



DEPARTMENT OF THE ARMY
ALASKA DISTRICT, U.S. ARMY CORPS OF ENGINEERS
REGULATORY DIVISION
P.O. BOX 6898
JBER, ALASKA 99506-0898

Regulatory Division
POA-2013-461

JAN 16 2015

ConocoPhillips Alaska, Inc.
Attention: Lynn DeGeorge
Post Office Box 100360
Anchorage, AK 99510

Dear Ms. DeGeorge:

Enclosed is the signed Department of the Army permit, file number POA-2013-461, Colville River, authorizing placement of fill material into waters of the United States (US) to construct the Greater Moose's Tooth 1 project for oil and gas production. The project location is within the Arctic Coastal Plain of Alaska, near the Beaufort Sea, approximately 12 miles northwest of Nuiqsut, Alaska. Also enclosed is a Notice of Authorization to post at the construction site.

If changes to the authorized project plan sheets (Figures) or location of the work are necessary for any reason, revised Figures must be submitted to us immediately. Federal law requires approval of any changes before construction begins.

Nothing in this letter excuses you from compliance with other Federal, State, or local statutes, ordinances, or regulations.

Please contact Harry A. Baij Jr. of my Regulatory Division staff at harry.a.baij@usace.army.mil, by mail at the address above, by phone at (907) 753-2784 or toll free from within Alaska at (800) 478-2712, if you need assistance. For more information about the Regulatory Program, please visit our website at <http://www.poa.usace.army.mil/Missions/Regulatory.aspx>.

Sincerely,

A handwritten signature in black ink, appearing to read "CDL", is written over a circular stamp or seal.

Christopher D. Lestochi
Colonel, U.S. Army Corps of Engineers
District Commander

Enclosures



DEPARTMENT OF THE ARMY
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JAN 16 2015

ConocoPhillips Alaska, Inc.
Attention: Lynn DeGeorge
Post Office Box 100360
Anchorage, AK 99510

Dear Ms. DeGeorge:

Enclosed are two copies of Department of the Army (DA) permit POA-2013-461, Colville River, which would authorize placement of fill material into waters of the United States (US) to construct the Greater Moose's Tooth 1 project for oil and gas production. The project location is within the Arctic Coastal Plain of Alaska, near the Beaufort Sea, approximately 12 miles northwest of Nuiqsut, Alaska.

The Alaska Department of Environmental Conservation has issued a Certificate of Reasonable Assurance pursuant to Section 401 of the Clean Water Act for your project and found it to be in accordance with the Alaska Water Quality Standards. This certification is attached to the DA and will become a part of this permit when it is finalized.

Additionally, we have enclosed a Notification of Administrative Appeal Options and Process and Request for Appeal form regarding this DA Permit (see section labeled "Initial Proffered Permit").

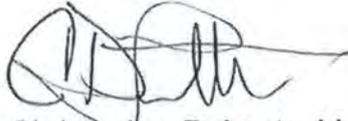
If you accept the conditions of the enclosed permit, please sign and date both copies and return them to us, along with your \$100.00 permit fee. Your check or money order should be made payable to FAO, USACE, Alaska District. The permit will not be valid until we have returned a finalized copy to you. This is not an authorization to commence construction. No work is to be performed in waters of the US, including wetlands, until you have received a validated (signed) copy of the permit.

Nothing in this letter shall be construed as excusing you from compliance with other Federal, State, or local statutes, ordinances, or regulations which may affect this work.

Please contact Harry A. Baij Jr. of my Regulatory Division staff at harry.a.baij@usace.army.mil, by mail at the address above, by phone at (907) 753-2784 or toll free from within Alaska at (800) 478-2712, if you need assistance. For more

information about the Regulatory Program, please visit our website at <http://www.poa.usace.army.mil/Missions/Regulatory.aspx>.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Lestochi", with a long horizontal flourish extending to the right.

Christopher D. Lestochi
Colonel, U.S. Army Corps of Engineers
District Commander

Enclosures

DEPARTMENT OF THE ARMY PERMIT

Permittee ConocoPhillips Alaska, Incorporated

Permit Number POA-2013-461, Colville River

Issuing Office U.S. Army Engineer District, Alaska

Note. The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform discharges and/or work in accordance with the terms and conditions specified below.

Project Description.

Discharge up to 632,000 cubic yards (cy) of clean sand and gravel fill materials into 72.6 acres waters of the United States (US) to construct the Greater Moose's Tooth 1 industrial infrastructure project for hydrocarbon production. Authorized discharges include construction of an access road, a drillsite, above-ground pipeline vertical support members (VSMs), pipeline valve pads, access road vehicle parking pullouts, and bridge abutments in accordance with Table 1.

Table 1: Size and Volume of Fill in Waters of the US, Including Wetlands

Component	Fill Type	Footprint (ac)	Fill Quantity (cy) ^a	Notes/Dimensions
GMT1 Drill Site	Gravel	11.8	131,000	290 feet to 463 feet wide by 1,200 feet long
Access Road (includes bridge abutments)	Gravel	59.1	482,000	7.7 miles long; 32-foot crown width and minimum 5-foot depth
Vehicle Pullout Pads	Gravel	0.9	8,550	3 vehicle pullout pads of 0.3 acres each measuring 50-foot wide by 200-foot long.
Manual Valve Pads	Gravel	0.7	6,500	2 pipeline valve pads of 0.35 acre each measuring is 100-foot by 100-foot with a 20-foot by 25-foot pipeline extension.
GMT1 to CD5 Pipeline VSMs	Sand Slurry/steel	0.07	3,000	8.3-mile above ground pipeline requiring approximately 1,000 new VSMs 55-feet apart
CD1 to CD4N Pipeline VSMs	Sand Slurry/steel	0.03	1,200	3.3-mile above ground pipeline requiring approximately 400 new VSMs aligned to existing VSMs
Total Fill	All types	72.6	632,250	

Note: VSM fill quantity is estimated to be approximately 3 cubic yards per VSM.

Oil, gas, and water produced from the GMT1 drillsite will be sent by pipeline to the CD5 pipeline leading to the Alpine Central Facility (ACF) for processing. Lean gas and Kuparuk-supplied seawater would be delivered to the GMT1 drillsite by pipeline from the ACF for injection into the reservoir.

All work will be performed in accordance with the attached Figures, 33 Sheets, dated 09-08-2014.

Project Location.

Within Section 6, T. 10 N., R. 3 E; Sections 24-29, 31, 32, and 33, T. 11 N., R. 3 E; and Sections 1, 12-18 and 19, T. 11 N., R. 4 E; Umiat Meridian, US Geological Survey Quadrangle Maps Harrison Bay A-3, Harrison Bay B-3; and Harrison Bay B-2.

The authorized discharges begin (eastern extent) at the connection with the existing Colville Delta 5 (CD-5) Access Road located at Latitude 70.304687 and Longitude -151.210979 NAD 83 and ends (western extent) at the GMT1 drillsite gravel pad located at Latitude 70.256952 and Longitude -151.479496 NAD 83. The project is located on the Arctic Coastal Plain (ACP) of Alaska, south of the Beaufort Sea, west of the Colville River, approximately 12 miles northwest of Nuiqsut, Alaska.

General Conditions.

1. The time limit for completing the work authorized ends on **January 31, 2021**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to the US Army Corps of Engineers, Alaska District, Regulatory Division for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions.

Pre-construction Meeting.

1. The permittee shall convene a pre-construction meeting, with their contractor representatives present, a minimum of 15-days prior to the discharge of fill material into waters of the US authorized under this DA permit. The permittee shall invite the USACE, and appropriate federal, state, and borough resource or regulatory agencies within 10-days of the meeting date. The permittee shall provide copies of this DA permit and all attachments to all contractor representatives who shall make the permit copies available in the field during construction activities.

Compensatory Mitigation.

2. a. To compensate for the unavoidable losses of waters of the US authorized under this DA permit, the permittee shall provide compensatory mitigation in accordance with their January 14, 2015, Mitigation Plan (Mitigation Plan). Any deviation from the existing Fish Creek Delta mitigation site shall be submitted to USACE for evaluation and approval.

b. The property must be used solely for the protection of its aquatic resources by the prohibitions set forth in the Mitigation Plan, section 3, Site Protection Instrument, site protective measures 1-9, with a legally sufficient Conservation Easement (CE). The CE must be approved by the USACE prior to recording, and recorded at the local recording district, prior to commencing the discharges of fill material authorized under this DA permit. A copy of the recorded CE shall be provided to the USACE within 30-days of recordation.

c. Should this DA permit be transferred, a copy of the recorded CE shall be provided to the transferee. Proof of the permit transfer and CE delivery to the transferee shall be provided to the USACE at time of transfer.

Fill Discharges.

3. a. All fill material authorized under this permit must consist of suitable material free from toxic pollutants in toxic amounts. Only clean earthen mineral material composed of coarse sands and gravels shall be used for fill.

b. All authorized fill area boundaries shall be surveyed and be clearly delineated (staked, flagged, or posted) prior to the discharge. No fill material, supplies, or construction materials shall be stockpiled on wetlands outside of the authorized fill areas. Transportation vehicles and equipment shall not be operated outside of the authorized fill areas, except as authorized by the State of Alaska and/or North Slope Borough to construct and operate on winter ice pads and/or roads or for tundra travel with specially designed and approved low tundra impact vehicles. Excavation of wetland soils is not authorized.

c. Snow and ice clearing operations necessary to discharge fill material within the fill areas authorized under this DA permit must prevent vegetation, soil, or debris from being discharged into waters of the US outside of all authorized fill areas.

d. All authorized discharges, except those to place, adjust, or relocate culverts, shall be completed during frozen winter conditions during the State of Alaska and/or North Slope Borough approved winter tundra construction/travel season. Discharges necessary to install additional culverts, correct culvert positions, and adjust culvert settings may occur outside of the approved winter tundra construction/travel season.

e. All fill slopes shall be immediately stabilized to prevent erosional impacts to the aquatic environment. Active sloughing of fill material, increased water turbidity, accumulation of sediment in waters and wetlands, and erosion on slopes or around culverts shall be indicators fill slope stabilization is not adequate.

f. If placement of the access road fill material is not completed within any winter season, sufficient openings shall be provided in the roadbed to maintain river and creek flows and overland cross-drainage. Road opening widths shall be of sufficient size to prevent scour of the adjacent tundra wetlands.

g. Road and fill pad surfaces and slopes shall be maintained without discharging fill material off of the embankments into waters of the US.

h. As-built surveys of all fill areas and pipeline VSMs shall be completed by a registered professional land surveyor following completion of construction. An as-built survey report shall be provided to the USACE within 120-days of construction completion showing the fill acreages for the access road, drillsite pad, and other smaller gravel fill areas authorized under this DA permit.

Fish and Wildlife.

4. a. To avoid disturbance of nesting birds, the authorized discharges into waters of the US shall not occur during the pre-nesting and nesting season (1 June - 31 July of each year). If fill discharges or ground disturbing activities must be conducted within waters of the US during the 1 June - 31 July time period, the permittee shall notify the USACE and USFWS, Fairbanks Field Office, to evaluate the potential effects of these activities on migratory birds. Fill discharges and ground disturbing activities outside the 1 June - 31 July time period shall not occur until authorized by the USACE.

b. All utility lines (power and communication) to drill pads shall be suspended from the VSMS/HSMs at a minimum elevation of 7 feet above tundra elevation.

c. The permittee shall comply with their Lighting Plan for Greater Moose's Tooth Unit Facility Development, dated January 6, 2015. All lighting on structures shall be shielded (downcast) to lessen the potential for migratory bird collisions during periods of inclement weather. Permanent communications towers shall be located on facility pads, be less than 200 feet above ground level, and be constructed without support wires. Strobe lighting shall be used during the day and beacons shall be used at night. Temporary towers requiring support wires shall have bird diverters on the wires to minimize collisions.

d. The permittee shall update and comply with their Wildlife Avoidance and Interaction Plan (Wildlife Plan), dated April 2012, to include the GMT1 project. The Wildlife Plan shall include a predator management plan and demonstrate how the permittee will deter ravens, gulls, foxes, and bears from the GMT1 project areas. The permittee shall design and construct all structures associated with the authorized development in a manner which discourages nesting of avian predators and fox denning. The permittee shall remove all bird nests from all structures annually prior to egg-laying to discourage avian predator nesting. The final Wildlife Plan shall be provided to the USACE and USFWS, Fairbanks Field Office, and approved by the USACE prior to commencing the discharges authorized under this DA permit.

Threatened and Endangered Species.

Spectacled eider disturbance

5. a. Ground-level activities (by vehicles or on-foot) within 200 meters of occupied spectacled eider nests, from June 1 through August 15, shall be restricted to authorized fill areas. The construction of permanent facilities, placement of fill materials, alteration of habitat, and introduction of high noise levels within 200 meters of occupied spectacled eider nests shall not occur during the June 1 through August 15 time period.

In instances where summer (June 1 through August 15) support, maintenance, and construction activities must occur off authorized fill areas, USFWS approved nest surveys must be conducted during mid-June (same year of the activity) prior to the approval of the activity. Collected data will be used to evaluate whether the action could occur based on employment of a 200-meter buffer around nests or if the activity must be delayed until after August 15 once ducklings are mobile and have left the nest site. The permittee shall work with and notify the USFWS when scheduling oil spill response training in spectacled eider habitat to take place outside of nest/brood-rearing periods or conduct nest surveys. The protocol and timing of nest surveys for spectacled eiders shall be determined in cooperation with and approved by the USFWS. The surveys will be supervised by biologists who have previous experience with spectacled eider nest surveys.

Predation.

b. *Waste Management Plan.* The permittee shall prepare and implement a comprehensive waste management plan (Waste Plan) for all activities occurring within the authorized project areas. The Waste Plan shall be provided to the USACE for approval, in consultation with the USFWS, BLM, Alaska Department of Natural Resources (ADNR), the North Slope Borough (NSB), and other regulatory agencies, as appropriate (based on agency legal authority and jurisdictional responsibility), as part of a plan of operations or other similar permit application. Waste management decisions affecting waste generations shall be addressed in the following priority: (1) prevention and reduction, (2) recycling, (3) treatment, and (4) disposal. The Plan shall consider and take into account the following requirements:

- 1) Methods to avoid attracting wildlife to food and garbage. The Plan shall identify precautions and methods to avoid attracting wildlife to food and garbage.

2) Disposal of putrescible waste. There shall be no burial of garbage. The permittee shall have a written procedure to ensure the handling and disposal of putrescible waste shall be accomplished in a manner that prevents the attraction of wildlife. All putrescible waste shall be incinerated, backhauled, or composted in a manner approved by the landowners, and/or agency of jurisdictional authority. All solid waste, including incinerator ash, shall be disposed of in an approved waste-disposal facility in accordance with appropriate Environmental Protection Agency (EPA) and/or Alaska Department of Environmental Conservation (ADEC) regulations and procedures. The Waste Plan shall prohibit the burial of human waste except as authorized by the landowner and/or agency of jurisdictional authority.

c. Predation.

The permittee shall utilize best available technology to prevent facilities from providing nesting, denning, or shelter sites for ravens, raptors, and foxes. The permittee shall provide the USACE with an annual report on the use of oil and gas facilities by ravens, raptors, and foxes as nesting, denning, and shelter site. Additionally, feeding of wildlife is prohibited and will be subject to non-compliance regulations.

Collisions.

d. Lighting. Illumination of all structures between August 1 and October 31 of each year shall be designed to direct artificial exterior lighting inward and downward, rather than upward and outward, unless otherwise required by the Federal Aviation Administration.

e. Utility lines. To reduce the possibility of spectacled eiders from colliding with above-ground utility lines (power and communication), such lines shall either be buried in the authorized fill areas or suspended on the pipeline vertical/horizontal support members (VSM/HSMs) except in rare cases which are to be few in number and limited in extent. Exceptions are limited to the following situations and must be reported to the USFWS when exceptions occur.

- 1) Overhead power or communication lines may be allowed when located entirely within the boundaries of a facility gravel pad;
- 2) Overhead power or communication lines may be allowed when engineering constraints at the specific and limited location make it infeasible to bury or connect the lines to a VSM/HSM.;
- 3) Overhead power or communication lines may be allowed in situations when human safety would be compromised by other methods.

f. Towers. To reduce the likelihood of spectacled eiders colliding with communication towers, they shall be located, to the extent practicable, on authorized gravel pads as close as possible to buildings or other structures, and on the east or west side of buildings or other structures. Support wires associated with communication towers, radio antennas, and other similar facilities, shall be avoided to the extent practicable. If support wires are necessary, they shall be clearly marked along their entire length to improve visibility to low-flying birds. Such markings shall be developed through consultation with the USFWS.

g. Monitoring. Record all positive sightings of spectacled eiders for the number, location, general habitat type, and gender (if practicable without disturbance) within the authorized project areas. Provide a summary report to the USFWS and USACE by December 1 of each year for the life of the project (use of the access road) or until the eiders become delisted.

Hydrology.

6. a. Existing (natural) drainage patterns shall be maintained throughout all construction and operation periods by the installation of culverts and bridges in all authorized fill areas in sufficient number and size to prevent ponding, dewatering, water diversion between watersheds, or concentrating runoff flows. Important field surveying, planning, and design work must ensure the placement of culverts and construction of bridges within the Ublutouch River; Barely, Crea, and Blackfish Creeks, and other unnamed watersheds along the access road are not affected by hydrologic changes due to project construction.

b. A hydrologic field survey to accurately identify culvert drainages points and bridge abutment locations shall be completed for the entire GMT1 access road length and drillsite at spring break-up and/or shortly thereafter. The permittee shall submit a report of the field hydrology findings, proposed culvert locations

and sizes, and proposed bridge locations and sizes to the USACE for approval prior to discharging fill material authorized under this DA permit.

c. The permittee shall prepare and submit a culvert monitoring report to the USACE, for the 3 summer seasons following fill placement authorized in this DA permit. The reports shall be submitted prior to July 30 of each year. The report shall include photographs of all road and pad areas to demonstrate the hydrologic conditions at spring break-up time and post break-up (summer conditions). The report shall include an evaluation of all areas where additional culverts are necessary to retain existing drainage patterns and where culvert maintenance, repair, upgrade, setting adjustments, or replacement are necessary. The culvert/drainage corrective work shall be completed by freeze-up within the same summer season the drainage problems are identified. Evidence of ponding, drying, erosion, or stream channel changes adjacent to authorized fill areas are indicators of necessary corrective action. Culverts shall be marked to facilitate snow removal operations to prevent excessive deposition of snow into creeks and drainage areas. Culverts shall be maintained to adequately convey surface waters throughout the life of the project (access road use).

d. The Crea Creek bridge shall be constructed with a minimum 40-foot span between the sheet-pile abutments and ensure riparian buffers (creek banks and overbank flow areas) are provided on each side. The mid-point of the bridge deck shall be located over the center of the creek channel at the point of crossing. The Crea Creek banks and wetlands adjacent to the abutments shall not be disturbed or excessively thawed during bridge construction (sheetpile installations) to cause riparian areas to subside during construction or during the following summer season. Figures showing the Crea Creek bridge crossing design features shall be submitted to the USACE for approval prior to the discharge of fill material authorized under this DA permit.

e. Design of the Barely Creek culverted road crossing shall be coordinated with the BLM, ADFG, and USACE. Final detailed design figures shall be provided to the USACE for approval prior to the discharge of fill material authorized under this DA permit.

f. A minimum 6-inch layer of organic and/or fine grained plant growth material seeded with local native plant species shall be provided on each side of the roadbed for a distance of 50-feet along each side of the Ublutouch River, Crea, and Barely Creek crossings. Biodegradable jute or matting shall be used to prevent erosion on the seeded slopes at installation. A figure showing the design features and a vegetation plan shall be submitted to the USACE for approval prior to the discharge of fill material authorized under this DA permit.

g. Flow discharge measurements shall be collected throughout the first 3 thaw seasons following construction of the access road at the crossings of the Ublutouch River, Barely Creek, and Crea Creek. Continuous stage and discharge monitoring shall be collected until seasonal flows cease. Flow discharge measurements shall be collected using the US Geological Survey methods appropriate for use on the North Slope. A report shall be provided to the USACE and BLM by December 1 of the year following completion of the access road showing the highest and lowest data for water flows, stages, and velocities. Photographs showing all bridge abutments at the ground surface, creek culvert inlets and outlets, and channel and bank conditions for each crossing on each side of the access road shall be included.

