

US Army Corps of Engineers Alaska District

Regulatory Division (1145) CEPOA-RD Post Office Box 6898 JBER, Alaska 99506-0898

Public Notice of Application for Permit

PUBLIC NOTICE DATE:	May 12, 2021
EXPIRATION DATE:	June 11, 2021
REFERENCE NUMBER:	POA-2021-00211
WATERWAY:	Smith Creek

Interested parties are hereby notified that a Department of the Army permit application has been received for work in waters of the United States (U.S.) as described below and shown on the enclosed project drawings.

All comments regarding this Public Notice (PN) should be sent to the address noted above. If you desire to submit your comments by email, you should send it to the Project Manager's email as listed below or to: regpagemaster@usace.army.mil. All comments should include the PN reference number listed above.

All comments should reach this office no later than the expiration date of this PN to become part of the record and be considered in the decision. Please contact Janet Post at (907) 753-2831, toll free from within Alaska at (800) 478-2712, by fax at (907) 753-5567, or by email at: Janet.L.Post@usace.army.mil if further information is desired concerning this notice.

APPLICANT: ADOT&PF, Mr. Brett Nelson, 2301 Peger Road, Fairbanks, AK 99709

<u>LOCATION</u>: The project site is located within Section 24, 25, 36, T. 8 N., R. 20 W., Kateel River Meridian; USGS Quad Map Kotzebue A-2; Latitude 66.0743° N., Longitude 162.7463° W.; 55 miles south of Kotzebue, in Deering, Alaska.

<u>PURPOSE</u>: The applicant's stated purpose is to construct safety and operational repairs to provide the community of Deering with safe and efficient, all-season airport access. The project purpose is also to bring the airport to current standards and meet criteria identified in the Alaska Plan, the Alaska Aviation System Plan, and current Federal Aviation Administration (FAA) design standards.

<u>PROPOSED WORK</u>: Resurface the existing runway, rehabilitate runway embankments, replace the airport lighting, improve airport drainage, and construct a new access road to the airport with a bridge over Smith Creek. The new bridge will have earthen abutments and approaches on either side of Smith Creek. The new road will provide all season access to the Deering Airport. Fill material (sand and gravel) will be excavated from up to five material sites in the Inmachuk River. The new access road to the Deering Airport requires fill placement into approximately 8.1 acres of wetlands. To stabilize thawing permafrost around the runway new fill material will be placed on existing runway embankments and into adjacent wetlands. Airport fill will total approximately 10.4 acres in wetlands. The rip rap protecting the bridge embankments will impact 0.2 acres of waters of the U.S. (WOTUS). A total of 18.8 acres of WOTUS will be filled. Temporary workspace of 4.8 acres, will buffer the evacuation and access road. Vegetation grubbing for the project will take place before May 20th or after July 20th to avoid impacts to nesting migratory birds. All work would be performed in accordance with the enclosed plan (sheets 1-2), dated October 2020.

<u>APPLICANT PROPOSED MITIGATION</u>: The applicant proposes the following mitigation measures to avoid, minimize, and compensate for impacts to WOTUS from activities involving discharges of dredged or fill material.

a. Avoidance: This project is in the Norton Sound Highlands land resource area in western Alaska, where wetlands are estimated to be 52.9 percent of the surface area. Stantec completed wetland mapping on 1,361 acres and uplands only totaled 90 acres (6.7 percent upland) in the area using high resolution aerial photography and elevation data. Mapping classifications included National Wetlands Inventory (Cowardin et al. 1979) and consolidated Viereck (Viereck et al. 1992) habitat classifications (Stantec 2021). The Deering road network, airport, supporting infrastructure, portions of material sites, and the village are on uplands. Additionally, several small upland areas were mapped on berms and cut banks adjacent to rivers and streams. Total avoidance of wetland impacts during any type of development in the Deering airport will neither be practicable nor possible.

