



BP Exploration (Alaska) Inc.
P.O. Box 196612
900 E. Benson Boulevard
Anchorage, AK 99519-6612
USA

December 2, 2016

DOG Permitting
Alaska Department of Natural Resources
Division of Oil and Gas
550 W. 7th Ave., Suite 800
Anchorage, Alaska 99501-3577

Amendment to Unit Plan of Operations
GC2 Facility Siting Pad Expansion 2016
LO/NS 69-026
Prudhoe Bay Unit

DOG Permitting:

BP Exploration (Alaska) Inc. (BPXA) proposes to expand the existing gravel pad in order to install a blast resistant module (BRM) on the Gathering Center 2 (GC2) pad in the Prudhoe Bay Unit (PBU). The purpose of this project is to provide a safe location for workers to perform non-operational tasks such as training, breaks, meetings, and management/administrative tasks at the GC2 facility.

In support of this request, attached are the following:

- Figures
- Project Description/Plan of Operations
- Unit Plan of Operation Application

Please note that this project is not mentioned in the Unit Plan of Development (POD), as the POD covers reservoir development activities, not routine operations and maintenance activities. If you have any questions or require additional information, please contact Pauline Ruddy at (907) 564-5328, Pauline.Ruddy@bp.com.

Sincerely,


Holly Willman, Facilities Program Manager
Global Projects Organization-Alaska

HSE file: 153.12.44 GC2 Facility Siting Pad Expansion 2016

- Placement of approximately 15,000 cubic yards of gravel to expand the existing pad by approximately 2.05 acres to allow room for the BRM installation.
- oPlacement of approximately 13,000 cubic yards of gravel in Area 1 (~1.75 acres) to allow room for the BRM facility, associated parking, access for maintenance equipment, and to provide access for fire suppression equipment. See attached figures.
- oPlacement of approximately 2,000 cubic yards of gravel in Area 2 (~0.3 acres) to allow access to the BRM from the pad entrance road and to provide a safe buffer from the electrical substation that is adjacent to the road. See attached figures.
- Cut and cap an existing power pole structure and an existing VSM approximately 6 inches above the ground in the area of the pad expansion.
- Equipment to be used for the gravel placement will include haul trucks, dozer, grader, compactor, and standard size pickup trucks.

BRM Installation and Related Facilities

- Install approximately 75 piles in the new gravel expansion area 1 (Figure 3) and on the existing gravel pad to support the BRM and walkway. The depth of the piles will range from 10 to 25 feet depending upon the load at the pile location.
- Construct the new BRM on the new piles.
- Construct an enclosed, elevated walkway approximately 180 feet in length on the new piles to connect the BRM to the existing building.
- Install two 12-inch diameter piles on tundra between the OT-21 pipeline and the pipe rack that goes to the flare pad to support the elevated walkway.
- Install three new power poles up to 20 inches in diameter on tundra (Figure 3). Reroute existing aerial power lines next to the edge of the new pad between the existing power poles and the new set of power poles. The power line will then be buried through the gravel pad close to the existing substation with another short section of aerial power line to connect to the substation. The aerial portion of the line will be approximately 400 linear feet, and the buried portion will be approximately 210 linear feet. Vibration dampeners will be installed on the aerial power lines which will increase their visibility.
- The exterior BRM lights are directional and will only illuminate the pad around the building.
- Run power, communication, and control system lines from the existing plant in a new aboveground cable tray mounted on the new BRM, walkway, and/or piles.
- Install a bullrail on pad adjacent to the new building. The power going from the new building to the bullrail will be buried in the gravel pad during installation.
- Install approximately 20 protective bollards on pad near the new BRM.
- Equipment to be used for the installation of the project components will include cranes, loaders, graders, light plants, pickup trucks, fork lifts, manlifts, trenching equipment, and temporary heaters. Storage, staging, temporary offices and break rooms will be placed on existing gravel pads or the new gravel pad.

Ice Road and Trenching

- The section of buried power line will run for a short distance in tundra. (approximately 25 ft) which will be trenched for power line placement. The trench will be approximately 2 feet wide and at least 5 feet deep.
- A 35 foot wide ice road will be constructed to access the installation location of the new power poles and the trench. An ice pad of approximately 100 feet by 100 feet will be installed at the power pole installation location.
- Necessary vegetative rehabilitation will begin the summer following the trenching.
- Less than approximately 120,000 gallons of water is expected to be needed for the ice road or alternative ice road.
- Water will come from BPXA permitted sources and will be accessed by existing gravel roads.
- Equipment used to construct the ice road will be water trucks, Maxi-Hauls, a road grader and loader.

