[, and to serve as the [Level two][Level three] Site Safety and Health Officer (SSHO) as detailed in Section 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS].[In addition to implementing and managing the QC program, the QC Manager may perform the duties of Project Superintendent.][The only duties and responsibilities of the QC Manager are to manage and implement the QC program on this Contract.] The QC Manager must attend the partnering meetings, QC Plan Meetings, Coordination and Mutual Understanding Meeting, conduct the QC meetings, perform the three phases of control[except for those phases of control designated to be performed by QC Specialists], perform submittal review and approval, ensure testing is performed and provide QC certifications and documentation required in this Contract. The QC Manager is responsible for managing and coordinating the three phases of control and documentation performed by[the QC Specialists,] testing laboratory personnel and any other inspection and testing personnel required by this Contract. The QC Manager is the manager of all QC activities.

1.6.1.2 Qualifications

The QC Manager must be an individual with a minimum of ~~[5][10][_____]~~ years combined experience in the following positions: Project Superintendent, QC Manager, Project Manager, Project Engineer or Construction Manager on similar size and type construction Contracts which included the major trades that are part of this Contract. ~~The individual must have at least [2][4][_____] years experience as a QC Manager.~~ The individual must be familiar with the requirements of EM 385-1-1 and have experience in the areas of hazard identification, safety compliance, and sustainability.

~~[The QC Manager must possess at least a Bachelor's degree in engineering, architecture, or construction management, with[a current professional engineer registration and] a minimum of [10][_____] years construction experience as a Project Superintendent, QC Manager, Project Manager, Project Engineer or Construction Manager on similar size and type construction Contracts which included the major trades that are part of this Contract. The individual must have at least [2][4][_____] years experience as a QC Manager. The individual must be familiar with the requirements of EM 385-1-1 and have experience in the areas of hazard identification, safety compliance, and sustainability.~~

The QC Manager and all members of the QC organization must be capable of reading, writing, and conversing fluently in the English language.

1.6.1.3 Construction Quality Management Training

In addition to the above experience and education requirements, the QC Manager Alternate QC Manager, Superintendent, QC Specialist, and DQCM must have completed the CQM for Contractors course. If the QC Manager does not have a current certification, obtain the CQM for Contractors course certification within 90 days of award. This course is periodically offered by the Naval Facilities Engineering Systems Command and the Army Corps of Engineers. Contact the Contracting Officer for information on the next scheduled class.

The Construction Quality Management Training certificate expires after 5 years. If the QC Manager's certificate has expired, retake the course to remain current.

photographic or video equipment or both. Diver(s) must be equipped to maintain two-way communication with QC personnel during diving operations. Prepare and submit a report including photographs or videos or both with the QC report after each dive. Frequency of underwater surveillance and inspection will be [_____] during installation and including final inspection. The UWQC Team must be an independent third party hired directly by the Prime Contractor, and must not be involved with the design, preparation of Contract, or installation of work.

~~1.6.5.2 Fire Protection QC Specialist (FPQC)~~

~~Provide a Fire Protection Quality Control Specialist (FPQC) within the QC organization to perform quality control related activities as specified herein on fire protection and life safety systems installed under this Contract.~~

1.6.5.2.1 Qualifications

The FPQC must have the following qualifications:

a. Be a registered Professional Engineer (P.E.) licensed by a Licensing Board in the United States, the District of Columbia, Guam or Puerto Rico, having passed the National Council of Examiners for Engineering and Surveying (NCEES) examination specifically in the discipline of Fire Protection Engineering.

b. Have a minimum of 5 years of Fire Protection Engineering experience on projects of similar relevance and complexity to the fire protection work specified under this Contract.

c. Other than the contractual obligations with the Prime Contractor, the FPQC must have no other business relationship (i.e., employee, owner, partner, operating officer, distributor, salesman, technical representative, family relationship, or financial investment) with the Prime Contractor or subcontractors.

d. Be employed by an independent engineering firm or company. The firm may identify multiple, to a maximum of five, licensed Fire Protection Engineers for the performance of the duties under this Contract but must submit the names and qualifications for Government approval for all individuals identified prior to them performing any work under this Contract. These individuals may not be substituted without prior approval from the Contracting Officer.

