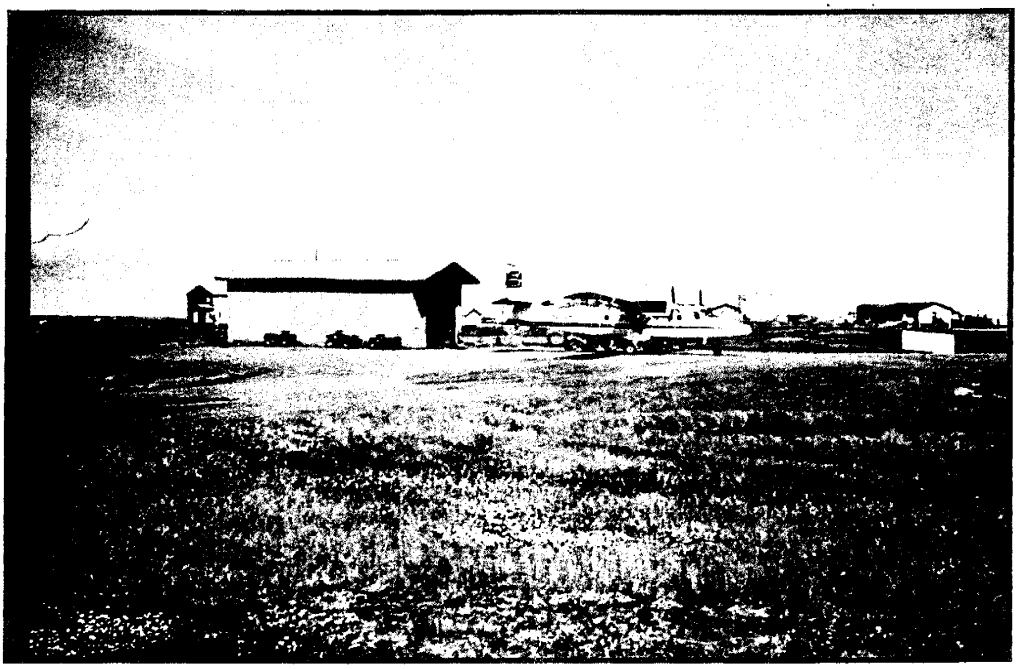
Kwigillingok Airport Improvement Project

Supplemental Environmental Assessment

FINAL



Prepared for:
Federal Aviation Administration

On Behalf of the Sponsor:
Native Village of Kwigillingok
P.O. Box 49
Kwigillingok, Alaska 99622

Prepared by:

HDR Alaska, Inc.
2525 C Street, Suite 305
Anchorage, Alaska 99503

March 2004

U.S. Department of Transportation
Federal Aviation Administration

FINDING OF NO SIGNIFICANT IMPACT

for

Kwigillingok Airport Improvement Project
Kwigillingok, Alaska

Federal Project Number: AIP 3-02-0165-01

Purpose and Need for Project

The purpose of the proposed project is to improve the safety of the operational areas at the Kwigillingok Airport by correcting the following deficiencies:

- Runway length, width, and safety area does not meet recommended design standards.
- Taxiway width and safety area does not meet recommended design standards
- The apron does not meet minimum service level size and no lease lot space is available.
- Operational surface course material is inadequate.
- The maintenance building penetrates the FAR Part 77 transitional surface.
- There is no runway lighting.
- The south end of the runway embankment is being eroded by an intertidal slough.

Proposed Federal Action

- Federal funding of the proposed improvements through the Airport Improvement Program (AIP).

Description of the Project

- Construct a 3,300 by 75 foot gravel surface runway with a 150 by 3,900 foot safety area.
- Construct a 75,000 square foot apron with a 35 by 250 foot connecting taxiway with an 80 foot wide safety area
- Install new medium intensity runway and taxiway lighting.
- Construct a segmented circle and install a lighted wind cone and rotating beacon.
- Construct a snow removal equipment building and purchase new snow removal equipment.
- Acquire lands needed for the runway extension, apron, and runway protection zones.

Mitigation Measures

This project has been coordinated with resource agencies and their comments incorporated into the Supplemental Environmental Assessment (EA). The project permitted in the original Environmental Assessment (DOT&PF 1996) proposed relocation of the entire portion of an unnamed tributary to the Kwigillingok River west of the runway embankment. This project proposes realignment of only one bend oft the tributary at the southwest end of the runway.

Draft permit applications have been prepared but not yet submitted for agency review and processing. Any conditions issued with the permits would ultimately become a condition of

approval of this Supplemental EA and included in the construction contract documents. Additional mitigation measures will be determined during final project design and permitting when material site characteristics and other project components are better defined.

Water Quality

- Project design and construction will incorporate measures to minimize the migration of sediment into the unnamed stream channel adjacent to the runway. Storm water runoff from the runway and aviation support areas will be directed toward adjacent waterbodies and wetlands to allow for settling of sediment and potential contaminants to minimize impacts to the unnamed stream channel, a tributary to the Kwigillingok River.
- Excavation and stabilization of the new stream channel will be completed prior to diverting flow from the existing channel.
- Runway construction will incorporate bank protection at the north and southwest ends, adjacent to the stream channel, to control erosion and protect the embankment.

Wetlands

- Approximately 119.5 acres of wetlands will potentially be impacted by the project, broken down by the following areas: up to 97 acres at borrow sources, 16. 5 acres to construct improvements at the airport, and 6 acres to realign the stream channel.
- An estimated 331,100 cubic yards of fill material will be placed into 19.5 acres of wetlands.
- Embankment material will be excavated and placed during winter.
- Runway embankment side slopes will be 4:1 and seeded to stabilize slopes and minimize erosion.
- Two borrow sources (Site A and Site B) will potentially be developed for the project. The maximum area potentially impacted (97 acres) will be permitted, however it is possible that the full acreage will not be exploited. Borrow Site B will be exploited first.
- Overburden will be removed and stockpiled and used (where possible) to reestablish natural vegetation during final stabilization of the borrow site.
- Final grading of the borrow area will include areas of irregular edges to increase diversity of physical habitat, grading of some areas with gradual slopes to provide shallow habitat for wading birds, and retaining small areas or "islands" of unexcavated material.
- Borrow area side slopes will be graded to stabilize slopes and minimize erosion and left to revegetate naturally.
- The new section of stream channel will be graded and revegetated to stabilize the bank and create habitat. The original section of channel will be filled with the material excavated to create the new channel.

Construction

- Excavated material will be stockpiled only within disturbed areas of the borrow source or areas designated to be filled at the airport site.
- Borrow material will be transported from the borrow source to the airport using temporary winter roads.
- Transportation of runway surfacing materials from the barge landing could require repairs to the airport access road, including culvert replacement and filling of low spots.
- Setbacks from streams and standing water will be maintained for refueling and vehicle maintenance activities.
- Construction vehicles will be required to stay within project boundaries.
- A mining and reclamation plan describing the sequence of borrow site development will be prepared.

- A storm water pollution prevention plan (SWPPP) will be implemented by the construction contractor.

Threatened and Endangered Species

- New embankment construction and borrow operations will occur between August 15 and May 15 to avoid potential impacts to nesting migratory birds, including spectacled eiders.

Cultural Resources

- No cultural resources are known to exist in the project area. If cultural resources are encountered during construction, work must cease and the State Historic Preservation Officer (SHPO) and the FAA Airports Division must be notified.

Required Permits

The following permits have been identified. Draft permit applications have been prepared but not submitted to agencies. Permit applications will be revised based on project design.

- Alaska Department of Environmental Conservation. Certificate of Reasonable Assurance.
- Alaska Department of Natural Resources. Division of Mining Land and Water. Temporary Water Use Permit for construction of an ice road and stream channel dewatering.
- Alaska Department of Natural Resources, Office of Habitat Management and Permitting. Fish Habitat Permit to realign a small segment of stream channel.
- Alaska Department of Natural Resources, Office of Project Management and Permitting. Coastal Consistency Determination.
- U.S. Army Corps of Engineers Section 10/404 Permit to (i) dredge wetlands to obtain fill, (ii) place fill in wetlands, (iii) realign a small segment of stream channel, (iv) work in tidally influenced waters.

Federal Finding and Approval

After careful and thorough consideration of the facts contained herein, the undersigned finds that the proposed federal action is consistent with the existing national environmental policies an objectives as set forth in section 101 (a) of the National Environmental Policy Act of 1969 (NEPA) and that it will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to section 102(2)(c) of NEPA.

Approved: _____ 5/11/04
Byron Huffman, FAA, Airports Division — Date

OPPORTUNITY FOR PUBLIC HEARING AND COMMENT

for

Kwigillingok Airport Improvement Project
Kwigillingok, Alaska

Public Hearing/Meetings and Comments

Public Meetings. Two public meetings were held in Kwigillingok. The first meeting, held on June 12, 2002, was an informational meeting to summarize project development to date, identify subsistence areas, and describe changes to the project as proposed in the 1996 EA. The second meeting held on August 29, 2002, was a formal National Environmental Policy Act (NEPA) public scoping meeting. The meeting included information about the NEPA process, public and agency scoping activities, development of the supplemental EA, and issues identified.

Public Hearings. No public hearing was requested or held.

A Notice of Supplemental EA (SEA) Availability and Opportunity for Public Hearing

The Notice of Availability of the Preliminary Final Supplemental Environmental Assessment and opportunity to request a public hearing was published in the classified section of the Tundra Drums on August 21 and August 28, 2003. A copy of the SEA was sent to the project representative in Kwigillingok to be available for review by the community. No comments or request for public hearing was received.

Ten (10) copies of the Preliminary Final SEA were distributed on October 27, 2003, to the following agencies with a request for comments:

Federal
Army Corps of Engineers (COE)
National Marine Fisheries Service (NMFS)
U.S. Environmental Protection Agency (EPA)
U.S. Fish and Wildlife Service (USFWS)

State
Alaska Department of Environmental Conservation (ADEC)
Alaska Department of Natural Resources, Division of Mining, Land and Water (ADNR, MLW)
Alaska Department of Natural Resources, Office of Habitat Management and Permitting (OHMP)
Alaska Department of Natural Resources, Office of Project Management and Permitting (OPMP)
Alaska Department of Natural Resources, State Historic Preservation Officer (SHPO)
Alaska Department of Transportation and Public Facilities (DOT&PF)

Responses were received from nine (9) agencies. Agency comments are summarized in Section 3.1, Table 3 "Regulatory and Resource Agency Comments on the SEA (2003)." Copies of the cover letter and agency correspondence are provided in Appendix C "Agency and Public Involvement."

Changes to the SEA
Changes made to the EA in response to agency comments are summarized below.

- 1.0 Purpose and Need: Updated cost and schedule information (see DOT&PF comment).
- 1.5 Project Description: Updated project description with borrow site details (see USFWS comment).
- 1.5.6 Realignment of Intertidal Stream: Expanded discussion of bank stabilization strategies associated with realignment of the intertidal stream and added Appendix F, a memo that describes three erosion protection strategies (see USFWS comment).
- 3.1 Agency Coordination: Updated to include agency comments on draft SEA.
- 3.2 Public Coordination: Updated to include public response to Notice of Availability of draft SEA.
- 4.2 Wetlands: Clarified description and address USFWS comments.
- 4.2.5 Wetlands - Borrow sites: Clarified acreages.
- 4.2.6 Wetlands – Stream realignment: Clarify stream channel changes.
- 4.2.7 Wetlands – Avoidance, minimization, and mitigation for wetland impacts: Described order of site development and proposed mitigation measures.
- 4.4 Protected Species: Included agency comments and clarify status of Alaska Native Tribal Health Consortium (ANTHC) borrow site.
- 4.11 Material Sites: Described sequence of development.
- 4.12 Construction Impacts: Updated BMP's.

Recommendations
The Native Village of Kwigillingok recommends that the project, as presented in the January 2004 Supplemental Environmental Assessment, with the above changes noted, be advanced. The project to be advanced is identified as the Preferred Alternative. Comments received during the public comment period do not alter the selection of the preferred alternative.

Kwigillingok Airport Improvement Project

Supplemental Environmental Assessment

FINAL

Federal Project Number: AIP 3-02-0165-01

Prepared for:
Federal Aviation Administration

On behalf of the Sponsor:
Native Village of Kwigillingok
In cooperation with the
Federal Aviation Administration
Alaska Region

Prepared by:
HDR Alaska, Inc.

This Environmental Assessment becomes a federal document when evaluated and signed by the responsible federal official.

Katrina C. Moss

Responsible Federal Aviation Administration Official

Comments regarding this document should be addressed to:

Katrina Moss Federal Aviation Administration Airports Division – AAL-616 222 West 7th Avenue, Box 14 Anchorage, AK 99513	Oscar Evon Native Village of Kwigillingok PO Box 49 Kwigillingok, Alaska 99622

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1.0 Purpose and Need

The Native Village of Kwigillingok, with funding from the Federal Aviation Administration (FAA), is planning improvements to the airport in Kwigillingok, Alaska (Figure 1) (see Appendix A for a full list of acronyms and abbreviations.). An airport layout plan (ALP) for the project was developed in the early 1990s by the Alaska Department of Transportation and Public Facilities (ADOT&PF). As required by the National Environmental Policy Act (NEPA), an environmental assessment (EA) was written for the project and relevant permits were obtained. In 1996, a Finding of No Significant Impact (FONSI) was signed by the FAA (ADOT&PF 1996).

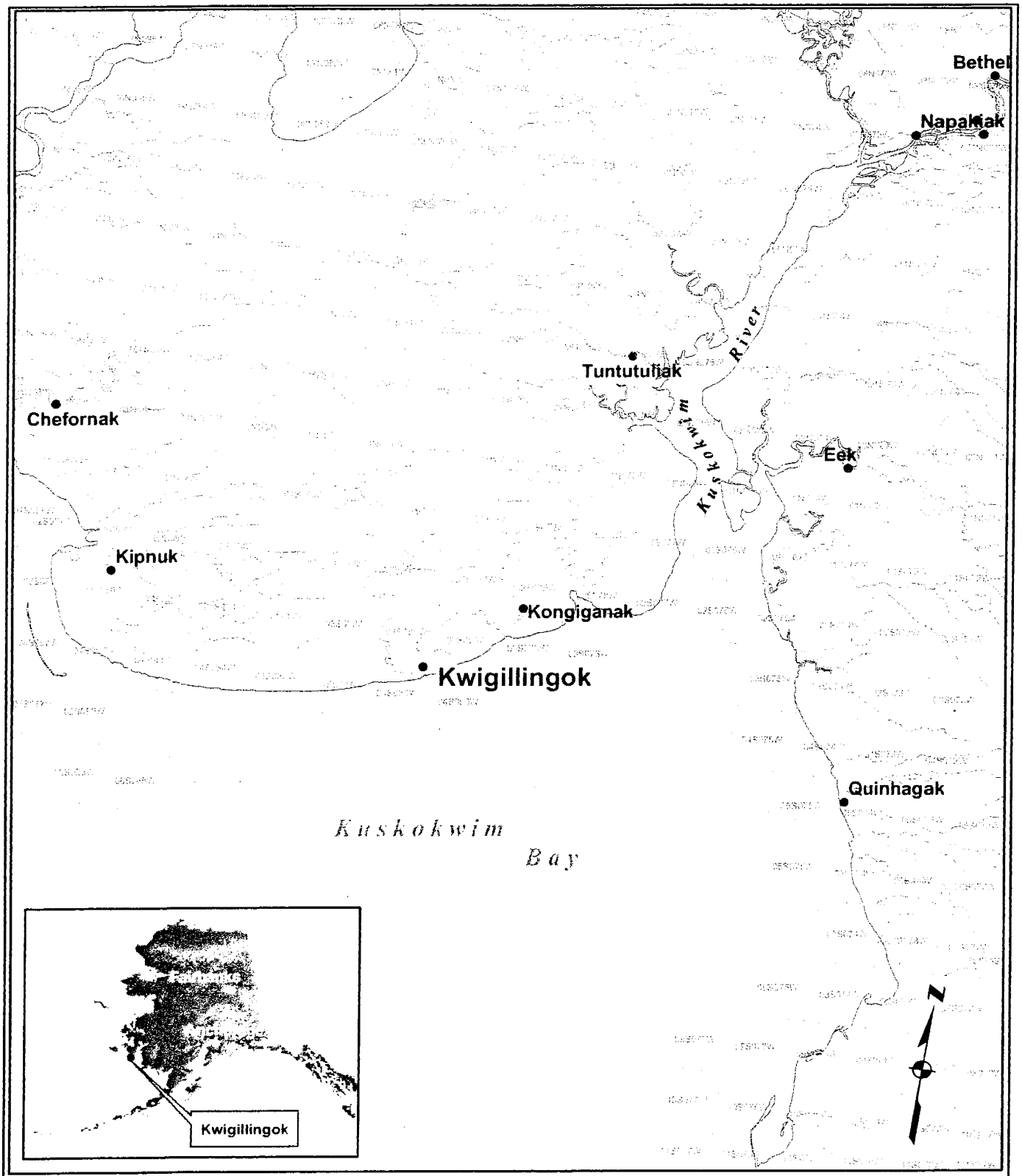
Following the initial planning and design efforts in the 1990s, the airport project was delayed due to difficulty in acquiring the land parcels needed for the project. In 2000, the Native Village of Kwigillingok hired consultants to explore the possibility of a Tribal sponsored airport. As a result, the Native Village of Kwigillingok became the airport sponsor, and the airport planning and design was initiated. The draft 2002 – 2006 Airport Improvement Program (AIP) Spending Plan shows funding for final project design scheduled for federal fiscal year (FFY) 2004. Funding for project construction is scheduled beyond FFY 2006.

Since the project details presented in the original EA have changed and over six years have passed since the original EA was approved, a supplemental EA is required under NEPA. Additionally, since all project permits are assumed to have expired, new permits must be obtained. This written supplement to the EA provides documentation of the basis for decisions concerning the project and includes new draft permit applications.

1.1 Description of Problem

The purpose of the proposed action is to bring the airport operating surfaces into compliance with federal standards. The following deficiencies are depicted on the Kwigillingok Airport Layout Plan (Appendix B): (1) runway length/width and safety area are deficient; (2) aircraft parking apron is deficient in minimum service level size; (3) operational surface course material is insufficient; (4) there is no runway lighting; (5) no future lease lot space is available; (6) the intertidal stream/slough along the southwestern edge of the airport is eroding the airport embankment; and (7) the existing maintenance building's penetration of the airport's navigable airspace 7:1 transition surface. These problems are discussed in detail below.

A problem which would not be addressed with this project is that the runway does not meet FAA criteria for wind coverage. Wind coverage recommendations would be resolved with construction of a crosswind runway, however, one possible crosswind orientation was dismissed after early analysis due to project cost and opposition from resource agencies and the local villagers. A crosswind runway is still identified as needed for the airport. However, wind studies are required before determining the best location and orientation. Wind data would be collected in the mid-term (6-10 years) and construction of a crosswind considered in the long-term (11-20 years) as indicated on the ALP.



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David Nairne | Associates

Kwigillingok Airport
Supplemental Environmental Assessment

LOCATION AND VICINITY MAP

Date
October 2002

Figure
1

The airport design recommendations contained in the ALP will correct dimensional deficiencies that do not meet FAA standards for airport design (FAA AC 150/5300-13), runway length (AC 150/5325-4A) and Federal Aviation Regulations, Part 139 Certification and Operations: Land Airports Serving Certain Air Carriers (FAR Part 139). The ALP also addresses recommendations for community class airports identified in the Alaska Aviation System Plan (AASP). These recommendations include apron size, runway length, and aviation support areas.

1.2 Relevant Statistical Information

The embankment for the airport at Kwigillingok was built by the State of Alaska in 1972. There were additional maintenance and extension projects in 1975, 1981, and 1984. The 1981 project utilized Federal funds. That airport improvement was primarily to resurface the existing runway. During the development of the Alaska Aviation System Plan (AASP) in the early and middle 1980's, it was recognized that Alaska has unique conditions that require airports, especially isolated community airports, to exceed minimum service level criteria. Airport geometric design is based on existing and forecasted service levels as set forth in the airport reference codes presented in the FAA AC 150/5300-13, and on state standards for Community Class Airports.

To ensure that airport improvements have sufficient capacity to accommodate existing and future aviation demands, and are capable of supporting an appropriate level of development, FAA and the AASP have identified specific design standards to meet specific levels of aviation demand. In general, airside development standards are related to the operational and physical characteristics of the airplane intended to use the airport. Aircraft approach speed and wingspan are the most critical characteristics to be considered when determining the size of airport facilities. FAA Advisory Circular (AC) 150/5300-13, Airport Design, correlates design standards to aircraft approach speeds and aircraft wingspan under a coding system called the Airport Reference Code (ARC). The ARC consists of two components:

1. A letter that represents the aircraft approach category, and
2. A roman numeral that represents the airplane design group.

The approach category is determined by the aircraft approach speed, and the design group is determined by the aircraft wingspan.

Based on the forecast aviation demand, the historical fleet mix, and the forecast fleet mix identified in the Phase 1 Report (DNA 2001), the Kwigillingok Airport should be designed for Aircraft Design Group II, aircraft with wingspan less than 24 meters (79 feet) (FAA AC 150/5300-150-13). Under this design group, the airport will be able to accommodate the aircraft currently providing service to Kwigillingok like to DHC-6 Twin Otter, as well as the Cessna Caravan and Beech 1900.

The airport should also meet Approach Category A standards, landings speeds less than 91 knots (FAA AC 150/5300-150-13) to be in line with the forecast use by Cessna aircraft such as the 172 and 207, the Piper Saratoga, and the DHC-6 Twin Otter.

The DHC-6 Twin Otter is the most demanding (ARC A-II) regular use aircraft (600+ operations annually) operating to and from the Kwigillingok Airport. According to the air traffic forecast, Kwigillingok Airport should be designed to accommodate aircraft with an ARC of at least A-II.

Because many of the community airports in the Yukon-Kuskokwim region are being constructed to B-II standards, constructing the Kwigillingok Airport to meet A-II standards (which do not meet the dimensional standards to a community class airport) likely would increase the cost of aviation services to Kwigillingok residents.

Constructing a B-II airport at Kwigillingok would increase the economic incentive to build fleets of larger B-II aircraft and keep them full by linking service to Villages with B-II airports. If operators have to keep smaller, less economically-efficient aircrafts in their fleets just to serve Kwigillingok, the costs will be passed to the residents in the form of higher passenger fares and cargo rates.

The recommended dimensional standards for runway length at community class airports exceed the runway length required by aircraft categorized with Approach Category of 'A'. Based on the anticipated future designation of the Kwigillingok Airport as a community class airport, runway length should be designed to meet the recommended runway length standards.

The current minimum runway length for small rural communities with at least 25 or more permanent year-round residents without other reliable year-round access is presently 3,100 feet (950 meters). Based on a recent recommendation from the FAA Alaska Region Airports Division, the minimum runway length for a rural village airport should be 3,300 feet (1,000 meters) with full runway safety area. A minimum runway length of 3,300 feet (1,000 meters) is recommended for the Kwigillingok Airport.

Inclusion of lights, gravel surfacing, detached apron with connecting taxiway and a snow removal equipment building will provide a facility that meets community class airport standards.

1.3 Activity Data/Airport Use

The Kwigillingok Airport is listed as a Community Class Airport in the AASP. It serves as the main transportation route to Kwigillingok. According to Alaska Department of Community and Economic Development (ADCED) data, Kwigillingok has a population of 338 (ADCED 2002). A majority of the flights to Kwigillingok, which include mail, supplies, and air taxi service, originate in Bethel, located 85 miles to the northeast. According to a Phase 1 Sponsorship Report completed by David Nairne Associates (DNA 2001), daily scheduled flights are operated by Arctic Circle Air, Arctic Transportation Services, ERA Aviation, Inc., and Grant Aviation. Hageland Air Service also provides both scheduled and charter air services to Kwigillingok. At the present time there are no permanently based aircraft at Kwigillingok.

The Kwigillingok Airport serves a limited range of aircraft, mainly small single engine props such as the Cessna Stationair, Caravan and Skyhawk and the Piper Saratoga, as well as light twin-engine aircraft such as the Piper Navajo, Shorts Skyvan and DeHavilland Twin Otter. An estimated 3,954 operations occur per year. Based on a moderate population forecast estimate

(2.2% per year for 2000 to 2010 and 2.0% per year for 2010 to 2020) over the next 20 years, operations are projected to increase to an estimated 6,000 operations by 2020 (DNA 2001).

1.4 Purpose of Action

The purpose of the proposed action is to improve the safety of the operational areas at the Kwigillingok Airport by correcting the previously identified deficiencies. Since transportation to the village of Kwigillingok is primarily by air, it is essential that airport facilities be brought up to standards to ensure the safe transport of the traveling public.

1.5 Project Description

With minor modifications, the Kwigillingok Airport Improvement Project continues to pursue the proposed and approved alternative from the original EA. Issues associated with components of other alternatives assessed in the original EA are not considered in this reevaluation because they are not part of the proposed action.

As currently planned, the primary components of the project include:

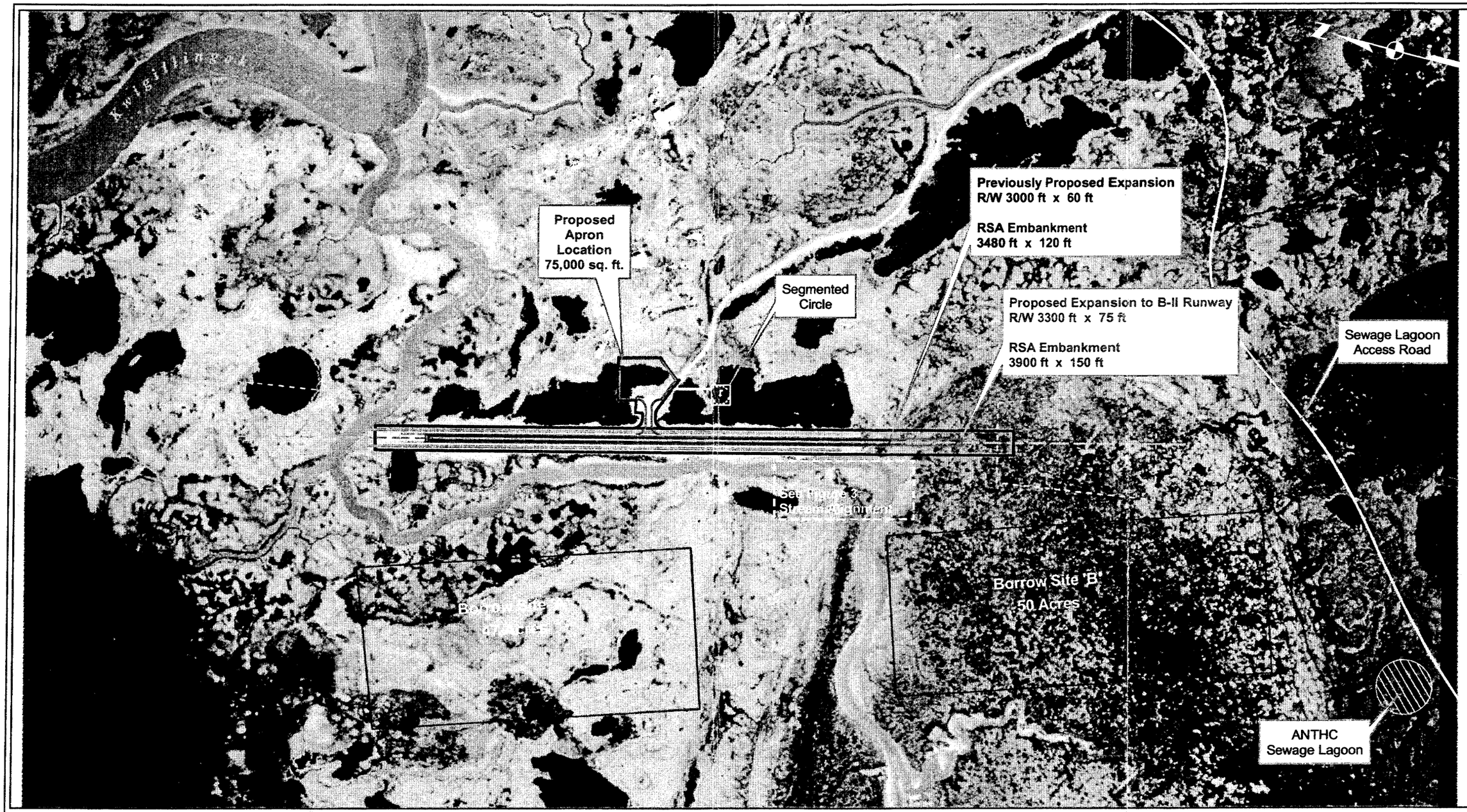
- A 3,300- by 75-foot gravel surface runway with safety areas 150 feet wide and 300 feet beyond each runway end.
- A 75,000 ft^2 apron.
- A 35-foot wide connecting taxiway with 80-foot wide safety areas.
- New medium intensity runway and taxiway lighting.
- A segmented circle and lighted wind cone.
- A rotating beacon.
- New snow removal equipment and a new equipment storage building.
- Potential use of 97 acres for borrow material. Borrow Site B (50 acres) is the preferred source and would be exploited first. Borrow Site A (47 acres) would be used only if materials in Borrow Site B were inadequate or exhausted.

The following sections describe the project components as currently planned.

1.5.1 Runway Length/Width and Safety Area

With regard to the AASP recommendations, the present 2,510- by 50-foot runway is deficient in length by 790 feet and in width by 25 feet (Figure 2). Safety areas also need to be increased to 150 feet wide and 300 feet beyond each runway end.

According to FAA AC 150/5300-13, aircraft cannot be parked closer than 250 feet from the runway centerline, which in turn dictates the minimum taxiway length. Taxiway safety area dimensions are also addressed in FAA AC 150/5300-13 and reveal the existing 40-foot wide taxiway safety area is deficient by 40 feet (FAA recommends 80 feet). The project would expand the runway, taxiway, and safety areas, maximizing the use of the existing embankment in its current location to bring these components up to current standards.



0 250 500 1,000 Feet

DNA
David Nairne + Associates

HDR Alaska, Inc.

Kwigillingok Airport
Supplemental Environmental Assessment

PREVIOUSLY PERMITTED PROJECT COMPONENTS AND NEW PROPOSED ACTION

Date
October 2002

Figure
2

1.5.2 Apron Dimensions

The existing 90- by 200-foot apron (18,000 square feet) is deficient in minimum service level size by 57,000 square feet according to the AASP. The apron is presently located approximately 160 to170 feet from the runway centerline. According to FAA AC 150/5300-13, the apron cannot be located within 250 feet of the runway centerline. The existing equipment storage building penetrates approximately one foot into the airport's navigable airspace. The project would expand the apron to 75,000 square feet and provide a new equipment storage building at the outer edge of the apron.

1.5.3 Operational Surfaces

The present operational surfaces do not conform to FAA AC 150/5300-13 standards. This federal guidance document requires each operational surface to have an adequate crown or grade to assure sufficient drainage to prevent ponding and each surface shall be adequately compacted and sufficiently stable to prevent rutting by aircraft, or the loosening or buildup of surface material which could impair directional control or cause damage to an aircraft.

1.5.4 Airport Lighting

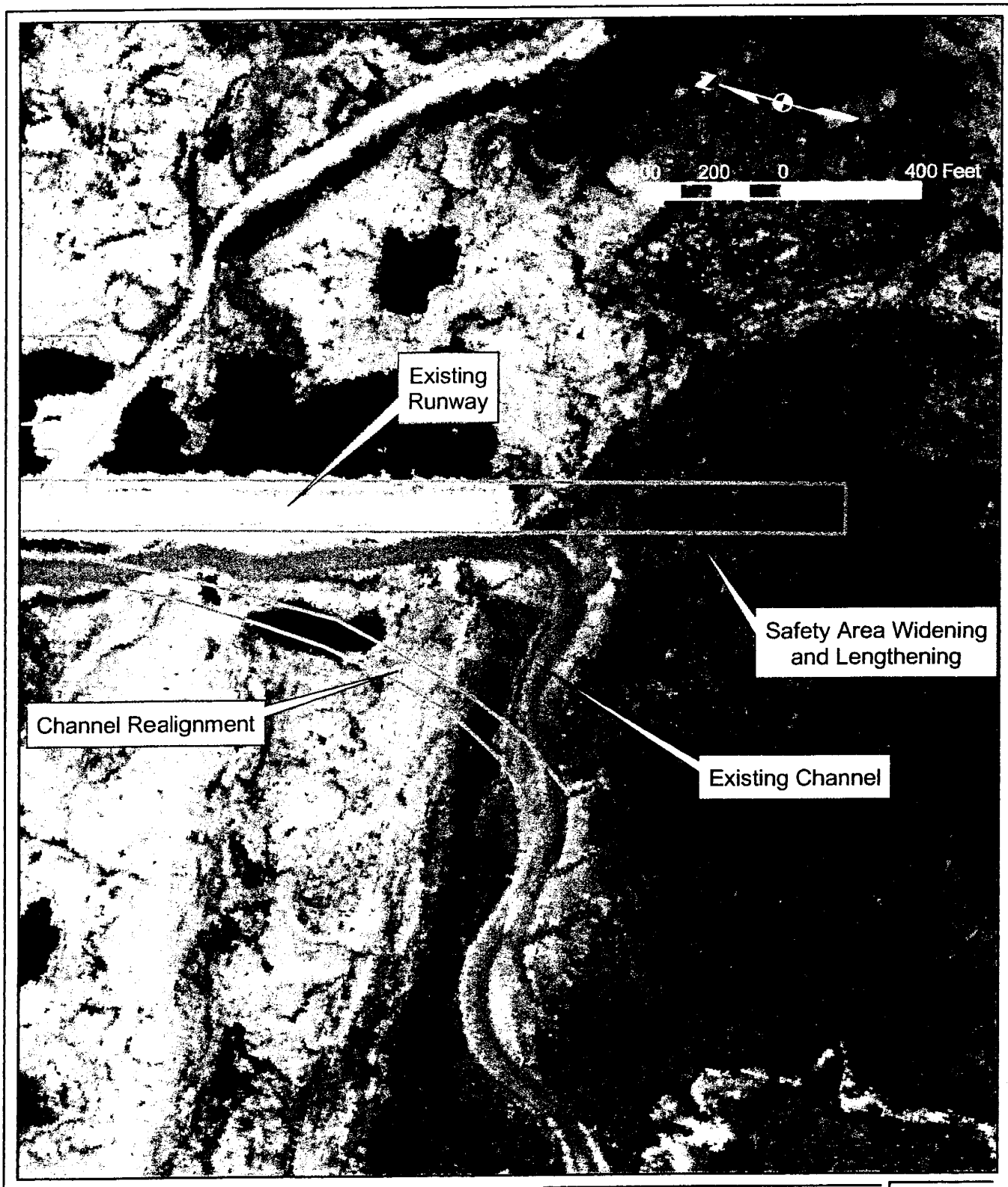
According to the AASP, airport lighting is considered a high priority at all airports in Alaska. Airports that receive year-round public use should receive runway edge lighting at a minimum and other lighting landing aids as appropriate. Installing runway lights is a high priority for the residents of Kwigillingok who have concerns over medical emergency airlifts. Pilots cannot land at the runway at night or under conditions when visibility is limited because the runway is not lighted. The project would install medium intensity runway and taxiway lighting at the airport.

1.5.5 Lease Lot Space

There is presently no lease lot space available. Available lease lot space aids in providing basic transportation service. Available lease lots would provide the opportunity for aviation related economic development and/or a community provided passenger waiting shelter. The 1982 Airport and Airway Improvement Act states "there will be no exclusive right for the use of the airport by any person providing, or intending to provide, aeronautical services to the public." The expansion of the Aviation Support Area will provide room for more than one lease lot at the airport.

1.5.6 Realignment of Intertidal Stream

The southwestern and northern edges of the airport embankment currently suffer from erosion from seasonal and intertidal stream activity. The proposed project would realign the stream away from the airport embankment (Figure 3). In addition, protection would be provided at both the north and southwest edges of the embankment. Three bank protection strategies were considered to stabilize the erosion: armor mat, vegetation, and channel realignment (Appendix F). The proposed design includes components of all three strategies.



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Kwigillingok Airport

Supplemental Environmental Assessment

STREAM REALIGNMENT

Date

October 2002

Figure

3

1.5.7 Airport Title

The airport is situated within a 109-acre tract of land, which was leased to ADOT&PF until 1999 by USFWS. The lease, which expired, was administered by Kwik, Inc., the Village Corporation, to which the land was conveyed under the Alaska Native Claims Settlement Act. Property acquisition for the project would include transferring approximately 116 acres of land in fee and approximately 16 acres of avigation and hazard easement from Kwik, Inc. and Calista to the airport sponsor (the Native Village of Kwigillingok). Native allotments shown on Figure 4 are in the process of being transferred to Kwik, Inc. prior to transference to the airport sponsor. The total property acquisition will be approximately 132 acres. All lands or interests required for the airport will be transferred to the Native Village of Kwigillingok prior to airport construction.

2.0 Changes in the Project

This supplemental EA considers changes to the project design since the 1996 FONSI. Since the original proposed improvements, there have been slight changes to the project area and new information regarding the natural environment has been obtained. With additional input from the Native Village of Kwigillingok, FAA, and other state and federal agencies, runway dimensions and components have been refined to comply with Alaska Aviation System Plan (AASP) and FAA standards. Changes to the project plans are described below and are shown on Figure 2.

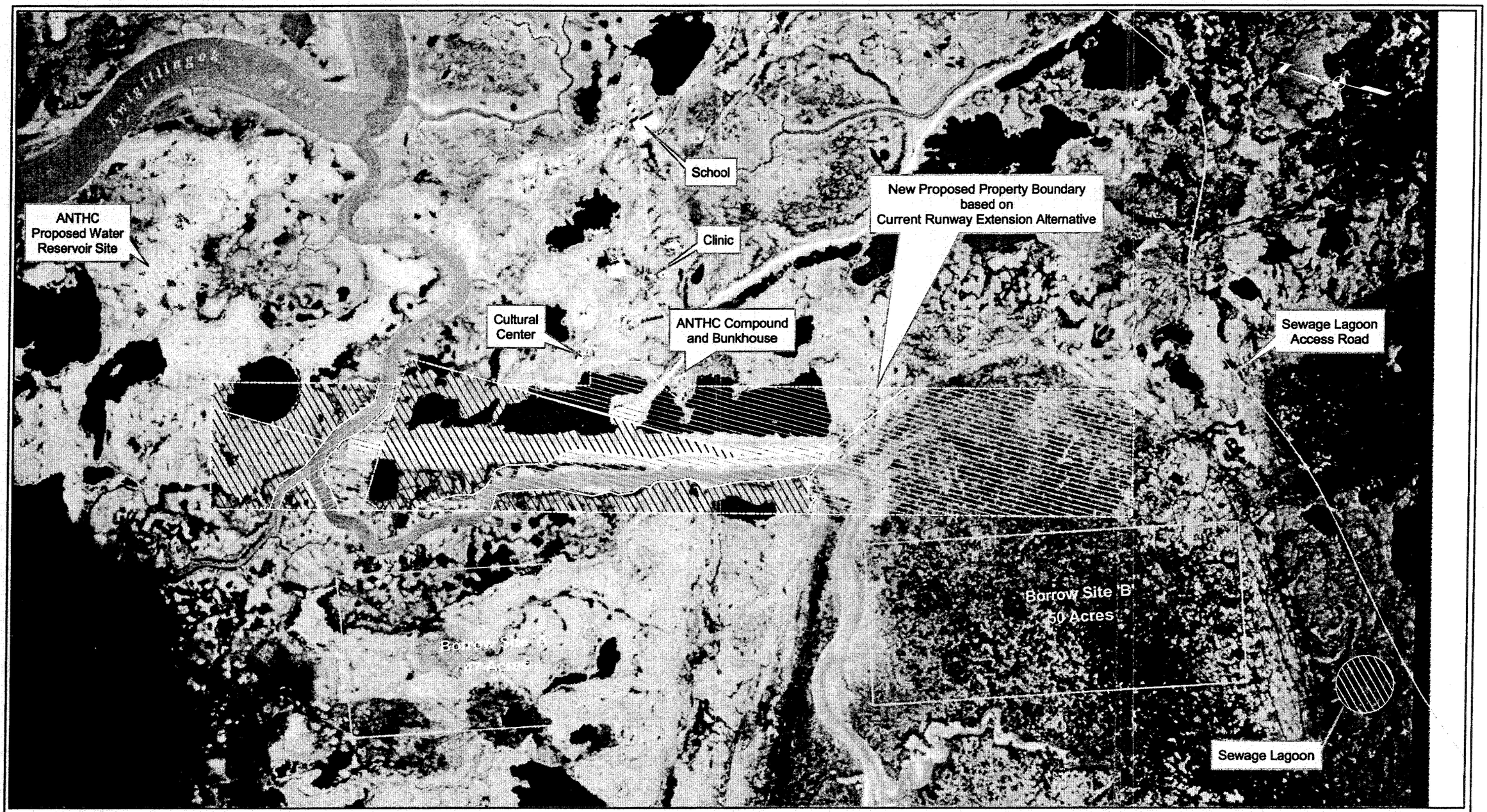
- ***Runway Dimensions.*** The project proposes to build a runway capable of accommodating a Category B-II aircraft. The runway would be 3,300 x 75 feet. **The original EA proposed a Category B-I airport with runway dimensions of 3,000 x 60 feet.**

- ***Runway Safety Areas.*** The project proposes to upgrade the runway safety area (RSA) length and width. The new RSA width would be 150 feet wide and RSA length would extend 300 feet from the runway ends. The total length of the runway with the safety areas would be 3,900 feet, of which 2,900 feet currently exists. **The original EA proposed RSA dimensions of 3,480 x 120 feet.**

- ***Stream Realignment.*** An unnamed tributary to the Kwigillingok River running parallel to the existing runway on the west side has been causing active erosion to the runway embankment. The project proposes to realign the stream slightly and stabilize the bank at the south end of the runway (Figures 2, 3, and 4). **The original EA proposed to realign the stream to a new route further west of the existing runway.**

- ***Material Sites.*** A new potential borrow site (Borrow Site A) has been identified to the west of the existing runway (Figure 2). **The original EA evaluated one material site – now called Borrow Site B.**

- ***Airport Sponsorship.*** The Native Village of Kwigillingok intends to sponsor the airport improvement project with funding from the FAA. **The original EA proposed sponsorship by the ADOT&PF with funding from the FAA.**



0 250 500 1,000 Feet

OWNER

KWIK, INC. SURFACE / CALISTA SUBSURFACE

NATIVE ALLOTMENT

STATE OF AK, DNR

DNA David Nairne Associates

HDR Alaska, Inc.

