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RECEIVED
Feb 15, 2018
SPCO

February 15, 2018

Letter No. 39197

Mr. Jason Walsh, State Pipeline Coordinator
Alaska Department of Natural Resources
3651 Penland Parkway
Anchorage, AK 99508

RE: Trans-Alaska Pipeline System, Pipeline Milepost 19.5
Land Description Modification for Right-of-Way Lease, ADL 63574
Buried Sills Addition adjacent to Sagavanirktok River

Dear Mr. Walsh:

Alyeska Pipeline Service Company, agent for the Trans Alaska Pipeline System lessees, hereby applies to modify the description of the TAPS facilities attached to the referenced lease in order to include new lands needed to accommodate the subject new construction. As discussed in recent Monthly Lands and Permits meetings, three new sills are planned adjacent to those which were installed in 2012 under authority of the Lease Amendment dated June 14, 2012. Please provide the details needed to pay the application fee.

The lands required for construction are described on Attachment A. The lands needed to accommodate the new structure after construction will be precisely described upon completion of the as-built survey.

A narrative and drawings are enclosed describing the work in further detail. An application for this work is being filed also with the U.S. Army Corps of Engineers. The work is planned to begin as early as June 1, 2018.

Thank you for your assistance in this matter. Please contact me at 787-8170 if we can provide additional information.

Sincerely,

A handwritten signature in blue ink, reading "Peter C. Nagel".

Peter C. Nagel, SR/WA
Land and Right-of-Way

Enclosures

cc: SPCS Records

SPCO-20180215-1

ATTACHMENT A

Township 7 North, Range 14 East (Umiat Meridian)

Section 4 W2NW4 and Section 5 E2NE4, those lands between the easterly TAPS right-of-way boundary and the left bank of the Sagavanirktok River, containing approximately 4.5 acres (See attached drawings).

**Trans Alaska Pipeline System, Milepost 19.5
Buried Sill Installation at Sagavanirktok River
Permit Narrative (February, 2018)**

Purpose

The purpose of this project is to install a field of buried sills at the vicinity of Pipeline Milepost 19.5. The structures will be installed in the uplands between the pipeline and a side channel of the Sagavanirktok (Sag) River to prevent additional erosion towards the buried pipe.

Site Description

The project site is located 19.5 miles south of Pump Station 1 and 38.7 miles north of Pump Station 2 on the Trans-Alaska Pipeline System.

At MP 19.5 the Sag River crosses the Arctic Coastal Plain, which primarily supports lowland tundra vegetation types. Wetland plant communities are the predominant vegetation type in the lowland tundra zone which includes mosses, lichens, herbs and low shrubs. The soils in this area consist of organic silt with some sand, gravel mixed with sand, numerous cobbles and scattered boulders.

The Sag River and its side channels are classified as anadromous fish streams. Arctic char, cisco and whitefish inhabit the Sag River. Between MP 16 and 36 is the Franklin Bluff's Peregrine Falcon ZRA. There is also a known caribou winter concentration area and a polar bear denning habitat between MP 13 – 26.

Problem Description

Progressive bank erosion over the past several years has decreased the buffer between the stream bank and the pipeline. The erosion is located upstream of a series of existing buried rock sills where severe spring breakups in 2015, 2016, and 2017 increased local bank erosion towards the pipeline. Bank protection is needed to prevent further erosion and protect the integrity of the mainline pipe.

Project Description

This project will construct three buried sills between the Pipeline workpad and the riverbank (see attached drawing). The buried sills consist of excavated trenches filled with riprap. Tundra mats will be used as necessary to minimize damages to the surrounding tundra. Riprap voids will be filled with insitu gravels. The organic surface layer will be stripped and stockpiled separately. As the riprap is installed, gravel from the excavation will be placed to fill the voids in the riprap. The stockpiled organics will be replaced on top of the sills and track walked.

Work in and Around Water

Equipment used on the project will be rock trucks, backhoes and loaders.

There will be no work in the Sagavanirktok River or its tributaries. There is a possibility that groundwater will be encountered but the excavation will not be dewatered.