Gravel, Dust, and Snow.

7. a. The permittee shall comply with the Alpine Facilities Erosion Control Plan-Greater Mooses Tooth, Revised, dated November 2013.

b. The permittee shall ensure pollution to aquatic resources from road gravel spray and fine airborne fill particle dust discharges are minimized to the maximum extent practicable. Dust abatement practices, during dust prone weather and/or seasonal conditions, must be performed for the life of the project (use of the road). Priority shall be given to dust abatement practices and road maintenance within the Ublutouch, Barely, and Crea watersheds to ensure water pollution does not occur to fish habitat areas. Compliance with this condition shall be determined by visible dust and gravel presence on tundra wetland areas adjacent to the authorized fill areas.

c. Snow removal operations shall not cause a discharge of gravel or debris onto adjacent tundra wetlands. Any materials gravel or debris inadvertently discharged into wetland areas beyond the fill footprint shall be removed before seasonal snow melt is complete.

Cease to Maintain or Abandon.

8. Should the permittee decide to cease to maintain, use, or to abandon the authorized fill and pipeline VSMs authorized under this DA permit, the USACE shall be notified by written communication and in compliance with General Condition 2 of this DA permit. Cease to maintain, use, and abandon are defined as non-use of the facilities, or portions thereof, for a period of 5 consecutive years. To ensure any portions of fills and attendant structures authorized under this permit are not abandoned, a report shall be submitted to the USACE every five years, beginning after the completion of construction of facilities authorized by this permit, which detail the permittee's hydrocarbon production plans and use of the access road and pipelines. If any authorized fill areas or pipeline sections are determined to be unmaintained, used, or abandoned, a fill and/or structure removal and site rehabilitation plan (Rehab Plan) shall be submitted to the USACE within 120 days of abandonment. The plan shall include, at a minimum: goals and objectives, site treatments, performance standards, reporting, remedial work plans, and monitoring to ensure performance standards are met. The plan shall include an objective of restoring fish and wildlife habitat.

Further Information.

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, State, or local authorization required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

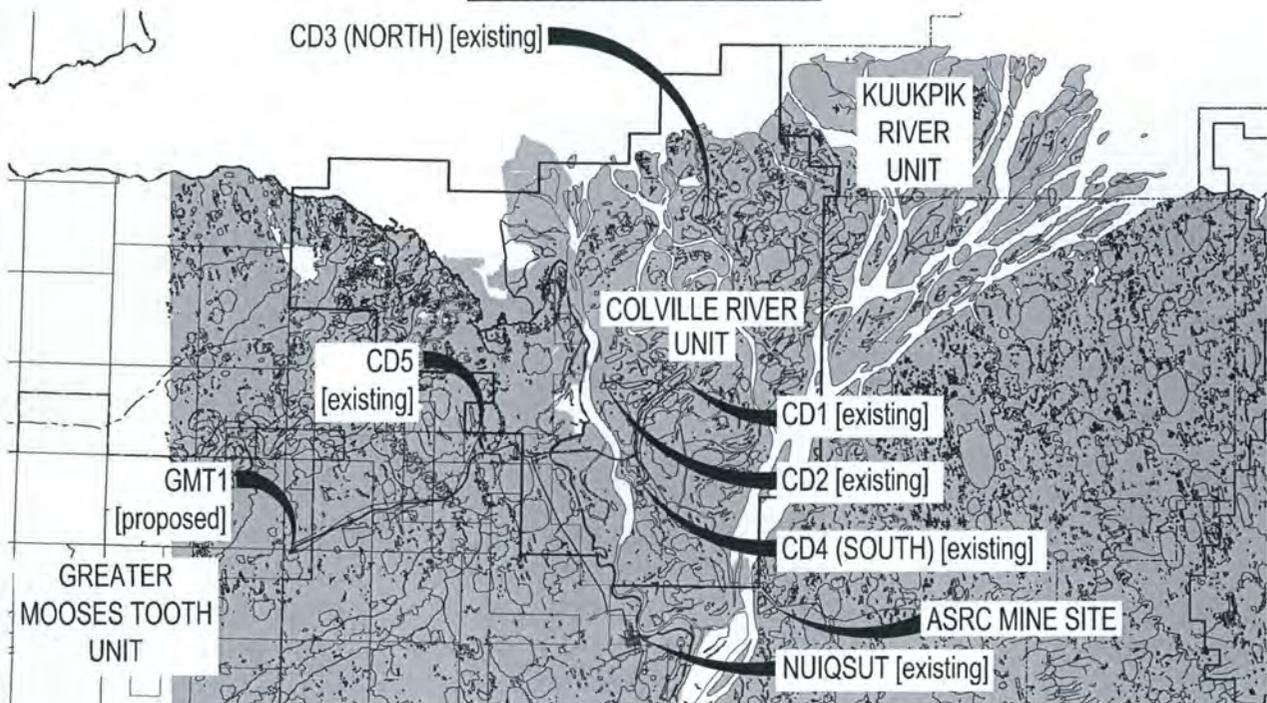
e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

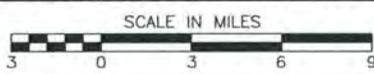
5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:



ALASKA VICINITY MAP



ALPINE SATELLITE DEVELOPMENT VICINITY MAP



P | N | D
ENGINEERS, INC.

ConocoPhillips
Alaska, Inc.

<p>PURPOSE: CONSTRUCT A GRAVEL DRILLING PAD AND ROAD ACCESS FOR OILFIELD DEVELOPMENT</p> <p>DATUM: BPMSL, NAD83 ASP ZONE 4</p> <p>ADJACENT PROPERTY OWNERS:</p> <ol style="list-style-type: none"> 1. KUUKPIK VILLAGE CORP 2. BUREAU OF LAND MANAGEMENT 3. ARCTIC SLOPE REGIONAL CORP 4. STATE OF ALASKA DNR 	<p>REFERENCE: POA 2013-461</p> <p>APPLICANT: CONOCOPHILLIPS ALASKA, INC (CPAI)</p> <p>LOCATION: T10N, R3E UMIAT MERIDIAN</p>	<p>PROPOSED: GMT1 ROAD, PAD & PIPELINE CONSTRUCTION</p> <p>IN: GREATER MOOSE TOOTH UNIT</p> <p>NEAR/AT: ALPINE</p> <p>COUNTY: ANS BOROUGH</p> <p>STATE: ALASKA</p> <p>SHEET 1 of 33 09-08-14</p>
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KUUKPIK VILLAGE CORPORATION
P.O. BOX 89187
NUIQSUT, AK 99789
(907) 480-6220
ATTN: ISAAC NUKAPIGAK

BUREAU OF LAND MANAGEMENT
1150 UNIVERSITY AVENUE
FAIRBANKS, AK 99709
ATTN: STEVE HARTMANN

ARCTIC SLOPE REGIONAL CORPORATION
P.O. BOX 129
BARROW, AK 99723
ATTN: REX A. ROCK SR.

STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINING, LAND & WATER
3700 AIRPORT WAY
FAIRBANKS, AK 99709
ATTN: GARY SCHULTZ

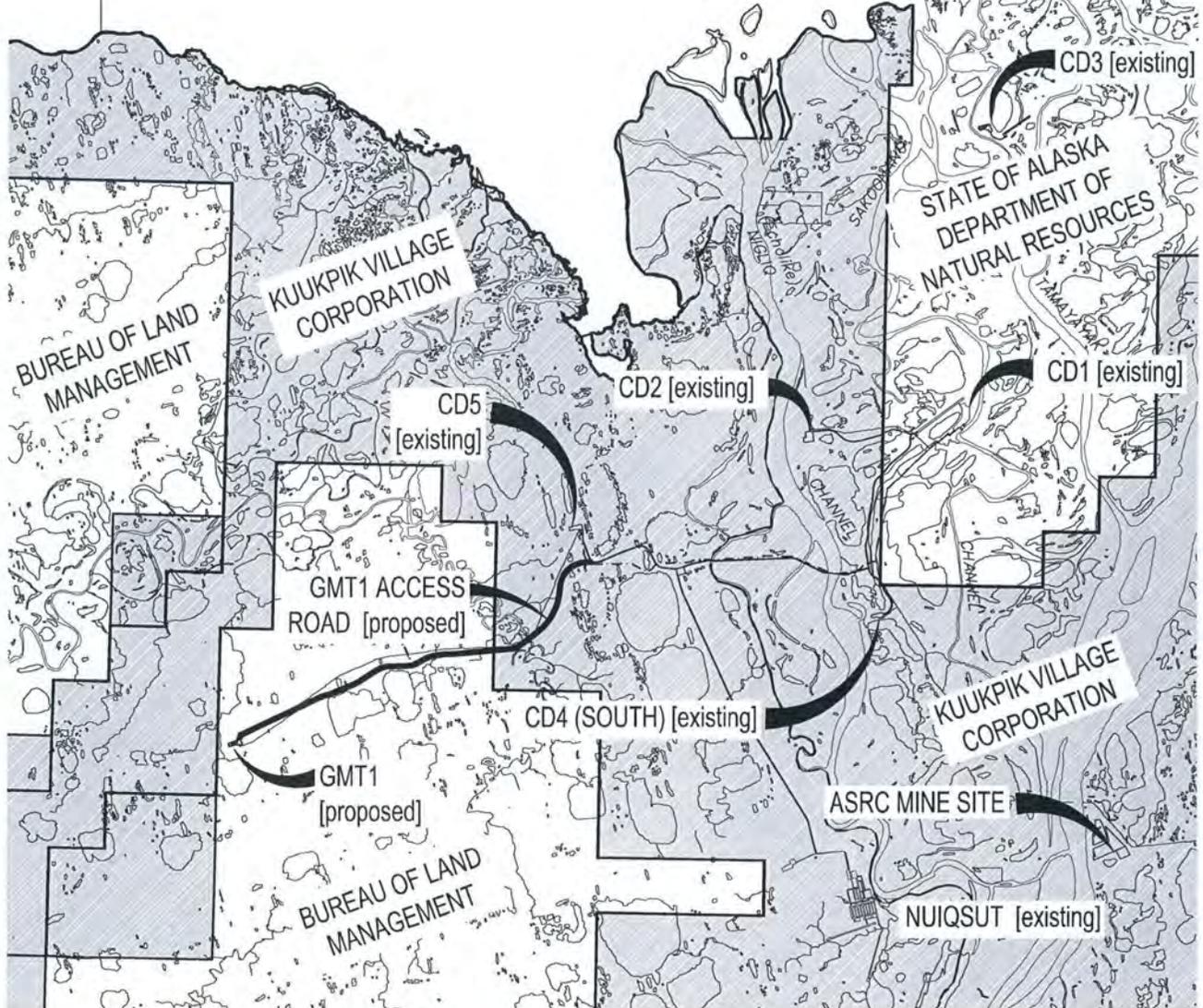


GMT1 ADJACENT LAND OWNERS

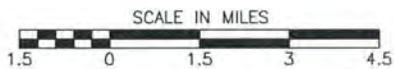
REFERENCE: POA 2013-461
APPLICANT: CPAI
PROPOSED: GMT1 ROAD, PAD,
& PIPELINE
CONSTRUCTION
AT: ALASKA
SHEET **2** of **33** 09-08-14



HARRISON
BAY



GMT1 ADJACENT LAND OWNERS MAP



THIS MAP PROJECTION IS BASE UPON ALASKA STATE PLANE, NAD 83. THIS MAP IS BASED ON DATA PROVIDED BY THE U.S. GEOLOGICAL SURVEY, THE ALASKA DEPARTMENT OF NATURAL RESOURCES, AND CONOCO PHILLIPS ALASKA, INC.



ConocoPhillips
Alaska, Inc.

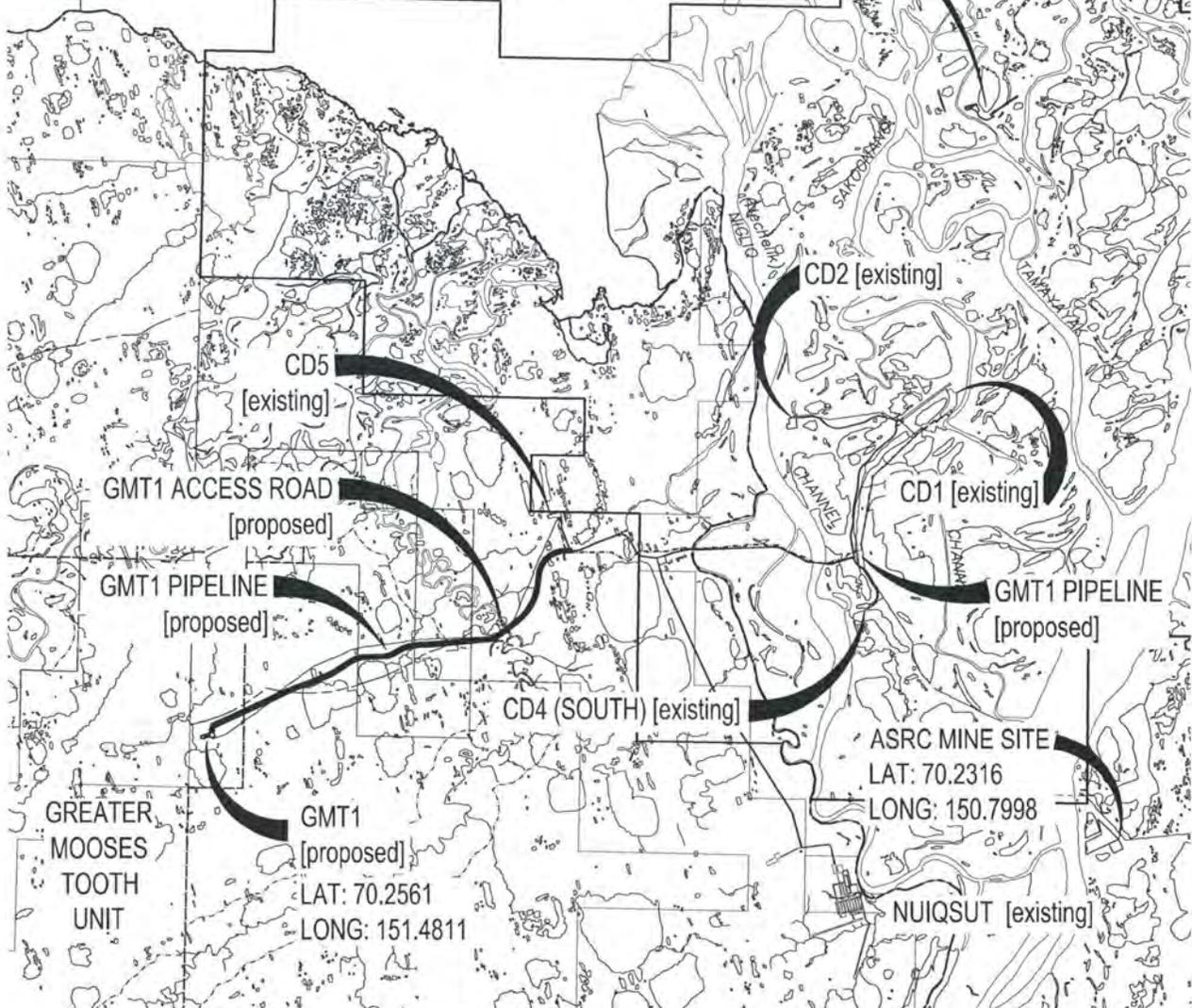
REFERENCE: POA 2013-461
APPLICANT: CPAI
PROPOSED: GMT1 ROAD, PAD,
& PIPELINE
CONSTRUCTION
AT: ALASKA
SHEET **3** of **33** 09-08-14



CD3 (NORTH) [existing]

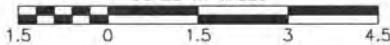
COLVILLE RIVER UNIT

HARRISON BAY



ALPINE SATELLITE DEVELOPMENT LOCATION MAP

SCALE IN MILES



- GREATER MOOSE TOOTH UNIT BOUNDARY
- COLVILLE RIVER OIL & GAS UNIT BOUNDARY
- NUIQSUT MUNICIPAL BOUNDARY
- FISH CREEK 3 MILE BUFFER
- TINMIAQSIUGVIK (UBLUTUOCH) RIVER 1/2 MILE BUFFER

THIS MAP PROJECTION IS BASE UPON ALASKA STATE PLANE, NAD 83. THIS MAP IS BASED ON DATA PROVIDED BY THE U.S. GEOLOGICAL SURVEY, THE ALASKA DEPARTMENT OF NATURAL RESOURCES, AND CONOCO PHILLIPS ALASKA, INC.



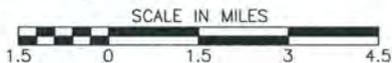
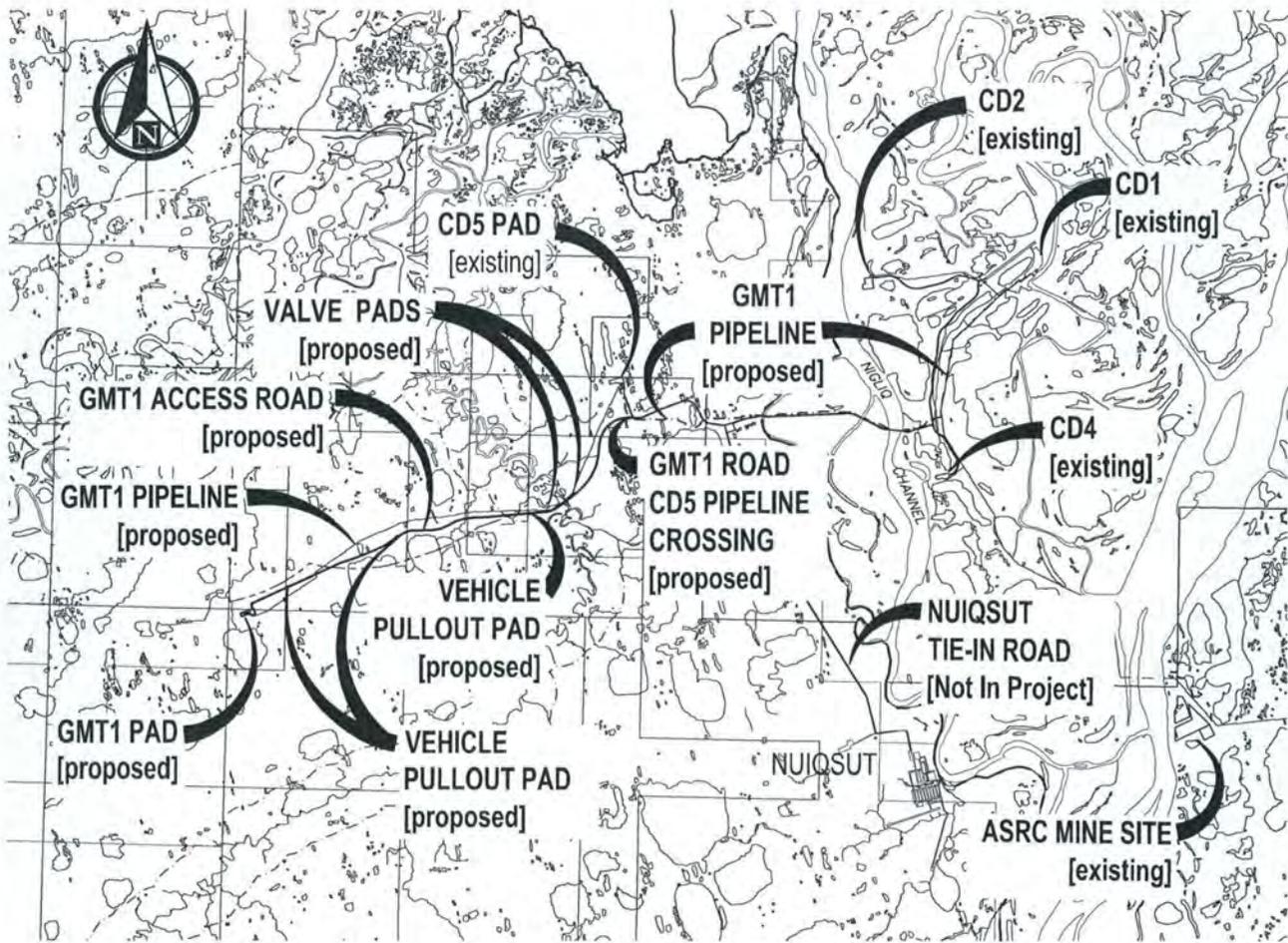
REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD, & PIPELINE CONSTRUCTION
 AT: ALASKA
 SHEET **4** of **33** 09-08-14

GMT1 FACILITIES	
ACCESS ROAD LENGTH	7.7 MILES
ACCESS ROAD FOOTPRINT	59.2 ACRES
PAD FOOTPRINT	11.8 ACRES
ACCESS ROAD FILL QUANTITY	482,000 CY
PAD FILL QUANTITY	131,000 CY

ASRC MATERIAL SOURCE	
GMT1 MATERIAL SOURCE PIT FOOTPRINT	23 ACRES
PERMIT AREA	23 ACRES
GRAVEL REQUIREMENT FOR GMT1	628,050 C.Y.

