.50	2.17	1.90	3
4.88	4.27	1.39	2.50	2.15	1.88	3
4.52	3.95	1.29	2.50	2.14	1.86	3
4.16	3.62	1.19	2.50	2.12	1.84	3
3.80	3.30	1.09	2.50	2.11	1.83	3
3.80	3.30	1.09	2.50	2.11	1.83	2
3.42	2.97	.98	2.50	2.09	1.81	2
3.04	2.63	.87	2.50	2.08	1.79	2
2.66	2.30	.76	2.50	2.07	1.77	2
2.28	1.97	.65	2.50	2.06	1.76	2
1.90	1.63	.54	2.50	2.04	1.75	2
1.52	1.31	.43	2.50	2.03	1.74	2
1.14	.98	.33	2.50	2.02	1.73	2
.76	.65	.22	2.50	2.01	1.72	2
.38	.32	.11	2.50	1.99	1.72	2
.00	.00	.00	2.50	1.98	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.68	.00	.00	.00	.00	.00	2
9.36	29.71	1.16	28.55	19.78	8.76	2
9.04	59.23	1.85	57.37	39.37	18.00	2
8.73	88.65	2.85	85.80	58.87	26.93	2
8.42	117.99	4.03	113.95	78.28	35.67	2
8.11	147.24	5.27	141.97	97.61	44.36	2
7.80	176.41	6.58	169.83	116.85	52.98	2
7.50	205.48	7.96	197.52	135.99	61.53	2
7.19	234.46	9.42	225.04	155.04	70.00	2
6.89	263.33	10.94	252.39	173.99	78.40	2
6.59	292.10	12.54	279.56	192.83	86.73	2
6.59	292.10	12.54	279.56	192.83	86.73	3
6.25	324.32	14.39	309.93	213.88	96.05	3
5.91	356.40	16.59	339.81	234.79	105.01	3
5.58	388.33	20.14	368.19	255.56	112.64	3
5.25	420.13	23.36	396.76	276.19	120.58	3
4.92	451.80	26.37	425.43	296.69	128.74	3
4.59	483.35	29.19	454.16	317.08	137.08	3
4.27	514.80	31.88	482.92	337.35	145.57	3
3.95	546.13	36.74	509.39	357.52	151.87	3
3.62	577.38	41.29	536.08	377.60	158.48	3
3.30	608.53	45.53	563.01	397.59	165.42	3
3.30	608.53	45.53	563.01	397.59	165.42	2
2.97	641.33	50.11	591.22	418.59	172.62	2
2.63	674.03	54.40	619.62	439.50	180.12	2
2.30	706.64	58.47	648.17	460.33	187.85	2
1.97	739.17	62.35	676.82	481.07	195.75	2
1.63	771.61	68.45	703.16	501.72	201.44	2
1.31	803.98	76.46	727.52	522.30	205.22	2
.98	836.26	84.76	751.50	542.79	208.70	2
.65	868.46	93.38	775.08	563.20	211.88	2
.32	900.56	102.32	798.24	583.52	214.72	2
.00	932.57	111.62	820.95	603.74	217.21	2

Time = 1141. Degree of Consolidation = 53.%

Total Settlement = .925

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 1141. = .925

Settlement caused by Secondary Compression at time 1141. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 114.29

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.54	1.42	3.00	2.32	2.11	1
4.44	4.07	1.28	2.83	2.29	2.10	1
3.91	3.60	1.14	2.70	2.27	2.09	1
3.39	3.14	.99	2.60	2.25	2.08	1
2.88	2.68	.85	2.52	2.22	2.07	1
2.39	2.23	.71	2.47	2.20	2.06	1
1.90	1.78	.57	2.42	2.18	2.05	1
1.42	1.33	.43	2.38	2.15	2.04	1
.94	.88	.28	2.35	2.13	2.03	1
.47	.44	.14	2.32	2.10	2.02	1
.00	.00	.00	2.29	2.08	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.54	919.38	145.94	773.45	590.55	182.89	1
4.07	964.85	158.79	806.05	619.81	186.24	1
3.60	1010.11	175.75	834.36	648.87	185.49	1
3.14	1055.16	193.37	861.79	677.72	184.07	1
2.68	1100.01	213.30	886.71	706.36	180.35	1
2.23	1144.64	233.37	911.27	734.79	176.49	1
1.78	1189.06	259.72	929.34	763.01	166.33	1
1.33	1233.28	286.43	946.85	791.02	155.83	1
.88	1277.28	313.21	964.07	818.82	145.25	1
.44	1321.07	339.83	981.24	846.40	134.84	1
.00	1364.66	373.44	991.22	873.79	117.44	1

Time = 1480. Degree of Consolidation = 70.%

Total Settlement = .457

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 1480. = .457

Settlement caused by Secondary Compression at time 1480. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.46	3.03	2.50	2.50	2.50	2
10.28	9.15	2.94	2.50	2.42	2.32	2
9.96	8.84	2.85	2.50	2.38	2.23	2
9.64	8.53	2.75	2.50	2.34	2.16	2
9.32	8.23	2.66	2.50	2.31	2.13	2
9.00	7.92	2.57	2.50	2.29	2.09	2
8.68	7.63	2.48	2.50	2.26	2.06	2
8.36	7.33	2.39	2.50	2.24	2.04	2
8.04	7.03	2.30	2.50	2.22	2.03	2
7.72	6.74	2.21	2.50	2.20	2.01	2
7.40	6.45	2.11	2.50	2.19	2.00	2

7.40	6.45	2.11	2.50	2.19	2.00	3
7.04	6.12	2.01	2.50	2.17	1.98	3
6.68	5.80	1.91	2.50	2.15	1.96	3
6.32	5.47	1.81	2.50	2.14	1.95	3
5.96	5.15	1.70	2.50	2.12	1.93	3
5.60	4.83	1.60	2.50	2.11	1.91	3
5.24	4.51	1.50	2.50	2.10	1.90	3
4.88	4.19	1.39	2.50	2.08	1.88	3
4.52	3.88	1.29	2.50	2.07	1.86	3
4.16	3.56	1.19	2.50	2.06	1.84	3
3.80	3.25	1.09	2.50	2.05	1.83	3
3.80	3.25	1.09	2.50	2.05	1.83	2
3.42	2.92	.98	2.50	2.04	1.81	2
3.04	2.59	.87	2.50	2.03	1.79	2
2.66	2.26	.76	2.50	2.02	1.77	2
2.28	1.93	.65	2.50	2.01	1.76	2
1.90	1.61	.54	2.50	1.99	1.75	2
1.52	1.28	.43	2.50	1.98	1.74	2
1.14	.96	.33	2.50	1.97	1.73	2
.76	.64	.22	2.50	1.96	1.73	2
.38	.32	.11	2.50	1.94	1.72	2
.00	.00	.00	2.50	1.93	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.46	.00	.00	.00	.00	.00	2
9.15	29.64	1.98	27.66	19.71	7.95	2
8.84	58.95	5.53	53.42	39.10	14.32	2
8.53	88.04	8.44	79.60	58.26	21.34	2
8.23	116.95	10.92	106.03	77.24	28.79	2
7.92	145.69	13.11	132.58	96.06	36.53	2
7.63	174.29	15.10	159.18	114.73	44.46	2
7.33	202.76	17.78	184.98	133.27	51.71	2
7.03	231.10	20.85	210.25	151.69	58.56	2
6.74	259.35	23.58	235.77	170.01	65.76	2
6.45	287.50	26.09	261.41	188.23	73.18	2
6.45	287.50	26.09	261.41	188.23	73.18	3
6.12	319.07	28.99	290.08	208.63	81.45	3
5.80	350.52	31.69	318.83	228.91	89.91	3
5.47	381.87	36.39	345.48	249.09	96.38	3
5.15	413.12	41.01	372.11	269.18	102.93	3
4.83	444.28	45.38	398.90	289.17	109.73	3
4.51	475.35	49.60	425.75	309.08	116.68	3
4.19	506.34	53.71	452.63	328.90	123.73	3
3.88	537.25	57.73	479.52	348.64	130.88	3
3.56	568.08	61.66	506.43	368.30	138.12	3
3.25	598.83	67.09	531.74	387.89	143.85	3
3.25	598.83	67.09	531.74	387.89	143.85	2
2.92	631.22	72.94	558.29	408.49	149.80	2
2.59	663.55	79.18	584.38	429.03	155.35	2
2.26	695.81	85.90	609.91	449.50	160.41	2
1.93	728.01	93.14	634.87	469.91	164.96	2
1.61	760.12	100.87	659.25	490.23	169.02	2
1.28	792.15	109.07	683.09	510.48	172.61	2
.96	824.10	117.68	706.42	530.63	175.78	2
.64	855.96	126.70	729.26	550.70	178.56	2
.32	887.72	136.11	751.61	570.68	180.94	2
.00	919.38	145.94	773.45	590.55	182.89	2

Time = 1480. Degree of Consolidation = 65.%

Total Settlement = 1.136

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 1480. = 1.136

Settlement caused by Secondary Compression at time 1480. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 114.01

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.53	1.42	3.00	2.30	2.11	1
4.44	4.06	1.28	2.83	2.28	2.10	1
3.91	3.60	1.14	2.70	2.26	2.09	1
3.39	3.14	.99	2.60	2.24	2.08	1
2.88	2.68	.85	2.52	2.22	2.07	1
2.39	2.22	.71	2.47	2.19	2.06	1
1.90	1.77	.57	2.42	2.17	2.05	1
1.42	1.32	.43	2.38	2.15	2.04	1
.94	.88	.28	2.35	2.12	2.03	1
.47	.44	.14	2.32	2.10	2.02	1
.00	.00	.00	2.29	2.08	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.53	917.64	152.54	765.09	588.81	176.29	1
4.06	963.00	166.08	796.92	617.97	178.95	1
3.60	1008.18	181.80	826.39	646.94	179.44	1
3.14	1053.17	199.42	853.75	675.72	178.03	1
2.68	1097.95	218.58	879.37	704.30	175.07	1
2.22	1142.53	239.65	902.88	732.68	170.20	1
1.77	1186.91	265.42	921.49	760.85	160.64	1
1.32	1231.08	291.51	939.57	788.82	150.75	1
.88	1275.05	317.67	957.38	816.58	140.80	1
.44	1318.81	343.65	975.15	844.14	131.02	1
.00	1362.36	377.69	984.67	871.49	113.18	1

Time = 1531. Degree of Consolidation = 71.%

Total Settlement = .465

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 1531. = .465

Settlement caused by Secondary Compression at time 1531. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.44	3.03	2.50	2.50	2.50	2
10.28	9.12	2.94	2.50	2.42	2.32	2
9.96	8.81	2.85	2.50	2.37	2.23	2
9.64	8.50	2.75	2.50	2.33	2.16	2
9.32	8.20	2.66	2.50	2.30	2.13	2
9.00	7.90	2.57	2.50	2.27	2.09	2
8.68	7.60	2.48	2.50	2.25	2.06	2

8.36	7.31	2.39	2.50	2.23	2.04	2
8.04	7.01	2.30	2.50	2.21	2.03	2
7.72	6.72	2.21	2.50	2.19	2.01	2
7.40	6.43	2.11	2.50	2.17	2.00	2
7.40	6.43	2.11	2.50	2.17	2.00	3
7.04	6.10	2.01	2.50	2.16	1.98	3
6.68	5.78	1.91	2.50	2.14	1.96	3
6.32	5.46	1.81	2.50	2.12	1.95	3
5.96	5.14	1.70	2.50	2.11	1.93	3
5.60	4.82	1.60	2.50	2.10	1.91	3
5.24	4.50	1.50	2.50	2.08	1.90	3
4.88	4.18	1.39	2.50	2.07	1.88	3
4.52	3.87	1.29	2.50	2.06	1.86	3
4.16	3.55	1.19	2.50	2.05	1.84	3
3.80	3.24	1.09	2.50	2.04	1.83	3
3.80	3.24	1.09	2.50	2.04	1.83	2
3.42	2.91	.98	2.50	2.03	1.81	2
3.04	2.58	.87	2.50	2.02	1.79	2
2.66	2.25	.76	2.50	2.01	1.77	2
2.28	1.93	.65	2.50	2.00	1.76	2
1.90	1.60	.54	2.50	1.99	1.75	2
1.52	1.28	.43	2.50	1.97	1.74	2
1.14	.96	.33	2.50	1.96	1.73	2
.76	.64	.22	2.50	1.95	1.73	2
.38	.32	.11	2.50	1.93	1.72	2
.00	.00	.00	2.50	1.92	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.44	.00	.00	.00	.00	.00	2
9.12	29.63	2.21	27.42	19.70	7.72	2
8.81	58.92	5.99	52.93	39.06	13.87	2
8.50	87.97	9.09	78.88	58.19	20.69	2
8.20	116.82	11.73	105.09	77.11	27.98	2
7.90	145.51	14.05	131.45	95.87	35.58	2
7.60	174.03	16.30	157.74	114.47	43.26	2
7.31	202.43	19.81	182.62	132.94	49.68	2
7.01	230.71	22.82	207.89	151.29	56.60	2
6.72	258.88	25.52	233.36	169.54	63.82	2
6.43	286.97	28.04	258.93	187.70	71.23	2
6.43	286.97	28.04	258.93	187.70	71.23	3
6.10	318.45	30.93	287.52	208.01	79.50	3
5.78	349.83	35.22	314.60	228.22	86.38	3
5.46	381.10	40.11	340.99	248.32	92.67	3
5.14	412.27	44.61	367.66	268.33	99.33	3
4.82	443.36	48.83	394.53	288.26	106.28	3
4.50	474.37	52.82	421.55	308.09	113.46	3
4.18	505.30	56.61	448.70	327.86	120.84	3
3.87	536.16	60.21	475.95	347.54	128.40	3
3.55	566.94	63.64	503.30	367.16	136.14	3
3.24	597.66	70.17	527.49	386.71	140.78	3
3.24	597.66	70.17	527.49	386.71	140.78	2
2.91	630.01	77.11	552.90	407.28	145.63	2
2.58	662.29	84.17	578.12	427.77	150.36	2
2.25	694.50	91.43	603.07	448.19	154.89	2
1.93	726.63	98.96	627.68	468.53	159.14	2
1.60	758.69	106.81	651.88	488.80	163.08	2
1.28	790.66	115.04	675.61	508.98	166.63	2
.96	822.55	123.69	698.85	529.08	169.77	2
.64	854.34	132.80	721.54	549.09	172.46	2
.32	886.04	142.40	743.64	569.00	174.65	2
.00	917.64	152.54	765.09	588.81	176.29	2

Time = 1531. Degree of Consolidation = 67.%

Total Settlement = 1.164

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 1531. = 1.164
 Settlement caused by Secondary Compression at time 1531. = .000
 Settlement Due to Desiccation = .000
 Surface Elevation = 113.97

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.50	1.42	3.00	2.28	2.11	1
4.44	4.04	1.28	2.83	2.26	2.10	1
3.91	3.58	1.14	2.70	2.24	2.09	1
3.39	3.12	.99	2.60	2.22	2.08	1
2.88	2.67	.85	2.52	2.20	2.07	1
2.39	2.21	.71	2.47	2.17	2.06	1
1.90	1.77	.57	2.42	2.15	2.05	1
1.42	1.32	.43	2.38	2.13	2.04	1
.94	.88	.28	2.35	2.11	2.03	1
.47	.44	.14	2.32	2.09	2.02	1
.00	.00	.00	2.29	2.07	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.50	912.21	171.95	740.25	583.38	156.88	1
4.04	957.33	185.80	771.53	612.29	159.23	1
3.58	1002.28	201.79	800.48	641.04	159.45	1
3.12	1047.04	218.69	828.35	669.60	158.75	1
2.67	1091.64	236.99	854.65	697.99	156.66	1
2.21	1136.04	260.12	875.92	726.19	149.73	1
1.77	1180.27	283.79	896.48	754.21	142.27	1
1.32	1224.30	307.76	916.54	782.04	134.50	1
.88	1268.15	331.81	936.34	809.69	126.66	1
.44	1311.81	359.67	952.13	837.14	115.00	1
.00	1355.28	390.77	964.51	864.41	100.11	1

Time = 1702. Degree of Consolidation = 75.%

Total Settlement = .492

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 1702. = .492

Settlement caused by Secondary Compression at time 1702. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.35	3.03	2.50	2.50	2.50	2
10.28	9.03	2.94	2.50	2.40	2.32	2
9.96	8.73	2.85	2.50	2.35	2.23	2

9.64	8.42	2.75	2.50	2.30	2.16	2
9.32	8.12	2.66	2.50	2.26	2.13	2
9.00	7.83	2.57	2.50	2.23	2.09	2
8.68	7.53	2.48	2.50	2.20	2.06	2
8.36	7.24	2.39	2.50	2.18	2.04	2
8.04	6.95	2.30	2.50	2.17	2.03	2
7.72	6.66	2.21	2.50	2.15	2.01	2
7.40	6.37	2.11	2.50	2.14	2.00	2
7.40	6.37	2.11	2.50	2.14	2.00	3
7.04	6.05	2.01	2.50	2.12	1.98	3
6.68	5.73	1.91	2.50	2.11	1.96	3
6.32	5.41	1.81	2.50	2.09	1.95	3
5.96	5.09	1.70	2.50	2.08	1.93	3
5.60	4.78	1.60	2.50	2.07	1.91	3
5.24	4.46	1.50	2.50	2.06	1.90	3
4.88	4.15	1.39	2.50	2.05	1.88	3
4.52	3.83	1.29	2.50	2.04	1.86	3
4.16	3.52	1.19	2.50	2.03	1.84	3
3.80	3.21	1.09	2.50	2.02	1.83	3
3.80	3.21	1.09	2.50	2.02	1.83	2
3.42	2.88	.98	2.50	2.01	1.81	2
3.04	2.56	.87	2.50	2.00	1.79	2
2.66	2.23	.76	2.50	1.99	1.77	2
2.28	1.91	.65	2.50	1.97	1.76	2
1.90	1.59	.54	2.50	1.96	1.75	2
1.52	1.27	.43	2.50	1.95	1.74	2
1.14	.95	.33	2.50	1.93	1.73	2
.76	.63	.22	2.50	1.92	1.73	2
.38	.31	.11	2.50	1.90	1.72	2
.00	.00	.00	2.50	1.89	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.35	.00	.00	.00	.00	.00	2
9.03	29.58	3.54	26.04	19.65	6.39	2
8.73	58.75	8.07	50.68	38.89	11.79	2
8.42	87.63	11.81	75.82	57.85	17.97	2
8.12	116.28	15.02	101.26	76.57	24.69	2
7.83	144.72	19.21	125.51	95.08	30.43	2
7.53	173.00	23.26	149.74	113.44	36.30	2
7.24	201.15	26.61	174.54	131.66	42.88	2
6.95	229.18	29.49	199.70	149.77	49.93	2
6.66	257.13	32.07	225.06	167.78	57.28	2
6.37	284.98	36.48	248.50	185.71	62.79	2
6.37	284.98	36.48	248.50	185.71	62.79	3
6.05	316.23	41.51	274.72	205.79	68.93	3
5.73	347.38	45.89	301.49	225.77	75.71	3
5.41	378.44	49.86	328.58	245.67	82.91	3
5.09	409.43	53.55	355.88	265.49	90.39	3
4.78	440.35	57.04	383.31	285.24	98.07	3
4.46	471.20	60.37	410.83	304.92	105.91	3
4.15	501.98	63.58	438.40	324.54	113.86	3
3.83	532.70	69.74	462.96	344.09	118.87	3
3.52	563.36	76.51	486.85	363.58	123.27	3
3.21	593.95	83.49	510.46	383.00	127.46	3
3.21	593.95	83.49	510.46	383.00	127.46	2
2.88	626.16	91.01	535.15	403.43	131.73	2
2.56	658.30	98.79	559.51	423.77	135.74	2
2.23	690.35	106.84	583.51	444.04	139.47	2
1.91	722.32	115.18	607.14	464.22	142.92	2
1.59	754.21	123.82	630.38	484.32	146.07	2
1.27	786.00	132.78	653.22	504.32	148.90	2
.95	817.70	142.05	675.65	524.24	151.41	2
.63	849.30	151.67	697.63	544.05	153.58	2
.31	880.81	161.63	719.18	563.77	155.41	2
.00	912.21	171.95	740.25	583.38	156.88	2

Time = 1702. Degree of Consolidation = 72.%

Total Settlement = 1.251

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 1702. = 1.251

Settlement caused by Secondary Compression at time 1702. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.86

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.47	1.42	3.00	2.24	2.11	1
4.44	4.01	1.28	2.83	2.22	2.10	1
3.91	3.55	1.14	2.70	2.20	2.09	1
3.39	3.10	.99	2.60	2.19	2.08	1
2.88	2.65	.85	2.52	2.17	2.07	1
2.39	2.20	.71	2.47	2.15	2.06	1
1.90	1.76	.57	2.42	2.13	2.05	1
1.42	1.31	.43	2.38	2.11	2.04	1
.94	.87	.28	2.35	2.09	2.03	1
.47	.43	.14	2.32	2.07	2.02	1
.00	.00	.00	2.29	2.06	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.47	905.54	200.45	705.09	576.71	128.38	1
4.01	950.33	214.86	735.48	605.30	130.18	1
3.55	994.98	229.53	765.45	633.74	131.71	1
3.10	1039.46	248.58	790.89	662.02	128.87	1
2.65	1083.79	268.93	814.86	690.14	124.72	1
2.20	1127.96	289.73	838.22	718.11	120.12	1
1.76	1171.96	310.81	861.15	745.90	115.24	1
1.31	1215.79	332.00	883.79	773.53	110.26	1
.87	1259.46	356.29	903.16	800.99	102.17	1
.43	1302.96	384.09	918.86	828.29	90.58	1
.00	1346.30	410.86	935.44	855.43	80.02	1

Time = 2001. Degree of Consolidation = 81.%

Total Settlement = .529

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 2001. = .529

Settlement caused by Secondary Compression at time 2001. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.24	3.03	2.50	2.50	2.50	2
10.28	8.93	2.94	2.50	2.38	2.32	2
9.96	8.62	2.85	2.50	2.31	2.23	2
9.64	8.32	2.75	2.50	2.26	2.16	2
9.32	8.03	2.66	2.50	2.22	2.13	2
9.00	7.73	2.57	2.50	2.19	2.09	2
8.68	7.44	2.48	2.50	2.17	2.06	2
8.36	7.15	2.39	2.50	2.15	2.04	2
8.04	6.87	2.30	2.50	2.13	2.03	2
7.72	6.58	2.21	2.50	2.12	2.01	2
7.40	6.30	2.11	2.50	2.10	2.00	2
7.40	6.30	2.11	2.50	2.10	2.00	3
7.04	5.98	2.01	2.50	2.09	1.98	3
6.68	5.66	1.91	2.50	2.08	1.96	3
6.32	5.35	1.81	2.50	2.06	1.95	3
5.96	5.03	1.70	2.50	2.05	1.93	3
5.60	4.72	1.60	2.50	2.04	1.91	3
5.24	4.41	1.50	2.50	2.03	1.90	3
4.88	4.09	1.39	2.50	2.02	1.88	3
4.52	3.78	1.29	2.50	2.01	1.86	3
4.16	3.48	1.19	2.50	2.00	1.84	3
3.80	3.17	1.09	2.50	1.98	1.83	3
3.80	3.17	1.09	2.50	1.98	1.83	2
3.42	2.84	.98	2.50	1.97	1.81	2
3.04	2.52	.87	2.50	1.96	1.79	2
2.66	2.20	.76	2.50	1.95	1.77	2
2.28	1.88	.65	2.50	1.93	1.76	2
1.90	1.56	.54	2.50	1.92	1.75	2
1.52	1.25	.43	2.50	1.91	1.74	2
1.14	.93	.33	2.50	1.89	1.73	2
.76	.62	.22	2.50	1.88	1.73	2
.38	.31	.11	2.50	1.86	1.72	2
.00	.00	.00	2.50	1.84	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.24	.00	.00	.00	.00	.00	2
8.93	29.51	5.27	24.23	19.58	4.65	2
8.62	58.53	10.71	47.81	38.67	9.14	2
8.32	87.20	15.12	72.08	57.42	14.66	2
8.03	115.61	20.71	94.90	75.90	19.00	2
7.73	143.82	25.46	118.36	94.19	24.18	2
7.44	171.88	29.26	142.63	112.32	30.30	2
7.15	199.82	32.91	166.91	130.33	36.58	2
6.87	227.65	38.29	189.37	148.24	41.13	2
6.58	255.40	42.88	212.52	166.06	46.46	2
6.30	283.07	46.96	236.11	183.80	52.31	2
6.30	283.07	46.96	236.11	183.80	52.31	3
5.98	314.10	51.59	262.51	203.67	58.84	3
5.66	345.05	55.79	289.26	223.45	65.81	3
5.35	375.92	59.66	316.26	243.15	73.11	3
5.03	406.72	63.27	343.44	262.78	80.67	3
4.72	437.44	69.73	367.71	282.33	85.38	3
4.41	468.09	76.99	391.11	301.82	89.29	3
4.09	498.67	84.33	414.34	321.23	93.11	3
3.78	529.19	91.79	437.40	340.57	96.83	3
3.48	559.62	99.36	460.26	359.84	100.42	3
3.17	589.99	107.08	482.90	379.04	103.86	3
3.17	589.99	107.08	482.90	379.04	103.86	2
2.84	621.95	115.36	506.60	399.22	107.38	2
2.52	653.84	123.82	530.01	419.31	110.70	2
2.20	685.63	132.50	553.13	439.32	113.81	2
1.88	717.34	141.40	575.93	459.24	116.70	2
1.56	748.95	150.55	598.40	479.06	119.34	2
1.25	780.47	159.96	620.51	498.79	121.72	2
.93	811.89	169.64	642.25	518.42	123.83	2
.62	843.21	179.61	663.60	537.96	125.65	2

.31	874.43	189.87	684.55	557.38	127.17	2
.00	905.54	200.45	705.09	576.71	128.38	2

Time = 2001. Degree of Consolidation = 78.%

Total Settlement = 1.358

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 2001. = 1.358

Settlement caused by Secondary Compression at time 2001. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.71

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.42	1.42	3.00	2.19	2.11	1
4.44	3.97	1.28	2.83	2.17	2.10	1
3.91	3.52	1.14	2.70	2.16	2.09	1
3.39	3.07	.99	2.60	2.14	2.08	1
2.88	2.63	.85	2.52	2.13	2.07	1
2.39	2.18	.71	2.47	2.11	2.06	1
1.90	1.74	.57	2.42	2.10	2.05	1
1.42	1.30	.43	2.38	2.08	2.04	1
.94	.87	.28	2.35	2.07	2.03	1
.47	.43	.14	2.32	2.05	2.02	1
.00	.00	.00	2.29	2.04	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.42	896.76	245.10	651.66	567.93	83.73	1
3.97	941.13	261.07	680.06	596.10	83.96	1
3.52	985.38	277.59	707.78	624.14	83.65	1
3.07	1029.49	294.47	735.02	652.05	82.97	1
2.63	1073.47	311.61	761.86	679.82	82.04	1
2.18	1117.31	328.92	788.39	707.46	80.93	1
1.74	1161.02	347.12	813.89	734.96	78.93	1
1.30	1204.58	370.37	834.21	762.32	71.89	1
.87	1248.02	392.96	855.06	789.55	65.51	1
.43	1291.32	414.87	876.46	816.65	59.80	1
.00	1334.50	438.92	895.58	843.63	51.96	1

Time = 2555. Degree of Consolidation = 88.%

Total Settlement = .577

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 2555. = .577

Settlement caused by Secondary Compression at time 2555. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.10	3.03	2.50	2.50	2.50	2
10.28	8.79	2.94	2.50	2.36	2.32	2
9.96	8.49	2.85	2.50	2.28	2.23	2
9.64	8.19	2.75	2.50	2.22	2.16	2
9.32	7.90	2.66	2.50	2.18	2.13	2
9.00	7.61	2.57	2.50	2.15	2.09	2
8.68	7.32	2.48	2.50	2.13	2.06	2
8.36	7.03	2.39	2.50	2.11	2.04	2
8.04	6.75	2.30	2.50	2.09	2.03	2
7.72	6.47	2.21	2.50	2.08	2.01	2
7.40	6.19	2.11	2.50	2.07	2.00	2
7.40	6.19	2.11	2.50	2.07	2.00	3
7.04	5.87	2.01	2.50	2.05	1.98	3
6.68	5.56	1.91	2.50	2.04	1.96	3
6.32	5.25	1.81	2.50	2.03	1.95	3
5.96	4.94	1.70	2.50	2.01	1.93	3
5.60	4.63	1.60	2.50	2.00	1.91	3
5.24	4.32	1.50	2.50	1.99	1.90	3
4.88	4.01	1.39	2.50	1.97	1.88	3
4.52	3.71	1.29	2.50	1.96	1.86	3
4.16	3.40	1.19	2.50	1.95	1.84	3
3.80	3.10	1.09	2.50	1.93	1.83	3
3.80	3.10	1.09	2.50	1.93	1.83	2
3.42	2.78	.98	2.50	1.92	1.81	2
3.04	2.47	.87	2.50	1.90	1.79	2
2.66	2.15	.76	2.50	1.89	1.77	2
2.28	1.84	.65	2.50	1.87	1.76	2
1.90	1.53	.54	2.50	1.86	1.75	2
1.52	1.22	.43	2.50	1.84	1.74	2
1.14	.91	.33	2.50	1.83	1.73	2
.76	.61	.22	2.50	1.81	1.73	2
.38	.30	.11	2.50	1.79	1.72	2
.00	.00	.00	2.50	1.78	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.10	.00	.00	.00	.00	.00	2
8.79	29.44	7.12	22.32	19.51	2.81	2
8.49	58.29	13.56	44.73	38.44	6.29	2
8.19	86.75	20.39	66.37	56.97	9.39	2
7.90	114.95	26.78	88.17	75.24	12.93	2
7.61	142.94	31.62	111.32	93.31	18.02	2
7.32	170.78	38.79	131.99	111.22	20.77	2
7.03	198.50	44.87	153.64	129.01	24.62	2
6.75	226.13	50.02	176.10	146.71	29.39	2
6.47	253.66	54.55	199.11	164.32	34.79	2
6.19	281.12	58.62	222.50	181.85	40.65	2
6.19	281.12	58.62	222.50	181.85	40.65	3
5.87	311.92	63.22	248.70	201.49	47.21	3
5.56	342.64	71.36	271.28	221.04	50.24	3
5.25	373.27	80.20	293.07	240.50	52.57	3
4.94	403.81	88.98	314.83	259.87	54.96	3
4.63	434.27	97.74	336.54	279.16	57.37	3
4.32	464.65	106.48	358.17	298.37	59.80	3
4.01	494.94	115.23	379.71	317.49	62.22	3
3.71	525.14	124.00	401.14	336.53	64.61	3
3.40	555.26	132.82	422.44	355.48	66.96	3
3.10	585.29	141.71	443.58	374.35	69.23	3
3.10	585.29	141.71	443.58	374.35	69.23	2
2.78	616.90	151.20	465.70	394.17	71.54	2
2.47	648.41	160.80	487.61	413.89	73.72	2
2.15	679.82	170.56	509.27	433.51	75.76	2
1.84	711.13	180.48	530.65	453.03	77.62	2

1.53	742.34	190.61	551.73	472.45	79.28	2
1.22	773.44	200.96	572.49	491.77	80.72	2
.91	804.44	211.55	592.89	510.98	81.91	2
.61	835.33	222.43	612.90	530.07	82.83	2
.30	866.10	233.60	632.50	549.06	83.44	2
.00	896.76	245.10	651.66	567.93	83.73	2

Time = 2555. Degree of Consolidation = 86.%

Total Settlement = 1.499

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 2555. = 1.499

Settlement caused by Secondary Compression at time 2555. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.52

ARKNAVSC

Consolidation and desiccation of soft layers---dredged fill

Problem ARKNAVSC

*****Soil data for compressible foundation*****

Material Type	Layer Thickness	Numbers of Sub-layers	Ca/Cc	Cr/Cc
1	5.00	10	.040	.150

Material type : 1 Specific Gravity of Solids: 2.83

I	Void Ratio	Effective Stress	Permeability	k/1+e	PK	Beta	Dsde	Alpha
1	3.000	.000E+00	.121E-02	.303E-03	.420E-03	.840E+02	.254E-01	
2	2.950	.420E+01	.111E-02	.282E-03	.384E-03	.880E+02	.248E-01	
3	2.900	.880E+01	.103E-02	.264E-03	.349E-03	.980E+02	.259E-01	
4	2.850	.140E+02	.949E-03	.247E-03	.311E-03	.108E+03	.266E-01	
5	2.800	.196E+02	.885E-03	.233E-03	.270E-03	.114E+03	.266E-01	
6	2.750	.254E+02	.823E-03	.220E-03	.272E-03	.124E+03	.272E-01	
7	2.700	.320E+02	.762E-03	.206E-03	.278E-03	.136E+03	.280E-01	
8	2.650	.390E+02	.700E-03	.192E-03	.283E-03	.160E+03	.307E-01	
9	2.600	.480E+02	.639E-03	.178E-03	.287E-03	.190E+03	.337E-01	
10	2.550	.580E+02	.579E-03	.163E-03	.282E-03	.220E+03	.359E-01	
11	2.500	.700E+02	.523E-03	.149E-03	.274E-03	.280E+03	.418E-01	
12	2.450	.860E+02	.468E-03	.136E-03	.248E-03	.340E+03	.461E-01	
13	2.400	.104E+03	.423E-03	.125E-03	.213E-03	.420E+03	.523E-01	
14	2.350	.128E+03	.383E-03	.114E-03	.198E-03	.500E+03	.572E-01	
15	2.300	.154E+03	.346E-03	.105E-03	.191E-03	.620E+03	.649E-01	
16	2.250	.190E+03	.310E-03	.953E-04	.192E-03	.780E+03	.743E-01	
17	2.200	.232E+03	.274E-03	.855E-04	.175E-03	.980E+03	.838E-01	
18	2.150	.288E+03	.245E-03	.777E-04	.158E-03	.112E+04	.870E-01	
19	2.100	.344E+03	.216E-03	.697E-04	.140E-03	.132E+04	.920E-01	
20	2.050	.420E+03	.194E-03	.637E-04	.125E-03	.166E+04	.106E+00	
21	2.000	.510E+03	.171E-03	.571E-04	.125E-03	.220E+04	.126E+00	
22	1.950	.640E+03	.151E-03	.513E-04	.114E-03	.270E+04	.138E+00	
23	1.900	.780E+03	.133E-03	.457E-04	.102E-03	.310E+04	.142E+00	
24	1.850	.950E+03	.117E-03	.411E-04	.876E-04	.380E+04	.156E+00	
25	1.800	.116E+04	.103E-03	.369E-04	.833E-04	.450E+04	.166E+00	
26	1.750	.140E+04	.900E-04	.327E-04	.834E-04	.540E+04	.177E+00	
27	1.700	.170E+04	.772E-04	.286E-04	.773E-04	.640E+04	.183E+00	
28	1.650	.204E+04	.662E-04	.250E-04	.616E-04	.840E+04	.210E+00	
29	1.600	.254E+04	.583E-04	.224E-04	.495E-04	.106E+05	.238E+00	
30	1.550	.310E+04	.511E-04	.200E-04	.486E-04	.121E+05	.243E+00	
31	1.500	.375E+04	.439E-04	.176E-04	.465E-04	.150E+05	.264E+00	
32	1.450	.460E+04	.377E-04	.154E-04	.425E-04	.179E+05	.276E+00	
33	1.400	.554E+04	.320E-04	.133E-04	.376E-04	.220E+05	.293E+00	
34	1.350	.680E+04	.274E-04	.116E-04	.318E-04	.296E+05	.345E+00	
35	1.300	.850E+04	.233E-04	.101E-04	.281E-04	.360E+05	.365E+00	
36	1.250	.104E+05	.199E-04	.883E-05	.262E-04	.380E+05	.336E+00	

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

Material Type	Specific Gravity	Ca/Cc	Cr/Cc	Saturation Limit	Desication Limit
2	2.710	.040	.150	6.700	3.100
3	2.710	.040	.150	6.700	3.100

Material type : 2

I	Ratio	Void Stress	Effective eability	Perm-	k/1+e
		PK	Beta	Dsde	Alpha
1	1.710	.000E+00	.940E+00	.347E+00	.343E+02 -.100E+03 -.347E+02
2	1.700	.100E+01	.955E-02	.354E-02	.172E+02 -.100E+03 -.354E+00
3	1.690	.200E+01	.850E-02	.316E-02	.133E-01 -.833E+02 -.263E+00
4	1.520	.160E+02	.290E-02	.115E-02	.106E-01 -.125E+03 -.144E+00
5	1.450	.320E+02	.150E-02	.612E-03	.595E-02 -.300E+03 -.184E+00
6	1.360	.640E+02	.470E-03	.199E-03	.238E-02 -.896E+03 -.178E+00
7	1.200	.256E+03	.400E-04	.182E-04	.754E-03 -.172E+04 -.313E-01
8	1.100	.512E+03	.645E-05	.307E-05	.891E-04 -.382E+04 -.117E-01
9	1.000	.102E+04	.743E-06	.371E-06	.133E-04 -.108E+05 -.402E-02
10	.870	.300E+04	.430E-07	.230E-07	.268E-05 -.152E+05 -.350E-03

Material type : 3

I	Ratio	Void Stress	Effective eability	Perm-	k/1+e
		PK	Beta	Dsde	Alpha
1	1.710	.000E+00	.940E+00	.347E+00	.343E+02 -.100E+03 -.347E+02
2	1.700	.100E+01	.955E-02	.354E-02	.172E+02 -.100E+03 -.354E+00
3	1.690	.200E+01	.850E-02	.316E-02	.133E-01 -.833E+02 -.263E+00
4	1.520	.160E+02	.290E-02	.115E-02	.106E-01 -.125E+03 -.144E+00
5	1.450	.320E+02	.150E-02	.612E-03	.595E-02 -.300E+03 -.184E+00
6	1.360	.640E+02	.470E-03	.199E-03	.238E-02 -.896E+03 -.178E+00
7	1.200	.256E+03	.400E-04	.182E-04	.754E-03 -.172E+04 -.313E-01
8	1.100	.512E+03	.645E-05	.307E-05	.891E-04 -.382E+04 -.117E-01
9	1.000	.102E+04	.743E-06	.371E-06	.133E-04 -.108E+05 -.402E-02
10	.870	.300E+04	.430E-07	.230E-07	.268E-05 -.152E+05 -.350E-03

Summary of lifts and print detail

Time days	Material Type	Fill Height	# Sub-layers	Void ratio	Start Day	Desicc. Month	Print detail
0.	2	3.8	10	1.71	820.	4	1
180.					820.	4	1
300.	3	3.6	10	1.71	820.	4	1
500.					820.	4	1
730.	2	3.2	10	1.71	820.	4	1
820.					820.	4	1
850.					850.	5	1
910.					910.	7	1
970.					970.	9	1
1060.					1060.	12	1
1100.					1100.	12	1
1140.					1140.	12	1

1480.	1480.	6	1
1530.	1530.	6	1
1700.	1700.	6	1
2000.	2000.	6	1
2555.	2555.	6	1

Summary of monthly rainfall and evaporation potential

Month	Rainfall	Evaporation
1	.240	.180
2	.270	.230
3	.400	.360
4	.250	.360
5	.320	.570
6	.530	.490
7	.680	.670
8	.540	.570
9	.430	.410
10	.250	.330
11	.180	.210
12	.260	.160

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

tau	Lower layer Void ratio	Lower layer Permeability	drainage path Length
.124E-01	1.500	.10000E-02	z = 6.00

Summary of desiccation parameters

Parameter	Value
Surface Drainage Efficiency	1.00
maximum evaporation efficiency	.50
saturation at desiccation limit	.75
maximum crust thickness	-1.81
time to desic. after initial fill	820.00
month of initial desiccation	4
elevation of fixed water table	100.00
elevation of top of incompres. found.	100.00

*****Initial Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	5.00	1.42	3.00	3.00	2.31	1
4.44	4.44	1.28	2.83	2.83	2.28	1
3.91	3.91	1.14	2.70	2.70	2.26	1
3.39	3.39	.99	2.60	2.60	2.24	1
2.88	2.88	.85	2.52	2.52	2.22	1
2.39	2.39	.71	2.47	2.47	2.20	1
1.90	1.90	.57	2.42	2.42	2.19	1
1.42	1.42	.43	2.38	2.38	2.17	1
.94	.94	.28	2.35	2.35	2.16	1
.47	.47	.14	2.32	2.32	2.14	1
.00	.00	2.29	2.29	2.13	1	

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
5.00	386.74	.00	386.74	237.12	149.62	1
4.44	437.59	16.20	421.38	271.76	149.62	1
3.91	487.09	32.41	454.68	305.06	149.62	1
3.39	535.57	48.61	486.96	337.34	149.62	1
2.88	583.27	64.82	518.46	368.84	149.62	1
2.39	630.41	81.02	549.39	399.76	149.62	1
1.90	677.09	97.23	579.86	430.24	149.62	1
1.42	723.39	113.43	609.96	460.33	149.62	1
.94	769.37	129.64	639.74	490.12	149.62	1
.47	815.07	145.84	669.23	519.61	149.62	1
.00	860.52	162.04	698.47	548.85	149.62	1

Time = 0. Degree of Consolidation = 0.%

Total Settlement = .000

Settlement at End of Primary Consolidation = .443

Settlement caused by Primary Consolidation at time 0. = .000

Settlement caused by Secondary Compression at time 0. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
3.80	3.80	1.40	1.71	1.71	1.71	2
3.42	3.42	1.26	1.71	1.71	1.53	2
3.04	3.04	1.12	1.71	1.71	1.46	2
2.66	2.66	.98	1.71	1.71	1.41	2
2.28	2.28	.84	1.71	1.71	1.37	2
1.90	1.90	.70	1.71	1.71	1.35	2
1.52	1.52	.56	1.71	1.71	1.34	2
1.14	1.14	.42	1.71	1.71	1.33	2
.76	.76	.28	1.71	1.71	1.31	2
.38	.38	.14	1.71	1.71	1.30	2
.00	.00	1.71	1.71	1.29	2	

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
3.80	.00	.00	.00	.00	.00	2
3.42	38.67	.00	38.67	23.71	14.96	2
3.04	77.35	.00	77.35	47.42	29.92	2
2.66	116.02	.00	116.02	71.14	44.89	2
2.28	154.70	.00	154.70	94.85	59.85	2
1.90	193.37	.00	193.37	118.56	74.81	2
1.52	232.05	.00	232.05	142.27	89.77	2
1.14	270.72	.00	270.72	165.98	104.74	2
.76	309.39	.00	309.39	189.70	119.70	2
.38	348.07	.00	348.07	213.41	134.66	2
.00	386.74	.00	386.74	237.12	149.62	2

Time = 0. Degree of Consolidation = 0.%

Total Settlement = .000

Settlement at End of Primary Consolidation = .450

Settlement caused by Primary Consolidation at time 0. = .000

Settlement caused by Secondary Compression at time 0. = .000

Consistency Error --DREDGED FILL --LAYER/ 1

***** Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.79	1.42	3.00	2.37	2.31	1
4.44	4.30	1.28	2.83	2.40	2.28	1
3.91	3.82	1.14	2.70	2.43	2.26	1
3.39	3.33	.99	2.60	2.44	2.24	1
2.88	2.84	.85	2.52	2.43	2.22	1
2.39	2.36	.71	2.47	2.41	2.20	1
1.90	1.88	.57	2.42	2.38	2.19	1
1.42	1.40	.43	2.38	2.34	2.17	1
.94	.93	.28	2.35	2.31	2.16	1
.47	.46	.14	2.32	2.27	2.14	1
.00	.00	.00	2.29	2.24	2.13	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.79	358.71	117.48	241.23	209.09	32.14	1
4.30	404.91	102.78	302.13	239.09	63.05	1
3.82	451.37	94.09	357.28	269.34	87.94	1
3.33	497.98	90.52	407.46	299.75	107.71	1
2.84	544.61	93.05	451.55	330.17	121.39	1
2.36	591.10	100.63	490.47	360.46	130.01	1
1.88	637.37	113.99	523.37	390.52	132.85	1
1.40	683.34	130.99	552.35	420.29	132.06	1
.93	729.00	149.97	579.02	449.74	129.28	1
.46	774.33	174.11	600.22	478.87	121.35	1
.00	819.36	200.15	619.21	507.69	111.52	1

