



LEASE PLAN OF OPERATIONS APPLICATION

State of Alaska

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



SECTION I: APPLICANT INFORMATION

1. Applicant:	2. Applicant Contact:
Name: Hilcorp Alaska, LLC Mailing Address: 3800 Centerpoint Dr., Ste. 1400 City: Anchorage State: AK Zip Code: 99503 Phone: 907-777-8300 Fax: 907-777-8560 Email: Enter Email.	First Name: Keegan Last Name: Fleming Title: Environmental Specialist Is the Mailing Address the same as Applicant's Mailing Address? If "No", please provide information below: <input checked="" type="checkbox"/> Yes Mailing Address: Enter Mailing Address. City: Enter City. State: Enter State. Zip Code: Enter Zip Code. Phone: 346-237-2238 Fax: Enter Fax. Email: kflaming@hilcorp.com

SECTION II: THIRD PARTY INFORMATION (Fill out this section only if you are applying for the Applicant)

SECTION III: APPLICATION DATE AND NUMBER (FOR OFFICE USE ONLY)

Third Party Company Name: Enter 3rd Party Company Name.

First Name: Enter First Name. Last Name: Enter Last Name.
 Title: Enter Title.
 Mailing Address: Enter Mailing Address.
 City: Enter City.
 State: Enter State. Zip Code: Enter Zip Code.
 Phone: Enter Phone. Fax: Enter Fax.
 Email: Enter Email.

Describe the affiliation to the Applicant:
 Describe your affiliation to the Applicant.

Application Date:

Application Number:

SECTION IV: PROJECT INFORMATION

1. Project Name:	Whiskey Gulch Exploration - Pad and Drill Wells
2. Proposed Start Date:	4/1/2021
3. Project Description:	
Describe what and where:	

Construct/prepare a new gravel access road pad (Whiskey Gulch Pad) on non-unitized private land near Anchor Point, Alaska, and drill one combination gas & oil exploration well and one gas only exploration well from the newly constructed/prepared pad. Potential production from the Whiskey Gulch Pad will be addressed and permitted in a Unit Plan of Operations Application based on the successful unitization of the area and success of the exploration drilling program.

SECTION V: LAND STATUS

1. State Mineral Estate:

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

Affected ADL: 392666 Date Effective: 3/1/2015 Date Assigned: 3/1/2015

Oil And Gas Lessee(s): Hilcorp Alaska, LLC

Surface Ownership: Private

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

Special Use Lands: None

Jointly Managed Lands: None

Other Considerations: None

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
WG #1 & #14 Wellbore & Correlative Rts.	T4S, R15W, S.M., AK, Section 23, 24, 25, 26	N 59.812599, W -151.804027
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Affected ADL: 392665 Date Effective: 3/1/2015 Date Assigned: 3/1/2015

Oil And Gas Lessee(s): Hilcorp Alaska, LLC

Surface Ownership: Private

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

Special Use Lands: None

Jointly Managed Lands: None

Other Considerations: None

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
WG #14 Correlative Rights	T4S, R15W, S.M., AK, Section 13, 14	N 59.824245, W -151.787023
Click here to enter text.	Click here to enter text.	Click here to enter text.
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Affected ADL: [Enter ADL.](#) Date Effective: [Enter Date.](#) Date Assigned: [Enter Date.](#)

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

Surface Ownership: [Click here to enter text.](#)

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

Special Use Lands: [Click here to enter text.](#)

Jointly Managed Lands: [Click here to enter text.](#)

Other Considerations: [Click here to enter text.](#)

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

Affected ADL: [Enter ADL.](#) Date Effective: [Enter Date.](#) Date Assigned: [Enter Date.](#)

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

Surface Ownership: [Click here to enter text.](#)

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

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Affected ADL: Enter ADL. Date Effective: Enter Date. Date Assigned: Enter Date.

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

Surface Ownership: Click here to enter text.

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

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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Click here to enter text.	Click here to enter text.	Click here to enter text.
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2. State of Alaska Surface Lands:

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

Oil And Gas Mineral Estate Owner: None

Access Authorization(s): None

Special Use Lands: None

Jointly Managed Lands: None

Other Considerations: None

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
None	None	None
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

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

Oil And Gas Mineral Estate Owner: Click here to enter text.

Access Authorization(s): Click here to enter text.

Special Use Lands: Click here to enter text.

Jointly Managed Lands: Click here to enter text.

Other Considerations: Click here to enter text.

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
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3. Private Lands:

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

Oil And Gas Mineral Estate Owner: State of Alaska, Department of Natural Resources
 Surface Ownership And Access Agreement(s): Barbra Lee Kerin, KPB Tax Parcels 16508321
 Special Use Lands: None
 Jointly Managed Lands: None
 Other Considerations: None

Project Components	Meridian, Township, Range, And Section(s)	GPS Coordinates
WG Road and Pad Site (KPB Parcel 16508321)	T4S, R15W, S.M., AK, Section 23	N 59.812599, W -151.804027, Varies
Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.

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

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

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

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

SECTION VI: BOND INFORMATION

Bonded Company: Hilcorp Alaska, LLC
 Type: Surety Bond Number: 022035257 Amount: \$500,000
 Bonding Company: Liberty Mutual Insurance Company
 Mailing Address: 175 Berkley Street
 City: Boston State: MA Zip Code: 02117
 Phone: Enter Phone. Fax: Enter Fax. Email: Enter Email.

SECTION VII: SEQUENCE AND SCHEDULE OF OPERATIONS

Project Milestone #	Project Milestone	Proposed Start Date	Proposed End Date
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1.	Construct Gravel Access Road and Pad	4/1/2021	4/30/2021
2.	Drill first well, Expected Development Zones, and Exploration Zones	5/1/2021	5/31/2021
3.	Well testing	6/1/2021	6/30/2021
4.	Temporarily Suspend/Secure Well	7/1/2021	7/5/2021
5.	Drill Second well, Expected Development Zones, and Exploration Zones	7/6/2021	8/6/2021
6.	Well testing	8/7/2021	9/7/2021
7.	Temporarily Suspend/Secure Well	9/8/2021	9/15/2021
8.	Enter Milestone.	Enter Date.	Enter Date.
9.	Enter Milestone.	Enter Date.	Enter Date.
10.	Note: Project is expected to begin as soon as all applicable permits and authorizations are received. Project schedule may change and dates may move forward or back. Project milestone #1 start date depends on weather, permitting, and company schedule.	-	-

SECTION VIII: PROJECTED USE REQUIREMENTS

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

New pad construction is required to reach potential targets in the Anchor Point area, and as such Hilcorp proposes constructing a 300' x 400' (2.75-acre) gravel pad (to be known as Whiskey Gulch Pad) within Section 23, Township 4 South, Range 15 West, Seward Meridian located off of the 3 miles north of Anchor Point Alaska, off the Old Sterling Highway at the end of Cape Niniichik Avenue (see Figure 1 in "Appendix A: Maps"). Whiskey Gulch Pad is proposed on partially improved private lands. Access to the pad is provided by existing KPB roadways to the intersection of Cape Niniichik Avenue and Opportunity Lane. Access roadway improvements over an existing driveway will begin within the KPB ROW at the intersection of Cape Niniichik Avenue and Opportunity Lane, and extend west to the pad location on private property. Pad and access road construction activities will include organics removal/grubbing of the construction footprint, leveling/preparing pad and access road footprint, placement of geotextile liner on the pad and access road footprint, and placement of approximately 20,000 cubic yards (cy) of gravel fill over the liner. Gravel fill will be compacted and a containment berm will be built around the edge of the pad. Final project engineering design drawings are included in "Appendix C: Other". One gas/oil combination exploration well (WG #1) and one gas-only exploration well (WG #14) will be drilled from the pad. Whiskey Gulch #1 will be drilled approximately 10,000' (measure depth) to the Southeast of Whiskey Gulch Pad. The first 7,700' of wellbore (ADL 392666) will be perforated to evaluate gas zones, and the bottom-hole location (ADL 392666) will be evaluated for oil resources. Whiskey Gulch #14 will extend approximately 10,000' (measure depth) to the Northeast of Whiskey Gulch Pad, and is a gas exploration well only (no oil exploration targets have been identified). Approximate surface locations and well paths and correlative rights buffers for WG #1 and WG #14 can be found in Figure 3 in "Appendix A: Maps". The exploration wells will be secured and suspended to determine if future development activities are warranted. If drilling proves successful, Unitization, and subsequent permitting of facilities and further development wells will be conducted separately.

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

NA – This authorization pertains to pad construction and exploration drilling activities only. No permanent facilities are proposed as part of this authorization. All permanent facilities will be permitted separately as needed.

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

A diesel fuel storage tank (~5,000 gallons) for equipment refueling will be onsite temporarily to support drilling efforts. Production related hazardous substance storage will be facilities will be permitted separately as needed.

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

Waste will be handled consistent with Hilcorp waste management practices as outlined below: • Waste will be properly segregated and containers labeled to ensure proper disposal. • Closed-top dumpsters will be onsite for food trash and household waste and will be hauled away from the site regularly to prevent overflowing. • Household waste/paper trash will be sent to the Kenai Peninsula Borough Landfill for disposal. • Oily waste will be segregated and sent to a specialty waste contractor for offsite disposal. • Waste drilling mud and cuttings will be hauled via vacuum truck or supersucker directly from the rig process tank to an offsite, permitted underground injection disposal facility. The only anticipated storage of drilling waste on location would be in the event of an issue at the disposal facility that prevented immediate shipment, in which case Hilcorp would obtain Alaska Department of Environmental Conservation (ADEC) Temporary Drilling Waste Storage plan approval.

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

Approximately 100 barrels (bbls) per day of freshwater will be used for drilling each well. Hilcorp intends to permit and drill a water source well at the Whiskey Gulch Pad Location. Alternatively, freshwater may be purchased from the City of Anchor Point or withdrawn from existing and permitted water wells at Paxton Pad or other nearby Hilcorp operated locations.

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

NA – This authorization pertains to pad construction and exploration drilling activities only. No utilities are proposed as part of this authorization. All utilities will be permitted separately as needed.

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

The successful construction contractor (or Hilcorp) will identify a material source suitable to support gravel needs associated with gravel road and pad construction. Clean fill material will be purchased through via the executed construction contract for improvement/construction of the road and pad. No material sites are planned to be created or permitted as part of this authorization.

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

Access to the pad is provided by the Sterling Highway and existing KPB roadways to the intersection of Cape Ninilchik Avenue and Opportunity Lane. Access roadway improvements over an existing driveway will begin within the KPB ROW at the intersection of Cape Ninilchik Avenue and Opportunity Lane, and extend west to the pad location on private property.

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

NA

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

Drilling activities will be conducted by Hilcorp Drilling under the direction of Monty Myers, Hilcorp's Drilling Manager (907-777-8431). Hilcorp owned Rig 169 or Rig 147 (sister drill rigs) will be used for drilling activities. Figure 4 shows typical layouts for the Hilcorp Rig 147 & 169 and associated equipment. Major components include the following: Equipment, including the drilling rig and pipe, the completion rig, mud tanks and mud pumps, boilers, drilling foreman/toolpusher trailer, light plants, generators, cement silo(s), and other miscellaneous equipment will be onsite temporarily to support drilling efforts. Well testing will be conducted for approximately 30 days for each well. The temporary testing equipment will include a line heater, liquids/gas separator, flare, and 400-bbl water storage tank.

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)
SHPO	Archeological Clearance	Report Submittal	Not Submitted	Pad Preparation & Construction
ADEC	MG1 Authorization for POGO	MG1	Not Submitted	Drilling Activities
ADEC	C-Plan Inclusion	NA	In Process	Drilling Activities
ADEC	SPCC Inclusion	NA	Completed	Drilling Activities
ADEC	Temporary Water Use Auth.	TBD	In Process	Water Well Installation and Use
KPB	ROW Permit	TBD	Not Submitted	Access Road Improvement
KPB	KPB Landfill Disposal Auth.	NA	In Process	Used Liner Disposal
AOGCC	Permit to Drill	TBD	Not Submitted	Drilling Activities
Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).
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Enter Agency.	Enter Permit Type.	Enter Permit Number.	Enter Application Status.	Enter Projected Use Requirement(s).

SECTION IX: REHABILITATION PLAN

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

Permanent improvements to the eastern portion of Cape Ninilchik Avenue (east of Opportunity lane) will remain in-place after the project is completed. Gravel access road and pad located on private lands will remain in-place after the exploration program is completed. No other permanent infrastructure, facilities, or equipment are proposed as part of this authorization. All materials and mobile equipment will be removed at the conclusion of the drilling and testing program to the satisfaction of the private land owner.

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

No rehabilitation activities are planned. All materials and mobile equipment will be removed at the conclusion of the drilling and testing program, and the gravel access road and pad will remain for use of the private land owner. Apart from permanent access road and pad construction, no impact to vegetation, habitat, wildlife, or resources is anticipated, any inadvertent impact the aforementioned will be rehabilitated to the satisfaction of the private land owner and any applicable agencies and/or stakeholders.

SECTION X: OPERATING PROCEDURES DESIGNED TO MINIMIZE ADVERSE EFFECTS

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

Fish and Wildlife Habitats: Because the project intends to utilize existing access roads in conjunction with road and pad construction within an existing KPB ROW and on private surface lands, no fish or wildlife habitats are anticipated to be impacted. All project activities will occur in accordance to any laws, regulations, and stipulations issued to Hilcorp, as well as all Hilcorp Wildlife Interaction plans, Procedures, and Best Management Practices.

Historic and Archeological Sites: Hilcorp contracted Charles M. Mobley & Associates to conduct an archaeological field study of the proposed project area in October 2020. Mr. Mobley detailed his methods, findings, and determination of project impacts in "Archeological Survey for Hilcorp Alaska LLC's Whiskey Gulch Pad and Road, Anchor Point, Alaska, 2020". A copy of the report will be provided to ADNR's Office of History and Archaeology. In the document, Mr. Mobley concluded that there are "No cultural properties eligible to the National Register of Historic Places were known in the Whiskey Gulch APE prior to this investigation, and none were observed or otherwise learned about during the investigation." If cultural resources are encountered, the Private Land Owner and the State Historical Preservation Office will be contacted immediately.

Public Use Areas: Public use areas will not be impacted by the proposed project, as this project occurs on private lands. While public access to Whiskey Gulch Pad will be restricted, other areas around the pad will not be restricted.

Other Uses: None

SECTION XI: GLOSSARY OF TERMS

Term #	Term	Term Definition
1.	ADEC	Alaska Department of Environmental Conservation
2.	ADNR	Alaska Department of Natural Resources
3.	USACE	United States Army Corps of Engineers
4.	OHA	Office of History and Archaeology
5.	TWUA	Temporary Water Use Authorization

6.	bbl	barrels
7.	cy	cubic yards
8.	Enter Term.	Enter Term Definition.
9.	Enter Term.	Enter Term Definition.
10.	Enter Term.	Enter Term Definition.

SECTION XII: CONFIDENTIALITY

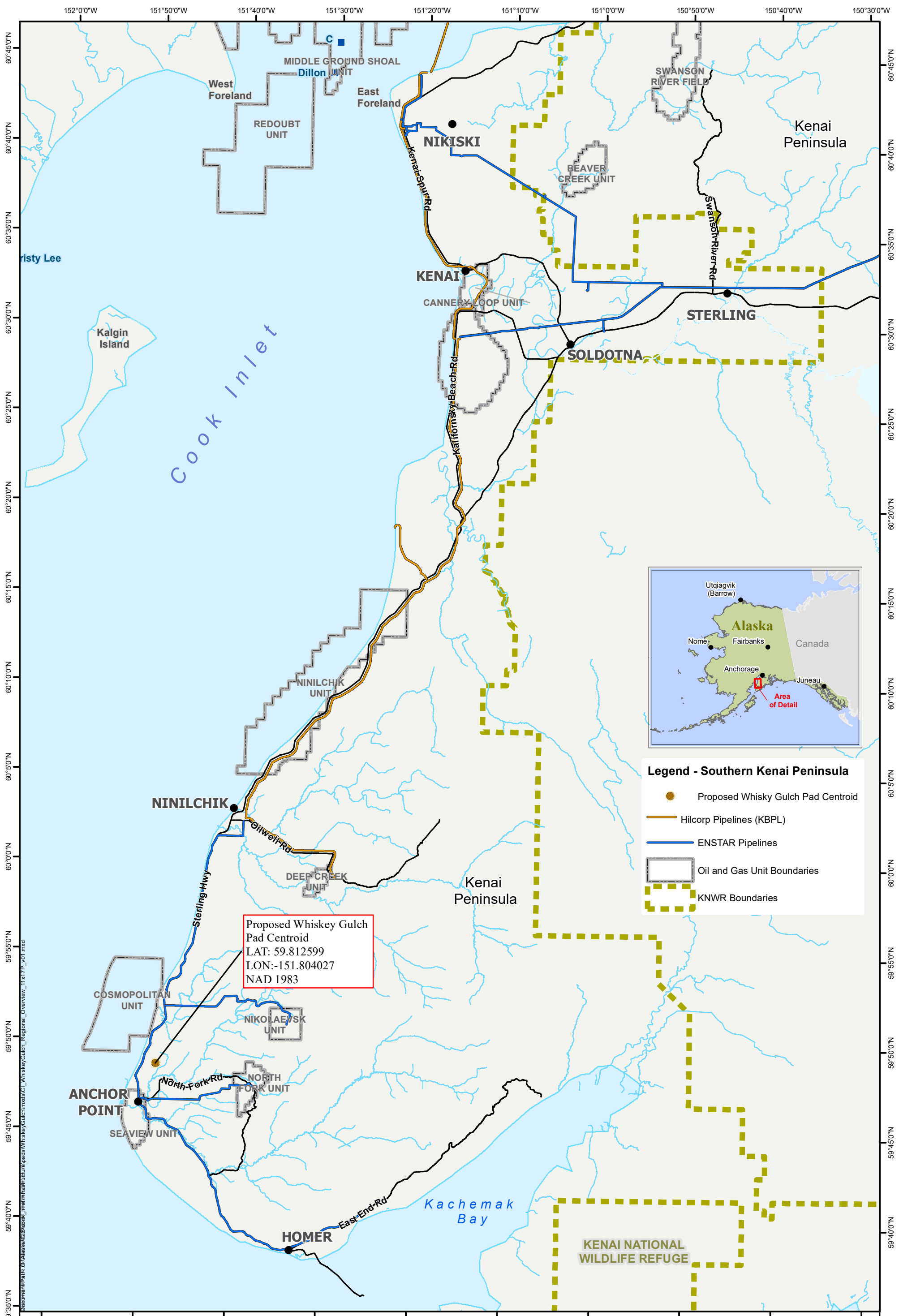
The undersigned hereby requests that each page/section of this application marked confidential be held confidential under AS 38.05.035(a)(8).

APPLICANT CONTACT:

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

APPENDIX A: MAPS

Include maps here.

