

Public



Cultural Resources Management Plan

August 17, 2020

AKLNG-6020-CRM-PLN-DOC-00001

Alaska LNG

3201 C Street, Suite 201
Anchorage, Alaska 99503
T: 907-330-6300
www.alaska-lng.com

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REVISION HISTORY

Rev	Date	Description	Originator	Reviewer	Approver
A	8/17/2020	Initial Draft	AGDC	Consulting Parties	
Approver Signature*					

*This signature approves the most recent version of this document.

MODIFICATION HISTORY

Rev	Section	Modification

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ABSTRACT AND MANAGEMENT SUMMARY

Report Title	Cultural Resources Management Plan
Report Date	August 17, 2020
Land Ownership	State of Alaska, Bureau of Land Management, Denali Borough, Denali National Park and Preserve, Fairbanks North Star Borough, City of Nenana, Matanuska-Susitna Borough, North Slope Borough, Kenai Peninsula Borough, Alaska Mental Health Trust Authority, University of Alaska, U.S. Army Corps of Engineers, Ahtna, Inc., Cook Inlet Region, Inc. (CIRI), Toghotthele Corporation, Tyonek Native Corporation, Salamatof Native Association.
Document No.	AKLNG-6020-CRM-PLN-DOC-00001
Project Description	Pursuant to Section 3 of the Natural Gas Act, on May 21, 2020, Alaska Gasline Development Corporation (AGDC) received Authorization from the Federal Energy Regulatory Commission (FERC) to construct, own and operate the following: a Gas Treatment Plant; a 1.0 mile long, 60-inch diameter Prudhoe Bay Unit Gas Transmission Line; a 62.5 mile long, 32-inch diameter Point Thomson Unit Gas Transmission Line; a 806.9 mile 42-inch diameter natural gas pipeline (Mainline Pipeline) and associated aboveground facilities including eight compressor stations and a heater station; and a 20 million metric-ton per annum liquefaction facility (Liquefaction Facilities), including an LNG Plant and Marine Terminal Facilities. Issuance of the federal permit constitutes an undertaking subject to review under Section 106 of the National Historic Preservation Act. On June 24, 2020, FERC executed a Programmatic Agreement (PA) to satisfy its Section 106 consultation responsibilities; this document has been prepared to guide and support the implementation of the PA.
Project Location	The Project location spans across the State of Alaska north to south, from Point Thomson to Prudhoe Bay, on the North Slope, to the Matanuska-Susitna Borough, across Cook Inlet to the Kenai Peninsula Borough to Nikiski. The Project area includes lands within the following USGS map quadrangles: Beechley Point (XBP, A1, A2, A3, B3); Flaxman Island (FLA, A4, A5); Sagavanirktok (SAG, A3, A4, B3, C3, C4, D3, D4); Philip Smith Mountains (PSM, A4, A5, B4, B5, C4, C5, D4); Chandalar (CHN, B6, C6, D6); Wiseman (WIS, A1, B1); Bettles (BET, A1, B1, B2, C2, D1, D2); Tanana (TAN, D1); Livengood (LIV, A4, B3, B4, C4, C5, D5, D6); Fairbanks (FAI, A5, B5, C4, C5, D1, D2, D3, D4); Healy (HEA, A5, A6, B4, B5, C4, D4, D5); Talkeetna Mountains (TLM, D6); Talkeetna (TAL, A1, B1, C1, D1); Tyonek (TYO, A3, A4, B2, B3, B4, C1, C2, D1); Anchorage (ANC, C7); Kenai (KEN, C4, C5, D3, D4).
Summary	This Plan provides an overview of cultural resources identification, consultation, and National Register of Historic Places (NRHP) eligibility evaluation work completed to date for the Project. The Plan identifies actions that will be completed to satisfy the terms of the PA, including strategies for the avoidance, minimization and mitigation of historic properties that may be adversely affected by the Project. A total of 965 cultural resources are present in the Project Area of Potential Effect, and 135 of these resources are considered historic properties (cultural resources determined to be eligible for listing in the NRHP).

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ACRONYMS AND ABBREVIATIONS

%.....	percent
ADNR.....	Alaska Department of Natural Resources
AFE.....	Authorization for Expenditure
AGDC.....	Alaska Gasline Development Corporation, Applicant
AGPPT.....	Alaska Gas Producer's Pipeline Team
AHPA.....	Alaska Historic Preservation Act
AHRS.....	Alaska Heritage Resources Survey
ANCSA.....	Alaska Native Claims Settlement Act
APE.....	Area of Potential Effect
APP.....	Alaska Pipeline Project
ARPA.....	Archaeological Resources Protection Act
ARRC.....	Alaska Railroad Corporation
AS.....	Alaska Statute
ASAP.....	Alaska Stand Alone Pipeline
ATWS.....	Additional Temporary Work Space
BIA.....	Bureau of Indian Affairs
BLM.....	Bureau of Land Management
B.P.....	Before Present
CFR.....	Code of Federal Regulations
CIRI.....	Cook Inlet Regional Incorporated
Consulting Parties.....	Signatories, Invited Signatories, and Concurring Parties to the PA
CRMP.....	Cultural Resources Management Plan
Denali Project.....	Denali – the Alaska Gas Pipeline LLC
DNPP.....	Denali National Park and Preserve
DOT&PF.....	Department of Transportation and Public Facilities
ENSTAR.....	ENSTAR Natural Gas Company
FEIS.....	Final Environmental Impact Statement
FERC.....	Federal Energy Regulatory Commission
FID.....	Financial Investment Decision
GPS.....	Global Positioning Systems
GTP.....	Gas Treatment Plant
IHLC.....	Iñupiat History, Language and Culture
INHT.....	Iditarod National Historic Trail
LMR.....	Land Management Regulations
LNG.....	Liquid Natural Gas
MP.....	Pipeline Milepost
NAGPRA.....	Native American Graves Protection and Repatriation Act
NEPA.....	National Environmental Policy Act
NHPA.....	National Historic Preservation Act

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NLUR/NHG Northern Land Use Research
 NPS National Park Service
 NRHP National Register of Historic Places
 NSB North Slope Borough
 OHA Office of History and Archaeology
 PA Programmatic Agreement
 PBTl Prudhoe Bay Transmission Line
 Plan Cultural Resources Management Plan
 PMRE Port MacKenzie Rail Extension
 Project Alaska LNG Project
 PTTL Point Thompson Transmission Line
 ROW right-of-way
 SHPO State Historic Preservation Officer
 SOI Secretary of the Interior
 SRB&A Stephan R. Braund and Associates
 TAPS Trans-Alaska Pipeline System
 TLUI Traditional Land Use Inventory
 U.S. United States
 U.S.C. United States Code
 USACE United States Army Corps of Engineers
 USGS United States Geological Survey

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1. INTRODUCTION

The Alaska Gasline Development Corporation (AGDC) has received an Order from the Federal Energy Regulatory Commission (FERC) granting authorization under Section 3 of the Natural Gas Act for the Alaska LNG Project (Project), consisting a Gas Treatment Plant (GTP); a 1.0 mile long, 60-inch diameter Prudhoe Bay Unit Gas Transmission Line (PBTTL); a 62.5 mile long, 32-inch diameter Point Thomson Unit Gas Transmission Line (PTTL); a 806.9 mile 42-inch diameter natural gas pipeline (Mainline Pipeline) and associated aboveground facilities including eight compressor stations and a heater station; and a 20 million metric-ton per annum liquefaction facility (Liquefaction Facilities), including an LNG Plant and Marine Terminal Facilities. On March 6, 2020, FERC issued a Final Environmental Impact Statement (FEIS) for the Project in compliance with the requirements of the National Environmental Policy Act (NEPA). Under Section 15 of the Natural Gas Act, FERC serves as the lead federal agency for compliance with NEPA. Issuance of the federal authorization constitutes an undertaking subject to review under Section 106 of the National Historic Preservation Act (NHPA). On June 24, 2020, FERC issued a final Programmatic Agreement (PA), signed by Consulting Parties, that outlines responsibilities, requirements and standards for the Project relative to cultural resources.¹ The purpose of this Cultural Resources Management Plan (CRMP or Plan) is to support and guide compliance with the stipulations of the PA.

This Plan details the procedures that will be followed to implement the PA, including historic property identification, assessments of effect, and historic property treatment. It includes strategies for the phased identification, evaluation, avoidance, minimization, and mitigation of adverse effects to cultural resources eligible for the National Register of Historic Places (NRHP) (i.e., historic properties), as well as reporting requirements.

1.1. Project Description and Planning Background

A Liquefaction Facility would be constructed on the eastern shore of Cook Inlet, south of the existing Agrium fertilizer plant, on the Kenai Peninsula, approximately 3 miles southwest of Nikiski and 8.5 miles north of Kenai. The Liquefaction Facility would include the structures, equipment, underlying access rights, and all other associated systems for processing and liquefaction of natural gas, as well as storage and loading of LNG to LNG ships. The Liquefaction Facility would include three liquefaction trains combining to process up to approximately 20 million metric tons per annum of LNG. Two 240,000-cubic-meter tanks would be constructed to store the LNG. The Liquefaction Facility would be capable of accommodating two LNG ships concurrently.

In addition to the Liquefaction Facility, the Project would include the following interdependent facilities:

- Mainline Pipeline: A 42-inch-diameter buried natural gas pipeline approximately 807 miles in length would extend from the Liquefaction Facility to the GTP at PBU, including the structures,

¹ Cultural resources are any prehistoric or historic site, district, object, cultural feature, building or structure, cultural landscape, or traditional cultural property (including artifacts, records, and related material remains). Once cultural resources are identified in the APE, agencies and consulting parties consult to determine if any qualify as historic properties (FERC 2017).

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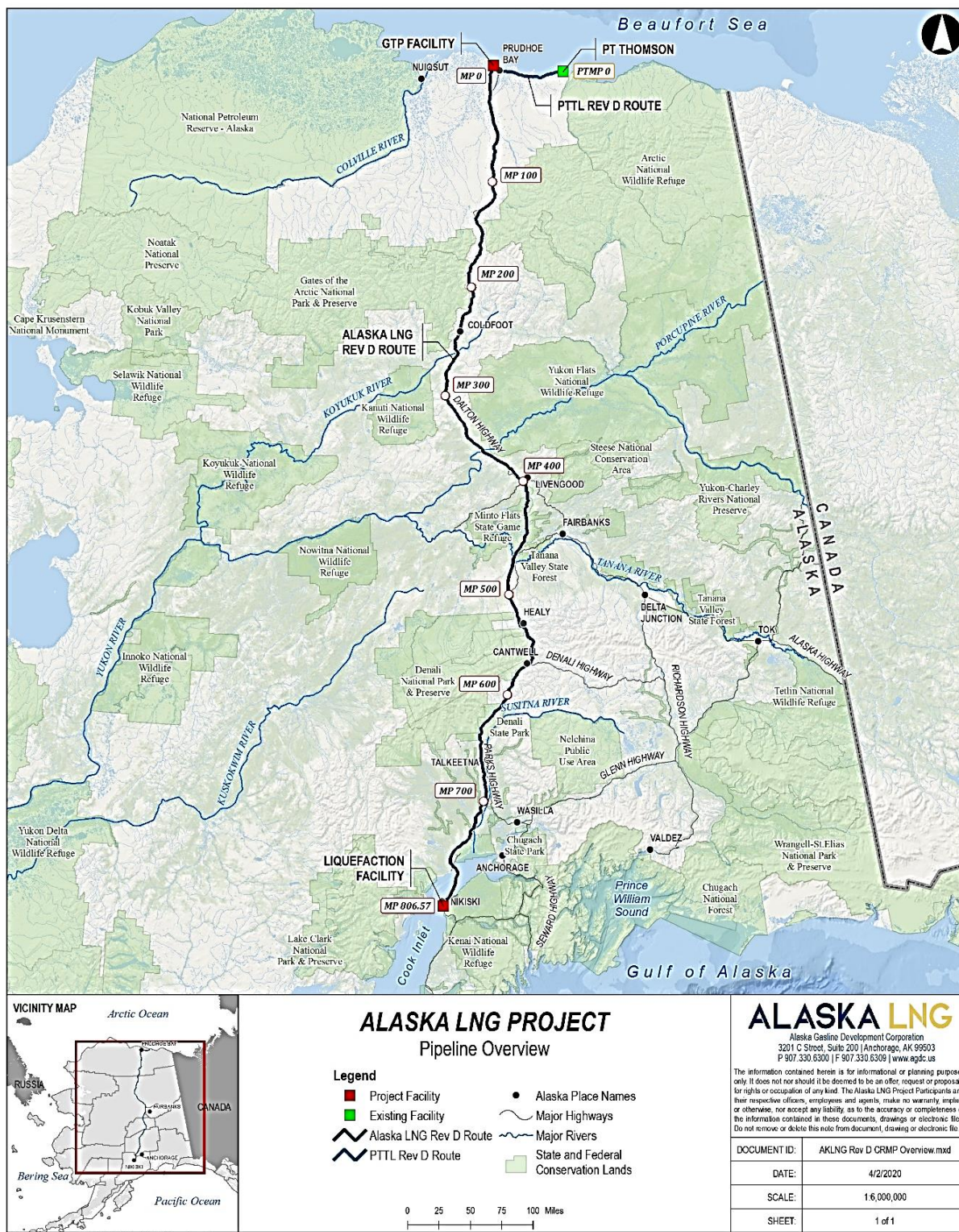
equipment, and other associated systems. The design anticipates eight compressor stations; one standalone heater station, and six cooling stations associated with six of the compressor stations; four meter stations; 30 mainline block valves; and associated infrastructure facilities. Associated infrastructure facilities include additional temporary workspace (ATWS), access roads, helipads, construction camps, pipe storage areas, material extraction sites, and material disposal sites.