Time = 180. Degree of Consolidation = 48.%

Total Settlement = .210

Settlement at End of Primary Consolidation = .443

Settlement caused by Primary Consolidation at time 180. = .210

Settlement caused by Secondary Compression at time 180. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
3.80	3.35	1.40	1.71	1.71	1.71	2
3.42	2.99	1.26	1.71	1.53	1.53	2
3.04	2.64	1.12	1.71	1.46	1.46	2
2.66	2.29	.98	1.71	1.41	1.41	2
2.28	1.96	.84	1.71	1.37	1.37	2
1.90	1.63	.70	1.71	1.35	1.35	2
1.52	1.30	.56	1.71	1.34	1.34	2
1.14	.97	.42	1.71	1.33	1.33	2
.76	.65	.28	1.71	1.31	1.31	2
.38	.32	.14	1.71	1.30	1.30	2
.00	.00	.00	1.71	1.32	1.29	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
3.35	.00	.00	.00	.00	.00	2
2.99	37.78	14.96	22.81	22.81	.00	2
2.64	74.55	29.92	44.62	44.62	.00	2
2.29	110.84	44.89	65.96	65.96	.00	2
1.96	146.72	59.85	86.87	86.87	.00	2
1.63	182.33	74.81	107.52	107.52	.00	2
1.30	217.81	89.77	128.04	128.04	.00	2
.97	253.17	104.74	148.43	148.43	.00	2
.65	288.44	119.70	168.74	168.74	.00	2
.32	323.58	134.66	188.92	188.92	.00	2
.00	358.71	117.48	241.23	209.09	32.14	2

Time = 180. Degree of Consolidation = 100.%

Total Settlement = .449

Settlement at End of Primary Consolidation = .450

Settlement caused by Primary Consolidation at time 180. = .449

Settlement caused by Secondary Compression at time 180. = .000

Surface Elevation = 108.14

Consistency Error --DREDGED FILL --LAYER/ 1

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.73	1.42	3.00	2.36	2.31	1
4.44	4.25	1.28	2.83	2.37	2.28	1
3.91	3.77	1.14	2.70	2.38	2.26	1
3.39	3.29	.99	2.60	2.38	2.24	1
2.88	2.81	.85	2.52	2.37	2.22	1
2.39	2.34	.71	2.47	2.36	2.20	1
1.90	1.86	.57	2.42	2.33	2.19	1
1.42	1.39	.43	2.38	2.31	2.17	1
.94	.92	.28	2.35	2.28	2.16	1
.47	.46	.14	2.32	2.25	2.14	1
.00	.00	.00	2.29	2.22	2.13	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.73	358.70	123.00	235.70	209.08	26.63	1
4.25	404.72	116.70	288.02	238.89	49.13	1
3.77	450.83	113.06	337.77	268.80	68.97	1
3.29	496.98	113.01	383.97	298.75	85.22	1
2.81	543.10	116.88	426.22	328.66	97.56	1
2.34	589.11	124.53	464.58	358.46	106.12	1
1.86	634.95	135.87	499.08	388.10	110.98	1
1.39	680.56	149.74	530.83	417.51	113.32	1
.92	725.93	169.03	556.91	446.68	110.23	1
.46	771.04	190.58	580.46	475.58	104.88	1
.00	815.89	215.43	600.46	504.22	96.24	1

Time = 300. Degree of Consolidation = 60.%

Total Settlement = .266

Settlement at End of Primary Consolidation = .443

Settlement caused by Primary Consolidation at time 300. = .266

Settlement caused by Secondary Compression at time 300. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
3.80	3.35	1.40	1.71	1.71	1.71	2
3.42	2.98	1.26	1.71	1.53	1.53	2
3.04	2.64	1.12	1.71	1.46	1.46	2
2.66	2.29	.98	1.71	1.41	1.41	2
2.28	1.96	.84	1.71	1.37	1.37	2
1.90	1.63	.70	1.71	1.35	1.35	2
1.52	1.30	.56	1.71	1.34	1.34	2
1.14	.97	.42	1.71	1.33	1.33	2
.76	.65	.28	1.71	1.31	1.31	2
.38	.32	.14	1.71	1.30	1.30	2
.00	.00	.00	1.71	1.31	1.29	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
3.35	.00	.00	.00	.00	.00	2

2.98	37.78	14.96	22.81	22.81	.00	2
2.64	74.55	29.92	44.62	44.62	.00	2
2.29	110.84	44.89	65.96	65.96	.00	2
1.96	146.72	59.85	86.87	86.87	.00	2
1.63	182.33	74.81	107.52	107.52	.00	2
1.30	217.81	89.77	128.04	128.04	.00	2
.97	253.17	104.74	148.44	148.44	.00	2
.65	288.44	119.70	168.74	168.74	.00	2
.32	323.58	134.66	188.92	188.92	.00	2
.00	358.70	123.00	235.70	209.08	26.63	2

Time = 300. Degree of Consolidation = 100.%

Total Settlement = .449

Settlement at End of Primary Consolidation = .450

Settlement caused by Primary Consolidation at time 300. = .449

Settlement caused by Secondary Compression at time 300. = .000

Surface Elevation = 108.08

Consistency Error --DREDGED FILL --LAYER/ 2

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.64	1.42	3.00	2.34	2.15	1
4.44	4.17	1.28	2.83	2.34	2.13	1
3.91	3.69	1.14	2.70	2.33	2.12	1
3.39	3.22	.99	2.60	2.32	2.10	1
2.88	2.75	.85	2.52	2.30	2.09	1
2.39	2.28	.71	2.47	2.28	2.08	1
1.90	1.82	.57	2.42	2.26	2.07	1
1.42	1.36	.43	2.38	2.24	2.06	1
.94	.90	.28	2.35	2.21	2.05	1
.47	.45	.14	2.32	2.18	2.04	1
.00	.00	.00	2.29	2.15	2.03	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.64	692.23	132.33	559.91	400.86	159.04	1
4.17	738.01	134.34	603.67	430.44	173.23	1
3.69	783.74	137.96	645.79	459.97	185.82	1
3.22	829.40	143.62	685.78	489.42	196.36	1
2.75	874.94	151.63	723.31	518.75	204.56	1
2.28	920.32	164.89	755.43	547.93	207.50	1
1.82	965.51	181.68	783.83	576.91	206.92	1
1.36	1010.48	202.23	808.25	605.68	202.57	1
.90	1055.21	225.80	829.41	634.21	195.20	1
.45	1099.69	256.87	842.81	662.48	180.34	1
.00	1143.89	291.79	852.10	690.48	161.62	1

Time = 500. Degree of Consolidation = 57.%

Total Settlement = .354

Settlement at End of Primary Consolidation = .620

Settlement caused by Primary Consolidation at time 500. = .354

Settlement caused by Secondary Compression at time 500. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
7.40	6.42	2.73	1.71	1.71	1.71	3
7.04	6.08	2.60	1.71	1.54	1.54	3
6.68	5.74	2.46	1.71	1.47	1.47	3
6.32	5.42	2.33	1.71	1.42	1.42	3
5.96	5.10	2.20	1.71	1.38	1.38	3
5.60	4.79	2.07	1.71	1.35	1.35	3
5.24	4.48	1.93	1.71	1.34	1.34	3
4.88	4.16	1.80	1.71	1.33	1.33	3
4.52	3.86	1.67	1.71	1.32	1.32	3
4.16	3.55	1.54	1.71	1.32	1.31	3
3.80	3.24	1.40	1.71	1.32	1.30	3
3.80	3.24	1.40	1.71	1.32	1.30	2
3.42	2.91	1.26	1.71	1.32	1.28	2
3.04	2.59	1.12	1.71	1.32	1.27	2
2.66	2.27	.98	1.71	1.32	1.26	2
2.28	1.94	.84	1.71	1.31	1.25	2
1.90	1.62	.70	1.71	1.31	1.23	2
1.52	1.29	.56	1.71	1.31	1.22	2
1.14	.97	.42	1.71	1.31	1.21	2
.76	.65	.28	1.71	1.30	1.20	2
.38	.32	.14	1.71	1.30	1.19	2
.00	.00	.00	1.71	1.30	1.19	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
6.42	.00	.00	.00	.00	.00	3
6.08	35.85	14.17	21.67	21.67	.00	3
5.74	70.75	28.35	42.40	42.40	.00	3
5.42	105.18	42.52	62.65	62.65	.00	3
5.10	139.24	56.70	82.54	82.54	.00	3
4.79	173.02	70.87	102.15	102.15	.00	3
4.48	206.66	85.05	121.61	121.61	.00	3
4.16	240.22	99.22	140.99	140.99	.00	3
3.86	273.65	113.40	160.25	160.25	.00	3
3.55	307.04	113.48	193.56	179.47	14.09	3
3.24	340.44	113.84	226.60	198.69	27.91	3
3.24	340.44	113.84	226.60	198.69	27.91	2
2.91	375.69	114.22	261.47	218.98	42.49	2
2.59	410.93	115.30	295.63	239.26	56.37	2
2.27	446.16	117.06	329.10	259.53	69.57	2
1.94	481.38	119.48	361.90	279.78	82.12	2
1.62	516.57	122.35	394.22	300.02	94.20	2
1.29	551.75	125.52	426.23	320.23	106.00	2
.97	586.90	128.76	458.14	340.42	117.72	2
.65	622.03	131.87	490.16	360.58	129.58	2
.32	657.13	134.66	522.47	380.73	141.75	2
.00	692.23	132.33	559.91	400.86	159.04	2

Time = 500. Degree of Consolidation = 90.%

Total Settlement = .976

Settlement at End of Primary Consolidation = 1.085
 Settlement caused by Primary Consolidation at time 500. = .976
 Settlement caused by Secondary Compression at time 500. = .000
 Surface Elevation = 111.07

Consistency Error --DREDGED FILL --LAYER/ 2

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.58	1.42	3.00	2.31	2.15	1
4.44	4.11	1.28	2.83	2.30	2.13	1
3.91	3.64	1.14	2.70	2.29	2.12	1
3.39	3.17	.99	2.60	2.27	2.10	1
2.88	2.71	.85	2.52	2.25	2.09	1
2.39	2.25	.71	2.47	2.23	2.08	1
1.90	1.79	.57	2.42	2.21	2.07	1
1.42	1.34	.43	2.38	2.19	2.06	1
.94	.89	.28	2.35	2.16	2.05	1
.47	.44	.14	2.32	2.14	2.04	1
.00	.00	.00	2.29	2.11	2.03	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.58	691.45	146.52	544.93	400.08	144.85	1
4.11	736.95	153.43	583.52	429.37	154.15	1
3.64	782.32	164.18	618.14	458.54	159.60	1
3.17	827.54	176.54	651.01	487.56	163.45	1
2.71	872.61	190.11	682.50	516.42	166.08	1
2.25	917.50	207.23	710.27	545.11	165.16	1
1.79	962.21	225.24	736.97	573.61	163.35	1
1.34	1006.72	248.24	758.48	601.92	156.56	1
.89	1051.03	274.75	776.28	630.02	146.26	1
.44	1095.12	302.35	792.77	657.91	134.85	1
.00	1138.99	330.72	808.27	685.58	122.69	1

Time = 730. Degree of Consolidation = 68.%

Total Settlement = .420

Settlement at End of Primary Consolidation = .620

Settlement caused by Primary Consolidation at time 730. = .420

Settlement caused by Secondary Compression at time 730. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
7.40	6.41	2.73	1.71	1.71	1.71	3
7.04	6.06	2.60	1.71	1.54	1.54	3
6.68	5.73	2.46	1.71	1.47	1.47	3
6.32	5.41	2.33	1.71	1.42	1.42	3
5.96	5.09	2.20	1.71	1.38	1.38	3
5.60	4.77	2.07	1.71	1.35	1.35	3
5.24	4.46	1.93	1.71	1.34	1.34	3
4.88	4.15	1.80	1.71	1.33	1.33	3
4.52	3.84	1.67	1.71	1.32	1.32	3
4.16	3.54	1.54	1.71	1.32	1.31	3
3.80	3.23	1.40	1.71	1.31	1.30	3
3.80	3.23	1.40	1.71	1.31	1.30	2
3.42	2.90	1.26	1.71	1.31	1.28	2
3.04	2.58	1.12	1.71	1.31	1.27	2
2.66	2.26	.98	1.71	1.31	1.26	2
2.28	1.93	.84	1.71	1.30	1.25	2
1.90	1.61	.70	1.71	1.30	1.23	2
1.52	1.29	.56	1.71	1.30	1.22	2
1.14	.97	.42	1.71	1.30	1.21	2
.76	.64	.28	1.71	1.30	1.20	2
.38	.32	.14	1.71	1.29	1.19	2
.00	.00	.00	1.71	1.29	1.19	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
6.41	.00	.00	.00	.00	.00	3
6.06	35.85	14.17	21.67	21.67	.00	3
5.73	70.75	28.35	42.40	42.40	.00	3
5.41	105.18	42.52	62.65	62.65	.00	3
5.09	139.24	56.70	82.54	82.54	.00	3
4.77	173.02	70.87	102.15	102.15	.00	3
4.46	206.66	85.05	121.61	121.61	.00	3
4.15	240.21	99.22	140.99	140.99	.00	3
3.84	273.65	113.40	160.25	160.25	.00	3
3.54	307.03	116.95	190.08	179.46	10.62	3
3.23	340.39	119.96	220.43	198.65	21.79	3
3.23	340.39	119.96	220.43	198.65	21.79	2
2.90	375.58	123.13	252.45	218.88	33.57	2
2.58	410.75	125.97	284.79	239.08	45.70	2
2.26	445.91	128.54	317.36	259.27	58.09	2
1.93	481.04	131.00	350.03	279.44	70.59	2
1.61	516.15	133.38	382.77	299.59	83.18	2
1.29	551.25	135.79	415.46	319.73	95.73	2
.97	586.33	138.24	448.09	339.85	108.25	2
.64	621.39	140.83	480.56	359.95	120.62	2
.32	656.43	143.56	512.87	380.02	132.84	2
.00	691.45	146.52	544.93	400.08	144.85	2

Time = 730. Degree of Consolidation = 91.%

Total Settlement = .988

Settlement at End of Primary Consolidation = 1.085

Settlement caused by Primary Consolidation at time 730. = .988

Settlement caused by Secondary Compression at time 730. = .000

Surface Elevation = 110.99

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.54	1.42	3.00	2.29	2.05	1
4.44	4.08	1.28	2.83	2.28	2.04	1
3.91	3.61	1.14	2.70	2.27	2.03	1
3.39	3.15	.99	2.60	2.25	2.02	1
2.88	2.69	.85	2.52	2.23	2.02	1
2.39	2.23	.71	2.47	2.21	2.01	1
1.90	1.78	.57	2.42	2.19	2.00	1
1.42	1.33	.43	2.38	2.16	1.99	1
.94	.88	.28	2.35	2.14	1.99	1
.47	.44	.14	2.32	2.11	1.98	1
.00	.00	.00	2.29	2.08	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.54	989.09	157.93	831.16	571.72	259.44	1
4.08	1034.41	166.58	867.83	600.84	266.99	1
3.61	1079.62	177.13	902.49	629.85	272.65	1
3.15	1124.69	189.48	935.21	658.71	276.50	1
2.69	1169.59	205.55	964.04	687.41	276.63	1
2.23	1214.32	223.23	991.09	715.93	275.16	1
1.78	1258.85	245.87	1012.98	744.26	268.72	1
1.33	1303.17	273.86	1029.32	772.38	256.94	1
.88	1347.26	304.46	1042.81	800.26	242.54	1
.44	1391.10	337.25	1053.86	827.90	225.96	1
.00	1434.68	380.56	1054.12	855.27	198.85	1

Time = 820. Degree of Consolidation = 62.%

Total Settlement = .452

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 820. = .452

Settlement caused by Secondary Compression at time 820. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.16	3.91	1.71	1.71	1.71	2
10.28	8.85	3.79	1.71	1.56	1.56	2
9.96	8.55	3.68	1.71	1.48	1.48	2
9.64	8.26	3.56	1.71	1.43	1.43	2
9.32	7.98	3.44	1.71	1.40	1.40	2
9.00	7.70	3.32	1.71	1.36	1.36	2
8.68	7.42	3.20	1.71	1.35	1.35	2
8.36	7.14	3.08	1.71	1.34	1.34	2
8.04	6.87	2.97	1.71	1.33	1.33	2
7.72	6.59	2.85	1.71	1.33	1.32	2
7.40	6.32	2.73	1.71	1.34	1.31	2

7.40	6.32	2.73	1.71	1.34	1.31	3
7.04	6.01	2.60	1.71	1.34	1.30	3
6.68	5.70	2.46	1.71	1.34	1.28	3
6.32	5.38	2.33	1.71	1.34	1.27	3
5.96	5.07	2.20	1.71	1.34	1.26	3
5.60	4.76	2.07	1.71	1.33	1.25	3
5.24	4.45	1.93	1.71	1.33	1.24	3
4.88	4.14	1.80	1.71	1.32	1.23	3
4.52	3.84	1.67	1.71	1.32	1.21	3
4.16	3.53	1.54	1.71	1.32	1.20	3
3.80	3.22	1.40	1.71	1.31	1.20	3
3.80	3.22	1.40	1.71	1.31	1.20	2
3.42	2.90	1.26	1.71	1.31	1.19	2
3.04	2.57	1.12	1.71	1.31	1.18	2
2.66	2.25	.98	1.71	1.30	1.18	2
2.28	1.93	.84	1.71	1.30	1.17	2
1.90	1.61	.70	1.71	1.30	1.17	2
1.52	1.28	.56	1.71	1.30	1.16	2
1.14	.96	.42	1.71	1.29	1.15	2
.76	.64	.28	1.71	1.29	1.15	2
.38	.32	.14	1.71	1.29	1.14	2
.00	.00	.00	1.71	1.28	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.16	.00	.00	.00	.00	.00	2
8.85	31.97	12.60	19.37	19.37	.00	2
8.55	63.11	25.20	37.91	37.91	.00	2
8.26	93.79	37.80	55.99	55.99	.00	2
7.98	124.20	50.40	73.80	73.80	.00	2
7.70	154.31	63.00	91.31	91.31	.00	2
7.42	184.27	75.60	108.68	108.68	.00	2
7.14	214.17	88.20	125.97	125.97	.00	2
6.87	243.95	100.80	143.16	143.16	.00	2
6.59	273.73	95.77	177.96	160.33	17.63	2
6.32	303.54	92.26	211.28	177.54	33.74	2
6.32	303.54	92.26	211.28	177.54	33.74	3
6.01	337.10	88.31	248.79	196.92	51.87	3
5.70	370.67	86.99	283.68	216.33	67.35	3
5.38	404.25	88.10	316.15	235.73	80.42	3
5.07	437.81	91.25	346.56	255.11	91.45	3
4.76	471.34	95.95	375.39	274.47	100.92	3
4.45	504.84	101.63	403.21	293.80	109.42	3
4.14	538.30	107.65	430.64	313.08	117.57	3
3.84	571.71	113.40	458.32	332.32	126.00	3
3.53	605.09	117.86	487.23	351.52	135.71	3
3.22	638.45	121.65	516.80	370.70	146.10	3
3.22	638.45	121.65	516.80	370.70	146.10	2
2.90	673.62	125.64	547.98	390.92	157.07	2
2.57	708.77	129.19	579.58	411.10	168.48	2
2.25	743.90	132.46	611.43	431.26	180.17	2
1.93	779.00	135.62	643.38	451.40	191.97	2
1.61	814.07	138.75	675.32	471.52	203.80	2
1.28	849.13	141.96	707.17	491.61	215.56	2
.96	884.16	145.35	738.81	511.68	227.13	2
.64	919.17	149.09	770.08	531.72	238.35	2
.32	954.14	153.26	800.89	551.74	249.15	2
.00	989.09	157.93	831.16	571.72	259.44	2

Time = 820. Degree of Consolidation = 83.%

Total Settlement = 1.438

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 820. = 1.438

Settlement caused by Secondary Compression at time 820. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.71

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.53	1.42	3.00	2.29	2.05	1
4.44	4.07	1.28	2.83	2.28	2.04	1
3.91	3.60	1.14	2.70	2.26	2.03	1
3.39	3.14	.99	2.60	2.24	2.02	1
2.88	2.68	.85	2.52	2.22	2.02	1
2.39	2.23	.71	2.47	2.20	2.01	1
1.90	1.78	.57	2.42	2.18	2.00	1
1.42	1.33	.43	2.38	2.16	1.99	1
.94	.88	.28	2.35	2.13	1.99	1
.47	.44	.14	2.32	2.10	1.98	1
.00	.00	.00	2.29	2.07	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.53	988.54	161.75	826.79	571.17	255.62	1
4.07	1033.82	170.82	863.00	600.25	262.75	1
3.60	1078.97	181.70	897.27	629.20	268.08	1
3.14	1123.98	194.89	929.09	658.00	271.09	1
2.68	1168.83	211.22	957.61	686.64	270.97	1
2.23	1213.49	229.02	984.48	715.10	269.37	1
1.78	1257.96	253.75	1004.21	743.37	260.84	1
1.33	1302.22	281.92	1020.30	771.42	248.87	1
.88	1346.25	312.36	1033.89	799.25	234.64	1
.44	1390.03	344.65	1045.37	826.82	218.55	1
.00	1433.55	388.75	1044.80	854.14	190.66	1

Time = 850. Degree of Consolidation = 64.%

Total Settlement = .461

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 850. = .461

Settlement caused by Secondary Compression at time 850. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.15	3.91	1.71	1.71	1.71	2

10.28	8.84	3.79	1.71	1.56	1.56	2
9.96	8.55	3.68	1.71	1.48	1.48	2
9.64	8.26	3.56	1.71	1.43	1.43	2
9.32	7.97	3.44	1.71	1.40	1.40	2
9.00	7.69	3.32	1.71	1.36	1.36	2
8.68	7.41	3.20	1.71	1.35	1.35	2
8.36	7.13	3.08	1.71	1.34	1.34	2
8.04	6.86	2.97	1.71	1.33	1.33	2
7.72	6.58	2.85	1.71	1.33	1.32	2
7.40	6.31	2.73	1.71	1.33	1.31	2
7.40	6.31	2.73	1.71	1.33	1.31	3
7.04	6.00	2.60	1.71	1.33	1.30	3
6.68	5.69	2.46	1.71	1.33	1.28	3
6.32	5.38	2.33	1.71	1.33	1.27	3
5.96	5.07	2.20	1.71	1.33	1.26	3
5.60	4.76	2.07	1.71	1.33	1.25	3
5.24	4.45	1.93	1.71	1.32	1.24	3
4.88	4.14	1.80	1.71	1.32	1.23	3
4.52	3.83	1.67	1.71	1.32	1.21	3
4.16	3.53	1.54	1.71	1.31	1.20	3
3.80	3.22	1.40	1.71	1.31	1.20	3
3.80	3.22	1.40	1.71	1.31	1.20	2
3.42	2.89	1.26	1.71	1.31	1.19	2
3.04	2.57	1.12	1.71	1.30	1.18	2
2.66	2.25	.98	1.71	1.30	1.18	2
2.28	1.93	.84	1.71	1.30	1.17	2
1.90	1.60	.70	1.71	1.30	1.17	2
1.52	1.28	.56	1.71	1.29	1.16	2
1.14	.96	.42	1.71	1.29	1.15	2
.76	.64	.28	1.71	1.29	1.15	2
.38	.32	.14	1.71	1.28	1.14	2
.00	.00	.00	1.71	1.28	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.15	.00	.00	.00	.00	.00	2
8.84	31.97	12.60	19.37	19.37	.00	2
8.55	63.11	25.20	37.91	37.91	.00	2
8.26	93.79	37.80	55.99	55.99	.00	2
7.97	124.20	50.40	73.80	73.80	.00	2
7.69	154.31	63.00	91.31	91.31	.00	2
7.41	184.27	75.60	108.68	108.68	.00	2
7.13	214.16	88.20	125.97	125.97	.00	2
6.86	243.95	100.80	143.16	143.16	.00	2
6.58	273.72	98.55	175.17	160.32	14.85	2
6.31	303.51	97.06	206.44	177.51	28.93	2
6.31	303.51	97.06	206.44	177.51	28.93	3
6.00	337.02	95.39	241.63	196.85	44.78	3
5.69	370.54	95.19	275.36	216.20	59.16	3
5.38	404.06	96.39	307.67	235.54	72.13	3
5.07	437.57	98.80	338.77	254.87	83.89	3
4.76	471.05	102.15	368.90	274.18	94.72	3
4.45	504.52	106.12	398.39	293.47	104.92	3
4.14	537.95	110.40	427.55	312.73	114.82	3
3.83	571.35	114.68	456.67	331.95	124.71	3
3.53	604.72	118.82	485.90	351.15	134.75	3
3.22	638.07	122.70	515.37	370.32	145.04	3
3.22	638.07	122.70	515.37	370.32	145.04	2
2.89	673.24	126.78	546.45	390.53	155.92	2
2.57	708.38	130.55	577.82	410.71	167.12	2
2.25	743.49	134.12	609.37	430.86	178.51	2
1.93	778.58	137.55	641.02	450.98	190.04	2
1.60	813.64	140.98	672.66	471.08	201.57	2
1.28	848.68	144.53	704.15	491.16	212.99	2
.96	883.69	148.28	735.41	511.21	224.20	2
.64	918.67	152.34	766.33	531.23	235.10	2
.32	953.62	156.80	796.83	551.22	245.61	2
.00	988.54	161.75	826.79	571.17	255.62	2

Time = 850. Degree of Consolidation = 83.%

Total Settlement = 1.447

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 850. = 1.447

Settlement caused by Secondary Compression at time 850. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.69

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.52	1.42	3.00	2.28	2.05	1
4.44	4.05	1.28	2.83	2.26	2.04	1
3.91	3.59	1.14	2.70	2.25	2.03	1
3.39	3.13	.99	2.60	2.23	2.02	1
2.88	2.67	.85	2.52	2.21	2.02	1
2.39	2.22	.71	2.47	2.19	2.01	1
1.90	1.77	.57	2.42	2.17	2.00	1
1.42	1.32	.43	2.38	2.14	1.99	1
.94	.88	.28	2.35	2.12	1.99	1
.47	.44	.14	2.32	2.09	1.98	1
.00	.00	.00	2.29	2.06	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.52	987.64	169.44	818.19	570.27	247.92	1
4.05	1032.82	179.22	853.60	599.25	254.35	1
3.59	1077.86	190.70	887.17	628.09	259.08	1
3.13	1122.76	205.64	917.12	656.78	260.34	1
2.67	1167.49	222.03	945.46	685.31	260.16	1
2.22	1212.05	242.50	969.55	713.66	255.89	1
1.77	1256.40	268.36	988.04	741.81	246.23	1
1.32	1300.54	296.31	1004.23	769.75	234.48	1
.88	1344.46	325.94	1018.52	797.46	221.06	1
.44	1388.14	360.85	1027.29	824.93	202.36	1
.00	1431.57	401.90	1029.67	852.16	177.51	1

Time = 910. Degree of Consolidation = 66.%

Total Settlement = .478

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 910. = .478

Settlement caused by Secondary Compression at time 910. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.14	3.91	1.71	1.71	1.71	2
10.28	8.83	3.79	1.71	1.56	1.56	2
9.96	8.53	3.68	1.71	1.48	1.48	2
9.64	8.24	3.56	1.71	1.43	1.43	2
9.32	7.96	3.44	1.71	1.40	1.40	2
9.00	7.68	3.32	1.71	1.36	1.36	2
8.68	7.40	3.20	1.71	1.35	1.35	2
8.36	7.12	3.08	1.71	1.34	1.34	2
8.04	6.84	2.97	1.71	1.33	1.33	2
7.72	6.57	2.85	1.71	1.33	1.32	2
7.40	6.29	2.73	1.71	1.33	1.31	2
7.40	6.29	2.73	1.71	1.33	1.31	3
7.04	5.99	2.60	1.71	1.33	1.30	3
6.68	5.68	2.46	1.71	1.33	1.28	3
6.32	5.37	2.33	1.71	1.33	1.27	3
5.96	5.06	2.20	1.71	1.32	1.26	3
5.60	4.75	2.07	1.71	1.32	1.25	3
5.24	4.44	1.93	1.71	1.32	1.24	3
4.88	4.13	1.80	1.71	1.32	1.23	3
4.52	3.83	1.67	1.71	1.31	1.21	3
4.16	3.52	1.54	1.71	1.31	1.20	3
3.80	3.21	1.40	1.71	1.31	1.20	3
3.80	3.21	1.40	1.71	1.31	1.20	2
3.42	2.89	1.26	1.71	1.30	1.19	2
3.04	2.57	1.12	1.71	1.30	1.18	2
2.66	2.24	.98	1.71	1.30	1.18	2
2.28	1.92	.84	1.71	1.29	1.17	2
1.90	1.60	.70	1.71	1.29	1.17	2
1.52	1.28	.56	1.71	1.29	1.16	2
1.14	.96	.42	1.71	1.28	1.15	2
.76	.64	.28	1.71	1.28	1.15	2
.38	.32	.14	1.71	1.28	1.14	2
.00	.00	.00	1.71	1.27	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.14	.00	.00	.00	.00	.00	2
8.83	31.97	12.60	19.37	19.37	.00	2
8.53	63.11	25.20	37.91	37.91	.00	2
8.24	93.79	37.80	55.99	55.99	.00	2
7.96	124.20	50.40	73.80	73.80	.00	2
7.68	154.31	63.00	91.31	91.31	.00	2
7.40	184.27	75.60	108.68	108.68	.00	2
7.12	214.16	88.20	125.96	125.96	.00	2
6.84	243.95	100.80	143.16	143.16	.00	2
6.57	273.71	101.35	172.37	160.32	12.05	2
6.29	303.47	101.97	201.50	177.48	24.02	2
6.29	303.47	101.97	201.50	177.48	24.02	3
5.99	336.95	102.68	234.27	196.77	37.49	3
5.68	370.41	103.85	266.57	216.07	50.50	3
5.37	403.87	105.53	298.34	235.35	62.99	3
5.06	437.31	107.68	329.63	254.62	75.02	3
4.75	470.74	110.28	360.46	273.87	86.59	3
4.44	504.15	113.23	390.92	293.10	97.82	3
4.13	537.53	116.46	421.08	312.31	108.76	3
3.83	570.90	119.87	451.02	331.50	119.52	3
3.52	604.24	123.37	480.87	350.67	130.20	3
3.21	637.55	126.95	510.61	369.81	140.80	3
3.21	637.55	126.95	510.61	369.81	140.80	2

2.89	672.69	130.71	541.98	389.98	152.00	2
2.57	707.80	134.48	573.32	410.13	163.19	2
2.24	742.89	138.27	604.62	430.26	174.36	2
1.92	777.94	142.09	635.85	450.35	185.50	2
1.60	812.97	146.01	666.96	470.42	196.54	2
1.28	847.97	150.08	697.89	490.45	207.43	2
.96	882.94	154.42	728.52	510.46	218.06	2
.64	917.87	159.02	758.86	530.43	228.42	2
.32	952.78	163.99	788.79	550.37	238.42	2
.00	987.64	169.44	818.19	570.27	247.92	2

Time = 910. Degree of Consolidation = 84.%

Total Settlement = 1.461

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 910. = 1.461

Settlement caused by Secondary Compression at time 910. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.66

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.50	1.42	3.00	2.27	2.05	1
4.44	4.04	1.28	2.83	2.25	2.04	1
3.91	3.58	1.14	2.70	2.24	2.03	1
3.39	3.12	.99	2.60	2.22	2.02	1
2.88	2.66	.85	2.52	2.20	2.02	1
2.39	2.21	.71	2.47	2.18	2.01	1
1.90	1.76	.57	2.42	2.16	2.00	1
1.42	1.32	.43	2.38	2.13	1.99	1
.94	.87	.28	2.35	2.11	1.99	1
.47	.44	.14	2.32	2.08	1.98	1
.00	.00	.00	2.29	2.05	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.50	986.84	176.97	809.87	569.48	240.40	1
4.04	1031.92	187.34	844.59	598.35	246.23	1
3.58	1076.87	200.55	876.31	627.09	249.22	1
3.12	1121.66	215.62	906.04	655.68	250.36	1
2.66	1166.29	232.09	934.20	684.10	250.09	1
2.21	1210.74	255.84	954.89	712.35	242.55	1
1.76	1254.99	281.50	973.49	740.39	233.10	1
1.32	1299.03	308.76	990.27	768.23	222.04	1
.87	1342.85	337.31	1005.54	795.85	209.69	1
.44	1386.44	374.26	1012.18	823.24	188.94	1
.00	1429.81	412.93	1016.88	850.40	166.48	1

Time = 970. Degree of Consolidation = 68.%

Total Settlement = .494

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 970. = .494

Settlement caused by Secondary Compression at time 970. = .000

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

***** Coordinates *****

***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.13	3.91	1.71	1.71	1.71	2
10.28	8.82	3.79	1.71	1.56	1.56	2
9.96	8.52	3.68	1.71	1.48	1.48	2
9.64	8.23	3.56	1.71	1.43	1.43	2
9.32	7.94	3.44	1.71	1.40	1.40	2
9.00	7.66	3.32	1.71	1.36	1.36	2
8.68	7.38	3.20	1.71	1.35	1.35	2
8.36	7.11	3.08	1.71	1.34	1.34	2
8.04	6.83	2.97	1.71	1.33	1.33	2
7.72	6.56	2.85	1.71	1.33	1.32	2
7.40	6.28	2.73	1.71	1.33	1.31	2
7.40	6.28	2.73	1.71	1.33	1.31	3
7.04	5.97	2.60	1.71	1.32	1.30	3
6.68	5.66	2.46	1.71	1.32	1.28	3
6.32	5.36	2.33	1.71	1.32	1.27	3
5.96	5.05	2.20	1.71	1.32	1.26	3
5.60	4.74	2.07	1.71	1.32	1.25	3
5.24	4.43	1.93	1.71	1.31	1.24	3
4.88	4.13	1.80	1.71	1.31	1.23	3
4.52	3.82	1.67	1.71	1.31	1.21	3
4.16	3.51	1.54	1.71	1.31	1.20	3
3.80	3.21	1.40	1.71	1.30	1.20	3
3.80	3.21	1.40	1.71	1.30	1.20	2
3.42	2.88	1.26	1.71	1.30	1.19	2
3.04	2.56	1.12	1.71	1.30	1.18	2
2.66	2.24	.98	1.71	1.29	1.18	2
2.28	1.92	.84	1.71	1.29	1.17	2
1.90	1.60	.70	1.71	1.29	1.17	2
1.52	1.28	.56	1.71	1.28	1.16	2
1.14	.96	.42	1.71	1.28	1.15	2
.76	.64	.28	1.71	1.28	1.15	2
.38	.32	.14	1.71	1.27	1.14	2
.00	.00	.00	1.71	1.27	1.14	2

***** Stresses *****

***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.13	.00	.00	.00	.00	.00	2
8.82	31.97	12.60	19.37	19.37	.00	2
8.52	63.11	25.20	37.91	37.91	.00	2
8.23	93.79	37.80	55.99	55.99	.00	2
7.94	124.20	50.40	73.80	73.80	.00	2
7.66	154.31	63.00	91.31	91.31	.00	2
7.38	184.27	75.60	108.68	108.68	.00	2
7.11	214.16	88.20	125.96	125.96	.00	2
6.83	243.95	100.80	143.16	143.16	.00	2
6.56	273.71	102.83	170.87	160.31	10.56	2
6.28	303.46	104.66	198.80	177.46	21.34	2
6.28	303.46	104.66	198.80	177.46	21.34	3
5.97	336.91	106.70	230.20	196.73	33.47	3

5.66	370.34	108.79	261.55	215.99	45.56	3
5.36	403.76	111.04	292.72	235.24	57.48	3
5.05	437.17	113.48	323.68	254.47	69.21	3
4.74	470.55	116.13	354.42	273.68	80.74	3
4.43	503.92	118.98	384.94	292.87	92.07	3
4.13	537.27	122.01	415.26	312.05	103.21	3
3.82	570.59	125.19	445.40	331.20	114.20	3
3.51	603.90	128.50	475.39	350.33	125.07	3
3.21	637.18	131.94	505.23	369.43	135.80	3
3.21	637.18	131.94	505.23	369.43	135.80	2
2.88	672.28	135.57	536.71	389.57	147.13	2
2.56	707.36	139.35	568.00	409.69	158.31	2
2.24	742.40	143.28	599.13	429.77	169.36	2
1.92	777.42	147.34	630.09	449.83	180.26	2
1.60	812.41	151.53	660.88	469.86	191.02	2
1.28	847.37	155.97	691.40	489.85	201.55	2
.96	882.29	160.66	721.64	509.81	211.82	2
.64	917.18	165.68	751.50	529.74	221.76	2
.32	952.03	171.08	780.96	549.63	231.33	2
.00	986.84	176.97	809.87	569.48	240.40	2

Time = 970. Degree of Consolidation = 85.%

Total Settlement = 1.474

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 970. = 1.474

Settlement caused by Secondary Compression at time 970. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.63

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.48	1.42	3.00	2.25	2.05	1
4.44	4.02	1.28	2.83	2.24	2.04	1
3.91	3.56	1.14	2.70	2.22	2.03	1
3.39	3.11	.99	2.60	2.20	2.02	1
2.88	2.65	.85	2.52	2.18	2.02	1
2.39	2.20	.71	2.47	2.16	2.01	1
1.90	1.76	.57	2.42	2.14	2.00	1
1.42	1.31	.43	2.38	2.12	1.99	1
.94	.87	.28	2.35	2.09	1.99	1
.47	.43	.14	2.32	2.07	1.98	1
.00	.00	.00	2.29	2.05	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.48	985.70	189.73	795.97	568.33	227.64	1
4.02	1030.62	201.35	829.28	597.05	232.22	1
3.56	1075.42	214.82	860.60	625.64	234.96	1

3.11	1120.06	229.63	890.43	654.08	236.35	1
2.65	1164.54	250.35	914.19	682.36	231.84	1
2.20	1208.84	273.76	935.08	710.46	224.63	1
1.76	1252.96	298.71	954.25	738.36	215.88	1
1.31	1296.87	324.95	971.92	766.07	205.85	1
.87	1340.57	354.68	985.88	793.56	192.32	1
.43	1384.05	391.21	992.84	820.85	172.00	1
.00	1427.33	427.76	999.57	847.92	151.65	1

Time = 1060. Degree of Consolidation = 71.%

Total Settlement = .515

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 1060. = .515

Settlement caused by Secondary Compression at time 1060. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.11	3.91	1.71	1.71	1.71	2
10.28	8.80	3.79	1.71	1.56	1.56	2
9.96	8.50	3.68	1.71	1.48	1.48	2
9.64	8.21	3.56	1.71	1.43	1.43	2
9.32	7.93	3.44	1.71	1.40	1.40	2
9.00	7.64	3.32	1.71	1.36	1.36	2
8.68	7.37	3.20	1.71	1.35	1.35	2
8.36	7.09	3.08	1.71	1.34	1.34	2
8.04	6.81	2.97	1.71	1.33	1.33	2
7.72	6.54	2.85	1.71	1.33	1.32	2
7.40	6.26	2.73	1.71	1.32	1.31	2
7.40	6.26	2.73	1.71	1.32	1.31	3
7.04	5.96	2.60	1.71	1.32	1.30	3
6.68	5.65	2.46	1.71	1.32	1.28	3
6.32	5.34	2.33	1.71	1.32	1.27	3
5.96	5.03	2.20	1.71	1.31	1.26	3
5.60	4.73	2.07	1.71	1.31	1.25	3
5.24	4.42	1.93	1.71	1.31	1.24	3
4.88	4.11	1.80	1.71	1.31	1.23	3
4.52	3.81	1.67	1.71	1.30	1.21	3
4.16	3.50	1.54	1.71	1.30	1.20	3
3.80	3.19	1.40	1.71	1.30	1.20	3
3.80	3.19	1.40	1.71	1.30	1.20	2
3.42	2.87	1.26	1.71	1.29	1.19	2
3.04	2.55	1.12	1.71	1.29	1.18	2
2.66	2.23	.98	1.71	1.29	1.18	2
2.28	1.91	.84	1.71	1.28	1.17	2
1.90	1.59	.70	1.71	1.28	1.17	2
1.52	1.27	.56	1.71	1.28	1.16	2
1.14	.95	.42	1.71	1.27	1.15	2
.76	.63	.28	1.71	1.27	1.15	2
.38	.32	.14	1.71	1.26	1.14	2
.00	.00	.00	1.71	1.26	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.11	.00	.00	.00	.00	.00	2
8.80	31.97	12.60	19.37	19.37	.00	2
8.50	63.11	25.20	37.91	37.91	.00	2

8.21	93.79	37.80	55.99	55.99	.00	2
7.93	124.20	50.40	73.80	73.80	.00	2
7.64	154.31	63.00	91.31	91.31	.00	2
7.37	184.27	75.60	108.68	108.68	.00	2
7.09	214.16	88.20	125.96	125.96	.00	2
6.81	243.95	100.80	143.16	143.16	.00	2
6.54	273.70	104.32	169.39	160.31	9.08	2
6.26	303.44	107.42	196.02	177.44	18.58	2
6.26	303.44	107.42	196.02	177.44	18.58	3
5.96	336.86	110.92	225.95	196.69	29.26	3
5.65	370.27	114.13	256.14	215.92	40.22	3
5.34	403.65	117.18	286.47	235.12	51.34	3
5.03	437.01	120.19	316.82	254.31	62.51	3
4.73	470.34	123.21	347.14	273.47	73.66	3
4.42	503.66	126.29	377.37	292.62	84.75	3
4.11	536.96	129.44	407.52	311.74	95.78	3
3.81	570.23	132.72	437.51	330.84	106.67	3
3.50	603.48	136.15	467.34	349.91	117.42	3
3.19	636.71	139.71	497.00	368.97	128.03	3
3.19	636.71	139.71	497.00	368.97	128.03	2
2.87	671.76	143.48	528.28	389.05	139.23	2
2.55	706.78	147.40	559.37	409.11	150.27	2
2.23	741.76	151.49	590.27	429.13	161.14	2
1.91	776.72	155.85	620.87	449.13	171.74	2
1.59	811.65	160.47	651.18	469.09	182.08	2
1.27	846.54	165.35	681.19	489.02	192.17	2
.95	881.39	170.61	710.78	508.91	201.87	2
.63	916.21	176.39	739.82	528.76	211.05	2
.32	950.98	182.68	768.30	548.57	219.73	2
.00	985.70	189.73	795.97	568.33	227.64	2

Time = 1060. Degree of Consolidation = 86.%

Total Settlement = 1.492

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 1060. = 1.492

Settlement caused by Secondary Compression at time 1060. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.59

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.47	1.42	3.00	2.24	2.05	1
4.44	4.01	1.28	2.83	2.23	2.04	1
3.91	3.56	1.14	2.70	2.21	2.03	1
3.39	3.10	.99	2.60	2.20	2.02	1
2.88	2.65	.85	2.52	2.18	2.02	1
2.39	2.20	.71	2.47	2.16	2.01	1
1.90	1.75	.57	2.42	2.13	2.00	1
1.42	1.31	.43	2.38	2.11	1.99	1
.94	.87	.28	2.35	2.09	1.99	1