Kwigillingok Airport

Supplemental Environmental Assessment

LAND OWNERSHIP AND COMMUNITY FACILITIES

Date: October 2002

Figure: 4

Table 1 includes information on the changes to the project from what was planned for the airport in the early 1990s and described in the original EA. The project modifications do not constitute a major change to the project or potential associated impacts.

Table 1. Summary of Changes to the Project Since the Original EA.

Project Component	Original EA (1996)	Change from Original EA
Runway Dimensions	3,000 ft x 60 ft	Increased to 3,300 ft x 75 ft
Runway Safety Areas	3,480 ft x 120 ft	Increased to 3,900 x 150 feet.
Stream Realignment	Proposed realignment was further west.	The small bend of the stream at the south end of the runway would be modified.
Material Sites	Only one borrow site (Site B) was evaluated.	New potential material site (Site A) added.
Airport Sponsorship	ADOT&PF	Sponsorship shifted from ADOT&PF to the Native Village of Kwigillingok.

3.0 Additional Agency and Public Coordination as a Result of Changes

3.1 Agency Coordination

The project team undertook coordination with regulatory agencies and the public when the project was restarted. Letters were sent on April 8, 2002 to resource and regulatory agencies inviting representatives to a scoping meeting on April 29, 2002 (Appendix C-1 to C-17). The letter informed the agencies of the changes in the project and provided an updated detailed description of the project. The U.S. Fish and Wildlife Service (USFWS) Ecological Services, the Alaska Department of Fish and Game (ADF&G), and the Division of Governmental Coordination (DGC) attended the meeting. The agenda and meeting minutes are included in Appendix C.

General comments from agencies regarding the project are listed in Table 2. Issues raised earlier and resolved in the original EA are not represented in this document. However, all issues documented in the original EA were revisited to determine whether there were additional impacts due to the modifications in project scope. The primary issues raised by the agencies during project scoping in 2002 include impacts to wetlands and threatened and endangered species. One written comment was received from the USFWS citing their concerns on these topics. Written correspondence and telephone conversations with agency representatives related to the scoping of this revised project are included in Appendix C.

Table 2. Regulatory and Resource Agency Comments on the Airport Project (2002)

Agency	Comments	Response to Comments
Alaska Department of Fish and Game (ADF&G)	• Maintain on-going communication with ADF&G during the design. • Loss of habitat should be minimized. • A Title 16 permit would be needed for in-stream work.	• The project team maintained contact with ADF&G through informal consultation. • Sites excavated or exposed for the project will be planted with native vegetation. • Habitat loss (specific to spectacled eider) was also minimized through implementation of USFWS requests. • A draft Title 16 permit application has been prepared (Appendix D).
Alaska State Historic Preservation Office (SHPO)	The Section 106 process must be completed.	Section 106 requirements have been met. After coordination with SHPO, it was determined that no cultural or historical sites will be impacted (SHPO 2002).
Alaska Division of Governmental Coordination (DGC)	Determine whether the project is consistent with enforceable policies of the State of Alaska's and Cenaliulriit coastal management policies.	A Coastal Zone Questionnaire has been prepared for the project (Appendix D).
U.S. Army Corps of Engineers (COE)	A Corps permit is required for fill in wetland areas at the site.	A Department of the Army Permit application for wetland fill has been completed and is attached (Appendix D).
National Marine Fisheries Service (NMFS)	An Essential Fish Habitat (EFH) assessment is not required.	A determination of no effect on EFH under the jurisdiction of the NMFS was made (Olson 2002).
U.S. Fish and Wildlife Service (USFWS)	• Endangered Species Act (ESA) consultation is required for spectacled eiders. • A survey may need to be completed before construction. • Efforts should be made to avoid wetlands and threatened and endangered species habitat impacts. • Mitigation for wetland impacts would be required.	• Ongoing ESA consultation with the USFWS occurred and is documented in Appendix C. • In lieu of a survey, it was agreed that the project embankment would be constructed in the winter to avoid nesting migratory birds. • The project team made every attempt to avoid filling wetlands on site. However, wetland fill could not be avoided. • The Sponsor will mitigate for this fill through the implementation of BMPs at the borrow sites and fill areas. (See Section 4.2.7 for additional details.)

The Preliminary Final SEA was distributed to agencies on October 27, 2003, for review and comment. The USFWS felt some of their earlier comments had not been adequately addressed and repeated several concerns. Both the USFWS and EPA responded with concern about the large area of wetland potentially impacted by borrow site development and recommended mitigation of unavoidable impacts comparable to those required under the Memorandum of Agreement (2003) between the FAA, ADOT&PF, and the signatory resource agencies. The project has made every effort to minimize impacts to wetlands, however Kwigillingok is located in an area where no natural uplands exist and where avoidance of wetlands is not possible.

Compensating for wetland impacts by restoring or creating wetlands is also not practicable because of the predominance of wetlands in the region. As a local-sponsor project, the Kwigillingok airport improvement project is not subject to the 2003 MOA and no in-lieu fee compensation is proposed. Additional follow-up with USFWS and EPA to inform them of how their comments were addressed in the EA was completed. Further coordination with the Cenaliulriit District Coordinator was also performed. Copies of all agency correspondence are contained in Appendix C (C-62 through C-85) and comments are summarized in Table 3.

Table 3. Regulatory and Resource Agency Comments on the SEA (2003)

Agency	Comments	Response to Comments
Army Corps of Engineers	Work in the unnamed tributary of the Kwigillingok River would require authorization under Section 10 because these waters are tidally influenced. A Section 404 permit would be required for the discharge of dredged and/or fill material into wetlands.	Draft permit application (Appendix D) covers Sections 10 and 404.
National Marine Fisheries Service	Impacts to Essential Fish Habitat (EFH) would be minimal. No further EFH assessment is required.	No response required.
U.S. Environmental Protection Agency	Made several informal comments based on verbal description of project, not on actual review of SEA: - Proposed material site is large - recommended preliminary exploratory and sampling work of material site. - Ensure impacts to endangered species and migratory waterfowl are adequately addressed - Recommended mitigation for wetland impacts be comparable to those required of DOT&PF under the MOA.	- Intent of SEA was to describe maximum area that could be impacted to obtain materials. SEA stresses Site B would be developed first and Site A would only be used if and when B was exhausted. (Section 4.11.) - Proposed material site development and construction timing satisfies USFWS recommendations. (Section 4.4.) - MOA is not applicable to this locally-sponsored project.
U.S. Fish and Wildlife Service	SEA does not address recommendations for adequate mitigation expressed in letter of 6/12/02 (i.e. restoration of wetlands functions, blockages to fish passage, or other human-caused impacts to wetlands or fish and wildlife habitat in the Kwigillingok area, ii. acquisition and permanent protection of similar habitat in the area, or iii. contribution of compensatory mitigation funds). SEA does not adequately address recommendations 3, 5, and 6 of 6/12/02 letter (3. alternatives to rip-rap or sheet pile hardening of runway embankment should be fully explored; 5. create and implement reclamation plans for borrow sites; 6. land clearing).	- Bank stabilization memo (Appendix F) describes alternatives considered appropriate. A combination of three (armor mat, vegetation, and channel realignment) is proposed. - A mining and reclamation plan would be developed during design. - Land clearing - dates to avoid impacts to nesting migratory birds are shown in Sections 4.4 and 4.11

Agency	Comments	Response to Comments
	Made five additional specific comments and recommendations: - Project description. Include borrow site in project description and develop a reclamation plan. - Intertidal stream. Better describe erosion that is prompting realignment of the intertidal stream and evaluate bioengineering alternatives. - Wetlands. SEA does not demonstrate impacts to wetlands have been minimized. Recommends geotechnical investigation prior to permitting to determine subsurface conditions. - Avoidance, minimization, and mitigation of wetlands impacts. - Recommends SEA describe potential for compensation of unavoidable impacts. - Protected species. Noted that concerns about protection of spectacled eiders had been adequately resolved.	- Description in Section 1.5 updated. Mining and reclamation plan would be developed during design. - Description and photos of erosion problems and proposed stabilization techniques are more fully described in bank stabilization memo (Appendix F). - Intent of SEA was to describe maximum area of wetlands that could be impacted to obtain materials. SEA stresses Site B would be developed first and Site A would only be used if and when B was exhausted. No geotechnical investigation is planned at this stage. - The MOA is not applicable to this locally-sponsored project and no in-lieu fee compensation is proposed. Borrow site reclamation will include some gently sloped shoreline areas with shallows, irregular edges, and islands. (Section 4.2.7) No response required.
Alaska Department of Environmental Conservation	No comments at this stage – will wait until permitting phase.	No response required.
Alaska Department of Natural Resources (ADNR) – Mining, Land, and Water	No comments.	No response required.
ADNR – Office of Habitat Management and Permitting (ADF&G)	No new issues or concerns identified.	No response required.
ADNR – Office of Project Management and Permitting	Provided a copy of a federal consistency determination form and details about project's local coastal district.	No response required.
ADNR – State Historic Preservation Officer	No response received.	No response required.
Alaska Department of Transportation and Public Facilities	Provided information on schedule and cost.	Section 1.0 updated.

3.2 Public Coordination

The public has been consulted numerous times since the project was restarted. Since the fall of 2000, the project team sought public comment at several public meetings in Kwigillingok. A Public Scoping Meeting was conducted on August 29, 2002 in Kwigillingok to obtain formal public comments and input. Notification of the meeting was published in the Tundra Drums on August 15, 2002 and the Anchorage Daily News on August 16, 2002. Announcements were also

broadcast on KYUK public radio in Bethel the week before the public meeting. The Native Village of Kwigillingok placed meeting notices in prominent community facilities prior to the meeting.

Prior to the Public Scoping Meeting, the Indian Reorganization Act (IRA) Council met on several occasions with the Elders to discuss the proposed Airport Improvement Project. The results of these discussions confirmed that there are no known/anticipated impacts with respect to subsistence activities, traditional land use or wildlife, including the spectacled eider. The Elders also confirmed that to the best of their knowledge, the "tidal creek" to the west of the current runway is not fish bearing. Finally, the Elders expressed a concern about a preliminary alternative location for the new apron as the area in question is used for berry picking. The project team explored other options for the apron location and it was determined that an expansion of the existing apron location would meet the needs of the community with the least impacts to subsistence and wetlands. Table 4 lists the most common comments and concerns heard from the public since the project was restarted. See Appendix C for public involvement materials and detailed information.

Table 4. Common Public Comments on the Airport Project

Public Comments	Response to Comments
No fish in Kwigillingok tributary.	Comment was documented and considered in the Supplemental EA analysis.
No sightings of spectacled eider or any ESA species in project area.	Comment was documented and considered in the Supplemental EA analysis.
No cultural resources to be affected by the project.	Comment was documented and considered in the Supplemental EA analysis.
Possible subsistence impacts due to a berry-picking patch in a preliminary alternative apron location.	Project team responded to comment by exploring other locations for the apron that would not affect subsistence activities and selecting the apron location presently proposed.
Residents would like for existing apron to be expanded instead of creating new one at the southeast end of the runway.	Project team redesigned the airport layout to expand the existing airport apron in its current location.

A notice of the availability of the draft SEA was placed in the classified section of The Tundra Drums on two consecutive Thursdays (August 21 and 28, 2003). A copy was available for local review at the office of the Native Village of Kwigillingok in Kwigillingok and at HDR Alaska in Anchorage. No comments were received. A copy of the public notice and affidavit of publication are in Appendix C (C-59).

4.0 Effect of Changes

The following section assesses the effects resulting from modifications of the project detailed in Section 2.0. These effects were identified by the project team and through agency and public consultation.

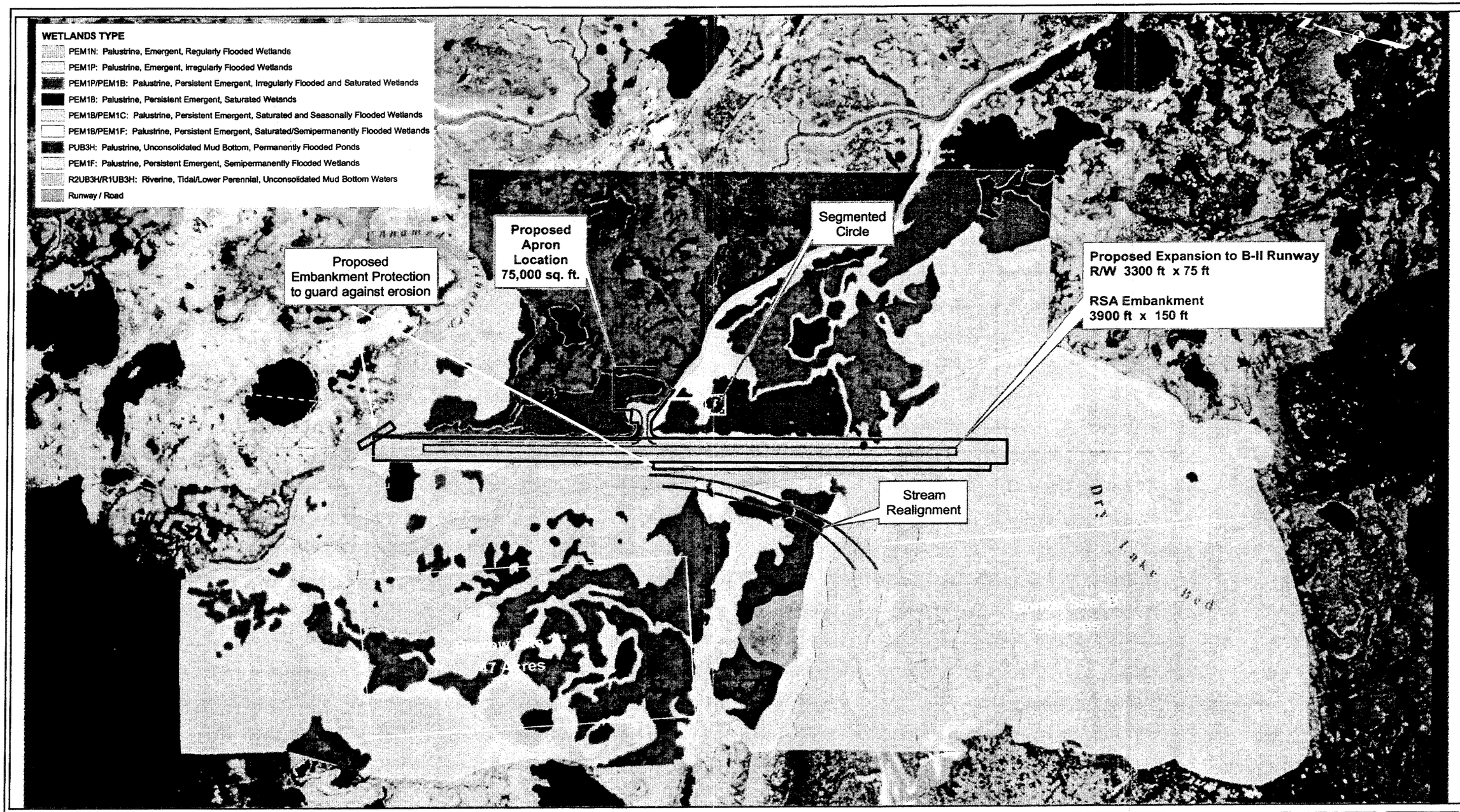
4.1 Water Quality

Runoff from the runway and apron areas could mobilize sediments, metals, and artificial nutrients into storm water flowing into the stream, ponds, and associated wetlands. The ponds adjacent to the runway would store much of the stormwater runoff, allowing for settling of sediment and potential contaminants. Additionally, directing storm water flow to natural wetlands in the project area would further mitigate water quality impacts. During construction, a Storm Water Pollution Prevention Plan (SWPPP) would be implemented and Best Management Practices (BMPs) would be used to control erosion and sediment discharge. Controlling site storm water runoff and treating via natural ponds and wetlands would minimize the overall impacts to the Kwigillingok River.

4.2 Wetlands

Due to the vast amount of wetlands in this region and almost no natural uplands, it was determined that wetland impacts were unavoidable to meet the purpose and need of the project. During initial planning and recent modifications of the project, the project team actively attempted to minimize impacts to wetlands through design and site planning.

The wetland and waterbody impacts of the project are described below and are summarized in Tables 5 and 6 and are shown on Figure 5. A Wetland Characterization Report is also included in Appendix E. According to the original EA, the total area of wetlands estimated to be impacted by the project was approximately 24 acres, with 132,500 cubic yards (cy) to be dredged and 144,580 cy of fill to be placed in the wetlands. As currently planned, approximately 119.5 acres of wetlands or waterbodies would be impacted by the whole project, with 331,100 cy of material to be dredged from up to 100 acres of wetland and placed in approximately 19.5 acres of wetlands or waterbodies. Included in these estimates are approximately 3 acres that would be dredged for the new stream channel and 3 acres of the existing channel that would be filled. A total of 16.5 acres of wetlands or ponds would be converted to uplands. Wetlands that would be excavated and the existing segment of stream channel that would be filled would be converted to different types of wetlands or waterbodies and would, over time, acquire natural ecological functions.



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DNA
David Nairne Associates

HDR Alaska, Inc.

Kwigillingok Airport
Supplemental Environmental Assessment

WETLANDS AND WATERBODIES WITHIN THE PROJECT AREA

Date
October 2002

Figure
5

Table 5. Airport Improvement Impacts on Wetlands and Waterbodies

	Approximate Area[a]	Approximate Volume	Type of Impact
	(Acres)	(Cubic Yards)	(Dredge or Fill)
Airport Features			
Runway Safety Area Expansion	6.5	125,400[b]	Fill
Future Safety Area Embankment	4.0	126,800[b]	Fill
Taxiway	1	8,200[b]	Fill
Apron	3.5	41,800[b]	Fill
Runway Surfacing	No Additional Impact	6,900[b]	Fill
Segmented Circle & Lighted Windcone (including access road)	1	5,700[b]	Fill
Unlighted Windcone	0.5	300[b]	Fill
Airport Fill Sub-Totals	16.5	315,100	Fill
Borrow Sources	97[d]	315,100[b]	Dredge
Stream Realignment – New Channel	3	16,000[c]	Dredge
Stream Realignment – Old Channel	3	16,000[c]	Fill
Totals			
Fill	19.5	331,100	
Dredge	100.0	331,100	
Total Acreage Impacted	**119.5**	-	

A = All impacts are within wetlands or waterbodies.

B = Volumes increased by 50% to compensate for settling.

C = Amount includes impacts due to new channel dredging as well as fill of existing channel.

D = Estimation of impacts assumes that both borrow sources will be needed for the project.

The majority of the wetland impacts would occur in the borrow source areas (approximately 97 acres). Since the exact nature of the subsurface material in the borrow pits is unknown, the estimated impacts are for the maximum area that could be exploited and include two borrow sites. Fill for the project would be excavated from Borrow Site B (50 acres) first, and then if needed, Borrow Site A (47 acres) with an assumed excavation depth of 5 to 15 feet. For this reason, it is possible that there would be less impacts to wetlands in the borrow site areas than is reported in this document. The fill would be placed in the winter of 2003-2004 and would be allowed to drain and settle before grading and surfacing. An ongoing Alaska Native Tribal Health Consortium (ANTHC) sanitation project is using a 3.7 acre borrow site adjacent to the proposed Borrow Site B. ANTHC's borrow site would not be used for this project.

The wetlands provide habitat for wildlife and protect and enhance water quality. As described in the original EA and in Appendix E, wetlands in the Kwigillingok area are generally characterized as having moderate to high value. The proposed impacts to wetlands would occur in moderate to high value wetlands as well.

Table 6. Wetland and Waterbody Types Affected by the Project

Wetland and Waterbody Type	NWI Code	Approximate Amount of Wetland/Waterbody Impacts (acres)
Palustrine, Emergent, Regularly Flooded wetlands	*PEM1N*	14.5
Palustrine, Emergent, Irregularly Flooded wetlands	*PEM1P*	54
Palustrine, Persistent Emergent, Saturated wetlands	*PEM1B*	24
Palustrine, Persistent Emergent, Irregularly Flooded and Saturated wetlands	*PEM1P/PEM1B*	1
Palustrine, Persistent Emergent, Saturated and Seasonally Flooded wetlands	*PEM1B/PEM1C*	1
Palustrine, Persistent Emergent, Semipermantly Flooded wetlands	*PEM1F*	18
Palustrine Persistent Emergent Saturated/Semipermanently Flooded wetlands	*PEM1B/PEM1F*	0.5
Palustrine, Unconsolidated Mud Bottom, Permanantely Flooded Ponds	*PUB3H*	5
Riverine, Tidal/Lower Perennial, Unconsolidated Mud Bottom waters	*R2UB3H/R1UB3H*	1.5
Total		**119.5**

The USFWS is concerned about the large area of potential impact from borrow source development (USFWS, Appendix C-69). As recommended by USFWS and proposed in this EA, the development of Borrow Site B would occur first. Borrow Site A would only be developed if and when the resources of Borrow Site B had been fully exploited. A subsurface investigation of Borrow Site B, as recommended by the USFWS, is not proposed at this time. While it would provide useful information about the nature and extent of subsurface materials in Borrow Site B, that information would not affect the overall material requirements of the project.

Although a Department of the Army Permit for wetland fill (2-920772) was issued by the Corps of Engineers (COE) authorizing the placement of fill in wetlands for the airport project, a new permit would be needed due to the expiration of the original permit and changes to the affected area (DePalmer 2002). Draft permit applications are attached in Appendix D. Steps taken to mitigate wetland impacts are summarized in Section 4.2.7.

4.2.1 Runway and Safety Area Impacts

The runway embankment would be widened and extended to the south to meet FAA and AASP standards. The new runway dimensions would be 3,300 x 75 feet with safety area dimensions of 3,900 x 150 feet. Construction of the embankment would fill approximately 10.5 acres of wetlands adjacent to the existing runway and in the dry lakebed to the south.

4.2.2 Taxiway Impacts

As proposed in the original EA, the taxiway would be lengthened and widened to meet FAA and AASP standards. The new taxiway width would be 35 feet with 80-foot wide safety areas. FAA

regulations state that the near edge of the apron must be at least 250 feet from the centerline of the runway. Thus, the new taxiway length would be approximately 137 feet long. To create the additional taxiway length and safety areas, the project would fill approximately 1 acre of wetlands adjacent to the existing taxiway and to the east.

4.2.3 Aviation Support Area

As proposed in the original EA, the proposed aviation support area would be approximately 75,000 ft^2 and would include the new apron and space for a future Automated Weather Observing System (AWOS). To create the aviation support area, the project would fill approximately 3.5 acres of wetlands to the east of the existing runway. The existing apron embankment would be expanded into the old borrow pits that are now ponded. These ponds are not tidally influenced and do not appear to pose a risk of active erosion to the embankment.

4.2.4 Segmented Circle, Wind Cones

Approximately 1.5 acres of wetlands would be impacted by the footprint of the segmented circle and the wind cones, and access to the segmented circle.

4.2.5 Borrow Sites

Two potential borrow sites have been identified for the project. As with most of the area in Kwigillingok, the borrow sites are in wetlands. Borrow Site A (47 acres) is located to the west of the stream. Borrow Site B (50 acres) is located in the drained lakebed to the south of the runway. Up to 97 acres of wetlands could be impacted by excavation activities in the borrow sources. The areas that were excavated would become ponds or would be converted to a different type of wetland from what presently exists there.

4.2.6 Stream Realignment

The project proposes to realign a segment of stream channel at the southwest end of the runway (Figure 3). Dredging to create the new channel would impact approximately 3 acres of wetlands. Filling of the existing channel would also impact approximately 3 acres of waterbody, which would be converted to wetland. The stream realignment would ultimately impact a total of approximately 6 acres of wetlands or waterbody.

4.2.7 Avoidance, Minimization, and Mitigation for Wetland Impacts

The project team attempted to avoid wetlands as much as possible for this project. However, it was not feasible to avoid impacts to wetlands because so much of the region is wetlands.

After it was determined that some wetland fill would be required, the project team made every effort to minimize the fill amount. The preferred alternative was selected partially because it avoided the large amounts of wetland fill that would be required if an entirely new airport was constructed. In addition, the project team decided to decrease the amount of the tributary realignment to reduce impacts. The original EA proposed relocation of the entire stream channel to the west of the runway. The project now proposes to realign only the bend of the stream on the southwest end of the runway where the risk of erosion is greatest.

The total amount of wetlands or waterbodies that would be filled for the project as planned is approximately 19.5 acres. Borrow material excavation could occur in up to 97 acres of wetlands. The runway embankment would be graded with 4:1 side slopes and seeded to stabilize slopes and minimize erosion. Exploitation of Borrow Site B would occur first. Areas of open water may develop as a result of excavation activities. Numerous waterbodies already exist immediately adjacent to and in the wider area surrounding the airport. A large portion of Borrow Site B was a waterbody prior to and following original construction of the airport until it drained several years ago. Neither borrow site is in the runway approach and departure paths and the potential transformation of a borrow area to a waterbody would not likely create additional wildlife hazard concerns. A mining and reclamation plan describing the sequence of excavation would be prepared. Organics would be removed and stockpiled. Final grading of the excavated pit would include sections of irregular edges to increase the diversity of physical habitat, grading of some areas with gradual slopes to provide shallow habitat for wading birds, and retaining small areas or "islands" of unexcavated material. Borrow area side slopes would be graded to stabilize slopes and minimize erosion and would be left to revegetate naturally. In addition, the project proposes to revegetate and stabilize the bank of the realigned tributary to reduce erosion and create suitable habitat.

Additional measures to reduce and minimize impacts to adjacent wetlands would include stockpiling embankment fill material within the project fill and material site extraction footprint, maintaining setbacks from streams and standing water for refueling and vehicle maintenance activities, requiring construction vehicles to stay within the project boundaries, and developing and implementing a National Pollutant Discharge Elimination System (NPDES) Storm Water Pollution Prevention Plan (SWPPP) for Construction Activities.

4.3 Essential Fish Habitat

Essential Fish Habitat (EFH) is defined as those waters and substrate necessary to certain fish species for spawning, breeding, feeding, or growth to maturity. EFH includes those aquatic areas and their associated physical, chemical, and biological properties that are used by fish. In freshwater habitats, only anadromous fish have EFH.

The ADF&G lists the Kwigillingok River as an anadromous stream (#3540-15950). The Kwigillingok tributary, while tidally influenced, is considered a freshwater stream. As documented in the original EA, the Kwigillingok River and its tributaries support whitefish species, arctic char, sculpin species, and other resident blackfish populations. Sculpin species are listed on the National Marine Fisheries Service (NMFS) webpage as a species managed under NMFS for EFH (NOAA 2002). However, consultation with NMFS indicated that, while the project does impact sculpin habitat, the project would not have a cumulative effect on sculpin species in the area and does not affect other sensitive EFH species in the area. Thus, NMFS concurred that there would be no effect to EFH and no additional consultation is necessary unless the project changes (NMFS, Appendix C-32).

The project as approved in the original EA proposed to realign a tributary to the Kwigillingok River and locate the new channel farther away from the runway. However, the current project proposes only to realign one bend of the stream and to stabilize the banks of the modified stream

with vegetation to avoid future active erosion of the runway embankment. Thus, the project would not incur as much of an impact to fish habitat as was originally approved.

4.4 Protected Species

The proposed project is in the vicinity of potential nesting habitat for spectacled eider (*Somateria fischeri*), a species listed as threatened under the Endangered Species Act (ESA) (USFWS, Appendix C-20). The ESA of 1973 was enacted to protect endangered and threatened species and to provide a means for their continued existence. Under the law, species may be listed as "endangered" (in danger of extinction throughout all or a significant portion of its range) or "threatened" (likely to become endangered in the foreseeable future). Section 7(a) of the ESA states "each federal agency shall...ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat." If a listed species or its habitat may be affected by a proposed action, Section 7 requires a consultation between the agency and the appropriate wildlife agency (in this case, the USFWS) to determine whether the project is likely to jeopardize the species or its habitat. Because of the presence of potential spectacled eider habitat in the area of Borrow Site A, the project was analyzed for its potential impacts on the species under the ESA.

Section 7 consultation between the ADOT&PF and the USFWS occurred during the early stages of the original EA analysis. A Biological Assessment (BA) completed in 1994 noted that, although the spectacled eider is listed as a potential migrant with potential breeding in the area, none had been found during a 1993 USFWS field trip (ADOT&PF 1996). The BA stated that a resident had seen spectacled eider in the vicinity of Kwigillingok, but never in the location of the project. The USFWS concurred with the findings of the BA in a letter dated March 8, 1994, stating "we concur with the findings of your BA that this project is not likely to jeopardize the continued existence of any threatened or endangered species; therefore, formal consultation is not necessary" (ADOT&PF 1996).

On June 12, 2002, the USFWS Ecological Services responded to the re-initiation of scoping activities and expressed concern of impacts to spectacled eider habitat in the area of the proposed material source "Borrow Site A" (USFWS, Appendix C-21). In the letter, USFWS stated that the FAA and Native Village of Kwigillingok should:

1. Coordinate with USFWS to conduct a spectacled eider nest field survey.
2. Co-locate the borrow sites for the airport and ANTHC project at Borrow Site B.
3. Perform borrow operations between August 15 and May 15 to avoid impacts to nesting migratory birds (including spectacled eiders) in the summer months.

In a subsequent letter (USFWS, Appendix C-48), responding to an FAA Section 7 consultation request, USFWS commented that, based on a review of aerial photographs of the borrow sites, there did not appear to be suitable nesting habitat. Because excavation would occur outside of the breeding season, USFWS concurred that the project would not likely affect listed species and no field survey would be required.

In response to USFWS recommendations and conversations with agency representatives, the FAA and Native Village of Kwigillingok proposed to co-locate the borrow sites with ANTHC's project and to construct the project embankment in the winter to avoid impacts to nesting eiders. The borrow site permitted for ANTHC's sanitation project was only 3.7 acres and located south of but adjacent to Borrow Site B. It does not contain sufficient material for the airport improvements and would not be used for this project. Borrow operations would be conducted in accordance with timing recommendations (August 15 to May 15).

Based on this information, the USFWS concurred that the project would not have an adverse impact on spectacled eiders, their habitat, or any other listed species (Rappoport 2002b). See Appendix C for more details regarding the ESA consultation and related information developed for this project.

4.5 Coastal Zone Consistency

The federal Coastal Zone Management Act requires that all federally conducted or supported activities be undertaken in a manner consistent with the enforceable policies of Alaska's coastal management program. Additionally, when located in a coastal district, the project must also be consistent with the coastal district's enforceable polices. Based on the *Guide to Preparing an ACMP Consistency Determination for Federal Activities* (DGC 1996), the airport project is planned to be consistent with the State of Alaska Coastal Management Program and applicable enforceable policies. The project was planned to ensure consistency with the Cenaliulriit Coastal Resource Service Area Management Plan (CCRSA 1999). However, the DGC would make a final determination of consistency upon submission of the Coastal Project Questionnaire (see Appendix D for a draft application).

4.6 Visual Resources

Visual impacts would increase slightly compared to the visual impacts described in the original EA. There would be more overall embankment added to the scenery, and there could be more temporary visual impacts related to extraction of the new proposed borrow source (Borrow Site A). While the impacts to the borrow source area would be temporary and would be mitigated by grading, visual resource impacts related to the runway, taxiway and apron embankment would be permanent. Due to the minimal amount of extra embankment that is to be evaluated in this supplemental EA, it is not likely that any adverse visual resource impacts would be substantial.

4.7 Cultural Resources

The State Historic Preservation Office (SHPO) was consulted (FAA, Appendix C-29) to determine the project's potential to affect historic properties of cultural and religious significance in accordance with Section 106 of the National Historic Preservation Act (36 CFR Part 800). According to the Alaska Heritage Resources Survey, there are no known cultural resources within the project area (Love 2002).

The Native Village of Kwigillingok, Kwik Inc. and Calista Corporation were specifically contacted to request comments on the project. No comments were received and a request was submitted to SHPO for concurrence that no historic properties would be affected. The SHPO concurred that the project would not impact any cultural or historical sites (SHPO, Appendix C-

34). See Appendix C for correspondence regarding the Section 106 consultation completed for this project.

4.8 Subsistence

According to comments from the Village, the area to the west of the stream is not typically used for subsistence activities. The Elders stated that the area to the southeast of the runway is used for berry-picking and expressed concern with earlier plans to construct the new apron on the southeast end of the runway. However, the project plans were modified to expand the existing apron embankment, thus the project is not expected to have a substantial impact on any subsistence activities.

4.9 Land Use

The airport is situated within a 109-acre tract of land, which was leased to ADOT&PF until 1999 by USFWS. The lease, which expired, was administered by Kwik, Inc., the Village Corporation to which the land was conveyed under the Alaska Native Claims Settlement Act. Property acquisition for the project would include transferring approximately 116 acres of land in fee and approximately 16 acres of avigation and hazard easement from Kwik, Inc. and Calista to the airport sponsor (the Native Village of Kwigillingok). Native allotments shown on Figure 4 are in the process of being transferred to Kwik, Inc. prior to transference to the airport sponsor. The total property acquisition will be approximately 132 acres.

4.10 Floodplains

Due to the lack of upland area and relatively flat topography in the region, the proposed action is within the floodplain for the Kwigillingok River. According to ADCED, no local flood hazard permit is required, as Kwigillingok does not participate in the National Flood Insurance Program (Miller 2002). However, the project would still need to comply with FAA standards, specifically Executive Order 11988. This order states that if there is no feasible and prudent alternative to building in the floodplain zone, the project may proceed as planned, as long as efforts are taken to minimize the adverse impacts incurred from building in a floodplain zone. Gravel material for the runway surface may be stockpiled temporarily at the barge landing and would be in the floodplain of the Kwigillingok River.

4.11 Material Sites

Altogether, approximately 315,100 cubic yards of material would be excavated from available borrow sites. Two borrow sites would potentially be developed for the airport project, one to the west (Borrow Site A) and one to the south (Borrow Site B) of the tidally influenced stream. The Village favors these locations for the material sources. Borrow Site B would be exploited first. It is closer to the airport, does not require crossing of the tidal slough, and contains lower quality wetlands. The ongoing ANTHC sanitation project is using a small 3.7 acre borrow site adjacent to Borrow Site B.

Both borrow sites are located entirely in wetlands. In addition to the mitigation measures discussed in Sections 4.2.7, and 4.12, best management practices would be used to minimize environmental impacts during construction activities. These include stockpiling materials only

within disturbed areas of the borrow sites and areas designated to be filled at the airport site, and developing and implementing an NPDES SWPPP. Materials would be transported from the borrow source to the project area using a temporary construction road.

4.12 Construction Impacts

Constructing the proposed improvements would likely have temporary impacts including increased noise and dust and possible impacts to surface water quality and aircraft schedules. Dust and water quality impacts would be minimized through the use of best management practices including stockpiling embankment fill material within the project fill footprint or disturbed areas of the borrow site, maintaining setbacks from streams and standing water for refueling and vehicle maintenance activities, requiring construction vehicles to stay within the project boundaries, removing all temporary construction roads, and developing and implementing an NPDES SWPPP for construction activities. Transportation of material from the proposed borrow sources should not impact existing surface transportation patterns as neither site is located near identified trails. Transportation of materials from the barge landing may require improvements to the airport access road, such as repairing culverts and filling low spots. These improvements would benefit road users.

5.0 Conclusion

The project continues to pursue the approved proposed alternative from the original EA. Changes in the project design have resulted in minimal changes in project impacts. Comments from regulatory agencies and the public regarding project changes have been carefully considered. The minor changes to the proposed action do not result in increased adverse environmental impacts other than what was proposed in the original EA. Recent coordination with NMFS and USFWS indicates that EFH and ESA species are not likely to be impacted by the project. Additionally, no cultural or historical resources would be affected and the project appears to be consistent with policies of the Cenaliulriit Coastal Resource Service Area Management Plan (CCRSA 1999).