SECTION V: LAND STATUS

1. State Mineral Estate:

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

Affected ADL: 028284 Date Effective: 9/1/1965 Date Assigned:

Oil And Gas Lessee(s): BP Exploration (Alaska) Inc.

Surface Ownership: State of Alaska

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

Special Use Lands: N/A

Jointly Managed Lands: N/A

Other Considerations: N/A

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
Power poles, trenching, and powerline work	T11N, R13E, S16, Umiat M	Lat: 70.310917 Long -148.862895
Gravel Pad Expansion	T11N, R13E, S16, Umiat M	Lat: 70.310917 Long -148.862895
BRM, piles and walkway	T11N, R13E, S16, Umiat M	Lat: 70.310917 Long -148.862895

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):

Special Use Lands:

Jointly Managed Lands:

Other Considerations:

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

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):

Special Use Lands:

Jointly Managed Lands:

Other Considerations:

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

SECTION VI: SEQUENCE AND SCHEDULE OF OPERATIONS

Project Milestone #	Project Milestone	Proposed Start Date	Proposed End Date
1.	Power poles, trenching, power line work, ice road and ice pad	4/1/2017	5/31/2017
2.	Gravel pad expansion	8/1/2017	12/31/2017
3.	BRM, piles, walkway	3/1/2018	12/31/2018
4.			
5.			
6.			
7.			
8.			
9.			
10.			

SECTION VII: PROJECTED USE REQUIREMENTS

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

N/A

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

A new BRM will be installed. See project description for more details.

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

N/A

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

N/A

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

Water for the ice road and ice pad will come from BPXA permitted sources and will be accessed by existing gravel roads. Approximately 120,000 gallons will be required.

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

An existing power line will be relocated per description in project description and figures.

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

N/A

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

N/A

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:

N/A

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

Agency	Permit Type	Permit Number	Application Status	Projected Use Requirement(s)
USACE	Individual Permit	POA-2016-483	Responding to Publi	None expected.
NSB	Development Permit	TBD	Applied	None expected.

SECTION VIII: REHABILITATION PLAN

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

No change from original plan.

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

No change from original plan.

SECTION IX: 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 Lease area and adjacent areas including:

Fish and Wildlife Habitats: N/A

Historic and Archeological Sites N/A

Public Use Areas: N/A

SECTION X: GLOSSARY OF TERMS

Term #	Term	Term Definition
1.	BRM	Blast Resistant Module
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

