Stephen W. Brashear
Senior Environmental Coordinator

ConocoPhillips Alaska, Inc.
Environmental Sustainability & Permitting
P.O. Box 100360
Anchorage, AK 99510-0360
Phone: (907) 263-4180
Email: steve.w.brashear@conocophillips.com

11/7/2022

DOG Permitting
State of Alaska
Department of Natural Resources
550 West 7th Avenue, Suite 1100
Anchorage, AK 99501-3563

Submitted Electronically to:
dog.permitting@alaska.gov

Re: CPAI Drill Site 3T Development Project
Request Approval of Unit Plan of Operations – New LONS
Kuparuk River Unit

Dear Regulators,

ConocoPhillips Alaska, Inc. (CPAI) respectfully requests authorization to expand the southeast side of the existing Drill Site 3T (DS-3T) gravel pad, widen the existing 2.9-mile DS-3T access road, and expand the access road intersection near Drill Site 3S (DS-3S) for module transport in the Kuparuk River Unit (KRU). The drillsite will be connected to and be supported by the existing KRU infrastructure through approximately 3 miles of new pipelines and a power line (attached to the proposed pipelines via messenger cable) routed from the DS-3T gravel pad to the DS-3S drillsite.

Additional details are provided in the attached ADNR DOG Unit Plan of Operations Application Form, project description, and figures.

The proposed work is scheduled to begin on August 1, 2023.

If you have any questions or need additional information, please contact me at (907) 263-4180 or steve.w.brashear@conocophillips.com.

Sincerely,

Stephen W. Brashear

Enclosures

UNIT PLAN OF OPERATIONS APPLICATION

State of Alaska
Department of Natural Resources, Division of Oil & Gas
550 W. 7th Ave, Suite 1100, Anchorage, AK 99501-3563
Phone: 907-269-8800 Fax: 907-269-8943
Permitting Email: dog.permitting@alaska.gov

SECTION I: APPLICANT INFORMATION

1. Applicant:

Name: ConocoPhillips Alaska, Inc. (CPAI)

Mailing Address: P.O. Box 100360

City: Anchorage

State: AK Zip Code: 99510-0360

Phone: N/A Fax: N/A

Email: gkaenvpermitting@conocophillips.com

2. Applicant Contact:

First Name: Steve Last Name: Brashear

Title: Senior Environmental Coordinator

Is the Mailing Address the same as Applicant's Mailing Address? If "No", please provide information below: ☒ Yes

Mailing Address: P.O. Box 100360

City: Anchorage State: AK Zip Code: 99510-0360

Phone: 907-263-4180 Fax: N/A

Email: Steve.W.Brashear@conocophillips.com

3. Unit Name Kuparuk River Unit (KRU)

4. Unit Operator Contact:

Is The Unit Operator Contact the same as the Applicant Contact? If "No", please provide information below: ☐ Yes

First Name: Wendy Last Name: Mahan Title: Field Environmental Coordinator

Mailing Address: P.O. Box 100360

City: Prudhoe Bay State: AK Zip Code: Enter Zip Code.

Phone: 907-659-7212 Fax: 907-659-7254 Email: N1438@conocophillips.com

Describe the relationship between the Unit Operator and the Applicant:

CPAI is the unit operator.

SECTION II: THIRD PARTY INFORMATION

(Fill out this section only if you are applying for the Applicant)

Third Party Company Name: N/A

First Name: N/A Last Name: N/A

Title: N/A

Mailing Address: N/A

City: N/A

State: N/A Zip Code: N/A

Phone: N/A Fax: N/A

Email: N/A

Describe the affiliation to the Applicant:

N/A

SECTION III: APPLICATION DATE AND NUMBER

(FOR OFFICE USE ONLY)

Application Date:

Application Number:

SECTION IV: PROJECT INFORMATION

1. Project Name:	Drill Site 3T (DS-3T) Development Project
2. Proposed Start Date:	8/1/2023

3. Project Description:

Is activity discussed in the approved Plan of Development on file with the Division's Units Section? ☐ Yes ☒ No

Describe what and where:

CPAI proposes to expand the southeast side of the existing DS-3T gravel pad, widen the 2.9-mile DS-3T access road, and expand the intersection of the DS-3S and DS-3T access roads in the Kuparuk River Unit (KRU). The existing DS-3T gravel pad will be expanded by one acre to enable installation of the Single Production Module (SPM), which is an advanced unit containing intelligent equipment that controls the drill site. The SPM consolidates all the modules typically found on a drill site into a single module that can be constructed and tested off-site. The SPM drives construction and operational efficiency, and it reduces the number of required structures on a drill site pad. Some of the equipment contained in the SPM includes metering for allocation, injection control, an electrical room, pig receiving/launching facilities, instrumentation, and other mechanisms that sustain the drill site. The DS-3T access road and its intersection with the DS-DS road will be expanded by a total of 2.7 acres to facilitate transport of the SPM (which is 140 feet long by 40 feet wide) and the larger drilling rig required for directional/extended reach drilling. The drillsite will be connected to and supported by the existing KRU infrastructure through approximately 3 miles of new pipelines routed from DS-3S to DS-3T, and power will be supplied via messenger cable connected to the new pipelines. All construction activities will occur in the KRU. The proposed work is scheduled to begin on August 1, 2023. See attached project description, maps and figures.

SECTION V: LAND STATUS

1. State Mineral Estate:

Are supplemental pages for land status included in Appendix C? ☐ Yes ☒ No

Affected ADL: ADL 025528 Date Effective: 7/1/2018 Date Assigned: 11/13/2018

Oil And Gas Lessee(s): CPAI

Surface Ownership: State of Alaska

Do you have, or anticipate having an Access Agreement: ☒ Yes ☐ No

Special Use Lands: None identified

Jointly Managed Lands: None identified

Other Considerations: None

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Pad Expansion	Umiat, T12N, R7E, Section 1	70.419336 N; 150.27072 W
Access Road Widening and culvert extensions	Umiat, T12N, R7E, Sections 1, 2, 11, 12	Linear Features have Multiple Locations (Available Upon Request)
Pipelines and Ice	Umiat, T12N, R7E, Sections 1, 12	Linear Features have Multiple Locations (Available Upon Request)

Affected ADL: ADL025544 Date Effective: 7/1/2018 Date Assigned: 11/13/2018

Oil And Gas Lessee(s): CPAI

Surface Ownership: State of Alaska

Do you have, or anticipate having an Access Agreement: ☒ Yes ☐ No

Special Use Lands: None identified

Jointly Managed Lands: None identified

Other Considerations: None

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Access Road Widening and culvert extensions	Umiat, T12N, R7E, Section 13	Linear Features have Multiple Locations (Available Upon Request)
Pipelines and Ice	Umiat, T12N, R7E, Section 13	Linear Features have Multiple Locations (Available Upon Request)
Click here to enter text.	Click here to enter text.	Click here to enter text.

Affected ADL: ADL380107 Date Effective: 7/1/2018 Date Assigned: 11/13/2018

Oil And Gas Lessee(s): CPAI

Surface Ownership: State of Alaska

Do you have, or anticipate having an Access Agreement: ☒ Yes ☐ No

Special Use Lands: None identified

Jointly Managed Lands: None identified

Other Considerations: None

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Access Road Widening and culvert extensions	Umiat, T12N, R8E, Sections 17, 18	Linear Features have Multiple Locations (Available Upon Request)
DS-3T Access Road Intersection Expansion	Umiat, T12N, R8E, Sections 17, 18	70.394701 N; 150.188735 W
Pipelines and Ice	Umiat, T12N, R8E, Sections 18	Linear Features have Multiple Locations (Available Upon Request)

Affected ADL: ADL380107 Date Effective: 7/1/2018 Date Assigned: 11/13/2018

Oil And Gas Lessee(s): CPAI

Surface Ownership: State of Alaska

Do you have, or anticipate having an Access Agreement: ☒ Yes ☐ No

Special Use Lands: None identified

Jointly Managed Lands: None identified

Other Considerations: None

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Proposed Pipeline Road Crossing	Umiat, T12N, R8E, Sections 18	70.397901 N; 150.218294 W
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Affected ADL: Enter ADL. Date Effective: Enter Date. Date Assigned: Enter Date.

Oil And Gas Lessee(s): Click here to enter text.

Surface Ownership: Click here to enter text.

Do you have, or anticipate having an Access Agreement: ☐ Yes ☐ No

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

2. State of Alaska Surface Lands:

Are supplemental pages for land status included in Appendix C? ☐ Yes ☒ No

Oil And Gas Mineral Estate Owner: N/A

Access Authorization(s): N/A

Special Use Lands: N/A

Jointly Managed Lands: N/A

Other Considerations: N/A

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
N/A	N/A	N/A
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: N/A

Access Authorization(s): N/A
Special Use Lands: N/A
Jointly Managed Lands: N/A
Other Considerations: N/A

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
N/A	N/A	N/A
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: N/A
Access Authorization(s): N/A
Special Use Lands: N/A
Jointly Managed Lands: N/A
Other Considerations: N/A

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
N/A	N/A	N/A
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

3. Private Lands:

Are supplemental pages for land status included in Appendix C? ☐ Yes ☒ No

Oil And Gas Mineral Estate Owner: N/A
Surface Ownership And Access Agreement(s): N/A
Special Use Lands: N/A
Jointly Managed Lands: N/A
Other Considerations: N/A

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
N/A	N/A	N/A
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: N/A
Surface Ownership And Access Agreement(s): N/A
Special Use Lands: N/A
Jointly Managed Lands: N/A
Other Considerations: N/A

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
N/A	N/A	N/A
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.
Surface Ownership And Access Agreement(s): N/A N/A
Special Use Lands: N/A
Jointly Managed Lands: N/A
Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
N/A	N/A	N/A

Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

SECTION VI: BOND INFORMATION

Bonded Company: ConocoPhillips

Type: Statewide Oil & Gas Number: 889180 Amount: $500,000

Bonding Company: Liberty Mutual Insurance Company

Mailing Address: ATTN: Tannis Mattson, 2929 Allen Parkway 2500

City: Houston State: TX Zip Code: 77019

Phone: (713) 276-8528 Fax: Enter Fax. Email: tannis.n.mattson@marsh.com

SECTION VII: SEQUENCE AND SCHEDULE OF OPERATIONS

Project Milestone #	Project Milestone	Proposed Start Date	Proposed End Date
1.	Plug and abandon existing suspended wells	12/1/2022	12/31/2022
2.	Gravel mining, gravel pad expansion, access road widening, culvert extensions, and intersection expansion	8/1/2023	5/31/2024
3.	Pipeline construction and Ice	10/1/2023	5/31/2024
4.	Pipeline crossing (casing installation)	10/1/2023	6/30/2024
5.	Drill site facilities construction	1/1/2024	3/31/2025
6.	Single Production Module Sealift & transport to DS-3T	7/1/2024	9/30/2024
7.	Pipeline tie-ins	7/1/2024	9/30/2024
8.	Pipeline hydrostatic testing	7/1/2024	9/30/2024
9.	Drilling and completion activities	10/1/2024	12/31/2027
10.	Enter Milestone.	Enter Date.	Enter Date.

SECTION VIII: PROJECTED USE REQUIREMENTS

1. Describe the proposed operations, including the location and design, of **Well Sites**:

CPAI proposed to install up to 29 new wells and wellhead shelters including 54 mouseholes to support drilling. CPAI will also plug and abandon two existing, suspended wells (See attached figures). The current plan premises alternating producer and injector wells drilled via a rotary drilling rig. The wells will be based on a standard three-string casing design using water-based mud and managed pressure drilling. The wells will be hydraulically stimulated and will require artificial lift to flow production. The development production wells will be horizontally and directionally drilled, and there will be some pilot holes drilled at an angle of 45-65 degrees to acquire additional data through the reservoir. The wells will target the "Morraine" turbidite reservoir that is located at approximately 5,000 feet True Vertical Depth Subsea (TVDSS).

2. Describe the proposed operations, including the location and design, of **Buildings**:

A 140-bed construction/drilling camp may be utilized on the DS-3T pad near the pad entrance to house construction and drilling staff. In addition, the SPM will be installed perpendicular to the well row with part of it supported by the pad expansion. The SPM reduces the number of structures required on the pad, because it consolidates them into a single unit containing intelligent equipment such as metering for allocation, injection controls, an electrical room, pig receiving/launching facilities, and other mechanisms that sustain the drill site. Well houses will also be installed on the existing pad to protect the wellheads, and associated piping and VSMs and HSMs will also be installed on the pad. A production heater skid with burner house will be installed south of the well row and east of the SPM. A chemical tank platform will be installed south of the well row and west of the SPM. A fuel conditioning skid platform will be installed on the existing pad west of the production heater skid. A switchgear platform and a pad edge valves platform will be installed on the pad expansion south of the SPM. An office trailer and break shack may be temporarily placed on the pad during construction and drilling, but their precise locations remain to be determined. Envirovacs are also expected to be placed on the existing pad.

3. Describe the proposed operations, including the location and design, of **Fuel and Hazardous Substances**:

CPAI holds a Spill Prevention, Control and Countermeasure Control Plan for its oil storage and has an approved Oil Discharge Prevention and Contingency Plan to control and clean up any accidental discharges of oils. All oil storage and handling will follow the CPAI procedures and best management practices. Any spills will be communicated to the proper agencies and landowners. CPAI maintains rigorous fuel transfer protocols and procedures, including the use of secondary containment during all fueling operations.

