

PUBLIC NOTICE

US Army Corps
of Engineers
New York District
Jacob K. Javits Federal Building
New York, N.Y. 10278-0090
ATTN: Regulatory Branch

In replying refer to:
Public Notice Number: NAN-2012-01342-EHA
Issue Date: January 28, 2014
Expiration Date: February 27, 2014

To Whom It May Concern:

The New York District, Corps of Engineers 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).

APPLICANT: New York City Department of Environmental Protection
Attn: Kathryn Mallon
96-05 Horace Harding Expressway, 4th Floor
Corona, New York 13373

ACTIVITY: Dredge sediments, install a sand cap and scour protection system.

WATERWAY: Gowanus Canal, tributary to Gowanus Bay

LOCATION: Borough of Brooklyn, Kings County, New York.

A detailed description and plans of the applicant's activity are enclosed to assist in your review.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

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 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.

ALL COMMENTS REGARDING THE PERMIT APPLICATION MUST BE PREPARED IN WRITING AND MAILED TO REACH THIS OFFICE BEFORE THE EXPIRATION DATE OF THIS NOTICE, otherwise, it will be presumed that there are no objections to the activity. Comments provided will become a part of the public record for this action.

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Any person may request, in writing, before this public notice expires, that a public hearing be held to collect information necessary to consider this application. Requests for public hearings shall state, with particularity, the reasons why a public hearing should be held. It should be noted that information submitted by mail is considered just as carefully in the permit decision process and bears the same weight as that furnished at a public hearing.

Our preliminary determination is that the activity for which authorization is sought herein is not likely to affect any Federally endangered or threatened species or their critical habitat. However, pursuant to Section 7 of the Endangered Species Act (16 U.S.C. 1531), the District Engineer is consulting with the appropriate Federal agency to determine the presence of and potential impacts to listed species in the project area or their critical habitat.

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act (Public Law 104-267), requires all Federal agencies to consult with the National Oceanic and Atmospheric Administration Fisheries Service (NOAA/FS) on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). The proposed work, fully described in the attached work description, could cause the disruption of habitat for various lifestages of some EFH-designated species as a result of a temporary increase in turbidity during construction. However, the New York District has made the preliminary determination that the site-specific adverse effects are not likely to be substantial because it is expected that fish populations would avoid the small area of disturbance. Further consultation with NOAA/FS regarding EFH impacts and conservation recommendations being conducted and will be concluded prior to the final decision.

Based upon a review of the latest published version of the National Register of Historic Places, there are no known sites eligible for, or included in, the Register within the permit area. Presently unknown archeological, scientific, prehistorical, or historical data may be lost by work accomplished under the required permit.

Reviews of activities pursuant to Section 404 of the Clean Water Act 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 and the applicant will obtain a water quality certificate or waiver from the appropriate state agency in accordance with Section 401 of the Clean Water Act prior to a permit decision.

Pursuant to Section 307 (c) of the Coastal Zone Management Act of 1972 as amended [16 U.S.C. 1456 (c)], for activities under consideration that are located within the coastal zone of a state which has a federally approved coastal zone management program, the applicant has certified in the permit application that the activity complies with, and will be conducted in a manner that is consistent with, the approved state coastal zone management program. By this public notice, we are requesting the state's concurrence with, objection to, or waiver of the applicant's certification. No permit decision will be made until one of these actions occur. For activities within the coastal zone of New York State, the applicant's certification and accompanying information is available from the Consistency Coordinator, New York State Department of State, Division of Coastal Resources and Waterfront Revitalization, Coastal Zone Management Program, One Commerce Plaza, 99 Washington Avenue, Albany, New York 12231, Telephone (518) 474-6000. Comments regarding the applicant's certification, and copies of any letters to this office commenting upon this proposal, should be so addressed.

In addition to any required water quality certificate and coastal zone management program concurrence, the applicant has obtained or requested the following governmental authorization for

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the activity under consideration:

- New York State Department of Environmental Conservation

It is requested that you communicate the foregoing information concerning the activity to any persons known by you to be interested and who did not receive a copy of this notice. If you have any questions concerning this application, you may contact this office at (917) 790-8523 and ask for Naomi Handell.

In order for us to better serve you, please complete our Customer Service Survey located at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey

For more information on New York District Corps of Engineers programs, visit our website at <http://www.nan.usace.army.mil>


for
Jodi M. McDonald
Chief, Regulatory Branch

Enclosures

WORK DESCRIPTION

The applicant, New York City Department of Environmental Protection (NYCDEP), has requested Department of the Army authorization for dredging with sand cap placement and scour protection for an existing Combined Sewer Outflow (CSO) structure in Gowanus Canal, tributary to Gowanus Bay, Borough of Brooklyn, Kings County, New York.

The work would involve:

Dredge via mechanical or hydraulic dredging method, approximately 9,400 cubic yards of sediment from a 825 foot long by 100 foot wide area to a depth of 5.7 feet below mean low water including a 0.5 foot over dredge. The dredged material is comprised of a dark black material containing large amounts of organic matter and a low percentage of solids.

The applicant proposes to use a barge-based dewatering plant to dewater the dredged material. The dewatering barge would be moored in the Canal at the 6th Street Basin. Dewatering filtrate or decant water would be discharged at the dredging site, upstream of a turbidity curtain. The dredged material would be placed at a state approved upland location so as not to reenter any waterway or wetlands.

After dredging, the applicant proposes to place a sand cap over the 825 foot long by 100 foot wide dredged area. The cap would be comprised of 8,000 cubic yards of clean upland sand placed below the plane of Spring High Water (SHW).

In order to prevent scour at the existing CSO structure, place approximately 300 cubic yards of cabled concrete mats in a 200 foot long by 100 foot wide area below the plane of SHW at the head of the Canal.

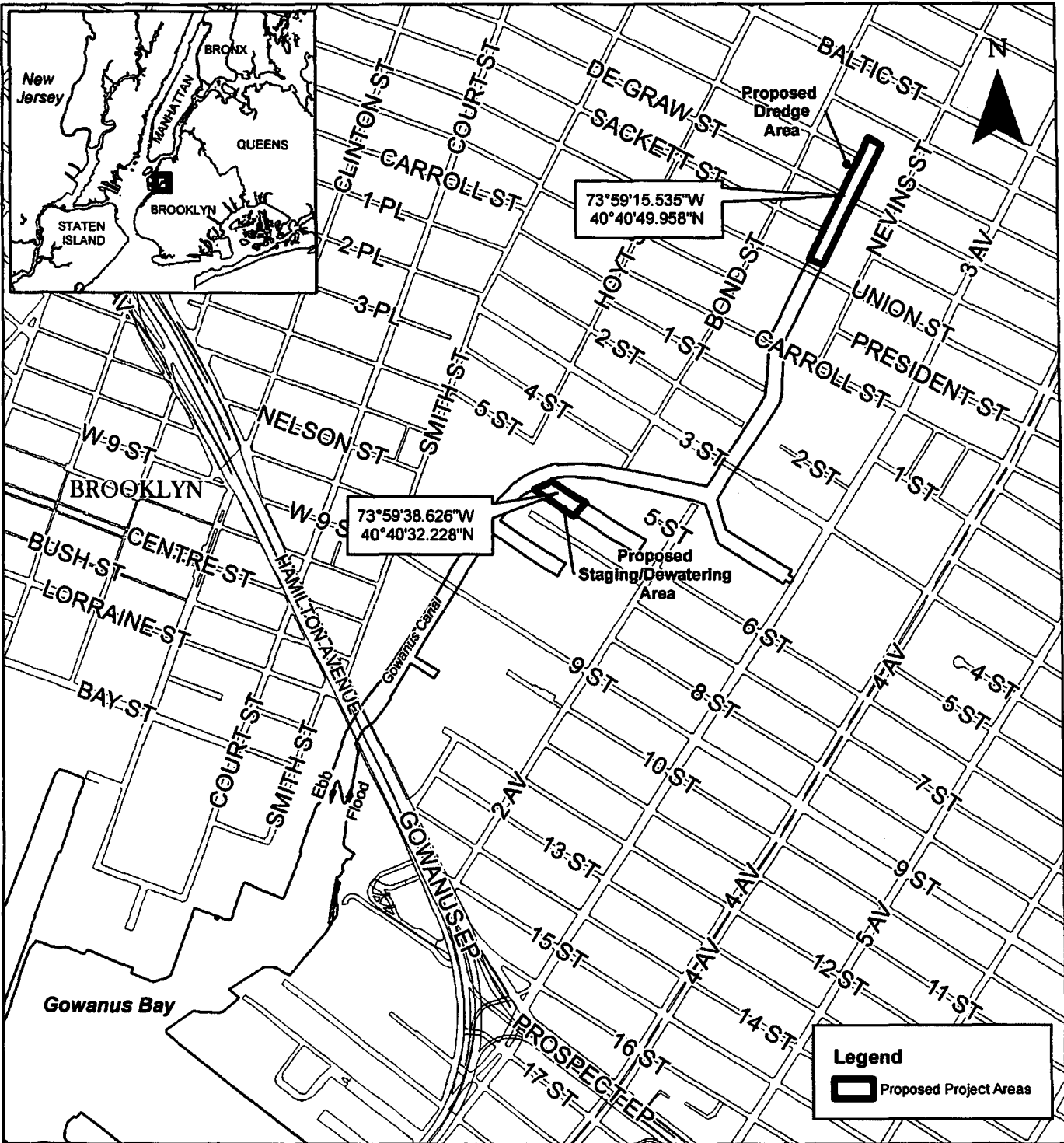
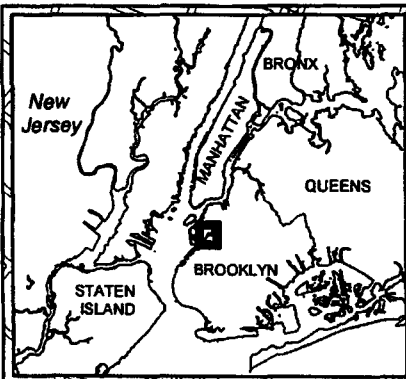
The applicant has stated that they have avoided, minimized, and mitigated for impacts proposed to the maximum extent practicable by using the following best management practices:

- Use of a turbidity curtain spanning the canal from bulkhead to bulkhead, extending from the water surface to the bottom of the canal.
- Dewatering filtrate or decant water would be discharged upstream of the turbidity curtain.
- If mechanical dredging is implemented, use of an environmental bucket.

The stated purpose of this project is to remove accumulated sediments from the Gowanus Canal, provide protection to the existing CSO structure and meet the requirements of a New York State Department of Environmental Conservation Consent Order to remove contaminated sediments and improve water quality.

Note that the Gowanus Canal is a designated U.S. Environmental Protection Agency Super Fund site. For more information please follow the following link:

<http://www.epa.gov/region02/superfund/npl/gowanus/>.



PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

PLAN DATUM: MEAN LOW WATER:

SPRING HIGH WATER (SHW)	ELEV. +6.10
MEAN HIGH WATER (MHW)	ELEV. +4.52
MEAN LOW WATER (MLW)	ELEV. 0.00
MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

VICINITY MAP

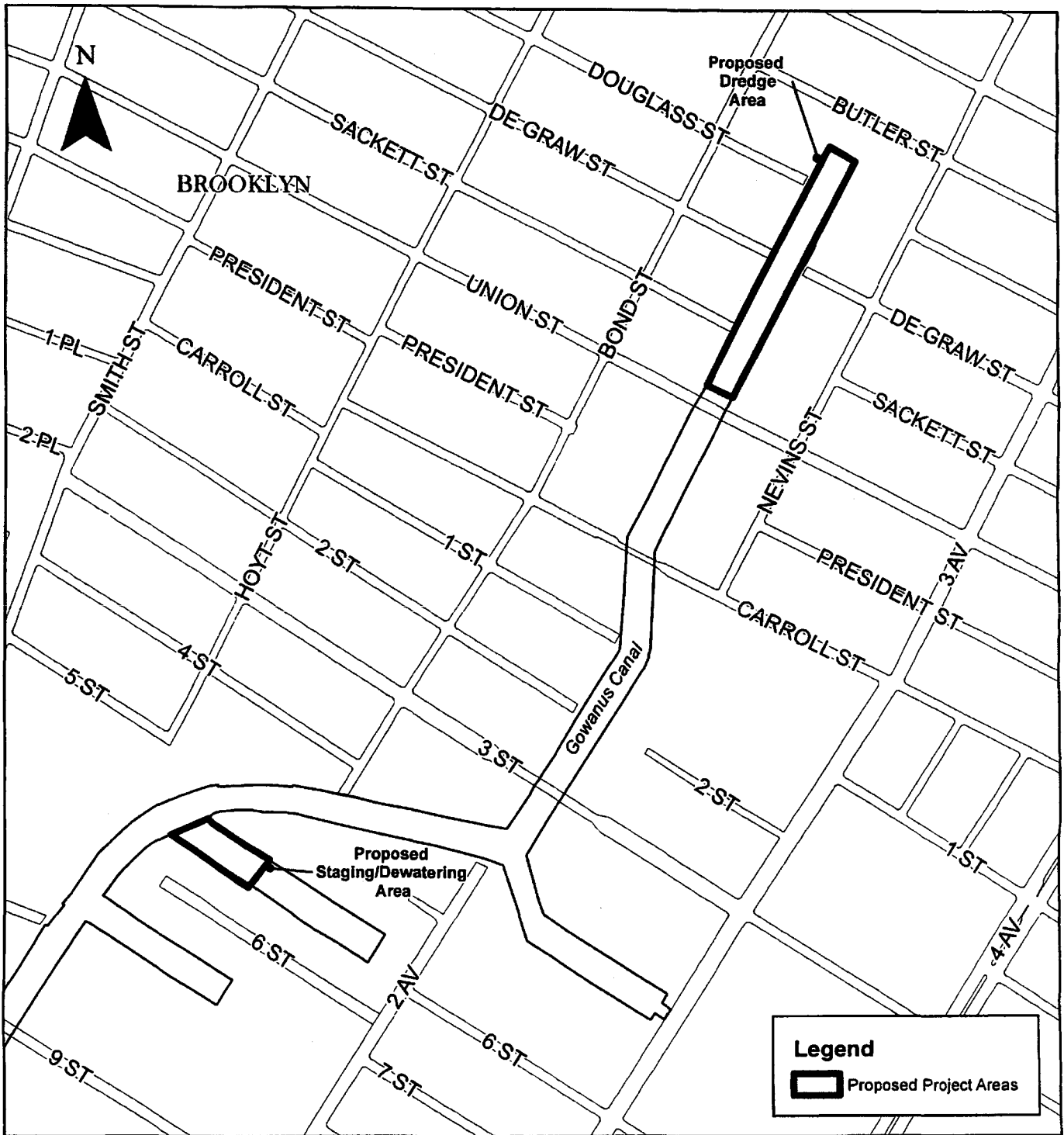
ENVIRONMENTAL DREDGING OF GOWANUS CANAL

0 250 500 1,000 1,500 Feet

IN: GOWANUS CANAL
AT: BROOKLYN
COUNTY OF: KINGS
STATE OF: NEW YORK
APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

SHEET 1 OF 22 DATE 1/2012
 REV. 2/2013

NAN-2012-01342-611A

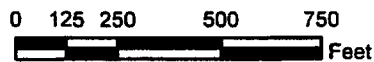


PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

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PROJECT LOCATION
ENVIRONMENTAL DREDGING
OF GOWANUS CANAL



IN: GOWANUS CANAL

AT: BROOKLYN

COUNTY OF: KINGS

STATE OF: NEW YORK

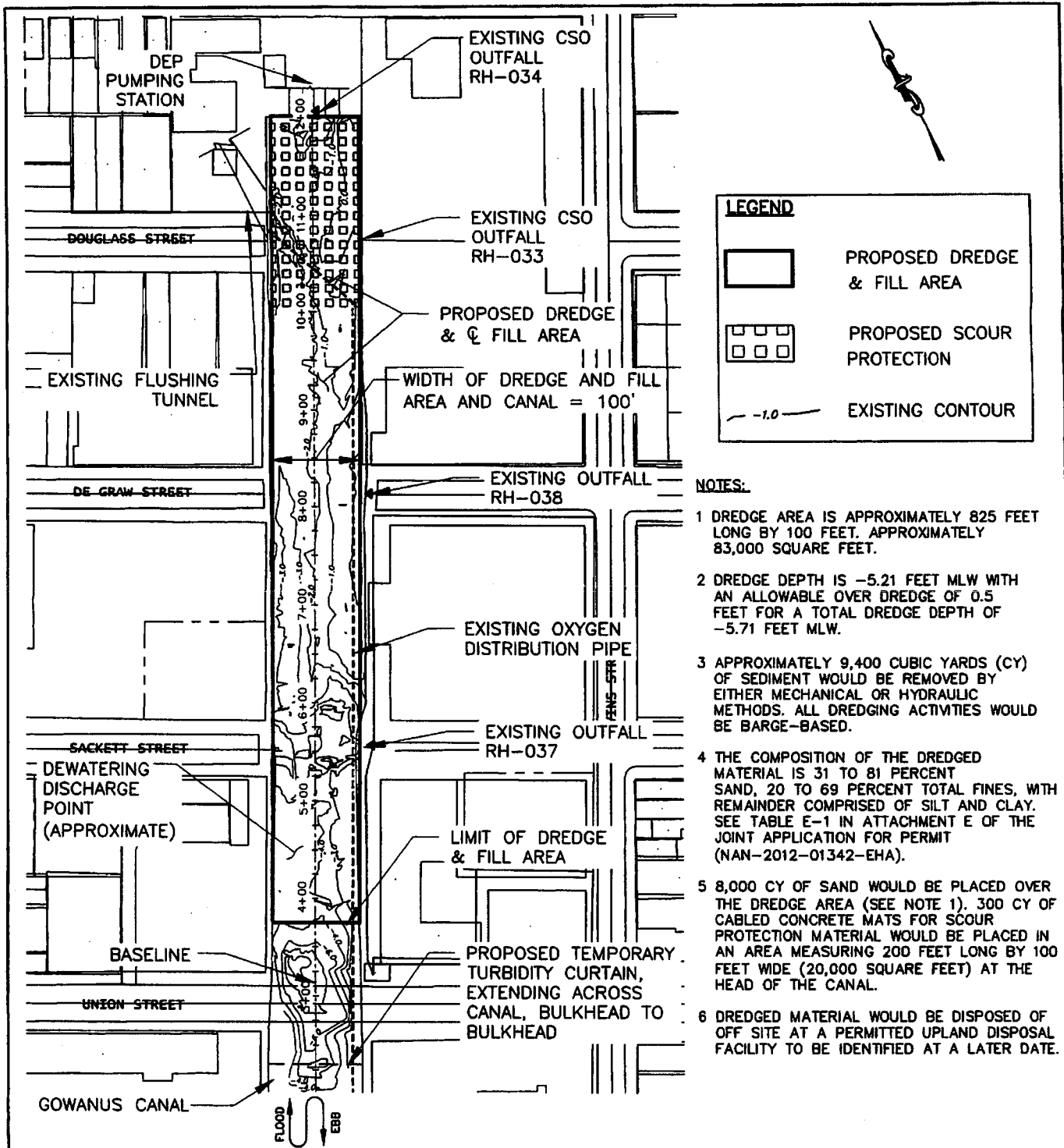
APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE




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LEGEND

-  PROPOSED DREDGE & FILL AREA
-  PROPOSED SCOUR PROTECTION
-  -1.0 EXISTING CONTOUR

- NOTES:**
- 1 DREDGE AREA IS APPROXIMATELY 825 FEET LONG BY 100 FEET. APPROXIMATELY 83,000 SQUARE FEET.
 - 2 DREDGE DEPTH IS -5.21 FEET MLW WITH AN ALLOWABLE OVER DREDGE OF 0.5 FEET FOR A TOTAL DREDGE DEPTH OF -5.71 FEET MLW.
 - 3 APPROXIMATELY 9,400 CUBIC YARDS (CY) OF SEDIMENT WOULD BE REMOVED BY EITHER MECHANICAL OR HYDRAULIC METHODS. ALL DREDGING ACTIVITIES WOULD BE BARGE-BASED.
 - 4 THE COMPOSITION OF THE DREDGED MATERIAL IS 31 TO 81 PERCENT SAND, 20 TO 69 PERCENT TOTAL FINES, WITH REMAINDER COMPRISED OF SILT AND CLAY. SEE TABLE E-1 IN ATTACHMENT E OF THE JOINT APPLICATION FOR PERMIT (NAN-2012-01342-EHA).
 - 5 8,000 CY OF SAND WOULD BE PLACED OVER THE DREDGE AREA (SEE NOTE 1). 300 CY OF CABLED CONCRETE MATS FOR SCOUR PROTECTION MATERIAL WOULD BE PLACED IN AN AREA MEASURING 200 FEET LONG BY 100 FEET WIDE (20,000 SQUARE FEET) AT THE HEAD OF THE CANAL.
 - 6 DREDGED MATERIAL WOULD BE DISPOSED OF OFF SITE AT A PERMITTED UPLAND DISPOSAL FACILITY TO BE IDENTIFIED AT A LATER DATE.


