



DEPARTMENT OF THE ARMY
CHIEF OF ENGINEERS
2600 ARMY PENTAGON
WASHINGTON, D.C. 20310-2600

AUG 13 2020

DAEN

MEMORANDUM FOR THE SECRETARY OF THE ARMY

SUBJECT: St. George Harbor Improvement, St. George, Alaska

1. I submit for transmission to Congress my report on navigation improvements for St. George, Alaska. It is accompanied by the report of the District Commander. These reports were prepared in response to Section 4010 of the Water Resources Development Act (WRDA) of 2007, Public Law 110-114, which authorizes a study to determine the feasibility of providing navigation improvements at St. George, Alaska. These reports are also prepared utilizing authority provided by Section 2006 of WRDA 2007, as amended, Remote and Subsistence Harbors, which provides that in conducting a study of harbor and navigation improvements the Secretary may recommend a project without demonstrating that the improvements are justified solely by National Economic Development (NED) benefits, if the Secretary determines that the improvements meet certain criteria. Preconstruction Engineering and Design (PED) activities, if funded, would be continued under the authority cited.

2. The City of St. George is on the northeast shore of St. George Island, the southernmost of five islands in the Pribilofs located in the Bering Sea. It lies 49 miles south of St. Paul Island, 750 air miles southwest of Anchorage, and 250 miles northwest of Unalaska. The 2017 population of St. George is 72. St. George is accessible only by water and air. St. George is also the name of the federally-recognized tribe on St. George. Subsistence activities are vital to this Alaska community and to many long term non-Native residents. The current conditions in the harbor are such that navigation to, from, and within the harbor are unsafe due to the wave climate in the entrance channel, seiche conditions within the inner basin, and degradation and overtopping of the existing breakwaters. These unsafe conditions limit the use of the harbor for all potential users. Access for barges is most restricted, with unsafe conditions occurring the majority of the year. The inability and inefficiencies related to delivering goods and fuel to the island directly impacts the cost of living at St. George. Due to vessel delays and the risk of damages, consumables are flown into the community at a higher cost than ocean going vessels could deliver.

3. The reporting officers recommend a plan to improve navigation access to St. George Island, Alaska. Based on an economic evaluation of alternative plan costs and economic benefits, none of the alternatives were economically justified. In accordance with the implementation guidance for Section 2006 of WRDA 2007, as amended, a Cost Effectiveness/Incremental Cost Analysis (CE/ICA) was undertaken to consider

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justification based on the contributions of the alternative plans to the long term viability of the region. The recommended plan results in a safe, reliable and efficient waterborne transportation system for the movement of commerce and subsistence vessels to St. George that allows for economic opportunities on the island and supports the long term viability of the city. The plan consists of a 450-foot wide by 550-foot-long mooring basin dredged to -20 feet Mean Lower Low Water (MLLW) protected by a 1,731-foot long north breakwater and a 250-foot long spur breakwater at the west edge of the basin. The basin connects to the Bering Sea with a 250-foot wide navigation channel dredged to -25 feet MLLW. Dredging the channel and basin for this alternative requires the removal of approximately 353,000 cubic yards of material. Inner harbor facilities would be created by filling an area to +10 feet MLLW, with a 300-foot long pile-supported dock and a concrete boat launch ramp to -5 feet MLLW for full tide launching access.

4. The recommended plan was developed in coordination with federal, state, and local agencies and Tribes, and has been determined to be environmentally acceptable. The recommended plan would not have any significant adverse effects; therefore, no compensatory mitigation measures would be required. The U.S. Army Corps of Engineers (USACE) will continue consultation in PED with the National Marine Fisheries Service for marine mammals protected under the Endangered Species Act and the Marine Mammal Protection Act. Completing consultation in PED will allow USACE to develop the necessary details to fully inform the National Marine Fisheries Service of effects to marine mammals. Details are necessary to determine the incidental take/harassment for anticipated confined underwater blasting required during construction. Unavoidable adverse impacts to cultural resources have been identified. A Memorandum of Agreement was executed in May 2020 between USACE and the Alaska State Historic Preservation Officer to address the adverse effects identified for the project.