b. Minimization: Equipment Storage: The design incorporates existing roads, minimizing impacts to WOTUS, to include wetlands and streams. The construction equipment will be offloaded at the barge landing during the summer. Equipment will be stored in designated upland areas. Temporary Work Areas: The access road as well as the bridge approaches have been shown with a temporary 25-foot-wide work area on either side. This buffer has been included in the drawings. This has been included to allow for construction deviations with equipment beyond the toe-to-toe layout of the road and bridge embankments. The buffer areas will be reserved, if needed when construction is complete. This acreage has been calculated as temporary work area totaling 4.8 acres. Access Road Drainage Construction Minimization Measures: Appropriately sized culverts will be placed along the access road to maintain hydrologic connectivity of the adjacent wetlands. The figures show several proposed locations. No additional fill is required for the culvert placements. The fill is calculated as part of the roadway. Swales and other concave landscape features that collect water will have hydrologic connectivity maintained using culverts. A two-lane bridge will cross Smith Creek and has been designed to accommodate high water, navigation, and winter snow machine traffic. Abutments will be placed on either side of the creek within the floodplain. Rip rap layout was designed to protect the embankments at all water stages. Erosion Sediment Control Plans and Stormwater Pollution Prevention Plans (SWPPPs) will be developed and implemented to prevent introduction of sediments and consequent turbidity into WOTUS during construction. Best Management Practice (BMP)s will be used project-wide to maintain instream water quality and stream bank stability.

c. Compensatory Mitigation: The reason for this project is public safety; for both the runway and access road. There are no external economic drivers. Due to the avoidance and minimization efforts the Alaska Department Of Transportation and Public Facilities (ADOT&PF) has undertaken with community input during the planning and design of this project, minimal cumulative impacts, the in-river material site location and the vast undeveloped wetland landscape within the watershed, North Arctic Brough (NAB) subsistence zoning, and by following the 404(b)(1) Guidelines sequencing, and adhering to current Alaska regulatory guidance, no compensatory mitigation will be offered to offset the 18.8 acres or less of permanent losses to wetlands and waters in this location. The temporary impacts of 4.8 acres will be reclaimed following construction.

<u>WATER QUALITY CERTIFICATION</u>: A permit for the described work will not be issued until a certification or waiver of certification, as required under Section 401 of the Clean Water Act (Public Law 95-217), has been received from the Alaska Department of Environmental Conservation.

<u>CULTURAL RESOURCES</u>: The lead Federal agency, ADOT&PF by agreement with the FAA, is responsible for compliance with the requirements of Section 106 of the National Historic Preservation Act. ADOT&PF consulted with the State Historic Preservation Office (SHPO), and on April 2, 2021, SHPO concurred with the finding of no historic property adversely affected.

ENDANGERED SPECIES: The project area is within the known or historic range of the bearded seal (Erignathus barbatus), ringed seal (Phoca hispida), western distinct population segment (DPS) Steller sea lion (Eumetopias jubatus), North Pacific right whale (Eubalaena japonica), Mexico DPS humpback whale (Megaptera novaeangliae), western North Pacific DPS humpback whale, fin whale (Balaenoptera physalus), sperm whale (Physeter macrocephalus), Cook Inlet beluga whale (Delphinapterus leucas), bowhead whale (Balaena mysticetus), designated Steller sea lion, Cook Inlet beluga, North Pacific right whale critical habitat, spectacled eiders (Somateria fischeri), Alaska-breeding Steller's eiders (Polysticta stelleri), and polar bears (Ursus maritimus). The ADOT&PF is the lead federal agency by agreement with the FAA. Section 7 consultation was completed between ADOT&PF and National Marine Fisheries Service (NMFS), and on February 22, 2021, NMFS concurred with ADOT&PF's effects determination of may affect, but not likely to adversely effect, with the implementation of required mitigation measures. Also, Section 7 consultation was completed between ADOT&PF and the United States Fish and Wildlife (USFWS), and on December 11, 2020, USFWS concurred with ADOT&PF's effects determination of not likely to adversely effect, with implementation of the Polar Bear Interaction Guidelines.

<u>ESSENTIAL FISH HABITAT</u>: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). We are currently gathering information and have yet to make a determination of effect. Should we find that the described activity may affect the species listed above, we will follow the appropriate course of action under Section 305(b)(2) of the Magnuson-Stevens Act. Any comments the NMFS may have concerning EFH will be considered in our final assessment of the described work.

<u>TRIBAL CONSULTATION</u>: The Alaska District fully supports tribal self-governance and government-to-government relations between Federally recognized Tribes and the Federal government. Tribes with protected rights or resources that could be significantly affected by a proposed Federal action (e.g., a permit decision) have the right to consult with the Alaska District on a government-to-government basis. Views of each Tribe regarding protected rights and resources will be accorded due consideration in this process. This PN serves as notification to the Tribes within the area potentially affected by the proposed work and invites their participation in the Federal decision-making process regarding the protected Tribal right or resource. Consultation may be initiated by the affected Tribe upon written request to the District Commander during the public comment period.