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MEAN LOW WATER (MLW)	ELEV. 0.00
MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

PLAN VIEW

ENVIRONMENTAL DREDGING OF GOWANUS CANAL



(IN FEET)

IN: GOWANUS CANAL
AT: BROOKLYN
COUNTY OF: KINGS
STATE OF: NEW YORK

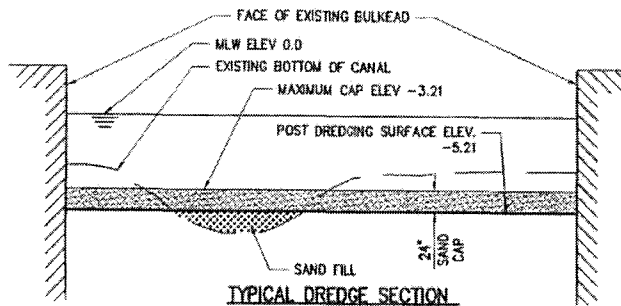
APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

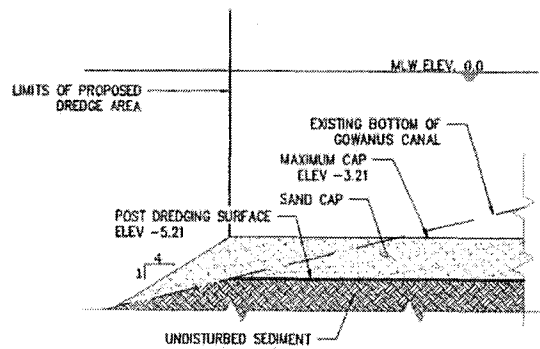
DATE 1/2012
REV. 2/2013

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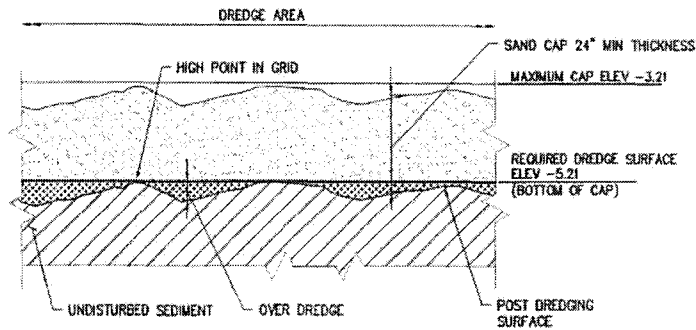
NAN-2012-01342-EHA



NOT TO SCALE



TYPICAL SECTION AT LIMITS OF DREDGING
SCALE: NOT TO SCALE



PROPOSED CAP DETAIL
NOT TO SCALE

PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

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SELECTED SECTION VIEWS AND PROFILES
ENVIRONMENTAL DREDGING OF GOWANUS CANAL

IN: GOWANUS CANAL

AT: BROOKLYN

COUNTY OF: KINGS

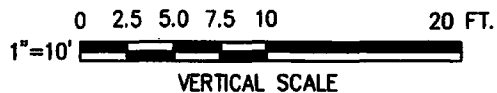
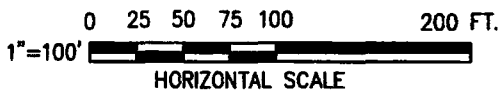
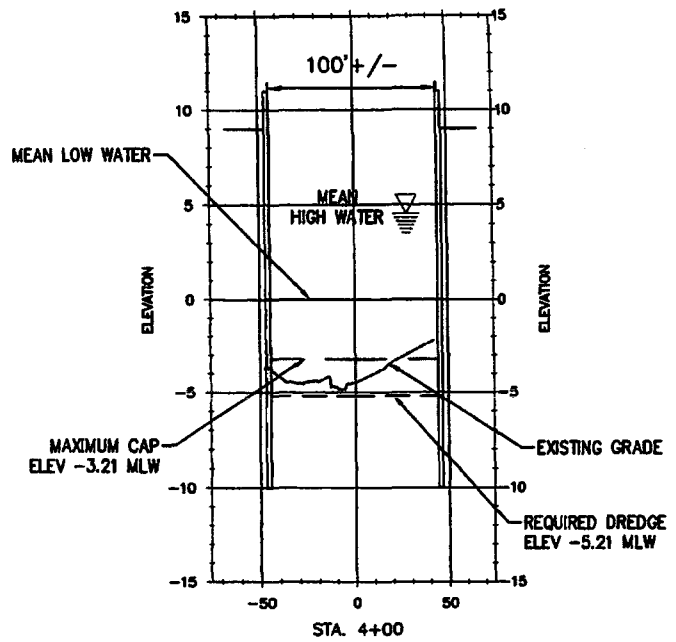
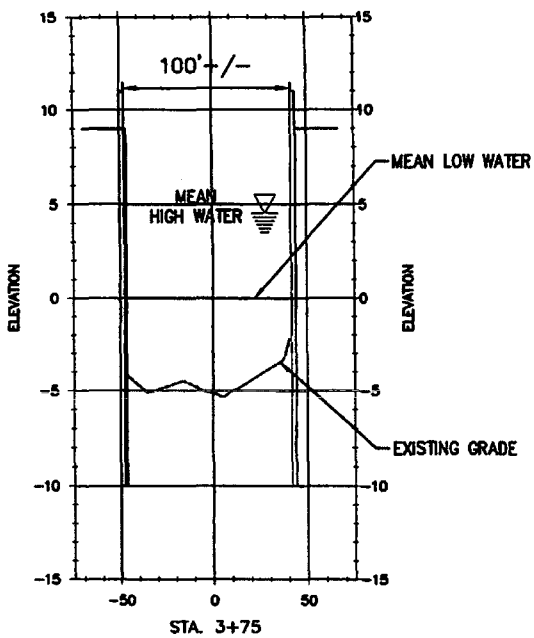
STATE OF: NEW YORK

APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

DATE 1/2012
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NAN-2012-01342-ETA



PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

PLAN DATUM MEAN LOW WATER:

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MEAN HIGH WATER (MHW)	ELEV. +4.53
MEAN LOW WATER (MLW)	ELEV. 0.00
MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

**SECTION VIEWS
STA. 3+75 and STA. 4+00
ENVIRONMENTAL DREDGING
OF GOWANUS CANAL**

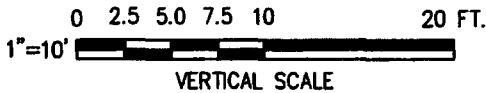
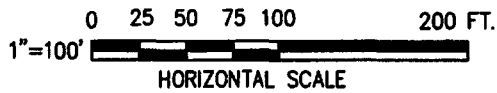
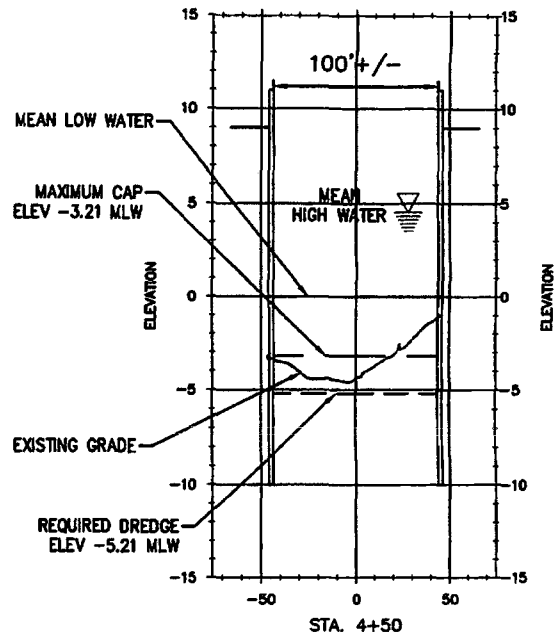
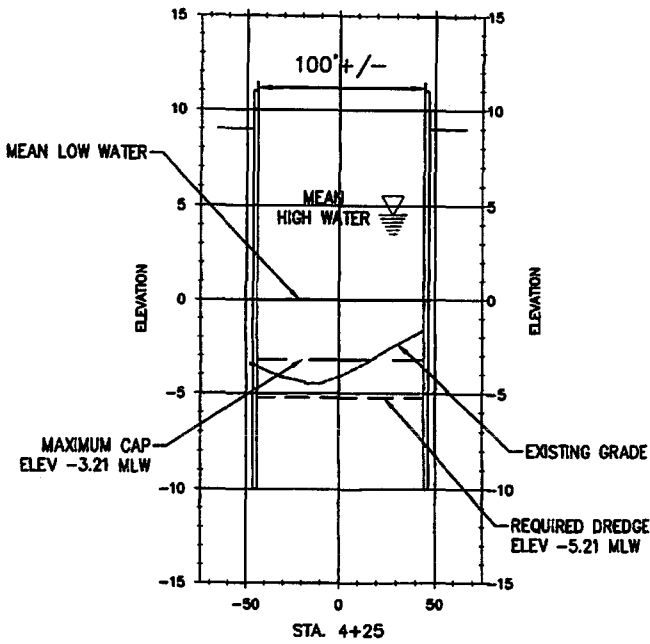
IN: GOWANUS CANAL
AT: BROOKLYN
COUNTY OF: KINGS
STATE OF: NEW YORK

APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

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DATE 1/2012
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PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

PLAN DATUM MEAN LOW WATER:

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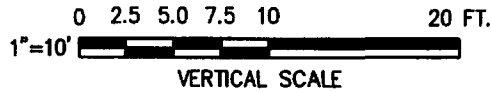
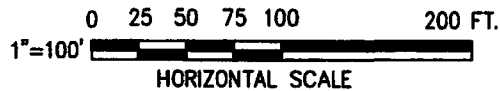
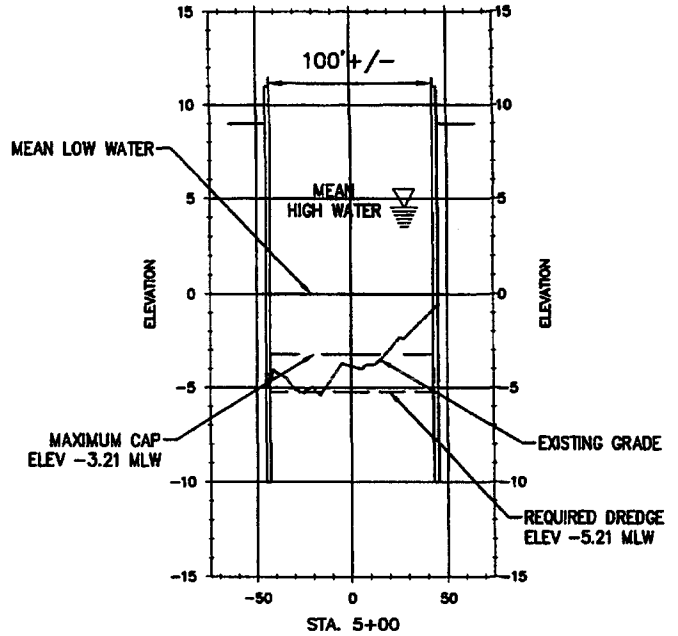
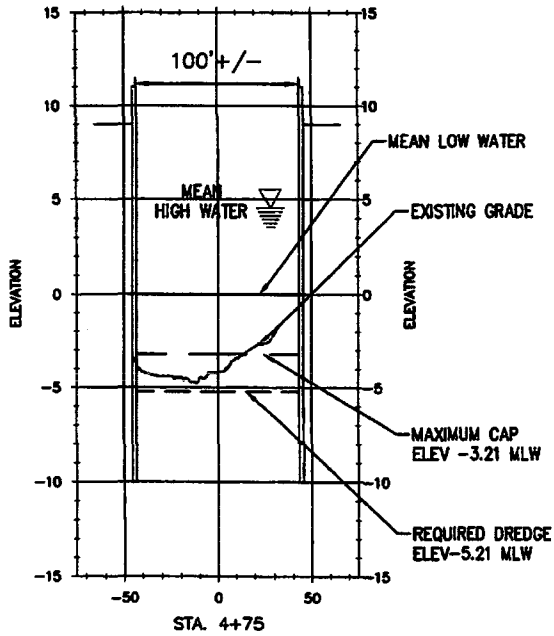
**SECTION VIEWS
STA. 4+25 and STA. 4+50
ENVIRONMENTAL DREDGING
OF GOWANUS CANAL**

