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NAVFAC PTS-H40 (December 2018)
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Preparing Activity: NAVFAC SUPERSEDING PTS-H40 (February 2018)

PERFORMANCE TECHNICAL SPECIFICATION
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SECTION H40

NAVIGATION DREDGING AND RECLAMATION
12/18

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NOTE: This section is intended to be used as a guide and contains requirements that are common to many different types of facilities; however, not all requirements and equipment items will be applicable to all projects. In addition, there may be special requirements for a particular project that are not addressed at all. The RFP preparer may have to incorporate additional information to address these special requirements in this PTS and corresponding Part 3 ESR. If the RFP preparer chooses to delete elements that are not required for the project, do not change the remaining Uniformat paragraph designations (example - A102001). Uniformat designations are unique to the products they are assigned to. However, the subparagraph numerical extensions (example - 1.2 or a,b,c) of the Uniformat designations may change if subparagraphs are deleted.

This guide specification is formatted utilizing Uniformat II, an industry recognized standard, ASTM E 1557. When the RFP preparer chooses to add a paragraph that does not apply to an existing building element already included in the specification, refer to the Uniformat/WBS located on the NAVFAC Design-Build Website for a listing of Uniformat II designations and definitions.

NOTE: The RFP preparer may view or hide the criteria notes in this PTS section by modifying the WORD preferences for "Hidden text". To view the criteria notes, choose "File" then "Option". Click "Display" then check the "Hidden text" box under "Always show these formatting marks on the screen". In the same section, check the box for "Print hidden text" under "Printing options" to print the criteria notes.
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NOTE: The Table of Contents is intended for navigation purposes only for the RFP writer and should not show up in the printed document.

TABLE OF CONTENTS

H40 GENERAL
H40 1.1 NARRATIVE
H40 1.2 NAVIGATION DREDGING AND RECLAMATION DESIGN GUIDANCE
H40 1.3 QUALITY ASSURRANCE
H40 1.4 DESIGN SUBMITTALS
H40 1.5 CONSTRUCTION SUBMITTALS
H4010 DREDGING
H4020 DREDGE DISPOSAL
H402001 OCEAN DISPOSAL
H402002 NEW CONFINED DISPOSAL FACILITIES
H402003 EXISTING CONFINED DISPOSAL FACILITY
H4030 RECLAMATION
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**H40 GENERAL**

RFP Part 3 including the Engineering System Requirements (ESR) provide project specific requirements. The RFP Part 4, Performance Technical Sections (PTS) provide generalized technical requirements that apply to multiple facility types and include more requirements than are applicable to any one project. Therefore, only the RFP Part 4 requirements that apply to the project and further define the RFP Part 3 project specific requirements are required.

 **H40 1.1 NARRATIVE**

Use this Section in conjunction with all parts of the Design Build (D/B) Request for Proposal (RFP) to determine the full requirements of this solicitation.

This Section covers the design and construction requirements for navigation dredging, and reclamation, described in ESR H40, *Navigation Dredging and Reclamation*, of Part 3 and as identified on the RFP drawings provided in Part 6.

 **H40 1.2 NAVIGATION DREDGING AND RECLAMATION DESIGN GUIDANCE**

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NOTE: This Performance Technical Specification (PTS) has been developed to utilize certain UFGS sections for prescriptive requirements. However, there may be rare occasions when additional prescriptive specifications may be identified by the Engineering Systems Requirements (ESR) to be edited by the Contractor's Designer of Record. If other UFGS sections or standards are to be referenced in this PTS section, list those not covered by the UMRL in the following two paragraphs.

If the product or system is new and not covered in the PTS, provide a new paragraph and heading. If the product or system is presently covered in the PTS but is being changed by the reference to the UFGS, edit the PTS paragraphs to eliminate redundancy or conflicts. In either case, identify the UFGS section in the products and materials (UNIFORMAT II/WBS level 4) text of the PTS as follows:

"Uniformat II/WBS Number – Paragraph Number Paragraph Heading
The Designer of Record must utilize UFGS Section Number, "Section Title" for the project specification, and submit the edited specification section as a part of the design submittal for the project."
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Provide the design and installation in accordance with the following references. This Performance Technical Specification (PTS) adds clarification to the fundamental requirements contained in the following Government Standards. The general requirements of this PTS Section are located in PTS Section Z10, *General Performance Technical Specification*.

