



DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, NORTH ATLANTIC DIVISION  
FORT HAMILTON MILITARY COMMUNITY  
302 GENERAL LEE AVENUE  
BROOKLYN, NY 11252-6700

CENAD-PD-P

6 Sep 2019

MEMORANDUM FOR Commander, U.S. Army Corps of Engineers, Norfolk District,  
Fort Norfolk 803 Front Street, Norfolk, VA 23510-1011

SUBJECT: Request for Approval of the New York and New Jersey Harbor Anchorages,  
General Reevaluation Report Study Review Plan

1. Reference Memorandum, CENAO-EX, dated 7 August 2019, subject as above.
2. The Deep Draft Navigation Planning Center of Expertise of the South Atlantic Division (SAD) is the lead office to execute the referenced Review Plan. The Review Plan does not include Independent External Peer Review, as it is not required.
3. The enclosed Review Plan is approved for execution and is subject to change as study circumstances require, consistent with study development under the Project Management Business Process. Subsequent revisions to this Review Plan or its execution require new written approval from the NAD Commander.
4. The point of contact is Mr. Larry Cocchieri, NAD Planning Program Manager at 347-370-4571 or [Lawrence.J.Cocchieri@usace.army.mil](mailto:Lawrence.J.Cocchieri@usace.army.mil).

Encl

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JEFFREY L. MILHORN  
Major General, USA  
Commanding



DEPARTMENT OF THE ARMY  
US ARMY CORPS OF ENGINEERS  
NORFOLK DISTRICT  
FORT NORFOLK  
803 FRONT STREET  
NORFOLK VA 23610-1011

CENAO-EX

07 August 2019

MEMORANDUM THRU Chief, Planning Division (Mr. Joseph Vietri)

FOR Commander, North Atlantic Division, U.S. Army Corps of Engineers, Fort Hamilton Military Community, 302 General Lee Avenue, Brooklyn, New York 11252-6700

SUBJECT: New York and New Jersey Harbor Anchorages, General Reevaluation Report – Resubmission of Updated Review Plan

1. This memorandum constitutes a request for and the rationale supporting the update of the Project Review Plan and the subsequent removal of the Type I Independent External Peer Review (IEPR) requirement on the General Reevaluation Report for the New York and New Jersey Harbor Anchorages Project. Guidance regarding the IEPR was previously contained in Engineering Circular 1165-2-214, Appendix D, dated 15 December 2012. This guidance was recently updated on 5 April 2019 by the Director of Civil Works Memorandum, Interim Guidance on Streamlining Independent External Pier Review (IEPR) for Improved Civil Works Product Delivery. The new guidance updated the mandatory triggers for IEPRs. Subsequently, under the new guidance no IEPR would have been required for the Anchorage project.
2. The Planning Center of Expertise for Deep Draft Navigation (PCX-DDN) has reviewed and approved the revised Review Plan for this project and concurs with the decision to request removal of the Type I IEPR from the Review Plan.
3. Pursuant to Director of Civil Works Memorandum, Interim Guidance on Streamlining Independent External Pier Review (IEPR) for Improved Civil Works Product Delivery: if none of the legally-required mandatory triggers are met, the MSC Commander will determine whether Type I IEPR is required when approving the project study's Review Management Organization (RMO) endorsed Review Plan (RP). Any additional action to exclude such a study from IEPR is not necessary and the RP must fully document the risk-informed decision making regarding the appropriate levels of review.
4. Based on the rationale presented in this memorandum, the Norfolk District respectfully requests the revised Review Plan be approved per your memo dated 31 January 2019 whereby subsequent reviews are subject to re-approval. There is ample experience within the U.S. Army Corps of Engineers and industry to consider the study and project activities as routine. The project does not impact life safety, and it is appropriately scoped such that it would not significantly benefit from an independent peer review.

CENAO-EX

Subject: New York and New Jersey Harbor Anchorages, General Reevaluation Report  
– Resubmission of Updated Review Plan

5. If there are any questions or additional information is needed regarding this request, please contact the planning team lead, Dr. Daniel Hughes, at (757) 201-7539, or Daniel.B.Hughes@usace.army.mil.

2 Encls

1. Review Plan
2. DDN-PCX Endorsement

For:



PATRICK V. KINSMAN, PE  
Colonel, EN  
Commanding



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
US ARMY CORPS OF ENGINEERS  
SOUTH ATLANTIC DIVISION  
60 FORSYTH STREET SW, ROOM 10M15  
ATLANTA, GA 30303-8801

CESAM-PD-D

22 July 2019

MEMORANDUM FOR Mr. Daniel Hughes, CENAO-WRP-R, U.S. Army Corps of Engineers, Norfolk District, 803 Front Street, Norfolk, Virginia 23510-1096

SUBJECT: Endorsement of Review Plan (RP) Update, New York and New Jersey Harbor Anchorages, New York, General Reevaluation Report (GRR)

1. References:

a. Memorandum, CESAM-PD-D, 20 November 2018; Subject: RP Endorsement, New York and New Jersey Harbor Anchorages, New York, GRR

b. Director of Civil Works Memorandum, 5 April 2019, Interim Guidance on Streamlining Independent External Peer Review (IEPR) for Improved Civil Works Product Delivery

c. Engineer Circular (EC) 1165-2-217, Review Policy for Civil Works, 20 February 2018

2. Reference 1.a. provided Deep Draft Navigation Planning Center of Expertise (DDNPCX) endorsement of the New York and New Jersey Harbor Anchorages, New York, GRR RP.