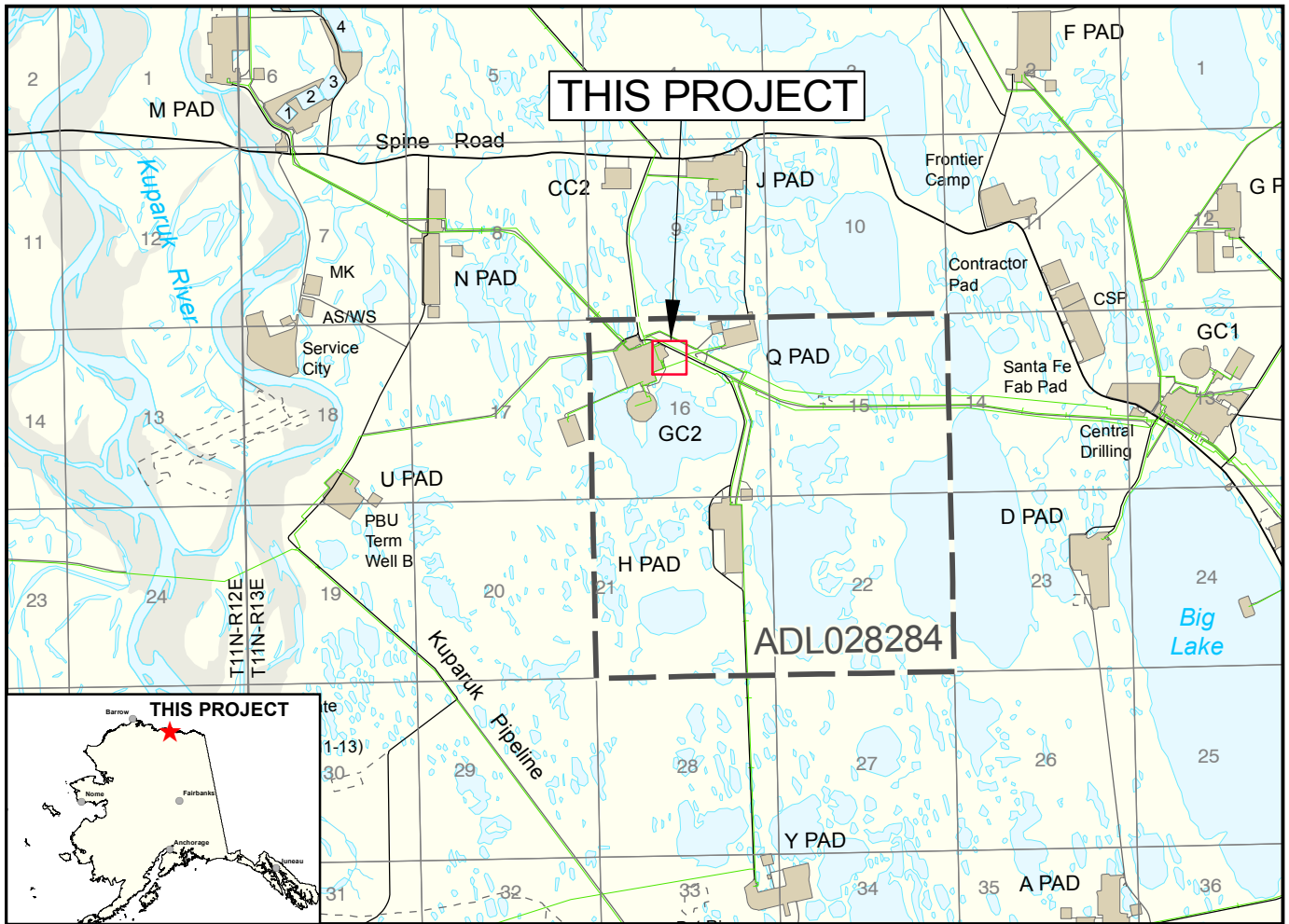
SECTION XI: CONFIDENTIALITY

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:

	Holly Willman	Project Manager, Global Projects Or	12/2/2016
Signature	Name	Title	Date

See attached figures.



This map is based on U.S.G.S quad Beechey Point (B-4) and on the Unit Operator's Facility Maps.



PROJECT LOCATION:

PRUDHOE BAY UNIT - GATHERING CENTER 2

NAD83

LAT. = 70° 18' 39.302" / DD 70.310917

LONG. = -148° 51' 46.421" / DD -148.862895

ALASKA STATE PLANE ZONE 4, NAD83

X = 1,780,731.80 FEET

Y = 5,964,455.50 FEET

SEC. 16 T11N, R13E UMIAT M.