1.6.5.2.2 Responsibilities

FPQC duties and responsibilities:

a. Assist in the development of the QC Plan including the Testing Plan and Log and executing the three phases of control for work involving the installation and testing of fire protection and life safety systems as an extension of the QC Manager.

b. Participate in project QC Meetings. Participate in Preparatory and Initial Phase meetings and perform and Follow-up inspections for work involving the installation and testing of fire protection and life safety systems.

c. Review and certify that all submittals pertaining to fire protection

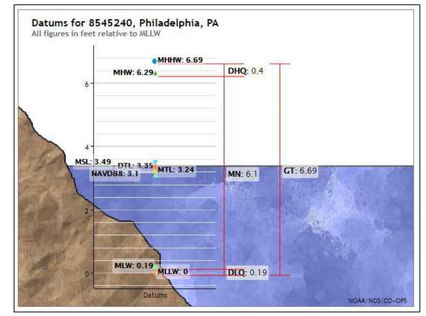
ESTIMATED DREDGING QUANTITIES FOR MAINTENANCE DREDGING AT PHILADELPHIA NAVY YARD

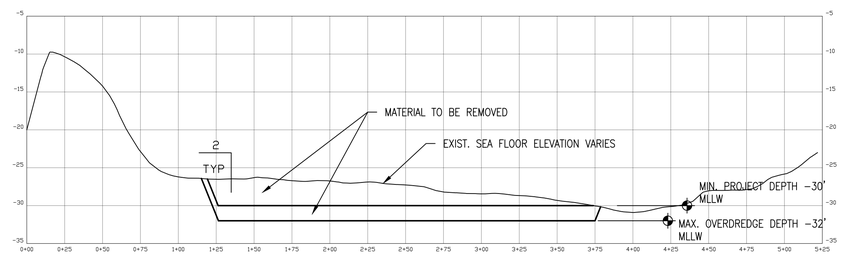
DREDGE AREA ID	SHEET	PIER AND/OR APPROACHES	AREA (SY)	DISPOSAL LOCATION	CONTRACT DEPTH (FT) (MLLW)	OVER DREDGE DEPTH (FT) (MLLW)	ESTIMATED VOLUME AVAILABLE WITHIN DREDGE LIMITS (CY)		
BASE BID: PHILADELPHIA NAVY YARD MAINTENANCE DREDGING							CONTRACT DEPTH	OVERDREDGE DEPTH	TOTAL VOLUME
RB-A	V-101	RESERVE BASIN DREDGE AREA "A"	29,208	WHITES BASIN OR BILES ISLAND	-30	-32	12,449	19,589	32,038
RB-A 7/8	V-101	RESERVE BASIN DREDGE AREA "A" - BORINGS 7 AND 8	23,427	~~WHITES BASIN~~	-30	-32	7,444	16,181	23,625
RB-C	V-101	RESERVE BASIN ACCESS CHANNEL - 26TH ST BRIDGE TO SCHUYKILL RIVER	27,105	WHITES BASIN OR BILES ISLAND	-30	-32	21,264	17,563	38,827
RB-D	V-101	RESERVE BASIN ACCESS CHANNEL - UNDER 26TH ST BRIDGE FOOTPRINT	1,290	WHITES BASIN OR BILES ISLAND	-30	-32	1,339	782	2,121
ESTIMATED VOLUME OF BASE BID:							42,496	54,115	96,611

NOTES:
1. ESTIMATED VOLUMES SHOWN HEREIN INCLUDE ADDITIONAL SILTATION EXPECTED TO OCCUR FROM THE DATE OF THE MOST RECENT CONDITION SURVEY TO THE EXPECTED DATE OF DREDGING (JANUARY 2026).
2. CONTRACT DEPTHS AND OVERDREDGE DEPTHS SHOWN HEREIN REFER TO NOAA MEAN LOWER LOW WATER DATUM (MLLW).

