

**RFI 157
Pebble Project EIS**

Request for Information

Title/Subject:	Bridge Construction Techniques
Requestor:	US Coast Guard
Date Transmitted:	06 Nov 2019
Recipient:	Pebble Limited Partnership
Response Requested by:	17 Jan 20
Rationale:	Information on anticipated bridge construction techniques will help inform the public as to what impacts will be temporary and what impacts may be permanent.
Describe the Information Requested and Level of Detail:	We request the following: Brief description of bridge construction techniques explaining use of temporary trestles used to install fixed bridges. Expected length of time needed for construction. Expected time windows for construction. Use of temporary pilings and plans for removal of any temporary construction trestle or associated pilings. Reduced navigational clearances during construction. Planned mitigation or remediation for areas directly impacted during construction. The level of detail need not include final engineering plans, but rather enough information on the construction activities to allow the Coast Guard to assess impacts caused during construction under environmental control laws and whether those impacts are temporary or lasting.

Recipient Response Form

Date Received from USACE:	Click here to enter text.
Response from Recipient (Describe Information Requested to the Level of Detail Requested; Provide Attachments as Needed):	Please see attached Technical Memorandum from Rowland Engineering Consultants
List Number and Type of Response Attachments:	RFI157_Pebble_Bridge Construction_Technical_Memorandum.pdf
Date Returned to USACE:	Click here to enter text.

AECOM Intake Form

Date Response was Received:	12/10/2019
Received by:	AECOM
Describe any Follow-up Related to this RFI:	Click here to enter text.



TECHNICAL MEMORANDUM

To: James Fueg
From: RECON, LLC: Steven Rowland, PE
Subject: Pebble Access Road, Multi-span Bridge Construction Techniques
Date: December 9, 2019

Summary

RECON has prepared this Technical Memo to provide a description and summary of the proposed use of temporary work trestles for construction of the proposed multi-span bridges on the Newhalen River and Gibraltar River.

Multi-span Bridge Construction Techniques

A temporary work trestle is planned for installation parallel to the Pebble Project (Project) access road bridges to be constructed over the Newhalen River and Gibraltar River. The intent of the work trestle is to facilitate construction of the permanent bridge by providing temporary access for workers, materials, and equipment (e.g. crane). Preliminary design assumes a temporary work trestle would be approximately 24 feet wide and nearly as long as the proposed permanent bridges. The work trestle would be supported on pier bents consisting of two or three pile each and spaced 30 to 60 feet apart depending on contractor's choice of trestle spans. The Gibraltar River work trestle may include up to twelve 24-inch diameter temp piles installed below OHW. The Newhalen River work trestle may include up to thirty-nine 24-inch diameter piles install below OHW. The temporary piles would likely be installed by drilling or use of vibratory and/or impact hammer and would be removed by pulling with a vibratory hammer when construction of the bridge is complete. While the contractor will determine construction means and methods, all temporary structures will be within the work limits and be removed upon project completion. No earthwork is planned below ordinary high-water (OHW).

Prior to construction all cultural clearance work would be completed in accordance with the Project's Programmatic Agreement. Any inadvertent discoveries during construction would be addressed in accordance with the Inadvertent Discovery Plan as described in the Programmatic Agreement.

No eagle nests have been identified in proximity to the proposed crossings and prior to construction additional survey work would be completed to confirm that no new nests have been established. Vegetation clearing activities would follow, to the maximum extent practicable, the USFWS Recommended Time Periods for Avoiding Vegetation Clearing in Alaska. If clearing outside of recommended time periods becomes necessary, PLP will coordinate with the USFWS for guidance closer to the commencement of construction.



Title 16 Fish Habitat permitting will be completed prior to construction and all construction activities would be conducted in accordance with any seasonal or temporal restrictions required by the Alaska Department of Fish and Game.

All construction activities would be conducted in compliance with the Project's Invasive Species Management Plan to prevent the introduction or propagation of invasive species.

Construction duration would be up to 18 months, with the final duration dependent on the project start date and any permit stipulations that could impact the timing of construction activities. Work on both crossings would commence as early as practicable in the summer of Year One of project construction with the objective of having the temporary work trestle installed early in the first summer and bridge construction completed by end of the following summer.

Work trestle and bridge construction would not interfere with navigation on the rivers. For safety reason, temporary short duration partial channel closures may be required during craning operations. Horizontal clearance between work trestle piers will be a minimum of 28 feet and may be as great as 58 feet. Vertical clearance will be a minimum of 12 feet above OHW. Given that vessels operating at the bridge site on the Newhalen River are typically small craft, and that only rafts are used on the Gibraltar River, no conflicts with planned clearances are anticipated. Reference is made to the draft USCG Section 9 Bridge Permit Applications prepared for the Newhalen River Bridge and the Gibraltar River Bridge. Included with these applications are conceptual drawings that include location and details relating to temporary work trestles.

Post construction, the bridge approaches would be stabilized, and site restoration activities would be completed, in accordance with the Project Restoration Plan (RFI123).