



Tesoro Alaska Company LLC

Kenai Refinery
54741 Energy Way
Kenai, AK 99611
Tel: 907-776-8191

October 20, 2021

Ms. Janice E. Palumbo
Environmental Compliance Specialist
Office of Solid Waste and Emergency Response
RCRA Permitting Unit
U.S. Environmental Protection Agency, Region 10
1200 Sixth Avenue
Seattle, WA 98101

Submitted via email
Palumbo.jan@epa.gov

**RE: KLNG Gravity Rock Retaining Wall – Work Plan
Tesoro Alaska Company LLC
Kenai Refinery
EPA ID# AKD 048679682**

Dear Ms. Palumbo:

Tesoro Alaska Company LLC (Tesoro) is submitting this work plan for mitigation of the Cook Inlet bluff erosion and sluffing using gravity rock wall (rock wall) techniques at the Kenai Liquified Natural Gas facility (KLNG) bluff (Figure 1). The intention of the rock wall stabilization project is to slow bluff erosion, protect existing infrastructure, and better control beach sheen events from a historical release. The rock wall will be a gravity retaining wall keyed into the beach at the base of the bluff and extending approximately 10-feet above the beach level. Figure 2 shows typical wall detail. The project is tentatively scheduled for October - November 2021, with any needed repair or reshaping work to be completed in the spring of 2022.

PURPOSE

The Cook Inlet bluff section to be stabilized is just north of an existing KLNG sheet pile wall in an area that has been eroding and sluffing at an accelerated rate over the last 2 years (Figure 1). The 1987 Hot Oil Pipeline Release has had episodic release events on the Cook Inlet beach in approximately the same location as the planned rock wall since 1987, and after more than 10-years of no noted events, sheen appeared again at the beach in the fall of 2019. A Conceptual Site Model and Remedial Alternatives Report (CSM/RA) was submitted to the US EPA on April 22, 2021 presenting a summary of currently understood site model data and remedy alternatives.

The CSM/RA recommended a bio-sparge system be installed to speed natural source-zone depletion at the site. Planning is currently underway to implement pilot scale testing, but large and frequent bluff erosion/sluffing events have created uncertainty with planned well and system installation close to active bluff movement.

The rock wall is not intended to stop bluff erosion but is an attempt to slow recent sluffing, provide additional bluff stability for planned pilot test installation activities, and slow migration of 1987 hot oil return pipeline release.

SCOPE OF WORK**Gravity Rock Wall**

Large rock (3 to 5-foot diameter) will be placed in a stack (see detail on Figure 2) to approximately 10 feet above the beach level. Rocks will be placed in a fashion to 'lock' with each other as practical to mimic the effect of a monolithic gravity retaining wall.

Rocks will be staged on the beach and placed using an excavator with a thumb attachment.

The primary steps for well rock wall construction include:

- Site preparation and staging.
- Rock wall base to be approximately 5- to 10-feet wide.
- Place rocks in locking manner to approximately 10-feet above the beach level or as high as can be practically and safely reached.

Safety

All Marathon safety and permitting procedures to be followed including appropriate Job Safety Analysis (JSA), Site Safety and Health Plan, and daily tailgate safety meetings. Special care to be taken during wall construction to observe any changing bluff conditions or stability concerns when stop work authority will be implemented to cease working and move to safe area while the situation is evaluated.

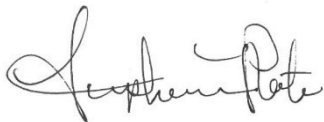
Schedule

The proposed schedule for 2021 rock wall construction is:

- October 2021 – Schedule with Marathon and subcontractors, complete safety and permitting requirements.
- October/November 2021 – Complete rock wall.
- Spring 2022 – Complete any rock wall repairs or additions as needed after any winter damage or movement.

If you have questions or comments please contact me at (907) 776-2090 or SPlate@Marathonpetroleum.com.