3. Due to a reduced project scope/impacts, the study will include an Environmental Assessment (EA) instead of an Environmental Impact Statement (EIS). Accordingly, the District has updated the RP (Enclosure 1) to incorporate Reference 1.b. and presented it to the DDNPCX for its review and endorsement in accordance with Reference 1.c.

4. The New York and New Jersey Harbor Anchorages study will evaluate potential anchorage area improvements. Dredged material will be placed in areas currently used for anchorage area maintenance. As stated, an EA will be prepared.

5. The DDNPCX concurs with the level and scope of review identified and supported in the RP, including the decision not to perform Type I IEPR. The project does not meet any of the mandatory triggers requiring Type I IEPR: the estimated total project cost is not greater than \$200 million; the Governor of an affected state has not requested peer

CESAM-PD-D

22 July 2019

SUBJECT: Endorsement of Review Plan (RP) Update, New York and New Jersey Harbor Anchorages, New York, General Reevaluation Report (GRR)

review by independent experts; and the project is not considered controversial due to significant public dispute over the size, nature, effects, or environmental costs or benefits of the project and does not require an EIS. Additionally, the RP provides a risk-informed rationale supporting the decision not to perform Type I IEPR.

6. The RP was reviewed for technical sufficiency and policy compliance by the undersigned. The RP checklist that documents that review is provided as Enclosure 2.

7. The DDNPCX recommends the RP for approval by the Major Subordinate Command (MSC) Commander. Following approval, please provide the DDNPCX with a copy of the MSC Commander's Approval Memorandum and a link to where the RP is posted on the District website. Prior to posting, the names of individuals identified in the RP should be removed (RP Attachment).

8. Thank you for the opportunity to assist in the preparation of the RP. Please coordinate any review related efforts outlined in the RP with the undersigned at (251) 694-3842.

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KIMBERLY P. OTTO  
Review Manager, DDNPCX

CF:  
CENAO-PMC/Klein  
CENAO-WRP-E/Conner  
CESAD-PDP/Bush, Small

**REVIEW PLAN**

**New York and New Jersey Harbor Anchorages  
General Reevaluation Report**

**Norfolk District**

**15 July 2019**

**MSC Approval Date: 31 January 2019  
Last Revision Date: 15 July 2019**



**US Army Corps  
of Engineers®**

# REVIEW PLAN

## New York and New Jersey Harbor Anchorages General Reevaluation Report

### Norfolk District

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# REVIEW PLAN

July 2019

## 1. OVERVIEW

This review plan (RP) defines the scope and level of peer review for the following study:

- **Project Name:** New York and New Jersey Harbor Anchorages (New York and New Jersey)
- **P2 Number:** 474207
- **Decision Document Type:** General Reevaluation Report (GRR) and Environmental Assessment (EA)
- **Project Type:** Single-Purpose Deep Draft Navigation
- **District:** Norfolk District (executing district) and New York District (supported district)
- **Major Subordinate Command (MSC):** North Atlantic Division
- **Review Management Organization (RMO):** Deep Draft Navigation Planning Center of Expertise (DDNPCX)
- **Review Plan Contacts:**
  - **District:**
    - Project Manager (Norfolk) (757) 201-7243
    - Planning Technical Team Lead (757) 201-7539
    - Project Manager (New York) (917) 790-8307
  - **MSC:** Chief Economist (917) 359-2819
  - **RMO:** DDNPCX Review Manager (251) 694-3842

## 2. KEY REVIEW PLAN DATES

**Date of RMO Endorsement of Review Plan:** 11/20/18

**Date of MSC Approval of Review Plan:** 01/31/19

**Date of Independent External Peer Review (IEPR) Exclusion Approval:** N/A

**Has the Review Plan changed since PCX Endorsement?** Yes

**Date of Last Review Plan Revision:** 07/01/19

**Date of Review Plan Web Posting:** Pending

**Date of Congressional Notifications:** Pending

## 3. MILESTONE SCHEDULE

	<u>Scheduled</u>	<u>Actual</u>	<u>Complete</u>
<b>Alternatives Milestone (AMM):</b>	09/14/18	09/19/18	Yes
<b>Tentatively Selected Plan (TSP):</b>	04/12/19	04/24/19	Yes
<b>Release Draft Report to Public:</b>	05/24/19	06/06/19	Yes
<b>Agency Decision Milestone (ADM):</b>	08/28/19		No
<b>Final Report Transmittal:</b>	11/12/19		No
<b>Senior Leaders Briefing:</b>	NA		No
<b>Chief's Report:</b>	04/20/20		No



