REPAIR FUEL PIER-LONG TERM EARECKSON AIR STATION SHEMYA, ALASKA (EAR063)

Welcome to all prospective offerors and interested parties. USACE Alaska District is advertising a firm-fixed price Design-Build (DB) Sustainment, Restoration, and Modernization project: Repair Fuel Pier-Long Term (EAR063) at Eareckson Air Station, Shemya, Alaska to provide a **50yr** pier repair solution.

This will be a Full and Open procurement with subcontracting opportunities with a contract cost limitation of approximately \$131M. The procurement will be conducted using two-phase source selection procedures and the award will be based on best value tradeoff source selection procedures, considering the price and non-price factors cited in the solicitation.

The information provided herein is for informational purposes only and is not meant to replace any official contract documentation. All questions shall be submitted in the Dr Checks Bidder Inquiry.





AGENDA

- > PURPOSE
- CONTRACTING INFORMATION
- > SOLICITATION INFORMATION
- > PROJECT OVERVIEW
- > ORIENTATION PLAN
- > RECENT DAMAGE
- EMERGENCY REPAIRS
- OPERATIONAL AND LOGISTICAL RESTRICTIONS
- UNEXPLODED ORDNANCE CLEARANCE
- > GEOTECHNICAL AND GEOPHYSICAL INVESTIGATIONS
- WESTERN SHORELINE PROTECTION
- ONGOING ENVIRONMENTAL COORDINATION





USACE ALASKA PROJECT TEAM

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CONTRACTING INFORMATION

Formal solicitation can be found via https://sam.gov/content/opportunities or https://piee.eb.mil/sol/xhtml/unauth/index.xhtml.

All communication regarding the solicitation should be routed through the contracting specialist and contracting officer.

Technical Inquiries and Questions should be submitted to ProjNet.

Any changes to the solicitation will be published to sam.gov and PIEE.EB.MIL.

Proposals will only be accepted via the PIEE Solicitation module.





REPAIR FUEL PIER-LONG TERM, EARECKSON AIR STATION, SHEMYA, ALASKA (EAR063)

- Solicitation Number: W911KB22R0005
- Phase 1 Offers Due: <u>14-Dec-2021 2:00pm AKST</u>
- Solicitation documents available for download via PIEE Solicitation module at:
 - https://piee.eb.mil/sol/xhtml/unauth/search/oppMgmtLink.xhtml?solNo=W911KB22R0005
- Electronic proposals will <u>only</u> be accepted via the PIEE Solicitation Module website. Additional information concerning PIEE can be found at:
 - https://pieetraining.eb.mil/wbt/xhtml/wbt/sol/index.xhtml





REPAIR FUEL PIER-LONG TERM, EARECKSON AIR STATION, SHEMYA, ALASKA

- Technical inquiries and questions:
 - via ProjNet at http://www.projnet.org/projnet
 - Bidder Inquiry Key is: NFEHNV-H4BIN3
 - System will close <u>10 Calendar Days</u> prior to proposal due date





- Schedule 1 (base)
 - o 0001 Design, Complete
 - o 0002 Mobilization and Demobilization required for Long Term Repair, Complete
 - o 0003 Construct 50 Year Design Life Pier, Complete
 - o 0004 Install New Transformer, Complete
 - o 0005 Construct Permanent Repairs at Fuel Line, Complete
 - o 0006 Construct 450 feet (60% of Total) Western Shore Protection, Complete
- Schedule 2 (optional work)
 - o 0009 Design and Construct 300 feet (Remaining 40% of Total) Western Shore Protection, Complete
- Schedule 3 (optional work)
 - o 0007 Stockpile, Sample, and Test Potentially Contaminated Soil Including Construction of Holding Cells, Estimated Quantity
- Schedule 4 (optional work)
 - o 0008 Dispose of POL Contaminated Soil, Estimated Quantity





Option Expirations and Associated Time Extension:

Proposal Schedule	Condition	Impact to Schedule
Schedule 2	Exercised within 120 days after NTP	No time extension
Schedule 3	Exercised prior to contract completion	Must be completed within 90 days of option exercised
Schedule 4	Exercised prior to contract completion	Must be completed within 180 days of option exercised





Eareckson Air Station is on Shemya Island, a logistically challenging, remote location at the western end of the Aleutian Island chain, approximately 1,500 air miles southwest of Anchorage.