Environmental Considerations and Mitigation

Buried sill installation was the preferred alternative to a conventional spur dike or a revetment. This method has the least impact on aquatic resources by keeping away from the riverbank and actively flowing water. The construction equipment movements will be confined to the existing TAPS workpad, the project footprint and tundra mats. The revegetation application that will be used for this project has been successfully demonstrated to restore the pre-existing biological productivity within two to three years in a high latitude arctic environment. Locations where this revegetation technique was used along the Sag River include Mileposts 32, 68, 72 and 85. No additional mitigation is planned.

Schedule

The project will be implemented between June and early October of 2018 and will take approximately 14 days to complete.

Approximate Construction Scope of Work

1. Mobilize personnel and equipment
2. Construct access to the work site
3. Excavate buried spur dike footprint
4. Place riprap
5. Backfill with gravel
6. Cap the footprint of excavation with stockpiled organics
7. Dispose of excess material, clean up work site and demobilize

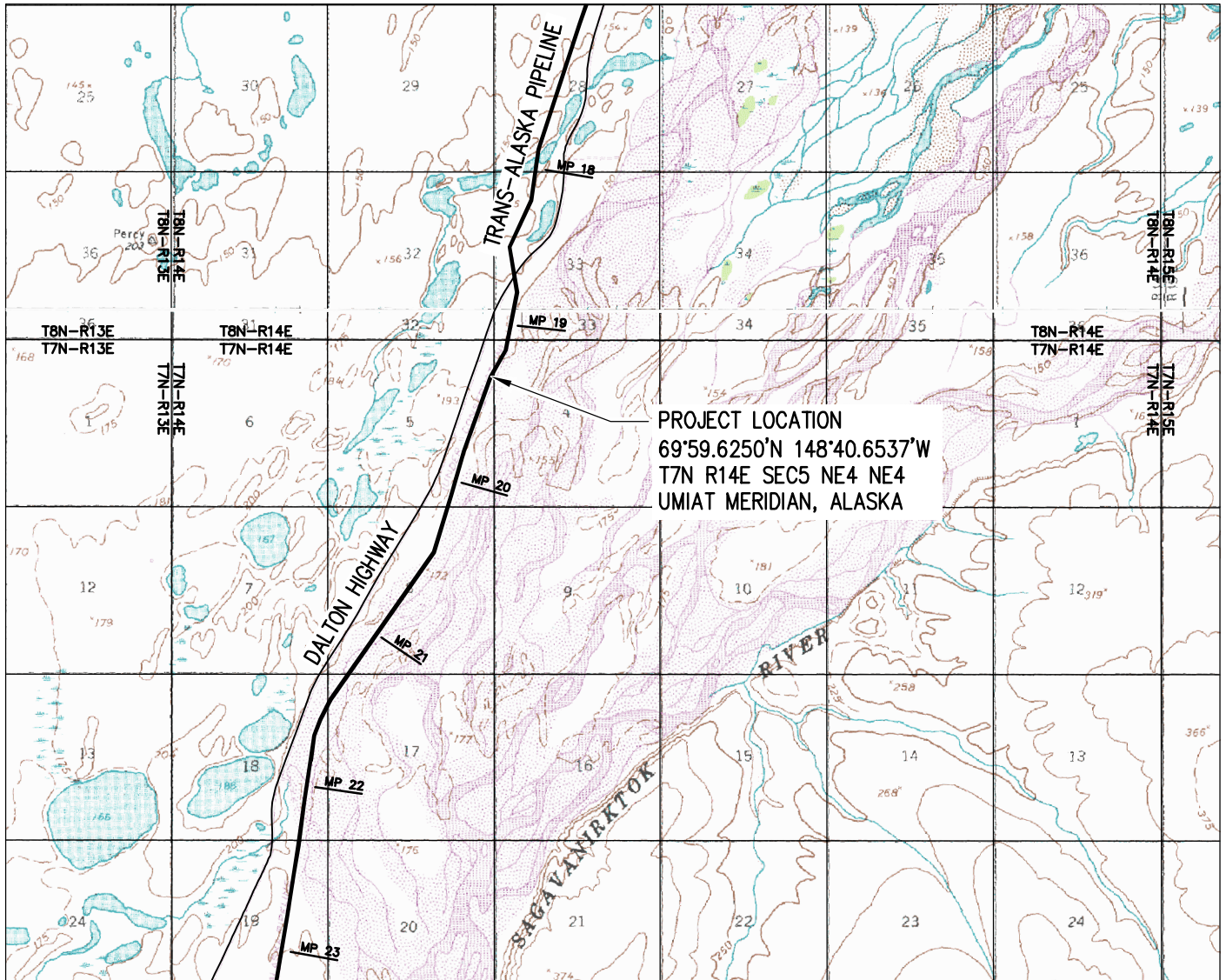
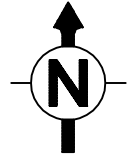
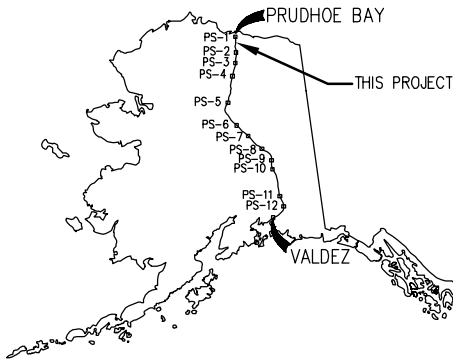
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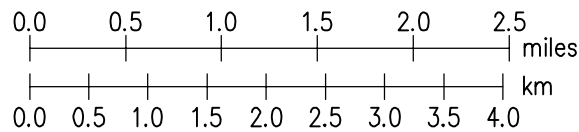
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PROJECT LOCATION
69°59.6250'N 148°40.6537'W
T7N R14E SEC5 NE4 NE4
UMIAT MERIDIAN, ALASKA