- Along the Mainline Pipeline, the Project may also provide primary interconnection points, allowing for gas delivery to existing gas transmission and distribution systems, as well as secondary interconnection points with the potential to deliver gas to new service areas.
- GTP: A new GTP and associated facilities in the PBU would receive natural gas from the PBTL and the PTTL. The GTP would treat/process the natural gas for delivery into the Mainline Pipeline.
- PBTL: A new 60-inch natural gas transmission line would extend aboveground for 1 mile from the outlet flange of the PBU gas production facility to the inlet flange of the GTP.
- PTTL: A new 32-inch natural gas transmission line would extend aboveground 62.5 miles from the outlet flange of the PTU gas production facility to the inlet flange of the GTP.

A complete description of the Project is included in FERC's FEIS (<https://www.ferc.gov/industries-data/natural-gas/final-environmental-impact-statement-0>). As noted in Volume 1, Section 2.3, of the FEIS, project construction and commissioning is estimated to take about eight years, and work is anticipated to be in phases over that time period (Table 2.3.1 of the FEIS outlines the Project Construction Schedule, and Table 2.3.1.2 describes construction activities by year). Cultural resources work will also be phased, and will be done along a timeline that allows for completion of additional survey, evaluation and on-site mitigation prior to construction activities.

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Figure 1. Alaska LNG Project Overview



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1.2. Purpose of the Plan

The purpose of this Plan is to support and guide compliance with the stipulations of the PA. The PA identifies a phased and project-specific path for compliance with Section 106. It includes the stipulations regarding continued consultation, historic property identification, assessment, and dispute resolution, to demonstrate compliance with Section 106 and its implementing regulations at 36 Code of Federal Regulation (CFR) 800.

FERC is the lead federal agency for the purposes of compliance with Section 106 of the NHPA and, as mandated by federal law for the Section 106 process, contacted and/or consulted with federally-recognized tribes and other entities as outlined in the PA. Parties that signed the PA included FERC, the Advisory Council on Historic Preservation (ACHP), Alaska State Historic Preservation Officer (SHPO), Bureau of Land Management (BLM), National Park Service (NPS), Alaska Department of Natural Resources (ADNR), Cook Inlet Region, Inc. (CIRI), Native Village of Tyonek, Knik Tribe, and AGDC.

Federal agencies work with Consulting Parties to identify historic properties within their project's Area of Potential Effect (APE); determine if the project will have an adverse effect; and then resolve the adverse effect through avoidance, minimization, or mitigation. In accordance with the PA, the Consulting Parties (to date, those parties that signed the PA as noted above) will be kept informed on the Undertaking and on the implementation of the PA.

This Plan summarizes the cultural resources identification and Section 106 consultation efforts completed to date for the Project and outlines the work that will be completed to support and guide compliance with the PA, including avoidance, minimization and mitigation measures for the treatment of historic properties that will be adversely affected by the Project.

1.3. Organization of the Plan

Section 1 of this Plan presents an introduction to the Project and the purpose of the Plan, as well as a brief Project description. Section 2 presents the regulatory context for cultural resources, including descriptions of applicable federal, state, and local cultural resource laws, regulations, policies, and permit requirements. Section 3 discusses the status of Section 106 consultation for the Project and the PA, and then concludes with a description of the APE.

Section 4 presents an overview of the cultural resources work completed to date, including summaries of previous Project-related surveys as well as other field and literature review investigations that have taken place in the APE. Section 5 identifies the cultural resources documented within the APE, and their eligibility for listing in the NRHP. Section 6 presents a discussion of the status of survey within the APE and the procedures for identification of historic properties in accordance with the PA, including field survey, site evaluations, and assessments of Project effects to historic properties within the APE. Section 7 identifies strategies that AGDC will implement to avoid, minimize, and mitigate effects to historic properties within the APE. This includes a table listing historic properties within the direct APE and the proposed mitigation or minimization measures to be implemented at each site.

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Section 8 presents a table summarizing the actions, reports, and plans AGDC will complete to satisfy its responsibilities in the PA. Sections 9 and 10 present the Plans for Inadvertent Discovery of Cultural Resources and the Plan of Action for the Inadvertent Discovery of Human Remains, respectively.

The appendices included with this Plan contain tables and map books with more detailed information on the location of cultural resource investigations within the APE, and the location of documented cultural resource sites within the APE. Additionally, an environmental and cultural overview of the Project area is included.

2. REGULATORY BACKGROUND

Under Section 15 of the Natural Gas Act, FERC serves as the lead federal agency for compliance with NEPA, triggering compliance with and consultation under Section 106 of the NHPA. Additionally, sizeable portions of the Project will be constructed on federal land managed by the BLM and to a lesser degree the NPS and will require the issuance of Right-of-Way (ROW) leases, which are also subject to the Section 106 process. Partnership with the State of Alaska triggers Project compliance with Alaska Statute (AS) 41.35.070 under the Alaska Historic Preservation Act (AHPA). Additionally, portions of the Project are located within the North Slope Borough (NSB), which maintains a permitting process that requires cultural resources to be taken into account for projects within its jurisdiction.

Other federal laws and regulations govern the management of cultural resources and human remains located on federal land. These laws include the Archaeological Resources Protection Act (ARPA) and the Native American Graves Protection and Repatriation Act (NAGPRA).

2.1. Section 106 of the National Historic Preservation Act (NHPA)

54 U.S.C. 306108; Regulations at 36 CFR 800

Section 106 of the NHPA of 1966, as amended, and implementing regulations at 36 CFR 800, mandate that federal agencies must take into account the effects their undertakings may have on historic properties. The NHPA defines an undertaking as, “a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including...those requiring a Federal permit, license, or approval” (36 CFR 500.16(y)). Per 36 CFR 800.16 (l)(1) as amended, an “historic property” is defined as:

“...any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.”

Section 106 lays out a process which seeks to balance historic preservation concerns with the requirements of the undertaking through consultation among the responsible lead federal agency and other parties, including the SHPO, other federal land-managing agencies, federally recognized Tribes, and other Alaska Native groups, representatives of local government, and other interested parties. The goal

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of consultation is to identify historic properties potentially affected by the undertaking, assess the effects of the undertaking, and seek measures to avoid, minimize, or mitigate (resolve) adverse effects to historic properties.

Section 3 describes Section 106 work done for the Project, and the June 24, 2020 PA defines further Section 106 implementation, including responsibilities, requirements and standards.

2.2. Archaeological Resources Protection Act of 1979

Public Law 96-95 (16 U.S.C. 470aa-470mm); Regulations at 43 CFR 7

ARPA provides for the protection of archaeological resources on federal and Indian lands and requires federal land managers to issue permits for the excavation or removal of archaeological resources from lands under their jurisdiction. ARPA stipulates that appropriate Tribes be notified prior to permit issuance to determine if significant religious or cultural sites may be affected. ARPA prohibits the sale or trafficking of artifacts removed from federal lands across interstate or international boundaries; and levies both civil and criminal penalties for the illegal excavation damage or defacement of archaeological sites and for the sale or trafficking of cultural materials illegally removed from federal lands.

Archaeological resources, as defined by ARPA, consist of any material remains of past human life or activities which are of archaeological interest and are at least 100 years in age and the physical site, location, or context in which they are found. A resource is of archaeological interest if, through its scientific study and analysis, information or knowledge can be obtained concerning human life or activities. Paleontological specimens, deposits, and remains are not considered archaeological resources under ARPA unless they are located in an archaeological context.

ARPA stipulates information concerning the nature and location of any archaeological resource on federal or Indian lands may not be made available to the public unless it is determined that such disclosure would further the purposes of the Act and not create a risk of harm to the resources or to the site where such resources are located.

2.3. Native American Graves Protection and Repatriation Act

25 U.S.C. 3001 et seq.; Regulations at 43 CFR 10

NAGPRA, which was passed in 1990, requires federal agencies and museums receiving federal funds to inventory collections of human remains and associated funerary objects as well as consult with Indian tribes and Native Hawaiian organizations on the repatriation or disposition of these remains and objects. NAGPRA further requires that Indian tribes or Native Hawaiian organizations be consulted whenever archaeological investigations encounter, or are expected to encounter, Native American cultural items or when such items are unexpectedly discovered on federal or tribal lands.

NAGPRA contains provisions for both the intentional and inadvertent discovery of Native American cultural items on federal and tribal lands. Section 4 of NAGPRA establishes that illegal trafficking in human remains and cultural items may result in criminal penalties.

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2.4. The Alaska Historic Preservation Act

AHPA (AS 41.35) was implemented in 1971 and regulates the treatment of historic, prehistoric, and archaeological resources on State of Alaska land or lands threatened by public (state) construction. The statute establishes that it is state policy to, “preserve and protect the historic, prehistoric, and archeological resources of Alaska from loss, desecration, and destruction so that the scientific, historic, and cultural heritage embodied in these resources may pass undiminished to future generations” (AS 41.35.010) and establishes state title to all historic, prehistoric, and archaeological resources located on state-owned or state-controlled land. By definition this includes, “deposits, structures, ruins, sites, buildings, graves, artifacts, fossils, or other subjects of antiquity which provide information pertaining to the historical or prehistorical culture of people in the state as well as to the natural history of the state” (AS 41.35.230).

The statute compels the ADNR to identify historic, prehistoric, and archaeological resources (AS 41.35.070(a)) and to determine if public construction projects will have any adverse impacts on these resources in advance of an undertaking (AS 41.35.070(b-c)).

The statute prohibits removal or destruction of the historic and archaeological resources located on state-owned or state-controlled lands, including tidelands and submerged lands, without a state permit. Additionally, the statute prohibits the possession, selling, buying, or transport of these resources without a state permit.

2.5. North Slope Borough Regulations

The Land Management Regulation (LMR) Division of the NSB reviews land use permits and monitors compliance with applicable regulations. The NSB’s Iñupiat History, Language and Culture (IHLC) Division has oversight of the historic, archaeological, and cultural sites within the boundaries of the NSB, which are recorded in the Traditional Land Use Inventory (TLUI) database. The IHLC is tasked with ensuring that development activities do not impact cultural sites, activities, or social/cultural practices and values. To that end, land use permits processed by LMR require the completion of a Certificate of IHLC/TLUI Clearance Application (Form 500). The TLUI clearance process also requires that cultural resource studies be conducted in project areas, and that consultation with affected village tribal presidents and city mayors occur before permits are granted.

3. SECTION 106 CONSULTATION

During the Section 106 process, federal agencies work with Consulting Parties to identify historic properties within their project’s APE. They determine if projects will have an adverse effect on those properties and then resolve adverse effects through avoidance, minimization, or mitigation. FERC is the lead federal agency for the purposes of compliance with Section 106 for this Project.

Consultation began on the project in October of 2014, in the ‘prefile’ phase of the project. FERC has conducted consultation (36 CFR 800.2) with federal, state, and local land-managing agencies as well as Alaska Native Claims Settlement Act (ANCSA) corporations that own lands within the Project area.

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Additionally, FERC consulted with Tribes, Tribal entities, and other organizations and individuals with a demonstrated interest in the Project.

Volume 3, Section 4.13 of the FEIS (<https://www.ferc.gov/sites/default/files/2020-05/03%2520Alaska%2520LNG%2520FEIS%2520Volume%25203.pdf>) describes FERC's Section 106 work, including a summary of the cultural resource surveys and consultations completed for each major facility. Section 4.14 of that same volume summarizes FERC's evaluation of the project relative to customary and traditional use of wildlife resources for subsistence. Section 1.4 of the FEIS, Volume 1 (<https://www.ferc.gov/sites/default/files/2020-05/01%2520Alaska%2520LNG%2520FEIS%2520Volume%25201.pdf>) describes FERC's outreach on traditional knowledge. Table 1.4-1 in that section identifies issues and concerns raised during traditional knowledge workshops and identifies where information can be found in the FEIS to address each issue.

3.1. Programmatic Agreement

Because of the scale of the Project, as well as the phased nature of design, engineering, and construction, FERC prepared a PA for compliance with Section 106. In addition to FERC and AGDC, the parties that signed the PA (called the Consulting Parties, and including Signatories, Invited Signatories, and Concurring Parties to the PA) include the ACHP, Alaska SHPO, BLM, NPS, ADNR, Knik Tribe, Native Village of Tyonek, and CIRI.

As defined in the PA, AGDC is responsible for assisting FERC in meeting its obligations under Section 106. AGDC's responsibilities include developing the CRMP (PA Stipulation V), historic property identification (PA Stipulation IV.B), facilitating consultation (PA Stipulation IV.B.ii, IV.C.iv.), gathering information to recommend evaluations for identified cultural resources within the APE (PA Stipulation IV.C), making recommendations for eligibility of cultural resource sites for the NRHP within the APE (PA Stipulation IV.C.ii), submitting proposed assessments of effect (PA Stipulation IV.C.iii), avoiding adverse effects to historic properties, and working with FERC in consultation with others to resolve adverse effects when they cannot be avoided (PA Stipulation IV.D).

The PA also defines standards (PA Stipulation VI) for the Project, including:

- Identification and evaluation studies and any required treatment plans will be developed by and carried out by or under the direct supervision of a cultural resources professional(s) who meets, at a minimum, the Secretary of the Interior's (SOI) "Qualifications Standards" for Archeology and Historic Preservation (48 Federal Register 44738-9, September 29, 1983). It is recognized in the PA that tribes or other groups may have special expertise regarding places of traditional religious, spiritual, or cultural significance, or Traditional Cultural Properties, but these individuals or groups may not meet the SOI Qualification Standards. The FERC indicated it will equally consider and incorporate, if appropriate, special expertise into decisions regarding the implementation of the PA, consistent with 36 CFR 800.2(c)(2).
- Reporting requirements, identification and evaluation studies, any required treatment plans, and the resulting reports are required to be consistent with the SHPO's state guidelines, the Secretary of the Interior's "Standards and Guidelines" (48 Federal Register 44716-42, September 29, 1983), the ACHP's publication, "Treatment of Archaeological Properties," and the FERC's Office of Energy

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Projects’ “Guidelines for Reporting on Cultural Resources Investigations for Natural Gas Projects” (July 2017).

Should any signatory or consulting party to the PA object at any time to any actions proposed or the manner in which the terms of the PA are implemented, the FERC staff shall consult with such parties to resolve the objection (PA, Stipulation XI).