6.0 List of Preparers

Project Manager	Scott Wharton, P.E., HDR Alaska Inc.
Environmental Assessment	Christie Kearney Andra Love Sally Morsell Susan Walker
Engineering/CAD Drawings	Shawn Metts
GIS/Graphics	Pro Mitra
Document Production/Word Processing	Dina Thompson

7.0 References

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Appendix A
Abbreviations and Acronyms

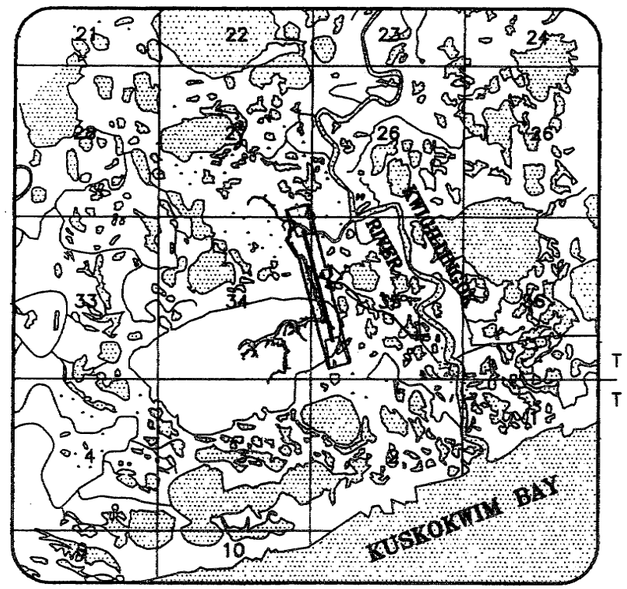
Abbreviation and Acronyms

AASP	Alaska Aviation System Plan
AC	Advisory Circular
ADCED	Alaska Department of Community and Economic Development
ADF&G	Alaska Department of Fish and Game
ADOT&PF	Alaska Department of Transportation and Public Facilities
ALP	Airport Layout Plan
ANTHC	Alaska Native Tribal Health Consortium
ARC	Airport Reference Code
AWOS	Automated Weather Observing System
BA	Biological Assessment
BMP	Best Management Practices
CCRSA	Cenaliulriit Coastal Resource Service Area
COE	U.S. Army Corps of Engineers
cy	Cubic yards
DGC	Division of Governmental Coordination
DNA	David Nairne and Associates
EA	Environmental Assessment
EFH	Essential Fish Habitat
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FONSI	Finding of No Significant Impact
IRA	Indian Reorganization Act
MIRL	Medium-intensity runway lighting
MITL	Medium-intensity taxiway lighting
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
RSA	Runway Safety Area
SHPO	State Historic Preservation Officer
SWPPP	Storm Water Pollution Prevention Plan
USFWS	U.S. Fish and Wildlife Service

Appendix B
Airport Layout Plan

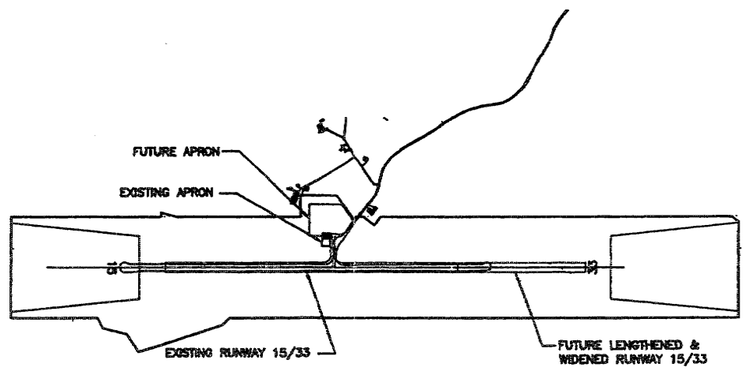
NATIVE VILLAGE OF KWIGILLINGOK
KWIGILLINGOK AIRPORT LAYOUT PLAN

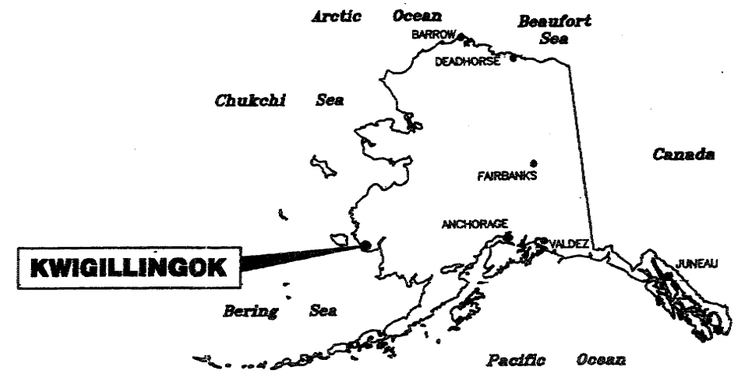
DECEMBER 3, 2002



VICINITY MAP

1"=1/2 MILE
T 3 S, R 81 W, SEC. 26, 27, 34, & 35
SEWARD MERIDIAN
U.S.G.S. KUSKOKWIM BAY (D-4), ALASKA





FILE: 09707\006\CAD\ALP
DATE: 12/03/02

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 4/3/03
BY: [signature] DATE: 3/5/03
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-600

FAA AIRSPACE REVIEW NUMBER:

BY	DATE	REVISIONS

NATIVE VILLAGE OF KWIGILLINGOK
AIRPORT LAYOUT PLAN

RECOMMENDED: E.S. WHARTON, P.E. — HDR ALASKA, INC — PROJECT MANAGER — 12-3-02
APPROVED: GEORGE EVON — TRIBAL ADMINISTRATOR — NATIVE VILLAGE OF KWIGILLINGOK — 12/16/02

DATE: 12/03/02
DESIGN: ESW
DRAWN: SJM
CHECKED: DH

KWIGILLINGOK AIRPORT

AIRPORT LAYOUT PLAN

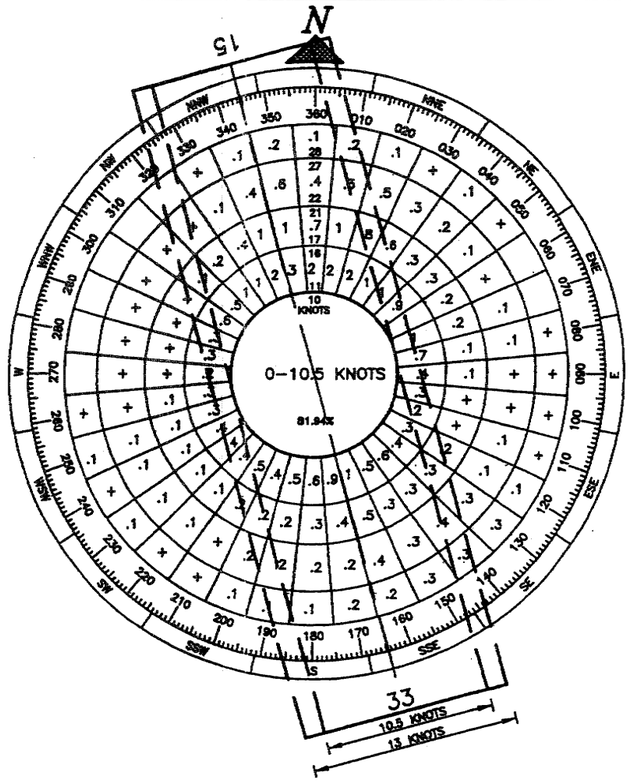
COVER SHEET & VICINITY MAPS

SHEET 1 OF 8

DRAWING INDEX

LEGEND

ITEM	EXISTING	FUTURE
PROPERTY LINE		
BUILDING RESTRICTION LINE		
AVIGATION & HAZARD EASEMENT		
AIRPORT REFERENCE POINT (A.R.P.)		
WIND CONE AND SEGMENTED CIRCLE		
CONTOURS		
ROADWAYS		
BUILDINGS		
ROTATING BEACON		
SHORELINE		
DITCHING		
CHANNEL CHANGE		
PAPI		
AWOS		



WIND DATA

NOTE: WIND SPEED IS INDICATED IN KNOTS.

WIND COVERAGE: RUNWAY 15/33 — 10.5 KNOTS : 83.75%; 13 KNOTS : 90.31%

SOURCE: HDR ALASKA INC. IN CONJUNCTION WITH DRYDEN INSTRUMENTATION DATA IS FOR KIPNUK, ALASKA LOCATED 28 MILES WEST OF KWIGILLINGOK.

PERIOD: OCT 1996 TO NOV 1998

NON-STANDARD CONDITIONS

ITEM	EXISTING	STANDARD B–II	FUTURE
RUNWAY WIDTH	50'	75'	75'
RUNWAY SAFETY AREA WIDTH	100'	150'	150'
RUNWAY SAFETY AREA LENGTH BEYOND ENDS	195'	300'	300'
RUNWAY CENTERLINE TO AIRCRAFT PARKING	175'	250'	250'
TAXIWAY WIDTH	30'	35'	35'
TAXIWAY SAFETY AREA WIDTH	40'	79'	79'
EQUIPMENT STORAGE BLDG WITHING PROPOSED BRL	OBSTRUCTION	NO OBST.	NO OBST.

BASIC DATA TABLE

RUNWAY DATA

ITEM			RUNWAY 15/33 EXISTING	NEAR TERM USABLE	FUTURE
EFFECTIVE GRADE			0.18%	0.18%	0.03%
% WIND COVERAGE	10.5 KNOTS		83.75%	83.75%	83.75%
	13 KNOTS		90.31%	90.31%	90.31%
INSTRUMENT RUNWAY			VISUAL	VISUAL (NPI)	VISUAL (NPI)
RUNWAY SURFACE			GRAVEL	GRAVEL	GRAVEL
PAVEMENT STRENGTH (LBS.)			N/A	N/A	N/A
APPROACH SURFACES			20:1	20:1	34:1
RUNWAY LIGHTING			NONE	M.I.R.L.	M.I.R.L.
RUNWAY MARKING			NONE	NONE	NONE
NAVIGATION AIDS			NONE	GPS	PAPI,GPS
RUNWAY SAFETY AREA DIMENSION			100'x2900'	150'x2850'	150'x3900'
RUNWAY DIMENSION			50'x2510'	60'x2310'	75'x3300'
RUNWAY OBJECT FREE AREA DIMENSION			250'x2990'	250'x2990'	500'x3900'
RUNWAY OBSTACLE FREE ZONE DIMENSION			250'x2910'	250'x2710'	400'x3700'
RUNWAY PROTECTION ZONE DIMENSIONS			250'x450'x1000'	250'x450'x1000'	500'x700'x1000'
THRESHOLD (N.A.D. 83)	RUNWAY 15	LAT.	59°52'47.21" N	59°52'45.74" N	59°52'45.74" N
		LONG.	163°10'13.23" W	163°10'12.42" W	163°10'12.42" W
	RUNWAY 33	LAT.	59°52'23.37" N	59°52'23.80" N	59°52'14.39" N
		LONG.	163°10'00.24" W	163°10'00.47" W	163°09'55.35" W

BASIC DATA TABLE

AIRPORT DATA

ITEM		EXISTING	NEAR TERM USABLE	FUTURE
AIRPORT ELEVATION (M.S.L.)		17.8'	–	18.1'
AIRPORT REFERENCE POINT (A.R.P.)	LAT.	59°52'35.29" N	–	59°52'30.07" N
	LONG.	163°10'06.73" W	–	163°10'03.89" W
TAXIWAY LIGHTING		NONE	M.I.T.L.	M.I.T.L.
RAMP LIGHTING		NONE	FLOOD	FLOOD
MEAN MAX. TEMPERATURE, HOTTEST MONTH (°F)		56°	56°	56°
MAGNETIC DECLINATION, YEAR		16°12', 1994	14°50', 2002	–
AIRPORT REFERENCE CODE		A–I	A–I	B–II
AIRPORT AND TERMINAL NAVIGATION AIDS		NONE	NONE	BEACON

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 4/3/03

BY: [signature] DATE: 4/3/03
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-600

FAA AIRSPACE REVIEW NUMBER: 02–AAL–189 NRA

BY	DATE	REVISIONS

NATIVE VILLAGE OF KWIGILLINGOK
AIRPORT LAYOUT PLAN

RECOMMENDED: E.S. WHARTON, P.E. — HDR ALASKA, INC — 12-3-02 — PROJECT MANAGER
APPROVED: OSCAR EVON — TRIBAL ADMINISTRATOR — 12/4/02 — NATIVE VILLAGE OF KWIGILLINGOK

DATE: 12/03/02
DESIGN: ESW
DRAWN: SJM
CHECKED: DH

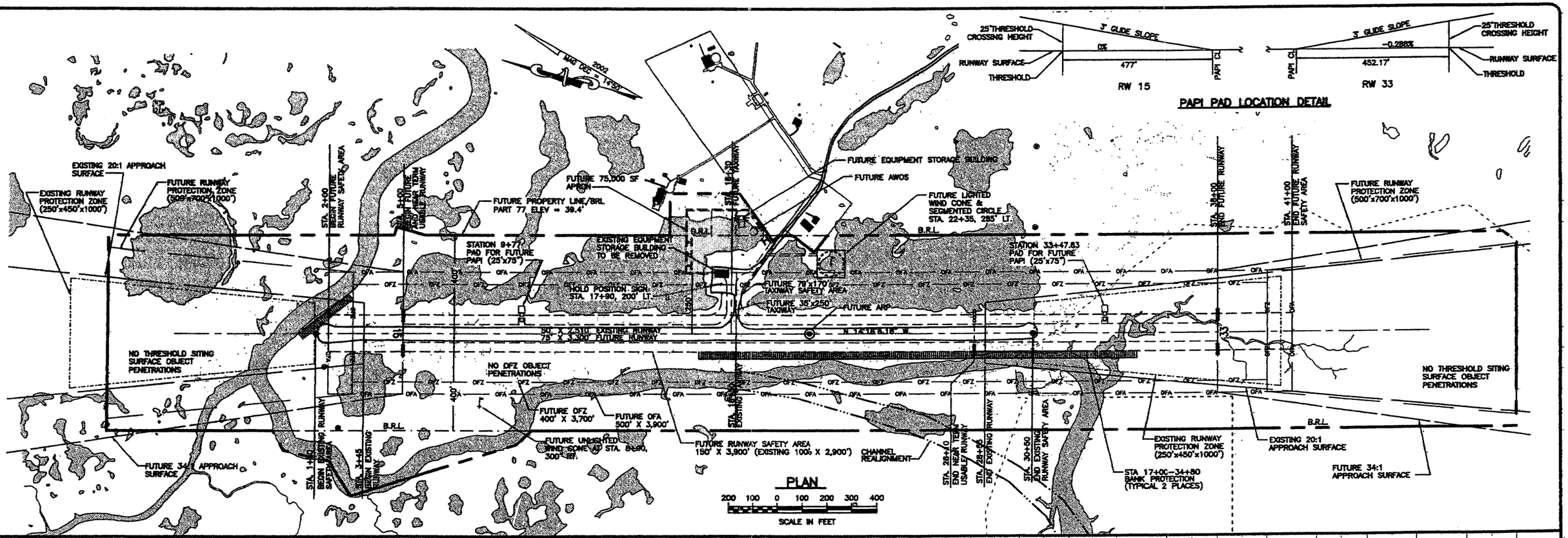
KWIGILLINGOK AIRPORT

AIRPORT LAYOUT PLAN

DATA TABLES & SHEET INDEX

SHEET 2 OF 8

FILE: 09707\008\CAD\ALP
DATE: 12/03/02



AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 4/3/03

BY: J.T. Zadl FOR DATE: 4/3/03
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-600

FAA AIRSPACE REVIEW NUMBER: 02-AAL-189 NRA

BY	DATE	REVISIONS

NATIVE VILLAGE OF KWIGILLINGOK
AIRPORT LAYOUT PLAN

RECOMMENDED: E.S. Wharton 12-3-02
E.S. WHARTON, P.E. — HDR ALASKA, INC — PROJECT MANAGER

APPROVED: 12/16/02
OSCAR EVON — TRIBAL ADMINISTRATOR — NATIVE VILLAGE OF KWIGILLINGOK

DATE: 12/03/02
DESIGN: ESW
DRAWN: SJM
CHECKED: DH

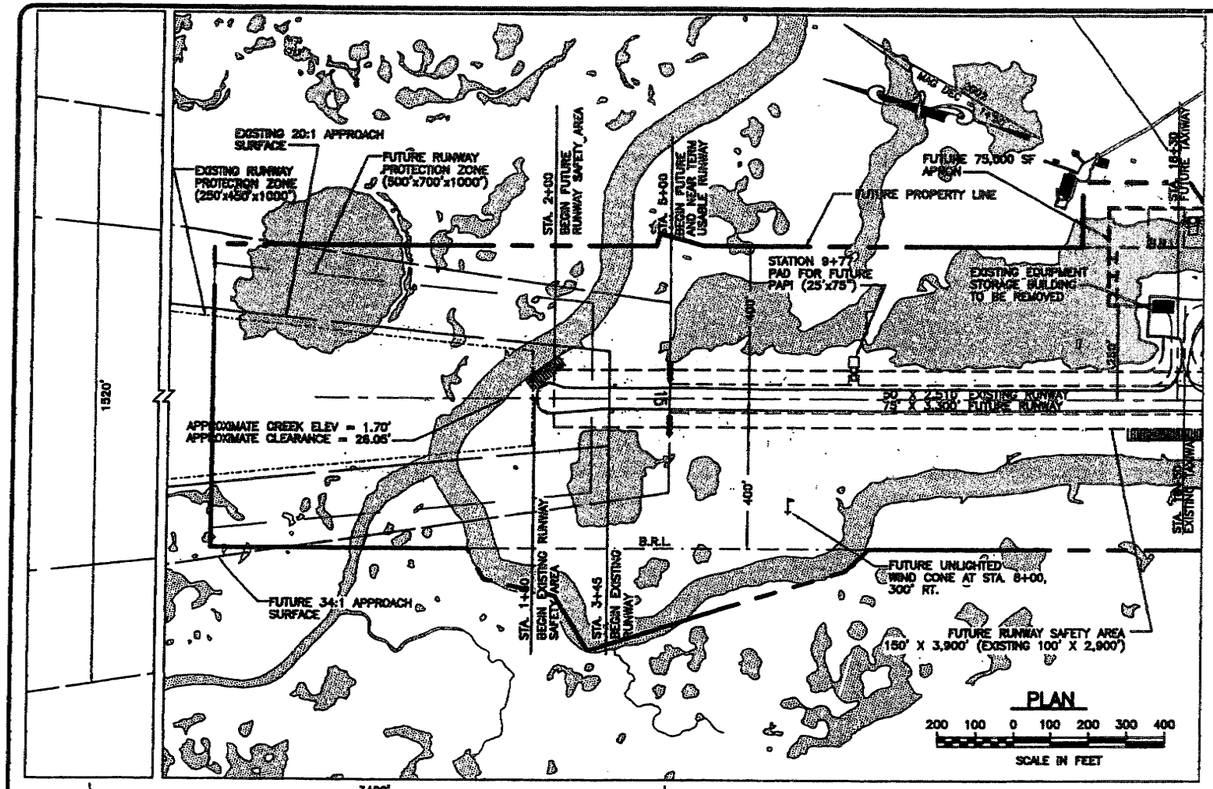
KWIGILLINGOK AIRPORT

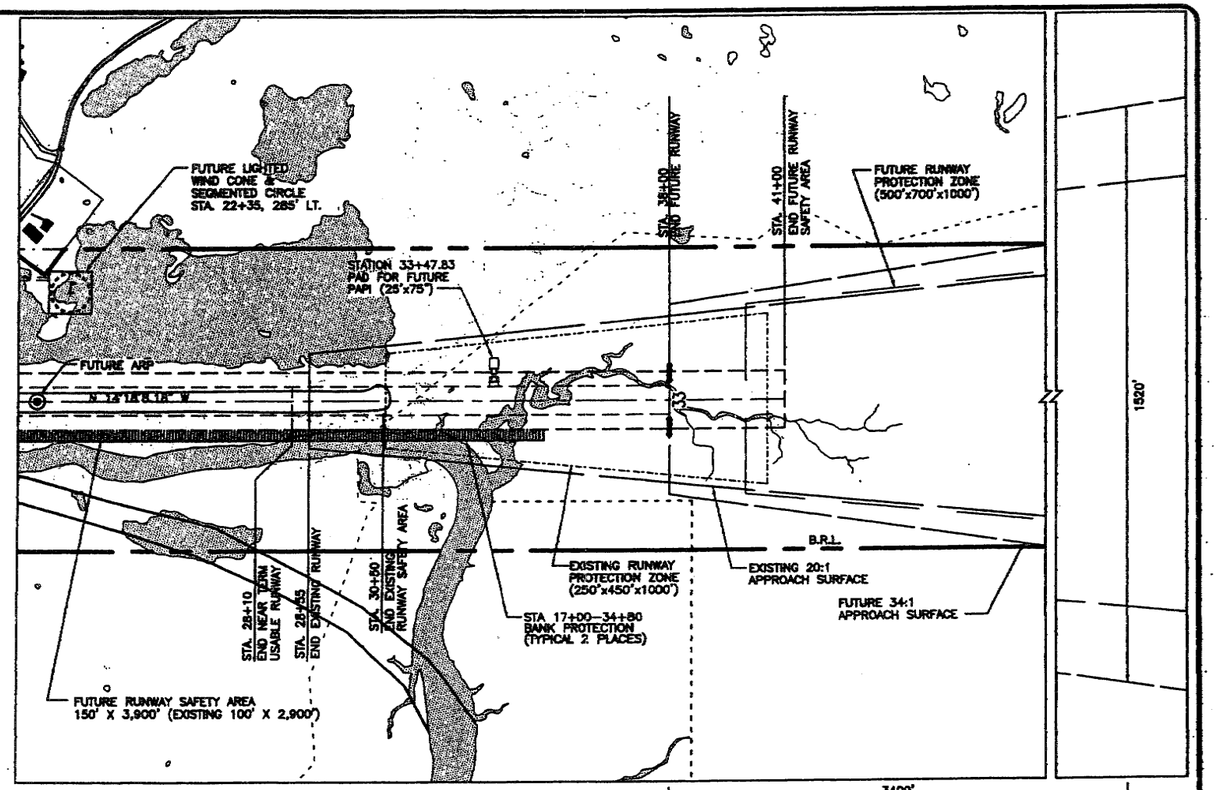
AIRPORT LAYOUT PLAN

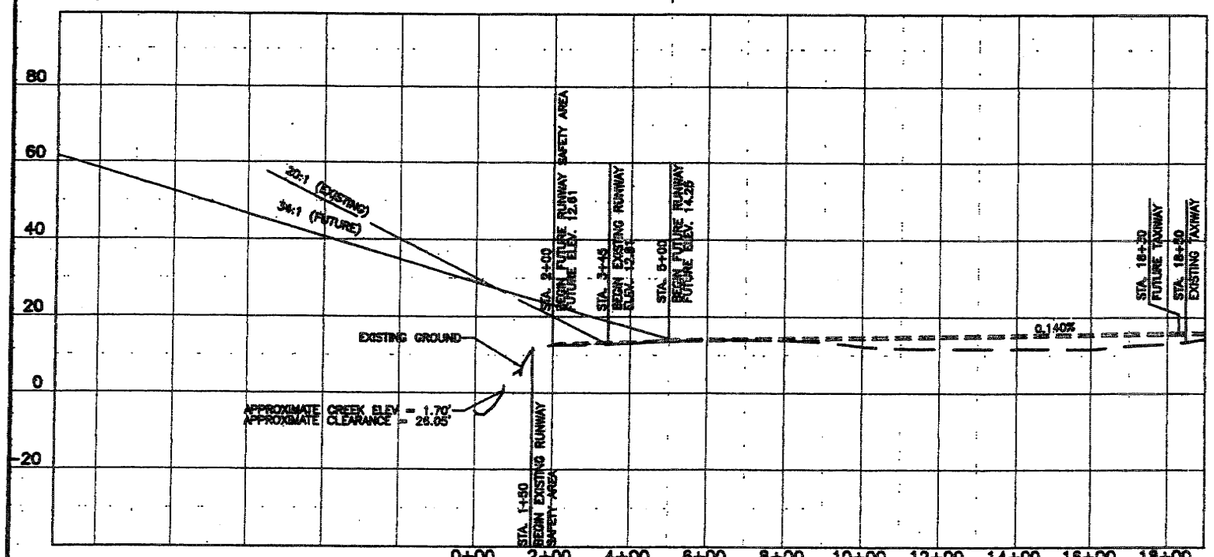
RUNWAY PLAN & PROFILE

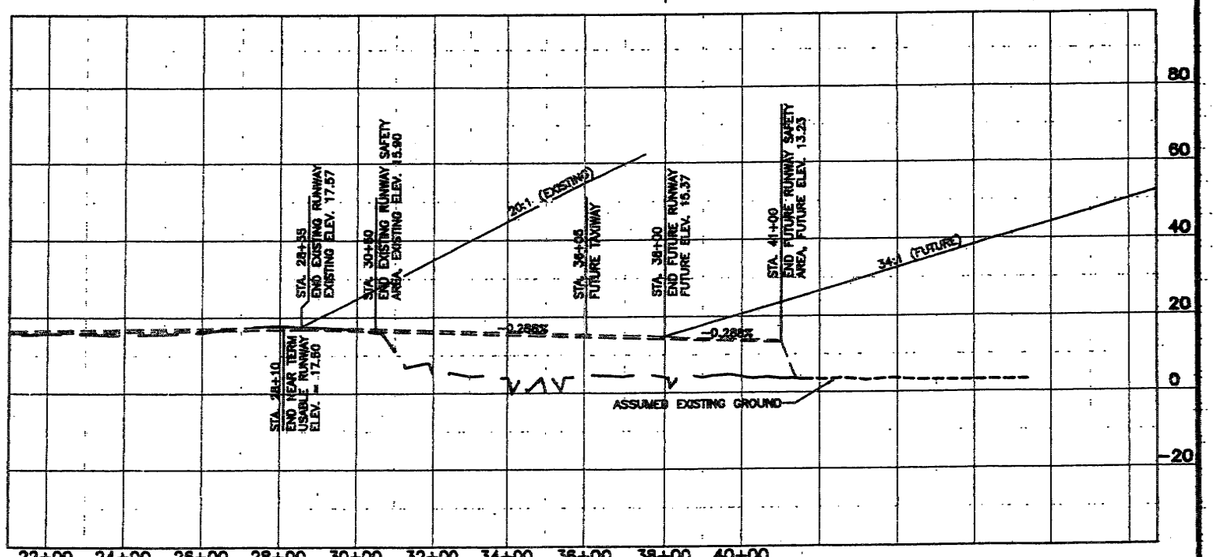
SHEET 3 OF 8

FILE: 09707\006\CAD\ALP
DATE: 12/03/02









PROFILE
SCALE: HORZ: 1"=200'
VERT: 1"=20'

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 2/2/03
BY: J. Smith FOR DATE: 2/3/03
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-600

FAA AIRSPACE REVIEW NUMBER: 02-AAL-189 NRA

BY	DATE	REVISIONS

FILE: 09707\006\CAD\ALP
DATE: 12/03/02

NATIVE VILLAGE OF KWIGILLINGOK
AIRPORT LAYOUT PLAN

RECOMMENDED: E.S. WHARTON, P.E. — HDR ALASKA, INC — PROJECT MANAGER — 12-3-02
APPROVED: OSCAR EKSN — TRIBAL ADMINISTRATOR — NATIVE VILLAGE OF KWIGILLINGOK — 12/16/02

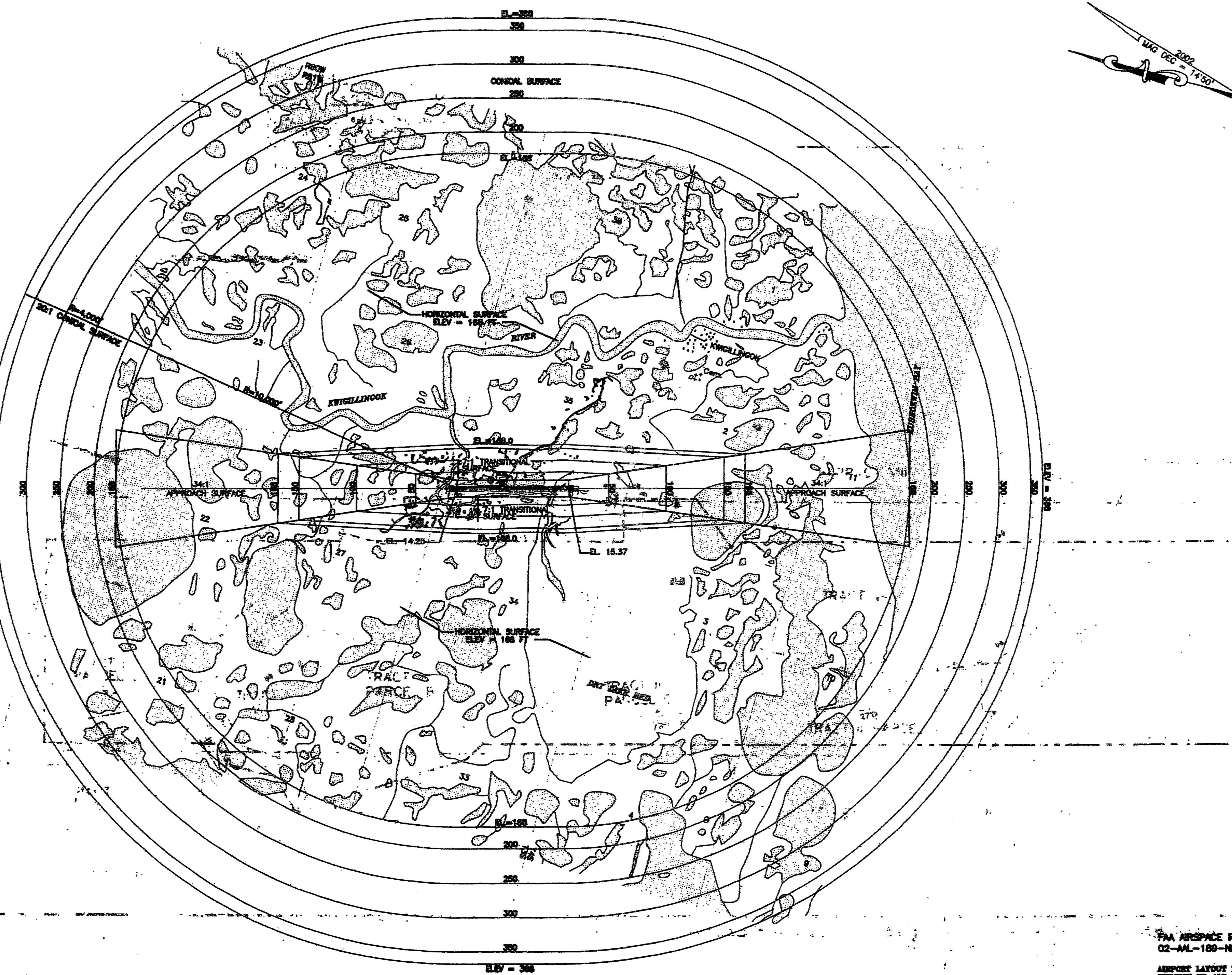
DATE: 12/03/02
DESIGN: ESW
DRAWN: SJM
CHECKED: DH

KWIGILLINGOK AIRPORT

AIRPORT LAYOUT PLAN

RUNWAY APPROACH SLOPES PLAN & PROFILE

SHEET 4 OF 8



LEGEND

WATER SURFACE

NOTES

1. AIRPORT AND RUNWAY ELEVATIONS ARE 18.0'
2. THIS DRAWING IS BASED ON USGS QUAD KUSKOKWIM BAY (D-4), ALASKA.
3. FOR PROPERTY STATUS, SEE PROPERTY PLAN ON SHEETS 6 AND 7.

OBSTRUCTION DATA TABLE

NUMBER	PENETRATION DISTANCE (FEET)	DESCRIPTION	DISPOSITION
1	18'	EXISTING BUILDING ROOF PEAK	TO BE RELOCATED IN MID TERM
2	8'	UNLIGHTED WIND CONE	TO BE RELOCATED IN MID TERM

FAA AIRSPACE REVIEW NUMBER:
02-AAL-189-NRA

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 3/3/03

By: [signature] DATE: 3/3/03
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-600

BY	DATE	REVISIONS

DATE: 12/03/02
DESIGN: ESW
DRAWN: SJM
CHECKED: DH

NATIVE VILLAGE OF KWIGILLINGOK
AIRPORT LAYOUT PLAN

RECOMMENDED: E.S. WHARTON, P.E. — HDR ALASKA, INC — PROJECT MANAGER — 12-3-02
APPROVED: OSCAR EVON — NATIVE VILLAGE OF KWIGILLINGOK — TRIBAL ADMINISTRATOR — 12/16/02

KWIGILLINGOK AIRPORT

AIRPORT LAYOUT PLAN
F.A.R. PART 77

SHEET 5 OF 8

FILE: Z:08707\008\CAD\ALP
DATE: 12/03/02

Surveyor's Certificate

I hereby certify that I am properly registered and licensed to practice Land Surveying in the State of Alaska, and that this drawing represents a survey made by me or under my direct supervision; and that the monuments shown hereon actually exist as described, and that all dimensions and other details are correct to the extent shown hereon.

Date Registration Number

Registered Land Surveyor

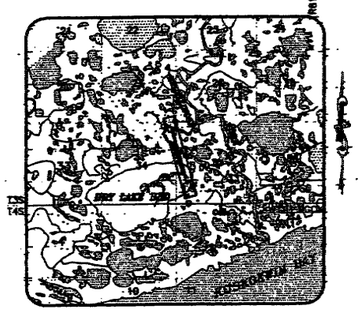
NOTE

ALL DATA TABLES ARE ON PROPERTY PLAN SHEET 2 (A.L.P. SHEET 7)

LEGEND

- BLM BRASS CAP MONUMENT
- A.D.A. MONUMENT
- PROPERTY BOUNDARY
- TRACT BOUNDARY
- PARCEL BOUNDARY

200 100 0 100 200 300 400
BAR SCALE



VICINITY MAP

T3S, R81W, SEC. 27, 34, & 35
T4S, R81W, SEC. 3
SEWARD MERIDIAN
KUSKOKWIM BAY (D-4), ALASKA

1 0 1 2
SCALE IN MILES

NEW PROPOSED PROPERTY BOUNDARY BASED ON CURRENT RUNWAY EXTENSION ALTERNATIVE

TRACT VIII

PREVIOUS LEASE

S 15°20'08" E 2725.18'

S 15°20'08" E 1161.85'
1015.57'

S 15°29'08" E 988.45'

TRACT IV

TRACT VII

TRACT I

NORTH 1911.07'
2032.14'

SOUTH 600.55'

S 32°39'00" E 304.82'

S 53°36'09" E 283.74'

MEANDER ALONG LAKE

TRACT III PARCEL B

TRACT V

TRACT II PARCEL B

TRACT II PARCEL C

TRACT II PARCEL A

TRACT III PARCEL C

TRACT III PARCEL A

N 15°20'08" W 1854.40'

N 15°20'08" W 2024.52'

S 32°39'00" E 696.30'

N 32°39'00" W 222.42'

DRY LAKE

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 2/12/03

By: [signature] Date

FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-600

FAA AIRSPACE REVIEW NUMBER:

REVISIONS

NATIVE VILLAGE OF KWIGILLINGOK
AIRPORT LAYOUT PLAN

HDR Alaska, Inc.

DATE: 12/03/02
DESIGN:
DRAWN:
CHECKED:

KWIGILLINGOK AIRPORT

AIRPORT LAYOUT PLAN

PROPERTY PLAN

SHEET 6 OF 8

FILE: 08707\006\CAD\ALP
DATE: 12/03/02

BEARING AND DISTANCE TABLE

LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE
L1	S 86°20'00" E	102.80'	L20	S 11°11'00" W	53.46'	L39	N 56°48'00" W	136.62'	L58	N 87°46'00" E	123.82'
L2	S 64°51'00" E	42.24'	L21	EAST	33.20'	L40	N 18°22'00" W	77.88'	L59	S 15°20'08" E	67.27'
L3	N 10°49'00" W	52.14'	L22	SOUTH	121.07'	L41	N 38°56'00" W	53.46'	L60	S 87°46'00" W	173.98'
L4	N 73°20'00" E	130.02'	L23	SOUTH	89.10'	L42	N 49°43'00" E	113.52'	L61	N 52°54'00" W	58.74'
L5	S 66°14'06" E	83.11'	L24	N 28°04'00" W	118.14'	L43	N 17°38'07" E	76.96'	L62	N 61°32'58" W	96.60'
L6	N 87°56'00" E	110.09'	L25	N 11°56'00" E	83.16'	L44	EAST	68.14'	L63	N 47°58'46" W	169.96'
L7	S 30°52'00" E	81.18'	L26	N 18°26'00" W	53.46'	L45	S 73°09'07" E	81.61'	L64	N 88°24'05" W	242.05'
L8	S 03°46'00" E	112.88'	L27	N 11°00'00" W	82.50'	L46	S 56°18'38" E	84.36'	L65	S 86°50'41" W	24.62'
L9	S 06°01'00" E	104.94'	L28	N 26°25'00" W	231.00'	L47	S 84°31'00" E	112.32'	L66	S 47°25'00" W	250.61'
L10	S 30°15'00" E	111.54'	L29	N 07°33'00" W	186.76'	L48	S 50°10'00" E	147.84'	L67	N 02°22'07" E	155.29'
L11	S 02°56'00" W	54.78'	L30	N 12°47'00" W	180.38'	L49	SOUTH	120.78'	L68	S 15°20'08" E	59.01'
L12	S 24°36'00" E	99.00'	L31	N 03°39'00" W	88.44'	L50	N 88°19'00" W	204.60'	L69	N 38°43'11" W	240.94'
L13	S 55°16'00" E	64.68'	L32	N 21°02'00" W	93.06'	L51	N 51°45'00" W	197.34'	L70	S 88°00'00" E	30.81'
L14	S 06°46'00" E	58.06'	L33	N 49°39'00" W	141.24'	L52	N 87°06'00" W	153.51'	L71	S 15°20'08" E	57.51'
L15	S 75°19'00" E	33.00'	L34	N 39°14'00" W	95.04'	L53	N 15°20'08" W	55.59'	L72	S 22°00'00" W	112.27'
L16	S 28°47'00" E	42.90'	L35	N 79°27'00" W	69.96'	L54	S 43°00'00" W	168.30'	L73	S 88°00'00" E	85.64'
L17	S 13°59'00" E	75.90'	L36	S 71°17'00" W	58.06'	L55	S 01°59'00" E	191.40'	L74	S 22°10'00" W	85.64'
L18	S 27°53'00" E	108.24'	L37	N 49°40'00" W	83.16'	L56	S 47°25'00" W	91.19'	L75	S 15°20'08" E	284.86'
L19	S 15°20'00" W	66.34'	L38	N 17°26'00" W	108.60'	L57	S 68°23'56" E	83.94'	L76	N 74°39'49" E	170.56'
									L77	S 15°20'08" E	141.21'

PROPERTY STATUS

TRACT	PARCEL	ACRES	OWNER
ROW		8.16	17(b) EASEMENT
100		109	U.S.F.W./KWIK, INC.
I		33.11	KWIK, INC.
II	A	7.91	NATIVE ALLOTMENT (EVA FRIEND)
II	B	20.68	NATIVE ALLOTMENT (EVA FRIEND)
II	C	5.44	KWIK, INC.
III	A	0.67	NATIVE ALLOTMENT (KATIE AVIGEAK)
III	B	8.13	NATIVE ALLOTMENT (KATIE AVIGEAK)
III	C	3.16	STATE OF ALASKA, D.N.R. – ILMA
IV		6.48	NATIVE ALLOTMENT
V		3.75	KWIK, INC.
VII		22.24	KWIK, INC.
VIII		0.11	KWIK, INC.

Surveyor's Certificate

I hereby certify that I am properly registered and licensed to practice Land Surveying in the State of Alaska, and that this drawing represents a survey made by me or under my direct supervision, and that the monuments shown hereon actually exist as described, and that all dimensions and other details are correct to the extent shown hereon.

Date Registration Number

Registered Land Surveyor

FILE: 08707\006\CAD\ALP
DATE: 12/03/02

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 3/3/03

By: [signature] DATE: 3/3/03
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-600

FAA AIRSPACE REVIEW NUMBER: 02-

REVISIONS

NATIVE VILLAGE OF KWIGILLINGOK
AIRPORT LAYOUT PLAN

DATE: 12/03/02
DESIGN:
DRAWN:
CHECKED:

KWIGILLINGOK AIRPORT

AIRPORT LAYOUT PLAN

PROPERTY PLAN

SHEET 7 OF 8

A. Purpose

This Kwigillingok Airport Layout Plan Narrative Report is provided along with the Airport Layout Plan in accordance with Federal Aviation Administration (FAA) Airport Design Advisory Circular 150/5300-13, Appendix 7. The rationale for the Kwigillingok Airport improvements will be outlined in this report.

B. Introduction

This Airport Layout Plan (ALP) supersedes the airport layout plan approved by the FAA in 1985.

Kwigillingok Airport is located along the Kwigillingok River approximately 1 mile west of the village of Kwigillingok and approximately 75 miles southwest of Bethel, Alaska. The Village of Kwigillingok has a population of approximately 300.

There are no roads to Kwigillingok and river access is limited to summer months. Aircraft travel is the sole year round method to access Kwigillingok.

C. Airport Usage and Forecasts

The Alaska Aviation System Plan (AASP) has designated this airport as a Community Class which is defined as the primary access to a small rural community of at least 25 permanent year-round residents without other reliable year-round access.

Currently there are no permanently based aircraft at Kwigillingok. Arctic Circle Air, Arctic Transportation Services, ERA Aviation, Grant Aviation, and Pen Air all provide scheduled passenger and/or freight service to Kwigillingok. Hageland Air Service serves Kwigillingok with charter operations. A poll of air carriers serving Kwigillingok indicated that there were approximately 3,954 operations for the year 2000, which is approximately 5 daily flights. According to the Alaska Department of Community and Economic Development (ADCED), the population in 1999 was 360 people. A population growth rate of 2.13% is expected through 2020. This growth rate is based on the potential for future population growth, aggressive economic development, and a consistent growth rate over the past 80 years. Using this growth rate it is estimated that there will be 7,868 operations per year in 2020.