<u>PUBLIC HEARING</u>: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, reasons for holding a public hearing.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts, which the proposed activity may have on the public interest, requires a careful weighing of all the factors that become relevant in each particular case. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. The outcome of the general balancing process would determine whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur. The decision should reflect the national concern for both protection and utilization of important resources. All factors, which may be relevant to the proposal, must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(I) guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria (see Sections 320.2 and 320.3), a permit will be granted unless the District Commander determines that it would be contrary to the public interest.

The Corps of Engineers (Corps) is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

<u>AUTHORITY</u>: This permit will be issued or denied under the following authority:

Discharge dredged or fill material into waters of the U.S. – Section 404 Clean Water Act (33 U.S.C. 1344). Therefore, our public interest review will consider the guidelines set forth under Section 404(b) of the Clean Water Act (40 CFR 230).

Project drawings are enclosed with this Public Notice.

District Commander U.S. Army, Corps of Engineers

Enclosures



Deering Airport and Access Road Improvements

Section 404 Permit Application

Supplemental Information

March 19, 2021

Prepared for:

Alaska Department of Transportation and Public Facilities 2301 Peger Road Fairbanks, AK 99709

Prepared by:

Stantec 725 East Fireweed Lane, Suite 200 Anchorage, Alaska 99503



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Prepared by:

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Victor Ross

Reviewed by

(signature)

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Zach Baer, PWS

Approved by

(signature)

Steve Reidsma, PWS



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Acronyms

ADF&G	Alaska Department of Fish and Game
BMPs	best management practices
DNR	Alaska Department of Natural Resources
DOT&PF	Alaska Department of Transportation and Public Facilities
EA	Final Environmental Assessment Deering Airport
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
LEDPA	Least Environmental Damaging Practicable Alternative
MOA	Memorandum of Agreement
NAB	Northwest Arctic Borough
PRM	Permittee Responsible Mitigation
SWPPP	Stormwater Pollution Protection Plan
USACE	U.S. Army Corps of Engineers
WOUS	waters of the U.S.

INTRODUCTION

This document supplements the information in the attached Engineering Form 4345, a permit application by the Alaska Department of Transportation and Public Facilities (DOT&PF) to rehabilitate an existing airport and construct an access road for the community of Deering. Source material and additional information regarding this project is provided in the *Final Environmental Assessment Deering* (EA) (DOT&PF and Stantec 2021).

APPLICATION BLOCK 15: LOCATION OF PROJECT

The project is in the Northwest Arctic Borough (NAB), approximately 55 miles south of Kotzebue. The airport and access road are located south of the village of Deering.

The locations of key project components are shown in Table 15-1 and in the attached figure set.

Project Component	Latitude N	Longitude W
Airport	66.0693	162.7663
Airport Access Road	66.0758	162.7494
Airport Access Road Bridge – Smith Creek	66.0764	162.7485
Material Source – Inmachuk River Bar #1	66.0653	162.7523
Material Source – Inmachuk River Bar #2	66.0625	162.7577
Material Source – Gravel Site 8	66.0249	162.8226
Material Source – RMS #2	66.0236	162.8258
Material Source – 2020_09	66.0166	162.8508
Material Source – 9-Mile Pit	66.0052	162.8863

 Table 15-1: Decimal Degree Location of the Key Project Components

The project is within the US Geological Survey Quadrangle Kotzebue A-2, Kateel River Meridian. The project is within the following township, ranges, and sections;

- T8N, R20W, S 24, 25, 36;
- T8N, R19W, S 19, 30; and
- T7N, R20W, S 2, 10, 11, 16, 20



APPLICATION BLOCK 21: TYPES OF MATERIAL DISCHARGED AND THE AMOUNT OF EACH TYPE IN CUBIC YARDS

Table 21-1 lists the project components and impacts to waters of the U.S. (WOUS) to include wetlands, ponds, and streams. Cubic yards of fill are estimated and may vary based on site-specific conditions. The permanent fill in WOUS is approximately 18.8 acres.

Gravel pit excavation will have a maximum footprint of 19.7 acres but will occur in the active floodplain, below the Ordinary High-Water Mark (OHWM) of the Inmachuk River; there will be no fill or loss of WOUS. There is a temporary stockpile site located in an identified gravel pit in the Inmachuk River of 2.8 acres. The excavated volume of river gravels will equal the deposited volume of sand and gravel deposited in wetlands. There are no on-site rip rap sources. Rip rap for the project will be imported.