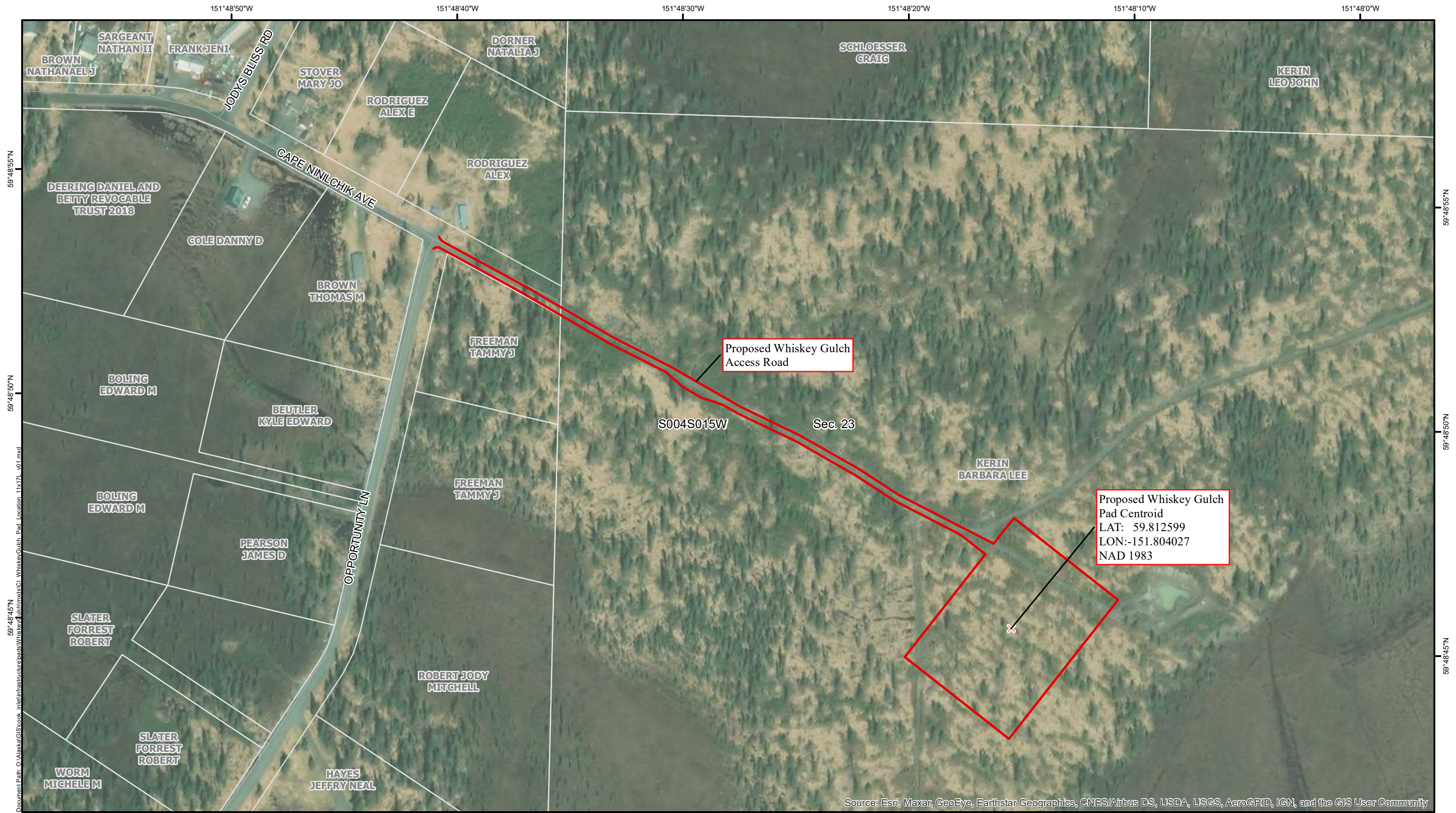


Proposed Whiskey Gulch Pad Centroid
 LAT: 59.812599
 LON: -151.804027
 NAD 1983

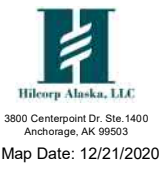
Legend - Southern Kenai Peninsula

- Proposed Whiskey Gulch Pad Centroid
- Hilcorp Pipelines (KBPL)
- ENSTAR Pipelines
- Oil and Gas Unit Boundaries
- KNWR Boundaries





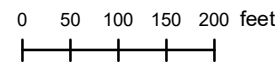
Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

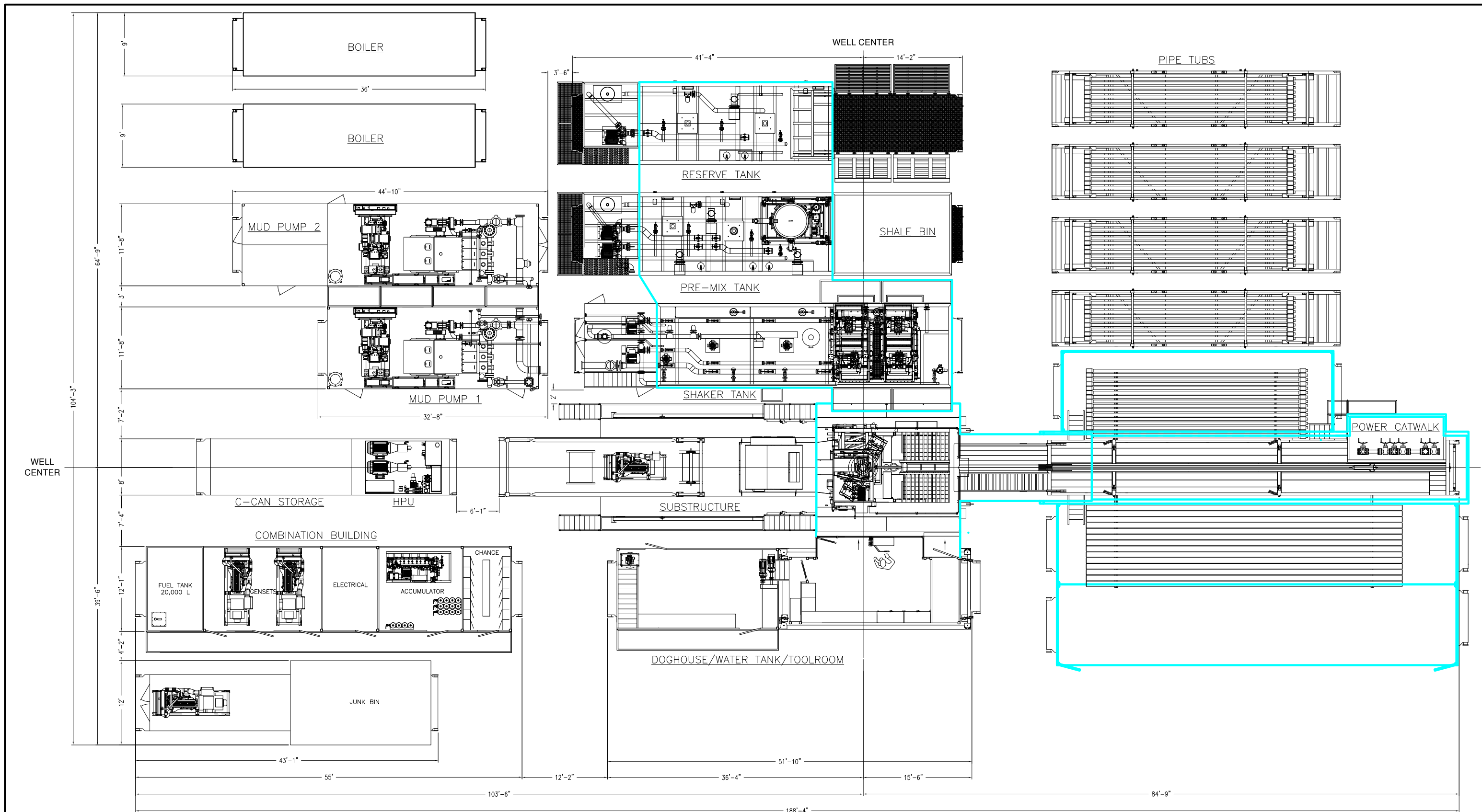


Proposed Whiskey Gulch Access Road and Pad

- Proposed Whiskey Gulch Access Road and Pad (McLane Consulting Inc - 12/21/2020)
- KPB Parcels (Surface Ownership)

1 inch = 200 feet @ 11x17 page size





REVISIONS				DRAWING REFERENCES		SCALE:	SHEET SIZE:	THE DESIGN AND PRINT SHOWN THERON ARE THE INVENTION AND PROPERTY OF SAXON ENERGY SERVICES INC. ALL RIGHTS OF THE INVENTION, DESIGN AND REPRODUCTION ARE RESERVED BY SAXON ENERGY SERVICES INC. CUSTOMER LOGO	PROJECT:	
NO.	BY	DATE	REVISION DESCRIPTION	DRAWING NO.	DRAWING TITLE	N.T.S.	B		PROJECT:	HILCORP ALASKA
0	NPS	13/04/08	ISSUED FOR REVIEW						EQUIPMENT:	SAXON MECHANICAL TELESCOPIC DOUBLE
									DWG TITLE:	WINTER RIG LAYOUT
									DRAWING NO.:	SES-AB-169-RL02-02
								REV:	0	
								CHECKED BY:		
								APPROVED BY:		
								DATE:		
								JOB/FILE#:	S-263-ENG	
								DATE:		
								RIG NO.:	169	



APPENDIX B: MITIGATION MEASURES

Include mitigation measures here.

MITIGATION MEASURE ANALYSIS: COOK INLET

The following instructions are provided for guidance to adequately complete the Mitigation Measure Analysis form.

1. The applicant shall respond to each Mitigation Measure, and all subsets of mitigation measures; i.e. A.2.d.i should be addressed and A.2.d.ii, and so forth.
2. The applicant's response shall begin by clearly indicating if the **mitigation measure is satisfied**, an **exception is requested**, or if the mitigation measure is **not applicable**.
3. The applicants' response shall then address how the proposed project clearly satisfies the mitigation measure, meets the intent of the mitigation measure, is not practicable, or is not applicable.
4. The applicant shall verify working 'in consultation with' parties other than Department of Natural Resources (DNR), Division of Oil and Gas (DO&G) by reporting meeting dates and parties present for Mitigation Measures which require consultation with parties other than DNR, DO&G; i.e. Mitigation Measure 1.b.

Please note that this form, along with the Plan of Operations Application form and the Plan of Operations, must be adequately completed before DNR DO&G will review an application for potential approval.

Cook Inlet	Company Response
A. Mitigation Measures	
1. Facilities and Operations	
<p>a. Oil and gas facilities, including pipelines, will be designed using industry-accepted engineering codes and standards. Technical submittals to the Division of Oil and Gas (DOG) that reflect the "practice of engineering," as defined by AS 08.48.341, must be sealed by a professional engineer registered in the State of Alaska.</p>	<p>A.1.a. Mitigation measure satisfied: All facilities and infrastructure will be designed using industry-accepted engineering codes and standards. Engineered drawings for applicable project components are included as an attachment to the Plan of Operations Application Package.</p>
<p>b. A plan of operations will be submitted and approved before conducting exploration, development, or production activities in accordance with 11 AAC 83.</p>	<p>A.1.b. Mitigation measure satisfied: The project will occur on Hilcorp leased Private land. No native allotments, designated recreation/subsistence use areas, or adjacent private surface lands will be entered for this project. This completed Mitigation Measures Analysis form and the accompanying completed Plan of Operations Application form are submitted in accordance with ADNDR DOG guidance.</p>
<p>c. Facilities will be designed and operated to minimize sight and sound impacts in areas of high residential, recreational, and subsistence use and important wildlife habitat.</p>	<p>A.1.c. Mitigation measure satisfied: The gravel drill pad will be constructed as close to the Eastern extent of the parcel as is practicable (while avoiding wetlands and environmentally sensitive areas) to minimize distance (and subsequent visual and sound impacts) to adjacent landowners to the West of the pad site. To the maximum extent possible trees and brush will be kept in place to between neighboring landowners and drilling operations to augment existing topography and mitigate visual and sound impacts. Impacts from pad and road construction, as well as drilling, will be temporary. Pad and road construction will last approximately 4 weeks. Drilling and well testing will last another approximately 8 weeks per well. Construction will occur on a daytime 12-hour shift, likely between 7AM and 7PM, to minimize noise during evening and nighttime hours. It is not practicable to operate the drilling rig on a schedule other than around the clock; however, steps will be taken to minimize visual and sound impacts during operation. Except where safety concerns dictate otherwise, lights on the drill rig and mobile light plants will be pointed down toward activities occurring on the pad. The typical use of loudspeakers to communicate during</p>

Revised: November 2018

	drilling will be replaced by the use of handheld radios. Additionally, drilling vehicles and heavy equipment will use broadband “white noise” backup alarms, instead of the typical louder and more annoying single-tone backup alarms.
d. The siting of facilities, including roads, airstrips, and pipelines, is prohibited within one-half mile of the coast as measured from the mean high water mark and 500 feet of all fish bearing water bodies.	A.1.d. Mitigation measure satisfied: The proposed Whiskey Gulch Pad will not be located within any of the buffer areas specified in this mitigation measure.
e. Notwithstanding (d) above, the siting of facilities is prohibited within one-half mile of the banks of the Harriet, Alexander, Lake, Deep, and Stariski creeks, and the Drift, Big, Kustatan, McArthur, Chuitna, Lewis, Theodore, Beluga, Susitna, Little Susitna, Kenai, Kasilof, Ninilchik, and Anchor rivers as measured from the ordinary high water mark. Facilities may be sited, on a case-by-case basis, within the one-half mile buffer for the creeks and rivers identified here in if the lessee demonstrates that siting of such facilities outside this buffer zone is not feasible or prudent, or that a location within the buffer is environmentally preferable.	A.1.e. Mitigation measure satisfied: The proposed Whiskey Gulch Pad will not be located within any of the buffer areas specified in this mitigation measure.
f. Impacts to important wetlands will be minimized to the satisfaction of the director, in consultation with Alaska Department of Fish and Game (ADF&G) and Alaska Department of Environmental Conservation (ADEC). The director will consider whether facilities are sited in the least sensitive areas.	A.1.f. Mitigation measure satisfied: Hilcorp has selected the private parcel and drilling location for this project specifically to avoid and minimize impacts to wetlands and other Waters Of The United States. The proposed gravel access road and drill pad is planned to be constructed on uplands, outside of identified wetlands, utilizing previously disturbed roadways and gravel extraction areas for the road and pad footprint where possible. A wetlands study of the project areal was completed by Weston Solutions, Inc. in 2020, confirming that the proposed access road and pad location is on uplands areas only.
g. Exploration roads, pads, and airstrips will be temporary. Use of gravel roads, pads, and airstrips may be permitted on a case-by-case basis by the director, in consultation with Division of Mining, Land, and Water (DMLW) and ADF&G.	A.1.g. Mitigation measure satisfied: The project is accessible via the Sterling Highway and Cape Ninilchik Ave. (also known as Kutayfa Ave.). The drill pad and access road will be built within existing/previously improved KPB ROW's and on Private lands.
h. Road and pipeline crossings will be aligned perpendicular or near perpendicular to watercourses.	A.1.h. Mitigation measure not applicable: No road or pipeline crossings of watercourses are planned as part of this project.

<p>i. Pipelines</p> <ul style="list-style-type: none"> i. Will use existing transportation corridors and be buried where soil and geophysical conditions permit. ii. In areas with above ground placement, pipelines must be designed, sited, and constructed to allow for the free movement of wildlife and to avoid significant alteration of large ungulate movement and migration patterns. iii. Where practicable, pipelines must be located on the upslope side of roadways and construction pads, unless it is determined that an alternative site is environmentally acceptable. iv. Pipelines and gravel pads will facilitate the containment and cleanup of spilled fluids. v. Pipelines that must cross marine waters will be constructed beneath the marine waters using directional drilling techniques, unless the director, in consultation with ADF&G and the local borough, approves an alternative method based on technical, environmental, and economic justification. Offshore pipelines must be located and constructed to prevent obstruction to marine navigation and fishing operations. 	<p>A.1.i. Mitigation measure not applicable: No pipelines are planned as part of this project.</p> <p>A.1.i.i. Mitigation measure not applicable: No pipelines are planned as part of this project.</p> <p>A.1.i.ii. Mitigation measure not applicable: No pipelines are planned as part of this project.</p> <p>A.1.i.iii. Mitigation measure not applicable: No pipelines are planned as part of this project.</p> <p>A.1.i.iv. Mitigation measure not applicable: No pipelines are planned as part of this project.</p> <p>A.1.i.v. Mitigation measure not applicable: No pipelines are planned as part of this project.</p>
<p>j. Causeways, docks, artificial gravel islands, and bottom founded structures will not be located in river mouths, estuaries, or active river deltas, except as provided for in (k) below.</p>	<p>A.1.j. Mitigation measure not applicable: No causeways, docks, artificial gravel islands, and bottom founded structures are planned as part of this project.</p>

<p>k. Each proposed structure will be reviewed on a case-by-case basis. Causeways, docks, artificial gravel islands and bottom founded structures may be permitted if the director, in consultation with ADF&G and ADEC, determines that a causeway or other structures are necessary for field development and that no practicable alternatives exist. Approved causeways will be designed, sited, and constructed to minimize significant changes to nearshore oceanographic circulation patterns and water quality characteristics (e.g., salinity, temperature, suspended sediments) that result in exceedances of water quality criteria, and must maintain free passage of marine and anadromous fish and marine mammals. A monitoring program may be required to address the objectives of water quality and free passage of fish and marine mammals, and mitigation will be required where significant deviation from objectives occurs.</p>	<p>A.1.k. Mitigation measure not applicable: No causeways, docks, artificial gravel islands, and bottom founded structures are planned as part of this project.</p>
<p>l. Upon abandonment of material sites, drilling sites, roads, pipelines, buildings or other facilities, such facilities must be removed, and the site rehabilitated to the satisfaction of the director, unless the director, in consultation with any non-state surface owner, as applicable, determines that such removal and rehabilitation is not in the state's interest.</p>	<p>A.1.l. Mitigation measure satisfied: Upon abandonment all surface infrastructure including material sites, drilling sites, roads, pipelines, buildings or other facilities will be removed and remediated to the satisfaction of the private land owner.</p>
<p>m. Material sites required for exploration and development activities will be:</p> <ul style="list-style-type: none"> i. restricted to the minimum necessary to develop the field efficiently and with minimal environmental damage, ii. where practicable, designed and constructed to function as water reservoirs for future use, and iii. located outside active floodplains of a watercourse unless the director of DMLW, after consultation with ADF&G, determines that there is no practicable alternative, or that a floodplain site would enhance fish and wildlife habitat after mining operations are completed and the site is closed. 	<p>A.1.m.</p> <p>A.1.m.i. Mitigation measure not applicable: No material sites are planned as part of this project. Gravel required for pad and access road construction will be obtained from 3rd party providers, extracting gravel from permitted gravel mine sites.</p> <p>A.1.m.ii. Mitigation measure not applicable: No material sites are planned as part of this project. Gravel required for pad and access road construction will be obtained from 3rd party providers, extracting gravel from permitted gravel mine sites.</p> <p>A.1.m.iii. Mitigation measure not applicable: No material sites are planned as part of this project. Gravel required for pad and access road construction will be obtained from 3rd party providers, extracting gravel from permitted gravel mine sites.</p>
<p>n. The director may include plan stipulations if necessary to reduce or eliminate adverse impacts to fish and wildlife or to protect the environment.</p>	<p>A.1.n. Mitigation measure satisfied: Opportunity for inclusion of potential plan stipulations is noted.</p>

