



## Entry Authorization

**ADL 421741**

Alaska Industrial Development and Export Authority, herein known as the Grantee, is issued this Entry Authorization authorizing the temporary use of a 450-foot wide corridor in order to construct and survey a final easement 250-feet in width and approximately 125 miles in length for a private industrial-access road and utility corridor on state lands within:

### Legal Description:

#### Fairbanks Meridian:

Township 25 North, Range 16 West, Sections 1-4;  
Township 25 North, Range 20 West, Sections 1-6;  
Township 25 North, Range 21 West, Sections 1-3;  
Township 26 North, Range 17 West, Sections 22-24, and 27-32;  
Township 26 North, Range 19 West, Sections 31-36;  
Township 26 North, Range 20 West, Sections 35 and 36;  
Township 26 North, Range 21 West, Sections 27-31, and 34;  
Township 26 North, Range 22 West, Sections 17-21, 28, 29, and 33-36;  
Township 26 North, Range 23 West, Sections 7-10, and 13-15;  
Township 26 North, Range 24 West, Sections 2-5, 7, 8, 10-12, 16, 17 20, and 21; and  
Township 26 North, Range 25 West, Sections 11 and 12.

#### Kateel River Meridian:

Township 19 North, Range 12 East, Sections 7-11, 13, 14, and 18;  
Township 19 North, Range 13 East, Sections 18-20, 25-29, and 32;  
Township 19 North, Range 14 East, Sections 13, 23, 24, and 26-30;  
Township 19 North, Range 15 East, Sections 18-21, 27-30, and 34-36  
Township 19 North, Range 16 East, Sections 25-29, and 31-35  
Township 19 North, Range 17 East, Sections 20-23 and 23, and 25-30;  
Township 19 North, Range 18 East, Sections 13-15, 19-24, and 30;  
Township 19 North, Range 23 East, Sections 8-12, 17, and 18;  
Township 19 North, Range 24 East, Sections 7-9, and 11-16;  
Township 19 North, Range 25 East, Sections 1-4, and 7-10;  
Township 19 North, Range 26 East, Sections 1-5, 9, and 10;  
Township 20 North, Range 25 East, Section 36;  
Township 20 North, Range 26 East, Sections 31, 32, and 36; and  
Township 20 North, Range 27 East, Section 30 and 31.

See Appendix A for additional information.

**This Entry Authorization is issued for the purpose of authorizing the following:**

Construction, installation, survey, and maintenance of a 250-foot wide and 125-mile long private exclusive easement for a private industrial-access road and utility corridor. This authorization is effective beginning \_\_\_\_\_ and ending \_\_\_\_\_ unless sooner terminated.

**This Entry Authorization is subject to the following:**

- Execution of this document by both parties.
- Compliance with all stipulations below, including pre-construction requirements such as preparation and Department of Natural Resources (DNR), Division of Mining, Land & Water (DMLW) approval of a Public Access Plan and other plans as described below and request of survey instructions.

**Stipulations**

1. **Authorized Officer:** The Authorized Officer (AO) for the State of Alaska (State), DNR-DMLW is the Regional Manager or designee.
2. **Change of Contact Information:** The Grantee shall maintain current contact information with the AO. Any change of contact information must be submitted in writing to the AO.
3. **Valid Existing Rights:** This authorization is subject to all valid existing rights and reservations in and to the authorized area. The State makes no representations or warranties, whatsoever, either expressed or implied, as to the existence, number, or nature of such valid existing rights.
4. **Preference Right:** No preference right for subsequent authorizations is granted or implied by this authorization.
5. **Third Party Access to and Use of Grantee's Improvements:** Grantee is authorized to limit and regulate access to, and charge a toll or fee for the use of, Grantee Improvements constructed on the Easement. Only with written concurrence and non-objection from the Grantee, the AO may grant additional authorizations to third parties for compatible uses on state land within the Easement. Because the Grantee's operation and maintenance of a private road and utility corridor has been determined to be in the public interest, all third-party uses of state lands shall not interfere with operations conducted under this Easement. Incidental crossing of this Easement pursuant to a Grantor-approved Access Plan or the exercise of prior existing rights is not considered "use" subject to Grantee fees and regulation; Grantee will be consulted prior to authorizing any crossings exceeding Generally Allowed Uses under 11 AAC 96.020.
6. **Inspections:** The AO shall have reasonable access to the authorized area for inspection. If the Grantee is found to be in noncompliance the authorized area may be subject to reinspection. The Grantee may be charged for actual expenses of any inspection.
7. **Survey:** Survey instructions shall be requested from DNR-DMLW's Survey Section prior to construction. A DNR-DMLW-approved as-built survey is required to determine the proper location and acreage of installed improvements and the associated easement on state-owned, DNR-DMLW-managed lands. The survey must be produced in accordance with survey instructions provided by the DNR-DMLW Survey Section and stamped by a Professional Land