ADL # 028284

DATUM: MEAN SEA LEVEL

PURPOSE: FACILITY SITING

ADJACENT PROPERTY OWNER:
STATE OF ALASKA

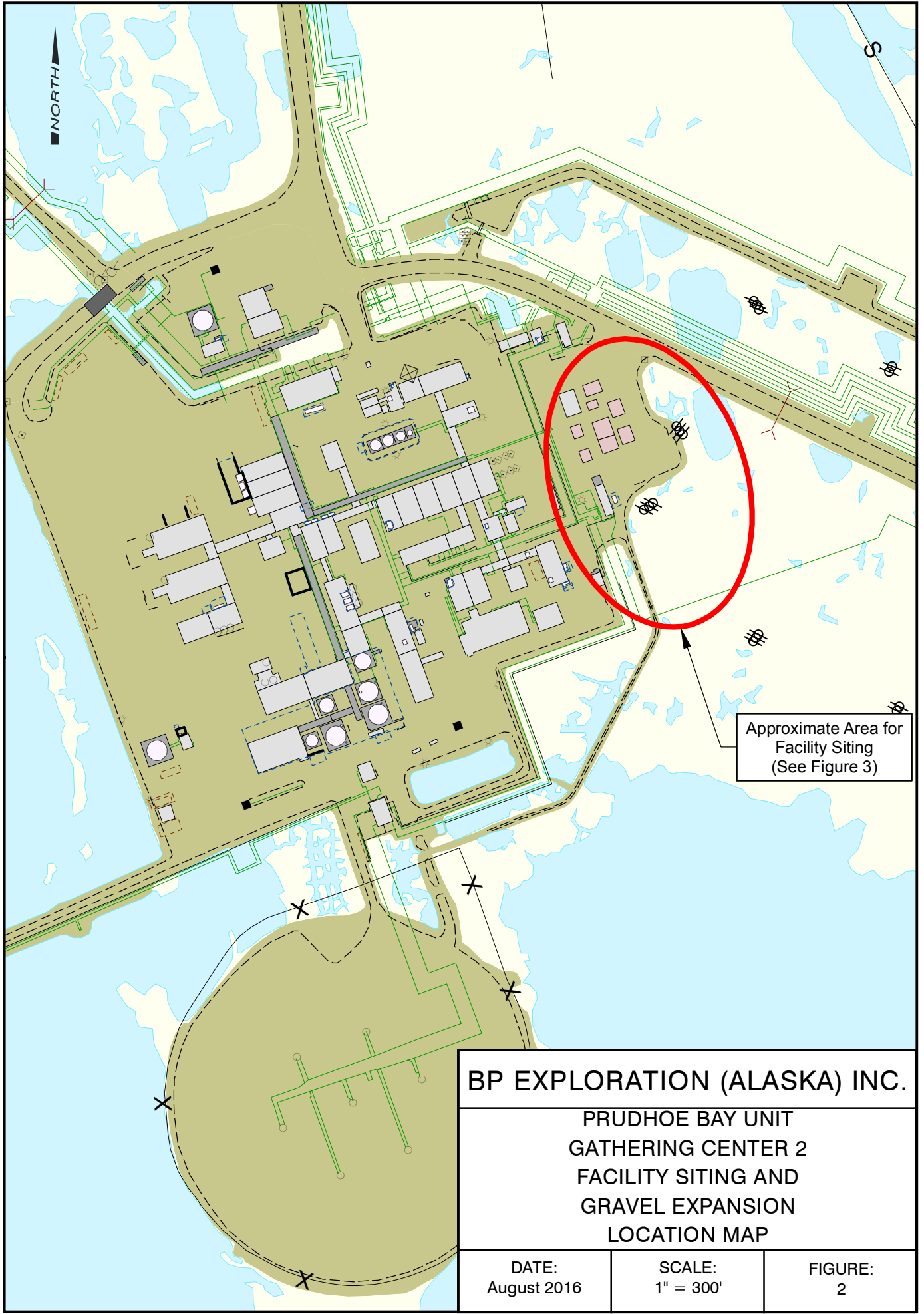
BP EXPLORATION (ALASKA) INC.