Project Component	WOUS Acres Impacted	Impacted Habitat	Cubic Yards Fill in WOUS	Fill Type	
Airport Embankments	10.4	PEM1, PSS1/EM1, PUB	115,500	River Gravels Borrow & Crushed Aggregate	
Access Road	8.1	PEM1, PSS1/EM1, PUB	ھ 5,250		
Pridao	0.08	R1UB	050	Rip rap	
Bridge	0.15	PEM1	950		
Temporary Work Areas	4.8	PEM1, PSS1/EM1, PUB, R1UB	0	none	
Total Permanent Impacts and Fill	18.8	PEM1, PSS1/EM1, PUB, R1UB	121,700	River Gravel Borrow, Crushed Aggregate, and Rip Rap	

Table 21-1: Project Impacts - Fill

Material Site	WOUS Acres Impacted	Impact Type
Inmachuk River Bar #2, Mine	6.1	Excavation
Gravel Site 8, Mine	2.1	Excavation
RMS #2, Mine	1.6	Excavation
2020_09, Mine	5.3	Excavation
9-Mile Pit, Mine	4.6	Excavation
Total Excavation	19.7	Excavation
Inmachuk River Bar #1; Staging Area	2.8	Temporary Stockpiling of Supplies
Total Temporary Stockpile	2.8	Temporary Stockpiling of Supplies
Total Material Site Acres*	22.5	Excavation and Temporary Stockpile

Table 21-2: Project Impacts - Excavation

*Apparent inconsistencies in sums are the results of rounding.

APPLICATION BLOCK 23: DESCRIPTION OF AVOIDANCE, MINIMIZATION, AND COMPENSATION ACTIVITIES BOTH UNDERTAKEN AND PROPOSED

23.1 Avoidance and Minimization by Planning and Design

During the preliminary and final design planning process, DOT&PF evaluated airport rehabilitation options, numerous material sites, and the access road route to identify the Least Environmentally Damaging Practicable Alternative (LEDPA). During the process, DOT&PF made efforts to reduce and avoid impacts to higher-value wetlands and intact wetlands in the area. These avoidance and minimization measures were incorporated in the preferred alternative (i.e., the design presented in this application). Alternatives considered but dismissed are addressed in detail in the EA (DOT&PF and Stantec 2021).

23.1.1 Alternatives and Revisions Considered

Wetlands and deep-water habitats in Alaska account for 50.7 percent of the state's total surface area (Hall et al. 1994). This project is in the Norton Sound Highlands land resource area in western Alaska, where wetlands are estimated to be 52.9 percent of the surface area (Hall et al. 1994).

Stantec completed wetland mapping on 1,361 acres and uplands only totaled 90 acres (6.7 percent upland) in the area using high resolution aerial photography and elevation data. Mapping classifications included National Wetlands Inventory (Cowardin et al. 1979) and consolidated Viereck (Viereck et al. 1992) habitat classifications (Stantec 2021). The Deering road network, airport, supporting infrastructure, portions of material sites, and the village are on uplands. Additionally, several small upland areas were



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mapped on berms and cut banks adjacent to rivers and streams. The rest of the area is considered WOUS. Gravel bars along the Inmachuk River with no vegetation were considered below OHW and part of the tributary due to historic imagery showing them submerged during seasonal flooding.

Total avoidance of wetland impacts during any type of development in the Deering airport will neither be practicable nor possible.

Airport Alternatives

Airport relocation was not deemed a practicable alternative. The existing airport is within one mile of Deering. The current location is not subject to coastal erosion. The existing location allows for the shortest access road to the airport.

With rehabilitation and repair the existing airport can continue to service the community. A new airport would require a road and site that would impact additional undisturbed wetlands and require fill material to be mined and placed for the project. The impacts to WOUS by constructing a new airport considering mining, fill, and access would be far greater than maintaining and operating the existing facility.

Material Sources

Material quantities required for the project are not substantive for the access road, runway rehabilitation, and navigational features (121,700 cy of material). Material for the project can be found locally on river bars within the Inmachuk River channel. In channel material sites avoid new roads and new construction impacts in wetland complexes. Table 23-1 shows 12 material sources considered for the project summarized by wetlands and water impacts. To reduce impacts to WOUS, several small material sites have been selected for this project. There are no larger areas within the river channel that could provide all material needed.