Surveyor registered in the State of Alaska. A final private exclusive easement will not be issued until the as-built survey has been approved by DNR-DMLW. The applicant is required to submit a preliminary draft as-built survey a minimum of one year prior to the expiration of the EA to allow adequate time for DNR-DMLW's review and approval of a final as-built survey.

8. **Requirements Prior to Construction and Operation:** Prior to *road construction* AIDEA shall submit the Public Access Plan (see below) and Reclamation Plan for DNR-DMLW approval. Following approval of the Public Access Plan, the Design and Construction Plans are required for review to ensure the requirements of the Public Access Plan are fully incorporated into the design. In addition, the Invasive Species Prevention and Management Plan and the Reclamation Plan are required prior to construction.

Prior to *operation of the road*, AIDEA shall develop a Spill Prevention and Response and Concentrate Recovery Plan in consultation with DEC and DNR-DMLW and provide DNR-DMLW a copy of the Spill Prevention Control and Countermeasure Plan. In addition, the Culvert Adaptive Management Plan, the NOA Management Plan, and the Dust Control Plan will be required prior to road operations.

9. **Public Access Plan:** Prior to closing any portion of this Easement to public access to crossing points, the Grantee shall prepare and submit a Public Access Plan inclusive of construction and operations periods to the AO for review and approval. To provide public notice of potential closures, evaluate any comments received, and render a decision to approve the plan, with or without modifications, the plan should be submitted to the AO at least 120 days before any closures are needed. DNR-DMLW approval of the plan will be required before construction may commence and before any portion of the corridor may be closed to public access.

The plan will include types and locations of designated crossing points, including ramps and other suitable methods for allowing public access to crossing points, to facilitate crossing, but not otherwise using, the Easement strictly for uses qualifying under Generally Allowed Uses (11 AAC 96.020); uses of these crossings exceeding Generally Allowed Uses must comply with 11 AAC 96.020. The Grantee will make provisions for suitable permanent crossings of this Easement for the public where this Easement crosses or runs along existing roads, foot trails, winter trails, valid existing easements, or other routes identified through Grantee coordination with local communities and land managers. Provisions for crossings will be implemented during Phase 1 construction and maintained through all project phases. The plan shall conform with the requirements set forth in the Administrative Decision under which this authorization was issued. Imposition of easements pursuant to AS 38.05.127 may occur as part of the plan approval process.

10. **Public Trust Doctrine:** The Public Trust Doctrine guarantees public access to, and the public right to use, navigable and public waters and the land beneath those navigable and public waters for navigation, commerce, fishing, and other purposes. This authorization is subject to the principles of the Public Trust Doctrine regarding navigable or public waters. The Public Trust doctrine requirement of ensuring access to and the right to use navigable and public waters does not extend to mandating access to and use of Grantee Improvements, which the Grantee may limit, regulate and charge a toll or fee for the use of consistent with this Private Exclusive Use Easement. Incidental crossing of this Easement pursuant to a Grantor-approved Access Plan or the exercise of prior existing rights is not considered "use" subject to Grantee

fees and regulation; Grantee shall be consulted prior to authorizing any crossings exceeding Generally Allowed Uses under 11 AAC 96.020.