4. Describe the proposed operations, including the location and design, of **Solid Waste Sites**:

Sanitary waste generated from the construction and drilling camps will be hauled to the wastewater treatment facility at Kuparuk Operations Center (KOC). Food waste and other non-hazardous waste will be transported to the Oxbow Landfill. Hazardous or solid waste associated with the Project will be managed in accordance with the Alaska Department of Conservation (ADEC) and Environmental Protection Agency regulations.Drilling waste (muds and cuttings) will be disposed of onsite through annular disposal or transported to an approved Class II disposal well such as the Kuparuk disposal wells at Drill Site 1B. Permanent reserve pits are not required. Waste materials generated from well work will be managed according to the Alaska Waste Disposal and Reuse Guide. Produced water will be processed and re-injected to the subsurface or in certain situations, disposed of through an approved disposal well.

5. Describe the proposed operations, including the location and design, of **Water Supplies**:

Freshwater will be required to support the Project during construction, drilling, and operations phases. Freshwater will be used to supply potable water for the construction and drilling camps. Additional freshwater withdrawals from local permitted lakes will be needed during pipeline construction (ice road and ice pad construction and maintenance, hydrostatic pipeline testing), for drilling support, and during operations (dust suppression). Water will be withdrawn from local permitted lakes with water withdrawal authorizations including water rights, temporary water use authorizations, and where necessary, fish habitat permits. Lake L9115 will be the primary source for fresh water to construct ice roads and pads in support of pipeline construction with other permitted local lakes providing supplemental water until an ice spur is constructed to access Lake L9115.

6. Describe the proposed operations, including the location and design, of **Utilities**:

Power will be supplied to DS-3T from the DS-3S 34.5kV transmission line which will be suspended from the DS-3T pipelines via messenger cable.

7. Describe the proposed operations, including the location and design, of **Material Sites**:

A total of approximately 52,200 cy of clean gravel, sand and slurry material will be required to fill 3.73 acres of tundra wetlands for this project. Materials will be sourced from existing permitted sources within KRU (e.g., Mine Site E and Mine Site C) and will be hauled to the project area on the existing Kuparuk River field road system. Material collection and placement is planned to be completed in one construction season. Gravel placement includes a 1-acre expansion of the existing DS-3T pad and a 2.7-acre expansion of the DS-3T access road and its intersection with the DS-3S road.

8. Describe the proposed operations, including the location and design, of **Roads**:

Access to the project area and support for gravel placement and road widening will be from existing gravel roads and project-specific iceroads and pads. No new permanent roads are anticipated at this time; however, the existing DS-3T access road and its intersection with the DS-3S road will be widened by a total of 2.70 acres to facilitate safe transport of the SPM and drilling rig. See attached figures for additional details.

9. Describe the proposed operations, including the location and design, of **Airstrips**:

N/A

10. Describe the proposed operations, including the location and design, of **All Other Facilities and Equipment**:

Support infrastructure includes the SPM, well houses, associated well lines, on-pad VSMs, valve shelters, conductors, mouseholes, thermosyphons, and a pipe rack with off-pad VSMs in support of three pipelines (8-inch water injection, 8-inch gas injection, and 16-inch produced crude) with space for a fourth pipeline based on future needs from DS-3T to DS-3S. Minor site-specific variations will likely occur due to field conditions. See the attached project description and figures for further details.

11. If another permit(s) is required for the above described Projected Use Requirements, provide the following information:

Are supplemental pages for land status included in Appendix C? ☐ Yes ☒ No

Agency	Permit Type	Permit Number	Application Status	Projected Use Requirement(s)
North Slope Borough	Administrative Approval	TBD	Submitted	1, 2, 6 10
USACE	Clean Water Act Section 404 Permit Modification	TBD	Submitted	1, 10

USFWS	Letter of Authorization-INC	Pending	Preparing	1, 10
USFWS	Letter of Authorization-INT	Pending	Preparing	1, 10
AOGCC	Permit to Drill	Pending	Preparing	1
ADNR DMLW	Temporary Water Use Authorization; Water Rights	Various	Obtained	5
ADNR DMLW	Temporary Land Use Permits	LAS 25360	Obtained	8
ADFG	Fish Habitat Permit	Various	Obtained	1, 10
ADEC	Section 401 Certification	POA-2019-444	Applied-Modification	1, 10
NSB	TLUI Clearance	TMB	Submitted	1
USEPA	Underground Injection Control	AK1I017-A	Obtained	4
Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).
Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).
Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).
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Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).

SECTION IX: REHABILITATION PLAN

1. Proposed Level of Infrastructure, Facilities and Equipment Removal:

N/A

2. Description of Restoration and Rehabilitation Activities for Vegetation, Habitat, Impacted Wildlife, and Other Applicable Resources:

The amended application does not change the rehabilitation plans outlined in the original authorization. Upon abandonment (UPDATE)

SECTION X: OPERATING PROCEDURES DESIGNED TO MINIMIZE ADVERSE EFFECTS

Describe operating procedures designed to prevent or minimize adverse effects on other natural resources and other uses of the Unit area and adjacent areas including:

Fish and Wildlife Habitats: CPAI has a Wildlife Avoidance and Interaction Plan designed to prevent or minimize adverse effects on other natural resources.

Historic and Archeological Sites: CPAI does not believe this would have any impacts to cultural resources since the area has been previously cleared from archeological and cultural clearance. No impacts are expected.

Public Use Areas: This area is not open to the public.

Other Uses: N/A

SECTION XI: GLOSSARY OF TERMS

Term #	Term	Term Definition
1	CPAI	ConocoPhillips Alaska, Inc
2	KRU	Kuparuk River Unit
3	N/A	Not applicable
4	DS-3T	Drill Site 3T
5	DS-3S	Drill Site 3S
6	cy	Cubic yard

7	NSB	North Slope Borough
8	TBD	To Be Determined
9	DMLW	Division of Mining, Land, and Water
10	Enter Term.	Enter Term Definition.

SECTION XII: CONFIDENTIALITY

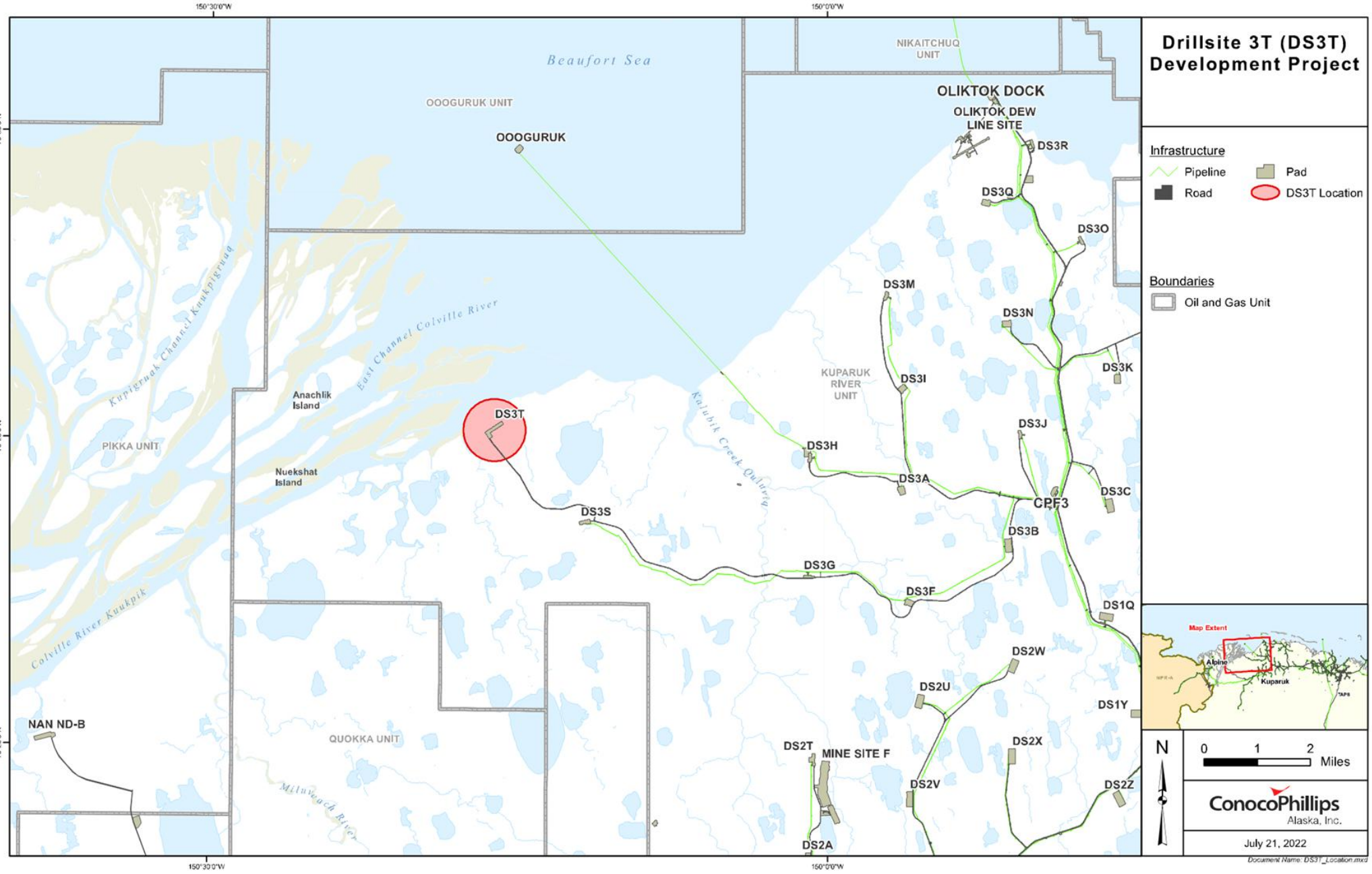
The undersigned hereby requests that each page/section of this application marked confidential be held confidential under AS 38.05.035(a)(8).

APPLICANT CONTACT:

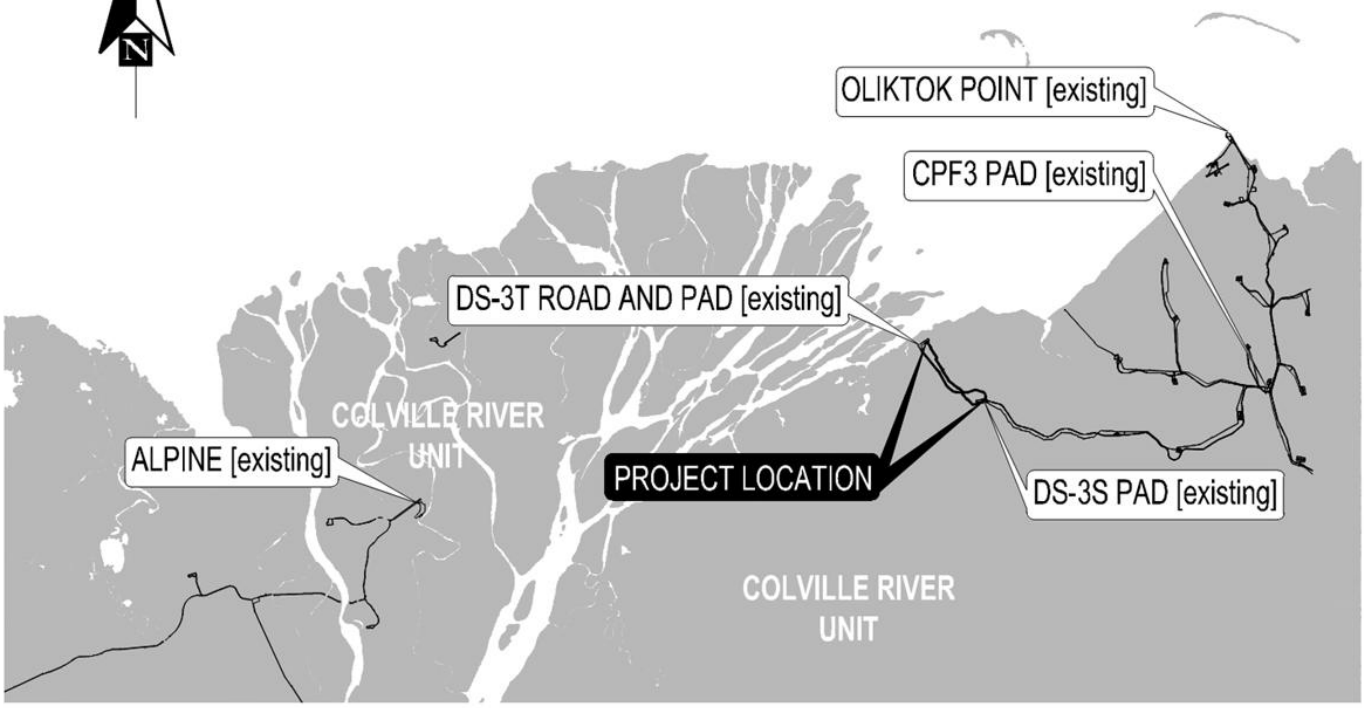
Sign here.	Enter Name.	Enter Title.	Enter Date.
Signature	Name	Title	Date

APPENDIX A: MAPS

See attached maps and figures


Drillsite 3T (DS3T) Development Project
Infrastructure
Pipeline
Pad
Road
DS3T Location
Boundaries
Oil and Gas Unit
Beaufort Sea
NIKAITCHUQ UNIT
OOOGURUK UNIT
OOOGURUK
OLIKTOK DOCK
OLIKTOK DEW LINE SITE
DS3R
DS3Q
DS3O
DS3M
DS3N
DS3K
DS3I
DS3J
DS3H
DS3A
DS3C
CPF3
DS3B
DS3S
DS3G
DS3F
DS1Q
DS2W
DS2U
DS1Y
DS2X
DS2V
DS2Z
DS2T
MINE SITE F
DS2A
DS3T
KUPARUK RIVER UNIT
PIKKA UNIT
QUOKKA UNIT
Anachlik Island
Nuekshat Island
East Channel Colville River
Kupigruak Channel Kuukpigruaq
Colville River Kuukpik
Kalubik Creek Quluvia
Miluveach River
NAN ND-B
Map Extent
Alpine
Kuparuk
N
0 1 2 Miles
ConocoPhillips Alaska, Inc.
July 21, 2022
Document Name: DS3T_Location.mxd
150°30'0"W
150°0'0"W
70°30'0"N
70°25'0"N
70°20'0"N

ALASKA VICINITY MAP



DS-3T VICINITY MAP

SCALE IN MILES

3 0 3 6 9

P|N|D ENGINEERS, INC.