 **H40 1.2.1 Government Standards**

UNIFIED FACILITIES CRITERIA (UFC)

UFC 4-150-06, *Military Harbors and Coastal Facilities*

U.S. ARMY CORPS OF ENGINEERS (COE)

COE EM 385-1-1, *Safety and Health Requirements Manual*

COE EM 1110-2-1003, *Hydrographic Surveying*

UNIFIED FACILITIES GUIDE SPECIFICATIONS (UFGS)

UFGS Section 31 23 00.00 20, *Excavation and Fill*

UFGS Section 35 20 23, *Dredging*

 **H40 1.2.2 General Requirements**

 **H40 1.2.2.1 Hydrographic Survey Data**

An existing hydrographic survey map is included in Part 6 of this RFP for the Contractor's information only. The Government does not guarantee that this map fully represents all submarine surface conditions. Contractor must perform, at his expense, such hydrographic survey as his Designer of Record deems necessary for the design and construction of the navigation dredging and reclamation related work.

 **H40 1.2.2.2 Dredge Material Management Plan**

Government's dredge material characterization and management plan is included in Part 6 of this RFP. Contractor’s dredging and disposal design and field operations must follow the guidelines provided in this report.

 **H40 1.2.2.3 Geotechnical Data**

Any information presented in Part 6 of this RFP with regard to soil sampling and laboratory testing is for the Contractor's information only and is not guaranteed to fully represent all subsurface conditions. Contractor must perform, at his expense, such subsurface exploration, investigation, testing, and analysis as his Designer of Record deems necessary for the design and construction of the navigation dredging and reclamation work. Contractor must assemble all boring logs and present them in the design plans.

 **H40 1.2.2.4 Navigation and Clearance**

In-water work must minimize interference with the use of the navigation channels and passages. The Contracting Officer will direct the shifting and moving of dredges or the interruption of in-water operations to accommodate the movement of vessels and floating equipment, if necessary.

Additional details of scheduling and clearance requirements are provided in Part 2 Section 01 14 00, *Work Restrictions*.

 **H40 1.2.2.5 UXO**

If Unexploded Ordnance (UXO) is encountered, stop dredging operation immediately and notify the Contracting Officer for direction.

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NOTE: For project that requires UXO identification and removal, specify project requirements.
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 **H40 1.2.2.6 Erosion and Sediment Control Plan**

The erosion and sediment control plan must include the measures required to reduce on-site erosion and off-site runoff and sedimentation. The plan must comply with all requirements of the state or territory in which the project is located.

 **H40 1.2.2.7 NPDES General Permit and SWP3**

National Pollutant Discharges Elimination System (NPDES) General Permit for Storm Water Discharges is required for construction sites over one acre.

The Storm Water Pollution Prevention Plan (SWP3) must be prepared by a registered professional engineer. The SWP3 is a comprehensive program document detailing the intended methods of complying with applicable storm water management regulations and requirements. The plan must comply with all requirements of the state in which the project is located.

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NOTE: Coordinate with other non-waterfront facility sections on NPDES & SWP3 requirements.
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 **H40 1.2.2.8 Contaminated Material Removal Work Plan**

The Contaminated Material Removal Work Plan must be prepared by a design professional which meets the criteria listed herein and specially address protection of on-site personnel, workers and the environment.

 **H40 1.2.2.9 Field Sampling and Laboratory Test Plan**

The Field Sampling and Laboratory Test Plan prepared by a design professional which meets the criteria listed herein and specially address protection of on-site personnel, workers and the environment.

 **H40 1.2.2.10 Permit and Environmental Control**

Dredging and reclamation work must meet the permit and environmental control requirements of Part 2 Section 01 57 19, *Temporary Environmental Controls*. Do not commence in-water construction until the required U.S. Army Corps of Engineers (USACOE) permits are obtained. Construction must meet the conditions stipulated in the USACOE permits.

 **H40 1.2.2.11 Vessel Maneuverability Study and Channel Design**

Vessel maneuverability study and channel design, if specified in ESR H40, *Navigation Dredging and Reclamation,*in Part 3 must be performed accordance with the guidance of UFC 4-150-06.

