DEPARTMENT OF THE ARMY
CHIEF OF ENGINEERS
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DAEN

THE SECRETARY OF THE ARMY

MAR 12 2021

SUBJECT: Elim Subsistence Harbor Study, Elim, Alaska

1. I submit for transmission to Congress my report on navigation improvements for Elim, Alaska. It is accompanied by the report of the District Commander. These reports were authorized by Section 203 of the Water Resources Development Act (WRDA) of 2000, as amended (33 U.S.C. 2269), the Tribal Partnership Program, which provides that the Secretary of the Army may carry out studies to determine the feasibility of the design and construction of water resources development projects that will substantially benefit Indian tribes, including Alaska Native Tribes. The design and construction of a project that is estimated to have a federal share of more than $18,500,000 requires Congressional authorization. These reports also utilize the authority of Section 2006 of WRDA 2007, as amended (33 U.S.C. 2242), 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 improvements meet certain criteria. Preconstruction Engineering and Design (PED) activities, if funded, would be continued under the authorities cited.

2. Elim is located on the northwest shore of Norton Bay on the Seward Peninsula, 96 miles east of Nome, and 460 miles northwest of Anchorage. Elim is located in the Nome Census Area, the Cape Nome Recording District, and the area encompasses 2.4 square miles of land. The 2018 population of Elim is 368. Elim is accessible only by water and air and, during the winter, snow machine. The Native Village of Elim is the federally-recognized tribe associated with the community of Elim. Subsistence activities are vital to this Alaskan community.

Elim has no moorage, harbor, or barge landing infrastructure, which affects commercial and subsistence fishers, vessels which transport fish from the fish buying station to the fish processing plant known as tenders, and the barges delivering fuel and freight to the community. Elim Beach is currently used for temporary subsistence and commercial boat storage, with vessels being pulled onto the beach. Freight barges currently beach on Elim Beach for offloading freight during high tide, or goods are lightered in from near shore. The freight barges must wait for high tide to beach and then offload quickly or become stranded, waiting until the next high tide to leave. While unloading, a tugboat must push the freight barge against the shore and remain idling to hold the barge in place. The fuel barge double-anchors offshore and must float a hose across open water

to deliver fuel. Moses Point is currently utilized for commercial and subsistence activities. Moses Point is approximately 12-15 miles northeast along a gravel road that is susceptible to storms and coastal erosion. The distance from the village and the propensity for the road to becoming impassable during bad weather leads to many missed opportunities for subsistence and commercial activities based from the Moses Point area. Additionally, rescue operations for vessels in distress are hampered in their ability to mobilize search and rescue efforts. Commercial and subsistence vessels are damaged in storms while stored at Moses Point or at Elim Beach. Marine infrastructure at Elim would improve efficiency for vessels, reduce damages to vessels, provide safer operations for residents, and enhance the long-term viability of the community.

3. The reporting officers recommend a plan to improve navigation access to Elim, 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 (33 U.S.C. 2242), a Cost Effectiveness/Incremental Cost Analysis (CE/ICA) was undertaken to consider 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 by providing for the safe maneuverability and protected mooring of the existing and anticipated fleet, and increasing the percentage of time that harbor facilities can be safely accessed. The Recommended Plan allows for the more efficient delivery of fuel and goods to the community, increases opportunities to harvest subsistence and commercial resources, and allows tenders to utilize the harbor. The resulting increase in efficency and operations coupled with expanded economic opportunities would provide the community the ability to enhance their local economy based on marine resources, which is essential for supporting Elim's mixed subsistence-cash economy and providing numerous benefits to strengthen the viability of the community of Elim.