#### 4. BACKGROUND

- **Date of 'Background' Information:** July 2019
- **Project Name:** New York and New Jersey Harbor Anchorages, New York, GRR
- **Location:** The project is located in the New York and New Jersey Harbor.
- **Authority:** Section 216 of the Flood Control Act of 1970 (Public Law 91-611) - "The Secretary of the Army, acting through the Chief of Engineers, is authorized to review the operation of projects the construction of which has been completed and which were constructed by the Corps of Engineers in the interest of navigation, flood control (flood damage reduction), water supply, and related purposes, when found advisable due to significantly changed physical or economic conditions, and to report, thereon to Congress with recommendations on the advisability of modifying the structures or their operations, and for improving the environment in the overall public interest."
- **Sponsor:** Port Authority of New York and New Jersey (PANYNJ)
- **Type of Study:** General Reevaluation Report
- **Final Report Approval Authority:** Headquarters, US Army Corps of Engineers (HQUSACE)
- **Congressional Authorization Required:** Yes
- **SMART Planning Status:** The project is currently 3x3 compliant (post-TSP milestone). The project schedule was reset after a delay and has been accelerated to bring the project back in alignment with the 3-year completion date. The schedule has been reviewed and approved by the vertical chain.
- **Project Area:** The New York and New Jersey Harbor Anchorages study is a single purpose deep draft navigation (DDN) project located within the New York and New Jersey Harbor Federal Project (Figure 1). The New York and New Jersey Harbor is the largest container port on the eastern seaboard of the United States (3<sup>rd</sup> largest in nation) and largest refined petroleum product port in the nation. The Port is situated along the northern portion of Atlantic Seaboard, approximately 270 miles north of Norfolk, Virginia and 200 miles south of Boston, Massachusetts.
- **Problem Statement:** The PANYNJ is interested in developing and improving the anchorage areas to make them more suitable for the increasing size and number of deep draft vessels, including ultra-large container vessels (ULCVs), calling on the harbor.
- **Federal Interest:** The Federal project includes a system of two anchorages (Red Hook and Graves End Bay); each anchorage area has been constructed to its authorized dimensions (i.e., varying widths and depths). Initial project scoping considered widening the existing areas, deepening greater portions of the anchorages, and/or developing possible new configurations of the existing anchorages. However, prior to the successful TSP milestone meeting, the project

scope was reduced to focus on improvements to the Graves End anchorage. This decision was driven by marginal economic benefits, anticipated environmental impacts, and high construction costs associated with improvements to the Red Hook anchorage area. Narrowing the project scope to Graves End, a naturally occurring deep water area, resulted in reduced dredge volumes, limited environmental impacts, and lower project costs. As such, an EA was determined appropriate and the RP has been updated to reflect the reduced project scope and associated review requirements.

- **Risk Identification:** This project has relatively low risk, considering that it is only the enhancement of existing elements of a Federal navigation project to meet changing conditions. Environmental impacts have been limited by reducing the project scope to focus on improvements to the Graves End anchorage. While New York Harbor is one of the busiest and most highly developed harbors in the U.S., project risks are similar to those found in other, typical (standard) USACE DDN studies or projects and are not expected to be significant nor inhibit successful implementation of this project. The project will not be justified by life safety considerations and does not involve significant threat to human life.
  
- **RP References:**
  - Engineer Circular (EC) 1165-2-217, Review Policy for Civil Works (CW), 20 February 2018
  - EC 1105-2-412, Assuring Quality of Planning Models, 31 March 2011
  - Engineer Regulation (ER) 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 November 2007
  - Chief's Memorandum, Delegation of Authority in Section 2034(a)(5)(A) of the Water Resources Development Act of 2007 (WRDA 2007), as amended (33 U.S.C. 2343), 8 January 2018
  - Director's Policy Memorandum (DPM) CW Programs 2018-05, Improving Efficiency and Effectiveness in U.S. Army Corps of Engineers (USACE) CW Project Delivery (Planning Phase and Planning Activities), 3 May 2018
  - Director of Civil Works (DCW) Memorandum, Delegation of Model Certification, 11 May 2018
  - DCW Memorandum, Revised Delegation of Authority in Section 2034(a)(5)(A) of WRDA 2007, as amended (33 U.S.C. 2343), 7 June 2018
  - Planning Bulletin (PB) 2018-01, Feasibility Study Milestones, 26 September 2018
  - DPM 2019-01, Policy & Legal Compliance Review, 9 January 2019
  - DCW Memorandum, Revised Implementation Guidance for Section 1001 of the Water Resources Reform and Development Act of 2014, Vertical Integration and Acceleration of Studies as Amended by Section 1330(b) of WRDA 2018, 25 March 2019
  - DCW Memorandum, Interim Guidance on Streamlining IEPR for Improved CW Product Delivery, 5 April 2019
  - New York and New Jersey Harbor Anchorages, Project Management Plan, Draft dated 26 October 2018
  - District Quality Control (DQC) Review of Civil Works Products, Standard Operating Procedures U.S. Army Corps of Engineers Norfolk District, February 2016



## 5. FACTORS AFFECTING THE LEVELS OF REVIEW

**A. Is it likely that the study will be challenging?**

It is not likely that the study will be challenging, as it is the reevaluation of a previously authorized and constructed project. There is an abundance of existing information and prior reports available for use in this study effort. The reevaluation of the previously authorized and constructed plan is not expected to be technically challenging. The non-Federal sponsor, the PANYNJ, has requested and fully supports the study. Since improvements would be to an existing feature of the authorized and constructed Federal project, it is unlikely that there would be significant social and/or institutional concerns for the acceptability of modifying the project.

**B. Provide a preliminary assessment of where the project risks are likely to occur and assess the magnitude of those risks.**

This project is relatively low risk, considering that it is only the enhancement of existing elements of a Federal navigation project to meet changing conditions. Due to the reduced project scope, there are no known environmental concerns. While this project does involve dredging areas which have not been dredged previously, the footprint is in a highly utilized/disturbed area and associated risks are low and are not expected to inhibit successful implementation of this project. An EA will be prepared.

