## **DEPARTMENT OF THE ARMY**



USACE 2600 ARMY PENTAGON WASHINGTON, D.C. 20310-2600

DAEN 03 June 2022

SUBJECT: New York – New Jersey Harbor Deepening Channel Improvements, New York and New Jersey

## THE SECRETARY OF THE ARMY

- 1. I submit, for transmission to Congress, my report on the study of navigation improvements for the New York and New Jersey Harbor. It is accompanied by the report of the District and Division Engineers. The study was conducted under the authority of Section 216 of Rivers and Harbors Act of 1970 (33 U.S. Code § 549a). Section 216 authorizes the Secretary of the Army, acting through the Chief of Engineers, to review the operation of projects for which construction has been completed and which were constructed by the U.S. Army Corps of Engineers (USACE) in the interest of navigation, flood control, water supply, and related purposes when found advisable due to significantly changed physical or economic conditions, and to recommend to Congress on the advisability of modifying the structures or their operations and for improving the quality of the environment in the overall public interest. The existing navigation project was authorized by Section 101(a)(2) of the Water Resources Development Act (WRDA) of 2000. Pre-construction engineering and design (PED), if funded, will continue under the study authority cited above.
- 2. The reporting officers recommended authorizing a plan to reduce navigation inefficiencies in the existing New York and New Jersey Harbor's channels. The recommended plan is the National Economic Development (NED) Plan. The plan includes the following improvements:
  - a. Deepen the Ambrose Channel for its entire length to a depth of -58 feet MLLW;
- b. Deepen the Anchorage Channel to a depth of -55 feet MLLW from the Narrows to 2,600 feet past its juncture with the northern edge of the widening known as "PJ-1" at the Port Jersey Channel;
- c. Deepen the Port Jersey Channel to -55 ft MLLW (-57 feet MLLW in rock or otherwise hard material) from its juncture with the Anchorage Channel to approximately 5,960 feet from the channel mouth adjacent to Global Terminal at Bayonne;
- d. Deepen the Kill Van Kull Channel to a depth of -55 feet MLLW (-57 feet MLLW in rock or otherwise hard material) from its juncture with the Anchorage Channel to its juncture with the Arthur Kill Channel and the Newark Bay Channel;

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- e. Deepen Newark Bay Channel to a depth of -55 ft MLLW (-57 ft MLLW in rock or otherwise hard material) from its juncture with the Kill Van Kull Channel to the juncture with the Elizabeth Channel;
- f. Deepen South Elizabeth Channel to -55 ft MLLW (-57 ft MLLW in rock or otherwise hard material);
- g. Deepen the Port Elizabeth Channel to -55 ft MLLW (-57 ft MLLW in rock or otherwise hard material);
- h. The above channels may be widened as required for structural stability and for the navigation of the design vessel with a length of 1,308.0 feet and beam of 193.5 feet to transit from sea to Elizabeth Port Authority Marine Terminal and Port Jersey Port Authority Marine Terminal.
- i. Construction of the recommended plan includes placement of approximately 33.24 million cubic yards of dredged material. This includes as part of least cost placement beneficially using dredged material by placing it upland, at the Historic Area Remediation Site, or on a reef consistent with the current 2008 Dredged Material Management Plan. A supplemental project-specific Dredged Material Management Plan will be developed during PED to identify the full array of opportunities that coincide with the production of the dredged material.
- j. Unavoidable environmental impacts to an estimated 0.5 acres of regulated subtidal shallow habitat would be fully compensated for. An appropriate and least cost mitigation plan, which could include habitat restoration or enhancement, purchase of mitigation bank credits, or an in-lieu fee program would be determined during PED. However, the maximum amount of mitigation anticipated for the project would be restoration of approximately 1.6 acres of out-of-kind habitat in the Sea Bright Offshore Borrow Area at an estimated cost of \$2,200,000.
- 3. The Port Authority of New York and New Jersey is the non-federal sponsor for the study. The Port Authority of New York and New Jersey has indicated their support for being the non-federal sponsor for implementation.
- 4. Project costs for the recommended plan are allocated to the commercial navigation purpose and based on October 2021 price levels.
- a. Project First Cost. The estimated project first cost of the recommended plan is \$5,563,899,000. This includes \$4,248,811,000 for General Navigation Features (GNFs) and \$1,315,088,000 for lands, easements, rights-of-way, and relocations (LERRs).