Elevations on Mean Lower Low Water
Station: 8545240, Philadelphia, PA **T.M.:** 0
Status: Accepted (Dec 21 2012) **Epoch:** 1983-2001
Units: Feet **Datum:** MLLW
Control Station: 8551910 Reedy Point, DE

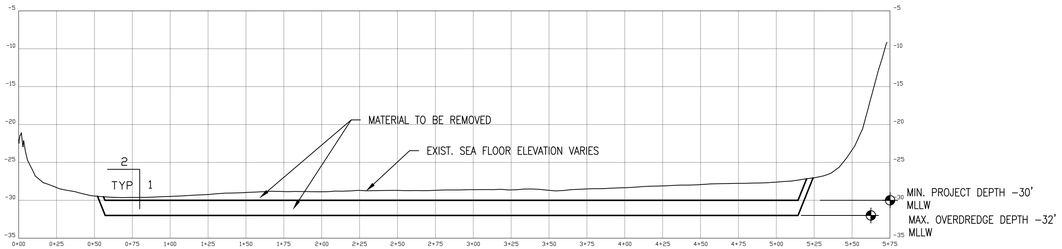
Datum	Value	Description
MHHW	6.69	Mean Higher-High Water
MHW	6.29	Mean High Water
MTL	3.24	Mean Tide Level
MSL	3.49	Mean Sea Level
DTL	3.35	Mean Diurnal Tide Level
MLW	0.19	Mean Low Water
MLLW	0.00	Mean Lower-Low Water
NAVD88	3.10	North American Vertical Datum of 1988





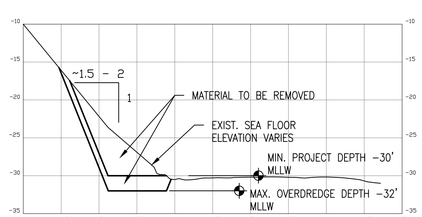
A / V-002 TRANSVERSE SECTION THROUGH ACCESS CHANNEL DREDGE AREA

NOT TO SCALE



B / V-002 TRANSVERSE SECTION THROUGH RESERVE BASIN DREDGE AREA

NOT TO SCALE



C / V-002 TRANSVERSE SECTION THROUGH RESERVE BASIN DREDGE AREA

NOT TO SCALE

TURBIDITY BARRIERS/CURTAINS NOTES:

TURBIDITY CURTAIN(S) SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH DETAIL SHOWN HEREIN. IN ADDITION, THE SILTATION BARRIERS SHALL BE AS FOLLOWS:

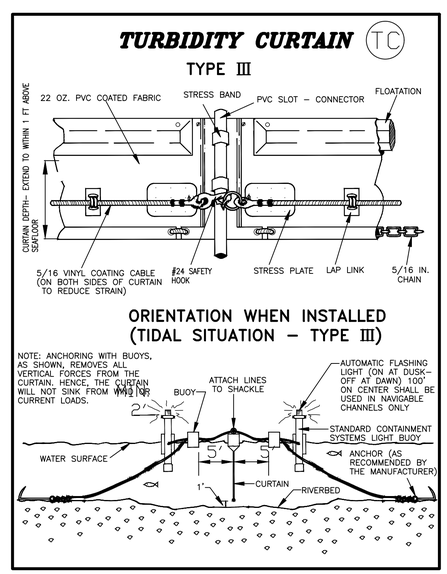
A. MADE OF A MATERIAL THAT IS UNLIKELY TO ENTANGLE ANY MARINE ANIMALS (I.E., REINFORCED IMPERMEABLE POLYCARBONATE VINYL FABRIC (PCV) COATED FABRIC

B. INSTALLED IN A MANNER IN WHICH A SEA TURTLE OR MARINE MAMMALS CANNOT BECOME EASILY ENTANGLED (I.E., STRETCHED OUT TIGHTLY WITH VERY LITTLE SLACK)

C. INSTALLED WITH THE MINIMUM EXTENT OF CURTAIN NEEDED (IN TERMS OF SURFACE TO BOTTOM HEIGHT, AS WELL AS TOTAL AREA SURROUNDED) WHILE STILL MEETING RWQCB REQUIREMENTS