ConocoPhillips Alaska, Inc.

PURPOSE: CONSTRUCT PIPELINE AND EXPAND AN EXISTING GRAVEL ROAD AND PAD FOR OILFIELD DEVELOPMENT DATUM: BPMSL, NAD83 ASP ZONE 4	REFERENCE: POA-2019-00444 APPLICANT: CONOCOPHILLIPS ALASKA, INC (CPAI) LOCATION: T12N R7E AND T12N R8E UMIAT MERIDIAN	PROPOSED: DS-3T PIPELINE CONSTRUCTION, ROAD AND PAD EXPANSION IN: KUPARUK RIVER UNIT COUNTY: NORTH SLOPE BOROUGH STATE: ALASKA SHEET **1** of **9** 9/21/2022

STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINING LAND AND WATER
3700 AIRPORT WAY
FAIRBANKS, AK 99709
(907) 451-2705
ATTN: NICHELLE JONES

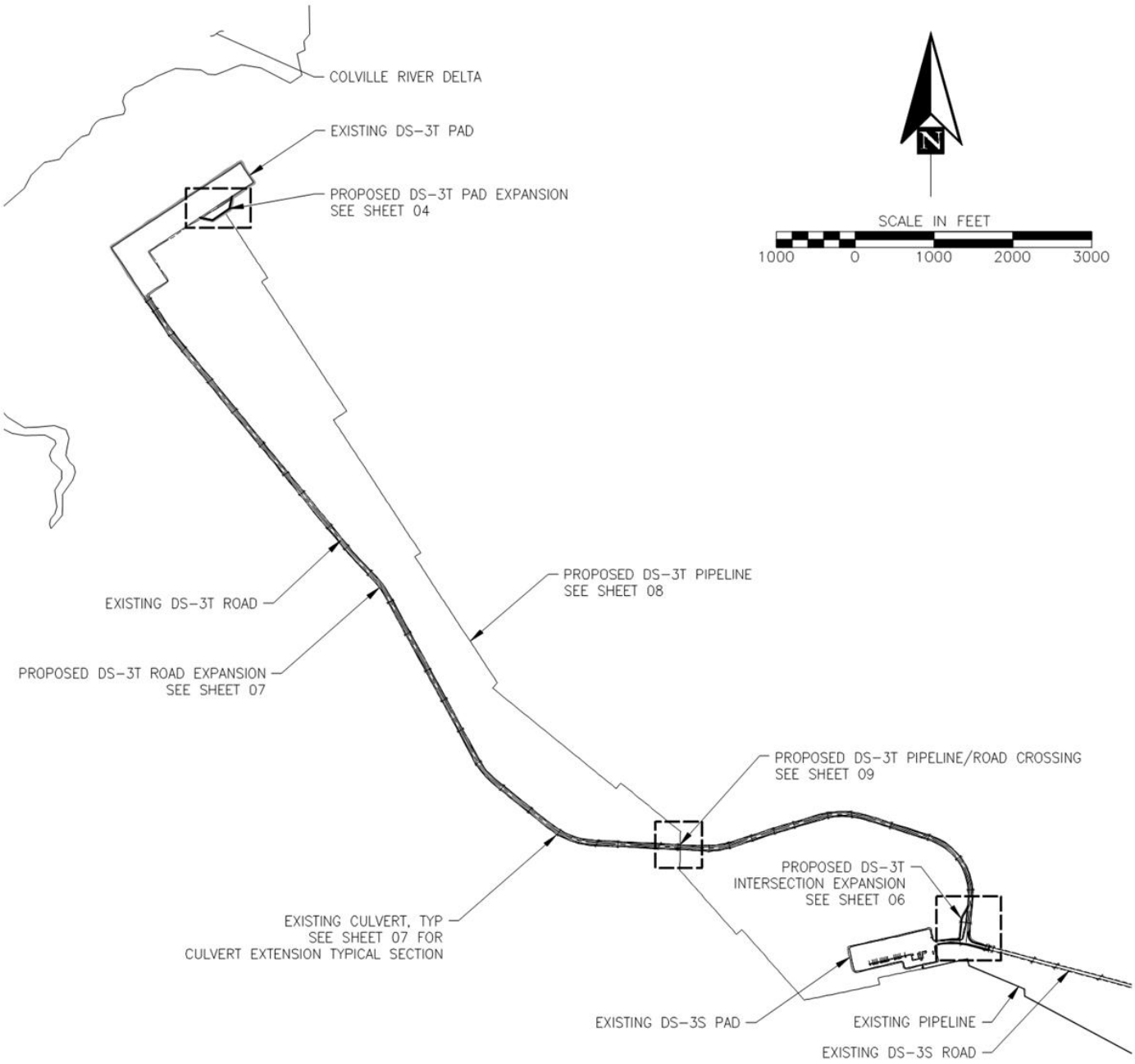
U.S. DEPT. OF INTERIOR BUREAU OF LAND MANAGEMENT
222 W 7th AVENUE #13
ANCHORAGE, ALASKA 99513
907-271-5080
ATTN: BUD C. CRIBELY

PND ENGINEERS, INC.

ConocoPhillips Alaska, Inc.

REFERENCE: POA-2019-00444
APPLICANT: CPAI
PROPOSED: DS-3T PIPELINE CONSTRUCTION, ROAD AND PAD EXPANSION
AT: ALASKA
SHEET **2** of **9** 9/21/2022

ADJACENT LAND OWNERS



DS-3T FACILITIES OVERVIEW PLAN

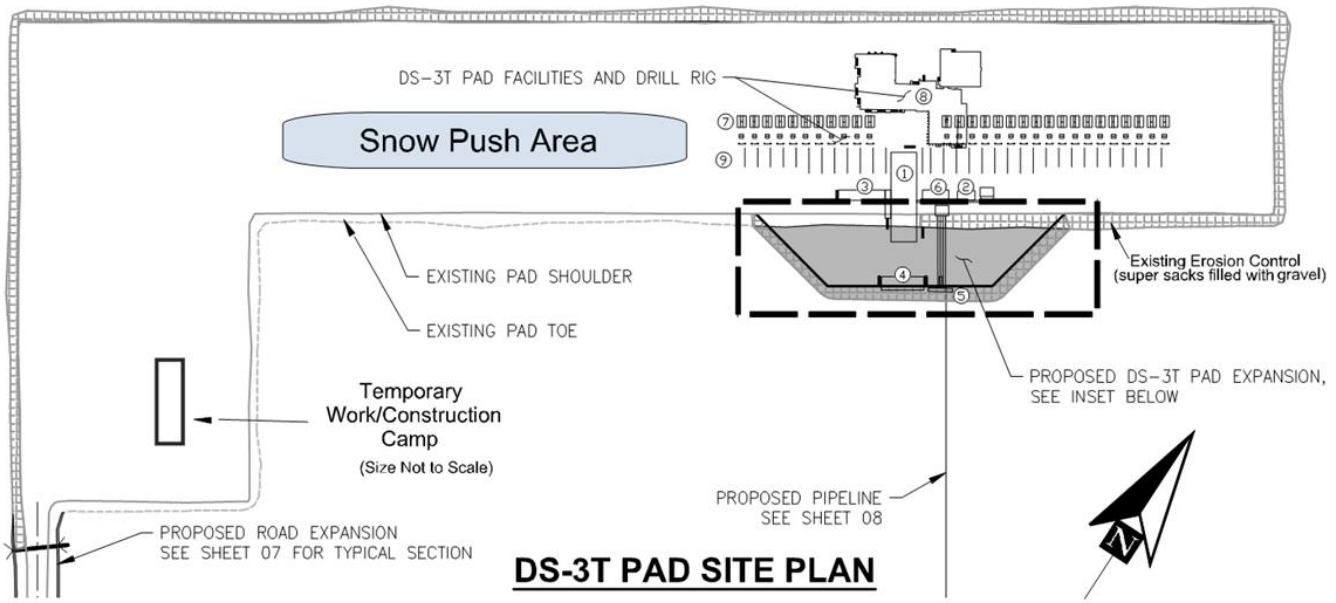
DS-3T FACILITY QUANTITIES	
DS-3T ROAD LENGTH	2.9 MILES
DS-3T ROAD EXPANSION FOOTPRINT	2.0 ACRES
ROAD EXPANSION FILL QUANTITY	27,000 CY
DS-3T PAD EXPANSION FOOTPRINT	1.0 ACRES
PAD EXPANSION FILL QUANTITY	16,500 CY
DS-3T INTERSECTION EXPANSION FOOTPRINT	0.7 ACRES
INTERSECTION EXPANSION FILL QUANTITY	7,600 CY
PIPELINE VSM COUNT	320
PIPELINE VSM FOOTPRINT	0.03 AC
PIPELINE SLURRY VOLUME	1,100 CY
TOTAL PROJECT FOOTPRINT	3.73 ACRES
TOTAL PROJECT FILL QUANTITY	52,200 CY

PND ENGINEERS, INC.

ConocoPhillips Alaska, Inc.

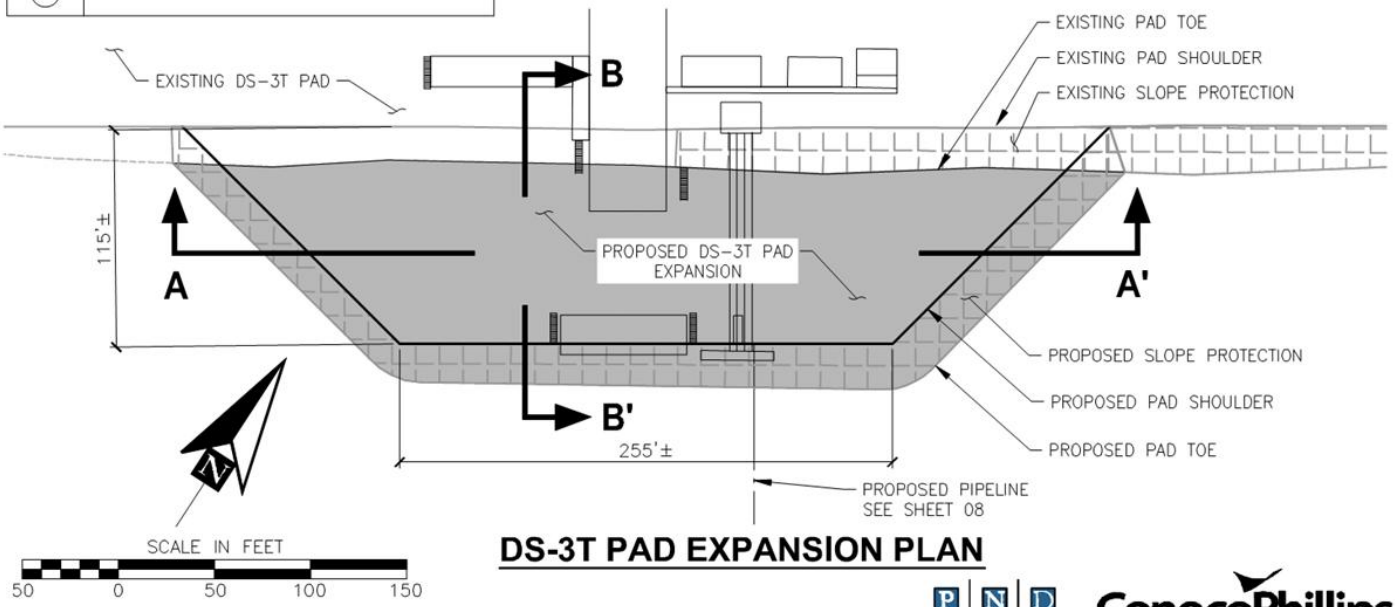
REFERENCE: POA-2019-00444
APPLICANT: CPAI
PROPOSED: DS-3T PIPELINE CONSTRUCTION, ROAD AND PAD EXPANSION
AT: ALASKA

 9/21/2022



DS-3T PAD SITE PLAN

FACILITIES			
1	SINGLE PROCESS MODULE	6	FUEL CONDITIONING SKID PLATFORM
2	PRODUCTION HEATER SKID W/ BURNER HOUSE	7	WELL HOUSES
3	CHEMICAL TANK PLATFORM	8	DRILL RIG
4	SWITCHGEAR PLATFORM	9	HSM's
5	PAD EDGE VALVES PLATFORM		



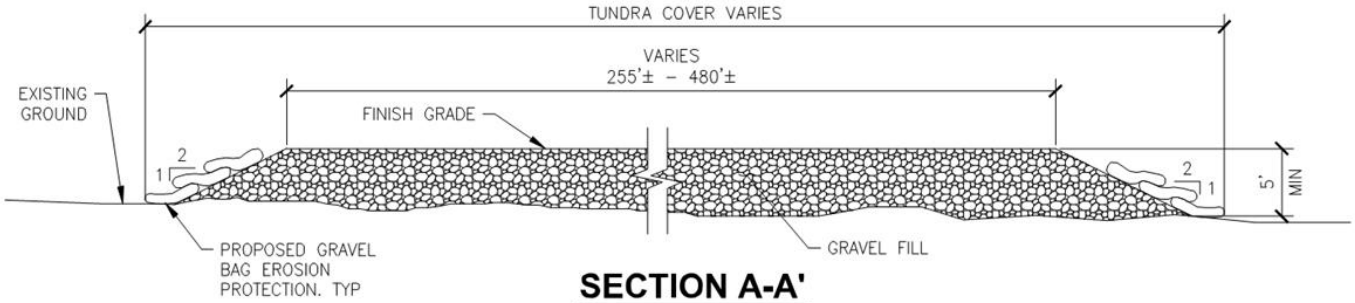
DS-3T PAD EXPANSION PLAN

PND ENGINEERS, INC.