- 11. Alaska Historic Preservation Act:** The Alaska Historic Preservation Act, AS 41.35.200, prohibits the appropriation, excavation, removal, injury, or destruction of any state owned historic, prehistoric, archaeological or paleontological site without written approval from the DNR Commissioner. Should any sites be discovered, the Grantee shall cease any activities that may cause damage and immediately contact the AO and the Office of History and Archaeology in the Division of Parks and Recreation.
- 12. Incurred Expenses:** The Grantor shall in no way be held liable for expenses incurred by the Grantee connected with the activities directly or indirectly related to this authorization.
- 13. Waiver of Forbearance:** Any failure on the part of the AO to enforce the terms of this authorization, or the waiver of any right under this authorization by the Grantee, unless in writing, shall not discharge or invalidate the authorization of such terms. No forbearance or written waiver affects the right of the AO to enforce any terms in the event of any subsequent violations of terms of this authorization.
- 14. Severability Clause:** If any clause or provision of this authorization is, in a final judicial proceeding, determined illegal, invalid, or unenforceable under present or future laws, then the Grantor and the Grantee agree that the remainder of this authorization will not be affected, and in lieu of each clause or provision of this authorization that is illegal, invalid, or unenforceable, there will be added as a part of this authorization a clause or provision as similar in terms to the illegal, invalid, or unenforceable clause or provision as may be possible, legal, valid, and enforceable.
- 15. Assignment:** This authorization may not be transferred or assigned without the prior written consent of the AO. Consent shall not be unreasonably withheld where the Grantee demonstrates that the proposed transfer or assignment is in the public interest and serves a public purpose. Transfer to a non-State party may result in substantive changes to the terms and conditions of this authorization as necessary to protect the State's interest.
- 16. Development Plan:** Development shall be limited to the authorized area and improvements specified in the approved development plan or subsequent modifications approved by the AO. The Grantee is responsible for accurately siting development and operations within the authorized area. Any proposed revisions to the development plan must be approved in writing by the AO before the change in use or development occurs.
- 17. Site Restoration:** Unless by a separate written agreement by the Grantor and Grantee, upon termination of this authorization, whether by abandonment, revocation or any other means, the Grantee shall return the lands to the Grantor in a condition acceptable to the AO in accordance with the approved reclamation plan.
- 18. Violations:** This authorization may be revoked upon violation of any of its terms, conditions, stipulations, nonpayment of fees, or upon failure to comply with any other applicable laws, statutes and regulations. A revocation may not become effective until 180 days after the Grantee has been notified in writing of the violation during which time the Grantee has an opportunity to cure any such violation.
- 19. Request for Information:** The AO may request the Grantee to provide any information directly or indirectly related to this authorization, in a manner prescribed by the AO.

Notwithstanding the foregoing, Grantee is not required to provide any information which it considers being commercially sensitive information or which is otherwise held subject to an obligation of confidentiality.

- 20. User/Operator Indemnification:** In connection with the entry on or use of assigned lands, subject to the limitations and provisions of AS 09.50.250-.270 and AS 37.05.170, the Grantee shall require that its contractors, subcontractors, operator, and or authorized users shall indemnify, save harmless, and defend the State, including DNR, its agents and its employees from any and all claims or actions for injuries or damages sustained by any person or property arising directly or indirectly from the construction or the contractor's performance of the contract, except when the proximate cause of the injury or damage is the State's sole negligence.
- 21. Maintenance of Improvements:** The Grantor is not responsible for maintenance of Grantee Improvements or liable for injuries or damages related to those improvements. No action or inaction of the Grantor is to be construed as assumption of responsibility.
- 22. Amendment or Modification:** The Grantee may request an amendment or modification of this authorization; the Grantee's request must be in writing. Any amendment or modification must be approved by the AO in advance and may require changes to the terms of this authorization.
- 23. Fire Prevention, Protection and Liability:** The Grantee shall ensure all contractors, subcontractors, operators, and authorized users take all reasonable precautions to prevent and suppress forest, structure, brush, and grass fires, and they assume full liability for any damage to state land and structures resulting from the negligent use of fire. The State is not liable for damage to the contractors, subcontractors, operators, or authorized users personal property.
- 24. Compliance with Government Requirements:** The Grantee shall, at its expense, comply with all federal, state, and local laws, regulations, and ordinances directly or indirectly related to this authorization. The Grantee shall ensure compliance by its employees, agents, contractors, subcontractors, licensees, or invitees.
- 25. Fuel and Hazardous Substances:** The use and/or storage of hazardous substances by the Grantee must be done in accordance with existing federal, state and local laws, regulations and ordinances. Debris (such as soil) contaminated with used motor oil, solvents, or other chemicals may be classified as a hazardous substance and must be removed and disposed of in accordance with existing federal, state and local laws, regulations and ordinances. Drip pans and materials, such as sorbent pads, must be on hand to contain and clean up spills from any transfer or handling of fuel.