3.2. Future Consultation

A primary component of successful implementation of the PA will be continued consultation and coordination among the Consulting Parties, and other interested parties, as appropriate in accordance with the PA (Stipulation III). Appendix G identifies these entities and their primary point of contact for the Project. AGDC will maintain and update this information annually as part of the Annual Agreement Report (see Section 8.1).

FERC, with the assistance of AGDC, shall keep the Consulting Parties² informed on the undertaking and implementation of the PA (PA Stipulation III.A). AGDC will share information gathered during consultation with tribes or other entities that may be relevant to AGDC’s responsibilities under the PA. This includes, but is not limited to, information relevant to training curriculum, inventory efforts, requests to participate in monitoring activities, requests to accompany crews in the field, and requests to participate in tribal liaison activities. This information will also be provided to FERC staff.

In addition, AGDC will facilitate consultation with other interested parties, as appropriate, using input from the Consulting Parties and stakeholder engagement. This may include further consultation with tribes to identify places of traditional religious or cultural significance. Parties who were contacted for or participated in consultation for the FEIS or PA are listed in Appendix H. This list also includes parties and organizations may have an interest in future participation and should be used as a starting point for future consultation efforts.

3.3. Area of Potential Effect (APE)

Under 36 CFR 800.16(d), the APE is defined as, “the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historical properties, if any such properties exist.”

FERC, as the lead federal agency and in consultation with PA Signatories, has established the undertaking’s APE, as defined in 36 CFR 800.16(d), which encompasses direct and indirect effects on historic properties for agency-permitted alternatives.

The APE considered for direct effects includes the rights-of-way for construction of the PTTL, PBTL, and Mainline Pipeline; and the footprint of off-corridor facilities, ATWS, permanent and temporary access roads, and the GTP and Liquefaction Facilities, including submerged lands in the Beaufort Sea and Cook

² Signatories, Invited Signatories, and Concurring Parties (PA, Stipulation III.A). AGDC will maintain and update a list of these and other tribal organizations that wish to be consulted on the CRMP.

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Inlet. The area considered for indirect effects is a 1-mile buffer around Project components as described in the FEIS.

A map of the APE for the LNG Project is provided in Appendix C. To aid in the review and discussion of the APE, it is divided into three regions:

1. The Northern region includes the northernmost portion of the APE at West Dock through pipeline MP 169.83;
2. The Interior region includes the APE for project components located between pipeline MP 169.83 and MP 579.56; and
3. The Southern region includes the APE for Project components located between pipeline MP 579.56 to MP 806.57 and the southernmost portion of the APE at the Liquefaction Facility.

4. PREVIOUS CULTURAL RESOURCE INVESTIGATIONS IN THE PROJECT AREA

Multiple cultural resource investigations have been conducted in the APE of the Project. Much of the Mainline alignment north of Livengood was surveyed in the 1970s by archaeologists working on the Trans Alaska Pipeline System (TAPS). Other cultural resource investigations completed within the vicinity of the APE include surveys of sections of the Parks Highway (DePew and Pendleton 2003; Thompson 2011), surveys conducted for the Alaska Railroad Corporation (ARRC), surveys for the Point MacKenzie Rail Extension (Pipkin 2006; Stephen R. Braund and Associates [SRB&A] 2009, 2010), and surveys conducted in the greater Fairbanks area for various municipal and borough projects (Matheson and Haldeman 1981; Dixon 1993). Robust surveys for proprietary oil and gas pipeline projects, including the Alaska LNG Project and the Alaska Pipeline Project (APP) have been completed within or in the vicinity of the Mainline alignment as well as some off-ROW component areas (Alaska LNG 2016; Northern Land Use Research [NLUR/NHG] n.d.). A table of previous survey investigations conducted in the APE through the close of 2019 is provided in Appendix C.

4.1. Oil and Gas-Related Cultural Resource Surveys

There have been a number of linear surveys within the vicinity of the LNG study area, associated with oil and gas-related work. TAPS was one of the first projects to complete systematic cultural resource surveys before its construction in the 1970s. More than 370 archaeological sites were documented during the TAPS surveys between 1969 and 1975 (Cook 1977). These field studies, which coincide in part with the Project APE, were conducted by personnel from the University of Alaska Fairbanks and what is now Alaska Pacific University. Another project that undertook cultural resource field investigations in the 1970s was the Northwest Alaska Pipeline Project. This project, which sought to construct a pipeline from Prudhoe Bay to the United States–Canada border, coincided in part with the APE between Prudhoe Bay and Livengood, before turning east toward the border (Aigner and Gannon 1981).

In 2001, investigations for the Alaska Gas Producer’s Pipeline Team (AGPPT) pipeline were conducted along a corridor from Prudhoe Bay and the United States-Canada border at Port Alcan (Potter et al. 2001). The northern portion of the AGPPT route is similar to the northern portion of the APE. A proprietary

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predictive model, which used geomorphic variables to identify portions of the proposed route as either low potential for containing cultural resources, moderate potential for containing cultural resources, or two separate types of high potential for containing cultural resources, was used to structure the field investigations. Low potential areas generally received spot checks by helicopter survey. Moderate and high potential areas generally received pedestrian surveys and some level of shovel testing. Approximately 624 linear miles of the AGPPT route were surveyed and 122 cultural resource sites were identified and recorded during the surveys.

In 2008, Denali – the Alaska Gas Pipeline LLC (Denali Project) proposed to construct a gas pipeline from Prudhoe Bay to Alberta, Canada. The northern portion of the Denali Project route followed the northern portion of the AGPPT route, and coincides with much of the northern portion of the APE for the LNG project. Cultural resource field investigations completed for the Denali Project focused primarily on the portions of the route between Delta Junction and the Canadian border and thus do not overlap the APE. However, a pedestrian survey with discretionary subsurface shovel testing was conducted at the Denali Project’s proposed Gas Treatment Plant at Prudhoe Bay in 2009 (NLUR/NHG n.d.) in the vicinity of the APE.

Between 2010 and 2012, the APP applied a refined version of the proprietary predictive model developed for the AGPPT project to identify areas of cultural resources sensitivity for pedestrian survey and shovel testing. This project had two proposed corridors: one which ran from Prudhoe Bay to Valdez, the other which ran from Prudhoe Bay to Alberta. Similar to TAPS, AGPPT, and the Denali Project, portions of the APP project corridor coincided with the Project APE. These overlapping areas are identified in Appendix C.

4.1.1. Alaska LNG Surveys

AGDC (through cultural resource contractors) conducted extensive cultural resource surveys in the APE for the Project. Below is a list of reports submitted to FERC, the Alaska SHPO, the BLM, and/or the NPS that provided the results of the cultural resource studies conducted between 2013 and 2019.

1. 2010, 2011, and 2013 Phase I Cultural Resource Summary Report: Archaeological Survey and Site Documentation (USAKE-UR-SRZZZ-00-0017, AKLNG-5000-HSE-RTA-DOC-00320)
2. 2013 Phase I Cultural Resource Report: Archaeological Survey and Site Documentation on Bureau of Land Management Lands (USAKE-UR-SRZZZ-00-0020, AKLNG-5000-HSE-RTA-DOC-00323)
3. 2013 Phase I Cultural Resource Report: Archaeological Survey and Site Documentation (USAKE-UR-SRZZZ-00-0021, AKLNG-5000-HSE-RTA-DOC-00325)
4. 2013_Phase I State Report Errata Sheet_071416 (USAKE-UR-SRZZZ-00-0021,_AKLNG-5000-HSE-RTA-DOC-00545)
5. 2014 Phase I Cultural Resources Inventory Report for the Proposed Liquefaction Facility Component of the Alaska LNG Project, Nikiski, Alaska (USAI-UR-SRZZZ-00-000014-000, AKLNG-5000-HSE-RTA-DOC-00092)

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6. Alaska LNG 2014 Phase I Cultural Resource Report Federal Lands, Archaeological Survey and Site Documentation (USAI-UR-SRZZZ-00-000022-000, AKLNG-5000-HSE-RTA-DOC-00105)
7. Alaska LNG 2014 Phase I Cultural Resource Report, Archaeological Survey and Site Documentation (USAI-UR-SRZZZ-00-000023-000, AKLNG-5000-HSE-RTA-DOC-00106)
8. 2014 Cultural Resources Data Gap Analysis and Sensitivity Model (USAKE-UR-SRZZZ-00-0033, AKLNG-5000-HSE-RTA-DOC-00542)
9. 2015 Interim Ethnographic Report – Iñupiat (USAI-UR-BRZZZ-00-000003-000, AKLNG-5000-HSE-RTA-DOC-00208)
10. EXP 2015 Cultural Resource Advisor Summary Report, Alaska LNG (AKLNG-5000-HSE-RTA-DOC-00546)
11. Alaska LNG 2015 Phase I Cultural Resource Report: Archaeological Survey and Site Documentation (USAI-P1-SRZZZ-00-000008-000, AKLNG-5000-HSE-RTA-DOC-00531)
12. Alaska LNG 2015 Phase I Cultural Resource Report: Archaeological Survey and Site Documentation. Bureau of Land Management Lands (USAI-P1-SRZZZ-00-000009-000, AKLNG-5000-HSE-RTA-DOC-00532)
13. Alaska LNG 2015 Cultural Resource Evaluation Report (USAI-P1-SRZZZ-00-000007-000, AKLNG-5000-HSE-RTA-DOC-00044)
14. Alaska LNG 2015 Phase II Cultural Resource Report: Site Evaluations (USAI-P1-SRZZZ-00-000005-000, AKLNG-5000-HSE-RTA-DOC-00042)
15. Alaska LNG 2015 Phase II Cultural Resource Report: Site Evaluations. Bureau of Land Management Lands (USAI-P1-SRZZZ-00-000004-000, AKLNG-5000-HSE-RTA-DOC-00041)
16. 2015 Phase I Cultural Resources Inventory and Monitoring Report for the Proposed Liquefaction Facility Component of Alaska LNG, Nikiski, Alaska (USAI-UR-SRZZZ-00-000071-000, AKLNG-5000-HSE-RTA-DOC-00547)
17. Submerged Cultural Resources Review and Assessment, Cook Inlet, Alaska (USAI-PI-SRZZZ-90-000001-000, AKLNG-5000-HSE-RTA-DOC-00521).
18. 2016 Ethnographic Report (USAI-UR-SRZZZ-00-000093-000, AKLNG-5000-HSE-RTA-DOC-000270)
19. July 2016 Phase II Cultural Resource Report: Site Evaluations of BET-00081, BET-00139, BET-00201, BET-00213, CHN-00021, CHN-00076, CHN-00124, CHN-00125, FAI-02390, PSM-00188, PSM-00588, PSM-00600, TAL-00208, WIS-00436, and WIS-00437 (USAI-UR-SRZZZ-00-000089-000, AKLNG-5000-HSE-RTA-DOC-00266)
20. 2016 Phase I Cultural Resource Report: Archaeological Survey and Site Documentation (ARPA) (USAI-P1-SRZZZ-00-000017-000, AKLNG-5000-HSE-RTA-DOC-00051)
21. 2016 Phase I Cultural Resource Report: Archaeological Survey and Site Documentation. (USAI-P1-SRZZZ-00-000019-000, AKLNG-5000-HSE-RTA-DOC-00053)

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22. 2016 Phase II Cultural Resource Report: Site Evaluations (USAI-P1-SRZZZ-00-000020-000, AKLNG-5000-HSE-RTA-DOC-00534)
23. 2016 Phase II Cultural Resource Report: Site Evaluations on Bureau of Land Management Lands (USAI-P1-SRZZZ-00-000018-000, AKLNG-5000-HSE-RTA-DOC-00533)
24. 2018 Phase II Cultural Resource Report for Alaska LNG DNPP Alt 2: Survey, Site Documentation, and Site Evaluation (AKLNG-6010-CRM-RTA-DOC-00002)
25. 2019 Submerged Cultural Resources Review and Assessment, Cook Inlet, Alaska (AKLNG-6010-CRM-RTA-DOC-000003)

To aid in depicting the status of surveys completed within the current APE, and the specific survey method used, a mapbook displaying identified surveys within the Project footprint is provided in Appendix C. The mapbook also displays surveys completed for the APP (discussed above) and ASAP projects (Section 4.1.2), which have similar project footprints and activities.

Cultural resource field investigations for the Project were designed based on mapped sensitivity or the archaeological potential of areas along the Alaska LNG Project corridor. Pre-survey helicopter overflights were conducted to demarcate generally high or low potential survey segments and note any visible historic buildings or structures. A desktop review of the corridor, which applied a proprietary predictive model, identified areas with very low to no potential for cultural resources and those areas were eliminated from field surveys. The remaining areas were segregated into low potential (Type A) and high potential (Type B) areas, taking into account consideration of known site locations, land cover, slope, surface geology, soils, distance to water, distance to trails, and wildlife distributions. For Type A areas, helicopter or vehicular surveys of segments not previously surveyed were used to identify isolated higher-potential areas for targeted field survey. For Type B areas, field investigations were implemented, including pedestrian transect surveys with systematic shovel testing of previously un-surveyed areas, as well as targeted surveys where the previous surveys (e.g., Denali Project, AGPPT, APP, or ASAP) were considered inadequate.

The field investigations included a combination of walkover, surface inspection, and shovel testing. Of these techniques, walkover transects or vehicular/aerial surveys were used most frequently in Type A survey areas. Surveys included visual inspection of areas where previous surveys were conducted or where topography and vegetation cover suggested a lower potential for cultural resources. These areas comprised wetlands or inundated areas, previously disturbed locations, and areas where the slope exceeded 15 percent (%). Shovel testing was employed along with these methods for Type B areas. Shovel tests were placed at a maximum interval of 15 meters (m) and assigned a unique identification number. Location data were collected using handheld GPS units; both location data and survey results were recorded on survey forms. The shovel tests were excavated to a depth below which cultural materials might be expected, as little as 10 centimeters below surface in some areas, and more than 100 centimeters below surface in others such as alluvial and colluvial settings. To investigate strata below the base of standard shovel tests, 1-inch-diameter cores were used.