ConocoPhillips Alaska, Inc.

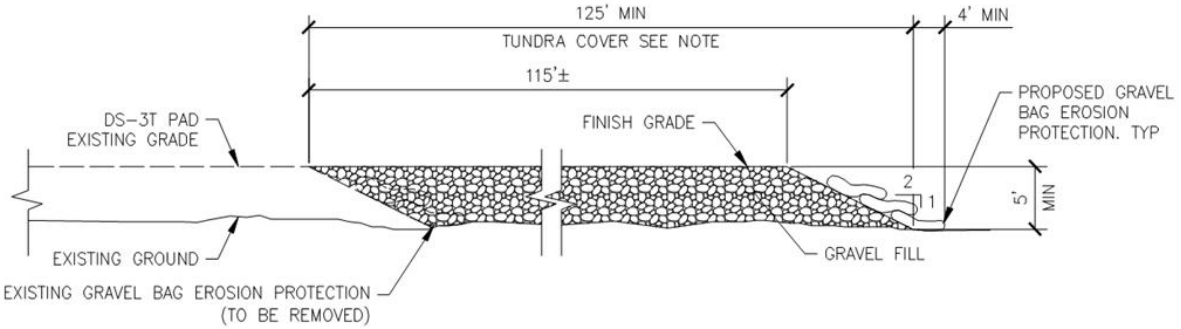
REFERENCE: POA-2019-00444
APPLICANT: CPAI
PROPOSED: DS-3T PIPELINE CONSTRUCTION, ROAD AND PAD EXPANSION
AT: ALASKA
SHEET **4** of **9** 9/21/2022

DS-3T PAD EXPANSION PLAN



SECTION A-A'
PAD EXPANSION LONGITUDINAL SECTION

NTS



SECTION B-B'
PAD EXPANSION TRANSVERSE SECTION

NTS

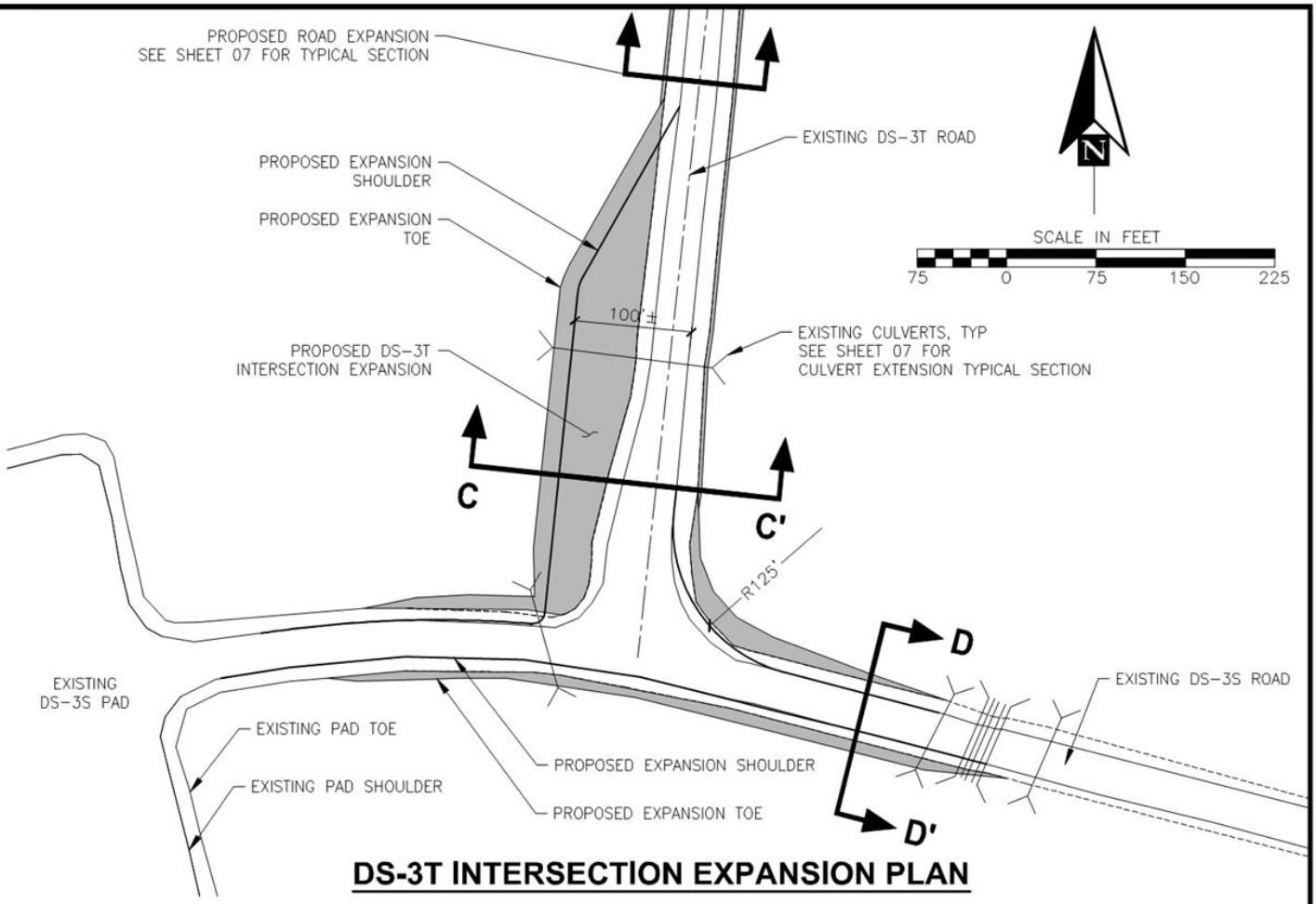
NOTES:
1. MINIMUM GRAVEL DEPTH 5.0' WITH 2:1 FILL SLOPES.
2. TUNDRA COVER (FILL FOOTPRINT) WILL VARY BASED ON EXISTING GROUND TOPOGRAPHY AND PAD ELEVATION.

P|N|D ENGINEERS, INC.

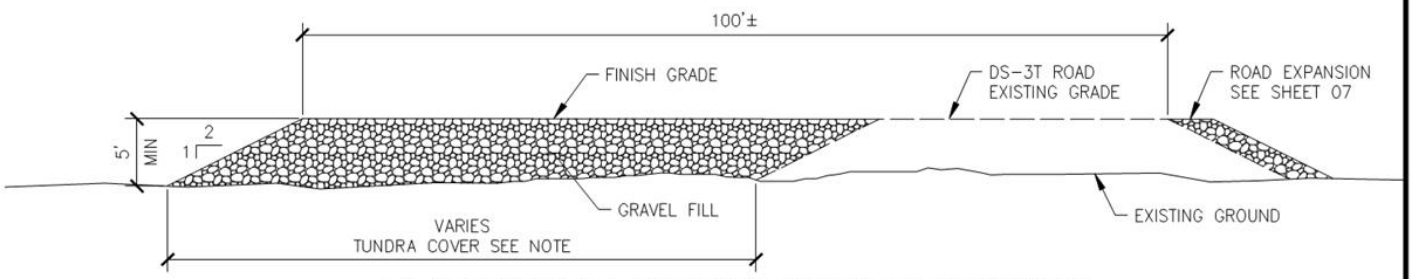
ConocoPhillips Alaska, Inc.

REFERENCE: POA–2019–00444
APPLICANT: CPAI
PROPOSED: DS–3T PIPELINE CONSTRUCTION, ROAD AND PAD EXPANSION
AT: ALASKA
SHEET **5** of **9** 9/21/2022

DS-3T PAD EXPANSION SECTIONS

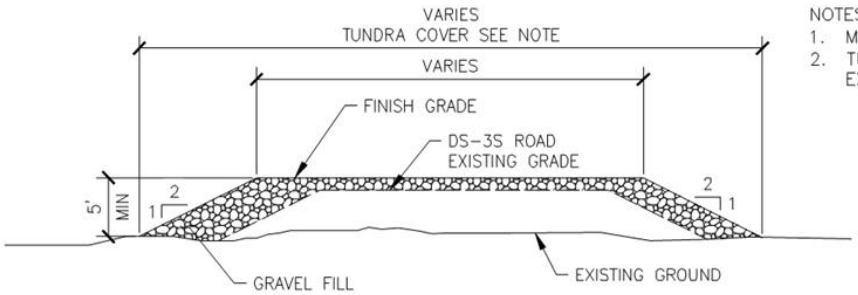


DS-3T INTERSECTION EXPANSION PLAN



SECTION C-C' INTERSECTION EXPANSION

NTS



SECTION D-D' INTERSECTION EXPANSION

NTS

NOTES:
1. MINIMUM GRAVEL DEPTH 5.0' WITH 2:1 FILL SLOPES.
2. TUNDRA COVER (FILL FOOTPRINT) WILL VARY BASED ON EXISTING GROUND TOPOGRAPHY AND ROAD ELEVATION.

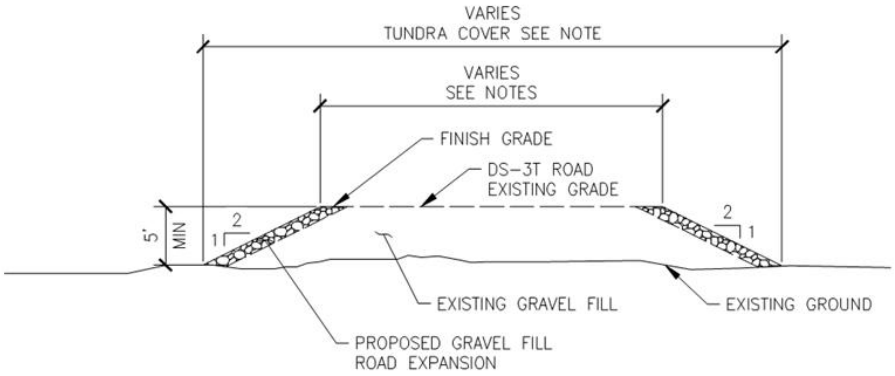
DS-3T INTERSECTION EXPANSION PLAN AND SECTIONS

PND ENGINEERS, INC.

ConocoPhillips Alaska, Inc.

REFERENCE: POA-2019-00444
APPLICANT: CPAI
PROPOSED: DS-3T PIPELINE CONSTRUCTION, ROAD AND PAD EXPANSION
AT: ALASKA

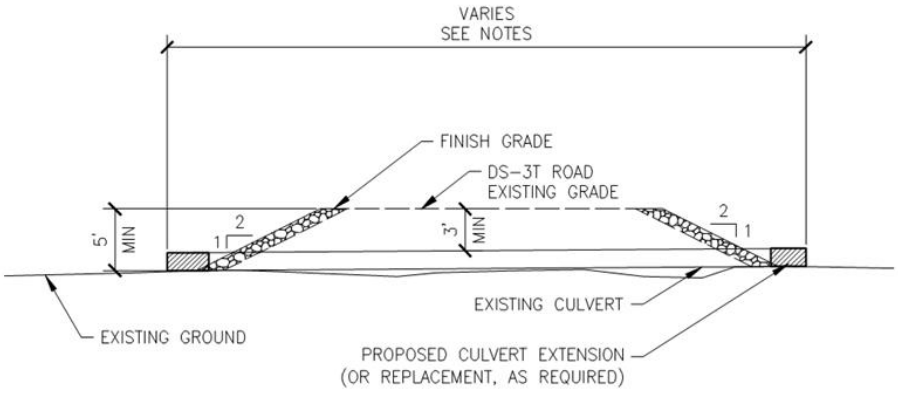
9/21/2022



ROAD EXPANSION TYPICAL SECTION

NTS

NOTES:
1. MINIMUM GRAVEL DEPTH 5.0' WITH 2:1 FILL SLOPES.
2. TUNDRA COVER (FILL FOOTPRINT) WILL VARY BASED ON EXISTING GROUND TOPOGRAPHY AND ROAD ELEVATION.
3. GRAVEL EXPANSION FOOTPRINT MAY OCCUR ON BOTH SIDES OF THE ROADWAY, AND IN SOME INSTANCES, ONLY ON ONE SIDE OF THE ROADWAY (IN ORDER TO MINIMIZE GRAVEL FILL, FILL FOOTPRINT, AND IMPACTS TO DRAINAGES).
4. NEW ROAD CENTERLINE MAY NOT ALIGN WITH EXISTING ROAD CENTERLINE.