4. The Recommended Plan includes a harbor at Elim Beach sized to accommodate one 160-foot barge and associated 86-foot tug, two tenders, and 50 vessels varying in size from 18 feet to 32 feet. The plan consists of a 300-foot wide entrance channel with a dredging depth of -13.0 feet Mean Lower Low Water (MLLW). Two rubble-mound breakwaters will encompass a 1.4-acre moorage basin to accommodate the 50 vessels and an interior channel to provide access to a boat launch with a dredging depth of -9.0 feet MLLW and a 2.5-acre turning and maneuvering basin for the tenders and barge and tug with a dredging depth of -13.0 feet MLLW. The west breakwater would be approximately 986 feet long and the east breakwater approximately 820 feet long. The eastern breakwater would be attached to the land. Also included in the project is approximately 1 acre of uplands for upland boat moorage, vehicle and trailer parking, and temporary connex storage. The plan includes an 87-foot long tender dock and a 100-foot wide barge landing with two moorage points. A road approximately 250 feet in length would connect the uplands to the boat launch. The fuel header would be extended from the existing fuel header currently located on the bluffs above Elim Beach. The fish buying station would also be relocated from Moses Point to Elim.

Maintenance dredging of the entrance channel and maneuvering basin would be conducted on an estimated 20-year cycle requiring dredging of approximately 40,000 cubic yards (CY) each cycle. The material from maintenance dredging would be disposed of in the offshore disposal area east southeast of the project site. Approximately 1,177 CY of the armor stone for the breakwater would need to be replaced every 25 years.

5. The Native Village of Elim is the non-federal cost sharing sponsor for all features. The project cost breakdown is based on Fiscal Year 2021 dollars at a discount rate of 2.5 percent.

a. Project First Cost: The estimated project first cost of the Recommended Plan is $74,538,000, including estimated general navigation features (GNF) constuction costs of $74,430,000, and the estimated value of lands easements, rights-of-way, and relocations (LERR) of $108,000.

b. Estimated Federal and Non-Federal Cost Shares: In accordance with the cost sharing provisions of Section 101 of WRDA 1986, as amended (33 U.S.C. 2211), the sharing of the GNF construction costs, estimated at $74,430,000, to support the Elim subsistence harbor would be 90 percent federal, or an estimated $66,987,000, and 10 percent non-federal, or an estimated $7,443,000, prior to the application of the non-federal cost sharing waiver and of the ability to pay reduction applicable to this project. The waiver of non-federal cost sharing of up to $511,000 provided to Indian tribes, including Alaska Native Tribes, by Section 1156 of WRDA 1986, as amended (33 U.S.C. 2310), is applicable to the Recommended Plan. In addition, Section 203(d)(1) of WRDA 2000, as amended (33 U.S.C. 2269(d)(1)), provides that the ability to pay of the Indian tribe be considered in determining the non-federal cost share in accordance with implementation guidance of the Secretary. The reporting officers have determined that the Native Village of Elim has met the criteria set out in the implementation guidance, and the non-federal share has been reduced accordingly. With the application of the Section 1156 waiver and Tribal Partnership ability to pay provision, the initial federal share of the project first cost is estimated to be $72,697,000 and non-federal share is $1,841,000, including the estimated value of LERR of $108,000 to be provided by the non-federal sponsor.

c. Additional 10 Percent Payment: The non-federal sponsor is required to pay an additional 10 percent of the project cost, as reduced by the LERR amount, and also as adjusted for the Tribal ability-to-pay, which is estimated to amount to $1,834,000, and may be paid over 30 years with interest.

d. Local Service Facilities: The cost for local service facilities is approximately $19,128,000, which consists of constructing a tender dock, moorage area, barge landing, boat launch and associated facilities on land. These costs are 100 percent non-federal and are not included in the project first costs.

e. Associated Costs: Aids to Navigation were calculated at $94,000 and are an associated federal cost.

f. Operation and Maintenance Costs: Operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) of the project after construction will consist of dredging of GNF features every 20 years and minor rock replacement on the breakwaters every 25 years with an estimated average annual cost of $131,000.

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 (33 U.S.C. 2280), includes estimates for GNF construction costs and the value of LERR provided under Section 10l(a)(3) of WRDA 1986, as amended (33 U.S.C. 2211(a)(3)). Accordingly, based on an October 2020 Price Level, the estimated project first cost for these purposes is $74,538,000.