**C. Is the project likely to be justified by life safety or is the study or project likely to involve significant life safety issues?**

The project will not be justified by life safety considerations and does not involve a significant threat to human life. The New York and New Jersey Harbor Anchorages study is a DDN project that will be economically justified based on the reduction in the value of resources required to transport commodities, or national economic development (NED) benefits, as outlined in ER 1105-2-100. Should the project not perform as expected, the impact would be a lower than expected benefit to NED, which does not impact human life and safety. Non-performance of the project would not affect the well-being of the general public and environment, but may negatively affect vessels that utilize the project. There is no residual risk to account for in this project due to the fact that the project purpose does not address or directly affect human health and safety. Climate and sea level change would not be a risk to this project but could improve the function of the project by providing deeper anchorages as sea level increases. The life safety assessment was reviewed by the Norfolk District Chief of Engineering on 16 October 2018 and received his concurrence.

**D. Has the Governor of an affected state requested a peer review by independent experts?**

There has not been a request for independent peer review by the Governors of either New York or New Jersey.

**E. Is it likely that the study/project will have significant public dispute as to the project's size, nature, or effects?**

The study/project is not likely to involve significant public dispute as to its size, nature, or effects of the project due to the fact that it is only a reevaluation of modifications to an existing feature of the authorized and constructed project. The improvements being considered are to an existing feature of the Federal navigation project and would only be implemented if economically justified, environmentally acceptable, and technically feasible.

F. Is the project/study likely to involve significant public dispute as to the economic or environmental cost or benefit of the project?

The study/project is not likely to involve significant public dispute as to the economic cost or benefit of the project. The non-Federal sponsor requested that the original study be re-examined to seek additional improvements. Their eagerness reflects the importance of maintaining and completing the project to accommodate existing and future commercial vessel traffic transiting in and out of the port. The maritime industry also supports the project, as it is expected to increase the transit efficiency of the port, which is a significant economic driver in the region and the nation.

G. Is the project/study likely to have significant interagency interest?

The project is anticipated to have less than significant environmental interagency interest. During development of the EA and in accordance with the requirements of all applicable Federal environmental laws, the Norfolk District will coordinate with the relevant state and Federal resource agencies to address such interests. A scoping meeting was held on 8 November 2018 that did not generate significant public interest; public interest was typical of that usually encountered for a DDN project of limited scope.

H. Is the information in the decision document or anticipated project design likely to be based on novel methods, involve innovative materials or techniques, present complex challenges for interpretation, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing practices?

The information in the GRR and the anticipated project design are not likely to be based on novel methods, involve the use of innovative materials or techniques, present complex challenges for interpretation, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing practices. It is a reevaluation of an existing feature of the Federal navigation project. The project will have traditional anchorage designs, typical dredging methods, and dredged material placement in areas currently used for anchorage area maintenance.

I. Does the project design require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design/construction schedule?

The project design is not anticipated to require redundancy, resiliency and/or robustness, unique construction sequencing, or a reduced or overlapping design construction schedule. The project is anticipated to utilize all of the same techniques that are currently utilized for maintenance or were utilized in the recent channel deepening. These are techniques utilized throughout the nation.

J. Is the estimated total cost of the project greater than \$200 million?

No. The estimated total cost of the project is expected to be in the range of \$20-\$50 million.

K. Will an Environmental Impact Statement (EIS) be prepared as part of the study?

No, an EA will be prepared. Initially it was thought that an EIS would be developed for the study to address potential public concern. However, public scoping meetings resulted in no identified public concerns. Further, an EA was determined appropriate following the decision to limit the study scope to an area with naturally occurring deep water and negligible environmental impacts.

- L. Is the project expected to have more than negligible adverse impacts on scarce or unique tribal, cultural, or historic resources?  
 No. The majority of the project is within an existing anchorage area and no impacts to Native American cultural resources are anticipated. A Programmatic Agreement to ensure National Historic Preservation Act, Section 106 compliance is planned during the feasibility phase. Consultation with appropriate Federally recognized tribes has also been initiated.
- M. Is the project expected to have substantial adverse impacts on fish and wildlife species and their habitat prior to the implementation of mitigation measures?  
 No, only minor affects are expected. The study will address and ensure compliance with the Endangered Species Act, the Magnuson-Stevens Fishery and Conservation Management Act including an Essential Fish Habitat Assessment, as well as other environmental compliance requirements.
- N. Is the project expected to have, before mitigation measures, more than a negligible adverse impact on an endangered or threatened species or their designated critical habitat?  
 No, only minor adverse impacts are expected. Recommended implementation actions might include Time of Year restrictions on construction activities or other measures.

## 6. REVIEW EXECUTION PLAN

This RP section provides a general description of each type of review and identifies the reviews anticipated for this study/project.

### A. Types of Review

- 1) **District Quality Control**. All decision documents (including data, analyses, environmental compliance documents, etc.) undergo DQC. Quality control should be performed continuously but at a minimum DQC must be performed on milestone submittals (PB 2018-01) and the draft and final decision documents. This internal review process covers basic science and engineering work products. It fulfills the project quality requirements of the Project Management Plan.
- 2) **Agency Technical Review (ATR)**. ATR is performed by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. These teams will be comprised of members who are certified/approved by their respective Communities of Practice (CoPs) to perform ATR. The ATR team lead will be from outside the home MSC. If significant life safety issues are involved in a study or project a safety assurance review should be conducted during ATR.
- 3) **Independent External Peer Review**. Type I IEPR may be required for decision documents under certain circumstances. This is the most independent level of review and is applied in cases that meet criteria where the risk and magnitude of the project are such that a critical examination by a qualified team outside of USACE, is warranted. A risk-informed decision is made as to whether Type I IEPR is appropriate. If required, Type I IEPR will be managed by an Outside

Eligible Organization (OEO), external to USACE. Neither the public nor scientific or professional societies would be asked to nominate potential external peer reviewers.