The airport is currently served primarily by single and twin engine wheeled aircraft. Single engine aircraft with an Airport Reference Code (ARC) A-I consist of Cessna 207's, 172 Skyhawk, and C-206 Grand Caravan as well as Piper Saratoga's. Small twin engine aircraft within ARC A-II, and B-I such as the Dehavilland Twin Otter and the Piper Navajo also serve Kwigillingok. The Shorts Skyvan (B-II) occasionally serves Kwigillingok as well. As the existing fleet ages it will become increasingly more difficult to replace the small single engine aircraft because they are no longer being manufactured. The Bethel aircraft fleet will tend to be more reliant on the small twin engine aircraft, ARC B-I and B-II that are available such as the Piper Navajo, Navajo Chieftain, Beech 1900, and Beech Super King Air. There is no local wind data available for the Kwigillingok Airport. The wind data for Kipnuk, Alaska located 28 miles to the west is assumed to be equivalent and will be used. The Yukon-Kuskokwim delta area has very little topographical relief.

D. Stage Development

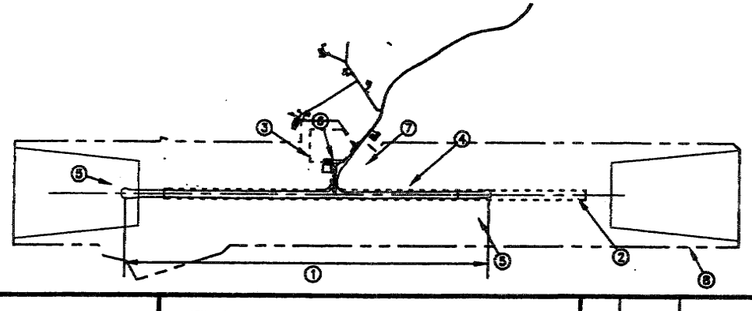
The development of the Kwigillingok Airport will be accomplished in staged increments of Near-Term (0-5 Years), Mid-Term (6-10 Years) and Long-Term (11-20 Years). Typically, construction requiring new embankment will be initiated during one stage and then completed for use during the following stage. The staged construction is necessary to allow the embankment to stabilize by consolidation over a period of five years.

Near-Term (0-5 Years) Development

Near-Term development will bring the existing runway into compliance with standards for an A-I airport, install medium intensity lighting, and construction of silt embankments for completion during the following stage. The embankments to be constructed are a 1,090 feet extension to the south of the existing Runway 15/33, and an embankment for a new apron to the east. The existing slough along the west side of Runway 15/33 will be rechanneled in order to move the flow further away from the safety area embankment, and the embankment armored with concrete block mats where slough flow threatens erosion.

Near-Term Work

1. Widen the existing 2,900' Runway 15/33 safety area from 100' to 150' and gravel surface 60' by 2,310' runway.
2. Construct a 150'x 1,090' embankment for a runway extension to the south of the existing Runway 15/33.
3. Construct a 75,000 sq. ft. embankment for the future apron.
4. Construct medium intensity lighting system for Runway 15/33, layout will accommodate future mid term airport expansion.
5. Stream rechannelization and armor embankment.
6. New rotating beacon constructed on the east side of the equipment storage building.
7. Construct embankment for a new lighted wind cone with a new segmented circle.
8. Property acquisition required for airport expansion and runway protection zones.



Mid-Term (6-10 Years) Development

Mid-term development will complete construction on the embankment placed in the near-term stage. This includes grading the expanded safety area and new apron and then importing surface material for runways, taxiways, and apron. The work shall include extending Runway 15/33 to 75'x 3,300 feet within a 150'x 3,900' safety area and installing medium intensity lighting along the runway extension, taxiway, and new aircraft parking area. Construct a new equipment storage building at the new 75,000 square foot apron.

Mid-Term Work

1. Lengthen Runway 15/33 from 2,310' to 3,300' and safety area from 2,900' to 3,900'. Widen runway surface to 75'.
2. Grade and surface 75,000 square foot apron and 250' x 35' taxiway with 79' wide taxiway safety area.
3. Construct medium intensity lighting system for the 1,090' extension of Runway 15/33, new segmented circle & lighted windcone.
4. Construct new Equipment Storage Building at new 75,000 square foot apron. Purchase new snow removal equipment.

Long-Term (11-20 Years) Development

Development proposed through the Mid-term is expected to be adequate for the Long-Term. Wind data should be gathered in the Mid-term to determine whether a crosswind runway is needed for Long-Term development.

E. Design Rationale

The major needs for this airport are to upgrade existing facilities to current standards, provide adequate crosswind coverage and to upgrade the facilities to meet the needs of the future aircraft fleet. The major obstacle to the improvements is the absence of competent embankment material.

1. Airport Reference Code (ARC)

The existing runway 15/33 is a substandard A-I facility which will be upgraded to current standards for A-I during the near-term and B-II during the mid-term.

Based on the forecast aviation demand, the historical fleet mix, and the forecast fleet mix the Kwigillingok Airport should be designed for Aircraft Design Group II, aircraft with wingspan less than 24 meters (79 feet) (FAA AC 150/5300-150-13). Under this design group, the airport will be able to accommodate the aircraft currently providing service to Kwigillingok like the DHC-6 Twin Otter, as well as the Cessna Caravan and Beech 1900.

The airport should also meet Approach Category B standards, landings speeds of 91 to 121 knots (FAA AC 150/5300-150-13).

The DHC-6 Twin Otter is the most demanding (ARC A-II) regular use aircraft (250+ operations annually) operating to and from the Kwigillingok Airport. According to the air traffic forecast, Kwigillingok Airport should be designed to accommodate this aircraft.

It should be noted however, that A-II design standards might be inappropriate for the Kwigillingok airport. Many of the community airports in the Yukon-Kuskokwim region are being constructed to B-II standards. Constructing Kwigillingok airport to meet A-II standards (which would not meet dimensional standards for a community class airport) could increase the cost of aviation services to Kwigillingok residents.

Commercial aircraft operators would have an economic incentive to build fleets of larger B-II aircraft and keep them full by linking service to villages with B-II airports. If operators have to keep smaller, less economically efficient, aircraft in their fleets just to serve Kwigillingok, the costs will be passed on to the residents in the form higher passenger fares and cargo rates.

The recommended dimensional standards for runway length at community class airports exceed the runway length required by aircraft categorized with an Approach Category of 'A'. Based on the anticipated future designation of the Kwigillingok Airport as a community class airport, runway length should be designed to meet the recommended runway length standards.

Wind Coverage

Runway 15/33 provides 83.76% coverage for 10.5 knot crosswinds and 90.31% coverage for 13 knot crosswinds using Kipnuk wind data. Wind data should be collected from nearby communities to determine the need for long-term future construction of a crosswind runway.

2. Runways

Runway 15/33

Kwigillingok Airport has one existing runway. Runway 15/33 was originally constructed in 1972 and gravel surfaced in 1982. The existing runway is 50 feet wide and 2510 feet long and has no light system. The existing safety area is 100 feet wide and 2900 feet long. The runway has a thin gravel cap over silty material. The existing profile is undulating.

Near-term construction will upgrade runway 15/33 to 60 feet wide by 2310 feet long, have a safety area 150 feet wide by 2900 feet long and smooth out the profile. This will bring the runway into conformance with A-I standards. The widening will be via shallow fills which will be constructed from native materials and be stable in the near-term. The near-term runway will be shortened to 2310 feet in order to provide the required safety area beyond each end and still remain on the existing embankment. The 2310 length interpolates to providing adequate length for between 75% and 95% of the small aircraft with less than 10 passenger seats. The 2310 foot runway will provide adequate service to the aircraft that currently serve Kwigillingok. The 60 feet by 2310 foot runway will have a medium intensity lighting system.

Midterm development is the same as ultimate development and will lengthen the runway to 3300 feet within a 150 feet by 3900 feet safety area. The 3300 feet meets the requirement for 100% of small aircraft having less than 10 passenger seats and will allow for upgrading to small twin engine aircraft use.

3. Taxiways

The existing taxiway is located at the mid-point of the existing runway and is an exit taxiway to the existing substandard apron. The existing taxiway is 30 feet wide and 130 feet long and meets A-I requirements. Mid-term development will complete construction of a new taxiway to the new apron. The taxiway will be 250 feet from the runway centerline to the new apron.

4. Aircraft Parking Areas

The present apron is 90 feet wide and 200 feet long (18,000 sq. ft.) with a thin gravel surface. The front edge of the existing apron is approximately 175 feet from the runway centerline and meets A-I requirements.

In the near term embankment will be placed in a new location at the southeast corner of the existing runway for a new apron. Mid-term development will move the aircraft parking area to the new 75,000 square foot apron. This parking area will be at a setback of 250 feet from the runway centerline. The aircraft parking area will be outside the 400 feet runway obstacle free area of Runway 15/33 as required for Ultimate development. The 75,000 square foot aircraft parking area will meet the guidelines of the AASP for community class airports. There will be four aircraft tie-downs provided.

5. Access Road

During near-term development, embankment will be placed to provide access to the new apron from the existing road. During Mid-term development this access road will be graded and surfaced.

6. Snow Removal Equipment Storage Building

The existing 24'x46' snow removal equipment storage building is located in the northeast corner of the existing apron at 235 feet from the runway centerline. A new SRE building will be constructed at the new apron in the mid term.

Kwigillingok Airport Design Standards					
Runway 15/33					
Item	Existing	Standard A-I*	Near-Term A-I	Standard B-II	Mid-Term B-II
Runway Length	2510'		2310'		3300'
Runway Width	50	60	60	75	75
Runway Shoulder Width	10	10	10	10	10
Runway Safety Area Width	100	120	150	150	150
Runway Safety Area Length beyond runway ends	195	240	RW15-300 RW33-240	300	300
Runway Object Free Area Width	250	250	250	500	500
Runway Object Free Area Length beyond runway ends	240	240	240	300	300
Taxiway Width	30	25	30	35	35
Taxiway Shoulder Width	5	10	5	10	10
Taxiway Safety Area Width	40	49	40	79	79
Taxiway Object Free Area Width	90	89	90	131	131
Aircraft Parking Area Setback	175	125	175	250	250
Runway Protection Zone Length	1000	1000	1000	1000	1000
Runway Protection Zone Inner Width	250	250	250	500	500
Runway Protection Zone Outer Width	450	450	450	700	700
Building Restriction Line	235	N/A	235	N/A	400
Approach Slope Angle	20:1	20:1	20:1	34:1	34:1

* Small Aircraft Exclusively

F. Property Status

The airport is situated within a 109 acre tract of land, which was leased to The State of Alaska DOT&PF until 1999 by USF&WS. The lease, which has expired, was administered by Kwik, Inc., the Village Corporation to which the land was conveyed under the Alaska Native Claims Settlement Act (ANCSA). Proposed property acquisition would include transferring approximately 116 acres of land in fee, and approximately 16 acres of avigation hazard easement from Kwik, Inc. and Calista to the sponsor. Native allotments will be transferred to Kwik, Inc prior to transference to the airport sponsor. The total property acquisition would be approximately 130 acres.

G. Community Involvement

Community involvement is being documented through a sponsorship evaluation report and an airport master plan.

H. Deviations from Standards

The runway safety area is deficient in length and width for a B-II aircraft. The runway is deficient in width also. The runway width will be increased to 60 feet, and the runway safety area deficiencies will be rectified in the near term. The aircraft parking separation, the taxiway width, and the taxiway safety area width will be rectified in the mid term. Also the runway will be widened again to 75 feet in the mid term.

I. Encroachments into Part 77 Surface

Runway 15/33 has an obstruction protruding into the FAR Part 77 imaginary surface. The existing snow removal equipment storage building roof projects 15 feet into the primary surface.

This encroachment will be eliminated during Mid-term development when the existing building is removed.

FILE: 08707\008\CAD\ALP
DATE: 12/03/02

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 12/3/02
By: [signature] DATE: 12/3/02
FAA, AIRPORTS DIVISION ALASKAN REGION, AAL-600

FAA AIRSPACE REVIEW NUMBER:

NATIVE VILLAGE OF KWIGILLINGOK
AIRPORT LAYOUT PLAN

RECOMMENDED: [signature] 12-3-02
E.S. WHARTON, P.E. HDR ALASKA, INC PROJECT MANAGER
APPROVED: [signature] 12/4/02

DATE: 12/03/02
DESIGN: ESW
DRAWN: SJN
CHECKED: DH

KWIGILLINGOK AIRPORT

AIRPORT LAYOUT PLAN

NARRATIVE REPORT

SHEET 8 OF 8

Appendix C
Agency and Public Involvement

Appendix C

Table of Contents
(Chronological Order)

April 8, 2002

Kevin Morgan
Regulatory Branch
Army Corps of Engineers
P.O. Box 898
Anchorage, AK 99506-0898

Subject: Kwigillingok Airport Improvement Project
Agency Scoping Meeting

Dear Kevin Morgan:

The Federal Aviation Administration (FAA) and the Native Village of Kwigillingok are planning needed improvements to the airport in Kwigillingok, Alaska (see attached figure). The purpose of this project is to bring the airport into compliance with current FAA standards. David Nairne Associates (DNA) and HDR Alaska, Inc. are assisting with the National Environmental Policy Act (NEPA) analysis and environmental permitting associated with planned airport improvement options.

Project Background

Kwigillingok's only connection to the mainland United States is through Bethel and Anchorage airports. Therefore, it is critical that the airport meets existing and future demands as efficiently and safely as possible.

In January of 1996, the Alaska Department of Transportation and Public Facilities (ADOT&PF) completed an Environmental Assessment for the planned airport improvements at Kwigillingok and a Finding of No Significant Impact (FONSI) was signed by the FAA. However, since that time the project scope has changed slightly and the project will no longer be sponsored by the ADOT&PF, as the Native Village of Kwigillingok intends to take over the responsibility. This is presented in the Phase I Sponsorship Evaluation conducted by DNA in September of 2001.

Project modifications include the following:

- Lengthening the runway embankment an additional 300 feet southward to a total length of approximately 3,300 feet (original EA proposed 3,000 feet total length); and
- Widening the runway from the current 35 feet to approximately 75 feet (original EA proposed 60 feet wide).

Sufficient safety areas, medium intensity runway lighting, and various navigational aids are included in the project description (see attached).

Agency Scoping Meeting

The Native Village of Kwigillingok and the FAA are interested in constructing the near term priority projects at the Kwigillingok Airport as soon as the environmental review is completed and funding is obtained. With this letter we would like to re-initiate agency scoping for this project. We would like your input on the project to ensure that the reevaluation of the environmental document covers the significant issues. Copies of the Kwigillingok Airport Environmental Assessment (DOT&PF, 1996) and the Phase I Sponsorship Evaluation (DNA, 2001) are available upon request.

You are invited to an agency scoping meeting to provide any concerns or issues your agency might have with the proposed project. The meeting is scheduled for:

10:00 a.m. Monday April 29, 2002
CIRI Building--4th Floor Conference Room
2525 C Street Anchorage

In addition to identifying any concerns or issues your agency might have with the proposed project, the following information is requested:

1. We understand that there is no FEMA flood information for the area. If you know of any other information and/or data with respect to the base floodplains, regulatory floodways, and/or special flood hazard areas or drainages that may be affected by the proposed project, please provide that information.
2. Identify the permits and/or clearances to be obtained from your agency for the proposed project.

Agency comments are important to understanding the scope of the environmental reevaluation effort. You can return comments to me in a number of ways: verbally during the agency scoping meeting, by regular mail to the address above, by e-mail to swharton@hdrinc.com, or by fax to 274-2022. I would appreciate receiving your comments by June 1, 2002.

I look forward to seeing you at the Agency Scoping Meeting. If you have any questions, please feel free to call me or Sally Morsell, HDR Senior Scientist, at 274-2000.

Sincerely,

Scott Wharton
HDR Alaska Project Manager

Enclosures

ny Corps of Engineers
in Morgan
ulatory Branch
). Box 898
horage, AK 99506-0898

tional Marine Fisheries Service
nne Hanson
stern AK Office Supervisor
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R/ Land, Mining, and Water
hard Mylius
ource Assessment Chief
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U.S. Environmental Protection Agency
Ted Rockwell
Alaska Operations Office
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Anchorage, AK 99513-7588

Alaska Dept. of Fish & Game
Wayne Dolezel
Permits Supervisor
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Anchorage, AK 99518-1599

Department of Environmental Conservation
Tim Rumfelt
Environmental Specialist
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Wasilla, AK 99687

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Ann Rapporport
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DNR/Office of History and Archaeology
Judith Bittner
State Historic Preservation Officer
550 W. 7th Ave., Suite 1310
Anchorage, AK 99501-3565

Division of Governmental Coordination
Cynthia Zuelow-Osborne
Project Review Assistant
550 W. 7th Ave., Suite 1660
Anchorage, AK 99503-5930

Kwigillingok Airport Improvements Project Description

The Native Village of Kwigillingok proposes to rehabilitate and reconstruct the airport at Kwigillingok, Alaska (Figure 1). The airport does not meet current standards for community class airports. The proposed project will bring it up to current federal and state standards for length, width, apron size, and setback. The following summary describes the proposed action, Alternative A.

Table 1
Proposed Improvements (Alternative A)

Project Element	Existing Usable	Near-Term Usable	Mid-Term Usable
		Category A-I	Category B-II
Runway (R/W) Length	2,510 ft	2,310 ft	3,300 ft*
R/W Width	50 ft	60 ft	75 ft*
R/W Safety Area Length	2,900 ft	2,900 ft	3,900 ft*
R/W Safety Area Width	100 ft	120 ft	150 ft*
Taxiway (T/W) Width	30 ft	30 ft	40 ft*
T/W Safety Area Width	40 ft	40 ft	80 ft*
Apron Dimensions	18,000 sf	18,000 sf	75,000 sf*
Future Equipment Storage Building Pad	None	50 x 90 ft	50 x 90 ft*
Access Road	10 x 370 ft	14 x 370 ft	24 x 800 ft*

* Embankment constructed during Near-Term Phase, but not usable until mid-Term.

Construction would occur in phases because the soil is wet and must settle and drain. Therefore, the proposed improvements will be described as Near-Term (0-2 years), and Mid-Term (3-5 years). The Near-Term phase will provide the embankment for the Mid-Term phase, at which time the embankment will be graded and surfaced with crush material. Additional improvements under the Near-Term phase include:

1. New gravel surfacing for the existing runway, access road, apron, and taxiway.
2. A new snow removal equipment storage building constructed on the new gravel pad.
3. A new rotating beacon constructed on the east side of the equipment storage building.
4. A new lighted wind cone with a new segmented circle.
5. Installation of a medium intensity runway and taxiway lighting system.
6. A shallow ditch (approximately 1 foot) excavated around the southern end of the airport to facilitate drainage away from the embankment.
7. Purchase a new motor grader for snow removal.
8. Property acquisition required for airport expansion and runway protection zones.

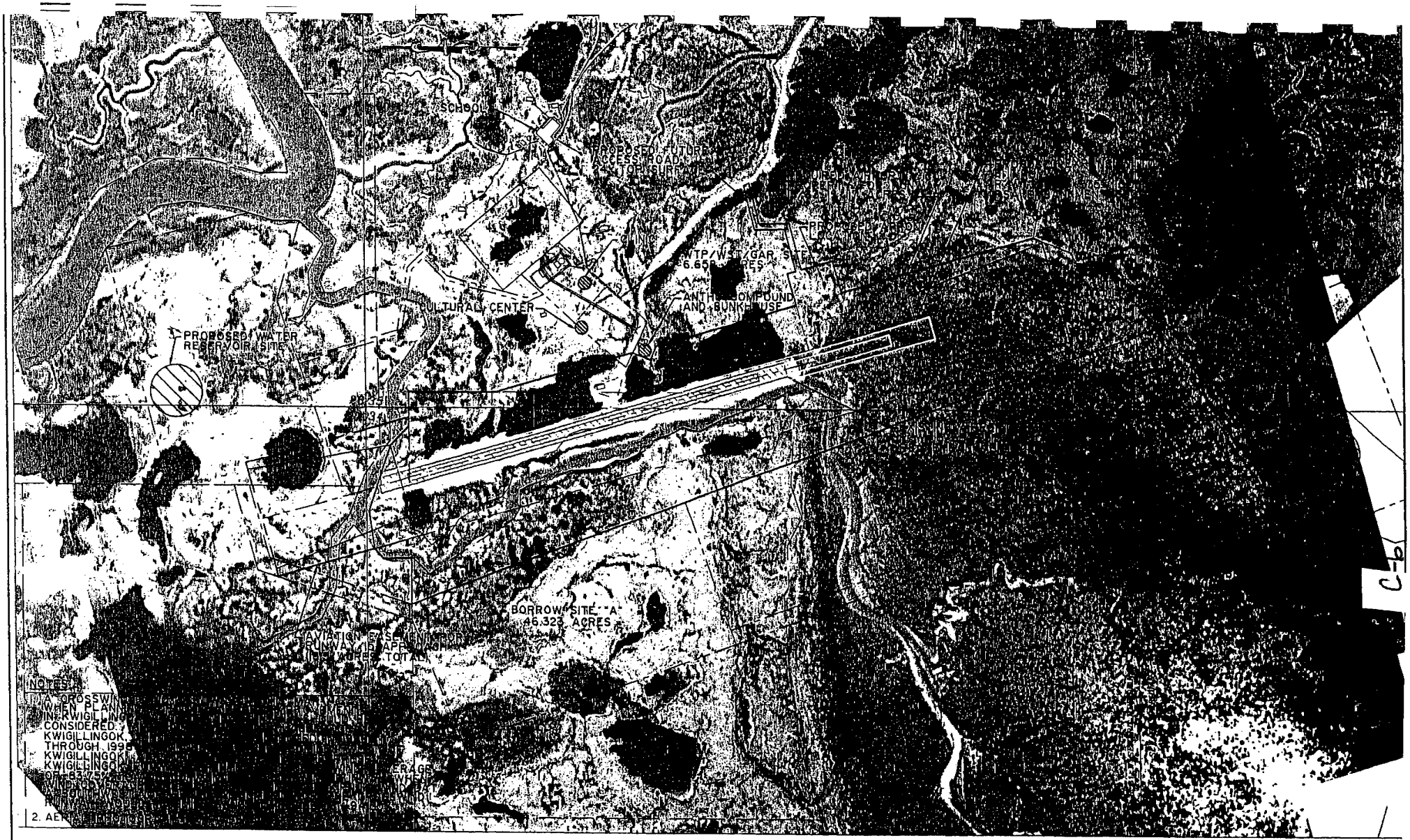
The airport is situated within a 109-acre tract of land, which was leased to DOT&PF until 1999 by USF&WS. The lease, which has expired, was administered by Kwik, Inc., the Village Corporation to which the land was conveyed under the Alaska Native Claims Settlement Act (ANCSA). Proposed property acquisition would include transferring approximately 116 acres of land in fee, and approximately 16 acres of avigation and

hazard easement from Kwik, Inc. and Calista to the sponsor. Native allotments shown on figure 1 will be transferred to Kwik, Inc. prior to transference to the airport sponsor. The total property acquisition would be approximately 132 acres.

Approximately 18 acres of wetlands would be impacted by the proposed improvements and up to 24 acres for the borrow activities under the Near-Term and Mid-Term phases, including the stream realignment. The stream on the west edge of the primary runway would be realigned slightly to eliminate erosion of the runway embankment.

Altogether 220,000 cubic yards of material would be excavated from available borrow sites. These consist of two borrow sources near an intertidally influenced stream that were described for an ongoing Alaska Native Tribal Health Consortium (ANTHC) sanitation project. Information from ANTHC indicates that these borrow sources are not expected to be fully exploited, therefore material should be available for the airport project. The village favors this location for the material borrow source. The airport expansion and the material sites will meet all ADF&G requirements for fish passage. Best Management Practices would be used to minimize impacts to wetlands during construction activities.

Mid-Term development will consist of grading the expanded safety area and new apron and then importing surface material for the runways, taxiway, apron, and access road. Note: embankment Conditions may require that the segmented circle, lighted wind cone and Equipment storage building be moved to the mid term phase of development.



DAVID NAIRNE & ASSOCIATES LTD.

HDR Alaska, Inc.

Kwigillingok Airport Master Plan

SITE PLAN

Date: APR 2002

Figure: 1

To Project File – Kwigillingok AMP 09707-006-249 4.3

From Andra Love

Date 4/25/02

HDR Alaska

M e m o r a n d u m

Subject Flood Hazard Permit Requirements

I called Christy Miller of DCED to find out what, if any flood hazard permit requirements apply to this project. Christy said that Kwigillingok does not participate in the National Flood Insurance Program, thus no local flood hazard permit is required.

However, the project will still need to comply with FAA standards, specifically Executive Order 11988. This order essentially states that if there is no feasible and prudent alternative to building in the floodplain zone, the project may proceed as planned, as long as efforts are taken to minimize the adverse impacts incurred from building in a floodplain zone.

While no flood hazard permit application or extraordinary documentation is required, a survey of the area may need to be completed in the design phase to ensure that the project is being constructed above the high water mark of the flood plain zone.

Christy also mentioned that since the project is within the Cenaliulriit Coastal Resource Service Area (CCRSA), we will need to make sure the project complies with the enforceable and administrative policies of the Alaska Coastal Management Program (ACMP) and the CCRSA. Although we have reviewed the CCRSA Coastal Management Plan to ensure that the project complies with it's policies, the Division of Governmental Coordination (DGC) will be responsible for making the final ACMP determination when reviewing the Coastal Project Questionnaire.

To Kwigillingok AMP Project File 09707-006-249/4.4

From Leslie Robbins (Andra Love)

Date 04/29/02

Memorandum

Subject Kwigillingok AMP Agency Meeting

Participants: Michael Kloppenburg, DNA Project Manager
Charla Sterne, FWS Ecological Services (T&E Species)
Neil Stichert, FWS Ecological Services (Wetlands, Biological Resources)
Ron Yaworksy, DNA Project Manager
Oscar Evon, Native Village of Kwigillingok
Maureen McCrea, DGC Project Review Coordinator
Gay Muhlberg, ADF&G Habitat Specialist
Scott Wharton, HDR Project Manager
Sally Morsell, HDR Environmental Planner
Andra Love, HDR Environmental Scientist
Leslie Robbins, HDR Public Involvement

The agency scoping meeting was held in the HDR conference room at 10:00 am on 4/29/02. The meeting was to introduce the project in its current state of planning and to generate feedback from the agencies. This meeting satisfies part of the scoping requirements for the NEPA process.

The meeting began at 10:05 am.

Following introductions, Andra Love gave a history of the project.

1. 1972: Kwigillingok Airport embankment built by Sate of Alaska.
2. Mid-1980's: Development of the AASP determines that rural, isolated communities in Alaska require airports that exceed the minimum standards, thus the airport at Kwigillingok needs improvements.
3. 1994-1995: Relevant permits issued for a project to upgrade the existing airport.
4. January 1996: ADOT issues an Environmental Assessment and FAA concurs with the Finding of No Significant Impact (FONSI) for proposed airport improvements. Near-term improvements scheduled for FY 96. However, negotiations with the State of Alaska over lease terms are unsuccessful.
5. 1996-2000: Project Permits expire (5-year time limit on most permits).
6. Fall 2000: – Native Village of Kwigillingok decides to investigate local sponsorship of the project and hires DNA and HDR Alaska to assist in the planning of the new airport, including draft permits, ALP set, and necessary NEPA coordination and documentation. The goal is to maximize the use of existing documents, as there will be no change in the project scope and intent. A reevaluation of the existing Environmental Assessment will be completed.
7. September 2001: Kwigillingok decides to sponsor the airport and a Phase 1 Airport Sponsorship Report is completed.
8. April 2002: NEPA agency scoping is initiated for the Reevaluation of the Environmental Assessment.

Scott Wharton discussed the project schedule and the goal of the project:

FY03 Design
FY04 Construction

1. To conduct a reevaluation of the Environmental Assessment for airport improvements at Kwigillingok, to include:
- a 3,300 ft by 60 ft runway,
- a 60,000 ft^2 apron,
- a 40 ft wide connecting taxiway,
- an aviation support area,
- an equipment maintenance building, and
- an all weather access road.

2. The scope is about the same as what was requested last time (construct additional embankment). But changes have to be made to keep up with new FAA requirements.

Love and Wharton described the two alternatives:

- Build Alternative
- No-Build Alternative

Love described the NEPA process.

1. Initializing the agency and public involvement for the NEPA process
2. Re-evaluation of environmental assessment
3. Primary project issues include:
   a. Wetlands
   b. Essential Fish Habitat
   c. Threatened and Endangered Species
   d. Section106

Love opened the meeting up for questions and comments.

Stichert: What permits were issued in 1995?

Love: ADF&G, COE, ADEC, CPQ, Consistency Determination completed

Yaworksy asked Evon to talk a bit about the project area/need in Kwigillingok.

Evon said it's been about two years since Kwigillingok has re-initiated the project.

Stichert: Has the channel ever been rerouted in the past? Do salmon use it?

Evon: Yes, the channel is natural, and no salmon use the channel.

Kloppenburg: The bank is sloughing, and there's an active tidal channel there.

Stichert: I see this project as a standard AMP in the Yukon-Kuskokwim area.

Wharton: The project will require some borrow.

Stichert: Do you have to combat erosion long-term?

Wharton: Yes, a protective embankment is needed; no stream relocation or riprap is necessary. Might use a concrete pavement, similar to the mats at Lake Hood. Again, the scope of the project is fairly standard, which includes:

- Building an embankment
- Lighting
- An apron
- Equipment storage building
- Beacon-lighted wind cone
- Delta isolated runway
- New access road

Wharton: The project would require importing about 20,000 tons of gravel surface material.

McCrea: Has the barge landing already been authorized? Keep in mind the DNR wants communities to make barge lease requests. A highly recommend a survey of the barge landing site. We won't start a review until all the authorizations have been obtained.

Stichert: Is it better to conduct the work in the summer/winter?

Evon: During the winter –an ice road/ice bridge will be used.

Yaworksy: ANTHC has constructed a sewage lagoon and access road over the past few years during the winters. This project construction would follow a similar process. Construction permits are held by the native village, and they would be sponsoring the design.

Wharton: Lighting wouldn't take that long, but embankment construction may take longer than a winter season. We can apply early for discretionary funds from FAA.

Kloppenburg: Would those discretionary funds accommodate bank protection? The lighting issue?

McCrea: If you would be getting the money to do the embankment in October 2003, when would you apply for permits?

Wharton: Permit issuance by October 2002 if at all possible.

Love: We'll need to gather more information on the Essential Fish Habitat, Threatened and Endangered Species, and Section 106, as they were not specifically addressed in the original EA. New permits or modifications will be submitted.

Stichert: My preference is to call this an extension rather than airport relocation. Do you have adequate geotechnical information? Develop the operational plan at the draft EA stage. Concern is two borrow sites. Perhaps scheduling a site visit this summer would help. Obtain aerial photography. Throughout operation, getting material across the water body is an issue.

McCrea: How is the gravel going to be brought in? Will you transport it from the barge to the airport or stockpile?

Wharton: A road exists between the barge and airport.

McCrea: More information is needed regarding the stockpile and whether that would be below/or near tidewater.

Sterne: Obtaining aerial photography should be your first priority. It could possibly eliminate the need for a site visit from an endangered species standpoint.

Evon: We may have aerial photography in the office and can get it to HDR.

Sterne: In terms of the Endangered Species Act, the sooner we get the aerial photography the better. The formal process could take up to 135 days. You may not be getting permits in October.

Stichert: Are there any salinity issues? It might be a good idea to review the salinity issue before going forward with a straightforward technical fix. Have you explored bioengineering options?

Love: We may be able to incorporate bioengineering techniques if it is stipulated by the ADF&G.

Stichert: Include in some chart, the following information:

- Acreage
- Habitat type
- Wetland type
- Footprint, excavation, fill
- Borrow sites, if piggybacking on any projects

How are you addressing overburden? Minimize temporary impacts.

Muhlberg: A more biotechnical investigation may be necessary. Will you have a greater level of detail by this summer? It doesn't make sense to apply this summer, if you'd just have to wait anyway.

McCrea: Who owns the land in the area?

Evon: The majority of the land is under control by local government. The completion of several land transfers will occur this October and November. Properties 2, 4 and 8 are well into the process. Property 3 is in the process too.

Stichert: Resource agencies would like to see a draft EA at least one month before the permit application. Again, our primary issues are: deposition or excavation of wetlands; habitat and wetland; fill and stockpile.

Muhlberg: Before you get too far into design, include ADF&G in the preliminary thoughts. Contact Wayne Dolezal at 267-2333 to see what he'll require for the Fish Habitat Application.

Stichert: If a substandard apron is available, DOT might want to evaluate that before considering a completely new site.

Wharton: I just want to reiterate that DOT is not involved in this project. DOT originally wrote the Environmental Assessment and planned to go forth with the project, but Kwigillingok Native Community is now the sponsor of the project and FAA will remain the funding agency.

Sterne: Again, I would like to see aerial photos before I provide comment. I'm curious about the barging/staging/stockpile area when the fill is brought up. Steller's Eiders winter in the area, and it may be critical habitat in the Kuskokwim Shoals, but these may be non-issues, we just don't know at this point.

Morsell: Are high color photos adequate?

Sterne and Stichert: Yes, high color photos are adequate.

McRea: Oscar, have you been in contact with the Cenaliulriit Coastal District concerning this project?

Evon: No, we have not.

McRea: You might just want to call them and let them know about this project, as it is in their district.

Scott Wharton adjourned the meeting at 11:10 am.

KWIGILLINGOK AIRPORT MASTER PLAN

SIGN-IN SHEET

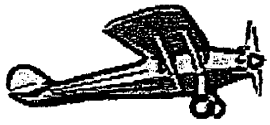
Agency Scoping Meeting

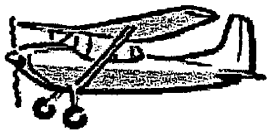
April 29, 2002

Anchorage, Alaska

Name	*Organization*	*Address*	*Phone/FAX*
Ron Yaworsky	DNA	250-171 W. ESPLANADE N.VANCOUVER B.C. V7M 3J9	604-984-3503 604-984-0627
Michael Kloppenburg	DNA	"	"
Scott Wharton	HDR	2525 C St #305 Anchorage, AK 99503	907 274-2000
Oscar Evan	Village of Kwigillingok	P.O. BOX 49 Kwigillingok, AK 99622	(907) 588-8114 (907) 588-8429 FAX
Andra Love	HDR Alaska	2525 C St. #305 Anchorage, AK 99503	(907) 274-2000 (907) 274-2022 FAX
[illegible]	[illegible]	[illegible]	
NEIL STICHERT	FWS	"	271 1777 271 2781 FAX
Leslie Lofthus	HDR	2525 C st #305 Anch, AK 99503	274-[illegible]
Maureen McCoea	DGC	550 W 7th Suite 1660 Anch 99576	269-7473 269-3981
Gay Muhlberg	ADF+G	333 Raspberry Rd Anch 99518	267 2446 267 2464
[illegible]	HDR	[illegible] Nikiski AK 99635	[illegible]

KWIGILLINGOK AIRPORT MASTER PLAN





AGENDA

NEPA Agency Scoping Meeting

Monday, April 29, 2002
Anchorage, Alaska

A. Introductions (Scott W.)

B. History of the project (Andra L.)

C. Project Schedule (Scott W.)

D. Project Description (Scott W.)

F. Description of Alternatives (Scott W. and Andra L.)
   a. Build Alternative
   b. No-Build Alternative

G. NEPA Process (Andra L.)
   a. Public and Agency Scoping Activities
   b. Reevaluation of Environmental Assessment
   c. Issues: wetlands, Essential Fish Habitat, Threatened and Endangered Species, Section 106.

H. Questions and Comments (Andra L.)

I. Meeting Close (Scott W.)

KWIGILLINGOK AIRPORT MASTER PLAN

COMMENT SHEET

Agency Scoping Meeting
April 29, 2002
Anchorage, Alaska

Please let us know your comments and ideas on the scope of the environmental review and the alternatives to be re-evaluated in the Kwigillingok Airport Master Plan Environmental Assessment.

Leave your comments with the HDR staff at the meeting, or mail, fax, or e-mail them by [redacted] June 1, 2002 to:

Scott Wharton, Project Manager
HDR Alaska
2525 C Street, Suite 305
Anchorage, AK 99503
Fax 274-2000
e-mail: swharton@hdrinc.com

Thanks for your input.

DNA Minutes of Meeting

t managers
planners
architects
engineers

.d Nairne + Associates

Suite 250
171 W
ade
North
ver
British
ia
Canada V7M

T 604 984 3503
800 300 0340
F 604 984 0627
E ryaworsky@

Meeting	**Kwigillingok Community**	Total Pages	3
Date + Time	**June 12, 2002, 1:30pm to**	Project No	3573
Project	**Kwigillingok Airport Planning Project**		

The following summarizes all subjects discussed and action items arising from the Kwigillingok Community Meeting, held June 12th, 2002.

Attendees	Organization	Fax
Councilor and 10 community members		
Oscar Evon	Native Village of Kwigillingok	907-588-8429
Dirk Greeley	HDR	907-274-2022
Andra Love	HDR	907-274-2022
Michael Kloppenburg	DNA	604-984-0627
Ron Yaworsky	DNA	604-984-0627

Items Discussed	Action By
Oscar reported on the status of land acquisitions. The paperwork for the transfer of Eva Friends parcels (#2 and #8) is with AVCP and is progressing.	Oscar to continue to follow up.
Oscar met with the heirs of Katie Aviegak. Their decision was to sell their parcel. This will require an updated appraisal (must be less than 1 year old) and further negotiations. Allowances for these items were included in the recently-submitted FAA design grant request.	Oscar to follow up once the design grant is received.
DNA summarized the project to date. The planning commenced in December, 2000. There were four community meetings leading to Phase I being completed and accepted by the community in June 2001.	
HDR summarized the work on the preliminary Airport Layout Plan ("ALP"), highlighting the "short term" plan and the "medium term" improvements. Short term improvements will	HDR to send a draft of the ALP within a month; Oscar to review

Prepared by DNA

Ron Yaworsky

Name Signature

include a wider, 2500 foot runway with lighting. The medium term improvements will include a 3300 foot runway with lighting, plus a larger apron. Oscar noted he will need time to review the ALP with the community. HDR will send Oscar a draft of the ALP in about a month to provide an opportunity to review with the community during August (in advance of the next community meeting).

with the community.

Erosion protection along the west side of the runway, and the north end, will be very important. Methods of "hard" erosion protection as well as "soft" erosion protection were discussed. One suggestion was to fill in the creek as a method of erosion protection.

There was discussion and concern over the location of the apron (the south and east end of the lengthened runway). The area where the new apron is currently shown is used for subsistence activities, including berry picking. The community asked that other options for apron location be looked at, including expansion of the current apron (which is much too small and too close to the existing runway).

HDR to look at other locations for the apron.

A question was raised about whether the lakes adjacent to the runway (i.e. the old borrow pits) could be drained.

HDR presented an overview of the Environmental Assessment process. HDR noted that the 1996 permits, obtained by DOT, have not only expired, but the project scope has changed, the project sponsor is now the Native Village of Kwigillingok, and some of the permitting requirements have changed. The new EA must follow NEPA.

There are three main additions since 1996:

1. Essential fish habitat - the tidal influenced stream to the north and west of the runway will have to be considered. The stream formed when the lake to the south-west drained. It was felt that there was not any fish in the stream.

HDR will send Oscar a formal request that he arrange for the Elders to be consulted about the creek history and the possible presence of any fish before the next Public

	Meeting.
2. Threatened or endangered species habitat, and in particular, spectacled eider habitat. The elders stated that on the basis of their first hand knowledge, there are no spectacled eiders in the area. They felt they are all in St. Lawrence Island. The community wanted to ensure their voice is heard on these issues.	HDR will send Oscar a formal request that he arrange for the Elders to be consulted about the species habitat before the next Public Meeting.
3. Cultural resources or significant sites - the elders stated they do not feel there was any historic use of the area to the west or to the south.	HDR will send Oscar a formal request that he arrange for the Elders to be consulted about cultural resources or significant sites before the next Public Meeting.
There is a requirement to hold a formal public meeting, advertised at least two weeks in advance. The meeting should be held once school returns. This meeting will be scheduled for the week of August 26th. Oscar will confirm the date with Council, and HDR will place the necessary ads in the ADN as well as in Bethel papers.	Oscar to confirm the date of the public meeting; HDR to place ads.
The Phase III portion of the project - the O+M plan was discussed. The major items discussed included:	
Oscar will provide us with existing job descriptions.	Oscar
The Plan must be written in simple "user friendly" style, and include easy-to-follow summaries.	DNA
The training requirements for construction will be highlighted.	DNA
The Reporting Schedules will be clarified - the schedules shown were suggested - and the mandatory versus optional reported will be shown.	DNA
Other possible revenue sources were discussed, and could include overnight parking revenues, lease revenues as well as landing fees and	To be further discussed.

freight charges.