The pier is in critical condition and cannot serve its purpose currently. The entire pier deck is limited to essential personnel only due to weight capacity limitation as a result of severe structural damage beneath. There were holes in the existing sheet pile which exposed the structural components to wave energy. There are voids within the cells where the structural fill has eroded away. The entire east face of sheet pile has torn off and other sheets piles were loose. All vehicular access to the pier is cut off due to erosion of the western shoreline. Design and repair will include replacement/refurbishment of the existing fuel pier and armoring of the adjacent, western shoreline and must be done in a timely manner to avoid a complete loss of the pier's structure.





Repair the pier components damaged in the February 2020 storm event.

- Repairs include a combi-wall system to encapsulate the existing pier's face.
 - The combi-wall system will extend approximately 560 Lineal Feet from the northern bulkhead corner, along the entire berthing face, and around the northern perimeter.
 - The large annular volume will be filled with cyclopean concrete which uses large stones to decrease the required volume of concrete.
- A new tieback system will be installed below the top of the deck elevation.
 - The proposed tie back system will require the removal and replacement of the existing pier deck.





(cont.)

- All existing voids and undermining in the original pier will be filled with grout.
- The repair will include a new fender system, electrical including lighting, fuel distribution and header, anodes, ladders and bollards.
- Repair Western Shoreline to slow coastal retreat and protect shore-side facilities, including the pier's access drive.
 - Removal and excavation of any existing seawall, debris, and past erosion systems in order to install new erosion protection.
 - New shoreline protection will utilize armor rock and precast concrete armor units.













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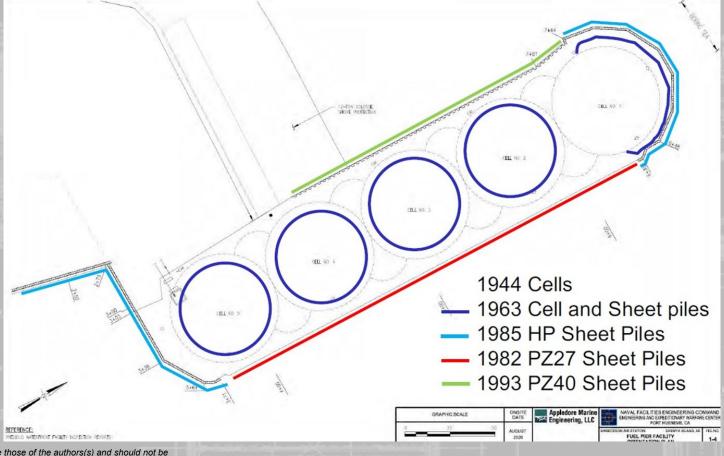




US Army Corps of Engineers ®

ORIENTATION PLAN

General overview of construction methodology and associated timeline of component addition.







Pier face separation from concrete deck up to 12 inches.







Pier face separation from concrete deck up to 12 inches.







Wave action entering via sheet piles torn away from pier face.







Wave action entering via sheet piles torn away from pier face.







Concrete patching located on east-facing pier edge.







Grout tubes filled along east-facing pier edge.







Concrete patching and grout tube located on east-facing pier edge.







Reduced wave action observed after pier face repairs completed.







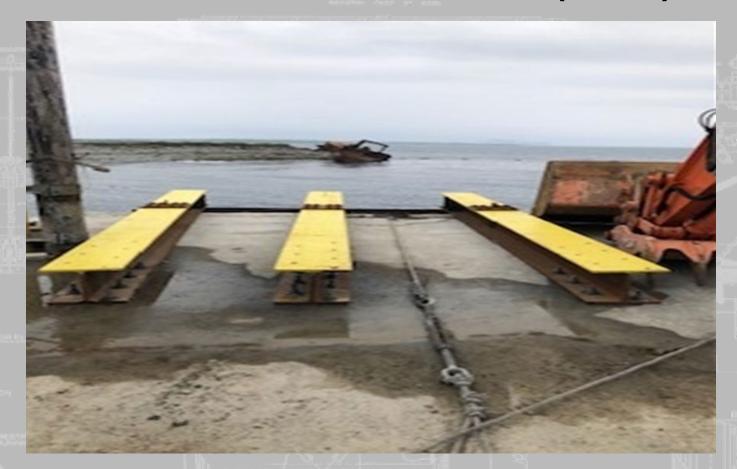
Bearing pad installed on concrete pier deck.