<p>2. Habitat, Fish, and Wildlife</p>	
<p>a. Detonation of explosives is prohibited in open water areas of fish bearing water bodies and in fish bearing water bodies that are not solidly frozen, including the substrate unless otherwise approved. Blasting criteria have been established by ADF&G and are available from ADF&G upon request. The location of known fish-bearing waters within the project area can be obtained from ADF&G.</p>	<p>A.2.a. Mitigation measure not applicable: Explosives will not be detonated for this project.</p>
<p>b. Any water intake structures in fish bearing water bodies will be designed, operated, and maintained to minimize fish entrapment, entrainment, or injury. All water withdrawal equipment must use fish screening devices approved by ADF&G.</p>	<p>A.2.b. Mitigation measure not applicable: No water will be utilized or extracted from fish bearing streams.</p>
<p>c. Removal of snow from fish-bearing rivers, streams, and natural lakes is subject to prior written approval by ADF&G. Compaction of snow cover overlying fish-bearing water bodies is prohibited except for approved crossings. If ice thickness is not sufficient to facilitate a crossing, then ice or snow bridges may be required</p>	<p>A.2.c. Mitigation measure not applicable: No snow is planned to be removed from or compacted over fish bearing water bodies.</p>
<p>d. Surface entry is prohibited in parcels that are within the Kenai River Special Management Area.</p>	<p>A.2.d. Mitigation measure not applicable: The project area is not within the Kenai River Special Management Area.</p>
<p>e. Surface entry, other than access, is prohibited on state lands within the Kenai National Wildlife refuge.</p>	<p>A.2.e. Mitigation measure not applicable: The project area is not within the Kenai National Wildlife Refuge.</p>
<p>f. The lessee is prohibited from placing drilling rigs and lease-related facilities and structures within an area near the Kenai River composed of: all land within Section 36 in T6N, R11W that is located south of a line drawn from the protracted NE corner to the protracted SW corner of the section; all land within the western half of Section 31 in T6N, R10W and Section 6 in T5N, R10W; and all land within Section 1 in T5N, R11W.</p>	<p>A.2.f. Mitigation measure not applicable: The project area is not near the Kenai River.</p>

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<p>g. Surface entry into the critical waterfowl habitat along the Kasilof River is prohibited. Directional drilling from adjacent sites may be allowed.</p>	<p>A.2.g. Mitigation measure not applicable: The project area is not near the Kasilof River.</p>
<p>h. Surface entry is prohibited within one-quarter mile of trumpeter swan nesting sites between April 1 and August 31. The siting of permanent facilities, including roads, material sites, storage areas, powerlines, and above ground pipelines is prohibited within one-quarter mile of known nesting sites. Trumpeter swan nesting sites will be identified by ADF&G at the request of the lessee.</p>	<p>A.2.h. Mitigation measure not applicable: There are no known trumpeter swan nesting sites in the area.</p>
<p>i. The director, in consultation with ADF&G, will restrict or modify lease related activities if scientific evidence documents the presence of Steller's eiders from the Alaska breeding population in the lease area and it is determined that oil and gas exploration and development will impact them or their over-wintering habitat in the near-shore waters of Cook Inlet.</p>	<p>A.2.i. Mitigation measure satisfied: Steller's eiders are known to overwinter offshore from the pad location, on Cook Inlet waters. Proposed activities are onshore, landward of the bluff, and do not have high risk of hydrocarbon releases to the inlet. Impacts to Steller's eider or other waterfowl species or their nearshore overwintering habitats are not anticipated.</p>
<p>j. The director, in consultation with ADF&G, may impose seasonal restrictions on activities located in and adjacent to important waterfowl and shorebird habitat during the plan of operations approval stage.</p>	<p>A.2.j. Mitigation measure not applicable: Project activities will occur landward of the bluff and will not impact important waterfowl and shorebird habitat.</p>
<p>k. A lessee must consult with ADF&G before commencing any activities to identify the locations of known brown bear den sites that are occupied in the season of proposed activities.</p>	<p>A.2.k. Mitigation measure satisfied: Prior to commencing any activities, Hilcorp will consult with ADF&G to identify the locations of known brown bear den sites that are occupied in the season of proposed activities</p>
<p>l. Exploration and production activities will not be conducted within one-half mile of occupied brown bear dens unless alternative mitigation measures are approved by ADF&G.</p>	<p>A.2.l. Mitigation measure satisfied: Activities will not be conducted within one-half mile of dens identified in consultation with ADF&G as per Mitigation measure A.2.k unless alternative mitigation measures are approved by ADF&G.</p>
<p>m. A lessee who encounters an occupied brown bear den not previously identified by ADF&G shall report it to the Division of Wildlife Conservation, ADF&G, within 24 hours. The lessee will avoid conducting mobile activities one-half mile from discovered occupied dens unless alternative mitigation measures are approved by the director, with concurrence from ADF&G. Non- mobile facilities will not be required to relocate.</p>	<p>A.2.m. Mitigation measure satisfied: Mitigation measure noted.</p>

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<p>n. For projects in proximity to areas frequented by bears, the lessee is required to prepare and implement a human-bear interaction plan designed to minimize conflicts between bears and humans. The plan will include measures to:</p> <ul style="list-style-type: none"> i. minimize attraction of bears to facility sites; ii. organize layout of buildings and work areas to minimize interactions between humans and bears; iii. warn personnel of bears near or on facilities and the proper actions to take; iv. if authorized, deter bears from the drill site; v. provide contingencies in the event bears do not leave the site; vi. discuss proper storage and disposal of materials that may be toxic to bears; and vii. provide a systematic record of bears on the site and in the immediate area. 	<p>A.2.n. Mitigation measure satisfied: Hilcorp has an Wildlife Interaction and Avoidance Plan in place. Hilcorp policy is to require best management practices that minimize attractants to bears and other wildlife. EH&S training conducted for site workers will include training for wildlife interactions.</p> <p>A.2.n.i. Sections 2.0 and 10.0 of the Wildlife Interaction and Avoidance Plan describe food and waste management procedures that help eliminate the potential for bears to associate humans and facilities with food.</p> <p>A.2.n.ii. Facility operators will visually scan the pad for the presence of bears before getting out of their vehicle or exiting a structure</p> <p>A.2.n.iii. Sections 1.4 and 10.0 of the Wildlife Interaction and Avoidance Plan describe notification procedures for bear sighting at or near a facility.</p> <p>A.2.n.iv. Section 10.2.1 of the Wildlife Interaction and Avoidance Plan describes bear deterrence activities for Hilcorp.</p> <p>A.2.n.v. Section 10.2 of the Wildlife Interaction and Avoidance Plan describes procedures for sighting communication and bear deterrence; if a bear is encountered at the site and the bear will not leave the site, work will cease until measures are taken for work to continue safely.</p> <p>A.2.n.vi. Storage and handling of materials will be such that materials are not left exposed to bears.</p> <p>A.2.n.vii. Sections 1.4 and 10.0 of the Wildlife Interaction and Avoidance Plan describe notification and documentation procedures for bear sightings at or near a facility.</p>
<p>o. Surface entry within the core calving area of the Kenai Lowlands Caribou Herd is prohibited, except that surface entry for seismic exploration may be allowed from October 16 to March 31.</p>	<p>A.2.o. Mitigation measure not applicable: Project area is not located within the Kenai Lowlands Caribou Herd core calving area.</p>
<p>p. Exploration and development activities may be restricted or prohibited between April 1 and October 15 within the core summer habitat of the Kenai Lowlands Caribou Herd, except that maintenance and operation of production wells may be allowed year-round. Permanent roads, or facilities other than production wells, may also be restricted or prohibited within this area. Facilities within the core summer habitat of the Kenai Lowlands Caribou Herd that require year-round access must be located in forested areas, where practical.</p>	<p>A.2.p. Mitigation measure not applicable: Project area is not located within the Kenai Lowlands Caribou Herd core summer habitat.</p>

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<p>q. Pipelines must be buried within the core summer habitat of the Kenai Lowlands Caribou Herd.</p>	<p>A.2.q. Mitigation measure not applicable: Project area is not located within the Kenai Lowlands Caribou Herd core summer habitat.</p>
<p>r. The director, in consultation with ADF&G, may impose additional and seasonal restrictions on activities located in, or requiring travel through or overflight of, important caribou or other large ungulate calving and wintering areas during the plan of operations approval stage.</p>	<p>A.2.r. Mitigation measure not applicable: Project area is not located within important caribou or other large ungulate calving and wintering areas.</p>
<p>s. No permanent or temporary oil and gas exploration or development may occur within High Value/High Sensitivity (Type 1) beluga whale habitat areas, unless it occurs on upland areas (above Mean Higher Water datum). Type 1 habitat areas include the following tracts: 320-334, 391-409, 410, 462, 464-475, 476-481, 483, 484, 485, 486, 493, 494, 497, 498, 522, 524-537, 538, 539, 540, 541, 542, 543, 544, 547-552, 559, 575-577, 579, 581, 582, 585, 586, 590, 593, 594, 598, 616-618, 620-623, 627, 655-658, and 662.</p>	<p>A.2.s. Mitigation measure not applicable: Project is not located within and has no impact on Cook Inlet beluga whale habitat, including type 1, 2 and 3 critical habitat areas.</p>
<p>t. The director will assess oil and gas-related activities within all High Value (Type 2) beluga whale habitat areas on a case-by-case basis. No permanent surface entry or structures are allowed, and temporary activities and structures, for example exploration drilling, will only be allowed between November 1 and April 1 of each year, unless it occurs on upland areas, within the following tracts: 021, 022, 126, 127, 129-132, 161, 162, 175, 177, 211, 218, 257, 301, 302, 373, 376, 377, and 384.</p>	<p>A.2.t. Mitigation measure not applicable: Project is not located within and has no impact on Cook Inlet beluga whale habitat, including type 1, 2 and 3 critical habitat areas.</p>
<p>u. The director will assess oil and gas-related activities within the remaining tracts (Type 3 habitat areas) on a case-by-case basis.</p>	<p>A.2.u. Mitigation measure not applicable: Project is not located within and has no impact on Cook Inlet beluga whale habitat, including type 1, 2 and 3 critical habitat areas.</p>
<p>3. Subsistence, and Other Fish and Wildlife Uses</p>	

<p>a. Lease-related use may be restricted, if necessary, to prevent unreasonable conflicts between lease-related activities and subsistence, commercial, sport, personal use, and educational fish and wildlife harvest activities. Traditional and customary access to subsistence areas will be maintained unless reasonable alternative access is provided to subsistence users. "Reasonable access" is access using means generally available to subsistence users. The lessee will consult with nearby communities, and native organizations for assistance in identifying and contacting local subsistence users.</p>	<p>A.3.a. Mitigation measure satisfied: Project is located on private land and will have no impact to subsistence and other fish and wildlife uses.</p>
<p>b. Before submitting a plan of operations that has the potential to disrupt subsistence activities, the lessee will consult with the potentially affected subsistence communities to discuss the siting, timing, and methods of proposed operations and safeguards or mitigating measures that could be implemented by the operator to prevent unreasonable conflicts. The parties will also discuss the reasonably foreseeable effect on subsistence activities of any other operations in the area that they know will occur during the lessee's proposed operations. Through this consultation, the lessee will make reasonable efforts to ensure that exploration, development, and production activities are compatible with subsistence hunting and fishing activities and will not result in unreasonable interference with subsistence harvests.</p>	<p>A.3.b. Mitigation measure satisfied: Project is located on private land and will have no impact to subsistence and other fish and wildlife uses.</p>
<p>4. Fuel, Hazardous Substances, and Waste</p>	
<p>a. The lessee will ensure that secondary containment is provided for the storage of fuel or hazardous substances and sized as appropriate to container type and according to governing regulatory requirements in 18 AAC 75 and 40 CFR 112. Containers with an aggregate storage capacity of greater than 55 gallons that contain fuel or hazardous substances will not be stored within 100 feet of a water body or within 1,500 feet of a current surface drinking water source.</p>	<p>A.4.a. All fuel and other hazardous substances will have appropriately sized impermeable secondary containment. No fuel, hazardous substances or waste will be stored within 100 feet of a water body or 1,500 feet of a current surface drinking water source.</p>
<p>b. During equipment storage or maintenance, the lessee will ensure that the site is protected from leaking or dripping fuel and hazardous substances by the placement of drip pans or other surface liners designed to catch and hold fluids under the equipment, or by creating an area for storage or maintenance using an impermeable liner or other suitable containment mechanism.</p>	<p>A.4.b. Mitigation measure satisfied: Limited equipment storage and maintenance may occur on pad and will be conducted above impermeable secondary containment.</p>

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<p>c. During fuel or hazardous substance transfer, the lessee will ensure that a secondary containment or a surface liner is placed under all container or vehicle fuel tank inlet and outlet points, hose connections, and hose ends. Appropriate spill response equipment, sufficient to respond to a spill of up to five gallons, must be on hand during any transfer or handling of fuel or hazardous substances.</p>	<p>A.4.c. Mitigation measure satisfied: Duck ponds or bermed liners will be placed beneath connections during fuel and other fluid transfers, and fluid transfer operations will be continuously monitored. During drilling operations, spill response equipment will be staged at the pad. During any fuel or other hazardous fluid transfers, spill response equipment to clean up a minimum of a 5-gallon spill will be kept with the vehicle used for the substance transfer.</p>
<p>d. The lessee will ensure that vehicle refueling will not occur within the annual floodplain, except as addressed and approved in the plan of operations. This measure does not apply to water-borne vessels.</p>	<p>A.4.d. Mitigation measure satisfied: No vehicle fueling will be conducted within an annual floodplain.</p>
<p>e. The lessee will ensure that all independent fuel and hazardous substance containers are permanently marked with the contents and the lessee's or contractor's name.</p>	<p>A.4.e. Mitigation measure satisfied: Fuel and hazardous substance containers will be marked as required.</p>
<p>f. The lessee will ensure that a fresh water aquifer monitoring well and quarterly water quality monitoring, is in place down gradient of a permanent storage facility, unless alternative acceptable technology is approved by ADEC.</p>	<p>A.4.f. Mitigation measure not applicable: Facility is not an above-ground liquid hydrocarbon storage facility.</p>
<p>g. The lessee will ensure that waste from operations is reduced, reused, or recycled to the maximum extent practicable. Garbage and domestic combustibles must be incinerated whenever possible or disposed of at an approved site in accordance with 18 AAC 60.</p>	<p>A.4.g. Mitigation measure satisfied: Waste will be reduced, reused, or recycled whenever practicable. During construction and drilling activities, closed top dumpsters will be on site for food trash and household waste and will be hauled away from the site regularly to prevent overfilling. Garbage will be disposed of at the Kenai Peninsula Borough landfill. Oily waste will be segregated and sent to an offsite contractor for disposal.</p>
<p>h. Proper disposal of garbage and putrescible waste is essential to minimize attraction of wildlife. The lessee must use the most appropriate and efficient method to achieve this goal. The primary method of garbage and putrescible waste is prompt, on-site incineration in compliance with State of Alaska air quality regulations. The secondary method of disposal is on-site frozen storage in animal-proof containers with backhaul to an approved waste disposal facility. The tertiary method of disposal is on-site non-frozen storage in animal proof containers with backhaul to an approved waste disposal facility. Daily backhauling of non-frozen waste is required unless safety considerations prevent it.</p>	<p>A.4.h. Mitigation measure satisfied: Garbage and putrescible waste will be handled, stored, and disposed of per Hilcorp's existing Wildlife Interaction and Avoidance Plan, Waste management plans, and best practices. All garbage and putrescible waste will be sealed inside of office trailers or within bear-proof containers, and removed from site on and as-needed basis.</p>

<p>i. New solid waste disposal sites, other than for drilling waste, will not be approved or located on state property for exploration.</p>	<p>A.4.i. Mitigation measure not applicable: A solid waste disposal site will not be constructed for this project.</p>
<p>j. The preferred method for disposal of muds and cuttings from oil and gas activities is by underground injection. The lessee will ensure that drilling mud and cuttings will not be discharged into lakes, streams, rivers, or wetlands. On-pad temporary cuttings storage may be allowed as necessary to facilitate annular injection and backhaul operations.</p>	<p>A.4.j. Mitigation measure satisfied: Mud and cuttings generated by activities will be hauled via vacuum truck or supersucker directly from the rig process tank to an offsite, permitted underground injection disposal facility. Hilcorp will request an ADEC Temporary Drilling Waste Storage plan authorization in the unlikely event drilling waste cannot be delivered directly for disposal.</p>
<p>5. Access</p>	
<p>a. Public access to, or use of, the lease area may not be restricted except within the immediate vicinity of drill sites, buildings, and other related structures. Areas of restricted access must be identified in the plan of operations. Lease facilities and operations will not block access to or along navigable or public waters as defined in AS 38.05.965.</p>	<p>A.5.a. Mitigation measure satisfied: Whiskey Gulch Pad access will be restricted. No access to public waters is blocked.</p>
<p>6. Prehistoric, Historic, and Archaeological Sites</p>	
<p>a. Before the construction or placement of any structure, road, or facility supporting exploration, development, or production activities, the lessee must conduct an inventory of prehistoric, historic, and archeological sites within the area, including a detailed analysis of the effects that might result from that construction or placement.</p>	<p>A.6.a. Mitigation measure satisfied: Hilcorp contracted Charles M. Mobley & Associates to conduct an archaeological field study of the proposed project area in October 2020. Mr. Mobley detailed his methods, findings, and determination of project impacts in <i>Archeological Survey for Hilcorp Alaska LLC's Whiskey Gulch Pad and Road, Anchor Point, Alaska, 2020</i>. A copy of the report will be provided to ADNR's Office of History and Archaeology. In the document, Mr. Mobley concluded that there are "No cultural properties eligible to the National Register of Historic Places were known in the Whiskey Gulch APE prior to this investigation, and none were observed or otherwise learned about during the investigation."</p>
<p>b. The inventory of prehistoric, historic, and archeological sites must be submitted to the director and the Office of History and Archeology (OHA). If a prehistoric, historic, or archeological site or area could be adversely affected by a lease activity, the director, after consultation with OHA, will direct the lessee as to the course of action to take to avoid or minimize adverse effects.</p>	<p>A.6.b. Mitigation measure satisfied: The archaeological field study of the proposed project area noted in A.6.a will be submitted to the Office of History and Archeology (OHA) as part of the project permitting process.</p>