The Native Village will begin to collect information on the number of landings from the Village agents immediately, so as to be able to better estimate the potential revenues from landing fees.	Oscar
The Plan should provide an easy-to-follow summary of FAA requirements.	DNA
Further details of the O+M plan will be discussed at the upcoming public meeting.	

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services Anchorage
605 West 4th Avenue, Room 61
Anchorage, Alaska 99501-2249

RECEIVED
JUN 14 2002

In reply refer to:
WAES

Scott Wharton
Project Manager, HDR Alaska
2525 C Street, Suite 305
Anchorage, AK 99503

JUN 12 2002

RE: Kwigillingok Airport
Improvement Project Scoping
Comments

Dear Mr. Wharton,

We have received and reviewed the agency scoping package for the airport improvement project at Kwigillingok. The project sponsor, the Native Village of Kwigillingok, proposes to lengthen the existing runway and safety areas to 3,300 feet, widen the runway from 35 feet to 75 feet, and construct a new apron, taxiway, snow removal equipment building, lighting, and navigational aids. Approximately 1000 feet of a tidally influenced stream adjacent to the western edge of the runway alignment is proposed to be realigned and stabilized. The proposed project will discharge approximately 220,000 cy of fill material into about 18 acres of wetlands for the airport improvement. Fill material for the airport and associated facilities will be derived from 24 acres of one of two (A and B) proposed borrow sites. The applicant would prefer to utilize whichever borrow site is opened by a contractor for the concurrent Alaska Native Tribal Health Consortium (ANTHC) sanitation project. As delineated in the scoping documents, these cooperative borrow sites (A, 46.3 acres, and B, 50.8 acres) may be entirely located on wetlands.

Fish and Wildlife Habitat:

Wetland, fish, and wildlife habitat values along the existing runway alignment have been impacted by the previous airport construction, however the wetlands and habitat located within the currently proposed alignment and excavation sites are largely intact and pristine. These wetland areas provide nesting and rearing habitat for landbirds, migratory waterfowl, and resident and anadromous fish. No known eagle nests are located in the project area.

Threatened and Endangered Species:

The village of Kwigillingok is located within spectacled eider breeding habitat and we have evidence of spectacled eiders (*Somateria fischeri*) breeding in this area of the southern Yukon-Kuskokwim Delta. A review of the aerial photograph and site map provided by the applicant

reveals that the proposed Borrow Site A is adjacent to what may be suitable spectacled eider nesting habitat. Breeding habitat is characterized by coastal salt marshes dominated by low wet-sedge and grass marshes with numerous small shallow water bodies. Preferred nest sites are on small islands and peninsulas, pond shorelines, and dry areas in wet meadows; most nests are directly adjacent to water bodies. Spectacled eiders are known to reuse previous year's nest bowls. Given the proximity of the proposed action to what appears to be suitable eider nesting habitat, we request that Service personnel and village representatives conduct the survey cooperatively according to Service protocols before June 20, prior to construction or excavation. The survey date should be coordinated with the village of Kwigillingok. The outcome of the survey will determine whether ESA Section 7 consultation on this project proceeds on a formal or informal basis.

Mitigation:

As discussed at the scoping meeting held at HDR, Inc. on April 29, 2002, the proposed mitigation to minimize and avoid the above impacts to wetlands includes revegetation of embankment sideslopes and adherence to best management practices. Therefore, this project will unavoidably impact not less than 42.0 (18.0 filled and 24.0 excavated) acres of wetlands under the jurisdiction of the U.S. Army Corps of Engineers (Corps). As a commenting agency to the Corps, the Service represents a national interest in the adequate mitigation of impacts to these wetland habitats important to fish and wildlife.

In addition, the Corps' October 31, 2001 Regulatory Guidance Letter 01-1 states that "The Corps must increase the effectiveness and compliance of mitigation required for authorized impacts to the aquatic environment, including wetlands." The Letter continues to further define applicability and types of mitigation, justification of compensatory mitigation ratios, and the *role of the permit applicant* in proposing mitigation. Therefore, we recommend that the project sponsor recognize and apply this guidance on their project.

Examples of mitigation to offset the wetland impacts of this project could include:

- Restoration of wetland functions, blockages to fish passage, or other human-caused impacts to wetlands or fish and wildlife habitat in the Kwigillingok area.
- Acquisition and permanent protection of similar habitat in the area.
- Contribution of compensatory mitigation funds to a third party for the purpose of protecting similar habitat in Alaska.

Recommendations:

In response to your request, we provide the additional following comments. We recommend that:

1. Site-specific characterization, delineation, and mapping of wetlands to be impacted by the project.

2. The project sponsor should coordinate with the Service to facilitate nest searches for spectacled eiders in the runway alignment and the excavation sites. If nests are located in the Borrow Site A, an alternative site may need to be delineated, or wintertime construction needs to be considered.

3. All alternatives to rip-rap or sheet pile hardening of the runway embankment be fully explored. We recommend that the site be stabilized utilizing vegetation and/or bioengineering techniques that accommodate the project need and minimize impacts to juvenile salmonid habitat.

4. Borrow sites for this project and the ANTHC project be co-located at Site B. Borrow Site B wetlands have less topographic and hydrologic complexity than those at Site A, and access to that site would not require crossing the stream adjacent to the runway, further minimizing potential impacts.

5. The project sponsor create and implement thorough reclamation plans for the borrow site(s) including recontouring of pit slopes, redistribution of overburden, creation of nest islands, and reseeding with native seed mix. We also request the delineation and maintenance of a 200-foot undisturbed vegetated buffer between the mined area and the stream and a 50-foot vegetated buffer around any open water wetland areas.

6. Land clearing at the airport alignment, necessary airspaces, and the materials site should occur only between August 15 and May 15 to avoid impacts to nesting migratory birds.

We believe that incorporating of these recommendations will meet your needs and protect wetland, fish, and wildlife resources that are in the public interest. If you have questions about any of our recommendations, please contact Fish and Wildlife Biologist Neil Stichert at 271-1777.

Sincerely,

NEIL FOR

Ann G. Rappoport
Field Supervisor

COE, Regulatory
FAA, Airports Division
ADF&G, W. Dolezal
YDNWR, M. Reardon

U. S. Department
of Transportation

**Federal Aviation
Administration**

Alaskan Region
Airports Division

222 W. 7th Avenue #14
Anchorage, Alaska
99513-7587

July 2, 2002

Willie Atti
Kwik Inc.
P.O. Box 50
Kwigillingok, AK 99622

Subject: Kwigillingok Airport Master Plan
Cultural Sites

Dear Mr. Atti:

As you know, the Native Village of Kwigillingok and the Federal Aviation Administration (FAA) are planning a project to extend and improve the Kwigillingok Airport. As part of our efforts to involve local cultural entities, we are soliciting comments of Alaska Native organizations about sites of cultural importance within the geographic region of this project. The purpose of this effort is to document any known sites of cultural or historic significance so that they can be evaluated in the Supplemental Environmental Assessment that to being prepared.

We have inventoried existing airport facilities, analyzed issues affecting airport development, and identified airport improvement alternatives. With input from the public, the Native Village of Kwigillingok selected one build alternative and one no-build alternative to evaluate in the Supplemental Environmental Assessment.

The build alternative involves extending the runway to a new length of 3,300 feet and a width of 75 feet (see attached figure). The runway would have standard safety areas and would be aligned parallel with prevailing winds, as indicated by wind data collection and by pilots and residents. In addition, a new apron, aviation support area, and airport access road would be constructed. Medium intensity runway lighting would also be included in the project.

In compliance with a suite of federal laws regarding cultural resources, most notably the National Historic Preservation Act of 1966, FAA must consider what effects the undertaking might have on prehistoric and historic properties. We would like to invite your organization to participate in this process. We wish to determine whether there are any cultural properties that could be affected by the proposed project, and to gather your views on the religious or cultural significance of sites of historic or prehistoric significance. These properties could be physical sites such as former villages or special areas with intangible associations, such as sacred sites, places of legend, or areas of traditional activity.

We have sent separate letters to the Native Village of Kwigillingok and Calista Corporation requesting their comments. If your organization is interested in participating in this process and has concerns, issues, or information to bring to our attention, or if you know persons within your organization who might be interested or have specific knowledge, please contact me at (907) 271-5454 or Scott Wharton of HDR Alaska at (907) 274-2000.

If you will be submitting comments, I encourage you to send them to me or HDR Alaska by August 2, 2002.

Sincerely,

Patricia A Sullivan

Patricia Sullivan, Environmental Specialist
Planning and Programming Branch
Airports Division

Enclosure

cc: Scott Wharton, HDR Alaska, Inc.
Oscar Evon, Native Village of Kwigillingok
Judith Bittner, State Historical Preservation Officer

U. S. Department
of Transportation

**Federal Aviation
Administration**

Alaskan Region
Airports Division

222 W. 7th Avenue #14
Anchorage, Alaska
99513-7587

July 2, 2002

June McAtee, Vice President of Lands
Calista Corporation
301 Calista Court, Suite A
Anchorage, AK 99518-3028

Subject: Kwigillingok Airport Master Plan
Cultural Sites

Dear Ms. McAtee:

The Native Village of Kwigillingok and the Federal Aviation Administration (FAA) are planning a project to extend and improve the Kwigillingok Airport and are soliciting comments of Alaska Native organizations about sites of cultural importance within the geographic region of this project. The purpose of this project is to bring the airport into compliance with current standards by incorporating improvements into the ongoing Airport Master Plan, to be finalized this winter.

The existing Kwigillingok Airport, which is the main lifeline into the community, is short and narrow. Improvements are needed to make sure that the airport meets existing and future aviation demand in a safe and efficient manner. We have inventoried existing airport facilities, analyzed issues affecting airport development, and identified airport improvement alternatives. With input from the public, we have selected one build alternative and one no-build alternative to evaluate in the Supplemental Environmental Assessment.

The build alternative involves extending the runway to a new length of 3,300 feet and a width of 75 feet (see attached figure). The runway would have standard safety areas and would be aligned parallel with prevailing winds, as indicated by wind data collection and by pilots and residents. In addition, a new apron, aviation support area, and airport access road would be constructed. Medium intensity runway lighting would also be included in the project.

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We have sent separate letters to the Native Village of Kwigillingok and Kwik Inc. requesting their comments. If your organization is interested in participating in this process and has concerns, issues, or information to bring to our attention, or if you know persons within your organization who might be interested or have specific knowledge, please contact me at (907) 271-5454 or Scott Wharton of HDR Alaska at (907) 274-2000.

If you will be submitting comments, I encourage you to send them to me or HDR Alaska by August 2, 2002.

Sincerely,

Patricia Sullivan

Patricia Sullivan, Environmental Specialist
Planning and Programming Branch
Airports Division

Enclosure

cc: Scott Wharton, HDR Alaska, Inc.
Oscar Evon, Native Village of Kwigillingok
Judith Bittner, State Historical Preservation Officer

U. S. Department
of Transportation

**Federal Aviation
Administration**

Alaskan Region
Airports Division

222 W. 7th Avenue #14
Anchorage, Alaska
99513-7587

July 2, 2002

Oscar Evon, CEO
Native Village of Kwigillingok
P.O. Box 49
Kwigillingok, AK 99551

Subject: Kwigillingok Airport Master Plan
Cultural Sites

Dear Mr. Evon:

As part of the ongoing Kwigillingok Airport Master Plan project, we are contacting Native entities regarding cultural resources that may be located within the project area. The purpose of this effort is to document any known sites of cultural or historic significance so that they can be evaluated in the Supplemental Environmental Assessment.

As you know, we have inventoried existing airport facilities, analyzed issues affecting airport development, and identified airport improvement alternatives. With input from the public, one build alternative and one no-build alternative have been selected to be evaluated in the Supplemental Environmental Assessment.

The build alternative involves extending the runway to a new length of 3,300 feet and a width of 75 feet (see attached figure). The runway would have standard safety areas and would be aligned parallel with prevailing winds, as indicated by wind data collection and by pilots and residents. In addition, a new apron, aviation support area, and airport access road would be constructed. Medium intensity runway lighting would also be included in the project.

In compliance with a suite of federal laws regarding cultural resources, most notably the National Historic Preservation Act of 1966, FAA must consider what effects the undertaking might have on prehistoric and historic properties. We would like to invite your organization to participate in this process. We wish to determine whether there are any cultural properties that could be affected by the proposed project, and to gather your views on the religious or cultural significance of sites of historic or prehistoric significance. These properties could be physical sites such as former villages or special areas with intangible associations, such as sacred sites, places of legend, or areas of traditional activity.

We have sent separate letters to Calista Corporation and Kwik Inc. requesting their comments. If your Tribe is interested in participating in this process and has concerns, issues, or information to bring to our attention, or if you know persons within your organization who might be interested

or have specific knowledge, please contact me at (907) 271-5454 or Scott Wharton of HDR Alaska at (907) 274-2000.

If you will be submitting comments, I encourage you to send them to me or HDR Alaska by August 2, 2002.

Sincerely,

Patricia Sullivan

Patricia Sullivan, Environmental Specialist
Planning and Programming Branch
Airports Division

Enclosure

cc: Scott Wharton, HDR Alaska, Inc.
Judith Bittner, State Historical Preservation Officer

U. S. Department
of Transportation

**Federal Aviation
Administration**

Alaskan Region
Airports Division

222 W. 7th Avenue #14
Anchorage, Alaska
99513-7587

August 2, 2002

Judith Bittner
State Historic Preservation Officer
550 West 7th Avenue, Suite 1310
Anchorage, AK 99501-3565

Subject: Kwigillingok Airport Master Plan
Section 106 Requirements

Dear Ms. Bittner,

The Native Village of Kwigillingok, with funding from the Federal Aviation Administration (FAA) is developing a new Master Plan for the Akiachak Airport. While these projects are typically sponsored by the Alaska Department of Transportation and Public Facilities with input from the native community, the Native Village of Kwigillingok wants to go a step further to become a full sponsor of the airport.

In January of 1996, the Alaska Department of Transportation and Public Facilities (ADOT&PF) completed an Environmental Assessment for airport improvements at Kwigillingok and a Finding of No Significant Impact (FONSI) was signed by the FAA. However, since that time the project scope has changed slightly and the project will no longer be sponsored by the ADOT&PF, as the Native Village of Kwigillingok intends to take over the responsibility.

The proposed action in the master plan consists of extending the airport to a new length of 3,300 feet and a width of 75 feet (see attached figure). The runway would have standard safety areas and would be aligned parallel with prevailing winds, as indicated by pilots and residents and wind data collection from Kipnuk. In addition, a new apron, aviation support area, and airport access road would be constructed. Medium intensity runway lighting is also included in the project. The project is located in Sections 25, 26, 27 & 34, T3S, R81W, SM on the USGS quadrangle Kuskokwim D-4. Surface rights in the project area are owned by Kwik Inc. (village Native corporation), and subsurface rights are owned by Calista Corporation.

No cultural resource surveys have been conducted in Kwigillingok, and a review of the Alaska Heritage Resource Survey (AHRS) files on June 26, 2002 indicates that no sites are listed in the project area. Participants in a community meeting in June stated that

there were no sites of specific cultural or religious significance in the project area or at the potential borrow source locations. In July, FAA sent letters to the Native Village of Kwigillingok, Kwik Inc., and Calista Corporation to request information on any sites of cultural or religious interest in the project area. No response was received and no sites were identified as having the potential to to be affected by the project.

Based on this information, the FAA requests your concurrence that the project will not have an adverse affect on any sites of cultural, historical, or archeological significance in the area.

Thank you for your assistance. If you have any questions, please contact me at (907) 271-5454 or Scott Wharton of HDR Alaska at (907) 274-2000.

Sincerely,

Patricia A Sullivan

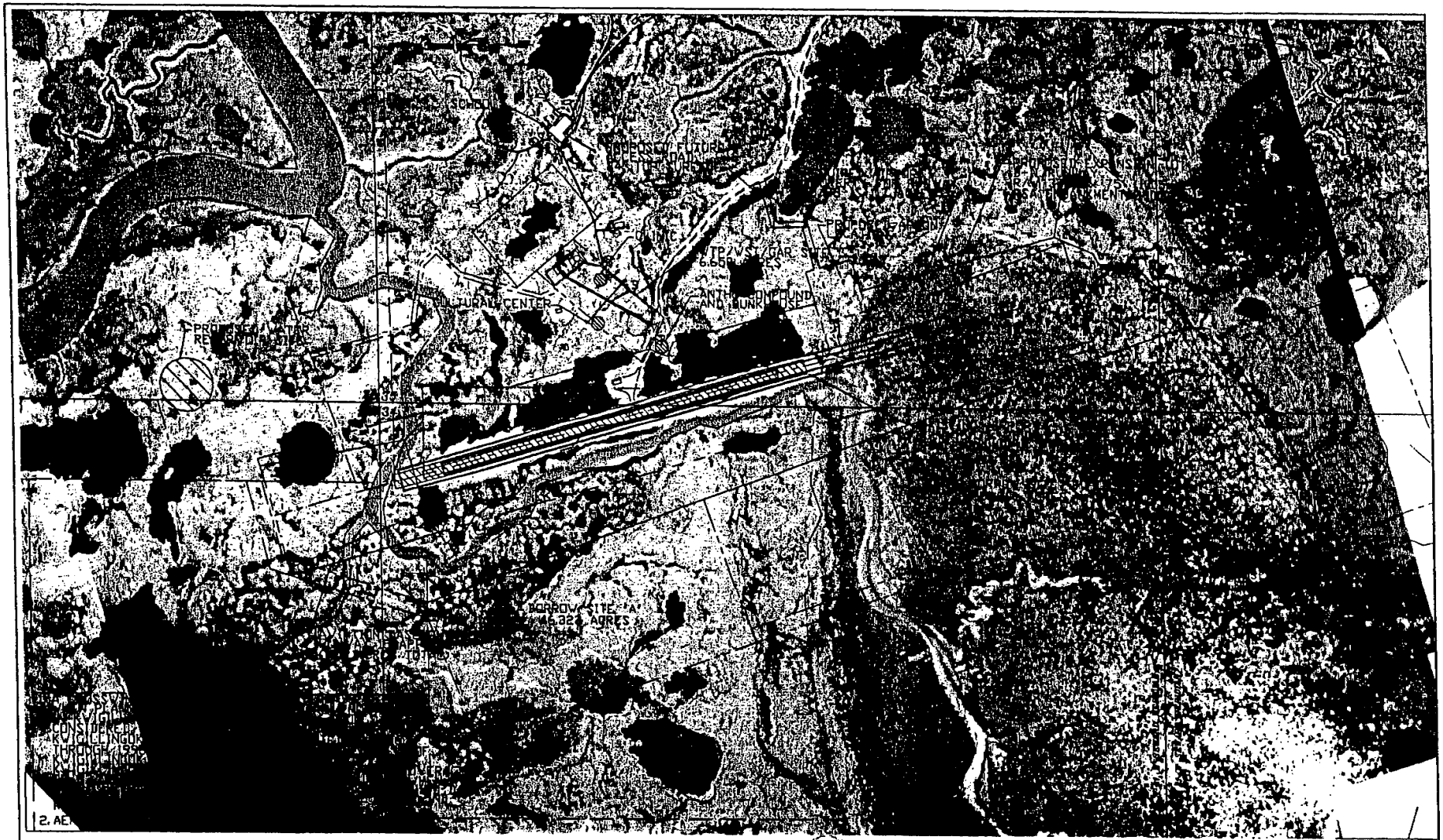
Patricia Sullivan, Environmental Specialist
Planning and Programming Branch
Airports Division

Concur/Do Not Concur _____

Judith E. Bittner — Date
State Historic Preservation Officer

Enclosure

cc: Scott Wharton, HDR Alaska
Oscar Evon, Native Village of Kwigillingok



DAVID NAIRNE & ASSOCIATES LTD.

HDR Alaska, Inc.

Kwigillingok Airport Master Plan

SITE PLAN

Date
JUNE 2002

Figure
1

.ove, Andra

rom: John Olson [john.olson@noaa.gov]
ent: Monday, July 22, 2002 4:26 PM
o: Love, Andra
ubject: RE: Kwigillingok EFH Consultation

\ndra,

his is in response to your request for concurrence with your Essential Fish Habitat (EFH) assessment for the proposed Kwingillingok Airport Project.

NOAA Fisheries (NMFS) has reviewed the proposed assessment and discussed the ıction with you. NMFS concurs with the your assessment, that there would be ıo effect to Essential Fish Habitat. Therefore, additional EFH consultation s not necessary. However, should significant changes develop during the inal design stages of the project, NMFS wishes to be given an ample review ›pportunity regarding EFH resource issues.

We remain willing to assist you with EFH and other living marine resource ıssues if needed. Should you have any questions concerning EFH please contact me at (907) 271-1508.

Thank you for the opportunity to comment.

Sincerely,

John Olson

-----Original Message-----
From: Love, Andra [mailto:alove@hdrinc.com]
Sent: Monday, July 22, 2002 9:42 AM
To: john.olson@noaa.gov
Subject: Kwigillingok EFH Consultation

Hi John,

After our discussion on Friday regarding the Kwigillingok Airport Master Plan project, it appears that the project will not affect Essential Fish Habitat and will not require further consultation with NMFS. For documentation purposes, would you mind responding to this email with your concurrence that no further consultation with NMFS is necessary for this project?

Thanks,
Andra Love

XKOD4

Ø T

3130-1K FAA
MP 9/5

AUG 05 2002

OMB

NHPA 4/15/02 "doc claims SHPO concurrence on age/sig"

U. S. Department
of Transportation

**Federal Aviation
Administration**

Alaskan Region
Airports Division

222 W. 7th Avenue #14
Anchorage, Alaska
99513-7587

August 2, 2002

Judith Bittner
State Historic Preservation Officer
550 West 7th Avenue, Suite 1310
Anchorage, AK 99501-3565

Subject: Kwigillingok Airport Master Plan
Section 106 Requirements

Dear Ms. Bittner,

The Native Village of Kwigillingok, with funding from the Federal Aviation Administration (FAA) is developing a new Master Plan for the Akiachak Airport. While these projects are typically sponsored by the Alaska Department of Transportation and Public Facilities with input from the native community, the Native Village of Kwigillingok wants to go a step further to become a full sponsor of the airport.

In January of 1996, the Alaska Department of Transportation and Public Facilities (ADOT&PF) completed an Environmental Assessment for airport improvements at Kwigillingok and a Finding of No Significant Impact (FONSI) was signed by the FAA. However, since that time the project scope has changed slightly and the project will no longer be sponsored by the ADOT&PF, as the Native Village of Kwigillingok intends to take over the responsibility.

The proposed action in the master plan consists of extending the airport to a new length of 3,300 feet and a width of 75 feet (see attached figure). The runway would have standard safety areas and would be aligned parallel with prevailing winds, as indicated by pilots and residents and wind data collection from Kipnuk. In addition, a new apron, aviation support area, and airport access road would be constructed. Medium intensity runway lighting is also included in the project. The project is located in Sections 25, 26, 27 & 34, T3S, R81W, SM on the USGS quadrangle Kuskokwim D-4. Surface rights in the project area are owned by Kwik Inc. (village Native corporation), and subsurface rights are owned by Calista Corporation.

No cultural resource surveys have been conducted in Kwigillingok, and a review of the Alaska Heritage Resource Survey (AHRS) files on June 26, 2002 indicates that no sites are listed in the project area. Participants in a community meeting in June stated that

there were no sites of specific cultural or religious significance in the project area or at the potential borrow source locations. In July, FAA sent letters to the Native Village of Kwigillingok, Kwik Inc., and Calista Corporation to request information on any sites of cultural or religious interest in the project area. No response was received and no sites were identified as having the potential to to be affected by the project.

Based on this information, the FAA requests your concurrence that the project will not have an adverse affect on any sites of cultural, historical, or archeological significance in the area.

Thank you for your assistance. If you have any questions, please contact me at (907) 271-5454 or Scott Wharton of HDR Alaska at (907) 274-2000.

Sincerely,

Patricia A Sullivan

Patricia Sullivan, Environmental Specialist
Planning and Programming Branch
Airports Division

No Historic Properties Affected
Alaska State Historic Preservation Officer
Date: 8-13-02
File No.: 3130-1P FAA
JPA

Concur/Do Not Concur _____

Judith E. Bittner — Date
State Historic Preservation Officer

Enclosure

cc: Scott Wharton, HDR Alaska
Oscar Evon, Native Village of Kwigillingok

Intent to Conduct Environmental Studies, Wetland Involvement, and NEPA Public Meeting

Kwigillingok Airport Master Plan Supplemental Environmental Assessment

The Native Village of Kwigillingok and the Federal Aviation Administration (FAA) are planning to prepare a Supplemental Environmental Assessment for airport improvements at Kwigillingok. Proposed improvements include:

- Expansion of existing runway to 3,300 ft long by 75 ft wide,
- a 75,000 ft^2 apron,
- a 40 ft wide connecting taxiway,
- an aviation support area,
- an equipment maintenance building, and
- an all weather access road.

Meeting Date:

Public Meeting
August 29 at 6:30 p.m.
Kwigillingok Tribal Council Offices
(Angutevialuum Llaavvkaara)
Kwigillingok, Alaska

If you would like to comment on the Supplemental Environmental Assessment or find additional information please come to the meeting or contact one of the following Project Managers:

Oscar Evon
Native Village of Kwig
P.O. Box 49
Kwigillingok, AK 99622
Phone (907) 588-8114
Fax (907) 588-8429

Michael Kloppenburg
David Nairne & Associates
171 W. Esplanade, Suite 250
North Vancouver, B.C. V7M 3J9
Phone (604) 984-3505
Fax (904) 984-0627
dna@davidnairne.com

Scott Wharton
HDR Alaska, Inc.
2525 C St. Suite 305
Anchorage, AK 99503
Phone (907) 274-2000
Fax (907) 274-2022
swharton@hdrinc.com

ADN 8/16/02

Intent to Conduct Environmental Studies, Wetland Involvement, and NEPA Public Meeting

Kwigillingok Airport Master Plan Supplemental Environmental Assessment

The Native Village of Kwigillingok and the Federal Aviation Administration (FAA) are planning to prepare a Supplemental Environmental Assessment for airport improvements at Kwigillingok. Proposed improvements include:

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Phone (604) 984-3505
Fax (904) 984-0627
dna@davidnairne.com

Scott Wharton
HDR Alaska, Inc.
2525 C St. Suite 305
Anchorage, AK 99503
Phone (907) 274-2000
Fax (907) 274-2022
swharton@hdrinc.com

U. S. Department
of Transportation

**Federal Aviation
Administration**

Alaskan Region
Airports Division

222 W. 7th Avenue #14
Anchorage, Alaska
99513-7587

August 19, 2002

Ellen Lance
U. S. Fish & Wildlife Service
605 W. 4th Ave., R, G-62
Anchorage, AK 99501-2231

Subject: Kwigillingok Airport Improvement Project
Informal Consultation in Accordance with Section 7 of the Endangered Species Act

Dear Ellen Lance:

The Federal Aviation Administration (FAA) and the Native Village of Kwigillingok are planning needed improvements to the airport in Kwigillingok, Alaska to ensure that the airport meets existing and future demands as efficiently and safely as possible (Figure 1). The existing runway, which is the main lifeline into the community from outside, is short and narrow and not in compliance with current FAA standards. The FAA and Village propose extending the runway and safety areas to 3,300 feet and a width of 75 feet. The runway would have standard safety areas and would be aligned parallel with prevailing winds, as indicated by wind data collection and by pilots and residents. In addition, a new apron, aviation support area, and airport access road would be constructed.

The Alaska Department of Transportation and Public Facilities (DOT&PF) wrote an Environmental Assessment (EA) and the FAA signed a Finding of No Significant Impact (FONSI) in 1996 for airport improvements. The EA decribed the environment, alternatives, and potential impacts of the alternatives on the affected environment. Because the FONSI was signed over 5 years ago, because the Native Village of Kwigillingok is now sponsoring the project instead of DOT&PF, and because the project scope has changed slightly, the FAA and the Native Village of Kwigillingok are reevaluating the project in a Supplemental Environmental Assessment.

Background on the Endangered Species Act

The Kwigillingok Airport project area is in the vicinity of potential nesting habitat for spectacled eider (*Somateria fischeri*), a species listed as threatened under the Endangered Species Act (ESA). The ESA of 1973 was enacted to protect endangered and threatened species and to provide a means for their ecosystems. Under the law, species may be listed as "endangered" (in

danger of extinction throughout all or a significant portion of its range) or "threatened" (likely to become endangered in the foreseeable future). Section 7(a) of the ESA states "each Federal agency shall...ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat." If a listed species or their habitat may be affected by a proposed action, Section 7 requires a consultation between the agency and the appropriate wildlife agency (in this case, the U.S. Fish and Wildlife Service) to determine whether the project is likely to jeopardize the species or its habitat. This letter is intended to meet the requirements of Section 7.

Previous Section 7 Consultation

Section 7 consultation between the DOT&PF and the USFWS occurred during the early stages of the original EA analysis. A Biological Assessment (BA) was completed in 1994 and is attached for your reference. The BA noted that, although spectacled eider is listed as a potential migrant with potential breeding in the area, none had been found during a 1993 USFWS field trip. The BA stated that a resident had seen spectacled eider in the vicinity of Kwigillingok, but never in the location of the project.

The USFWS concurred with the findings of the BA in a letter dated March 8, 1994, stating "we concur with the findings of your BA that this project is not likely to jeopardize the continued existence of any threatened or endangered species; therefore, formal consultation is not necessary."

Current Section 7 Consultation

On June 12, 2002, we received a written response to our scoping activities from USFWS Ecological Services expressing concern of impacts to spectacled eider habitat in the area of the proposed material source "Borrow Site A". In the letter USFWS stated that the FAA and Native Village of Kwigillingok should:

1. Coordinate with USFWS to conduct a spectacled eider nest field survey.
2. Co-locate the borrow sites for the airport and Alaska Native Tribal Health Consortium (ANTHC) project at Borrow Site B.
3. Perform excavation in borrow pits between August 15 and May 15 to avoid impacts to nesting migratory birds (including spectacled eiders) in the summer months.

In response to USFWS recommendations and conversations with agency representatives, the FAA and Native Village of Kwigillingok propose the following activities.

1.) During a conversation between USFWS and HDR (July 18, 2002-attached), USFWS stated that, although there is suitable habitat near Kwigillingok, they would not normally expect to find spectacled eiders in the project area. Since embankment construction will occur in frozen conditions and any work during the nesting/breeding season would only occur on surface embankment, FAA and the Native Village of Kwigillingok do not anticipate that the project is likely to jeopardize the continued existence of the species. Thus, no spectacled eider survey is needed.

2.) Following discussions with ANTHC and the Corps of Engineers, we determined that it would be possible to co-locate the borrow site for the airport and the ANTHC projects at

Borrow Site B and are in the process of preparing relevant permit applications. Borrow Site B would not provide enough fill material for the entire airport project. While the project will make every attempt to get as much of the material as possible from Borrow Site B, additional material needed to complete the project, Borrow Site A, will be used to supplement the project. Co-location of the borrow sources and the selection of Borrow Site B as the primary source of material will decrease project impacts and avoid spectacled eider habitat, since no nesting habitat has been identified at Borrow Site B.

3.) Since spectacled eider breeding pairs could occupy the area from May to Mid-August excavation will only occur between August 15 and May 15.

With regard to these recommendations, we would like to request your concurrence that the project is not likely to have an adverse affect on any threatened or endangered species. You can return comments to me at (907) 271-5454 or Scott Wharton of HDR Alaska at (907) 274-2000.

Sincerely,

Patricia Sullivan, Environmental Specialist
Planning and Programming Branch
Airports Division

Enclosures

cc: Oscar Evon, Native Village of Kwigillingok
Scott Wharton, HDR

STATE OF ALASKA

WALTER J. HICKEL, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

CENTRAL REGION – DIVISION OF DESIGN AND CONSTRUCTION
PRELIMINARY DESIGN & ENVIRONMENTAL

4111 AVIATION AVENUE
P.O. BOX 196900
ANCHORAGE, ALASKA 99519-6900
(FAX 243-1512)
(907) 266-1508

March 22, 1994

Re: Kwigillingok Airport
Improvements
Project No. 60118

Section 7 Consultation

Ann Rappoport
Field Supervisor
USF&WS, Ecological Services & Endangered Species
605 W. 4th Avenue, Room 62
Anchorage, Alaska 99501

Dear Ms. Rappoport:

Thank you for your March 8, 1994 concurrence on the conclusions of the Biological Assessment prepared for the Section 7 Consultation on the subject project. We would like to take this opportunity to forward you a clean copy of the February 16, 1994 Biological Assessment, provide some additional information, and address the recommendations provided in your March 8, 1994 finding.

ADDITIONAL INFORMATION

The construction of embankment for airport improvements will be done in the winter. This is the most effective construction method for the wet, silty material at Kwigillingok. Therefore, the majority of impacts will occur when the ground is frozen and when nesting birds and migratory waterfowl are not in the area. Also, summer construction activity will be limited to work on the embankment and would not disturb nesting areas. These construction methods will reduce or eliminate the chance that construction activities will impact a nest or disturb rearing of any bird species.

The following is provided for your information: We recently acquired a document by Alice Stickney, Subsistence Division, Alaska Department of Fish & Game, titled Coastal Ecology and Wild Resource use in the Central Bering Sea Area: Hooper Bay and Kwigillingok, Technical Paper No. 85, September 1984. Ms. Stickney headed up a research team that followed the seasonal subsistence activities in

Kwigillingok between June 1981 and May 1983. The team stayed in the village from 10 to 14 days each trip, with trips timed to coincide with local subsistence rounds throughout each season of the year. The research is very detailed and contains numerous maps showing the locations of subsistence activities including sealing, waterfowl hunting and egg gathering, greens gathering, mammal hunting and various fisheries. ADF&G should be able to supply you with a copy if you do not already have this document.

RESPONSE TO RECOMMENDATIONS

Recommendation 1: We do not propose to have an eider survey performed. The winter (frozen condition) construction of embankment will entail the majority of impacts on the land. Alice Stickney states that eiders can be found near the shorefast ice around Kwigillingok in January or February (five to seven miles or more out from land in a normal year). Break-up occurs about late April in the Kwigillingok area. Therefore, it is very unlikely that any unintentional taking of a spectacled eider by construction crews would occur as a result of construction activity. Also, there will be no disturbance of potential nesting habitat during the nesting season due to winter embankment construction.

Recommendation 2: We shall implement the coordination procedures as outlined in the Biological Assessment and will request USF&WS participation in the preconstruction conference, and in developing materials to provide to construction staff.

Recommendation 3: We will request that the ADOT&PF Project Engineer, the on-site State presence, notify the Preliminary Design and Environmental Section staff of any noted spectacled eiders or falcons. PD&E staff will pass this information to your office.

Thank you for your prompt review of the Biological Assessment and willingness to work with the Department on the proposed project. We are evaluating your comments on the environmental document and

modifying the design. A meeting to discuss resolution of your comments will be scheduled as soon as this process is complete. If you have any comments call me or Diana Rigg, Environmental Analyst at 266-1448.

Sincerely,

Steven R. Horn, P.E.
Supervisor

Enclosure

cc: Diana Rigg, Environmental Analyst, PD&E
Jerry Ruehle, Environmental Team Leader, PD&E
John Wahl, P.E., Project Manager, Aviation Design

BIOLOGICAL ASSESSMENT

1. Full description of the project: Provided in the draft environmental assessment (EA) submitted to your office January 18, 1994.

2. Description of specific area that may be affected: Provided in the draft EA and in Appendix C of the EA.

3. Current status, habitat use, and behavior of T/E species in project area:

Spectacled Eider	Listed as a potential migrant with potential breeding in the area by USF&WS. None noted in the July 1993 field trip. Arthur Lake, Kwigillingok IRA Council Administrator stated January 25, 1994, that he has seen Spectacled Eider in the vicinity of Kwig, but never in the location of the proposed improvements.
Peregrine Falcon	A falcon was noted feeding in the area during the July 1993 field trip. There is no local habitat for breeding areas. The nearest area for potential breeding is 70-75 air miles east in the Jacksmith Bay/Goodnews/Platinum area.
Albatross	Listed as a potential migrant in the area. No sightings in July 1993. This is a pelagic species which does not breed in Alaska. There was a sighting of the Short Tailed Albatross off Kodiak Island in 1988. None of the research material listed in Item 4, below, contained information on the Short Tailed Albatross.

Category 1 Species: A Category 1 species is one for which the USF&WS has enough information on file to list the species as threatened or endangered.

Stellers Eider	Will be listed in the future. No sightings in July 1993. According to the ADF&G Alaska Habitat Management Guide, Volume I, Stellers do not breed in the vicinity of Kwig ("...predominately north of the Bering Strait...") and that they may be found in spring and summer in the lagoons of Bristol Bay and the Alaska Peninsula southeast of Kwig. Subadults can be found near Nelson Lagoon, Port Heiden Bay, Seal Island Lagoon and Izembek Lagoon in June

and July with adults arriving in August. Stellers winter in the vicinity of Kodiak, and along the west half of the Alaska Peninsula.

Category 2 Species:

Lynx

No sightings in July 1993. Howard Golden, ADF&G Division of Wildlife Conservation stated January 31, 1994 that lynx are rare in Game Management Unit 18 - the entire Y-K Delta. Lynx are most often found within areas of good snowshoe hare habitat and the Y-K Delta has little good habitat for snowshoe hare. Randy Kacyon, ADF&G Biologist in Bethel stated there are no known lynx in the Kwig area. He has sealed beaver and otter from Kwig, but no other fur bearers.

Harlequin Duck

No sightings in July 1993. ADF&G Alaska Habitat Management Guide, Volume I states... "The Harlequin nests by fast-running clear streams associated with trout and grayling and is never seen in the freshwater habitat associated with most ducks." Harlequins are found at the margin of the sea after nesting and are recorded throughout the Bering Sea, often far from land and around all the islands. On the west coast of North America, Harlequins winter in greatest numbers in the Aleutian Islands. In Kodiak, Harlequins are found in rocky coastal habitats.

B/T Curlew

No sightings in July 1993. According to the Yukon Delta National Wildlife Refuge, Final Environmental Statement page 62, the Bristle-thighed Curlew nests in the mountains north of the Yukon River. This bird migrates to islands throughout the South Pacific for over wintering. The final Yukon Delta National Wildlife Refuge, CCP, EIS, Wilderness Review and Wild River Plan, 1988 states on page 85 that the known nesting for the B/T Curlew was expanded to the Seward Peninsula in 1985. The southern

Nulato Hills were the only known nesting ground prior to that date.

Artemisia g. s. — No sightings in July 1993. This plant is found in an area over 100 air miles east of Kwig in mountainous, well drained areas. Flora of Alaska and Neighboring Territories by Eric Hultén indicates it would be found on sandy slopes. It would be unlikely this species exists anywhere near the proposed improvements in the flat, silty saturated soils around Kwig.

4. Discussion of the methods used to determine the information in item 3, above:

1. USF&WS letter dated January 18, 1994;
2. USF&WS report dated October 26, 1993;
3. Telephone contact with Arthur Lake, Kwigillingok IRA Council Administrator;
4. Telephone contact with Howard Golden, Wildlife Biologist, ADF&G, Wildlife Conservation Section;
5. Telephone contact with Randy Kacyon, Biologist, ADF&G, Bethel, Alaska;
6. Flora of Alaska and Neighboring Territories by Eric Hultén;
7. Yukon Delta National Wildlife Refuge Final Environmental Statement, 1974;
8. ADF&G Alaska Habitat Management Guide, Southwestern Region, Volume I, Fish and Wildlife;
9. Yukon Delta National Wildlife Refuge Final CCP, EIS Wilderness Review and Wild River Plan, 1988;
10. and USGS topographic maps, 1:250,000, Kuskokwim Bay, Goodnews Bay, Hagemeister Island, and Nushigak Bay and Baird Inlet.

