



**US Army Corps
of Engineers**
Philadelphia District

Wanamaker Building
100 Penn Square East
Philadelphia, PA 19107-3390
ATTN: CENAP-OP-R

Public Notice

Public Notice No.
CENAP-OP-R-2016-180

Date

Application No.
CENAP-OP-R-2016-180

File No.

CENAP-OP-R-2016-180-85

In Reply Refer to:
REGULATORY BRANCH

This District has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344).

The purpose of this notice is to solicit comments and recommendations from the public concerning issuance of a Department of the Army permit for the work described below.

APPLICANT: City of Rehoboth Beach
229 Rehoboth Avenue
Post Office Box 1163
Rehoboth Beach, Delaware 19971

AGENT: Sean Snow
GHD, Inc.
16701 Melford Boulevard
Suite 330
Bowie, Maryland 20715

WATERWAY: Atlantic Ocean

LOCATION: 38 Henlopen Avenue Rehoboth Beach, Sussex County, Delaware
Tax Map Parcels 3-34-14.09-215.00
(Lat. 38.71368°N/Long.-75.0807°W).

ACTIVITY: The applicant, City of Rehoboth Beach, has applied for a Department of the Army permit to install a wastewater outfall pipeline and diffuser via directional drilling and mechanical or hydraulic dredging in the Atlantic Ocean east of Deauville Beach, Rehoboth Beach, Sussex County, Delaware. The proposed pipeline alignment begins at the existing Rehoboth Beach Waste Water Treatment Plant, follows the Lewes and Rehoboth canal north to Grove Park. The pipeline will then turn northeast to Henlopen Avenue and continue along Henlopen Avenue to the Deauville Beach parking area and terminate in the Atlantic Ocean, approximately 6,000 linear feet from the parking area. The twenty-four (24) inch high density polyethylene (HDPE) or polyvinyl chloride (PVC) pipeline would be directionally drilled approximately 3,000 linear feet, eight (8) feet below the ocean substrate. At this point, a mechanical or hydraulic dredge would excavate an eight (8) feet deep trench for the remaining 3,000 linear feet. Once the pipe is anchored in place with concrete collars, the trench would be backfilled with 2.5 feet of soil, 4 feet of ballast stone, followed by 1.5 feet of the native substrate. The terminus of the outfall pipe

will consist of a 120 linear feet diffuser comprised of 8 risers, 1.5 feet above the ocean substrate, with 4 ports per riser. The diffuser will be installed on pilings to ensure stability. The dimensions of the structures are indicated on the attached plans.

PURPOSE: The Rehoboth Beach Wastewater Treatment Plant (RBWWTP) currently discharges its treated effluent to the Lewes and Rehoboth Canal, which connects the Rehoboth Bay to the Delaware Bay. The RBWWTP currently receives wastewater from the City of Rehoboth and surrounding areas of Henlopen Acres and Dewey Beach. The original treatment plant was completed in 1989 and was upgraded in two phases, in 1994 and 1997, to reduce the nitrogen and phosphorus discharge as required. Minor upgrades were also implemented at the plant in 2002 to improve grit removal.

The RBWWTP is an advanced secondary treatment plant that produces an effluent of higher quality than that of a typical secondary treatment plant. It is currently meeting and achieving higher levels of treatment than required by the current existing National Pollutant Discharge Elimination System (NPDES) permit limits with effluent concentrations and loading well below the permitted amounts. The design capacity of the plant is considered adequate, and there are no plans to expand the capacity either now or in the future.

In 1996, Rehoboth Bay was listed as a “water quality limited” water body by the Delaware Department of Natural Resources and Environmental Control (DDNREC). Thus a consent order (Civil Action Number 98C-12-023-THG) was issued to the City of Rehoboth Beach to find another disposal method to eliminate discharge to Rehoboth Bay. Several alternatives were evaluated in the final Environmental Impact Statement (EIS) dated December 2012, and following the DDNREC Record of Decision (ROD) in January 2015, an ocean outfall was deemed the best option for the City. The ROD and EIS can be found at the following website: <http://www.dnrec.delaware.gov/wr/Services/Pages/Financial-Assistance-Branch-proposed-Rehoboth-ocean-outfall.aspx>.

Post construction of the ocean outfall, treated effluent from the RBWWTP will be diffused into the water 6,000 linear feet offshore. This effluent will have been treated through enhanced nutrient removal treatment with modelling predicting rapid dilution to background levels within 1,000 feet south of the diffuser assembly.

The RBWWTP will be permitted through the Environmental Protection Agency’s (EPA) NPDES in two phases. The first phase is to allow the plant to continue to discharge into the Lewes and Rehoboth Canal during construction. The second phase will take effect once the ocean outfall is complete, and will permit the plant to discharge through the diffuser in the Atlantic Ocean. The RBWWTP currently meets and will continue to meet NPDES regulations set forth for this particular treatment facility.

AVOIDANCE/MINIMIZATION/COMPENSATION STATEMENT:

On April 10, 2008, the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency published a *Final Rule on Compensatory Mitigation for the Losses of Aquatic Resources* (33 CFR 325 and 332 and 40 CFR 230). The rule took effect on June 9, 2008. In accordance with 33 CFR Part 325.1(d)(7) of the rule, the applicant has stated that the proposed project has

been designed to avoid and minimize adverse effects on the aquatic environment to the maximum extent practicable, and has further documented that compensatory mitigation is not necessary. The following aspects and features of the project demonstrate the applicant's efforts in this regard.

The applicant has stated that they will perform the work utilizing best management practices to minimize impacts to aquatic resources. These best management practices include, but are not limited to using a hydraulic directional drill, vibratory pile driving utilizing a soft start method for installation of the diffuser, limiting pile driving activities to no more than 12 hours per day, operating shallow draft vessels to maximize navigational clearance for marine species and adhering to seasonal time of year restrictions. Furthermore, multiple alternatives were analyzed as part of the EIS with the ocean outfall diffuser system determined to be the practicable alternative available and capable of being done after taking into consideration environmental consequences, cost, existing technology, and logistics in light of overall project purposes.

A preliminary review of this application indicates that threatened or endangered species under the jurisdiction of the National Marine Fisheries Service (NMFS) may occur in the project area. Based on the Final EIS, ROD and analysis that all effects of the proposed action will be insignificant and/or discountable, and in consultation with the National Marine Fisheries Service, the proposed work is not likely to adversely affect listed species or their critical habitat pursuant to Section 7 of the Endangered Species Act as amended.

The decision whether to issue a permit will be based on an evaluation of the activity's probable impact including its cumulative impacts on the public interest. The decision will reflect the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the work must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the work will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs and welfare of the people. A Department of the Army permit will be granted unless the District Engineer determines that it would be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Comments on the proposed work should be submitted, in writing, within 30 days to the District Engineer, U.S. Army Corps of Engineers, Philadelphia District, Wanamaker Building, 100 Penn Square East, Philadelphia, Pennsylvania 19107-3390.

Review of the National Register of Historic Places indicates that no registered properties or properties listed as eligible for inclusion therein are located within the permit area of the work. Based on a Phase 1 Archaeological Survey reviewed by the State Historic Preservation Office, the Philadelphia District has determined that no known historic properties, eligible for or listed in the National Register of Historic Places, will be affected by this project.

Essential Fish Habitat: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act 1996 (Public Law 104-267), requires all Federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency that may adversely effect Essential Fish Habitat (EFH).

Effects of the Project: The project is located in Essential Fish Habitat according to the Guide to Essential Fish Habitat Designations in the Northeastern United States. The following managed species of fish have been listed in the guide as occurring in the vicinity of the project: Atlantic cod (*Gadus morhua*), red hake (*Urophycis chuss*), winter flounder (*Pseudopleuronectes americanus*), windowpane flounder (*Scophthalmus aquosus*), Atlantic sea herring (*Clupea harengus*), monkfish (*Lophius americanus*), bluefish (*Pomatomus saltatrix*), Atlantic butterflyfish (*Peprilus triacanthus*), summer flounder (*Paralichthys dentatus*), scup (*Stenotomus chrysops*), black sea bass (*Centropristus striata*), surf clam (*Spisula solidissima*), spiny dogfish (*Squalus acanthias*), king mackerel (*Scomberomerus cavalla*), Spanish mackerel (*Scomberomerus maculatus*), cobia (*Rachycentron canadum*), sand tiger shark (*Carcharias taurus*), Atlantic angel shark (*Squatina dumerili*), Atlantic sharpnose shark (*Rhizopriondon terraenovae*), dusky shark (*Carcharhinus obscurus*), sandbar shark (*Carcharhinus plumbeus*) and scalloped hammerhead shark (*Sphyrna lewini*).