The storage of petroleum products below Ordinary High Water (OHW) or Mean High Water Mark (MHW) is prohibited. Fuel storage containers, including flow test holding tanks and hazardous substances, with a total combined capacity larger than 55 gallons shall not be placed within 100 feet (500 feet in the Bering Straits CRSA) from the ordinary high water mark of waterbodies. All fuel storage containers and associated materials must be removed by the authorization expiration date. All fuel and hazardous substance containers shall be marked with the contents and the Grantee's name using paint or a permanent label.

Definitions:

Containers means any item which is used to hold fuel or hazardous substances. This includes tanks, drums, double-walled tanks, portable testing facilities, fuel tanks on small equipment such as light plants and generators, flow test holding tanks, slop oil tanks, bladders, and bags. Manifolded tanks or any tanks in a series must be considered as single independent containers. Vehicles, including mobile seismic tanks, are not intended to be included under this definition.

Hazardous substances are defined under AS 46.03.826(5) as (a) an element or compound which, when it enters the atmosphere, water, or land, presents an imminent and substantial danger to the public health or welfare, including fish, animals, or vegetation; (b) oil; or (c) a substance defined as a hazardous substance under 42 U.S.C. 9601(14).

Secondary containment means an impermeable diked area or portable impermeable containment structure capable of containing 110 percent of the volume of the largest independent container. Double-walled tanks do not qualify as secondary containment unless an exception is granted for a particular tank. All piping and manifolds shall be within secondary containment.

Surface liner means any safe, non-permeable container (e.g., drips pans, fold-a-tanks, etc.) designed to catch and hold fluids for the purpose of preventing spills. Surface liners should be of adequate size and volume based on worst-case spill risk.

- 26. Site Restoration of Ground Disturbing Activities:** To prevent erosion, disturbed areas shall be stabilized immediately after construction. Revegetation of the site shall begin as soon as site conditions allow and in the same growing season as the disturbance unless climatic conditions warrant additional time. Additional time must be approved by the AO. Native vegetation and topsoils removed for project construction shall be stockpiled separately and used for site rehabilitation.
- 27. Roadside Vegetation:** The Grantee shall employ mitigation measures to reduce contamination of roadside vegetation through industry Best Management Practices (BMPs) that prevent and minimize fugitive dust, stormwater runoff, erosion, and spills and leaks. Contaminant monitoring will continue throughout the life of the project.
- 28. Revegetation:** In order to minimize the risk of introducing invasive species, the Grantee will rely on use of topsoil with live native vegetation where practicable, and on planting and reseeding as secondary options. If planting and reseeding is required native grass seed from the Alaska Plant Materials Center will be required.
- 29. Notification of Discharge:** The Grantee shall immediately notify the Department of Environmental Conservation (DEC) and AO of any unauthorized discharge of any amount of oil to water, a discharge of any amount of a hazardous substances (other than oil), and any discharge of oil greater than 55 gallons on land. All fires and explosions must also be reported immediately.