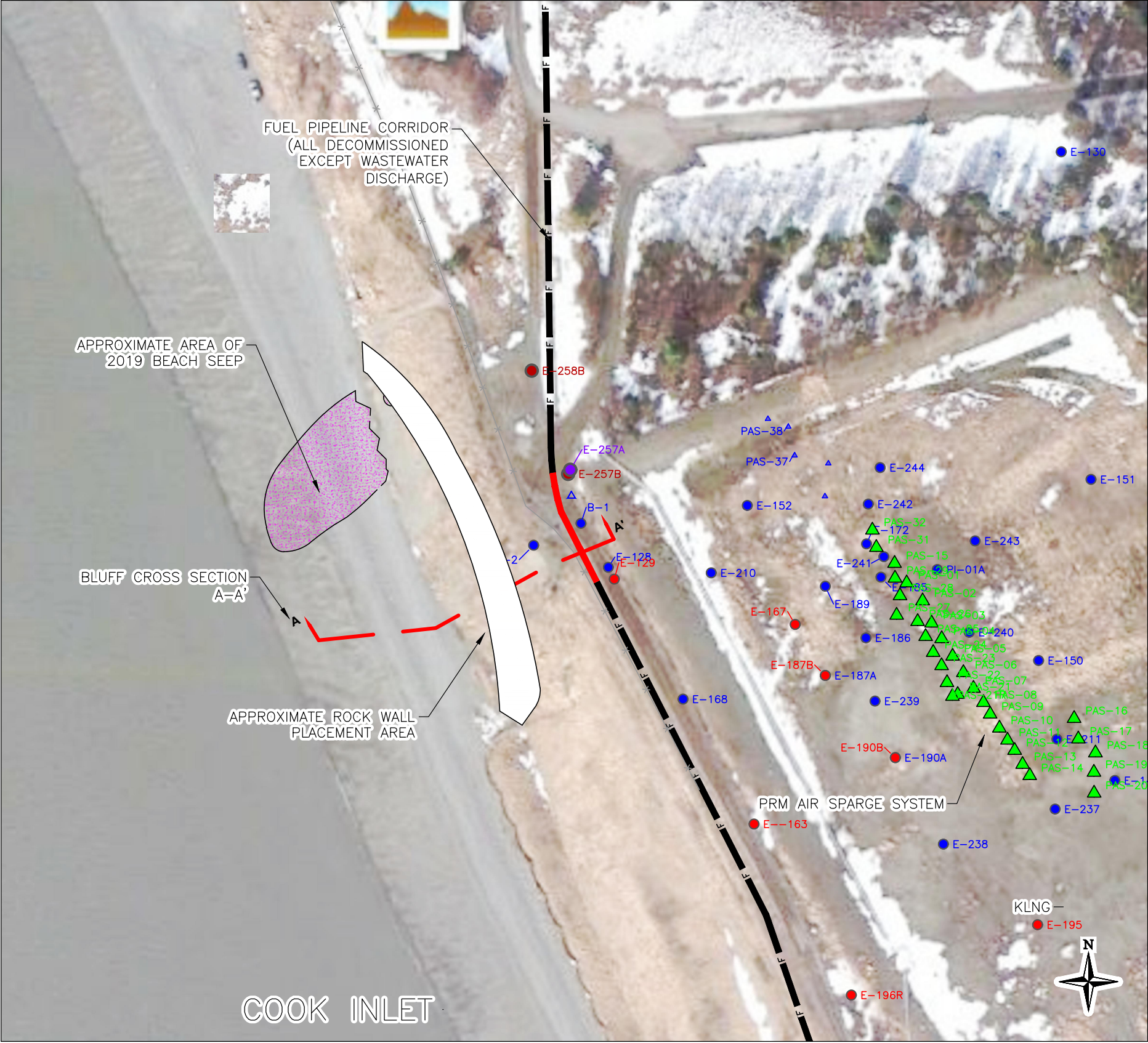
Sincerely,



Stephanie Plate, PE
Project Manager

cc: Trihydro
Pete Campbell, ADEC

N:\STOW\TESORO\CADD\KENAIREFINERY\RCRA_PERMIT\CORRECTIVEACTIONS\PM_PRMA\BEACHSEEP\BEACHSEEPROCKWALLPLAN2021



2 SITE AREA
SCALE: 1" = 100'

Image Citation: ©2012 TerraMetrics; ©2012 Google



1 VICINITY MAP
SCALE: 1" = 1,500'

0 1,500'

EXPLANATION

- E-169 EXISTING B-AQUIFER MONITORING WELL LOCATION AND NUMBER
- E-164 EXISTING A-AQUIFER MONITORING WELL LOCATION AND NUMBER
- E-257B NEW B-AQUIFER MONITORING WELL LOCATION AND NUMBER
- E-257A NEW A-AQUIFER MONITORING WELL LOCATION AND NUMBER
- A AQUIFER MONITORING WELL LOCATION AND NUMBER
- PROPOSED BIO-SPARGE WELL
- EXISTING/HISTORICAL FUEL PIPE CORRIDOR (SEE DETAIL BELOW)
- ESTIMATED REPLACED SECTION OF HOT OIL RETURN LINE