Analysis of the Effects: The proposed work which is the subject of this application would occur during the winter months in the Atlantic Ocean off the coast of Rehoboth Beach, Sussex County, Delaware. The proposed work area is an unlikely spawning or nursery area for the managed species. Consequently, concentrations of the sessile life stages (eggs and larva) of the listed species are not expected to be within the area under review. The pelagic adults and juveniles of the listed species are highly mobile and capable of avoiding such impacts as may be associated with the work. Additionally, the disturbance to the benthic community would be temporary and re-establish after completion of the project. Furthermore, the implementation of a seasonal restriction to prohibit any in-water work from May 1 through October 1 when these species normally occur in the project vicinity would minimize any adverse effects to these resource values.

Corps of Engineers View: Based upon the above analysis and in consultation with the NMFS Habitat Conservation Division, the Corps of Engineers has determined that the proposed project would not have substantial direct, indirect, site-specific, or habitat-wide impacts on EFH, or upon the managed species and their life stages listed in the above referenced EFH guide, either

individually, cumulatively or synergistically. The proposed project would not eliminate, diminish, nor disrupt the functions of EFH.

Proposed Mitigation: Impacts to aquatic resources resulting from the proposed project are expected to be temporary in nature. As such, no compensatory mitigation has been proposed.

In accordance with Section 307(c) of the Coastal Zone Management Act of 1972, applicants for Federal Licenses or Permits to conduct an activity affecting land or water uses in a State's coastal zone must provide certification that the activity complies with the State's Coastal Zone Management Program. The applicant has stated that the proposed activity complies with and will be conducted in a manner that is consistent with the approved State Coastal Zone Management (CZM) Program. No permit will be issued until the State has concurred with the applicant's certification or has waived its right to do so. Comments concerning the impact of the proposed and/or existing activity on the State's coastal zone should be sent to this office, with a copy to the State's Office of Coastal Zone Management.

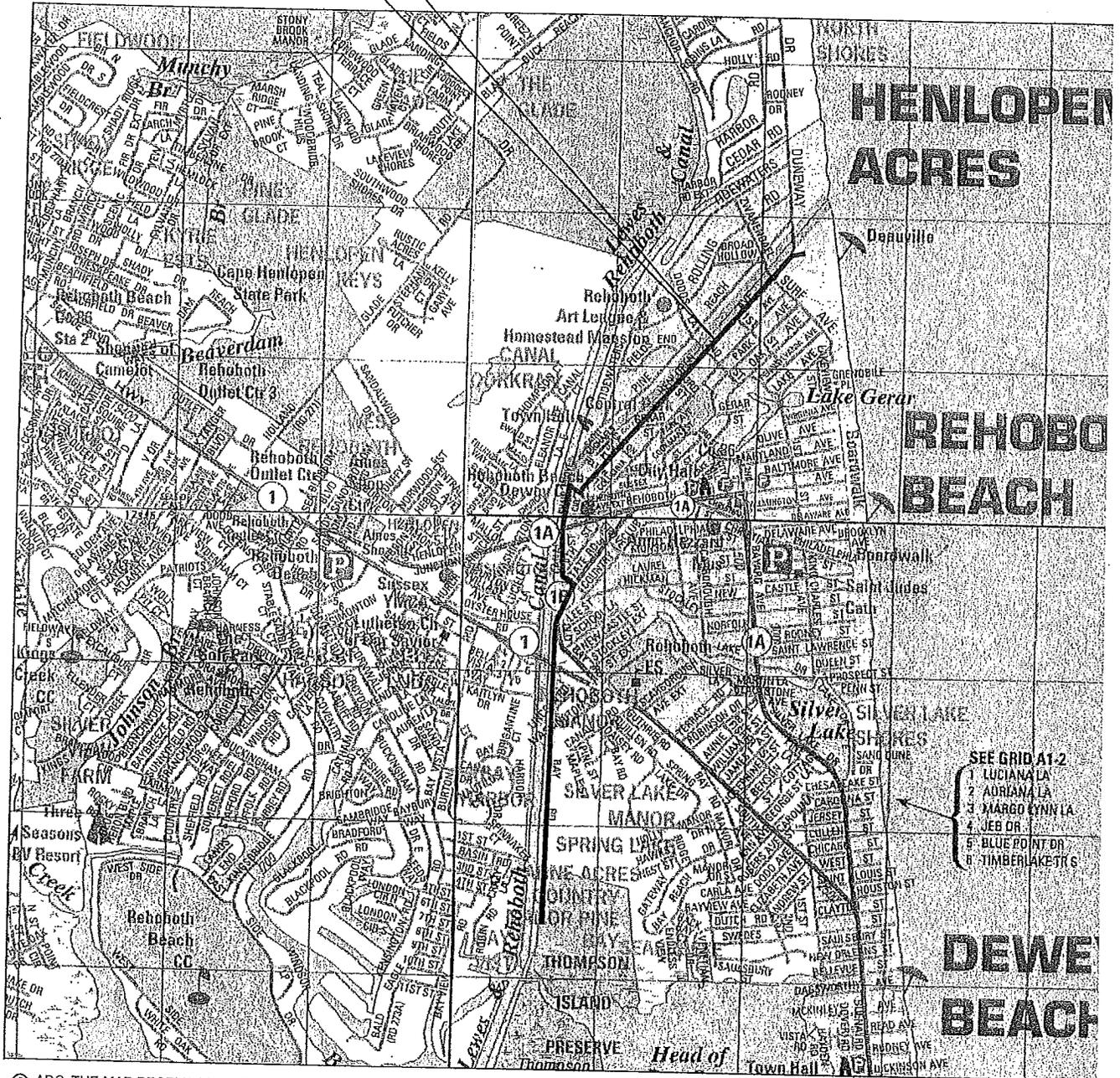
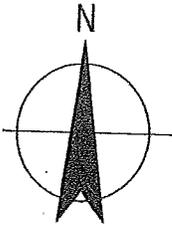
The evaluation of the impact of the work described above on the public interest will include application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act.

Any person may request, in writing, to the District Engineer, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state in writing, with particularity, the reasons for holding a public hearing.

Additional information concerning this permit application may be obtained by calling Michael Yost at 302-736-9763, by email at michael.d.yost@usace.army.mil, or by writing this office at the above address.

Edward E. Bonner
Chief, Regulatory Branch

PIPE ALIGNMENT
PROJECT LOCATION



© ADC, THE MAP PEOPLE, BY PERMISSION PUN # 09011200

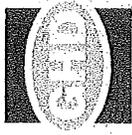
VICINITY MAP

NOT TO SCALE



CITY OF REHOBOTH BEACH, DELAWARE OCEAN OUTFALL PROJECT

PROJECT NUMBER: 2017-001 PERMIT SUBMITTAL



- CONTRACT:**
1. CITY OF REHOBOTH BEACH
 2. OWNER: CITY OF REHOBOTH BEACH
 3. PROJECT: OCEAN OUTFALL PROJECT
 4. PROJECT LOCATION: REHOBOTH BEACH, DE
 5. PROJECT NUMBER: 2017-001
 6. PROJECT DATE: 08/2017
 7. PROJECT DRAWN BY: JPM
 8. PROJECT CHECKED BY: JPM
 9. PROJECT DATE: 08/2017
 10. PROJECT DATE: 08/2017

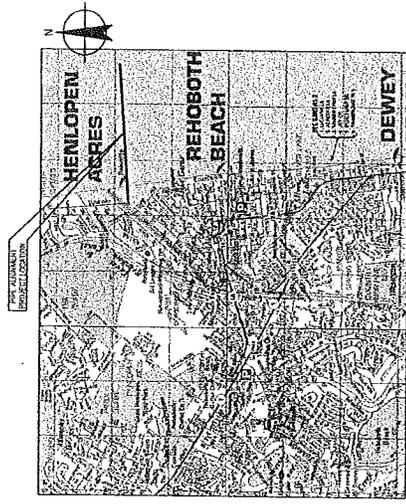
ALL PERMITS MUST BE OBTAINED FROM THE DELAWARE DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE BEFORE BEGINNING CONSTRUCTION.