IN: GOWANUS CANAL
AT: BROOKLYN
COUNTY OF: KINGS
STATE OF: NEW YORK

APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

SHEET 6 OF 22
DATE 1/2012
REV. 2/2013

NAN-2012-01342-CHA



PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

PLAN DATUM MEAN LOW WATER:

SPRING HIGH WATER (SHW)	ELEV. +6.10
MEAN HIGH WATER (MHW)	ELEV. +4.53
MEAN LOW WATER (MLW)	ELEV. 0.00
MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

**SECTION VIEWS
STA. 4+75 and STA. 5+00
ENVIRONMENTAL DREDGING
OF GOWANUS CANAL**

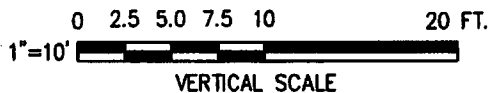
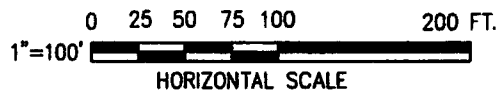
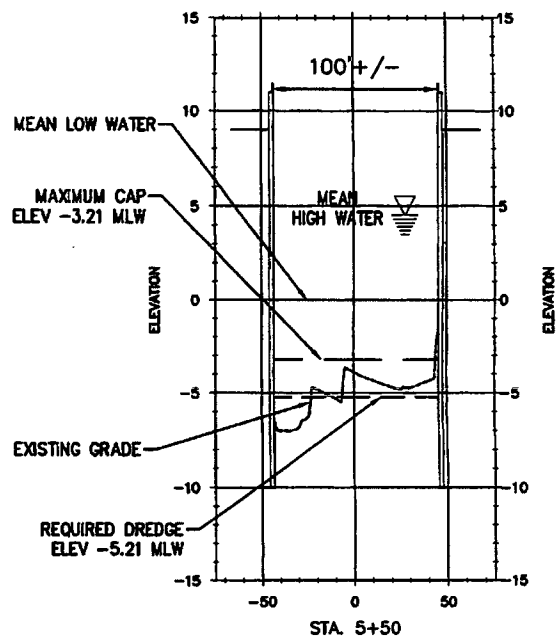
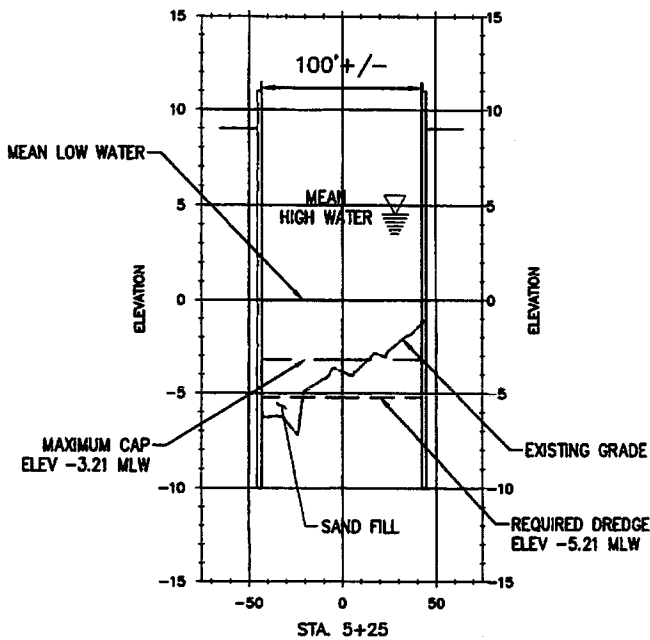
IN: GOWANUS CANAL
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STATE OF: NEW YORK

APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

SHEET 7 OF 22

DATE 1/2012
REV. 2/2013

NAN-2012-01342-617



PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

PLAN DATUM MEAN LOW WATER:

SPRING HIGH WATER (SHW)	ELEV. +6.10
MEAN HIGH WATER (MHW)	ELEV. +4.53
MEAN LOW WATER (MLW)	ELEV. 0.00
MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

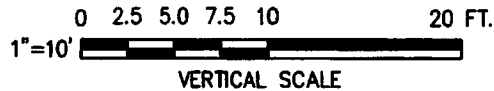
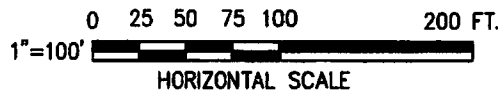
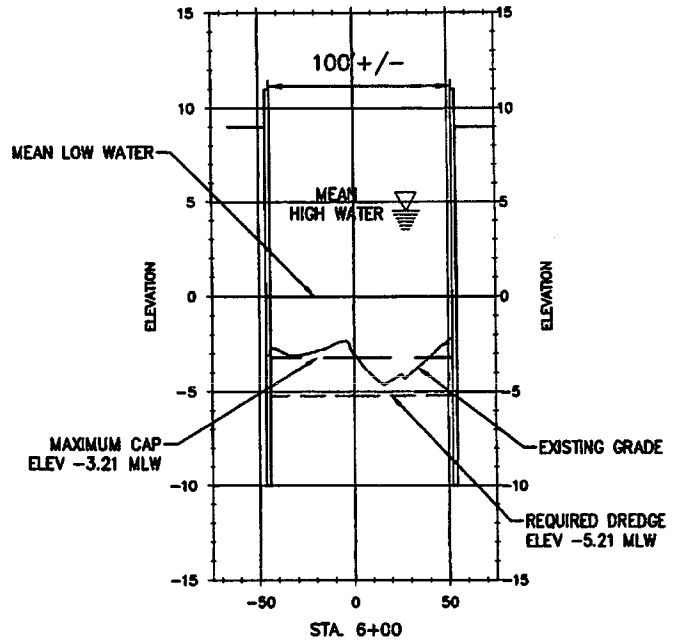
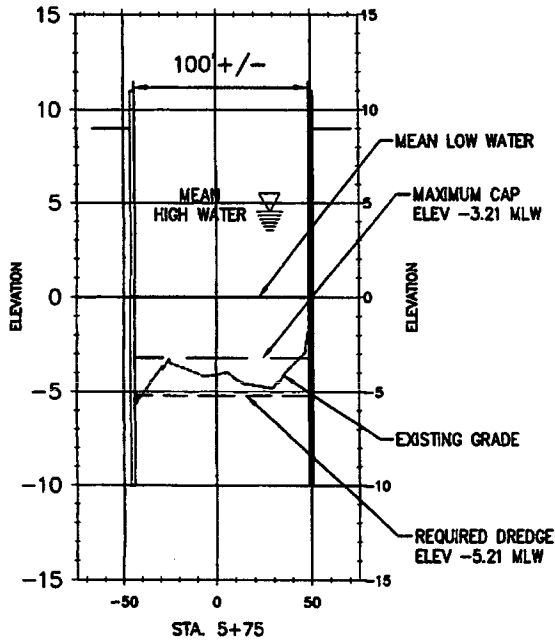
**SECTION VIEWS
STA. 5+25 and STA. 5+50
ENVIRONMENTAL DREDGING
OF GOWANUS CANAL**

IN: GOWANUS CANAL
AT: BROOKLYN
COUNTY OF: KINGS
STATE OF: NEW YORK

APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

SHEET 8 OF 22
DATE 1/2012
REV. 2/2013

NAN-2012-01342-EHA



PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

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MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

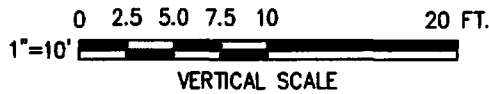
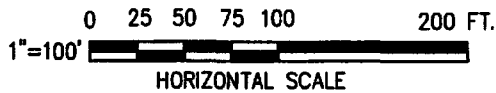
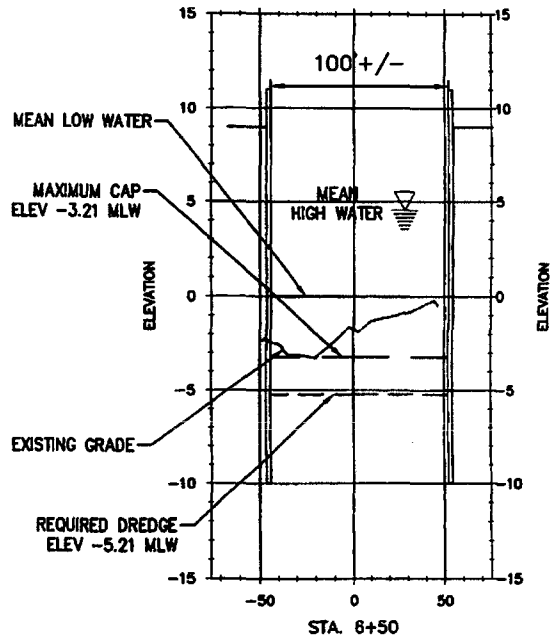
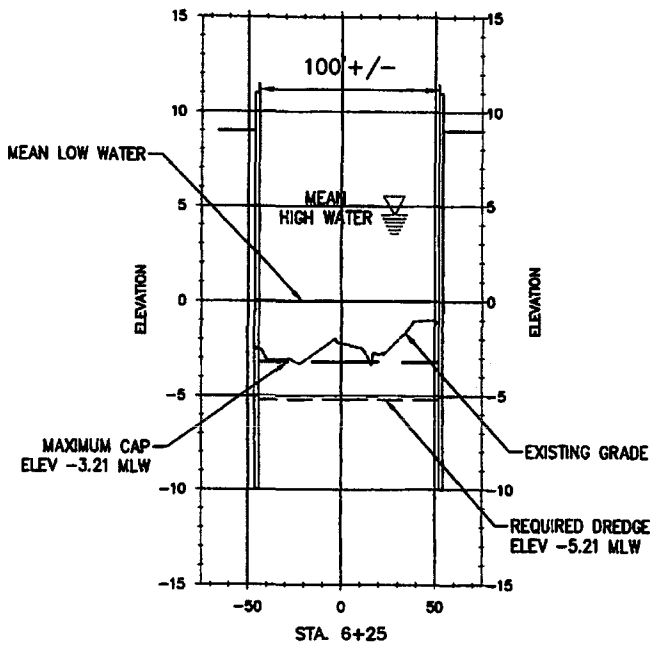
**SECTION VIEWS
STA. 5+75 and STA. 6+00
ENVIRONMENTAL DREDGING
OF GOWANUS CANAL**