CULVERT EXTENSION TYPICAL SECTION

NTS

NOTES:
1. CULVERT LENGTHS/EXTENSIONS ARE SPECIFIC TO EACH CULVERT LOCATION, DEPENDING ON TOPOGRAPHY, ROAD HEIGHT, AND CULVERT SKEW ANGLE.
2. CULVERT EXTENSIONS MAY BE REQUIRED ON ONE OR BOTH SIDES OF THE ROAD.
3. IF CULVERT EXTENSION IS NOT PRACTICAL, THE EXISTING CULVERT WILL BE REMOVED AND REPLACED.

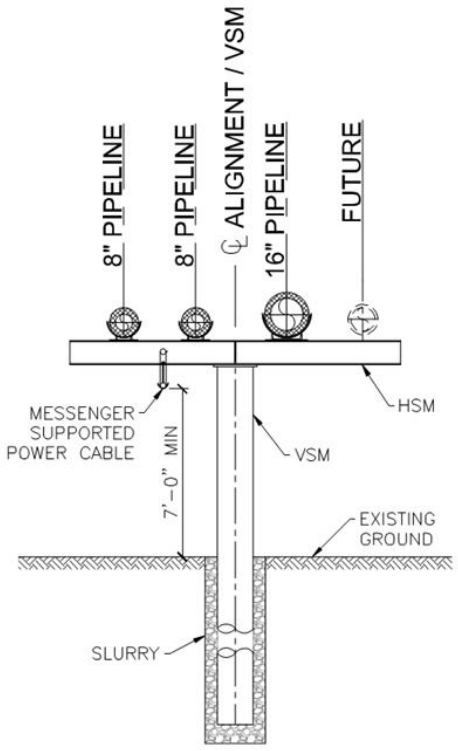
PND ENGINEERS, INC.

ConocoPhillips Alaska, Inc.

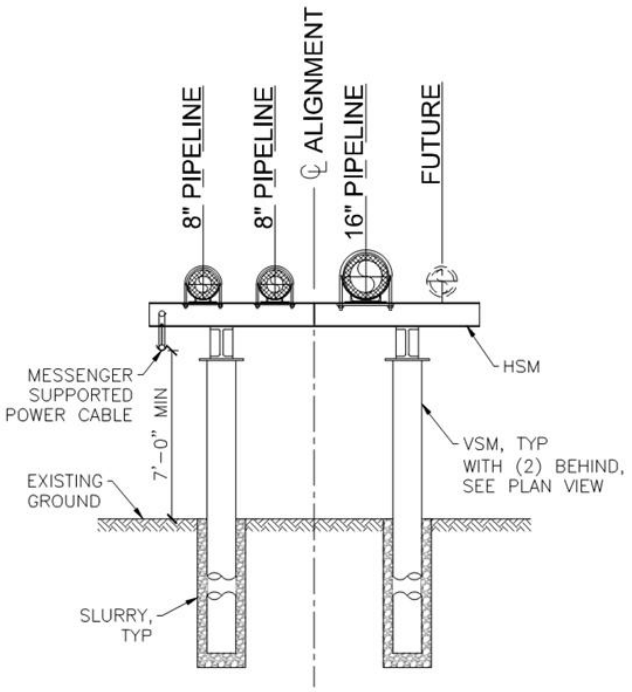
DS-3T ROAD EXPANSION AND CULVERT EXTENSION TYPICAL SECTIONS

REFERENCE: POA-2019-00444
APPLICANT: CPAI
PROPOSED: DS-3T PIPELINE CONSTRUCTION, ROAD AND PAD EXPANSION
AT: ALASKA

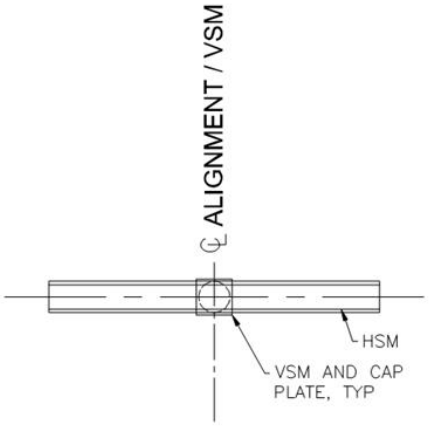
 9/21/2022



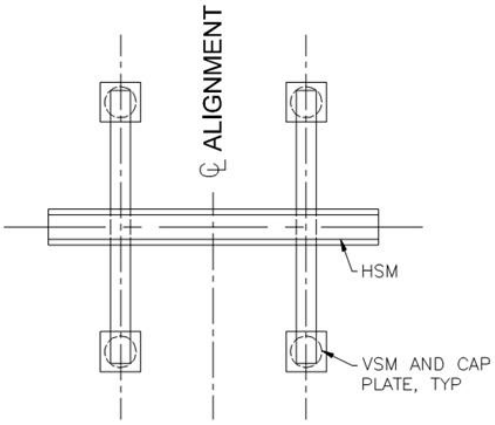
TYPICAL PIPELINE ELEVATION



PIPELINE ANCHOR ELEVATION



TYPICAL PIPELINE PLAN



PIPELINE ANCHOR PLAN

TYPICAL DS-3T PIPELINE DETAILS

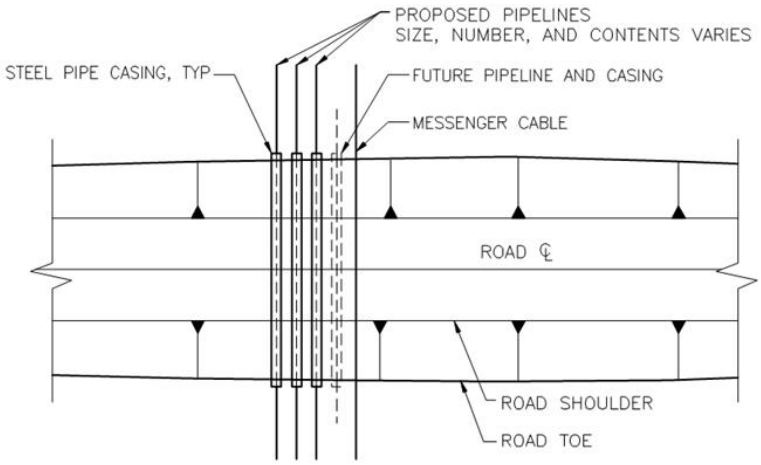
TYPICAL DS-3T PIPELINE ANCHOR DETAILS

NOTES:
1. PIPELINE LAYOUTS ARE SCHEMATIC, FOR INFORMATION ONLY. FINAL PIPELINE LAYOUTS WILL BE DETERMINED DURING DETAILED DESIGN.

P|N|D ENGINEERS, INC.

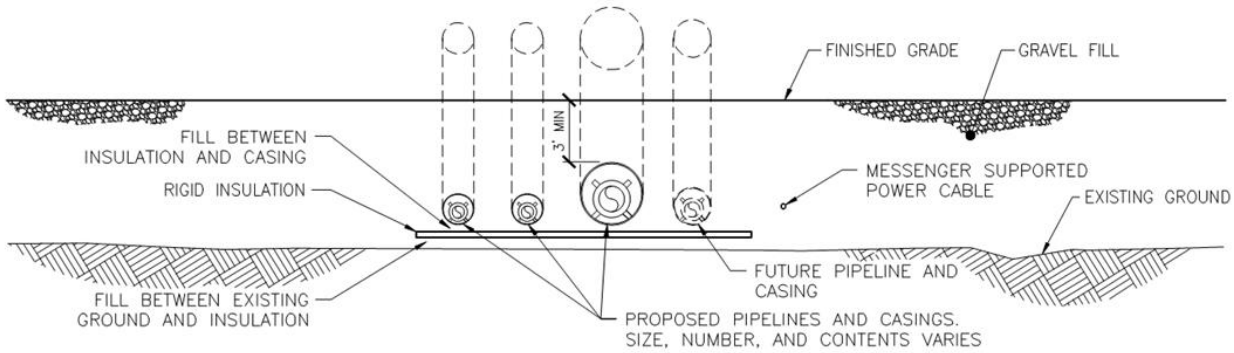
ConocoPhillips Alaska, Inc.

REFERENCE: POA-2019-00444
APPLICANT: CPAI
PROPOSED: DS-3T PIPELINE CONSTRUCTION, ROAD AND PAD EXPANSION
AT: ALASKA
SHEET **8** of **9** 9/21/2022