SUSSEX COUNTY ENGINEERING DEPARTMENT

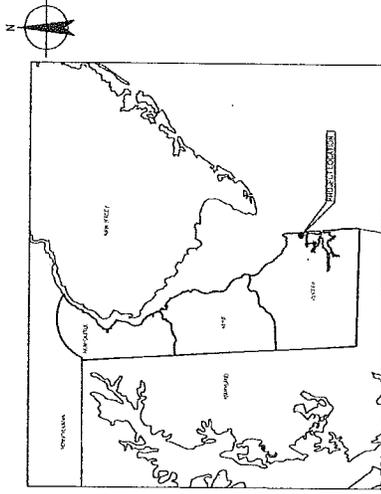
COUNTY NUMBER _____ DATE _____



FOR UTILITY LOCATIONS
BEFORE BEGINNING CONSTRUCTION



VICINITY MAP
NOT TO SCALE



LOCATION MAP
NOT TO SCALE

<p>FOR PERMIT SUBMITTAL NOT FOR CONSTRUCTION</p>		<p>Client: CITY OF REHOBOTH BEACH, DELAWARE Project: OCEAN OUTFALL PROJECT Title: COVER SHEET</p>	
<p>City: Rehoboth Beach State: DE Date: 8/20/2017</p>	<p>Design: JPM Check: JPM Approved: JPM Physical Division: KSO Date: 08/20/17 Scale: AS NOTED</p>	<p>City: Rehoboth Beach State: DE Date: 8/20/2017</p>	<p>Contract No.: Drawing No.: 86-18693-G001 Sheet: A</p>

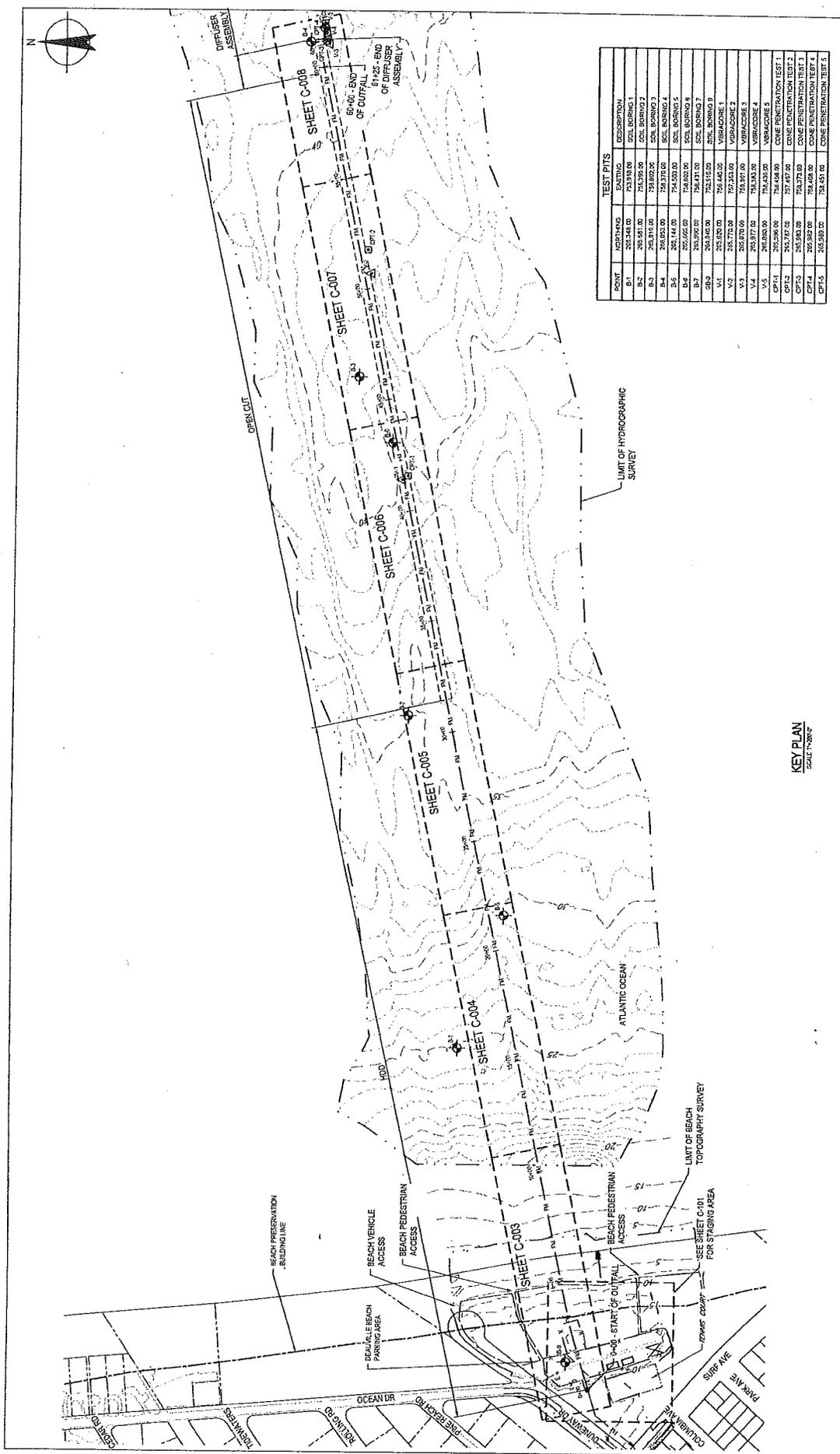
PRELIMINARY

CITY OF REHOBOTH BEACH, DELAWARE

OCEAN OUTFALL PROJECT

COVER SHEET

City of Rehoboth Beach, Delaware
1000 Market Street, Suite 200, Rehoboth Beach, DE 19970
T 302-208-8800 F 302-208-8511
E info@rehabeach.com P 302-208-8511



POINT	NORTHING	EASTING	DESCRIPTION
B-1	252,344.00	724,752.00	SOIL BORING 1
B-2	252,481.00	724,752.00	SOIL BORING 2
B-3	252,518.00	724,752.00	SOIL BORING 3
B-4	252,655.00	724,752.00	SOIL BORING 4
B-5	252,792.00	724,752.00	SOIL BORING 5
B-6	252,929.00	724,752.00	SOIL BORING 6
B-7	253,066.00	724,752.00	SOIL BORING 7
B-8	253,203.00	724,752.00	SOIL BORING 8
B-9	253,340.00	724,752.00	SOIL BORING 9
B-10	253,477.00	724,752.00	SOIL BORING 10
CPT-1	252,344.00	724,752.00	CONE PENETRATION TEST 1
CPT-2	252,481.00	724,752.00	CONE PENETRATION TEST 2
CPT-3	252,618.00	724,752.00	CONE PENETRATION TEST 3
CPT-4	252,755.00	724,752.00	CONE PENETRATION TEST 4
CPT-5	252,892.00	724,752.00	CONE PENETRATION TEST 5

KEY PLAN
SCALE 1"=200'

PRELIMINARY

CITY OF REHOBOTH BEACH, DELAWARE

OCEAN OUTFALL PROJECT

OVERALL SITE AND KEY PLAN

Client	City of Rehoboth Beach	Contract No.	86-18693-C001
Project	Ocean Outfall Project	Sheet No.	3 of 3
Title	Overall Site and Key Plan	Revision	Rev. A
Scale	1" = 200'	Drawn By	City of Rehoboth Beach
Date	02/20/15	Checked By	City of Rehoboth Beach
Project Director	City of Rehoboth Beach	Reviewed By	City of Rehoboth Beach
Author	City of Rehoboth Beach	Approved By	City of Rehoboth Beach

FOR PERMIT SUBMITTAL
NOT FOR CONSTRUCTION

City of Rehoboth Beach
111 S. 2nd Street, 3rd Floor
Rehoboth Beach, DE 19754
E: info@cityofrehoboth.com

Scale: 1" = 200'