5. Direct and indirect impacts of the project to T/E species:

There will be no direct impacts to the three listed T/E species and none to the Category 1 or 2 species by any of the proposed activities. Indirect impacts include a minimal loss of available tundra for future nesting and feeding for the listed species, although it is unlikely that these species, except for the Spectacled Eider, would be found there. The proposed borrow area is expected to fill in with water, creating additional open water habitat and shore line for nesting. There are no known indirect impacts to the American peregrine falcon, Short-tailed albatross and none to Artemisia glomerata subglabra as it does not exist in the vicinity of Kwigillingok.

6. Analysis of the effects of the action on listed and proposed species and their habitats including cumulative impacts from other projects:

There are no direct and few indirect impacts associated with the proposed improvements. The effects of the action on listed and proposed species is none to minimal. The loss of tundra habitat is minimal and there are more than sufficient surrounding acres of tundra to allow nesting and feeding habitat for any and all T/E species likely to nest there. There are no other proposed federal, state or local projects in the vicinity known to ADOT&PF at this time.

7. Coordination measures that will reduce/eliminate adverse impacts to T/E species:

There are no adverse impacts to T/E species as a result of the proposed project. However, prior to construction, ADOT&PF staff will meet with the Contractor to discuss the possibility that Spectacled Eider may be found nesting in the area. According to AB Research Notes, Fall, 1993, ARCO has developed Eider Identification Cards for distribution to employees. The cards provide instructions for what to do if an Eider is seen. Similar cards along with posters could be developed following USF&WS protocol and distributed to the Contractor and ADOT&PF Project Manager. Also, the USF&WS personnel would be invited to the pre-construction conference with the Contractor to discuss protocol for encountering T&E species and other concerns.

8. The expected status of T/E species in the future:

The expected status of the T/E, Category 1 and Category 2 species in the project vicinity in the short term is expected to remain the same except for the Stellers Eider. Based on conversations with Virginia Moran, USF&WS Biologist, it is likely that the Stellers Eider will be listed on the T/E list in the near future. The long-term status of any of the species listed in the USF&WS January 18, 1994 letter is difficult to predict. Status of the species is not expected to change dramatically, however, there is the possibility that the Arctic Peregrine Falcon may be removed from the list due to its resurgence in population since the prohibition of DDT (pers. comm. Virginia Moran). To quote the March 8, 1994 letter: "On September 30, 1993, a proposed rule to de-list the Arctic peregrine falcon was published in the Federal Register (FR 58:188 pg 51035). Comments on this proposal were due December 29, 1993. The comments are now being compiled. A final proposal will be published in the Federal Register announcing the final rule or withdrawing the rule based on new information obtained during the comment period. Therefore, it is the Arctic peregrine falcon that could potentially be de-listed. The American peregrine Falcon will remain on the list for the foreseeable future."

9. Determination of "is likely to adversely affect" or "is not likely to adversely affect" critical habitat:

The USF&WS January 18, 1994 letter does not identify the proposed impact area as "critical habitat". The project would not adversely affect critical habitat of any of the listed species.

10. Determination of "is likely/not likely to jeopardize" the continued existence of any endangered or threatened species:

The project as proposed is not likely to jeopardize the continued existence of any endangered or threatened species or of any Category 1 or 2 species. Neither the Spectacled Eider nor the Stellers Eider are known by local inhabitants to nest in the proposed impact area. The American Peregrine Falcon and Short-tailed albatross do not nest in the vicinity of Kwigillingok and the North American Lynx is not a likely inhabitant. No Harlequin Ducks or Bristle-Thighed Curlews were noted during the July 1993 field trip although 22 other species of birds were noted. The plant species Artemisia

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services Anchorage
605 West 4th Avenue, Room 61
Anchorage, Alaska 99501-2249

RECEIVED
AUG 29 2002

in reply refer to
WAES

August 28, 2002

Ms. Patricia Sullivan, Environmental Specialist
Federal Aviation Administration
Planning and Programming Branch, Airports Division
222 W. 7th Ave. #14
Anchorage, AK 99513-7587

Re: Kwigillingok Airport Improvement Project (*consultation number 2002-0153*)

Dear Ms. Sullivan,

This is in reply to your request for concurrence with your determination that the proposed improvements to the airport in Kwigillingok are not likely to adversely affect threatened and endangered species. The proposed airport improvements include runway and safety area extension, construction of a new apron, aviation support area, and airport access road.

Kwigillingok is located on the north shore of Kuskokwim Bay. The airport at Kwigillingok is within potential breeding habitat for spectacled eider (*Somateria fischeri*) and borders Critical Habitat designated for wintering Steller's eiders (*Polysticta stelleri*). Spectacled and Steller's eiders were listed as threatened under the Endangered Species Act in 1993 and 1997 (respectively). Spectacled eiders breed along the coast, from the mouth of the Kuskokwim River to southern Norton Sound. Steller's eiders congregate around the Kuskokwim Shoals to molt in late summer.

The proposed project plan specifies two Borrow Sites for excavation of fill, and that excavation in the borrow pits will occur between August 15 and May 15. We have expressed concern over the risk of take for nesting spectacled eiders related to the development of Borrow Site A. However, aerial photographs of Borrow Site A were reviewed, by the Service, and it was determined unlikely breeding habitat for spectacled eiders.

Because habitat does not appear suitable, and because excavation will occur outside of breeding season, the Service concurs with the FAA determination that this project is not likely to adversely affect listed species. Preparation of a biological assessment or further consultation under section 7 of the Act regarding this project is not necessary at this time. If project plans change, additional information on listed or proposed species becomes available, or new species are listed that may be affected by the project, consultation should be reinitiated.

This letter relates only to federally listed or proposed species and/or designated or proposed critical habitat under our jurisdiction. It does not address species under the jurisdiction of National Marine Fisheries Service, or other legislation or responsibilities under the Fish and Wildlife Coordination Act, Clean Water Act, National Environmental Policy Act, or the Bald

and Golden Eagle Protection Act.

This concludes section 7 consultation on the Kwigillingok Airport Improvement Project. Thank you for your cooperation in meeting our joint responsibilities under section 7 of the Endangered Species Act. If you have any questions, please contact me at (907) 271-1467. In future correspondences regarding this consultation, please refer to consultation number 2002-0153.

Sincerely,

Ellen W. Lance
Endangered Species Biologist

Cc: Scott Wharton, HDR

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)NA

t managers
planners
architects
engineers

Nairne + Associates

Suite 250
171 W Esplanade
North Vancouver
British Columbia
Canada V7M 3J9
T 604 984 3503
F 604 984 0627
E dna@
davidnairne·com

Memorandum

To	**HDR Alaska**	Date	**19 Sep 2002**
Attn	**Andra Love & Scott Wharton**	Project no	**3573**
Project	**Kwigillingok Airport Improvement**		
From	**Michael Kloppenburg**	Total pages	**3**
Copy to	**Native Village of Kwigillingok – Attn.: Oscar Evon**		

RE: August 29, 2002 NEPA Public Scoping Meeting – Summary of Input

Andra: I have prepared the following summary of input received from the Kwigillingok Community at the August 29, 2002 NEPA Public Scoping Meeting relating to the Kwigillingok Airport – Environmental Assessment. The summary should **not** be interpreted as a literal record of discussion and input.

1. **HDR Sign-In Sheet**: The formal "sign-in" sheet indicates that a total of 18 individuals attended the Public Meeting. A "scanned" copy of the sign-in sheet has already been forwarded to HDR.

2. **IRA Council**: I believe that most, if not all, of the IRA Council attended the meeting.

3. **HDR Comment Sheet**: The "Comment" sheet provided by HDR was left blank.

4. **Preliminary Discussion**: A brief discussion was held with Oscar Evon, Administrator and MaryAnn Wilkinson, IRA Council President prior to the formal start of the Public Meeting. This discussion is summarized as follows: Subsequent to the June 12, 2002 Community Meeting whereupon it was suggested that input from the Elders would be desirable, the IRA Council met on several occasions with the Elders to discuss the proposed Airport Improvement Project. The results of these discussions confirms that there are no known/anticipated impacts with respect to subsistence activities, traditional land use or wildlife, including the spectacled eider. The Elder also confirmed that to the best of their knowledge, the "tidal creek" to the west of the current runway is not fish bearing. Finally, the Elders expressed a concern about the proposed location for the new Airport Apron as this area is now actively used for berry picking.

5. **Proposed Apron Location**: The proposed location for the new Airport Apron was the subject of much discussion (see Note 4 above). With the recent

construction of the sewage lagoon access road, residents have had much easier access to any area replete with wild berries. This area coincides with the location proposed for a new Airport Apron. There were numerous suggestions to expand the existing Airport Apron, if feasible. A commitment was made by the Consultant to investigate the feasibility of utilizing the existing apron as long as the required safety setbacks, etc.. can be achieved. (*A subsequent field survey completed on September 8, 2002 has confirmed that expanding the existing Airport Apron is technically feasible and the draft Airport Layout Plan will incorporate the proposal*).

6. **Tidal Creek/Channel**: The tidal creek/channel to the west of the existing Airport Runway was also the subject of much discussion. A brief history of the creek was presented by several Elders. It appears that the creek generally came into being as a result of the lake (now a dry lake bed to the south of the Runway) draining into the Kwigillingok River. Those in attendance, including several Elders, confirmed that the creek is generally viewed as a "nuisance" with no value to the community. The creek/channel has no fish in it and is not considered to be fish habitat. In fact, the creek's tidal action is actively eroding and undermining the existing Runway. The residents are very anxious that the Airport Improvement Project include significant erosion protection works which several residents suggested should also include redirecting the southern portion of the creek away from the Runway where erosion appears to be most active.

7. **Potential Airport Improvement Related Impacts:** The following summarizes the responses from the Public when questioned about potential impacts from the Airport Improvement Project:

   - Fish Habitat: The water features in the general vicinity of the existing Airport and the proposed expanded Airport are not considered to be fish habitat by the Community;
   - Threatened Species: There is no evidence of threatened species, including the Spectacled Eider, in the general vicinity of the existing Airport nor in the area to be developed for the proposed expanded Airport;
   - Cultural & Significant Sites: There are no known cultural or significant sites in the general vicinity of the existing Airport nor the proposed expanded Airport;
   - Traditional Land Uses: As noted above, the original proposed location for the new Airport Apron is a significant concern to the Community. However, it appears that expanding the existing Apron is feasible.

   In closing, there are no known Environmental Assessment issues or concerns relating to the proposed Airport Improvement Project.

8. **Closing Remarks**: The following discussion occurred towards the end of the Public Meeting:

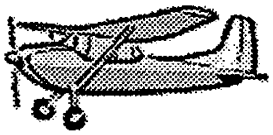
   - DNA & HDR will endeavor to submit the Draft Phase 2 Airport Master Plan (Environmental Assessment & Airport Layout Plan) and Draft Phase 3 Airport Management and Operations Plan by the end of September/early October.

- DNA & HDR will also start assembling a list of potential equipment and workforce requirements for the Airport Improvement Works;
- DNA & HDR will assist the Native Village of Kwigillingok (NVK) to expedite the FAA review and approvals of the Phase 2 and 3 Reports and secure the design grant from the FAA;
- NVK will immediately start recording aircraft landings by collecting information from the Operator's Village Agents as this information will assist in setting an appropriate Landing Fee and estimating the potential revenue that can be generated.

Sincerely,
David Nairne + Associates Ltd

Michael Kloppenburg

KWIGILLINGOK AIRPORT MASTER PLAN



AGENDA

NEPA Public Scoping Meeting

Thursday, August 29, 2002
Kwigillingok, Alaska

A. Introductions

B. History of the Project

C. Project Schedule

D. Project Description

F. NEPA Process
   a. Public and Agency Scoping Activities
   b. Supplemental Environmental Assessment
   c. Identification of the Issues: wetlands, Essential Fish Habitat, Threatened and Endangered Species, Section 106

G. Questions and Comments

H. Meeting Close

NEPA Public Scoping Meeting

- History of the Project
  - 1996 Environmental Assessment completed and Finding of No Significant Impact (FONSI) signed by FAA
  - Project delayed due to land status issues.
  - 2000 Native Village of Kwigillingok takes over sponsorship and project scope is slightly modified
  - 2001 Sponsorship Evaluation completed
  - 2002 Supplemental Environmental Assessment (EA) and Airport Layout Plan (ALP) being drafted.
- Project Schedule
  - Draft Supplemental EA to be issued in Fall for public comment
  - Draft ALP to be completed in Fall
  - EA comments reviewed and addressed
  - FONSI signed by FAA, Final EA and ALP issued with Airport Master Plan
  - Construction to begin in winter of 2003

Project Description and Process

- Project Description
  - Extend runway (3,300 ft. long x 75 ft. wide)
  - Construct new apron (75,000 ft^2)
  - Connect apron and runway with taxiway
  - New access road
  - Runway and taxiway lighting
  - Segmented circle, lighted wind cone, rotating beacon
  - New snow removal equipment and building
  - Stream realignment
- NEPA Process
  - Agency Scoping
  - Public Scoping
  - Ongoing coordination with Native groups, agencies and the public
  - Supplemental Environmental Assessment
  - Finding of No Significant Impact

Issues Identification

- Major Issues Identified
  - Cultural and Historic Sites
  - Essential Fish Habitat
  - Threatened and Endangered Species (spectacled eider)
  - Wetlands
  - Land Use (e.g. subsistence)
  - Others?

- Questions and Comments

U. S. Department
of Transportation

Federal Aviation
Administration

Alaskan Region

222 W. 7th Avenue #14
Anchorage, Alaska
99513-7587

February 3, 2003

Mr. Scott Wharton, P.E.
Project Manager
HDR Alaska, Inc.
2525 C Street, Suite 305
Anchorage, Alaska 99503-2639

Dear Mr. Scott Wharton:

Kwigillingok Airport
Airport Layout Plan Approval
Airspace Case 02AAL-189NRA

We have completed our review of the Kwigillingok Airport Layout Plan (ALP), and find it acceptable from a planning standpoint. Please note the minor pen and ink change made to the mylars as follows:

1. Basic Data Table and Airport Data. The "Visual" classification under Instrument Runway for Near-Term and Future Runway 15/33 was changed to "NPI".

No Modifications to Standards are approved with this ALP approval.

We note that the native allotments shown on sheet 6 and 7 will need to be acquired prior to any airport development.

The approval indicated by my signature is given subject to the condition that the proposed airport development that requires environmental processing shall not be undertaken without prior written environmental approval by the FAA.

This approval considers only the safety, utility, and efficiency of the airport. This approval does not represent a commitment to provide financial assistance to implement the proposed plan. FAA assistance in any development or its approval for any development will be determined at the time of request, based on the existing regulations, project justification, and eligibility at the time of the request.

When airport construction, alteration, or deactivation is undertaken, such action requires FAA notification and review in accordance with the provisions of Part 77 and Part 157 of the Federal Aviation Regulations. In addition, all airport construction must be completed in accordance with FAA Advisory circulars current at the time of construction.

Please attach this letter to the enclosed ALP and retain it in your files for future use.

If you have any questions, please contact Mr. Gabriel Mahns at 271-3665.

Sincerely,

Debbie Roth, Deputy Division Manager
Airports Division

Attachment
Kwigillingok ALP
cc: Mr. Oscar Evon, AAL-530, ANC FPO/AVN-123

Draft Supplemental EA Distribution for Agency and Public Comment

CLASSIFIEDS

Notice of Availability of the Final Draft Supplemental Environmental Assessment for Kwigillingok Airport.

A Draft Environmental Assessment (EA) has been prepared for improvements proposed for the Kwigillingok Airport. The Draft EA describes alternatives and evaluates the probable environmental, social, and economic impacts of the proposed improvements.

The proposed improvements include: Expanding the current runway embankment to provide a 3,300 ft x 75 ft gravel surface runway with a safety area 150 wide extending 300 ft beyond each runway end, Expanding the existing 18,000 sf apron to 75,000 sf, Providing a 40 wide by 212 ft long connecting taxiway with 80 ft wide safety area, Providing new medium intensity runway and taxiway lighting, a new segmented circle and windcone, a rotating beacon, snow removal equipment building and two pieces of snow removal equipment.

Copies of the Draft EA are available for review at the following locations: Native Village of Kwigillingok Offices, Kwigillingok AK 99622. Contact: Oscar Evon, Tribal Administrator (907)-588-8114, or HDR Alaska Inc. 2525 "C" St. Suite 305, Anchorage AK 99503, Contact: Scott Wharton, Project Manager (907)-274-2000. email: swharton@hdrinc.com

Written comments regarding the project will be accepted until September 25, 2003 at the following address:

HDR Alaska Inc. 2525 C St. Suite 305, Anchorage AK 99503

No public hearing is planned. Requests for a public hearing will be considered if received by the Project Manager before September 25, 2003.

(301311, 8/21, 8/28)

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AND THE VALDEZ VANGUARD

AO/PO# NON GIVEN
AIO(S)# 301311

HDR-ALASKA INC.
ATTN: SCOTT WHARTON
2525 C. ST. SUITE 305
ANCHORAGE, AK 99503

AFFIDAVIT OF PUBLICATION

UNITED STATES OF AMERICA, STATE OF ALASKA, THIRD DIVISION. BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC THIS DAY PERSONALLY APPEARED **VIOLETA I. RODRIGUEZ** WHO, BEING FIRST DULY SWORN, ACCORDING TO LAW, SAYS THAT SHE IS THE CLASSIFIED/LEGAL COORDINATOR FOR THE **TUNDRA DRUMS** PUBLISHED AT ANCHORAGE IN SAID DIVISION THREE AND STATE OF ALASKA AND THAT THE ADVERTISEMENT, OF WHICH THE ANNEXED IS A TRUE COPY, WAS PUBLISHED IN SAID PUBLICATION ON **8/21/03** AND THEREAFTER FOR A TOTAL OF **2** CONSECUTIVE ISSUE(S), THE LAST PUBLICATION APPEARING ON **8/28/03**, AND THAT THE RATE CHARGED THEREON IS NOT IN EXCESS OF THE RATE CHARGED TO PRIVATE INDIVIDUALS.

Violeta Rodriguez

VIOLETA I. RODRIGUEZ
CLASSIFIED/LEGAL COORDINATOR
ALASKA NEWSPAPERS, INC.

SUBSCRIBED AND SWORN TO ME ON 9/10/03

Bonnie L. Jack

BONNIE L. JACK
MY COMMISSION EXPIRES ON 8/15/07

State of Alaska

p.159

October 27, 2003

Kevin Morgan
Regulatory Branch
Army Corps of Engineers
P.O. Box 898
Anchorage, AK 99506-0898

Subject: Kwigillingok Airport Improvements
Supplemental Environmental Assessment
Request for Comments

Dear Mr. Morgan:

The Native Village of Kwigillingok, with funding from the Federal Aviation Administration, is proposing improvements to the Kwigillingok Airport. The Native Village of Kwigillingok, the project sponsor, contracted with HDR Alaska, Inc. and David Nairne and Associates, to prepare a Supplemental Environmental Assessment (EA) and update the Airport Layout Plan (ALP).

Initial planning and design of airport improvements occurred in the mid-1990s with the Alaska Department of Transportation and Public Facilities as the project sponsor. An ALP and EA were prepared, a Finding of No Significant Impact (FONSI) was signed, and permits were obtained at this time. Land acquisition issues delayed project construction and in 2000 the Native Village of Kwigillingok assumed sponsorship of the project.

The project proposed then and now would rehabilitate and upgrade the airport in its existing location. Elements of the project design have been modified since the original EA was finalized and under the National Environmental Policy Act a supplemental EA is required to address any impacts of these changes. In addition, the permits issued for the original project have expired. The attached document, *Kwigillingok Airport Improvement Project Supplemental EA Preliminary Final,* only considers changes made to the preferred alternative that was approved and permitted under the original project. Draft permit applications are included, however the applications are not being submitted to agencies at this time.

Major elements of the proposed project are listed below:

- Construct a 3,300- by 75-foot gravel surface runway with a 150- by 3,900-foot safety area.
- Construct a 75,000 square foot apron with a 35-by 250-foot connecting taxiway with a 80-foot wide safety area
- Install new medium intensity runway and taxiway lighting.

HDR Alaska, Inc.
2525 C Street
Suite 305
Anchorage, AK 99503-2632
Phone: (907) 274-2000
Fax: (907) 274-2022
www.hdrinc.com

- Construct a segmented circle and install a lighted wind cone and rotating beacon.
- Construct a snow-removal equipment building and purchase new snow removal equipment.
- Realign a short segment of stream channel
- Stabilize portions of runway embankment at (i) south end of runway and (ii) north end of runway.
- Acquire lands needed for the runway extension, apron, and runway protection zones.

The first opportunity to participate in this project was provided during the scoping phase. The input provided at that time and subsequent follow-up have been considered in the preparation of this document. We encourage you to review this Supplemental EA. Please send your comments to HDR Alaska by November 28, 2003. You are also welcome to submit comments by e-mail to suwalker@hdrinc.com. Please contact me by telephone at 644-2055 or Scott Wharton at 644-2046 if you have any questions.

Sincerely,

HDR Alaska, Inc.

Susan Walker
Environmental Planner

cc: John Lovett, FAA
Oscar Evon, Native Village of Kwigillingok
Ron Yaworsky, DNA

EA Distribution List:
Kevin Morgan, Army Corps of Engineers
Jeanne Hansen, National Marine Fisheries Service
Richard Mylius, ADNR, Division Of Land, Mining, and Water
Ted Rockwell, U.S. Environmental Protection Agency
Mac Mclean, ADNR Office of Habitat Management and Permitting
Tim Rumfelt, Alaska Department of Environmental Conservation
Ann Rappoport, U.S. Fish and Wildlife Service
Judith Bittner, ADNR, Office of History and Archaeology
Cynthia Zuelow-Osborne, ADNR, Office of Project Management and Permitting
Allen Kemplen, Alaska Department of Transportation and Public Facilities

Walker, Susan

From: Mac McLean [mac_mclean@dnr.state.ak.us]
Sent: Wednesday, November 12, 2003 10:36 AM
To: Walker, Susan
Cc: Robert F Mclean
Subject: Supplemental EA; Kwigillingok Airport

The Office of Habitat Management and Permitting (OHMP) has reviewed the Supplemental Environmental Assessment (Preliminary Final) for the Kwigillingok Airport Improvement Project. OHMP has not identified any new issues or concerns requiring further resolution.

Mac McLean
Habitat Biologist
907-459-7281

Walker, Susan

From: Cynthia Zuelow Osborne [Cynthia_Zuelow-Osborne@dnr.state.ak.us]
Sent: Tuesday, November 25, 2003 12:09 PM
To: Walker, Susan
Subject: Kwigillingok Airport

November 25, 2003

Ms. Susan Walker
Environmental Planner
HDR Alaska, Inc.
2525 C Street, Suite 305
Anchorage, AK 99503

RE: Kwigillingok Airport Improvements Supplemental EA

Dear Ms. Walker,

Thank you for contacting the Alaska Department of Natural Resources, Office of Project Management and Permitting, Alaska Coastal Management Program (ACMP) concerning the current status of the Kwigillingok Airport Project.

As noted in the "Supplemental Environmental Assessment" prepared for this project, work at this site was previously presented for ACMP review by the Alaska Department of Transportation and Public Facilities (ADOT&PF). An ACMP consistency determination was issued under project number AK9502-04AA (Kwigillingok Airport Reconstruction). Project objectives were not completed and authorizations issued in response to the ADOT&PF proposal have expired. In addition, modifications have been made to the project scope and ownership and management of airport property have changed. Project work described in the Supplemental EA is now proposed by the Federal Aviation Administration in cooperation with the Native Village of Kwigillingok. As noted in paragraph 4.5 of the Supplemental EA, federal project proponents are required to conduct activities in a manner consistent with the enforceable policies of the State and Local Coastal District where applicable. Please note that this office requests the completion and submission of a federal consistency determination as per Section 307 of the Coastal Zone Management Act and 15 CFR paragraph 930. A copy of the *Federal Guide to Preparing an ACMP Consistency Determination for Federal Activities* is attached for your convenience. The community of Kwigillingok is located within the Cenaliulriit Coastal District. Additional information on local enforceable policies may be obtained by contacting Mr. John Oscar, District Coordinator (P.O. Box 69, Mekoryuk, Alaska 99630; 907-827-8749).

Thank you for the opportunity to comment on the Supplemental EA and for your cooperation with the ACMP. Please feel free to contact me at 907-269-7478 with additional questions, if any.

Sincerely,
Cynthia Zuelow-Osborne
Project Review Assistant

Walker, Susan

From: Allen Kemplen [allen_kemplen@dot.state.ak.us]
Sent: Wednesday, November 26, 2003 3:17 PM
To: Walker, Susan
Subject: kwigillingok airport

Card for Allen Kemplen

Hello Ms. Walker,

Thank you for the opportunity to comment on the preliminary final Supplementary Environmental Assessment for the Kwigillingok Airport Improvement Project. As you know this is a local sponsor initiative and the State DOT&PF is not directly involved in the project.

We appreciate being kept informed of the community's direct efforts with FAA to improve their airport. I would like to point out some details regarding scheduling of the project. Although the FAA approved the Airport Layout Plan in their correspondence of February 3, 2003 they also stated that "this approval does not represent a commitment to provide financial assistance to implement the proposed plan."

The preliminary final document on page 1 under purpose and need has final design scheduled to start in the during the first quarter of 2003 and project construction to occur in the winter of 2003-2004. The draft FFY '02-'06 Airport Improvement Program Spending Plan dated October 23, 2003 has $468,750 programmed for design in FFY'04, construction ($3 million) to occur sometime beyond FFY'06 and a grader programmed beyond FFY'06 at $229,000.

A recent Department estimate developed for the upgrade of the airport at Kongiganak, with similar design parameters, is in the vicinity of $8,450,000.

It may be prudent to confirm the information in this Supplemental Environmental Assessment as it relates to scheduling of the proposed project.

Thank you for the opportunity to comment.

Allen

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

November 26, 2003

RECEIVED
DEC 0 8 2003

Susan Walker
Environmental Planner
HDR
2525 C Street
Anchorage, Alaska 99503

Re: Kwigillingok Airport Improvements
Supplemental EA - request for Comments

Dear Ms. Walker:

The National Marine Fisheries Service (NMFS) has reviewed your request for comments on behalf of the Federal Aviation Administration (FAA) regarding the Supplemental Environmental Assessment Request for the Kwigillingok Airport Improvements. NMFS agrees that the described action will have minimal impact to Essential Fish Habitat (EFH) and will not result in any substantive adverse effects. No further EFH Assessment is required. NMFS does not offer any EFH conservation recommendations. Further EFH consultation is not necessary, and we have no objection to the project. However, NMFS requests an opportunity to review any significant changes proposed during the final design stages of the project.

John Olson is the NMFS contact for this project, and can be reached by telephone at (907) 271-1508.

Sincerely,

Jonathan M. Kurland
Assistant Regional Administrator
for Habitat Conservation

cc: Patricia Sullivan, Environmental Specialist
Planning and Programming Branch, Airports Division
Federal Aviation Administration
222 West 7th Ave. #14
Anchorage, AK. 99513

Corps, EPA, OHMP. USFWS - Anchorage

Walker, Susan

From: Rumfelt, Tim [tim_rumfelt@dec.state.ak.us]
Sent: Wednesday, December 03, 2003 2:56 PM
To: Walker, Susan
Cc: Rumfelt, Tim
Subject: RE: Kwigillingok Airport SEA

NO, we will handle it during the permitting phase. I scanned the document and the constructional aspects were covered with general statements, thus nothing to really comment on.

Tim

-----Original Message-----
From: Walker, Susan [mailto:Susan.Walker@hdrinc.com]
Sent: Tuesday, December 02, 2003 2:43 PM
To: tim_rumfelt@dec.state.ak.us
Subject: Kwigillingok Airport SEA

Tim:

The four week comment period for the Kwigillingok Airport Supplemental EA ended last week and I am doing a final check with folks we have not heard from. Are you intending to submit comments?

Susan Walker

C-66

Walker, Susan

From: Duncan.Steve@epamail.epa.gov
Sent: Thursday, December 04, 2003 4:48 PM
To: Walker, Susan; duncan.steve@epamail.epa.gov
Subject: Re: Kwigillingok

TR EPA
12-04-03.doc

Susan,

Pretty close. Remember I haven't seen any of the material and all I know is what you told me on the phone and what I picked up in phone calls to a couple of other people. Be sure your NEPA document includes a good 404(b)(1) alternatives analysis for the whole project since it is all in wetlands, including the material sites. I'm sure the choice of the preferred airport site is related to the existing facility but you should address other potential sites as well as other adjacent properties along with alternative designs. As for the material sites the above applies and since you have chosen 2 sites at 90 acres plus or minus, you need to discuss the capabilities of both sites and analyze whether both sites are still needed or if one will do. In order to discuss the site capabilities, some preliminary exploratory and sampling work needs to be done so you know the type and quantity of materials that are potentially available at each site. You should include a discussion of material site impacts based on what you know is there and what will have to be done to get it. Finally, I assume you have a good purpose and need statement for the project.

Steve

"Walker, Susan"
<Susan.Walker@hdrinc.com>

12/04/2003 03:55 PM

To: Steve Duncan/R10/USEPA/US@EPA
cc:
Subject: Kwigillingok

Steve:

Does this reflect the essence of our conversation? You are welcome to make edits?

Susan

<<TR EPA 12-04-03.doc>>
(See attached file: TR EPA 12-04-03.doc)

HDR | ONE COMPANY *Many Solutions*℠

Telephone Record

Project:	Kwigillingok SEA - Preliminary Final	Project No:	09707-006-002
Date:	12/4/2003	Subject:	Request for Comments Agency Follow-Up
Call to:	Steve Duncan, EPA	Phone No:	(907) 271-5083
Call from:	Susan Walker, HDR Alaska Inc.	Phone No:	(907) 644-2055

Discussion, Agreement and/or Action:

I contacted Steve Duncan to see if EPA would be submitting comments on the project. He said EPA would not provide a formal written response, but he made the following comments:

- The proposed material site is very large. He felt it was important to get a better understanding of what was out there and permit only the area needed (per Section 404 (b) 1).
- Ensure that impacts to endangered species and migratory waterfowl are adequately addressed.
- Recommended that mitigation for wetland impacts comparable to what is required of DOT&PF under the MOA (Memorandum Of Agreement among the Federal Aviation Administration, U.S. Army Corps of Engineers, Alaska Department of Transportation and Public Facilities, U.S. Fish and Wildlife Service, and Alaska Department of Fish and Game Regarding Impacts to Wetland and Other Aquatic Resources, Mitigation and Airport Improvement Projects in Alaska) be considered.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services Anchorage
605 West 4th Avenue, Room 61
Anchorage, Alaska 99501-2249

RECEIVED
DEC 0 9 2003

DEC 8 2003

IN REPLY REFER TO:

AFWFO

Ms. Susan Walker
HDR Alaska, Inc.
2525 C Street, Suite 305
Anchorage, Alaska 99503-2632

Re: Kwigillingok Airport
Improvements Supplemental
Environmental Assessment

Dear Ms. Walker:

The U.S. Fish and Wildlife Service (Service) has reviewed the October 27, 2003, preliminary final Supplemental Environmental Assessment (SEA) for the Kwigillingok Airport Improvements Project. The proposed project now includes: expansion of the existing runway to a 3,300- by 75-foot gravel surface runway with safety areas 150 feet wide by 300 feet beyond each runway end; a 75,000 square foot apron, a 35-foot wide connecting taxiway with 80-foot wide safety areas; new lighting; a segmented circle and lighted wind cone; a rotating beacon; and new snow removal equipment and equipment storage building. Additionally, the proposed project would realign an unnamed tributary of the Kwigillingok River away from the airport embankment. Two material sites (borrow site A at 47 acres and borrow site B at 50 acres) would be developed. Approximately 119.5 acres of wetlands would be impacted by the project.

The Service provided comments on this project on several occasions. Based on the field report of Service biologist Michael R. North dated October 26, 1993, the Service considers wetlands in the project area to be high value habitat for migratory birds, including waterfowl and shorebirds. More recently, a letter dated June 12, 2002, was provided in response to a request for scoping comments. At that time, the project proposed impacting approximately 42 acres of aquatic habitat. The Service stated that while wetland, fish, and wildlife habitat values along the existing alignment had been impacted, the wetlands and habitat located within the proposed alignment and borrow sites are largely intact and pristine. These wetland areas provide nesting and rearing habitat for landbirds, migratory waterfowl, and resident and anadromous fish. In our letter, the Service recommended mitigation to offset wetland impacts and provided three examples for consideration (i.e., restore fish and wildlife habitat that had been impacted by human activities in the area; acquire or permanently protect similar habitat in the area; or contribute compensatory funds to a third party). The SEA does not does address our three recommendations for adequate

mitigation. Additionally, the Service provided six specific recommendations to identify, avoid and minimize potential project impacts. Recommendations numbered 1, 2, and 4 have been adequately resolved in the SEA; however the SEA does not address recommendations numbered 3, 5, and 6. These concerns are discussed below in our comments on the specific sections of the SEA.

As you may be aware, a new process for the environmental review of airports in Alaska was outlined in the January 10, 2003, *Memorandum of Agreement Among the Federal Aviation Administration (FAA), U.S. Army Corps of Engineers, Alaska Department of Transportation and Public Facilities (ADOT&PF), USFWS, and the Alaska Department of Fish and Game Regarding Impacts to Wetland and Other Aquatic Resources, Mitigation and Airport Improvement Projects in Alaska* (MOA). While we understand that the MOA applies to FAA-funded, ADOT&PF-sponsored projects, and that this project is sponsored by the Native Village of Kwigillingok, the Service encourages FAA and the Village of Kwigillingok to abide by the MOA. The MOA represents an interagency agreement designed to streamline airport project reviews while providing minimization and compensation for the loss of wetlands when avoidance is impractical. It also provides a method that the signatory agencies have jointly agreed should be followed. The MOA contains Avoidance and Minimization Procedures (AMPs), and requires that after the AMPs have been followed, unavoidable wetland impacts will be compensated for through payments into the Alaska Wetland Conservation Fund at the rate of $500 per acre. While the Alaska Wetland Conservation Fund was established specifically for ADOT&PF sponsored projects, the intent was to also encourage participation of other FAA funded projects sponsored by local governments to address mitigation requirements identified in FAA-approved National Environmental Policy Act (NEPA) documents. As mentioned above, the Service considers the area around the Kwigillingok airport to be comprised of high-value wetlands. We continue to recommend several steps be taken to avoid and minimize impacts, and we continue to recommend compensation to offset unavoidable wetland impacts.

The Service has the following specific comments and recommendations on the SEA:

1. Page 4, Project Description: The two proposed borrow sites should be included as components of the project and described in this section. Recommendation 5 in our June 12, 2002, letter should be addressed. The Service recommends that material site reclamation plans be developed. At a minimum, the SEA should include general guidelines and performance standards for material site reclamation.

2. Page 5, Realignment of Intertidal Stream: It is not clear from information presented in the SEA or in the original EA the extent of erosion to the runway embankment. This information is needed so that practicable alternatives can be properly evaluated. In our June 12, 2002, letter (recommendation 3), we recommended that bioengineering alternatives be evaluated. There is no mention of bioengineering or other alternatives in the SEA.

3. Page 10, Wetlands: The SEA states that due to the vast amount of wetlands in the region, it was determined that wetland impacts are unavoidable. The Service agrees that impacts

to all wetlands are unavoidable. However, the SEA does not demonstrate that impacts to wetlands have been minimized to the greatest practicable extent. For example, in our June 12, 2002, letter (recommendation 4) we recommended that material be removed from borrow site B and not borrow site A to minimize impacts. Based on information presented in this section, we understand that borrow site B is the preferred location and that borrow site A may not be needed if borrow site B has sufficient material. The Service recommends that investigations of the exact nature of the subsurface material in borrow site B be evaluated now, and that this information be presented in the final EA. This will result in an environmental document and permit applications which more accurately describe the extent of potential project impacts. Avoidance of borrow site A alone, would reduce impacts to wetlands by almost 50 percent.

4. Page 13, Avoidance, Minimization and Mitigation for Wetland Impacts: As stated above, the Service does not think that the SEA adequately demonstrates that impacts to wetlands have been minimized to the greatest practicable extent. In our June 12, 2002, letter, the Service provided three examples of mitigation measures to offset unavoidable impacts to wetlands. This section mentions some general measures which will be implemented as part of the project. These are primarily minor Best Management Practices designed to avoid and minimize some impacts but they do not adequately compensate for the loss or modification of 119.5 acres of high value wetlands. As mentioned above, material site reclamation plans should be developed and described in the SEA. Additionally, we continue to recommend that compensation be provided. The SEA should describe the potential for compensation of unavoidable impacts, either through the procedure described in the MOA between State and Federal agencies regarding impacts to wetlands and other aquatic resources, or through some other valid process.

5. Page 14, Protected Species: Service concerns related to protection of spectacled eiders have been adequately resolved. In addition to protection of endangered species, the Service is responsible for protecting migratory birds. Migratory birds, including songbirds, waterfowl, shorebirds, and raptors, are protected under the Migratory Bird Treaty Act of 1918 *(16 U.S.C. 703-712)*. Federal regulations *(50 CFR 21.11)* prohibit unauthorized take of migratory birds, which is defined *(50 CFR 10.12)* to include "pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting." To prevent impacts to nesting birds, no vegetation clearing, fill placement, excavation, or other construction activities should be conducted between May 15 and August 10, except at sites which have been sufficiently disturbed or altered (e.g., with fill, plastic, or other materials that will cover nesting habitat) before May 1 to eliminate suitable nesting habitat.

Thank you for the opportunity to provide comments and recommendations. If you have any questions regarding these recommendations, please contact project biologist Phil Brna at 271-2440, or by email at phil_brna@fws.gov.

Sincerely,

Ann G. Rappoport
Field Supervisor

cc: Oscar Evon, NVK
P. Sullivan, FAA
J. Wolfe, COE
R. Willis, ADF&G
E. Weiss, ADNR
S. Duncan, EPA
M. Reardon, YDNWR

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, ALASKA
P.O. BOX 6898
ELMENDORF AFB, ALASKA 99506-6898

REPLY TO
ATTENTION OF:

DECEMBER 1 1 2003

Regulatory Branch
North Section
9-1992-0772

Ms. Susan Walker
HDR Alaska, Inc.
2525 C Street, Suite 305
Anchorage, Alaska 99503-2632

Dear Ms. Walker:

This is in response to your October 2003, request, on behalf of the Native Village of Kwigillingok, for review of the Kwigillingok Airport Improvement Project Supplemental Environmental Assessment. The project would bring the airport operating surfaces into compliance with Federal Aviation Administration standards.

Your proposed project was reviewed pursuant to Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Section 10 of the Rivers and Harbors Act of 1899 requires that a Department of the Army (DA) permit be obtained for certain structures or work in or affecting navigable waters of the U.S., prior to conducting the work. Any proposed structure or work in these waters would have to be reviewed to ensure that navigation would not be hindered by any proposed activity. The unnamed tributary of the Kwigillingok River, adjacent to the airport, is considered a navigable water of the U.S. Therefore, any work, including stream realignment, would require authorization under Section 10 of the Rivers and Harbors Act.

In addition, Section 404 of the Clean Water Act requires that a DA permit be obtained for the placement or discharge of dredged and/or fill material into waters of the U.S., including wetlands, prior to conducting the work. Since some of your proposed work is located in waters of the U.S., including wetlands, a Section 404 permit would be required prior to conducting the work.

For regulatory purposes, the Corps of Engineers defines wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Navigable waters of the U.S. are those waters subject to the ebb and flow of the tide shoreward to the mean high water mark, and/or other waters identified as navigable by the Alaska District.

This determination was based on a review of the information you furnished and limited information available in our office. A more detailed jurisdiction determination would need to be accomplished to determine the exact location of waters of the U.S.

Please be advised that land clearing operations involving vegetation removal with mechanized equipment such as front-end loaders, backhoes, or bulldozers with sheer blades, rakes, or discs in wetlands; or windrowing of vegetation, land leveling, or other soil disturbances are considered placement of fill material under our jurisdiction.

Your proposal will need to address the complete and total project. The Environmental Protection Agency's 404(B)(1) guidelines require that the proposed discharge of dredged or fill material contain all appropriate and practicable steps to minimize potential impacts on the aquatic ecosystem, and the discharge must represent the least environmentally damaging practicable alternative.