VALVE PAD QUANTITIES	
WEST VALVE PAD	
AREA OF TUNDRA COVER	0.35 ACRES
QUANTITY OF GRAVEL	3,250 CY
EAST VALVE PAD	
AREA OF TUNDRA COVER	0.35 ACRES
QUANTITY OF GRAVEL	3,250 CY

VEHICLE PULLOUT PAD QUANTITIES	
WEST VEHICLE PULLOUT PAD	
AREA OF TUNDRA COVER	0.3 ACRES
QUANTITY OF GRAVEL	2,850 CY
CENTRAL VEHICLE PULLOUT PAD	
AREA OF TUNDRA COVER	0.3 ACRES
QUANTITY OF GRAVEL	2,850 CY
EAST VEHICLE PULLOUT PAD	
AREA OF TUNDRA COVER	0.3 ACRES
QUANTITY OF GRAVEL	2,850 CY



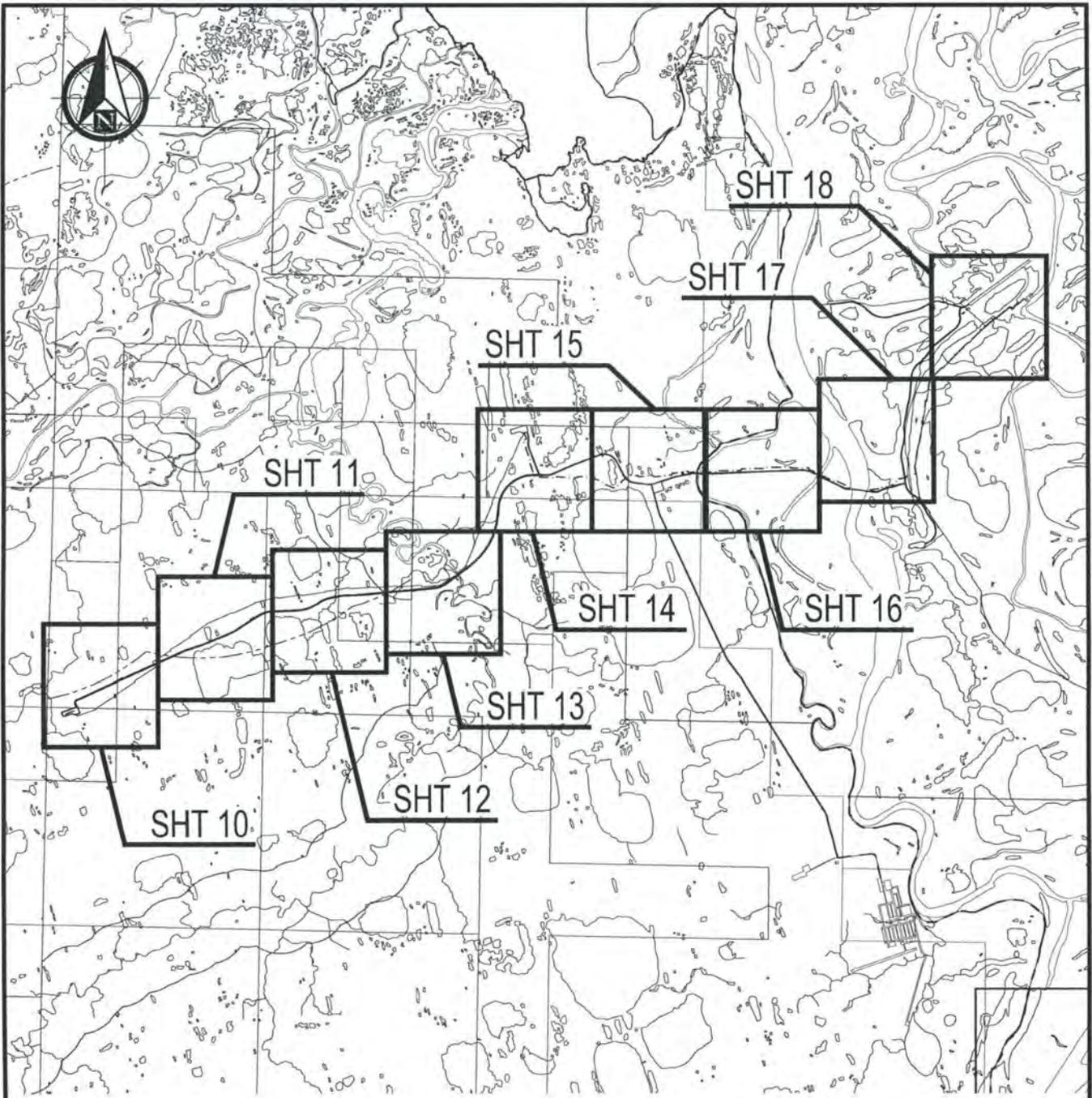
----- FISH CREEK 3 MILE BUFFER
 - - - - - TINMIAQSIUGVIK (UBLUTUOCH) RIVER 1/2 MILE BUFFER

THIS MAP PROJECTION IS BASE UPON ALASKA STATE PLANE, NAD 83. THIS MAP IS BASED ON DATA PROVIDED BY THE U.S. GEOLOGICAL SURVEY, THE ALASKA DEPARTMENT OF NATURAL RESOURCES, AND CONOCO PHILLIPS ALASKA, INC.

GMT1 PROPOSED SATELLITE FACILITY OVERVIEW

P | N | D
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 Alaska, Inc.

REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD, & PIPELINE CONSTRUCTION
 AT: ALASKA
 SHEET **5** of **33** 09-08-14



ConocoPhillips
Alaska, Inc.

**GMT1 & ALPINE PROPOSED ACCESS ROAD
AND PIPELINE ROUTE KEY MAP**

REFERENCE: POA 2013-461
APPLICANT: CPAI
PROPOSED: GMT1 ROAD, PAD,
& PIPELINE
CONSTRUCTION
AT: ALASKA
SHEET **6** of **33** 09-08-14



FISH CREEK
3 MILE BUFFER

VEHICLE PULLOUT PAD
[proposed]

GMT1 ACCESS ROAD
[proposed]

GMT1 PIPELINES
[proposed]

CROSS DRAINAGE
CULVERT
[proposed]

GMT1 PAD
[proposed]

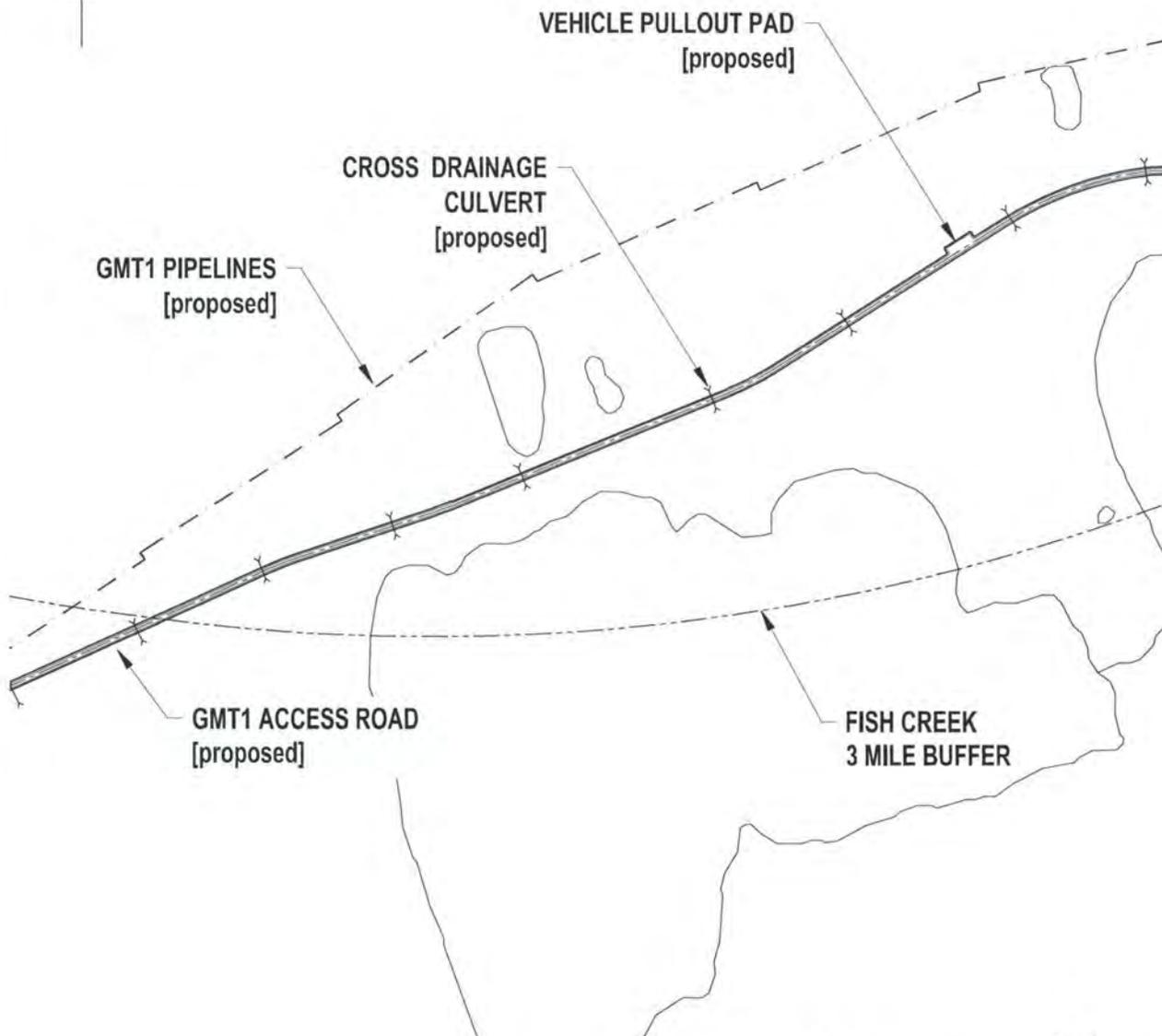
NOTE: 24" MINIMUM CULVERT SIZE FOR CROSS DRAINAGE. CULVERT
LOCATIONS, SIZES, AND QUANTITIES TO BE DETERMINED DURING
A SUMMER FIELD SURVEY PRIOR TO CONSTRUCTION.



ConocoPhillips
Alaska, Inc.

REFERENCE: POA 2013-461
APPLICANT: CPAI
PROPOSED: GMT1 ROAD, PAD,
& PIPELINE
CONSTRUCTION
AT: ALASKA
SHEET **7** of **33** 09-08-14

**PROPOSED GMT1 PIPELINE AND ACCESS ROAD
ROUTE KEY MAP 1 OF 9**



NOTE: 24" MINIMUM CULVERT SIZE FOR CROSS DRAINAGE. CULVERT LOCATIONS, SIZES, AND QUANTITIES TO BE DETERMINED DURING A SUMMER FIELD SURVEY PRIOR TO CONSTRUCTION.



**PROPOSED GMT1 PIPELINE AND ACCESS ROAD
ROUTE KEY MAP 2 OF 9**



REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD, & PIPELINE CONSTRUCTION
 AT: ALASKA
 SHEET **8** of **33** 09-08-14



TINMIAQSIUGVIK
(UBLUTUOCH) RIVER
1/2 MILE BUFFER

GMT1 PIPELINES
[proposed]

40' BRIDGE
[proposed]

GMT1 ACCESS ROAD
[proposed]

CREA CREEK

CROSS DRAINAGE
CULVERT
[proposed]

FISH CREEK
3 MILE BUFFER

NOTE: 24" MINIMUM CULVERT SIZE FOR CROSS DRAINAGE. CULVERT
LOCATIONS, SIZES, AND QUANTITIES TO BE DETERMINED DURING
A SUMMER FIELD SURVEY PRIOR TO CONSTRUCTION.

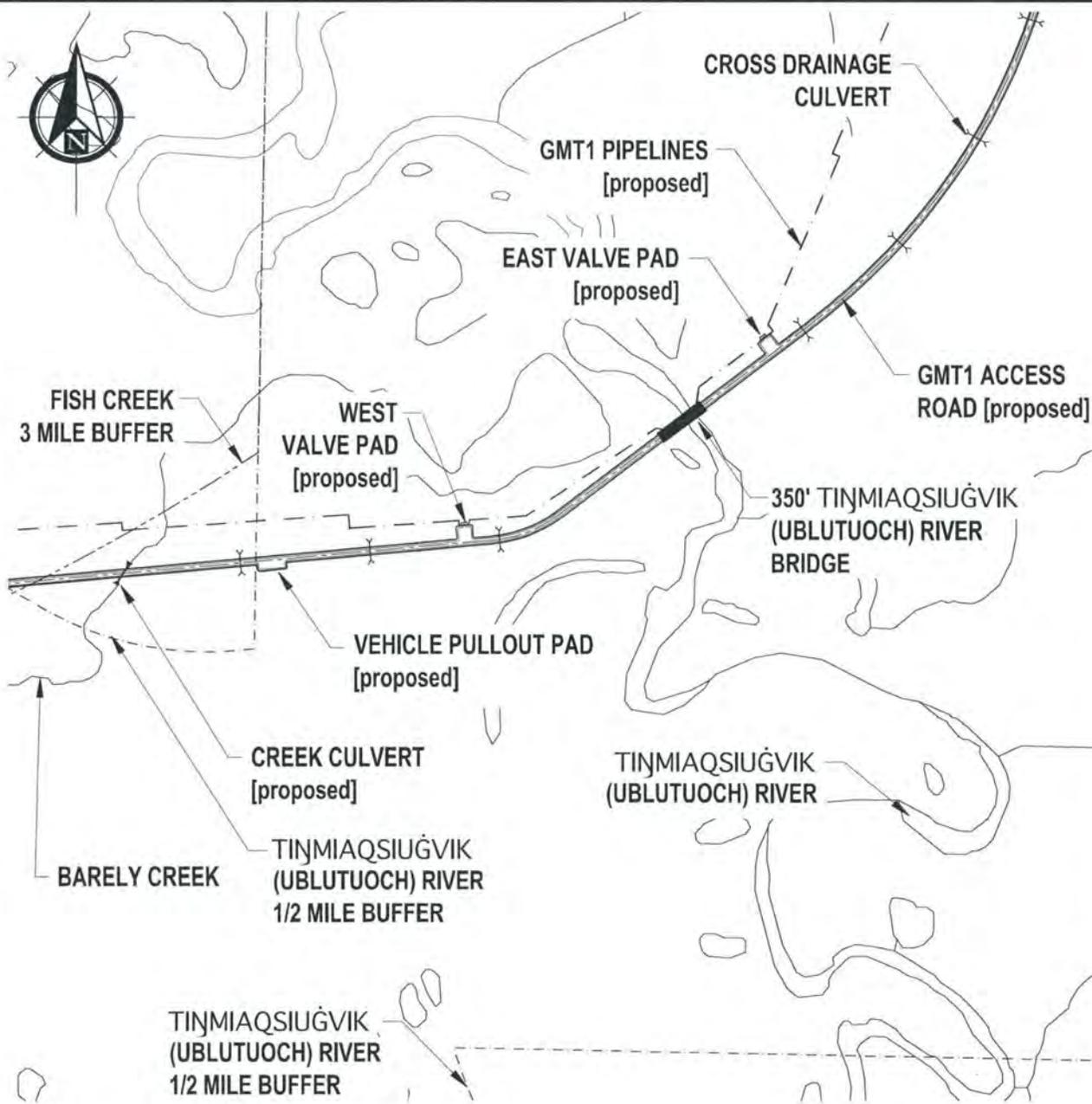


**PROPOSED GMT1 PIPELINE AND ACCESS ROAD
ROUTE KEY MAP 3 OF 9**



ConocoPhillips
Alaska, Inc.

REFERENCE: POA 2013-461
APPLICANT: CPAI
PROPOSED: GMT1 ROAD, PAD,
& PIPELINE
CONSTRUCTION
AT: ALASKA
SHEET **9** of **33** 09-08-14



NOTES:

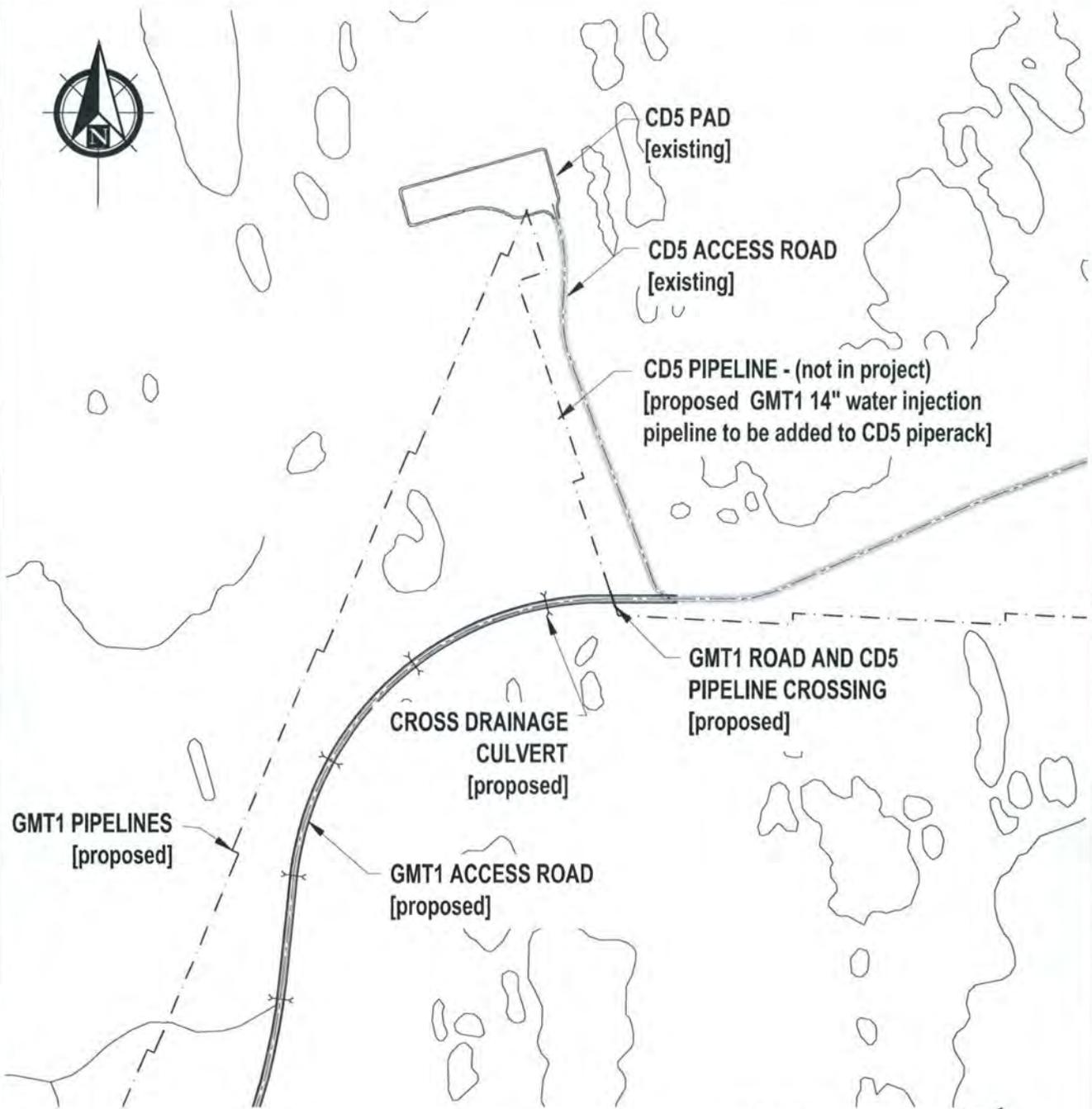
1. CROSS DRAINAGE CULVERTS ARE A MINIMUM OF 24" DIAMETER. CROSS DRAINAGE CULVERT LOCATIONS, SIZES, AND QUANTITIES TO BE DETERMINED DURING A SUMMER FIELD SURVEY PRIOR TO CONSTRUCTION.
2. BARELY CREEK CULVERT DESIGN AND FIELD VERIFICATION TO BE COMPLETED IN ACCORDANCE WITH ADF&G REQUIREMENTS DURING SUMMER PRIOR TO CONSTRUCTION.