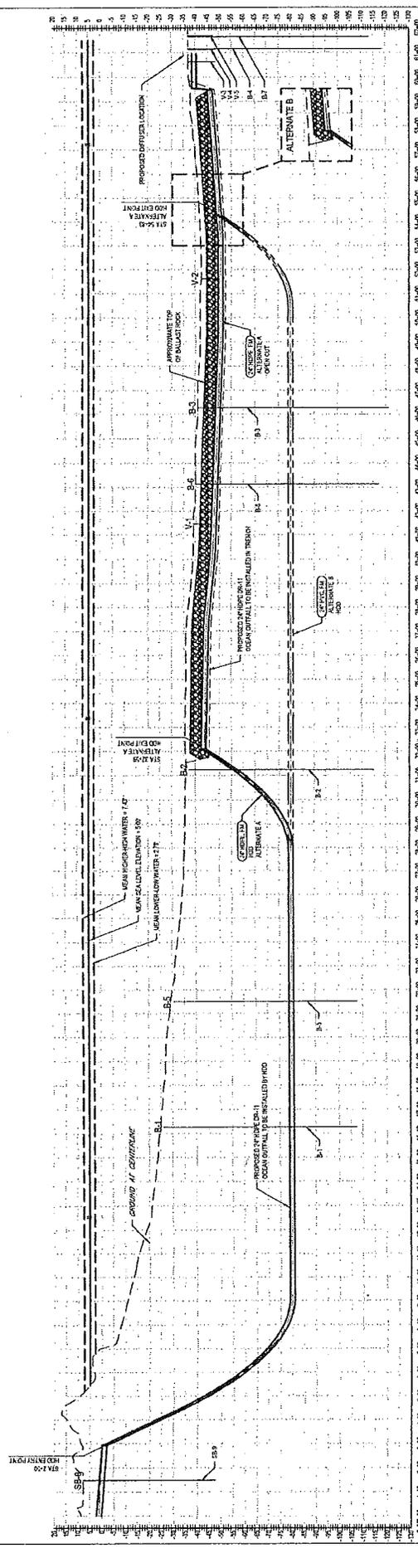
DATE: 02/20/15

PROJECT DIRECTOR: [Signature]

CHECKED BY: [Signature]

REVIEWED BY: [Signature]

APPROVED BY: [Signature]



OCEAN OUTFALL OVERALL PROFILE

NOTE: SEE PLAN SHEET FOR MORE DETAIL

PRELIMINARY

**CITY OF REHOBOTH BEACH, DELAWARE
OCEAN OUTFALL PROJECT
OVERALL PROFILE**

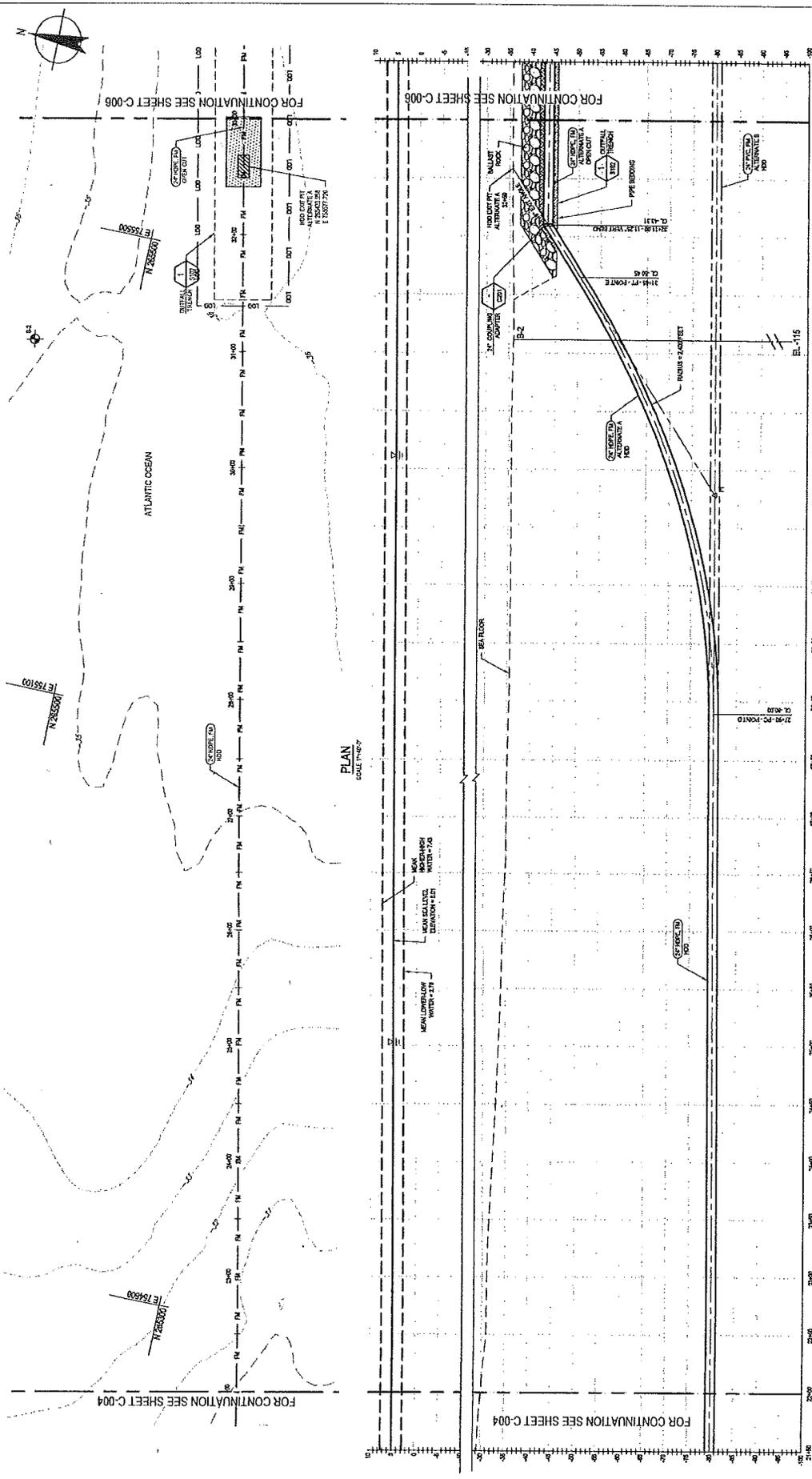
Client	City of Rehoboth Beach, Delaware	Designer: JBT	City Engineer: BMD	Contract No.	86-18693-C002
Drawn: CTF	Checked: JPM	Approved: HCB	Date: 02/27/16	Scale: AS NOTED	Sheet No.: 4 of 23
Project Director: HCB	City Engineer: BMD	City Engineer: BMD	City Engineer: BMD	City Engineer: BMD	City Engineer: BMD