.47	.43	.14	2.32	2.06	1.98	1
.00	.00	.00	2.29	2.04	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.47	985.19	195.41	789.78	567.82	221.96	1
4.01	1030.05	207.44	822.62	596.48	226.14	1
3.56	1074.78	220.81	853.98	625.01	228.97	1
3.10	1119.37	236.67	882.69	653.39	229.31	1
2.65	1163.78	258.06	905.72	681.60	224.12	1
2.20	1208.03	281.10	926.93	709.64	217.29	1
1.75	1252.08	305.63	946.45	737.49	208.96	1
1.31	1295.94	331.18	964.76	765.15	199.62	1
.87	1339.59	362.11	977.48	792.59	184.89	1
.43	1383.04	397.30	985.74	819.83	165.91	1
.00	1426.28	433.47	992.81	846.87	145.94	1

Time = 1100. Degree of Consolidation = 72.%

Total Settlement = .524

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 1100. = .524

Settlement caused by Secondary Compression at time 1100. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.10	3.91	1.71	1.71	1.71	2
10.28	8.79	3.79	1.71	1.56	1.56	2
9.96	8.49	3.68	1.71	1.48	1.48	2
9.64	8.20	3.56	1.71	1.43	1.43	2
9.32	7.92	3.44	1.71	1.40	1.40	2
9.00	7.64	3.32	1.71	1.36	1.36	2
8.68	7.36	3.20	1.71	1.35	1.35	2
8.36	7.08	3.08	1.71	1.34	1.34	2
8.04	6.81	2.97	1.71	1.33	1.33	2
7.72	6.53	2.85	1.71	1.33	1.32	2
7.40	6.26	2.73	1.71	1.32	1.31	2
7.40	6.26	2.73	1.71	1.32	1.31	3
7.04	5.95	2.60	1.71	1.32	1.30	3
6.68	5.64	2.46	1.71	1.32	1.28	3
6.32	5.33	2.33	1.71	1.31	1.27	3
5.96	5.03	2.20	1.71	1.31	1.26	3
5.60	4.72	2.07	1.71	1.31	1.25	3
5.24	4.41	1.93	1.71	1.31	1.24	3
4.88	4.11	1.80	1.71	1.30	1.23	3
4.52	3.80	1.67	1.71	1.30	1.21	3
4.16	3.49	1.54	1.71	1.30	1.20	3
3.80	3.19	1.40	1.71	1.29	1.20	3
3.80	3.19	1.40	1.71	1.29	1.20	2
3.42	2.87	1.26	1.71	1.29	1.19	2
3.04	2.55	1.12	1.71	1.29	1.18	2
2.66	2.23	.98	1.71	1.28	1.18	2
2.28	1.91	.84	1.71	1.28	1.17	2
1.90	1.59	.70	1.71	1.28	1.17	2
1.52	1.27	.56	1.71	1.27	1.16	2
1.14	.95	.42	1.71	1.27	1.15	2
.76	.63	.28	1.71	1.26	1.15	2

.38	.32	.14	1.71	1.26	1.14	2
.00	.00	.00	1.71	1.25	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.10	.00	.00	.00	.00	.00	2
8.79	31.97	12.60	19.37	19.37	.00	2
8.49	63.11	25.20	37.91	37.91	.00	2
8.20	93.79	37.80	55.99	55.99	.00	2
7.92	124.20	50.40	73.80	73.80	.00	2
7.64	154.31	63.00	91.31	91.31	.00	2
7.36	184.27	75.60	108.68	108.68	.00	2
7.08	214.16	88.20	125.96	125.96	.00	2
6.81	243.95	100.80	143.16	143.16	.00	2
6.53	273.70	104.85	168.85	160.31	8.55	2
6.26	303.43	108.42	195.01	177.43	17.58	2
6.26	303.43	108.42	195.01	177.43	17.58	3
5.95	336.85	112.43	224.41	196.68	27.74	3
5.64	370.24	116.09	254.15	215.89	38.26	3
5.33	403.60	119.52	284.08	235.08	49.00	3
5.03	436.95	122.83	314.12	254.25	59.87	3
4.72	470.27	126.06	344.20	273.40	70.81	3
4.41	503.56	129.34	374.23	292.52	81.71	3
4.11	536.84	132.66	404.18	311.62	92.56	3
3.80	570.09	136.02	434.07	330.70	103.37	3
3.49	603.32	139.54	463.78	349.75	114.03	3
3.19	636.52	143.19	493.33	368.78	124.55	3
3.19	636.52	143.19	493.33	368.78	124.55	2
2.87	671.54	147.05	524.49	388.83	135.65	2
2.55	706.53	151.08	555.45	408.86	146.59	2
2.23	741.49	155.32	586.17	428.86	157.31	2
1.91	776.42	159.84	616.59	448.83	167.76	2
1.59	811.32	164.62	646.70	468.76	177.94	2
1.27	846.18	169.79	676.39	488.66	187.73	2
.95	881.00	175.34	705.66	508.52	197.14	2
.63	915.78	181.43	734.35	528.34	206.02	2
.32	950.51	188.05	762.46	548.11	214.35	2
.00	985.19	195.41	789.78	567.82	221.96	2

Time = 1100. Degree of Consolidation = 87.%

Total Settlement = 1.500

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 1100. = 1.500

Settlement caused by Secondary Compression at time 1100. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.58

Consistency Error --DREDGED FILL --LAYER/ 3

***** Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.46	1.42	3.00	2.24	2.05	1
4.44	4.01	1.28	2.83	2.22	2.04	1
3.91	3.55	1.14	2.70	2.21	2.03	1
3.39	3.10	.99	2.60	2.19	2.02	1
2.88	2.64	.85	2.52	2.17	2.02	1
2.39	2.20	.71	2.47	2.15	2.01	1
1.90	1.75	.57	2.42	2.13	2.00	1
1.42	1.31	.43	2.38	2.11	1.99	1
.94	.87	.28	2.35	2.08	1.99	1
.47	.43	.14	2.32	2.06	1.98	1
.00	.00	.00	2.29	2.04	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.46	984.70	200.59	784.11	567.33	216.78	1
4.01	1029.50	212.91	816.60	595.93	220.66	1
3.55	1074.18	226.39	847.79	624.40	223.39	1
3.10	1118.70	244.03	874.67	652.72	221.95	1
2.64	1163.06	265.17	897.89	680.88	217.01	1
2.20	1207.25	287.98	919.27	708.86	210.41	1
1.75	1251.25	312.06	939.19	736.66	202.53	1
1.31	1295.06	337.14	957.92	764.26	193.65	1
.87	1338.67	369.10	969.57	791.67	177.90	1
.43	1382.08	403.12	978.96	818.87	160.09	1
.00	1425.29	438.99	986.31	845.88	140.42	1

Time = 1140. Degree of Consolidation = 73.%

Total Settlement = .532

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 1140. = .532

Settlement caused by Secondary Compression at time 1140. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.09	3.91	1.71	1.71	1.71	2
10.28	8.78	3.79	1.71	1.56	1.56	2
9.96	8.48	3.68	1.71	1.48	1.48	2
9.64	8.19	3.56	1.71	1.43	1.43	2
9.32	7.91	3.44	1.71	1.40	1.40	2
9.00	7.63	3.32	1.71	1.36	1.36	2
8.68	7.35	3.20	1.71	1.35	1.35	2
8.36	7.07	3.08	1.71	1.34	1.34	2
8.04	6.80	2.97	1.71	1.33	1.33	2
7.72	6.52	2.85	1.71	1.33	1.32	2
7.40	6.25	2.73	1.71	1.32	1.31	2
7.40	6.25	2.73	1.71	1.32	1.31	3
7.04	5.94	2.60	1.71	1.32	1.30	3
6.68	5.63	2.46	1.71	1.32	1.28	3
6.32	5.33	2.33	1.71	1.31	1.27	3
5.96	5.02	2.20	1.71	1.31	1.26	3
5.60	4.71	2.07	1.71	1.31	1.25	3
5.24	4.41	1.93	1.71	1.30	1.24	3
4.88	4.10	1.80	1.71	1.30	1.23	3
4.52	3.79	1.67	1.71	1.30	1.21	3
4.16	3.49	1.54	1.71	1.29	1.20	3

3.80	3.18	1.40	1.71	1.29	1.20	3
3.80	3.18	1.40	1.71	1.29	1.20	2
3.42	2.86	1.26	1.71	1.29	1.19	2
3.04	2.54	1.12	1.71	1.28	1.18	2
2.66	2.22	.98	1.71	1.28	1.18	2
2.28	1.90	.84	1.71	1.28	1.17	2
1.90	1.58	.70	1.71	1.27	1.17	2
1.52	1.27	.56	1.71	1.27	1.16	2
1.14	.95	.42	1.71	1.26	1.15	2
.76	.63	.28	1.71	1.26	1.15	2
.38	.32	.14	1.71	1.25	1.14	2
.00	.00	.00	1.71	1.25	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.09	.00	.00	.00	.00	.00	2
8.78	31.97	12.60	19.37	19.37	.00	2
8.48	63.11	25.20	37.91	37.91	.00	2
8.19	93.79	37.80	55.99	55.99	.00	2
7.91	124.20	50.40	73.80	73.80	.00	2
7.63	154.31	63.00	91.31	91.31	.00	2
7.35	184.27	75.60	108.68	108.68	.00	2
7.07	214.16	88.20	125.96	125.96	.00	2
6.80	243.95	100.80	143.16	143.16	.00	2
6.52	273.70	105.36	168.34	160.30	8.04	2
6.25	303.43	109.38	194.05	177.43	16.62	2
6.25	303.43	109.38	194.05	177.43	16.62	3
5.94	336.83	113.90	222.94	196.66	26.28	3
5.63	370.21	117.98	252.23	215.87	36.36	3
5.33	403.56	121.78	281.78	235.04	46.74	3
5.02	436.89	125.36	311.53	254.19	57.34	3
4.71	470.19	128.82	341.37	273.32	68.05	3
4.41	503.47	132.27	371.20	292.42	78.78	3
4.10	536.72	135.74	400.98	311.50	89.48	3
3.79	569.95	139.25	430.70	330.56	100.15	3
3.49	603.16	142.87	460.29	349.59	110.70	3
3.18	636.34	146.63	489.71	368.59	121.11	3
3.18	636.34	146.63	489.71	368.59	121.11	2
2.86	671.33	150.61	520.72	388.63	132.10	2
2.54	706.30	154.76	551.54	408.63	142.91	2
2.22	741.23	159.17	582.06	428.60	153.46	2
1.90	776.13	163.86	612.27	448.54	163.73	2
1.58	811.00	168.82	642.18	468.44	173.74	2
1.27	845.83	174.18	671.65	488.31	183.34	2
.95	880.61	179.94	700.68	508.13	192.54	2
.63	915.36	186.22	729.13	527.92	201.22	2
.32	950.05	193.09	756.96	547.65	209.31	2
.00	984.70	200.59	784.11	567.33	216.78	2

Time = 1140. Degree of Consolidation = 87.%

Total Settlement = 1.508

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 1140. = 1.508

Settlement caused by Secondary Compression at time 1140. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.56

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.41	1.42	3.00	2.19	2.05	1
4.44	3.96	1.28	2.83	2.17	2.04	1
3.91	3.51	1.14	2.70	2.16	2.03	1
3.39	3.06	.99	2.60	2.14	2.02	1
2.88	2.62	.85	2.52	2.13	2.02	1
2.39	2.17	.71	2.47	2.11	2.01	1
1.90	1.73	.57	2.42	2.09	2.00	1
1.42	1.30	.43	2.38	2.07	1.99	1
.94	.86	.28	2.35	2.05	1.99	1
.47	.43	.14	2.32	2.04	1.98	1
.00	.00	.00	2.29	2.02	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.41	980.78	244.73	736.05	563.41	172.64	1
3.96	1025.16	260.04	765.12	591.59	173.53	1
3.51	1069.41	276.68	792.73	619.64	173.09	1
3.06	1113.53	294.61	818.92	647.55	171.37	1
2.62	1157.50	313.71	843.79	675.31	168.48	1
2.17	1201.31	333.70	867.61	702.93	164.69	1
1.73	1244.97	357.88	887.09	730.38	156.71	1
1.30	1288.46	385.68	902.78	757.66	145.12	1
.86	1331.79	413.14	918.65	784.79	133.86	1
.43	1374.97	443.47	931.49	811.76	119.73	1
.00	1417.99	473.97	944.02	838.58	105.44	1

Time = 1480. Degree of Consolidation = 81.%

Total Settlement = .586

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 1480. = .586

Settlement caused by Secondary Compression at time 1480. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.03	3.91	1.71	1.71	1.71	2
10.28	8.72	3.79	1.71	1.56	1.56	2
9.96	8.42	3.68	1.71	1.48	1.48	2
9.64	8.13	3.56	1.71	1.43	1.43	2
9.32	7.85	3.44	1.71	1.40	1.40	2
9.00	7.57	3.32	1.71	1.36	1.36	2
8.68	7.29	3.20	1.71	1.35	1.35	2
8.36	7.01	3.08	1.71	1.34	1.34	2
8.04	6.73	2.97	1.71	1.33	1.33	2
7.72	6.46	2.85	1.71	1.32	1.32	2
7.40	6.19	2.73	1.71	1.32	1.31	2

7.40	6.19	2.73	1.71	1.32	1.31	3
7.04	5.88	2.60	1.71	1.31	1.30	3
6.68	5.57	2.46	1.71	1.30	1.28	3
6.32	5.27	2.33	1.71	1.30	1.27	3
5.96	4.96	2.20	1.71	1.29	1.26	3
5.60	4.66	2.07	1.71	1.29	1.25	3
5.24	4.35	1.93	1.71	1.28	1.24	3
4.88	4.05	1.80	1.71	1.28	1.23	3
4.52	3.75	1.67	1.71	1.28	1.21	3
4.16	3.45	1.54	1.71	1.27	1.20	3
3.80	3.15	1.40	1.71	1.27	1.20	3
3.80	3.15	1.40	1.71	1.27	1.20	2
3.42	2.83	1.26	1.71	1.26	1.19	2
3.04	2.51	1.12	1.71	1.26	1.18	2
2.66	2.19	.98	1.71	1.25	1.18	2
2.28	1.88	.84	1.71	1.25	1.17	2
1.90	1.56	.70	1.71	1.24	1.17	2
1.52	1.25	.56	1.71	1.24	1.16	2
1.14	.93	.42	1.71	1.23	1.15	2
.76	.62	.28	1.71	1.23	1.15	2
.38	.31	.14	1.71	1.22	1.14	2
.00	.00	.00	1.71	1.21	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.03	.00	.00	.00	.00	.00	2
8.72	31.97	12.60	19.37	19.37	.00	2
8.42	63.11	25.20	37.91	37.91	.00	2
8.13	93.79	37.80	55.99	55.99	.00	2
7.85	124.20	50.40	73.80	73.80	.00	2
7.57	154.31	63.00	91.31	91.31	.00	2
7.29	184.27	75.60	108.68	108.68	.00	2
7.01	214.16	88.20	125.96	125.96	.00	2
6.73	243.95	100.80	143.16	143.16	.00	2
6.46	273.69	109.16	164.53	160.29	4.23	2
6.19	303.38	116.52	186.86	177.38	9.48	2
6.19	303.38	116.52	186.86	177.38	9.48	3
5.88	336.73	124.84	211.88	196.55	15.33	3
5.57	370.02	132.20	237.82	215.67	22.15	3
5.27	403.26	138.79	264.47	234.74	29.73	3
4.96	436.46	144.75	291.71	253.76	37.94	3
4.66	469.62	150.24	319.38	272.75	46.63	3
4.35	502.74	155.43	347.31	291.70	55.62	3
4.05	535.83	160.38	375.46	310.61	64.84	3
3.75	568.89	165.14	403.75	329.49	74.26	3
3.45	601.91	169.87	432.04	348.34	83.70	3
3.15	634.90	174.60	460.30	367.16	93.14	3
3.15	634.90	174.60	460.30	367.16	93.14	2
2.83	669.69	179.62	490.07	386.98	103.09	2
2.51	704.44	184.83	519.61	406.77	112.84	2
2.19	739.15	190.27	548.87	426.52	122.36	2
1.88	773.82	195.97	577.85	446.23	131.62	2
1.56	808.45	202.09	606.36	465.89	140.47	2
1.25	843.03	208.70	634.33	485.51	148.82	2
.93	877.56	215.97	661.58	505.08	156.51	2
.62	912.03	224.12	687.91	524.59	163.32	2
.31	946.44	233.55	712.89	544.04	168.85	2
.00	980.78	244.73	736.05	563.41	172.64	2

Time = 1480. Degree of Consolidation = 91.%

Total Settlement = 1.571

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 1480. = 1.571

Settlement caused by Secondary Compression at time 1480. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.44

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.40	1.42	3.00	2.18	2.05	1
4.44	3.95	1.28	2.83	2.17	2.04	1
3.91	3.50	1.14	2.70	2.15	2.03	1
3.39	3.06	.99	2.60	2.14	2.02	1
2.88	2.61	.85	2.52	2.12	2.02	1
2.39	2.17	.71	2.47	2.10	2.01	1
1.90	1.73	.57	2.42	2.09	2.00	1
1.42	1.30	.43	2.38	2.07	1.99	1
.94	.86	.28	2.35	2.05	1.99	1
.47	.43	.14	2.32	2.03	1.98	1
.00	.00	.00	2.29	2.02	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.40	980.23	250.91	729.32	562.86	166.46	1
3.95	1024.56	266.47	758.09	590.99	167.10	1
3.50	1068.76	283.13	785.64	618.99	166.65	1
3.06	1112.83	301.00	811.83	646.85	164.98	1
2.61	1156.75	319.73	837.02	674.57	162.46	1
2.17	1200.52	339.24	861.28	702.13	159.15	1
1.73	1244.13	364.66	879.47	729.54	149.93	1
1.30	1287.59	391.61	895.98	756.79	139.19	1
.86	1330.89	418.26	912.63	783.89	128.74	1
.43	1374.03	448.64	925.39	810.83	114.56	1
.00	1417.03	478.18	938.85	837.62	101.23	1

Time = 1530. Degree of Consolidation = 82.%

Total Settlement = .593

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 1530. = .593

Settlement caused by Secondary Compression at time 1530. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.02	3.91	1.71	1.71	1.71	2

10.28	8.71	3.79	1.71	1.56	1.56	2
9.96	8.41	3.68	1.71	1.48	1.48	2
9.64	8.12	3.56	1.71	1.43	1.43	2
9.32	7.84	3.44	1.71	1.40	1.40	2
9.00	7.56	3.32	1.71	1.36	1.36	2
8.68	7.28	3.20	1.71	1.35	1.35	2
8.36	7.00	3.08	1.71	1.34	1.34	2
8.04	6.73	2.97	1.71	1.33	1.33	2
7.72	6.45	2.85	1.71	1.32	1.32	2
7.40	6.18	2.73	1.71	1.32	1.31	2
7.40	6.18	2.73	1.71	1.32	1.31	3
7.04	5.87	2.60	1.71	1.31	1.30	3
6.68	5.56	2.46	1.71	1.30	1.28	3
6.32	5.26	2.33	1.71	1.30	1.27	3
5.96	4.95	2.20	1.71	1.29	1.26	3
5.60	4.65	2.07	1.71	1.29	1.25	3
5.24	4.35	1.93	1.71	1.28	1.24	3
4.88	4.04	1.80	1.71	1.28	1.23	3
4.52	3.74	1.67	1.71	1.27	1.21	3
4.16	3.44	1.54	1.71	1.27	1.20	3
3.80	3.14	1.40	1.71	1.26	1.20	3
3.80	3.14	1.40	1.71	1.26	1.20	2
3.42	2.82	1.26	1.71	1.26	1.19	2
3.04	2.51	1.12	1.71	1.26	1.18	2
2.66	2.19	.98	1.71	1.25	1.18	2
2.28	1.87	.84	1.71	1.25	1.17	2
1.90	1.56	.70	1.71	1.24	1.17	2
1.52	1.25	.56	1.71	1.24	1.16	2
1.14	.93	.42	1.71	1.23	1.15	2
.76	.62	.28	1.71	1.22	1.15	2
.38	.31	.14	1.71	1.21	1.14	2
.00	.00	.00	1.71	1.20	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.02	.00	.00	.00	.00	.00	2
8.71	31.97	12.60	19.37	19.37	.00	2
8.41	63.11	25.20	37.91	37.91	.00	2
8.12	93.79	37.80	55.99	55.99	.00	2
7.84	124.20	50.40	73.80	73.80	.00	2
7.56	154.31	63.00	91.31	91.31	.00	2
7.28	184.27	75.60	108.68	108.68	.00	2
7.00	214.16	88.20	125.96	125.96	.00	2
6.73	243.95	100.80	143.16	143.16	.00	2
6.45	273.69	109.67	164.02	160.29	3.73	2
6.18	303.37	117.49	185.88	177.38	8.50	2
6.18	303.37	117.49	185.88	177.38	8.50	3
5.87	336.71	126.30	210.41	196.54	13.87	3
5.56	369.99	134.09	235.90	215.64	20.26	3
5.26	403.22	141.07	262.15	234.70	27.45	3
4.95	436.40	147.34	289.06	253.71	35.35	3
4.65	469.54	153.12	316.43	272.67	43.75	3
4.35	502.65	158.52	344.13	291.60	52.53	3
4.04	535.71	163.67	372.04	310.49	61.55	3
3.74	568.74	168.62	400.13	329.35	70.78	3
3.44	601.74	173.54	428.21	348.17	80.03	3
3.14	634.71	178.45	456.26	366.96	89.29	3
3.14	634.71	178.45	456.26	366.96	89.29	2
2.82	669.47	183.64	485.83	386.76	99.07	2
2.51	704.18	189.02	515.16	406.52	108.64	2
2.19	738.86	194.66	544.21	426.23	117.97	2
1.87	773.50	200.57	572.94	445.91	127.03	2
1.56	808.10	206.88	601.21	465.54	135.67	2
1.25	842.64	213.75	628.89	485.12	143.77	2
.93	877.13	221.25	655.88	504.65	151.23	2
.62	911.57	229.66	681.91	524.13	157.78	2
.31	945.94	239.32	706.62	543.53	163.08	2
.00	980.23	250.91	729.32	562.86	166.46	2

Time = 1530. Degree of Consolidation = 91.%
 Total Settlement = 1.580
 Settlement at End of Primary Consolidation = 1.733
 Settlement caused by Primary Consolidation at time 1530. = 1.580
 Settlement caused by Secondary Compression at time 1530. = .000
 Settlement Due to Desiccation = .000
 Surface Elevation = 113.43

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.38	1.42	3.00	2.17	2.05	1
4.44	3.94	1.28	2.83	2.15	2.04	1
3.91	3.49	1.14	2.70	2.14	2.03	1
3.39	3.04	.99	2.60	2.12	2.02	1
2.88	2.60	.85	2.52	2.11	2.02	1
2.39	2.16	.71	2.47	2.09	2.01	1
1.90	1.73	.57	2.42	2.07	2.00	1
1.42	1.29	.43	2.38	2.06	1.99	1
.94	.86	.28	2.35	2.04	1.99	1
.47	.43	.14	2.32	2.03	1.98	1
.00	.00	.00	2.29	2.01	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.38	978.59	268.41	710.18	561.22	148.96	1
3.94	1022.78	284.69	738.08	589.21	148.88	1
3.49	1066.83	301.64	765.20	617.06	148.14	1
3.04	1110.75	319.18	791.57	644.78	146.79	1
2.60	1154.53	337.30	817.24	672.35	144.89	1
2.16	1198.17	359.98	838.19	699.78	138.41	1
1.73	1241.66	385.02	856.63	727.06	129.57	1
1.29	1285.00	409.70	875.30	754.20	121.10	1
.86	1328.20	436.51	891.69	781.20	110.49	1
.43	1371.26	464.20	907.06	808.06	99.00	1
.00	1414.19	490.94	923.25	834.78	88.47	1

Time = 1700. Degree of Consolidation = 84.%

Total Settlement = .612

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 1700. = .612

Settlement caused by Secondary Compression at time 1700. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.99	3.91	1.71	1.71	1.71	2
10.28	8.68	3.79	1.71	1.56	1.56	2
9.96	8.39	3.68	1.71	1.48	1.48	2
9.64	8.10	3.56	1.71	1.43	1.43	2
9.32	7.81	3.44	1.71	1.40	1.40	2
9.00	7.53	3.32	1.71	1.36	1.36	2
8.68	7.25	3.20	1.71	1.35	1.35	2
8.36	6.98	3.08	1.71	1.34	1.34	2
8.04	6.70	2.97	1.71	1.33	1.33	2
7.72	6.43	2.85	1.71	1.32	1.32	2
7.40	6.15	2.73	1.71	1.31	1.31	2
7.40	6.15	2.73	1.71	1.31	1.31	3
7.04	5.85	2.60	1.71	1.30	1.30	3
6.68	5.54	2.46	1.71	1.30	1.28	3
6.32	5.23	2.33	1.71	1.29	1.27	3
5.96	4.93	2.20	1.71	1.28	1.26	3
5.60	4.63	2.07	1.71	1.28	1.25	3
5.24	4.33	1.93	1.71	1.27	1.24	3
4.88	4.02	1.80	1.71	1.27	1.23	3
4.52	3.72	1.67	1.71	1.26	1.21	3
4.16	3.42	1.54	1.71	1.26	1.20	3
3.80	3.12	1.40	1.71	1.25	1.20	3
3.80	3.12	1.40	1.71	1.25	1.20	2
3.42	2.81	1.26	1.71	1.25	1.19	2
3.04	2.49	1.12	1.71	1.24	1.18	2
2.66	2.18	.98	1.71	1.24	1.18	2
2.28	1.86	.84	1.71	1.23	1.17	2
1.90	1.55	.70	1.71	1.23	1.17	2
1.52	1.24	.56	1.71	1.22	1.16	2
1.14	.93	.42	1.71	1.22	1.15	2
.76	.62	.28	1.71	1.21	1.15	2
.38	.31	.14	1.71	1.20	1.14	2
.00	.00	.00	1.71	1.20	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.99	.00	.00	.00	.00	.00	2
8.68	31.97	12.60	19.37	19.37	.00	2
8.39	63.11	25.20	37.91	37.91	.00	2
8.10	93.79	37.80	55.99	55.99	.00	2
7.81	124.20	50.40	73.80	73.80	.00	2
7.53	154.31	63.00	91.31	91.31	.00	2
7.25	184.27	75.60	108.68	108.68	.00	2
6.98	214.15	88.20	125.96	125.96	.00	2
6.70	243.95	100.80	143.16	143.16	.00	2
6.43	273.68	111.17	162.52	160.29	2.23	2
6.15	303.36	120.38	182.98	177.36	5.62	2
6.15	303.36	120.38	182.98	177.36	5.62	3
5.85	336.67	130.76	205.91	196.49	9.41	3
5.54	369.91	139.99	229.92	215.56	14.35	3
5.23	403.09	148.19	254.90	234.57	20.33	3
4.93	436.22	155.58	280.65	253.53	27.12	3
4.63	469.31	162.35	306.95	272.43	34.52	3
4.33	502.34	168.62	333.72	291.30	42.43	3
4.02	535.34	174.53	360.80	310.12	50.69	3
3.72	568.29	180.20	388.09	328.90	59.19	3
3.42	601.21	185.69	415.52	347.64	67.88	3
3.12	634.08	191.12	442.97	366.34	76.63	3
3.12	634.08	191.12	442.97	366.34	76.63	2

2.81	668.75	196.86	471.89	386.04	85.85	2
2.49	703.37	202.71	500.66	405.70	94.95	2
2.18	737.95	208.74	529.21	425.32	103.90	2
1.86	772.48	214.98	557.51	444.89	112.62	2
1.55	806.97	221.59	585.38	464.41	120.97	2
1.24	841.41	228.57	612.84	483.89	128.95	2
.93	875.79	236.03	639.77	503.31	136.45	2
.62	910.12	244.09	666.03	522.68	143.35	2
.31	944.39	252.76	691.63	541.98	149.65	2
.00	978.59	268.41	710.18	561.22	148.96	2

Time = 1700. Degree of Consolidation = 93.%

Total Settlement = 1.606

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 1700. = 1.606

Settlement caused by Secondary Compression at time 1700. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.38

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.36	1.42	3.00	2.14	2.05	1
4.44	3.91	1.28	2.83	2.13	2.04	1
3.91	3.47	1.14	2.70	2.12	2.03	1
3.39	3.03	.99	2.60	2.10	2.02	1
2.88	2.59	.85	2.52	2.09	2.02	1
2.39	2.15	.71	2.47	2.07	2.01	1
1.90	1.72	.57	2.42	2.06	2.00	1
1.42	1.29	.43	2.38	2.04	1.99	1
.94	.86	.28	2.35	2.03	1.99	1
.47	.43	.14	2.32	2.01	1.98	1
.00	.00	.00	2.29	2.00	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.36	976.41	294.53	681.88	559.04	122.84	1
3.91	1020.39	310.52	709.88	586.82	123.05	1
3.47	1064.25	326.89	737.36	614.47	122.89	1
3.03	1107.97	343.60	764.37	641.99	122.38	1
2.59	1151.56	366.29	785.27	669.38	115.89	1
2.15	1195.02	388.97	806.05	696.63	109.42	1
1.72	1238.35	411.25	827.10	723.76	103.34	1
1.29	1281.55	435.42	846.13	750.75	95.38	1
.86	1324.62	460.50	864.13	777.62	86.51	1
.43	1367.57	484.80	882.77	804.37	78.41	1
.00	1410.41	508.20	902.21	831.00	71.21	1

Time = 2000. Degree of Consolidation = 88.%

Total Settlement = .637

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 2000. = .637

Settlement caused by Secondary Compression at time 2000. = .000

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

***** Coordinates *****

***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.96	3.91	1.71	1.71	1.71	2
10.28	8.65	3.79	1.71	1.56	1.56	2
9.96	8.35	3.68	1.71	1.48	1.48	2
9.64	8.06	3.56	1.71	1.43	1.43	2
9.32	7.78	3.44	1.71	1.40	1.40	2
9.00	7.50	3.32	1.71	1.36	1.36	2
8.68	7.22	3.20	1.71	1.35	1.35	2
8.36	6.94	3.08	1.71	1.34	1.34	2
8.04	6.66	2.97	1.71	1.33	1.33	2
7.72	6.39	2.85	1.71	1.32	1.32	2
7.40	6.12	2.73	1.71	1.31	1.31	2
7.40	6.12	2.73	1.71	1.31	1.31	3
7.04	5.81	2.60	1.71	1.30	1.30	3
6.68	5.51	2.46	1.71	1.29	1.28	3
6.32	5.20	2.33	1.71	1.28	1.27	3
5.96	4.90	2.20	1.71	1.27	1.26	3
5.60	4.60	2.07	1.71	1.27	1.25	3
5.24	4.30	1.93	1.71	1.26	1.24	3
4.88	4.00	1.80	1.71	1.25	1.23	3
4.52	3.70	1.67	1.71	1.25	1.21	3
4.16	3.40	1.54	1.71	1.24	1.20	3
3.80	3.10	1.40	1.71	1.24	1.20	3
3.80	3.10	1.40	1.71	1.24	1.20	2
3.42	2.79	1.26	1.71	1.23	1.19	2
3.04	2.48	1.12	1.71	1.23	1.18	2
2.66	2.16	.98	1.71	1.22	1.18	2
2.28	1.85	.84	1.71	1.22	1.17	2
1.90	1.54	.70	1.71	1.21	1.17	2
1.52	1.23	.56	1.71	1.21	1.16	2
1.14	.92	.42	1.71	1.20	1.15	2
.76	.61	.28	1.71	1.20	1.15	2
.38	.31	.14	1.71	1.19	1.14	2
.00	.00	.00	1.71	1.18	1.14	2

***** Stresses *****

***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.96	.00	.00	.00	.00	.00	2
8.65	31.97	12.60	19.37	19.37	.00	2
8.35	63.11	25.20	37.91	37.91	.00	2
8.06	93.79	37.80	55.99	55.99	.00	2
7.78	124.20	50.40	73.80	73.80	.00	2
7.50	154.31	63.00	91.31	91.31	.00	2
7.22	184.27	75.60	108.68	108.68	.00	2
6.94	214.15	88.20	125.95	125.95	.00	2
6.66	243.95	100.80	143.16	143.16	.00	2
6.39	273.68	113.38	160.30	160.28	.02	2
6.12	303.33	124.67	178.66	177.33	1.32	3
6.12	303.33	124.67	178.66	177.33	1.32	3
5.81	336.60	137.39	199.21	196.43	2.78	3

5.51	369.79	148.72	221.08	215.45	5.63	3
5.20	402.91	158.88	244.03	234.39	9.65	3
4.90	435.96	167.97	267.99	253.26	14.72	3
4.60	468.95	176.22	292.73	272.08	20.65	3
4.30	501.89	183.74	318.15	290.84	27.31	3
4.00	534.77	190.62	344.15	309.55	34.60	3
3.70	567.61	197.08	370.54	328.22	42.32	3
3.40	600.41	203.21	397.19	346.84	50.35	3
3.10	633.16	209.11	424.06	365.42	58.64	3
3.10	633.16	209.11	424.06	365.42	58.64	2
2.79	667.70	215.33	452.37	384.99	67.38	2
2.48	702.18	221.41	480.77	404.51	76.26	2
2.16	736.62	227.45	509.17	423.99	85.18	2
1.85	771.02	233.53	537.49	443.43	94.06	2
1.54	805.37	239.73	565.65	462.82	102.83	2
1.23	839.68	246.15	593.53	482.16	111.37	2
.92	873.94	252.94	621.00	501.46	119.54	2
.61	908.15	264.66	643.49	520.71	122.78	2
.31	942.30	279.88	662.43	539.90	122.53	2
.00	976.41	294.53	681.88	559.04	122.84	2

Time = 2000. Degree of Consolidation = 95.%

Total Settlement = 1.641

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 2000. = 1.641

Settlement caused by Secondary Compression at time 2000. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.32

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.33	1.42	3.00	2.12	2.05	1
4.44	3.89	1.28	2.83	2.10	2.04	1
3.91	3.45	1.14	2.70	2.09	2.03	1
3.39	3.01	.99	2.60	2.07	2.02	1
2.88	2.58	.85	2.52	2.06	2.02	1
2.39	2.14	.71	2.47	2.05	2.01	1
1.90	1.71	.57	2.42	2.04	2.00	1
1.42	1.28	.43	2.38	2.02	1.99	1
.94	.85	.28	2.35	2.01	1.99	1
.47	.43	.14	2.32	2.00	1.98	1
.00	.00	.00	2.29	1.99	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.33	973.93	325.71	648.21	556.56	91.65	1
3.89	1017.67	341.44	676.23	584.10	92.13	1
3.45	1061.28	361.76	699.52	611.50	88.02	1

3.01	1104.77	382.30	722.47	638.79	83.68	1
2.58	1148.14	402.20	745.94	665.96	79.99	1
2.14	1191.40	421.83	769.57	693.01	76.56	1
1.71	1234.55	444.01	790.54	719.96	70.58	1
1.28	1277.59	465.43	812.16	746.79	65.36	1
.85	1320.53	486.20	834.32	773.53	60.80	1
.43	1363.36	506.19	857.18	800.16	57.02	1
.00	1406.10	532.31	873.79	826.69	47.10	1

Time = 2555. Degree of Consolidation = 92.%

Total Settlement = .667

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 2555. = .667

Settlement caused by Secondary Compression at time 2555. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.92	3.91	1.71	1.71	1.71	2
10.28	8.61	3.79	1.71	1.56	1.56	2
9.96	8.31	3.68	1.71	1.48	1.48	2
9.64	8.02	3.56	1.71	1.43	1.43	2
9.32	7.74	3.44	1.71	1.40	1.40	2
9.00	7.46	3.32	1.71	1.36	1.36	2
8.68	7.18	3.20	1.71	1.35	1.35	2
8.36	6.90	3.08	1.71	1.34	1.34	2
8.04	6.63	2.97	1.71	1.33	1.33	2
7.72	6.35	2.85	1.71	1.32	1.32	2
7.40	6.08	2.73	1.71	1.31	1.31	2
7.40	6.08	2.73	1.71	1.31	1.31	3
7.04	5.77	2.60	1.71	1.30	1.30	3
6.68	5.47	2.46	1.71	1.28	1.28	3
6.32	5.16	2.33	1.71	1.27	1.27	3
5.96	4.86	2.20	1.71	1.26	1.26	3
5.60	4.56	2.07	1.71	1.25	1.25	3
5.24	4.26	1.93	1.71	1.25	1.24	3
4.88	3.97	1.80	1.71	1.24	1.23	3
4.52	3.67	1.67	1.71	1.23	1.21	3
4.16	3.37	1.54	1.71	1.23	1.20	3
3.80	3.08	1.40	1.71	1.22	1.20	3
3.80	3.08	1.40	1.71	1.22	1.20	2
3.42	2.77	1.26	1.71	1.22	1.19	2
3.04	2.46	1.12	1.71	1.21	1.18	2
2.66	2.15	.98	1.71	1.20	1.18	2
2.28	1.84	.84	1.71	1.20	1.17	2
1.90	1.53	.70	1.71	1.19	1.17	2
1.52	1.22	.56	1.71	1.19	1.16	2
1.14	.92	.42	1.71	1.18	1.15	2
.76	.61	.28	1.71	1.18	1.15	2
.38	.30	.14	1.71	1.18	1.14	2
.00	.00	.00	1.71	1.17	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.92	.00	.00	.00	.00	.00	2
8.61	31.97	12.60	19.37	19.37	.00	2
8.31	63.11	25.20	37.91	37.91	.00	2

8.02	93.79	37.80	55.99	55.99	.00	2
7.74	124.20	50.40	73.80	73.80	.00	2
7.46	154.31	63.00	91.31	91.31	.00	2
7.18	184.27	75.60	108.68	108.68	.00	2
6.90	214.15	88.20	125.96	125.96	.00	2
6.63	243.95	100.80	143.16	143.16	.00	2
6.35	273.68	113.40	160.28	160.28	.00	2
6.08	303.33	125.94	177.38	177.33	.05	2
6.08	303.33	125.94	177.38	177.33	.05	3
5.77	336.59	140.17	196.41	196.41	.00	3
5.47	369.75	154.35	215.40	215.40	.00	3
5.16	402.81	167.89	234.93	234.29	.64	3
4.86	435.79	180.01	255.78	253.10	2.69	3
4.56	468.69	190.82	277.87	271.82	6.05	3
4.26	501.52	200.52	301.00	290.47	10.53	3
3.97	534.28	209.20	325.08	309.06	16.02	3
3.67	566.99	217.04	349.94	327.59	22.35	3
3.37	599.64	224.23	375.41	346.07	29.34	3
3.08	632.25	230.85	401.40	364.51	36.90	3
3.08	632.25	230.85	401.40	364.51	36.90	2
2.77	666.62	237.78	428.84	383.91	44.93	2
2.46	700.94	244.24	456.70	403.27	53.43	2
2.15	735.22	250.60	484.61	422.58	62.03	2
1.84	769.44	258.21	511.23	441.85	69.38	2
1.53	803.62	271.61	532.02	461.07	70.95	2
1.22	837.76	284.14	553.62	480.24	73.38	2
.92	871.86	295.46	576.39	499.38	77.02	2
.61	905.92	306.01	599.91	518.47	81.44	2
.30	939.94	316.08	623.85	537.53	86.32	2
.00	973.93	325.71	648.21	556.56	91.65	2

Time = 2555. Degree of Consolidation = 97.%

Total Settlement = 1.681

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 2555. = 1.681

Settlement caused by Secondary Compression at time 2555. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.25

APPENDIX C: Alternative PSDDF Results for Extended Disposal

CH

Consolidation and desiccation of soft layers---dredged fill

Problem CH

*****Soil data for compressible foundation*****

Material Type	Layer Thickness	Numbers of Sub-layers	Ca/Cc	Cr/Cc
1	5.00	10	.040	.150

Material type : 1 Specific Gravity of Solids: 2.83

I	Void Ratio	Effective Stress	Permeability	k/1+e	PK	Beta	Dsde	Alpha
1	3.000	.000E+00	.121E-02	.303E-03	.420E-03	.840E+02	.254E-01	
2	2.950	.420E+01	.111E-02	.282E-03	.384E-03	.880E+02	.248E-01	
3	2.900	.880E+01	.103E-02	.264E-03	.349E-03	.980E+02	.259E-01	
4	2.850	.140E+02	.949E-03	.247E-03	.311E-03	.108E+03	.266E-01	
5	2.800	.196E+02	.885E-03	.233E-03	.270E-03	.114E+03	.266E-01	
6	2.750	.254E+02	.823E-03	.220E-03	.272E-03	.124E+03	.272E-01	
7	2.700	.320E+02	.762E-03	.206E-03	.278E-03	.136E+03	.280E-01	
8	2.650	.390E+02	.700E-03	.192E-03	.283E-03	.160E+03	.307E-01	
9	2.600	.480E+02	.639E-03	.178E-03	.287E-03	.190E+03	.337E-01	
10	2.550	.580E+02	.579E-03	.163E-03	.282E-03	.220E+03	.359E-01	
11	2.500	.700E+02	.523E-03	.149E-03	.274E-03	.280E+03	.418E-01	
12	2.450	.860E+02	.468E-03	.136E-03	.248E-03	.340E+03	.461E-01	
13	2.400	.104E+03	.423E-03	.125E-03	.213E-03	.420E+03	.523E-01	
14	2.350	.128E+03	.383E-03	.114E-03	.198E-03	.500E+03	.572E-01	
15	2.300	.154E+03	.346E-03	.105E-03	.191E-03	.620E+03	.649E-01	
16	2.250	.190E+03	.310E-03	.953E-04	.192E-03	.780E+03	.743E-01	
17	2.200	.232E+03	.274E-03	.855E-04	.175E-03	.980E+03	.838E-01	
18	2.150	.288E+03	.245E-03	.777E-04	.158E-03	.112E+04	.870E-01	
19	2.100	.344E+03	.216E-03	.697E-04	.140E-03	.132E+04	.920E-01	
20	2.050	.420E+03	.194E-03	.637E-04	.125E-03	.166E+04	.106E+00	
21	2.000	.510E+03	.171E-03	.571E-04	.125E-03	.220E+04	.126E+00	
22	1.950	.640E+03	.151E-03	.513E-04	.114E-03	.270E+04	.138E+00	
23	1.900	.780E+03	.133E-03	.457E-04	.102E-03	.310E+04	.142E+00	
24	1.850	.950E+03	.117E-03	.411E-04	.876E-04	.380E+04	.156E+00	
25	1.800	.116E+04	.103E-03	.369E-04	.833E-04	.450E+04	.166E+00	
26	1.750	.140E+04	.900E-04	.327E-04	.834E-04	.540E+04	.177E+00	
27	1.700	.170E+04	.772E-04	.286E-04	.773E-04	.640E+04	.183E+00	
28	1.650	.204E+04	.662E-04	.250E-04	.616E-04	.840E+04	.210E+00	
29	1.600	.254E+04	.583E-04	.224E-04	.495E-04	.106E+05	.238E+00	
30	1.550	.310E+04	.511E-04	.200E-04	.486E-04	.121E+05	.243E+00	
31	1.500	.375E+04	.439E-04	.176E-04	.465E-04	.150E+05	.264E+00	
32	1.450	.460E+04	.377E-04	.154E-04	.425E-04	.179E+05	.276E+00	
33	1.400	.554E+04	.320E-04	.133E-04	.376E-04	.220E+05	.293E+00	
34	1.350	.680E+04	.274E-04	.116E-04	.318E-04	.296E+05	.345E+00	
35	1.300	.850E+04	.233E-04	.101E-04	.281E-04	.360E+05	.365E+00	
36	1.250	.104E+05	.199E-04	.883E-05	.262E-04	.380E+05	.336E+00	