Site Name	Solootod	Impacts in Wetlands/Waters (Acres)				es)
Site Name	Selected	PEM1	PSS1	PSS1/EM1	R3UB	Total
2020_03	No				0.7	0.7
2020_06	No		0.1		2.7	2.8
2020_07	No			0.5	2.4	2.9
2020_09	Yes			0.2	5.1	5.3
5-Mile Pit (206-02-07)	No	0.1		0.1		0.1
9-Mile Pit/Gravel Site 5	Yes	0.0			4.6	4.6
Gravel Site 6	No				2.5	2.5
Gravel Site 8	No	0.3		0.2	1.6	2.1
Inmachuk River Bars 1, Staging area (206-02-01)	Yes	0.7		0.1	2.1	2.8
Inmachuk River Bars 2	Yes	2.6		0.1	3.4	6.1
RMS #2	Yes			0.0	1.6	1.6
RMS #3	No			0.6	4.9	5.5
	Totals*	3.6	0.1	1.7	31.7	37.1

Table 23-1: Material Sites Evaluated

*Apparent inconsistencies in sums are the results of rounding.

The material site selection criteria compared material availability (access, type, and volume), existing land use, and reclamation for the twelve sites. Mineral material must be available in the site in quantity and quality during the construction season to justify the costs of mining. The material sites listed above are all near or in the Inmachuk River channel. Several sites are currently used locally, and therefore not available. Several sites had no verifiable material volume and were therefore rejected. Table 23-1 lists the material sites that were selected for the project.

The application acreage shown in Table 21-2 is the maximum material site acreage required for gravel excavation. The plan is to further reduce this acreage, as additional geotechnical data is assessed, but today these are the sites identified for gravel mining and included in this application.

Equipment Mobilization

The mobilization of equipment will be during the summer. Barges will move heavy equipment to Deering using the existing barge landing in town. No improvements to the barge landing are required, and it has existing road access. No impacts to wetlands or waters are expected from the transport of equipment to Deering (DOT&PF and Stantec 2021). Staging areas near town have been identified for the temporary storage of equipment.



23.2 Minimization Activities Proposed during Construction

Following the preliminary and final WOUS avoidance and design reviews, DOT&PF evaluated a suite of best management practices (BMPs) to further minimize anticipated impacts from the proposed project.

Construction Methods

Material Sites

The DOT&PF plans to use material from no more than six sites located on gravel bars within the Inmachuk River. Material extraction from gravel bars will ensure no net loss of WOUS, as each material site will be excavated below the OHWM, and eventually re-aggrade from the river's natural flooding. The mining of material from gravel bars will reduce the need for terrestrial material sites. Terrestrial alternatives will require additional disturbance in wetlands for material sites and access.

Each material site will be permitted for use through the Alaska Department of Natural Resources (DNR) Division of Mining Land & Water. DOT&PF will submit a Mining and Reclamation Guideline document to DNR for each of the material sites. In addition, sites on NANA Regional Corporation land will be permitted through NANA. The construction contractor will create a Project Mining and Reclamation Plan for each site to be submitted to DOT&PF, DNR, and NANA for approval. It will include appropriate BMPs to minimize impacts to WOUS at each location. Gravel sources will be mined to maximize mineral material extraction from the smallest footprint.

At each material source location, adequate setbacks from the active river channel will be maintained to avoid impacts to fish and sediment transport to the active channel. If the river braid is crossed for pit access excavation will occur during winter months when the ground is frozen, and the river waters are at a low-flow level. Material stockpiles will be moved out of the active floodplain before river breakup in the spring.

Access Road

The access road alignment overlies ground that is subject to thaw settlement. Road design includes placing geotextile underlayment and the use of insulation board to protect thaw susceptible soils. The road will be constructed to an average depth of 6 feet to help provide additional thermal protection for the underlying permafrost, and to provide a drivable surface above the 100-year flood event. The road will have an average driving surface of 24 feet and a toe-to-toe width of a minimum of 75 feet. The figures show the toe-to-toe fill.

Excavation along the route will be avoided to minimize thermal degradation of the frozen soils. Dust control measures will be implemented as needed to reduce suspension of fugitive dust during construction and as part of ongoing road maintenance.



Equipment Storage

The design incorporates existing roads, minimizing impacts to WOUS, to include wetlands and streams. The construction equipment will be offloaded at the barge landing during the summer. Equipment will be stored in designated upland areas.

Temporary Work Areas

The access road as well as the bridge approaches have been shown with a temporary 25-foot-wide work area on either side. This buffer has been included in the drawings. This has been included to allow for construction deviations with equipment beyond the toe-to-toe layout of the road and bridge embankments. The buffer areas will be reseeded, if needed when construction is complete. This acreage has been calculated as temporary work area totaling 4.8 acres.