<p>c. If a site, structure, or object of prehistoric, historic, or archaeological significance is discovered during lease operations, the lessee shall report the discovery to the director as soon as possible. The lessee will make all reasonable efforts to preserve and protect the discovered site, structure, or object from damage until the director, after consultation with the State Historic Preservation Office, has directed the lessee on the course of action to take for its preservation.</p>	<p>A.6.c. Mitigation measure satisfied: EH&S training includes instruction to site workers to stop work if any archaeological/historic sites or artifacts are discovered. Discovery of archeological/historic sites or artifacts will be reported as soon as possible, as required, to the appropriate agencies.</p>
<p>7. Local Hire, Communication, and Training</p>	
<p>a. The lessee is encouraged to employ local and Alaska residents and contractors, to the extent they are available and qualified, for work performed in the lease area. The lessee will submit, as part of the plan of operations, a hiring plan that will include a description of the operator's plans for partnering with local communities to recruit, hire, and train local and Alaska residents and contractors. As a part of this plan, the lessee is encouraged to coordinate with employment and training services offered by the State of Alaska and local communities to train and recruit employees from local communities.</p>	<p>A.7.a. Mitigation measure satisfied: Approximately 75 percent of Hilcorp's workforce is comprised of Alaskan residents. Hilcorp works with local organizations, such as the Alaska Support Industry Alliance and the Kenai Peninsula Economic Development District, and local Chambers of Commerce to encourage growth in the local service sector. While not all contracted services are awarded to local/in-state providers, Hilcorp strives to do business locally whenever possible. To the extent they are available and qualified, locally based contractors will provide construction support for this and other projects.</p>
<p>b. In accordance with Administrative Order 278, the lessee is encouraged to employ apprentice labor to perform at least 15 percent of total work hours, to the extent they are available and qualified, for work performed in the lease area. The lessee will submit, as part of the plan of operations, a hiring plan detailing the means by which the lessee might incorporate apprentice labor.</p>	<p>A.7.b. Mitigation measure satisfied: Hilcorp Alaska prioritizes local hire and actively supports workforce development efforts in Alaska. We work with entities such as the Pipeline Training Center, University of Alaska, Kenai Peninsula College Process Technology Program and various workers unions to offer internships and on the job training opportunities both in the field and technical support positions</p>
<p>c. A plan of operations application must describe the lessee's past and prospective efforts to communicate with local communities and interested local community groups.</p>	<p>A.7.c. Mitigation measure satisfied: Hilcorp employees are actively engaged with regulators and stakeholders on all activities within the state. Hilcorp community outreach to date has included correspondence and/or presentations to Anchor Point Chamber of Commerce, the Alaska Support Industry Alliance, Cook Inlet Regional Citizens Advisory Council, and the Kenai Peninsula Economic Development District. Hilcorp personnel have been in contact with local land owners and area businesses regarding the activity associated with Whiskey Gulch Pad construction and proposed drilling program.</p> <p>Hilcorp's Alaska-based External Affairs Manager ensures that Hilcorp remains in open communication with stakeholders, regulators and the general public in Alaska. Hilcorp will continue to keep community members informed of planned activities by bulk mailings, posting targeted informational flyers in local information repositories (e.g., post offices), and evaluating projects on a case-by-case basis to</p>

	hold public meetings.
<p>d. A plan of operations application must include a training program</p> <ul style="list-style-type: none"> i. for all personnel including contractors and subcontractors; ii. designed to inform each person working on the project of environmental, social, and cultural concerns that relate to that person's job; iii. using methods to ensure personnel understand and use techniques necessary to preserve geological, archeological, and biological resources; and iv. designed to help personnel increase their sensitivity and understanding of community values, customs, and lifestyles in areas where they will be operating. 	<p>A.7.d.</p> <p>A.7.d.i. Mitigation measure satisfied: Company and contract personnel will participate in project kickoff meetings that will include information specific to the impacts to resources related to the project and local project area.</p> <p>A.7.d.ii. Mitigation measure satisfied: The project kickoff training will include the following: A discussion regarding environmental, social, and cultural concerns as they relate to the project. Ensuring personnel understand and use techniques necessary to preserve geological, archeological, and biological resources. Increasing sensitivity and understanding of community values, customs, and lifestyles in areas where they will be operating.</p> <p>A.7.d.iii. Mitigation measure satisfied: The project kickoff training will include the following: A discussion regarding environmental, social, and cultural concerns as they relate to the project. Ensuring personnel understand and use techniques necessary to preserve geological, archeological, and biological resources. Increasing sensitivity and understanding of community values, customs, and lifestyles in areas where they will be operating.</p> <p>A.7.d.iv. Mitigation measure satisfied: The project kickoff training will include the following: A discussion regarding environmental, social, and cultural concerns as they relate to the project. Ensuring personnel understand and use techniques necessary to preserve geological, archeological, and biological resources. Increasing sensitivity and understanding of community values, customs, and lifestyles in areas where they will be operating.</p>
<p>8. Definitions</p>	

Facilities - Any structure, equipment, or improvement to the surface, whether temporary or permanent, including, but not limited to, roads, pads, pits, pipelines, power lines, generators, utilities, airstrips, wells, compressors, drill rigs, camps, and buildings.

Hazardous substance - As defined under 42 USC 9601 - 9675 (Comprehensive Environmental Response, Compensation, and Liability Act of 1980).

Important wetlands - Those wetlands that are of high value to fish, waterfowl, and shorebirds because of their unique characteristics or scarcity in the region or that have been determined to function at a high level using the hydrogeomorphic approach.

Minimize - To reduce adverse impacts to the smallest amount, extent, duration, size, or degree reasonable in light of the environmental, social, or economic costs of further reduction.

Plan of operation - A lease plan of operations under 11 AAC 83.158 and a unit plan of operations under 11 AAC 83.346.

Practicable - Feasible in light of overall project purposes after considering cost, existing technology, and logistics of compliance with the mitigation measure.

Secondary containment - An impermeable diked area, portable impermeable containment structure, or integral containment space capable of containing the volume of the largest independent container. The containment will, in the case of external containment, have enough additional capacity to allow for local precipitation.

Temporary - No more than 12 months.

APPENDIX C: OTHER

Insert other information here.

HILCORP ALASKA, LLC

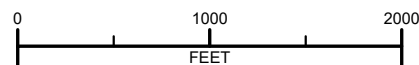
WHISKEY GULCH PAD PROJECT ACCESS ROAD & PAD CONSTRUCTION

ACCESS ROAD CONSTRUCTION: 1,440 LF

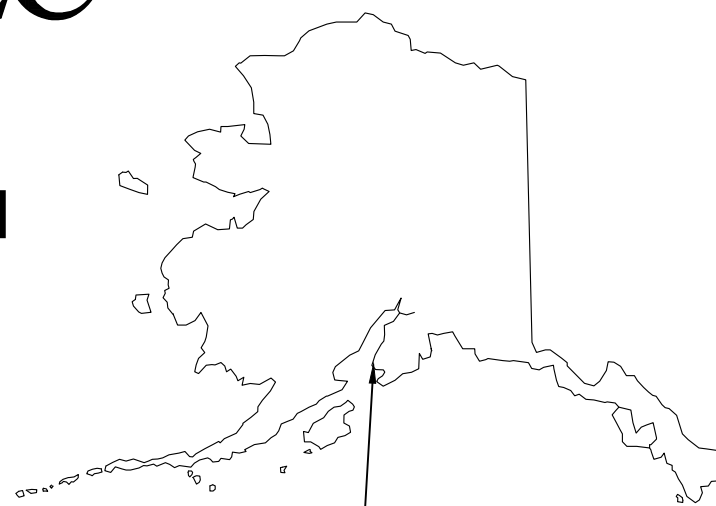
PAD CONSTRUCTION: 120,000 SF



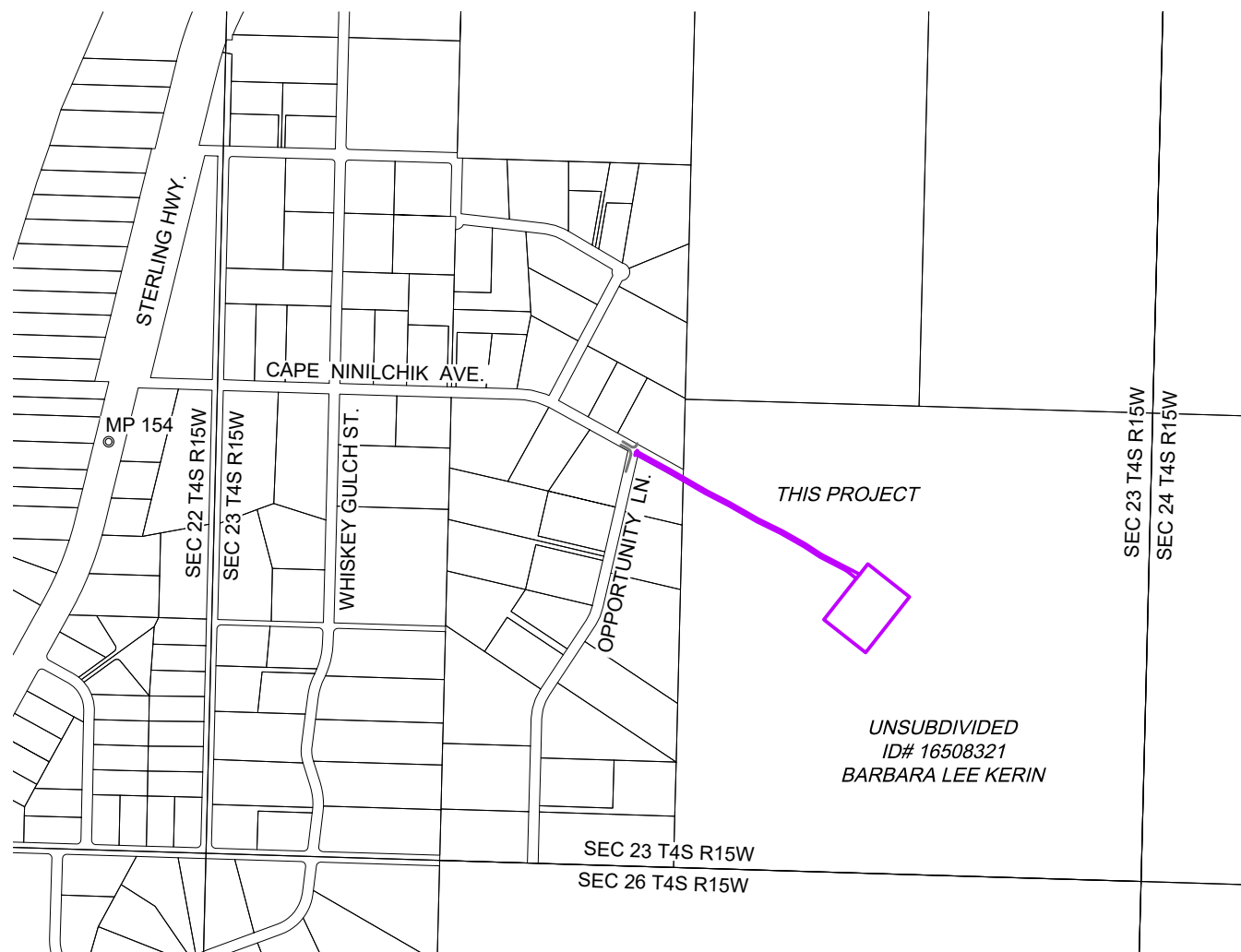
SCALE



VICINITY MAP



PROJECT LOCATION
ANCHOR POINT, ALASKA



UNSUBDIVIDED
ID# 16508321
BARBARA LEE KERIN

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
S1	COVER & PROJECT LOCATION
S2	QUANTITIES, NOTES & SCHEDULES
D1 - D3	DETAILS & TYPICAL SECTIONS
E1 - E2	EXISTING CONDITIONS & DEMO PLANS
P1	PAD PLAN VIEW
P2 - P3	ACCESS ROAD PLAN & PROFILE
X1	PAD CROSS SECTIONS
X2 - X4	ACCESS ROAD CROSS SECTIONS
V1	PAD & ACCESS ROAD QUANTITIES

NOTES

- BASIS OF HORIZONTAL DATUM IS NORTH AMERICA DATUM 1983, ALASKA STATE PLANE ZONE 4.
- BASIS OF VERTICAL DATUM IS NORTH AMERICA VERTICAL DATUM 88.
- BASIS OF COORDINATES IS ADOT CONTROL POINT WITH ALASKA STATE PLANE COORDINATES (ASP) ZONE 4:
N = 2130008.218
E = 1304392.263
ELEV. = 241.561' (NAVD88 GEOID 12BAK)

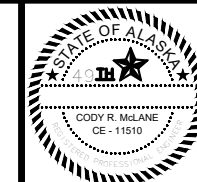
CALL BEFORE YOU DIG

UNDERGROUND UTILITIES MAY BE PRESENT WITHIN PROJECT LIMITS. HAVE ALL UNDERGROUND UTILITIES LOCATED IN FIELD BEFORE CONSTRUCTION COMMENCES.

CALL THE DIGLINE LOCATE CENTER AT:
811

LEGEND

	FOUND GLO MONUMENT
	FOUND PROPERTY CORNER
	TEST HOLE
	WELL
	SEPTIC VENT / CLEANOUT
	ELECTRIC METER
	RV HOOKUP
	MAILBOX
	UTILITY POLE
	PHONE PED
	ELECTRIC TRANSFORMER
	OVERHEAD ELECTRIC
	PIPELINE
	SIGN
	PROPERTY / R.O.W. LINE
	SECTION LINE
	EASEMENT
	CENTERLINE
	FENCE LINE
	TREE LINE
	SURVEY CONTROL POINT
	WETLAND
	DESIGN ROAD SHOULDER / PAD EDGE
	DITCH BOTTOM
	DAYLIGHT CUT
	DAYLIGHT FILL
	PROPERTY LINE / EDGE OF R.O.W.
	EXISTING GRADE CONTOUR LINES
	DESIGN CULVERT (CSP)
	CULVERT END SECTION
	DESIGN CONTOURS
	CLEARING LIMITS
	EXISTING CULVERT
	ROADBED WIDENING



REV	DATE	DESCRIPTION	BY

HILCORP ALASKA LLC
WHISKEY GULCH PAD
PROJECT INTRODUCTION



McLANE
Consulting Inc
ENGINEERING - TESTING
SURVEYING - MAPPING
P.O. BOX 468
SOLDOTNA, AK. 99669
VOICE: (907) 283-4218
FAX: (907) 283-3265
WWW.MCLANECG.COM

DRAWN BY: CRM

CHECKED BY: CRM

HORIZ. SCALE: N/A

VERT. SCALE: N/A

SHEET: S1

JOB NO. 207025

FIELD BOOK NO.

FIELD WORK DATE: NOV 2020

12/21/2020 LFC

ESTIMATE OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
110(1)	EXISTING UTILITIES IN CONSTRUCTION ZONE	LUMP SUM	ALL REQUIRED
201(3B)	CLEARING & GRUBBING (5.974 ACRES)	LUMP SUM	ALL REQUIRED
202(1)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS (DEMO)	LUMP SUM	ALL REQUIRED
203(3)	UNCLASSIFIED EXCAVATION (WASTE)	CUBIC YARD	19036
203(5)	BORROW, SUBBASE GRADING B	CUBIC YARD	15064
203(15A)	ACCESS ROAD CONSTRUCTION	LUMP SUM	ALL REQUIRED
203(15B)	DRILL PAD CONSTRUCTION	LUMP SUM	ALL REQUIRED
203(17)	SCREENING BERM	EACH	3
618(1)	SEEDING (HYDRAULIC METHOD)	LUMP SUM	ALL REQUIRED
630(1)	WOVEN GEOTEXTILE, SEPARATION GRADE	SQUARE YARD	17174
630(2)	NON-WOVEN GEOTEXTILE, SEPARATION GRADE	SQUARE YARD	4879
640(1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED
641(1)	TEMPORARY EROSION AND POLLUTION CONTROL	CONTINGENT SUM	ALL REQUIRED
643(2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED

NOTES:

1. THIS PROJECT IS BASED ON A LUMP SUM, FIXED FEE COST FORMAT. VOLUMETRIC QUANTITIES ARE PROVIDED AS AN INFORMATIONAL ITEM ONLY. IT IS UP TO THE INDIVIDUAL BIDDER TO DETERMINE THE ACTUAL AMOUNT OF SPECIFIC MATERIAL REQUIRED TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. BIDDERS HAVE FULL ACCESS TO THE PUBLIC RIGHT-OF-WAY AND PROJECT PARCEL AND ARE ENCOURAGED TO INSPECT THE SITE AND INVESTIGATE SUBSURFACE SOIL CONDITIONS AND POSSIBLE UTILITY CONFLICTS.
2. ESTIMATING FACTORS ARE BASED ON NEAT-LINE, IN-PLACE, COMPACTED VOLUMETRIC QUANTITY.
3. CLEARING & GRUBBING AND GEOTEXTILE QUANTITIES AREA BASED ON HORIZONTAL AREA.
4. GEOTEXTILE QUANTITIES INCLUDE SEAM OVERLAP AREAS.

MATERIAL GRADATION REQUIREMENTS

SIEVE	PERCENT PASSING BY WEIGHT
6"	100%
2"	85 - 100%
1"	--
No. 4	15 - 55%
No. 16	--
No. 200	0 - 6%

TYPICAL SECTION A/D1, B/D1, C/D1, A/D2 & B/D2 NOTES

1. ALL CONSTRUCTION ACTIVITY MUST REMAIN WITHIN PROJECT EASEMENT LIMITS.
2. IN EXISTING ROAD AREAS WHERE SHOULDER WIDENING IS REQUIRED:
 - A. EXCAVATE AS SPECIFIED BELOW FINISH GRADE OR TO EXISTING SUITABLE MATERIAL, WHICH EVER IS LESS.
 - B. PLACE SEPARATION GRADE GEOTEXTILE OVER SUBGRADE AS SPECIFIED.
 - C. BACKFILL WITH APPROPRIATE FILL MATERIALS. SHAPE AS SPECIFIED.
3. IN PAD AND ROAD AREAS EXCAVATE GRADE & SHAPE SUBGRADE PRIOR TO PLACING FILL MATERIAL AS DEPICTED. OBTAIN SUBGRADE APPROVAL BY ENGINEER BEFORE PLACING FILL MATERIAL.
4. EMBANKMENT FILL SHALL BE PLACED IN NO GREATER THAN 8" LIFTS AND COMPACTED TO 95% OF MAXIMUM DENSITY.
5. EXISTING GROUND VARIES THROUGHOUT PROJECT.

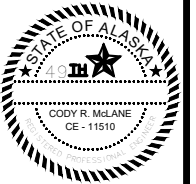
GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING STORM WATER DISCHARGE FROM THE CONSTRUCTION SITE AND COMPLYING WITH THE PROVISIONS OF PERMIT ISSUED BY THE US ARMY CORE OF ENGINEERS. DURING CONSTRUCTION PROVIDE FOR TEMPORARY DRAINAGE, EROSION AND SEDIMENT CONTROL UTILIZING BEST MANAGEMENT PRACTICES. A STORM WATER POLLUTION PREVENTION PLAN **IS NOT** REQUIRED FOR THIS PROJECT.
2. DISPOSE OF ALL VEGETATION, GRUBBING MATERIAL, WASTE EXCAVATION, AND ALL OTHER CONSTRUCTION DEBRIS IN DESIGNATED ON-SITE LOCATIONS. CLEARING DEBRIS THAT HAS BEEN GRINDED OR CHIPPED INTO SUB 12" PIECES MAY BE LEFT IN PLACE.
3. UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND BASED ON RECORD INFORMATION AND FIELD LOCATES. HAVE ALL UNDERGROUND UTILITIES LOCATED IN FIELD BEFORE CONSTRUCTION COMMENCES. CALL THE DIGLINE LOCATE CENTER AT 811.
4. POTENTIAL UTILITY CONFLICTS ARE NOT LIMITED TO THOSE SHOWN ON THE PROJECT PLANS. UNDERGROUND UTILITY LINES MAY BE MISS-MARKED IN THE FIELD OR NOT LOCATED ALTOGETHER. THE CONTRACTOR IS ENCOURAGED TO INSPECT THE SITE AND DETERMINE ALL POTENTIAL UTILITY CONFLICTS. STOP EXCAVATION ACTIVITIES IMMEDIATELY AND NOTIFY THE PROJECT ENGINEER IF ANY UTILITY CONFLICTS ARE REVEALED DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITY LINES AND STRUCTURES IN THE PROJECT LIMITS AND HAULING ROUTES. FOR KNOWN UTILITY LOCATIONS.
5. PROVIDE APPROPRIATE SIGNS AND WARNING DEVICES TO ISOLATE THE CONSTRUCTION AREA AND ENSURE VEHICULAR AND PEDESTRIAN TRAFFIC SAFETY. PREPARE AND SUBMIT TRAFFIC CONTROL PLAN TO ENGINEER FOR APPROVAL BEFORE CONSTRUCTION.
6. PRIOR TO THE PLACEMENT OF ANY EMBANKMENT MATERIAL, THE CONTRACTOR IS REQUIRED TO PROVIDE THE ENGINEER WITH RESULTS OF A LABORATORY MOISTURE DENSITY ANALYSIS (AASHTO T-180 METHOD D) ON THE DESIGN SOURCE OF MATERIAL TO BE USED.
7. PLACE EMBANKMENT FILL IN NO GREATER THAN 8" LIFTS AND COMPACTED TO 95% OF MAXIMUM DENSITY, AS DETERMINED BY AASHTO T 180, METHOD D.
8. SEED ALL DISTURBED NON-GRAVEL AREAS BY HYDRAULIC METHOD.
9. CONSTRUCTION SURVEYING AND MONITORING IS PROVIDED BY THE OWNER.
10. COORDINATE WITH OWNER'S REPRESENTATIVE TO SCHEDULE JOB SAFETY ANALYSIS REVIEW, WORK PERMIT, AND TAILGATE SAFETY MEETING AT PROJECT LOCATION BEFORE ANY CONSTRUCTION ACTIVITIES OR HAULING OPERATIONS. COMPLY WITH HILCORP SAFETY AND OPERATIONAL PLANS AND REGULATIONS AT ALL TIMES.