Steel members installed on concrete pier deck looking West.







Steel "banjo" installed on concrete pier deck looking East.







Steel "banjo" installed on concrete pier deck looking South.







Steel "banjo" installed on concrete pier deck and new steel pier-face sheeting.







Steel members installed on concrete pier deck.







Steel shims installed on pier face.







Steel members and shims installed on pier face.







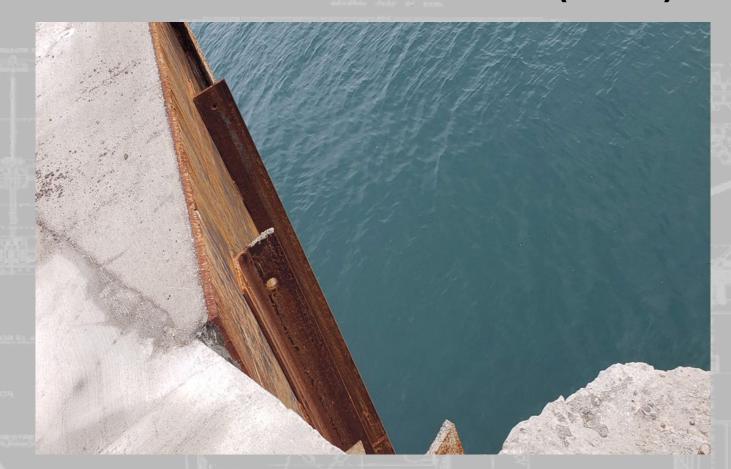
Steel members and shims installed on pier face.







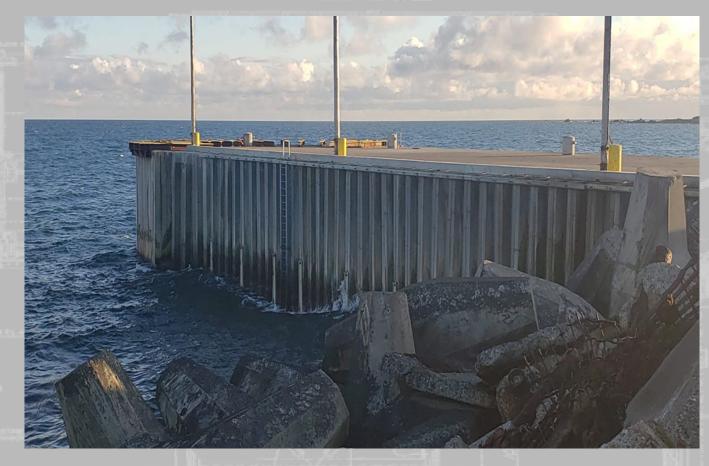
Steel sheet installed on pier face.







Finished short-term repairs on pier nose looking Northeast.







Finished short-term repairs on pier nose looking North.







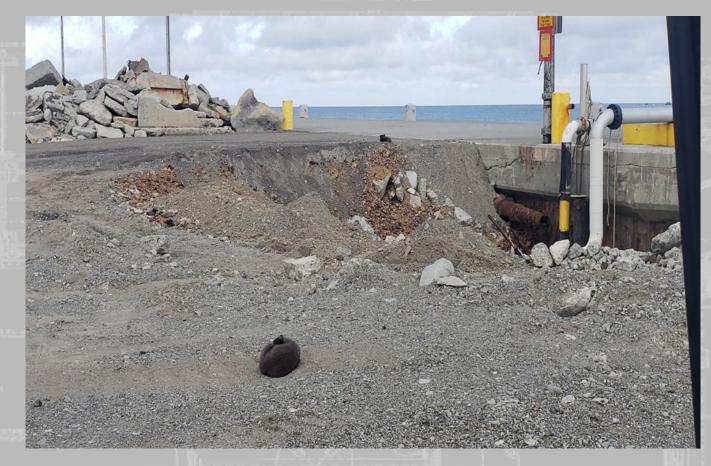
Profile of pier internal structure and existing fuel head.