Access Road Drainage Construction Minimization Measures

Appropriately sized culverts will be placed along the access road to maintain hydrologic connectivity of the adjacent wetlands. The figures show several proposed locations. No additional fill is required for the culvert placements. The fill is calculated as part of the roadway. Swales and other concave landscape features that collect water will have hydrologic connectivity maintained using culverts. A two-lane bridge will cross Smith Creek and has been designed to accommodate high water, navigation, and winter snow machine traffic. Abutments will be placed on either side of the creek within the floodplain. Rip rap layout was designed to protect the embankments at all water stages.

Erosion Sediment Control Plans and Stormwater Pollution Prevention Plans (SWPPPs) will be developed and implemented to prevent introduction of sediments and consequent turbidity into WOUS during construction. BMPs will be used project-wide to maintain in-stream water quality and stream bank stability.

Best Management Practices

Erosion Control Measures

For the Construction, DOT&PF will file a Notice of Intent with the Alaska Department of Environmental Conservation to comply with the Alaska Pollutant Discharge Elimination System General Permit for construction. A SWPPP will be included.

BMPs for embankment stabilization will include contouring and seeding with native species to reduce embankment erosion and potential sediment runoff into wetland areas.

Temporary Water Use Authorizations from the state may be required. Water withdrawals may be needed for dust control during construction and during regular road maintenance. Dust is expected to have minimal impacts to the adjacent vegetation due to the low volume of traffic and short distance from Deering to the airport. Water and ice may also be needed if ice roads are built for gravel access. BMPs for water intakes will be used.



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Construction Timing and Sequencing

The project will be built over two construction seasons, and construction activities will be conducted during winter and summer of each year.

Initial deployment and movement of materials and equipment will occur during the summer to allow for summer start up and a fall material source assessment.

Airport and drainage structure construction will take place during summer months and include culvert upgrades within the existing footprint for drainage.

Fish and Wildlife Avoidance

A discussion of fish and wildlife found in the project area is included in the EA (DOT&PF and Stantec 2021). Section 7 Endangered Species Act consultation is part of the EA process, and recommendations from the agencies are included in the project EA.

Vegetation for the road will be cleared outside of migratory bird timing windows to avoid nesting birds.

The material sources requiring access across the Inmachuk River will be excavated in the winter. Main channel water levels will be lower than other times of the year, allowing for material extraction in gravel bars without impacting water quality or fish passage.

Invasive Species Control Measures

Post-construction stabilization will include final grading of embankment fill and seeding disturbed areas. To minimize the introduction of invasive species to the project area, DOT&PF will comply with Executive Order 13112 to mitigate the spread of invasive species.

Temporal Impacts

Air Quality: The operation of heavy equipment and hauling fill material will create dust during dry conditions, which may cause temporary air quality impacts. This effect will be temporary and will be controlled by BMPs prescribing water control of dust.

Water Quality: The project will require an Erosion and Sediment Control Plan(s) and SWPPP(s) prior to construction. Post-construction stabilization will include seeding and stabilizing embankment fill and other disturbed areas. A mining and reclamation plan will be prepared for the material site. Water withdrawals will be temporary for winter haul route construction, dust control, road compaction, and temporary construction camps.

Material Sites: Material site development will result in temporary disturbance of gravel bars within the active floodplain of the Inmachuk River. Some sedimentation and turbidity may take place, which will be minimized through the implementation of a SWPPP for the project. Fish habitat will be protected by conducting operations in dewatered conditions away from the mainstem of the Inmachuk River.



23.3 Minimization as Part of the Project

The proposed material sources for the project, located in the Inmachuk River channel, will be mined on gravel bars during low water conditions in the winter. The material source boundaries will include river gravel bars and islands mapped as riverine channel (no field verification). After the project is completed, excavated areas used for material extraction will likely pond due to a high-water table, and/or connected to the river through flooding or design. The material sources, after reclamation is complete, will remain as WOUS as functioning gravel or channel within the Inmachuk River floodplain.

The in-river mining at the proposed material sources will potentially provide functional lift to the Inmachuk River by potentially creating overwintering fish habitat. On the North Slope's Sagavanirktok River, the Alaska Department of Fish and Game (ADF&G) noted the potential for creation of overwintering habitat for fish through gravel extraction and started recommending gravel extraction in-river (Morris 2000). McLean (1993) noted that mining in-river will provide net benefits for fish while avoiding many of the costs and impacts of terrestrial mining. Mining in-river on the Sagavanirktok River will provide overwintering fish habitat, "...for a considerable period of time" (McLean 1993).

23.4 Compensatory Mitigation

23.4.1 Compensatory Mitigation Steps

Compensatory mitigation includes three options: the purchase of mitigation bank credits, the purchase of in-lieu fee program credits, and performing Permittee Responsible Mitigation (PRM) projects under a watershed approach. There are no mitigation banks servicing this watershed, nor are there any in-lieu fee options available for Western Alaska, leaving PRM as the only possible mitigation option.