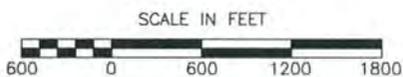
**PROPOSED GMT1 PIPELINE AND ACCESS ROAD
ROUTE KEY MAP 4 OF 9**



REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD, & PIPELINE CONSTRUCTION
 AT: ALASKA
 SHEET **10** of **33** 09-08-14



NOTE: 24" MINIMUM CULVERT SIZE FOR CROSS DRAINAGE. CULVERT LOCATIONS, SIZES, AND QUANTITIES TO BE DETERMINED DURING A SUMMER FIELD SURVEY PRIOR TO CONSTRUCTION.



**PROPOSED GMT1 PIPELINE AND ACCESS ROAD
ROUTE KEY MAP 5 OF 9**



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Alaska, Inc.

REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD,
 & PIPELINE
 CONSTRUCTION
 AT: ALASKA
 SHEET **11** of **33** 09-08-14



CD5 ACCESS ROAD
[existing]

277' NIGLIAGVIK BRIDGE
[existing]

VALVE PAD
[existing]

CD5 PIPELINE - (not in project)
[proposed GMT1 14" water injection
pipeline to be added to CD5 piperack]

KUUKPIK LAYDOWN PAD
[not in project]

NUIQSUT TIE-IN ROAD
[not in project]

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Alaska, Inc.



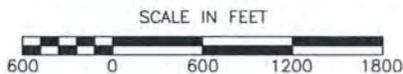
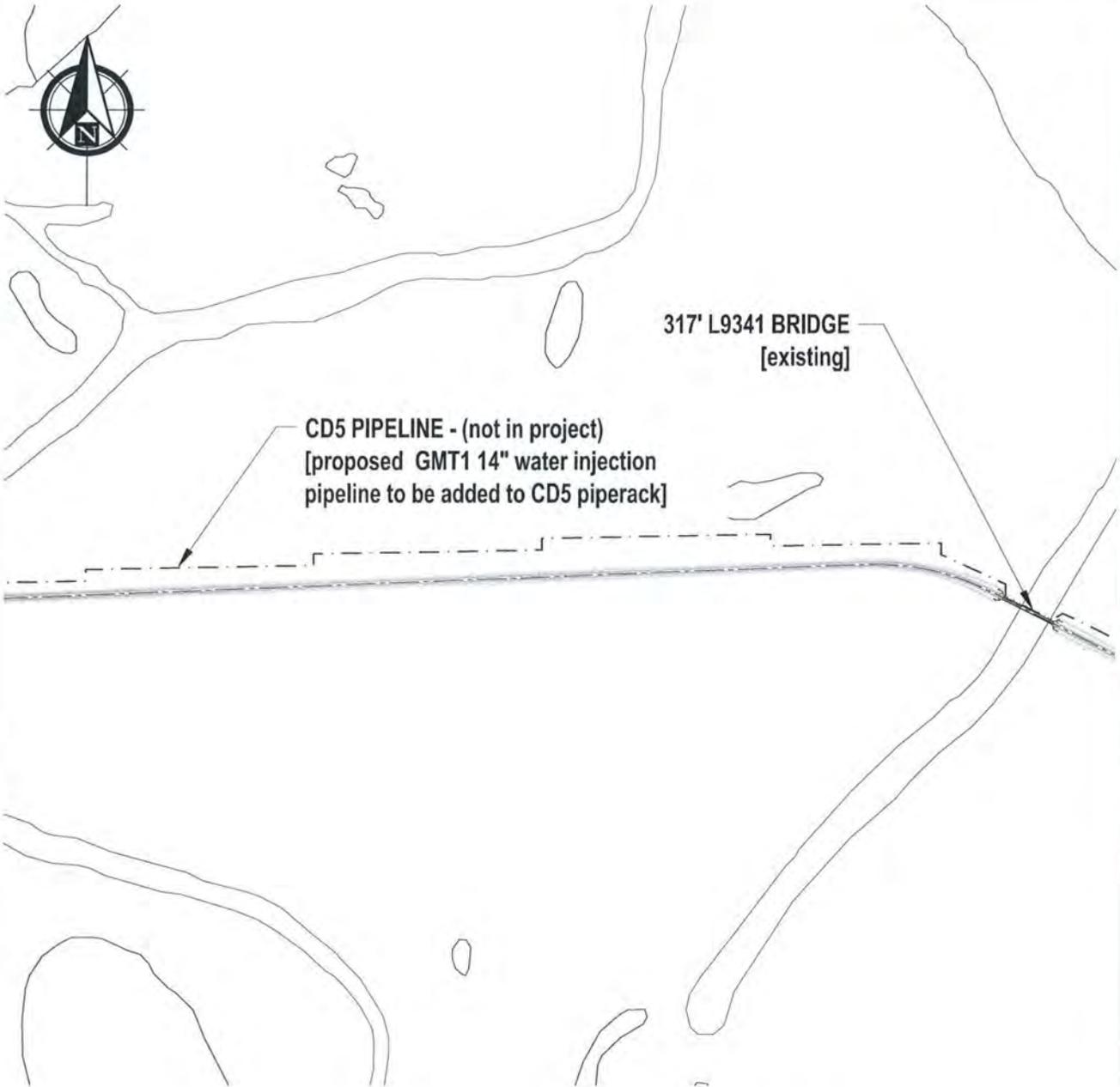
**EXISTING CD5 TO CD4N PIPELINE AND ACCESS ROAD
ROUTE KEY MAP 6 OF 9**

REFERENCE: POA 2013-461
APPLICANT: CPAI
PROPOSED: GMT1 ROAD, PAD,
& PIPELINE
CONSTRUCTION
AT: ALASKA
SHEET **12** of **33** 09-08-14



317' L9341 BRIDGE
[existing]

CD5 PIPELINE - (not in project)
[proposed GMT1 14" water injection
pipeline to be added to CD5 piperack]



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Alaska, Inc.

REFERENCE: POA 2013-461
APPLICANT: CPAI
PROPOSED: GMT1 ROAD, PAD,
& PIPELINE
CONSTRUCTION

AT: ALASKA
SHEET **13** of **33** 09-08-14

EXISTING CD5 TO CD4N PIPELINE AND ACCESS ROAD
KEY ROUTE MAP 7 OF 9



NIGLIQ CHANNEL

CD4 ROAD
[existing]

CD4 & ALPINE SALES
PIPELINES [existing]
CD5 PIPELINES [not in project]

GMT1 PIPELINE
[proposed piperack with 14" water injection pipeline
parallel to existing CD4 and Alpine sales piperacks]

CD5 PIPELINE - (not in project)
[proposed GMT1 14" water injection
pipeline to be added to CD5 piperack]

1405' NIGLIQ BRIDGE
[existing]

250' L9323 BRIDGE
[existing]

CD4N

CD5 ROAD
[existing]



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Alaska, Inc.

PROPOSED GMT1 PIPELINE (CD4N TO CD1)
ROUTE KEY MAP 8 OF 9

REFERENCE: POA 2013-461
APPLICANT: CPAI
PROPOSED: GMT1 ROAD, PAD,
& PIPELINE
CONSTRUCTION
AT: ALASKA
SHEET **14** of **33** 09-08-14



CD1 ALPINE FACILITY

CD2 ROAD [existing]

CD4 ROAD [existing]

CD4 & ALPINE SALES PIPELINES [existing]
CD5 PIPELINES [not in project]

GMT1 PIPELINE
[proposed piperack with 14" water injection pipeline parallel to existing CD4 and Alpine sales piperacks]

SCALE IN FEET

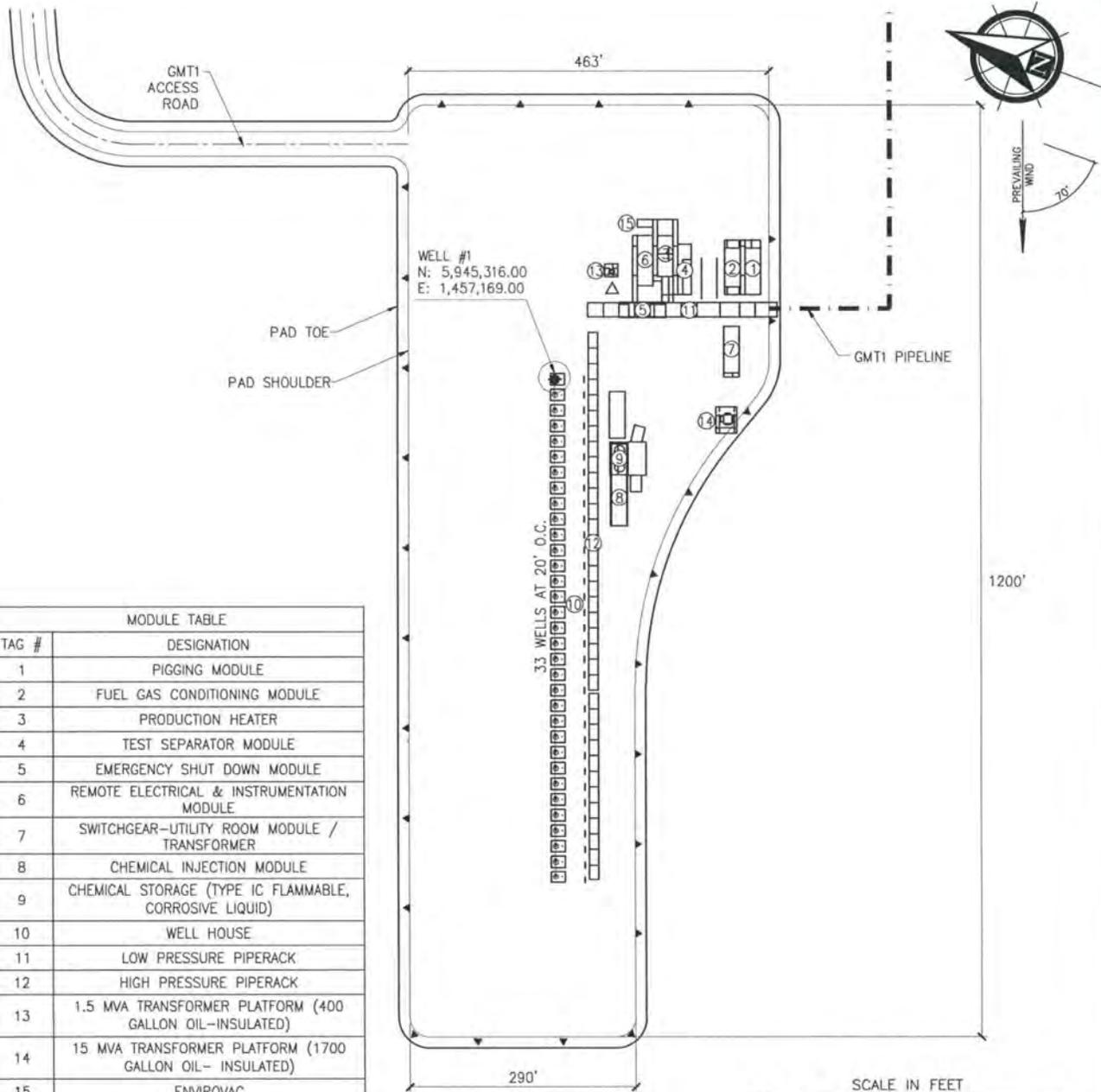


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Alaska, Inc.

PROPOSED GMT1 PIPELINE (CD4N TO CD1)
ROUTE KEY MAP 9 OF 9

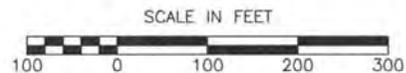
REFERENCE: POA 2013-461
APPLICANT: CPAI
PROPOSED: GMT1 ROAD, PAD,
& PIPELINE
CONSTRUCTION
AT: ALASKA
SHEET **15** of **33** 09-08-14



MODULE TABLE	
TAG #	DESIGNATION
1	PIGGING MODULE
2	FUEL GAS CONDITIONING MODULE
3	PRODUCTION HEATER
4	TEST SEPARATOR MODULE
5	EMERGENCY SHUT DOWN MODULE
6	REMOTE ELECTRICAL & INSTRUMENTATION MODULE
7	SWITCHGEAR-UTILITY ROOM MODULE / TRANSFORMER
8	CHEMICAL INJECTION MODULE
9	CHEMICAL STORAGE (TYPE IC FLAMMABLE, CORROSIVE LIQUID)
10	WELL HOUSE
11	LOW PRESSURE PIPERACK
12	HIGH PRESSURE PIPERACK
13	1.5 MVA TRANSFORMER PLATFORM (400 GALLON OIL-INSULATED)
14	15 MVA TRANSFORMER PLATFORM (1700 GALLON OIL- INSULATED)
15	ENVIROVAC

GMT1 PAD QUANTITIES	
AREA OF TUNDRA COVER	11.8 ACRES
QUANTITY OF GRAVEL	131,000 CY

NOTE:
MINIMUM GRAVEL DEPTH
5.0' WITH 2:1 FILL SLOPES



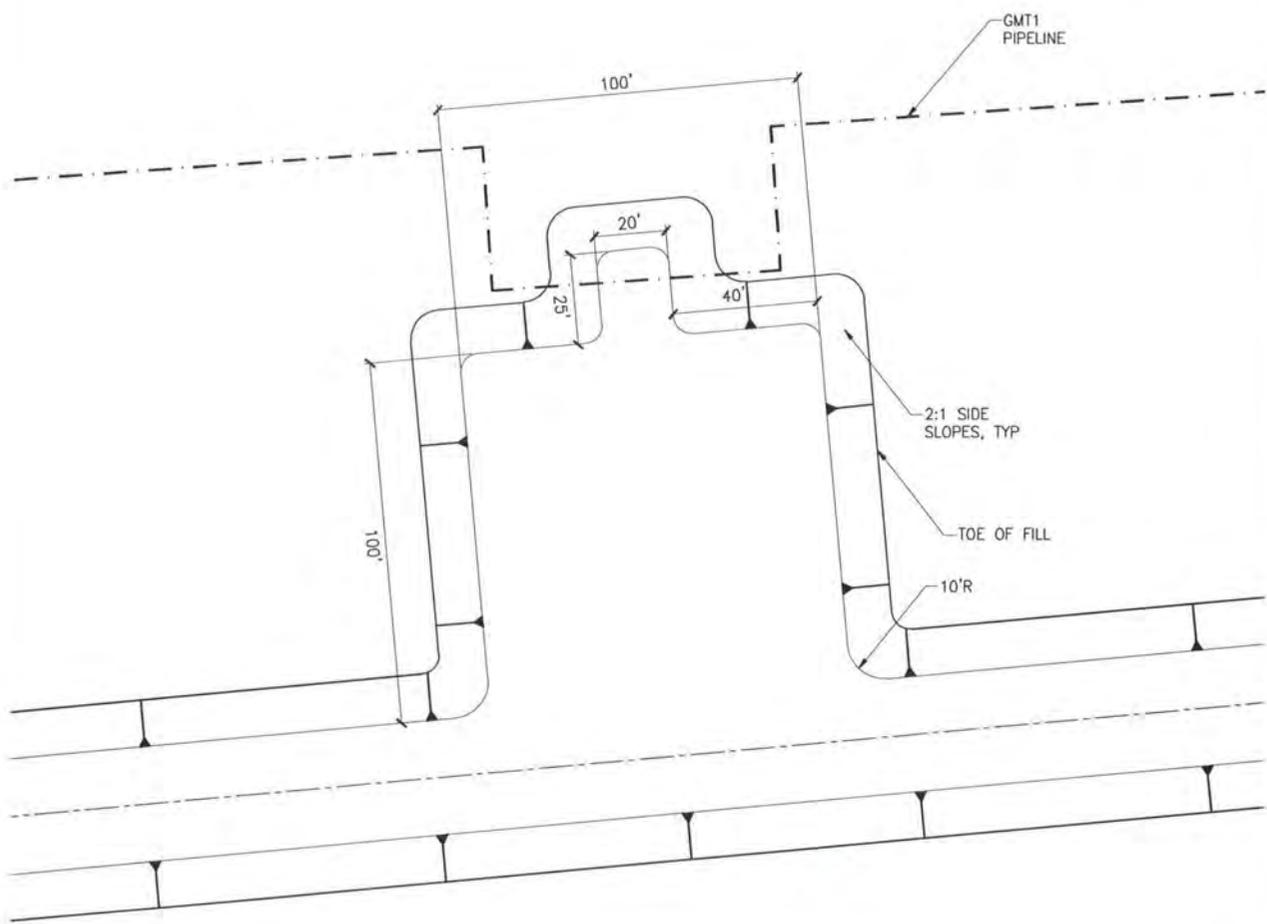
THIS MAP PROJECTION IS BASE UPON ALASKA STATE PLANE, NAD 83. THIS MAP IS BASED ON DATA PROVIDED BY THE U.S. GEOLOGICAL SURVEY, THE ALASKA DEPARTMENT OF NATURAL RESOURCES, AND CONOCO PHILLIPS ALASKA, INC.

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Alaska, Inc.

REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD,
 & PIPELINE
 CONSTRUCTION
 AT: ALASKA
 SHEET **16** of **33** 09-08-14

GMT1 PROPOSED PAD FOOTPRINT WITH 33 WELLS



VALVE PAD QUANTITIES	
WEST VALVE PAD	
AREA OF TUNDRA COVER	0.35 ACRES
QUANTITY OF GRAVEL	3,250 CY
EAST VALVE PAD	
AREA OF TUNDRA COVER	0.35 ACRES
QUANTITY OF GRAVEL	3,250 CY

NOTE:
 MINIMUM GRAVEL DEPTH
 5.0' WITH 2:1 FILL SLOPES

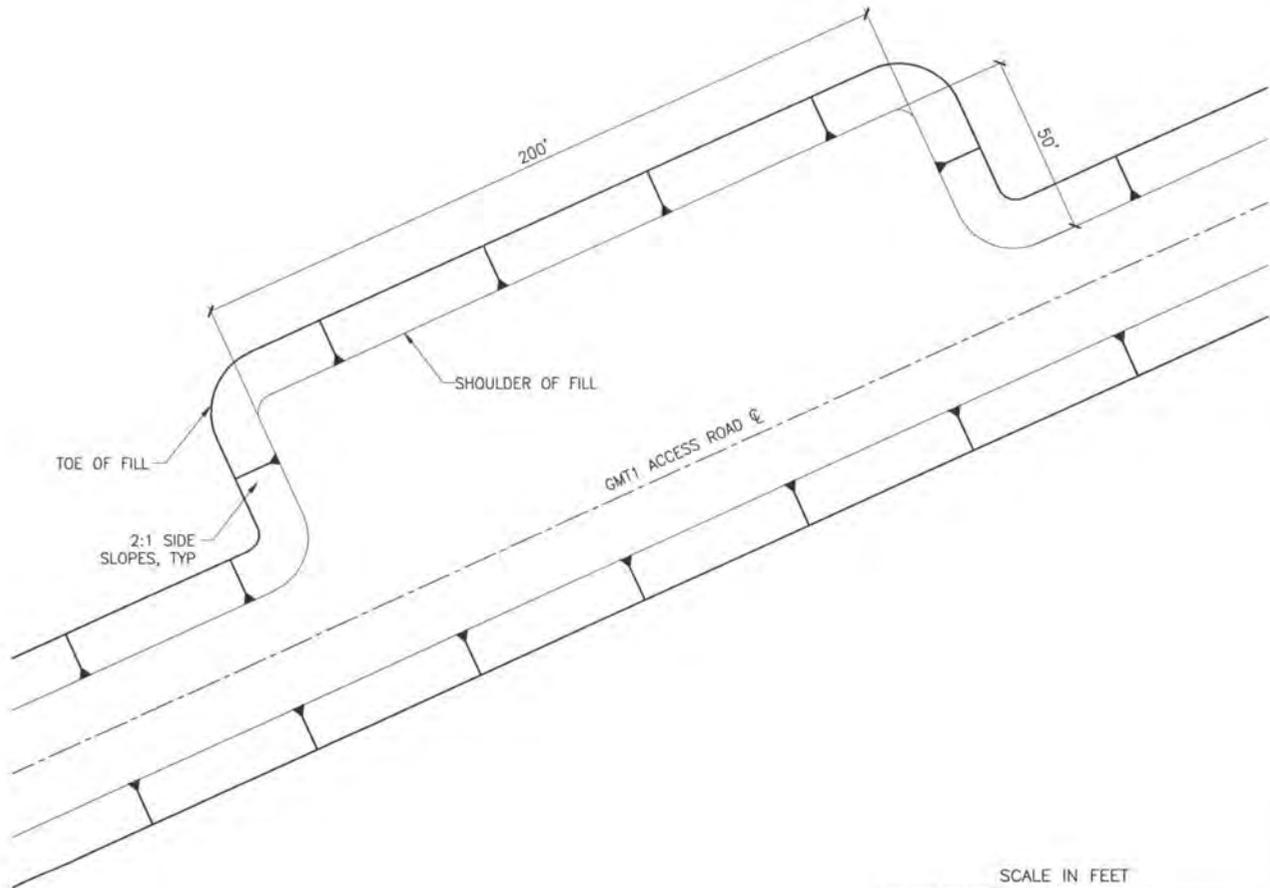
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THIS MAP PROJECTION IS BASE UPON ALASKA STATE PLANE, NAD 83. THIS MAP IS BASED ON DATA PROVIDED BY THE U.S. GEOLOGICAL SURVEY, THE ALASKA DEPARTMENT OF NATURAL RESOURCES, AND CONOCO PHILLIPS ALASKA, INC.

REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD,
 & PIPELINE
 CONSTRUCTION
 AT: ALASKA
 SHEET **17** of **33** 09-08-14

GMT1 PROPOSED TYPICAL VALVE PAD FOOTPRINT



VEHICLE PULLOUT PAD QUANTITIES	
WEST VEHICLE PULLOUT PAD	
AREA OF TUNDRA COVER	0.3 ACRES
QUANTITY OF GRAVEL	2,850 CY
CENTRAL VEHICLE PULLOUT PAD	
AREA OF TUNDRA COVER	0.3 ACRES
QUANTITY OF GRAVEL	2,850 CY
EAST VEHICLE PULLOUT PAD	
AREA OF TUNDRA COVER	0.3 ACRES
QUANTITY OF GRAVEL	2,850 CY

NOTE:
MINIMUM GRAVEL DEPTH
5.0' WITH 2:1 FILL SLOPES

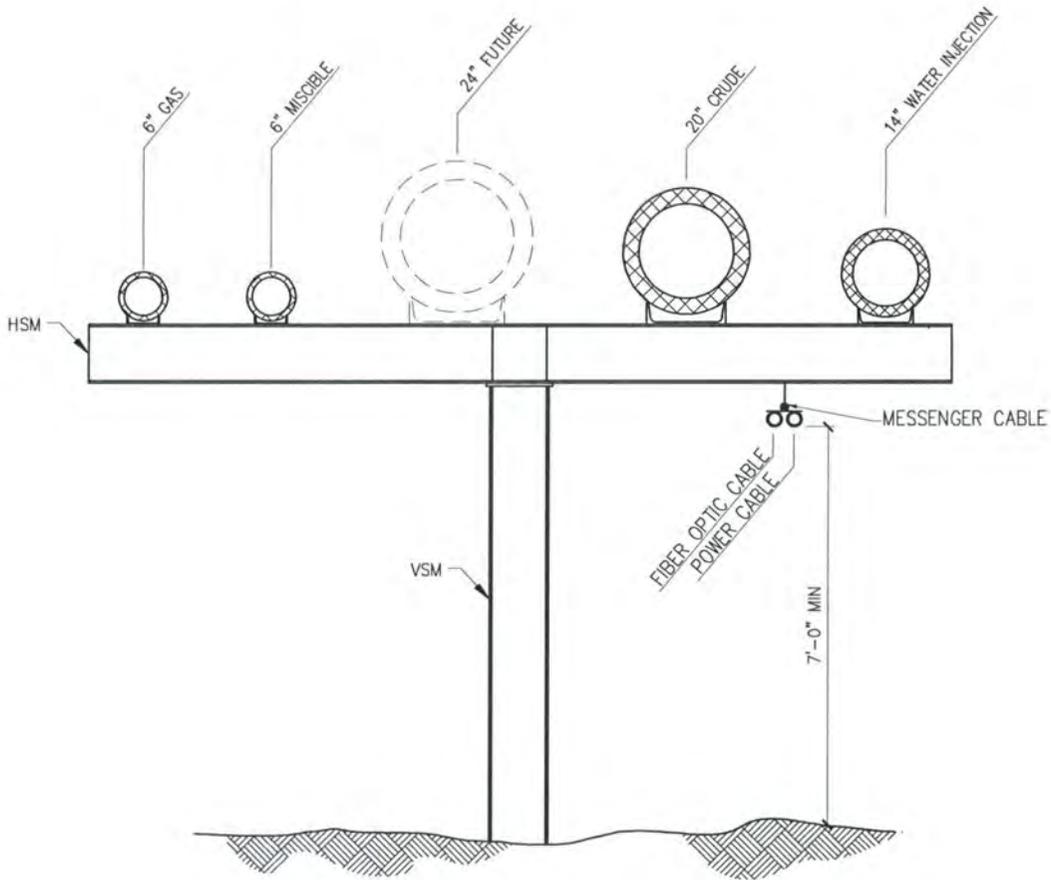
THIS MAP PROJECTION IS BASE UPON ALASKA STATE PLANE, NAD 83. THIS MAP IS BASED ON DATA PROVIDED BY THE U.S. GEOLOGICAL SURVEY, THE ALASKA DEPARTMENT OF NATURAL RESOURCES, AND CONOCO PHILLIPS ALASKA, INC.

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Alaska, Inc.

GMT1 PROPOSED TYPICAL VEHICLE PULLOUT PAD FOOTPRINT

REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD,
 & PIPELINE
 CONSTRUCTION
 AT: ALASKA
 SHEET **18** of **33** 09-08-14



GMT1 TO CD5 PROPOSED PIPELINE TYPICAL SECTION

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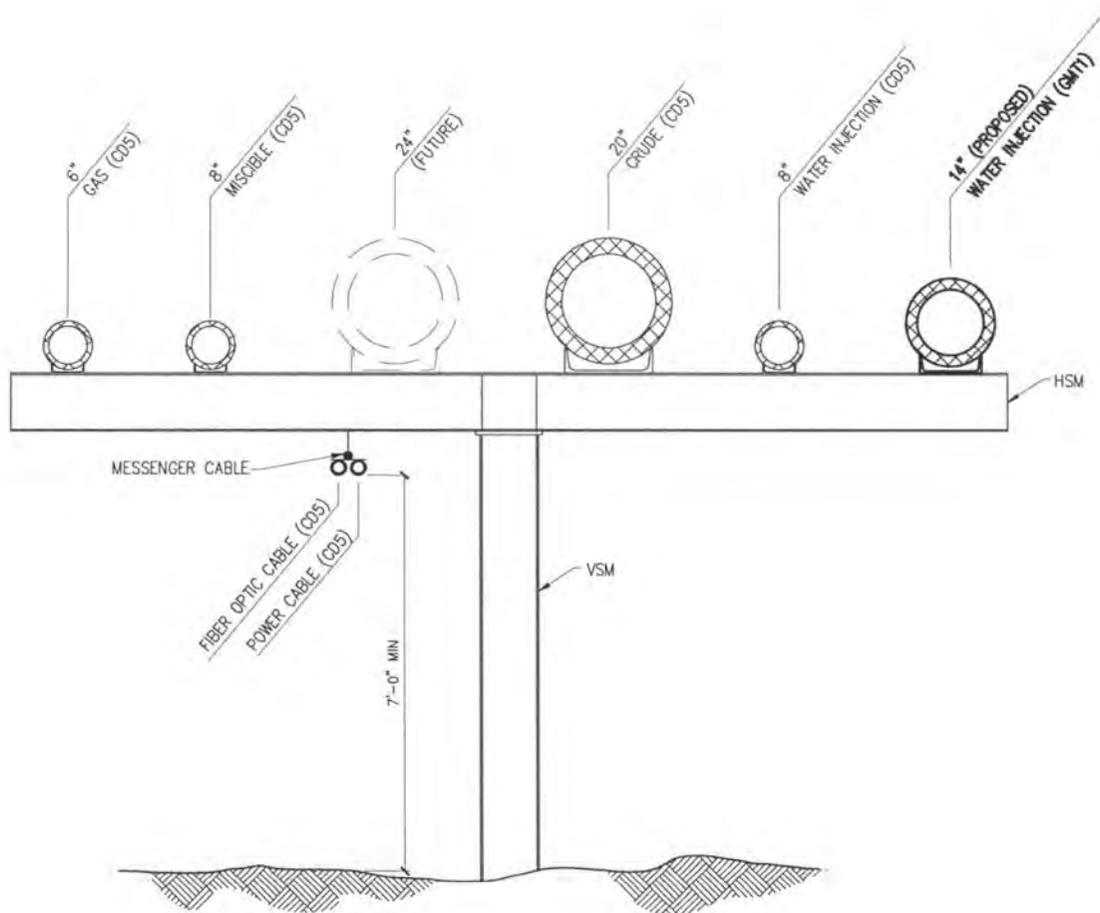
ConocoPhillips
Alaska, Inc.

REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD,
 & PIPELINE
 CONSTRUCTION

AT: ALASKA

SHEET **19** of **33** 09-08-14

GMT1 TO CD5 PROPOSED PIPELINE TYPICAL SECTION



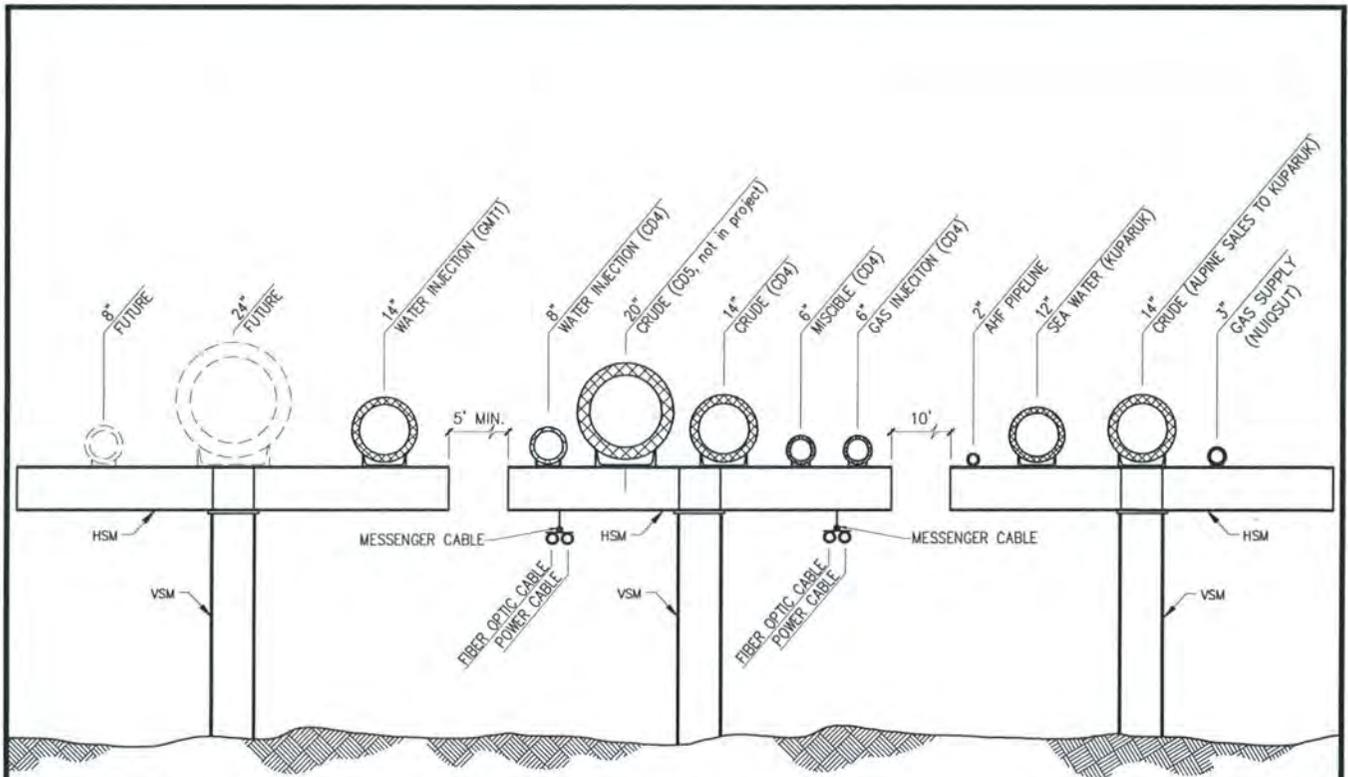
CD5 TO CD4N TYPICAL PIPELINE SECTION

NOTE: PROPOSED 14" WATER INJECTION LINE TO BE ADDED TO CD5 PIPERACK [not in project].



REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD,
 & PIPELINE
 CONSTRUCTION
 AT: ALASKA
 SHEET **20** of **33** 09-08-14

CD5 to CD4N PROPOSED PIPELINE SECTION



**PROPOSED
GMT1 PIPELINE**

**EXISTING
CD-4 PIPELINE**

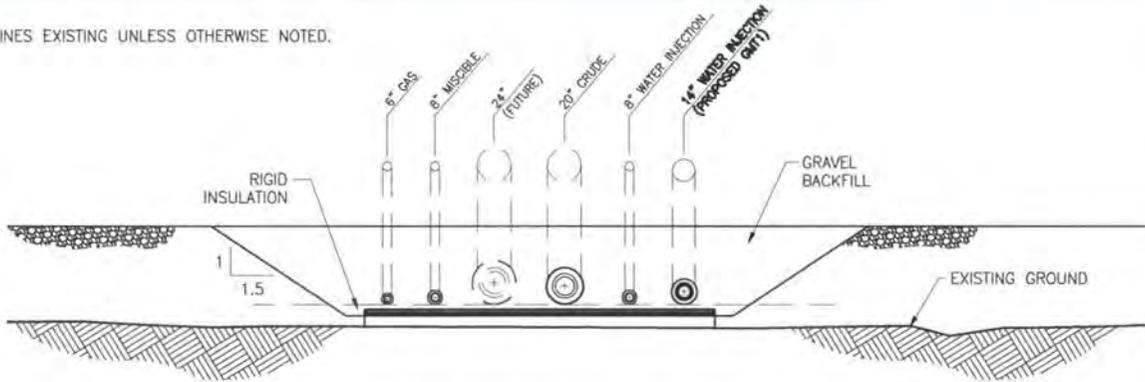
**EXISTING ALPINE
SALES PIPELINE**

CD4N TO CD1 (ALPINE) PROPOSED PIPELINE SECTION

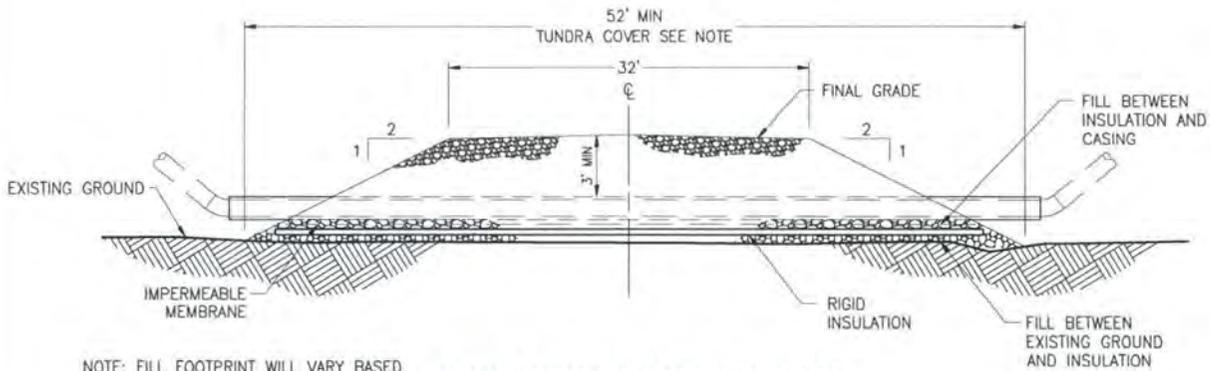
EN|G|N|E|E|R|S **ConocoPhillips**
 ENGINEERS, INC. Alaska, Inc.

REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD,
 & PIPELINE
 CONSTRUCTION
 AT: ALASKA
 SHEET **21** of **33** 09-08-14

NOTE: PIPELINES EXISTING UNLESS OTHERWISE NOTED.