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- b. Estimated Federal and Non-Federal Share. The total estimated federal and non-federal shares of the project cost are \$2,124,561,500 and \$3,439,337,500 respectively in accordance with provisions of Sections 101(a) of the Water Resources Development Act (WRDA) of 1986, as amended (33 U.S.C. 2211(a)).
- c. Additional 10 Percent Payment. In addition to the non-federal sponsor's estimated share of the project first cost determined in paragraph 4.b. above, the non-federal sponsor must pay an additional 10 percent of the costs for GNFs of the project, or \$424,811,000, in cash over a period not to exceed 30 years, with interest in accordance with Section 101(a)(2) of WRDA 1986, as amended (33 U.S.C. 2211(a)(2)). The value of LERRs provided by the non-federal sponsor under 33 U.S.C. 2211(a)(3), and the costs of utility relocations borne by the non-federal sponsor under 33 U.S.C. 2211(a)(4), will be credited toward payment of this amount.
- d. Associated Costs. Total associated costs for the project are estimated at \$85,267,000. The associated costs include dredging berthing areas at Elizabeth Port Authority Marine Terminal and Port Jersey Port Authority Marine Terminal. Additional aids to navigation are not anticipated.
- e. Authorized Project Cost and Section 902 Calculation. The project first cost for the purpose of calculating the maximum cost of the project pursuant to Section 902 WRDA 1986, as amended (33 U.S.C. 2280), includes the total cost of construction of the GNFs, the value of LERRs, and the costs of utility relocations. Accordingly, as set forth in paragraph 4.a., above, based on October 2021 prices, the total estimated project first cost for these purposes is \$5,563,899,000. Based on October 2021 price levels, a discount rate of 2.25 percent, and a 50-year period of economic analysis, the project average annual benefits and costs are estimated at \$433,473,000 and \$244,806,000, respectively, with resulting net benefits of \$188,667,000 and a benefit-to-cost ratio of 1.8 To 1.
- f. Operations and Maintenance Costs. Incremental average annual operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) costs of the project after construction are estimated at \$3,521,000 in accordance with Section 101(b)(1) of WRDA 1986, as amended (33 U.S.C. 2211(b)(1)). Responsibility for the annual operation and maintenance costs is split 50 percent federal and 50 percent non-federal.
- 6. In accordance with Engineering Regulation 1165-2-217 on the review of decision documents, all technical, engineering, and scientific work underwent an open, dynamic, and rigorous review process to ensure technical quality. This included District Quality Control Review, Agency Technical Review, Independent External Peer Review, and policy and legal review. All comments from the above referenced reviews have been addressed and incorporated into the final documents.