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

Material Type	Specific Gravity	Ca/Cc	Cr/Cc	Saturation Limit	Desication Limit
2	2.740	.040	.150	6.700	3.100
3	2.740	.040	.150	6.700	3.100

Material type : 2

I	Ratio	Void	Effective	Perm-	k/1+e		
		Stress	eability	PK	Beta	Dsde	Alpha
1	2.500	.000E+00	.200E-02	.571E-03	.472E-03	-.200E+02	-.114E-01
2	2.450	.100E+01	.189E-02	.548E-03	.747E-03	-.250E+02	-.137E-01
3	2.420	.200E+01	.175E-02	.512E-03	.878E-03	-.750E+02	-.384E-01
4	2.250	.160E+02	.121E-02	.372E-03	.779E-03	-.111E+03	-.414E-01
5	2.150	.320E+02	.949E-03	.301E-03	.660E-03	-.240E+03	-.723E-01
6	2.050	.640E+02	.733E-03	.240E-03	.531E-03	-.574E+03	-.138E+00
7	1.760	.256E+03	.260E-03	.942E-04	.412E-03	-.953E+03	-.898E-01
8	1.580	.512E+03	.120E-03	.465E-04	.212E-03	-.206E+04	-.960E-01
9	1.390	.102E+04	.376E-04	.157E-04	.972E-04	-.565E+04	-.890E-01
10	1.140	.300E+04	.800E-05	.374E-05	.480E-04	-.792E+04	-.296E-01

Material type : 3

I	Ratio	Void	Effective	Perm-	k/1+e		
		Stress	eability	PK	Beta	Dsde	Alpha
1	2.500	.000E+00	.200E-02	.571E-03	.472E-03	-.200E+02	-.114E-01
2	2.450	.100E+01	.189E-02	.548E-03	.747E-03	-.250E+02	-.137E-01
3	2.420	.200E+01	.175E-02	.512E-03	.878E-03	-.750E+02	-.384E-01
4	2.250	.160E+02	.121E-02	.372E-03	.779E-03	-.111E+03	-.414E-01
5	2.150	.320E+02	.949E-03	.301E-03	.660E-03	-.240E+03	-.723E-01
6	2.050	.640E+02	.733E-03	.240E-03	.531E-03	-.574E+03	-.138E+00
7	1.760	.256E+03	.260E-03	.942E-04	.412E-03	-.953E+03	-.898E-01
8	1.580	.512E+03	.120E-03	.465E-04	.212E-03	-.206E+04	-.960E-01
9	1.390	.102E+04	.376E-04	.157E-04	.972E-04	-.565E+04	-.890E-01
10	1.140	.300E+04	.800E-05	.374E-05	.480E-04	-.792E+04	-.296E-01

Summary of lifts and print detail

Time days	Material Type	Fill Height	# Sub- layers	Void ratio	Start Day	Dessic. Month	Print detai
0.	2	3.8	10	2.50	820.	4	1
180.					820.	4	1
1480.	3	3.6	10	2.50	820.	4	1
1600.					820.	4	1
2960.	2	3.2	10	2.50	820.	4	1
3200.					820.	4	1
3500.					850.	5	1
4000.					910.	7	1
4500.					970.	9	1
5000.					1060.	12	1
5500.					1100.	12	1
6000.					1140.	12	1

6500.	1480.	6	1
7000.	1530.	6	1
7500.	1700.	6	1
8000.	2000.	6	1
8500.	2555.	6	1

Summary of monthly rainfall and evaporation potential

Month	Rainfall	Evaporation
1	.240	.180
2	.270	.230
3	.400	.360
4	.250	.360
5	.320	.570
6	.530	.490
7	.680	.670
8	.540	.570
9	.430	.410
10	.250	.330
11	.180	.210
12	.260	.160

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

tau	Lower layer Void ratio	Lower layer Permeability	drainage path Length
1.70	1.500	.10000E-02	z = 6.00

Summary of desiccation parameters

Parameter	Value
Surface Drainage Efficiency	1.00
maximum evaporation efficiency	.50
saturation at desiccation limit	.75
maximum crust thickness	.16
time to desic. after initial fill	820.00
month of initial desiccation	4
elevation of fixed water table	100.00
elevation of top of incompres. found.	100.00

*****Initial Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	5.00	1.42	3.00	3.00	2.37	1
4.44	4.44	1.28	2.83	2.83	2.34	1
3.91	3.91	1.14	2.70	2.70	2.31	1
3.39	3.39	.99	2.60	2.60	2.28	1
2.88	2.88	.85	2.52	2.52	2.26	1
2.39	2.39	.71	2.47	2.47	2.24	1
1.90	1.90	.57	2.42	2.42	2.22	1
1.42	1.42	.43	2.38	2.38	2.20	1
.94	.94	.28	2.35	2.35	2.19	1
.47	.47	.14	2.32	2.32	2.17	1
.00	.00	2.29	2.29	2.16	1	

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
5.00	355.00	.00	355.00	237.12	117.88	1
4.44	405.85	16.20	389.64	271.76	117.88	1
3.91	455.35	32.41	422.94	305.06	117.88	1
3.39	503.83	48.61	455.22	337.34	117.88	1
2.88	551.54	64.82	486.72	368.84	117.88	1
2.39	598.67	81.02	517.65	399.76	117.88	1
1.90	645.35	97.23	548.12	430.24	117.88	1
1.42	691.65	113.43	578.22	460.33	117.88	1
.94	737.63	129.64	608.00	490.12	117.88	1
.47	783.33	145.84	637.49	519.61	117.88	1
.00	828.78	162.04	666.73	548.85	117.88	1

Time = 0. Degree of Consolidation = 0.%

Total Settlement = .000

Settlement at End of Primary Consolidation = .388

Settlement caused by Primary Consolidation at time 0. = .000

Settlement caused by Secondary Compression at time 0. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
3.80	3.80	1.09	2.50	2.50	2.50	2
3.42	3.42	.98	2.50	2.50	2.30	2
3.04	3.04	.87	2.50	2.50	2.20	2
2.66	2.66	.76	2.50	2.50	2.14	2
2.28	2.28	.65	2.50	2.50	2.10	2
1.90	1.90	.54	2.50	2.50	2.07	2
1.52	1.52	.43	2.50	2.50	2.04	2
1.14	1.14	.33	2.50	2.50	2.02	2
.76	.76	.22	2.50	2.50	2.00	2
.38	.38	.11	2.50	2.50	1.99	2
.00	.00	2.50	2.50	1.97	2	

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
3.80	.00	.00	.00	.00	.00	2
3.42	35.50	.00	35.50	23.71	11.79	2
3.04	71.00	.00	71.00	47.42	23.58	2
2.66	106.50	.00	106.50	71.14	35.36	2
2.28	142.00	.00	142.00	94.85	47.15	2
1.90	177.50	.00	177.50	118.56	58.94	2
1.52	213.00	.00	213.00	142.27	70.73	2
1.14	248.50	.00	248.50	165.98	82.52	2
.76	284.00	.00	284.00	189.70	94.31	2
.38	319.50	.00	319.50	213.41	106.09	2
.00	355.00	.00	355.00	237.12	117.88	2

Time = 0. Degree of Consolidation = 0.%

Total Settlement = .000

Settlement at End of Primary Consolidation = .426

Settlement caused by Primary Consolidation at time 0. = .000

Settlement caused by Secondary Compression at time 0. = .000

***** Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.92	1.42	3.00	2.74	2.37	1
4.44	4.39	1.28	2.83	2.69	2.34	1
3.91	3.88	1.14	2.70	2.62	2.31	1
3.39	3.37	.99	2.60	2.56	2.28	1
2.88	2.86	.85	2.52	2.50	2.26	1
2.39	2.37	.71	2.47	2.45	2.24	1
1.90	1.89	.57	2.42	2.40	2.22	1
1.42	1.41	.43	2.38	2.36	2.20	1
.94	.93	.28	2.35	2.32	2.19	1
.47	.46	.14	2.32	2.28	2.17	1
.00	.00	.00	2.29	2.25	2.16	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.92	346.51	26.84	319.67	228.63	91.04	1
4.39	395.61	33.73	361.88	261.53	100.35	1
3.88	444.19	43.74	400.45	293.90	106.55	1
3.37	492.20	56.07	436.12	325.70	110.42	1
2.86	539.66	69.72	469.94	356.96	112.98	1
2.37	586.63	86.30	500.33	387.72	112.60	1
1.89	633.16	103.14	530.03	418.05	111.97	1
1.41	679.30	123.44	555.86	447.99	107.87	1
.93	725.08	143.72	581.35	477.56	103.79	1
.46	770.51	166.05	604.46	506.79	97.67	1
.00	815.64	190.22	625.42	535.71	89.71	1

Time = 181. Degree of Consolidation = 19.%

Total Settlement = .074

Settlement at End of Primary Consolidation = .388

Settlement caused by Primary Consolidation at time 181. = .074

Settlement caused by Secondary Compression at time 181. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
3.80	3.66	1.09	2.50	2.50	2.50	2
3.42	3.28	.98	2.50	2.50	2.30	2
3.04	2.90	.87	2.50	2.49	2.20	2
2.66	2.53	.76	2.50	2.46	2.14	2
2.28	2.15	.65	2.50	2.42	2.10	2
1.90	1.78	.54	2.50	2.39	2.07	2
1.52	1.42	.43	2.50	2.35	2.04	2
1.14	1.06	.33	2.50	2.31	2.02	2
.76	.70	.22	2.50	2.26	2.00	2
.38	.35	.11	2.50	2.22	1.99	2
.00	.00	.00	2.50	2.18	1.97	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
3.66	.00	.00	.00	.00	.00	2
3.28	35.48	.06	35.42	23.70	11.73	2
2.90	70.94	.24	70.70	47.37	23.34	2
2.53	106.29	.78	105.51	70.93	34.59	2
2.15	141.39	1.93	139.46	94.24	45.22	2
1.78	176.25	4.62	171.63	117.31	54.32	2
1.42	210.87	7.67	203.20	140.14	63.06	2
1.06	245.22	11.08	234.14	162.71	71.43	2
.70	279.28	14.80	264.49	184.98	79.51	2
.35	313.04	20.69	292.35	206.94	85.41	2
.00	346.51	26.84	319.67	228.63	91.04	2

Time = 181. Degree of Consolidation = 32.%

Total Settlement = .136

Settlement at End of Primary Consolidation = .426

Settlement caused by Primary Consolidation at time 181. = .136

Settlement caused by Secondary Compression at time 181. = .000

Surface Elevation = 108.59

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.68	1.42	3.00	2.44	2.37	1
4.44	4.19	1.28	2.83	2.41	2.34	1
3.91	3.71	1.14	2.70	2.37	2.31	1
3.39	3.23	.99	2.60	2.34	2.28	1
2.88	2.76	.85	2.52	2.31	2.26	1
2.39	2.29	.71	2.47	2.29	2.24	1
1.90	1.83	.57	2.42	2.26	2.22	1

1.42	1.37	.43	2.38	2.24	2.20	1
.94	.91	.28	2.35	2.22	2.19	1
.47	.45	.14	2.32	2.20	2.17	1
.00	.00	.00	2.29	2.18	2.16	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.68	330.62	88.10	242.52	212.74	29.78	1
4.19	377.15	101.67	275.48	243.07	32.42	1
3.71	423.37	117.06	306.31	273.08	33.23	1
3.23	469.30	132.20	337.10	302.81	34.29	1
2.76	514.97	146.95	368.02	332.27	35.75	1
2.29	560.40	163.02	397.38	361.49	35.89	1
1.83	605.61	180.38	425.23	390.50	34.73	1
1.37	650.61	197.60	453.00	419.29	33.71	1
.91	695.42	215.23	480.18	447.90	32.28	1
.45	740.04	231.83	508.21	476.32	31.89	1
.00	784.50	253.00	531.50	504.57	26.92	1

Time = 1480. Degree of Consolidation = 82.%

Total Settlement = .319

Settlement at End of Primary Consolidation = .388

Settlement caused by Primary Consolidation at time 1480. = .319

Settlement caused by Secondary Compression at time 1480. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
3.80	3.41	1.09	2.50	2.50	2.50	2
3.42	3.04	.98	2.50	2.32	2.30	2
3.04	2.69	.87	2.50	2.23	2.20	2
2.66	2.34	.76	2.50	2.17	2.14	2
2.28	2.00	.65	2.50	2.13	2.10	2
1.90	1.66	.54	2.50	2.10	2.07	2
1.52	1.32	.43	2.50	2.08	2.04	2
1.14	.99	.33	2.50	2.06	2.02	2
.76	.66	.22	2.50	2.05	2.00	2
.38	.33	.11	2.50	2.03	1.99	2
.00	.00	.00	2.50	2.01	1.97	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
3.41	.00	.00	.00	.00	.00	2
3.04	34.79	10.61	24.18	23.00	1.18	2
2.69	68.72	19.76	48.96	45.14	3.82	2
2.34	102.16	28.80	73.35	66.79	6.56	2
2.00	135.29	37.84	97.45	88.13	9.32	2
1.66	168.19	46.86	121.33	109.25	12.08	2
1.32	200.93	54.05	146.88	130.20	16.68	2
.99	233.52	60.13	173.39	151.01	22.39	2
.66	266.00	67.16	198.84	171.69	27.14	2
.33	298.36	77.73	220.63	192.27	28.37	2
.00	330.62	88.10	242.52	212.74	29.78	2

Time = 1480. Degree of Consolidation = 92.%

Total Settlement = .391

Settlement at End of Primary Consolidation = .426

Settlement caused by Primary Consolidation at time 1480. = .391

Settlement caused by Secondary Compression at time 1480. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 108.09

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.66	1.42	3.00	2.44	2.20	1
4.44	4.17	1.28	2.83	2.40	2.19	1
3.91	3.69	1.14	2.70	2.37	2.17	1
3.39	3.22	.99	2.60	2.33	2.16	1
2.88	2.75	.85	2.52	2.31	2.14	1
2.39	2.28	.71	2.47	2.28	2.13	1
1.90	1.82	.57	2.42	2.25	2.12	1
1.42	1.36	.43	2.38	2.23	2.10	1
.94	.90	.28	2.35	2.20	2.09	1
.47	.45	.14	2.32	2.18	2.08	1
.00	.00	.00	2.29	2.15	2.07	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.66	659.24	90.86	568.38	429.68	138.70	1
4.17	705.71	104.05	601.66	459.94	141.72	1
3.69	751.86	120.25	631.62	489.89	141.72	1
3.22	797.73	135.94	661.80	519.56	142.24	1
2.75	843.34	151.20	692.14	548.96	143.18	1
2.28	888.69	170.04	718.65	578.10	140.54	1
1.82	933.80	189.08	744.71	607.01	137.70	1
1.36	978.68	210.47	768.21	635.68	132.52	1
.90	1023.33	231.57	791.76	664.14	127.62	1
.45	1067.76	259.61	808.15	692.36	115.79	1
.00	1111.97	288.27	823.70	720.37	103.33	1

Time = 1601. Degree of Consolidation = 61.%

Total Settlement = .337

Settlement at End of Primary Consolidation = .552

Settlement caused by Primary Consolidation at time 1601. = .337

Settlement caused by Secondary Compression at time 1601. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
7.40	6.89	2.11	2.50	2.50	2.50	3
7.04	6.53	2.01	2.50	2.50	2.31	3
6.68	6.17	1.91	2.50	2.50	2.21	3
6.32	5.81	1.81	2.50	2.50	2.15	3
5.96	5.45	1.70	2.50	2.49	2.11	3
5.60	5.09	1.60	2.50	2.46	2.08	3
5.24	4.74	1.50	2.50	2.42	2.05	3
4.88	4.39	1.39	2.50	2.38	2.03	3
4.52	4.04	1.29	2.50	2.33	2.01	3
4.16	3.70	1.19	2.50	2.28	1.99	3
3.80	3.37	1.09	2.50	2.23	1.98	3
3.80	3.37	1.09	2.50	2.23	1.98	2
3.42	3.02	.98	2.50	2.20	1.96	2
3.04	2.67	.87	2.50	2.16	1.94	2
2.66	2.33	.76	2.50	2.14	1.92	2
2.28	1.99	.65	2.50	2.11	1.91	2
1.90	1.65	.54	2.50	2.09	1.89	2
1.52	1.32	.43	2.50	2.07	1.87	2
1.14	.99	.33	2.50	2.06	1.85	2
.76	.66	.22	2.50	2.04	1.84	2
.38	.33	.11	2.50	2.02	1.82	2
.00	.00	.00	2.50	2.01	1.80	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
6.89	.00	.00	.00	.00	.00	3
6.53	33.63	.00	33.63	22.46	11.16	3
6.17	67.26	.01	67.25	44.93	22.32	3
5.81	100.87	.06	100.81	67.37	33.44	3
5.45	134.47	.25	134.22	89.80	44.42	3
5.09	167.94	.84	167.10	112.11	54.99	3
4.74	201.17	2.37	198.80	134.16	64.64	3
4.39	234.13	5.56	228.58	155.96	72.62	3
4.04	266.83	9.29	257.54	177.49	80.05	3
3.70	299.22	13.43	285.79	198.71	87.08	3
3.37	331.29	18.90	312.39	219.61	92.78	3
3.37	331.29	18.90	312.39	219.61	92.78	2
3.02	364.85	24.80	340.05	241.38	98.67	2
2.67	398.17	29.91	368.26	262.91	105.35	2
2.33	431.29	36.75	394.54	284.25	110.29	2
1.99	464.24	44.39	419.85	305.40	114.44	2
1.65	497.03	51.01	446.02	326.41	119.61	2
1.32	529.69	56.89	472.80	347.29	125.52	2
.99	562.24	62.20	500.04	368.04	132.00	2
.66	594.68	70.59	524.08	388.69	135.39	2
.33	627.01	80.74	546.27	409.23	137.03	2
.00	659.24	90.86	568.38	429.68	138.70	2

Time = 1601. Degree of Consolidation = 49.%

Total Settlement = .514

Settlement at End of Primary Consolidation = 1.060

Settlement caused by Primary Consolidation at time 1601. = .514

Settlement caused by Secondary Compression at time 1601. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 111.55

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.50	1.42	3.00	2.26	2.20	1
4.44	4.04	1.28	2.83	2.24	2.19	1
3.91	3.58	1.14	2.70	2.22	2.17	1
3.39	3.13	.99	2.60	2.20	2.16	1
2.88	2.67	.85	2.52	2.19	2.14	1
2.39	2.22	.71	2.47	2.17	2.13	1
1.90	1.77	.57	2.42	2.15	2.12	1
1.42	1.33	.43	2.38	2.14	2.10	1
.94	.88	.28	2.35	2.12	2.09	1
.47	.44	.14	2.32	2.11	2.08	1
.00	.00	.00	2.29	2.09	2.07	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.50	631.00	186.39	444.62	401.44	43.17	1
4.04	675.95	200.26	475.69	430.19	45.50	1
3.58	720.75	214.55	506.21	458.78	47.42	1
3.13	765.40	228.53	536.87	487.23	49.64	1
2.67	809.91	245.78	564.13	515.53	48.60	1
2.22	854.26	264.14	590.13	543.68	46.45	1
1.77	898.48	282.46	616.02	571.69	44.33	1
1.33	942.55	300.67	641.88	599.56	42.32	1
.88	986.47	318.68	667.80	627.28	40.52	1
.44	1030.26	336.42	693.83	654.86	38.98	1
.00	1073.90	357.21	716.69	682.30	34.39	1

Time = 2960. Degree of Consolidation = 90.%

Total Settlement = .495

Settlement at End of Primary Consolidation = .552

Settlement caused by Primary Consolidation at time 2960. = .495

Settlement caused by Secondary Compression at time 2960. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
7.40	6.43	2.11	2.50	2.50	2.50	3
7.04	6.08	2.01	2.50	2.32	2.31	3
6.68	5.75	1.91	2.50	2.24	2.21	3
6.32	5.42	1.81	2.50	2.18	2.15	3
5.96	5.09	1.70	2.50	2.14	2.11	3
5.60	4.77	1.60	2.50	2.11	2.08	3
5.24	4.45	1.50	2.50	2.09	2.05	3
4.88	4.14	1.39	2.50	2.07	2.03	3
4.52	3.82	1.29	2.50	2.05	2.01	3
4.16	3.51	1.19	2.50	2.04	1.99	3
3.80	3.20	1.09	2.50	2.02	1.98	3
3.80	3.20	1.09	2.50	2.02	1.98	2
3.42	2.87	.98	2.50	2.01	1.96	2
3.04	2.54	.87	2.50	1.99	1.94	2
2.66	2.22	.76	2.50	1.97	1.92	2
2.28	1.90	.65	2.50	1.96	1.91	2
1.90	1.58	.54	2.50	1.94	1.89	2

1.52	1.26	.43	2.50	1.93	1.87	2
1.14	.94	.33	2.50	1.91	1.85	2
.76	.63	.22	2.50	1.90	1.84	2
.38	.31	.11	2.50	1.88	1.82	2
.00	.00	.00	2.50	1.87	1.80	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
6.43	.00	.00	.00	.00	.00	3
6.08	33.00	9.86	23.14	21.83	1.31	3
5.75	65.20	18.28	46.92	42.86	4.06	3
5.42	96.94	27.41	69.53	63.43	6.10	3
5.09	128.38	35.26	93.11	83.70	9.41	3
4.77	159.60	44.44	115.16	103.76	11.40	3
4.45	190.66	51.69	138.97	123.65	15.31	3
4.14	221.59	57.80	163.78	143.41	20.37	3
3.82	252.40	63.14	189.26	163.06	26.20	3
3.51	283.11	72.50	210.62	182.60	28.01	3
3.20	313.72	82.54	231.18	202.05	29.13	3
3.20	313.72	82.54	231.18	202.05	29.13	2
2.87	345.93	93.19	252.74	222.46	30.27	2
2.54	378.03	103.73	274.30	242.78	31.53	2
2.22	410.02	114.17	295.85	262.98	32.88	2
1.90	441.91	124.54	317.37	283.08	34.30	2
1.58	473.69	134.85	338.84	303.07	35.77	2
1.26	505.36	145.13	360.23	322.95	37.27	2
.94	536.93	155.41	381.52	342.73	38.79	2
.63	568.39	165.69	402.70	362.41	40.29	2
.31	599.75	176.01	423.74	381.98	41.76	2
.00	631.00	186.39	444.62	401.44	43.17	2

Time = 2960. Degree of Consolidation = 91.%

Total Settlement = .967

Settlement at End of Primary Consolidation = 1.060

Settlement caused by Primary Consolidation at time 2960. = .967

Settlement caused by Secondary Compression at time 2960. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 110.94

***** Current Conditions in Compressible Foundation *****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.47	1.42	3.00	2.24	2.11	1
4.44	4.01	1.28	2.83	2.22	2.10	1
3.91	3.56	1.14	2.70	2.20	2.09	1
3.39	3.10	.99	2.60	2.19	2.08	1
2.88	2.65	.85	2.52	2.17	2.07	1
2.39	2.20	.71	2.47	2.15	2.06	1
1.90	1.76	.57	2.42	2.13	2.05	1
1.42	1.31	.43	2.38	2.11	2.04	1
.94	.87	.28	2.35	2.09	2.03	1
.47	.44	.14	2.32	2.08	2.02	1
.00	.00	.00	2.29	2.06	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.47	915.06	198.84	716.22	586.23	129.99	1
4.01	959.87	213.67	746.20	614.84	131.36	1
3.56	1004.53	228.36	776.17	643.29	132.88	1
3.10	1049.03	246.72	802.31	671.59	130.72	1
2.65	1093.37	266.60	826.78	699.73	127.05	1
2.20	1137.56	286.89	850.67	727.71	122.96	1
1.76	1181.58	307.56	874.02	755.53	118.49	1
1.31	1225.44	328.52	896.92	783.18	113.74	1
.87	1269.14	351.63	917.51	810.67	106.83	1
.44	1312.67	379.86	932.80	838.00	94.81	1
.00	1356.03	407.27	948.76	865.16	83.61	1

Time = 3201. Degree of Consolidation = 80.%

Total Settlement = .526

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 3201. = .526

Settlement caused by Secondary Compression at time 3201. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.39	3.03	2.50	2.50	2.50	2
10.28	9.08	2.94	2.50	2.44	2.32	2
9.96	8.76	2.85	2.50	2.41	2.23	2
9.64	8.45	2.75	2.50	2.39	2.16	2
9.32	8.14	2.66	2.50	2.37	2.13	2
9.00	7.84	2.57	2.50	2.34	2.09	2
8.68	7.53	2.48	2.50	2.31	2.06	2
8.36	7.23	2.39	2.50	2.27	2.04	2
8.04	6.94	2.30	2.50	2.24	2.03	2
7.72	6.64	2.21	2.50	2.21	2.01	2
7.40	6.35	2.11	2.50	2.19	2.00	2
7.40	6.35	2.11	2.50	2.19	2.00	3
7.04	6.02	2.01	2.50	2.16	1.98	3
6.68	5.70	1.91	2.50	2.13	1.96	3
6.32	5.38	1.81	2.50	2.11	1.95	3
5.96	5.06	1.70	2.50	2.09	1.93	3
5.60	4.74	1.60	2.50	2.08	1.91	3
5.24	4.42	1.50	2.50	2.06	1.90	3
4.88	4.11	1.39	2.50	2.05	1.88	3
4.52	3.80	1.29	2.50	2.03	1.86	3
4.16	3.49	1.19	2.50	2.02	1.84	3
3.80	3.18	1.09	2.50	2.00	1.83	3
3.80	3.18	1.09	2.50	2.00	1.83	2
3.42	2.85	.98	2.50	1.99	1.81	2
3.04	2.53	.87	2.50	1.97	1.79	2
2.66	2.21	.76	2.50	1.96	1.77	2
2.28	1.89	.65	2.50	1.94	1.76	2
1.90	1.57	.54	2.50	1.93	1.75	2
1.52	1.25	.43	2.50	1.91	1.74	2
1.14	.94	.33	2.50	1.90	1.73	2
.76	.62	.22	2.50	1.88	1.73	2
.38	.31	.11	2.50	1.86	1.72	2
.00	.00	.00	2.50	1.85	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.39	.00	.00	.00	.00	.00	2
9.08	29.71	1.25	28.46	19.78	8.68	2
8.76	59.19	2.41	56.78	39.34	17.44	2
8.45	88.54	4.36	84.18	58.75	25.43	2
8.14	117.74	6.51	111.23	78.03	33.20	2
7.84	146.78	8.85	137.94	97.15	40.79	2
7.53	175.66	11.34	164.32	116.10	48.22	2
7.23	204.36	13.96	190.40	134.88	55.53	2
6.94	232.88	17.21	215.67	153.47	62.20	2
6.64	261.22	21.90	239.32	171.88	67.44	2
6.35	289.40	26.00	263.40	190.13	73.27	2
6.35	289.40	26.00	263.40	190.13	73.27	3
6.02	320.93	30.75	290.18	210.49	79.68	3
5.70	352.28	37.57	314.71	230.68	84.04	3
5.38	383.49	44.39	339.10	250.72	88.39	3
5.06	414.56	50.33	364.23	270.62	93.61	3
4.74	445.53	55.66	389.87	290.42	99.45	3
4.42	476.39	60.53	415.86	310.11	105.75	3
4.11	507.16	66.23	440.93	329.71	111.21	3
3.80	537.83	75.45	462.38	349.22	113.16	3
3.49	568.42	84.78	483.64	368.64	115.00	3
3.18	598.92	94.22	504.70	387.97	116.73	3
3.18	598.92	94.22	504.70	387.97	116.73	2
2.85	631.01	104.29	526.71	408.27	118.44	2
2.53	663.00	114.47	548.53	428.47	120.06	2
2.21	694.88	124.72	570.15	448.57	121.59	2
1.89	726.66	135.06	591.60	468.55	123.04	2
1.57	758.33	145.47	612.85	488.44	124.41	2
1.25	789.89	155.97	633.92	508.21	125.71	2
.94	821.35	166.54	654.81	527.88	126.93	2
.62	852.70	177.20	675.49	547.44	128.05	2
.31	883.93	187.96	695.97	566.89	129.08	2
.00	915.06	198.84	716.22	586.23	129.99	2

Time = 3201. Degree of Consolidation = 69.%

Total Settlement = 1.205

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 3201. = 1.205

Settlement caused by Secondary Compression at time 3201. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.87

***** Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.44	1.42	3.00	2.22	2.11	1
4.44	3.99	1.28	2.83	2.20	2.10	1
3.91	3.54	1.14	2.70	2.18	2.09	1
3.39	3.08	.99	2.60	2.17	2.08	1
2.88	2.64	.85	2.52	2.15	2.07	1
2.39	2.19	.71	2.47	2.13	2.06	1
1.90	1.75	.57	2.42	2.11	2.05	1
1.42	1.31	.43	2.38	2.10	2.04	1
.94	.87	.28	2.35	2.08	2.03	1

.47	.43	.14	2.32	2.06	2.02	1
.00	.00	.00	2.29	2.05	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.44	904.58	216.19	688.39	575.75	112.64	1
3.99	949.21	230.84	718.36	604.17	114.19	1
3.54	993.68	250.00	743.68	632.44	111.24	1
3.08	1038.00	269.65	768.35	660.56	107.80	1
2.64	1082.17	289.41	792.76	688.52	104.24	1
2.19	1126.17	309.19	816.98	716.32	100.66	1
1.75	1170.02	328.90	841.12	743.97	97.15	1
1.31	1213.72	350.03	863.69	771.46	92.23	1
.87	1257.26	375.85	881.41	798.80	82.61	1
.43	1300.66	400.68	899.98	825.99	73.98	1
.00	1343.92	425.37	918.54	853.04	65.50	1

Time = 3500. Degree of Consolidation = 84.%

Total Settlement = .552

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 3500. = .552

Settlement caused by Secondary Compression at time 3500. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.23	3.03	2.50	2.50	2.50	2
10.28	8.91	2.94	2.50	2.39	2.32	2
9.96	8.61	2.85	2.50	2.33	2.23	2
9.64	8.30	2.75	2.50	2.28	2.16	2
9.32	8.01	2.66	2.50	2.24	2.13	2
9.00	7.71	2.57	2.50	2.21	2.09	2
8.68	7.42	2.48	2.50	2.18	2.06	2
8.36	7.13	2.39	2.50	2.16	2.04	2
8.04	6.84	2.30	2.50	2.14	2.03	2
7.72	6.56	2.21	2.50	2.12	2.01	2
7.40	6.27	2.11	2.50	2.11	2.00	2
7.40	6.27	2.11	2.50	2.11	2.00	3
7.04	5.95	2.01	2.50	2.09	1.98	3
6.68	5.63	1.91	2.50	2.08	1.96	3
6.32	5.32	1.81	2.50	2.06	1.95	3
5.96	5.00	1.70	2.50	2.05	1.93	3
5.60	4.69	1.60	2.50	2.04	1.91	3
5.24	4.38	1.50	2.50	2.02	1.90	3
4.88	4.07	1.39	2.50	2.01	1.88	3
4.52	3.76	1.29	2.50	2.00	1.86	3
4.16	3.45	1.19	2.50	1.99	1.84	3
3.80	3.15	1.09	2.50	1.97	1.83	3
3.80	3.15	1.09	2.50	1.97	1.83	2
3.42	2.82	.98	2.50	1.96	1.81	2
3.04	2.50	.87	2.50	1.94	1.79	2
2.66	2.19	.76	2.50	1.93	1.77	2
2.28	1.87	.65	2.50	1.91	1.76	2
1.90	1.55	.54	2.50	1.90	1.75	2
1.52	1.24	.43	2.50	1.88	1.74	2
1.14	.93	.33	2.50	1.87	1.73	2
.76	.62	.22	2.50	1.85	1.73	2

.38	.31	.11	2.50	1.84	1.72	2
.00	.00	.00	2.50	1.82	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.23	.00	.00	.00	.00	.00	2
8.91	29.54	4.42	25.12	19.62	5.50	2
8.61	58.63	9.45	49.18	38.78	10.40	2
8.30	87.41	13.62	73.78	57.63	16.16	2
8.01	115.92	18.05	97.87	76.21	21.66	2
7.71	144.22	23.20	121.02	94.58	26.44	2
7.42	172.35	27.30	145.05	112.79	32.26	2
7.13	200.36	30.81	169.55	130.87	38.68	2
6.84	228.24	35.67	192.57	148.83	43.75	2
6.56	256.03	40.90	215.12	166.68	48.44	2
6.27	283.72	45.54	238.18	184.45	53.73	2
6.27	283.72	45.54	238.18	184.45	53.73	3
5.95	314.78	50.85	263.94	204.35	59.59	3
5.63	345.74	55.64	290.10	224.14	65.97	3
5.32	376.61	60.04	316.57	243.83	72.73	3
5.00	407.39	64.29	343.10	263.45	79.65	3
4.69	438.09	72.57	365.52	282.98	82.54	3
4.38	468.71	80.95	387.76	302.43	85.33	3
4.07	499.25	89.43	409.82	321.80	88.01	3
3.76	529.70	98.02	431.68	341.09	90.59	3
3.45	560.08	106.72	453.35	360.30	93.06	3
3.15	590.36	115.54	474.82	379.41	95.41	3
3.15	590.36	115.54	474.82	379.41	95.41	2
2.82	622.24	124.97	497.27	399.50	97.76	2
2.50	654.02	134.54	519.48	419.49	99.99	2
2.19	685.70	144.24	541.46	439.39	102.07	2
1.87	717.28	154.08	563.19	459.18	104.02	2
1.55	748.76	164.07	584.69	478.87	105.82	2
1.24	780.13	174.20	605.93	498.46	107.48	2
.93	811.40	184.47	626.93	517.94	108.99	2
.62	842.57	194.90	647.67	537.32	110.36	2
.31	873.63	205.47	668.16	556.59	111.57	2
.00	904.58	216.19	688.39	575.75	112.64	2

Time = 3500. Degree of Consolidation = 79.%

Total Settlement = 1.373

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 3500. = 1.373

Settlement caused by Secondary Compression at time 3500. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.67

***** Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.41	1.42	3.00	2.18	2.11	1
4.44	3.96	1.28	2.83	2.17	2.10	1
3.91	3.51	1.14	2.70	2.15	2.09	1
3.39	3.06	.99	2.60	2.14	2.08	1
2.88	2.62	.85	2.52	2.12	2.07	1

2.39	2.18	.71	2.47	2.11	2.06	1
1.90	1.74	.57	2.42	2.09	2.05	1
1.42	1.30	.43	2.38	2.08	2.04	1
.94	.87	.28	2.35	2.06	2.03	1
.47	.43	.14	2.32	2.05	2.02	1
.00	.00	.00	2.29	2.04	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.41	895.46	254.94	640.52	566.63	73.89	1
3.96	939.76	271.15	668.61	594.72	73.89	1
3.51	983.92	287.67	696.25	622.68	73.57	1
3.06	1027.96	304.34	723.62	650.51	73.10	1
2.62	1071.86	321.07	750.79	678.21	72.58	1
2.18	1115.63	337.82	777.81	705.78	72.03	1
1.74	1159.27	358.13	801.14	733.21	67.93	1
1.30	1202.77	380.08	822.70	760.51	62.18	1
.87	1246.16	401.36	844.80	787.69	57.11	1
.43	1289.42	422.33	867.08	814.75	52.34	1
.00	1332.56	445.79	886.77	841.68	45.08	1

Time = 4001. Degree of Consolidation = 90.%

Total Settlement = .588

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 4001. = .588

Settlement caused by Secondary Compression at time 4001. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.08	3.03	2.50	2.50	2.50	2
10.28	8.77	2.94	2.50	2.36	2.32	2
9.96	8.46	2.85	2.50	2.28	2.23	2
9.64	8.17	2.75	2.50	2.22	2.16	2
9.32	7.88	2.66	2.50	2.18	2.13	2
9.00	7.59	2.57	2.50	2.15	2.09	2
8.68	7.30	2.48	2.50	2.13	2.06	2
8.36	7.01	2.39	2.50	2.11	2.04	2
8.04	6.73	2.30	2.50	2.09	2.03	2
7.72	6.45	2.21	2.50	2.08	2.01	2
7.40	6.17	2.11	2.50	2.06	2.00	2
7.40	6.17	2.11	2.50	2.06	2.00	3
7.04	5.85	2.01	2.50	2.05	1.98	3
6.68	5.54	1.91	2.50	2.04	1.96	3
6.32	5.23	1.81	2.50	2.02	1.95	3
5.96	4.92	1.70	2.50	2.01	1.93	3
5.60	4.61	1.60	2.50	1.99	1.91	3
5.24	4.30	1.50	2.50	1.98	1.90	3
4.88	4.00	1.39	2.50	1.97	1.88	3
4.52	3.69	1.29	2.50	1.95	1.86	3
4.16	3.39	1.19	2.50	1.94	1.84	3
3.80	3.09	1.09	2.50	1.92	1.83	3
3.80	3.09	1.09	2.50	1.92	1.83	2
3.42	2.77	.98	2.50	1.91	1.81	2
3.04	2.46	.87	2.50	1.89	1.79	2
2.66	2.14	.76	2.50	1.88	1.77	2
2.28	1.83	.65	2.50	1.86	1.76	2

1.90	1.52	.54	2.50	1.85	1.75	2
1.52	1.21	.43	2.50	1.83	1.74	2
1.14	.91	.33	2.50	1.81	1.73	2
.76	.60	.22	2.50	1.80	1.73	2
.38	.30	.11	2.50	1.78	1.72	2
.00	.00	.00	2.50	1.76	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.08	.00	.00	.00	.00	.00	2
8.77	29.44	7.18	22.26	19.51	2.75	2
8.46	58.28	13.66	44.62	38.43	6.20	2
8.17	86.74	20.61	66.13	56.96	9.17	2
7.88	114.92	27.02	87.90	75.22	12.68	2
7.59	142.91	31.91	111.00	93.27	17.73	2
7.30	170.74	39.42	131.31	111.18	20.14	2
7.01	198.45	45.56	152.89	128.96	23.93	2
6.73	226.06	50.81	175.25	146.64	28.61	2
6.45	253.58	55.47	198.11	164.23	33.87	2
6.17	281.02	59.74	221.28	181.75	39.53	2
6.17	281.02	59.74	221.28	181.75	39.53	3
5.85	311.80	64.61	247.19	201.36	45.83	3
5.54	342.49	73.76	268.73	220.89	47.84	3
5.23	373.10	82.94	290.16	240.33	49.83	3
4.92	403.61	92.12	311.50	259.67	51.83	3
4.61	434.04	101.29	332.75	278.93	53.82	3
4.30	464.38	110.47	353.91	298.10	55.81	3
4.00	494.63	119.67	374.95	317.18	57.77	3
3.69	524.79	128.92	395.87	336.17	59.69	3
3.39	554.86	138.22	416.64	355.08	61.56	3
3.09	584.83	147.59	437.24	373.89	63.36	3
3.09	584.83	147.59	437.24	373.89	63.36	2
2.77	616.38	157.59	458.79	393.64	65.15	2
2.46	647.82	167.70	480.12	413.30	66.82	2
2.14	679.16	177.95	501.21	432.85	68.36	2
1.83	710.39	188.35	522.04	452.29	69.75	2
1.52	741.52	198.92	542.59	471.63	70.96	2
1.21	772.53	209.69	562.85	490.86	71.99	2
.91	803.44	220.65	582.78	509.97	72.81	2
.60	834.23	231.84	602.39	528.98	73.41	2
.30	864.91	243.27	621.64	547.86	73.77	2
.00	895.46	254.94	640.52	566.63	73.89	2

Time = 4001. Degree of Consolidation = 87.%

Total Settlement = 1.519

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 4001. = 1.519

Settlement caused by Secondary Compression at time 4001. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.49

***** Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.39	1.42	3.00	2.17	2.11	1

4.44	3.94	1.28	2.83	2.15	2.10	1
3.91	3.50	1.14	2.70	2.14	2.09	1
3.39	3.05	.99	2.60	2.12	2.08	1
2.88	2.61	.85	2.52	2.11	2.07	1
2.39	2.17	.71	2.47	2.09	2.06	1
1.90	1.73	.57	2.42	2.08	2.05	1
1.42	1.30	.43	2.38	2.06	2.04	1
.94	.86	.28	2.35	2.05	2.03	1
.47	.43	.14	2.32	2.04	2.02	1
.00	.00	.00	2.29	2.03	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.39	890.03	266.08	623.95	561.20	62.75	1
3.94	934.22	284.71	649.52	589.19	60.33	1
3.50	978.28	302.71	675.57	617.04	58.53	1
3.05	1022.19	320.11	702.08	644.74	57.34	1
2.61	1065.96	336.97	729.00	672.32	56.68	1
2.17	1109.61	356.53	753.08	699.76	53.32	1
1.73	1153.13	377.61	775.52	727.07	48.44	1
1.30	1196.53	397.71	798.82	754.27	44.55	1
.86	1239.81	416.94	822.87	781.35	41.52	1
.43	1282.99	438.11	844.88	808.32	36.56	1
.00	1326.06	458.77	867.29	835.19	32.10	1

Time = 4500. Degree of Consolidation = 92.%

Total Settlement = .605

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 4500. = .605

Settlement caused by Secondary Compression at time 4500. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.99	3.03	2.50	2.50	2.50	2
10.28	8.68	2.94	2.50	2.34	2.32	2
9.96	8.38	2.85	2.50	2.25	2.23	2
9.64	8.09	2.75	2.50	2.19	2.16	2
9.32	7.80	2.66	2.50	2.15	2.13	2
9.00	7.51	2.57	2.50	2.12	2.09	2
8.68	7.23	2.48	2.50	2.10	2.06	2
8.36	6.94	2.39	2.50	2.08	2.04	2
8.04	6.66	2.30	2.50	2.06	2.03	2
7.72	6.38	2.21	2.50	2.05	2.01	2
7.40	6.11	2.11	2.50	2.03	2.00	2
7.40	6.11	2.11	2.50	2.03	2.00	3
7.04	5.79	2.01	2.50	2.02	1.98	3
6.68	5.48	1.91	2.50	2.00	1.96	3
6.32	5.18	1.81	2.50	1.99	1.95	3
5.96	4.87	1.70	2.50	1.97	1.93	3
5.60	4.56	1.60	2.50	1.96	1.91	3
5.24	4.26	1.50	2.50	1.94	1.90	3
4.88	3.96	1.39	2.50	1.93	1.88	3
4.52	3.66	1.29	2.50	1.92	1.86	3
4.16	3.36	1.19	2.50	1.90	1.84	3
3.80	3.06	1.09	2.50	1.89	1.83	3
3.80	3.06	1.09	2.50	1.89	1.83	2