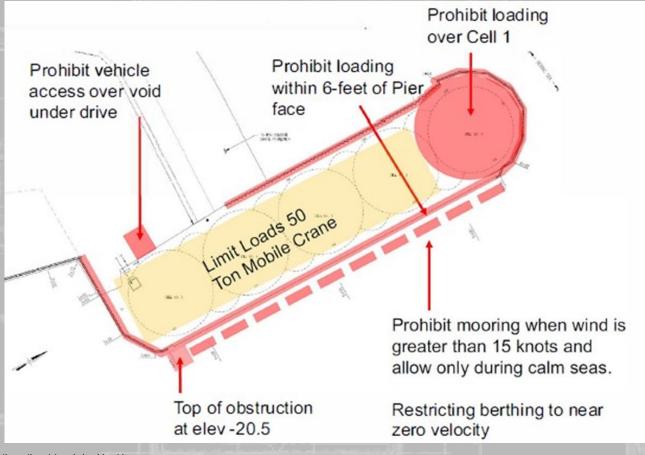
Pier access ramp, resident fox population, and existing fuel head.







OPERATIONAL AND LOGISTICAL RESTRICTIONS







OPERATIONAL AND LOGISTICAL RESTRICTIONS

Overview of project site and approved barge landing location.







UNEXPLODED ORDNANCE CLEARANCE

Unexploded ordinance (UXO) identification, removal, and disposal will be handled by USACE Huntsville. A qualified UXO Contractor will clear the construction area and provide construction support throughout the project.

Any efforts that require breaking ground of any amount or involve work within the water will require a UXO clearing activity and shall be accounted for in project scheduling.

It is expected that close coordination between the selected offerors and the UXO contractor shall be required.





UNEXPLODED ORDNANCE CLEARANCE

A Munitions and Explosives of Concern (MEC) Probability Assessment was performed in 2018. That document is provided on the following slides.

"In summary, MEC was found historically at the Alcan Harbor Beach on the surface and may also exist in the subsurface at these MRSs. Potential pathways for exposure to MEC at these sites may include walking and intrusive activities. MEC has also been found historically in the underwater portion of the Alcan Harbor and exposure to MEC in the underwater portion of the MRS may include but not limited to divers or personnel performing construction activities such as dredging, pile driving, landing and/or mooring of watercraft."





2018 USACE MEC Probability Assessment.

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MEC Probability Assessment

This assessment is used to determine the probability of encountering MEC during USACE projects. The probability will be scored as: "No probability", "Low probability", or "Moderate to High probability". Results of the assessment will determine what action if any is needed. See EM 385-1-97, Chapter III for appropriate response.

Site Name / Location	Project #	Date
Alcan Harbor/Eareckson Air Station, Alaska	V	19-April-2018
	(MRS DA002A)	

Site History and Project Description

The current mission of Eareckson AS, formerly Shemya Air Force Base (AFB), is to provide logistical support for en route military aircraft, to provide early warning radar surveillance, and to support Department of Defense (DoD) communications. It is frequently employed as a refueling stop for military flights for air routes to Japan, China, Indo-China, and other destinations in Asia and the Pacific (USAF, 1998). Eareckson AS has restricted access to mission-related personnel; no public recreation or tourism is currently permitted (USAF, 2003).