J. B. THOMAS
 Mechanical Engineering
 1724 200 0515 S. F. 1300 300 001
 E: jbt@jbt.com W: www.jbt.com

PERMIT SUBMITTAL (Not for Construction)	SCALE: 1"=50' (IF ORIGINAL)	0 100 200 300 400
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A PERMIT SUBMITTAL (Not for Construction)	CITY ENGINEER BMD				
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 Project: City Hall
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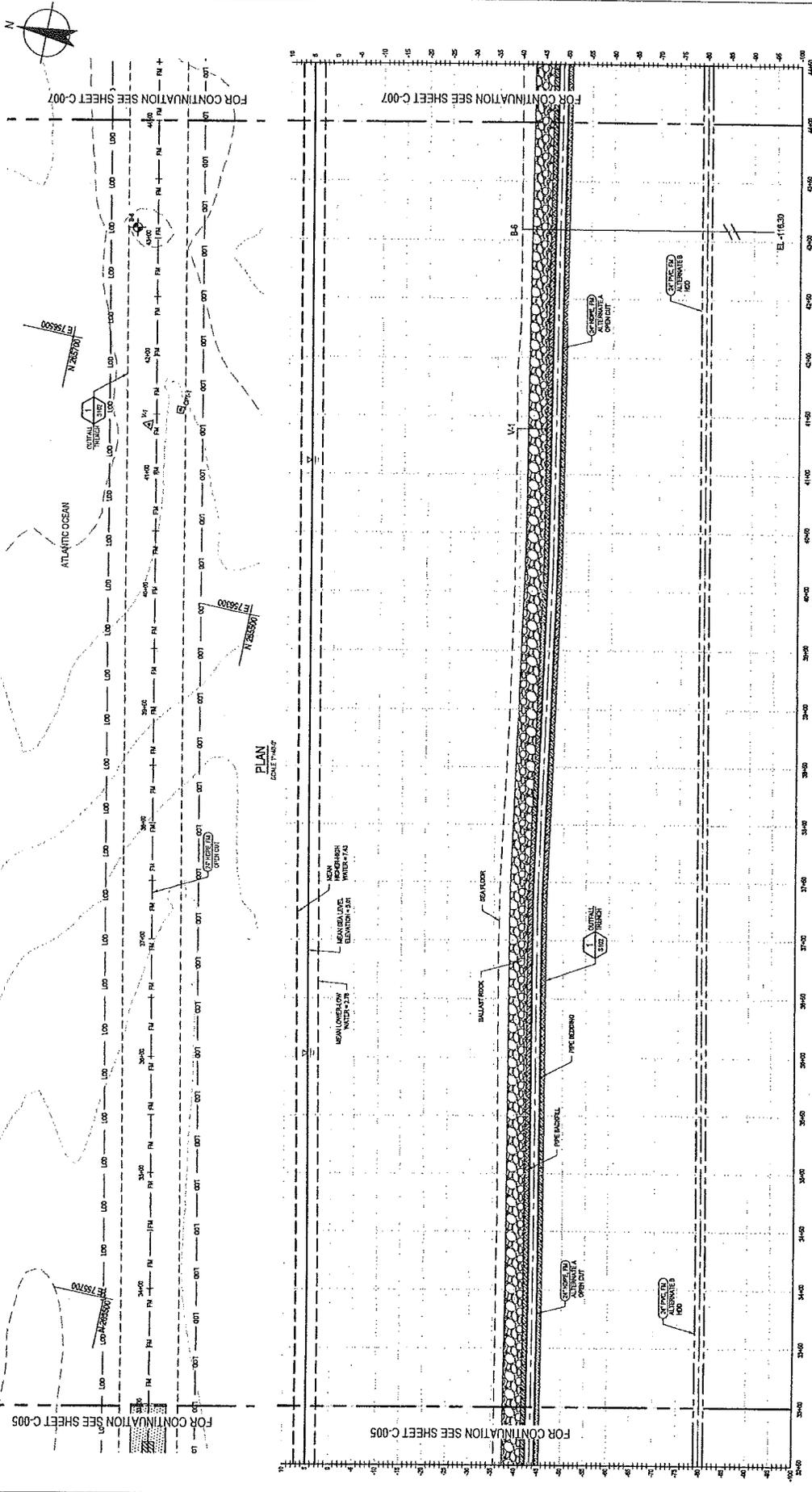
PRELIMINARY
CITY OF REHOBOTH BEACH, DELAWARE
OCEAN OUTFALL PROJECT
PIPELINE PLAN AND PROFILE 3

Client	City of Rehoboth Beach, Delaware
Project	Ocean Outfall Project
Drawn	AS NOTED
Checked	AS NOTED
Design	AS NOTED
Checked	AS NOTED
Approved	AS NOTED
Drawn	AS NOTED
Checked	AS NOTED
Approved	AS NOTED

Date: 1/28/2014 10:51 AM
 File: C:\Users\jgibson\Documents\Projects\Rehoboth Beach\Rehoboth Beach Ocean Outfall Project\Rehoboth Beach Ocean Outfall Project.dwg
 Plot Date: 1/28/2014 10:51 AM
 Plot File: C:\Users\jgibson\Documents\Projects\Rehoboth Beach\Rehoboth Beach Ocean Outfall Project\Rehoboth Beach Ocean Outfall Project.dwg

SHEET NO. 03 OF 03
 DRAWING NO. 86-18693-C005
 SCALE: 1" = 40' (PLAN)
 SCALE: 1" = 10' (PROFILE)

FOR CONTINUATION SEE SHEET C-004
 FOR CONTINUATION SEE SHEET C-006



PRELIMINARY

CITY OF REHOBOTH BEACH, DELAWARE
OCEAN OUTFALL PROJECT
PIPELINE PLAN AND PROFILE 4

Client	City of Rehoboth Beach	Project	Ocean Outfall
Design	CTF	Drawn	JM
Checked	JM	Project Director	NGO
Approved	JM	Date	02/20/19
Scale	AS NOTED	Scale	AS NOTED

Contract No. **Am1 D** Drawing No. **86-18693-C006**

City of Rehoboth Beach, Delaware
 1100 S. DuPont Highway, Rehoboth Beach, DE 19970, USA
 Tel: 302-293-8177 Fax: 302-293-8171
 E: info@cityofrehoboth.com W: www.cityofrehoboth.com

FOR PERMIT SUBMITTAL
 NOT FOR CONSTRUCTION

SCALE: 1" = 100' AT ORIGINAL SIZE
 SCALE: 1" = 10' AT ORIGINAL SIZE

CTF	JM	NGO	08/11
Drawn	JM	Checked	JM
Project Director	NGO	Date	02/20/19

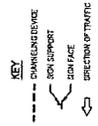
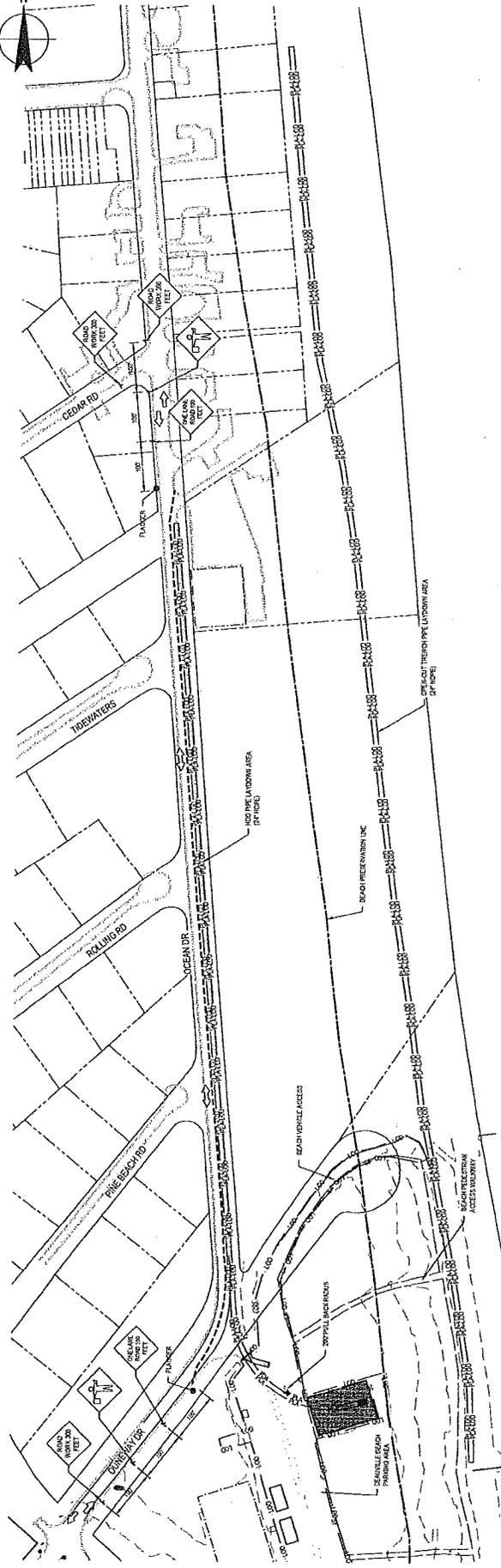
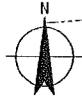
City of Rehoboth Beach, Delaware
 1100 S. DuPont Highway, Rehoboth Beach, DE 19970, USA
 Tel: 302-293-8177 Fax: 302-293-8171
 E: info@cityofrehoboth.com W: www.cityofrehoboth.com

Project: **City of Rehoboth Beach, Delaware - Ocean Outfall Project**

Scale: **1" = 100' AT ORIGINAL SIZE**

Scale: **1" = 10' AT ORIGINAL SIZE**

City of Rehoboth Beach, Delaware
 1100 S. DuPont Highway, Rehoboth Beach, DE 19970, USA
 Tel: 302-293-8177 Fax: 302-293-8171
 E: info@cityofrehoboth.com W: www.cityofrehoboth.com



- NOTES:**
1. PRIOR TO CLOSING OF ROADWAY, CONTRACTOR SHALL ESTABLISH OUTSIDE STORAGE AND STAGING AREAS FOR ALL MATERIALS AND EQUIPMENT. ALL MATERIALS AND EQUIPMENT SHALL BE REMOVED AFTER COMPLETION OF THE PIPE INSTALLATION AND SURFACING SHALL BE COMPLETED.
 2. CONTRACTOR SHALL PROVIDE ACCESS FOR HOMES AND BUSINESSES ALONG OCEAN DRIVE DURING SHUTDOWN.