GEOTEXTILE NOTES

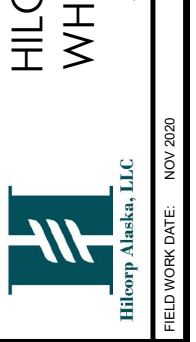
1. INSTALL GEOTEXTILE PER PLAN REQUIREMENTS. AREAS WHERE LIMITS OF SUBGRADE EXCAVATION ARE NATIVE SANDS OR GRAVELS (NFS) DON'T REQUIRE GEOTEXTILE. VOLUME ESTIMATES ASSUME ALL ROAD AND PAD AREAS REQUIRE GEOTEXTILE.
2. PLACE GEOTEXTILE PER MANUFACTURES RECOMMENDATIONS. OVERLAP ALL JOINTS A MINIMUM OF 24 INCHES.
3. GEOTEXTILE SEPARATION GRADE SPECIFICATIONS:

TYPE	GRAB TENSILE STRENGTH	PUNCTURE STRENGTH	MULLEN BURST	TRAPEZOIDAL TEAR
NON-WOVEN:	155 LBS	80 LBS	280 PSI	60 LBS
WOVEN:	170 LBS	80 LBS	375 PSI	60 LBS



REV	DATE	DESCRIPTION	BY

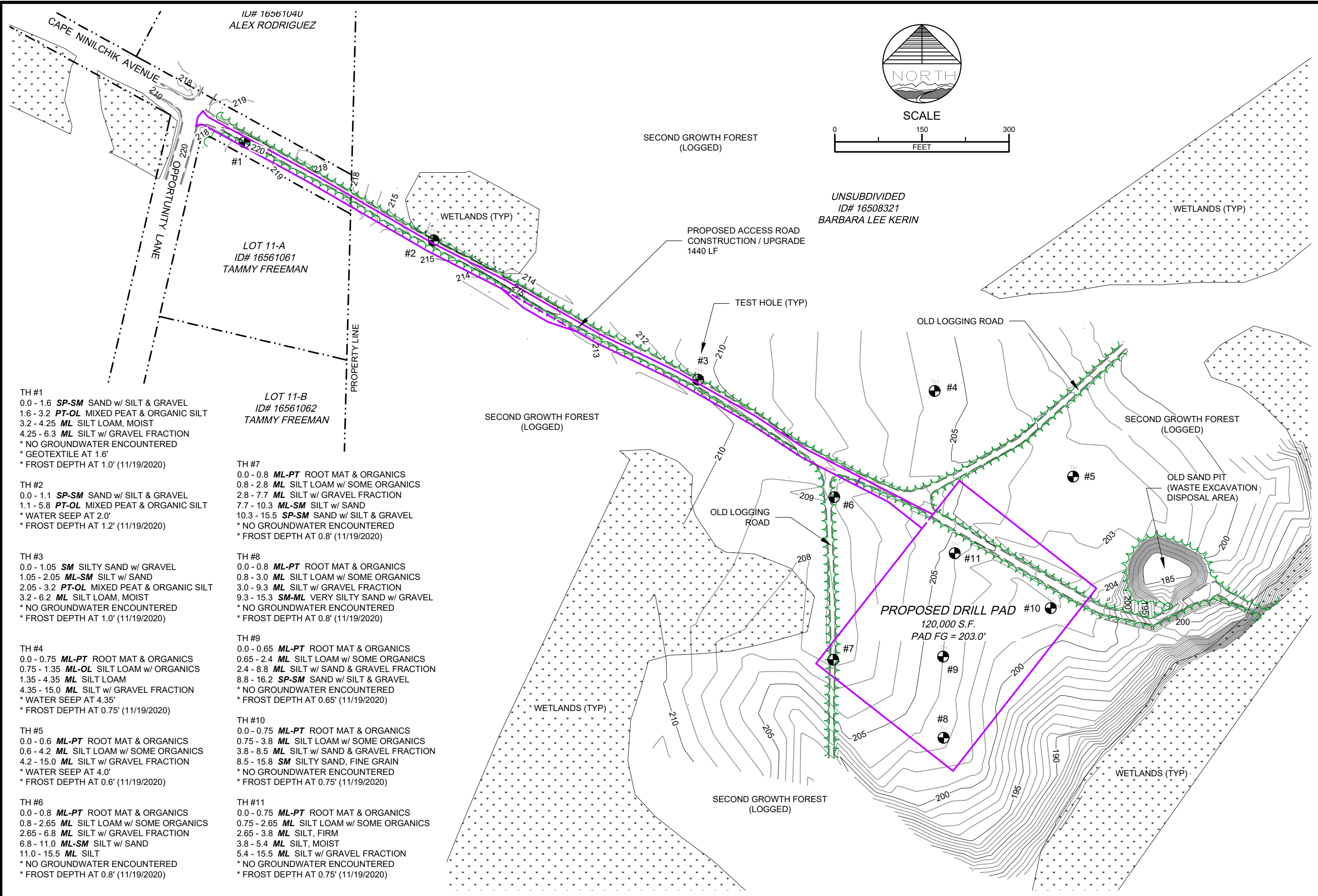
HILCORP ALASKA LLC
WHISKEY GULCH PAD
SCHEDULE & NOTES



McLANE Consulting Inc
 ENGINEERING - TESTING
 SURVEYING - MAPPING
 P.O. BOX 468
 SOLDOTNA, AK. 99669
 VOICE: (907) 283-4218
 FAX: (907) 283-3265
 WWW.MCLANECG.COM

DRAWN BY: CRM
 CHECKED BY: CRM
 HORZ. SCALE: N/A
 VERT. SCALE: N/A
 SHEET: **S1**

FIELD BOOK NO. 207025
 FIELD WORK DATE: NOV 2020



TH #1
 0.0 - 1.6 **SP-SM** SAND w/ SILT & GRAVEL
 1.6 - 3.2 **PT-OL** MIXED PEAT & ORGANIC SILT
 3.2 - 4.25 **ML** SILT LOAM, MOIST
 4.25 - 6.3 **ML** SILT w/ GRAVEL FRACTION
 * NO GROUNDWATER ENCOUNTERED
 * GEOTEXTILE AT 1.6'
 * FROST DEPTH AT 1.0' (11/19/2020)

TH #2
 0.0 - 1.1 **SP-SM** SAND w/ SILT & GRAVEL
 1.1 - 5.8 **PT-OL** MIXED PEAT & ORGANIC SILT
 * WATER SEEP AT 2.0'
 * FROST DEPTH AT 1.2' (11/19/2020)

TH #3
 0.0 - 1.05 **SM** SILTY SAND w/ GRAVEL
 1.05 - 2.05 **ML-SM** SILT w/ SAND
 2.05 - 3.2 **PT-OL** MIXED PEAT & ORGANIC SILT
 3.2 - 6.2 **ML** SILT LOAM, MOIST
 * NO GROUNDWATER ENCOUNTERED
 * FROST DEPTH AT 1.0' (11/19/2020)

TH #4
 0.0 - 0.75 **ML-PT** ROOT MAT & ORGANICS
 0.75 - 1.35 **ML-OL** SILT LOAM w/ ORGANICS
 1.35 - 4.35 **ML** SILT LOAM
 4.35 - 15.0 **ML** SILT w/ GRAVEL FRACTION
 * WATER SEEP AT 4.35'
 * FROST DEPTH AT 0.75' (11/19/2020)

TH #5
 0.0 - 0.6 **ML-PT** ROOT MAT & ORGANICS
 0.6 - 4.2 **ML** SILT LOAM w/ SOME ORGANICS
 4.2 - 15.0 **ML** SILT w/ GRAVEL FRACTION
 * WATER SEEP AT 4.0'
 * FROST DEPTH AT 0.6' (11/19/2020)

TH #6
 0.0 - 0.8 **ML-PT** ROOT MAT & ORGANICS
 0.8 - 2.65 **ML** SILT LOAM w/ SOME ORGANICS
 2.65 - 6.8 **ML** SILT w/ GRAVEL FRACTION
 6.8 - 11.0 **ML-SM** SILT w/ SAND
 11.0 - 15.5 **ML** SILT
 * NO GROUNDWATER ENCOUNTERED
 * FROST DEPTH AT 0.8' (11/19/2020)

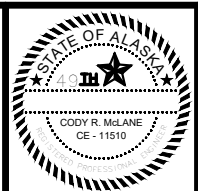
TH #7
 0.0 - 0.8 **ML-PT** ROOT MAT & ORGANICS
 0.8 - 2.8 **ML** SILT LOAM w/ SOME ORGANICS
 2.8 - 7.7 **ML** SILT w/ GRAVEL FRACTION
 7.7 - 10.3 **ML-SM** SILT w/ SAND
 10.3 - 15.5 **SP-SM** SAND w/ SILT & GRAVEL
 * NO GROUNDWATER ENCOUNTERED
 * FROST DEPTH AT 0.8' (11/19/2020)

TH #8
 0.0 - 0.8 **ML-PT** ROOT MAT & ORGANICS
 0.8 - 3.0 **ML** SILT LOAM w/ SOME ORGANICS
 3.0 - 9.3 **ML** SILT w/ GRAVEL FRACTION
 9.3 - 15.3 **SM-ML** VERY SILTY SAND w/ GRAVEL
 * NO GROUNDWATER ENCOUNTERED
 * FROST DEPTH AT 0.8' (11/19/2020)

TH #9
 0.0 - 0.65 **ML-PT** ROOT MAT & ORGANICS
 0.65 - 2.4 **ML** SILT LOAM w/ SOME ORGANICS
 2.4 - 8.8 **ML** SILT w/ SAND & GRAVEL FRACTION
 8.8 - 16.2 **SP-SM** SAND w/ SILT & GRAVEL
 * NO GROUNDWATER ENCOUNTERED
 * FROST DEPTH AT 0.65' (11/19/2020)

TH #10
 0.0 - 0.75 **ML-PT** ROOT MAT & ORGANICS
 0.75 - 3.8 **ML** SILT LOAM w/ SOME ORGANICS
 3.8 - 8.5 **ML** SILT w/ SAND & GRAVEL FRACTION
 8.5 - 15.8 **SM** SILTY SAND, FINE GRAIN
 * NO GROUNDWATER ENCOUNTERED
 * FROST DEPTH AT 0.75' (11/19/2020)

TH #11
 0.0 - 0.75 **ML-PT** ROOT MAT & ORGANICS
 0.75 - 2.65 **ML** SILT LOAM w/ SOME ORGANICS
 2.65 - 3.8 **ML** SILT, FIRM
 3.8 - 5.4 **ML** SILT, MOIST
 5.4 - 15.5 **ML** SILT w/ GRAVEL FRACTION
 * NO GROUNDWATER ENCOUNTERED
 * FROST DEPTH AT 0.75' (11/19/2020)



REV	DATE	DESCRIPTION	BY

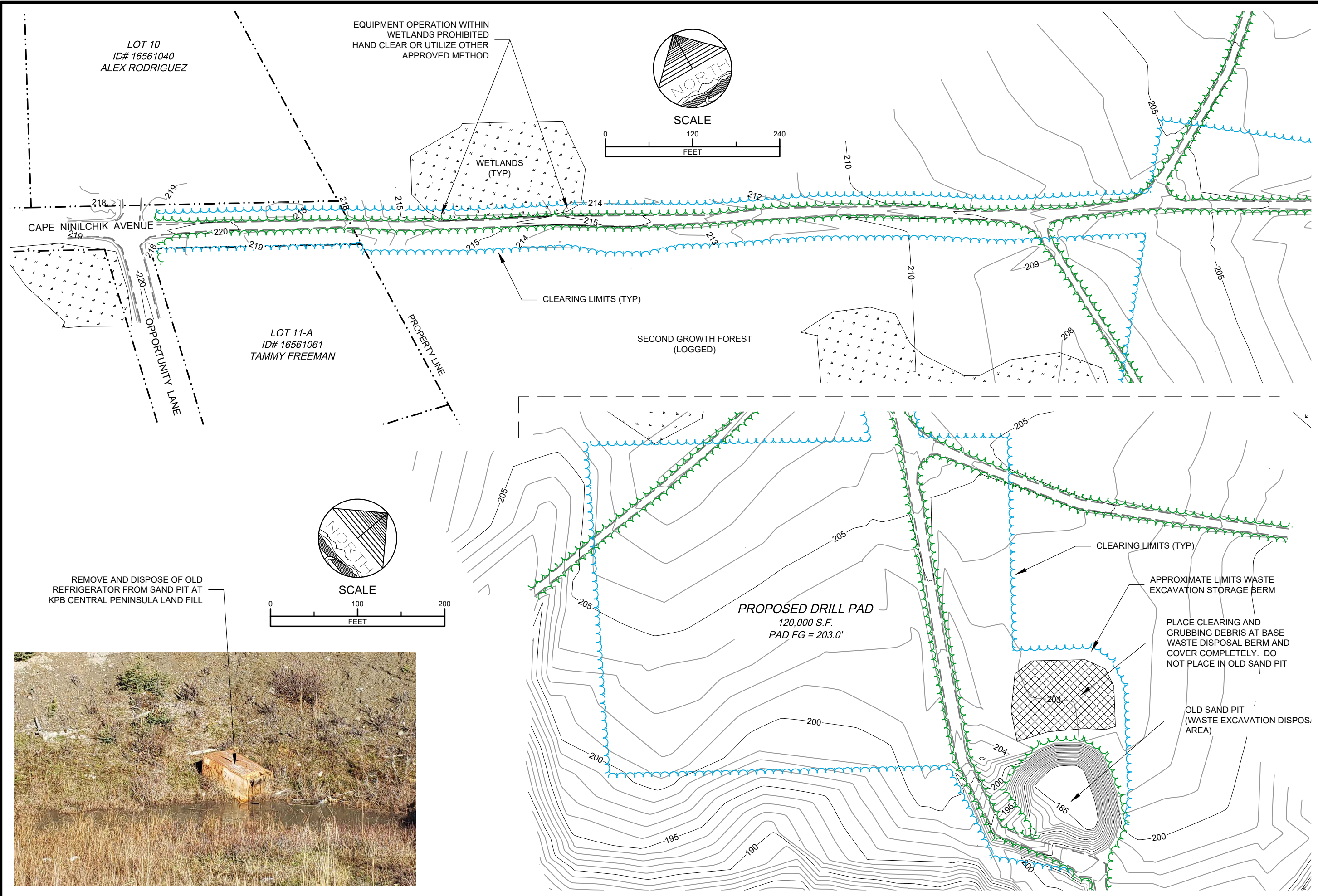
HILCORP ALASKA LLC
WHISKEY GULCH PAD
EXISTING CONDITIONS & SOILS

Hilcorp Alaska, LLC
 FIELD WORK DATE: NOV 2020
 JOB NO. 207025
 FIELD BOOK NO.



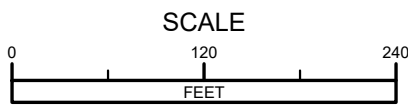
McLANE Consulting Inc
 ENGINEERING - TESTING
 SURVEYING - MAPPING
 P.O. BOX 468
 SOLDOTNA, AK 99669
 VOICE: (907) 283-4218
 FAX: (907) 283-3265
 WWW.MCLANECG.COM

DRAWN BY: CRM
 CHECKED BY: CRM
 HORZ. SCALE: 1" = 150'
 VERT. SCALE: N/A
 SHEET: **E1**



LOT 10
ID# 16561040
ALEX RODRIGUEZ

EQUIPMENT OPERATION WITHIN
WETLANDS PROHIBITED
HAND CLEAR OR UTILIZE OTHER
APPROVED METHOD

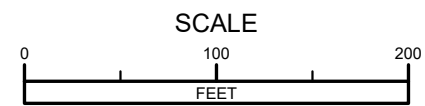
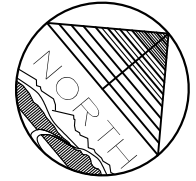


WETLANDS
(TYP)

CLEARING LIMITS (TYP)

SECOND GROWTH FOREST
(LOGGED)

LOT 11-A
ID# 16561061
TAMMY FREEMAN



REMOVE AND DISPOSE OF OLD
REFRIGERATOR FROM SAND PIT AT
KPB CENTRAL PENINSULA LAND FILL

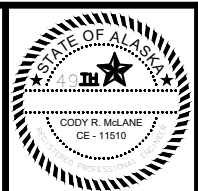
PROPOSED DRILL PAD
120,000 S.F.
PAD FG = 203.0'

CLEARING LIMITS (TYP)

APPROXIMATE LIMITS WASTE
EXCAVATION STORAGE BERM

PLACE CLEARING AND
GRUBBING DEBRIS AT BASE
WASTE DISPOSAL BERM AND
COVER COMPLETELY. DO
NOT PLACE IN OLD SAND PIT

OLD SAND PIT
(WASTE EXCAVATION DISPOS.
AREA)



REV	DATE	DESCRIPTION	BY

HILCORP ALASKA LLC
WHISKEY GULCH PAD
CLEARING LIMITS & DEMO PLAN



ENGINEERING - TESTING
SURVEYING - MAPPING
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WWW.MCLANECG.COM

DRAWN BY: CRM
CHECKED BY: CRM
HORZ. SCALE: VARIES
VERT. SCALE: N/A
SHEET: E2

FIELD WORK DATE: NOV 2020
JOB NO. 207025
FIELD BOOK NO. 12/21/2020 LFC



BY		CRM
DESCRIPTION		
DATE		12/21/2020
REV		LFC

HILCORP ALASKA LLC
 WHISKEY GULCH PAD
 DETAILS & TYPICAL SECTIONS

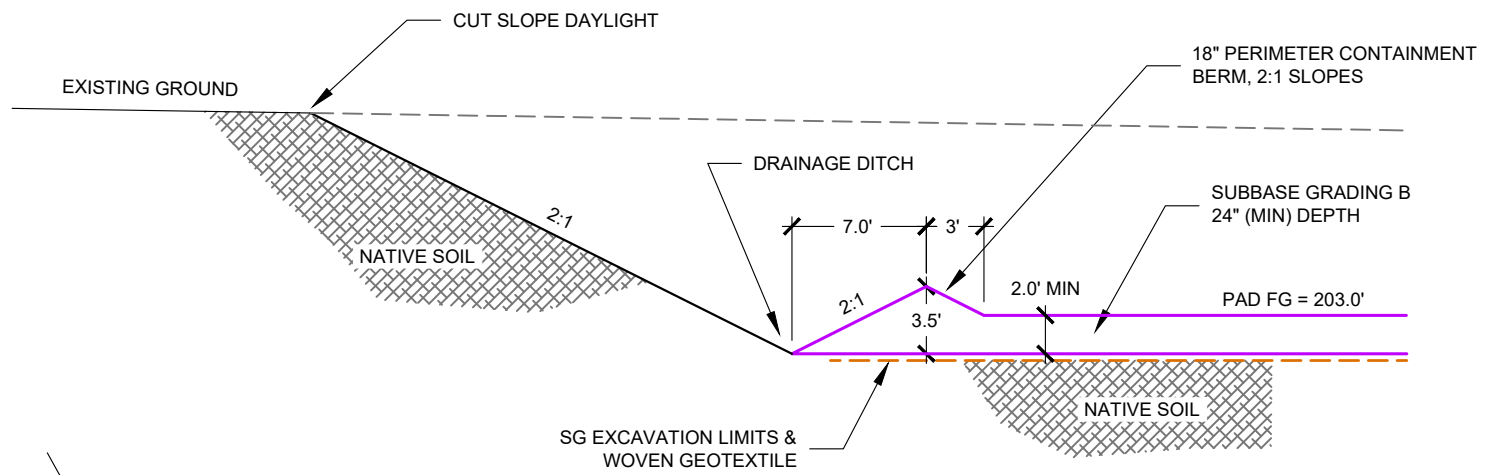
Hilcorp Alaska, LLC
 FIELD WORK DATE: NOV 2020
 JOB NO. 207025
 FIELD BOOK NO.