Historical evidence suggests that Alcan Harbor contains submerged jettisoned munitions. Jettison activities reportedly occurred sometime prior to 1956; a Hydrographic Office Notice to Mariners identified "all the waters of Alcan Harbor southward of, and its approaches within an area of 500-yard radius northward of 52°44′06″N., 174°04′25″E." as dangerous in February of1956. Ordnance has historically been discovered washed up on shore or found in the shallow waters off of the beach. EOD reports note the following MEC discoveries (USAF, 2010a):

- A letter dated 30 April 1956 from the U.S. Coast Guard (USCG) to the USACE indicated evidence that high explosive bombs had been jettisoned in Alcan Harbor. It was undetermined if MEC was actually present in the harbor (USCG, 1956).
- In October 1958, Hill AFB EOD and U.S. Navy performed a land clearance of Alcan Harbor. Ordnance found was the same as in 1955 with the addition of AN-M57 and ANM65 bombs found underwater (USAF, 2010a).
- A 1983 EOD trip report indicated evidence that Shemya was cleared in 1946–1947 by the 18th Air Ammunition Squadron. All ordnance found was placed on a barge, taken to an area just north of Alcan Harbor, and sunk. The report concluded that the location of the sunken munitions barge and the pattern of sea current could account for the ordnance discoveries along the north beach areas (USAF, 1983a).

2018 USACE MEC Probability Assessment.

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MEC Probability Assessment

- In 1987, a 250-lb AN-M57 bomb with an M112 tail fuze along with 94 rounds of .50 caliber ammunition was discovered washed up on shore approximately 50 yards west of the pier. EOD retrieved the items and disposed of them by detonation (USAF, 2010a).
- In 1987, an unfuzed, unfired M101 155mm projectile was found in 30 feet of water in Alcan Harbor. EOD retrieved the projectile and disposed of it by detonation (USAF, 2010a).
- In 2004, a 37mm M16 cartridge was found washed ashore on Alcan Harbor Beach. EOD secured and disposed of the cartridge (USAF, 2010a).
- In 2005, a second 37mm M16 cartridge was found washed ashore on Alcan Harbor Beach. EOD again secured and disposed of the cartridge (USAF, 2010a).
- In 2006, a visual survey was conducted at the site as part of the CSE Phase I. Small Arms Ammunition (SAA) was found during the visual survey; no MEC was found (USAF, 2007).
- In 2008, a visual survey was conducted at the site as part of the CSE Phase II. SAA was found during the visual survey; no MEC was found (USAF, 2010a).

In summary, MEC was found historically at the Alcan Harbor Beach on the surface and may also exist in the subsurface at these MRSs. Potential pathways for exposure to MEC at these sites may include walking and intrusive activities. MEC has also been found historically in the underwater portion of the Alcan Harbor and exposure to MEC in the underwater portion of the MRS may include but not limited to divers or personnel performing construction activities such as dredging, pile driving, landing and/or mooring of watercraft.

2018 USACE MEC Probability Assessment.

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MEC Probability Assessment

Nothing follows.

Table Z.1 - Munitions Type

Physical or historical evidence suggests High/low Explosives (i.e., pyrotechnics, Riot control filler, propellants, or Chemical Agent) regardless of configuration may be located on site.	10
Small Arms Ammunition. Physical or historical evidence supports that no military munitions other than small arms were used on the site.	2
Physical or historical evidence supports that no military munitions or small arms ammunition were used on site.	0

Circle the highest score that applies to the site.

Table Z.2 - Hazard Source

Physical or historical evidence supports the site is a former or active range		
(practice or Live), for Open Burning/Open Detonation of Munitions, munitions		
burial pit, or the site is a former or active munitions maintenance, manufacturing,		
or demilitarization facility.		
Physical or historical evidence supports the site was a firing point, munitions stora transfer point, or small arms range.	ge or 2	
Physical or historical evidence supports that no military munitions or small arms ammunition were used on site.	0	

Circle the highest score that applies to the site.

Table Z.3 - MEC Assessment

Total score from tables 1 and 2	
Combined score from tables 1 and $2 = 8 - 15$	Moderate to High probability
Combined score from tables 1 and $2 = 1-7$	Low probability
Combined score from tables 1 and $2 = 0$	No probability

Circle the probability assessment.

GEOTECHNICAL AND GEOPHYSICAL INVESTIGATIONS

Recent task orders have been awarded to provide results from Geomatic, Geophysical, and Geotechnical Investigations. To date the following activities have been accomplished:

- 3ea test pits have been dug to 10ft depth along the Western Shoreline
- Geophysical data gathered from those same pits
- 6ea Borings through the pier to a depth of 100ft below deck height

Locations of those efforts are shown on the following slide.