- 4) **Cost Engineering Review.** All decision documents shall be coordinated with the Cost Engineering Mandatory Center of Expertise (MCX). The MCX will assist in determining the expertise needed on the ATR team. The MCX will provide Cost Engineering certification. The RMO is responsible for coordinating with the MCX for the reviews; these reviews typically occur as part of ATR.
- 5) **Model Review and Approval/Certification.** EC 1105-2-412 mandates the use of certified or approved models for all planning work to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions.
- 6) **Policy and Legal Compliance Review (P&LCR).** All decision documents will be reviewed for compliance with USACE policy and law. ER 1105-2-100 (Appendix H) and DMP 2019-01 provide guidance on P&LCRs. These reviews culminate in determinations that report recommendations and the supporting analyses/coordination comply with law and policy and warrant approval or further recommendation to higher authority by the home MSC Commander.
- 7) **Public Review.** The home District will post the RMO endorsed and MSC approved RP on the District's public website. Internet posting of the RP provides opportunity for the public to comment on that document. It is not considered a formal comment period, and there is no set timeframe for public comment. The project delivery team (PDT) should consider any comments received and determine if RP revisions are necessary. The public will also be provided with the opportunity to review and comment on the draft and final decision documents during the public comment period. Should IEPR be required, public comments would be provided to the IEPR panel for consideration.

## **B. Anticipated Project Reviews and Estimated Costs**

Table 1 provides the estimated schedule and cost for reviews anticipated for this study.

Table 1: New York and New Jersey Harbor Anchorages – Anticipated Reviews

Products to undergo Review	Review Level	Start Date	End Date	Cost	Complete
Draft GRR and EA	District Quality Control	03/28/19	04/12/19	\$50,200	Yes
	Agency Technical Review	06/3/19	7/14/19	\$60,920 <sup>1</sup>	No
	Type I IEPR	NA		NA	No
Final GRR and EA	Policy and Legal Review	06/3/19	7/14/19	N/A	No
	District Quality Control	09/27/19	10/11/19	\$50,200	No
	Agency Technical Review	10/11/19	11/05/19	\$60,920 <sup>1</sup>	No
	Policy and Legal Review	11/12/19	12/20/19	N/A	No
In-Kind Products or Analyses <sup>2</sup>	N/A				

<sup>1</sup> Estimated cost for Draft and Final Report ATRs does not include the cost of ATR Team Lead participation in milestone meetings or other engagement/coordination beyond that directly related with those ATRs. The estimated cost for ATR of the Draft Report is based upon the following assumptions:

- ATR Team Lead – 30 hours, \$130/hour
- ATR Team – 10 Technical Disciplines, 40 hours/discipline, average \$125/hour
- RMO – 40 hours, \$143/hour

<sup>2</sup> Products and analyses provided by non-Federal sponsor as in-kind services are subject to DQC, ATR, and IEPR. However, no in-kind products or analyses will be developed by the non-Federal sponsor.



### C. District Quality Control

The home district shall manage DQC and will appoint a DQC Lead to lead that review (see EC 1165-2-217, paragraph 8.a.1).

- 1) **Review Team Expertise.** Table 2 identifies the required DQC team expertise.

**Table 2: Required DQC Expertise**

DQC Team Disciplines	Expertise Required
DQC Lead	The DQC lead should be a senior professional with extensive experience preparing Civil Works decision documents and conducting DQC. The lead may also serve as a reviewer for a specific discipline (i.e., planning, economics, environmental resources, etc.).
Plan Formulation	The plan formulation reviewer should be a senior water resources planner with experience in DDN studies and familiarity with GRR study requirements and the SMART Planning process.
Economics	The economics reviewer should be a senior economist with experience in DDN studies and familiarity with GRR study requirements and HarborSym. The economics DQC team member will be identified by the DDNPCX.
Environmental Resources	The environmental reviewer should have expertise in evaluating the impacts associated with DDN and dredging projects as well as extensive knowledge of estuarine and coastal ecology. The reviewer should also be familiar with the environmental coordination and NEPA requirements for DDN projects.
Cultural Resources	Cultural resources reviewer should have expertise in evaluating the impacts associated with DDN and dredging projects as well as extensive knowledge of underwater archaeology. The reviewer should also be familiar with the environmental coordination and NEPA/National Historic Preservation Act (NHPA) requirements for DDN projects.
Hydrology, Hydraulics and Coastal (HH&C) Engineer	The HH&C engineering reviewer should be an expert in the field of hydraulics and have a thorough understanding of open channel dynamics and have experience in DDN studies/projects. The reviewer should also be familiar with computer modeling techniques that were used for prior studies of the harbor.
Geotechnical Engineering	The reviewer will have an understanding of the behavior of soils, site characterization, material management, slope stability, and the analysis and placement of dredged material.
Cost Engineering	The cost engineering reviewer should have experience evaluating cost requirements for a DDN project and experience with the Abbreviated Risk Analysis, Cost and Schedule Risk Analysis (Crystal Ball) and CEDEP models.
Navigation Project Design and Engineering (Operations)	The project design reviewer should have experience in the design, construction, operations and maintenance (O&M) of DDN projects including development of dredged material plans, surveying, mapping, and volume computations.
Real Estate	The real estate reviewer should have expertise in the real estate requirements of DDN projects and preparation of Real Estate Plans.