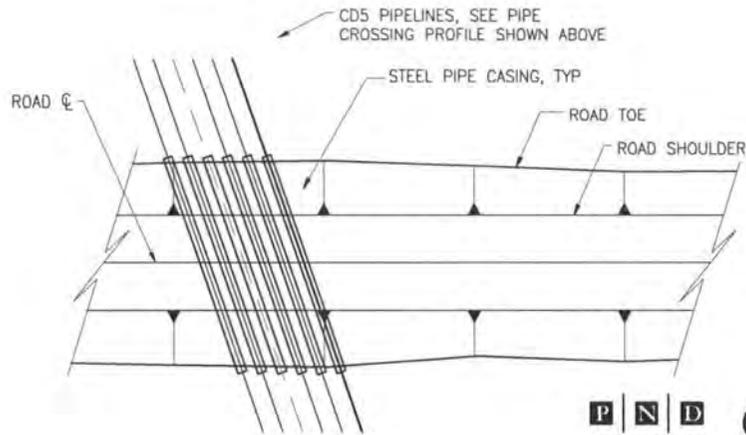


PIPE CROSSING PROFILE
NOT TO SCALE



NOTE: FILL FOOTPRINT WILL VARY BASED UPON TOPOGRAPHY & ROAD ELEVATION

PIPE CROSSING SECTION
NOT TO SCALE



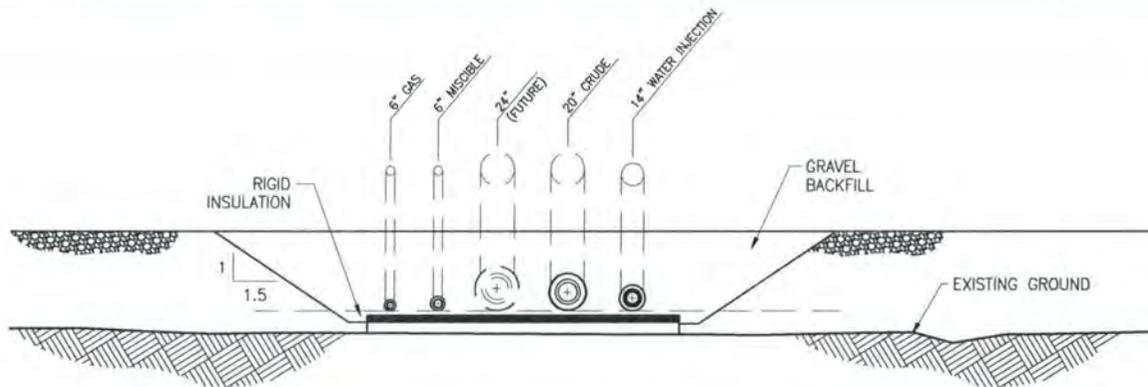
PIPE CROSSING PLAN
NOT TO SCALE

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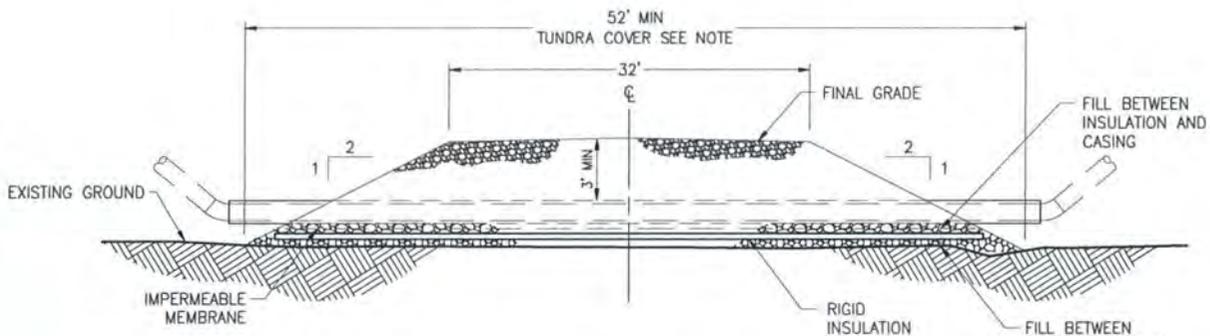
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 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD,
 & PIPELINE
 CONSTRUCTION
 AT: ALASKA
 SHEET **22** of **33** 09-08-14

GMT1 ROAD AT CD5 PIPELINE CROSSING



PIPE CROSSING PROFILE

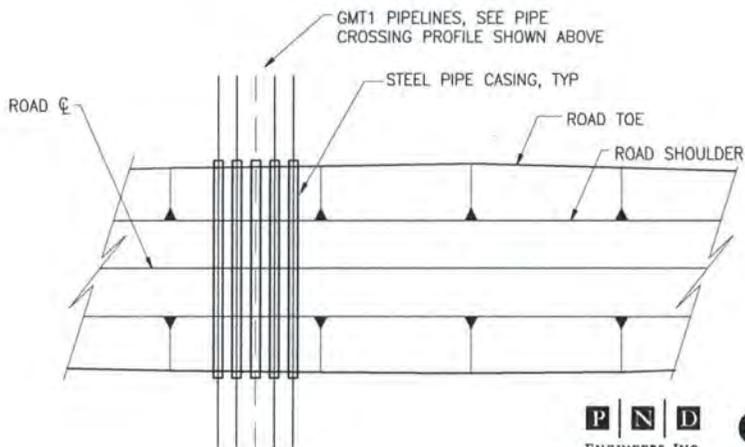
NOT TO SCALE



NOTE: FILL FOOTPRINT WILL VARY BASED UPON TOPOGRAPHY & ROAD ELEVATION

PIPE CROSSING SECTION

NOT TO SCALE



PIPE CROSSING PLAN

NOT TO SCALE

P | N | D
ENGINEERS, INC.

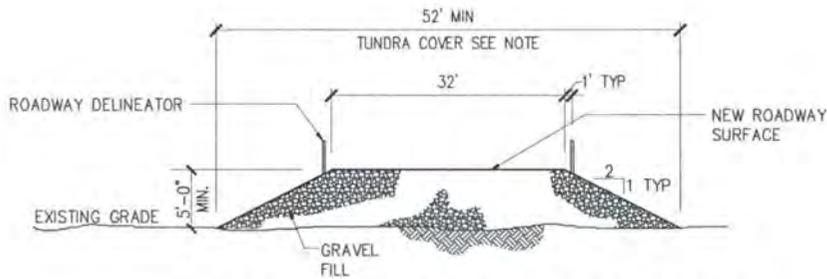
ConocoPhillips
Alaska, Inc.

REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD,
 & PIPELINE
 CONSTRUCTION

AT: ALASKA

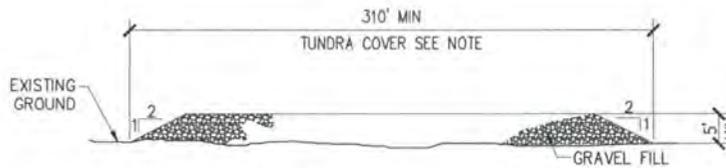
SHEET **23** of **33** 09-08-14

GMT1 ROAD AT GMT1 PIPELINE CROSSING



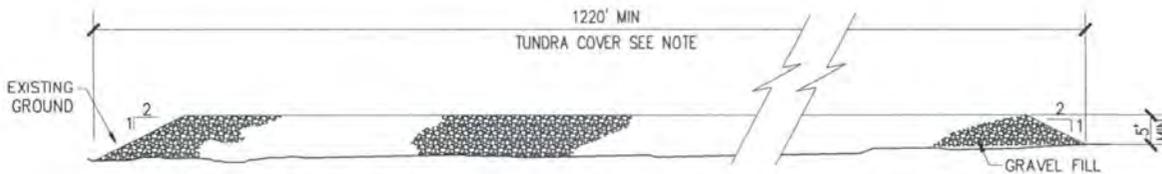
GMT1 TYPICAL GRAVEL ROADWAY SECTION

NOT TO SCALE



GMT1 TYPICAL WELL PAD TRANSVERSE SECTION

NOT TO SCALE



GMT1 TYPICAL WELL PAD LONGITUDINAL SECTION

NOT TO SCALE

NOTE: FILL FOOTPRINT WILL VARY BASED UPON TOPOGRAPHY & ROAD/PAD ELEVATION

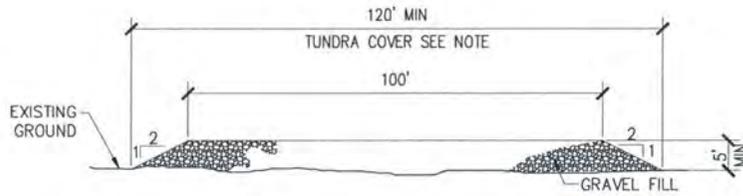


REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD,
 & PIPELINE
 CONSTRUCTION

AT: ALASKA

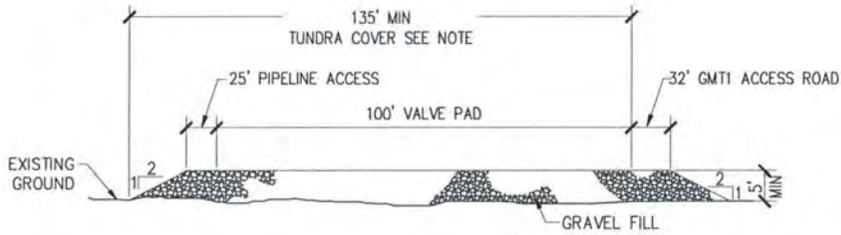
SHEET **24** of **33** 09-08-14

**GMT1 PROPOSED TYPICAL ROAD &
 WELL PAD SECTIONS**



VALVE PAD TYPICAL TRANSVERSE SECTION

NOT TO SCALE



**VALVE PAD TYPICAL LONGITUDINAL SECTION
WITH 25' PIPELINE ACCESS EXTENSION**

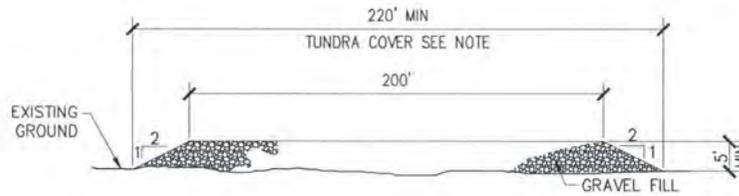
NOT TO SCALE

NOTE: FILL FOOTPRINT WILL VARY BASED UPON TOPOGRAPHY & PAD ELEVATION

**GMT1 PROPOSED TYPICAL
VALVE PAD SECTIONS**

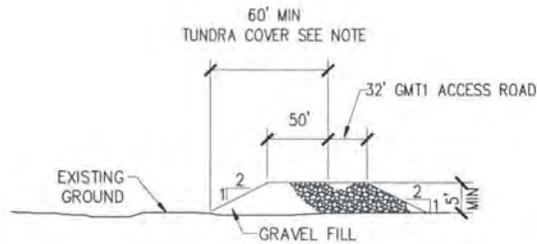


REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD,
 & PIPELINE
 CONSTRUCTION
 AT: ALASKA
 SHEET **25** of **33** 09-08-14



**VEHICLE PULLOUT PAD TYPICAL
LONGITUDINAL SECTION**

NOT TO SCALE



**VEHICLE PULLOUT PAD TYPICAL
TRANSVERSE SECTION**

NOT TO SCALE

NOTE: FILL FOOTPRINT WILL VARY BASED UPON TOPOGRAPHY & PAD ELEVATION

**GMT1 PROPOSED TYPICAL
VEHICLE PULLOUT PAD
SECTIONS**

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ENGINEERS, INC.

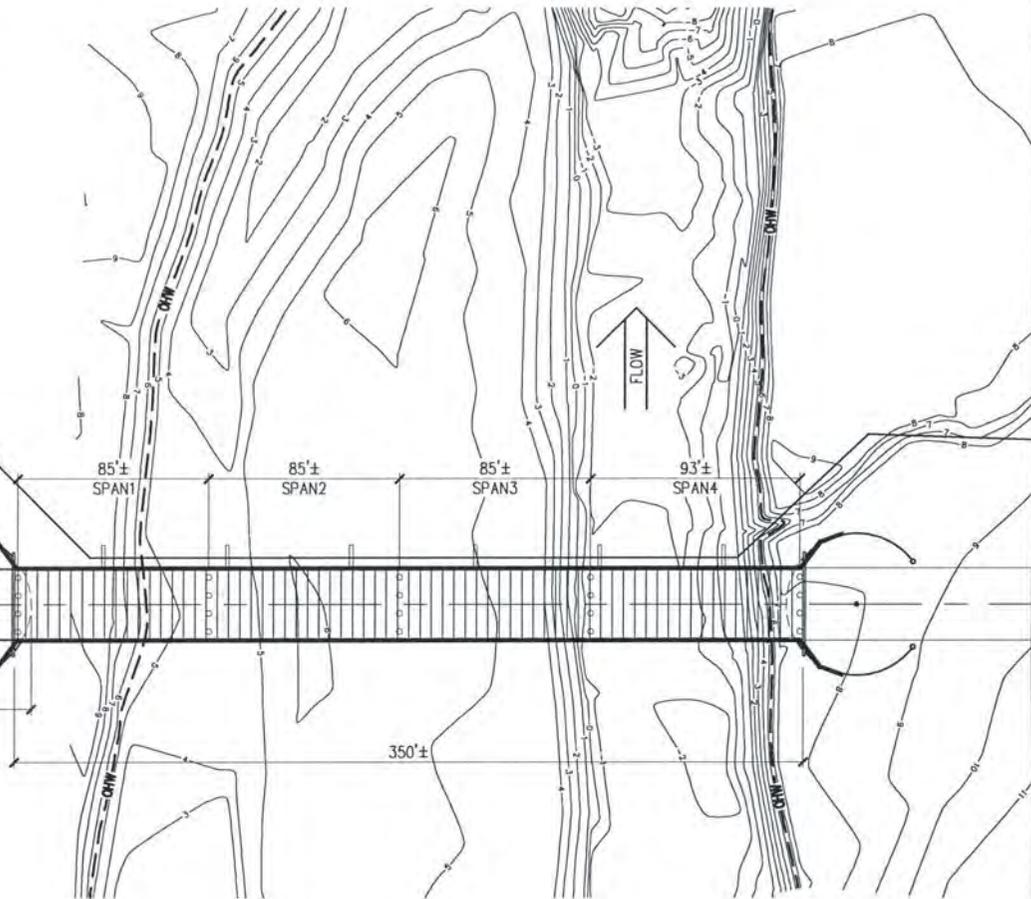
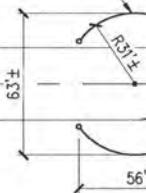
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Alaska, Inc.

REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD,
 & PIPELINE
 CONSTRUCTION
 AT: ALASKA
 SHEET **26** of **33** 09-08-14



GMT1 PIPELINE
[proposed]

SHEET PILE
ABUTMENT, TYP



**PROPOSED TIŇMIAQSIUGVIK
(UBLUTUOCH) BRIDGE PLAN**

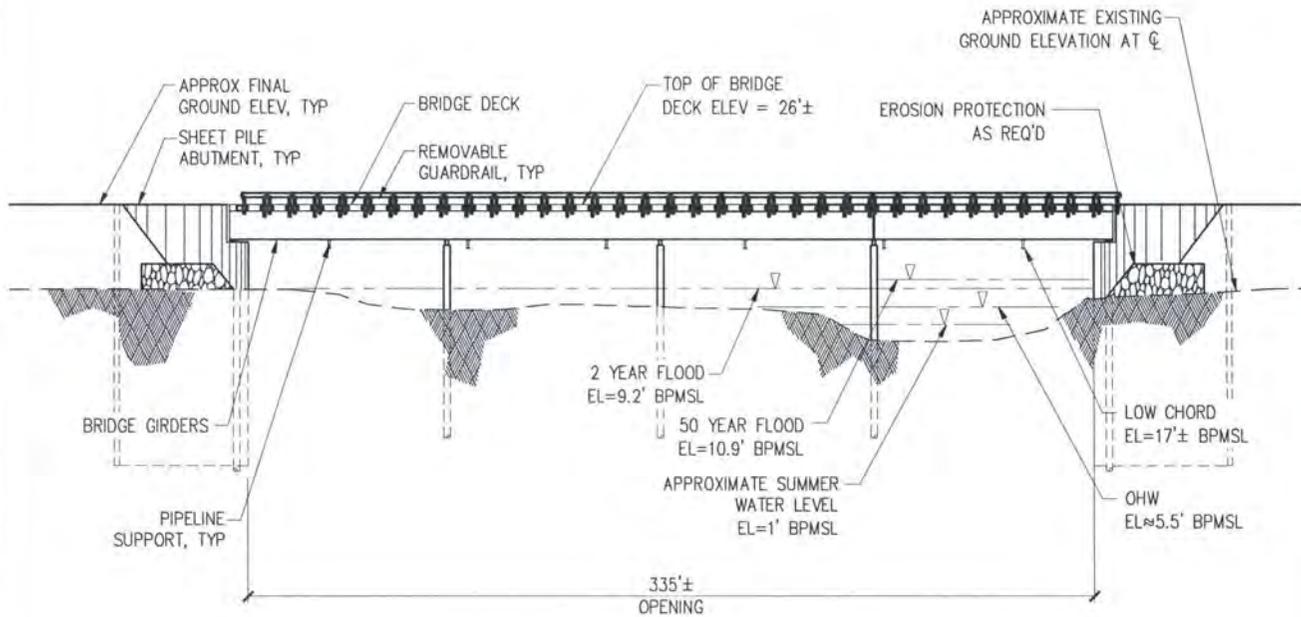
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**GMT1 PROPOSED TIŇMIAQSIUGVIK
BRIDGE PLAN**



ConocoPhillips
Alaska, Inc.

REFERENCE: POA 2013-461
APPLICANT: CPAI
PROPOSED: GMT1 ROAD, PAD,
& PIPELINE
CONSTRUCTION
AT: ALASKA
SHEET **27** of **33** 09-08-14



**PROPOSED TINMIAQSIUGVIK
(UBLUTUOCH) BRIDGE ELEVATION AT CENTERLINE**

NTS

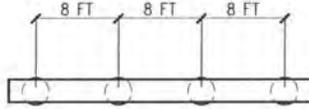
NOTE: VERTICAL SCALE SHOWN 2X HORIZONTAL SCALE

**GMT1 PROPOSED TINMIAQSIUGVIK
BRIDGE PROFILE**

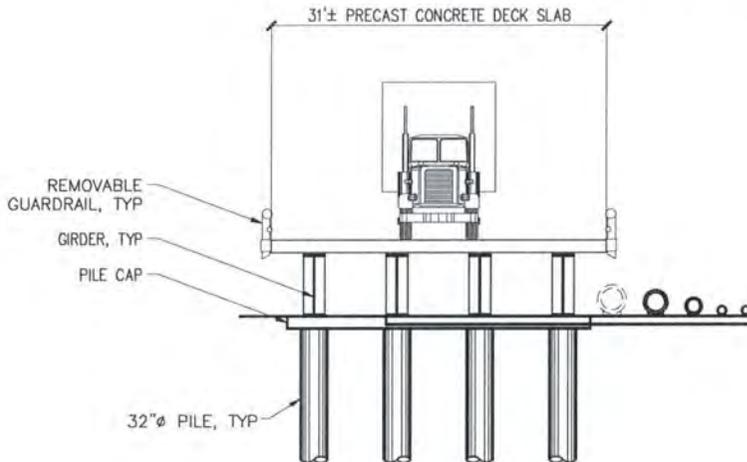
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ConocoPhillips
Alaska, Inc.

REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD,
 & PIPELINE
 CONSTRUCTION
 AT: ALASKA
 SHEET **28** of **33** 09-08-14



**PROPOSED TINMIAQSIUGVIK
(UBLUTUOCH) BRIDGE PIER PLAN VIEW**
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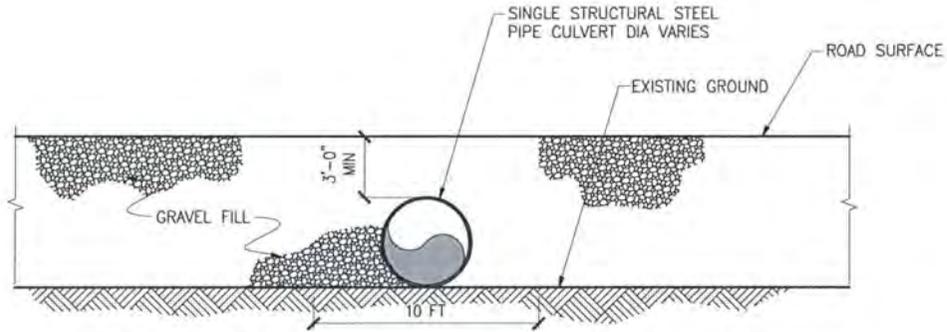
**PROPOSED TINMIAQSIUGVIK
(UBLUTUOCH) BRIDGE PIER ELEVATION VIEW**
NTS

**GMT1 PROPOSED TINMIAQSIUGVIK
(UBLUTUOCH) BRIDGE PIER PLAN AND
ELEVATION**

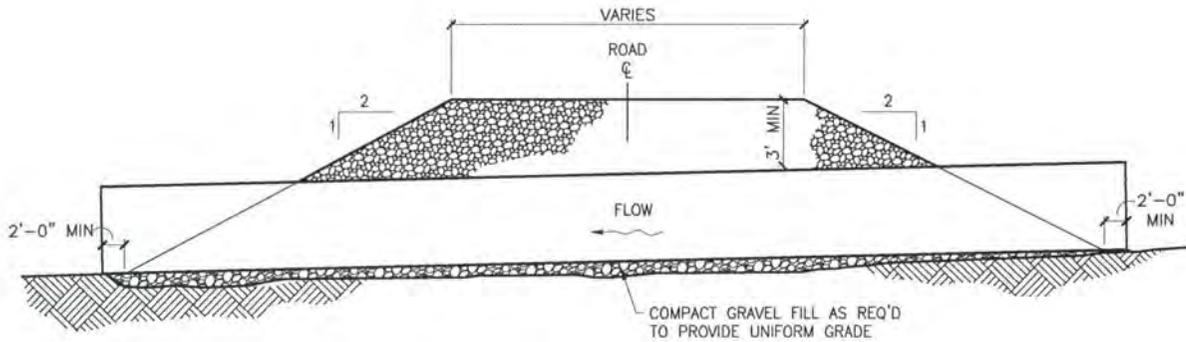
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ConocoPhillips
Alaska, Inc.

REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD,
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 AT: ALASKA
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PROPOSED SINGLE CULVERT ELEVATION



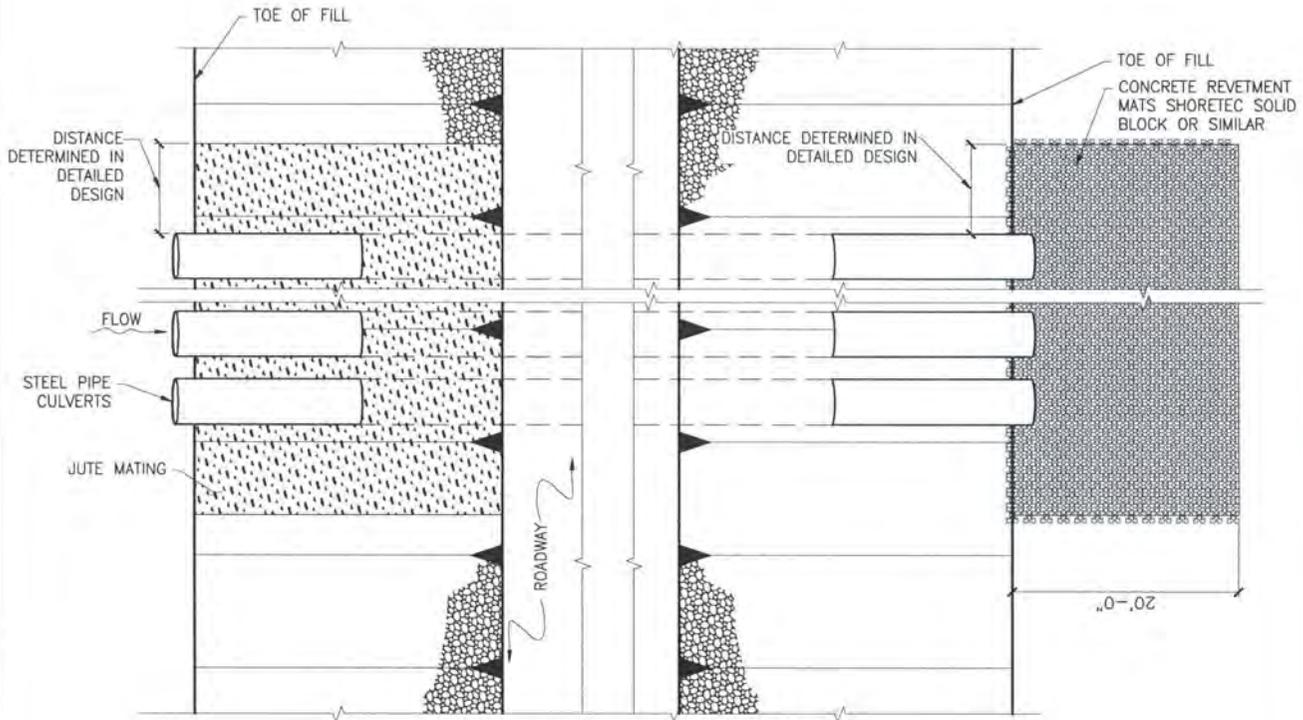
PROPOSED CULVERT SECTION

**GMT1 PROPOSED TYPICAL
CROSS DRAINAGE CULVERT
SECTION**

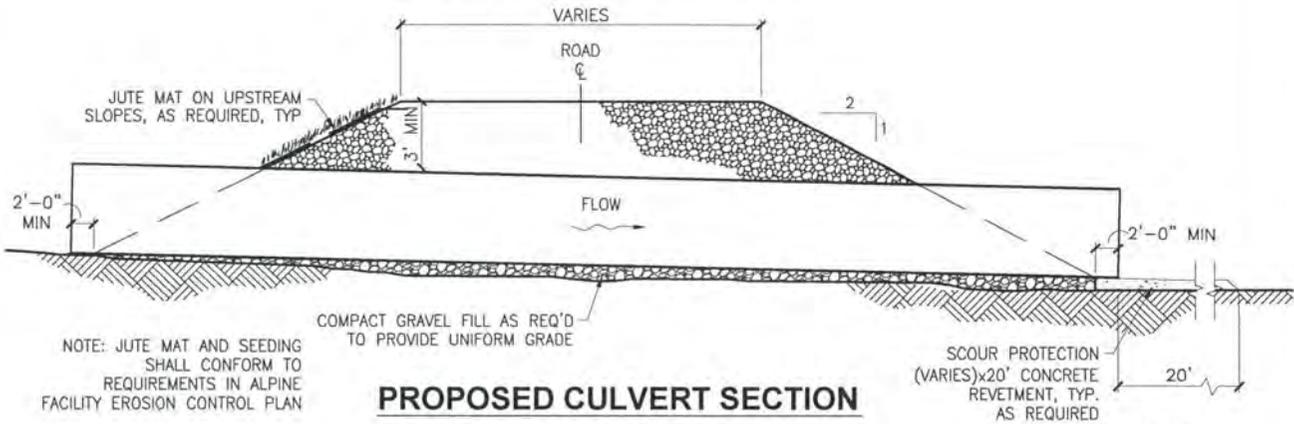
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ENGINEERS, INC.

ConocoPhillips
Alaska, Inc.

REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD,
 & PIPELINE
 CONSTRUCTION
 AT: ALASKA
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PROPOSED CULVERT PLAN



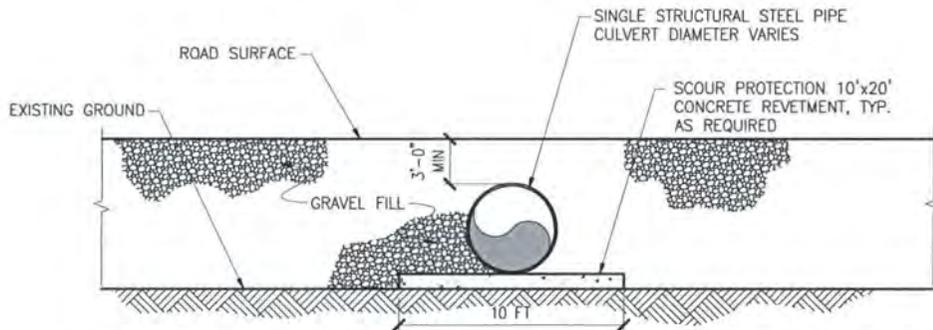
PROPOSED CULVERT SECTION

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ENGINEERS, INC.

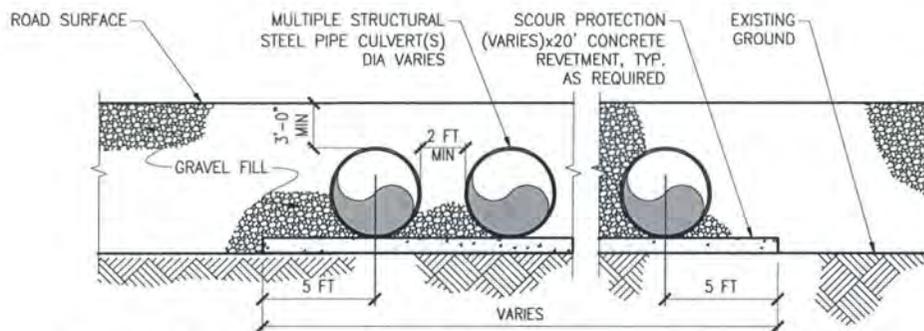
ConocoPhillips
Alaska, Inc.

GMT1 PROPOSED TYPICAL CREEK CULVERT

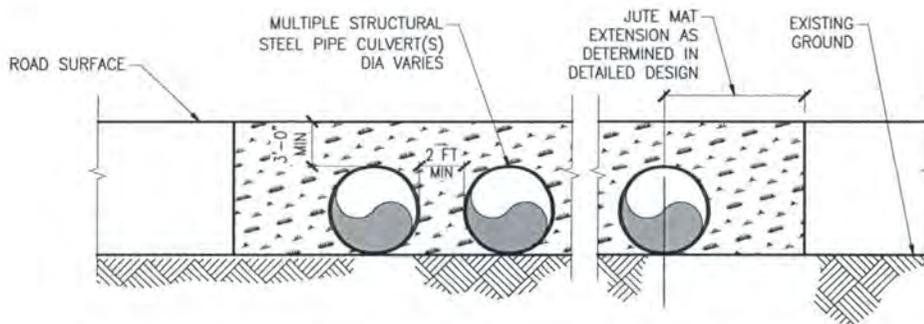
REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD,
 & PIPELINE
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PROPOSED SINGLE CULVERT DOWNSTREAM ELEVATION



PROPOSED MULTIPLE CULVERTS DOWNSTREAM ELEVATION



PROPOSED MULTIPLE CULVERTS UPSTREAM ELEVATION

GMT1 PROPOSED TYPICAL CREEK CULVERT

P | N | D
ENGINEERS, INC.

ConocoPhillips
Alaska, Inc.

REFERENCE: POA 2013-461
 APPLICANT: CPAI
 PROPOSED: GMT1 ROAD, PAD,
 & PIPELINE
 CONSTRUCTION
 AT: ALASKA
 SHEET **33** of **33** 09-08-14



THE STATE
of **ALASKA**
GOVERNOR SEAN PARNELL

Department of Environmental
Conservation

DIVISION OF WATER
Wastewater Discharge Authorization Program

555 Cordova Street
Anchorage, Alaska 99501-2617
Main: 907.269.6285
Fax: 907.334.2415
www.dec.alaska.gov/water/wwdp

November 21, 2014

Certified Mail: 7012-3460-0002-9326-6681

Lynn DeGeorge
Senior Environmental Coordinator
ConocoPhillips Alaska, Inc
P.O. Box 100360
Anchorage, Alaska 99510

Re: Colville River Greater Mooses Tooth One (GMT1)
Reference No. POA-2013-461

Dear Ms. DeGeorge:

In accordance with Section 401 of the Federal Clean Water Act of 1977 and provisions of the Alaska Water Quality Standards, the Department of Environmental Conservation (DEC) is issuing the enclosed Certificate of Reasonable Assurance for placement of fill material in waters of the U.S. in association with the development of a road-accessible drill site, associated pipelines, and ancillary facilities in the National Petroleum Reserve-Alaska (NPR-A).

DEC regulations provide that any person who disagrees with this decision may request an informal review by the Division Director in accordance with 18 AAC 15.185 or an adjudicatory hearing in accordance with 18 AAC 15.195 – 18 AAC 15.340. An informal review request must be delivered to the Director, Division of Water, 555 Cordova Street, Anchorage, AK 99501, within 15 days of the permit decision. Visit <http://www.dec.state.ak.us/commish/ReviewGuidance.htm> for information on Administrative Appeals of Department decisions.

An adjudicatory hearing request must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, PO Box 111800, Juneau, AK 99811-1800, within 30 days of the permit decision. If a hearing is not requested within 30 days, the right to appeal is waived.

By copy of this letter we are advising the U.S. Army Corps of Engineers of our actions and enclosing a copy of the certification for their use.

Sincerely,

Handwritten signature of James Rypkema in cursive.

James Rypkema
Section Manager, Storm Water and Wetlands

Enclosure: 401 Certificate of Reasonable Assurance

cc: (with encl.)
Harry Baij Jr, USACE, Anchorage

William Morris, ADF&G
USFWS Field Office Fairbanks
Gayle Martin, EPA Operations, Anchorage

STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CERTIFICATE OF REASONABLE ASSURANCE

A Certificate of Reasonable Assurance, in accordance with Section 401 of the Federal Clean Water Act and the Alaska Water Quality Standards is issued to ConocoPhillips at P.O. Box 100360, Anchorage, Alaska, for placement of fill material in waters of the U.S. in association with the development of a road-accessible drill site, associated pipelines, and ancillary facilities to safely develop, produce, and transport hydrocarbons from the Greater Mooses Tooth Unit (GMTU) to the existing Alpine Central Processing Facility. The applicant proposes the placement of 628,050 cubic yards (CY) of clean fill material into 72.7 acres of waters of the U.S., including wetlands to construct: 7.7 mile access road, including bridges and abutments; an 11.8-acre drill pad with 33-well capacity at GMT1; placement of fill in 0.1 acre of wetlands to support vertical support members for pipelines; two 0.35 acre fill areas to support the manual pipeline valve pads; and three vehicle pullout pads for access.

A State Water Quality Certification is required under Section 401 because the proposed activity will be authorized by a U.S. Army Corps of Engineers permit, reference number POA-2013-461 and a discharge of pollutants to waters of the U.S. located in the State of Alaska may result from the proposed activity. Public notice of the application for this certification was given as required by 18 AAC 15.180 in the Corps Public Notice POA-2013-461 posted from September 15, 2014 to October 30, 2014.

The proposed activity is located within the following areas:

- Section 6, T. 10 N., R. 3 E.;
- Sections 24-29, 31, 32, and 33, T. 11 N., R. 3 E.;
- Section 1, 12-19, T. 11 N., R. 4 E.; Umiat Meridian near Nuiqsut, Alaska.
- Start of GMT1 proposed project from the proposed the road intersection with the existing CD-5 Access Road: Latitude 70.304687 and Longitude -151.210979 NAD 83 decimal degrees;
- End of GMT1 proposed project at the drillsite gravel pad: Latitude 70.256952 and Longitude -151.479496 NAD 83 decimal degrees; Arctic Coastal Plain of Alaska in the National Petroleum Reserve—Alaska near the Beaufort Sea and west of the Colville River, approximately 12 miles northwest of Nuiqsut, Alaska.

The Department of Environmental Conservation (DEC) reviewed the application and certifies that there is reasonable assurance that the proposed activity, as well as any discharge which may result, will comply with applicable provisions of Section 401 of the Clean Water Act and the Alaska Water Quality Standards, 18 AAC 70, provided that the following alternative measures are adhered to.

1. Reasonable precautions and controls must be used to prevent incidental and accidental discharge of petroleum products or other hazardous substances. Fuel storage and handling activities for equipment must be sited and conducted so there is no petroleum contamination of the ground, surface runoff or water bodies.
2. During construction, spill response equipment and supplies such as sorbent pads shall be available and used immediately to contain and cleanup oil, fuel, hydraulic fluid, antifreeze, or other pollutant spills. Any spill amount must be reported in accordance with Discharge Notification and Reporting Requirements (AS 46.03.755 and 18 AAC 75 Article 3). The applicant

must contact by telephone the DEC Area Response Team for Northern Alaska at (907) 451-2121 during work hours or 1-800-478-9300 after hours. Also, the applicant must contact by telephone the National Response Center at 1-800-424-8802.

3. During the work on the culverts and bridges, construction equipment shall not be operated below the ordinary high water mark if equipment is leaking fuel, oil, hydraulic fluid, or any other hazardous material. Equipment shall be inspected on a daily basis for leaks. If leaks are found the equipment shall not be used and pulled from service until the leak is repaired.
4. All work areas, material access routes, and surrounding wetlands involved in the construction project shall be clearly delineated and marked in such a way that equipment operators do not operate outside of the marked areas.
5. Natural drainage patterns shall be maintained, to the extent practicable, without introducing ponding or drying.
6. Excavated or fill material, including overburden, shall be placed so that it is stable, meaning after placement the material does not show signs of excessive erosion. Indicators of excess erosion include: gullying, head cutting, caving, block slippage, material sloughing, etc.
7. Fill material must be clean sand, gravel or rock, free from petroleum products and toxic contaminants in toxic amounts.
8. Fill placed during winter construction within wetlands that during the summer contain surface water that is connected to natural bodies of water, must be stabilized or contained in the spring prior to breakup. This action is to ensure that silts are not carried from the fill to the natural bodies of water in the spring and summer.
9. Prior to fill placement in the spring or summer, a silt fence or similar structure shall be installed on a line parallel to and within five feet of the proposed fill toe of slope within all wetland areas that contain standing water that is connected to any natural body of water or where the fill toe is within 25 feet of such a water body. This structure shall remain in place until the fill has been stabilized or contained in another manner.
10. Any disturbed ground and exposed soil not covered with fill must be stabilized and re-vegetated with endemic species, grasses, or other suitable vegetation in an appropriate manner to minimize erosion and sedimentation, so that a durable vegetative cover is established in a timely manner.

This certification expires five (5) years after the date the certification is signed. If your project is not completed by then and work under U.S Army Corps of Engineers Permit will continue, you must submit an application for renewal of this certification no later than 30 days before the expiration date (18 AAC 15.100).

Date: November 21, 2014



James Rypkema, Section Manager
Storm Water and Wetlands

Greater Moose's Tooth 1

Mitigation Plan



**ConocoPhillips Alaska, Inc.
700 G Street
Anchorage, AK, 99501**

January 14, 2015

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Figures

Figure 1	GMT1 and Fish Creek Conservation Easements Overview Map
Figure 2	Proposed Conservation Easement Area Wetland Acreage
Figure 3	GMT1 Proposed Infrastructure Alternative A Wetland Acreage

Appendices

Appendix A	Wetlands and Aquatic Site Assessment for the Fish Creek Delta - 2014
Appendix B	Aquatic Site Assessment for the Greater Mooses Tooth One Development Project – 2014

Acronyms

ASA	Aquatic Site Assessment
ASRC	Arctic Slope Regional Corporation
CFR	Code of Federal Regulations
CPAI	ConocoPhillips Alaska, Inc.
E2EM1/USP	Meadow/Pond Complex
E2EM1P	Estuarine Irregularly Flooded Emergent Meadow
GMT1	Greater Moose's Tooth One
ILF	in-lieu fee
Kuukpik	Kuukpik Corporation
Mitigation Rule	Compensatory Mitigation for Losses of Aquatic Resources
NE NPR-A	Northeast National Petroleum Reserve-Alaska
NSB	North Slope Borough
PEM1/SS1B	Saturated emergent-deciduous shrub meadow
PEM1/SS1E	Seasonally flooded saturated emergent-deciduous shrub meadow
PRM	permittee responsible mitigation
USACE	U.S. Army Corps of Engineers, Alaska District

Summary

ConocoPhillips Alaska, Inc. (CPAI) is submitting this permittee responsible mitigation plan to the U.S. Army Corps of Engineers (USACE) for its use in accordance with the "Compensatory Mitigation for Losses of Aquatic Resources" (Mitigation Rule) regulation as issued on April 10, 2008. CPAI is proposing the creation of a 342.36 acre conservation easement on lands owned by Kuukpik Corporation (Kuukpik) within the North Slope Borough (NSB) of Alaska for preservation. The proposed Kuukpik Corporation conservation easement site is located approximately 12 miles north-northwest of Nuiqsut, Alaska within the Fish Creek delta (Figure 1). This site is adjacent to the Kuukpik conservation easement which borders the Beaufort Sea. The proposed areas are located between multiple small channels within the Fish Creek delta.