ADJACENT PROPERTY OWNER: STATE OF ALASKA

ALYESKA PIPELINE SERVICE CO.

X318-20X TAPS MP 19 SAGAVANIRKTOK RIVER
BURIED SILL INSTALLATION
LOCATION AND VICINITY MAP

TRANS ALASKA PIPELINE SYSTEM

DATE: 02/02/18

PLATE 1

REV. B DWN. MTH CKD. AJN APPR. JPD

SCALE: AS NOTED

SHEET 1 OF 3

AUTOCAD DWG. DO NOT REVISE MANUALLY.

FILE DATE: -

PLOT SCALE: -

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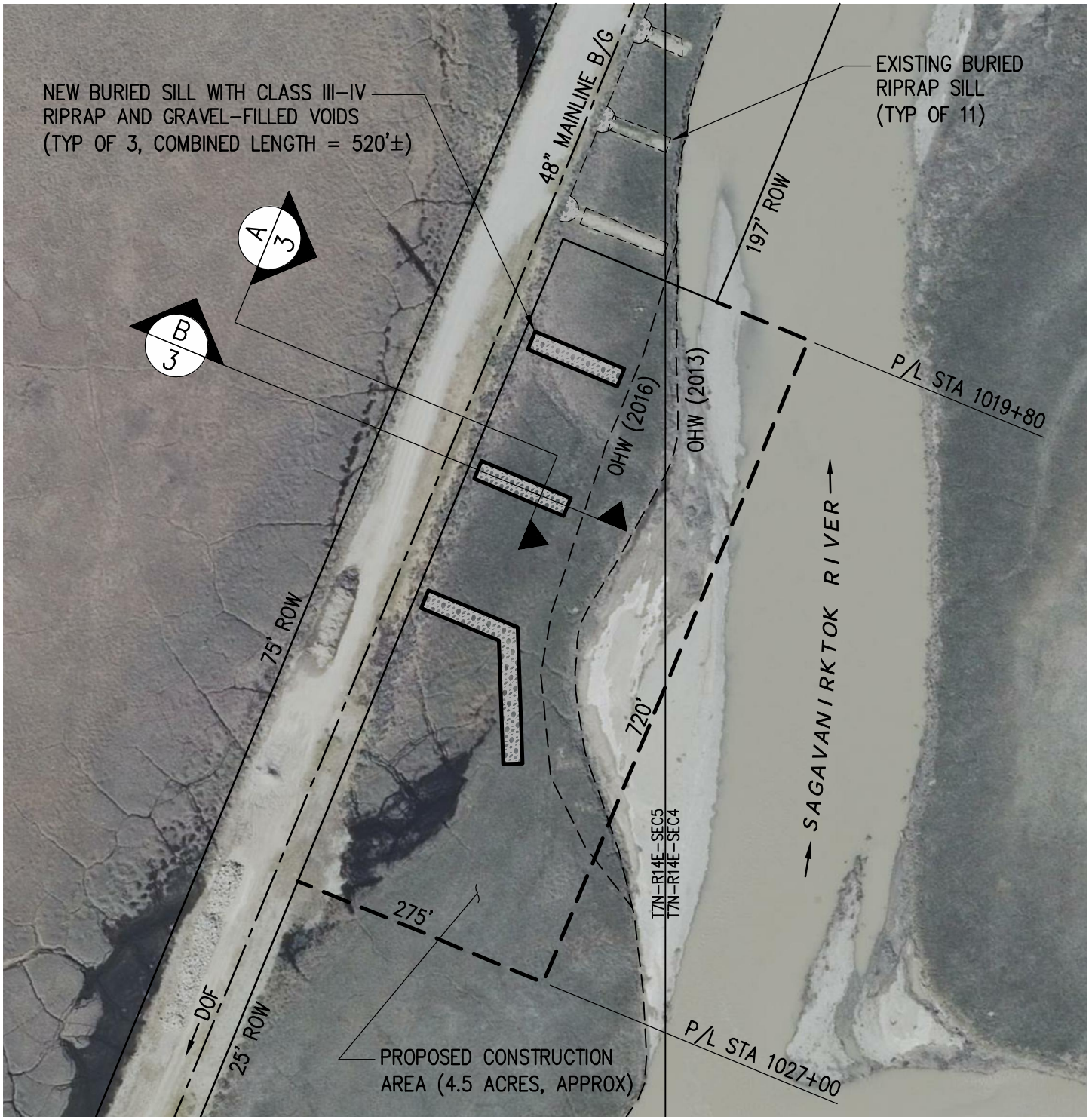
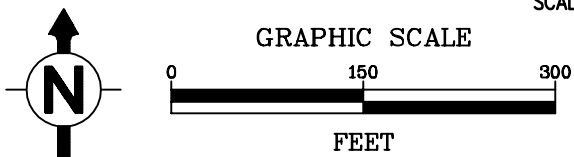