- 2) **Documentation of DQC.** DQC of the draft and final reports require a specific certification of DQC completion. Documentation of DQC should follow the District Quality Manual and the MSC Quality Management Plan. An example DQC Certification statement is provided in EC

1165-2-217 (Figure 4). DiChecks software will be used to document DQC review comments, responses, and issue resolution.

Documentation of completed DQC will be provided to the MSC, RMO, and ATR Team leader prior to initiating an ATR. The ATR team will assess the quality of the DQC performed and provide a summary of that assessment in the ATR report. Missing or inadequate DQC documentation can result in delays to the start of other reviews (see EC 1165-2-217, paragraph 8).

#### D. Agency Technical Review

ATR will assess whether the analyses are technically correct and comply with USACE guidance and whether the documents explain the analyses and results in a clear manner. Further, the ATR will ensure proper and effective DQC has been performed and will ensure that the product is consistent with established criteria, guidance, procedures, and policy. The RMO will identify the ATR team members and manage the ATRs. Review team members will not be nominated by the home District/MS.

- 1) **Review Team Expertise.** ATR will be performed by a team whose members are certified or approved by their respective CoPs to perform reviews. Table 3 identifies the disciplines and required ATR team expertise.

**Table 3: Required ATR Team Expertise**

ATR Team Disciplines	Expertise Required
ATR Lead	The ATR lead will be a senior professional with extensive experience preparing CW decision documents and conducting ATR. The lead should have the skills to manage a virtual team through an ATR. The lead may serve as a reviewer for a specific discipline (e.g., plan formulation, economics, etc.).
Plan Formulation	The plan formulation reviewer should be a senior water resources planner with experience in DDN studies and familiarity with GRR study requirements and the SMART Planning process.
Economics	The economics reviewer(s) should be a senior economist with experience in DDN studies and familiarity with GRR study requirements and HarborSym. Typically, two economics reviewers are required, one to review the Economics Appendix and the other to review inputs/outputs of HarborSym modeling.
Environmental Resources	The environmental reviewer should have expertise in estimating the impacts associated with deep navigation and dredging projects as well as extensive knowledge of estuarine and coastal ecology. The reviewer should also be familiar with environmental coordination and NEPA requirements for DDN projects.
Cultural Resources	The cultural resources reviewer should have expertise in evaluating the impacts associated with DDN and dredging projects as well as extensive knowledge of underwater archaeology. The reviewer should also be familiar with environmental coordination and NEPA/NHPA requirements for DDN projects.
HH&C Engineer	The HH&C engineering reviewer should be an expert in the field of hydraulics and have a thorough understanding of open channel dynamics and have experience in DDN studies/projects. The reviewer should also be familiar

	with computer modeling techniques that were used for prior studies of the harbor.
Geotechnical Engineer/Geologist	The reviewer will have expertise in the behavior of soils, site characterization, material management, slope stability, and the analysis and disposal of dredged material.
Cost Engineering	The cost engineering reviewer will be identified by the MCX and have expertise in evaluating cost requirements for a DDN project and in using the Abbreviated Risk Analysis, Cost and Schedule Risk Analysis (Crystal Ball) and CEDEP models.
Navigation Project Design and Engineering (Operations)	The project design reviewer should have experience in the design, construction, O&M of DDN projects including development of dredged material plans, surveying, mapping, and volume computations.
Real Estate	The real estate reviewer should have expertise in the real estate requirements of DDN projects and preparation of Real Estate Plans.
Climate Preparedness and Resilience/HH&C Climate Reviewer	A member of the Climate Preparedness and Resilience CoP or an HH&C Climate certified reviewer will participate on the ATR team.

- 2) **Documentation of ATR.** DrChecks will be used to document all ATR comments, responses, and issue resolution. Comments should be limited to those needed to ensure product adequacy. All members of the ATR team should use the four part comment structure (EC 1165-2-217, paragraph 9(k)(1)). If a concern cannot be resolved by the ATR team and PDT, it will be elevated to the vertical team for resolution using the EC 1165-2-217 issue resolution process. The comment(s) can then be closed in DrChecks by noting the concern has been elevated for resolution. The ATR Lead will prepare a Statement of Technical Review (see EC 1165-2-217, paragraph 9), for the draft and final reports, certifying that review issues have been resolved or elevated.

## E. Independent External Peer Review

- 1) **Decision on Type I IEPR.** Based upon current guidance and the limited study/project scope (modification of a feature of an authorized and constructed project), the PDT's risk informed assessment is that the study/project does not meet any of the mandatory triggers requiring Type I IEPR: there is no significant threat to human life; the estimated total cost of the project is expected to be between \$20 and \$50 million, which is less than the \$200 million threshold; the governors of New York and New Jersey have not requested peer review by independent experts; and neither the DCW nor the Chief of Engineers has determined that the project study is controversial due to significant public dispute over either the size, nature, or effects of the project or the economic or environmental costs or benefits of the project.

When a decision document does not trigger a mandatory Type I IEPR, a risk informed recommendation is utilized. This process explicitly considers the consequences of non-performance on project economics, the environment, and social well-being (public safety and social justice), as well as indicated whether the product is likely to contain influential scientific information or be a highly influential scientific assessment; or involve any other issues that provide a rationale for determining the appropriate level of review. Furthermore, the recommendation must make a case that the study is so limited in scope or impact that it would not significantly benefit from IEPR. Section 5 of this RP highlights the limited scope and

anticipated limited impacts associated with the study and project implementation. The project was reviewed by Norfolk District Chief of Engineering on 16 October 2018 and it was determined that that the project does not involve any significant threat to human life.