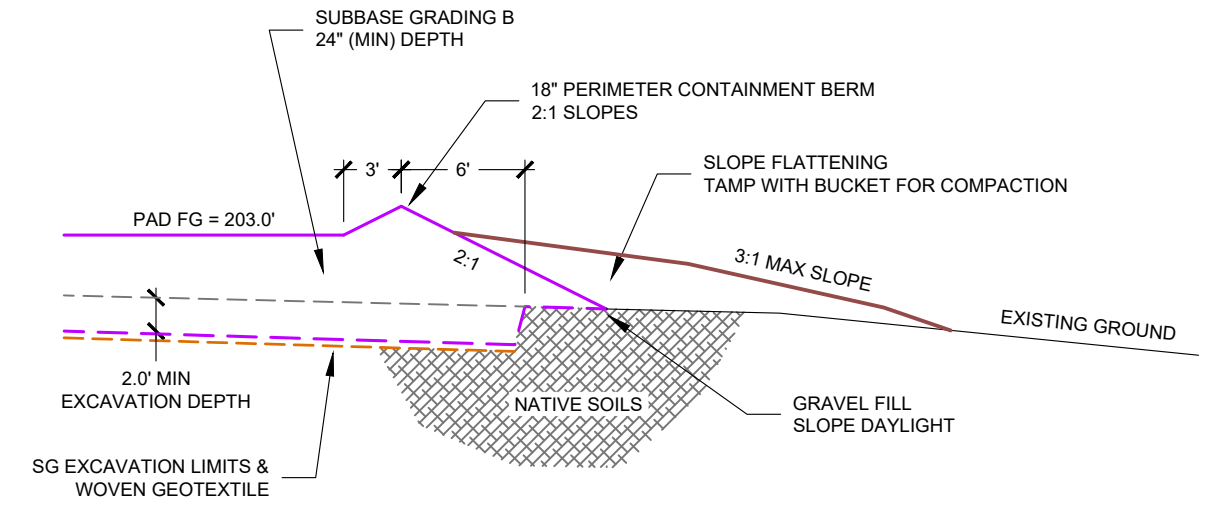
McLANE
 Consulting Inc

ENGINEERING - TESTING
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 P.O. BOX 468
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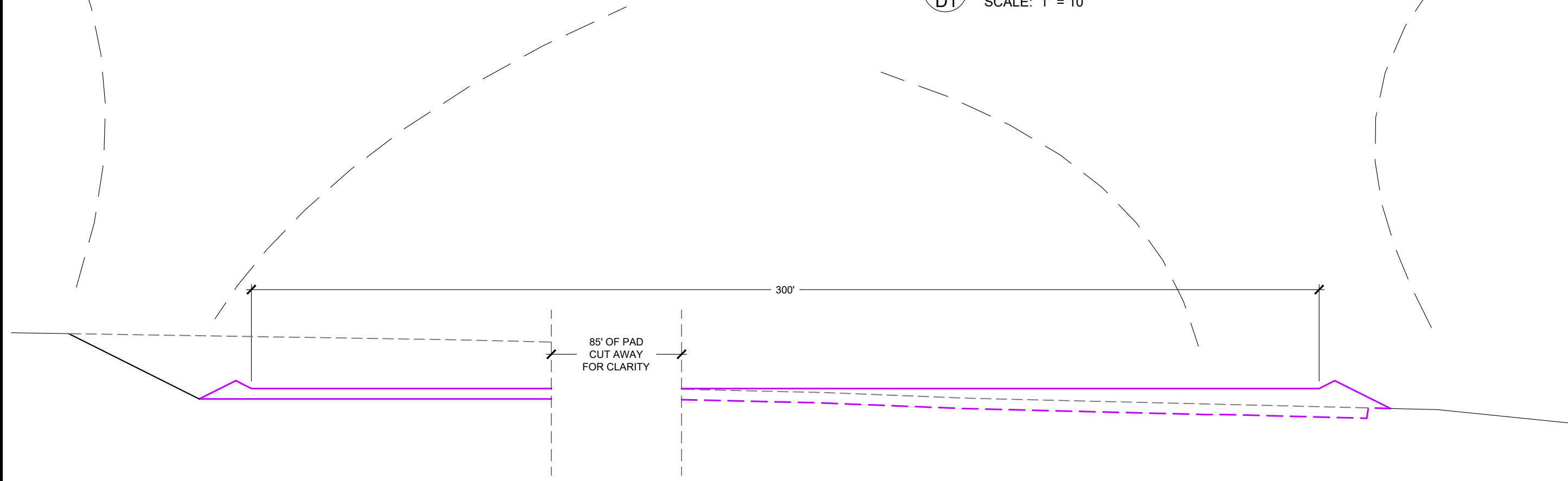
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 CHECKED BY: CRM
 HORZ. SCALE: N/A
 VERT. SCALE: N/A
 SHEET: D1



C
D1 PAD CUT SECTION
 SCALE: 1" = 10'



B
D1 PAD FILL SECTION
 SCALE: 1" = 10'



A
D1 PAD TYPICAL SECTION
 SCALE: 1" = 20'



REV	DATE	DESCRIPTION	BY

HILCORP ALASKA LLC
 WHISKEY GULCH PAD
 DETAILS & TYPICAL SECTIONS
 FIELD BOOK NO. 207025
 NOV 2020
 Hilcorp Alaska, LLC

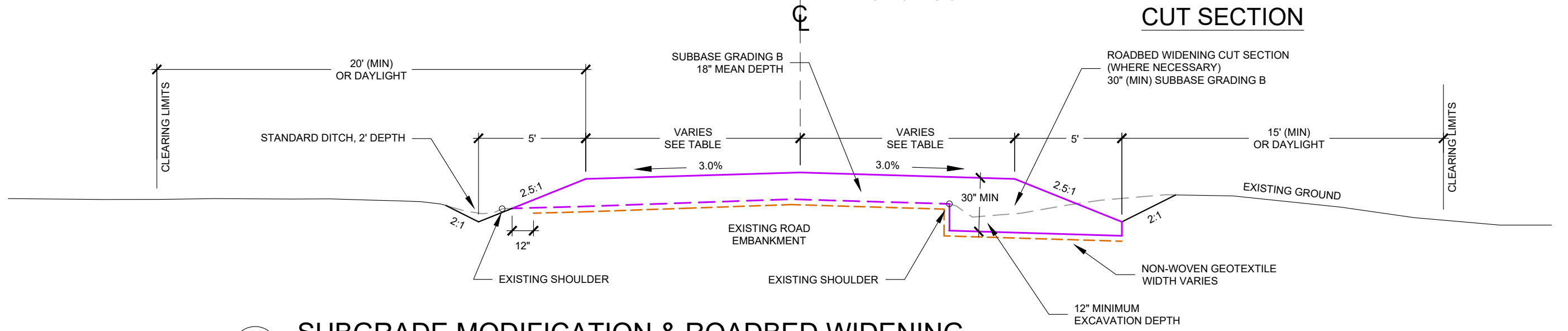
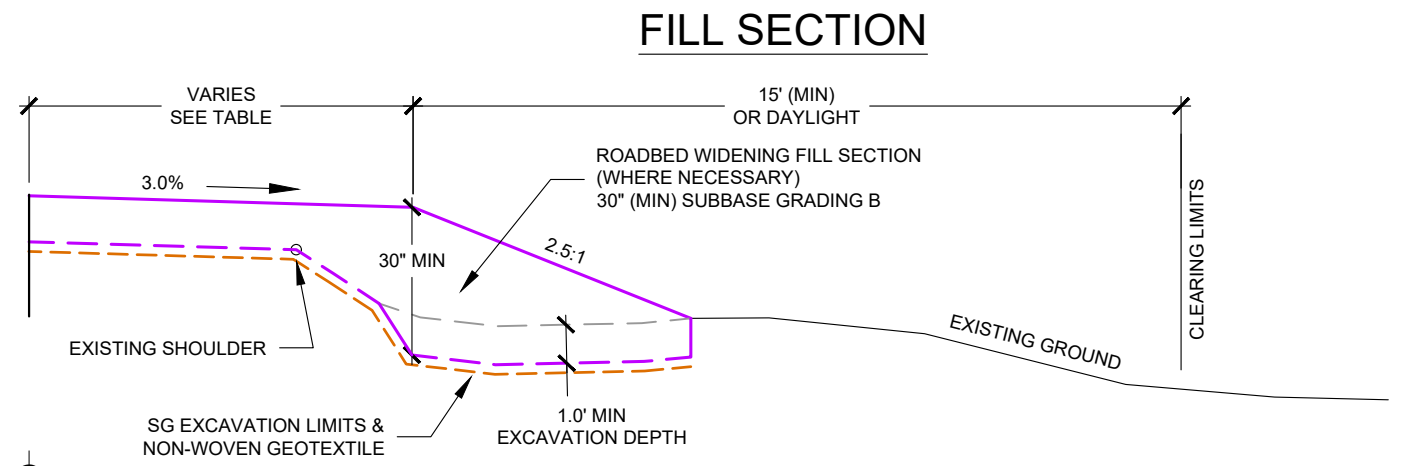
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 VOICE: (907) 283-4218
 FAX: (907) 283-3265
 WWW.MCLANECG.COM

DRAWN BY: CRM
 CHECKED BY: CRM
 HORZ. SCALE: 1" = 5'
 VERT. SCALE: 1" = 5'
 SHEET: D2

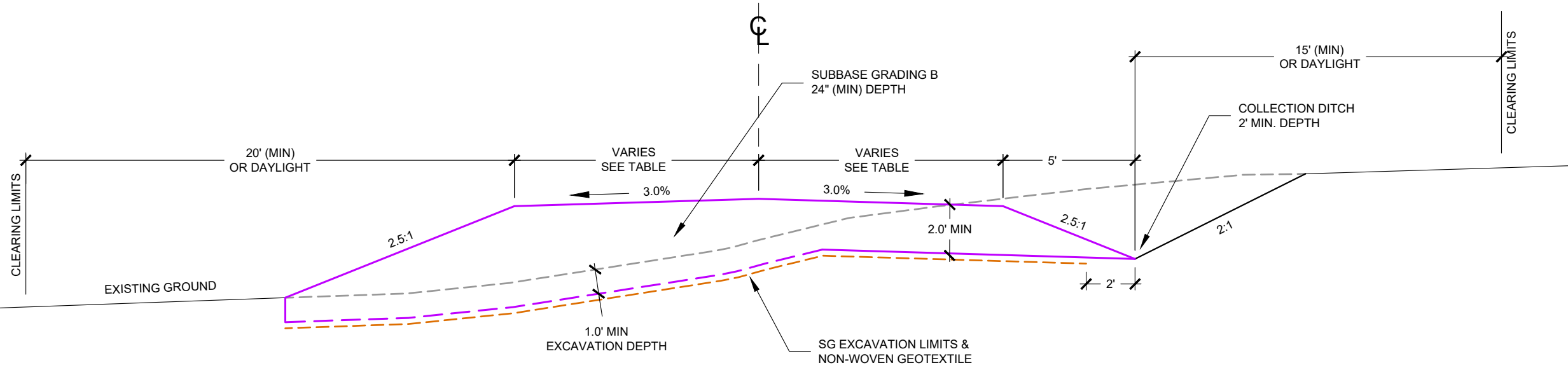
SHOULDER WIDTH TABLE

ALIGNMENT	STATION	LT WIDTH FROM CL	RT WIDTH FROM CL
ACCESS ROAD	0+50 - 6+50	8'	8'
ACCESS ROAD	7+00 - 7+50	8'	18'
ACCESS ROAD	8+00 - 14+10	8'	8'
ACCESS ROAD	14+90	8'	22'

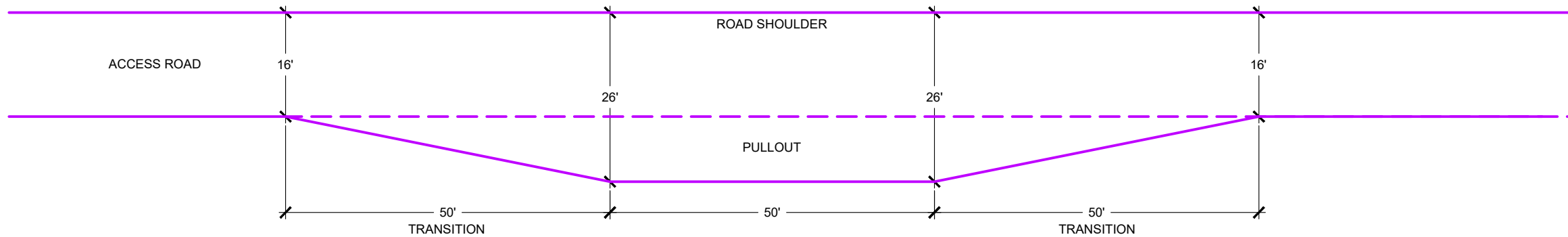
1. TRANSITION UNIFORMLY BETWEEN SPECIFIED SHOULDER WIDTHS.



A
D2 **SUBGRADE MODIFICATION & ROADBED WIDENING**
SCALE: 1" = 5' STA: 0+50 TO 13+50



B
D2 **EMBANKMENT CONSTRUCTION**
SCALE: 1" = 5' STA: 13+50 TO 14+90



A
D3

TYPICAL ACCESS ROAD PULLOUT

SCALE: 1" = 20'

REV	DATE	DESCRIPTION	BY
			CRM

HILCORP ALASKA LLC
 WHISKEY GULCH PAD
 DETAILS & TYPICAL SECTIONS
 JOB NO. - 207025
 FIELD BOOK NO.
 FIELD WORK DATE: NOV 2020



McLANE Consulting Inc
 ENGINEERING - TESTING
 SURVEYING - MAPPING
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 FAX: (907) 283-3265
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DRAWN BY: CRM
 CHECKED BY: CRM
 HORZ. SCALE: 1" = 5'
 VERT. SCALE: 1" = 5'
 SHEET: D3



REV	DATE	DESCRIPTION	BY

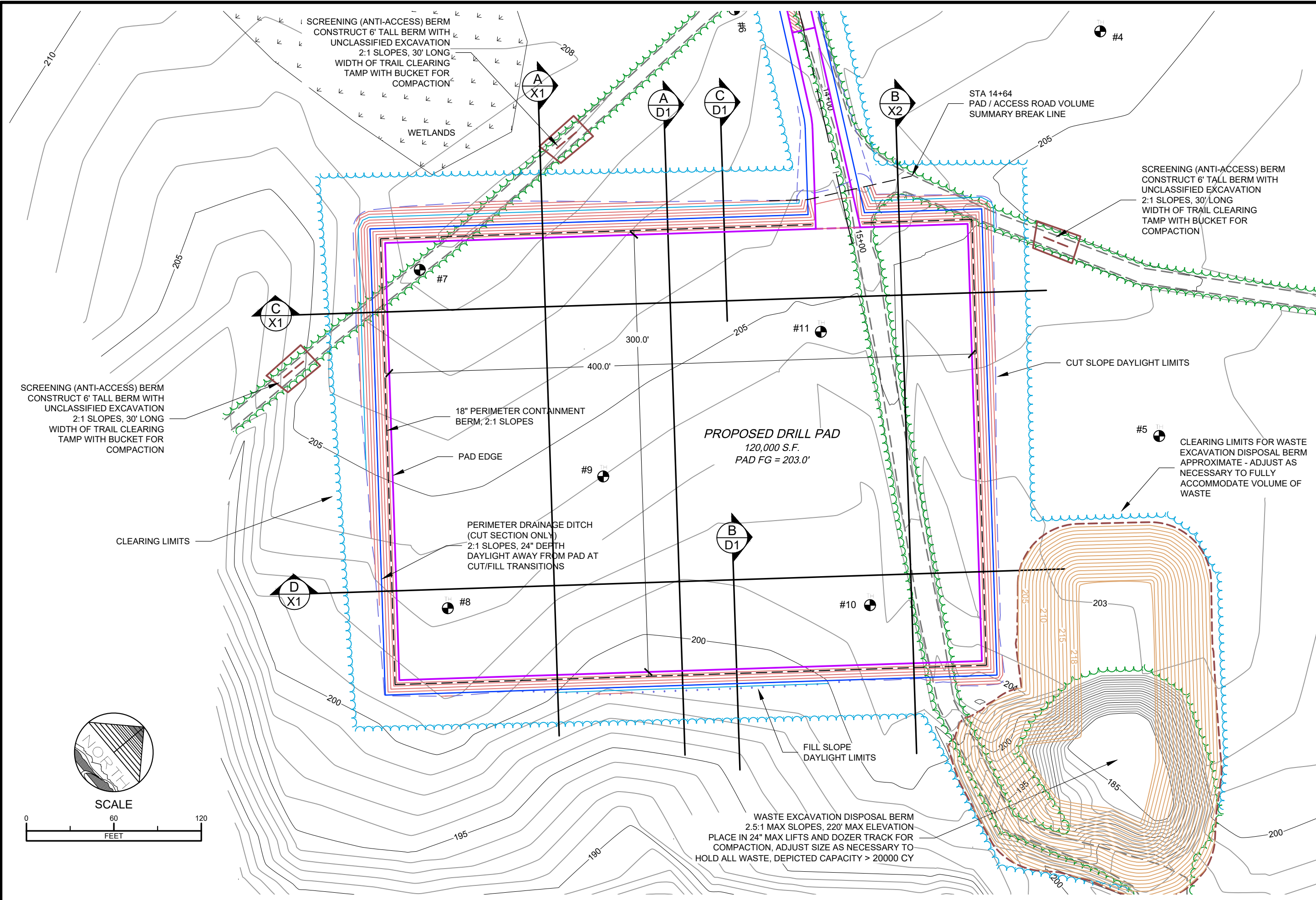
HILCORP ALASKA LLC
 WHISKEY GULCH PAD
 DRILL PAD PLAN VIEW

Hilcorp Alaska, LLC
 FIELD WORK DATE: NOV 2020
 JOB NO. 207025
 FIELD BOOK NO.