The least environmentally damaging practicable alternative may include construction in uplands, reducing the size of the proposal to the minimum discharge necessary for the project, or the inclusion of compensatory mitigation. An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project purpose. If it is otherwise a practicable alternative, an area not presently owned by the applicant that could reasonably be obtained, utilized, expanded, or managed in order to fulfill the basic purpose of the proposed activity may be considered.

For your information, several DA permits have been issued in the past for work at the Kwigillingok Airport. The most recent permit was issued on February 17, 1999, and modified on January 30, 2002, to the Alaska Department of Transportation and Public Facilities. The permit expires on January 28, 2005.

Nothing in this letter shall be construed as excusing you from compliance with other Federal, State, or local statutes, ordinances, or regulations that may affect any proposed work.

Please take a moment to complete and return the enclosed questionnaire. Our interest is to see how we can continue to improve our service to you, our customer, and how best to achieve these improvements. Upon your request, you may also provide additional comments by telephone or a meeting. We appreciate your efforts and interest in evaluating the Regulatory Program.

We appreciate your cooperation with the Corps of Engineers' Regulatory Program. Please refer to file number 9-1992-0772 in future correspondence or if you have any questions concerning this determination. You may contact me by mail at the letterhead address, ATTN: CEPOA-CO-R-N, at 753-2716, or by FAX at 753-5567. For additional information about our Regulatory Program, visit our web site at www.poa.usace.army.mil/reg.

Sincerely,

Jim Wolfe
Project Manager

Enclosure

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Memo

To: File	
From: Susan Walker	Project: Kwigillingok Airport Draft SEA
CC: Scott Wharton	
Date: December 16, 2003	Job No: 009707-006-249

RE: Kwigillingok Supplemental EA - Agency Comments

Written or e-mail comments on the EA were received from the following agencies:

Federal
Corps of Engineers
Environmental Protection Agency
National Marine Fisheries Service
U.S. Fish and Wildlife Service

State
Alaska Department of Environmental Conservation
Alaska Department of Fish and Game
Alaska Department of Natural Resources, Office of Project Management and Permitting
Alaska Department of Transportation and Public Facilities

Follow-up calls were made to:

Alaska Department of Natural Resources, Mining, Land and Water
Name: Richard Mylius, Telephone: 269-8600
Date: 11/20/03
Response: Responded by voice-mail. Director's office had no comments.

Alaska Department of Natural Resources, State Historic Preservation Officer
Name: Stephanie Ludwig, Telephone: 269-8720
Date: 11/21/03
Response: None received. SHPO had earlier issued a decision of "No Historic Properties Affected" in response to an FAA request. The decision was received on 8/13/02.

Walker, Susan

From: Walker, Susan
Sent: Friday, March 05, 2004 12:01 PM
To: 'phil_brna@fws.gov'
Subject: Kwigillingok Airport SEA

Phil:

At FAA's request, we are notifying agencies that provided comments on the Kwigillingok SEA with a summary of changes that were made to the document to address the comments. Agency comments and our response are summarized in two tables.

The first table summarizes agency comments and includes sections of amended text.

The second table (labeled Table 3) is taken directly from the document. It looks very similar to the first, but doesn't show text amendments, only cross-references.

This is for your information only - no response is required. Thanks.

Susan

Walker, Susan

From: Walker, Susan
Sent: Friday, March 05, 2004 12:09 PM
To: 'Duncan.Steve@epamail.epa.gov'
Subject: Kwigillingok SEA

Steve:

At FAA's request, we are notifying agencies that provided comments on the Kwigillingok SEA of changes made to the document to address the comments. Agency comments and our response are summarized in two tables.

The first table summarizes agency comments and includes sections of amended text.

The second table (labeled Table 3) is taken directly from the document. It looks very similar to the first, but doesn't show text amendments, only cross-references.

This is for your information only - no response is required. Thanks.

Susan

Environmental Planner

HDR ONE COMPANY | *Many Solutions*

2525 C Street, Suite 305 | Anchorage, AK| 99503-2632

Main Line: 907.644.2000 | Direct Line: 907.644.2055 | Fax: 907.644.2022 |

Email: susan.walker@hdrinc.com

Kwigillingok Supplemental EA – Summary of Agency Comments Received 12/15/2003 and how they are Addressed in the Final Document

All comments received were summarized in the Final SEA in Section 3.0, Table 3. Regulatory and Resource Agency Comments on the SEA (2003). Amendments to the text were made where necessary. Response and amendments to agency comments are shown in blue text.

Agency	Comments Response in Document
Federal	
Army Corps of Engineers 12/15/03	Work in the unnamed tributary of the Kwigillingok River would require authorization under Section 10 because these waters are tidally influenced. A Section 404 permit would be required for the discharge of dredged and/or fill material into wetlands. **Appendix D contains a Section 404/10 draft permit application.**
National Marine Fisheries Service 11/26/03	Impacts to Essential Fish Habitat (EFH) would be minimal. No further EFH assessment is required. **No response required.**
U.S. Environmental Protection Agency 12/04/03[1]	Made several informal comments based on verbal description of project, not on actual review of SEA: - proposed material site is large - recommended preliminary exploratory and sampling work of material site **See Section 4.11: The intent of the SEA was to describe the maximum area that could be impacted to obtain materials. The SEA stresses Site B would be developed first and Site A would only be used if and when B was exhausted.** - ensure impacts to endangered species and migratory waterfowl are adequately addressed **See Section 4.4: The proposed material site development and construction timing satisfies USFWS recommendations.** - recommended mitigation for wetland impacts be comparable to those required of DOT&PF under the MOA **The MOA is not applicable to this locally-sponsored project and no in-lieu fee compensation is proposed. Where areas of open water form in the borrow area, borrow site reclamation would include some gently sloped shoreline areas with shallows, irregular edges, and islands. (Section 4.2.7)**

C-36

U.S. Fish and Wildlife Service, 12/9/03[1]	SEA does not address recommendations for adequate mitigation expressed in letter of 6/12/02 (i. restoration of wetlands functions, blockages to fish passage, or other human-caused impacts to wetlands or fish and wildlife habitat on the Kwigillingok area, ii. acquisition and permanent protection of similar habitat in the area, or iii. contribution of compensatory mitigation funds). **See responses to specific comments below.** SEA does not adequately address recommendations 3, 5, and 6 of 6/12/02 letter (3. alternatives to rip-rap or sheet pile hardening of runway embankment should be fully explored; 5. create and implement reclamation plans for borrow sites; 6. land clearing. **Under Sections 4.4 and 4.11, Land clearing - dates to avoid impacts to nesting migratory birds are shown in Sections 4.4 and 4.11). Amended text to say Borrow operations would be conducted in accordance with timing recommendations (August 15 to May 15).** **See other responses to specific comments below.** Made five additional specific comments and recommendations: Project description. Include borrow site in project description and develop a reclamation plan. **Section 1.5 Project Description text amended to say: Potential use of 97 acres for borrow material. Borrow Site B (50 acres) is the preferred source and would be exploited first. Borrow Site A (47 acres) would be used only if materials in Borrow Site B were inadequate or exhausted.** **Amended text in Section 4.2.7 Avoidance, Minimization and Mitigation for Wetland Impacts to say: A mining and reclamation plan describing the sequence of excavation would be prepared.** Intertidal stream. Better describe erosion that is prompting realignment of the intertidal stream and evaluate bioengineering alternatives. **Amended text in Section 1.5.6 Realignment of Intertidal Stream to say: Three bank protection strategies were considered to stabilize the erosion: armor mat, vegetation, and channel realignment (Appendix F). The proposed design includes components of all three strategies.** **Added a new appendix to document, Appendix F Bank Stabilization Technical Memo.** Wetlands. SEA does not demonstrate impacts to wetlands have been minimized. Recommends geotechnical investigation prior to permitting to determine subsurface conditions. **The intent of the SEA was to describe the maximum area of wetlands that could be impacted to obtain materials. The SEA stresses Site B would be developed first and Site A would only be used if and when B was exhausted. No geotechnical investigation is planned at this stage.** **Section 4.2, Wetlands was amended to say: The USFWS is concerned about the large area of potential impact from borrow source development (USFWS Appendix C-69). As recommended by USFWS and proposed in this EA, the development of Borrow Site B would occur first. Borrow Site**

J-24

	A would only be developed if and when the resources of Borrow Site B had been fully exploited. A subsurface investigation of Borrow Site B, as recommended by the USFWS, is not proposed at this time. While it would provide useful information about the nature and extent of subsurface materials in Borrow Site B, that information would not affect the overall material requirements of the project. Avoidance minimization and mitigation of wetlands impacts. Recommends SEA describe potential for compensation of unavoidable impacts. **The MOA is not applicable to this locally-sponsored project and no in-lieu fee compensation is proposed. Where areas of open water form in the borrow area, borrow site reclamation would include some gently sloped shoreline areas with shallows, irregular edges, and islands. (Section 4.2.7)** Protected species. Noted that concerns about protection of spectacled eiders had been adequately resolved. **No response required.**
State	
Alaska Department of Environmental Conservation 12/03/03	No comments at this stage – will wait until permitting phase. **No response required.**
Alaska Department of Natural Resources (ADNR) – Mining, Land, and Water, 11/20/03	No comments. **No response required.**
ADNR – Office of Habitat Management and Permitting (ADFG) 11/12/03	No new issues or concerns identified. **No response required.**
ADNR – Office of Project Management and Permitting 11/25/03	Provided a copy of a federal consistency determination form and details about project's local coastal district. **Local coastal district coordinator contacted. No further response required.**
ADNR – State Historic Preservation Officer	No response received. **SHPO coordination completed in 2002. No further response required.**
Alaska Department of Transportation and Public Facilities 11/26/03	Provided information on schedule and cost. **Section 1.0 Purpose and Need text amended to say: The draft 2002 – 2006 Airport Improvement Program (AIP) Spending Plan shows funding for final project design scheduled for federal fiscal**

C. 80

	year (FFY) 2004. Funding for project construction is scheduled beyond FFY 2006.
[1] Indicates agencies that were sent a copy of the comment summary. **NOTE:** EPA responded to this summary with an email (See C-86) reiterating the need for compensatory mitigation for unavoidable impacts.	

Table 3. Regulatory and Resource Agency Comments on the SEA (2003)

[Source: Kwigillingok Airport Supplemental Environmental Assessment, January 2004]

Agency	Comments	Response to Comments
Army Corps of Engineers	Work in the unnamed tributary of the Kwigillingok River would require authorization under Section 10 because these waters are tidally influenced. A Section 404 permit would be required for the discharge of dredged and/or fill material into wetlands.	Draft permit application (Appendix D) covers Sections 10 and 404.
National Marine Fisheries Service	Impacts to Essential Fish Habitat (EFH) would be minimal. No further EFH assessment is required.	No response required.
U.S. Environmental Protection Agency	Made several informal comments based on verbal description of project, not on actual review of SEA: - Proposed material site is large - recommended preliminary exploratory and sampling work of material site. - Ensure impacts to endangered	- Intent of SEA was to describe maximum area that could be impacted to obtain materials. SEA stresses Site B would be developed first and Site A would only be used if and when B was exhausted. (Section 4.11.) - Proposed material site development and

	species and migratory waterfowl are adequately addressed - Recommended mitigation for wetland impacts be comparable to those required of DOT&PF under the MOA.	construction timing satisfies USFWS recommendations. (Section 4.4.) - MOA is not applicable to this locally-sponsored project.
U.S. Fish and Wildlife Service	SEA does not address recommendations for adequate mitigation expressed in letter of 6/12/02 (i.e. restoration of wetlands functions, blockages to fish passage, or other human-caused impacts to wetlands or fish and wildlife habitat in the Kwigillingok area, ii. acquisition and permanent protection of similar habitat in the area, or iii. contribution of compensatory mitigation funds). SEA does not adequately address recommendations 3, 5, and 6 of 6/12/02 letter (3. alternatives to rip-rap or sheet pile hardening of runway embankment should be fully explored; 5. create and implement reclamation plans for borrow sites; 6. land clearing). Made five additional specific comments and recommendations: - Project description. Include borrow site in project description and	- Bank stabilization memo (Appendix F) describes alternatives considered appropriate. A combination of three (armor mat, vegetation, and channel realignment) is proposed. - A mining and reclamation plan would be developed during design. - Land clearing - dates to avoid impacts to nesting migratory birds are shown in Sections 4.4 and 4.11 - Description in Section 1.5 updated. Mining and reclamation plan would be

28-2

	develop a reclamation plan. - Intertidal stream. Better describe erosion that is prompting realignment of the intertidal stream and evaluate bioengineering alternatives. - Wetlands. SEA does not demonstrate impacts to wetlands have been minimized. Recommends geotechnical investigation prior to permitting to determine subsurface conditions. - Avoidance, minimization, and mitigation of wetlands impacts. - Recommends SEA describe potential for compensation of unavoidable impacts. - Protected species. Noted that concerns about protection of spectacled eiders had been adequately resolved.	developed during design. - Description and photos of erosion problems and proposed stabilization techniques are more fully described in bank stabilization memo (Appendix F). - Intent of SEA was to describe maximum area of wetlands that could be impacted to obtain materials. SEA stresses Site B would be developed first and Site A would only be used if and when B was exhausted. No geotechnical investigation is planned at this stage. - The MOA is not applicable to this locally-sponsored project and no in-lieu fee compensation is proposed. Borrow site reclamation will include some gently sloped shoreline areas with shallows, irregular edges, and islands. (Section 4.2.7) No response required.
Alaska Department of Environmental Conservation	No comments at this stage – will wait until permitting phase.	No response required.
Alaska Department of Natural Resources (ADNR) – Mining, Land,	No comments.	No response required.

1-82

and Water		
ADNR – Office of Habitat Management and Permitting (ADF&G)	No new issues or concerns identified.	No response required.
ADNR – Office of Project Management and Permitting	Provided a copy of a federal consistency determination form and details about project's local coastal district.	No response required.
ADNR – State Historic Preservation Officer	No response received.	No response required.
Alaska Department of Transportation and Public Facilities	Provided information on schedule and cost.	Section 1.0 updated.

C-84

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Telephone Record

Project:	Kwigillingok SEA	Project No:	09707-006-002
Date:	March 2004	Subject:	Local CRSA Poilicies
Call to:	John Oscar, Cenaliulriit Coastal District	Phone No:	907-827-8748
Call from:	Susan Walker, HDR	Phone No:	907-644-2055

Discussion, Agreement and/or Action:

Several calls (3/5, 3/8 and 3/9) were made to John Oscar about local policies and the final SEA. No contact was made.

C-85

Walker, Susan

From: Duncan.Steve@epamail.epa.gov
Sent: Friday, March 12, 2004 12:18 PM
To: Walker, Susan
Cc: duncan.steve@epamail.epa.gov
Subject: Re: Kwigillingok SEA

SEAFeedbacktoAgencies.doc (68 ...

Thanks Susan. Even though you said no comment required, I feel compelled to comment with regard to the response to our mitigation comment. Even though the DOT&PF MOA is not applicable in this instance, that does not preclude the need for compensatory mitigation for unavoidable impacts. We feel such mitigation is entirely appropriate and if the applicant chooses not to provide mitigation in a manner comparable to that outlined in the DOT&PF MOA, they should propose other appropriate compensatory mitigation.

Thanks,

Steve

"Walker, Susan" <Susan.Walker@hdrinc.com>

03/05/2004 12:09 PM

To: Steve Duncan/R10/USEPA/US@EPA
cc:
Subject: Kwigillingok SEA

Steve:

At FAA's request, we are notifying agencies that provided comments on the Kwigillingok SEA of changes made to the document to address the comments. Agency comments and our response are summarized in two tables.

The first table summarizes agency comments and includes sections of amended text.

The second table (labeled Table 3) is taken directly from the document. It looks very similar to the first, but doesn't show text amendments, only cross-references.

This is for your information only - no response is required. Thanks.

Susan

Environmental Planner

HDR ONE COMPANY | Many Solutions

2525 C Street, Suite 305 | Anchorage, AK| 99503-2632

Main Line: 907.644.2000 | Direct Line: 907.644.2055 | Fax: 907.644.2022
|

Email: susan.walker@hdrinc.com(See attached file:
SEAFeedbacktoAgencies.doc)

Appendix D
Draft Permit Applications

- US Army Corps of Engineers Section 404
  (Copy of Permit No. N-1999-0764, Kwigillingok River 3 issued for landfill project)
- Alaska Department of Fish and Game Title 16
- Division of Governmental Coordination Coastal Project Questionnaire
- Department of Natural Resources Temporary Water Use Permit
- Project Description

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)			
1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETED

(ITEMS BELOW TO BE FILLED BY APPLICANT)	
5. APPLICANT'S NAME **Native Village of Kwigillingok; Oscar Evon**	8. AUTHORIZED AGENT'S NAME AND TITLE **HDR Alaska, Inc; Scott Wharton**
6. APPLICANT'S ADDRESS **P.O. Box 49** **Kwigillingok, AK 99622**	9. AGENT'S ADDRESS **HDR Alaska, Inc.** **2525 C Street, Suite 305** **Anchorage, Alaska 99503**
7. APPLICANT'S PHONE NOS. W/AREA CODE **Phone (907) 588-8114** **Fax (907) 588-8429**	10. AGENT'S PHONE NOS. W/AREA CODE **Phone (907) 274-2000** **Fax (907) 274-2022**

11. STATEMENT OF AUTHORIZATION

I hereby authorize **Scott Wharton of HDR Alaska, Inc.** to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

APPLICANT'S SIGNATURE _____ DATE _____

NAME, LOCATION AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE

Kwigillingok Airport Master Plan

13. NAME OF WATERBODY, IF KNOWN	14. PROJECT STREET ADDRESS
• **Various Wetlands** • **Unnamed Tributary to the Kwigillingok River**	
15. LOCATION OF PROJECT **Kwigillingok** (COUNTY) **Alaska** (STATE)	**Around the Kwigillingok Airport –** **Sec. 25, 26, 27, and 34, T3S, R81W, Seward Meridian,** **USGS Quadrangle Kuskokwim D-4**

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN

Sec. 25, 26, 27, and 34, T3S, R81W, Seward Meridian, USGS Quadrangle Kuskokwim D-4

17. DIRECTIONS TO THE SITE

See attached figure.

18. Nature of Activity

The project involves extending and reconstructing the airport at Kwigillingok (see attached figures). The existing runway would be extended to 3,300 long and 75 feet wide with sufficient safety areas. Project components also include a new apron, taxiway, and aviation support area. The proposed project will have wetland impacts and is adjacent to an intertidally influenced stream that will need to be realigned slightly so as to eliminate erosion of the runway embankment (see attached). The purpose of the project is to correct existing deficiencies at the Kwigillingok Airport and to bring the facility up to current standards for a community class airport.

19. Project Purpose

The purpose of the project is to correct existing deficiencies at the Kwigillingok Airport, such as inadequate runway and safety area dimensions, and to bring the facility up to current standards for a community class airport.

USE BLOCKS 20-22 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

Fill of wetlands is required for the expansion and upgrade of airport facilities including the runway, safety areas, and new taxiway.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards

Approximately 331,100 cy of dredge and 331,100 cy of fill (662,200 cy total). See attached for individual amounts of fill for each component.

22. Surface Area in Acres of Wetlands or Other Waters Filled

Approximately 19.5 acres of wetlands would be impacted by the proposed improvements and approximately 97 acres for the borrow activities. Approximately 6 acres will be impacted by the stream rechannelization.

23. Is Any Portion of the Work Already Complete? Yes_____No____X_____, IF YES, DESCRIBE THE COMPLETED WORK

24. Addresses of Adjoining Property Owners, Lessees, Etc. Whose Property Adjoins the Waterbody

The airport is situated within a 109-acre tract of land, which was leased to DOT&PF until 1999 by USF&WS. The lease, which has expired, was administered by Kwik, Inc., the Village Corporation to which the land was conveyed under the Alaska Native Claims Settlement Act. Property acquisition has included transferring approximately 116 acres of land in fee, and approximately 16 acres of avigation and hazard easement from Kwik, Inc. and Calista to the sponsor. Native allotments shown on figure 1 are being transferred to Kwik, Inc. prior to transference to the airport sponsor. The total property acquisition is approximately 132 acres.

25. List of Other Certifications or Approvals/Denials Received from other Federal, State or Local Agencies for Work Described in This Application.

USACE Section 404 Permit (2-920772), Issued 5/17/95.
ADF&G Title 16 Permit (AK9502-04AA), Issued 4/5/95. Modification requested concurrent with this application.
DGC Coastal Zone Consistency Determination (AK9502-04AA), Issued 4/5/95. Modification requested concurrent with this application.

ADEC Section 401 Certificate of Reasonable Assurance (AK9502-04AA), Issued 4/5/95. Modification requested concurrent with this application.
ADEC Air and Water Quality Certification of Reasonable Assurance per FAA Order 5050.4A (AK9502-04AA), Issued 3/8/94. Modification requested concurrent with this application.

26. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT	DATE	SIGNATURE OF AGENT	DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that : Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

DEPARTMENT OF THE ARMY PERMIT

Permittee: Kwigillingok Tribal Council

Permit No.: N-1999-0764, Kwigillingok River 3

Issuing Office U.S. Army Engineer District, Alaska

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: Construct a 0.75-mile by 26' by 3.75' landfill access road and a 350' by 20' by 3.75' landfill (berms and interior road). The access road will be approximately 16' wide. Approximately 6 acres of wetlands will be impacted. Fill silt will be obtained from the existing borrow pit. Non-frost susceptible gravel will be imported from a commercial source to the project site via barge. All organics will be stockpiled near the proposed facility and redistributed to the affected area.

All work shall be performed in accordance with the attached plans, one sheet dated September 27, 2001, two sheets dated October 2, 2001, and four additional sheets undated.

Project Location : Approximately 1.5 miles south of town, 59 degrees 51 miles north latitude, 163 degrees 08 minutes west longitude, Kwigillingok, Alaska.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on March 30, 2004 . If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a revaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

John Nichols, Project Engineer — 3/12/02

(PERMITTEE) AND TITLE — (DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

(DISTRICT ENGINEER) — (DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions have the transferee sign and date below.

(TRANSFEREE) — (DATE)

GENERAL WATERWAY/WATERBODY APPLICATION
ALASKA DEPARTMENT OF FISH AND GAME
Habitat Division
333 Raspberry Road
Anchorage, AK 99518-1599

A. APPLICANT:

1. Name: Native Village of Kwigillingok, Oscar Evon
2. Address: P.O. Box 49
   Kwigillingok, AK 99622
   Telephone: (907) 588-8114, Fax: (907) 588-8429
3. Contractor: HDR Alaska, Inc., Scott Wharton
   2525 C Street, Suite 305
   Anchorage, AK 99503
   (907) 274-2000, Fax: (907) 274-2022

B. TYPE AND PURPOSE OF PROJECT:

The project involves reconstructing the airport at Kwigillingok (see attached). A new 3,300 x 75-foot runway with sufficient safety areas would be built, as well as a new apron, taxiway, and aviation support area. Construction would occur in phases because the soil is wet and must settle and drain. The project proposes to realign the stream at the southwest end of the runway to reduce erosion. See attached project description for more information.

C. LOCATION OF PROJECT SITE:

Waterbody Name	Anadromous Stream #	Township, Range, Section, Meridian	USGS Quad
Unnamed Stream	N/A	T3S; R81W; S25, 26, 27, and 34; SM	Kuskokwim D-4

See attached vicinity map and project plans.

D. TIME FRAME FOR PROJECT: 2003 to 2008 (construction to occur in phases)

E. CONSTRUCTION METHODS:

1. Will the stream be diverted? **Yes** No
   How will the stream be diverted? **The stream bend on the southwest edge of the runway will be realigned to the west of the runway to eliminate erosion of the runway embankment. See the attached plans for the proposed stream alignment.**

How long? **Permanent**

2. Will stream channelization occur? **Yes** No

3. Will the banks of the stream be altered or modified? **Yes** No

Describe: **New stream banks will be constructed in the areas where the stream is to be realigned.**

4. List all tracked or wheeled equipment (type and size) that will be used in the stream (in the water, on ice, or in the floodplain): dozer, dump truck
How long will equipment be in the stream? During Winter

5. a. Will material be removed from the floodplain, bed, stream, or lake?
Yes No

b. Will material be removed from below the water table?
Yes No

If so, to what depth? **5 feet**

Is a pumping operation planned? **Yes** No

6. Will material (including spoils, debris, or overburden) be deposited in the flood plain, stream, or lake? **Yes** No

If so, what type? **Overburden from the dredging of the new stream channel will be placed in the existing stream channel.**

Amount: **Approximately 16,000 cubic yards.**

Disposal site location(s): **Existing channel.**

7. Will blasting be performed? Yes **No**

Weight of charges:

Type of substrate:

8. Will temporary fills in the stream or lake be required during construction (e.g., for construction traffic around construction site)? **Yes** No

9. Will ice bridges be required? **Yes** No

F. **SITE REHABILITATION/RESTORATION PLAN:** On a separate sheet present a site rehabilitation plan.

G. WATERBODY CHARACTERISTICS:

Width of stream: **approximately 15 feet**

Depth of stream or lake: **approximately 5 feet**

Type of stream or lake bottom (e.g., sand, gravel, mud): **silty/muddy**

Stream gradient: **<1**

H. HYDRAULIC EVALUATION:

1. Will a structure (e.g., culvert, bridge support, dike) be placed below ordinary high water of the stream? Yes **No**

   If yes, attach engineering drawings or a field sketch, as described in Step B.
   For culverts, attach stream discharge data for a mean annual flood (Q=2.3), if available.
   Describe potential for channel changes or increased bank erosion, if applicable:

2. Will more than 25,000 cubic yards of material be removed?
   Yes **No**

   If yes, attach a written hydraulic evaluation including, at a minimum, the following: potential for channel changes, assessment of increased aufeis (glaciering) potential, assessment of potential for increased bank erosion.

I HEREBY CERTIFY THAT ALL INFORMATION PROVIDED ON OR IN CONNECTION WITH THIS APPLICATION IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

_____ _____

Signature of Applicant Date

Coastal Project Questionnaire and Certification Statement

Please answer all questions. To avoid a delay in processing, **please call the department if you answer "yes" to any of the questions related to that department**. Maps and plan drawings must be included with your packet.

An incomplete packet will be returned.

■ APPLICANT INFORMATION

1. Native Village of Kwigillingok, Oscar Evon
   Name of Applicant
   Box 49
   Address
   Kwigillingok, Alaska 99622
   City/State Zip Code
   (907) 588-8114
   Daytime Phone
   (907) 588-8429
   Fax Number E-mail Address

2. Scott Wharton; HDR Alaska, Inc.
   Agent (or responsible party if other than applicant)
   2525 C Street, Suite 305
   Address
   Anchorage, AK 99503
   City/State State Zip Code Zip Code
   (907) 274-2000
   Daytime Phone
   (907) 274-2022 swharton@hdrinc.com
   Fax Number E-mail Address

■ PROJECT INFORMATION

	Yes	No
1. This activity is a: ☐ new project ☒ modification or addition to an existing project. If a modification, do you currently have any state, federal or local approvals related to this activity?	☒	☐

Note: Approval means any form of authorization. If "yes," please list below:

Approval Type	Approval #	Issuance Date	Expiration Date
USACE Section 404 Permit	2-920772	5/17/95	5/31/98
ADF&G Title 16 Permit	AK9502-04AA	4/5/95	12/31/97
DGC Coastal Consistency Determination	AK9502-04AA	4/4/95	Assumed 4/4/00
ADEC Section 401 Certificate	AK9502-04AA	4/5/95	Assumed 4/5/00
ADEC Air and Water Quality Certificate	AK9502-04AA	3/8/94	Assumed 3/8/94

2. If a modification, has this project ever been reviewed by the State of Alaska under the ACMP? ☒ ☐
   Previous State I.D. Number: AK9502-04AA Previous Project Name: Kwigillingok Airport Project

■ PROJECT DESCRIPTION

1. Provide a brief description of your entire project and ALL associated facilities and land use conversions. Attach additional sheet(s) as needed.

The project involves extending and reconstructing the airport at Kwigillingok (see attached figures). The existing runway would be extended to 3,300 long and 75 feet wide with sufficient safety areas. Project components also include a new apron, taxiway, and aviation support area. The proposed project will have wetland impacts and is adjacent to an intertidally influenced stream that will need to be realigned slightly so as to eliminate erosion of the runway embankment (see attached). The purpose of the project is to correct existing deficiencies at the Kwigillingok Airport and to bring the facility up to current standards for a community class airport.

Although a FONSI was signed for the Environmental Assessment in January, 1996 and relevant permits were issued, the project was delayed due to lease acquisition difficulties. In the interim, the Native

'illage of Kwigillingok has decided to sponsor the project. Thus, a Supplemental Environmental .ssessment and new permits are necessary.

2. Attach the following: • a detailed description of the project, all associated facilities, and land use conversions, etc. (Be specific, including access roads, caretaker facilities, waste disposal sites, etc.); • a project timeline for completion of all major activities in the proposal; • a site plan depicting property boundary with all proposed actions; • other supporting documentation that would facilitate review of the project. Note: If the project is a modification, identify existing facilities as well as proposed changes on the site plan.

■ PROJECT LOCATION

1. Attach a copy of the topographical and vicinity map clearly indicating the location of the project. Please include a map title and scale. **See attached figures.**

2. The project is located in which region (see attached map): ☒ Northern ☐ Southcentral ☐ Southeast
   ☐ within or associated with the Trans-Alaska Pipeline corridor

3. Location of project (Include the name of the nearest land feature or body of water.) **Kwigillingok River**
   Township **3S** Range **81W** Section **25, 26, 27, 34** Meridian Seward Latitude/Longitude **59.864/163.134** USGS **Quad Map Kuskokwim D-4**

4. Is the project located in a coastal district? Yes ☒ No ☐ If yes, identify: Cenaliulriit Coastal District
   (Coastal districts are a municipality or borough, home rule or first class city, second class with planning, or coastal resource service area.)
   Note: A coastal district is a participant in the State's consistency review process. It is possible for the State review to be adjusted to accommodate a local permitting public hearing. Early interaction with the district is important; please contact the district representative listed on the attached contact list.

5. Identify the communities closest to your project location: **Kwigillingok, Bethel**

6. The project is on: ☐ State land or water* ☐ Federal land ☒ Private land*
   ☐ Municipal land ☐ Mental Health Trust land
   **State land can be uplands, tidelands, or submerged lands to 3 miles offshore. See Question #1 in DNR section.*
   Contact the applicable landowner(s) to obtain necessary authorizations.
   ***Property acquisition includes transferring approximately 116 acres of land in fee, and approximately 16 acres of avigation and hazard easement from Kwik, Inc. and Calista to the sponsor. Native allotments will be transferred to Kwik, Inc. prior to transference to the airport sponsor. The total property acquisition is approximately 132 acres.**

■ DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC) APPROVALS

	Yes	No
1. Will a discharge of wastewater from industrial or commercial operations occur?	☐	☒
Will the discharge be connected to an already approved sewer system?	☐	☒
Will the project include a stormwater collection/discharge system?	☐	☒
2. Do you intend to construct, install, modify, or use any part of a wastewater (sewage or greywater) disposal system?*	☐	☒

*Two vault-type toilets will be constructed at the boat ramp site. According to ADEC (see attached correspondence) final design of the wastewater disposal system will need to be submitted to ADEC for approval once completed. See attached telephone log between Rieth and Love on June 9, 2000.

a) If so, will the discharge be 500 gallons per day or greater? ..... ☐ ☐

b) If constructing a domestic wastewater treatment or disposal system, will the system be located within fill material requiring a COE permit? ..... ☐ ☐

If you answered yes to a) or b), answer the following:

1) What is the distance from the bottom of the system to the top of the subsurface water table? _____

2) How far is any part of the wastewater disposal system from the nearest surface water? _____

3) Is the surrounding area inundated with water at any time of the year? ..... ☐ ☐

4) How big is the fill area to be used for the absorption system? _____

(Questions 1 & 2 will be used by DEC to determine whether separation distances are being met; Questions 3 & 4 relate to the required size of the fill if wetlands are involved.)

	Yes	No
3. Do you expect to request a mixing zone for your proposed project?	☐	☒

(If your wastewater discharge will exceed Alaska water quality standards, you may apply for a mixing zone. If so, please contact DEC to discuss information required under 18 AAC 70.032.)

4. a) Will your project result in the construction, operation, or closure of a facility for the disposal of solid waste? ..... ☐ ☒

(Note: Solid waste means drilling wastes, household garbage, refuse, sludge, construction or demolition wastes, industrial solid waste, asbestos, and other discarded, abandoned, or unwanted solid or semi-solid material, whether or not subject to decomposition, originating from any source. Disposal means placement of solid waste on land.)

b) Will your project result in the treatment of solid waste at the site? ..... ☐ ☒

(Examples of treatment methods include, but are not limited to: incineration, open burning, baling, and composting.)

c) Will your project result in the storage or transfer of solid waste at the site? * ..... ☐ ☒

*The project itself will not create any solid waste. Operation of the boat ramp will result in solid waste. Plans for the project include a 5 yd^3 dumpster. Solid waste will be stored in a manner where it will not attract animals. The City of Whittier will be responsible for the solid waste at the site and will dispose of it in an ADEC-approved manner. See attached telephone log between Rieth and Love on June 9, 2000.

d) Will the project result in the storage of more than 50 tons of materials for reuse, recycling, or resource recovery? ..... ☐ ☒

e) Will any sewage solids or biosolids be disposed of or land-applied to the site? ..... ☐ ☒

(Sewage solids include wastes that have been removed from a wastewater treatment plant system, such as a septic tank, lagoon dredge, or wastewater treatment sludge that contain no free liquids. Biosolids are the solid, .semi-solid, or liquid residues produced during the treatment of domestic septage in a treatment works which are land applied for beneficial use.)

5. Will your project require the application of oil, pesticides, and/or any other broadcast chemicals? ..... ☐ ☒

6. a) Will you have a facility with industrial processes that are designed to process no less than *five tons per hour* and needs air pollution controls to comply with State emission standards? ..... ☐ ☒

b) Will you have stationary or transportable fuel burning equipment, including flares, with a total fuel consumption capacity no less than 50 million Btu/hour? ..... ☐ ☒

c) Will you have a facility with incinerators having a total charging capacity of no less than 1,000 pounds per hour? ..... ☐ ☒

d) Will you have a facility with equipment or processes that are subject to Federal New Source Performance Standards or National Emission Standards for hazardous air pollutants? ..... ☐ ☒

i) Will you propose exhaust stack injection? ..... ☐ ☐

e) Will you have a facility with the potential to emit no less than 100 tons per year of any regulated air contaminant? ..... ☐ ☒

f) Will you have a facility with the potential to emit no less than 10 tons per year of any hazardous air contaminant or 25 tons per year of all hazardous air contaminants? ..... ☐ ☒

g) Will you construct or add stationary or transportable fuel burning equipment of no less than 10 million Btu/hour in the City of Unalaska or the City of St. Paul? ..... ☐ ☒

h) Will you construct or modify in the Port of Anchorage a volatile liquid storage tank with a volume no less than 9,000 barrels, or a volatile liquid loading rack with a design throughput no less than 15 million gallons? ..... ☐ ☒

i) Will you be requesting operational or physical limits designed to reduce emissions from an existing facility in an air quality nonattainment area to offset an emission increase from another new of modified facility? ..... ☐ ☒

	Yes	No
7. Will you be developing, constructing, installing, or altering a public water system?	☐	☒

8. a) Will your project involve the operation of waterborne tank vessels or oil barges that carry crude or non-crude oil as bulk cargo, or the transfer of oil or other petroleum products to or from such a vessel or a pipeline system? ..... ☐ ☒

b) Will your project require or include onshore or offshore oil facilities with an effective aggregate storage capacity of greater than 5,000 barrels of crude oil or greater than 10,000 barrels of non-crude oil? ..... ☐ ☒

c) Will you be operating facilities on the land or water for the exploration or production of hydrocarbons? ..... ☐ ☒

If you answered "NO" to ALL questions in this section, continue to next section.
If you answered "YES" to ANY of these questions, contact the DEC office nearest you for information and application forms. Please be advised that all new DEC permits and approvals require a 30-day public notice period. DEC Pesticide permits take effect no sooner than 40 days after the permit is issued.

Based on your discussion with DEC, please complete the following:

Types of project approvals or permits needed	Date application submitted

9. Does your project qualify for a general permit for wastewater or solid waste? ..... ☐ ☒
Note: A general permit is an approval issued by DEC for certain types of routine activities.

If you answered "YES" to any questions in this section and are not applying for DEC permits, indicate reason:

☐ _____(DEC contact) told me on ___ that no DEC approvals are required on this project because_____

☐ **Other:**_____

■ DEPARTMENT OF FISH & GAME (DFG) APPROVALS

1. Will you be working in, removing water or material from, or placing anything in, a stream, river or lake?* (This includes work or activities below the ordinary high water mark or on ice, in the active flood plain, on islands, in or on the face of the banks, or, for streams entering or flowing through tidelands, above the level of mean lower low tide.)
Note: If the proposed project is located within a special flood hazard area, a floodplain development permit may be required. Contact the affected city or borough planning department for additional information and a floodplain determination.) ..... ☒ ☐

Name of waterbody: Unnamed Tributary to Kwigillingok River.

2. Will you do any of the following:..... ☒ ☐

Please indicate below:

- ☐ Build a dam, river training structure, other instream impoundment, or weir
- ☐ Use the water
- ☐ Pump water into or out of stream or lake (including dry channels)
- ☒ Divert or alter the natural stream channel
- ☒ Change the water flow or the stream channel
- ☒ Introduce silt, gravel, rock, petroleum products, debris, brush, trees, chemicals, or other organic/inorganic material, including waste of any type, into the water
- ☒ Alter, stabilize or restore the banks of a river, stream or lake (provide number of linear feet affected along the bank(s) **Approximately 2,000 feet**
- ☐ Mine, dig in, or remove material, including woody debris, from the beds or banks of a waterbody
- ☐ Use explosives in or near a waterbody
- ☒ Build a bridge (including an ice bridge)
- ☒ Use the stream, lake or waterbody as a road (even when frozen), or cross the stream with tracked or wheeled vehicles, log-dragging or excavation equipment (backhoes, bulldozers, etc.)
- ☐ Install a culvert or other drainage structure
- ☒ Construct, place, excavate, dispose or remove any material below the ordinary high water of a waterbody
- ☐ Construct a storm water discharge or drain into the waterbody
- ☐ Place pilings or anchors
- ☐ Construct a dock
- ☐ Construct a utility line crossing
- ☐ Maintain or repair an existing structure
- ☐ Use an instream in-water structure not mentioned here

	Yes	No
3. Is your project located in a designated State Game Refuge, Critical Habitat Area or State Game Sanctuary?	☐	☒
4. Does your project include the construction/operation of a salmon hatchery?	☐	☒
5. Does your project affect, or is it related to, a previously permitted salmon hatchery?	☐	☒
6. Does your project include the construction of an aquatic farm?	☐	☒

If you answered "No" to ALL questions in this section, continue to next section.
If you answered "Yes" to ANY questions under 1-3, contact the Regional or Area DFG Habitat and Restoration Division Office for information and application forms.
If you answered "Yes" to ANY questions under 4-6, contact the DFG Commercial Fisheries Division headquarters for information and application forms.

