

**RFI 164  
Pebble Project EIS**

**Request for Information**

<b>Title/Subject:</b>	<b>Permanent Berm in Iliamna Lake for Natural Gas Pipeline</b>
<b>Requestor:</b>	USACE
<b>Date Transmitted:</b>	3/30/2020
<b>Recipient:</b>	Pebble Limited Partnership
<b>Response Requested by:</b>	4/9/2020
<b>Rationale:</b>	Additional information is needed on construction of the proposed permanent berm in Iliamna Lake for placement of the natural gas pipeline to better assess potential impacts in the EIS.
<b>Describe the Information Requested and Level of Detail:</b>	Please provide information on how the permanent berm would be constructed, the general location where the berm would be needed, what fill material would be used and where the fill would come from, and potential measures to ensure the pipeline would not drift off of the berm due to lateral movement (e.g., would the pipeline be anchored to the permanent berm?).

**Recipient Response Form**

<b>Date Received from USACE:</b>	Click here to enter text.
<b>Response from Recipient (Describe Information Requested to the Level of Detail Requested; Provide Attachments as Needed):</b>	<p>The berms would be constructed using clean graded engineered fill and rock (containing no fines to avoid sedimentation resulting from the placement of the fill). Gradation and sizing of the fill and rock would be selected to ensure the material stays in place and is not susceptible to berm sidewall failure or long-term scour/erosion. The fill would be drawn from one of the existing onshore material sites and transported from shore using a barge and placed using a barge mounted clamshell dredge or extended reach backhoe depending on water depth.</p> <p>The typical berm segment length is expected to be of the order of 30m and the berm heights will be approximately 0.5m (for a typical span height of 0.5m and length 30m). The span remediation berms are only required in areas of unacceptable pipeline free spanning; outside of these segments, the pipeline would be resting on and supported by the natural lakebed surface. Water depths for the segments with span correction berms range from 10-40m, which are too deep for ice scour impacts. The on-bottom stability design of the proposed NPS12 heavy wall pipe would be such that the pipeline remains stable in place on each berm support when subject to anticipated water conditions (no tidal influences and limited current) and no requirements for anchoring are anticipated. In addition, the spans will be supported along their entire length so there is no gap remaining between pipeline and lakebed; the span is completely infilled. If anchoring were required in future based on operational monitoring observations, mitigation methods might include the placement of concrete saddle weights or similar weight-additive methods.</p>
<b>List Number and Type of Response Attachments:</b>	Click here to enter text.
<b>Date Returned to USACE:</b>	Click here to enter text.

**AECOM Intake Form**

<b>Date Response was Received:</b>	3/31/2020
<b>Received by:</b>	AECOM

<b>Describe any Follow-up Related to this RFI:</b>	<a href="#">Click here to enter text.</a>
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