D. INSPECTED DAILY TO ENSURE PROPER INTEGRITY AND FOR THE PRESENCE OF ENTANGLED OR ENTRAPPED PROTECTED SPECIES

E. REMOVED IMMEDIATELY UPON PROJECT COMPLETION



DREDGING AND DESIGN NOTES

1. BATHYMETRY SHOWN ON INDIVDUAL SHEETS ARE FROM ACTUAL SURVEY DATES AS ANNOTATED ON EACH SHEET.

3. Contractor shall contact local utility companies, prior to commencing with dredging work, to mark and/or verify ALL existing submarine utilities including, but not limited to electric, gas, telephone, data, etc..., within sufficient time required. Any existing utilities location and depth shown on the contract drawings are approximate and shall be verified prior to dredging. Contractor shall hire a qualified third party surveying firm to conduct, at a minimum, sub-bottom profiling and magnetometer survey of the dredging areas in order to verify all existing utilities location and depth. Contractor shall coordinate with the local utility companies as necessary for utility location verification. All coordination with utility companies location and work shall be borne by the contractor. Contractor shall coordinate all 26th street bridge lifts in advance, with the owner (NAVY YARD PIDC), as necessary for dredging in Area RB-D and to facilitate contractor vessel and barge traffic.
4. Existing 15 KV Power Line, originally installed laying on the seafloor, shall be field located using contractor's divers in order to verify current location and depth below current seafloor surface. Power line horizontal location shall be marked by attaching buoys @ max. 50' spacing. Survey buoy locations using RTK GPS and furnish the government X and Y Coordinates in PA State Plane Coordinate system. Existing cable depth at each buoy, (below existing seafloor to top of cable) shall be measured by contractor's divers. Depth recordings shall be to measured to at least the nearest 0.50'. CONTRACTOR SHALL SECURE AND PROTECT POWER LINE DURING DREDGING. MAX. DREDGE DEPTH @ ELEC. CABLE SHALL BE FIELD DETERMINED BASED ON AVAILABLE SLACK IN CABLE. CONTRACTOR SHALL COORDINATE WITH GOVERNMENT AND DOMINION ENERGY PRIOR TO COMMENCING WITH DREDGING

SYM	DESCRIPTION	DATE	APPR

NAVFAC

APPROVED BY
APPROVED
By James S. Georgo, P.E. at 4:03:57 PM, 11/4/2025
MIDLANT HYDRO BRANCH PDC-45C SUPERVISOR

AE LOGO

APPROVED
JAMES E. DONAHUE, R.A.
DESIGN PRODUCTION DIRECTOR
FOR COMMANDER NAVFAC DATE

APPROVED
ACTIVITY - SATISFACTORY TO DATE

PROJECT MGR SAM/JSG
DES JSG DRW JSG CHK JSG
BRANCH MGR DLB
CHIEF ENG/ARCH EJA
FIRE PROTECTION N/A

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
CAPITAL IMPROVEMENTS CORE - HYDROGRAPHIC ENGINEERING TEAM
NAVAL FACILITIES ENGINEERING COMMAND ~ MID ATLANTIC
NAVAL STATION ~ NORFOLK, VIRGINIA
PHILADELPHIA NAVY YARD
PHILADELPHIA, PA
FY 26 MAINTENANCE DREDGING
RESERVE BASIN - PHILADELPHIA NAVY YARD
DETAIL SHEET

CODE ID. NO. 80091 SIZE D
SCALE: AS NOTED
MAXIMO NO.
JOB ORDER NO.
WORK ORDER NO. 1783178
CONSTR. CONTR. NO. N/A
NAVFAC DRAWING NO. 12902789
SHEET 2 OF 3
V-002

DRAWFORM REVISED 08-29-18

FILE NAME: D:\JSGDC_Current_Projects\1783178_PNY Reserve Basin FY26 Maintenance Dredging\CAD\PNY_Reserve Basin FY26 Maintenance Dredging.dwg LAYOUT NAME: V-002 DETAIL PLOTTED: Tuesday, November 04, 2025 - 4:00pm USER: jsgeo