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- 7. The New York and New Jersey Harbor Deepening Channel Improvements feasibility study identified that a specific feasibility study would be warranted for the pathway to Howland Hook Marine Terminal. It is recommended that a new feasibility study be initiated under the authority of Section 216 of Rivers and Harbors Act of 1970 to determine whether there are additional federal investments warranted for channel improvements for the pathway to Howland Hook Marine Terminal.
- 8. Washington-level review indicated that the project recommended by the reporting officers is technically feasible, environmentally acceptable, and economically justified. The plan complies with all essential elements of the 1983 U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Land Related Resources Implementation Studies and complies with other administrative and legislative policies and guidelines. Also, the views of interested parties, including federal, state, and local agencies have been considered. Environmental commitments will be implemented for air quality, water and sediment quality, biological resources, cultural resources, vibration, and noise.
- 9. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the selected plan for navigation improvements in the New York and New Jersey Harbor be authorized for implementation, as a federal project, with such modifications thereof as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing and other applicable requirements of Federal laws, regulations, and policies. Federal implementation of the project for commercial navigation includes, but is not limited to, the following items of local cooperation to be undertaken by the non-federal sponsor in accordance with applicable Federal laws, regulations, and policies:
  - a. Provide the non-Federal share of construction costs, as further specified below:
- (1) Provide, during design, 50 percent of the costs of design for the GNFs of the project in accordance with the terms of the design agreement for the project;
- (2) Provide, during construction, 50 percent of the costs of the GNFs allocated to that portion of the project with a channel depth in excess of 50 feet;
- b. Provide all lands, easements, rights-of-way, including those required for relocations and dredged material placement facilities, acquire or compel the removal of obstructions, and perform or ensure the performance of all relocations, including utility relocations, as determined by the Federal government to be necessary for the construction, operation, and maintenance of the GNFs;
- c. For each relocation of a utility, or portion thereof, located in or under navigable waters of the United States that is required to accommodate a channel depth over 45

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feet, pay to the owner of the utility at least one half of the owner's relocation costs, unless the owner voluntarily agrees to waive all or a portion of the non-federal sponsor's contribution;

- d. Pay, with interest over a period not to exceed 30 years following completion of construction of the GNFs, an additional amount equal to 10 percent of the construction costs of the GNFs less the amount of credit afforded by the Federal government for the value of the real property interests and relocations, including utility relocations, provided by the non-federal sponsor for the GNFs, except for the value of the real property interests and relocations provided for mitigation, which is included in the construction costs of the GNFs.
- e. For general navigation features in excess of 50 feet (MLLW), pay 50 percent of the excess cost of operation and maintenance of the project, which includes operation and maintenance of dredged material placement facilities, over that cost which the Federal government determines would be incurred for operation and maintenance if the project had a depth of 50 feet;
- f. Ensure that the local service facilities are constructed, operated, and maintained at no cost to the Federal government, and that all applicable licenses and permits necessary for construction, operation, and maintenance of such work are obtained;
- g. Give the Federal government a right to enter, at reasonable times and in a reasonable manner, upon the real property interests that the non-federal sponsor owns or controls for the purpose of operating and maintaining the project;
- h. Hold and save the Federal government free from all damages arising from design, construction, operation and maintenance of the project, except for damages due to the fault or negligence of the Federal government or its contractors;
- i. Perform, or ensure performance of, any investigations for hazardous, toxic, and radioactive wastes (HTRW) that are determined necessary to identify the existence and extent of any HTRW regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601-9675, and any other applicable law, that may exist in, on, or under real property interests that the Federal government determines to be necessary for construction, operation and maintenance of the GNFs;
- j. Agree, as between the Federal government and the non-federal sponsor, to be solely responsible for the performance and costs of cleanup and response of any HTRW regulated under applicable law that are located in, on, or under real property interests required for construction, operation, and maintenance of the project, including the costs of any studies and investigations necessary to determine an appropriate

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response to the contamination, without reimbursement or credit by the Federal government;

- k. Perform the non-federal sponsor's responsibilities in a manner that will not cause HTRW liability to arise under applicable law to the maximum extent practicable; and
- I. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended, (42 U.S.C. 4630 and 4655) and the Uniform Regulations contained in 49 C.F.R Part 24, in acquiring real property interests necessary for construction, operation, and maintenance of the project including those necessary for relocations and placement area improvements; and inform all affected persons of applicable benefits, policies, and procedures in connection with said act.
- 10. The recommendations contained herein reflect the information available at this time and current departmental policies governing formulation of individual projects. These recommendations do not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the non-federal sponsor, the state(s), interested federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

SCOTT A. SPELLMON Lieutenant General, USA Chief of Engineers