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Select prehistoric and historic period artifacts were collected from the surface and in shovel tests. Non-diagnostic prehistoric artifacts were recorded in the field using GPS, documented in field notes, and photographed. Diagnostic items and tools were collected for further analysis. Unique diagnostic historic artifacts were retained for analysis; however, non-diagnostic or mass-produced items were recorded and left at the site. For surveys conducted on State and Federal lands, a provisional artifact curation agreement was obtained with the University of Alaska, Museum of the North in Fairbanks for the eventual disposition of the collected artifacts. The disposition of artifacts collected from surveys on private lands was done in accordance with landowner requirements.

Investigations to determine the potential for deeply buried cultural deposits within the APE for the Alaska LNG Project footprint were initiated during the 2015 field season (Proue et al. 2016); excluding the Denali Route. Recent studies documented stratified Late Pleistocene and Holocene sites in dune fields of the Tanana Valley. Project representatives sought to investigate eolian landforms similar to these where deeply stratified cultural materials were recorded. Dune deposits in the lower Nenana River and the loess deposit mantling the lower foothills bordering the east side of the Tolovana River were selected for deep testing (Proue et al. 2016). Field investigations included excavation of 1-m x 1-m test units to a depth of at least 1.2 m into dune and loess deposits to search for cultural materials and to collect charcoal and sediment samples. Sediments were excavated with shovels and trowels, and then passed through 1/8-inch mesh screens. Deposits below 1.2 m were examined using a 1-inch soil probe with extensions to permit sampling to 5 m below ground surface (Proue et al. 2016).

Cultural resource surveys conducted in 2015 focused not only on the pipeline corridor, but also off-ROW facilities and previously documented cultural resources sites. In 2016, surveys focused primarily on the pipeline centerline of the Point Thomson Transmission Line, access routes, and off-ROW facilities. By the close of the 2016 field season, approximately 33,828 acres (comprising just over 50% of the Alaska LNG Project area) had been surveyed. Intensive Phase II surveys were completed for the project between 2015 and 2016, which resulted in the NRHP eligibility evaluation of more than 150 cultural resources (Alaska LNG 2016). Surveys of DNPP were conducted in late summer 2018 (AGDC 2018) and in 2019, submerged cultural resources in Cook Inlet were evaluated along the pipeline and pipelay corridors, bringing the total surveyed area to over 90% for the Alaska LNG project (AGDC 2019).

4.1.2. ASAP Surveys

AGDC (through cultural resource contractors) conducted aerial and pedestrian archaeological surveys in the APE of the Alaska Standalone Pipeline (ASAP) project route between 2009 and 2014. The surveys for that project were useful for the Alaska LNG project as well, because much of the footprint for the ASAP project aligns with the Project APE.

Results of the ASAP survey efforts are reported in the following AGDC reports, which have been submitted to the Alaska Office of History and Archaeology (OHA):

- Alaska Stand Alone Gas Pipeline Project/ASAP Cultural Resource Report for the 2010 and 2011 Field Seasons (AGDC 2012);

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- Alaska Stand Alone Gas Pipeline Project/ASAP Cultural Resource Report for the 2013 Field Season (AGDC 2014a);
- Alaska Stand Alone Gas Pipeline Project/ASAP Cultural Resource Report for the 2013 Field Season North of Livengood (AGDC 2014b);
- Alaska Stand Alone Gas Pipeline Project/ASAP Cultural Resource Report for the 2014 Field Season (AGDC 2015b); and
- Letter Report from Marko Radonich to Earle Williams (BLM 2012).

In 2009, AGDC conducted aerial and vehicular (windshield) reconnaissance surveys for the entire then-Mainline alignment, at the time referred to as the ASAP ENSTAR Bullet Line; however, no pedestrian survey was conducted at that time. The goal of the 2009 surveys was to identify pedestrian survey target areas for future years, and understand the general topography of the Project as a whole (AGDC 2012).

In 2010, AGDC instituted pedestrian survey methods and completed a pedestrian reconnaissance survey within a 300-foot corridor along 75 miles of the then-Mainline alignment. The 2010 survey occurred at 10 locations between the North Slope, Happy Valley, and the Trapper Creek area. The survey was conducted in parallel transects, spaced 50 feet apart; systematic shovel testing occurred at 1,000-foot intervals in areas considered to have high potential for cultural resources. The 2010 pedestrian reconnaissance survey resulted in the identification of 10 new cultural resource sites (AGDC 2013).

Pedestrian surveys continued in 2011, when AGDC conducted pedestrian reconnaissance survey with discretionary subsurface (shovel) testing within a 200-foot corridor along approximately 243 miles of the then-Mainline alignment and Fairbanks Lateral alignment. The Mainline alignment survey was focused on the portion of the Mainline south of Fairbanks. AGDC also completed 50 miles of aerial reconnaissance and limited pedestrian survey in the Minto Flats area (AGDC 2013). In addition to the alignment survey, AGDC conducted archaeological testing at proposed borehole locations between Healy and Willow. The tested boreholes were located both within and outside of the 2011 alignment survey targets.

In 2012, pedestrian survey and shovel testing was completed at three proposed borehole locations at the Mainline alignment's crossing at the Yukon River. No cultural resources were identified as a result of this testing (BLM 2012).

In 2013, AGDC conducted pedestrian reconnaissance surveys with discretionary subsurface (shovel) testing along a 200-foot-wide corridor centered along 88 miles of the then-Mainline alignment. A survey was completed at various places from Livengood south, and in a 5-mile section north of Livengood, near Grayling Lake. No new cultural resources were identified at Grayling Lake, 13 new cultural resources were documented south of Livengood, and 12 previously-recorded Alaska Heritage Resources Survey (AHRs) sites were revisited (AGDC 2014a).

In 2014, SHPO and federal land managing agencies expressed concern regarding the number of intensive surveys occurring for oil and gas projects, and the potential impacts these surveys were having on cultural resources. Consequently, AGDC refined survey methods to create as little an impact as possible and still collect enough information about the location and nature of cultural resources along the Mainline

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alignment. These methods, including Levels II and III survey methods, were employed for surveys conducted in 2014.

The overall intent of the 2014 field surveys was to identify the location, nature, and extent of cultural resources along the Mainline alignment for the purpose of better project consultation and planning. Because the survey area spanned a large part of the state and crossed many diverse natural settings, the methods and strategies of cultural resource surveys varied from place to place. Areas were judged as having high, medium, or low probability for cultural resources based on several factors, including landform, proximity to other known cultural resources, and proximity to natural resources such as waterbodies, or concentrations of subsistence fish, plants, and wildlife species.

Intensive survey and subsurface testing was not conducted in areas with high concentrations of previously documented sites (e.g., Galbraith Lake, Gallagher Flint Station, etc.), as numerous sites had already been identified at these locations and additional intensive survey methods presented the potential to adversely affect the sites.

Survey methods included a variety of Level II reconnaissance, and Level III pedestrian intensive survey strategies. Pedestrian survey was conducted by crews of three to five people. Aerial survey was conducted with a crew of three archaeologists. Windshield survey was conducted by a group of four archaeologists riding together in a car.

Level II reconnaissance survey involved a general visual inspection of an area by means of helicopter, automobile (windshield), and non-systematic pedestrian access. Reconnaissance-level surveys involved gathering general information about an area of low to moderately low potential, or in areas of moderate potential that were not readily accessible by foot. When done by air, surveyors flew in a helicopter traveling low and slow enough to visually inspect the survey area terrain for indications of cultural resources. Windshield reconnaissance was also done slowly in low potential areas where the survey area was visible from the roadside. Windshield and aerial reconnaissance survey provided a basis for identification of higher potential areas for pedestrian survey.

Level III pedestrian-intensive survey involved a systematic mode of visual inspection where, whenever possible, the crew walked 15-m parallel transects. Where parallel transects were not possible, adapted survey strategies were used to take advantage of exposed ground, areas with good ground visibility and access. Pedestrian survey methods were used for areas of medium to high potential that could be accessed on foot. Pedestrian-intensive survey involved the discretionary, non-systematic excavation of subsurface shovel tests in areas of high potential or to define the boundaries of a site.

During both reconnaissance and pedestrian intensive surveys, if potential for finding cultural resources appeared to increase, methods for investigation and testing were intensified at the discretion of the field crew chief. Subsurface testing also occurred at the discretion of the crew chief, primarily as a means to intensively investigate areas of high potential or define the boundaries of a site.

Survey areas and efforts were documented with digital photographs, Garmin Global Positioning Systems (GPS), GPS-enabled tablets, hand-drawn maps using compass and measuring tape, and in the notes

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handwritten daily by each field crew member. Observed cultural resources and subsurface testing were described in field notes, photographed, and geo-located using GPS.

A total of 404.5 miles of the ASAP Mainline alignment were surveyed in 2014, including 252 miles of Level II aerial reconnaissance, 77.5 miles of Level II windshield reconnaissance, and 76 miles of Level III pedestrian intensive. A total of 24 new cultural resource sites were documented.

4.2. Other Notable Surveys

4.2.1. Northern Region

In addition to the aforementioned oil and gas-related surveys, a number of cultural resource investigations have been conducted along the Dalton Highway in association with highway maintenance and improvements, including proposed material sources (DePew 2001; DePew and Pendleton 2003; Gerlach et al. 2001; Thompson 2002, 2013a, 2013b). Many of these surveys covered portions of off-ROW LNG Project components located adjacent to the Dalton Highway, and employed similar survey methods as those used during the ASAP and Alaska LNG Project cultural resources surveys. In addition, BLM has conducted numerous discrete surveys in the APE in association with mining permits and other assessments (Adkins 2000a-g; Mills 2003; Smith 2004).

4.2.2. Interior Region

Notable cultural resource investigations that have occurred within the APE in the Interior Region, and which have employed methods similar to the ASAP and Alaska LNG projects, include the Tower Hill Mines surveys near Livengood (Proue et al. 2014, 2013), surveys associated with maintenance and operation of the ARRC (Cultural Resource Consultants, LLC 2005; Kriz 2004; Reuther et al. 2003; Potter et al. 2004; Williams and Ream 2005; Yarborough 2005), and surveys associated with electric distribution lines (Potter and Bowers 2004).

4.2.3. Southcentral Region

The Southcentral Region has been the focus of a number of surveys associated with Parks Highway improvement projects (Thompson 2011) as well as Matanuska-Susitna Borough-sponsored cultural resource investigations. Surveys associated with the Port MacKenzie Rail Extension (PMRE) project, however, are one of the largest and most noteworthy investigations overlapping the APE. Surveys for PMRE were conducted primarily in 2008 (SRB&A 2010) and resulted in the identification of 42 cultural resources.

5. CULTURAL RESOURCES IN THE APE

This section identifies and describes the cultural resources in the Project APE. Appendix A lists identified cultural resources in the direct APE, including the approximate route milepost, the site's AHRs number, NRHP eligibility status, a site description and an estimated period for start of construction. The Northern region includes the GTP, PTTL and PBTL and the Mainline from MP 0 to MP 169.83, at Atigun Pass. The Interior region runs from MP 169.83 to MP 579.56, near Broad Pass. The Southcentral region begins at

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pipeline MP 579.56 and continues to the pipeline's terminus at MP 806.57 and also includes the Liquefaction Facility. These regions correspond to the regional divisions used in the environmental and cultural context overview (Appendix E) and to regional divisions identified in cultural resources survey reports prepared previously. In addition, a mapbook displaying the location of each cultural resource in relation to the APE is attached in Appendix C.

The Alaska OHA maintains a central data repository of cultural resources that have been documented within the state. The inventory, known as the AHRS, includes more than 45,000 reported resources, including archaeological sites, buildings, structures, objects, and districts (OHA 2018). While much of the LNG APE has received some level of previous cultural resource survey, only a portion of Alaska in general has been surveyed for cultural resources. Consequently, when reviewing the AHRS inventory, a lack of reported sites in any given area in the state may not indicate the area is devoid of cultural resources. Furthermore, as technology for cultural resource surveys and mapping has changed, precision of site location mapping has improved. Resources documented prior to the advent of GPS may not be mapped in the AHRS at their actual locations, and resources documented as discrete points in the AHRS may in fact cover larger areas.

Paleontological resources are considered natural resources and are not subject to Section 106 consideration. However, the State of Alaska includes fossils and resources important to the natural history of the state in its definition of "historic, prehistoric, and archaeological resources" (AS 41.35.230), thus they are included in the AHRS inventory and shown in Appendix A.

Examination of AHRS records revealed that a total of 965 documented AHRS sites are located within the APE for the Project. Of the AHRS sites, 140 are within the direct APE, and the remaining 825 are within the indirect APE. NRHP eligibility status for the direct APE sites is shown in Appendix A, and summarized in Table 1. Sites with insufficient data and sites that have not yet been evaluated will be addressed as defined under the terms of the PA and CRMP.

Table 1. Number of Cultural Resources in the Direct APE

NRHP Status	Total Number of Sites in Direct APE	Percentage of Total
Determined Eligible and/or Listed	57	41
Treated as Eligible	5	3.5
National Historic Landmark	1	< 1
Eligibility Pending with SHPO	6	4
Not Eligible	52	37
Unevaluated (Paleontological)	0	0
Insufficient Data or Unevaluated	19	13.5

Documented linear cultural resources, such as trails and roads, are designated with a different AHRS number for each map quadrangle through which they cross. Some of these linear resources cross the direct APE multiple times, and have multiple AHRS designations, but represent a single resource. Similarly, some AHRS sites and districts are large polygons that may be present in both the direct and indirect APE.

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Notable site concentrations along the Mainline alignment and off-ROW project components have been identified and are detailed in Appendix D.