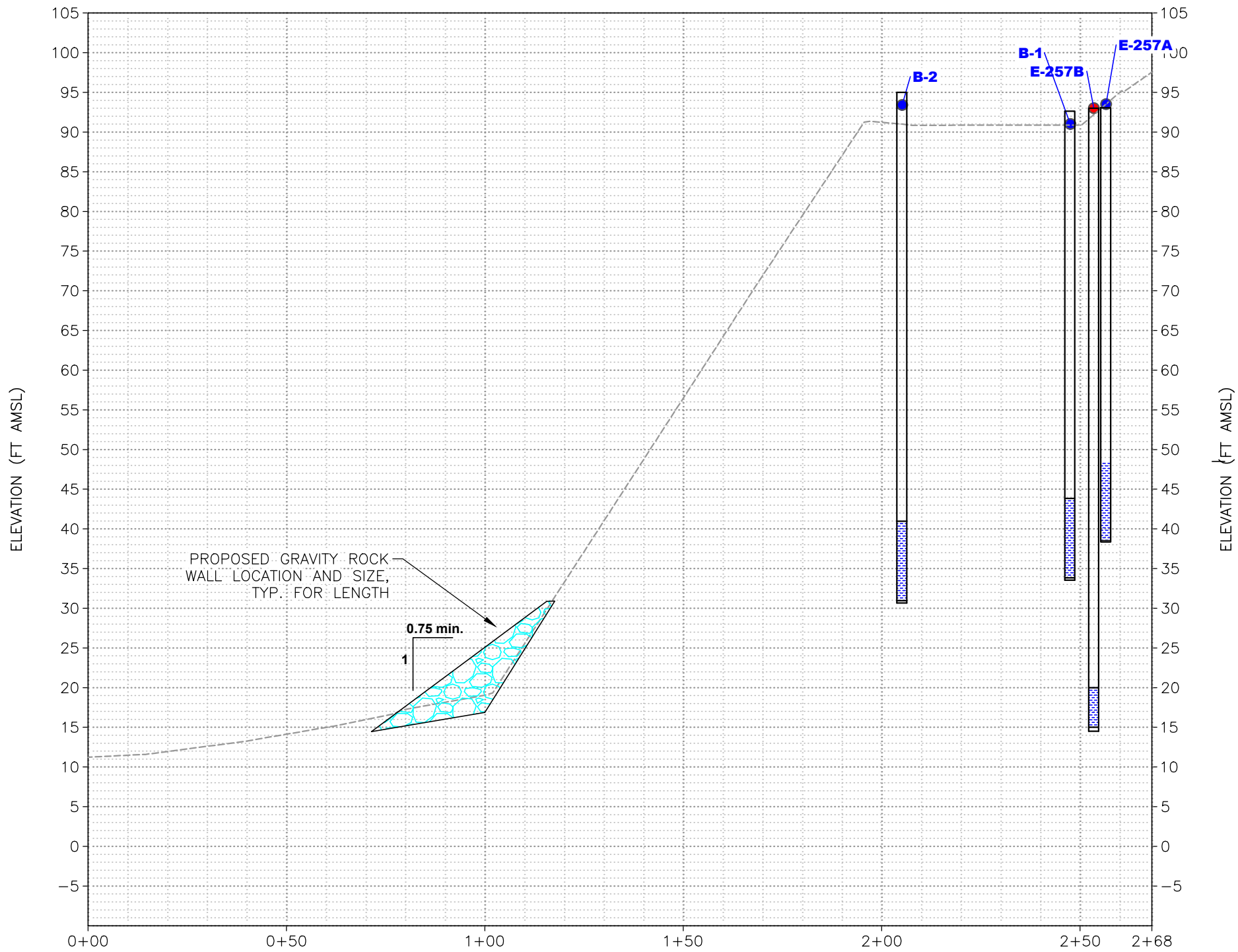
FIGURE 1

SITE AND VICINITY MAP

**GRAVITY ROCK RETAINING WALL
TESORO KENAI REFINERY
KENAI, ALASKA**

Drawn By: JWM Checked By: BM Scale: NONE Date: 10/20/21 File: BEACHSEEPROCKWALLPLAN2021

M:\STOV\TESORO\CADD\KENAIREFINERY\RCRA_PERMIT\CORRECTIVEACTIONS\PM_PRA\BEACHSEEP\BEACHSEEPROCKWALLPLAN2021



1 BLUFF CROSS SECTION A-A'
SCALE: 1" = 30'



FIGURE 2

CROSS SECTION

GRAVITY ROCK RETAINING WALL
TESORO KENAI REFINERY
KENAI, ALASKA

Drawn By: JWM | Checked By: BM | Scale: NONE | Date: 10/19/21 | File: BEACHSEEPROCKWALLPLAN2021