The goal of PRM under a watershed approach is to maintain and improve the quality and quantity of aquatic resources within the impacted watershed through the selection of mitigation sites and projects. PRM includes the restoration, establishment, enhancement, or preservation of wetlands undertaken by a permittee to compensate for wetland impacts resulting from the project. The Mitigation Rule identifies three types of PRM projects:

- PRM through onsite and in-kind mitigation: PRM projects are in the same watershed, and within the same wetland habitat types.
- PRM through onsite and out-of-kind mitigation: PRM projects are in the same watershed, but within different wetland habitat types.
- PRM through offsite mitigation: PRM projects are in the watershed, to the extent possible. The restoration or enhancement work can be completed outside the watershed of the impact site and does not necessarily replace in-kind habitat.

Compensatory Mitigation: Background

The 2008 Mitigation Rule issued by the U.S. Army Corps of Engineers (USACE) and Environmental Protection Agency (EPA), 2008 outlines a process that includes avoiding wetland losses where practicable, minimizing wetland impacts where avoidance is not practicable, and compensating for



impacts to the extent appropriate and practicable. The term practicable is defined as, "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes" (USACE and EPA 2018). Such terminology affords discretion and flexibility to the U.S. Army Corps of Engineers (USACE) to craft day-to-day decisions for highly diverse environmental, economic, and geographical conditions. On June 15, 2018, the U.S. Environmental Protection Agency and USACE signed a Memorandum of Agreement (MOA) providing additional guidance on flexibilities for Section 404 Clean Water Act permit mitigation requirements. The 2018 MOA details how flexibilities can be applied in the State of Alaska given the abundance of wetlands and unique circumstances involved with permitting in the state. The MOA recognized six guiding principles that are specific to the State of Alaska:

- Avoiding wetlands may not be practicable where there is a high proportion of land in a watershed or region which is jurisdictional wetlands;
- Restoring, enhancing, or establishing wetlands for compensatory mitigation may not be practicable due to limited availability of sites and/or technical or logistical limitations;
- Compensatory mitigation options over a larger watershed scale may be appropriate given that compensation options are frequently limited at a smaller watershed scale;
- Where a large proportion of land is under public ownership, compensatory mitigation opportunities may be available on public land;
- Out-of-kind compensatory mitigation may be appropriate when it better serves the aquatic resource needs of the watershed; and
- Applying a less rigorous permit review for small projects with minor environmental impacts is consistent with the Section 404 program regulations.

These principles and understanding were used to outline a compensatory mitigation strategy for this project.

Project Purpose

The Deering Airport and Access Road's purpose is to provide the community of Deering with safe and efficient airport access and address Deering Airport deficiencies that would bring the airport to current standards and meet criteria identified in the Alaska Statewide Transportation Plan, the Alaska Aviation System Plan, and current Federal Aviation Administration (FAA) design standards. The existing airport access road along the Inmachuk River is eroding into the river, and floods during high water events. Deering is off the road system, with the only year-round accessibility by air transportation, and barge service limited to summer months. While small boats, all-terrain vehicles, and snow machines are used for personal inter-village and subsistence travel, Deering relies heavily on year-round air transportation for major commerce, supplies, fuel, access, and medical evacuation. The only practical option is to improve the existing airport and construct a new airport access road away from seasonal flooding.



Restoration

The material source sites selected (not including staging) in the Inmachuk River floodplain total 19.7 acres. After construction is complete, the material sources will remain a WOUS, as functioning gravel bars or river channels within the Inmachuk River floodplain. Mining at the proposed material sources will potentially provide functional lift to the River by creating overwintering fish habitat.

Wetlands and Waters

There is no upland alternative for this project. Wetlands and waters impacts are unavoidable for community expansion projects in Deering. The footprint was minimized by using the existing facility and by using small material sites in the river rather creating a large material site in wetlands.

Conservation Lands

There are no conservation lands impacted by this project. The project area is located approximately 42 miles east of the Bering Land Bridge National Preserve, the preserve is 2.7-million-acres on the Peninsula in northwest Alaska, the Bering Land Bridge is one of the nation's most remote national park units (NPS 2021).