PHOTO DATE: 2013

PLAN

SCALE: 1" = 150'



ADJACENT PROPERTY OWNER: STATE OF ALASKA

ALYESKA PIPELINE SERVICE CO.

X318-20X TAPS MP 19 SAGAVANIRKTOK RIVER
BURIED SILL INSTALLATION
PLAN

TRANS ALASKA PIPELINE SYSTEM

DATE: 02/02/18

PLATE 2

REV. B DWN. MTH CKD. AJN APPR. JPD

SCALE: AS NOTED

SHEET 2 OF 3

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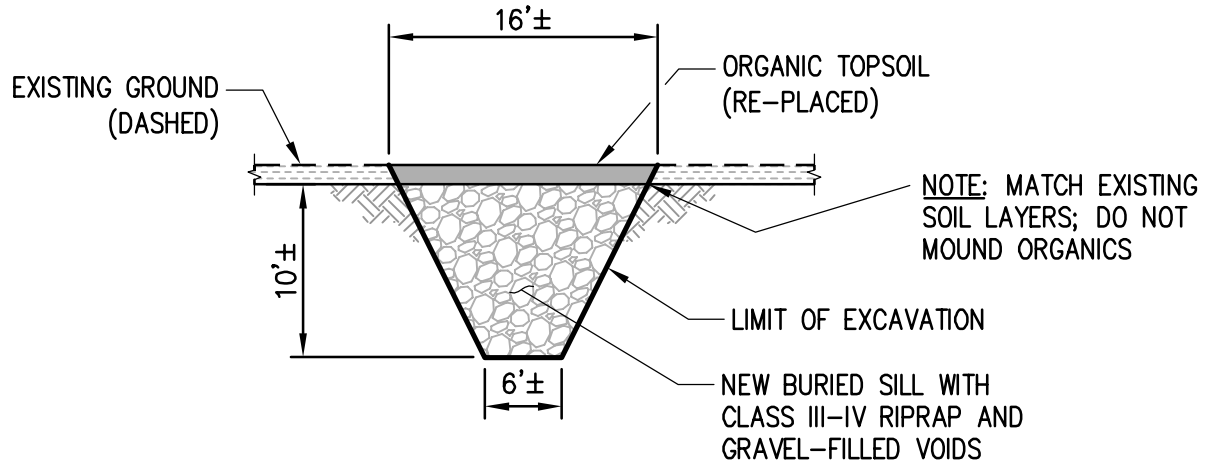
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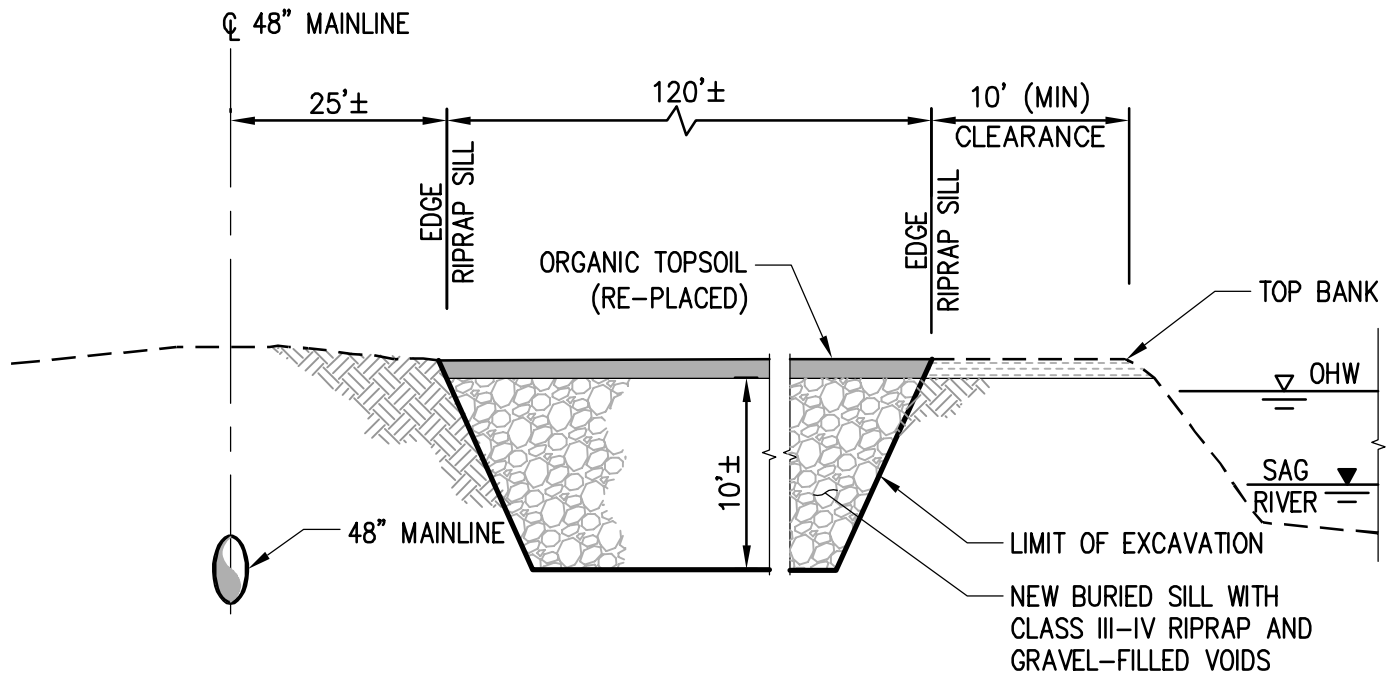
ESTIMATED MATERIAL QUANTITIES

	BELOW OHW	ABOVE OHW	TOTAL
CLASS III-IV RIPRAP (CY)	0	3,200	3,200
CLASS III-IV RIPRAP (SF)	0	10,400	10,400



TYPICAL SECTION

SCALE: 1" = 10'

A
2

TYPICAL SECTION

VERT. SCALE: 1" = 10'

HORZ. SCALE: 1" = 20'

B
2

ADJACENT PROPERTY OWNER: STATE OF ALASKA

ALYESKA PIPELINE SERVICE CO.

X318-20X TAPS MP 19 SAGAVANIRKTOK RIVER
BURIED SILL INSTALLATION
SECTIONS

TRANS ALASKA PIPELINE SYSTEM

DATE: 02/02/18

PLATE 3

REV. B DWN. MTH CKD. AJN APPR. JPD

SCALE: AS NOTED

SHEET 3 OF 3

AUTOCAD DWG. DO NOT REVISE MANUALLY.

FILE DATE: -

PLOT SCALE: -

FILENAME: -