If a discharge, including a cumulative discharge, of oil is greater than 10 gallons but less than 55 gallons, or a discharge of oil greater than 55 gallons is made to an impermeable secondary containment area, the Grantee shall report the discharge within 48 hours. Any discharge of oil greater than one gallon up to 10 gallons, including a cumulative discharge, solely to land, must be reported in writing on a monthly basis.

Notification of discharge must be made to DEC online at [ReportSpills.alaska.gov](http://ReportSpills.alaska.gov) or by phone at 1-800-478-9300.

Notification of discharge must be made to the appropriate DNR Office, preferably by e-mail: Anchorage email [dnr.scro.spill@alaska.gov](mailto:dnr.scro.spill@alaska.gov), (907) 269-8528; Fairbanks email [dnr.nro.spill@alaska.gov](mailto:dnr.nro.spill@alaska.gov), (907) 451-2739; Juneau email [dnr.sero.spill@alaska.gov](mailto:dnr.sero.spill@alaska.gov), (907) 465-3513. The Grantee shall supply the AO with all incident reports submitted to DEC.

- 30. Waste disposal:** On-site refuse disposal is prohibited, unless specifically authorized. All waste generated during operation, maintenance, and termination activities under this authorization shall be removed and disposed of at an off-site DEC approved disposal facility. Waste, in this paragraph, means all discarded matter, including but not limited to human waste, trash, garbage, refuse, oil drums, petroleum products, ashes and discarded equipment.
- 31. Design and Construction Plans:** Grantee shall provide DNR-DMLW with a copy of the Design and Construction Plans, including drawings, with sufficient detail to enable a complete evaluation of all proposed structures, facilities, methods and mitigation measures to ensure compliance with the requirements of this authorization.
- 32. Reclamation Plan:** The Grantee shall submit a reclamation plan prior to construction.
- 33. Spill Prevention Control and Countermeasure Plan:** Grantee shall provide DNR-DMLW a copy of the Spill Prevention Control and Countermeasure Plan (SPCCP).
- 34. Spill Prevention and Response and Concentrate Recovery Plan (SPRCRP):** A SPRCRP will be required prior to operation of the Ambler Road. The plan shall be developed in consultation with DEC and DNR. The plan shall address who will be responsible for responding to spills; what tundra treatment guidelines will be used; and what equipment and mitigation measures the applicant will employ.
- 35. Concentrate Transportation:** Trucks hauling concentrate from the Ambler Mining District to the Dalton Highway will be required to use covered, sealed containers to prevent ore concentrate from escaping the haul trucks and minimize the potential for impacts on streams from concentrate transport. The operating requirement will be carried through into Grantee's permit requirements of any road user.
- 36. Permafrost:** Grantee shall design and construct the road to follow standard industry practices to reduce or eliminate permafrost degradation and associated road quality deterioration. Provisions for reducing permafrost degradation would be included in project design. Potential methods for addressing permafrost concerns include embankment insulation, air convention embankment, thermosyphons, sunsheds, snowsheds, or air ducts.
- 37. Foam Insulation:** If foam is used to insulate the permafrost from thermal degradation, it will be composed of closed-cell extruded polystyrene or other closed cell foams (e.g., blue board) rather than non-extruded expanded polystyrene foam.
- 38. Waterbodies and Wetlands:** All construction and operation activities will be conducted with due regard for good resource management and in such a manner as not to block any stream or drainage system; change the character or course of a streams; cause the pollution of any stream, lake, wetland, or land area; or cause pollution of the air, except as authorized by the appropriate state agency.
- 39. Stream Crossings & Floodplain Connectivity:** Stream crossings will preserve floodplain connectivity to the greatest extent practicable.