6. HISTORIC PROPERTY IDENTIFICATION AND ASSESSMENT OF EFFECT

6.1. Survey Progress and Data Gap Analyses

To date approximately 96% of the Mainline ROW has been surveyed, 68.12% of which was surveyed at the pedestrian level. Approximately 50% of the direct APE for off-ROW components, including but not limited to temporary workspaces, camps, and HDD entry and exit pads, has also been surveyed using pedestrian, windshield, aerial, and marine methodology. Table 2 delineates the amount and type of survey that has occurred along the Mainline ROW footprint. Table 3 delineates the amount and type of survey that has occurred for off-ROW project components. The amount and type of survey that has occurred within the direct APE for each type of project component, including off-ROW components, is delineated in Appendix F.

Table 2. Percentage of Survey by Region of ROW Components through December 31, 2019

	Pedestrian		Vehicle		Aerial		Marine		Desktop		Unsurveyed		Total Acres	Total Percentage
Region	Acres	Percentage	Acres	Percentage	Acres	Percentage	Acres	Percentage	Acres	Percentage	Acres	Percentage		
Northern														
Alaska LNG Rev D	1,716.3	57.4%	13.4	0.4%	1,198.4	40.1%	--	0.0%	62.3	2.1%	1.0	0.0%	2,991.4	100.0%
PTTL Rev D	18.8	1.1%	--	0.0%	1,491.0	86.9%	--	0.0%	0.0	0.0%	205.8	12.0%	1,715.7	100.0%
Northern Total	1,735.1	36.9%	13.4	0.3%	2,689.4	57.1%	--	0.0%	62.3	1.3%	206.8	4.4%	4,707.0	100.0%
Interior														
Alaska LNG Rev D	5,843.5	77.8%	544.6	7.3%	740.6	9.9%	--	0.0%	161.9	2.2%	219.1	2.9%	7,509.7	100.0%
Interior Total	5,843.5	77.8%	544.6	7.3%	740.6	9.9%	--	0.0%	161.9	2.2%	219.1	2.9%	7,509.7	100.0%
Southcentral														
Alaska LNG Rev D	2,433.5	5.8%	409.6	1.0%	767.8	1.8%	8,813.1	21.0%	29,334.6	69.8%	248.9	0.6%	42,007.5	100.0%
Southcentral Total	2,433.5	5.8%	409.6	1.0%	767.8	1.8%	8,813.1	21.0%	29,334.6	69.8%	248.9	0.6%	42,007.5	100.0%
Grand Total	10,012.1	18.5%	967.6	1.8%	4,197.9	7.7%	8,813.1	16.3%	29,558.9	54.5%	674.8	1.2%	54,224.2	100.0%

Note:
 ROW Components include the pipeline Construction and Operational ROW, Additional Temporary Workspace (ATWS), Compressor Stations, Meter Stations, Mainline Block Valves and Helipads.
 Based on Alaska LNG project footprint, Mainline Rev D and PTTL Rev D, includes all acreage required for construction.
 Acreage for Mainline Meter Stations within the GTP and LNG Facilities, and for Block Valves and Compressor Station Camps within Compressor Station Facilities is set to 0.00 acres.

Table 3. Percentage of Survey by Region of Off-ROW Components through December 31, 2019

	Pedestrian		Vehicle		Aerial		Marine		Desktop		Unsurveyed		Total Acres	Total Percentage
Region	Acres	Percentage	Acres	Percentage	Acres	Percentage	Acres	Percentage	Acres	Percentage	Acres	Percentage		
Northern														
Alaska LNG Rev D	886.6	28.2%	66.2	2.1%	1,613.5	51.3%	--	0.0%	389.0	12.4%	189.3	6.0%	3,144.7	100.0%
PTTL Rev D	0.3	0.1%	--	0.0%	317.1	96.4%	--	0.0%	--	0.0%	11.4	3.5%	328.8	100.0%
Northern Total	887.0	25.5%	66.2	1.9%	1,930.6	55.6%	--	0.0%	389.0	11.2%	200.8	5.8%	3,473.6	100.0%
Interior														
Alaska LNG Rev D	3,934.5	68.8%	288.5	5.0%	113.7	2.0%	--	0.0%	63.4	1.1%	1,321.2	23.1%	5,721.4	100.0%
Interior Total	3,934.5	68.8%	288.5	5.0%	113.7	2.0%	--	0.0%	63.4	1.1%	1,321.2	23.1%	5,721.4	100.0%
Southcentral														
Alaska LNG Rev D	1,504.9	39.4%	64.9	1.7%	310.6	8.1%	87.7	2.3%	498.8	13.1%	1,352.2	35.4%	3,819.1	100.0%
Southcentral Total	1,504.9	39.4%	64.9	1.7%	310.6	8.1%	87.7	2.3%	498.8	13.1%	1,352.2	35.4%	3,819.1	100.0%
Grand Total	6,326.4	48.6%	419.6	3.2%	2,355.0	18.1%	87.7	0.7%	951.2	7.3%	2,874.1	22.1%	13,014.0	100.0%

Note:
Off-ROW Components include Gas Treatment Plant (GTP), Liquefaction Facility, Access Roads, Camps, Pipe Storage Yards, Borrow Sources, Disposal Sites, Mainline MOF, DJ Yards and Railroad Pads/Sidings.
Based on Alaska LNG project footprint, Mainline Rev D and PTTL Rev D, includes all acreage required for construction.
Acreage for Mainline Meter Stations within the GTP and LNG Facilities, and for Block Valves and Compressor Station Camps within Compressor Station Facilities is set to 0.00 acres.

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A significant body of knowledge has been collected within the project's direct APE as noted in Tables 1 - 3. Remaining survey to be done in the direct APE is generally in small, distributed parcels and is associated with land ownership status and site type. These areas are shown in red in the map books in Appendix B. In addition, archival research and consideration of ethnographic data may be needed, depending on the location and activities, to evaluate the indirect APE.

To determine locations and priorities for additional evaluations, survey and testing, AGDC will provide Data Gap Analyses and identify survey targets and unevaluated cultural resources within the APE for each Construction Spread. Data Gap Analyses for each construction spread can be conducted concurrently or separately, as project phasing allows. These Data Gap Analyses will include:

- A general discussion and review of existing cultural resources data relevant to the project;
- A general discussion of outstanding or unavailable data recommended for compliance;
- Methods for determining and identifying data gaps;
- Discussion of key cultural resource data sources and assessment of their reliability, suitability, adequacy, applicability and completeness with respect to the LNG project;
- Discussion of the nature, magnitude, and location of areas where data gaps exist and priorities for data acquisition in these areas;
- Recommendations for outstanding field, archival and ethnographic data acquisition and analysis;
- Methodology for conducting outstanding field, archival and ethnographic data acquisition and analysis; and
- Maps identifying the spatial extent of data gaps and locations where field investigation is planned.

AGDC will complete the Data Gap Analysis for the first construction spread within 6 months of the Final Investment Decision (FID) or AGDC Board-approved Authorization for Expenditures (AFE) and submit it to FERC for distribution to the Consulting Parties, for review and comment. Consulting Parties will have 30 calendar days to review and provide comment on each submitted Data Gap Analysis. AGDC will address comments and make revisions within 30 calendar days of the closure of the comment period, or as negotiated. If no comments are received within the 30 calendar day review period, the Data Gap Analysis for that construction spread will be considered complete. Review and revision period lengths may be extended through negotiation.

6.2. Annual Cultural Resources Work Plans

AGDC will complete an Annual Cultural Resources Work Plan, informed by the Data Gap Analysis. The Annual Cultural Resources Work Plan will detail the proposed cultural resource survey and evaluation, the methods to be used, the schedule for completion, and field plans for completing the survey and NRHP evaluations for the upcoming year. Should that year's work plan include on-site mitigation and monitoring targets (see Section 7), these activities will also be included in the Annual Cultural Resources Work Plan. The Annual Cultural Resources Work Plan will also include details and copies of the curation agreement(s)

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and a description of curation methods for artifacts that may be collected during survey or treatment activities over the course of the Project. Collections and curation will be managed as defined in the PA (Stipulation VII).

AGDC will develop the Annual Cultural Resources Work Plan in consultation with the Consulting Parties and will seek to include other interested parties in plan development as appropriate. Specifically, AGDC will seek to include tribal participation in field survey efforts. Consulting Parties will have 30 calendar days to review and provide comment. AGDC will address comments and revise the report within 30 calendar days of the closure of the comment period, or as negotiated. If no comments are received within the 30 calendar day review period, concurrence will be assumed and the Annual Cultural Resources Work Plan will be considered complete.

6.3. NRHP Evaluations

NRHP evaluations of previously documented and newly identified cultural resources will be completed per 36 CFR 63, NPS Bulletin 15, “How to Apply the National Register Criteria for Evaluation.” Per the terms of the PA (IV.C.ii), AGDC will provide NRHP eligibility recommendations to the FERC staff, SHPO, BLM, NPS and tribes and other interested parties as appropriate (PA, IV.C.ii) for review and comment period of 30 days. Eligibility recommendations may be submitted for multiple Construction Spreads concurrently, as appropriate according to the Annual Cultural Resources Work Plan. FERC must receive concurrence from BLM and NPS on determinations of eligibility for resources under their jurisdiction.

6.4. Assessments of Effect

Per the terms of the PA (IV.C.iii), AGDC will submit proposed assessments of effect to FERC staff, SHPO, BLM, NPS, tribes, and other interested parties as appropriate, for a review and comment period of 30 days. The FERC will consider all timely comments received before consulting with SHPO for final determinations of effect. The SHPO will have 30 days to respond.

For adversely effected historic properties, the finding of effect will include recommended resolution measures. Findings of effect may be submitted for multiple Construction Spreads concurrently, as appropriate according to the Annual Cultural Resources Work Plan. FERC must receive concurrence from BLM and NPS on findings of effect and recommendations for resources under their jurisdiction. The findings of effect will inform the Avoidance, Minimization, and Treatment plan for historic properties within any given Construction Spread (see Section 7).

7. HISTORIC PROPERTIES TREATMENT AND MITIGATION

Cultural resources within the direct APE have the potential to be affected primarily by ground-disturbing activities associated with Project construction, long-term operation and maintenance, and reclamation activities, while those resources in the indirect APE could be affected by long-term visual, audible, and atmospheric changes introduced by the construction of aboveground permanent facilities, changes to vegetation from buried project components, or increased access to areas previously not easily accessed.

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This section of the CRMP describes steps and protocols to be followed to resolve adverse effects as required by the PA, Stipulation IV.D.

To the extent practicable, AGDC will implement measures to avoid and minimize adverse effects to historic properties (PA Stipulation IV.D.i). AGDC has sought to avoid impacts to cultural resources throughout project planning, and in some cases has rerouted the alignments, abandoned proposed material sites, and moved the location of project facilities to do so. Examples include modification of the Mainline alignment to avoid culturally sensitive areas in the vicinity of Montana Creek, and the deletion of Access Road AR-BV-N-718.7, to avoid culturally sensitive areas near Redshirt and Cow Lakes.

In general, avoidance will be the preferred treatment. Historic properties within the direct APE that can be avoided will be given a minimum 500-foot-diameter buffer, or a buffer as otherwise agreed with the Consulting Parties. The buffer will be placed from the outside edge of the historic property's boundary and marked for avoidance at least 15 calendar days prior to commencement of construction activities. Marking will be either physical flagging or a means of electronically identifying sites and will remain in place until construction activities have ceased in the area. Additionally, professionals meeting the appropriate qualification standards (see PA Stipulation VI.A) will be tasked with monitoring the avoided properties during construction, through a series of drop-in site visits, to confirm marked areas are being avoided (see Section 7.3). Minimization measures may include construction in winter when the ground is frozen and covered with a layer of snow sufficient to protect underlying resources, and/or reconfiguration of workspaces, and flagging and necking down of construction areas to avoid nearby sites. Mitigation and/or monitoring will be conducted when ground-disturbing construction activities are located within 500 feet of historic properties that may be adversely affected by ground-disturbing activities (PA Stipulation I.D.). AGDC shall not proceed on portions of the Project until the applicable provisions of the PA and this CRMP, including development and implementation of on-site measures of required treatment plans to resolve adverse effects, have been carried out for that location and AGDC has received notice to proceed from FERC.

7.1. Standard Site Treatment Plans

Prior to development of detailed Avoidance, Minimization and Treatment Plans, and to increase efficiency during planning for each Construction Spread, AGDC will draft Standard Site Treatment Plans for site types such as surface lithic scatters, deeply buried sites, or historic cabins within each region (see also Section 7.6). Standard Site Treatment Plans will incorporate regional differences, including regional research questions and regional methods for field investigation. The Standard Site Treatment Plans will be informed by the resolution of effects submitted and agreed to by the Consulting parties as part of the assessment of effects (Section 6.4, above) and will include but are not limited to proposed mitigation methods, research questions and design, methods for field investigation and lab analysis (including remote sensing techniques and advanced dating or analytical techniques as appropriate), artifact collection and cataloging procedures, deliverables and copies of curation agreements. AGDC will draft the Standard Site Treatment Plans within 6 months of the FID/AFE and distribute to Consulting Parties, for review and comment. Consulting Parties will have 30 calendar days to review and provide comment. AGDC will address comments and revise the plan within 30 calendar days of the closure of the comment period,

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or as negotiated. If no comments are received within the 30 calendar day review period, the plan will be considered complete. Standard Site Treatment Plans can be submitted for each region separately, or concurrently based on activity schedules.

7.2. Avoidance, Minimization, and Treatment Plans

Prior to initiation of construction activities within a Construction Spread, AGDC will draft an Avoidance, Minimization, and Treatment Plan. The basis for avoidance, minimization, or mitigation measures will be the resolution of effects submitted and agreed to by Consulting Parties as part of the finding of effects for sites within a given Construction Spread (See Section 6.4). The Avoidance, Minimization, and Treatment Plans will, at minimum:

- identify historic properties within the APE for that Construction Spread,
- list the historic properties proposed for avoidance,
- list the historic properties proposed for monitoring, and define the monitoring plan,
- identify the selected Standard Site Treatment Plan for each adversely affected historic property within the Construction Spread,
- identify define site-specific minimization or mitigation measures, and treatment plans (non-standard), as necessary and appropriate, for adversely affected historic properties that demand a unique and individualized treatment approach, and/or
- a schedule for completion, deliverables, and reporting timelines.