 **H40 1.3 QUALITY ASSURANCE**

Materials installed in the work must be inspected and found to be in compliance with industry standards and these specifications prior to acceptance of the work. Items found to be not in compliance must be removed, or corrective measures taken, to assure compliance with the referenced standard.

 **H40 1.3.1 Hydrographic Surveys**

Perform pre-dredge hydrographic survey to establish the base line sea bottom profile and post-dredge hydrographic survey to verify that the dredged depth and limits meet the RFP requirements.

Perform hydrographic surveys as detailed in UFGS Section 35 20 23, *Dredging*, and meet or exceed the survey standards listed in the US Army Corps of Engineers EM 1110-2-1003 (Hydrographic Surveying) for Class I surveys. Surveys must be done in compatible datum as listed in the RFP drawings provided in Part 6. The hydrographic surveying firm selected by the Contractor must be approved by the Contractor's Engineer of Record prior to performing surveys for this Contract.

 **H40 1.3.2 Earthwork**

Perform field quality control required in UFGS Section 31 23 00.00 20, *Excavation and Fill*.

 **H40 1.4 DESIGN SUBMITTALS**

Submit design submittals in accordance with PTS Section Z10, *General Performance Technical Specification*, Part 2 Section 01 33 10.05 20, *Design Submittal Procedures*, FC 1-300-09N, *Navy and Marine CorpsDesign Procedures*, UFC 3-201-01, *Civil Engineering*, and UFC 4-150-06, *Military Harbors and Coastal Facilities*.

Additional design submittals for dredging and reclamation are as follows:

Concept Design Submittal:

Preliminary vessel maneuverability study and channel design report if required per ESR H40, *Navigation Dredging and Reclamation*, in Part 3

Concept dredging and reclamation layout plans

Concept design report to provide detailed description including sketches describing all proposed in-water constructions adequate for the USACOE permit application

Detailed dredge disposal plan including where, how and permitting information.

Design Development Submittal:

Final vessel maneuverability study and channel design report if required per ESR H40, *Navigation Dredging and Reclamation*, in Part 3

Preliminary dredging and reclamation plans with locations, limits and phasing of construction and type of construction finalized

Preliminary dredging and reclamation details

Preliminary geotechnical report(s)

100 Percent and Final Design Submittal:

Final plans, sections and details

Final geotechnical report(s)

 **H40 1.5 CONSTRUCTION SUBMITTALS**

The general requirements of this PTS Section are located in PTS Section Z10, *General Performance Technical Specification*. Submit construction submittals in accordance with Part 2 Section 01 33 00.05 20, *Construction Submittal Procedures*.

**H4010 DREDGING**

Contractor must dredge to the depths described in ESR H40, *Navigation Dredging and Reclamation*, of Part 3 the channel, turning basin and berth areas as identified on RFP drawings provided in Part 6 or as required to be determined by the Contractor. Contractor's Designer-of Record must edit UFGS Section 35 20 23, *Dredging*, for the project specification. No blasting will be permitted to perform dredging.

**H4020 DREDGE DISPOSAL**

Dispose of the dredge material at the disposal site(s) described in ESR H40, *Navigation Dredging and Reclamation*, of Part 3.

**H402001 OCEAN DISPOSAL**

Information on the ocean disposal site if used is provided in ESR H40, *Navigation Dredging and Reclamation*, in Part 3.

**H402002 NEW CONFINED DISPOSAL FACILITIES**

The new confined disposal facility if required in accordance to ESR H40, *Navigation Dredging and Reclamation*, in Part 3, must have adequate capacity to store the dredged material including considerations for over-dredge allowance and bulk factor.

**H402003 EXISTING CONFINED DISPOSAL FACILITY**

Information on the existing confined disposal facility, if used, is provided in ESR H40, *Navigation Dredging and Reclamation*, in Part 3.

**H4030 RECLAMATION**

Locations of reclamation are identified in the drawings provided in Part 6 or as required to be determined by the Contractor. Handling of the material must be as specified within UFGS Section 31 23 00.00 20, *Excavation and Fill*.

-- End of Section --