3.42	2.75	.98	2.50	1.87	1.81	2
3.04	2.44	.87	2.50	1.86	1.79	2
2.66	2.13	.76	2.50	1.85	1.77	2
2.28	1.82	.65	2.50	1.83	1.76	2
1.90	1.51	.54	2.50	1.82	1.75	2
1.52	1.21	.43	2.50	1.80	1.74	2
1.14	.90	.33	2.50	1.79	1.73	2
.76	.60	.22	2.50	1.78	1.73	2
.38	.30	.11	2.50	1.77	1.72	2
.00	.00	.00	2.50	1.75	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.99	.00	.00	.00	.00	.00	2
8.68	29.38	8.80	20.57	19.45	1.12	2
8.38	58.07	16.23	41.85	38.22	3.63	2
8.09	86.36	25.49	60.86	56.58	4.29	2
7.80	114.37	31.87	82.49	74.66	7.83	2
7.51	142.18	41.13	101.06	92.55	8.51	2
7.23	169.85	48.41	121.44	110.29	11.15	2
6.94	197.40	54.48	142.93	127.91	15.01	2
6.66	224.85	59.74	165.12	145.44	19.68	2
6.38	252.21	64.90	187.31	162.87	24.44	2
6.11	279.49	74.09	205.41	180.22	25.18	2
6.11	279.49	74.09	205.41	180.22	25.18	3
5.79	310.09	84.44	225.65	199.65	26.00	3
5.48	340.59	94.61	245.97	218.98	26.99	3
5.18	370.98	104.61	266.37	238.21	28.16	3
4.87	401.29	114.46	286.83	257.34	29.48	3
4.56	431.49	124.15	307.35	276.38	30.96	3
4.26	461.61	133.70	327.91	295.33	32.58	3
3.96	491.63	143.11	348.52	314.18	34.33	3
3.66	521.56	152.40	369.16	332.95	36.21	3
3.36	551.40	161.58	389.83	351.62	38.20	3
3.06	581.16	170.64	410.52	370.21	40.31	3
3.06	581.16	170.64	410.52	370.21	40.31	2
2.75	612.47	180.24	432.23	389.73	42.50	2
2.44	643.68	189.72	453.96	409.16	44.80	2
2.13	674.80	199.09	475.71	428.49	47.23	2
1.82	705.82	208.33	497.49	447.72	49.77	2
1.51	736.75	217.45	519.30	466.86	52.44	2
1.21	767.58	226.43	541.15	485.91	55.24	2
.90	798.33	235.27	563.05	504.86	58.19	2
.60	828.98	243.95	585.03	523.73	61.30	2
.30	859.55	252.45	607.09	542.51	64.59	2
.00	890.03	266.08	623.95	561.20	62.75	2

Time = 4500. Degree of Consolidation = 92.%

Total Settlement = 1.606

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 4500. = 1.606

Settlement caused by Secondary Compression at time 4500. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.39

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.39	1.42	3.00	2.17	2.11	1
4.44	3.94	1.28	2.83	2.15	2.10	1
3.91	3.49	1.14	2.70	2.13	2.09	1
3.39	3.05	.99	2.60	2.12	2.08	1
2.88	2.61	.85	2.52	2.10	2.07	1
2.39	2.17	.71	2.47	2.09	2.06	1
1.90	1.73	.57	2.42	2.07	2.05	1
1.42	1.30	.43	2.38	2.06	2.04	1
.94	.86	.28	2.35	2.05	2.03	1
.47	.43	.14	2.32	2.04	2.02	1
.00	.00	.00	2.29	2.03	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.39	888.72	268.70	620.02	559.89	60.13	1
3.94	932.89	288.05	644.85	587.86	56.99	1
3.49	976.92	306.59	670.32	615.68	54.65	1
3.05	1020.80	324.36	696.44	643.35	53.08	1
2.61	1064.54	341.43	723.10	670.89	52.22	1
2.17	1108.15	362.58	745.57	698.29	47.28	1
1.73	1151.63	383.39	768.24	725.58	42.67	1
1.30	1195.00	403.08	791.92	752.74	39.18	1
.86	1238.25	422.11	816.14	779.79	36.35	1
.43	1281.40	443.09	838.32	806.73	31.58	1
.00	1324.45	462.91	861.54	833.58	27.96	1

Time = 5001. Degree of Consolidation = 93.%

Total Settlement = .610

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 5001. = .610

Settlement caused by Secondary Compression at time 5001. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.97	3.03	2.50	2.50	2.50	2
10.28	8.66	2.94	2.50	2.33	2.32	2
9.96	8.36	2.85	2.50	2.24	2.23	2
9.64	8.07	2.75	2.50	2.19	2.16	2
9.32	7.78	2.66	2.50	2.15	2.13	2
9.00	7.49	2.57	2.50	2.12	2.09	2
8.68	7.21	2.48	2.50	2.09	2.06	2
8.36	6.93	2.39	2.50	2.07	2.04	2
8.04	6.65	2.30	2.50	2.06	2.03	2
7.72	6.37	2.21	2.50	2.04	2.01	2
7.40	6.09	2.11	2.50	2.03	2.00	2
7.40	6.09	2.11	2.50	2.03	2.00	3
7.04	5.78	2.01	2.50	2.01	1.98	3
6.68	5.47	1.91	2.50	2.00	1.96	3
6.32	5.16	1.81	2.50	1.98	1.95	3
5.96	4.86	1.70	2.50	1.96	1.93	3
5.60	4.55	1.60	2.50	1.95	1.91	3
5.24	4.25	1.50	2.50	1.94	1.90	3
4.88	3.95	1.39	2.50	1.92	1.88	3

4.52	3.65	1.29	2.50	1.91	1.86	3
4.16	3.35	1.19	2.50	1.89	1.84	3
3.80	3.05	1.09	2.50	1.88	1.83	3
3.80	3.05	1.09	2.50	1.88	1.83	2
3.42	2.74	.98	2.50	1.86	1.81	2
3.04	2.43	.87	2.50	1.85	1.79	2
2.66	2.12	.76	2.50	1.84	1.77	2
2.28	1.82	.65	2.50	1.82	1.76	2
1.90	1.51	.54	2.50	1.81	1.75	2
1.52	1.20	.43	2.50	1.80	1.74	2
1.14	.90	.33	2.50	1.79	1.73	2
.76	.60	.22	2.50	1.77	1.73	2
.38	.30	.11	2.50	1.76	1.72	2
.00	.00	.00	2.50	1.75	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.97	.00	.00	00	.00	.00	2
8.66	29.36	9.14	20.23	19.44	.79	2
8.36	58.04	16.96	41.07	38.18	2.89	2
8.07	86.29	26.27	60.02	56.51	3.51	2
7.78	114.28	33.31	80.97	74.57	6.40	2
7.49	142.06	42.69	99.37	92.43	6.94	2
7.21	169.70	50.02	119.68	110.14	9.54	2
6.93	197.22	56.15	141.07	127.73	13.34	2
6.65	224.64	61.48	163.17	145.23	17.94	2
6.37	251.97	68.80	183.18	162.63	20.55	2
6.09	279.22	78.40	200.82	179.95	20.87	2
6.09	279.22	78.40	200.82	179.95	20.87	3
5.78	309.77	89.21	220.56	199.33	21.23	3
5.47	340.22	99.80	240.41	218.61	21.80	3
5.16	370.56	110.18	260.38	237.79	22.59	3
4.86	400.81	120.34	280.46	256.87	23.60	3
4.55	430.96	130.30	300.66	275.85	24.81	3
4.25	461.01	140.05	320.96	294.73	26.22	3
3.95	490.97	149.60	341.37	313.53	27.84	3
3.65	520.84	158.96	361.88	332.23	29.65	3
3.35	550.62	168.11	382.50	350.84	31.67	3
3.05	580.31	177.08	403.23	369.36	33.87	3
3.05	580.31	177.08	403.23	369.36	33.87	2
2.74	611.55	186.55	425.00	388.82	36.19	2
2.43	642.70	195.81	446.90	408.18	38.72	2
2.12	673.76	204.85	468.91	427.45	41.47	2
1.82	704.72	213.67	491.05	446.62	44.43	2
1.51	735.60	222.28	513.32	465.71	47.61	2
1.20	766.39	230.67	535.72	484.71	51.00	2
.90	797.09	238.84	558.25	503.63	54.62	2
.60	827.71	246.79	580.93	522.46	58.47	2
.30	858.26	254.50	603.75	541.21	62.54	2
.00	888.72	268.70	620.02	559.89	60.14	2

Time = 5001. Degree of Consolidation = 93.%

Total Settlement = 1.627

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 5001. = 1.627

Settlement caused by Secondary Compression at time 5001. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.36

*****Current Conditions in Compressible Foundation*****

***** Coordinates *****

***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.38	1.42	3.00	2.17	2.11	1
4.44	3.94	1.28	2.83	2.15	2.10	1
3.91	3.49	1.14	2.70	2.13	2.09	1
3.39	3.05	.99	2.60	2.12	2.08	1
2.88	2.61	.85	2.52	2.10	2.07	1
2.39	2.17	.71	2.47	2.09	2.06	1
1.90	1.73	.57	2.42	2.07	2.05	1
1.42	1.30	.43	2.38	2.06	2.04	1
.94	.86	.28	2.35	2.05	2.03	1
.47	.43	.14	2.32	2.04	2.02	1
.00	.00	.00	2.29	2.03	2.01	1

***** Stresses *****

***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.38	888.25	269.47	618.78	559.42	59.36	1
3.94	932.42	289.01	643.40	587.38	56.02	1
3.49	976.43	307.70	668.73	615.19	53.54	1
3.05	1020.30	325.57	694.74	642.86	51.87	1
2.61	1064.04	342.70	721.34	670.39	50.95	1
2.17	1107.64	364.28	743.35	697.78	45.57	1
1.73	1151.11	385.02	766.09	725.05	41.04	1
1.30	1194.47	404.60	789.87	752.21	37.66	1
.86	1237.72	423.73	813.99	779.25	34.74	1
.43	1280.86	444.48	836.37	806.19	30.19	1
.00	1323.90	464.08	859.82	833.03	26.80	1

Time = 5502. Degree of Consolidation = 93.%

Total Settlement = .611

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 5502. = .611

Settlement caused by Secondary Compression at time 5502. = .000

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

***** Coordinates *****

***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.97	3.03	2.50	2.50	2.50	2
10.28	8.65	2.94	2.50	2.33	2.32	2
9.96	8.35	2.85	2.50	2.24	2.23	2
9.64	8.06	2.75	2.50	2.18	2.16	2
9.32	7.77	2.66	2.50	2.14	2.13	2
9.00	7.48	2.57	2.50	2.11	2.09	2
8.68	7.20	2.48	2.50	2.09	2.06	2
8.36	6.92	2.39	2.50	2.07	2.04	2
8.04	6.64	2.30	2.50	2.06	2.03	2
7.72	6.36	2.21	2.50	2.04	2.01	2
7.40	6.08	2.11	2.50	2.03	2.00	2
7.40	6.08	2.11	2.50	2.03	2.00	3
7.04	5.77	2.01	2.50	2.01	1.98	3
6.68	5.46	1.91	2.50	1.99	1.96	3
6.32	5.16	1.81	2.50	1.98	1.95	3

5.96	4.85	1.70	2.50	1.96	1.93	3
5.60	4.55	1.60	2.50	1.95	1.91	3
5.24	4.25	1.50	2.50	1.93	1.90	3
4.88	3.94	1.39	2.50	1.92	1.88	3
4.52	3.65	1.29	2.50	1.90	1.86	3
4.16	3.35	1.19	2.50	1.89	1.84	3
3.80	3.05	1.09	2.50	1.88	1.83	3
3.80	3.05	1.09	2.50	1.88	1.83	2
3.42	2.74	.98	2.50	1.86	1.81	2
3.04	2.43	.87	2.50	1.85	1.79	2
2.66	2.12	.76	2.50	1.83	1.77	2
2.28	1.81	.65	2.50	1.82	1.76	2
1.90	1.51	.54	2.50	1.81	1.75	2
1.52	1.20	.43	2.50	1.80	1.74	2
1.14	.90	.33	2.50	1.78	1.73	2
.76	.60	.22	2.50	1.77	1.73	2
.38	.30	.11	2.50	1.76	1.72	2
.00	.00	.00	2.50	1.75	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.97	.00	.00	.00	.00	.00	2
8.65	29.36	9.28	20.08	19.43	.65	2
8.35	58.02	17.27	40.75	38.16	2.59	2
8.06	86.26	26.59	59.68	56.48	3.20	2
7.77	114.24	33.93	80.31	74.53	5.78	2
7.48	142.01	43.31	98.70	92.38	6.33	2
7.20	169.64	50.65	118.99	110.08	8.91	2
6.92	197.15	56.80	140.35	127.66	12.69	2
6.64	224.56	62.14	162.41	145.14	17.27	2
6.36	251.87	70.28	181.59	162.53	19.06	2
6.08	279.11	80.03	199.07	179.84	19.24	2
6.08	279.11	80.03	199.07	179.84	19.24	3
5.77	309.64	91.00	218.64	199.20	19.43	3
5.46	340.07	101.74	238.33	218.47	19.87	3
5.16	370.40	112.24	258.16	237.62	20.54	3
4.85	400.62	122.50	278.12	256.68	21.44	3
4.55	430.75	132.53	298.22	275.64	22.58	3
4.25	460.78	142.33	318.45	294.51	23.94	3
3.94	490.72	151.91	338.81	313.28	25.54	3
3.65	520.57	161.26	359.31	331.95	27.35	3
3.35	550.32	170.38	379.94	350.54	29.40	3
3.05	579.99	179.29	400.71	369.04	31.66	3
3.05	579.99	179.29	400.71	369.04	31.66	2
2.74	611.21	188.69	422.53	388.48	34.05	2
2.43	642.34	197.84	444.50	407.82	36.68	2
2.12	673.38	206.76	466.62	427.07	39.56	2
1.81	704.33	215.42	488.90	446.22	42.68	2
1.51	735.18	223.85	511.34	465.30	46.04	2
1.20	765.96	232.03	533.93	484.28	49.65	2
.90	796.65	239.97	556.68	503.18	53.49	2
.60	827.26	247.67	579.59	522.01	57.58	2
.30	857.79	255.13	602.66	540.75	61.91	2
.00	888.25	269.47	618.78	559.42	59.36	2

Time = 5502. Degree of Consolidation = 94.%

Total Settlement = 1.635

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 5502. = 1.635

Settlement caused by Secondary Compression at time 5502. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.35

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.38	1.42	3.00	2.17	2.11	1
4.44	3.94	1.28	2.83	2.15	2.10	1
3.91	3.49	1.14	2.70	2.13	2.09	1
3.39	3.05	.99	2.60	2.12	2.08	1
2.88	2.61	.85	2.52	2.10	2.07	1
2.39	2.17	.71	2.47	2.09	2.06	1
1.90	1.73	.57	2.42	2.07	2.05	1
1.42	1.30	.43	2.38	2.06	2.04	1
.94	.86	.28	2.35	2.05	2.03	1
.47	.43	.14	2.32	2.04	2.02	1
.00	.00	.00	2.29	2.03	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.38	888.09	269.72	618.37	559.26	59.11	1
3.94	932.25	289.32	642.94	587.22	55.72	1
3.49	976.27	308.04	668.22	615.03	53.20	1
3.05	1020.13	325.93	694.20	642.69	51.51	1
2.61	1063.86	343.08	720.79	670.22	50.57	1
2.17	1107.46	364.79	742.67	697.61	45.06	1
1.73	1150.93	385.50	765.43	724.88	40.55	1
1.30	1194.29	405.05	789.24	752.03	37.21	1
.86	1237.53	424.20	813.33	779.07	34.26	1
.43	1280.67	444.89	835.78	806.00	29.77	1
.00	1323.71	464.42	859.29	832.84	26.45	1

Time = 6001. Degree of Consolidation = 93.%

Total Settlement = .611

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 6001. = .611

Settlement caused by Secondary Compression at time 6001. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.96	3.03	2.50	2.50	2.50	2
10.28	8.65	2.94	2.50	2.33	2.32	2
9.96	8.35	2.85	2.50	2.24	2.23	2
9.64	8.06	2.75	2.50	2.18	2.16	2
9.32	7.77	2.66	2.50	2.14	2.13	2
9.00	7.48	2.57	2.50	2.11	2.09	2
8.68	7.20	2.48	2.50	2.09	2.06	2
8.36	6.92	2.39	2.50	2.07	2.04	2
8.04	6.64	2.30	2.50	2.06	2.03	2
7.72	6.36	2.21	2.50	2.04	2.01	2
7.40	6.08	2.11	2.50	2.02	2.00	2

7.40	6.08	2.11	2.50	2.02	2.00	3
7.04	5.77	2.01	2.50	2.01	1.98	3
6.68	5.46	1.91	2.50	1.99	1.96	3
6.32	5.16	1.81	2.50	1.98	1.95	3
5.96	4.85	1.70	2.50	1.96	1.93	3
5.60	4.55	1.60	2.50	1.95	1.91	3
5.24	4.24	1.50	2.50	1.93	1.90	3
4.88	3.94	1.39	2.50	1.92	1.88	3
4.52	3.64	1.29	2.50	1.90	1.86	3
4.16	3.35	1.19	2.50	1.89	1.84	3
3.80	3.05	1.09	2.50	1.87	1.83	3
3.80	3.05	1.09	2.50	1.87	1.83	2
3.42	2.74	.98	2.50	1.86	1.81	2
3.04	2.43	.87	2.50	1.85	1.79	2
2.66	2.12	.76	2.50	1.83	1.77	2
2.28	1.81	.65	2.50	1.82	1.76	2
1.90	1.51	.54	2.50	1.81	1.75	2
1.52	1.20	.43	2.50	1.80	1.74	2
1.14	.90	.33	2.50	1.78	1.73	2
.76	.60	.22	2.50	1.77	1.73	2
.38	.30	.11	2.50	1.76	1.72	2
.00	.00	.00	2.50	1.75	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.96	.00	.00	.00	.00	.00	2
8.65	29.36	9.33	20.03	19.43	.60	2
8.35	58.01	17.38	40.64	38.16	2.48	2
8.06	86.25	26.70	59.56	56.47	3.08	2
7.77	114.22	34.15	80.07	74.51	5.56	2
7.48	141.99	43.52	98.47	92.36	6.11	2
7.20	169.62	50.87	118.75	110.06	8.69	2
6.92	197.13	57.03	140.09	127.64	12.46	2
6.64	224.53	62.38	162.15	145.11	17.04	2
6.36	251.84	70.80	181.04	162.50	18.54	2
6.08	279.07	80.60	198.46	179.80	18.67	2
6.08	279.07	80.60	198.46	179.80	18.67	3
5.77	309.60	91.63	217.96	199.16	18.80	3
5.46	340.02	102.42	237.60	218.41	19.19	3
5.16	370.34	112.96	257.38	237.57	19.82	3
4.85	400.56	123.26	277.30	256.62	20.69	3
4.55	430.68	133.31	297.37	275.57	21.80	3
4.24	460.70	143.13	317.57	294.43	23.14	3
3.94	490.63	152.71	337.92	313.19	24.73	3
3.64	520.47	162.06	358.41	331.86	26.55	3
3.35	550.22	171.17	379.04	350.44	28.61	3
3.05	579.88	180.06	399.82	368.93	30.89	3
3.05	579.88	180.06	399.82	368.93	30.89	2
2.74	611.10	189.43	421.66	388.36	33.30	2
2.43	642.22	198.55	443.67	407.69	35.97	2
2.12	673.25	207.42	465.83	426.93	38.90	2
1.81	704.19	216.03	488.16	446.09	42.07	2
1.51	735.04	224.39	510.65	465.15	45.50	2
1.20	765.81	232.50	533.31	484.13	49.18	2
.90	796.49	240.36	556.14	503.03	53.11	2
.60	827.10	247.97	579.13	521.85	57.28	2
.30	857.63	255.34	602.29	540.59	61.70	2
.00	888.09	269.72	618.37	559.26	59.11	2

Time = 6001. Degree of Consolidation = 94.%

Total Settlement = 1.637

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 6001. = 1.637

Settlement caused by Secondary Compression at time 6001. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.35

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.38	1.42	3.00	2.17	2.11	1
4.44	3.94	1.28	2.83	2.15	2.10	1
3.91	3.49	1.14	2.70	2.13	2.09	1
3.39	3.05	.99	2.60	2.12	2.08	1
2.88	2.61	.85	2.52	2.10	2.07	1
2.39	2.17	.71	2.47	2.09	2.06	1
1.90	1.73	.57	2.42	2.07	2.05	1
1.42	1.30	.43	2.38	2.06	2.04	1
.94	.86	.28	2.35	2.05	2.03	1
.47	.43	.14	2.32	2.04	2.02	1
.00	.00	.00	2.29	2.03	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.38	888.03	269.80	618.23	559.20	59.03	1
3.94	932.20	289.41	642.78	587.16	55.62	1
3.49	976.21	308.15	668.06	614.97	53.09	1
3.05	1020.08	326.05	694.03	642.63	51.40	1
2.61	1063.80	343.19	720.61	670.16	50.46	1
2.17	1107.40	364.95	742.45	697.55	44.91	1
1.73	1150.87	385.65	765.22	724.81	40.41	1
1.30	1194.23	405.19	789.04	751.96	37.07	1
.86	1237.47	424.35	813.12	779.00	34.11	1
.43	1280.61	445.02	835.59	805.94	29.65	1
.00	1323.65	464.53	859.12	832.77	26.35	1

Time = 6501. Degree of Consolidation = 93.%

Total Settlement = .612

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 6501. = .612

Settlement caused by Secondary Compression at time 6501. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.96	3.03	2.50	2.50	2.50	2
10.28	8.65	2.94	2.50	2.33	2.32	2
9.96	8.35	2.85	2.50	2.24	2.23	2
9.64	8.06	2.75	2.50	2.18	2.16	2
9.32	7.77	2.66	2.50	2.14	2.13	2
9.00	7.48	2.57	2.50	2.11	2.09	2
8.68	7.20	2.48	2.50	2.09	2.06	2

8.36	6.92	2.39	2.50	2.07	2.04	2
8.04	6.64	2.30	2.50	2.05	2.03	2
7.72	6.36	2.21	2.50	2.04	2.01	2
7.40	6.08	2.11	2.50	2.02	2.00	2
7.40	6.08	2.11	2.50	2.02	2.00	3
7.04	5.77	2.01	2.50	2.01	1.98	3
6.68	5.46	1.91	2.50	1.99	1.96	3
6.32	5.15	1.81	2.50	1.98	1.95	3
5.96	4.85	1.70	2.50	1.96	1.93	3
5.60	4.55	1.60	2.50	1.94	1.91	3
5.24	4.24	1.50	2.50	1.93	1.90	3
4.88	3.94	1.39	2.50	1.92	1.88	3
4.52	3.64	1.29	2.50	1.90	1.86	3
4.16	3.35	1.19	2.50	1.89	1.84	3
3.80	3.05	1.09	2.50	1.87	1.83	3
3.80	3.05	1.09	2.50	1.87	1.83	2
3.42	2.74	.98	2.50	1.86	1.81	2
3.04	2.43	.87	2.50	1.85	1.79	2
2.66	2.12	.76	2.50	1.83	1.77	2
2.28	1.81	.65	2.50	1.82	1.76	2
1.90	1.51	.54	2.50	1.81	1.75	2
1.52	1.20	.43	2.50	1.80	1.74	2
1.14	.90	.33	2.50	1.78	1.73	2
.76	.60	.22	2.50	1.77	1.73	2
.38	.30	.11	2.50	1.76	1.72	2
.00	.00	.00	2.50	1.75	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.96	.00	.00	.00	.00	.00	2
8.65	29.35	9.34	20.01	19.43	.58	2
8.35	58.01	17.41	40.60	38.16	2.44	2
8.06	86.25	26.74	59.52	56.47	3.04	2
7.77	114.22	34.22	79.99	74.51	5.48	2
7.48	141.99	43.60	98.39	92.35	6.03	2
7.20	169.61	50.95	118.66	110.05	8.61	2
6.92	197.12	57.11	140.01	127.63	12.38	2
6.64	224.52	62.46	162.06	145.10	16.95	2
6.36	251.83	70.98	180.85	162.49	18.36	2
6.08	279.05	80.80	198.25	179.78	18.47	2
6.08	279.05	80.80	198.25	179.78	18.47	3
5.77	309.58	91.85	217.73	199.14	18.58	3
5.46	340.00	102.65	237.35	218.40	18.95	3
5.15	370.32	113.21	257.11	237.55	19.56	3
4.85	400.54	123.52	277.02	256.60	20.42	3
4.55	430.65	133.59	297.07	275.54	21.52	3
4.24	460.67	143.41	317.26	294.40	22.87	3
3.94	490.60	152.99	337.61	313.16	24.45	3
3.64	520.44	162.34	358.10	331.83	26.27	3
3.35	550.18	171.45	378.73	350.40	28.33	3
3.05	579.84	180.32	399.52	368.89	30.62	3
3.05	579.84	180.32	399.52	368.89	30.62	2
2.74	611.05	189.69	421.37	388.32	33.05	2
2.43	642.17	198.80	443.38	407.65	35.73	2
2.12	673.20	207.64	465.56	426.89	38.67	2
1.81	704.14	216.24	487.90	446.04	41.87	2
1.51	734.99	224.57	510.42	465.10	45.32	2
1.20	765.76	232.66	533.10	484.08	49.02	2
.90	796.44	240.49	555.95	502.98	52.98	2
.60	827.05	248.07	578.97	521.79	57.18	2
.30	857.58	255.41	602.17	540.54	61.63	2
.00	888.03	269.80	618.23	559.20	59.03	2

Time = 6501. Degree of Consolidation = 94.%

Total Settlement = 1.638

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 6501. = 1.638

Settlement caused by Secondary Compression at time 6501. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.35

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.38	1.42	3.00	2.17	2.11	1
4.44	3.94	1.28	2.83	2.15	2.10	1
3.91	3.49	1.14	2.70	2.13	2.09	1
3.39	3.05	.99	2.60	2.12	2.08	1
2.88	2.61	.85	2.52	2.10	2.07	1
2.39	2.17	.71	2.47	2.09	2.06	1
1.90	1.73	.57	2.42	2.07	2.05	1
1.42	1.30	.43	2.38	2.06	2.04	1
.94	.86	.28	2.35	2.05	2.03	1
.47	.43	.14	2.32	2.04	2.02	1
.00	.00	.00	2.29	2.03	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.38	888.01	269.83	618.18	559.18	59.00	1
3.94	932.18	289.44	642.74	587.14	55.59	1
3.49	976.19	308.18	668.01	614.95	53.06	1
3.05	1020.05	326.08	693.97	642.61	51.36	1
2.61	1063.78	343.22	720.56	670.14	50.42	1
2.17	1107.38	364.99	742.39	697.53	44.86	1
1.73	1150.85	385.69	765.16	724.79	40.36	1
1.30	1194.20	405.22	788.98	751.94	37.04	1
.86	1237.45	424.39	813.06	778.98	34.08	1
.43	1280.59	445.05	835.53	805.92	29.62	1
.00	1323.63	464.55	859.07	832.75	26.32	1

Time = 7000. Degree of Consolidation = 93.%

Total Settlement = .612

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 7000. = .612

Settlement caused by Secondary Compression at time 7000. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.96	3.03	2.50	2.50	2.50	2
10.28	8.65	2.94	2.50	2.33	2.32	2
9.96	8.35	2.85	2.50	2.24	2.23	2

9.64	8.06	2.75	2.50	2.18	2.16	2
9.32	7.77	2.66	2.50	2.14	2.13	2
9.00	7.48	2.57	2.50	2.11	2.09	2
8.68	7.20	2.48	2.50	2.09	2.06	2
8.36	6.92	2.39	2.50	2.07	2.04	2
8.04	6.64	2.30	2.50	2.05	2.03	2
7.72	6.36	2.21	2.50	2.04	2.01	2
7.40	6.08	2.11	2.50	2.02	2.00	2
7.40	6.08	2.11	2.50	2.02	2.00	3
7.04	5.77	2.01	2.50	2.01	1.98	3
6.68	5.46	1.91	2.50	1.99	1.96	3
6.32	5.15	1.81	2.50	1.98	1.95	3
5.96	4.85	1.70	2.50	1.96	1.93	3
5.60	4.55	1.60	2.50	1.94	1.91	3
5.24	4.24	1.50	2.50	1.93	1.90	3
4.88	3.94	1.39	2.50	1.92	1.88	3
4.52	3.64	1.29	2.50	1.90	1.86	3
4.16	3.35	1.19	2.50	1.89	1.84	3
3.80	3.05	1.09	2.50	1.87	1.83	3
3.80	3.05	1.09	2.50	1.87	1.83	2
3.42	2.74	.98	2.50	1.86	1.81	2
3.04	2.43	.87	2.50	1.85	1.79	2
2.66	2.12	.76	2.50	1.83	1.77	2
2.28	1.81	.65	2.50	1.82	1.76	2
1.90	1.51	.54	2.50	1.81	1.75	2
1.52	1.20	.43	2.50	1.80	1.74	2
1.14	.90	.33	2.50	1.78	1.73	2
.76	.60	.22	2.50	1.77	1.73	2
.38	.30	.11	2.50	1.76	1.72	2
.00	.00	.00	2.50	1.75	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.96	.00	.00	.00	.00	.00	2
8.65	29.35	9.35	20.01	19.43	.58	2
8.35	58.01	17.43	40.58	38.16	2.43	2
8.06	86.25	26.75	59.50	56.47	3.03	2
7.77	114.22	34.25	79.96	74.51	5.46	2
7.48	141.99	43.63	98.36	92.35	6.01	2
7.20	169.61	50.98	118.63	110.05	8.58	2
6.92	197.11	57.14	139.98	127.62	12.35	2
6.64	224.51	62.49	162.02	145.10	16.93	2
6.36	251.82	71.04	180.78	162.48	18.30	2
6.08	279.05	80.87	198.18	179.78	18.40	2
6.08	279.05	80.87	198.18	179.78	18.40	3
5.77	309.58	91.93	217.65	199.14	18.51	3
5.46	340.00	102.74	237.26	218.39	18.87	3
5.15	370.31	113.30	257.02	237.54	19.48	3
4.85	400.53	123.61	276.92	256.59	20.33	3
4.55	430.64	133.68	296.97	275.54	21.43	3
4.24	460.66	143.51	317.16	294.39	22.77	3
3.94	490.59	153.09	337.50	313.15	24.35	3
3.64	520.43	162.44	357.99	331.81	26.17	3
3.35	550.17	171.54	378.63	350.39	28.24	3
3.05	579.83	180.42	399.41	368.88	30.53	3
3.05	579.83	180.42	399.41	368.88	30.53	2
2.74	611.04	189.78	421.26	388.30	32.96	2
2.43	642.16	198.88	443.28	407.63	35.64	2
2.12	673.18	207.72	465.46	426.87	38.59	2
1.81	704.12	216.31	487.81	446.02	41.79	2
1.51	734.97	224.64	510.34	465.08	45.25	2
1.20	765.74	232.71	533.03	484.06	48.97	2
.90	796.42	240.53	555.89	502.96	52.93	2
.60	827.03	248.11	578.92	521.77	57.15	2
.30	857.56	255.43	602.13	540.52	61.61	2
.00	888.01	269.83	618.18	559.18	59.00	2

Time = 7000. Degree of Consolidation = 94.%

Total Settlement = 1.639

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 7000. = 1.639

Settlement caused by Secondary Compression at time 7000. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.35

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.38	1.42	3.00	2.17	2.11	1
4.44	3.94	1.28	2.83	2.15	2.10	1
3.91	3.49	1.14	2.70	2.13	2.09	1
3.39	3.05	.99	2.60	2.12	2.08	1
2.88	2.61	.85	2.52	2.10	2.07	1
2.39	2.17	.71	2.47	2.09	2.06	1
1.90	1.73	.57	2.42	2.07	2.05	1
1.42	1.30	.43	2.38	2.06	2.04	1
.94	.86	.28	2.35	2.05	2.03	1
.47	.43	.14	2.32	2.04	2.02	1
.00	.00	.00	2.29	2.03	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.38	888.01	269.84	618.17	559.18	58.99	1
3.94	932.17	289.45	642.72	587.14	55.59	1
3.49	976.18	308.19	668.00	614.94	53.05	1
3.05	1020.05	326.09	693.96	642.61	51.36	1
2.61	1063.78	343.23	720.55	670.13	50.42	1
2.17	1107.37	365.00	742.38	697.52	44.86	1
1.73	1150.84	385.70	765.15	724.79	40.36	1
1.30	1194.20	405.23	788.97	751.94	37.04	1
.86	1237.44	424.39	813.05	778.98	34.07	1
.43	1280.58	445.06	835.52	805.91	29.61	1
.00	1323.62	464.55	859.07	832.75	26.32	1

Time = 7501. Degree of Consolidation = 93.%

Total Settlement = .612

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 7501. = .612

Settlement caused by Secondary Compression at time 7501. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.96	3.03	2.50	2.50	2.50	2
10.28	8.65	2.94	2.50	2.33	2.32	2
9.96	8.35	2.85	2.50	2.24	2.23	2
9.64	8.06	2.75	2.50	2.18	2.16	2
9.32	7.77	2.66	2.50	2.14	2.13	2
9.00	7.48	2.57	2.50	2.11	2.09	2
8.68	7.20	2.48	2.50	2.09	2.06	2
8.36	6.92	2.39	2.50	2.07	2.04	2
8.04	6.64	2.30	2.50	2.05	2.03	2
7.72	6.36	2.21	2.50	2.04	2.01	2
7.40	6.08	2.11	2.50	2.02	2.00	2
7.40	6.08	2.11	2.50	2.02	2.00	3
7.04	5.77	2.01	2.50	2.01	1.98	3
6.68	5.46	1.91	2.50	1.99	1.96	3
6.32	5.15	1.81	2.50	1.98	1.95	3
5.96	4.85	1.70	2.50	1.96	1.93	3
5.60	4.55	1.60	2.50	1.94	1.91	3
5.24	4.24	1.50	2.50	1.93	1.90	3
4.88	3.94	1.39	2.50	1.92	1.88	3
4.52	3.64	1.29	2.50	1.90	1.86	3
4.16	3.35	1.19	2.50	1.89	1.84	3
3.80	3.05	1.09	2.50	1.87	1.83	3
3.80	3.05	1.09	2.50	1.87	1.83	2
3.42	2.74	.98	2.50	1.86	1.81	2
3.04	2.43	.87	2.50	1.85	1.79	2
2.66	2.12	.76	2.50	1.83	1.77	2
2.28	1.81	.65	2.50	1.82	1.76	2
1.90	1.51	.54	2.50	1.81	1.75	2
1.52	1.20	.43	2.50	1.80	1.74	2
1.14	.90	.33	2.50	1.78	1.73	2
.76	.60	.22	2.50	1.77	1.73	2
.38	.30	.11	2.50	1.76	1.72	2
.00	.00	.00	2.50	1.75	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.96	.00	.00	.00	.00	.00	2
8.65	29.35	9.35	20.00	19.43	.58	2
8.35	58.01	17.43	40.58	38.16	2.42	2
8.06	86.25	26.75	59.50	56.47	3.03	2
7.77	114.22	34.26	79.96	74.51	5.45	2
7.48	141.99	43.63	98.35	92.35	6.00	2
7.20	169.61	50.99	118.62	110.05	8.57	2
6.92	197.11	57.15	139.97	127.62	12.34	2
6.64	224.51	62.50	162.01	145.10	16.92	2
6.36	251.82	71.07	180.76	162.48	18.28	2
6.08	279.05	80.90	198.15	179.78	18.37	2
6.08	279.05	80.90	198.15	179.78	18.37	3
5.77	309.57	91.95	217.62	199.14	18.48	3
5.46	339.99	102.76	237.23	218.39	18.84	3
5.15	370.31	113.33	256.98	237.54	19.45	3
4.85	400.53	123.64	276.88	256.58	20.30	3
4.55	430.64	133.71	296.93	275.53	21.40	3
4.24	460.66	143.54	317.12	294.39	22.74	3
3.94	490.59	153.12	337.46	313.14	24.32	3
3.64	520.42	162.47	357.95	331.81	26.14	3
3.35	550.17	171.58	378.59	350.39	28.20	3
3.05	579.82	180.44	399.38	368.88	30.50	3
3.05	579.82	180.44	399.38	368.88	30.50	2
2.74	611.04	189.81	421.23	388.30	32.93	2
2.43	642.15	198.91	443.25	407.63	35.62	2
2.12	673.18	207.75	465.43	426.87	38.56	2
1.81	704.12	216.33	487.79	446.01	41.77	2
1.51	734.97	224.66	510.31	465.08	45.23	2
1.20	765.73	232.73	533.00	484.05	48.95	2
.90	796.42	240.55	555.87	502.95	52.92	2
.60	827.02	248.12	578.91	521.77	57.14	2

.30	857.55	255.44	602.11	540.51	61.60	2
.00	888.01	269.84	618.17	559.18	58.99	2

Time = 7501. Degree of Consolidation = 94.%

Total Settlement = 1.639

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 7501. = 1.639

Settlement caused by Secondary Compression at time 7501. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.35

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.38	1.42	3.00	2.17	2.11	1
4.44	3.94	1.28	2.83	2.15	2.10	1
3.91	3.49	1.14	2.70	2.13	2.09	1
3.39	3.05	.99	2.60	2.12	2.08	1
2.88	2.61	.85	2.52	2.10	2.07	1
2.39	2.17	.71	2.47	2.09	2.06	1
1.90	1.73	.57	2.42	2.07	2.05	1
1.42	1.30	.43	2.38	2.06	2.04	1
.94	.86	.28	2.35	2.05	2.03	1
.47	.43	.14	2.32	2.04	2.02	1
.00	.00	.00	2.29	2.03	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.38	888.01	269.84	618.17	559.18	58.99	1
3.94	932.17	289.45	642.72	587.14	55.59	1
3.49	976.18	308.19	667.99	614.94	53.05	1
3.05	1020.05	326.09	693.96	642.60	51.36	1
2.61	1063.78	343.23	720.54	670.13	50.42	1
2.17	1107.37	365.00	742.37	697.52	44.85	1
1.73	1150.84	385.70	765.14	724.79	40.36	1
1.30	1194.20	405.23	788.97	751.94	37.03	1
.86	1237.44	424.39	813.05	778.97	34.07	1
.43	1280.58	445.06	835.52	805.91	29.61	1
.00	1323.62	464.56	859.06	832.74	26.32	1

Time = 8000. Degree of Consolidation = 93.%

Total Settlement = .612

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 8000. = .612

Settlement caused by Secondary Compression at time 8000. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.96	3.03	2.50	2.50	2.50	2
10.28	8.65	2.94	2.50	2.33	2.32	2
9.96	8.35	2.85	2.50	2.24	2.23	2
9.64	8.06	2.75	2.50	2.18	2.16	2
9.32	7.77	2.66	2.50	2.14	2.13	2
9.00	7.48	2.57	2.50	2.11	2.09	2
8.68	7.20	2.48	2.50	2.09	2.06	2
8.36	6.92	2.39	2.50	2.07	2.04	2
8.04	6.64	2.30	2.50	2.05	2.03	2
7.72	6.36	2.21	2.50	2.04	2.01	2
7.40	6.08	2.11	2.50	2.02	2.00	2
7.40	6.08	2.11	2.50	2.02	2.00	3
7.04	5.77	2.01	2.50	2.01	1.98	3
6.68	5.46	1.91	2.50	1.99	1.96	3
6.32	5.15	1.81	2.50	1.98	1.95	3
5.96	4.85	1.70	2.50	1.96	1.93	3
5.60	4.55	1.60	2.50	1.94	1.91	3
5.24	4.24	1.50	2.50	1.93	1.90	3
4.88	3.94	1.39	2.50	1.92	1.88	3
4.52	3.64	1.29	2.50	1.90	1.86	3
4.16	3.35	1.19	2.50	1.89	1.84	3
3.80	3.05	1.09	2.50	1.87	1.83	3
3.80	3.05	1.09	2.50	1.87	1.83	2
3.42	2.74	.98	2.50	1.86	1.81	2
3.04	2.43	.87	2.50	1.85	1.79	2
2.66	2.12	.76	2.50	1.83	1.77	2
2.28	1.81	.65	2.50	1.82	1.76	2
1.90	1.51	.54	2.50	1.81	1.75	2
1.52	1.20	.43	2.50	1.80	1.74	2
1.14	.90	.33	2.50	1.78	1.73	2
.76	.60	.22	2.50	1.77	1.73	2
.38	.30	.11	2.50	1.76	1.72	2
.00	.00	.00	2.50	1.75	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.96	.00	.00	.00	.00	.00	2
8.65	29.35	9.35	20.00	19.43	.58	2
8.35	58.01	17.43	40.58	38.16	2.42	2
8.06	86.25	26.75	59.50	56.47	3.03	2
7.77	114.22	34.26	79.95	74.51	5.45	2
7.48	141.99	43.64	98.35	92.35	6.00	2
7.20	169.61	50.99	118.62	110.05	8.57	2
6.92	197.11	57.15	139.96	127.62	12.34	2
6.64	224.51	62.50	162.01	145.10	16.92	2
6.36	251.82	71.07	180.76	162.48	18.27	2
6.08	279.05	80.90	198.15	179.78	18.37	3
6.08	279.05	80.90	198.15	179.78	18.37	3
5.77	309.57	91.96	217.62	199.14	18.48	3
5.46	339.99	102.77	237.23	218.39	18.84	3
5.15	370.31	113.33	256.98	237.54	19.44	3
4.85	400.53	123.64	276.88	256.58	20.30	3
4.55	430.64	133.72	296.93	275.53	21.39	3
4.24	460.66	143.54	317.12	294.38	22.73	3
3.94	490.59	153.13	337.46	313.14	24.32	3
3.64	520.42	162.47	357.95	331.81	26.14	3
3.35	550.17	171.58	378.59	350.39	28.20	3
3.05	579.82	180.45	399.37	368.88	30.50	3
3.05	579.82	180.45	399.37	368.88	30.50	2
2.74	611.04	189.81	421.22	388.30	32.92	2
2.43	642.15	198.91	443.24	407.63	35.61	2
2.12	673.18	207.75	465.43	426.87	38.56	2
1.81	704.11	216.33	487.78	446.01	41.77	2

1.51	734.96	224.66	510.31	465.08	45.23	2
1.20	765.73	232.73	533.00	484.05	48.95	2
.90	796.42	240.55	555.87	502.95	52.92	2
.60	827.02	248.12	578.90	521.77	57.14	2
.30	857.55	255.44	602.11	540.51	61.60	2
.00	888.01	269.84	618.17	559.18	58.99	2

Time = 8000. Degree of Consolidation = 94.%

Total Settlement = 1.639

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 8000. = 1.639

Settlement caused by Secondary Compression at time 8000. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.35

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.38	1.42	3.00	2.17	2.11	1
4.44	3.94	1.28	2.83	2.15	2.10	1
3.91	3.49	1.14	2.70	2.13	2.09	1
3.39	3.05	.99	2.60	2.12	2.08	1
2.88	2.61	.85	2.52	2.10	2.07	1
2.39	2.17	.71	2.47	2.09	2.06	1
1.90	1.73	.57	2.42	2.07	2.05	1
1.42	1.30	.43	2.38	2.06	2.04	1
.94	.86	.28	2.35	2.05	2.03	1
.47	.43	.14	2.32	2.04	2.02	1
.00	.00	.00	2.29	2.03	2.01	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.38	888.01	269.84	618.17	559.18	58.99	1
3.94	932.17	289.45	642.72	587.14	55.59	1
3.49	976.18	308.19	667.99	614.94	53.05	1
3.05	1020.05	326.09	693.96	642.60	51.36	1
2.61	1063.78	343.23	720.54	670.13	50.42	1
2.17	1107.37	365.00	742.37	697.52	44.85	1
1.73	1150.84	385.70	765.14	724.79	40.36	1
1.30	1194.20	405.23	788.97	751.94	37.03	1
.86	1237.44	424.39	813.05	778.97	34.07	1
.43	1280.58	445.06	835.52	805.91	29.61	1
.00	1323.62	464.56	859.06	832.74	26.32	1