AGDC will submit Avoidance, Minimization, and Treatment Plans to the SHPO, BLM, NPS, and ADNR, as appropriate, and to the FERC, for a 30-day review period (PA Stipulation IV.D.iii). If no comments are received within the comment period, the plan will be considered complete. FERC will consider timely comments and may require AGDC to incorporate changes to the treatment plans. If so, AGDC will address comments and revise the plan within 30 calendar days of the closure of the comment period, for resubmittal and concurrence from the SHPO and land manager, as appropriate (PA Stipulation IV.D.iii.b). Each Avoidance, Minimization, and Treatment Plan will be drafted no less than 120 days prior to the start of construction activities in that location, to allow for adequate review, consultation, and concurrence.

The Avoidance, Minimization and Treatment Plans will inform both the Annual Cultural Resources Work Plan (to incorporate proposed avoidance, minimization, and treatment for historic properties that may have been identified during the previous year of cultural resources survey), and the Annual Agreement Report. Results of Plan implementation for each Construction Spread, including documentation of any treatment or other mitigation approaches at individual or groups of sites will be submitted as part of the Annual Agreement and Annual Treatment Reports, unless special reporting requirements are identified as part of site-specific mitigation/treatment plans.

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7.3. Monitoring

The Avoidance, Minimization, and Treatment Plans for each Construction Spread will also incorporate monitoring plans, where appropriate. Monitoring is defined as active observation of earth-moving or other work that could adversely affect historic properties within the APE. Many of these monitoring procedures will be shared across each plan. The monitoring plan will delineate the locations wherein construction must be monitored by an SOI-qualified professional, the type of activities that will be monitored, how and when monitoring will occur, the type(s) of cultural material that may be encountered during construction in that area, and the specific stipulations and thresholds for stopping construction, protecting the resource, notification, consultation, evaluation and resuming work. Monitoring plans developed as part of the Avoidance, Minimization, and Treatment Plan for each Construction Spread will endeavor to involve Tribal liaisons in monitoring activities. A summary of annual monitoring results will be included in the Annual Agreement Report and Annual Report.

7.3.1. Drop-In Monitoring

Drop-in monitoring will occur during construction to confirm historic properties marked for avoidance are being avoided, and the agreed buffer around historic properties is being maintained. Monitoring visits to avoid historic properties by SOI-qualified professional(s) will occur no less than once at the beginning of a construction period and once at the end of construction activities, including following winter construction activities. Areas within a Construction Spread identified in the Annual Cultural Resources Work Plans and/or Avoidance, Minimization, and Treatment Plans as highly probable to contain NRHP-eligible archaeological resources will be monitored during ground-disturbing activities.

7.3.2. Pre-Construction Meeting

Cultural resource monitors shall attend the pre-construction meeting for each Construction Spread. The meeting shall be held prior to the commencement of ground-disturbing activity or other work associated with construction that could adversely affect historic properties. The pre-construction meeting shall also be attended by the Project Site Manager, crew supervisors, and contractors. The corresponding landowner and Tribal liaisons participating in the monitoring shall also be invited to attend. The Project Site Manager, in cooperation with the Cultural Resource Monitor, will present the boundaries of the area to be monitored, and explain the monitoring procedures and stop work authorities to the meeting attendees. Meetings may be conducted in person or electronically.

7.4. Contractor Cultural Resource Awareness Training Program

AGDC will develop cultural resource awareness training materials. The training program will teach contractors and their employees:

- how to recognize cultural resources they may come into contact with,
- why it is important to protect cultural resources,
- what to expect when working in the area of cultural resources (both those that are marked off and those that might be being monitored during construction), and

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- how to implement the Inadvertent Discovery procedures. In particular, training will cover how to recognize and sensitively treat burials and cremated remains.

The training curriculum will be developed in consultation with the Consulting Parties, and AGDC will seek Tribal participation in development of the curriculum. AGDC will then develop the cultural resource awareness training, provide train-the-trainer sessions, and make the training materials available to relevant AGDC and construction personnel working on the Project. Training instruction may be in person, electronic, or a combination of methods.

Contractors will be required to provide training to field and other relevant personnel, and AGDC will have an assurance process in place to confirm training was provided as planned.

At least 90 calendar days prior to construction initiation, AGDC will provide FERC and SHPO a copy of the training curriculum and schedule for instruction, for review. FERC and SHPO will have 30 calendar days to review and provide comment. AGDC will address comments and revise the plan within 15 calendar days of the closure of the comment period, or as negotiated.

7.5. Strategies for Avoidance, Minimization, and Mitigation of Historic Properties in the Direct APE

As discussed previously, avoidance will be the preferred approach to identified cultural resources, through the establishment of a construction buffer. AGDC will determine the feasibility of site avoidance in consultation with pipeline engineers and include a listing of historic properties proposed for avoidance in the Avoidance, Minimization, and Treatment Plans (see Section 7.2).

Until the specific properties that can be avoided are identified, AGDC will plan to implement minimization and mitigation as identified in Standard Site Treatment Plans and site-specific plans as-needed. Recommendations for mitigation will depend largely on the historic property type (e.g., prehistoric surface lithic scatter) and the nature of project effects to the property. A discussion of some property types, and associated mitigation strategies/actions is presented in Section 7.6.

For historic properties where data recovery is recommended, AGDC, at the direction of FERC, will consider:

1. the feasibility of community archaeology,
2. field schools,
3. creation of a K-12 curriculum or other projects for local schools, and
4. other public archaeology opportunities that allow for greater involvement by Alaskans in the investigation and stewardship of archaeological resources.

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7.6. Special Consideration for Mitigation of Certain Site Types in the Direct APE

7.6.1. Prehistoric Surface Lithic Scatters

A number of historic properties are prehistoric surface lithic scatters where lithic materials were observed on and, in many cases collected from, the site's surface or root mat. Subsurface testing at these sites generally revealed few buried artifacts or materials.

The significance of these sites – either individually or when considered as a historic district where appropriate – is in their potential to provide information important to prehistory (NRHP Criterion D); thus, data recovery is the recommended mitigation. Because of the surficial nature of these sites and the previous collection that may have occurred, data recovery potential at the site itself may be limited. Data recovery for these sites should focus on the collection of any remaining surface material, and spatial analysis of the location of these lithic scatters in combination with laboratory analysis of the previously and newly collected materials.

Alternatively, AGDC may recommend the development of multiple property documentation and registration criteria for prehistoric surface lithic scatters based on regional, chronological, or other linking characteristics.

7.6.2. Prehistoric Surface and Subsurface Lithic Deposits

Historic properties comprised of surface and subsurface lithic deposits are also significant in their potential to provide information important to prehistory (NRHP Criterion D) and data recovery is the recommended mitigation. Because of the surficial and buried nature of these sites and the previous collection that has occurred, data recovery potential at these sites is varied. Data recovery for these sites should consider and be commensurate with the adverse effect, take into account the amount of previous disturbance, and identify an appropriate balance of new surface survey/excavation, spatial analysis, and/or laboratory analysis of previously and newly collected materials.

Much of the collected material from excavations and testing of sites located within the APE is housed at the University of Alaska Museum of the North. AGDC recommends that site treatment plans for data recovery involving laboratory analysis of collected materials consider the hiring and training of high school and/or undergraduate-level interns to assist analysis, to provide exposure to and training in cultural resources lab techniques.

Alternatively, AGDC may recommend the development of multiple property documentation and registration criteria for prehistoric surface and subsurface lithic scatters based on regional, chronological, or other linking characteristics.

7.6.3. Previously Excavated or Extensively Tested Prehistoric Surface and Subsurface Sites

A number of sites in the direct APE were excavated in the 1970s and 1980s in association with archaeological investigations that occurred for the construction of TAPS. Additionally, many of the other prehistoric sites in the Northern and Interior regions were extensively tested during archaeological survey for the Alaska LNG Project.

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At these types of sites, the data recovery potential may be limited, due to disturbance and destruction associated with previous excavation, testing, and collection. Therefore, data recovery in the form of spatial analysis and/or laboratory analysis of previously collected materials is recommended, or alternative mitigation is recommended, as discussed in the following sections. Again, the selected mitigation approach will consider and be commensurate with the adverse effect and may necessitate an individualized treatment plan for certain sites.

As noted above, much of the collected material from excavations and testing of sites located within the APE is housed at the University of Alaska Museum of the North. AGDC recommends that site treatment plans for data recovery involving analysis of previously collected materials consider the hiring and training of high school and/or undergraduate-level interns to assist analysis, to provide exposure to and training in cultural resources lab techniques.

7.6.4. Historic Roads

Appendix J of the First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council On Historic Preservation, the Alaska State Historic Preservation Officer, and the Alaska Department Of Transportation And Public Facilities Regarding Implementation Of Section 106 Of the National Historic Preservation Act For The Federal-Aid Highway Program In Alaska (Alaska Road PA) provides general guidance on how to evaluate historic roads for significance, and what mitigation measures might be appropriate.

There are two eligible historic roads within the direct APE, the Dalton Highway and the Denali Highway. Both highways were evaluated for historic significance in 2019.³ Additional consultation with DOT&PF and SHPO is needed to determine the nature of the effects of the Project on both the Dalton and Denali highways, and what, if any, mitigation is appropriate.

Prior to the initiation of project activities, including vegetation clearing, in the vicinity of the Dalton and Denali highways, AGDC will consult with DOT&PF, and the Consulting Parties to determine if the Project will adversely affect the Dalton and Denali highways, and what avoidance, minimization, and mitigation measures will be employed to address the effects.

7.6.5. Historic Trails

The direct APE for the Mainline alignment crosses a number of historic trails, including the INHT (see Appendix D). The significance of these trails is in their association with important historic events or patterns of events (Criterion A); specifically, the sport of dog mushing and access to historic mining camps. In most cases, these trails are used contemporarily by all-terrain vehicles and dog mushing teams and their integrity is related to maintaining access and connectivity to destinations and other trails, and maintaining general trail conditions including width, area vegetation, and existing route and configuration.

³ Two Parks Highway road segments (FAI-02441 and FAI-02439) are within the Direct APE, but as they but fall under the Interstate Highway System Section 106 exemption, will not be evaluated.

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Adverse effects to historic trails are most likely to come from temporary access restrictions due to construction and altering the setting of the trail through the removal and maintenance of vegetation along the buried pipeline where it intersects the trails or is otherwise visible from the trails.

Upon completion of construction activities, AGDC will return trail crossings to their original conditions, to the extent practicable. AGDC will also minimize impacts to trail conditions by maintaining vegetation consistent with existing trail characteristics during project construction, with the exception of access roads and the area directly above the pipeline. For reasons related to pipeline integrity and safety, rooted trees will not be allowed to grow within close proximity to the pipeline in the operational right-of-way.

7.7. Strategies for Avoidance, Minimization, and Mitigation of Historic Properties in the Indirect APE

As noted previously, historic properties within the indirect APE are most likely to be affected by long-term visual, audible, and atmospheric changes introduced by the construction of aboveground permanent facilities, changes to vegetation from buried project components, and increased access to areas previously not easily accessed. Consequently, strategies for avoidance, minimization, and mitigation for historic properties within the indirect APE are organized by type of effect.

7.7.1. Historic Properties Sensitive to Increased Visitation

Visitation due to increased or newly available access is most likely to occur at historic properties within one quarter mile of the direct APE. While all historic properties within this range may be adversely affected, prehistoric and historic resources with surface artifacts in particular have potential to be adversely affected. AGDC will minimize effects to historic properties within the indirect APE through the site monitoring program (see Section 7.3), to monitor the effects of nearby construction, operation, maintenance, and reclamation activities to these sites. Monitoring will involve, at a minimum, a schedule of field visits to a sample of NRHP-eligible archaeological sites (number and locations determined in consultation with Consulting Parties for each Construction Spread) within the indirect and direct APE to check for obvious signs of disturbance, including vandalism and looting. Results of the monitoring will be included in the Annual Agreement Report (see Section 8.1). If effects to historic properties are observed during the monitoring, Consulting Parties will consult on the nature of the effect and the implementation of appropriate protection, avoidance, or treatment measures.

7.7.2. Visually, Audibly, and Atmospherically-Sensitive Historic Properties

The introduction of a pipeline corridor, access roads, and other project components may result in indirect effects to historic properties; specifically, visual effects, such as noticeable breaks in vegetation, audible effects, such as construction noise or road traffic in a previously undeveloped area, and atmospheric effects, such as dust from construction traffic on newly constructed gravel access roads.

AGDC will minimize these effects through a combination of vegetation screening, timing of construction activities, and dust control measures. Minimization efforts to address visual, audible, and atmospheric effects to historic properties in the indirect APE will be identified in the Avoidance, Minimization, and

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Treatment Plan and summarized for each Construction Spread. Additionally, AGDC will incorporate monitoring of a subset of these properties as part of the site monitoring program (number and locations determined in consultation with appropriate Consulting Parties for each Construction Spread), to review the minimization measures and assess their efficacy in minimizing effects. Results of the monitoring will be included in the Annual Agreement Report (see Section 9.1). If effects to historic properties are observed during the annual monitoring, Consulting Parties will consult on the nature of the effect and the implementation of appropriate protection, avoidance, or treatment measures.

8. CRMP IMPLEMENTATION SEQUENCE AND SCHEDULE

The CRMP will be distributed to Consulting Parties for a 30-day review and comment period (PA Stipulation V.C). The CRMP will be finalized when the SHPO, the ACHP, the BLM Central Yukon Field Office Manager, and the NPS Denali National Park and Preserve Superintendent signs a signature page for the CRMP and the FERC approves the CRMP. The initiating event for implementation of additional consultation; historic property identification, evaluation, and assessment of effects; and implementation of avoidance and/or mitigation measures will be the FID or AFE for construction of the Project or a portion of the Project. Some activities outlined in the CRMP (such as data gap analyses, development of Standard Site Treatment Plans, etc.) may be completed proactively prior to issuance of the FID/AFE as resources and funding allow. Review and comment processes defined in the PA will be followed for proactive work products as they are completed.