5. Project Cost Breakdown based on Fiscal Year (FY) 2020 (October 2019) prices.

a. Project First Cost: The estimated project first cost of the recommended plan is \$159,838,000, which includes the cost of constructing the General Navigation Features (GNF) and the value of Lands, Easements, Rights-of-way, and Relocations (LERR) estimated as follows: \$141,199,000 for GNF, \$75,000 for LERRs, \$7,246,000 for PED, and \$11,318,000 for construction management.

b. Additional 10 Percent Payment: The non-federal sponsor is also required to pay, over 30 years, an additional 10 percent of the project first cost minus the LERR cost. This amount is estimated to be \$15,976,300. The LERR cost will be credited against this 10 percent amount.

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c. Estimated Federal and Non-Federal Cost Shares: The cost of construction in support of channel depths between 0 feet and including 20 feet MLLW is shared 90 percent federal and 10 percent non-federal. While the project has an entrance channel depth of 25-feet, where an entrance channel is deeper than the interior channels because of the more adverse navigation conditions of the entrance channel, cost sharing is the same as the deepest reach of the more protected interior channels. The federal and non-federal shares of the project first cost, adjusted for the non-federal LERR costs credited against the additional 10 percent payment, are estimated to be \$143,787,000 and \$16,051,000, respectively.

d. Operation and Maintenance Costs: Annual operation, maintenance, repair, replacement and rehabilitation for the recommended plan is estimated to be \$351,000.

e. Associated Costs: Estimated associated federal costs of \$91,000 include navigation aids, a U.S. Coast Guard expense.

f. Local Service Facilities: The associated costs for local service facilities is approximately \$23,764,000 for docks, mooring, causeway, and berthing areas. These are non-federal costs and are not included in the project first cost for the recommended plan.

g. Authorized Project Cost and Section 902 Calculation. The project first cost, for the purposes of authorization and calculating the maximum cost of the project pursuant to Section 902 of WRDA 1986, as amended, includes estimates for GNF construction costs and the value of LERR. Based on FY 2020 price levels (October 2019), the estimated project first cost for these purposes is \$159,838,000.

6. The recommended plan is supported by the City of St. George, which is the non-federal sponsor. Because benefit to cost ratios of alternative plans were all below 0.3, no NED plan was identified. Consistent with Section 2006 of WRDA 2007, a CE/ICA was completed to support plan selection. To characterize the long-term community viability at St. George, navigation access through the use of moorage days was used to characterize the opportunities in the area. The recommended plan would produce an additional 179 days for access and moorage. The recommended plan provides average annual benefits of \$1,066,000. The average annual cost is \$7,698,000. The benefit to cost ratio is 0.14. Economic analyses are based on a 50-year period of analysis and the FY 2020 federal discount rate of 2.75 percent.

7. In accordance with USACE policy on the review of decision documents, all technical, engineering and scientific work underwent an open, dynamic and vigorous review process to ensure technical quality. This included two Agency Technical Reviews, and two USACE headquarters policy and legal reviews. An exclusion from Independent

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External Peer Review was granted. All concerns identified during the above reviews have been addressed and incorporated in the final report.

8. Washington level review indicates that the project recommended by the reporting officers is technically sound, environmentally and socially acceptable, and cost effective. The plan complies with all essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Related Land 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.

9. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the navigation improvements for St. George, Alaska, be authorized in accordance with the reporting officers' recommended plan. My recommendation is subject to cost sharing, financing, and other applicable requirements of federal laws and policies, including Section 101 of WRDA 1986, as amended (33 U.S.C. 2211). The non-federal sponsor is responsible for providing the non-federal share of project costs and all lands, easements, and rights of way, including those necessary for the borrowing of material and the disposal of dredged or excavated material, and would perform or assure the performance of all relocations, including utility relocations. This recommendation is subject to the non-federal sponsor agreeing to comply with applicable federal laws and policies. Prior to implementation, the non-federal sponsor shall agree to:

a. Provide, during the periods of design and construction, funds necessary to make its total contribution for commercial navigation equal to 10 percent of the cost of design and construction of the general navigation features attributable to dredging to a depth not in excess of -20 feet MLLW, plus 10 percent of the cost of design and construction attributable to dredging the entrance channel to a depth in excess of -20 feet MLLW, which is cost shared at the same percentage because the greater depth is due to adverse navigation conditions.

b. Provide all LERR, including those necessary for the borrowing of material and placement of dredged or excavated material, and perform or assure performance of all relocations, including utility relocations, as determined by the Federal Government to be necessary for the construction or operation and maintenance of the GNF, all in compliance with applicable provisions of the Uniform Relocation and Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601-4655) and the regulations contained in 49 C.F.R. Part 24.

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c. Pay with interest, over a period not to exceed 30 years following completion of the period of construction of the GNF, an additional amount equal to 10 percent of the total cost of construction of the GNF less the amount of credit afforded by the Federal Government for the value of the lands, easements, rights-of-way, and relocations, including utility relocations, provided by the non-federal sponsor for the GNF. If the amount of credit afforded by the Federal Government for the value of LERR, including utility relocations, provided by the non-federal sponsor equals or exceeds 10 percent of the total cost of construction of the GNF, the non-federal sponsor shall not be required to make any contribution under this paragraph, nor shall it be entitled to any refund for the value of LERR, including utility relocations, in excess of 10 percent of the total costs of construction of the GNF.

d. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on project lands, easements, and rights-of-way or the addition of facilities which might reduce the outputs produced by the project, hinder operation and maintenance of the project, or interfere with the project's proper function.

e. Provide, operate, and maintain, at no cost to the Federal Government, the local service facilities in a manner compatible with the project's authorized purposes and in accordance with applicable federal and state laws and regulations and any specific directions prescribed by the Federal Government.

f. Hold and save the United States free from all damages arising from the construction or operation and maintenance of the project, any betterments, and the local service facilities, except for damages due to the fault or negligence of the United States or its contractors.

g. Perform, or ensure performance of, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 9601-9675, that may exist in, on, or under LERR, and disposal areas that the Federal Government determines to be necessary for the construction or operation and maintenance of the GNF. However, for lands, easements, or rights-of-way that the Federal Government determines to be subject to the navigation servitude, only the Federal Government shall perform such investigation unless the Federal Government provides the non-federal sponsor with prior specific written direction, in which case the non-federal sponsor shall perform such investigations in accordance with such written direction.

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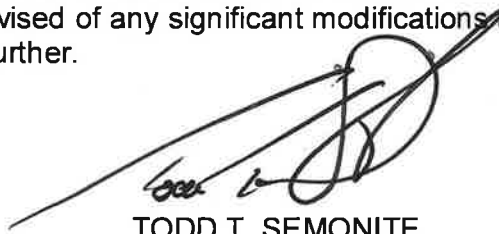
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h. Assume complete financial responsibility, as between the Federal Government and the non-federal sponsor, for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under LERR, and disposal areas required for the construction or operation and maintenance of the project.

i. Agree, as between the Federal Government and the non-federal sponsor, that the non-federal sponsor shall be considered the operator of the local service facilities for the purpose of CERCLA liability, and, to the maximum extent practicable, perform its obligations related to the project in a manner that will not cause liability to arise under CERCLA.

10. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does 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 the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the sponsor, the state, interested federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

*PROUD TO SUPPORT
THE GREAT TRIBE OF
SAINT GEORGE TO PROVIDE
A SAFE AND ECONOMICAL
PORT FOR THIS
CRITICAL FISHING COMMUNITY.*



TODD T. SEMONITE
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