IN: GOWANUS CANAL
AT: BROOKLYN
COUNTY OF: KINGS
STATE OF: NEW YORK

APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

SHEET 9 OF 22
DATE 1/2012
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NAN-2012-01342-E11A



PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

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MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

**SECTION VIEWS
STA. 6+25 and STA. 6+50
ENVIRONMENTAL DREDGING
OF GOWANUS CANAL**

IN: GOWANUS CANAL

AT: BROOKLYN

COUNTY OF: KINGS

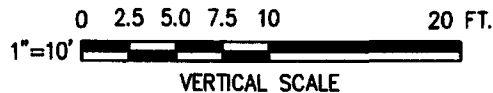
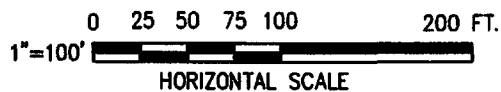
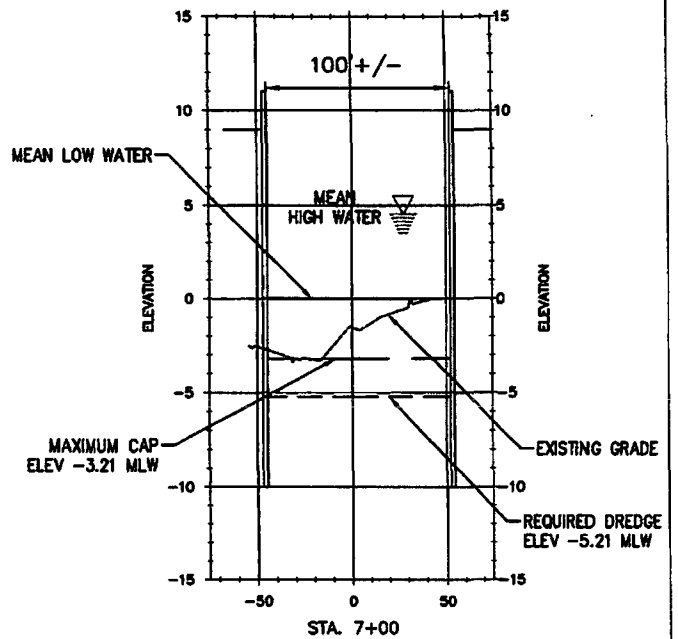
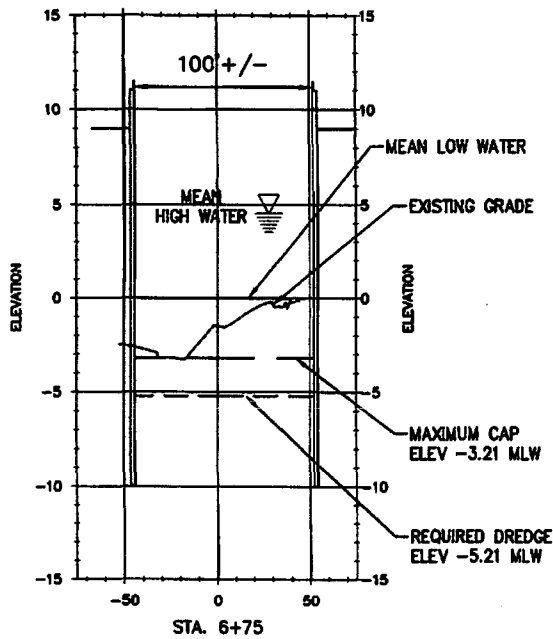
STATE OF: NEW YORK

APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

SHEET 10 OF 22
DATE 1/2012
REV. 2/2013

NAN-2012-01342-E m7



PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

PLAN DATUM MEAN LOW WATER:

SPRING HIGH WATER (SHW)	ELEV. +6.10
MEAN HIGH WATER (MHW)	ELEV. +4.53
MEAN LOW WATER (MLW)	ELEV. 0.00
MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

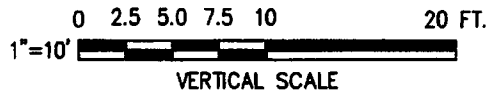
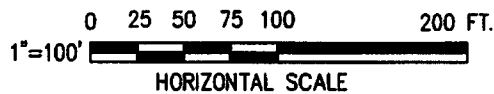
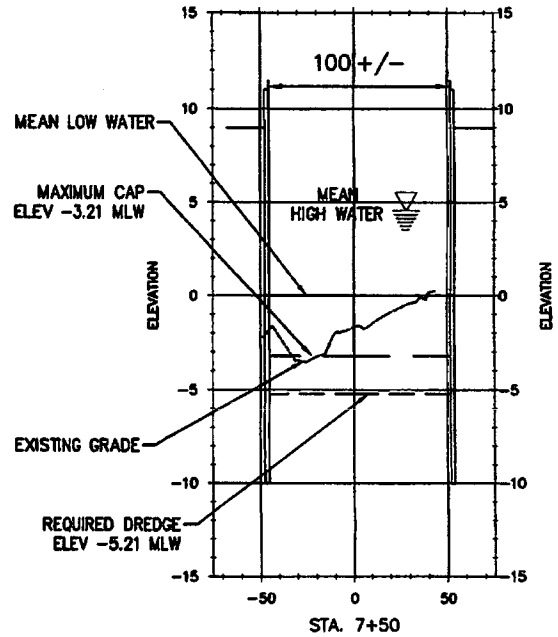
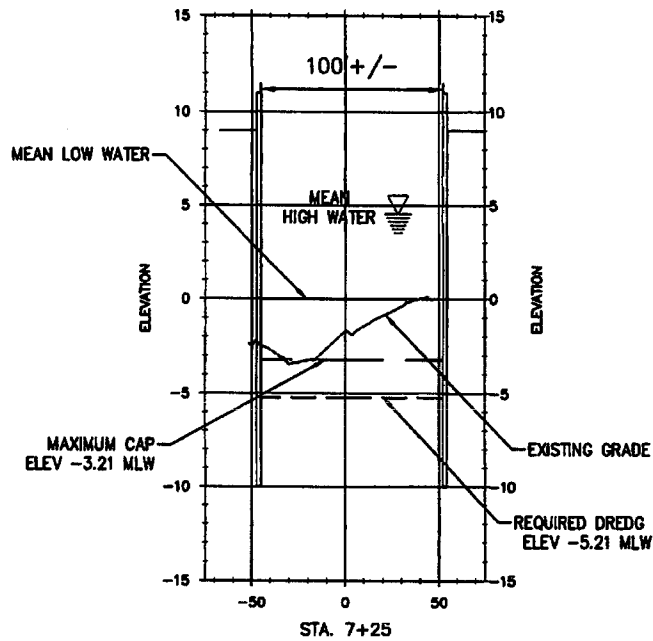
**SECTION VIEWS
STA. 6+75 and STA. 7+00
ENVIRONMENTAL DREDGING
OF GOWANUS CANAL**

IN: GOWANUS CANAL
AT: BROOKLYN
COUNTY OF: KINGS
STATE OF: NEW YORK

APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

SHEET 11 OF 22
DATE 1/2012
REV. 2/2013

NAN-2012-01342-ETHA



PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

PLAN DATUM MEAN LOW WATER:

SPRING HIGH WATER (SHW)	ELEV. +6.10
MEAN HIGH WATER (MHW)	ELEV. +4.53
MEAN LOW WATER (MLW)	ELEV. 0.00
MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

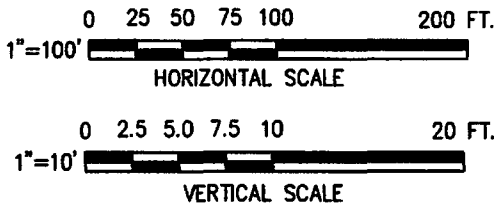
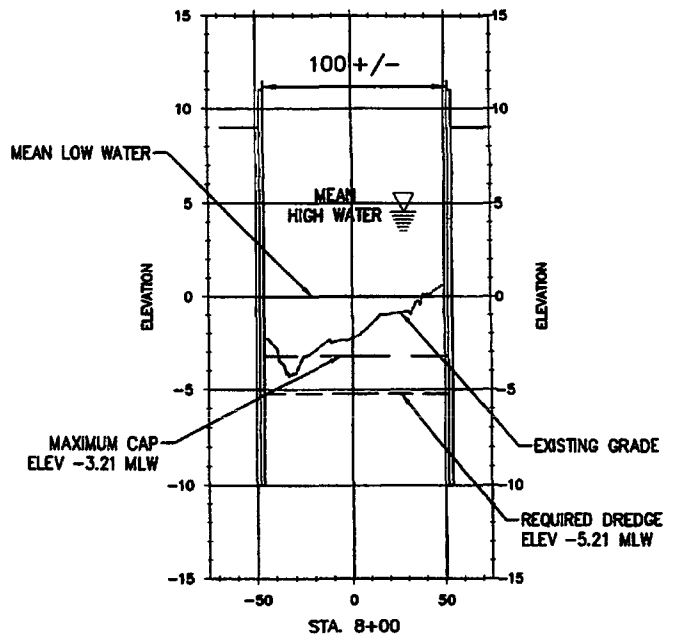
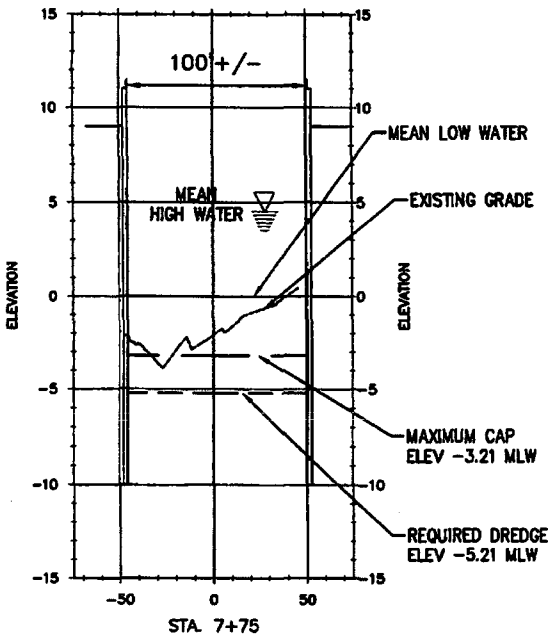
**SECTION VIEWS
STA. 7+25 and STA. 7+50
ENVIRONMENTAL DREDGING
OF GOWANUS CANAL**

IN: GOWANUS CANAL
AT: BROOKLYN
COUNTY OF: KINGS
STATE OF: NEW YORK

APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

SHEET 12 OF 22
DATE 1/2012
REV. 2/2013

NAN-2012-C1342-EHA



PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

PLAN DATUM MEAN LOW WATER:

SPRING HIGH WATER (SHW)	ELEV. +6.10
MEAN HIGH WATER (MHW)	ELEV. +4.53
MEAN LOW WATER (MLW)	ELEV. 0.00
MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

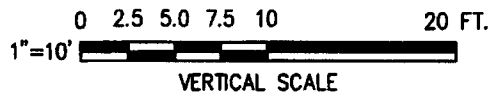
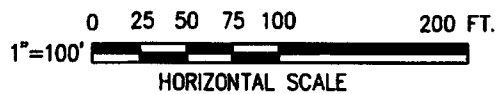
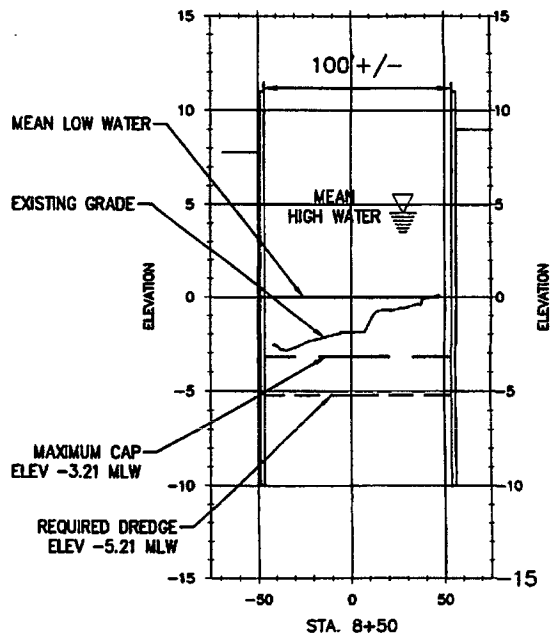
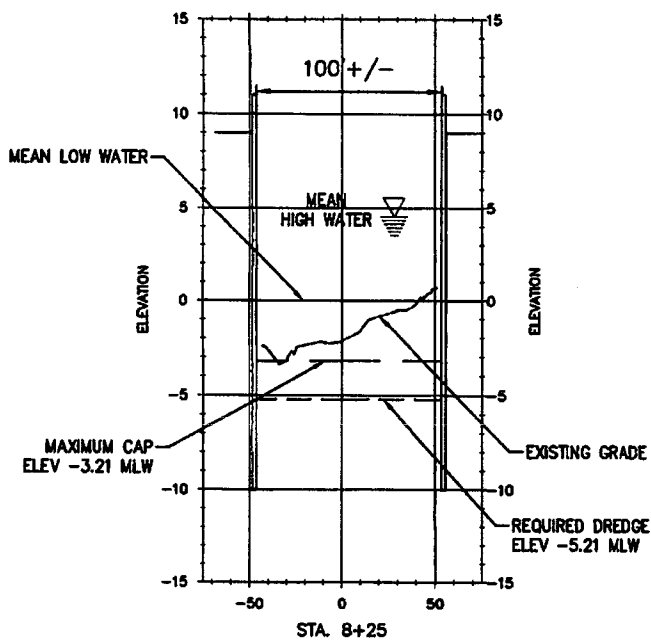
**SECTION VIEWS
STA. 7+75 and STA. 8+00
ENVIRONMENTAL DREDGING
OF GOWANUS CANAL**

IN: GOWANUS CANAL
AT: BROOKLYN
COUNTY OF: KINGS
STATE OF: NEW YORK

APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

SHEET 13 OF 22
DATE 1/2012
REV. 2/2013

NAN-2012-01342-ETHA



PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

PLAN DATUM MEAN LOW WATER:

SPRING HIGH WATER (SHW)	ELEV. +6.10
MEAN HIGH WATER (MHW)	ELEV. +4.53
MEAN LOW WATER (MLW)	ELEV. 0.00
MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

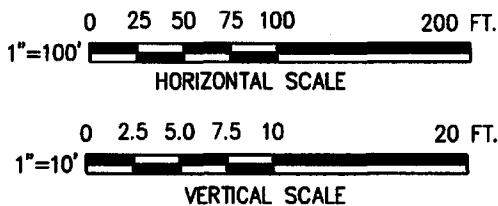
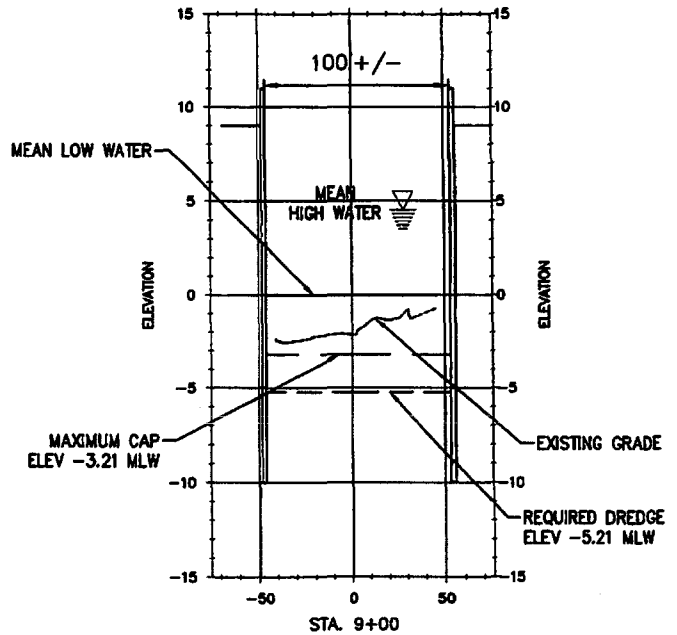
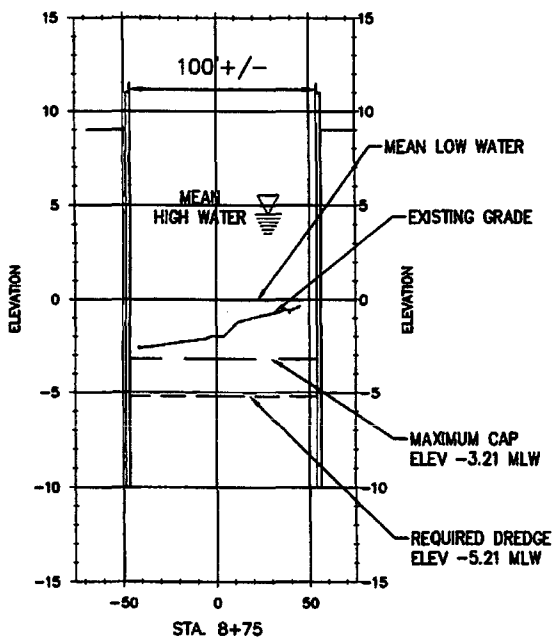
**SECTION VIEWS
STA. 8+25 and STA. 8+50
ENVIRONMENTAL DREDGING
OF GOWANUS CANAL**

IN: GOWANUS CANAL
AT: BROOKLYN
COUNTY OF: KINGS
STATE OF: NEW YORK

APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

DATE 1/2012
REV. 2/2013
SHEET 14 OF 22

NAN-2012-01342-61A



PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

PLAN DATUM MEAN LOW WATER:

SPRING HIGH WATER (SHW)	ELEV. +6.10
MEAN HIGH WATER (MHW)	ELEV. +4.53
MEAN LOW WATER (MLW)	ELEV. 0.00
MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

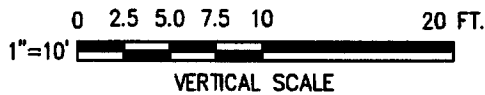
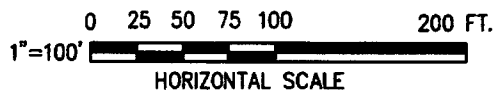
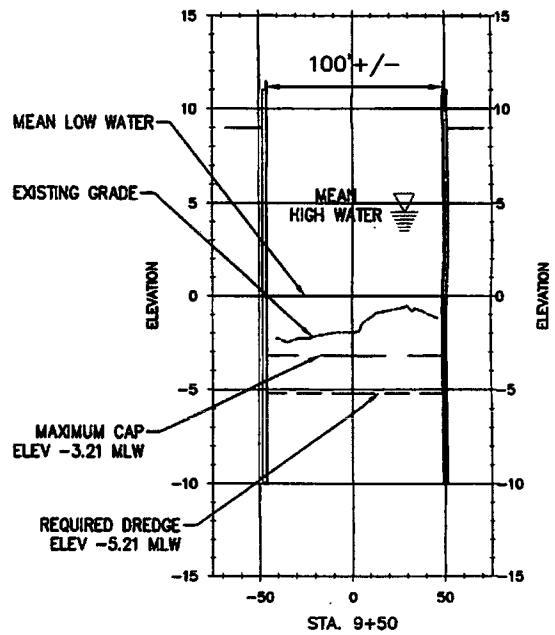
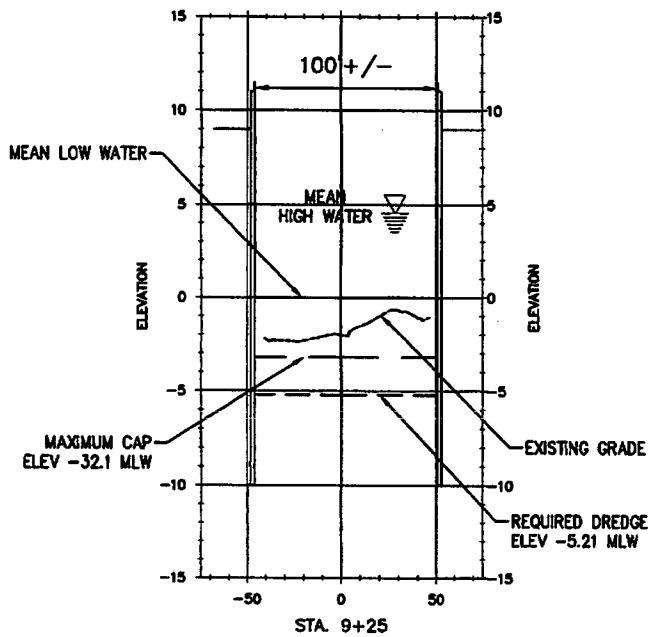
**SECTION VIEWS
STA. 8+75 and STA. 9+00
ENVIRONMENTAL DREDGING
OF GOWANUS CANAL**

IN: GOWANUS CANAL
AT: BROOKLYN
COUNTY OF: KINGS
STATE OF: NEW YORK

APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

SHEET 15 OF 22
DATE 1/2012
REV. 2/2013

NAN-2012-01342-EHA



PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

PLAN DATUM MEAN LOW WATER:

SPRING HIGH WATER (SHW)	ELEV. +6.10
MEAN HIGH WATER (MHW)	ELEV. +4.53
MEAN LOW WATER (MLW)	ELEV. 0.00
MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