Time = 8501. Degree of Consolidation = 93.%

Total Settlement = .612

Settlement at End of Primary Consolidation = .656

Settlement caused by Primary Consolidation at time 8501. = .612

Settlement caused by Secondary Compression at time 8501. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.96	3.03	2.50	2.50	2.50	2
10.28	8.65	2.94	2.50	2.33	2.32	2
9.96	8.35	2.85	2.50	2.24	2.23	2
9.64	8.06	2.75	2.50	2.18	2.16	2
9.32	7.77	2.66	2.50	2.14	2.13	2
9.00	7.48	2.57	2.50	2.11	2.09	2
8.68	7.20	2.48	2.50	2.09	2.06	2
8.36	6.92	2.39	2.50	2.07	2.04	2
8.04	6.64	2.30	2.50	2.05	2.03	2
7.72	6.36	2.21	2.50	2.04	2.01	2
7.40	6.08	2.11	2.50	2.02	2.00	2
7.40	6.08	2.11	2.50	2.02	2.00	3
7.04	5.77	2.01	2.50	2.01	1.98	3
6.68	5.46	1.91	2.50	1.99	1.96	3
6.32	5.15	1.81	2.50	1.98	1.95	3
5.96	4.85	1.70	2.50	1.96	1.93	3
5.60	4.55	1.60	2.50	1.94	1.91	3
5.24	4.24	1.50	2.50	1.93	1.90	3
4.88	3.94	1.39	2.50	1.92	1.88	3
4.52	3.64	1.29	2.50	1.90	1.86	3
4.16	3.35	1.19	2.50	1.89	1.84	3
3.80	3.05	1.09	2.50	1.87	1.83	3
3.80	3.05	1.09	2.50	1.87	1.83	2
3.42	2.74	.98	2.50	1.86	1.81	2
3.04	2.43	.87	2.50	1.85	1.79	2
2.66	2.12	.76	2.50	1.83	1.77	2
2.28	1.81	.65	2.50	1.82	1.76	2
1.90	1.51	.54	2.50	1.81	1.75	2
1.52	1.20	.43	2.50	1.80	1.74	2
1.14	.90	.33	2.50	1.78	1.73	2
.76	.60	.22	2.50	1.77	1.73	2
.38	.30	.11	2.50	1.76	1.72	2
.00	.00	.00	2.50	1.75	1.71	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.96	.00	.00	.00	.00	.00	2
8.65	29.35	9.35	20.00	19.43	.58	2
8.35	58.01	17.43	40.58	38.16	2.42	2
8.06	86.25	26.75	59.50	56.47	3.03	2
7.77	114.22	34.26	79.95	74.51	5.45	2
7.48	141.99	43.64	98.35	92.35	6.00	2
7.20	169.61	50.99	118.62	110.05	8.57	2
6.92	197.11	57.15	139.96	127.62	12.34	2
6.64	224.51	62.50	162.01	145.10	16.92	2
6.36	251.82	71.07	180.75	162.48	18.27	2
6.08	279.05	80.90	198.15	179.78	18.37	2
6.08	279.05	80.90	198.15	179.78	18.37	3
5.77	309.57	91.96	217.62	199.14	18.48	3
5.46	339.99	102.77	237.23	218.39	18.84	3
5.15	370.31	113.33	256.98	237.54	19.44	3
4.85	400.53	123.65	276.88	256.58	20.30	3
4.55	430.64	133.72	296.93	275.53	21.39	3
4.24	460.66	143.54	317.12	294.38	22.73	3
3.94	490.59	153.13	337.46	313.14	24.32	3
3.64	520.42	162.47	357.95	331.81	26.14	3
3.35	550.17	171.58	378.59	350.39	28.20	3
3.05	579.82	180.45	399.37	368.88	30.50	3
3.05	579.82	180.45	399.37	368.88	30.50	2

2.74	611.04	189.81	421.22	388.30	32.92	2
2.43	642.15	198.91	443.24	407.63	35.61	2
2.12	673.18	207.75	465.43	426.87	38.56	2
1.81	704.11	216.33	487.78	446.01	41.77	2
1.51	734.96	224.66	510.31	465.08	45.23	2
1.20	765.73	232.73	533.00	484.05	48.95	2
.90	796.42	240.55	555.87	502.95	52.92	2
.60	827.02	248.12	578.90	521.77	57.14	2
.30	857.55	255.44	602.11	540.51	61.60	2
.00	888.01	269.84	618.17	559.18	58.99	2

Time = 8501. Degree of Consolidation = 94.%

Total Settlement = 1.639

Settlement at End of Primary Consolidation = 1.748

Settlement caused by Primary Consolidation at time 8501. = 1.639

Settlement caused by Secondary Compression at time 8501. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.35

SC

Consolidation and desiccation of soft layers---dredged fill

Problem SC

*****Soil data for compressible foundation*****

Material Type	Layer Thickness	Numbers of Sub-layers	Ca/Cc	Cr/Cc
1	5.00	10	.040	.150

Material type : 1 Specific Gravity of Solids: 2.83

	Void Ratio	Effective Stress	Permeability	PK	Beta	Dsde	Alpha	k/1+e
1	3.000	.000E+00	.121E-02	.303E-03	.420E-03	-.840E+02	-.254E-01	
2	2.950	.420E+01	.111E-02	.282E-03	.384E-03	-.880E+02	-.248E-01	
3	2.900	.880E+01	.103E-02	.264E-03	.349E-03	-.980E+02	-.259E-01	
4	2.850	.140E+02	.949E-03	.247E-03	.311E-03	-.108E+03	-.266E-01	
5	2.800	.196E+02	.885E-03	.233E-03	.270E-03	-.114E+03	-.266E-01	
6	2.750	.254E+02	.823E-03	.220E-03	.272E-03	-.124E+03	-.272E-01	
7	2.700	.320E+02	.762E-03	.206E-03	.278E-03	-.136E+03	-.280E-01	
8	2.650	.390E+02	.700E-03	.192E-03	.283E-03	-.160E+03	-.307E-01	
9	2.600	.480E+02	.639E-03	.178E-03	.287E-03	-.190E+03	-.337E-01	
10	2.550	.580E+02	.579E-03	.163E-03	.282E-03	-.220E+03	-.359E-01	
11	2.500	.700E+02	.523E-03	.149E-03	.274E-03	-.280E+03	-.418E-01	
12	2.450	.860E+02	.468E-03	.136E-03	.248E-03	-.340E+03	-.461E-01	
13	2.400	.104E+03	.423E-03	.125E-03	.213E-03	-.420E+03	-.523E-01	
14	2.350	.128E+03	.383E-03	.114E-03	.198E-03	-.500E+03	-.572E-01	
15	2.300	.154E+03	.346E-03	.105E-03	.191E-03	-.620E+03	-.649E-01	
16	2.250	.190E+03	.310E-03	.953E-04	.192E-03	-.780E+03	-.743E-01	
17	2.200	.232E+03	.274E-03	.855E-04	.175E-03	-.980E+03	-.838E-01	
18	2.150	.288E+03	.245E-03	.777E-04	.158E-03	-.112E+04	-.870E-01	
19	2.100	.344E+03	.216E-03	.697E-04	.140E-03	-.132E+04	-.920E-01	
20	2.050	.420E+03	.194E-03	.637E-04	.125E-03	-.166E+04	-.106E+00	
21	2.000	.510E+03	.171E-03	.571E-04	.125E-03	-.220E+04	-.126E+00	
22	1.950	.640E+03	.151E-03	.513E-04	.114E-03	-.270E+04	-.138E+00	
23	1.900	.780E+03	.133E-03	.457E-04	.102E-03	-.310E+04	-.142E+00	
24	1.850	.950E+03	.117E-03	.411E-04	.876E-04	-.380E+04	-.156E+00	
25	1.800	.116E+04	.103E-03	.369E-04	.833E-04	-.450E+04	-.166E+00	
26	1.750	.140E+04	.900E-04	.327E-04	.834E-04	-.540E+04	-.177E+00	
27	1.700	.170E+04	.772E-04	.286E-04	.773E-04	-.640E+04	-.183E+00	
28	1.650	.204E+04	.662E-04	.250E-04	.616E-04	-.840E+04	-.210E+00	
29	1.600	.254E+04	.583E-04	.224E-04	.495E-04	-.106E+05	-.238E+00	
30	1.550	.310E+04	.511E-04	.200E-04	.486E-04	-.121E+05	-.243E+00	
31	1.500	.375E+04	.439E-04	.176E-04	.465E-04	-.150E+05	-.264E+00	
32	1.450	.460E+04	.377E-04	.154E-04	.425E-04	-.179E+05	-.276E+00	
33	1.400	.554E+04	.320E-04	.133E-04	.376E-04	-.220E+05	-.293E+00	
34	1.350	.680E+04	.274E-04	.116E-04	.318E-04	-.296E+05	-.345E+00	
35	1.300	.850E+04	.233E-04	.101E-04	.281E-04	-.360E+05	-.365E+00	
36	1.250	.104E+05	.199E-04	.883E-05	.262E-04	-.380E+05	-.336E+00	

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

Material Type	Specific Gravity	Ca/Cc	Cr/Cc	Saturation Limit	Desication Limit
2	2.710	.040	.150	6.700	3.100
3	2.710	.040	.150	6.700	3.100

Material type : 2

	Void Ratio	Effective Stress	Permeability	k/1+e			
I	Ratio	Stress	ability	PK	Beta	Dsde	Alpha
1	1.710	.000E+00	.940E+00	.347E+00	.343E+02	.100E+03	.347E+02
2	1.700	.100E+01	.955E-02	.354E-02	.172E+02	.100E+03	.354E+00
3	1.690	.200E+01	.850E-02	.316E-02	.133E-01	.833E+02	.263E+00
4	1.520	.160E+02	.290E-02	.115E-02	.106E-01	.125E+03	.144E+00
5	1.450	.320E+02	.150E-02	.612E-03	.595E-02	.300E+03	.184E+00
6	1.360	.640E+02	.470E-03	.199E-03	.238E-02	.896E+03	.178E+00
7	1.200	.256E+03	.400E-04	.182E-04	.754E-03	.172E+04	.313E-01
8	1.100	.512E+03	.645E-05	.307E-05	.891E-04	.382E+04	.117E-01
9	1.000	.102E+04	.743E-06	.371E-06	.133E-04	.108E+05	.402E-02
10	.870	.300E+04	.430E-07	.230E-07	.268E-05	.152E+05	.350E-03

Material type : 3

	Void Ratio	Effective Stress	Permeability	k/1+e			
I	Ratio	Stress	ability	PK	Beta	Dsde	Alpha
1	1.710	.000E+00	.940E+00	.347E+00	.343E+02	.100E+03	.347E+02
2	1.700	.100E+01	.955E-02	.354E-02	.172E+02	.100E+03	.354E+00
3	1.690	.200E+01	.850E-02	.316E-02	.133E-01	.833E+02	.263E+00
4	1.520	.160E+02	.290E-02	.115E-02	.106E-01	.125E+03	.144E+00
5	1.450	.320E+02	.150E-02	.612E-03	.595E-02	.300E+03	.184E+00
6	1.360	.640E+02	.470E-03	.199E-03	.238E-02	.896E+03	.178E+00
7	1.200	.256E+03	.400E-04	.182E-04	.754E-03	.172E+04	.313E-01
8	1.100	.512E+03	.645E-05	.307E-05	.891E-04	.382E+04	.117E-01
9	1.000	.102E+04	.743E-06	.371E-06	.133E-04	.108E+05	.402E-02
10	.870	.300E+04	.430E-07	.230E-07	.268E-05	.152E+05	.350E-03

Summary of lifts and print detail

Time days	Material Type	Fill Height	# Sub-layers	Void ratio	Start Day	Dessic. Month	Print detail
0.	2	3.8	10	1.71	820.	4	1
180.					820.	4	1
1480.	3	3.6	10	1.71	820.	4	1
1600.					820.	4	1
2960.	2	3.2	10	1.71	820.	4	1
3200.					820.	4	1
3500.					850.	5	1
4000.					910.	7	1
4500.					970.	9	1

5000.	1060.	12	1
5500.	1100.	12	1
6000.	1140.	12	1
6500.	1480.	6	1
7000.	1530.	6	1
7500.	1700.	6	1
8000.	2000.	6	1
8500.	2555.	6	1

Summary of monthly rainfall and evaporation potential

Month	Rainfall	Evaporation
1	.240	.180
2	.270	.230
3	.400	.360
4	.250	.360
5	.320	.570
6	.530	.490
7	.680	.670
8	.540	.570
9	.430	.410
10	.250	.330
11	.180	.210
12	.260	.160

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

tau	Lower layer Void ratio	Lower layer Permeability	drainage path Length
.124E-01	1.500	.10000E-02	z = 6.00

Summary of desiccation parameters

Parameter	Value
Surface Drainage Efficiency	1.00
maximum evaporation efficiency	.50
saturation at desiccation limit	.75
maximum crust thickness	-1.81
time to desic. after initial fill	820.00
month of initial desiccation	4
elevation of fixed water table	100.00
elevation of top of incompres. found.	100.00

*****Initial Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	5.00	1.42	3.00	3.00	2.31	1
4.44	4.44	1.28	2.83	2.83	2.28	1
3.91	3.91	1.14	2.70	2.70	2.26	1
3.39	3.39	.99	2.60	2.60	2.24	1
2.88	2.88	.85	2.52	2.52	2.22	1
2.39	2.39	.71	2.47	2.47	2.20	1
1.90	1.90	.57	2.42	2.42	2.19	1
1.42	1.42	.43	2.38	2.38	2.17	1
.94	.94	.28	2.35	2.35	2.16	1
.47	.47	.14	2.32	2.32	2.14	1
.00	.00	.00	2.29	2.29	2.13	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
5.00	386.74	.00	386.74	237.12	149.62	1
4.44	437.59	16.20	421.38	271.76	149.62	1
3.91	487.09	32.41	454.68	305.06	149.62	1
3.39	535.57	48.61	486.96	337.34	149.62	1
2.88	583.27	64.82	518.46	368.84	149.62	1
2.39	630.41	81.02	549.39	399.76	149.62	1
1.90	677.09	97.23	579.86	430.24	149.62	1
1.42	723.39	113.43	609.96	460.33	149.62	1
.94	769.37	129.64	639.74	490.12	149.62	1
.47	815.07	145.84	669.23	519.61	149.62	1
.00	860.52	162.04	698.47	548.85	149.62	1

Time = 0. Degree of Consolidation = 0.%

Total Settlement = .000

Settlement at End of Primary Consolidation = .443

Settlement caused by Primary Consolidation at time 0. = .000

Settlement caused by Secondary Compression at time 0. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
3.80	3.80	1.40	1.71	1.71	1.71	2
3.42	3.42	1.26	1.71	1.71	1.53	2
3.04	3.04	1.12	1.71	1.71	1.46	2
2.66	2.66	.98	1.71	1.71	1.41	2
2.28	2.28	.84	1.71	1.71	1.37	2
1.90	1.90	.70	1.71	1.71	1.35	2
1.52	1.52	.56	1.71	1.71	1.34	2
1.14	1.14	.42	1.71	1.71	1.33	2
.76	.76	.28	1.71	1.71	1.31	2
.38	.38	.14	1.71	1.71	1.30	2

.00 .00 .00 1.71 1.71 1.29 2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
3.80	.00	.00	.00	.00	.00	2
3.42	38.67	.00	38.67	23.71	14.96	2
3.04	77.35	.00	77.35	47.42	29.92	2
2.66	116.02	.00	116.02	71.14	44.89	2
2.28	154.70	.00	154.70	94.85	59.85	2
1.90	193.37	.00	193.37	118.56	74.81	2
1.52	232.05	.00	232.05	142.27	89.77	2
1.14	270.72	.00	270.72	165.98	104.74	2
.76	309.39	.00	309.39	189.70	119.70	2
.38	348.07	.00	348.07	213.41	134.66	2
.00	386.74	.00	386.74	237.12	149.62	2

Time = 0. Degree of Consolidation = 0.%

Total Settlement = .000

Settlement at End of Primary Consolidation = .450

Settlement caused by Primary Consolidation at time 0. = .000

Settlement caused by Secondary Compression at time 0. = .000

Consistency Error --DREDGED FILL --LAYER/ 1

***** Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.79	1.42	3.00	2.37	2.31	1
4.44	4.30	1.28	2.83	2.40	2.28	1
3.91	3.82	1.14	2.70	2.43	2.26	1
3.39	3.33	.99	2.60	2.44	2.24	1
2.88	2.84	.85	2.52	2.43	2.22	1
2.39	2.36	.71	2.47	2.41	2.20	1
1.90	1.88	.57	2.42	2.38	2.19	1
1.42	1.40	.43	2.38	2.34	2.17	1
.94	.93	.28	2.35	2.31	2.16	1
.47	.46	.14	2.32	2.27	2.14	1
.00	.00	.00	2.29	2.24	2.13	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.79	358.71	117.48	241.23	209.09	32.14	1
4.30	404.91	102.78	302.13	239.09	63.05	1
3.82	451.37	94.09	357.28	269.34	87.94	1
3.33	497.98	90.52	407.46	299.75	107.71	1
2.84	544.61	93.05	451.55	330.17	121.39	1
2.36	591.10	100.63	490.47	360.46	130.01	1
1.88	637.37	113.99	523.37	390.52	132.85	1
1.40	683.34	130.99	552.35	420.29	132.06	1
.93	729.00	149.97	579.02	449.74	129.28	1
.46	774.33	174.11	600.22	478.87	121.35	1

.00 819.36 200.15 619.21 507.69 111.52 1

Time = 180. Degree of Consolidation = 48.%

Total Settlement = .210

Settlement at End of Primary Consolidation = .443

Settlement caused by Primary Consolidation at time 180. = .210

Settlement caused by Secondary Compression at time 180. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
3.80	3.35	1.40	1.71	1.71	1.71	2
3.42	2.99	1.26	1.71	1.53	1.53	2
3.04	2.64	1.12	1.71	1.46	1.46	2
2.66	2.29	.98	1.71	1.41	1.41	2
2.28	1.96	.84	1.71	1.37	1.37	2
1.90	1.63	.70	1.71	1.35	1.35	2
1.52	1.30	.56	1.71	1.34	1.34	2
1.14	.97	.42	1.71	1.33	1.33	2
.76	.65	.28	1.71	1.31	1.31	2
.38	.32	.14	1.71	1.30	1.30	2
.00	.00	.00	1.71	1.32	1.29	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
3.35	.00	.00	.00	.00	.00	2
2.99	37.78	14.96	22.81	22.81	.00	2
2.64	74.55	29.92	44.62	44.62	.00	2
2.29	110.84	44.89	65.96	65.96	.00	2
1.96	146.72	59.85	86.87	86.87	.00	2
1.63	182.33	74.81	107.52	107.52	.00	2
1.30	217.81	89.77	128.04	128.04	.00	2
.97	253.17	104.74	148.43	148.43	.00	2
.65	288.44	119.70	168.74	168.74	.00	2
.32	323.58	134.66	188.92	188.92	.00	2
.00	358.71	117.48	241.23	209.09	32.14	2

Time = 180. Degree of Consolidation = 100.%

Total Settlement = .449

Settlement at End of Primary Consolidation = .450

Settlement caused by Primary Consolidation at time 180. = .449

Settlement caused by Secondary Compression at time 180. = .000

Surface Elevation = 108.14

Consistency Error --DREDGED FILL --LAYER/ 1

***** Current Conditions in Compressible Foundation *****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.57	1.42	3.00	2.31	2.31	1
4.44	4.10	1.28	2.83	2.29	2.28	1
3.91	3.63	1.14	2.70	2.27	2.26	1
3.39	3.17	.99	2.60	2.25	2.24	1
2.88	2.71	.85	2.52	2.23	2.22	1
2.39	2.25	.71	2.47	2.21	2.20	1
1.90	1.80	.57	2.42	2.20	2.19	1
1.42	1.34	.43	2.38	2.18	2.17	1
.94	.89	.28	2.35	2.17	2.16	1
.47	.45	.14	2.32	2.15	2.14	1
.00	.00	.00	2.29	2.14	2.13	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.57	358.64	146.72	211.92	209.02	2.91	1
4.10	404.08	160.75	243.34	238.26	5.08	1
3.63	449.33	176.02	273.32	267.30	6.02	1
3.17	494.40	190.10	304.30	296.16	8.13	1
2.71	539.30	205.49	333.81	324.86	8.95	1
2.25	584.04	220.03	364.01	353.40	10.61	1
1.80	628.63	234.49	394.14	381.78	12.36	1
1.34	673.08	252.35	420.74	410.03	10.71	1
.89	717.39	269.88	447.51	438.13	9.38	1
.45	761.56	287.12	474.44	466.10	8.34	1
.00	805.60	303.78	501.82	493.94	7.89	1

Time = 1480. Degree of Consolidation = 97.%

Total Settlement = .430

Settlement at End of Primary Consolidation = .443

Settlement caused by Primary Consolidation at time 1480. = .430

Settlement caused by Secondary Compression at time 1480. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
3.80	3.35	1.40	1.71	1.71	1.71	2
3.42	2.98	1.26	1.71	1.53	1.53	2
3.04	2.63	1.12	1.71	1.46	1.46	2
2.66	2.29	.98	1.71	1.41	1.41	2
2.28	1.96	.84	1.71	1.37	1.37	2
1.90	1.63	.70	1.71	1.35	1.35	2
1.52	1.30	.56	1.71	1.34	1.34	2
1.14	.97	.42	1.71	1.33	1.33	2
.76	.65	.28	1.71	1.31	1.31	2
.38	.32	.14	1.71	1.30	1.30	2
.00	.00	.00	1.71	1.29	1.29	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
3.35	.00	.00	.00	.00	.00	2
2.98	37.78	14.96	22.81	22.81	.00	2
2.63	74.55	29.92	44.62	44.62	.00	2
2.29	110.84	44.89	65.96	65.96	.00	2
1.96	146.72	59.85	86.87	86.87	.00	2
1.63	182.33	74.81	107.52	107.52	.00	2
1.30	217.81	89.77	128.04	128.04	.00	2
.97	253.18	104.74	148.44	148.44	.00	2
.65	288.44	119.70	168.74	168.74	.00	2
.32	323.59	134.66	188.93	188.93	.00	2
.00	358.64	146.72	211.92	209.02	2.91	2

Time = 1480. Degree of Consolidation = 100.%

Total Settlement = .450

Settlement at End of Primary Consolidation = .450

Settlement caused by Primary Consolidation at time 1480. = .450

Settlement caused by Secondary Compression at time 1480. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 107.92

Consistency Error --DREDGED FILL --LAYER/ 2

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.55	1.42	3.00	2.30	2.15	1
4.44	4.08	1.28	2.83	2.28	2.13	1
3.91	3.61	1.14	2.70	2.26	2.12	1
3.39	3.15	.99	2.60	2.24	2.10	1
2.88	2.69	.85	2.52	2.22	2.09	1
2.39	2.24	.71	2.47	2.21	2.08	1
1.90	1.78	.57	2.42	2.19	2.07	1
1.42	1.33	.43	2.38	2.17	2.06	1
.94	.89	.28	2.35	2.14	2.05	1
.47	.44	.14	2.32	2.12	2.04	1
.00	.00	.00	2.29	2.10	2.03	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.55	692.63	155.98	536.65	401.26	135.39	1
4.08	737.96	168.27	569.69	430.39	139.31	1
3.61	783.13	181.46	601.67	459.35	142.32	1
3.15	828.13	195.82	632.31	488.15	144.16	1
2.69	872.97	211.77	661.20	516.78	144.42	1
2.24	917.64	227.79	689.85	545.25	144.60	1
1.78	962.14	248.14	714.00	573.54	140.46	1
1.33	1006.46	270.81	735.65	601.66	133.98	1
.89	1050.60	294.69	755.91	629.60	126.31	1
.44	1094.55	319.64	774.90	657.34	117.56	1

.00 1138.29 345.93 792.36 684.88 107.48 1

Time = 1600. Degree of Consolidation = 73.%

Total Settlement = .451

Settlement at End of Primary Consolidation = .620

Settlement caused by Primary Consolidation at time 1600. = .451

Settlement caused by Secondary Compression at time 1600. = .000

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

***** Coordinates *****

A	XI	Z	Einitial	E	Eeop	Material
7.40	6.43	2.73	1.71	1.71	1.71	3
7.04	6.08	2.60	1.71	1.54	1.54	3
6.68	5.75	2.46	1.71	1.47	1.47	3
6.32	5.43	2.33	1.71	1.42	1.42	3
5.96	5.11	2.20	1.71	1.38	1.38	3
5.60	4.79	2.07	1.71	1.35	1.35	3
5.24	4.48	1.93	1.71	1.34	1.34	3
4.88	4.17	1.80	1.71	1.33	1.33	3
4.52	3.86	1.67	1.71	1.32	1.32	3
4.16	3.55	1.54	1.71	1.32	1.31	3
3.80	3.25	1.40	1.71	1.33	1.30	3
3.80	3.25	1.40	1.71	1.33	1.30	2
3.42	2.92	1.26	1.71	1.33	1.28	2
3.04	2.59	1.12	1.71	1.33	1.27	2
2.66	2.27	.98	1.71	1.33	1.26	2
2.28	1.94	.84	1.71	1.32	1.25	2
1.90	1.61	.70	1.71	1.32	1.23	2
1.52	1.29	.56	1.71	1.31	1.22	2
1.14	.97	.42	1.71	1.31	1.21	2
.76	.64	.28	1.71	1.30	1.20	2
.38	.32	.14	1.71	1.29	1.19	2
.00	.00	.00	1.71	1.28	1.19	2

***** Stresses *****

***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
6.43	.00	.00	.00	.00	.00	3
6.08	35.85	14.17	21.67	21.67	.00	3
5.75	70.75	28.35	42.40	42.40	.00	3
5.43	105.18	42.52	62.65	62.65	.00	3
5.11	139.24	56.70	82.54	82.54	.00	3
4.79	173.02	70.87	102.15	102.15	.00	3
4.48	206.66	85.05	121.61	121.61	.00	3
4.17	240.22	99.22	141.00	141.00	.00	3
3.86	273.65	113.40	160.25	160.25	.00	3
3.55	307.06	108.64	198.42	179.48	18.94	3
3.25	340.50	105.54	234.96	198.76	36.20	3
3.25	340.50	105.54	234.96	198.76	36.20	2
2.92	375.82	102.29	273.54	219.12	54.42	2
2.59	411.16	101.57	309.59	239.49	70.10	2
2.27	446.49	103.25	343.25	259.86	83.38	2
1.94	481.81	107.04	374.77	280.21	94.56	2
1.61	517.09	112.63	404.45	300.53	103.92	2
1.29	552.32	119.68	432.64	320.80	111.84	2
.97	587.49	127.85	459.64	341.01	118.63	2
.64	622.61	136.85	485.76	361.16	124.60	2
.32	657.66	146.31	511.35	381.25	130.10	2

.00 692.63 155.98 536.65 401.26 135.39 2

Time = 1600. Degree of Consolidation = 89.%

Total Settlement = .970

Settlement at End of Primary Consolidation = 1.085

Settlement caused by Primary Consolidation at time 1600. = .970

Settlement caused by Secondary Compression at time 1600. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 110.98

Consistency Error --DREDGED FILL --LAYER/ 2

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.41	1.42	3.00	2.18	2.15	1
4.44	3.96	1.28	2.83	2.16	2.13	1
3.91	3.51	1.14	2.70	2.15	2.12	1
3.39	3.07	.99	2.60	2.14	2.10	1
2.88	2.62	.85	2.52	2.12	2.09	1
2.39	2.18	.71	2.47	2.11	2.08	1
1.90	1.74	.57	2.42	2.09	2.07	1
1.42	1.30	.43	2.38	2.08	2.06	1
.94	.87	.28	2.35	2.07	2.05	1
.47	.43	.14	2.32	2.06	2.04	1
.00	.00	2.29	2.05	2.03	1	

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.41	685.95	258.66	427.29	394.58	32.70	1
3.96	730.22	274.03	456.19	422.65	33.54	1
3.51	774.37	289.24	485.13	450.59	34.54	1
3.07	818.40	304.49	513.90	478.41	35.49	1
2.62	862.30	319.79	542.52	506.12	36.40	1
2.18	906.09	334.90	571.19	533.70	37.49	1
1.74	949.76	351.85	597.91	561.16	36.75	1
1.30	993.31	371.54	621.77	588.51	33.26	1
.87	1036.75	390.65	646.09	615.74	30.35	1
.43	1080.07	409.27	670.80	642.87	27.94	1
.00	1123.29	428.70	694.60	669.88	24.71	1

Time = 2960. Degree of Consolidation = 94.%

Total Settlement = .584

Settlement at End of Primary Consolidation = .620

Settlement caused by Primary Consolidation at time 2960. = .584

Settlement caused by Secondary Compression at time 2960. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
7.40	6.32	2.73	1.71	1.71	1.71	3
7.04	5.98	2.60	1.71	1.54	1.54	3
6.68	5.64	2.46	1.71	1.47	1.47	3
6.32	5.32	2.33	1.71	1.42	1.42	3
5.96	5.00	2.20	1.71	1.38	1.38	3
5.60	4.69	2.07	1.71	1.35	1.35	3
5.24	4.37	1.93	1.71	1.34	1.34	3
4.88	4.06	1.80	1.71	1.33	1.33	3
4.52	3.76	1.67	1.71	1.32	1.32	3
4.16	3.45	1.54	1.71	1.31	1.31	3
3.80	3.14	1.40	1.71	1.30	1.30	3
3.80	3.14	1.40	1.71	1.30	1.30	2
3.42	2.82	1.26	1.71	1.28	1.28	2
3.04	2.50	1.12	1.71	1.27	1.27	2
2.66	2.18	.98	1.71	1.26	1.26	2
2.28	1.87	.84	1.71	1.25	1.25	2
1.90	1.55	.70	1.71	1.24	1.23	2
1.52	1.24	.56	1.71	1.23	1.22	2
1.14	.93	.42	1.71	1.22	1.21	2
.76	.62	.28	1.71	1.21	1.20	2
.38	.31	.14	1.71	1.21	1.19	2
.00	.00	.00	1.71	1.20	1.19	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
6.32	.00	.00	.00	.00	.00	3
5.98	35.85	14.17	21.67	21.67	.00	3
5.64	70.75	28.35	42.40	42.40	.00	3
5.32	105.18	42.52	62.65	62.65	.00	3
5.00	139.24	56.70	82.54	82.54	.00	3
4.69	173.02	70.87	102.15	102.15	.00	3
4.37	206.66	85.05	121.61	121.61	.00	3
4.06	240.20	99.22	140.98	140.98	.00	3
3.76	273.65	113.40	160.25	160.25	.00	3
3.45	307.00	127.57	179.42	179.42	.00	3
3.14	340.25	141.66	198.59	198.50	.09	3
3.14	340.25	141.66	198.59	198.50	.09	2
2.82	375.24	156.71	218.53	218.53	.00	2
2.50	410.12	171.67	238.45	238.45	.00	2
2.18	444.89	186.15	258.74	258.26	.49	2
1.87	479.56	199.16	280.41	277.97	2.44	2
1.55	514.15	210.96	303.19	297.59	5.60	2
1.24	548.65	221.65	327.00	317.13	9.87	2
.93	583.07	231.43	351.64	336.59	15.05	2
.62	617.43	240.55	376.88	355.98	20.89	2
.31	651.72	249.17	402.56	375.32	27.24	2
.00	685.95	258.66	427.29	394.58	32.71	2

Time = 2960. Degree of Consolidation = 99.%

Total Settlement = 1.077

Settlement at End of Primary Consolidation = 1.085

Settlement caused by Primary Consolidation at time 2960. = 1.077

Settlement caused by Secondary Compression at time 2960. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 110.74

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.38	1.42	3.00	2.16	2.05	1
4.44	3.93	1.28	2.83	2.15	2.04	1
3.91	3.49	1.14	2.70	2.14	2.03	1
3.39	3.04	.99	2.60	2.12	2.02	1
2.88	2.60	.85	2.52	2.10	2.02	1
2.39	2.16	.71	2.47	2.09	2.01	1
1.90	1.73	.57	2.42	2.07	2.00	1
1.42	1.29	.43	2.38	2.06	1.99	1
.94	.86	.28	2.35	2.04	1.99	1
.47	.43	.14	2.32	2.03	1.98	1
.00	.00	.00	2.29	2.01	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.38	980.13	271.49	708.64	562.77	145.88	1
3.93	1024.30	287.88	736.42	590.73	145.69	1
3.49	1068.33	304.63	763.70	618.55	145.14	1
3.04	1112.23	321.70	790.53	646.25	144.28	1
2.60	1155.99	339.07	816.92	673.81	143.12	1
2.16	1199.61	361.32	838.29	701.23	137.06	1
1.73	1243.10	385.51	857.59	728.50	129.09	1
1.29	1286.44	409.68	876.76	755.64	121.12	1
.86	1329.64	435.97	893.68	782.64	111.03	1
.43	1372.71	463.56	909.15	809.50	99.65	1
.00	1415.64	490.41	925.23	836.23	89.00	1

Time = 3200. Degree of Consolidation = 85.%

Total Settlement = .613

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 3200. = .613

Settlement caused by Secondary Compression at time 3200. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	9.02	3.91	1.71	1.71	1.71	2
10.28	8.71	3.79	1.71	1.56	1.56	2

9.96	8.41	3.68	1.71	1.48	1.48	2
9.64	8.12	3.56	1.71	1.43	1.43	2
9.32	7.84	3.44	1.71	1.40	1.40	2
9.00	7.56	3.32	1.71	1.36	1.36	2
8.68	7.28	3.20	1.71	1.35	1.35	2
8.36	7.00	3.08	1.71	1.34	1.34	2
8.04	6.72	2.97	1.71	1.33	1.33	2
7.72	6.45	2.85	1.71	1.32	1.32	2
7.40	6.18	2.73	1.71	1.32	1.31	2
7.40	6.18	2.73	1.71	1.32	1.31	3
7.04	5.87	2.60	1.71	1.32	1.30	3
6.68	5.56	2.46	1.71	1.31	1.28	3
6.32	5.25	2.33	1.71	1.31	1.27	3
5.96	4.95	2.20	1.71	1.30	1.26	3
5.60	4.64	2.07	1.71	1.30	1.25	3
5.24	4.34	1.93	1.71	1.29	1.24	3
4.88	4.03	1.80	1.71	1.29	1.23	3
4.52	3.73	1.67	1.71	1.28	1.21	3
4.16	3.43	1.54	1.71	1.27	1.20	3
3.80	3.13	1.40	1.71	1.27	1.20	3
3.80	3.13	1.40	1.71	1.27	1.20	2
3.42	2.81	1.26	1.71	1.26	1.19	2
3.04	2.49	1.12	1.71	1.25	1.18	2
2.66	2.18	.98	1.71	1.24	1.18	2
2.28	1.86	.84	1.71	1.24	1.17	2
1.90	1.55	.70	1.71	1.23	1.17	2
1.52	1.24	.56	1.71	1.22	1.16	2
1.14	.93	.42	1.71	1.21	1.15	2
.76	.62	.28	1.71	1.21	1.15	2
.38	.31	.14	1.71	1.20	1.14	2
.00	.00	.00	1.71	1.19	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
9.02	.00	.00	.00	.00	.00	2
8.71	31.97	12.60	19.37	19.37	.00	2
8.41	63.11	25.20	37.91	37.91	.00	2
8.12	93.79	37.80	55.99	55.99	.00	2
7.84	124.20	50.40	73.80	73.80	.00	2
7.56	154.31	63.00	91.31	91.31	.00	2
7.28	184.27	75.60	108.68	108.68	.00	2
7.00	214.16	88.20	125.96	125.96	.00	2
6.72	243.95	100.80	143.16	143.16	.00	2
6.45	273.70	106.19	167.51	160.30	7.20	2
6.18	303.42	111.07	192.34	177.42	14.92	2
6.18	303.42	111.07	192.34	177.42	14.92	3
5.87	336.81	116.56	220.25	196.64	23.61	3
5.56	370.16	121.92	248.24	215.82	32.43	3
5.25	403.48	127.45	276.03	234.96	41.07	3
4.95	436.76	133.26	303.51	254.07	49.44	3
4.64	470.00	139.43	330.57	273.13	57.44	3
4.34	503.19	146.07	357.12	292.15	64.97	3
4.03	536.34	153.17	383.17	311.12	72.05	3
3.73	569.44	160.67	408.77	330.04	78.73	3
3.43	602.48	168.55	433.92	348.91	85.02	3
3.13	635.47	176.78	458.68	367.72	90.96	3
3.13	635.47	176.78	458.68	367.72	90.96	2
2.81	670.22	185.50	484.73	387.52	97.21	2
2.49	704.92	194.39	510.53	407.25	103.28	2
2.18	739.54	203.42	536.12	426.91	109.21	2
1.86	774.11	212.54	561.56	446.51	115.05	2
1.55	808.60	221.58	587.02	466.05	120.98	2
1.24	843.03	230.36	612.67	485.52	127.16	2
.93	877.40	239.00	638.40	504.92	133.48	2
.62	911.70	247.42	664.28	524.26	140.02	2
.31	945.95	255.71	690.23	543.54	146.69	2
.00	980.13	271.49	708.64	562.77	145.88	2

Time = 3200. Degree of Consolidation = 91.%

Total Settlement = 1.581

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 3200. = 1.581

Settlement caused by Secondary Compression at time 3200. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.41

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.36	1.42	3.00	2.14	2.05	1
4.44	3.91	1.28	2.83	2.13	2.04	1
3.91	3.47	1.14	2.70	2.11	2.03	1
3.39	3.03	.99	2.60	2.10	2.02	1
2.88	2.59	.85	2.52	2.08	2.02	1
2.39	2.15	.71	2.47	2.07	2.01	1
1.90	1.72	.57	2.42	2.05	2.00	1
1.42	1.29	.43	2.38	2.04	1.99	1
.94	.86	.28	2.35	2.03	1.99	1
.47	.43	.14	2.32	2.01	1.98	1
.00	.00	.00	2.29	2.00	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.36	976.97	295.75	681.22	559.61	121.62	1
3.91	1020.94	311.82	709.12	587.37	121.75	1
3.47	1064.79	328.25	736.54	615.01	121.53	1
3.03	1108.50	345.36	763.14	642.52	120.62	1
2.59	1152.08	368.22	783.86	669.90	113.96	1
2.15	1195.53	390.76	804.77	697.14	107.63	1
1.72	1238.85	412.84	826.01	724.25	101.75	1
1.29	1282.04	437.07	844.96	751.24	93.72	1
.86	1325.10	461.93	863.17	778.10	85.07	1
.43	1368.05	486.01	882.04	804.84	77.19	1
.00	1410.88	509.21	901.67	831.47	70.20	1

Time = 3500. Degree of Consolidation = 88.%

Total Settlement = .639

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 3500. = .639

Settlement caused by Secondary Compression at time 3500. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.97	3.91	1.71	1.71	1.71	2
10.28	8.66	3.79	1.71	1.56	1.56	2
9.96	8.36	3.68	1.71	1.48	1.48	2
9.64	8.07	3.56	1.71	1.43	1.43	2
9.32	7.79	3.44	1.71	1.40	1.40	2
9.00	7.50	3.32	1.71	1.36	1.36	2
8.68	7.23	3.20	1.71	1.35	1.35	2
8.36	6.95	3.08	1.71	1.34	1.34	2
8.04	6.67	2.97	1.71	1.33	1.33	2
7.72	6.40	2.85	1.71	1.32	1.32	2
7.40	6.13	2.73	1.71	1.31	1.31	2
7.40	6.13	2.73	1.71	1.31	1.31	3
7.04	5.82	2.60	1.71	1.30	1.30	3
6.68	5.51	2.46	1.71	1.29	1.28	3
6.32	5.21	2.33	1.71	1.29	1.27	3
5.96	4.91	2.20	1.71	1.28	1.26	3
5.60	4.60	2.07	1.71	1.27	1.25	3
5.24	4.30	1.93	1.71	1.27	1.24	3
4.88	4.00	1.80	1.71	1.26	1.23	3
4.52	3.70	1.67	1.71	1.25	1.21	3
4.16	3.40	1.54	1.71	1.25	1.20	3
3.80	3.11	1.40	1.71	1.24	1.20	3
3.80	3.11	1.40	1.71	1.24	1.20	2
3.42	2.79	1.26	1.71	1.24	1.19	2
3.04	2.48	1.12	1.71	1.23	1.18	2
2.66	2.16	.98	1.71	1.23	1.18	2
2.28	1.85	.84	1.71	1.22	1.17	2
1.90	1.54	.70	1.71	1.21	1.17	2
1.52	1.23	.56	1.71	1.21	1.16	2
1.14	.92	.42	1.71	1.20	1.15	2
.76	.61	.28	1.71	1.20	1.15	2
.38	.31	.14	1.71	1.19	1.14	2
.00	.00	.00	1.71	1.18	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.97	.00	.00	.00	.00	.00	2
8.66	31.97	12.60	19.37	19.37	.00	2
8.36	63.11	25.20	37.91	37.91	.00	2
8.07	93.79	37.80	55.99	55.99	.00	2
7.79	124.20	50.40	73.80	73.80	.00	2
7.50	154.31	63.00	91.31	91.31	.00	2
7.23	184.27	75.60	108.68	108.68	.00	2
6.95	214.15	88.20	125.96	125.96	.00	2
6.67	243.95	100.80	143.16	143.16	.00	2
6.40	273.68	112.00	161.68	160.28	1.40	2
6.13	303.35	122.06	181.29	177.35	3.94	2
6.13	303.35	122.06	181.29	177.35	3.94	3
5.82	336.64	133.41	203.23	196.47	6.76	3
5.51	369.86	143.63	226.23	215.52	10.71	3
5.21	403.02	152.85	250.17	234.50	15.67	3
4.91	436.11	161.29	274.83	253.42	21.41	3
4.60	469.15	169.14	300.01	272.28	27.73	3
4.30	502.14	176.53	325.61	291.09	34.52	3
4.00	535.07	183.52	351.55	309.85	41.70	3
3.70	567.96	190.32	377.64	328.57	49.07	3
3.40	600.80	196.99	403.81	347.23	56.58	3
3.11	633.60	203.54	430.06	365.85	64.20	3
3.11	633.60	203.54	430.06	365.85	64.20	2
2.79	668.17	210.45	457.72	385.46	72.26	2

2.48	702.69	217.31	485.38	405.02	80.36	2
2.16	737.16	224.21	512.94	424.52	88.42	2
1.85	771.57	231.26	540.32	443.98	96.34	2
1.54	805.94	238.30	567.64	463.38	104.25	2
1.23	840.25	245.49	594.77	482.74	112.03	2
.92	874.52	252.98	621.53	502.04	119.50	2
.61	908.72	266.05	642.67	521.28	121.39	2
.31	942.87	281.42	661.45	540.47	120.99	2
.00	976.97	295.75	681.22	559.61	121.62	2

Time = 3500. Degree of Consolidation = 94.%

Total Settlement = 1.632

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 3500. = 1.632

Settlement caused by Secondary Compression at time 3500. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.33

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.33	1.42	3.00	2.12	2.05	1
4.44	3.89	1.28	2.83	2.10	2.04	1
3.91	3.45	1.14	2.70	2.09	2.03	1
3.39	3.01	.99	2.60	2.08	2.02	1
2.88	2.58	.85	2.52	2.06	2.02	1
2.39	2.14	.71	2.47	2.05	2.01	1
1.90	1.71	.57	2.42	2.04	2.00	1
1.42	1.28	.43	2.38	2.03	1.99	1
.94	.85	.28	2.35	2.01	1.99	1
.47	.43	.14	2.32	2.00	1.98	1
.00	.00	.00	2.29	1.99	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.33	974.23	323.74	650.49	556.87	93.63	1
3.89	1017.98	339.55	678.44	584.41	94.02	1
3.45	1061.61	359.34	702.27	611.84	90.43	1
3.01	1105.12	380.14	724.97	639.14	85.84	1
2.58	1148.50	400.28	748.22	666.32	81.90	1
2.14	1191.77	419.85	771.92	693.38	78.54	1
1.71	1234.93	442.25	792.67	720.34	72.34	1
1.28	1277.98	463.90	814.07	747.18	66.89	1
.85	1320.92	484.87	836.05	773.92	62.13	1
.43	1363.76	505.10	858.66	800.56	58.11	1
.00	1406.51	531.05	875.46	827.10	48.36	1