Results of these findings will be provided as an amendment to this announcement as they become available.





Locations of forthcoming Geophysical and Geotechnical Investigations.







GEOTECHNICAL AND GEOPHYSICAL INVESTIGATIONS

It is expected that prior to design and construction successful offeror shall perform an offshore investigation around the work area consisting of a seafloor multi-beam Bathymetric survey and Geophysical survey to thoroughly characterize the underlying subsurface strata.





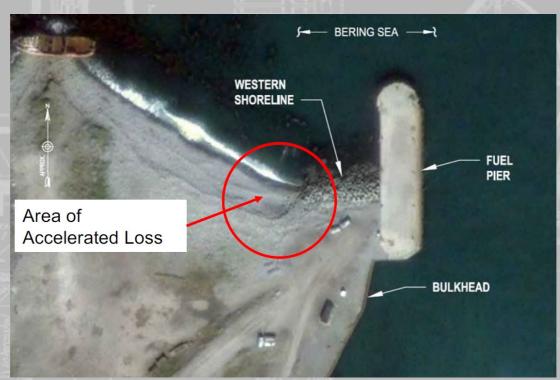
WESTERN SHORELINE PROTECTION (2001)

Significant loss of shoreline has occurred in the recent past. Shoreline retreat has been estimated at 4ft per year.









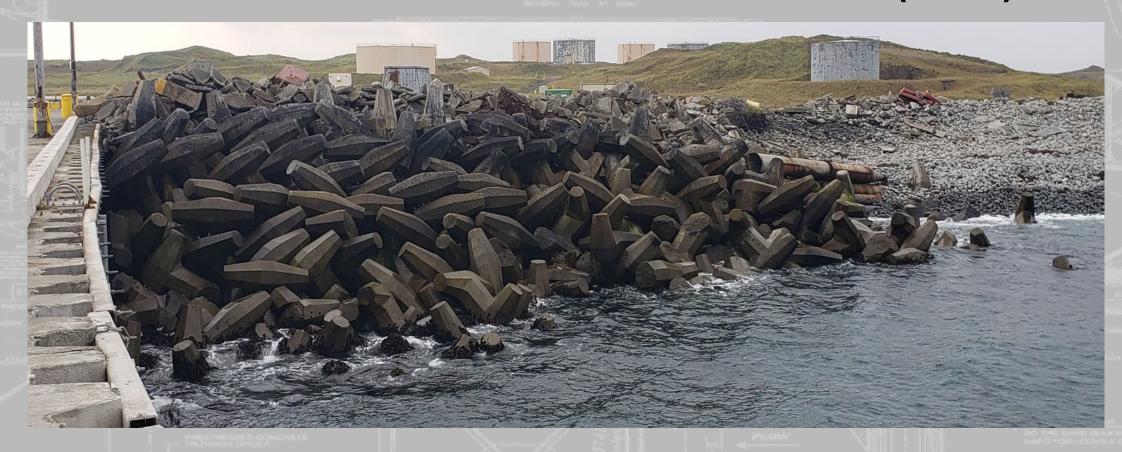
WESTERN SHORELINE PROTECTION (2001)







WESTERN SHORELINE PROTECTION (2021)







ONGOING ENVIRONMENTAL COORDINATION

Beginning in May 2021 USACE biologists have completed monthly marine mammal surveys on Shemya Island. These surveys provide a necessary part of the data needed for the Letter of Authorization (LOA) needed under the Marine Mammal Protection Act and for Endangered Species Act Coordination. Compliance with these two acts is a longer process than NEPA, so it has been the top priority. It was also necessary to gather the field data during the summer and fall when construction would likely occur. More field surveys are scheduled for late September and August this year. Concurrently, the framework for the LOA application is being developed and upcoming work will center around incorporating the dock design and construction methodology into the analysis for the LOA application.

*Environmental Assessment must be completed in full before physical construction commences.





WE SINCERELY APPRECIATE YOUR PARTICIPATION







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Solicitation W911KB22R0005 can be found via https://sam.gov/content/opportunities or https://piee.eb.mil/sol/xhtml/unauth/index.xhtml.