If negotiations for the proposed Kuukpik Corporation conservation easement are unsuccessful, CPAI proposes to create a conservation easement on land owned by the Arctic Slope Regional Corporation (ASRC) from the "Slope/Flat/Depressional Wetlands" and "Rural" credit structures to satisfy the GMT1 project's compensatory mitigation. Lands at one of three locations ASRC is currently proposing in their Umbrella Mitigation Bank would be considered for the conservation easement.

This submittal satisfies the criteria as described in 33 Code of Federal Regulations (CFR) 332.4 (c) for a mitigation plan, and specifically proposes permittee-responsible mitigation (PRM) in the form of protection of a parcel in the Fish Creek watershed. As a secondary option, CPAI proposes the same type of PRM on land owned by ASRC to satisfy compensatory mitigation.

1 Objectives

The objective is to satisfy the compensatory mitigation requirement of Section 404 of the Clean Water Act by creating a 342.36 acre conservation easement on land owned by Kuukpik Corporation (Kuukpik) at the location indicated on Figure 1. Figure 2 is a description of the aquatic resource types, as named in the Cowardin Classification System, and amount of each type at the site of the proposed conservation easement. The method of compensation proposed for this site is land preservation. The resources proposed for preservation contribute significantly to the ecological sustainability of the watershed in which the GMT1 development will occur. A detailed description of the aquatic resources within the conservation easement can be found in the conservation easement aquatic site assessment (ASA) (Appendix A). A conservation easement on this site will preserve the functions and services of wetlands in the delta area of the watershed to be able to support the upstream areas of the watershed. Not only will it protect the existing aquatic resources, but it will also protect the subsistence lifestyle of the residents of Nuiqsut. Fish creek is a primary location for subsistence fishing, and by preserving this area in the delta, it will help ensure that subsistence will continue in this area. It will be adjacent to the pending Kuukpik conservation easement, resulting in an enlarged continuous conservation area and avoiding separate "pockets" of conservation lands.

Preservation is appropriate under the criteria of 33 U.S.C. § 332.3(h) because the conservation easement will preserve important physical, chemical, and biological functions of the Fish Creek watershed on lands that are privately held and otherwise available for development, including potentially development under existing oil and gas leases.

In the event that the negotiations for the lands to be used for this conservation easement are unsuccessful, CPAI proposes to establish a similar conservation easement as PRM on land owned by Arctic Slope Regional Corporation (ASRC) at Cape Halkett, Starfish Bluff, or Upper Colville River. These three sites have been proposed for preservation in the ASRC Umbrella Mitigation Bank. Aquatic site assessments are complete for these lands.

2 Site Selection Criteria

A variety of criteria support the selection of the Kuukpik Corporation site for this conservation easement.

The first factor is proximity of the conservation easement location to the actual development site. The easement is located within the Fish Creek drainage, as is the GMT1 development, to be consistent with the watershed approach as advocated by USACE. In addition, land proposed for the conservation easement is immediately adjacent to land selected by Kuukpik Corporation to be established as a conservation easement for compensatory mitigation of the Nuiqsut Spur Road.

A second factor is the selection of high value wetlands for preservation and, to the extent feasible, to select higher value wetlands to compensate for the wetlands that will be impacted by the GMT1 project. Approximately 88% of the proposed GMT1 project area is comprised of saturated emergent deciduous shrub meadow (PEM1/SS1B) and seasonally flooded saturated emergent-deciduous shrub meadow (PEM1/SS1E): two of the most common wetland types within the Northeast National Petroleum Reserve – Alaska (NE NPR-A) and are classified as high to moderate functioning wetlands (categories I and II). There are five types of wetlands located in the proposed conservation easement site. There is one waterbody type within the area, E1UBL., The remaining wetland types were classified as high functioning wetlands (category I).

A third factor is habitat diversity. There are many different types of wildlife that use the selected conservation easement site. Mammals, fish, and birds alike use many of the wetland types proposed in this conservation easement. Moreover, because of the presence of these wildlife resources, the selected site serves as an important area for subsistence activities. Accordingly, the selection of this site for preservation as the conservation easement provides an ecologically self-sustaining aquatic resource that supports subsistence uses with a diversity of wildlife.

A final factor is local support. The proposed preservation of wetlands in the Fish Creek delta has support from the landowner, Kuukpik, and support within the local community.

3 Site Protection Instrument

Kuukpik owns the surface at the site of the conservation easement. ASRC owns the subsurface to include sand/gravel and oil/gas. The proposed conservation easement is located within the Colville River Unit, an oil and gas producing unit which is operated by CPAI on behalf of various other unit owners. CPAI proposes to create and record a conservation easement on the 342.36 acre site, describing the allowed and prohibited uses of the surface. CPAI will provide USACE documentation from Kuukpik consenting to restrictions on surface disturbance of this site. CPAI will also provide USACE documentation from ASRC consenting to restrictions on subsurface disturbance of this site, including a prohibition on sand/gravel extraction, and a prohibition on use of the surface for oil and gas production. It should be noted that oil and gas may still be produced from the subsurface of the affected parcels, but the surface location of a drillsite would be outside the boundaries of this conservation easement.

To remain consistent with the adjacent Kuukpik conservation easement, the accepted uses and restrictions will remain the same for this conservation easement. Below is a modified excerpt from the Kuukpik Corporation Nuiqsut Spur Road and Storage Pad Project Final Mitigation Plan, which the GMT1 conservation easement will follow:

Subsistence uses (including but not limited to hunting, fishing, trapping, egg gathering, and vegetation collection) will also be allowed in the conservation easement area without restriction. Commercial guided hunting will not be allowed in the conservation easement area. Other commercial activities, such as snow trails and seismic data collection, or crossing the conservation easement by the oil industry or other business ventures will be determined on a case-by-case basis by the holder of the conservation easement for this site. The recorded legally sufficient conservation easement documents will name both the holder and the steward of the conservation easement site, which may or may not be the same entity. The holder will have the right to enforce site protective measures associated with this easement creation. The following activities will be strictly prohibited by the Site Protection Instrument (Conservation Easement):

- 1. Any dredging or excavation of any soils, sediments, and other substrates.*
- 2. Any discharge of dredged or fill materials.*
- 3. Construction of durable structures, both permanent and temporary.*
- 4. Disturbance of soil, sediment, and other substrates by mechanical equipment and transportation vehicles.*
- 5. Drilling for hydrocarbon resources and surface mining.*
- 6. Vegetation removal, clearing, cutting, or other destruction, except for subsistence food uses.*
- 7. Storage, abandonment, stockpiling, or disposal of any earthen materials, debris, refuse, supplies, durable materials, or other manmade objects.*
- 8. Changing the surface hydrology of the area by ditching, pumping, damming, or other dewatering or hydrating methods.*
- 9. Mechanized snow and ice clearing operations and construction of snow or ice structures including ice roads and ice pads.*
- 10. Commercial guided hunting (not subject to USACE enforcement).*

It should be noted that winter seismic data acquisition activity, which does not disturb soils or destroy vegetation, is not prohibited.

4 Baseline Information

A description of the wetland types and their abundances for the conservation easement site is provided in Appendix A. The geographic coordinates for the easement are provided in Figure 2.

A detailed description of the wetland types and their abundances for the GMT1 project site is provided in Appendix B. The geographic coordinates for the impacted site are provided in Figure 3.

5 Determination of Credits

5.1 Conservation Easement

CPAI's primary proposed compensatory mitigation is via off-site (away from the project area) preservation through permittee-responsible mitigation. The preservation of the 342.36 acre site for the unavoidable impacts to aquatic resources that will result from the construction of the 72.7 acre GMT1 project was based on the guidance as provided in the Alaska District Regulatory Guidance Letter, RGL 2009-01. The RGL 2009-01 has been rescinded, but currently no other guidance has been established to replace it.

CPAI has estimated the compensatory ratios for direct impacts for the GMT1 project (Table 1). These values were generated based on the RGL 2009-01 guidance.

Table 1: Estimated Compensatory Mitigation Ratios for GMT1 Project Impacts

NWI Code	GMT1 Proposed Project (acres)	GMT1 Functional Category	Estimated GMT1 Ratio (X:1)	Estimated Direct Impacts Mitigation Acreage
Direct Impacts				
R2UBH	0.2	II	2.25	0.45
R2EME	0.2	I	3	0.6
PUBH	<0.1 ¹	I	3	<0.1
PUSR	<0.1 ¹	III	1.5	0.15
PEM1T	<0.1 ¹	I	3	<0.1
PEM1H	0.8	I	3	2.4
PEM1F	6.9	I	3	20.7
PEM1/SS1E	20.7	I	3	62.1
PEM1/SS1B	43.4	II	2.25	97.65
PSS1C	0.4	II	2.25	0.9
Us (uplands)	(0.1)	Not included in total wetlands calculation	0	0
Total	72.6		Total	184.95

Indirect Impacts				
PEM1/SS1E, PEM1F, PEM1H, R2EME, PEM1T, PUBH	290.60	I	0.30	87.18
PEM1/SS1B, PSS1C, L1UBH, R2UBH	291.30	II	0.225	65.54
PUSR	<0.10	III	0.15	0.02
All Pipeline waters/wetlands	93.33		0.05	4.67
Total	582.0		Total	157.41
Total Impacts				
Direct Impacts	72.6			184.95
Indirect Impacts	582.0			157.41
Total	654.6		Total	342.36

1 - For calculation of impacts this value was estimated to be 0.1 acres

CPAI estimates the indirect impacts ratio to be based on the wetland category designation of 10% of direct impacts. This ratio was selected because these wetlands have the potential to incur impacts and they will not be impacted in the same manner as the directly affected wetlands. The indirect impacts, for this project, are defined as impacts caused by gravel spray and/or dust deposition and is delineated by a 300-foot zone surrounding all sides of gravel infrastructure. Mitigation measures have been incorporated into the project and current design to minimize the extent of the indirect impacts (e.g. road watering, culvert placement, etc...). By implementing these mitigation measures, the extent of gravel spray and dust deposition have been minimized during operation. The total number of acres determined to potentially incur indirect impacts is 582.0 acres. When the estimated ratio is applied, the mitigation for these acres would be 157.41 acres.

The total impacted acreage (direct and indirect) for the GMT1 project is 654.6 acres. The total compensatory mitigation acreage for direct and indirect impacts is estimated to be 342.36 acres (Table 1).

The proposed conservation easement has a greater abundance of higher functioning wetland types than the GMT1 project site, as documented in the respective ASAs (Appendices A and B). By establishing the conservation easement, additional protection to the river and stream acreage will be provided (which is not accounted for nor captured in the calculations). This beneficial impact is seemingly unaccounted for in documentation prior to this Mitigation Plan. The conservation easement wetlands should be rated as a 1:1 mitigation ratio, Table 2 denotes these ratios for the conservation easement wetlands.

Table 2: Estimated Compensatory Mitigation Ratios for Conservation Easement

NWI Code	Proposed Conservation Easement (acres)	Conservation Easement Functional Category	Estimated Ratio (X:1)	Estimated Mitigation Acreage
E2US4P	12.72	I	1	12.72
E2US3P	156.37	I	1	156.37
E2EM1P	30.96	I	1	30.96
E2EM1/USP	116.05	I	1	116.05
E1UBL	26.26	I	1	26.26
Total	342.36		Total	342.36

By equating the total GMT1 compensatory mitigation acreage and the estimated mitigation acreage of the conservation easement, this yields an appropriate amount of wetlands to constitute the conservation easement. This method accounts for higher functioning wetland preservation for impacts to lower functioning wetlands at appropriate ratios.

Using the above method, to compensate for 654.6 acres of direct and indirect impacts, CPAI proposes a 342.36 acre conservation easement on high to moderate functioning wetlands. If negotiations for the proposed Kuukpik Corporation conservation easement are unsuccessful, CPAI proposes permittee responsible mitigation as preservation via the use of ASRC's Umbrella Mitigation Bank lands. CPAI is proposing 342.36 acres as compensatory mitigation for the total direct and indirect impacts associated with the GMT1 development.

Due to the location and the nature of the wetlands within the GMT1 project, the types of credits to be purchased from the ASRC Umbrella Mitigation Bank are "Slope/Flat/Depressional Wetlands" within the "Rural" category.

6 Mitigation Work Plan

CPAI is not proposing any work at the conservation easement site. A map showing the geographic boundaries of the proposed easement is provided in Figure 2.

7 Maintenance Plan

CPAI is not providing a maintenance plan for this conservation easement. No maintenance will be necessary as this site is for preservation.

8 Performance Standards

CPAI is not proposing any performance standards. No performance standards are necessary as this site is for preservation.

9 Monitoring Requirements

The holder of the conservation easement will monitor the site via any or all of the following methods: the most recent aerial imagery available for the year; over flights; and/or on-site ground level photography on an annual basis. The holder will submit an annual report to USACE by December 1 of each year which will include a photographic image of the site and surrounding areas and a written report of any physical changes from the previous annual report. If there is no new annual imagery available for the reporting year, then a report will be filed stating the aerial imagery has not been updated since the previous year's report. The site will be physically visited during the period of May 1 to October 1 and within one year of the establishment of the conservation easement to document baseline conditions. A report from this site visit will be compiled to include photographs and a description of the site; this report will serve as the first annual report.

10 Long-term Management Plan

CPAI is not proposing performance standards (as noted in Section 8), therefore a long-term management plan is not necessary. CPAI will establish the conservation easement for preservation; the holder of the easement will monitor the site as per Section 9; and the prohibited activities as mentioned in Section 3 will be enforced by the holder.

11 Adaptive Management Plan

Site changes are expected to occur only due to natural events caused by weather. CPAI is not proposing an adaptive management plan for changes that are caused by natural events. CPAI does propose an adaptive management plan for changes that occur due to human activity (e.g. debris, surface disturbances from non-subsistence activities, hydrocarbon spills, and other changes resulting from the prohibited activities listed in Section 3). The holder of the conservation easement, Kuukpik Corporation, may separately oversee response to human activities at the site.

12 Financial Assurances

CPAI has a strong financial position as the world's largest independent exploration and production company, based on proven reserves and production of liquids and natural gas. CPAI has an established presence on the North Slope and regular engagement with Kuukpik and the USACE. In light of, the USACE authority to prohibit the discharge of gravel for GMT1 until the compensatory mitigation commitment is adequately secured, CPAI requests the USACE conclude that financial assurances are not necessary. CPAI agrees to establish the

conservation easement in advance of the construction activity. If additional time is needed to resolve outstanding issues regarding provision of financial assurance, prior to initiation of the construction activity, CPAI will provide a performance bond, escrow account, or letter of credit in an amount required by the USACE. The USACE will determine the financial assurance amount.

13 Other Relevant Information

CPAI believes the information provided to date (permit application documents, ASAs, and the mitigation plan) is sufficient for the USACE to make determinations pertaining to this compensatory mitigation site. CPAI will work with the USACE to provide any additional information and documentation within reason.

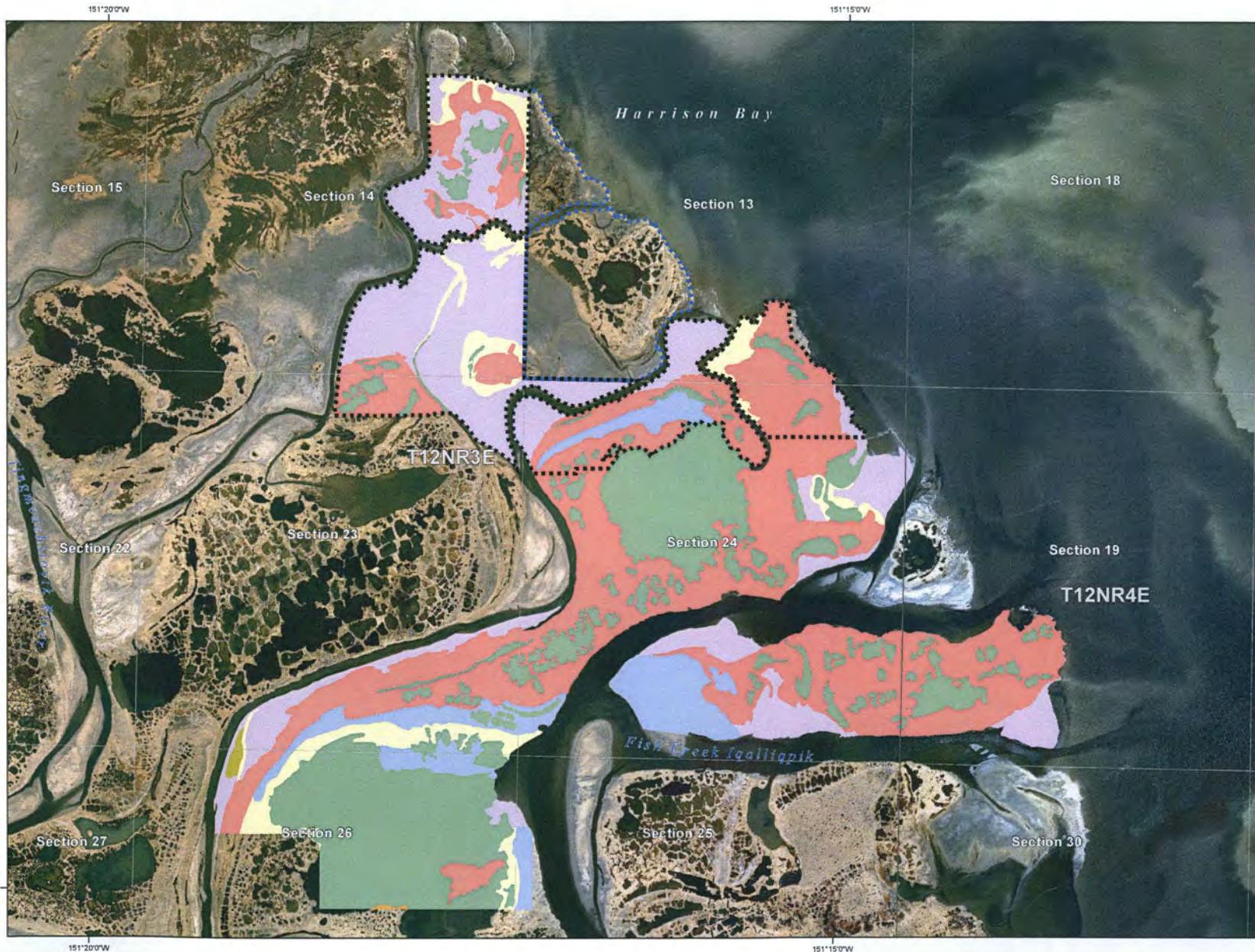


Figure 2

Proposed Conservation Easement Area Wetland Acreage

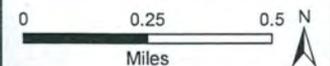
Proposed Easement

-  Fish Creek Conservation Easement Based on Aquatic Site Assessment
-  Kuukpik Conservation Easement (Approx. 127.0 Acres)

Wetland Type

-  E1UBL
-  E2EM1/USP
-  E2EM1P
-  E2US3P
-  E2US4P
-  PEM1/SS1E
-  U

Wetland	Acreage
 E1UBL	26.26
 E2EM1/USP	116.05
 E2EM1P	30.96
 E2US3P	156.37
 E2US4P	12.72
Total	342.36



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