Time = 4000. Degree of Consolidation = 92.%

Total Settlement = .665

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 4000. = .665

Settlement caused by Secondary Compression at time 4000. = .000

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

***** Coordinates *****

***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.92	3.91	1.71	1.71	1.71	2
10.28	8.61	3.79	1.71	1.56	1.56	2
9.96	8.32	3.68	1.71	1.48	1.48	2
9.64	8.03	3.56	1.71	1.43	1.43	2
9.32	7.74	3.44	1.71	1.40	1.40	2
9.00	7.46	3.32	1.71	1.36	1.36	2
8.68	7.18	3.20	1.71	1.35	1.35	2
8.36	6.91	3.08	1.71	1.34	1.34	2
8.04	6.63	2.97	1.71	1.33	1.33	2
7.72	6.36	2.85	1.71	1.32	1.32	2
7.40	6.08	2.73	1.71	1.31	1.31	2
7.40	6.08	2.73	1.71	1.31	1.31	3
7.04	5.78	2.60	1.71	1.30	1.30	3
6.68	5.47	2.46	1.71	1.28	1.28	3
6.32	5.17	2.33	1.71	1.27	1.27	3
5.96	4.87	2.20	1.71	1.26	1.26	3
5.60	4.57	2.07	1.71	1.26	1.25	3
5.24	4.27	1.93	1.71	1.25	1.24	3
4.88	3.97	1.80	1.71	1.24	1.23	3
4.52	3.67	1.67	1.71	1.24	1.21	3
4.16	3.38	1.54	1.71	1.23	1.20	3
3.80	3.08	1.40	1.71	1.22	1.20	3
3.80	3.08	1.40	1.71	1.22	1.20	2
3.42	2.77	1.26	1.71	1.22	1.19	2
3.04	2.46	1.12	1.71	1.21	1.18	2
2.66	2.15	.98	1.71	1.21	1.18	2
2.28	1.84	.84	1.71	1.20	1.17	2
1.90	1.53	.70	1.71	1.20	1.17	2
1.52	1.22	.56	1.71	1.19	1.16	2
1.14	.92	.42	1.71	1.19	1.15	2
.76	.61	.28	1.71	1.18	1.15	2
.38	.31	.14	1.71	1.18	1.14	2
.00	.00	.00	1.71	1.17	1.14	2

***** Stresses *****

***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.92	.00	.00	.00	.00	.00	2
8.61	31.97	12.60	19.37	19.37	.00	2
8.32	63.11	25.20	37.91	37.91	.00	2
8.03	93.79	37.80	55.99	55.99	.00	2
7.74	124.20	50.40	73.80	73.80	.00	2
7.46	154.31	63.00	91.31	91.31	.00	2
7.18	184.27	75.60	108.68	108.68	.00	2
6.91	214.15	88.20	125.96	125.96	.00	2
6.63	243.95	100.80	143.16	143.16	.00	2
6.36	273.68	113.40	160.28	160.28	.00	2
6.08	303.33	125.95	177.37	177.33	.04	3
6.08	303.33	125.95	177.37	177.33	.04	3
5.78	336.59	140.17	196.42	196.42	.00	3
5.47	369.75	154.34	215.41	215.40	.00	3

5.17	402.82	167.02	235.79	234.30	1.50	3
4.87	435.80	178.43	257.37	253.11	4.27	3
4.57	468.71	188.65	280.06	271.84	8.22	3
4.27	501.56	197.86	303.70	290.51	13.18	3
3.97	534.34	206.22	328.12	309.12	19.00	3
3.67	567.07	213.83	353.24	327.67	25.57	3
3.38	599.75	220.78	378.97	346.18	32.79	3
3.08	632.38	227.34	405.04	364.64	40.41	3
3.08	632.38	227.34	405.04	364.64	40.41	2
2.77	666.77	234.29	432.49	384.07	48.42	2
2.46	701.12	240.98	460.14	403.45	56.69	2
2.15	735.42	247.57	487.85	422.79	65.06	2
1.84	769.67	254.20	515.47	442.07	73.40	2
1.53	803.87	266.13	537.74	461.31	76.43	2
1.22	838.02	279.40	558.62	480.50	78.12	2
.92	872.13	291.75	580.38	499.65	80.73	2
.61	906.20	303.02	603.19	518.76	84.42	2
.31	940.24	313.61	626.63	537.83	88.80	2
.00	974.23	323.74	650.49	556.87	93.63	2

Time = 4000. Degree of Consolidation = 97.%

Total Settlement = 1.676

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 4000. = 1.676

Settlement caused by Secondary Compression at time 4000. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.26

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.31	1.42	3.00	2.09	2.05	1
4.44	3.87	1.28	2.83	2.08	2.04	1
3.91	3.43	1.14	2.70	2.06	2.03	1
3.39	3.00	.99	2.60	2.05	2.02	1
2.88	2.57	.85	2.52	2.04	2.02	1
2.39	2.14	.71	2.47	2.03	2.01	1
1.90	1.71	.57	2.42	2.02	2.00	1
1.42	1.28	.43	2.38	2.01	1.99	1
.94	.85	.28	2.35	2.00	1.99	1
.47	.42	.14	2.32	1.99	1.98	1
.00	.00	.00	2.29	1.99	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.31	972.51	365.59	606.92	555.15	51.78	1
3.87	1016.00	381.49	634.50	582.43	52.08	1
3.43	1059.39	397.51	661.88	609.61	52.27	1
3.00	1102.68	413.63	689.05	636.70	52.35	1

2.57	1145.88	431.25	714.63	663.70	50.93	1
2.14	1188.99	449.65	739.35	690.61	48.74	1
1.71	1232.02	467.64	764.38	717.42	46.96	1
1.28	1274.95	485.27	789.68	744.15	45.52	1
.85	1317.80	502.60	815.20	770.80	44.40	1
.42	1360.56	523.94	836.62	797.36	39.26	1
.00	1403.24	548.05	855.19	823.83	31.36	1

Time = 4500. Degree of Consolidation = 95.%

Total Settlement = .690

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 4500. = .690

Settlement caused by Secondary Compression at time 4500. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.90	3.91	1.71	1.71	1.71	2
10.28	8.59	3.79	1.71	1.56	1.56	2
9.96	8.29	3.68	1.71	1.48	1.48	2
9.64	8.00	3.56	1.71	1.43	1.43	2
9.32	7.71	3.44	1.71	1.40	1.40	2
9.00	7.43	3.32	1.71	1.36	1.36	2
8.68	7.15	3.20	1.71	1.35	1.35	2
8.36	6.88	3.08	1.71	1.34	1.34	2
8.04	6.60	2.97	1.71	1.33	1.33	2
7.72	6.33	2.85	1.71	1.32	1.32	2
7.40	6.05	2.73	1.71	1.31	1.31	2
7.40	6.05	2.73	1.71	1.31	1.31	3
7.04	5.75	2.60	1.71	1.30	1.30	3
6.68	5.44	2.46	1.71	1.28	1.28	3
6.32	5.14	2.33	1.71	1.27	1.27	3
5.96	4.84	2.20	1.71	1.26	1.26	3
5.60	4.54	2.07	1.71	1.25	1.25	3
5.24	4.24	1.93	1.71	1.24	1.24	3
4.88	3.95	1.80	1.71	1.23	1.23	3
4.52	3.65	1.67	1.71	1.23	1.21	3
4.16	3.35	1.54	1.71	1.22	1.20	3
3.80	3.06	1.40	1.71	1.21	1.20	3
3.80	3.06	1.40	1.71	1.21	1.20	2
3.42	2.75	1.26	1.71	1.20	1.19	2
3.04	2.44	1.12	1.71	1.20	1.18	2
2.66	2.13	.98	1.71	1.19	1.18	2
2.28	1.83	.84	1.71	1.19	1.17	2
1.90	1.52	.70	1.71	1.18	1.17	2
1.52	1.22	.56	1.71	1.18	1.16	2
1.14	.91	.42	1.71	1.17	1.15	2
.76	.61	.28	1.71	1.17	1.15	2
.38	.30	.14	1.71	1.16	1.14	2
.00	.00	.00	1.71	1.16	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.90	.00	.00	.00	.00	.00	2
8.59	31.97	12.60	19.37	19.37	.00	2
8.29	63.11	25.20	37.91	37.91	.00	2
8.00	93.79	37.80	55.99	55.99	.00	2

7.71	124.20	50.40	73.80	73.80	.00	2
7.43	154.31	63.00	91.31	91.31	.00	2
7.15	184.27	75.60	108.68	108.68	.00	2
6.88	214.15	88.20	125.96	125.96	.00	2
6.60	243.95	100.80	143.16	143.16	.00	2
6.33	273.68	113.40	160.28	160.28	.00	2
6.05	303.33	126.00	177.33	177.33	.00	2
6.05	303.33	126.00	177.33	177.33	.00	3
5.75	336.59	140.17	196.41	196.41	.00	3
5.44	369.75	154.35	215.40	215.40	.00	3
5.14	402.81	168.52	234.29	234.29	.00	3
4.84	435.78	182.45	253.33	253.08	.25	3
4.54	468.65	195.03	273.62	271.78	1.84	3
4.24	501.45	206.35	295.10	290.40	4.70	3
3.95	534.17	216.62	317.55	308.95	8.60	3
3.65	566.82	225.94	340.87	327.42	13.45	3
3.35	599.41	234.39	365.02	345.84	19.18	3
3.06	631.94	242.26	389.68	364.19	25.48	3
3.06	631.94	242.26	389.68	364.19	25.48	2
2.75	666.22	250.65	415.57	383.51	32.06	2
2.44	700.44	261.42	439.02	402.77	36.25	2
2.13	734.61	276.45	458.15	421.98	36.18	2
1.83	768.73	290.38	478.34	441.13	37.21	2
1.52	802.80	303.67	499.12	460.24	38.88	2
1.22	836.82	316.14	520.69	479.31	41.38	2
.91	870.81	328.17	542.64	498.33	44.31	2
.61	904.75	340.54	564.22	517.31	46.90	2
.30	938.66	353.20	585.45	536.25	49.20	2
.00	972.51	365.59	606.92	555.15	51.78	2

Time = 4500. Degree of Consolidation = 98.%

Total Settlement = 1.703

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 4500. = 1.703

Settlement caused by Secondary Compression at time 4500. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.21

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.29	1.42	3.00	2.07	2.05	1
4.44	3.86	1.28	2.83	2.06	2.04	1
3.91	3.42	1.14	2.70	2.05	2.03	1
3.39	2.99	.99	2.60	2.04	2.02	1
2.88	2.56	.85	2.52	2.03	2.02	1
2.39	2.13	.71	2.47	2.02	2.01	1
1.90	1.70	.57	2.42	2.01	2.00	1
1.42	1.27	.43	2.38	2.00	1.99	1
.94	.85	.28	2.35	2.00	1.99	1
.47	.42	.14	2.32	1.99	1.98	1

.00 .00 .00 2.29 1.98 1.97 1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.29	971.06	387.85	583.21	553.69	29.52	1
3.86	1014.42	403.13	611.28	580.84	30.44	1
3.42	1057.68	418.23	639.45	607.91	31.54	1
2.99	1100.86	435.52	665.34	634.88	30.46	1
2.56	1143.95	452.80	691.15	661.77	29.38	1
2.13	1186.96	469.56	717.41	688.57	28.83	1
1.70	1229.89	485.70	744.19	715.30	28.89	1
1.27	1272.74	501.30	771.44	741.94	29.50	1
.85	1315.51	519.28	796.23	768.51	27.72	1
.42	1358.21	540.74	817.47	795.01	22.46	1
.00	1400.84	561.85	838.99	821.43	17.56	1

Time = 5000. Degree of Consolidation = 97.%

Total Settlement = .705

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 5000. = .705

Settlement caused by Secondary Compression at time 5000. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.87	3.91	1.71	1.71	1.71	2
10.28	8.56	3.79	1.71	1.56	1.56	2
9.96	8.27	3.68	1.71	1.48	1.48	2
9.64	7.98	3.56	1.71	1.43	1.43	2
9.32	7.69	3.44	1.71	1.40	1.40	2
9.00	7.41	3.32	1.71	1.36	1.36	2
8.68	7.13	3.20	1.71	1.35	1.35	2
8.36	6.85	3.08	1.71	1.34	1.34	2
8.04	6.58	2.97	1.71	1.33	1.33	2
7.72	6.30	2.85	1.71	1.32	1.32	2
7.40	6.03	2.73	1.71	1.31	1.31	2
7.40	6.03	2.73	1.71	1.31	1.31	3
7.04	5.73	2.60	1.71	1.30	1.30	3
6.68	5.42	2.46	1.71	1.28	1.28	3
6.32	5.12	2.33	1.71	1.27	1.27	3
5.96	4.82	2.20	1.71	1.26	1.26	3
5.60	4.52	2.07	1.71	1.25	1.25	3
5.24	4.22	1.93	1.71	1.24	1.24	3
4.88	3.92	1.80	1.71	1.23	1.23	3
4.52	3.63	1.67	1.71	1.22	1.21	3
4.16	3.33	1.54	1.71	1.21	1.20	3
3.80	3.04	1.40	1.71	1.20	1.20	3
3.80	3.04	1.40	1.71	1.20	1.20	2
3.42	2.74	1.26	1.71	1.19	1.19	2
3.04	2.43	1.12	1.71	1.18	1.18	2
2.66	2.12	.98	1.71	1.18	1.18	2
2.28	1.82	.84	1.71	1.17	1.17	2
1.90	1.51	.70	1.71	1.17	1.17	2
1.52	1.21	.56	1.71	1.16	1.16	2
1.14	.91	.42	1.71	1.16	1.15	2
.76	.60	.28	1.71	1.16	1.15	2
.38	.30	.14	1.71	1.15	1.14	2

.00 .00 .00 1.71 1.15 1.14 2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.87	.00	.00	.00	.00	.00	2
8.56	31.97	12.60	19.37	19.37	.00	2
8.27	63.11	25.20	37.91	37.91	.00	2
7.98	93.79	37.80	55.99	55.99	.00	2
7.69	124.20	50.40	73.80	73.80	.00	2
7.41	154.31	63.00	91.31	91.31	.00	2
7.13	184.27	75.60	108.68	108.68	.00	2
6.85	214.15	88.20	125.96	125.95	.00	2
6.58	243.95	100.80	143.16	143.16	.00	2
6.30	273.68	113.40	160.28	160.28	.00	2
6.03	303.33	126.00	177.33	177.33	.00	2
6.03	303.33	126.00	177.33	177.33	.00	3
5.73	336.59	140.17	196.41	196.41	.00	3
5.42	369.75	154.35	215.40	215.40	.00	3
5.12	402.81	168.52	234.29	234.29	.00	3
4.82	435.78	182.70	253.08	253.08	.00	3
4.52	468.65	196.87	271.78	271.78	.00	3
4.22	501.42	211.05	290.37	290.37	.00	3
3.92	534.09	224.77	309.33	308.87	.45	3
3.63	566.67	237.58	329.10	327.28	1.82	3
3.33	599.17	249.60	349.57	345.60	3.97	3
3.04	631.59	265.66	365.92	363.84	2.08	3
3.04	631.59	265.66	365.92	363.84	2.08	2
2.74	665.74	282.71	383.03	383.03	.00	2
2.43	699.83	297.67	402.16	402.16	.00	2
2.12	733.87	312.36	421.52	421.24	.27	2
1.82	767.87	324.69	443.18	440.28	2.90	2
1.51	801.83	336.07	465.76	459.27	6.48	2
1.21	835.75	347.14	488.61	478.23	10.38	2
.91	869.63	358.12	511.51	497.15	14.36	2
.60	903.47	368.69	534.79	516.03	18.76	2
.30	937.28	378.50	558.78	534.88	23.90	2
.00	971.06	387.85	583.21	553.69	29.52	2

Time = 5000. Degree of Consolidation = 100.%

Total Settlement = 1.727

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 5000. = 1.727

Settlement caused by Secondary Compression at time 5000. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.17

Consistency Error --DREDGED FILL --LAYER/ 3

***** Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A XI Z Einital E Eeop Material

5.00	4.28	1.42	3.00	2.06	2.05	1
4.44	3.85	1.28	2.83	2.05	2.04	1
3.91	3.42	1.14	2.70	2.04	2.03	1
3.39	2.98	.99	2.60	2.03	2.02	1
2.88	2.55	.85	2.52	2.03	2.02	1
2.39	2.13	.71	2.47	2.02	2.01	1
1.90	1.70	.57	2.42	2.01	2.00	1
1.42	1.27	.43	2.38	2.00	1.99	1
.94	.85	.28	2.35	1.99	1.99	1
.47	.42	.14	2.32	1.98	1.98	1
.00	.00	.00	2.29	1.98	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.28	970.83	400.05	570.78	553.46	17.32	1
3.85	1014.11	415.27	598.84	580.54	18.30	1
3.42	1057.31	431.77	625.54	607.54	18.00	1
2.98	1100.42	448.46	651.97	634.44	17.52	1
2.55	1143.45	464.51	678.94	661.27	17.67	1
2.13	1186.41	480.00	706.41	688.02	18.38	1
1.70	1229.29	494.99	734.30	714.70	19.61	1
1.27	1272.10	509.51	762.59	741.30	21.29	1
.85	1314.83	529.75	785.08	767.83	17.25	1
.42	1357.50	549.70	807.79	794.29	13.50	1
.00	1400.10	569.18	830.92	820.69	10.23	1

Time = 5500. Degree of Consolidation = 98.%

Total Settlement = .713

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 5500. = .713

Settlement caused by Secondary Compression at time 5500. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.87	3.91	1.71	1.71	1.71	2
10.28	8.56	3.79	1.71	1.56	1.56	2
9.96	8.26	3.68	1.71	1.48	1.48	2
9.64	7.97	3.56	1.71	1.43	1.43	2
9.32	7.69	3.44	1.71	1.40	1.40	2
9.00	7.41	3.32	1.71	1.36	1.36	2
8.68	7.13	3.20	1.71	1.35	1.35	2
8.36	6.85	3.08	1.71	1.34	1.34	2
8.04	6.58	2.97	1.71	1.33	1.33	2
7.72	6.30	2.85	1.71	1.32	1.32	2
7.40	6.03	2.73	1.71	1.31	1.31	2
7.40	6.03	2.73	1.71	1.31	1.31	3
7.04	5.72	2.60	1.71	1.30	1.30	3
6.68	5.42	2.46	1.71	1.28	1.28	3
6.32	5.11	2.33	1.71	1.27	1.27	3
5.96	4.81	2.20	1.71	1.26	1.26	3
5.60	4.51	2.07	1.71	1.25	1.25	3
5.24	4.22	1.93	1.71	1.24	1.24	3
4.88	3.92	1.80	1.71	1.23	1.23	3
4.52	3.62	1.67	1.71	1.22	1.21	3
4.16	3.33	1.54	1.71	1.21	1.20	3
3.80	3.04	1.40	1.71	1.20	1.20	3

3.80	3.04	1.40	1.71	1.20	1.20	2
3.42	2.73	1.26	1.71	1.19	1.19	2
3.04	2.42	1.12	1.71	1.18	1.18	2
2.66	2.12	.98	1.71	1.18	1.18	2
2.28	1.81	.84	1.71	1.17	1.17	2
1.90	1.51	.70	1.71	1.17	1.17	2
1.52	1.21	.56	1.71	1.16	1.16	2
1.14	.90	.42	1.71	1.15	1.15	2
.76	.60	.28	1.71	1.15	1.15	2
.38	.30	.14	1.71	1.15	1.14	2
.00	.00	.00	1.71	1.14	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.87	.00	.00	.00	.00	.00	2
8.56	31.97	12.60	19.37	19.37	.00	2
8.26	63.11	25.20	37.91	37.91	.00	2
7.97	93.79	37.80	55.99	55.99	.00	2
7.69	124.20	50.40	73.80	73.80	.00	2
7.41	154.31	63.00	91.31	91.31	.00	2
7.13	184.27	75.60	108.68	108.68	.00	2
6.85	214.15	88.20	125.96	125.96	.00	2
6.58	243.95	100.80	143.16	143.16	.00	2
6.30	273.68	113.40	160.28	160.28	.00	2
6.03	303.33	126.00	177.33	177.33	.00	2
6.03	303.33	126.00	177.33	177.33	.00	3
5.72	336.59	140.17	196.41	196.41	.00	3
5.42	369.75	154.35	215.40	215.40	.00	3
5.11	402.81	168.52	234.29	234.29	.00	3
4.81	435.78	182.70	253.08	253.08	.00	3
4.51	468.65	196.87	271.78	271.78	.00	3
4.22	501.42	211.05	290.37	290.37	.00	3
3.92	534.09	224.77	309.32	308.87	.45	3
3.62	566.67	237.59	329.09	327.28	1.81	3
3.33	599.17	249.62	349.55	345.60	3.95	3
3.04	631.59	265.72	365.87	363.84	2.03	3
3.04	631.59	265.72	365.87	363.84	2.03	2
2.73	665.74	282.71	383.03	383.03	.00	2
2.42	699.83	297.67	402.16	402.16	.00	2
2.12	733.87	312.63	421.24	421.24	.00	2
1.81	767.87	327.59	440.27	440.27	.00	2
1.51	801.81	342.56	459.25	459.25	.00	2
1.21	835.70	357.52	478.18	478.18	.00	2
.90	869.54	371.46	498.08	497.06	1.02	2
.60	903.34	382.79	520.55	515.89	4.65	2
.30	937.10	392.16	544.94	534.69	10.25	2
.00	970.83	400.05	570.78	553.46	17.32	2

Time = 5500. Degree of Consolidation = 100.%

Total Settlement = 1.730

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 5500. = 1.730

Settlement caused by Secondary Compression at time 5500. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.16

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.28	1.42	3.00	2.06	2.05	1
4.44	3.85	1.28	2.83	2.05	2.04	1
3.91	3.42	1.14	2.70	2.04	2.03	1
3.39	2.98	.99	2.60	2.03	2.02	1
2.88	2.55	.85	2.52	2.03	2.02	1
2.39	2.13	.71	2.47	2.02	2.01	1
1.90	1.70	.57	2.42	2.01	2.00	1
1.42	1.27	.43	2.38	2.00	1.99	1
.94	.85	.28	2.35	1.99	1.99	1
.47	.42	.14	2.32	1.98	1.98	1
.00	.00	.00	2.29	1.98	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.28	970.83	400.05	570.78	553.46	17.32	1
3.85	1014.11	415.27	598.84	580.54	18.30	1
3.42	1057.31	431.77	625.54	607.54	18.00	1
2.98	1100.42	448.46	651.96	634.44	17.52	1
2.55	1143.45	464.51	678.94	661.27	17.67	1
2.13	1186.41	480.00	706.40	688.02	18.38	1
1.70	1229.29	494.99	734.30	714.70	19.61	1
1.27	1272.10	509.51	762.59	741.30	21.29	1
.85	1314.83	529.75	785.08	767.83	17.25	1
.42	1357.50	549.71	807.79	794.29	13.50	1
.00	1400.10	569.18	830.92	820.69	10.23	1

Time = 6000. Degree of Consolidation = 98.%

Total Settlement = .713

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 6000. = .713

Settlement caused by Secondary Compression at time 6000. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.87	3.91	1.71	1.71	1.71	2
10.28	8.56	3.79	1.71	1.56	1.56	2
9.96	8.26	3.68	1.71	1.48	1.48	2
9.64	7.97	3.56	1.71	1.43	1.43	2
9.32	7.69	3.44	1.71	1.40	1.40	2
9.00	7.41	3.32	1.71	1.36	1.36	2
8.68	7.13	3.20	1.71	1.35	1.35	2
8.36	6.85	3.08	1.71	1.34	1.34	2
8.04	6.58	2.97	1.71	1.33	1.33	2
7.72	6.30	2.85	1.71	1.32	1.32	2
7.40	6.03	2.73	1.71	1.31	1.31	2
7.40	6.03	2.73	1.71	1.31	1.31	3

7.04	5.72	2.60	1.71	1.30	1.30	3
6.68	5.42	2.46	1.71	1.28	1.28	3
6.32	5.11	2.33	1.71	1.27	1.27	3
5.96	4.81	2.20	1.71	1.26	1.26	3
5.60	4.51	2.07	1.71	1.25	1.25	3
5.24	4.22	1.93	1.71	1.24	1.24	3
4.88	3.92	1.80	1.71	1.23	1.23	3
4.52	3.62	1.67	1.71	1.22	1.21	3
4.16	3.33	1.54	1.71	1.21	1.20	3
3.80	3.04	1.40	1.71	1.20	1.20	3
3.80	3.04	1.40	1.71	1.20	1.20	2
3.42	2.73	1.26	1.71	1.19	1.19	2
3.04	2.42	1.12	1.71	1.18	1.18	2
2.66	2.12	.98	1.71	1.18	1.18	2
2.28	1.81	.84	1.71	1.17	1.17	2
1.90	1.51	.70	1.71	1.17	1.17	2
1.52	1.21	.56	1.71	1.16	1.16	2
1.14	.90	.42	1.71	1.15	1.15	2
.76	.60	.28	1.71	1.15	1.15	2
.38	.30	.14	1.71	1.15	1.14	2
.00	.00	.00	1.71	1.14	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.87	.00	.00	.00	.00	.00	2
8.56	31.97	12.60	19.37	19.37	.00	2
8.26	63.11	25.20	37.91	37.91	.00	2
7.97	93.79	37.80	55.99	55.99	.00	2
7.69	124.20	50.40	73.80	73.80	.00	2
7.41	154.31	63.00	91.31	91.31	.00	2
7.13	184.27	75.60	108.68	108.68	.00	2
6.85	214.15	88.20	125.96	125.96	.00	2
6.58	243.95	100.80	143.16	143.16	.00	2
6.30	273.68	113.40	160.28	160.28	.00	2
6.03	303.33	126.00	177.33	177.33	.00	2
6.03	303.33	126.00	177.33	177.33	.00	3
5.72	336.59	140.17	196.41	196.41	.00	3
5.42	369.75	154.35	215.40	215.40	.00	3
5.11	402.81	168.52	234.29	234.29	.00	3
4.81	435.78	182.70	253.08	253.08	.00	3
4.51	468.65	196.87	271.78	271.78	.00	3
4.22	501.42	211.05	290.37	290.37	.00	3
3.92	534.09	224.77	309.32	308.87	.45	3
3.62	566.67	237.59	329.09	327.28	1.81	3
3.33	599.17	249.62	349.55	345.60	3.95	3
3.04	631.59	265.72	365.87	363.84	2.03	3
3.04	631.59	265.72	365.87	363.84	2.03	2
2.73	665.74	282.71	383.03	383.03	.00	2
2.42	699.83	297.67	402.16	402.16	.00	2
2.12	733.87	312.63	421.24	421.24	.00	2
1.81	767.87	327.59	440.27	440.27	.00	2
1.51	801.81	342.56	459.25	459.25	.00	2
1.21	835.70	357.52	478.18	478.18	.00	2
.90	869.54	371.46	498.08	497.06	1.02	2
.60	903.34	382.79	520.55	515.89	4.65	2
.30	937.10	392.16	544.94	534.69	10.25	2
.00	970.83	400.05	570.78	553.46	17.32	2

Time = 6000. Degree of Consolidation = 100.%

Total Settlement = 1.730

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 6000. = 1.730

Settlement caused by Secondary Compression at time 6000. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.16

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.28	1.42	3.00	2.06	2.05	1
4.44	3.85	1.28	2.83	2.05	2.04	1
3.91	3.42	1.14	2.70	2.04	2.03	1
3.39	2.98	.99	2.60	2.03	2.02	1
2.88	2.55	.85	2.52	2.03	2.02	1
2.39	2.13	.71	2.47	2.02	2.01	1
1.90	1.70	.57	2.42	2.01	2.00	1
1.42	1.27	.43	2.38	2.00	1.99	1
.94	.85	.28	2.35	1.99	1.99	1
.47	.42	.14	2.32	1.98	1.98	1
.00	.00	.00	2.29	1.98	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.28	970.83	400.05	570.78	553.46	17.32	1
3.85	1014.11	415.27	598.84	580.54	18.30	1
3.42	1057.31	431.77	625.54	607.54	18.00	1
2.98	1100.42	448.46	651.96	634.44	17.52	1
2.55	1143.45	464.51	678.94	661.27	17.67	1
2.13	1186.41	480.00	706.40	688.02	18.38	1
1.70	1229.29	494.99	734.30	714.70	19.61	1
1.27	1272.10	509.51	762.59	741.30	21.29	1
.85	1314.83	529.75	785.08	767.83	17.25	1
.42	1357.50	549.71	807.79	794.29	13.50	1
.00	1400.10	569.18	830.92	820.69	10.23	1

Time = 6500. Degree of Consolidation = 98.%

Total Settlement = .713

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 6500. = .713

Settlement caused by Secondary Compression at time 6500. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.87	3.91	1.71	1.71	1.71	2
10.28	8.56	3.79	1.71	1.56	1.56	2

9.96	8.26	3.68	1.71	1.48	1.48	2
9.64	7.97	3.56	1.71	1.43	1.43	2
9.32	7.69	3.44	1.71	1.40	1.40	2
9.00	7.41	3.32	1.71	1.36	1.36	2
8.68	7.13	3.20	1.71	1.35	1.35	2
8.36	6.85	3.08	1.71	1.34	1.34	2
8.04	6.58	2.97	1.71	1.33	1.33	2
7.72	6.30	2.85	1.71	1.32	1.32	2
7.40	6.03	2.73	1.71	1.31	1.31	2
7.40	6.03	2.73	1.71	1.31	1.31	3
7.04	5.72	2.60	1.71	1.30	1.30	3
6.68	5.42	2.46	1.71	1.28	1.28	3
6.32	5.11	2.33	1.71	1.27	1.27	3
5.96	4.81	2.20	1.71	1.26	1.26	3
5.60	4.51	2.07	1.71	1.25	1.25	3
5.24	4.22	1.93	1.71	1.24	1.24	3
4.88	3.92	1.80	1.71	1.23	1.23	3
4.52	3.62	1.67	1.71	1.22	1.21	3
4.16	3.33	1.54	1.71	1.21	1.20	3
3.80	3.04	1.40	1.71	1.20	1.20	3
3.80	3.04	1.40	1.71	1.20	1.20	2
3.42	2.73	1.26	1.71	1.19	1.19	2
3.04	2.42	1.12	1.71	1.18	1.18	2
2.66	2.12	.98	1.71	1.18	1.18	2
2.28	1.81	.84	1.71	1.17	1.17	2
1.90	1.51	.70	1.71	1.17	1.17	2
1.52	1.21	.56	1.71	1.16	1.16	2
1.14	.90	.42	1.71	1.15	1.15	2
.76	.60	.28	1.71	1.15	1.15	2
.38	.30	.14	1.71	1.15	1.14	2
.00	.00	.00	1.71	1.14	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.87	.00	.00	.00	.00	.00	2
8.56	31.97	12.60	19.37	19.37	.00	2
8.26	63.11	25.20	37.91	37.91	.00	2
7.97	93.79	37.80	55.99	55.99	.00	2
7.69	124.20	50.40	73.80	73.80	.00	2
7.41	154.31	63.00	91.31	91.31	.00	2
7.13	184.27	75.60	108.68	108.68	.00	2
6.85	214.15	88.20	125.96	125.96	.00	2
6.58	243.95	100.80	143.16	143.16	.00	2
6.30	273.68	113.40	160.28	160.28	.00	2
6.03	303.33	126.00	177.33	177.33	.00	2
6.03	303.33	126.00	177.33	177.33	.00	3
5.72	336.59	140.17	196.41	196.41	.00	3
5.42	369.75	154.35	215.40	215.40	.00	3
5.11	402.81	168.52	234.29	234.29	.00	3
4.81	435.78	182.70	253.08	253.08	.00	3
4.51	468.65	196.87	271.78	271.78	.00	3
4.22	501.42	211.05	290.37	290.37	.00	3
3.92	534.09	224.77	309.32	308.87	.45	3
3.62	566.67	237.59	329.09	327.28	1.81	3
3.33	599.17	249.62	349.55	345.60	3.95	3
3.04	631.59	265.72	365.87	363.84	2.03	3
2.73	665.74	282.71	383.03	383.03	.00	2
2.42	699.83	297.67	402.16	402.16	.00	2
2.12	733.87	312.63	421.24	421.24	.00	2
1.81	767.87	327.59	440.27	440.27	.00	2
1.51	801.81	342.56	459.25	459.25	.00	2
1.21	835.70	357.52	478.18	478.18	.00	2
.90	869.54	371.46	498.08	497.06	1.02	2
.60	903.34	382.79	520.55	515.89	4.65	2
.30	937.10	392.16	544.94	534.69	10.25	2
.00	970.83	400.05	570.78	553.46	17.32	2

Time = 6500. Degree of Consolidation = 100.%

Total Settlement = 1.730

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 6500. = 1.730

Settlement caused by Secondary Compression at time 6500. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.16

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.28	1.42	3.00	2.06	2.05	1
4.44	3.85	1.28	2.83	2.05	2.04	1
3.91	3.42	1.14	2.70	2.04	2.03	1
3.39	2.98	.99	2.60	2.03	2.02	1
2.88	2.55	.85	2.52	2.03	2.02	1
2.39	2.13	.71	2.47	2.02	2.01	1
1.90	1.70	.57	2.42	2.01	2.00	1
1.42	1.27	.43	2.38	2.00	1.99	1
.94	.85	.28	2.35	1.99	1.99	1
.47	.42	.14	2.32	1.98	1.98	1
.00	.00	.00	2.29	1.98	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.28	970.83	400.05	570.78	553.46	17.32	1
3.85	1014.11	415.27	598.84	580.54	18.30	1
3.42	1057.31	431.77	625.54	607.54	18.00	1
2.98	1100.42	448.46	651.96	634.44	17.52	1
2.55	1143.45	464.51	678.94	661.27	17.67	1
2.13	1186.41	480.00	706.40	688.02	18.38	1
1.70	1229.29	494.99	734.30	714.70	19.61	1
1.27	1272.10	509.51	762.59	741.30	21.29	1
.85	1314.83	529.75	785.08	767.83	17.25	1
.42	1357.50	549.71	807.79	794.29	13.50	1
.00	1400.10	569.18	830.92	820.69	10.23	1

Time = 7000. Degree of Consolidation = 98.%

Total Settlement = .713

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 7000. = .713

Settlement caused by Secondary Compression at time 7000. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.87	3.91	1.71	1.71	1.71	2
10.28	8.56	3.79	1.71	1.56	1.56	2
9.96	8.26	3.68	1.71	1.48	1.48	2
9.64	7.97	3.56	1.71	1.43	1.43	2
9.32	7.69	3.44	1.71	1.40	1.40	2
9.00	7.41	3.32	1.71	1.36	1.36	2
8.68	7.13	3.20	1.71	1.35	1.35	2
8.36	6.85	3.08	1.71	1.34	1.34	2
8.04	6.58	2.97	1.71	1.33	1.33	2
7.72	6.30	2.85	1.71	1.32	1.32	2
7.40	6.03	2.73	1.71	1.31	1.31	2
7.40	6.03	2.73	1.71	1.31	1.31	3
7.04	5.72	2.60	1.71	1.30	1.30	3
6.68	5.42	2.46	1.71	1.28	1.28	3
6.32	5.11	2.33	1.71	1.27	1.27	3
5.96	4.81	2.20	1.71	1.26	1.26	3
5.60	4.51	2.07	1.71	1.25	1.25	3
5.24	4.22	1.93	1.71	1.24	1.24	3
4.88	3.92	1.80	1.71	1.23	1.23	3
4.52	3.62	1.67	1.71	1.22	1.21	3
4.16	3.33	1.54	1.71	1.21	1.20	3
3.80	3.04	1.40	1.71	1.20	1.20	3
3.80	3.04	1.40	1.71	1.20	1.20	2
3.42	2.73	1.26	1.71	1.19	1.19	2
3.04	2.42	1.12	1.71	1.18	1.18	2
2.66	2.12	.98	1.71	1.18	1.18	2
2.28	1.81	.84	1.71	1.17	1.17	2
1.90	1.51	.70	1.71	1.17	1.17	2
1.52	1.21	.56	1.71	1.16	1.16	2
1.14	.90	.42	1.71	1.15	1.15	2
.76	.60	.28	1.71	1.15	1.15	2
.38	.30	.14	1.71	1.15	1.14	2
.00	.00	.00	1.71	1.14	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.87	.00	.00	.00	.00	.00	2
8.56	31.97	12.60	19.37	19.37	.00	2
8.26	63.11	25.20	37.91	37.91	.00	2
7.97	93.79	37.80	55.99	55.99	.00	2
7.69	124.20	50.40	73.80	73.80	.00	2
7.41	154.31	63.00	91.31	91.31	.00	2
7.13	184.27	75.60	108.68	108.68	.00	2
6.85	214.15	88.20	125.96	125.96	.00	2
6.58	243.95	100.80	143.16	143.16	.00	2
6.30	273.68	113.40	160.28	160.28	.00	2
6.03	303.33	126.00	177.33	177.33	.00	2
6.03	303.33	126.00	177.33	177.33	.00	3
5.72	336.59	140.17	196.41	196.41	.00	3
5.42	369.75	154.35	215.40	215.40	.00	3
5.11	402.81	168.52	234.29	234.29	.00	3
4.81	435.78	182.70	253.08	253.08	.00	3
4.51	468.65	196.87	271.78	271.78	.00	3
4.22	501.42	211.05	290.37	290.37	.00	3
3.92	534.09	224.77	309.32	308.87	.45	3
3.62	566.67	237.59	329.09	327.28	1.81	3
3.33	599.17	249.62	349.55	345.60	3.95	3
3.04	631.59	265.72	365.87	363.84	2.03	3
3.04	631.59	265.72	365.87	363.84	2.03	2
2.73	665.74	282.71	383.03	383.03	.00	2

2.42	699.83	297.67	402.16	402.16	.00	2
2.12	733.87	312.63	421.24	421.24	.00	2
1.81	767.87	327.59	440.27	440.27	.00	2
1.51	801.81	342.56	459.25	459.25	.00	2
1.21	835.70	357.52	478.18	478.18	.00	2
.90	869.54	371.46	498.08	497.06	1.02	2
.60	903.34	382.79	520.55	515.89	4.65	2
.30	937.10	392.16	544.94	534.69	10.25	2
.00	970.83	400.05	570.78	553.46	17.32	2

Time = 7000. Degree of Consolidation = 100.%

Total Settlement = 1.730

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 7000. = 1.730

Settlement caused by Secondary Compression at time 7000. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.16

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.28	1.42	3.00	2.06	2.05	1
4.44	3.85	1.28	2.83	2.05	2.04	1
3.91	3.42	1.14	2.70	2.04	2.03	1
3.39	2.98	.99	2.60	2.03	2.02	1
2.88	2.55	.85	2.52	2.03	2.02	1
2.39	2.13	.71	2.47	2.02	2.01	1
1.90	1.70	.57	2.42	2.01	2.00	1
1.42	1.27	.43	2.38	2.00	1.99	1
.94	.85	.28	2.35	1.99	1.99	1
.47	.42	.14	2.32	1.98	1.98	1
.00	.00	.00	2.29	1.98	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.28	970.83	400.05	570.78	553.46	17.32	1
3.85	1014.11	415.27	598.84	580.54	18.30	1
3.42	1057.31	431.77	625.54	607.54	18.00	1
2.98	1100.42	448.46	651.96	634.44	17.52	1
2.55	1143.45	464.51	678.94	661.27	17.67	1
2.13	1186.41	480.00	706.40	688.02	18.38	1
1.70	1229.29	494.99	734.30	714.70	19.61	1
1.27	1272.10	509.51	762.59	741.30	21.29	1
.85	1314.83	529.75	785.08	767.83	17.25	1
.42	1357.50	549.71	807.79	794.29	13.50	1
.00	1400.10	569.18	830.92	820.69	10.23	1

Time = 7500. Degree of Consolidation = 98.%

Total Settlement = .713

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 7500. = .713

Settlement caused by Secondary Compression at time 7500. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.87	3.91	1.71	1.71	1.71	2
10.28	8.56	3.79	1.71	1.56	1.56	2
9.96	8.26	3.68	1.71	1.48	1.48	2
9.64	7.97	3.56	1.71	1.43	1.43	2
9.32	7.69	3.44	1.71	1.40	1.40	2
9.00	7.41	3.32	1.71	1.36	1.36	2
8.68	7.13	3.20	1.71	1.35	1.35	2
8.36	6.85	3.08	1.71	1.34	1.34	2
8.04	6.58	2.97	1.71	1.33	1.33	2
7.72	6.30	2.85	1.71	1.32	1.32	2
7.40	6.03	2.73	1.71	1.31	1.31	2
7.40	6.03	2.73	1.71	1.31	1.31	3
7.04	5.72	2.60	1.71	1.30	1.30	3
6.68	5.42	2.46	1.71	1.28	1.28	3
6.32	5.11	2.33	1.71	1.27	1.27	3
5.96	4.81	2.20	1.71	1.26	1.26	3
5.60	4.51	2.07	1.71	1.25	1.25	3
5.24	4.22	1.93	1.71	1.24	1.24	3
4.88	3.92	1.80	1.71	1.23	1.23	3
4.52	3.62	1.67	1.71	1.22	1.21	3
4.16	3.33	1.54	1.71	1.21	1.20	3
3.80	3.04	1.40	1.71	1.20	1.20	3
3.80	3.04	1.40	1.71	1.20	1.20	2
3.42	2.73	1.26	1.71	1.19	1.19	2
3.04	2.42	1.12	1.71	1.18	1.18	2
2.66	2.12	.98	1.71	1.18	1.18	2
2.28	1.81	.84	1.71	1.17	1.17	2
1.90	1.51	.70	1.71	1.17	1.17	2
1.52	1.21	.56	1.71	1.16	1.16	2
1.14	.90	.42	1.71	1.15	1.15	2
.76	.60	.28	1.71	1.15	1.15	2
.38	.30	.14	1.71	1.15	1.14	2
.00	.00	.00	1.71	1.14	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.87	.00	.00	.00	.00	.00	2
8.56	31.97	12.60	19.37	19.37	.00	2
8.26	63.11	25.20	37.91	37.91	.00	2
7.97	93.79	37.80	55.99	55.99	.00	2
7.69	124.20	50.40	73.80	73.80	.00	2
7.41	154.31	63.00	91.31	91.31	.00	2
7.13	184.27	75.60	108.68	108.68	.00	2
6.85	214.15	88.20	125.96	125.96	.00	2
6.58	243.95	100.80	143.16	143.16	.00	2
6.30	273.68	113.40	160.28	160.28	.00	2
6.03	303.33	126.00	177.33	177.33	.00	3
5.72	336.59	140.17	196.41	196.41	.00	3
5.42	369.75	154.35	215.40	215.40	.00	3

5.11	402.81	168.52	234.29	234.29	.00	3
4.81	435.78	182.70	253.08	253.08	.00	3
4.51	468.65	196.87	271.78	271.78	.00	3
4.22	501.42	211.05	290.37	290.37	.00	3
3.92	534.09	224.77	309.32	308.87	.45	3
3.62	566.67	237.59	329.09	327.28	1.81	3
3.33	599.17	249.62	349.55	345.60	3.95	3
3.04	631.59	265.72	365.87	363.84	2.03	3
3.04	631.59	265.72	365.87	363.84	2.03	2
2.73	665.74	282.71	383.03	383.03	.00	2
2.42	699.83	297.67	402.16	402.16	.00	2
2.12	733.87	312.63	421.24	421.24	.00	2
1.81	767.87	327.59	440.27	440.27	.00	2
1.51	801.81	342.56	459.25	459.25	.00	2
1.21	835.70	357.52	478.18	478.18	.00	2
.90	869.54	371.46	498.08	497.06	1.02	2
.60	903.34	382.79	520.55	515.89	4.65	2
.30	937.10	392.16	544.94	534.69	10.25	2
.00	970.83	400.05	570.78	553.46	17.32	2

Time = 7500. Degree of Consolidation = 100.%

Total Settlement = 1.730

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 7500. = 1.730

Settlement caused by Secondary Compression at time 7500. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.16