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 HORZ. SCALE: 1" = 60'
 VERT. SCALE: N/A
 SHEET: P1



SCREENING (ANTI-ACCESS) BERM
 CONSTRUCT 6' TALL BERM WITH
 UNCLASSIFIED EXCAVATION
 2:1 SLOPES, 30' LONG
 WIDTH OF TRAIL CLEARING
 TAMP WITH BUCKET FOR
 COMPACTION

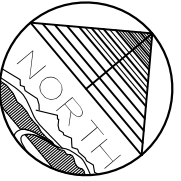
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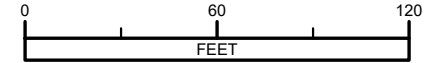
PROPOSED DRILL PAD
 120,000 S.F.
 PAD FG = 203.0'

PERIMETER DRAINAGE DITCH
 (CUT SECTION ONLY)
 2:1 SLOPES, 24" DEPTH
 DAYLIGHT AWAY FROM PAD AT
 CUT/FILL TRANSITIONS

WASTE EXCAVATION DISPOSAL BERM
 2.5:1 MAX SLOPES, 220' MAX ELEVATION
 PLACE IN 24" MAX LIFTS AND DOZER TRACK
 FOR COMPACTION, ADJUST SIZE AS NECESSARY TO
 HOLD ALL WASTE, DEPICTED CAPACITY > 20000 CY



SCALE





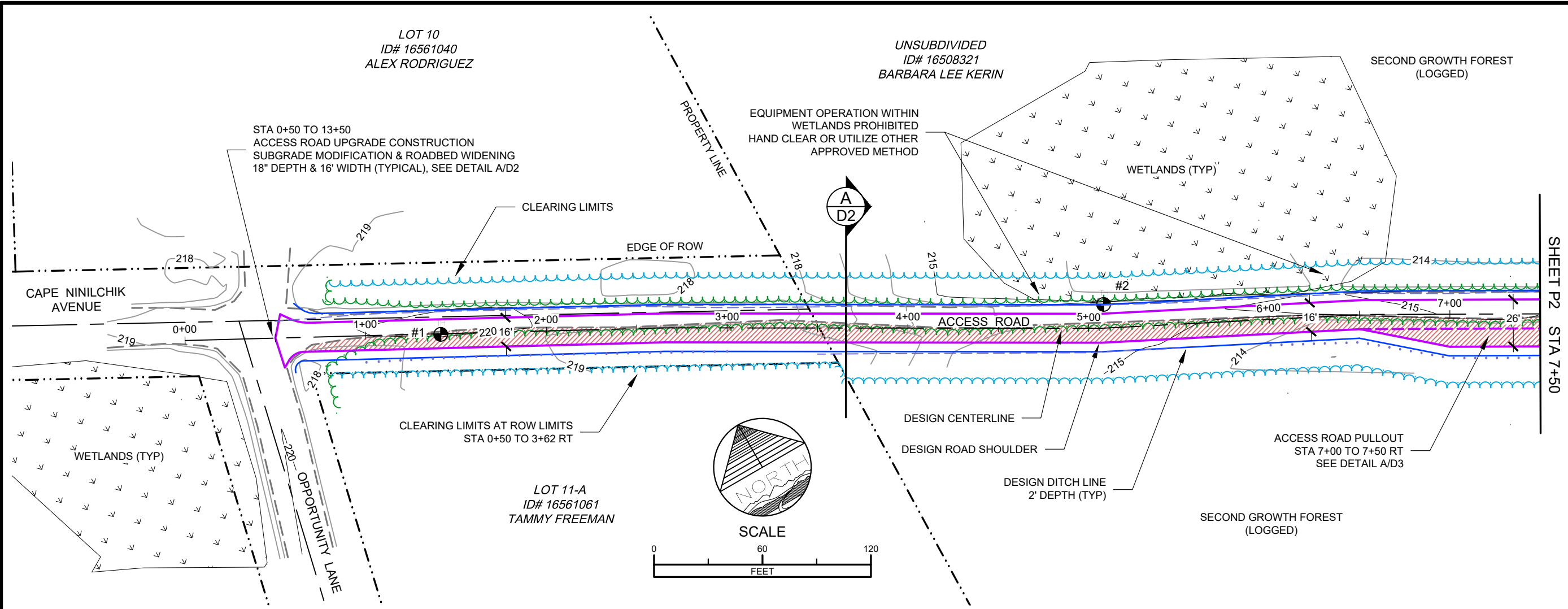
REV	DATE	DESCRIPTION	BY

HILCORP ALASKA LLC
WHISKEY GULCH PAD
ACCESS ROAD PLAN VIEW & PROFILE

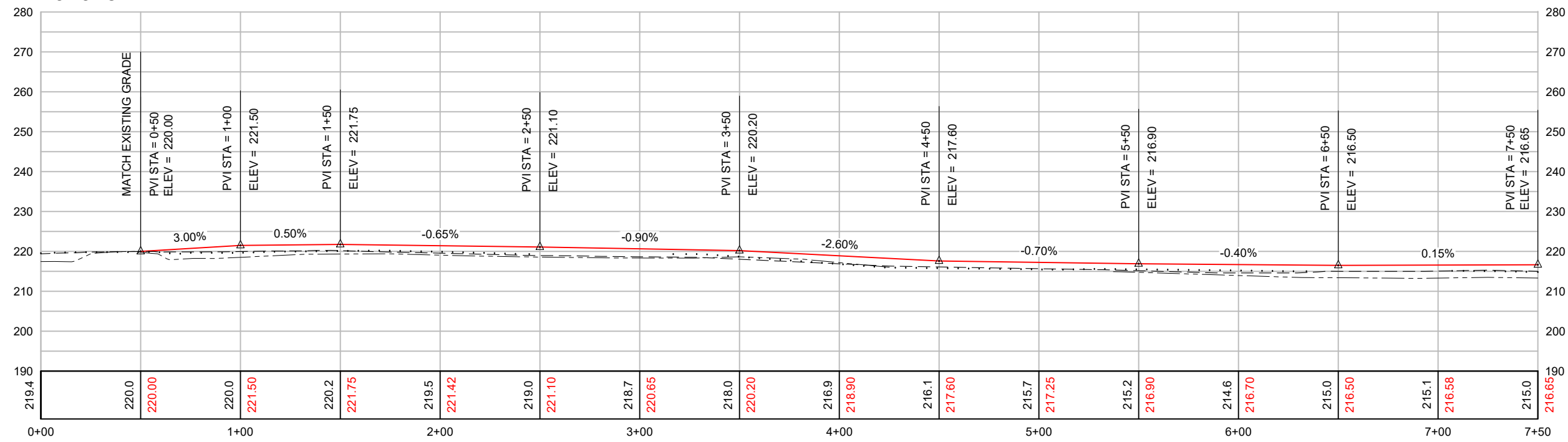
FIELD BOOK NO. 207025
 JOB NO. 207025
 FIELD WORK DATE: NOV 2020

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 HORZ. SCALE: 1" = 60'
 VERT. SCALE: 1" = 30'
 SHEET: **P2**



207025 A1





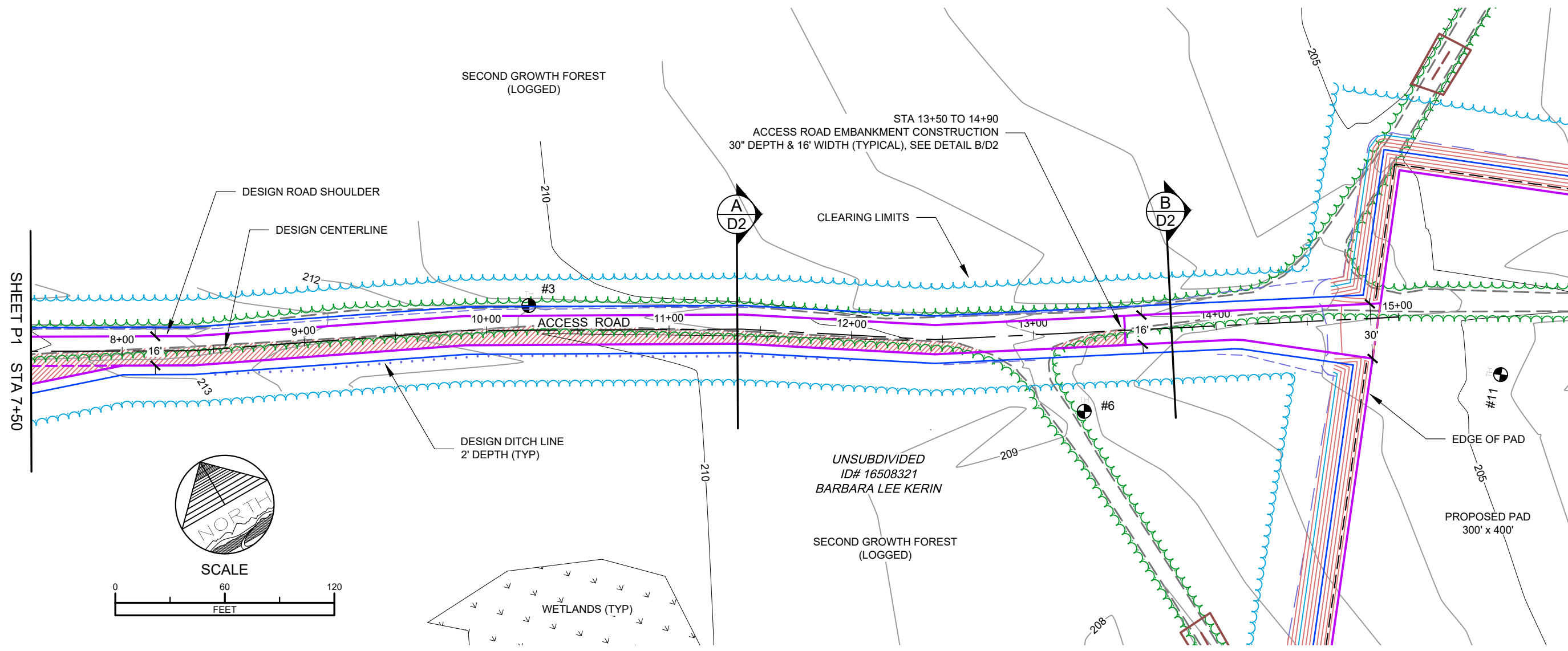
REV	DATE	DESCRIPTION	BY	CRM

HILCORP ALASKA LLC
WHISKEY GULCH PAD
ACCESS ROAD PLAN VIEW & PROFILE

FIELD BOOK NO. 207025
 JOB NO. 207025
 FIELD WORK DATE: NOV 2020

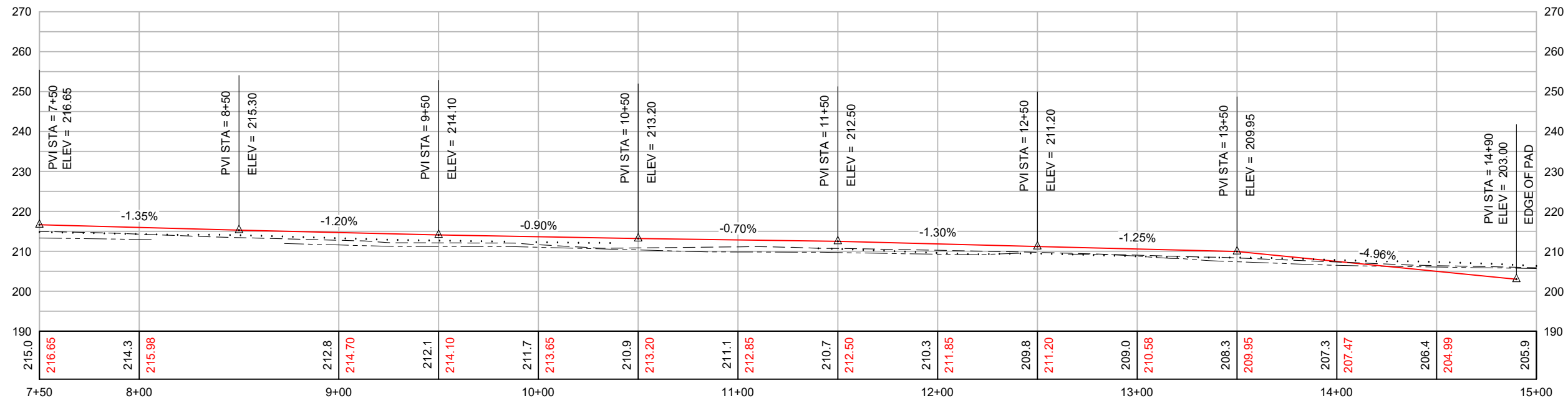
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HORZ. SCALE:	1" = 60'
VERT. SCALE:	1" = 30'
SHEET:	P3



	C/L FG GRADE
	EXISTING C/L GRADE
	EXISTING 13' LEFT GRADE
	EXISTING 13' RIGHT GRADE

207025 A1

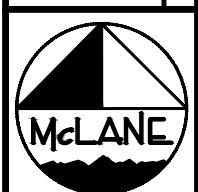




REV	DATE	DESCRIPTION	BY

HILCORP ALASKA LLC
WHISKEY GULCH PAD
PAD CROSS SECTIONS

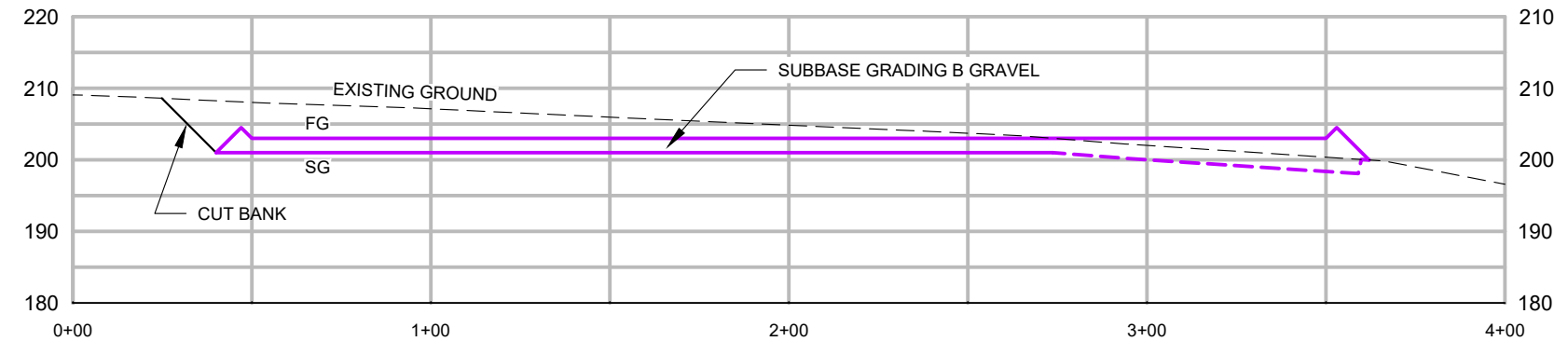
Hilcorp Alaska, LLC
FIELD WORK DATE: NOV 2020
JOB NO. - 207025
FIELD BOOK NO.



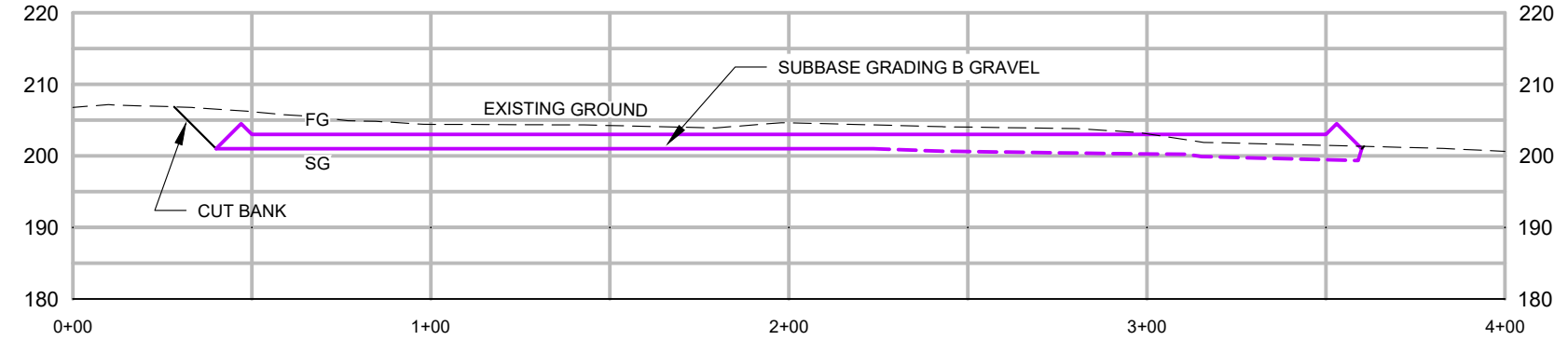
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DRAWN BY: CRM
CHECKED BY: CRM
HORZ. SCALE: 1" = 50'
VERT. SCALE: 1" = 25'
SHEET: X1