Additionally, the risk informed recommendation that Type I IEPR is not warranted for this study/project is based upon the following:

- It is not anticipated to include an EIS;
- The Chief of Engineers has not determined it to be controversial;
- It is anticipated to have no more than negligible adverse impacts on scarce or unique tribal, cultural, or historic resources;
- It is anticipated to have no substantial adverse impacts on fish and wildlife species and their habitat prior to the implementation of mitigation measures;
- Before implementation of mitigation measures, it is anticipated to have no more than a negligible adverse impact on a species listed as endangered or threatened species under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) or the critical habitat of such species designated under such Act;
- Is for an activity for which there is ample experience within USACE and the industry to treat the activity as being routine; and
- Has minimal life safety risk.

- 2) **Decision on Type II IEPR.** Type II IEPR, Safety Assurance Review, is managed outside of the USACE and is performed on design and construction activities for any project where potential hazards pose a significant threat to human life. For Type II IEPRs, a panel is convened to review the design and construction activities before construction begins and periodically thereafter until construction activities are completed.

The PDT has assessed this single purpose DDN project and determined that it does not meet the criteria for conducting Type II IEPR:

- The Federal action is not justified by life safety and failure of the project will not pose a significant threat to human life.
- The project does not involve the use of innovative materials or techniques where the engineering is based on novel methods; it does not present complex challenges for interpretations; it does not contain precedent-setting methods or models; and it does not present conclusions that are likely to change prevailing practices. The anchorage is already in use. Construction and maintenance techniques have been standardized and no new techniques are expected to be utilized for design and construction activities.
- The project design does not require redundancy, resiliency, or robustness as the design of navigation improvements at the New York and New Jersey Harbor will be based upon previously developed and utilized construction techniques which do not require redundancy, resiliency, and/or robustness.

- The project does not have unique construction sequencing or a reduced or overlapping design construction schedule.

## F. Model Certification or Approval

EC 1105-2-412 mandates the use of certified or approved models for all planning activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Planning models are any models and analytical tools used to define water resources management problems and opportunities; to formulate potential alternatives to address study area problems and take advantage of opportunities; to evaluate potential effects of alternatives; and to support decision making. The use of a certified/approved planning model does not constitute technical review of a planning product. The selection and application of the model and assessment of input and output data is the responsibility of the users and is subject to DQC, ATR, and IEPR (if required). The following models may be used to develop the decision document.

**Table 5: Planning Models**

Model Name and Version	Brief Model Description and How It Will Be Used in the Study	Certification / Acceptance Status
HarborSym	HarborSym is a discrete event Monte-Carlo simulation model designed to facilitate economic analyses of proposed navigation improvement projects in coastal harbors. Incorporating risk and uncertainty, the model will be used to estimate transportation cost savings (benefits) attributable to fleet and loading changes under future with project conditions.	Certified
RECONS	A regional economic impact modeling tool that estimates jobs, income, sales, and value added associated with Corps Civil Works and ARRA spending, as well as stemming from effects of additional economic activities (for example, water transportation, tourism spending, etc.) at more than 1,400 Corps project areas.	Certified

EC 1105-2-412 does not cover engineering models used in planning. The responsible use of well-known and proven USACE developed and commercial engineering software will continue. The professional practice of documenting the application of the software and modeling results will be followed. The USACE Scientific and Engineering Technology Initiative has identified many engineering models as preferred or acceptable for use in studies. These models should be used when appropriate. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required). The following models may be used to develop the decision document.

**Table 6: Engineering Models**

Model Name and Version	Brief Model Description and How It Will Be Used in the Study	Certification / Acceptance Status
Abbreviated Risk Analysis, Cost Schedule Risk Analysis	Cost risk analyses identify the amount of contingency that must be added to a project cost estimate and define the high risk drivers. The analyses will include a narrative identifying the risks or uncertainties. During the alternatives evaluation, the PDT will assist the cost engineer in defining confidence/risk levels associated with the project features within the abbreviated risk analysis. For the Class 3 estimate, an evaluation of risks will be performed using Crystal Ball Cost Schedule Risk Analysis for construction costs over \$40 million or the Abbreviated Risk Analysis for projects under \$40 million.	MCX mandatory

CEDEP	Corps-proprietary, Excel add-on for Cost Engineering; used to estimate costs of alternatives and the recommended plan	MCX mandatory
ArcGIS	Used to visually represent alternatives and the TSP	Enterprise

## G. Policy and Legal Compliance Review

In accordance with DPM CW Programs 2018-05, P&LCRs for draft and final planning decision documents are delegated to the MSC responsible for the execution of the study.

With input from MSC and HQUSACE functional leaders and through collaboration with the Chief of Office of Water Project Review (OWPR), the MSC Chief of Planning and Policy is responsible for establishing a competent interdisciplinary P&LCR team (DPM 2019-01). The composition of the policy review team will be drawn from HQUSACE, the MSC, the Planning Center of Expertise (PCX), and other review resources as needed. The identification of Counsel members will follow the procedures set forth by the HQUSACE Chief Counsel, as coordinated by HQUSACE and MSC Counsel functional leaders. The MSC Chief of Planning and Policy and the Chief of OWPR will collaborate to identify and endorse a P&LCR Manager from among the P&LCR team identified for the study. The manager may be a MSC, PCX, or HQUSACE employee. The team is identified in Attachment 1 of this RP.