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.28	1.42	3.00	2.06	2.05	1
4.44	3.85	1.28	2.83	2.05	2.04	1
3.91	3.42	1.14	2.70	2.04	2.03	1
3.39	2.98	.99	2.60	2.03	2.02	1
2.88	2.55	.85	2.52	2.03	2.02	1
2.39	2.13	.71	2.47	2.02	2.01	1
1.90	1.70	.57	2.42	2.01	2.00	1
1.42	1.27	.43	2.38	2.00	1.99	1
.94	.85	.28	2.35	1.99	1.99	1
.47	.42	.14	2.32	1.98	1.98	1
.00	.00	.00	2.29	1.98	1.97	1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.28	970.83	400.05	570.78	553.46	17.32	1
3.85	1014.11	415.27	598.84	580.54	18.30	1
3.42	1057.31	431.77	625.54	607.54	18.00	1
2.98	1100.42	448.46	651.96	634.44	17.52	1

2.55	1143.45	464.51	678.94	661.27	17.67	1
2.13	1186.41	480.00	706.40	688.02	18.38	1
1.70	1229.29	494.99	734.30	714.70	19.61	1
1.27	1272.10	509.51	762.59	741.30	21.29	1
.85	1314.83	529.75	785.08	767.83	17.25	1
.42	1357.50	549.71	807.79	794.29	13.50	1
.00	1400.10	569.18	830.92	820.69	10.23	1

Time = 8000. Degree of Consolidation = 98.%

Total Settlement = .713

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 8000. = .713

Settlement caused by Secondary Compression at time 8000. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.87	3.91	1.71	1.71	1.71	2
10.28	8.56	3.79	1.71	1.56	1.56	2
9.96	8.26	3.68	1.71	1.48	1.48	2
9.64	7.97	3.56	1.71	1.43	1.43	2
9.32	7.69	3.44	1.71	1.40	1.40	2
9.00	7.41	3.32	1.71	1.36	1.36	2
8.68	7.13	3.20	1.71	1.35	1.35	2
8.36	6.85	3.08	1.71	1.34	1.34	2
8.04	6.58	2.97	1.71	1.33	1.33	2
7.72	6.30	2.85	1.71	1.32	1.32	2
7.40	6.03	2.73	1.71	1.31	1.31	2
7.40	6.03	2.73	1.71	1.31	1.31	3
7.04	5.72	2.60	1.71	1.30	1.30	3
6.68	5.42	2.46	1.71	1.28	1.28	3
6.32	5.11	2.33	1.71	1.27	1.27	3
5.96	4.81	2.20	1.71	1.26	1.26	3
5.60	4.51	2.07	1.71	1.25	1.25	3
5.24	4.22	1.93	1.71	1.24	1.24	3
4.88	3.92	1.80	1.71	1.23	1.23	3
4.52	3.62	1.67	1.71	1.22	1.21	3
4.16	3.33	1.54	1.71	1.21	1.20	3
3.80	3.04	1.40	1.71	1.20	1.20	3
3.80	3.04	1.40	1.71	1.20	1.20	2
3.42	2.73	1.26	1.71	1.19	1.19	2
3.04	2.42	1.12	1.71	1.18	1.18	2
2.66	2.12	.98	1.71	1.18	1.18	2
2.28	1.81	.84	1.71	1.17	1.17	2
1.90	1.51	.70	1.71	1.17	1.17	2
1.52	1.21	.56	1.71	1.16	1.16	2
1.14	.90	.42	1.71	1.15	1.15	2
.76	.60	.28	1.71	1.15	1.15	2
.38	.30	.14	1.71	1.15	1.14	2
.00	.00	.00	1.71	1.14	1.14	2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.87	.00	.00	.00	.00	.00	2
8.56	31.97	12.60	19.37	19.37	.00	2
8.26	63.11	25.20	37.91	37.91	.00	2
7.97	93.79	37.80	55.99	55.99	.00	2

7.69	124.20	50.40	73.80	73.80	.00	2
7.41	154.31	63.00	91.31	91.31	.00	2
7.13	184.27	75.60	108.68	108.68	.00	2
6.85	214.15	88.20	125.96	125.96	.00	2
6.58	243.95	100.80	143.16	143.16	.00	2
6.30	273.68	113.40	160.28	160.28	.00	2
6.03	303.33	126.00	177.33	177.33	.00	2
6.03	303.33	126.00	177.33	177.33	.00	3
5.72	336.59	140.17	196.41	196.41	.00	3
5.42	369.75	154.35	215.40	215.40	.00	3
5.11	402.81	168.52	234.29	234.29	.00	3
4.81	435.78	182.70	253.08	253.08	.00	3
4.51	468.65	196.87	271.78	271.78	.00	3
4.22	501.42	211.05	290.37	290.37	.00	3
3.92	534.09	224.77	309.32	308.87	.45	3
3.62	566.67	237.59	329.09	327.28	1.81	3
3.33	599.17	249.62	349.55	345.60	3.95	3
3.04	631.59	265.72	365.87	363.84	2.03	3
3.04	631.59	265.72	365.87	363.84	2.03	2
2.73	665.74	282.71	383.03	383.03	.00	2
2.42	699.83	297.67	402.16	402.16	.00	2
2.12	733.87	312.63	421.24	421.24	.00	2
1.81	767.87	327.59	440.27	440.27	.00	2
1.51	801.81	342.56	459.25	459.25	.00	2
1.21	835.70	357.52	478.18	478.18	.00	2
.90	869.54	371.46	498.08	497.06	1.02	2
.60	903.34	382.79	520.55	515.89	4.65	2
.30	937.10	392.16	544.94	534.69	10.25	2
.00	970.83	400.05	570.78	553.46	17.32	2

Time = 8000. Degree of Consolidation = 100.%

Total Settlement = 1.730

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 8000. = 1.730

Settlement caused by Secondary Compression at time 8000. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.16

Consistency Error --DREDGED FILL --LAYER/ 3

*****Current Conditions in Compressible Foundation*****

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
5.00	4.28	1.42	3.00	2.06	2.05	1
4.44	3.85	1.28	2.83	2.05	2.04	1
3.91	3.42	1.14	2.70	2.04	2.03	1
3.39	2.98	.99	2.60	2.03	2.02	1
2.88	2.55	.85	2.52	2.03	2.02	1
2.39	2.13	.71	2.47	2.02	2.01	1
1.90	1.70	.57	2.42	2.01	2.00	1
1.42	1.27	.43	2.38	2.00	1.99	1
.94	.85	.28	2.35	1.99	1.99	1
.47	.42	.14	2.32	1.98	1.98	1

.00 .00 .00 2.29 1.98 1.97 1

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
4.28	970.83	400.05	570.78	553.46	17.32	1
3.85	1014.11	415.27	598.84	580.54	18.30	1
3.42	1057.31	431.77	625.54	607.54	18.00	1
2.98	1100.42	448.46	651.96	634.44	17.52	1
2.55	1143.45	464.51	678.94	661.27	17.67	1
2.13	1186.41	480.00	706.40	688.02	18.38	1
1.70	1229.29	494.99	734.30	714.70	19.61	1
1.27	1272.10	509.51	762.59	741.30	21.29	1
.85	1314.83	529.75	785.08	767.83	17.25	1
.42	1357.50	549.71	807.79	794.29	13.50	1
.00	1400.10	569.18	830.92	820.69	10.23	1

Time = 8500. Degree of Consolidation = 98.%

Total Settlement = .713

Settlement at End of Primary Consolidation = .726

Settlement caused by Primary Consolidation at time 8500. = .713

Settlement caused by Secondary Compression at time 8500. = .000

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

***** Coordinates ***** ***** Void Ratios *****

A	XI	Z	Einitial	E	Eeop	Material
10.60	8.87	3.91	1.71	1.71	1.71	2
10.28	8.56	3.79	1.71	1.56	1.56	2
9.96	8.26	3.68	1.71	1.48	1.48	2
9.64	7.97	3.56	1.71	1.43	1.43	2
9.32	7.69	3.44	1.71	1.40	1.40	2
9.00	7.41	3.32	1.71	1.36	1.36	2
8.68	7.13	3.20	1.71	1.35	1.35	2
8.36	6.85	3.08	1.71	1.34	1.34	2
8.04	6.58	2.97	1.71	1.33	1.33	2
7.72	6.30	2.85	1.71	1.32	1.32	2
7.40	6.03	2.73	1.71	1.31	1.31	2
7.40	6.03	2.73	1.71	1.31	1.31	3
7.04	5.72	2.60	1.71	1.30	1.30	3
6.68	5.42	2.46	1.71	1.28	1.28	3
6.32	5.11	2.33	1.71	1.27	1.27	3
5.96	4.81	2.20	1.71	1.26	1.26	3
5.60	4.51	2.07	1.71	1.25	1.25	3
5.24	4.22	1.93	1.71	1.24	1.24	3
4.88	3.92	1.80	1.71	1.23	1.23	3
4.52	3.62	1.67	1.71	1.22	1.21	3
4.16	3.33	1.54	1.71	1.21	1.20	3
3.80	3.04	1.40	1.71	1.20	1.20	3
3.80	3.04	1.40	1.71	1.20	1.20	2
3.42	2.73	1.26	1.71	1.19	1.19	2
3.04	2.42	1.12	1.71	1.18	1.18	2
2.66	2.12	.98	1.71	1.18	1.18	2
2.28	1.81	.84	1.71	1.17	1.17	2
1.90	1.51	.70	1.71	1.17	1.17	2
1.52	1.21	.56	1.71	1.16	1.16	2
1.14	.90	.42	1.71	1.15	1.15	2
.76	.60	.28	1.71	1.15	1.15	2
.38	.30	.14	1.71	1.15	1.14	2

.00 .00 .00 1.71 1.14 1.14 2

***** Stresses ***** ***** Pore Pressures *****

XI	Total	Effective	Total	Static	Excess	Material
8.87	.00	.00	.00	.00	.00	2
8.56	31.97	12.60	19.37	19.37	.00	2
8.26	63.11	25.20	37.91	37.91	.00	2
7.97	93.79	37.80	55.99	55.99	.00	2
7.69	124.20	50.40	73.80	73.80	.00	2
7.41	154.31	63.00	91.31	91.31	.00	2
7.13	184.27	75.60	108.68	108.68	.00	2
6.85	214.15	88.20	125.96	125.96	.00	2
6.58	243.95	100.80	143.16	143.16	.00	2
6.30	273.68	113.40	160.28	160.28	.00	2
6.03	303.33	126.00	177.33	177.33	.00	2
6.03	303.33	126.00	177.33	177.33	.00	3
5.72	336.59	140.17	196.41	196.41	.00	3
5.42	369.75	154.35	215.40	215.40	.00	3
5.11	402.81	168.52	234.29	234.29	.00	3
4.81	435.78	182.70	253.08	253.08	.00	3
4.51	468.65	196.87	271.78	271.78	.00	3
4.22	501.42	211.05	290.37	290.37	.00	3
3.92	534.09	224.77	309.32	308.87	.45	3
3.62	566.67	237.59	329.09	327.28	1.81	3
3.33	599.17	249.62	349.55	345.60	3.95	3
3.04	631.59	265.72	365.87	363.84	2.03	3
3.04	631.59	265.72	365.87	363.84	2.03	2
2.73	665.74	282.71	383.03	383.03	.00	2
2.42	699.83	297.67	402.16	402.16	.00	2
2.12	733.87	312.63	421.24	421.24	.00	2
1.81	767.87	327.59	440.27	440.27	.00	2
1.51	801.81	342.56	459.25	459.25	.00	2
1.21	835.70	357.52	478.18	478.18	.00	2
.90	869.54	371.46	498.08	497.06	1.02	2
.60	903.34	382.79	520.55	515.89	4.65	2
.30	937.10	392.16	544.94	534.69	10.25	2
.00	970.83	400.05	570.78	553.46	17.32	2

Time = 8500. Degree of Consolidation = 100.%

Total Settlement = 1.730

Settlement at End of Primary Consolidation = 1.733

Settlement caused by Primary Consolidation at time 8500. = 1.730

Settlement caused by Secondary Compression at time 8500. = .000

Settlement Due to Desiccation = .000

Surface Elevation = 113.16

APPENDIX D: Linear Model Results for MKARNS

DMCA #1

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 40.23T2 \geq 2635087$
- 2) $T1 \geq 162.7$
- 3) $T2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 32994.991

Variable	Value	Reduced Costs
T1	243.991	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	81.291	0.000
3	0.000	-1.002

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-402.685	1.000	No Upper Limit
T2	-0.002	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	2635087.000	No Upper Limit
2	No Lower Limit	162.700	243.991
3	16.232	32751.000	No Upper Limit

DMCA #2

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 102.42T2 \geq 6708516$
- 2) $1T1 \geq 414.1$
- 3) $1T2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 33372.165

Variable	Value	Reduced Costs
T1	621.165	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	207.065	0.000
3	0.000	-1.006

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-158.172	1.000	No Upper Limit
T2	-0.006	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	6708516.000	No Upper Limit
2	No Lower Limit	414.100	621.165
3	0.000	32751.000	No Upper Limit

DMCA #3

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 63.05T2 > 4129664$
- 2) $T1 > 254.9$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 33133.384

Variable	Value	Reduced Costs
T1	382.384	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	127.484	0.000
3	0.000	-1.004

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-256.939	1.000	No Upper Limit
T2	-0.004	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	4129664.000	No Upper Limit
2	No Lower Limit	254.900	382.384
3	0.000	32751.000	No Upper Limit

DMCA #4

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 29.09T2 > 1905757$
- 2) $1T1 > 117.6$
- 3) $1T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 32927.450

Variable	Value	Reduced Costs
T1	176.450	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	58.850	0.000
3	0.000	-1.002

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-556.892	1.000	No Upper Limit
T2	-0.002	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	1905757.000	No Upper Limit
2	No Lower Limit	117.600	176.450
3	0.000	32751.000	No Upper Limit

DMCA #5

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 30.59T2 > 2003554$
- 2) $T1 > 123.7$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 32936.519

Variable	Value	Reduced Costs
T1	185.519	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	61.819	0.000
3	0.000	-1.002

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-556.892	1.000	No Upper Limit
T2	-0.002	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	2003554.000	No Upper Limit
2	No Lower Limit	123.700	185.519
3	0.000	32751.000	No Upper Limit

DMCA #6

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 40.28T2 \geq 2638415$
- 2) $T1 \geq 162.9$
- 3) $T2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 32995.298

Variable	Value	Reduced Costs
T1	244.298	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	81.398	0.000
3	0.000	-1.002

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-402.185	1.000	No Upper Limit
T2	-0.002	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	2638415.000	No Upper Limit
2	No Lower Limit	162.900	244.298
3	14.027	32751.000	No Upper Limit

DMCA #7

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 26.05T2 > 1706053$
- 2) $T1 > 105.3$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 32908.976

Variable	Value	Reduced Costs
T1	157.976	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	52.676	0.000
3	0.000	-1.002

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-621.881	1.000	No Upper Limit
T2	-0.002	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	1706053.000	No Upper Limit
2	No Lower Limit	105.300	157.976
3	0.000	32751.000	No Upper Limit

DMCA #8

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 116.42T2 \geq 7625763$
- 2) $T1 \geq 470.7$
- 3) $T2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 33457.089

Variable	Value	Reduced Costs
T1	706.089	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	235.389	0.000
3	0.000	-1.007

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-139.151	1.000	No Upper Limit
T2	-0.007	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	7625763.000	No Upper Limit
2	No Lower Limit	470.700	157.976
3	0.000	32751.000	No Upper Limit

DMCA #9

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 14.75T2 > 966259$
- 2) $T1 > 59.6$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 32840.465

Variable	Value	Reduced Costs
T1	89.465	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	29.865	0.000
3	0.000	-1.001

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-1098.305	1.000	No Upper Limit
T2	-0.001	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	966259.000	No Upper Limit
2	No Lower Limit	59.600	89.465
3	0.000	32751.000	No Upper Limit

DMCA #10

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 14.42T2 > 944253$
- 2) $T1 \geq 58.3$
- 3) $T2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 32838.440

Variable	Value	Reduced Costs
T1	87.440	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	29.140	0.000
3	0.000	-1.001

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-1123.440	1.000	No Upper Limit
T2	-0.001	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	944253.000	No Upper Limit
2	No Lower Limit	58.300	87.440
3	14.355	32751.000	No Upper Limit

DMCA #11

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 17.36T2 \geq 1137025$
- 2) $T1 \geq 70.2$
- 3) $T2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 32856.283

Variable	Value	Reduced Costs
T1	105.283	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	35.083	0.000
3	0.000	-1.001

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-933.180	1.000	No Upper Limit
T2	-0.001	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	1137025.000	No Upper Limit
2	No Lower Limit	70.200	105.283
3	12.385	32751.000	No Upper Limit

DMCA #12

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 17.36T2 \geq 1137025$
- 2) $T1 \geq 70.2$
- 3) $T2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 32856.283

Variable	Value	Reduced Costs
T1	105.283	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	35.083	0.000
3	0.000	-1.001

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-933.180	1.000	No Upper Limit
T2	-0.001	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	1137025.000	No Upper Limit
2	No Lower Limit	70.200	105.283
3	12.385	32751.000	No Upper Limit

DMCA #13

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 46.27T2 \geq 3030855$
- 2) $T1 \geq 187.1$
- 3) $T2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 33031.632

Variable	Value	Reduced Costs
T1	280.632	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	93.532	0.000
3	0.000	-1.003

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-350.119	1.000	No Upper Limit
T2	-0.003	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	3030855.000	No Upper Limit
2	No Lower Limit	187.100	280.632
3	3.566	32751.000	No Upper Limit

DMCA #14

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 45.19T2 > 2960088$
- 2) $T1 > 182.7$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 33025.081

Variable	Value	Reduced Costs
T1	274.081	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	91.381	0.000
3	0.000	-1.003

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-358.486	1.000	No Upper Limit
T2	-0.003	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	2960088.000	No Upper Limit
2	No Lower Limit	182.700	274.081
3	0.000	32751.000	No Upper Limit

DMCA #15

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 6.04T2 > 395321$
- 2) $T1 > 24.4$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 32787.613

Variable	Value	Reduced Costs
T1	36.613	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	12.213	0.000
3	0.000	-1.000

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-2682.119	1.000	No Upper Limit
T2	0.000	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	395321.000	No Upper Limit
2	No Lower Limit	24.400	36.613
3	0.000	32751.000	No Upper Limit

DMCA #16

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 30.3T2 > 1984404$
- 2) $1T1 > 122.5$
- 3) $1T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 32934.751

Variable	Value	Reduced Costs
T1	183.751	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	61.251	0.000
3	0.000	-1.002

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-534.653	1.000	No Upper Limit
T2	-0.002	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	1984404.000	No Upper Limit
2	No Lower Limit	122.500	183.751
3	3.168	32751.000	No Upper Limit

DMCA #17

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 77.21T2 > 5057685$
- 2) $T1 > 312.2$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 33219.296

Variable	Value	Reduced Costs
T1	468.296	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	156.096	0.000
3	0.000	-1.005

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-209.817	1.000	No Upper Limit
T2	-0.005	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	5057685.000	No Upper Limit
2	No Lower Limit	312.200	468.296
3	0.000	32751.000	No Upper Limit

DMCA #18

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 55.21T2 \geq 3616639$
- 2) $T1 \geq 223.2$
- 3) $T2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 33085.866

Variable	Value	Reduced Costs
T1	334.866	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	111.666	0.000
3	0.000	-1.003

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-293.425	1.000	No Upper Limit
T2	-0.003	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	3616639.000	No Upper Limit
2	No Lower Limit	223.200	334.866
3	0.000	32751.000	No Upper Limit

DMCA #19

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 71.14T2 > 4659603$
- 2) $T1 > 287.6$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 33182.451

Variable	Value	Reduced Costs
T1	431.451	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	143.851	0.000
3	0.000	-1.004

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-227.720	1.000	No Upper Limit
T2	-0.004	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	4659603.000	No Upper Limit
2	No Lower Limit	287.600	431.451
3	0.000	32751.000	No Upper Limit

DMCA #20

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 43.68T2 > 2861357$
- 2) $T1 > 176.6$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 33015.933

Variable	Value	Reduced Costs
T1	264.933	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	88.333	0.000
3	0.000	-1.003

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-370.879	1.000	No Upper Limit
T2	-0.003	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	2861357.000	No Upper Limit
2	No Lower Limit	176.600	264.933
3	0.000	32751.000	No Upper Limit

DMCA #21

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 28.07T2 > 1838752$
- 2) $T1 > 113.5$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 32921.251

Variable	Value	Reduced Costs
T1	170.251	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	56.751	0.000
3	0.000	-1.002

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-577.129	1.000	No Upper Limit
T2	-0.002	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	1838752.000	No Upper Limit
2	No Lower Limit	113.500	170.251
3	0.000	32751.000	No Upper Limit

DMCA #22

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 82.6T2 \geq 5410355$
- 2) $T1 \geq 334$
- 3) $T2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 33251.962

Variable	Value	Reduced Costs
T1	500.962	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	166.962	0.000
3	0.000	-1.005

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-196.126	1.000	No Upper Limit
T2	-0.005	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	5410355.000	No Upper Limit
2	No Lower Limit	334.000	500.962
3	5.387	32751.000	No Upper Limit

DMCA #23

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 89.39T2 \geq 5855170$
- 2) $T1 \geq 361.4$
- 3) $T2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 33293.147

Variable	Value	Reduced Costs
T1	542.147	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	180.747	0.000
3	0.000	-1.006

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-181.228	1.000	No Upper Limit
T2	-0.006	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	5855170.000	No Upper Limit
2	No Lower Limit	361.400	542.147
3	0.000	32751.000	No Upper Limit

DMCA #24

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 89.39T2 \geq 5855170$
- 2) $T1 \geq 361.4$
- 3) $T2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 33293.147

Variable	Value	Reduced Costs
T1	542.147	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	180.747	0.000
3	0.000	-1.006

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-181.228	1.000	No Upper Limit
T2	-0.006	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	5855170.000	No Upper Limit
2	No Lower Limit	361.400	542.147
3	0.000	32751.000	No Upper Limit

DMCA #25

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T_1 - 15.3T_2 \geq 1002121$
- 2) $T_1 \geq 61.9$
- 3) $T_2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 32843.791

Variable	Value	Reduced Costs
T1	92.791	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	30.891	0.000
3	0.000	-1.001

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-1058.824	1.000	No Upper Limit
T2	-0.001	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	1002121.000	No Upper Limit
2	No Lower Limit	61.900	92.791
3	43.072	32751.000	No Upper Limit

DMCA #26

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 69.76T2 > 4569521$
- 2) $T1 > 282.1$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 33174.101

Variable	Value	Reduced Costs
T1	423.101	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	141.001	0.000
3	0.000	-1.004

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-232.225	1.000	No Upper Limit
T2	-0.004	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	4569521.000	No Upper Limit
2	No Lower Limit	282.100	423.101
3	7.153	32751.000	No Upper Limit

DMCA #27

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 43.48T2 > 2847782$
- 2) $T1 > 175.8$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 33014.691

Variable	Value	Reduced Costs
T1	263.691	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	87.891	0.000
3	0.000	-1.003

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-372.585	1.000	No Upper Limit
T2	-0.003	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	2847782.000	No Upper Limit
2	No Lower Limit	175.800	263.691
3	4.094	32751.000	No Upper Limit

DMCA #28

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 48.12T2 \geq 3152062$
- 2) $T1 \geq 194.6$
- 3) $T2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 33042.854

Variable	Value	Reduced Costs
T1	291.854	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	97.254	0.000
3	0.000	-1.003

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-336.658	1.000	No Upper Limit
T2	-0.003	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	3152062.000	No Upper Limit
2	No Lower Limit	194.600	291.854
3	9.518	32751.000	No Upper Limit

DMCA #29

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 8.79T2 \geq 575515$
- 2) $T1 \geq 35.5$
- 3) $T2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 32804.296

Variable	Value	Reduced Costs
T1	53.296	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	17.796	0.000
3	0.000	-1.001

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-1843.003	1.000	No Upper Limit
T2	-0.001	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	575515.000	No Upper Limit
2	No Lower Limit	35.500	53.296
3	0.000	32751.000	No Upper Limit

DMCA #30

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 7.08T2 > 463898$
- 2) $T1 > 28.6$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 32793.949

Variable	Value	Reduced Costs
T1	42.949	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	14.349	0.000
3	0.000	-1.000

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-2288.136	1.000	No Upper Limit
T2	0.000	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	463898.000	No Upper Limit
2	No Lower Limit	28.600	42.949
3	0.000	32751.000	No Upper Limit

DMCA #31

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 13.93T2 > 912520$
- 2) $T1 \geq 56.3$
- 3) $T2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 32835.490

Variable	Value	Reduced Costs
T1	84.490	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	28.190	0.000
3	0.000	-1.001

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-1162.958	1.000	No Upper Limit
T2	-0.001	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	912520.000	No Upper Limit
2	No Lower Limit	56.300	84.490
3	0.000	32751.000	No Upper Limit

DMCA #32

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 29.48T2 > 1931273$
- 2) $T1 > 119.2$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 32929.813

Variable	Value	Reduced Costs
T1	178.813	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	59.613	0.000
3	0.000	-1.002

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-549.525	1.000	No Upper Limit
T2	-0.002	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	1931273.000	No Upper Limit
2	No Lower Limit	119.200	178.813
3	0.000	32751.000	No Upper Limit

DMCA #33

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 34.62T2 > 2268000$
- 2) $T1 > 140$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 32960.990

Variable	Value	Reduced Costs
T1	209.990	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	69.990	0.000
3	0.000	-1.002

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-467.938	1.000	No Upper Limit
T2	-0.002	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	2268000.000	No Upper Limit
2	No Lower Limit	140.000	209.990
3	0.000	32751.000	No Upper Limit

DMCA #34

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 4.83T2 > 316380$
- 2) $T1 > 19.5$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 32780.294

Variable	Value	Reduced Costs
T1	29.294	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	9.794	0.000
3	0.000	-1.000

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-3354.037	1.000	No Upper Limit
T2	0.000	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	316380.000	No Upper Limit
2	No Lower Limit	19.500	29.294
3	0.000	32751.000	No Upper Limit

DMCA #35

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 8.87T2 > 581248$
- 2) $T1 > 35.9$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 32804.812

Variable	Value	Reduced Costs
T1	53.812	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	17.912	0.000
3	0.000	-1.001

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-1826.381	1.000	No Upper Limit
T2	-0.001	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	581248.000	No Upper Limit
2	No Lower Limit	35.900	53.812
3	37.430	32751.000	No Upper Limit

DMCA #36

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 14.58T2 > 955068$
- 2) $T1 > 59$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 32839.431

Variable	Value	Reduced Costs
T1	88.431	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	29.431	0.000
3	0.000	-1.001

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-1111.111	1.000	No Upper Limit
T2	-0.001	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	955068.000	No Upper Limit
2	No Lower Limit	59.000	88.431
3	50.206	32751.000	No Upper Limit

DMCA #37

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 8.79T2 > 575891$
- 2) $T1 \geq 35.5$
- 3) $T2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 32804.319

Variable	Value	Reduced Costs
T1	53.319	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	17.819	0.000
3	0.000	-1.001

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-1843.003	1.000	No Upper Limit
T2	-0.001	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	575891.000	No Upper Limit
2	No Lower Limit	35.500	53.319
3	0.000	32751.000	No Upper Limit

DMCA #38

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T_1 - 12.6T_2 > 825092$
- 2) $T_1 > 50.9$
- 3) $T_2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 32827.405

Variable	Value	Reduced Costs
T1	76.405	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	25.505	0.000
3	0.000	-1.001

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-1285.714	1.000	No Upper Limit
T2	-0.001	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	825092.000	No Upper Limit
2	No Lower Limit	50.900	76.405
3	0.000	32751.000	No Upper Limit

DMCA #39

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 11.34T2 \geq 742577$
- 2) $T1 \geq 45.8$
- 3) $T2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 32819.764

Variable	Value	Reduced Costs
T1	68.764	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	22.964	0.000
3	0.000	-1.001

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-1428.571	1.000	No Upper Limit
T2	-0.001	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	742577.000	No Upper Limit
2	No Lower Limit	45.800	68.764
3	0.000	32751.000	No Upper Limit

DMCA #40

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 13.77T2 > 901830$
- 2) $T1 \geq 55.7$
- 3) $T2 \geq 32751$

OPTIMAL SOLUTION

Objective Function Value = 32834.507

Variable	Value	Reduced Costs
T1	83.507	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	27.807	0.000
3	0.000	-1.001

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-1176.471	1.000	No Upper Limit
T2	-0.001	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	901830.000	No Upper Limit
2	No Lower Limit	55.700	83.507
3	37.037	32751.000	No Upper Limit

DMCA #41

LINEAR PROGRAMMING PROBLEM

MIN 1T1+1T2

S.T.

- 1) $16200T1 - 37.35T2 > 2446668$
- 2) $T1 > 151$
- 3) $T2 > 32751$

OPTIMAL SOLUTION

Objective Function Value = 32977.538

Variable	Value	Reduced Costs
T1	226.538	0.000
T2	32751.000	0.000

Constraint	Slack/Surplus	Dual Prices
1	0.000	0.000
2	75.538	0.000
3	0.000	-1.002

OBJECTIVE COEFFICIENT RANGES

Variable	Lower Limit	Current Value	Upper Limit
T1	-433.735	1.000	No Upper Limit
T2	-0.002	1.000	No Upper Limit

RIGHT HAND SIDE RANGES

Constraint	Lower Limit	Current Value	Upper Limit
1	No Lower Limit	2446668.000	No Upper Limit
2	No Lower Limit	151.000	226.538
3	0.000	32751.000	No Upper Limit

APPENDIX E: Input Values for MKARNS Linear Model

	Dredge	DMCA	DMCA	DMCA	3' Lift	Linear (4.5ft)	Consolidation	Coeff.	RHS Constraint	RHS Constraint
DMCA #	Vol. (yd^3)	Vol. (yd^3)	Vol. (ft^3)	Area (ft^2)	Vol. (ft^3)	Det. Lift (ft^3)	Rate (ft/hour)	of T2 (ft^3/hr)	T1 (hours)	T2 (hours)
1	162659.7	325319.4	8783623.8	878362.4	2635087	1317543.6	0.0000458	40.23	162.7	32751
2	414105.9	828211.8	22361718.6	2236171.9	6708516	3354257.8	0.0000458	102.42	414.1	32751
3	254917.5	509835.0	13765545.0	1376554.5	4129664	2064831.8	0.0000458	63.05	254.9	32751
4	117639.3	235278.6	6352522.2	635252.2	1905757	952878.3	0.0000458	29.09	117.6	32751
5	123676.2	247352.4	6678514.8	667851.5	2003554	1001777.2	0.0000458	30.59	123.7	32751
6	162865.1	325730.2	8794715.4	879471.5	2638415	1319207.3	0.0000458	40.28	162.9	32751
7	105311.9	210623.8	5686842.6	568684.3	1706053	853026.4	0.0000458	26.05	105.3	32751
8	470726.1	941452.2	25419209.4	2541920.9	7625763	3812881.4	0.0000458	116.42	470.7	32751
9	59645.6	119291.2	3220862.4	322086.2	966259	483129.4	0.0000458	14.75	59.6	32751
10	58287.2	116574.4	3147508.8	314750.9	944253	472126.3	0.0000458	14.42	58.3	32751
11	70186.7	140373.4	3790081.8	379008.2	1137025	568512.3	0.0000458	17.36	70.2	32751
12	70186.7	140373.4	3790081.8	379008.2	1137025	568512.3	0.0000458	17.36	70.2	32751
13	187089.8	374179.6	10102849.2	1010284.9	3030855	1515427.4	0.0000458	46.27	187.1	32751
14	182721.5	365443.0	9866961.0	986696.1	2960088	1480044.2	0.0000458	45.19	182.7	32751
15	24402.5	48805.0	1317735.0	131773.5	395321	197660.3	0.0000458	6.04	24.4	32751
16	122494.1	244988.2	6614681.4	661468.1	1984404	992202.2	0.0000458	30.30	122.5	32751
17	312202.8	624405.6	16858951.2	1685895.1	5057685	2528842.7	0.0000458	77.21	312.2	32751
18	223249.3	446498.6	12055462.2	1205546.2	3616639	1808319.3	0.0000458	55.21	223.2	32751
19	287629.8	575259.6	15532009.2	1553200.9	4659603	2329801.4	0.0000458	71.14	287.6	32751
20	176627.0	353254.0	9537858.0	953785.8	2861357	1430678.7	0.0000458	43.68	176.6	32751
21	113503.2	227006.4	6129172.8	612917.3	1838752	919375.9	0.0000458	28.07	113.5	32751
22	333972.5	667945.0	18034515.0	1803451.5	5410355	2705177.3	0.0000458	82.60	334.0	32751
23	361430.3	722860.5	19517233.5	1951723.4	5855170	2927585.0	0.0000458	89.39	361.4	32751
24	361430.3	722860.5	19517233.5	1951723.4	5855170	2927585.0	0.0000458	89.39	361.4	32751
25	61859.3	123718.6	3340402.2	334040.2	1002121	501060.3	0.0000458	15.30	61.9	32751
26	282069.2	564138.4	15231736.8	1523173.7	4569521	2284760.5	0.0000458	69.76	282.1	32751
27	175789.0	351578.0	9492606.0	949260.6	2847782	1423890.9	0.0000458	43.48	175.8	32751
28	194571.7	389143.4	10506871.8	1050687.2	3152062	1576030.8	0.0000458	48.12	194.6	32751
29	35525.6	71051.2	1918382.4	191838.2	575515	287757.4	0.0000458	8.79	35.5	32751
30	28635.7	57271.4	1546327.8	154632.8	463898	231949.2	0.0000458	7.08	28.6	32751
31	56328.4	112656.8	3041733.6	304173.4	912520	456260.0	0.0000458	13.93	56.3	32751
32	119214.4	238428.8	6437577.6	643757.8	1931273	965636.6	0.0000458	29.48	119.2	32751
33	140000.0	280000.0	7560000.0	756000.0	2268000	1134000.0	0.0000458	34.62	140.0	32751
34	19529.6	39059.2	1054598.4	105459.8	316380	158189.8	0.0000458	4.83	19.5	32751
35	35879.5	71759.0	1937493.0	193749.3	581248	290624.0	0.0000458	8.87	35.9	32751
36	58954.8	117909.6	3183559.2	318355.9	955068	477533.9	0.0000458	14.58	59.0	32751
37	35548.8	71097.6	1919635.2	191963.5	575891	287945.3	0.0000458	8.79	35.5	32751
38	50931.6	101863.2	2750306.4	275030.6	825092	412546.0	0.0000458	12.60	50.9	32751
39	45838.1	91676.2	2475257.4	247525.7	742577	371288.6	0.0000458	11.34	45.8	32751
40	55668.5	111337.0	3006099.0	300609.9	901830	450914.9	0.0000458	13.77	55.7	32751
41	151028.9	302057.8	8155560.6	815556.1	2446668	1223334.1	0.0000458	37.35	151.0	32751

APPENDIX F: Project Management Solution for MKARNS

Case Study

	Dredge	DMCA	DMCA	3' Lift	Linear	(ft^3) Year		
DMCA #	Vol. (yd^3)	Vol. (yd^3)	Area (ft^2)	Vol. (ft^3)	Det. Lift (ft.^3)	1	2	3
1	162659.7	325319.4	878362.4	2635087.1	1317543.6	1317543.6		
2	414105.9	828211.8	2236171.9	6708515.6	3354257.8	3354257.8		
3	254917.5	509835.0	1376554.5	4129663.5	2064831.8	2064831.8		
4	117639.3	235278.6	635252.2	1905756.7	952878.3	952878.3		
5	123676.2	247352.4	667851.5	2003554.4	1001777.2	1001777.2		
6	162865.1	325730.2	879471.5	2638414.6	1319207.3	1319207.3		
7	105311.9	210623.8	568684.3	1706052.8	853026.4	853026.4		
8	470726.1	941452.2	2541920.9	7625762.8	3812881.4	3812881.4		
9	59645.6	119291.2	322086.2	966258.7	483129.4	483129.4		
10	58287.2	116574.4	314750.9	944252.6	472126.3	472126.3		
11	70186.7	140373.4	379008.2	1137024.5	568512.3	568512.3		
12	70186.7	140373.4	379008.2	1137024.5	568512.3	568512.3		
13	187089.8	374179.6	1010284.9	3030854.8	1515427.4	1515427.4		
14	182721.5	365443.0	986696.1	2960088.3	1480044.2	1480044.2		
15	24402.5	48805.0	131773.5	395320.5	197660.3	197660.3		
16	122494.1	244988.2	661468.1	1984404.4	992202.2	992202.2		
17	312202.8	624405.6	1685895.1	5057685.4	2528842.7	2528842.7		
18	223249.3	446498.6	1205546.2	3616638.7	1808319.3	1808319.3		
19	287629.8	575259.6	1553200.9	4659602.8	2329801.4	2329801.4		
20	176627.0	353254.0	953785.8	2861357.4	1430678.7	1430678.7		
21	113503.2	227006.4	612917.3	1838751.8	919375.9	919375.9		
22	333972.5	667945.0	1803451.5	5410354.5	2705177.3		2705177.3	
23	361430.3	722860.5	1951723.4	5855170.1	2927585.0		2927585.0	
24	361430.3	722860.5	1951723.4	5855170.1	2927585.0		2927585.0	
25	61859.3	123718.6	334040.2	1002120.7	501060.3		501060.3	
26	282069.2	564138.4	1523173.7	4569521.0	2284760.5		2284760.5	
27	175789.0	351578.0	949260.6	2847781.8	1423890.9		1423890.9	
28	194571.7	389143.4	1050687.2	3152061.5	1576030.8		1576030.8	
29	35525.6	71051.2	191838.2	575514.7	287757.4		287757.4	
30	28635.7	57271.4	154632.8	463898.3	231949.2		231949.2	
31	56328.4	112656.8	304173.4	912520.1	456260.0		456260.0	
32	119214.4	238428.8	643757.8	1931273.3	965636.6		965636.6	
33	140000.0	280000.0	756000.0	2268000.0	1134000.0		1134000.0	
34	19529.6	39059.2	105459.8	316379.5	158189.8		158189.8	
35	35879.5	71759.0	193749.3	581247.9	290624.0		290624.0	
36	58954.8	117909.6	318355.9	955067.8	477533.9		477533.9	
37	35548.8	71097.6	191963.5	575890.6	287945.3		287945.3	
38	50931.6	101863.2	275030.6	825091.9	412546.0		412546.0	
39	45838.1	91676.2	247525.7	742577.2	371288.6		371288.6	
40	55668.5	111337.0	300609.9	901829.7	450914.9		450914.9	
41	151028.9	302057.8	815556.1	2446668.2	1223334.1		1223334.1	
					Tot. Vol.	29971036	21094069	0
					Capacity (based on Time below)	34992000	34992000	46656000
					Time	90 day	90 day	120 day

							Total Dredged Volume (ft.^3)	Final DMCA Dredged
4	5	6	7	8	9	10	CHECK	Vol. (ft^3)
	1317543.6						2635087.1	4391811.9
	3354257.8						6708515.6	11180859.3
	2064831.8						4129663.5	6882772.5
	952878.3						1905756.7	3176261.1
	1001777.2						2003554.4	3339257.4
	1319207.3						2638414.6	4397357.7
	853026.4						1706052.8	2843421.3
	3812881.4						7625762.8	12709604.7
	483129.4						966258.7	1610431.2
	472126.3						944252.6	1573754.4
	568512.3						1137024.5	1895040.9
	568512.3						1137024.5	1895040.9
	1515427.4						3030854.8	5051424.6
	1480044.2						2960088.3	4933480.5
	197660.3						395320.5	658867.5
	992202.2						1984404.4	3307340.7
	2528842.7						5057685.4	8429475.6
	1808319.3						3616638.7	6027731.1
	2329801.4						4659602.8	7766004.6
	1430678.7						2861357.4	4768929.0
	919375.9						1838751.8	3064586.4
		2705177.3					5410354.5	9017257.5
		2927585.0					5855170.1	9758616.8
		2927585.0					5855170.1	9758616.8
		501060.3					1002120.7	1670201.1
		2284760.5					4569521.0	7615868.4
		1423890.9					2847781.8	4746303.0
		1576030.8					3152061.5	5253435.9
		287757.4					575514.7	959191.2
		231949.2					463898.3	773163.9
		456260.0					912520.1	1520866.8
		965636.6					1931273.3	3218788.8
		1134000.0					2268000.0	3780000.0
		158189.8					316379.5	527299.2
		290624.0					581247.9	968746.5
		477533.9					955067.8	1591779.6
		287945.3					575890.6	959817.6
		412546.0					825091.9	1375153.2
		371288.6					742577.2	1237628.7
		450914.9					901829.7	1503049.5
		1223334.1					2446668.2	4077780.3
0	29971036	21094069	0	0	0	0		
17496000	5443200	5443200	5443200	1944000	46656000	46656000		
45 day	14 day	14 day	14 day	5 day				

VITA

Brett Andrew Cowan, P.E.

Candidate for the Degree of

Doctor of Philosophy

Thesis: DREDGED MATERIAL CONTAINMENT AREA SITING AND
MANAGEMENT PRACTICES FOR THE McCLELLAN-KERR ARKANSAS
NAVIGATION SYSTEM

Major Field: Civil Engineering

Biographical:

Education: Graduated from Seminole High School, Seminole, Oklahoma in May 1994; received Bachelor of Science degree in Civil Engineering with an Environmental Option from Oklahoma State University, Stillwater, Oklahoma in May 1999; received Master of Science degree in Civil Engineering Construction Project Management from Oklahoma State University in July 2000. Completed the requirements for the Doctor of Philosophy degree with a major in Civil Engineering at Oklahoma State University in May 2007.

Experience: Employed as a civil engineering intern by the City of Tulsa Public Works, summer of 1999; employed as a graduate teaching assistant by the Oklahoma State University Department of Civil and Environmental Engineering, 2000 and 2006; currently employed as a civil engineer by the U.S. Army Corps. Of Engineers – Tulsa District, 2001 to present.

Professional Memberships: American Indian Science and Engineering Society, American Society of Civil Engineers, Society of American Military Engineers, Registered Professional Engineer in the State of Oklahoma

Name: Brett Cowan

Date of Degree: May, 2007

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: DREDGED MATERIAL CONTAINMENT AREA SITING AND
MANAGEMENT PRACTICES FOR THE McCLELLAN-KERR
ARKANSAS NAVIGATION SYSTEM

Pages in Study: 272

Candidate for the Degree of Doctor of Philosophy

Major Field: Civil Engineering

The McClellan-Kerr Arkansas Navigation System (MKARNS) currently has a 9-ft. draft channel for carrying raw materials into the Port of Catoosa in Oklahoma. By deepening the channel to a 12-ft draft, approximately 33 percent more barge capacity can generate greater commerce for the navigation system. However, this creates an engineering problem of disposing of millions of cubic yards of dredged material.

A feasibility study by the United States Army Corps of Engineers determined that 41 Dredged Material Containment Areas (DMCAs) would be able to contain and maintain the dredging needs of the new system for a 50-year design life. The need to manage and develop a comprehensive disposal plan to maximize disposal and minimize the time was therefore created.

By developing a Linear Model to balance the disposal production rate with the consolidation rate, the dredged disposal operations can be optimized to minimize the overall time to deepen the navigation system. The Linear Model was then checked with current standard practices to see if an accurate reflection of the geotechnical properties of dredged material were maintained during settlement processes.

The geotechnical assumptions about the dredged material were broad but are capable of defining a typical soil in the MKARNS. The case study concluded that the current navigation system can be deepened to the required three feet in seven years using 41 proposed DMCAs.

ADVISER'S APPROVAL: Donald R. Snethen