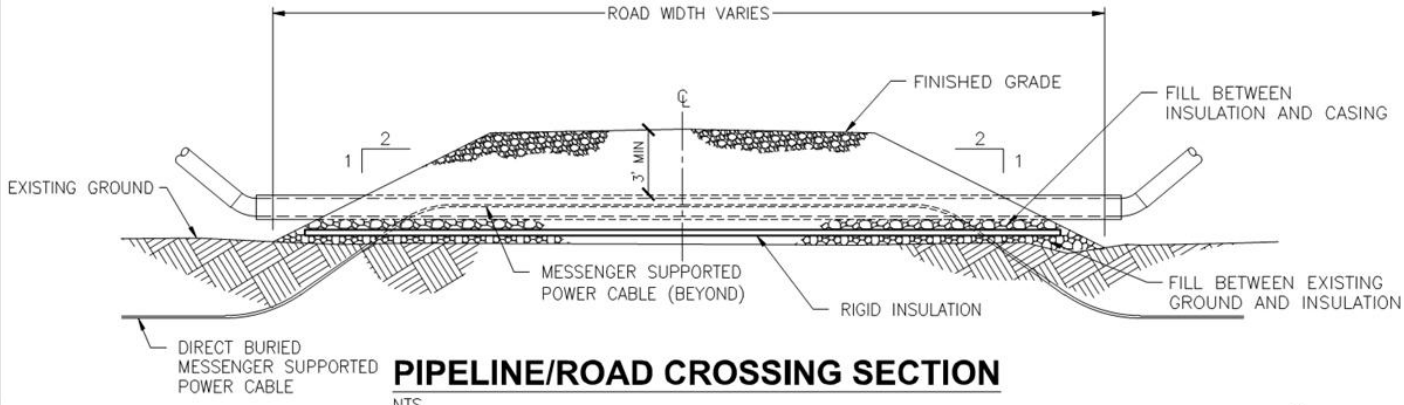
DS-3T PIPELINE/ROAD CROSSING PLAN

NTS



PIPELINE/ROAD CROSSING PROFILE

NTS



PIPELINE/ROAD CROSSING SECTION

NTS

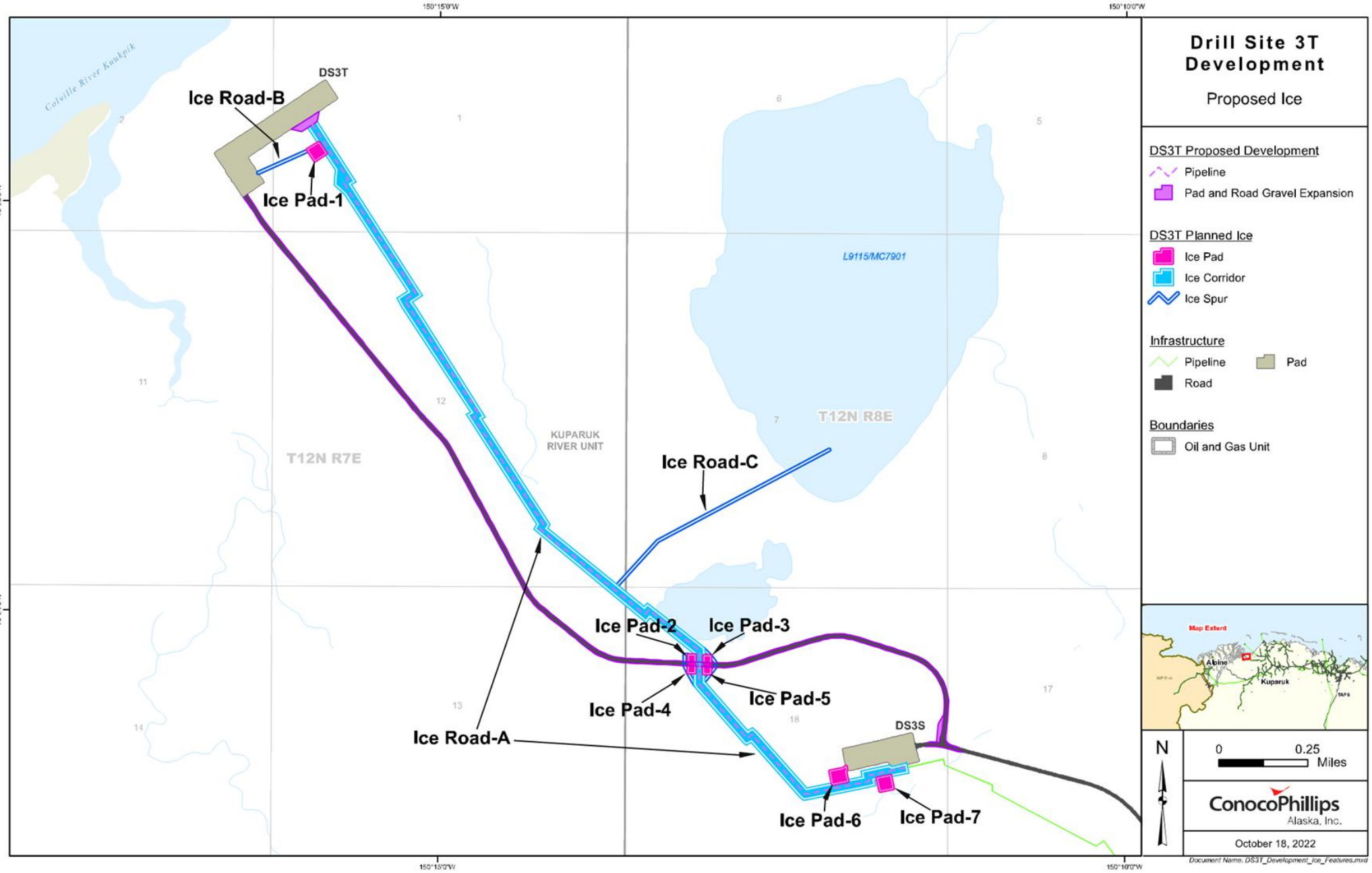
NOTE:
1. MINIMUM GRAVEL DEPTH 5.0' WITH 2:1 FILL SLOPES.
2. TUNDRA COVER (FILL FOOTPRINT) WILL VARY BASED ON EXISTING GROUND TOPOGRAPHY AND ROAD ELEVATION.
3. FINAL ROAD EXPANSION CONDITIONS SHOWN. EXISTING ROAD CONDITIONS (SHOULDER AND TOE) NOT SHOWN FOR CLARITY.

P | N | D ENGINEERS, INC.

ConocoPhillips Alaska, Inc.

REFERENCE: POA-2019-00444
APPLICANT: CPAI
PROPOSED: DS-3T PIPELINE CONSTRUCTION, ROAD AND PAD EXPANSION
AT: ALASKA
SHEET **9** of **9** 9/21/2022

DS-3T PIPELINE/ROAD CROSSING PLAN AND SECTION


Drill Site 3T Development
Proposed Ice
DS3T Proposed Development
Pipeline
Pad and Road Gravel Expansion
DS3T Planned Ice
Ice Pad
Ice Corridor
Ice Spur
Infrastructure
Pipeline
Pad
Road
Boundaries
Oil and Gas Unit
Map Extent
Alpine
Kuparuk
TAPS
N
0
0.25
Miles
ConocoPhillips
Alaska, Inc.
October 18, 2022
Document Name: DS3T_Development_Ice_Features.mxd
DS3T
Ice Road-B
Ice Pad-1
Ice Road-C
Ice Pad-2
Ice Pad-3
Ice Pad-4
Ice Pad-5
Ice Road-A
DS3S
Ice Pad-6
Ice Pad-7
T12N R7E
T12N R8E
KUPARUK RIVER UNIT
L9115/MC7901
Colville River Kuukpik
150°15'0"W
150°10'0"W
70°25'0"N
70°20'0"N

DS-3T Development Project – Ice Features

Ice Feature	Dimensions: length x width	Location TRS
Ice Road-A	2.9 miles x 132 ft	T12N R7E Sections 1,12,13 T12N R8E Sections 18
Ice Road-B	1,200 ft x 30 ft	T12N R7E Sections 1,2
Ice Road-C	4,000 ft x 30 ft	T12N R7E Sections 12 T12N R8E Sections 7
Ice Pad-1	200 ft x 200 ft	T12N R7E Sections 1
Ice Pad-2	100 ft x 100 ft	T12N R8E Sections 18
Ice Pad-3	100 ft x 100 ft	T12N R8E Sections 18
Ice Pad-4	100 ft x 100 ft	T12N R8E Sections 18
Ice Pad-5	100 ft x 100 ft	T12N R8E Sections 18
Ice Pad-6	200 ft x 200 ft	T12N R8E Sections 18
Ice Pad-7	200 ft x 200 ft	T12N R8E Sections 18

APPENDIX C: OTHER

See the attached project description

DRILL SITE 3T

DEVELOPMENT PROJECT

KUPARUK RIVER UNIT

PROJECT DESCRIPTION

ConocoPhillips Alaska, Inc.
P.O. Box 100360
Anchorage, AK 99510-0360

Table of Contents

1.0 APPLICANT 1

2.0 PROJECT LOCATION AND SITE DESCRIPTION 1

2.1 Project Location 1
2.2 Site Description 1

3.0 PROJECT OVERVIEW 2

3.1 Project Purpose and Need 2
3.2 Project Summary 2

4.0 PROJECT SCHEDULE 4

5.0 TEMPORARY AND PERMANENT IMPACTS TO WETLANDS 5

6.0 PROJECT COMPONENTS 5

6.1 Existing Project Components 5
6.2 DS-3T Proposed Project Components 5
6.3 Proposed DS-3T Gravel Pad Expansion and Drillsite Components 6
6.4 Power Source and Communications 7
6.5 Material Site 7
6.6 Camp Requirements 7
6.7 Office Requirements 7
6.8 Water Use Requirements 7

7.0 ICE CONSTRUCTION 7

9.0 FLUID STORAGE 8

10.0 CONTINGENCY PLANS 8

10.1 Spill Prevention Measures 8
10.2 State Spill Response Plan 9
10.3 Federal SPCC Plan 9
10.4 Subsidence Issues 9

11.0 EROSION CONTROL 9

12.0 SNOW REMOVAL 9

13.0 WASTE DISPOSAL 10

13.1 Wastewater 10
13.2 Solid Waste 10

14.0 AIR EMISSIONS 10

15.0 WILDLIFE 10

15.1 Endangered Species Act and Marine Mammal Protection Act 10

16.0 CULTURAL RESOURCES 11

17.0 ALASKA NATIVE HIRE POLICY 12

18.0 TRAINING....12

19.0 PERMITS, AUTHORIZATIONS AND APPROVALS....12

LIST OF TABLES

Table 1: Project Location 1
Table 2: Existing Infrastructure.... 3
Table 3: Proposed Project Summary.... 4
Table 4: Estimated Project Schedule 4
Table 5: Footprint of Project Components and Fill Requirements to WOUS.... 5
Table 6: Camp Use.... 7
Table 7: Summary of Permits, Authorizations and Approvals....12

ATTACHED FIGURES

DS-3T Pipeline Construction, Road and Pad Expansion, and Ice Features

ABBREVIATIONS and ACRONYMS

ADEC	Alaska Department of Environmental Conservation
ADNR	Alaska Department of Natural Resources
Caelus	Caelus Energy Alaska, LLC
CPAI	ConocoPhillips Alaska, Inc.
CWA	Clean Water Act
cy	cubic yards
DMLW	Division of Mining, Land and Water
DS-3S	Drill Site 3S
DS-3T	Drill Site 3T
EPA	United States Environmental Protection Agency
GI	Gas Injection
GKA	Greater Kuparuk Area
H	horizontal
HSM	Horizontal Support Member
KIC	Kuparuk Industrial Center
KOC	Kuparuk Operations Center
KRU	Kuparuk River Unit
NSB	North Slope Borough
ODPCP	Oil Discharge Prevention and Contingency Plan
Pioneer	Pioneer Natural Resources Alaska, Inc.
PO	Produced Oil
Project	DS-3T Development Project
SPCC	Spill Prevention, Control, and Countermeasure
SPM	Single Production Module
SWPPP	Storm Water Pollution Prevention Plan
TLUI	Traditional Land Use Inventory
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
V	vertical
VSM	Vertical Support Member
WI	Water injection
WOUS	Waters of the Unites States

1.0 APPLICANT

ConocoPhillips Alaska, Inc. (CPAI)
PO Box 100360
Anchorage, Alaska 99510-0360
Point of Contact: Steve Brashear
Phone: (907) 263-4180

2.0 PROJECT LOCATION AND SITE DESCRIPTION

2.1 Project Location

The proposed DS-3T Development Project (Project) includes the existing DS-3T gravel pad, an existing access road, and proposed pipelines on the North Slope of Alaska, east of the Colville River Delta on lands owned by the State of Alaska. The DS-3T gravel pad is located approximately 2.3 miles northwest of Drill Site 3S (DS-3S) and approximately 1,000 feet from the northeast bank of the Colville River. The DS-3T gravel pad is located within the North Slope Borough (NSB) and within the Kuparuk River Unit (KRU). The mineral rights are owned by Arctic Slope Regional Corporation and the State of Alaska. None of the proposed project facilities are located on or near Native Allotments or traditional use areas. Table 1 lists the existing and proposed project component locations. See the attached "DS-3T Pipeline Construction, Road and Pad Expansion, and Ice Features" drawings for the project location and vicinity map.

Table 1: Project Location

Project Component	Township	Range	Section(s)[a]	Latitude[b]	Longitude [b]
DS-3T Drillsite (existing pad and proposed expansion)	12N	7E	1	70.419336	-150.27072
Proposed Access Road Widening and culvert extensions	12N	7E	1, 2, 11, 12, 13	—	—
	12N	8E	17, 18	—	—
DS-3T Access Road (existing and proposed intersection expansion)	12N	8E	17, 18	70.394701	-150.188735
Proposed Pipelines: • 16" Produced Oil (PO) • 8" Water Injection (WI) • 8" Gas Injection (GI)	12N	7E	1, 12, 13	—	—
	12N	8E	18	—	—
Proposed Pipeline Road Crossing	12N	8E	18	70.397901	-150.218294

[a] All sections are within the Umiat Meridian
[b] Latitude and longitude coordinates for linear Project features are not provided because of the multiple locations these features traverse. Approximate linear feature coordinates are available upon request.

2.2 Site Description

The project area is within the Arctic Coastal Plain physiographic region and the DS-3T gravel pad is located east of the Colville River Delta. The landscape is comprised of flat tundra, low dwarf vegetation, shallow lakes and ponds, and palustrine and marine/estuarine wetlands resulting from

poorly drained soils. As is typical on the North Slope, the project area is located on permafrost where the subsurface is perennially frozen.

3.0 PROJECT OVERVIEW

3.1 Project Purpose and Need

The placement of gravel at DS-3T and construction of pipelines from DS-3T to DS-3S will support the production of oil from the Moraine Reservoir within the Torok formation. The Project will provide safe, efficient, and reliable surface facilities to develop DS-3T and bring online the production of oil by the second quarter of 2025. When it is commissioned, DS-3T will leverage existing KRU facilities that are currently operational.

The Project will support additional development and production of petroleum reserves within the KRU Oil & Gas unit. The proposed project will serve to offset declining production from the Alaska North Slope and maintain throughput of Alaska's Trans-Alaska Pipeline System. Development will provide benefits to local, state, and national economies by creating local-hire jobs during construction and operation, tax revenues, royalties, and new resources to help meet the country's domestic energy demand.

3.2 Project Summary

CPAI proposes to place 52,200 cubic yards (cy) of material (clean gravel fill, clean gravel bag erosion protection, and sand slurry) onto 3.73 acres of wetlands, to expand the southeast side of the existing DS-3T gravel pad and anchor the side slopes of the expansion, widen the 2.9-mile DS-3T access road and expand the access road intersection near DS-3S for module and drill rig transport, and to construct pipelines supported by common vertical support members (VSM). The Project will be connected to and supported by the existing KRU infrastructure through approximately 3 miles of new pipelines routed from the DS-3T drillsite to DS-3S and power supplied via messenger cable connected to new pipelines. See the attached "DS-3T Pipeline Construction, Road and Pad Expansion, and Ice Features" drawings for specific fill requirements and acreage for project components.

DS-3T was originally permitted for up to 50 wells, and CPAI has reconfigured the on-pad facilities to optimize the utilization of space, accommodate a single production module (SPM) and appurtenances, and commence hydrocarbon production. The gravel pad will be expanded by placing 16,500 cy of clean gravel fill and clean gravel-filled bags (for erosion protection) onto 1.0 acre of wetlands to allow for installation of the SPM while providing adequate drill rig access for the purpose of developing hydrocarbon resources.

Surface infrastructure on the pad will include wells, well houses, VSMs, piping and other appurtenances. A temporary 140-bed construction/drilling camp may also be located on the existing pad. The SPM will be installed on the existing pad and pad expansion. The SPM is an advanced self-contained unit that consolidates numerous other modules that would traditionally be found on a pad and controls the functionality of the drill site. It contains intelligent equipment inside a single module, including metering for allocation, injection controls, an electrical room, and pig receiving/launching facilities. The SPM is production-related only, and no separation or processing will occur on the drill site. All processing will occur at Central Processing Facility 3. The SPM drives increased efficiency and functionality of drill site operations by consolidating

multiple modules into one unit, and it can be assembled and tested off-site. The SPM is advanced technology that allows fewer structures to be constructed on a pad.