Cumulative Impacts

The Deering community is the only settlement on the Inmachuk River (NAB 2019). The community is located on the only uplands in the area. The Deering-Inmachuk Road follows the Inmachuk River for about 25 miles to the historic Utica Gold Mine located approximately 13 miles south of the project area. The Inmachuk River has been placer mined, mostly by dredging, over about 8.5 miles of length starting at an elevation of about 100 feet and continuing upstream to an elevation of about 250 feet (Cobb, 1975). The existing Deering-Inmachuk road is used to currently access the airport, and a series of material sites on the river. The airport and access road will increase the community footprint by 18.8 acres.

There are few other existing impacts in the region. The mining upriver is historic and is not active. Buckland is the nearest community, and the two communities are not connected by a road.

The addition of 18.8 acres of fill in the form of airport facilities and roads will have no measurable impact to the undeveloped watersheds surrounding Deering.

NAB Zoning

The NAB designates the City of Deering as a "village" district. Outside of the City of Deering, the borough designates the lands as "Subsistence Conservation." This subsistence conservation district is specifically named as the Inmachuk River subsistence conservation district. This zoning designation protects these lands for local community subsistence harvest (NAB 2019).



Public Interest

The project will provide Deering area residents a safe and reliable airport. The current airport is degraded as the permafrost underlying the embankment has melted. There are no reliable roads for the community to use to leave the community or receive fuel and supplies. Snow machine access is not rapid nor reliable in all seasons. The airport is the main artery for the town, and there are no other alternatives for supply delivery or medical evacuation for the community.

Least Environmental Damaging Practicable Alternative

DOT&PF has selected an alternative for the airport that has been demonstrated to be practicable for the community of Deering. DOT&PF, working in an area that was mapped as 93 percent wetlands has avoided wetland impacts by not developing terrestrial material sources. Material for the project will use existing gravel bars within the Inmachuk River channel. The proposed sites will provide sufficient material for the project while completely avoiding terrestrial wetland material site impacts through extraction and haulage.

Barge traffic will move construction equipment to the site. No conservation units are impacted by the proposed action. Winter access roads to material sites avoids fill in streams.

The preferred airport location uses existing fill pads to meet safety requirements, while obtaining material within the Inmachuk River gravel bars, which reduces the permanent impacts of this project.

The reason for this project is public safety; for both the runway and access road, there are no external economic drivers. Due to the avoidance and minimization efforts DOT&PF has undertaken with community input during the planning and design of this project, minimal cumulative impacts, the in-river material site location and potential functional lift, the vast wetland landscape within the watershed, NAB subsistence zoning, and by following the 404(b)(1) Guidelines sequencing, and adhering to current Alaska regulatory guidance, no compensatory mitigation will be offered to offset the 18.8 acres or less of permanent losses to wetlands and waters in this location. The temporary impacts of 4.8 acres will be reclaimed following construction.



APPLICATION BLOCK 26. LIST OF OTHER CERTIFICATIONS OR APPROVALS/DENIALS RECEIVED FROM OTHER FEDERAL, STATE, OR LOCAL AGENCIES FOR WORK DESCRIBED IN THIS APPLICATION

Agency	Type of Approval	Identification Number	Date Applied	Date Approved	Date Denied	
Federal Permits and Authorizations						
USFWS	Migratory Bird Treaty Act compliance	N/A	6/5/2020	7/1/2020	N/A	
NMFS	Magnuson- Stevens Fishery Conservation and Management Act EFH consultation and assessment		1/25/2021	Pending		
USFWS, NMFS	ESA Section 7 Consultation	N/A	12/10/2020	12/11/2020	N/A	
NMFS	MMPA Consultation		12/10/2020	Pending		
Native Village of Deering	Government to Government Consultation	N/A	6/5/2020 & 1/19/2021	1/29/2021	N/A	
		State Permits and A	uthorizations			
SHPO, Tribes, and Consulting Parties	Section 106 Consultation	3130-1R FAA / 2020-00203	1/4/2021	1/25/2021	N/A	
ADEC, Division of Water Quality	Section 401 Certification – Certificate of Reasonable Assurance		Concurrent			
ADEC, Division of Water Quality	Alaska Pollutant Discharge Elimination System (APDES) Construction General Permit (CGP)		Concurrent			
ADNR, Division of Mining Land & Water	Application for Temporary Use of Water		Concurrent			



DEERING AIRPORT AND ACCESS ROAD IMPROVEMENTS

Agency	Type of Approval	Identification Number	Date Applied	Date Approved	Date Denied	
ADF&G	Title 16 Fish Habitat Permit		Concurrent			
	Local Permits and Authorizations					
NAB, Planning Department	Title 9 Land Use Permit		Concurrent			



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ATTACHMENT 1 FIGURES