- 40. Hydrologic Connectivity:** Bridges and culverts will be installed at all identified drainage crossings, including rills and ephemeral channels, to maintain hydrologic connectivity, minimize changes to watershed basin areas, and reduce the likelihood of water impoundment degrading permafrost. An adequate number of culverts and/or bridges will be installed to maintain hydrologic continuity and existing drainage patterns within wetland complexes, ephemeral channels, and perennial stream channels. Grantee shall evaluate the use of bridges versus culverts on braided streams to reduce impacts to the stream and allow natural stream channel movement. Design features related to this mitigation will be determined during the design/permitting phase and implemented throughout the project footprint on state managed lands.
- 41. Floodplain Connectivity:** During design, culvert widths and bridge spans will be increased as needed, and/or overflow culverts will be installed to improve floodplain connectivity and accommodate stream characteristics to reduce the likelihood of damming or erosion. Overflow culverts, typically set at higher elevations relative to the primary culvert, will be considered at stream crossings where aufeis formation is probable to keep water flowing across the roadway and prevent erosion and damming should flow through the primary culvert become impeded or blocked by ice. Overflow culverts also will be considered at stream crossings where there is a high likelihood of large woody debris (e.g., fallen trees) blocking culverts, based on the prevalence of timbered banks and active stream erosion upstream of the crossing. Overflow culverts also will be considered at broad, active floodplains, especially where the main stream channel is poorly defined, to better accommodate hydrologic connectivity across the floodplain. Design features related to this mitigation will be determined during the design phase and implemented throughout the project footprint on state managed lands.
- 42. Culverts Widths:** Culvert widths will be 1.2 times the bankfull width of the stream plus two feet as recommended in the Washington Department of Fish and Wildlife's Water Crossing Design Guidelines, 2013. Culverts in fish-bearing streams will be designed to maintain a natural channel and substrates to maintain a natural stream bed character. This embedded stream simulation design will maintain fish passage by retaining the natural stream slope, meander, and water velocity and depth patterns similar to the natural (undisturbed) stream reaches upstream and downstream of the culvert location.
- 43. Cross-drainage Culvert Locations:** Final cross-drainage culvert locations will be determined in the field during breakup and locations staked. Existing (natural) drainage patterns will be maintained throughout all construction and operation periods by the installation of culverts in all authorized fill areas in sufficient number and size to prevent ponding, dewatering, water diversion between watersheds, or concentrating runoff flows and to ensure that hydrology is not altered.
- 44. Overflow Culverts:** Overflow culverts should be at the same grade level as the floodplain, and placed to match the flood-flow patterns in the floodplain.
- 45. Culvert Adaptive Management Plan:** A Culvert Adaptive Management Plan (AMP) for monitoring, maintaining, and repairing culverts over the life of the road shall be developed in consultation with Alaska Department of Fish and Game (ADF&G) and the U.S. Army Corps of Engineers (USACE). The AMP shall include documentation of culvert locations with Geographic Positioning System (GPS) waypoints; regular monitoring during culvert installation and through the road operations; corrective measures which would be taken if



concerns are identified; and timeframes for those measures to be implemented. Corrective measures may include installation of additional culverts, increasing culvert size, adding thaw lines, adding deadman anchors or other appropriate measures. The Grantee shall use its proposed Ambler Mining District Industrial Access Project (AMDIAP) subsistence Advisory Committee to help in oversight of the AMP.