9. ADMINISTRATIVE REPORTING AND SCHEDULE OF REQUIRED PLANS, ACTIVITIES, AND REPORTS

This CRMP has identified a number of technical plans, activities, and reports to be completed to comply with the terms of the PA and Section 106 requirements. In addition to these technical plans, activities, and reports, the PA stipulates annual and other reports and annual meetings as described below.

9.1. Annual Agreement Reports and Annual Meeting

Per PA Stipulation VIII.B, AGDC will complete an Annual Agreement Report on the progress of implementation of the stipulations of the PA. The Annual Report will be distributed to Consulting Parties for a 45-day review period. FERC may direct AGDC to revise the annual report based on comments received. If so, AGDC will make revisions and submit the final report within 30 days following the review and comment period. A copy of the report with any sensitive information redacted will be posted to the project website for public consumption. A preliminary template for Annual Reports is provided in Appendix G.

The content for Annual Reports will include, at minimum:

- A description of the past year's activities, including presentation of and revisions to training materials;
- Proposed revisions to methods based on findings or results from the previous year(s);

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- A projection of the upcoming year's activities, including information about possible Project modifications;
- A summary of the past year's and anticipated upcoming efforts to identify, evaluate, and protect historic properties, including references for cultural resource reports and results of DOEs;
- A summary of any historic properties affected, as well as any testing, remediation, or mitigation efforts;
- A summary of artifacts or other archaeological or historic materials encountered, including representative photographs or drawings, a description of analyses, and other recordation documents as appropriate;
- A summary of artifacts sent to an approved facility for curation, or returned to the landowner, as appropriate;
- Clear maps of areas surveyed or monitored, cultural resources identified, and alternative routes to be followed to avoid any identified historic properties;
- A description of the progress of the Undertaking and any known or expected changes to the Undertaking;
- An updated list of Consulting Parties.

If considered necessary per the PA, AGDC will facilitate an annual meeting, to discuss the previous year's activities and activities scheduled for the coming year. The PA stipulates that the Annual Report be distributed to Consulting Parties for review and comment at least 45 days prior to the annual meeting (Stipulation VIII.B), and the Annual Agreement Report is scheduled to be delivered December 31. To simplify this timeline, and to coincide with delivery of Annual Cultural Resources Work Plans, AGDC recommends that FERC schedule any annual meeting around February 15th, and AGDC submit the final Annual Report to the Consulting Parties within 30 days of the closure of the comment period and/or Annual Meeting. Table 4 provides a summarized schedule of the preparation, implementation, and delivery of the technical plans, activities, and reports, and PA-stipulated Annual Reports, annual meetings, and progress reporting.

9.2. Annual Treatment Report

AGDC will document the implementation and completion of approved field treatment program(s) in an Annual Treatment Report in accordance with the PA (IV.D.vi). The Annual Treatment Reports will contain, but are not limited, to:

- A description of the past year's mitigation and treatment activities;
- Summary of artifacts sent to an approved facility for curation or returned to landowner, as appropriate; and
- Projection of upcoming year's mitigation and treatment activities, including information about possible Project modifications.

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AGDC will submit a draft of the Annual Treatment Report to the Consulting Parties for their review and comment by December 31 of each year. Consulting Parties will have 60 calendar days to review and provide comment. AGDC will address comments and revise the report within 30 calendar days of the closure of the comment period, or as negotiated. If no comments are received within the 60 calendar day review period, concurrence will be assumed and the Annual Treatment Report will be considered complete.

Table 4. Summary and Schedule of CRMP Required Plans, Activities, and Reports

Plan or Report Title	Schedule for Completion (Calendar Days)	Responsible Party	Reviewers/ Participants	Length of Comment Period (Calendar Days)	Length of Revision Period (Calendar Days)	CRMP Reference
Data Gap Analyses ¹	First Construction Spread, within 6 months of the FID/AFE	AGDC	Consulting Parties	30 Days	30 Days	Section 6.1
Standard Site Treatment Plans ¹	Within 6 months of the FID/AFE	AGDC	Consulting Parties	30 Days	30 Days	Section 7.1
Annual Cultural Resources Work Plan	First Construction Spread, following satisfactory completion of the corresponding Data Gap Analysis	AGDC	Signatories	30 Days	30 Days	Section 6.2
Avoidance, Minimization and Treatment Plan ¹	First Construction Spread, within 1 year of the FID/AFE, inform Cultural Resources Report and Annual Report; will include Finding of Effect by Construction Spread	AGDC	Consulting Parties	60 Days	30 Days	Section 7.2
Cultural Resource Awareness Training Curriculum	At least 90 days prior to construction initiation	AGDC	FERC and SHPO review, Consulting Parties for informational purposes	30 Days	15 Days	Section 7.4
Gallagher Flint Station Field Visit	Within 1 year of the FID/AFE	AGDC	Consulting Parties	N/A	N/A	Appendix D
PA Annual Meeting	On or around February 15th annually, starting from FID/AFE	FERC	Consulting Parties	N/A	N/A	Section 9.1

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Plan or Report Title	Schedule for Completion (Calendar Days)	Responsible Party	Reviewers/ Participants	Length of Comment Period (Calendar Days)	Length of Revision Period (Calendar Days)	CRMP Reference
Annual Agreement Report	By March 15th annually, starting from FID/AFE	AGDC	Consulting Parties	N/A	N/A	Section 9.1
Annual Treatment Report ¹	By December 31 each year; includes NRHP evaluations and findings of effect	AGDC	Consulting Parties	60 Days	30 Days	Section 9.2

¹ Signatory, SHPO, and/or land manager concurrence required.

² Contains NRHP eligibility determinations that will require SHPO concurrence within 30 days.

10. PLAN FOR THE INADVERTENT DISCOVERY OF CULTURAL RESOURCES

Cultural resources may be encountered aboveground and belowground during construction of the LNG Project and might include historic or prehistoric materials. In the event that previously unknown cultural resources are discovered during project activities, the Plan for Unanticipated Discovery of Cultural Resources and Human Remains (Appendix J) will be followed. If the discovery involves human remains or cultural resources considered funerary objects, sacred objects, or objects of cultural patrimony, the Plan for Inadvertent Discovery of Human Remains (see Section 10) should be implemented instead. Both of these plans are described in more detail in Appendix H.

1. Stop Work: Stop work in the immediate area of the discovery, notify the Project Site Manager, leave the discovery in place, and cease all ground disturbing activities within 100 feet of site.
2. Immediate Notification and Protection: The individual who made the discovery should immediately notify the Project site manager and delineate a 30-foot minimum buffer zone of avoidance. The buffer zone should be flagged with highly visible flagging or staked with brightly colored staking placed no greater than 25 feet apart. The Project site manager will be responsible for preventing traffic through the project resource area, except as necessary to remove vehicles and equipment.
3. Notify Project Archaeologist: If no Project archaeologist or archaeological monitor is on site, the Project site manager will contact the Project archaeologist, who will determine whether the discovery is a cultural resource. If the discovery is not a cultural resource, he/she will notify the Project site manager that construction may proceed in the area of the discovery. If the Project archaeologist determines that the discovery is a cultural resource,
4. Notify Project Management: The Project site manager is responsible for notifying Project Management, the State Historic Preservation Office, and any private landowner, if applicable, of the discovery and the Project archaeologist's determination as to whether the discovery constitutes a

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cultural resource. The persons/entities who should be notified in the event of an unanticipated discovery are listed below⁴:

FERC

James Martin, Project Manager
Office of Energy Projects
Federal Energy Regulatory Commission
Office Phone: 202-502-8700 Email: James.Martin@ferc.gov

AGDC

Frank Richards, President
Alaska Gasline Development Corporation
Office Phone: 907-330-6352 Email: frichards@agdc.us

SHPO

(For SHPO contacts, use this email as primary contact if no phone contact is made)
Office Phone: 907-269-8700
Email: oha.permits@alaska.gov
State Archaeologist/Deputy SHPO Phone: 907-269-8700
Fax: 907-269-8908
Email: oha.permits@alaska.gov

Landowner

See Table 5 to identify appropriate landowner contact information.

Local Tribes and Tribes that Have Expressed an Interest in Being Notified

See Table 6 to identify the appropriate Tribal contact information.

5. Complete Work Stoppage Log: A Work Stoppage Log will be completed whenever construction has been halted due to a discovery. Log documentation will demonstrate that Project procedures, as noted above and detailed in Appendix H.

Table 5. LNG Landowner Contact Information within Construction Footprint

Name	Address	Phone	Email
State Lands (Except Alaska Mental Health Trust, University of Alaska, ARRC)			
For All Discoveries, Regardless of State Agency (Except as Noted Above)			
Alaska Office of History and Archaeology	550 W. 7th Ave, Ste. 1310 Anchorage, AK 99501	907-269-8700	oha.permits@alaska.gov
Bureau of Land Management			
For Discoveries between Pipeline MP 0-121			
BLM Arctic Field Office	1150 University Ave Fairbanks, AK 99709	1-800-437-7021	N/A
For Discoveries Between Pipeline MP 121 – 369.5, MP 397.3-420.5, MP 422.7-469.7, MP 471.7-497.7 and MP 520.7-530.8			

⁴ These contacts are up to date as of the agreement finalization. AGDC will maintain and update these and other contact information as needed.

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Name	Address	Phone	Email
BLM Central Yukon Field Office Attn: Field Manager	222 University Ave Fairbanks, AK 99709	907-474-2200	N/A
For Discoveries Between Pipeline MP 369.5 to 397.3, MP 420.5 to 422.7, MP 469.7 to 471.7, MP 497.7 to 520.7 and MP 530.8 to 544			
BLM Eastern Interior Field Office Attn: Field Manager	222 University Ave Fairbanks, AK 99709	907-474-2200	N/A
For Discoveries Between Pipeline MP 544 – 705.7			
BLM Glenallen Field Office Attn: Field Manager	PO Box 147 Glennallen, AK 99588	907-822-3217	N/A
For Discoveries Between Pipeline MP 705.7 – 733.47			
BLM Anchorage Field Office Attn: Field Manager	4700 BLM Rd Anchorage, AK 99507	907-267-1246	N/A
National Park Service			
For Discoveries between Pipeline MP 536.1 – 544.31			
Denali National Park and Preserve: Superintendent	P.O. Box 9 Denali Park, AK 99755	907-683-2294 Ext. 6	
Boroughs and Municipalities			
North Slope Borough			
IHLC Central Office Colleen Akpik-Lemen	PO Box 69 Utqiagvik, AK 99723	907-852-0422 Or 907-852-2611	colleen.akpik-lemen@north-slope.org
Fairbanks North Star Borough			
Manager, Lands Department Sandra Mota	PO Box 71267 Fairbanks, AK 99709	907-459-1241 Or 907-459-1000	land@fnsb.us
Denali Borough			
Planning and Land Use Department Marsha Lambert	PO Box 480 Healy, AK 99743	907-683-1330	mlambert@denaliborough.com
Matanuska-Susitna Borough			
Eileen Probasco	350 E. Dahlia Ave. Palmer, AK 99645	907-861-8501 Or 907-861-7801	eileen.probasco@matsugov.us
Kenai Peninsula Borough			
Land Management Division Marcus Mueller, Land Management Officer	144 North Binkley Street Soldotna, AK 99669	907-714-2205	mmueller@kpb.us
Municipality of Nenana			
Municipality Office and City of Nenana Port Authority	Municipality: PO Box 277 Nenana, AK 99760 Port Authority: PO Box 70 Nenana, AK 99730	907-832-5501 (Port Authority Only)	N/A
Alaska Native Regional Corporations			
Ahtna, Incorporated			

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Name	Address	Phone	Email
Land and Resources Department Joe Bovee Or Ahtna, Inc. (General)	Land and Resources: PO Box 649 Glenallen, AK 99588 Or Ahtna, Inc. (General): 110 W. 38th Ave, Ste. 100 Anchorage, AK 99503	907-822-3476 (Land and Resources) Or 907-868-8250 (Ahtna, Inc. General)	jbovee@ahtna-inc.com
Cook Inlet Region Inc.			
Land and Resources Department	PO Box 93330 Anchorage, AK 99509	907-263-5140 Or 907-263-5191	info@ciri.com
Doyon, Limited			
Lands and Natural Resources Jamie Marunde	1 Doyon Place, Suite 300 Fairbanks, AK 99701	907-459-2030 Or 907-459-2000	marundej@doyon.com
Alaska Native Village Corporations			
Toghotthele Corporation			
President Carrie Brown	PO Box 249 Nenana, AK 99760	907-832-5832	cbrown@togcorp.net
Tyonek Native Corporation			
Land Manager David Kroto	1689 C Street, Suite 219 Anchorage, AK 99501-5131	907-272-0707	dkroto@tyonek.com
Salamatof Native Association			
President/CEO Chris Monfor	P.O. Box 2682 Kenai, AK 99611	907-283-7864	cmonfor@salamatof.com
Other			
Alaska Mental Health Trust			
Trust Land Office	2600 Cordova St., Ste. 100 Anchorage, AK 99503	907-269-8658	mhtlo@alaska.gov
University of Alaska			
Facilities and Land Management Laura Carmack	1815 Bragaw St., Ste. 101 Anchorage, AK 99508	907-786-7795 Or 907-786-7760	lmcarmack@alaska.edu
Alaska Railroad Corporation			
Corporate Planning and Real Estate	327 W. Ship Creek Ave. Anchorage, AK 99501	907-265-2448 Or 907-265-2670	RealEstTech@akrr.com
Native Allotment (1) – Bureau of Indian Affairs			
BIA Alaska Regional Office, Realty Services	3601 C Street, Suite 1100 Anchorage AK 99503	907-271-4085	N/A

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Table 6. Local Tribes and Tribes that have Expressed an Interest in being Notified