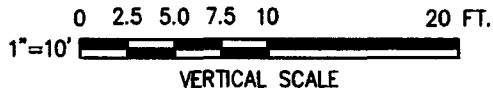
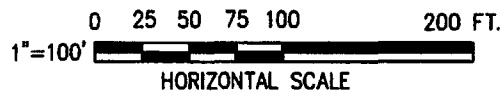
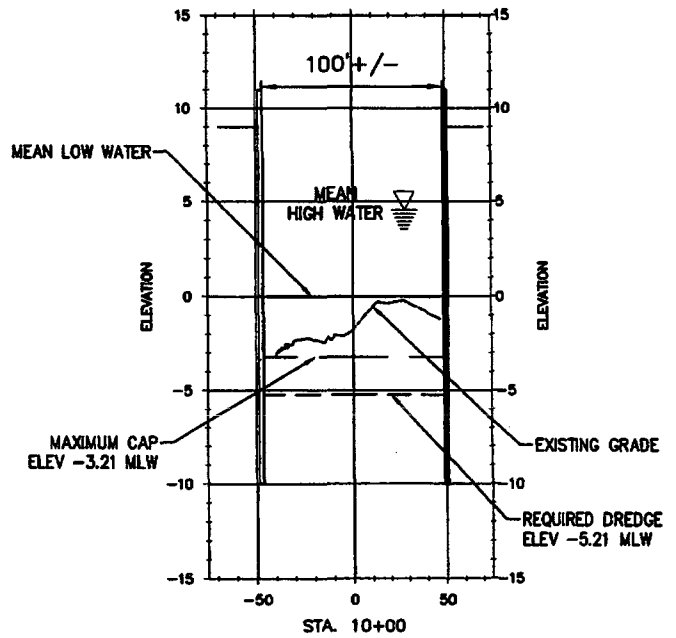
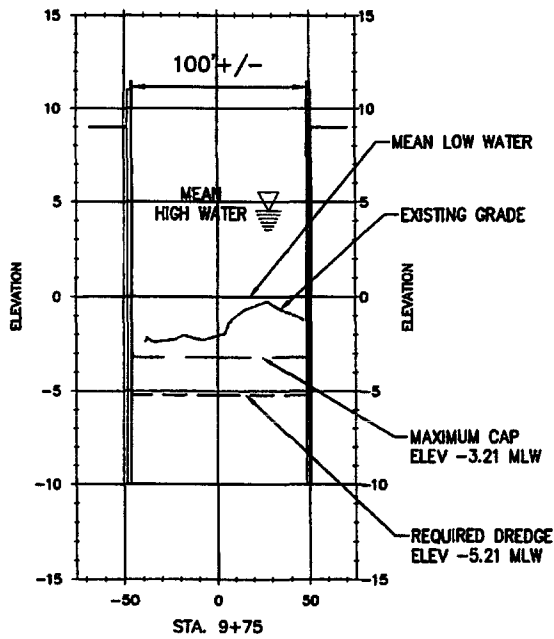
**SECTION VIEWS
STA. 9+25 and STA. 9+50
ENVIRONMENTAL DREDGING
OF GOWANUS CANAL**

IN: GOWANUS CANAL
AT: BROOKLYN
COUNTY OF: KINGS
STATE OF: NEW YORK

APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

SHEET 16 OF 22
DATE 1/2012
REV. 2/2013

NAN-2012-01342-EHA



PURPOSE: TO CONDUCT ENVIRONMENTAL
 DREDGING TO REMOVE
 ACCUMULATED SEDIMENT MOUNDS

PLAN DATUM MEAN LOW WATER:

SPRING HIGH WATER (SHW)	ELEV. +6.10
MEAN HIGH WATER (MHW)	ELEV. +4.53
MEAN LOW WATER (MLW)	ELEV. 0.00
MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

**SECTION VIEWS
 STA. 9+75 and STA. 10+00**

**ENVIRONMENTAL DREDGING
 OF GOWANUS CANAL**

IN: GOWANUS CANAL

AT: BROOKLYN

COUNTY OF: KINGS

STATE OF: NEW YORK

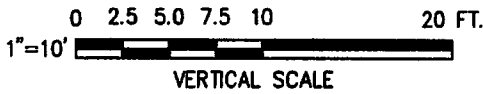
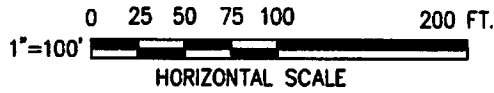
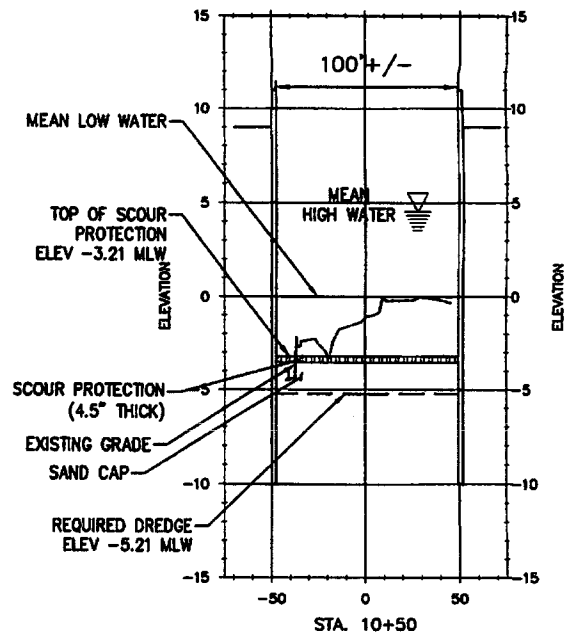
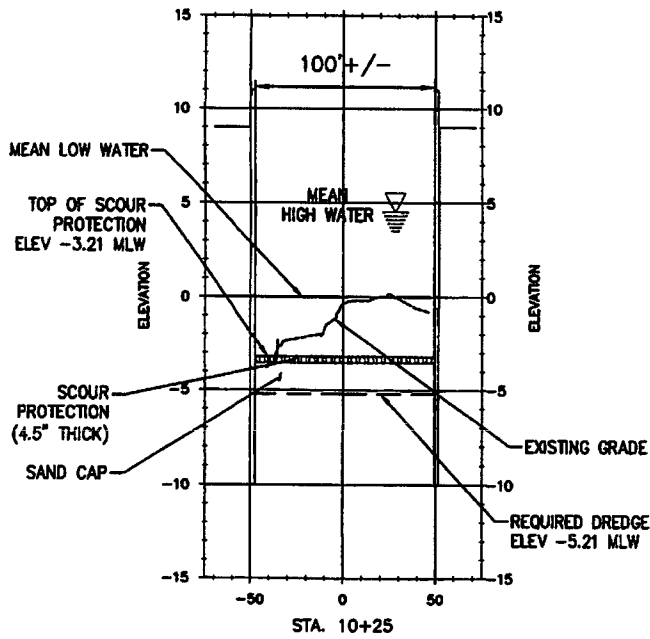
APPLICATION BY: NEW YORK CITY DEPARTMENT
 OF ENVIRONMENTAL PROTECTION

PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

SHEET 17 OF 22

DATE 1/2012
 REV. 2/2013

NAN 2012-01342-EHA



NOTE:

1. 300 CY OF CABLED CONCRETE MATS FOR SCOUR PROTECTION MATERIAL WOULD BE PLACED IN AN AREA MEASURING 200 FEET LONG BY 100 FEET WIDE (20,000 SF).

PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

PLAN DATUM MEAN LOW WATER:

SPRING HIGH WATER (SHW)	ELEV. +6.10
MEAN HIGH WATER (MHW)	ELEV. +4.53
MEAN LOW WATER (MLW)	ELEV. 0.00
MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

**SECTION VIEWS
STA. 10+25 and STA. 10+50
ENVIRONMENTAL DREDGING
OF GOWANUS CANAL**

IN: GOWANUS CANAL

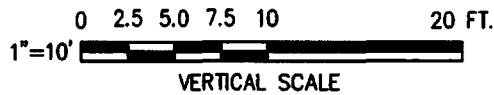
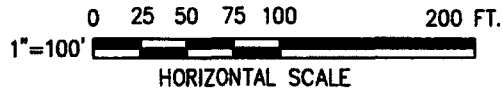
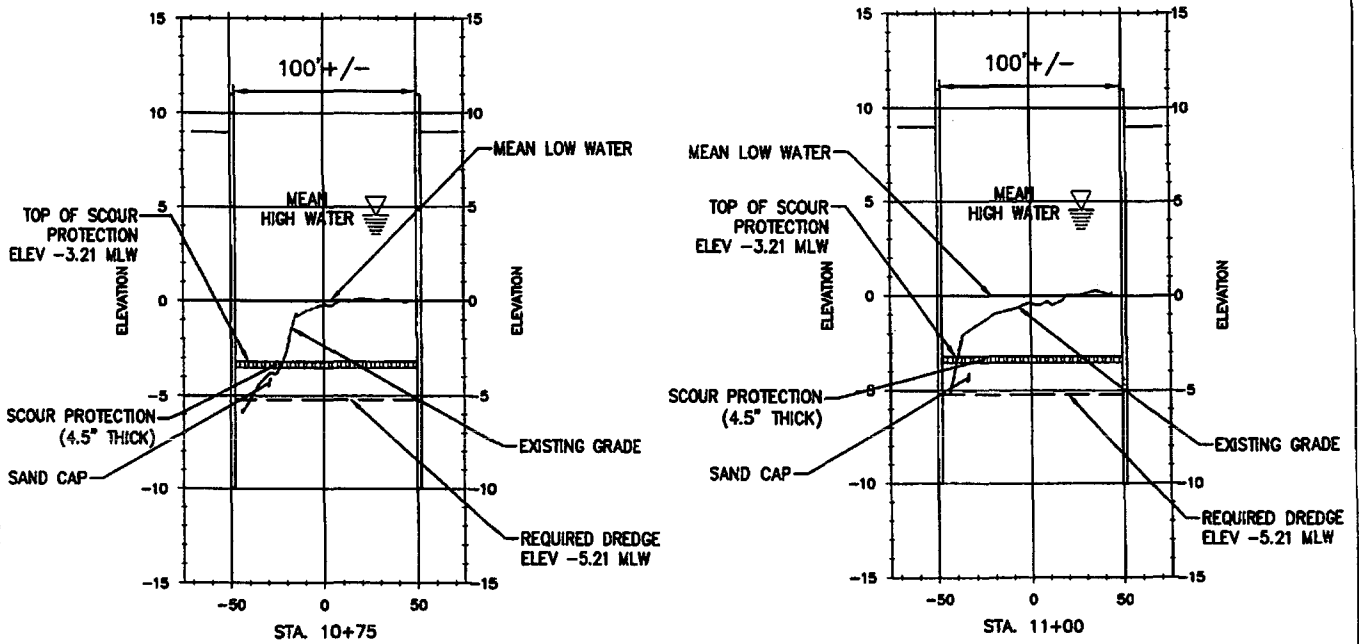
AT: BROOKLYN

COUNTY OF: KINGS

STATE OF: NEW YORK

APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE



NOTE:

- 300 CY OF CABLED CONCRETE MATS FOR SCOUR PROTECTION MATERIAL WOULD BE PLACED IN AN AREA MEASURING 200 FEET LONG BY 100 FEET WIDE (20,000 SF).

PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

PLAN DATUM MEAN LOW WATER:

SPRING HIGH WATER (SHW)	ELEV. +6.10
MEAN HIGH WATER (MHW)	ELEV. +4.53
MEAN LOW WATER (MLW)	ELEV. 0.00
MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

**SECTION VIEWS
STA. 10+75 and STA. 11+00
ENVIRONMENTAL DREDGING
OF GOWANUS CANAL**

IN: GOWANUS CANAL

AT: BROOKLYN

COUNTY OF: KINGS

STATE OF: NEW YORK

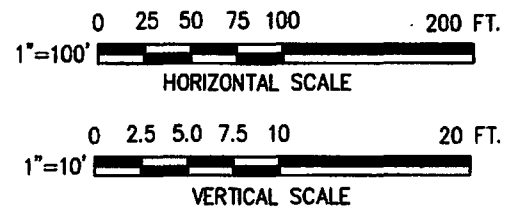
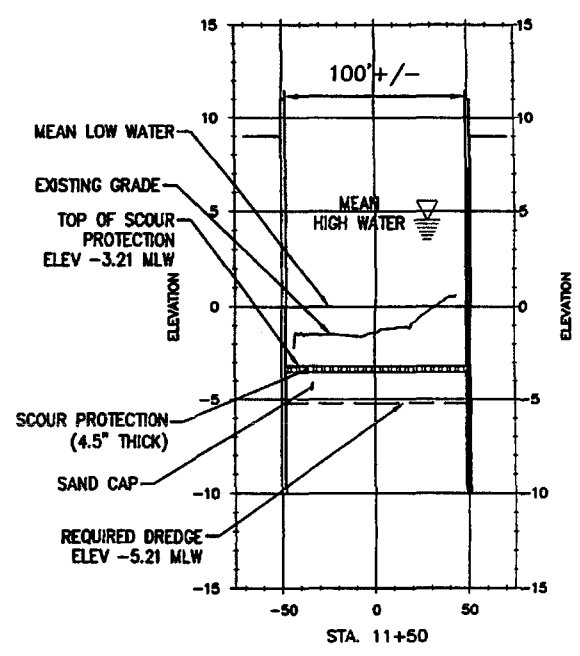
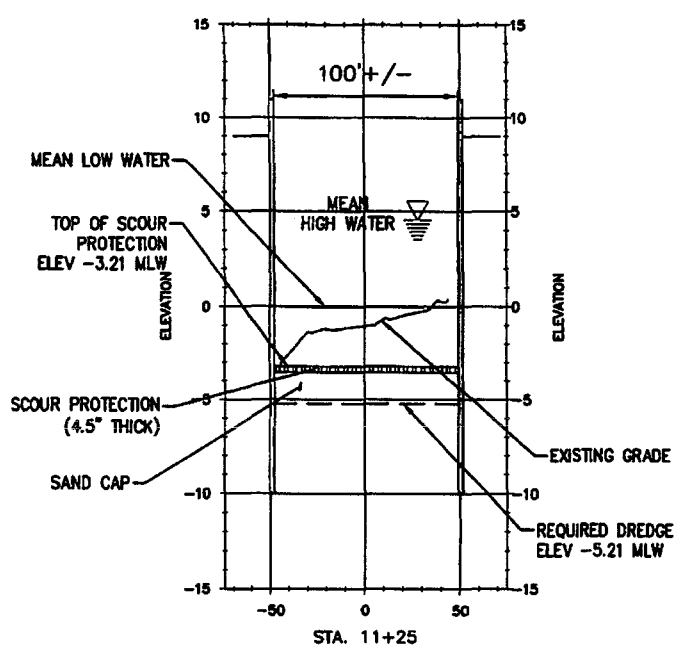
APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

SHEET 19 OF 22

DATE 1/2012
REV. 2/2013

NAN-2012-01342-CHA



NOTE:
 1. 300 CY OF CABLED CONCRETE MATS FOR SCOUR PROTECTION MATERIAL WOULD BE PLACED IN AN AREA MEASURING 200 FEET LONG BY 100 FEET WIDE (20,000 SF).

PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

PLAN DATUM MEAN LOW WATER:

SPRING HIGH WATER (SHW)	ELEV. +6.10
MEAN HIGH WATER (MHW)	ELEV. +4.53
MEAN LOW WATER (MLW)	ELEV. 0.00
MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

**SECTION VIEWS
 STA. 11+25 and STA. 11+50**

**ENVIRONMENTAL DREDGING
 OF GOWANUS CANAL**

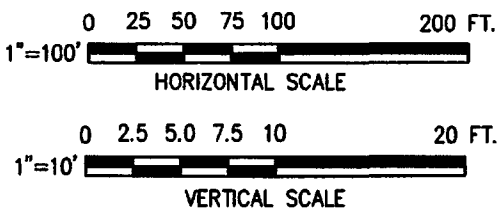
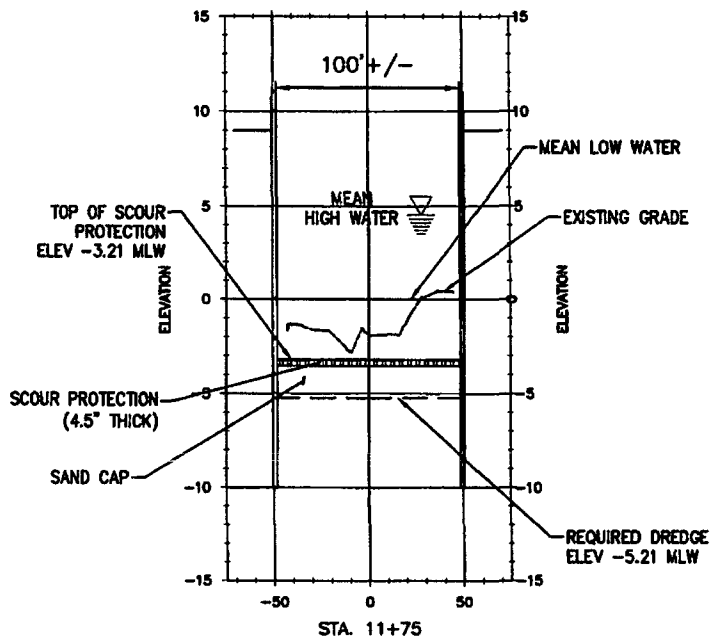
IN: GOWANUS CANAL
AT: BROOKLYN
COUNTY OF: KINGS
STATE OF: NEW YORK

APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

DATE 1/2012
 REV. 2/2013

SHEET 20 OF 22

NIAN-2012-01342-E117



NOTE:

- 300 CY OF CABLED CONCRETE MATS FOR SCOUR PROTECTION MATERIAL WOULD BE PLACED IN AN AREA MEASURING 200 FEET LONG BY 100 FEET WIDE (20,000 SF).

PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

PLAN DATUM MEAN LOW WATER:

SPRING HIGH WATER (SHW)	ELEV. +6.10
MEAN HIGH WATER (MHW)	ELEV. +4.53
MEAN LOW WATER (MLW)	ELEV. 0.00
MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

**SECTION VIEW
STA. 11+75
ENVIRONMENTAL DREDGING
OF GOWANUS CANAL**

IN: GOWANUS CANAL

AT: BROOKLYN

COUNTY OF: KINGS

STATE OF: NEW YORK

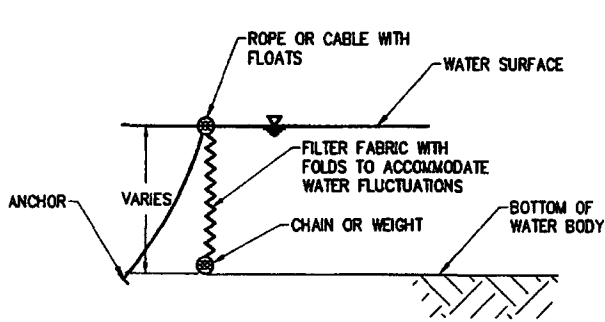
APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

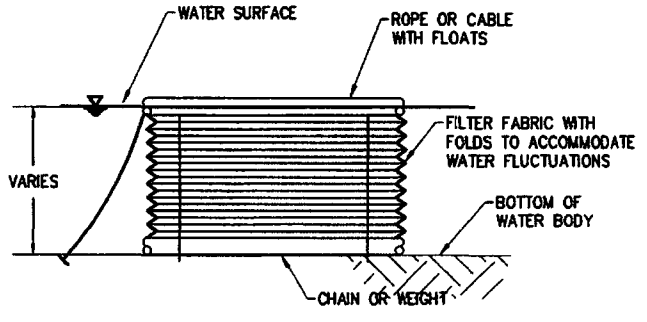
SHEET 21 OF 22

DATE 1/2012
REV. 2/2013

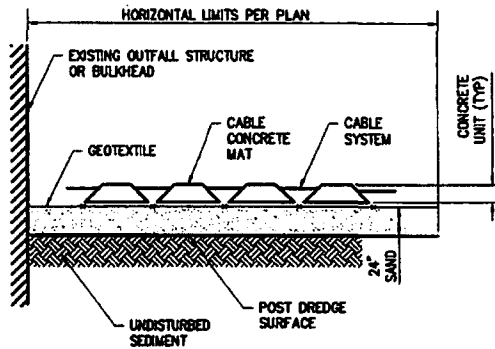
NAN-2012-01342-EHA



TEMPORARY TURBIDITY CURTAIN SECTION
NOT TO SCALE



TEMPORARY TURBIDITY CURTAIN ELEVATION
NOT TO SCALE



SCOUR PROTECTION - TYPICAL SECTION
SCALE: NOT TO SCALE

NOTE:

1. 300 CY OF CABLED CONCRETE MATS FOR SCOUR PROTECTION MATERIAL WOULD BE PLACED IN AN AREA MEASURING 200 FEET LONG BY 100 FEET WIDE (20,000 SF).

PURPOSE: TO CONDUCT ENVIRONMENTAL DREDGING TO REMOVE ACCUMULATED SEDIMENT MOUNDS

PLAN DATUM MEAN LOW WATER:

SPRING HIGH WATER (SHW)	ELEV. +6.10
MEAN HIGH WATER (MHW)	ELEV. +4.53
MEAN LOW WATER (MLW)	ELEV. 0.00
MEAN LOWER LOW WATER (MLLW)	ELEV. -0.21

TURBIDITY CURTAIN AND SCOUR PROTECTION DETAILS
ENVIRONMENTAL DREDGING OF GOWANUS CANAL

IN: GOWANUS CANAL

AT: BROOKLYN

COUNTY OF: KINGS

STATE OF: NEW YORK

APPLICATION BY: NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

PREPARED BY: AECOM/HYDROQUAL, A JOINT VENTURE

DATE 1/2012
SHEET 22 OF 22
REV. 2/2013

NAN-2012-01342-e11A