- 46. Groundwater Flow:** The Grantee shall use construction methods and road design features that minimize the disruption of groundwater flow through the active layer above permafrost covered by the roadbed, to protect groundwater-fed wetlands such as fens. For updrainage of fens and other unique wetland features the use of more porous fill material shall be maximized and compaction to underlying soils limited.
- 47. Uncommon Wetlands:** Disturbance to uncommon wetlands such as patterned fens and moss-lichen wetlands will be avoided to the maximum extent practicable.
- 48. Vegetation Buffer:** Where it is practicable, a 100-foot undisturbed vegetation buffer will be maintained along ponds, lakes, creeks, rivers or higher-value wetland (patterned fens, emergent wetlands and moss-lichen wetlands) unless site-specific conditions warrant an exception. Any exceptions must be approved by the AO. The buffer width will start from the edge of the riparian area associated with the waterbodies or from the edge of the higher value wetland.
- 49. Erosion Control Measures:** The Grantee shall install erosion control measures along the perimeter of all work areas to prevent the displacement of fill material outside the authorized work area. The erosion control measures shall remain in place and be maintained until all authorized work is completed and the work areas are stabilized. To the maximum extent practicable, plastic-free erosion and sediment control products such as netting manufactured from 100-percent biodegradable materials like jute, sisal or coir fiber shall be used for erosion control. Immediately after completion of the final grading of the land surface, all slopes, land surfaces, and filled areas shall be stabilized using sod, degradable mats, barriers, or a combination of similar stabilizing materials to prevent erosion.
- 50. Dust Control Plan:** The Grantee shall provide the AO with a copy of the Dust Control Plan.
- 51. Dust Suppressants:** Dust suppressants with ingredients known to be harmful to aquatic organisms will not be used within 328 feet of any fish-bearing stream and higher-value wetlands (i.e., emergent wetlands, moss-lichen wetlands, patterned fens, shallow ponds).
- 52. Naturally Occurring Asbestos:** Grantee shall avoid the use of materials containing naturally occurring asbestos (NOA is defined as 0.1 percent asbestos by mass) to the greatest extent practicable. If use of NOA materials cannot be avoided, the fill material and road cuts will be capped with non-NOA materials in order to not expose NOA to the air, and Grantee shall follow DOT&PF measures as allowed under 17 Alaska Administrative Code 97 and described in May 14, 2015 regulations regarding the use of materials containing NOA.
- 53. Naturally Occurring Asbestos Management Plan:** The Grantee shall develop and implement a plan to inform workers and residents of all communities in the area directly affected by the Ambler Road of the occurrence of NOA in road materials, and on the ways to minimize exposure to NOA and reduce health risk.
- 54. Gravel and Construction Materials:** Gravel and other construction materials shall not be taken from streambeds, riverbeds, active floodplains, lakeshore or outlets of lakes *without authorization from ADF&G and approval of the AO*. Material sites will be located outside of

active channels and active floodplains. A 500' buffer around all streams will be maintained, within which no material site or access road to a material site will be located.

**55. Clean Fill:** The Grantee shall use only clean fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete blocks with exposed reinforcement bars, and soils contaminated with any toxic substance, in toxic amounts in accordance with Section 307 of the Clean Water Act.

**56. Snow and Ice Clearing:** Snow and ice clearing operations shall not result in the discharge of vegetation, soil or debris into waters of the U.S. outside of all authorized fill areas.

**57. Mining and Reclamation Plan:** Grantee shall provide a Mining and Reclamation Plan for approval for any material mined within the construction corridor, but not a part of standard cut and fill operations.

**58. Invasive Species Prevention and Management Plan:** The Grantee will prepare an Invasive Species Prevention and Management Plan (ISPMP) to prevent the introduction and spread of Non-native Invasive Species (NNIS), including terrestrial and aquatic plant and animals. At a minimum, the ISPMP will:

- a. Be consistent with the current state and federal Invasive Species Management Policies;
- b. Identify methods and timeframe for conducting a baseline NNIS assessment prior to initiating surface disturbing activities, and periodic assessments throughout the duration of the authorization;
- c. Identify methods of NNIS prevention and infestation management;
- d. Include clear procedures for documenting and reporting detections of NNIS;
- e. Include specific practices, procedures, and best management practices for preventing the introduction and spread of NNIS, including ensuring that all equipment is free from invasive species seeds and propagules (both terrestrial and aquatic);
- f. Include a program (procedures, timeframes, documentation) for training all employees engaged in road construction or maintenance and all drivers authorized to use the road in invasive species awareness and abatement to include identification and reporting of any invasive species encountered during field activities.
- g. Include an adaptive management and monitoring framework to mitigate the introduction and spread of NNIS (including terrestrial and aquatic plants and animals) throughout the duration of the authorization and for at least five growing seasons after completion of reclamation.