TRAFFIC CONTROL PIPE LAYDOWN AREA PLAN 1
SCALE 1"=100'

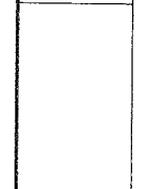
PRELIMINARY
CITY OF REHOBOTH BEACH, DELAWARE
OCEAN OUTFALL PROJECT
TRAFFIC CONTROL AND PIPE
LAYDOWN/STAGING AREA PLAN

Client	City of Rehoboth Beach, Delaware
Project	Ocean Outfall Project
Title	Traffic Control and Pipe Laydown/Staging Area Plan
Contract No.	86-18693-C106
Sheet No.	1 of 2
Rev.	A

Drawn	CTF	Designer	JM
Checked	JPM	Checked	BUC
Approved	KSD	Approved	KSD
Project Director	KSD	Project Director	KSD
Date	02/02/16	Date	02/02/16
Scale	1" = 100'	Scale	1" = 100'

GND INC.
18751 Midcoast Delaware, Suite 208, Beach, MD 20715, USA
T: 202-238-8539 F: 202-238-8571
B: 202-238-8539 E: info@gndinc.com Website: www.gndinc.com

FOR PERMIT SUBMITTAL
NOT FOR CONSTRUCTION

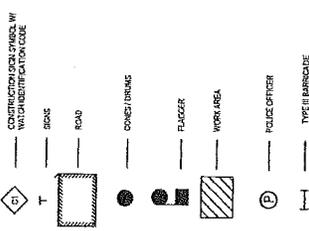


Permit No.	86-18693-C106
Date	02/02/2016
Sheet No.	1 of 2
Rev.	A

Drawn	CTF	Checked	BUC	Approved	KSD
Project Director	JPM	Project Director	KSD	Project Director	KSD
Date	02/02/16	Date	02/02/16	Date	02/02/16

A PERMIT SUBMITTAL
No. 86-18693-C106-001
Date: 02/02/2016 11:30 AM
Sheet No. 1 of 2
Rev. A

PLAN LEGEND

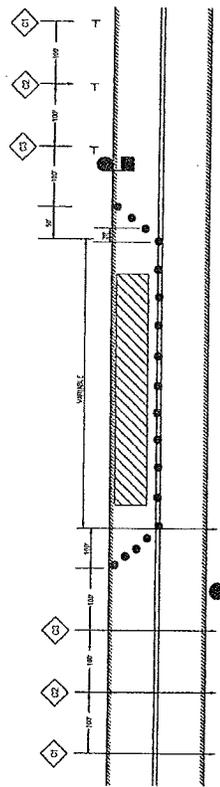


TRAFFIC CONTROL SEQUENCE OF CONSTRUCTION

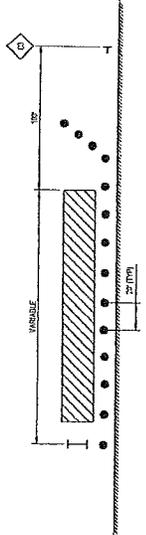
- STEP 1: THE CONTRACTOR SHALL PLACE ALL CONSTRUCTION WARNING SIGNS AND BARRICADES IN ACCORDANCE WITH THE APPROVED TRAFFIC CONTROL PLAN. THE APPROACH WARNING SIGNS SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED.
- STEP 2: THE CONTRACTOR SHALL PLACE ONE LANE TRAFFIC FLAGGER CONTROL PLATE AND TEMPORARY TRAFFIC CONTROL SIGNS IN ACCORDANCE WITH THE APPROVED TRAFFIC CONTROL PLAN.
- STEP 3: CONSTRUCT ALL PROPOSED WORK.
- STEP 4: REMOVE TRAFFIC CONTROL SIGNS AND RECONSTRUCT IN ACCORDANCE WITH THE APPROVED TRAFFIC CONTROL PLAN.

TRAFFIC CONTROL NOTES

- CITY OF REHOBOTH BEACH SHALL BE ADVISED IN WRITING AT LEAST 48 HOURS PRIOR TO BEGINNING ANY WORK IN ORDER TO OBTAIN A PERMIT TO CONDUCT TRAFFIC CONTROL OPERATIONS. THE APPROVED TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE CITY ENGINEER FOR REVIEW AND APPROVAL.
- ALL CONSTRUCTION AND MATERIALS FOR THE TRAFFIC CONTROL SYSTEM SHALL BE IN ACCORDANCE WITH THE DRAWINGS CONTAINED IN THE LATEST EDITION OF THE STATE OF DELAWARE MANUAL ON STANDARD TRAFFIC CONTROL DEVICES.
- NO WORK SHALL BE CONDUCTED IN THE PROHIBITED ZONE BY THE CONTRACTOR.
- RETRACTED TRAFFIC SIGNS SHALL BE USED AS DIRECTIONAL SIGNS AT NIGHT ADAPTING THE CONSTRUCTION AREA.
- IF A SIGN OR PLACARD IS DAMAGED OR DESTROYED, IT SHALL BE REPLACED WITHIN 24 HOURS.
- IF A SIGN OR PLACARD IS DAMAGED OR DESTROYED, IT SHALL BE REPLACED WITHIN 24 HOURS.
- ALL TRAFFIC CONTROL SIGNS SHALL BE PLACED AT THE END OF EACH DAY OF CONSTRUCTION. SIGNS SHALL BE PLACED AT THE END OF EACH DAY OF CONSTRUCTION. SIGNS SHALL BE PLACED AT THE END OF EACH DAY OF CONSTRUCTION.
- CONTRACTOR SHALL MAINTAIN ADEQUATE LIGHTING AT ALL TIMES TO MAINTAIN VISIBILITY TO TRAFFIC.
- ALL TEMPORARY SIGNS THAT DO NOT APPLY SHALL BE COVERED OR REMOVED.
- CHARACTERISTICS OF ROAD AND TRAFFIC CONDITIONS SHALL BE TAKEN INTO ACCOUNT.
- ALL TRAFFIC CONTROL SIGNS SHALL BE SET IN THEIR PROPER POSITION AT ALL TIMES, AND SHALL BE MAINTAINED, REPAIRED, OR REPLACED AS NECESSARY TO PREVENT THEM FROM BEING OBLITERATED.
- ALL CONSTRUCTION SIGNS SHALL BE IN ACCORDANCE WITH THE APPROVED TRAFFIC CONTROL PLAN.
- ALL SIGNS SHALL BE PLACED TO THE RIGHT OF THE ROADWAY UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR SHALL MAINTAIN ADEQUATE LIGHTING AT ALL TIMES TO MAINTAIN VISIBILITY TO TRAFFIC.
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- CONTRACTOR SHALL MAINTAIN ADEQUATE LIGHTING AT ALL TIMES TO MAINTAIN VISIBILITY TO TRAFFIC.
- ALL WORK SHALL BE COMPLETED BY 5:00 PM UNLESS OTHERWISE SPECIFIED.
- ALL WORK SHALL BE COMPLETED BY 5:00 PM UNLESS OTHERWISE SPECIFIED.