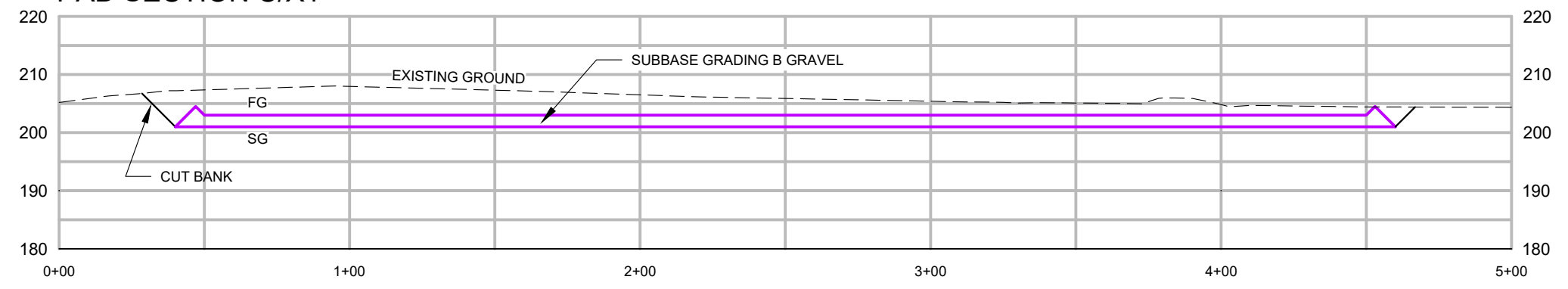
PAD SECTION A/X1



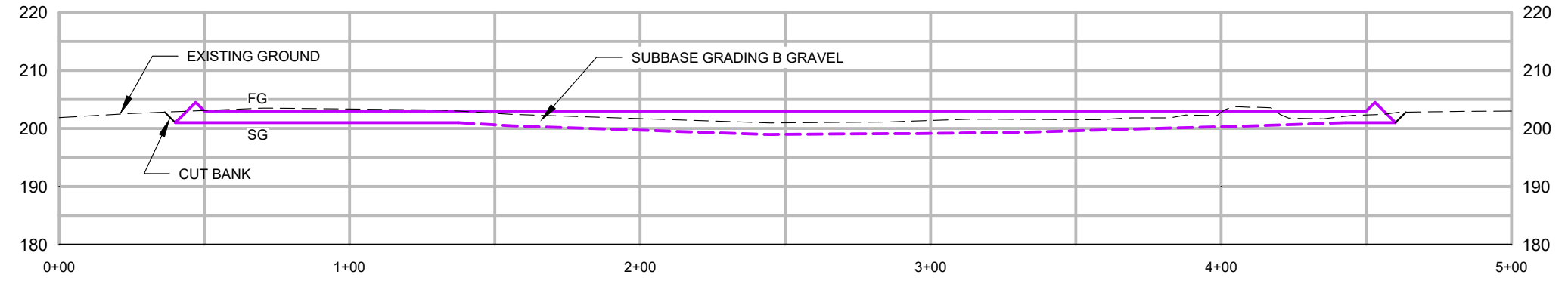
PAD SECTION B/X1

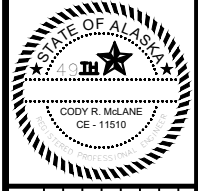


PAD SECTION C/X1

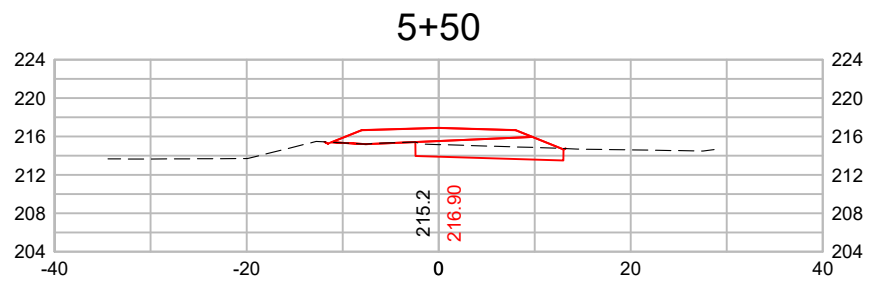
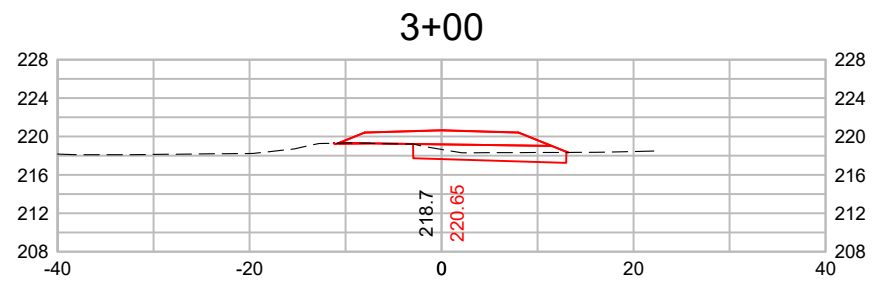
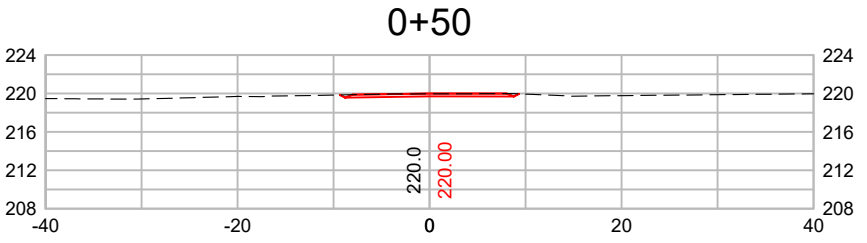
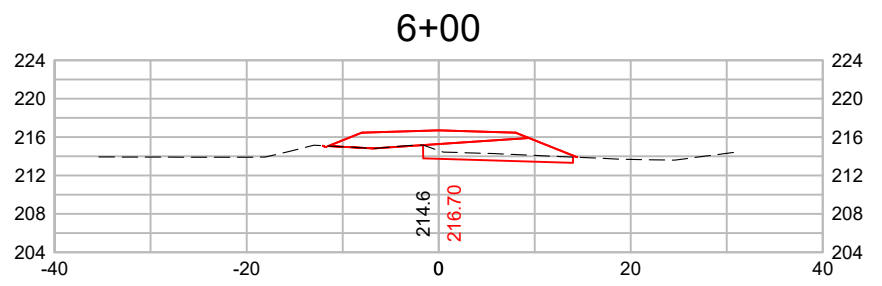
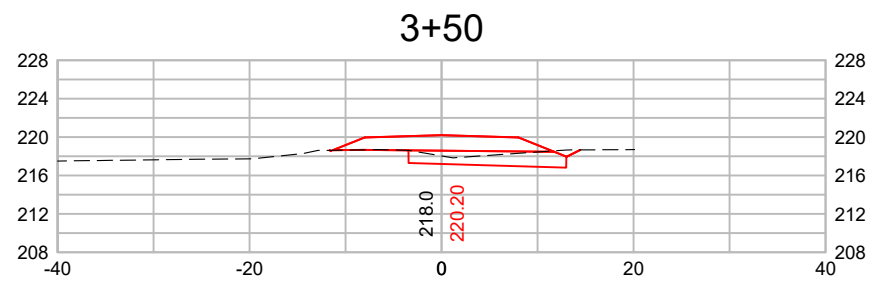
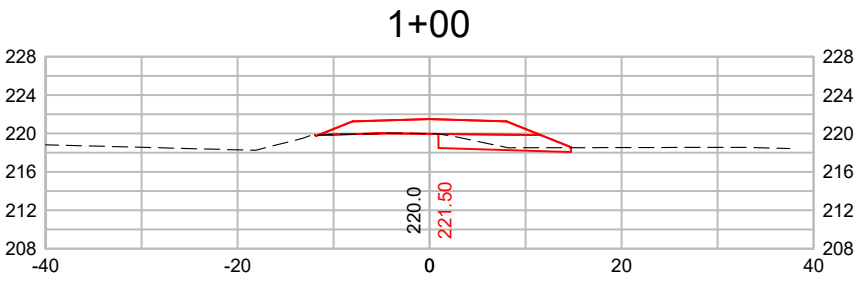
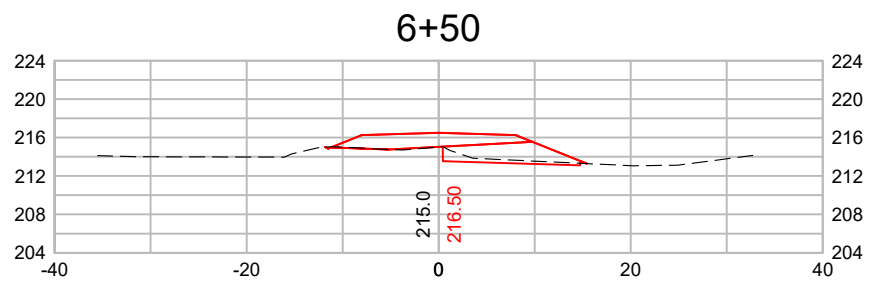
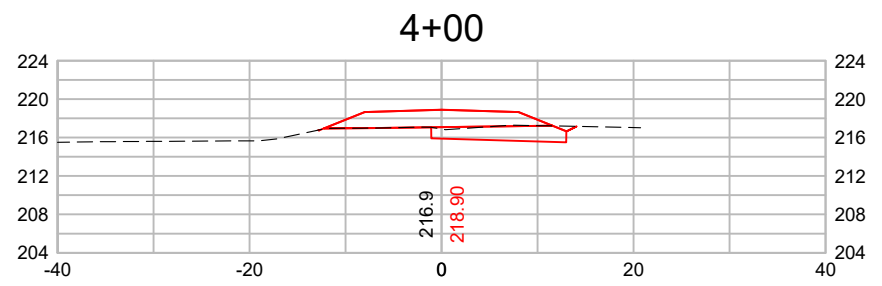
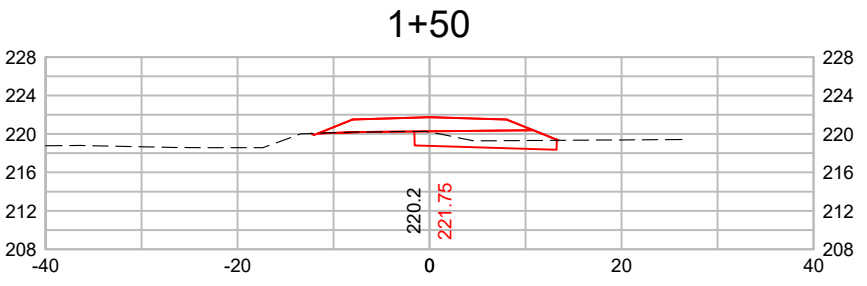
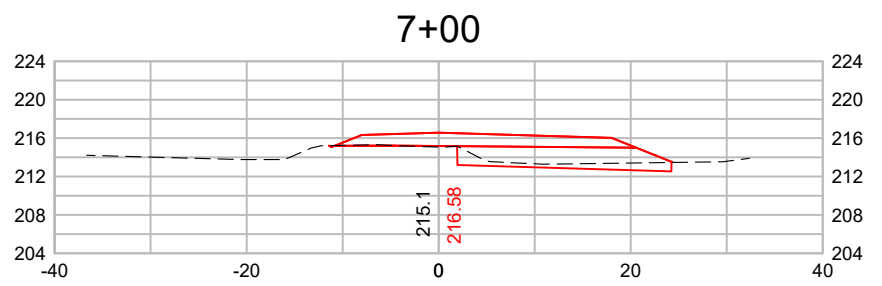
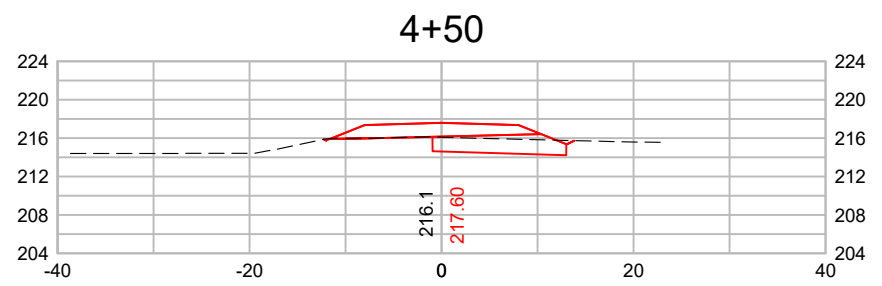
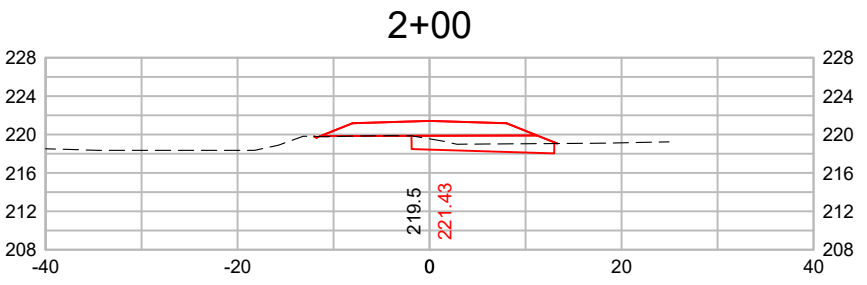
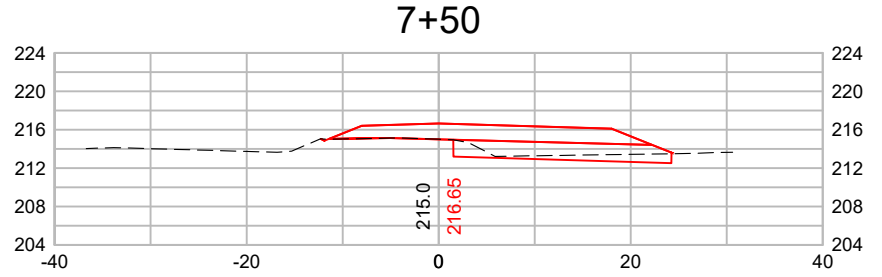
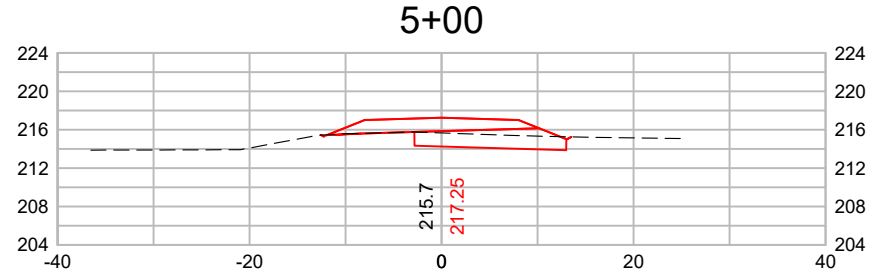
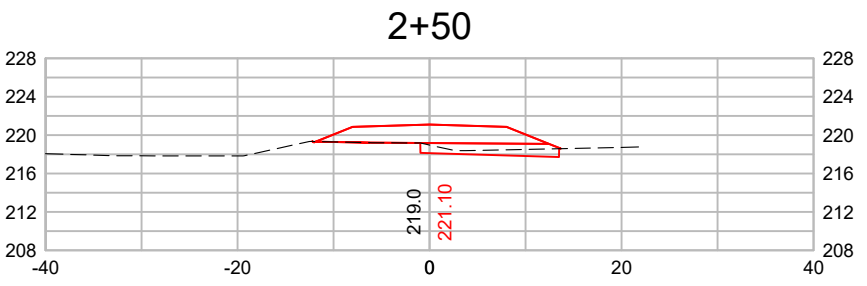


PAD SECTION D/X1





— PROPOSED TEMPLATE
 - - - - - EXISTING GROUND
 216.5 EXISTING GRADE AT C/L
 217.95 C/L GRADE AT TOP SUBBASE B



REV	DATE	DESCRIPTION	BY

HILCORP ALASKA LLC
 WHISKEY GULCH PAD
 ACCESS ROAD CROSS SECTIONS

HILCORP Alaska, LLC
 FIELD WORK DATE: NOV 2020
 FIELD BOOK NO. 207025



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 CHECKED BY: CRM
 HORZ. SCALE: 1" = 20'
 VERT. SCALE: 1" = 20'
 SHEET: X2



EXCAVATION & BELOW TEMPLATE FILL VOLUME TABLE						
STATION	CUT AREA	FILL AREA	CUT VOLUME	FILL VOLUME	CUM. CUT VOLUME	CUM. FILL VOLUME
0+50	5.20	0.00	0.0	0.0	0.0	0.0
1+00	8.94	0.07	13.1	0.1	13.1	0.1
1+50	14.40	0.01	21.6	0.1	34.7	0.1
2+00	13.53	0.18	25.9	0.2	60.6	0.3
2+50	9.05	0.02	20.9	0.2	81.5	0.5
3+00	15.37	0.04	22.6	0.1	104.1	0.5
3+50	20.04	0.01	32.8	0.0	136.9	0.6
4+00	20.12	0.04	37.2	0.0	174.1	0.6
4+50	21.53	0.00	38.6	0.0	212.6	0.7
5+00	22.32	0.00	40.6	0.0	253.2	0.7
5+50	19.60	0.00	38.8	0.0	292.0	0.7
6+00	11.57	0.03	28.9	0.0	320.9	0.7
6+50	6.63	0.42	16.9	0.4	337.8	1.1
7+00	15.04	0.41	20.1	0.8	357.8	1.9
7+50	15.59	0.19	28.4	0.6	386.2	2.4
8+00	13.69	0.23	27.1	0.4	413.3	2.8
8+50	10.86	0.11	22.7	0.3	436.0	3.1
9+00	8.03	0.23	17.5	0.3	453.5	3.5
9+50	8.79	0.01	15.6	0.2	469.1	3.7
10+00	10.40	0.00	17.8	0.0	486.9	3.7
10+50	11.65	0.03	20.4	0.0	507.3	3.7
11+00	10.95	0.04	20.9	0.1	528.2	3.8
11+50	9.13	0.24	18.6	0.3	546.8	4.0
12+00	10.03	0.79	17.7	0.9	564.5	5.0
12+50	18.78	0.15	26.7	0.9	591.2	5.8
13+00	2.28	0.23	19.5	0.4	610.7	6.2
13+50	12.85	0.07	14.0	0.3	624.7	6.5
14+00	59.26	0.00	66.8	0.1	691.5	6.5
14+15	78.11	0.00	38.2	0.0	729.6	6.5
14+50	153.51	0.00	150.1	0.0	879.8	6.5
14+64	186.58	0.00	88.2	0.0	967.9	6.5

WIDENING VOLUME TABLE			
STATION	AREA	VOLUME	CUMULATIVE VOLUME
0+50	0.00	0.0	0.0
1+00	20.25	18.7	18.7
1+50	24.75	41.7	60.4
2+00	23.65	44.8	105.2
2+50	17.12	37.8	143.0
3+00	25.24	39.2	182.2
3+50	24.04	45.6	227.8
4+00	19.94	40.7	268.6
4+50	24.84	41.5	310.0
5+00	28.25	49.2	359.2
5+50	28.76	52.8	411.9
6+00	28.52	53.0	465.0
6+50	24.60	49.2	514.2
7+00	46.41	65.8	579.9
7+50	40.33	80.3	660.2
8+00	28.28	63.5	723.8
8+50	26.87	51.1	774.8
9+00	22.28	45.5	820.3
9+50	21.11	40.2	860.5
10+00	25.90	43.5	904.0
10+50	34.05	55.5	959.5
11+00	31.08	60.3	1019.9
11+50	25.02	52.0	1071.8
12+00	22.37	43.9	1115.7
12+50	21.98	41.1	1156.8
13+00	0.00	20.4	1177.1
13+50	25.77	23.9	1201.0
14+00	0.00	23.9	1224.8
14+15	0.00	0.0	1224.8
14+50	0.00	0.0	1224.8
14+64	0.00	0.0	1224.8

OVERLAY VOLUME TABLE			
STATION	AREA	VOLUME	CUMULATIVE VOLUME
0+50	4.91	0.0	0.0
1+00	27.53	30.0	30.0
1+50	25.53	49.1	79.2
2+00	26.99	48.6	127.8
2+50	35.81	58.2	185.9
3+00	25.41	56.7	242.6
3+50	28.63	50.0	292.7
4+00	33.07	57.1	349.8
4+50	24.67	53.5	403.3
5+00	24.27	45.3	448.6
5+50	22.83	43.6	492.2
6+00	23.91	43.3	535.5
6+50	24.04	44.4	579.9
7+00	34.24	54.0	633.9
7+50	46.13	74.4	708.3
8+00	26.85	67.6	775.8
8+50	24.28	47.3	823.2
9+00	30.74	50.9	874.1
9+50	30.50	56.7	930.8
10+00	27.51	53.7	984.5
10+50	24.33	48.0	1032.5
11+00	26.28	46.9	1079.4
11+50	30.63	52.7	1132.1
12+00	26.96	53.3	1185.4
12+50	24.58	47.7	1233.1
13+00	31.78	52.2	1285.3
13+50	24.24	51.9	1337.2
14+00	42.59	61.9	1399.0
14+15	42.59	23.7	1422.7
14+50	57.70	65.0	1487.7
14+64	62.89	31.3	1519.0

WHISKEY GULCH PAD & ACCESS ROAD EXCAVATION AND EMBANKMENT FILL VOLUME SUMMARY

DESCRIPTION	STATION RANGE	UNCLASSIFIED EXCAVATION (CY)	SUBBASE GRADING B TOTAL FILL (CY)
ACCESS ROAD	0+50 - 14+64	968	2751
WHISKEY GULCH PAD	N/A	18068	12313
PROJECT TOTALS		19036	15064

REV	DATE	DESCRIPTION	BY

HILCORP ALASKA LLC
WHISKEY GULCH PAD
VOLUME SUMMARY


 FIELD WORK DATE: NOV 2020 JOB NO. 207025 FIELD BOOK NO. LFC


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DRAWN BY:	CRM
CHECKED BY:	CRM
HORIZ. SCALE:	N/A
VERT. SCALE:	N/A
SHEET:	V1