**PRUDHOE BAY UNIT
GATHERING CENTER 2
FACILITY SITING AND
GRAVEL EXPANSION
VICINITY MAP**

DATE:
August 2016

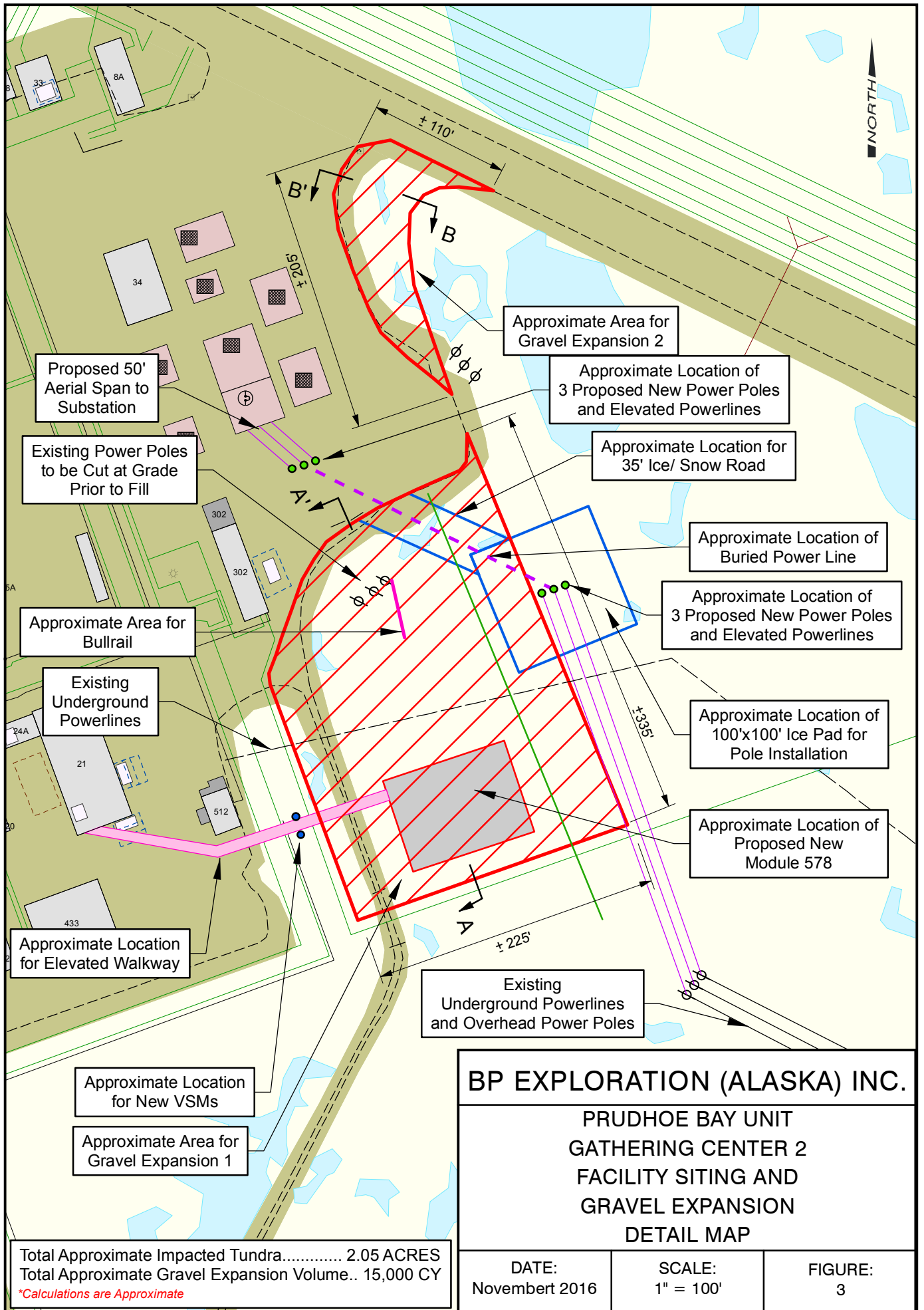
SCALE:
1" = 1 Mile

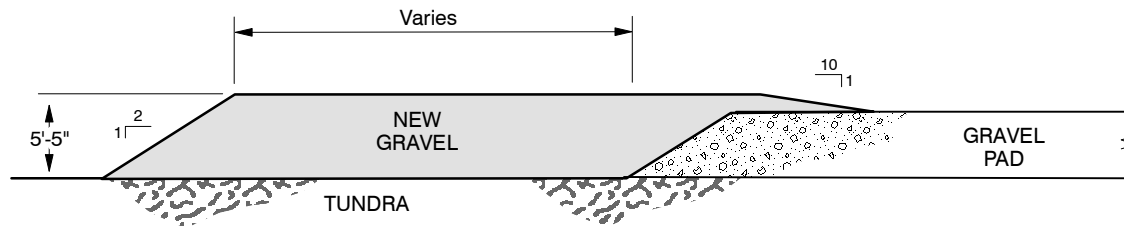
FIGURE:
1



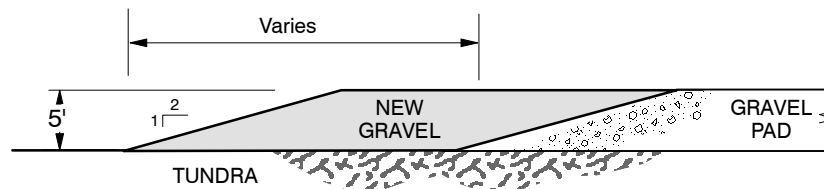
Approximate Area for
Facility Siting
(See Figure 3)

BP EXPLORATION (ALASKA) INC.		
PRUDHOE BAY UNIT GATHERING CENTER 2 FACILITY SITING AND GRAVEL EXPANSION LOCATION MAP		
DATE: August 2016	SCALE: 1" = 300'	FIGURE: 2





CROSS SECTION A - A'



CROSS SECTION B - B'

BP EXPLORATION (ALASKA) INC.

PRUDHOE BAY UNIT
GATHERING CENTER 2
FACILITY SITING AND
GRAVEL EXPANSION
CROSS SECTIONS

DATE:
August 2016

SCALE:
NOT TO SCALE

FIGURE:
4

ALL DIMENSIONS ARE APPROXIMATE