1. TRAFFIC CONTROL - TWO-WAY, ONE LANE TRAFFIC (FLAGGER CONTROL)
NOT TO SCALE



2. TRAFFIC CONTROL - TWO-WAY, ONE LANE TRAFFIC SHOULDER CLOSURE (FLAGGER CONTROL)
NOT TO SCALE

PRELIMINARY

CITY OF REHOBOTH BEACH, DELAWARE
OCEAN OUTFALL PROJECT
TRAFFIC CONTROL NOTES AND DETAILS

Sheet No. **Am1 D** Drawing No. **86-18690-C-107** Date: **11/17/2010** Rev. **A**

Drawn	CTF	Design	JM
Checked	JPM	Project	BMG
Appr'd	KSS	City Engineer	BMG
Date	07/20/10	City Engineer	KSS

FOR PERMIT SUBMITTAL
NOT FOR CONSTRUCTION

City of Rehoboth Beach, Delaware
18701 Memorial Boulevard, Suite 300, Lewes, MD 20153, USA
Tel: 302.326.6800 Fax: 302.326.6811
E: info@cityofrehobothbeach.com

Scale: 1"=40' AT ORIGINAL SIZE

City of Rehoboth Beach, Delaware
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STRUCTURAL GENERAL NOTES

- A. GENERAL:
 1. THESE DRAWINGS ARE FOR INFORMATION ONLY. NO PART OF THESE DRAWINGS SHALL BE USED FOR CONSTRUCTION.
 2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF EXISTING STRUCTURE AND FOUNDATION. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF EXISTING STRUCTURE AND FOUNDATION. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF EXISTING STRUCTURE AND FOUNDATION.
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1. MOST OF THE CONCRETE SURFACES IN ACCORDANCE WITH AND IN PROOF OF SPECIFICATIONS.
 1. REINFORCED STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A601, GRADE 60.
 1. PROVIDE 1/8" DIA. WIRE MESH REINFORCING BETWEEN REINFORCING BARS AND PROVIDE REINFORCING CONCRETE COVER.
 2. REINFORCING BARS SHALL BE EMPLOYED AS SPECIFIED FOR REINFORCING BARS.
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 10. REINFORCING BARS SHALL BE EMPLOYED AS SPECIFIED FOR REINFORCING BARS.
2. WHERE UNDESIGNED CONDITIONS OF FILL TO CAP CONNECTIONS ARE INDICATED ON THE DRAWINGS, THE FILL BETWEEN THE PILES AND STRUCTURE OF THE STRUCTURE SHALL BE CAREFULLY EXAMINED AND THE FILL SHALL BE REPLACED WITH A MATERIAL OF EQUAL OR BETTER QUALITY THAN THAT WHICH WAS REMOVED. THE FILL SHALL BE COMPACTED TO THE PROPER DENSITY AND SHALL BE PROTECTED FROM WEATHER. THE FILL SHALL BE PROTECTED FROM WEATHER. THE FILL SHALL BE PROTECTED FROM WEATHER.
3. ALL REINFORCING BARS SHALL BE EMPLOYED AS SPECIFIED FOR REINFORCING BARS.
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10. ALL REINFORCING BARS SHALL BE EMPLOYED AS SPECIFIED FOR REINFORCING BARS.

PRELIMINARY

CITY OF REHOBOTH BEACH, DELAWARE

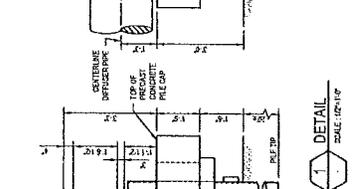
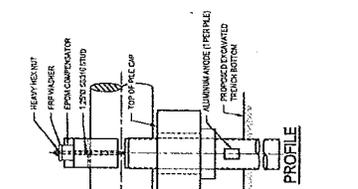
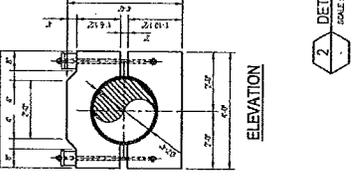
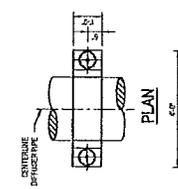
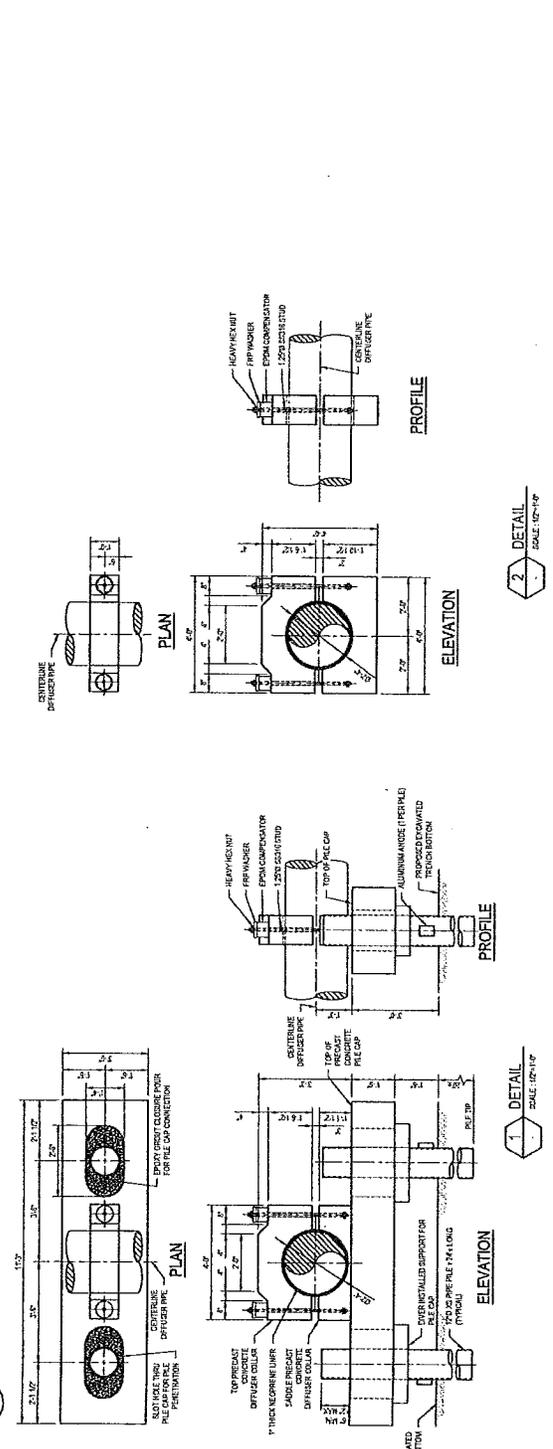
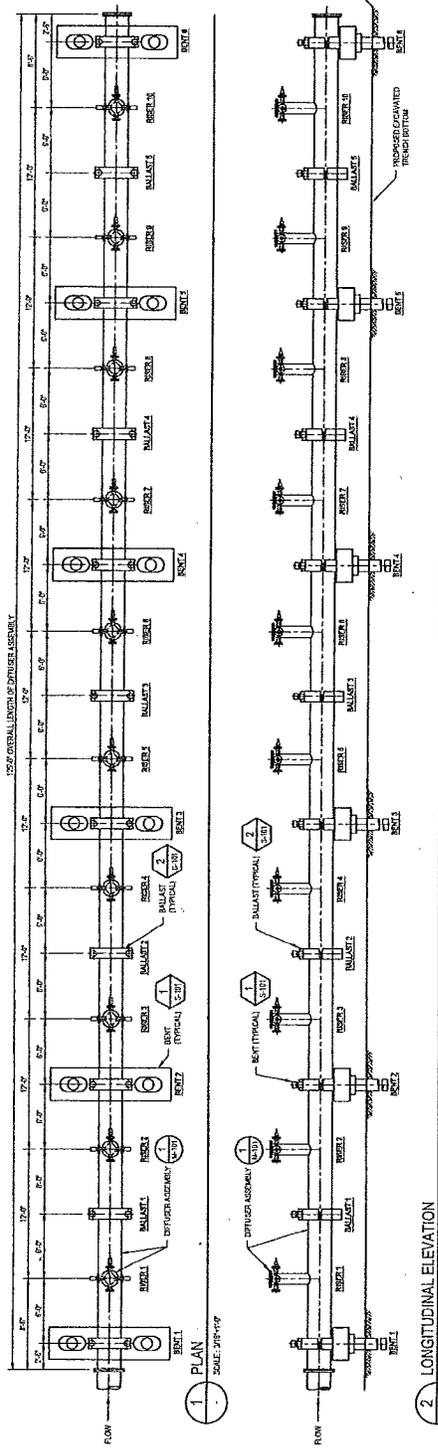
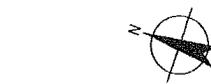
OCEAN OUTFALL PROJECT