6. The non-federal sponsor for this study, the Native Village of Elim, is supportive of the Recommended Plan. Because benefit to cost ratios of alternative plans were all below 0.5, no NED plan was identified. Consistent with Section 2006 of WRDA 2007, as amended (33 U.S.C. 2242), a CE/ICA was completed to support plan selection. To evaluate the alternatives' impact on the long-term community viability at Elim, navigation access through the use of moorage days was used to characterize the opportunities in the area. The Recommended Plan provides average annual benefits of $1,107,000. The average annual cost is $3,451,000, with net annual benefits of ($2,344,000). The benefit to cost ratio is 0.32. Economic analyses are based on a 50-year period of analysis.

7. The Recommended Plan was developed in coordination with federal, state, and local agencies and Tribes, and has been determined to be environmentally acceptable. Coordination will continue with the National Marine Fisheries Service (NMFS) pursuant to the Endangered Species Act (ESA), as amended (16 U.S.C. 1531 *et seq.*) and Marine Mammal Protection Act (MMPA), as amended (16 U.S.C. 1361 *et seq.*) for effects to marine mammals related to underwater noise and vessel movement. ESA and MMPA consultations will be completed in PED when construction details needed to inform incidental take are known.

8. In accordance with United States Army Corps of Engineers' Civil Works review policy, 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 Headquarters policy and legal compliance reviews. An exclusion from a Type I Independent External Peer Review was granted. All concerns identified during the reviews have been addressed and incorporated in the report.

9. 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 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.

10. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that the navigation improvements for Elim, Alaska, be authorized in accordance with the reporting officers' Recommended Plan with such modifications as in the discretion of the Chief of Engineers may be advisable. 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 application of the $511,000 waiver of non-federal cost sharing provided by Section 1156 of WRDA 1986, as amended (33 U.S.C. 2310), and the application of the ability to pay reduction in accordance with Section 203(d)(1) of WRDA 2000, as amended (33 U.S.C. 2269(d)(1)). The non-federal sponsor is responsible for providing the non-federal share of the project costs and all lands, easements, and rights of way, including those needed 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. Federal implementation of the recommended project would be subject to the non-federal sponsor agreeing to comply with federal laws and policies, including but not limited to:

a. Provide, during the period of design and construction, funds necessary to make its total contribution to commercial navigation equal to 10 percent of the cost of design and construction of the GNFs attributable to dredging to a depth not in excess of -20 feet MLLW, as reduced by the waiver amount in accordance with Section 1156 of WRDA 1986, as amended (33 U.S.C. 2310) and by application of the ability to pay factor in accordance with Section 203 of WRDA 2000, as amended (33 U.S.C. 2269).

b. Provide all lands, easement, and rights-of-way (LER), including those necessary for the borrowing of material and placement of dredged or excavated material, and perform or assure the performance of all relocations, including utility relocations, all as determined by the federal government to be necessary for the construction or operation and maintenance of the GNFs and all in compliance with applicable provisions of the Uniform Relocation 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;

c. Pay with interest, over a period not to exceed 30 years following completion of the period of construction of the GNFs, an additional amount equal to 10 percent of the total cost of construction of GNFs less the amount of credit afforded by the federal government for the value of the LER and relocations, including utility relocations, provided by the non-federal sponsor for the GNFs. If the amount of credit afforded by the federal government for the value of LER, and relocations, including utility relocations, provided by the non-federal sponsor equals or exceeds 10 percent of the total cost of construction of the GNFs, 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 LER and relocations, including utility relocations, in excess of 10 percent of the total costs of construction of the GNFs;

d. 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 laws and regulations and any specific directions prescribed by the Government;

e. Give the federal government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-federal sponsor owns or controls for access to the project for the purpose of completing, inspecting, operating and maintaining the GNFs;

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. Keep and maintain books, records, documents, or other evidence pertaining to costs and expenses for a minimum of three years after the final accounting and assure that such materials are reasonably available for examination, audit, or reproduction by the federal government;

h. Perform, or ensure performance of, any investigations for hazardous substances as 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 U.S.C. 9601–9675, that may exist in, on, or under LER that the federal government determines to be necessary for the construction or operation and maintenance of the GNFs. 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;

i. 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 LER that the federal government determines to be necessary for the construction or operation and maintenance of the project; and

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

11. 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 non-federal 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.

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Chief of Engineers