In addition to the DS-3T gravel pad expansion, the access road will be widened by placing 27,000 cy of clean gravel fill onto 2.0 acres of wetlands to accommodate delivery of the SPM and the drill rig. Approximately 7,600 cy of clean gravel will also be placed on 0.7 acres of wetlands to expand the turn radius at the intersection of the DS-3S and DS-3T roads. The road width and turn radius require expansion to accommodate the large size of the SPM (140' x 40') and the large drill rig that is required for directional/extended reach drilling.

The Project will be connected to and be supported by the existing KRU infrastructure through pipelines and a power line (attached to the proposed pipelines via messenger cable) routed from DS-3S to the DS-3T pad. The new pipelines will include a 16-inch diameter produced oil (PO) pipeline, an eight-inch diameter water injection (WI) pipeline, and an eight-inch diameter gas injection (GI) pipeline. The pipelines will be installed on approximately 320 VSMs and new horizontal support members (HSM). The HSMs will accommodate space for an additional pipeline based on future needs. The power line will be routed to DS-3T via messenger cable attached to the new pipelines, and a pipeline crossing will be installed in the existing DS-3T access road. The pipelines and messenger cable will be installed a minimum of seven feet above the tundra surface, except where the pipelines meet the DS-3T and DS-3S gravel pads and the proposed pipeline crossing.

Existing culverts will be extended at various locations along the existing access road where the road will be widened to maintain surface drainage patterns during construction and operations. Where culvert extensions are not practical, the existing culvert(s) will be removed and replaced with culvert(s) a minimum of 24 inches in diameter.

CPAI proposes to drill up to 29 wells to develop hydrocarbon resources from the existing DS-3T pad. The wells will target the "Moraine" turbidite reservoir that is located approximately 5,000 feet True Vertical Depth Subsea (TVDSS). The current plan includes alternating producer and injector wells drilled via a rotary drilling rig. The wells will be based on a standard three-string casing design using water-based mud and managed pressure drilling. These wells will be hydraulically stimulated and will require artificial lift to flow production. The production wells will be horizontal and directionally drilled. Additionally, there will be some pilot holes drilled at an angle of 45-65 degrees to acquire additional data through the reservoir. Two existing wells that were drilled and suspended by Caelus and will be plugged and abandoned by CPAI in December 2022. See the attached "DS-3T Pipeline Construction, Road and Pad Expansion, and Ice Features" drawings for project summary details.

Table 2 summarizes the initial construction of the DS-3T gravel pad and access road that was previously executed by Caelus as approved by various permits.

Table 2: Existing Infrastructure

Activity	Area (Acres)	Description
DS-3T Gravel Pad	19.6	2.3 miles north of DS-3S, connected by road, within the Kuparuk River field.
DS-3T Access Road	21.0	Gravel road connecting DS-3T and DS-3S
Wells	N/A	2 suspended on-pad wells

Table 3 summarizes the proposed gravel pad expansion, access road widening, and pipelines with VSMs.

Table 3: Proposed Project Summary

Activity	Area (Acres)	Description
DS-3T Gravel Pad Expansion	1.0	Expand gravel pad and install erosion protection to accommodate support infrastructure
DS-3T Access Road Widening	2.0	Widening of gravel road for safe module transport
Access Road Intersection Expansion	0.7	Widening of the intersection of DS3T and DS3S Access Roads for safe module transport
Pipeline VSMs	0.03	Sand slurry back-fill
Pipeline Road Crossing Installation	—	Install casings to accommodate pipelines and power routed between DS-3T and DS-3S
Culvert Extension	—	Extend culverts along access road at road-widening locations as necessary
Drill Wells	—	Drill 29 of the 50 wells previously approved.
Total Acres	3.73	

4.0 PROJECT SCHEDULE

Development activity for the Project is planned to begin as early as August 2023. Drilling activities will begin in Q4, 2024 and extend through 2027 with first oil anticipated in Q2, 2025. The DS-3T gravel work will begin in August 2023 and will include pipeline casing installations, and the SPM will be delivered in the summer of 2024. Pipelines will be constructed starting in November 2023 and pipeline hydrostatic testing will commence in August 2024. Drilling and completion activities will be conducted from October 2024 through 2027. Table 4 below summarizes the project schedule details.

Table 4: Estimated Project Schedule

Timeframe	Project Activity
Q3-Q4 2022	Submit permit applications and supporting documents
Q4 2022	Plug and abandon existing suspended wells
Q3 2023 – Q2 2024	Gravel mining, gravel pad expansion, access road widening, culvert extensions, and intersection expansion
Q4 2023 – Q2 2024	Ice road and ice pad construction
Q4 2023 – Q2 2024	Pipeline construction
Q4 2023 – Q2 2024	Pipeline crossing (casing installation)
Q1 2024 – Q1 2025	Drill site facilities construction
Q3 2024	SPM Sealift & transport to DS-3T
Q3 2024	Pipeline tie-ins
Q3 2024	Pipeline hydrostatic testing
Q4 2024 – Q4 2027	Drilling and completion activities
Q2 2025	First oil

As detailed design progresses, the project construction and drilling schedule may be modified. The placement of gravel for the 1.0-acre gravel pad expansion, the 2.0-acre road widening, and the 0.7-acre intersection expansion is planned to be completed in one construction season to

minimize safety risks and gravel mining impacts associated with a multi-year expansion. VSM installation and pipeline installation is also scheduled to be completed in one construction season.

5.0 TEMPORARY AND PERMANENT IMPACTS TO WETLANDS

The proposed pad expansion will result in unavoidable temporary impacts and permanent impacts to tundra wetlands located within the project area. Temporary impacts include increased turbidity and sediment. The permanent impacts would affect a total of 1.0 acre of wetlands for the proposed gravel pad improvements, 2.7 acres of wetlands for the proposed road improvements, and 0.03 acres of wetlands for back-filling VSMs. Table 5 lists the project footprint quantities and fill requirements to Waters of the United States (WOUS).

Table 5: Footprint of Project Components and Fill Requirements to WOUS

Component	Fill Type	Footprint (acres)	WOUS Footprint (acres)	Fill Quantity (cy)	Notes/Assumptions
DS-3T Gravel Pad Expansion	Gravel/gravel erosion protection	1.0	1.0	16,500	Based on a minimum pad thickness of 5 feet with 2H:1V side slopes.
DS-3T Access Road Widening	Gravel	2.0	2.0	27,000	Based on a minimum pad thickness of 5 feet with 2H:1V side slopes.
DS-3T Access Road Intersection Expansion	Gravel	0.7	0.7	7,600	Based on a minimum pad thickness of 5 feet with 2H:1V side slopes.
Pipeline VSMs	Sand slurry	0.03	0.03	1,100	Approximately 320 off-pad VSMs
Totals	Gravel	3.7	3.7	51,100	
	Sand slurry	0.03	0.03	1,100	
	Total fill	3.73	3.73	52,200	

6.0 PROJECT COMPONENTS

6.1 Existing Project Components

The existing DS-3T gravel pad currently consists of the following components:

- 19.6-acre gravel pad with erosion protection
- 2.9-mile grave access road
- 2 existing wells drilled and suspended by the previous permittee

6.2 DS-3T Proposed Project Components

CPAI proposes to construct and install the following Project components:

- 1.0-acre gravel pad expansion of DS-3T
- 2.0-acre gravel access road widening improvements between DS-3T and DS-3S
- 0.7-acre access road intersection expansion near DS-3S
- 16-inch PO pipeline
- 8-inch WI pipeline

- 8-inch GI pipeline
- New VSMs and HSMs to support three pipelines and a messenger cable with additional space for a future pipeline
- Road crossing for pipelines and power
- Culvert extensions
- 29 new wells and wellhead shelters (including 54 mouseholes to support drilling)

6.3 Proposed DS-3T Gravel Pad Expansion and Drillsite Components

The proposed 1.0-acre gravel pad expansion will be constructed with clean gravel and will have a minimum pad thickness of five feet from the tundra surface with side slopes of 2 feet of horizontal (H) width to 1 foot of vertical (V) height (2H:1V) in most areas. The *Kuparuk Storm Water Pollution Prevention Plan* (SWPPP) will be amended to include DS-3T construction and management of the expanded gravel pad drainage. See the attached "DS-3T Pipeline Construction, Road and Pad Expansion, and Ice Features" drawings for details.

The proposed gravel pad expansion is sized and designed to provide adequate space for drillsite facilities including the SPM, valve shelters, rig movement, drilling material storage, and well work equipment. A total of 29 wells are planned for the Project, and thermosyphons will be installed directly behind the wells to protect the on-pad pipe rack VSMs.

Processing of production fluid beyond routine well testing and heating of process fluids is not planned at DS-3T. DS-3T drillsite facilities may include the following components and equipment, and additional tools and equipment necessary for safe and effective operations:

- Chemical injection module (including tanks within module, containment, and exterior tank fill connection
- Chemical, drilling and production fluid storage with containments and truck loading areas (as required for bulk loading and unloading)
- Chemical storage tank platform
- Construction Camp
- Construction trailers and offices
- Drill rigs and all ancillary components
- Emergency shutdown module
- Envirovac
- Equipment and material storage
- Fuel gas conditioning module and skid
- Lighting as needed near the well rows
- Pig launching/receiving module
- Production heater and appurtenances
- Production heater skid
- Remote electrical and instrumentation module
- Single Production Module (SPM)
- Switchgear platform
- Transformer platforms
- Utility terminals
- Valves shelter platform
- VSMs (on-pad to support piping and facilities)

- Well houses and well laterals

6.4 Power Source and Communications

Power will be supplied to DS-3T from the DS-3S 34.5kV transmission line, which will be suspended from the DS-3T pipelines via messenger cable.

6.5 Material Site

A total of approximately 52,200 cy of clean gravel, sand and slurry material will be required to fill 3.73 acres of WOUS for this project. Materials will be sourced from existing permitted sources within KRU and will be hauled to the project area on the existing Kuparuk River field road system. Material collection and placement is planned to be completed in one construction season.

6.6 Camp Requirements

A temporary construction and drilling camp may be located on the DS-3T gravel pad. The camp would accommodate up to 140 beds and would be placed on the southwest portion of the existing gravel pad. The camp would support the housing of construction workers, ice road crews, and drilling staff. During operations, personnel will be housed at the existing Kuparuk Operations Center (KOC) and Kuparuk Industrial Center (KIC) camps. Table 6 provides details for camp requirements to support construction, drilling, and operations.

Table 6: Camp Use

Project Phase	Camp	Location	Schedule of Use
Construction	Temporary Camp	DS-3T	Q2 2023 – Q1 2025
Drilling	Drill rig camp(s)	DS-3T	Q4 2024 – Q4 2027
Operations	KOC and KIC	Central Processing Facility 1	Q2 2025 – end of field life

6.7 Office Requirements

Construction office trailers and break shacks will be on site during construction and may be onsite intermittently to support drilling and operations activities.

6.8 Water Use Requirements

Freshwater will be required to support the Project during construction, drilling, and operations phases. Freshwater will be used to supply potable water for the construction and drilling camps. Additional freshwater withdrawals from local permitted lakes will be needed during pipeline construction (ice road and ice pad construction and maintenance, hydrostatic pipeline testing), for drilling support, and during operations (dust suppression). Water will be withdrawn from local permitted lakes with water withdrawal authorizations including water rights, temporary water use authorizations, and where necessary, fish habitat permits.

7.0 ICE CONSTRUCTION

A combination of project-specific ice features will be constructed, maintained, and utilized to construct the new pipelines from DS-3S to DS-3T. Three ice roads and seven ice pads will be

utilized to support pipeline construction. Freshwater sources for the ice features will include Lake L9115 and other local permitted lakes. See attached figures for additional details.

8.0 DRILLING

Drilling is planned to begin in October 2024. Drilling and completion activities will occur from October 2024 through 2027, until all planned wells are completed. Drill rig engines will be powered by ultra-low sulfur diesel and drill rig boilers and heaters will be operated by low end point diesel prior to the commissioning of the new power line routed to DS-3T via messenger. Once the powerline is commissioned, drill rig engines will be operated by shore power generated at Central Processing Facility 3 and ultra-low sulfur diesel fuel will be available for back-up.

9.0 FLUID STORAGE

Diesel may be stored on site during drilling and construction operations. Other fluid storage during the operations phase may include corrosion inhibitor, scale inhibitor, emulsion breaker, foam inhibitor, surfactant, methanol, glycol, and other products related to hydrocarbon production. Fluids used in well drilling, workovers, treatments, and associated operations will be stored at DS-3T as well as other locations in the Greater Kuparuk Area.

Secondary containment for single-wall storage tanks with a capacity of 55 gallons or more will be large enough for the contents of the largest tank in the containment with additional capacity to allow for local precipitation. Double-walled storage tanks will be designed to contain a leak and will utilize a system to prevent a discharge resulting from overfill. Double-walled fuel storage tanks with a capacity of 660 gallons or more will be located within a lined dike or otherwise covered by a local waiver of lined dike requirements. Manifold tanks without isolation valves will be treated as a single tank for calculating secondary containment requirements.

Oil storage will comply with state and federal oil pollution prevention requirements, according to the *Kuparuk Oil Discharge Prevention and Contingency Plan* (ODPCP) and *Spill Prevention, Control, and Countermeasure (SPCC) Plan*. Secondary containment for oil storage tanks will be sized appropriately to the container type and according to governing regulatory requirements in 18 Alaska Administrative Code 75 and 40 CFR 112.