STRUCTURAL GENERAL NOTES

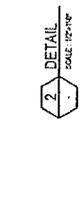
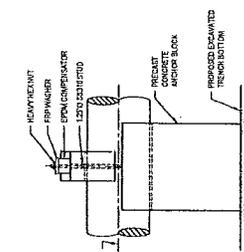
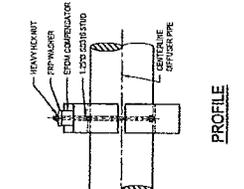
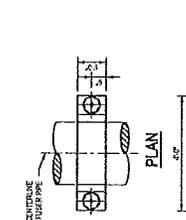
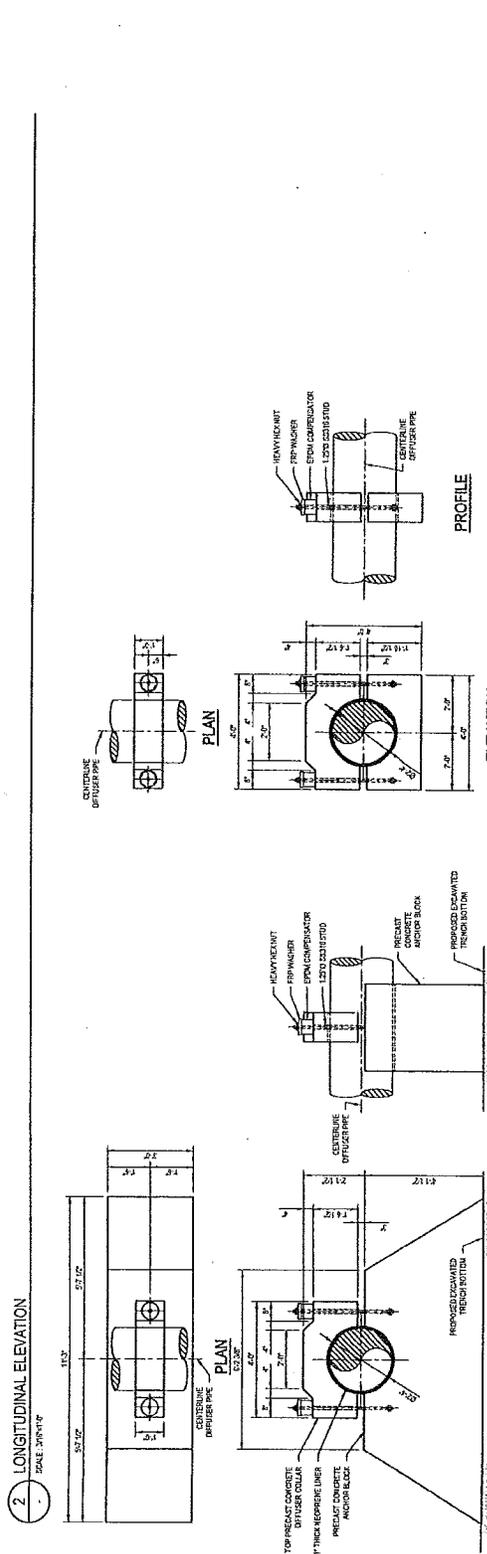
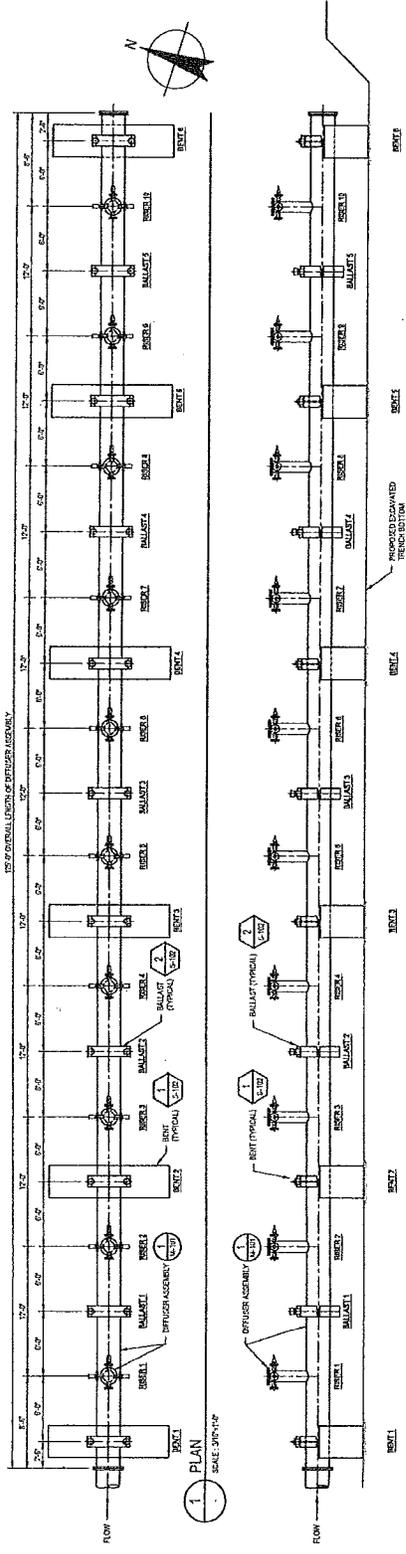
Drawn	PS	Designer	CS	Client	City of Rehoboth Beach, Delaware
Checked	JM	Design	CL	Project	Ocean Outfall Project
Date	11/10/16	Project No.	N30	Task	Structural General Notes
Scale	NONE	Contract No.	860216	Contract No.	86-18693-S001

Drawing No: 86-18693-S001

Rev. A



PRELIMINARY		CITY OF REHOBOTH BEACH, DELAWARE		OCEAN OUTFALL PROJECT		DIFFUSER SUPPORT STRUCTURE - ALTERNATE A		PLAN AND ELEVATION	
Client	Project	Designer	CS	Drawn	PS	Checked	JK	Approved	MS
		Check	CL	Scale	AG-DROWN	Scale	MS/DJ/S	Scale	MS/DJ/S
This Drawing shall be used for construction only and shall be subject to change without notice.									
For Permit Submittal Not for Construction									
CHD Inc. 4755 Market Development, Suite 200, Dorney MD 20714, USA E: chd@chd.com, W: www.chd.com									
Drawing No: 86-18693-S101 Job No: 86-18693 Rev: A									



<p>PRELIMINARY</p> <p>CITY OF REHOBOTH BEACH, DELAWARE</p> <p>OCEAN OUTFALL PROJECT</p> <p>DIFFUSER SUPPORT STRUCTURE - ALTERNATE B</p> <p>PLAN AND ELEVATION</p>		<p>Client: City of Rehoboth Beach, Delaware</p> <p>Project: Ocean Outfall Project</p> <p>Sheet: Diffuser Support Structure - Alternate B</p> <p>Scale: 3/8" = 1'-0"</p> <p>Contract No.: 86-18693-S102</p> <p>Rev: A</p>
<p>Drawn: PS</p> <p>Checked: JM</p> <p>Approved: KSN</p> <p>Date: 08/15/12</p>	<p>Designer: CD</p> <p>Checker: CL</p> <p>City Engineer: KSN</p> <p>City Engineer: CD</p>	<p>Scale: AS SHOWN</p> <p>Scale: 3/8" = 1'-0"</p> <p>Scale: 1/2" = 1'-0"</p> <p>Scale: 1/4" = 1'-0"</p> <p>Scale: 1/8" = 1'-0"</p>
<p>FOR PERMIT SUBMITTAL NOT FOR CONSTRUCTION</p> <p>GRID INC. 1075 Industrial Boulevard, Suite 201, Newark, NJ 07102 USA P: 201-998-8810 F: 201-998-8811 www.gridinc.com</p>		
<p>1. PERMIT SUBMITTAL</p> <p>Scale: 3/8" = 1'-0"</p> <p>Scale: 1/2" = 1'-0"</p> <p>Scale: 1/4" = 1'-0"</p> <p>Scale: 1/8" = 1'-0"</p>		
<p>2. LONGITUDINAL ELEVATION</p> <p>Scale: 3/8" = 1'-0"</p>		