**59. Minimize Impacts to Wildlife:** The Grantee must include, in its road design, measures to minimize impacts to wildlife movement and minimize habitat fragmentation during construction. This may include, but not be limited to, such features as:

- a. Burying infrastructure or facilities that may deter wildlife movement.
- b. Creating wildlife escapement design features in excavations.
- c. Siting and orienting infrastructure and facilities to allow unfettered wildlife movement.
- d. Using vegetation to provide screened and unfragmented movement corridors around infrastructure and facilities.

- 60. Clearing Activities:** The Grantee shall ensure that vegetation clearing during all phases of construction will be scheduled to minimize impacts on migratory birds. The primary mechanism to avoid and minimize impacts is to conduct vegetation clearing outside of the nesting season (May 1–July 15 for this region). If the Grantee chooses to clear vegetation during this timeframe, then the Grantee shall have a qualified biologist survey any area where vegetation would be damaged by the project or associated activities within 48 hours prior to vegetation disturbance. If an active nest is located, an appropriate avoidance area (as determined by the qualified biologist) will be marked and avoided until the biologist determines that the nest has been naturally vacated.
- 61. Road Traffic:** Vehicles will be required to slow down or stop and wait to permit the free and unrestricted movement of wildlife across the road at any location. During known caribou migration, the AO may require temporary cessation of traffic.
- 62. Winter Maintenance:** Snowbank height will be minimized to allow caribou passage, in particular during spring migrations, to the extent practicable.
- 63. Breeding Seasons:** During periods of wildlife breeding, lambing, or calving activity, and during major migrations of wildlife, the Grantee's activities on DNR-managed land may be restricted by the AO with written notice. From time to time, the AO may furnish the Grantee a list of areas identified by ADF&G where such actions may be required, together with anticipated dates of restriction.
- 64. Construction Timing Windows:** The Grantee shall work with land managers and wildlife agencies to identify construction timing windows to protect wildlife. Timing design features related to this mitigation will be determined during the design/permitting phase.
- 65. Fish-bearing-stream Crossings:** All fish-bearing-stream crossings will be natural channel designs (e.g., U.S. Fish and Wildlife Service 2019) and follow fish passage design guidelines to facilitate fish passage for all life stages.
- 66. Airstrips:** The Grantee shall operate project airstrips for Ambler Road activities only, except for emergency landings. The general public shall not have use of airstrips for recreational or other, non-business related purposes.
- 67. Subsistence Working Group:** The Grantee shall consult directly and regularly with affected subsistence communities, represented in the subsistence working group formed by the Grantee including the following items:
- a. The Grantee shall consult with directly affected subsistence communities to discuss the siting, timing, and methods of road construction and operations.
  - b. The Grantee shall make every reasonable effort, including such mechanisms as conflict avoidance agreements and mitigating measures, to ensure that road construction activities and operations and maintenance activities carefully consider and minimize interference with subsistence activities.
- 68. Subsistence Activity Impact Mitigation:** The Grantee shall notify workers and road users when subsistence activities are ongoing in the area and direct them to refrain from actions that may affect the activities (e.g., not removing trapline markers). Subsistence activity impact mitigation will also include:

- a. Identifying locations and times when subsistence activities occur and minimizing work during these times and in these areas to the maximum extent practicable.
- b. Scheduling work (e.g., blasting) to avoid conflict with subsistence activities when possible.
- c. Managing project-related aviation activities to minimize disturbance of hunters or prey species.

*Signature page follows*

Any correspondence on this authorization may be directed to the Department of Natural Resources, Division of Mining, Land and Water, Northern Regional Lands Office, 3700 Airport Way, Fairbanks, Alaska, 99709, (907) 451-2740.

I have read and understand all the foregoing and attached stipulations. By signing this authorization, I agree to conduct the authorized activity in accordance with the terms and conditions of this authorization.

Signature of Grantee or Authorized Representative	Title	Date
---	-------	------

Grantee's Address	City	State	Zip
-------------------	------	-------	-----

Contact Person	Home Phone	Work Phone
----------------	------------	------------

Signature of Authorized State Representative	Title	Date
--	-------	------