10.0 CONTINGENCY PLANS

CPAI will amend, as needed, the existing *Kuparuk ODPCP* and *Kuparuk SPCC Plan* to address operation of the expanded DS-3T drillsite. The *Kuparuk ODPCP* complies with State of Alaska requirements in Alaska Statute 46.04.030, 18 AAC 75, United States Environmental Protection Agency (EPA) regulations in 40 CFR 112.20. The *Kuparuk SPCC Plan* complies with Federal US EPA regulations in 40 CFR 112.

The intent of the ODPCP and SPCC Plan is to demonstrate CPAI's ability to prevent facility oil spills from entering the water and land and to ensure effective response in the event of an accidental release.

10.1 Spill Prevention Measures

CPAI provides regular training for its employees on the importance of preventing oil spills, hazardous substances spills, and spill reporting. CPAI provides new-employee orientation, annual environmental training seminars, and annual training for oil handling personnel on ODPCP and SPCC Plan requirements. CPAI employees participate in frequent safety meetings to address

spill prevention and response issues as appropriate. The CPAI Incident Management Team also participates in regularly scheduled training programs and conducts spill response exercises in coordination with local, state, and federal agencies.

CPAI conducts ground-based and aerial examinations of pipelines and facilities. Aerial surveillance is often aided by aircraft-mounted infrared technology. Infrared technology makes it possible to identify spills based on the temperature signature resulting from the release of warm fluid. Infrared technology can detect heat in darkness or when other circumstances such as fog or drifted snow limit visibility.

10.2 State Spill Response Plan

CPAI has implemented an oil spill contingency plan designed to minimize accidental oil spill impacts. The existing Alaska Department of Environmental Conservation (ADEC) approved *Kuparuk ODPCP* will be amended, as needed, to address the expanded DS-3T drillsite. As demonstrated by the *Kuparuk ODPCP*, CPAI will ensure that readily accessible inventories of appropriate oil spill response equipment and personnel in the Greater Kuparuk Area (GKA) will be available for use at the drillsite. In addition, the spill response cooperative, Alaska Clean Seas, will act as CPAI's primary response action contractor and will provide trained personnel to manage all stages of a spill response, from containment to recovery and cleanup.

10.3 Federal SPCC Plan

The *Kuparuk SPCC Plan* has been established in accordance with federal regulations and describes CPAI's spill prevention programs in place to minimize the potential for oil discharges at KRU facilities. This plan will be updated, as needed, to address the expanded DS-3T drillsite. In addition, the existing *Kuparuk ODPCP* serves as the EPA-approved SPCC Facility Response Plan and demonstrates that CPAI's capability to respond to potential oil spills entering the water and land and to ensure rapid response in the event of an accidental release.

10.4 Subsidence Issues

Thermosyphons will be installed directly behind the wells to protect the on-pad pipe rack VSMs.

11.0 EROSION CONTROL

The existing L-shaped DS-3T gravel pad is designed and orientated to withstand a 100-year flood event. Additionally, side slopes are armored with clean gravel filled bags, each containing four cubic yards of clean gravel to protect the pad against erosion. See the attached "DS-3T Pipeline Construction, Road and Pad Expansion, and Ice Features" drawings for erosion control placement details.

The proposed project will continue to follow the *Kuparuk SWPPP*, which will be updated to include the expanded DS-3T gravel pad. This plan outlines procedures for operation, monitoring, and maintenance of various erosion control methods. Erosion control in the GKA is accomplished using a combination of engineering and physical armor methods.

12.0 SNOW REMOVAL

A snow removal plan will be finalized for DS-3T. GKA standard operation procedures require the use of snow blowing equipment that minimizes gravel carryover to the tundra. Snow removal plans require placement of cleared snow in designated snow push areas. We anticipate that snow

will be pushed and stored on unused areas of the pad (i.e. north of the plugged and abandoned wells). See the attached "DS-3T Pipeline Construction, Road and Pad Expansion, and Ice Features" drawings for additional details.

13.0 WASTE DISPOSAL

13.1 Wastewater

Sanitary waste generated from the construction and drilling camps will be hauled to the wastewater treatment facility at KOC. The treated wastewater will be hauled to and disposed of at an existing approved disposal site as per the regulations.

13.2 Solid Waste

Food waste will be placed in a municipal solid waste dumpster equipped with a cage and door to prevent wildlife access. The food waste will be transported to the Oxbow Landfill. Other non-hazardous solid waste will be recycled or transported to the Oxbow Landfill. Hazardous or solid waste associated with the Project will be managed in accordance with the ADEC and EPA regulations.

Drilling waste (muds and cuttings) will be disposed of onsite through annular disposal or transported to an approved Class II disposal well such as the Kuparuk disposal wells at Drill Site 1B. Permanent reserve pits are not required. Waste materials generated from well work will be managed according to the *Alaska Waste Disposal and Reuse Guide*. Produced water will be processed and re-injected to the subsurface or in certain situations, disposed of through an approved disposal well.

14.0 AIR EMISSIONS

Drilling will be conducted under the existing KRU Minor General 2 Permit AQ1015MG201P or other portable oil and gas operation permitting mechanisms. No additional permitting actions are anticipated for construction support, well installation or operations. Installation of a production heater is planned, and an applicability determination will be completed to determine potential permitting actions. No stationary emission units are anticipated to be added to support the proposed expansion.

15.0 WILDLIFE

CPAI has developed a *Wildlife Avoidance and Interaction Plan* for CPAI's North Slope locations in consultation with state and federal agency representatives to provide guidance to CPAI employees and contractors and assist them in implementing appropriate standardized procedures when wildlife is encountered. CPAI will continue to follow this plan for DS-3T and will update or modify the plan as necessary in consultation with regulatory agencies and the local community. The Nuna project was subject to prior ESA consultation with USFWS (April 18, 2012, Biological Opinion for Nuna POA-2005-1295-M6). The Project activities will be carried out in accordance with the Reasonable and Prudent Measures and Terms and Conditions of that Biological Opinion.

15.1 Endangered Species Act and Marine Mammal Protection Act

Threatened or endangered species that may occur in the DS-3T project area include polar bears (Ursus maritimus), spectacled eiders (Somateria fischeri), and Steller's eiders (Polysticta stelleri). The DS-3T project is located within designated critical habitat for polar bears.

The Project overlaps with preferred spectacled eider nesting habitat, but this habitat is not constrained on the North Slope or in the project area.

Steller's Eiders are extremely rare along the central Beaufort Sea coast where the GKA and DS-3T are located. Breeding distribution in Alaska is primarily near Utqiaġvik, although the historical range included the entire Arctic Coastal Plain of Alaska (Quakenbush et al. 2002). In the last 22 years, Steller's Eiders have been sighted 3 times on the Colville delta (1995 [J. Bart, Boise State University, pers. comm.], and 2001 and 2007 [Johnson et al. 2002, 2008b]), and 5 times in the Greater Kuparuk Area (1995, 2000, 2001, 2007, and 2014 [Anderson et al. 2008; CPAI, unpubl. data]). There are no records of Steller's Eider nests or broods from the Colville River delta or adjacent Kuparuk oilfield areas, including breeding bird surveys conducted by the US Fish and Wildlife Service (USFWS) from 1992 to 2012.

All gravel placement activities for the proposed project would occur outside the bird nesting window (no fill activities will occur between June 1 and July 31) so as to avoid disturbance to any active Steller's or spectacled eider nests. Additionally, off-pad activities are prohibited in the project area during bird nesting season without additional approvals. The low densities of Steller's and spectacled eiders in the proposed project area and the construction schedule will limit the potential for adverse effects from the proposed project on Steller's and spectacled eiders.

Historical surveys have identified zero polar bear dens within 5 miles of the project location. Polar bears are not likely to be adversely affected by the proposed project. Project activities are assessed and conducted in accordance with the Beaufort Sea Incidental Take Regulations and Letters of Authorization for incidental and intentional take issued to CPAI by the USFWS. CPAI's *Wildlife Avoidance and Interaction Plan* contains a Polar Bear Avoidance and Interaction Plan. This plan details information on polar bear interaction procedures, polar bear dens and denning habitat protections, den survey techniques, (including visual and infrared surveys), personnel training, attractant management, best management practices, and work cessation procedures.

16.0 CULTURAL RESOURCES

An archeological field survey, *Cultural Resources Reconnaissance for the Nuna Project, North Slope, Alaska for the Year 2010*, was conducted in 2010 by Reanier & Associates, Inc. prior to initial DS-3T gravel pad construction and no cultural resources were identified in the project area and no previously unknown cultural resources were identified in the Project during the field survey.

Reanier & Associates, Inc. conducted an additional survey of the proposed DS-3T project area in summer 2022 to locate currently unknown sites and drafted a forthcoming letter report stating there are no listed or eligible properties existing in the vicinity of the worksite. Letter reports resulting from surveys include:

- Background information on the history of the landscape and human use of the study area since the last ice age,
- Physical descriptions of the area,
- Results of the reconnaissance survey, and
- Conclusions and recommendations for cultural resource clearances.

The records review will include the Alaska Heritage Resources Survey database, maintained by the Office of History and Archaeology within the Alaska Department of Natural Resources (ADNR) and the Traditional Land Use Inventory (TLUI) database, maintained by the NSB.

Cultural resources are not anticipated to be impacted by the proposed project. The USACE, NSB, State of Alaska, and local entities will be notified immediately if prehistoric, historic, or archaeological objects are discovered during construction or operations.

17.0 ALASKA NATIVE HIRE POLICY

CPAI is committed to continuing its partnership with local contractors and businesses in the development of the Greater Kuparuk Area. This gravel will be placed by the existing maintenance contractor work force at Kuparuk. When reasonably foreseeable to do so, CPAI has committed to hire and, where appropriate, to provide training to Kuukpik shareholders, Nuiqsut residents, and Alaska Natives. When appropriate, local resident hire will continue to be coordinated through the Kuukpik employment coordinator to identify and place qualified individuals interested in working on the project. In addition, CPAI and its contractors assist with scholarships, career training, and internship opportunities to further expand local workforce capabilities and ensure that local residents are hired and retained.

18.0 TRAINING

CPAI provides new-employee orientation on health, safety, and environmental issues, annual environmental training seminars, and appropriate certification classes for specific activities including spill prevention and response. All North Slope employees and contractors are required to complete an 8-hour unescorted training program where they receive a North Slope Environmental Field Handbook and an Alaska Safety Handbook. This training emphasizes protection of archaeological and biological resources, avoiding conflicts with subsistence activities, relevant health and safety measures, and project mitigation commitments.

19.0 PERMITS, AUTHORIZATIONS AND APPROVALS

Table 7 provides a summary of permits, authorizations, and approvals that may be required to construct the Project. In some cases, current permits will be amended or modified to incorporate the expansion.

Table 7: Summary of Permits, Authorizations and Approvals

Agency	Permits, Approvals, and Other Requirements
Federal Agencies	
USACE	• CWA Section 404 Permit Modification
EPA	• Reviews during the USACE Section 404 permitting process • OPA90 SPCC Plan and Facility Response Plan
USFWS	• Marine Mammal Protection Act Letter of Authorization for Incidental Take of Polar Bears Marine Mammal Protection Act Letter of Authorization for Intentional Take (Deterrence of Polar Bears) • Consultation with USACE under Section 7 of the Endangered Species Act (ESA)/Issuance of Biological Opinion for ESA-listed Species

Agency	Permits, Approvals, and Other Requirements
National Marine Fisheries Service	• Consultation with USACE under Section 7 of the ESA/Issuance of Biological Opinion for ESA-listed Species • Consultation with USACE under the Magnuson-Stevens Fishery Conservation and Management Act for Essential Fish Habitat
State Agencies	
ADNR Division of Mining, Land and Water (DMLW), Northern Region	• Temporary Land Use Permits • Cultural Resource Coordination/Consultation with State Historic Preservation Officer under National Historic Preservation Act Section 106
ADNR DMLW, Water Resources Section	• Temporary Water Use Authorizations • Water Rights
ADNR Division of Oil and Gas (DOG)	• Unit Plan of Operations Amendment Approval
ADNR DOG State Pipeline Coordinators Section	• Pipeline Right-of-way Lease
ADEC	• CWA Section 401 Water Quality Certification • CWA Section 402 Alaska Pollutant and Discharge Elimination System permit • Certificates of Proof of Financial Responsibility – Onshore Production Facility • ODPCP - Amendment • Temporary Storage of Drilling Waste • Temporary Camp Permit
Alaska Department of Fish and Game	• Title 16 Fish Habitat Permits • Public Safety Permits
Alaska Oil and Gas Conservation Commission	• Permit to Drill • Approval for Annular Disposal of Drilling Wastes • Area Injection Order (Class II Disposal) • Conservation Order (Pool Rules) • Well Sundries
Alaska Department of Public Safety, Division of Fire and Life Safety	• Fire and Life Safety Plan Review • Fire Marshal Approval
Local Entities	
NSB	• Iñupiat History, Language, and Culture Division: Traditional Land Use Inventory TLUI Clearance Certificate • Administrative Approvals

APPENDIX B: MITIGATION MEASURES

No new exceptions from previous LONS 11-005