Name	Address	Phone	Email
For Discoveries in the Northern Region (Pipeline MP 0-169.83)			
Native Village of Nuiqsut	PO Box 169 Nuiqsut, AK 99789	907-480-3010	native.village@astaalaska.net
Village of Anaktuvuk Pass	PO Box 21065 Anaktuvuk Pass, AK 99721	907-661-2575	Caroline.sheldon@inupiat.gov
Native Village of Barrow	P.O. Box 1139 Barrow, AK 99732	907-852-4411	Muriel.Brower@nvbarrow.net
Native Village of Kaktovik	P.O. Box 8 Kaktovik, AK 99747	907-640-2042	nvkaktovik@gmail.com
Inupiat Community of the Arctic	P.O. Box 934 Utqiagvik, AK 99723	907-852-4227	www.inupiatgov.com
For Discoveries in the Interior Region (Pipeline MP 169.83-579.56)			
Alatna Village	PO Box 70 Alatna, AK 99720	907-968-2304	alatnatribes@yahoo.com
Allakaket Traditional Council	PO Box 50 Allakaket, AK 99720	907-968-2237	allakaketpa@yahoo.com
Evansville Village	PO Box 26087 Bettles Field, AK 99726	907-692-5005	evansvillealaska@gmail.com
Native Village of Stevens	PO Box 74012 Stevens Village, AK 99774	907-478-7228	margaretmatthew23@gmail.com
Rampart Village	PO Box 67029 Rampart, AK 99767	907-358-3312	rvc.irr@gmail.com
Manley Hot Springs Village	PO Box 105 Manley Hot Springs, AK 99756	907-672-3177	N/A
Native Village of Minto	PO Box 58026 Minto, AK 99758	907-798-7112	Chief.charle@tananachiefs.org
Nenana Native Village	PO Box 369 Nenana, AK 99760	907-452-5063	ta.nnc@outlook.com
Native Village of Cantwell	PO Box 94 Cantwell, AK 99729	907-688-6020	Rene_nicklie@hotmail.com
Tanana Chiefs Conference	122 First Avenue Fairbanks, AK 99701	907-452-8251	legal_dept@tananachiefs.org
For Discoveries in the Southern Region (Pipeline MP 579.56-806.57)			
Knik Tribe	P.O. Box 871565 1744 N. Prospect Drive Palmer, AK 99645	907-373-7991	rmartin@kniktribe.org
Native Village of Eklutna	26339 Eklutna Village Road Chugiak, AK 99567	907-688-6020	nve@eklutna-nsn.gov
Chickaloon Village Traditional Council	PO Box 1105 Chickaloon, AK 99674	907-982-7616	alwade@chickaloon-nsn.gov
Native Village of Tyonek	PO Box 82009 Tyonek, AK 99682	907-583-2201	nvtenvironmental_dir@outlook.com
Salamatof Native Association	P.O. Box 2682 Kenai, AK 99611	907-283-7864	emorrison@salamatoftribe.org
Kenaitze Indian Tribe	150 N. Willow Street PO Box 988 Kenai, AK 99611	907-335-7200	N/A

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11. INADVERTENT DISCOVERY OF HUMAN REMAINS

The treatment of human remains following inadvertent discovery is governed by state and federal laws, land status, post-mortem interval, and biological/cultural affiliation. Human remains may include intact burials or isolated bones and fragmentary bone pieces.

Several Alaska state laws are applicable to the discovery of human remains. The State Medical Examiner has jurisdiction over all human remains in the state (with rare exceptions, such as military aircraft deaths); regardless of how long the remains have been deposited. Alaska state laws governing discovery of human remains include:

- AS 12.65.5, which requires immediate notification of a peace officer of the state (police, Village Public Safety Officer, or Alaska State Trooper) and the State Medical Examiner when death has “been caused by unknown or criminal means, during the commission of a crime, or by suicide, accident, or poisoning.”
- AS 11.46.482(a) (3), which applies to all lands in Alaska, makes the “intentional and unauthorized destruction or removal of any human remains or the intentional disturbance of a grave” a class C felony.
- AS 41.35.200, which applies only to state lands, makes the disturbance of “historic, prehistoric, and archaeological resources” (including graves, per definition) a Class A misdemeanor.
- AS 18.50.250, which applies to all lands in Alaska, requires permits for transport, disinterment/exhumation, and reinternment of human remains.

On federal lands and federal trust lands, the unauthorized destruction or removal of archaeological human remains (i.e., more than 100 years old) is a violation of 16 U.S.C. 470ee (ARPA). If human remains on federal or federal trust lands are determined to be Native American, their treatment and disposition are also governed by the Native American Graves and Repatriation Act (NAGPRA) of 1990 (P.L. 101-601; 25 U.S.C. 3001-30013; 104 Stat. 3048-3058; 43 CFR 10). NAGPRA also applies to the discovery of certain classes of cultural items, including funerary objects, sacred objects, and objects of cultural patrimony (together, NAGPRA items).

Per 42 CFR 10.2, the definitions of human remains and NAGPRA items are:

Human Remains means the physical remains of the body of a person of Native American ancestry. The term does not include remains or portions of remains that may reasonably be determined to have been freely given or naturally shed by the individual from whose body they were obtained, such as hair made into ropes or nets. For the purposes of determining cultural affiliation, human remains incorporated into a funerary object, sacred object, or object of cultural patrimony, as defined below, must be considered as part of that item.

Funerary Objects means items that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed intentionally at the time of death or later with or near individual human remains. Funerary objects must be identified by a preponderance

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of the evidence as having been removed from a specific burial site of an individual affiliated with a particular Indian tribe or Native Hawaiian organization or as being related to specific individuals or families or to known human remains. The term burial site means any natural or prepared physical location, whether originally below, on, or above the surface of the earth, into which as part of the death rite or ceremony of a culture, individual human remains were deposited, and includes rock cairns or pyres which do not fall within the ordinary definition of gravesite.

Sacred Objects means items that are specific ceremonial objects needed by traditional Native American religious leaders for the practice of traditional Native American religions by their present-day adherents. While many items, from ancient pottery sherds to arrowheads, might be imbued with sacredness in the eyes of an individual, these regulations are specifically limited to objects that were devoted to a traditional Native American religious ceremony or ritual and which have religious significance or function in the continued observance or renewal of such ceremony.

Objects of Cultural Patrimony means items having ongoing historical, traditional, or cultural importance central to the Indian tribe...rather than property owned by an individual tribal or organization member. These objects are of such central importance that they may not be alienated, appropriated, or conveyed by any individual tribal or organization member. Such objects must have been considered inalienable by the culturally affiliated Indian tribe...at the time the object was separated from the group. Objects of cultural patrimony include items such as Zuni War Gods, the Confederacy Wampum Belts of the Iroquois, and other objects of similar character and significance to the Indian tribe...as a whole.

11.1. Plan for the Inadvertent Discovery and Treatment of Human Remains, Funerary Objects, Sacred Objects, and Objects of Cultural Patrimony

In the event that human remains or NAGPRA items are inadvertently discovered, the following plan will be implemented, regardless of land ownership.

1. Stop Work: All work in the immediate vicinity will halt until a determination of whether the remains are human.
2. Protection of Discovery: Possible human remains will be treated with dignity at all times. Remains will be immediately covered with a tarp or other materials (but not recovered in soil or rock) for temporary protection in place.
3. Determination of Whether Remains are Human: The project archaeologist is responsible for making an initial identification of the remains and to initiate the processes required by state and federal law. If the Project archaeologist is not on site, the Stop Work order will remain in place and all personnel remain a minimum of 100 feet away from the discovery, until the Project archaeologist has arrived on site and made an initial determination.

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4. Notification: Individuals who will be notified immediately in the event of discoveries of potential human remains are listed in below. The Project archaeologist and Project site manager will be immediately notified. The Project archaeologist will proceed with making an initial determination as described above. The Project site manager is responsible for notification of other authorities, and landowners. The persons/entities who should be notified in the event of an unanticipated discovery are listed below and in Tables 5 (above), 6 (above), and 7.

Alaska State Troopers, Missing Persons Bureau Phone: 907-269-5038 Fax: 907-337-2059 Lt. Paul Fussey Phone: 907-269-5682, Email: paul.fussey@alaska.gov Malia Miller Phone: 907-269-5038, Email: malia.miller@alaska.gov *After contact by phone, send email with relevant information and photos to Lt. Fussey and Malia Miller.
Alaska State Medical Examiner's Office Reporting Hotline (Death Hotline) to speak with on-duty investigator Phone: 907-334-2356 or 1-888-332-3273 (Outside Anchorage) Stephen Hoage Operations Administrator Phone: 907-334-2202 Fax: 907-334-2216 Email: Stephen.Hoage@alaska.gov Dr. Anne Zink, Chief Medical Examiner Phone: 907-334-2200 Phone: 907-465-3090 Email: anne.zink@alaska.gov
Local Law Enforcement See Table 7 to identify appropriate local law enforcement contact
Landowner See Table 5 for landowner contact information
AGDC Frank Richards, President Alaska Gasline Development Corporation Office Phone: 907-330-6352 Email: frichards@agdc.us
FERC James Martin, Project Manager Office of Energy Projects Federal Energy Regulatory Commission Office Phone: 202-502-8700 Email: James.Martin@ferc.gov
Alaska Office of History and Archaeology (SHPO) Office Phone: 907-269-8700 Email: oha.permits@alaska.gov State Archaeologist/Deputy SHPO Office phone: 907-269-8700 Fax: 907-269-8908 Email: oha.permits@alaska.gov
Local Tribes and Tribes Likely to be Culturally Affiliated with the Discovery See Table 6 to identify appropriate tribal contacts.

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Table 7. Local Law Enforcement Contacts

Name	Address	Phone	Email
For Discoveries in the North Slope Borough			
North Slope Borough Police, Central Office	N/A	907-852-0311 ext. 2602	jeff.brown@north-slope.org
For Discoveries Along Dalton Hwy, South of North Slope Borough and Along Parks Hwy (including Fairbanks- North Star Borough and Denali Borough)			
Alaska State Troopers D Detachment Coldfoot Post	N/A	907-678-5211	N/A
Alaska State Troopers D Detachment Fairbanks Post	N/A	907-451-5100	N/A
Alaska State Troopers D Detachment Nenana Post	N/A	907-832-5554	N/A
Alaska State Troopers D Detachment Healy Post	N/A	907-683-2232	N/A
Alaska State Troopers D Detachment Cantwell Post	N/A	907-768-2202	N/A
For Discoveries within Fairbanks North Star Borough			
Alaska State Troopers D Detachment	N/A	907-451-5100	N/A
For Discoveries within Matanuska-Susitna Borough			
Alaska State Troopers B Detachment Mat-Su West Post	N/A	907-373-8300	N/A
For Discoveries within Kenai Peninsula Borough			
Alaska State Troopers A Detachment North	N/A	907-262-4453	N/A

12. MODIFICATIONS AND REVISIONS

After initial approval, any Signatory or Invited Signatory may request amending the CRMP (PA Stipulation V.E). Substantive amendments will require approval from Signatories and Invited Signatories. AGDC will distribute proposed revisions to the Signatories and Invited signatories for review and comment. If all agree that the change(s) are substantive, then the revised CRMP will be adopted when the SHPO, the ACHP, the BLM Central Yukon Field Office Manager, and the NPS Denali National Park and Preserve Superintendent signs the signature page for the CRMP and the FERC approves the amended CRMP. If all the parties required for approval agree that the change(s) are not substantive (such as updating contact information or correcting an error), then the CRMP will be updated without requiring a new signature page. Changes to the CRMP will be noted will be tracked using the revision and amendment logs located in Appendix K.

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- Alaska Department of Fish and Game. 1988. Susitna Flats State Game Refuge Management Plan. Divisions of Habitat and Game, Alaska Department of Fish and Game, Anchorage.
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14. SIGNATURES

NOTE TO REVIEWERS: Stipulation V.D. defines the exact parties who need to sign the CRMP as the SHPO, the ACHP, the BLM Central Yukon Field Office Manager, and the NPS Denali National Park and Preserve Superintendent.

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CULTURAL RESOURCES MANAGEMENT PLAN

FOR THE

ALASKA LNG PROJECT

FERC DOCKET NUMBER CP17-178-000

Signatory

FEDERAL ENERGY REGULATORY COMMISSION

Date:

J. Rich McGuire, Division of Gas – Environment and Engineering

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CULTURAL RESOURCES MANAGEMENT PLAN

FOR THE

ALASKA LNG PROJECT

FERC DOCKET NUMBER CP17-178-000

Signatory

ALASKA STATE HISTORIC PRESERVATION OFFICER

Date:

Judith E. Bittner, State Historic Preservation Officer

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FOR THE

ALASKA LNG PROJECT

FERC DOCKET NUMBER CP17-178-000

Signatory

ADVISORY COUNCIL ON HISTORIC PRESERVATION

Date:

John M. Fowler, Executive Director

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CULTURAL RESOURCES MANAGEMENT PLAN

FOR THE

ALASKA LNG PROJECT

FERC DOCKET NUMBER CP17-178-000

Invited Signatory

BUREAU OF LAND MANAGEMENT

Date:

Tim LaMarr, Central Yukon Field Office Manager

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CULTURAL RESOURCES MANAGEMENT PLAN

FOR THE

ALASKA LNG PROJECT

FERC DOCKET NUMBER CP17-178-000

Invited Signatory

NATIONAL PARK SERVICE

Date:

Don Striker, Acting Regional Director, National Park Service, Interior Region 11

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15. APPENDICES

*Appendices are Privileged and Confidential

- A: Documented AHRS Sites and Associated Construction Spread
- B: Areas of Potential Effect and Areas Surveyed Mapbook
- C: Previous Survey Investigations in the APE
- D: Notable Site Concentrations and Special Mitigation Considerations
- E: Environmental and Cultural Overview
- F: Cultural Resources Survey Completed at Project Components in the Direct APE
- G: Contact Information for Signatories, Invited Signatories, and Concurring Parties to the Programmatic Agreement
- H: Parties Invited to Consult in Development of the Programmatic Agreement
- I: Annual Report Template
- J: Plan for Unanticipated Discovery of Cultural Resources and Human Remains
- K: Revision and Amendment Logs