The P&LCR team will:

- Provide advice and support to the PDT and decision makers at the District, MSC, HQUSACE, and Assistant Secretary of the Army for Civil Works levels.
- Engage at both the MSC and HQUSACE levels, ensuring that the vertical teaming aspect of SMART planning is maintained.
- Help guide PDTs through project development and the completion of policy and legally compliant documents, identifying policy and legal issues as early as possible such that issues can be addressed while minimizing impacts to study and project costs and schedules.
- Provide impartial and unbiased recommendations, advice, and support to decision makers.

**ATTACHMENT 1: TEAM ROSTERS**

PROJECT DELIVERY TEAM			
Name	Office	Position	Phone Number
Richard Klein	CENAO-PMC	Project Manager	757-201-7385
Dan Hughes	CENAO-WRP-R	Planning Technical Team Lead	757-201-7539
Susan Conner	CENAO-WRP-R	Planning Chief	757-201-7320
Rachel Haug	CENAO-WRP-E	Study Team Lead	757-201-7589
Dave Schulte	CENAO-WRP-E	Environmental	757-201-7007
John Haynes	CENAO-WRP-E	Cultural Resources	757-201-7008
Julie McGuire	CESAM-PD-D	Economics and HarborSym	251-690-2607
Robert Sweitzer	CENAO-WRO-NS	Hydro Surveying	757-201-7666
Tammy Knecht	CENAO-WRO-G	GIS	757-201-7081
Steve Powell	CENAO-WRO-D	Channel Design and Dredged Material Management	757-201-7788
Jeff Swallow	CENAO-WRO-G	Mapping and Volumes	757-201-7213
Jane Bolton	CENAO-ECE-G	Geology and Soils	757-201-7123
Sherry Jean	CENAO-ECE-E	Cost Estimates	757-201-7823
Alicia Farrow	CENAO-ECE-H	Hydrology and Hydraulics	757-201-7869
Matt Donaldson	CENAO-OC	Legal Review	757-201-7867
Kevin Kane	CENAO-RE	Real Estate Plan	757-201-7562
Eartha Garrett	CECT-NAO	Contracting Support	757-201-7131
Lindsey Ambush	CENAO-RM	Financial Management Support	757-201-7224
Christy Alexander	CENAO-RMA	Cost Share Control and Accounting	757-201-7325
Lindera Owens	CENAO-PMC	Financial Management Support	757-201-7119
Brycc Wisemiller	CENAN-PP-C	Program and Project Support	917-790-8307
Christopher Dols	CENAN-EN-C	Cost Estimator	917 790-8347

DISTRICT QUALITY CONTROL TEAM			
Name	Office	Position	Phone Number
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Danielle Tommaso	CENAN-PL-FC	Plan Formulation	917-790-8527
Jennifer Purcell	CESWF-PEC-PE	Economics	817-886-1663
Catherine Alcoba	CENAN-PL-EC	Environmental Resources	917-790-8216
Crissa Scarpa	CENAN-PL-EW	Cultural Resources	917-790-8612
Gail Woolley	CENAN-EN-H	Hydraulic Engineering	917-790-8246
Stanley Sedwick	CENAN-EN-DE	Geotechnical Engineering	917-790-8370
Kaitlyn Eng	CENAN-EN-C	Cost Engineering	917-790-8545
Kenneth Person	CENAN-OP-ST	Operations	917-790-8541
Warren LaRiverine	CENAN-RE	Real Estate	917-790-8450

AGENCY TECHNICAL REVIEW TEAM			
Name	Office	Position	Phone Number
Samantha Borer	CESAJ-PD-P	AIR Lead & Plan Formulation	904-232-1066
Walker Messer	CENWS-PM-P	Economics	206-764-6755
Courtney Jackson	CESAJ-PD-D	Economics - HarborSym	904-232-1019
Barbara Conlin	CENAP-PL-E	Environmental	215-656-6557
Nancy Brighton	CECW-PB	Cultural Resources Sr.	202-761-4618
Meredith Moreno	CESAJ-PD-ES	Cultural Resources Jr.	904-232-1577
Steve Potts	CENAE-EDG	Geotechnical/Geologist	978-318-8311
Thomas Gambucci	CEMVR-EC-H	HH&C	309-794-5848
Jeffrey Corbino	CEMVN-OD-T	Operations	504-862-1958
Paula Johnson-Muic	CESWD-PDR	Real Estate	469-487-7031
Bill Bolte	CENWW-ECE	Cost Estimating	509-527-7585

VERTICAL TEAM			
Name	Office	Position	Phone Number
Chris Ricciardi	CENAD-PD-C	Program Manager	347-370-4534
Joe Vietri	CENAD-PD-P	MSC Chief of Planning and Policy	347-370-4570
Cathy Shuman	CECW-NAD-RIT	Deputy Chief NAD RIT	202-761-1379
Eric Bush	CESAD-PDP	DDNPCX Director	404-562-5220
Todd Nettles	DDNPCX	DDNPCX Technical Director	251-694-3841
Kim Otto	DDNPCX	DDNPCX Review Manager	251-694-3842

POLICY AND LEGAL COMPLIANCE REVIEW TEAM			
Name	Office	Position	Phone Number
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Ralph LaMoglia	CENAD-RB-T	Engineering and Construction	347-370-4599
Hans Moritz	CENWP-ENC-HD	Climate Change	503-808-4864
Karen Kennedy	CENAD-PD-RE	Real Estate	347-370-4516
Doug Stamper	CENAD-PD-OR	Operations	347-370-4608
Pat Falcigno	CECC-NAD	Office of Counsel	347-370-4524