Based on your discussion with DFG, please complete the following:

Types of project approvals or permits needed	Date application submitted
Title 16 ADF&G Fish Habitat Permit	Concurrent with this submittal

If you answered "YES" to any questions in this section and are not applying for DFG permits, indicate reason:

☐ **_____ (DFG contact) told me on _____ that no DFG approvals are required on this project because_____**

☐ **Other:** _____

■ DEPARTMENT OF NATURAL RESOURCES (DNR) APPROVALS

1. Is the proposed project on State-owned land or water or will you need to cross State-owned land for access?* ("Access" includes temporary access for construction purposes. *Note: In addition to State-owned uplands, the State owns almost all land below the ordinary high water line of navigable streams, rivers and lakes, and below the*

mean high tide line seaward for three miles.). ..... ☒ ☐

a) Is this project for a commercial activity?.. ..... ☐ ☒

2. Is the project on Alaska Mental Health Trust land (AMHT) or will you need to cross AMHT land?
Note: Alaska Mental Health Trust land is not considered State land for the purpose of ACMP reviews. ..... ☐ ☒

	Yes	No
3. Do you plan to dredge or otherwise excavate/remove materials on State-owned land? **Tributary**	☒	☐

Location of dredging site if different than the project site:_____
Township _____ Range _____ Section _____ Meridian _____ USGS Quad Map _____

4. Do you plan to place fill or dredged material on State-owned land? ..... ☒ ☐
Location of fill disposal site if other than the project site:_____
Township _____ Range _____ Section _____ Meridian _____ USGS Quad Map _____
Source is on: ☐ State Land ☐ Federal Land ☐ Private Land ☐ Municipal Land

5. Do you plan to use any of the following State-owned resources: ..... ☐ ☒
☐ ***Timber***: Will you be harvesting timber? Amount: _____
☐ ***Materials such as rock, sand or gravel, peat, soil, overburden, etc.:*** .....
Which material? Rock, sand, gravel_____ Amount:_____
Location of source: ☐ Project site ☐ Other, describe: _____
Township _____ Range _____ Section _____ Meridian _____ USGS Quad Map _____

6. Are you planning to divert, impound, withdraw, or use any fresh water, except from an existing public water system or roof rain catchment system (regardless of land ownership)? ..... ☒ ☐
Amount (maximum daily, not average, in gallons per day): _____
Source: **Kwigillingok Tributary** Intended Use: **Construction of Ice Road**
If yes, will your project affect the availability of water to anyone holding water rights to that water? ..... ☐ ☒

7. Will you be building or altering a dam (regardless of land ownership)? ..... ☐ ☒

8. Do you plan to drill a geothermal well (regardless of land ownership)? ..... ☐ ☒

9. At any one site (regardless of land ownership), do you plan to do any of the following? ..... ☐ ☒

☐ Mine five or more acres over a year's time
☐ Mine 50,000 cubic yards or more of materials (rock, sand or gravel, soil, peat, overburden, etc.) over a year's time
☐ Have a cumulative unreclaimed mined area of five or more acres

If yes to any of the above, contact DNR about a reclamation plan.

If you plan to mine less than the acreage/amount stated above and have a cumulative unreclaimed mined area of less than five acres, do you intend to file a voluntary reclamation plan for approval? ..... ☐ ☐

10. Will you be exploring for or extracting coal? ..... ☐ ☒

11. a) Will you be exploring for or producing oil and gas? ..... ☐ ☒
b) Will you be conducting surface use activities on an oil and gas lease or within an oil and gas unit? ... ☐ ☒

12. Will you be investigating, removing, or impacting historical or archaeological or paleontological resources (anything over 50 years old) on State-owned land? ..... ☐ ☒

13. Is the proposed project located within a known geophysical hazard area? ..... ☐ ☒

Note: 6 AAC 80.900(9) defines geophysical hazard areas as "those areas which present a threat to life or property from geophysical or geological hazards, including flooding, tsunami run-up, storm surge run-up, landslides, snowslides, faults, ice hazards, erosion, and littoral beach process." "known geophysical hazard area" means any area identified in a report or map published by a federal, state, or local agency, or by a geological or engineering consulting firm, or generally known by local knowledge, as having known or potential hazards from geologic, seismic, or hydrologic processes.

	Yes	No
14. Is the proposed project located in a unit of the Alaska State Park System?	☐	☒

If you answered "No" to ALL questions in this section, continue to Federal Approvals section.
If you answered "Yes" to ANY questions in this section, contact DNR for information.

Based on your discussion with DNR, please complete the following:

Types of project approvals or permits needed	Date application submitted
DNR Temporary Water Use Permit	Concurrent with this submittal

If you answered "YES" to any questions in this section and are not applying for DNR permits, indicate reason:
☐ _____ **(DNR contact) told me on ___ that no DNR approvals are required on this project because_____**
☐ **Other:** _____

■ FEDERAL APPROVALS

U.S. Army Corps of Engineers (COE)

1. Will you be dredging or placing structures or fills in any of the following:
tidal (ocean) waters? streams? lakes? wetlands*? ..... ☒ ☐
If yes, have you applied for a COE permit? requesting approval under an existing permit (number... ☒ ☐
Date of submittal: **concurrent with this submittal**

(Note: Your application for this activity to the COE also serves as application for DEC Water Quality Certification.)

**If you are not certain whether your proposed project is in a wetlands (wetlands include muskegs), contact the COE, Regulatory Branch at (907) 753-2720 for a wetlands determination (outside the Anchorage area call toll free 1-800-478-2712).*

Bureau of Land Management (BLM)

2. Is the proposed project located on BLM land, or will you need to cross BLM land for access? ..... ☐ ☒
If yes, have you applied for a BLM permit or approval? ..... ☐ ☐
Date of submittal: _____

U.S. Coast Guard (USCG)

3. a) Will you be constructing a bridge or causeway over tidal (ocean) waters, or navigable rivers, streams or lakes? ..... ☐ ☒
b) Does your project involve building an access to an island? ..... ☐ ☒
c) Will you be siting, constructing, or operating a deepwater port? ..... ☐ ☒
If yes, have you applied for a USCG permit? ..... ☐ ☐
Date of submittal: _____

U.S. Environmental Protection Agency (EPA)

4. a) Will the proposed project have a discharge to any waters? ..... ☐ ☒
b) Will you be disposing of sewage sludge (contact EPA at 206-553-1941)? ..... ☐ ☒
If you answered yes to a) or b), have you applied for an EPA National Pollution Discharge Elimination System (NPDES) permit? ..... ☐ ☐
Date of submittal: _____

(Note: For information regarding the need for an NPDES permit, contact EPA at (800) 424-4372.)

c) Will construction of your project expose 5 or more acres of soil?* *(This applies to the total amount of land disturbed, even if disturbance is distributed over more than one season, and also applies to areas that are part of a larger common plan of development or sale.)* ☒ ☐
*Construction contractor will draft and submit a SWPPP to the EPA for approval.

	Yes	No
d) Is your project an industrial facility which will have stormwater discharge which is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant?	☐	☒

If you answered yes to c) or d), your project may require an NPDES Stormwater permit.
Contact EPA at 206-553-8399.

Federal Aviation Administration (FAA)

5. a)	Is your project located within five miles of any public airport?	☒	☐
b)	Will you have a waste discharge that is likely to decay within 5,000 feet of any public airport?	☐	☒

If yes, please **contact the Airports Division of the FAA** at (907) 271-5444.

Federal Energy Regulatory Commission (FERC)

6. a)	Does the project include any of the following:		
	1) a non-federal hydroelectric project on any navigable body of water	☐	☒
	2) a location on federal land (including transmission lines)	☐	☒
	3) utilization of surplus water from any federal government dam	☐	☒
b)	Does the project include construction and operation, or abandonment of natural gas pipeline facilities under sections (b) and (c) of the Federal Power Act (FPA)?	☐	☒
c)	Does the project include construction for physical interconnection of electric transmission facilities under section 202 (b) of the FPA?	☐	☒
	If you answered yes to any questions under number 6, have you applied for a permit from FERC?	☐	☐

Date of submittal: _____
(Note: For information, contact FERC, Office of Hydropower Licensing (202) 219-2668; Office of Pipeline Regulation (202) 208-0700; Office of Electric Power Regulation (202) 208-1200.)

U.S. Forest Service (USFS)

7. a)	Does the proposed project involve construction on USFS land?	☐	☒
b)	Does the proposed project involve the crossing of USFS land with a water line?	☐	☒
	If the answer to either question is yes, have you applied for a USFS permit or approval?	☐	☐

Date of submittal: _____

8. Have you applied for any other federal permits or authorizations? ☒ ☐

AGENCY	APPROVAL TYPE	DATE SUBMITTED
U.S. Army Corps of Engineers	Modification/ANTHC Permit	Concurrent with this submittal
U.S. EPA	Storm Water Pollution Prevention Plan	Contractor will complete
ADF&G	Fish Habitat Permit Application	Concurrent with this submittal
DNR	Temporary Water Use Permit	Concurrent with this submittal

Please be advised that the CPQ identifies permits subject to a consistency review. You may need additional permits from other agencies or the affected city and/or borough government to proceed with your activity.

Certification Statement

The information contained herein is true and complete to the best of my knowledge. I certify that the proposed

Program.

Signature of Applicant or Agent | Date

Note: Federal agencies conducting an activity that will affect the coastal zone are required to submit a federal consistency determination, per 15 CFR 930, Subpart C, rather than this certification statement. DGC has developed a guide to assist federal agencies with this requirement. Contact DGC to obtain a copy.

This certification statement will not be complete until all required State and federal authorization requests have been submitted to the appropriate agencies.

- **To complete your packet, please attach your State permit applications and copies of your federal permit applications to this questionnaire.**

DIVISION OF MINING, LAND & WATER
WATER RESOURCES SECTION

Alaska Department of NATURAL RESOURCES

550 West 7th Ave., Suite 900A
Anchorage, AK 99501-3577
907-269-8503
Fax: 269-8947

400 Willoughby, 4th Floor
Juneau, AK 99801
907-465-3400
Fax: 586-2954

Office Use Only Date/Time Stamp

Office Use Only TWUP/LAS #	*Office Use Only* CID #	*Office Use Only* Receipt Type WR

APPLICATION FOR TEMPORARY WATER USE PERMIT

Instructions

- *Complete one application for each project – **Incomplete applications will not be accepted***
- *Attach map indicating water withdrawal point(s), location(s) of water use, and point(s) of return flow – **Map must identify meridian, township, range, and section***
- *Attach sketch, photos, and/or plans of water system, and driller's well log, if applicable*
- *Attach completed Coastal Project Questionnaire, if applicable (see page 3)*
- *Submit filing fee – **Non-refundable** (see page 3)*

Kwigillingok Airport Master Plan
Project Name

Native Village of Kwigillingok
Business Name

Oscar Evon
Contact Person

Box 49
Mailing Address

Kwigillingok
City

Alaska
State

99622
Zip Code

(907) 588-8114
Phone Number

(907) 588-8429
Fax Number

E-mail Address

Legal Descriptions

Location of Water Use – ***It is applicant's responsibility to obtain and maintain legal occupancy***

Identifiable Landmarks (e.g. milepost, subdivision)	Meridian	Township	Range	Section	Quarter Sections	
Kwigillingok River	Seward	3S	81W	25,26,27	¼	¼
				34	¼	¼

Location of Water Source – ***It is applicant's responsibility to obtain and maintain legal access***

Geographic Name of Water Body or Well Depth	Meridian	Township	Range	Section	Quarter Sections	
Kwigillingok River	Seward	3S	81W	25,26,27	¼	¼
				34	¼	¼

Location of Water Return Flow or Discharge, *if applicable*

Geographic Name of Water Body or Well Depth	Meridian	Township	Range	Section	Quarter Sections	
					¼	¼
					¼	¼

Attach extra page if needed

Water Quantity and Use

Purpose of Water Use	Quantity of Water		Season *Permit not to exceed 5 years (may be renewed)*		Calculations *Show how quantity was determined*
	Maximum Withdrawal Rate	Total Daily Amount	Date Work Will Start	*Date All Work Will be Completed	Hours/day _____ Days/week _____
Construction of Ice Road			2003	2005	
Rechannelization of Tributary					
Total Amount			***You may want to use the end of the construction season for your ending date***		

Method of Taking Water

Pump	Pump intake _____ inches	Hours working _____ hours/day
	Pump output _____ GPM	Length of pipe _____ feet (from pump to point of use)
Gravity	Pipe diameter _____ inches	Length of pipe _____ feet (take point to use point)
	Head _____ feet	
Ditch	L _____ H _____ W _____ feet	Diversion _____ GPM or CFS
Reservoir	L _____ H _____ W _____ feet	Water storage _____ AF
Dam	L _____ H _____ W _____ feet	Water storage _____ AF

Project Description

What alternative water sources are available to your project should a portion of your requested diversion be excluded because of water shortage or public interest concerns?

None

Are there any surface water bodies or water wells at or near your site(s) that could be affected by the proposed activity? If yes, list any ground water monitoring programs going on at or near the sites, any water shortages or water quality problems in the area, and any information about the water table, if known.

None. Water table is very close to surface and most of the terrain is considered wetlands.

Briefly describe the type and size of equipment used to withdraw and transport water, including the amount of water the equipment uses or holds.

(Not available)

Briefly describe what changes at the project site and surrounding area will occur or are likely to occur because of construction or operation of your project (e.g. public access, streambed alteration, trenching, grading, excavation).

Stream will be rechannelized at the southwest end of runway. No permanent impacts are expected with ice road.

Briefly describe land use around the water take, use, and return flow points (e.g. national park, recreational site, residential)

Land is mostly open space.

Will project be worked in phases? State reason for completion date.

Project will be phased to allow for draining and settling of the embankment material.

Briefly summarize your entire project.

See attached project description.

Attach extra page if needed

References

Coastal Zone

If this appropriation is within the Coastal Zone, and you are using more than 1,000 GPD from a surface source or 5,000 GPD from a subsurface source, you need to submit a completed Coastal Project Questionnaire. ***For more information on the Coastal Zone, contact the Division of Governmental Coordination; Anchorage 269-7470, Juneau 465-3562.***

Fee Schedule – ***Make checks payable to "Department of Revenue"***

$ 50.00 For use of 5,000 GPD or less.
$ 100.00 For use of more than 5,000 GPD but less than 30,000 GPD.
$ 200.00 For use of 30,000 GPD or more but less than 100,000 GPD.
$ 300.00 For use of 100,000 GPD or more but less than 500,000 GPD.
$ 500.00 For use of 500,000 GPD or more but less than 1,000,000 GPD.
$ 1,000.00 For use of 1,000,000 GPD or more except...(see next line)
$ 1,500.00 For use of 1,000,000 GPD or more, outside of the hydrologic unit from which it was removed (based on current USGS Hydrologic Unit Map of Alaska).
$ 500.00 For use of any quantity of glacier ice.

Definitions

GPD = Gallons per day
CFS = Cubic feet per second
GPM = Gallons per minute
AFY = Acre-feet per year (325,851 gallons/year)
AFD = Acre-feet per day (325,851 gallons/day)
MGD = Million gallons per day

Conversion Table

5,000 GPD=	30,000 GPD=	100,000 GPD=	500,000 GPD=	1,000,000 GPD=
0.01 CFS	0.05 CFS	0.2 CFS	0.8 CFS	1.5 CFS
3.47 GPM	20.83 GPM	69.4 GPM	347. 2 GPM	694.4 GPM
5.60 AFY	33.60 AFY	112.0 AFY	560.1 AFY	1120.1 AFY
0.2 AFD	0.09 AFD	0.3 AFD	1.5 AFD	3.1 AFD
0.01 MGD	0.03 MGD	0.1 MGD	0.5 MGD	1.0 MGD

The information presented in this application is true and correct to the best of my knowledge. I understand that no water right or priority is established per 11 AAC 93.210-220, that water use remains subject to appropriation by others, and that a temporary water use permit may be revoked if necessary to protect the water rights of other persons or the public interest.

Signature _____ Date _____

Name (please print) _____ Title _____

Kwigillingok Airport Improvement Project Description

The Native Village of Kwigillingok and the Federal Aviation Administration (FAA) propose to rehabilitate and reconstruct the airport at Kwigillingok, Alaska (see attached figures). The airport does not meet current standards for community class airports. The proposed project will bring it up to current federal and state standards for length, width, apron size, and setback. An Environmental Assessment (EA) was completed and a Finding of No Significant Impact (FONSI) was signed by the FAA in 1996, but construction of the improvements did not occur at that time. The proposed action (Alternative A) has been modified to meet the most updated standards proposed by the Alaska Aviation Systems Plan and the FAA and a Supplemental EA has been prepared. The following summary describes the proposed action, Alternative A.

Table 1
Proposed Improvements (Alternative A)

Project Element	Existing Usable	Proposed Action Category B-II
Runway (R/W) Length	2,510 ft	3,300 ft*
R/W Width	50 ft	75 ft*
R/W Safety Area Length	2,900 ft	3,900 ft*
R/W Safety Area Width	100 ft	150 ft*
Taxiway (T/W) Width	30 ft	40 ft*
T/W Safety Area Width	40 ft	80 ft*
Apron Dimensions	18,000 sf	75,000 sf*
Equipment Storage Building Pad	None	50 x 90 ft*

* Embankment constructed in phases.

The airport is situated within a 109-acre tract of land, which was leased to DOT&PF until 1999 by USF&WS. The lease, which has expired, was administered by Kwik, Inc., the Village Corporation to which the land was conveyed under the Alaska Native Claims Settlement Act (ANCSA). Proposed property acquisition would include transferring approximately 116 acres of land in fee, and approximately 16 acres of avigation and hazard easement from Kwik, Inc. and Calista to the sponsor. Native allotments shown on Figure 1 will be transferred to Kwik, Inc. prior to transference to the airport sponsor. The total property acquisition would be approximately 132 acres.

Approximately 16.5 acres of wetlands would be impacted by the proposed airport improvements, approximately 97 acres by borrow activities (see Tables 2 and 3), and approximately 6 acres by the stream channel realignment. The stream bank on the west edge of the primary runway would be realigned to eliminate erosion of the runway embankment (see attached figures). This portion of the project would necessitate dredging of 3 acres of wetlands for the new channel location and filling of 3 acres in the existing stream channel. An estimated 16,000 cy of material would be moved from the new channel to the old channel. At the borrow sites, borrow material would be excavated from 5 to 15 feet deep and an estimated 315,500 cy of borrow material would be required. For the whole project, the total estimated impact to wetlands would be approximately 119.5 acres.

The village favors the locations proposed for the material borrow sources. The airport expansion and the material sites will meet all ADF&G requirements for fish passage.

Best Management Practices would be used to minimize impacts to wetlands during construction activities.

Table 2. Airport Improvement Impacts on Wetlands.

	Approximate Area[a]	Approximate Volume	Type of Impact
	(Acres)	(Cubic Yards)	(Dredge or Fill)
Runway Safety Area Expansion	6.5	125,400[b]	Fill
Future Safety Area Embankment	4.0	126,800[b]	Fill
Taxiway	1	8,200[b]	Fill
Apron	3.5	41,800[b]	Fill
Runway Surfacing	No New Impact	6,900[b]	Fill
Segmented Circle & Lighted Windcone (including access road)	1	5,700[b]	Fill
Unlighted Windcone and AWOS	0.5	300[b]	Fill
Airport Fill Sub-Totals	16.5	315,100	Fill
Borrow Sources	97[d]	315,500	Dredge
Stream Realignment – New Channel	3	16,000[c]	Dredge
Stream Realignment – Old Channel	3	16,000[c]	Fill
Totals			
Fill	19.5	331,100	
Dredge	100.0	331,100	
Total Acreage Impacted	**119.5**	-	

a = All Impacts are within wetlands.

b = Volumes increased by 50% to compensate for settling.

c = Amount includes impacts due to new channel dredging as well as fill of existing channel.

d = Estimation of impacts assumes that both borrow sources will be needed for the project.

Table 3. Wetland and Waterbody Types Affected by the Project.

Wetland and Waterbody Type	NWI Code	Approximate Amount of Wetland Impacts (acres)
Palustrine, Emergent, Regularly Flooded wetlands	*PEM1N*	14.5
Palustrine, Emergent, Irregularly Flooded	*PEM1P*	54

Wetland and Waterbody Type	NWI Code	Approximate Amount of Wetland Impacts (acres)
wetlands		
Palustrine, Persistent Emergent, Saturated wetlands	*PEM1B*	24
Palustrine, Persistent Emergent, Irregularly Flooded and Saturated wetlands	*PEM1P/ PEM1B*	1
Palustrine, Persistent Emergent, Saturated and Seasonally Flooded wetlands	*PEM1B/ PEM1C*	1
Palustrine, Persistent Emergent, Semipermantly Flooded wetlands	*PEM1F*	18
Palustrine Persistent Emergent Saturated/Semipermanently Flooded wetlands	*PEM1B/ PEM1F*	0.5
Palustrine, Unconsolidated Mud Bottom, Permanantely Flooded Ponds	*PUB3H*	5
Riverine, Tidal/Lower Perennial, Unconsolidated Mud Bottom waters	*R2UB3H/ R1UB3H*	1.5
Total		**119.5**

Appendix E
Wetlands Characterization Report

Wetland and Waterbody Characterization Report

Introduction

The Native Village of Kwigillingok, with funding from the Federal Aviation Administration (FAA), is planning an airport improvement project in Kwigillingok, Alaska. An original airport layout plan for the project was developed and a Finding of No Significant Impact (FONSI) was signed for the environmental assessment (EA) in 1996. However, the project was delayed and has since been modified to comply with updated standards. The Native Village of Kwigillingok is now the sponsor of the project and plans to begin construction for the project in the winter of 2003-2004, pending approval of the Supplemental EA and re-issuance of relevant permits.

The proposed action involves extending the airport to a new length of 3,300 feet and a width of 75 feet (see Figure 1). The runway would have sufficient safety areas and would be aligned parallel with prevailing winds, as indicated by wind data and by pilots and residents. In addition, a new apron, aviation support area, and airport access road would be constructed. Project material would be extracted from two borrow sources to the south and west of the existing runway.

An investigation of wetland types in the project area was performed by interpretation of stereo aerial photography of the project area. Seven wetland types were identified near the project area. Palustrine, Emergent, Regularly and Irregularly Flooded wetlands (PEM1N and PEM1P) were identified in the areas associated with the tidal action of the tributary to the Kwigillingok River. Palustrine, Persistent Emergent, Saturated, Seasonally Flooded, and Semipermanantly Flooded wetlands (PEM1C and PEM1B) and were mapped in areas not associated with the tidal action of the tributary. In addition, Palustrine, Unconsolidated Mud Bottom, Permanantly Flooded Ponds were interspersed throughout the project area (PEM1C, PEM1B and PEM1F). The tributary and associated sloughs were identified as Riverine, Tidal/Lower Perennial, Unconsolidated Mud Bottom waters (R2UB3H/R1UB3H). The entire environment surrounding Kwigillingok is wetland or waterways and there is no alternative to locating airport improvements within these areas. The locations of the wetland and waterbody types described above can be seen in Figure 1.

Wetland Type Description

Wetland types in the Kwigillingok area have been named using the conventions of the National Wetlands Inventory (NWI) of the U.S. Fish and Wildlife Service (see Table 1). To date, the area around Kwigillingok has not been inventoried by the U.S. Fish and Wildlife Service.

Palustrine, Emergent, Regularly Flooded wetland (PEM1N) occupies the areas adjacent to the Kwigillingok River tributary and its associated sloughs. These areas are tidally influenced and are characterized by tidal water alternately flooding and exposing the land surface at least once daily. The soil type is generally silt and vegetation consists mostly of sedges and grasses. The water in these areas are assumed to be fresh, and not brackish or saline.

Palustrine, Emergent, Irregularly Flooded wetland (PEM1P) occupies some areas near the tributary and the sloughs as well as most of the drained lakebed to the south of the existing airport. These wetlands are tidally influenced and are characterized by an influx of tidal water over the land surface less often than daily. Standing water and a shallow water table are common in these areas and the dominant vegetation is grasses and sedges.

Palustrine, Persistent Emergent, Seasonally Flooded wetland (PEM1C) and *Palustrine, Persistent Emergent, Saturated* wetland (PEM1B) occupies areas that are not directly associated with the Kwigillingok River or the tributary. PEM1B wetlands are slightly less wet than many of the other wetlands in the area. These areas are saturated much of the time but surface water is rarely present. PEM1C wetlands are characterized by the presence of surface water for extended periods early in the season and not later in the season. Both PEM1B and PEM1C wetlands are interspersed throughout the project area and both are dominated by grasses and sedges.

Palustrine, Persistent Emergent, Semipermantly Flooded wetland (PEM1F) occupies many of the areas that are not associated with the tidally influenced tributary. Much of the vegetation consists of sedges and other rooted herbs. Surface water remains in these wetlands most of the year.

Palustrine, Unconsolidated Mud Bottom, Permanantely Flooded Ponds (PUB3H) occupy the areas and channels that do not drain directly into the Kwigillingok River. Ponds are largely unvegetated, however, sedges may inhabit the shoreline.

Riverine, Tidal/Lower Perennial, Unconsolidated Mud Bottom waters (R2UB3H/R1UB3H) occupy the tributary and associated sloughs that drain into the Kwigillingok River. The gradient of the tributary is low and the water velocity is influenced by tides that intermittently affect the Kwigillingok River. They are largely unvegetated with a tidally deposited silt substrate.

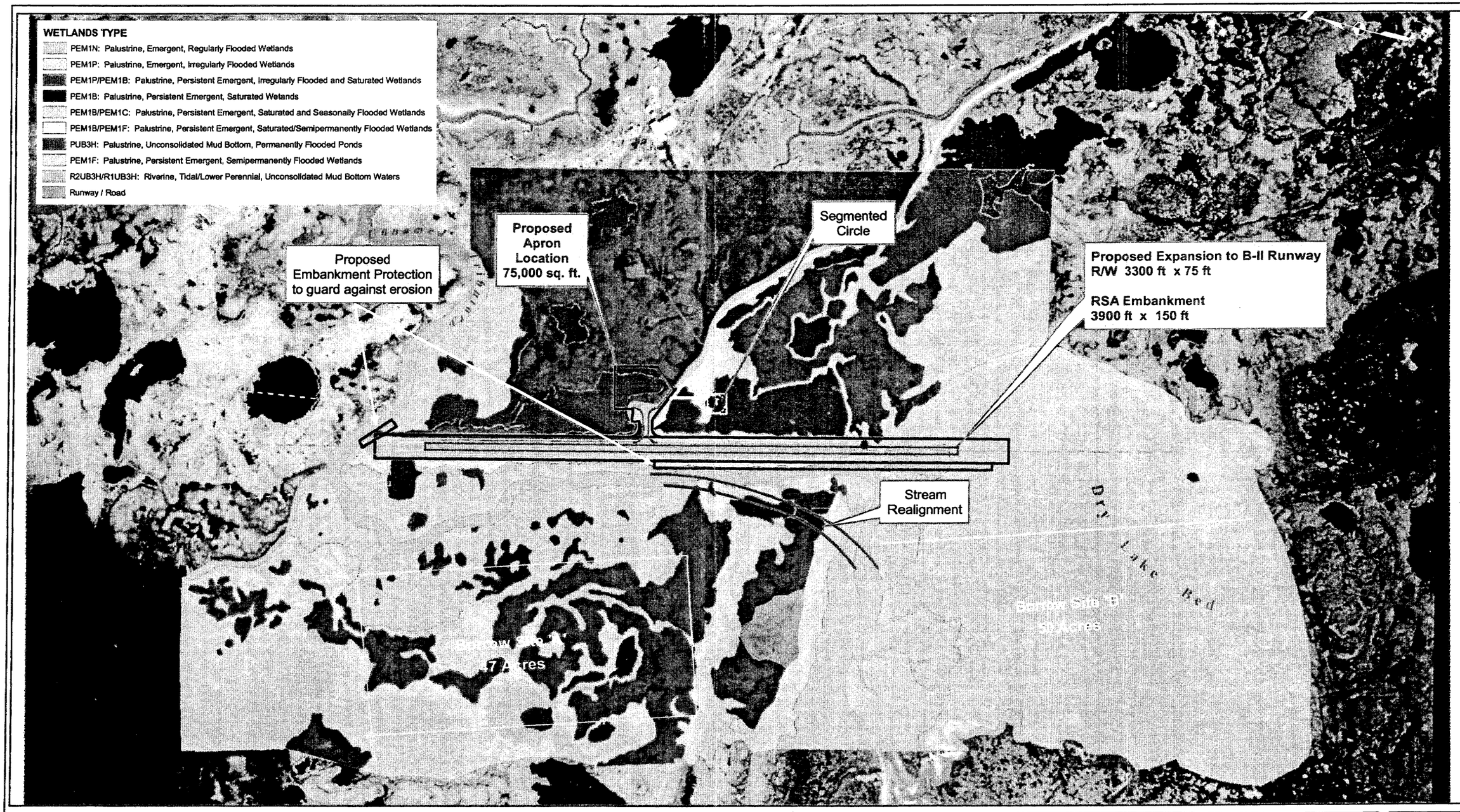
Table 1. Wetland and Waterbody Types in the Kwigillingok Airport Project Area.

Wetland and Waterbody Type	NWI Code
Palustrine, Emergent, Regularly Flooded wetlands	*PEM1N*
Palustrine, Emergent, Irregularly Flooded wetlands	*PEM1P*
Palustrine, Persistent Emergent, Saturated wetlands	*PEM1B*
Palustrine, Persistent Emergent, Irregularly Flooded and Saturated wetlands	*PEM1P/PEM1B*
Palustrine, Persistent Emergent, Saturated and Seasonally Flooded wetlands	*PEM1B/PEM1C*
Palustrine, Persistent Emergent, Semipermantly Flooded wetlands	*PEM1F*
Palustrine Persistent Emergent Saturated/Semipermanently Flooded wetlands	*PEM1B/PEM1F*
Palustrine, Unconsolidated Mud Bottom, Permanantely Flooded Ponds	*PUB3H*
Riverine, Tidal/Lower Perennial, Unconsolidated Mud Bottom waters	*R2UB3H/R1UB3H*
Total	

Wetland Function and Importance

All the wetland types in the project vicinity are important in nutrient cycling that supports the food web of the area. Organic matter and nutrients from plant and animal sources are used onsite and transported offsite by mobile animals and flowing water. All the wetlands in the project area provide plant and wildlife habitat. The wetlands directly adjacent to the Kwigillingok River are subject to tidal influence, which make them less suitable for nesting. The vegetation in these wetlands protects against erosion during tidal fluctuation and storm surges. The tidal habitats may be used as feeding areas for fish when inundated.

While these wetlands provide important habitat for individual organisms and provide some nutrients that support food webs offsite, wetlands are ubiquitous in the Kwigillingok area.



DNA
David Nairne | Associates

HDR Alaska, Inc.

Kwigillingok Airport
Supplemental Environmental Assessment

WETLANDS AND WATERBODIES WITHIN THE PROJECT AREA

Date
October 2002

Figure
1

Appendix F
Bank Stabilization Technical Memo

To Scott Wharton

From Justin Marcum

Date 8/15/02

Subject Kwigillingok Airport Bank Stabilization

HDR Alaska

M e m o r a n d u m

BACKGROUND

The Native Village of Kwigillingok has expressed an interest in expanding the existing runway. Plans include extending and widening the existing runway and safety areas. These improvements will bring the airport up to current federal and state standards for the typical aircraft use.

Currently there are erosion problems at the northern end of the runway as well as at the southwest edge of the safety area from a slough the feeds into the Kwigillingok River and ultimately into Kuskokwim Bay. The planned safety area expansion will only compound the erosion problem due to the fact that the safety area side slopes will impede upon the existing slough channel.

Tribal administrator Oscar Evon was contacted to obtain some slough history and it was found that the airport was constructed before the slough formed. The airport was constructed in the early 1970's and the slough formed shortly after draining the lake in the area. It appears that the runway embankment limited the slough from forming with natural meanders.

ALTERNATIVES

Three basic strategies exist to control erosion problems such as those encountered in Kwigillingok. These include "hard" erosion protection such as armor mat, "soft" protection such as a vegetative mat, and channel realignment. Combinations of these strategies may provide the best overall erosion protection and bank stabilization.

Armor Mat

Use of "hard" erosion protection such as a concrete block armor mat was chosen by the State Department of Transportation and Public Facilities (DOT&PF) in the original airport reconstruction plans dated 1996, although this construction was never completed. The typical section from these plans is shown in the attached Figure 1. Also attached is Figure 6 from the Kwigillingok Airport Improvements Environmental Assessment dated January 1996. This figure is a similar section but more detailed with elevations and the extents of the armor mat in plan view.

This typical section also includes a slight realignment in order to accommodate the additional width involved in widening the safety area. It should be noted that these construction plans called for an increase in the safety area width from 100 feet to 120 feet. The current project description involves an increase to 150 feet. Therefore the current project requires an additional 25 feet on each side of centerline versus the original 10 feet on each side. This increase of 15 feet will significantly increase the amount of channel realignment required.

Another issue associated with this alternative includes the determination of the depth at which to extend the armor mat. The armor mat should be extended to at least the bottom of the existing channel if not deeper. The DOT&PF typical section has the armor mat ending at a specific elevation above the bottom of the existing channel. Also a filter fabric should be placed below the concrete blocks to prevent soil from leaching outside of the mat. The apparent opening size of this filter fabric should be designed to accommodate the grain size of the soils present on site.

Vegetation

Another alternative to be considered is the use of "soft" erosion protection. This could include anything from salvaging vegetation from the borrow pit to customizing a seed mix or using a commercial seed mix.

Nancy Moore with the Alaska Plant Materials Center stated that the best option is to salvage the natural vegetation because it is most likely to survive in the long term. She also stated that a commercial mix probably would not work although a custom seed mix would work if time was available to bioengineer it. The commercial mix would not take to the saturated silty soil present in the area. She also stated that suitable side slopes such as 3 horizontal to 1 vertical should be used.

Vegetation could be used in conjunction with armor mat. Some forms of armor mats contain open cells within the concrete that provide growing areas to plant vegetation. This combination will provide an additional form of physical stability.

Channel Realignment

HDR has determined that channel realignment is a viable alternative. The channel could be realigned as shown in the attached Figure 2. This would move the channel away from the erosion problem area and allow for adequate area to widen the safety area. The existing channel will be filled with spoils from the realignment. This realignment would shorten the length of the channel and therefore increase the slope of the channel. The additional increase in slope is unknown at this time but could be obtained with additional survey information. It is assumed that the increase in slope will not cause any significant increase in velocity due to the fact that this slough is tidally affected and is essentially in a backwater condition.

The existing channel, in locations upstream and downstream of the airport, should be surveyed in order to obtain what the original slough morphology is including average channel width, side slopes, and channel slope.

The side slopes of the realigned channel would need to be shaped similar to what the original slough side slopes were. The realignment would also eliminate a 90° turn in the slough that might have been created with the original construction of the airport and return the slough similar to its original morphology.

PREFERRED ALTERNATIVE

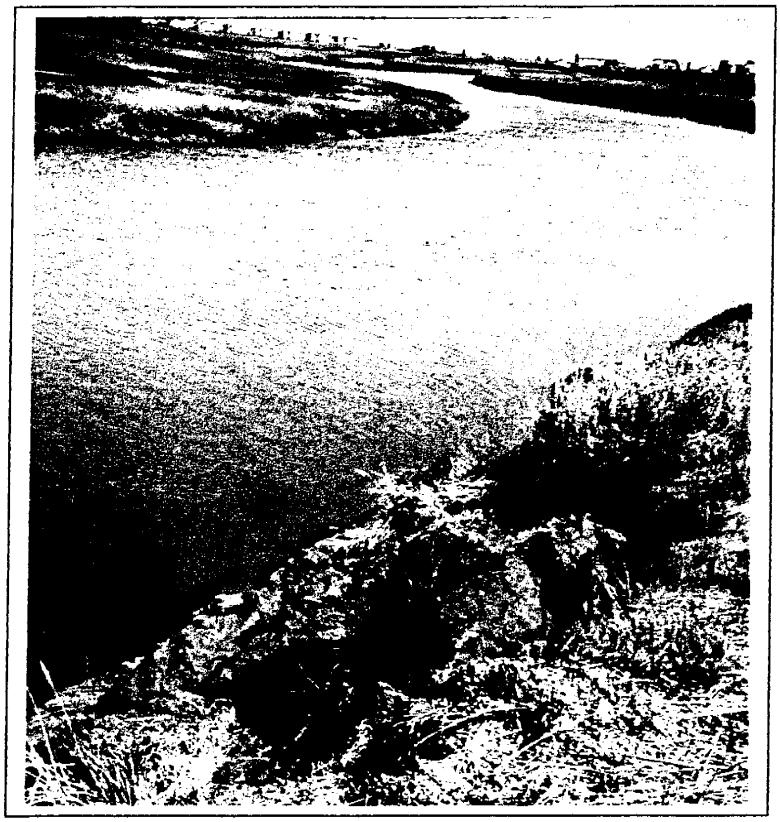
The preferred alternative is a combination of all three alternatives. The channel should be realigned as shown in Figure 2. Vegetation from the realignment should be salvaged and placed on the new channel side slopes. This natural vegetation should be used due to the fact that it is already surviving and existent in this type of material and will provide the best stabilization in the long term.

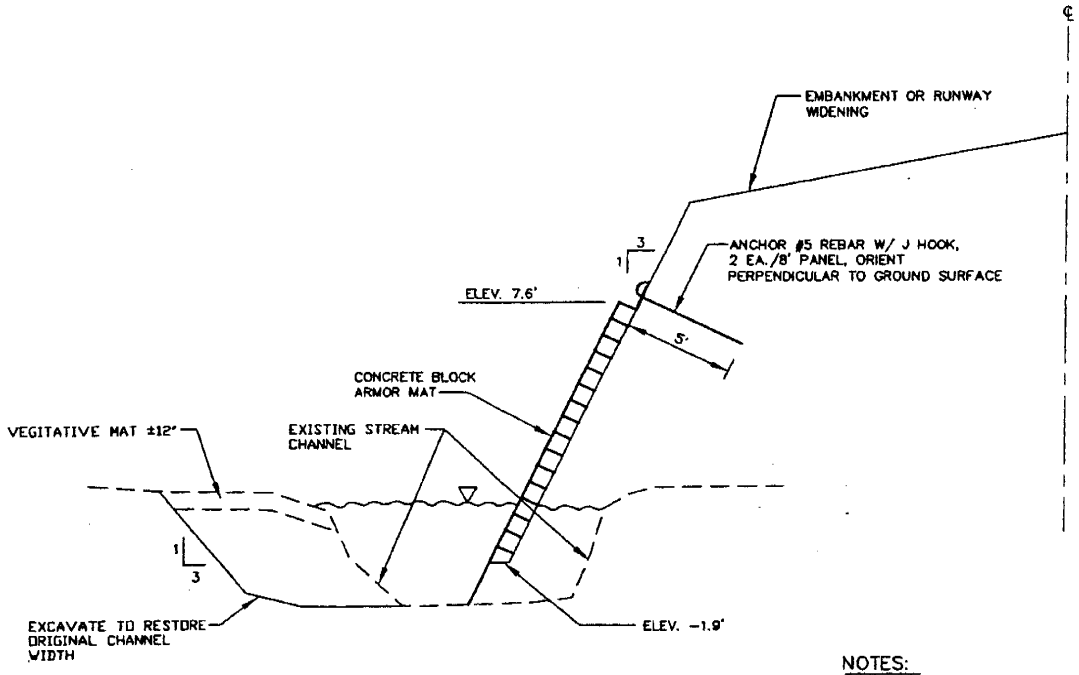
The final design for this realignment is contingent on additional survey information. The new channel slope and morphology should be as similar as possible to the original channel to try and maintain the original flow. Channel cross-sections should also be obtained in the slough immediately adjacent to the runway.

Open celled concrete armor mat should still be placed on the safety area embankment where the erosion problem occurred on the southwest side of the runway. The cells should be filled with salvaged vegetation or planted with a customized seed mix similar to that of the natural vegetation. If the channel realignment is properly designed and constructed then the channel will no longer be in contact with this area. Although if the channel begins to migrate toward the runway, the safety area embankment will be protected and stable due to the fact that it would have been in place for awhile and the vegetation would have had time to establish.

Open celled armor mat with vegetation should also be placed at the north end of the runway where erosion is occurring. This should be suitable at this location. If the side slope needs to be adjusted there is room to do so due to the fact that the safety area is being shifted 50 feet to the

south to compensate for the erosion problem. The side slope of the channel with the armor mat should be placed at the same side slope of the existing channel that has been surveyed. This is most likely at a 3 horizontal to 1 vertical ratio or 4:1 slope whereas the existing embankment slope is closer to a 2:1 slope. The purpose for the "hard" protection in conjunction with the "soft" protection is based on the fact that the "hard" protection will provide immediate protection while the "soft" protection has time to establish itself.





TYPICAL SECTION
NO SCALE

NOTES:

1. ARMOR MAT SEGMENT SIZE 8' X 30'
2. ACTUAL MAT LOCATION MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
3. VEGITATIVE MAT SHALL BE SET ASIDE SEPARATELY. UPON COMPLETION OF EXCAVATION, MAT SHALL BE PLACED ON DISTURBED STREAM SLOPES IN EXCAVATED AREA.

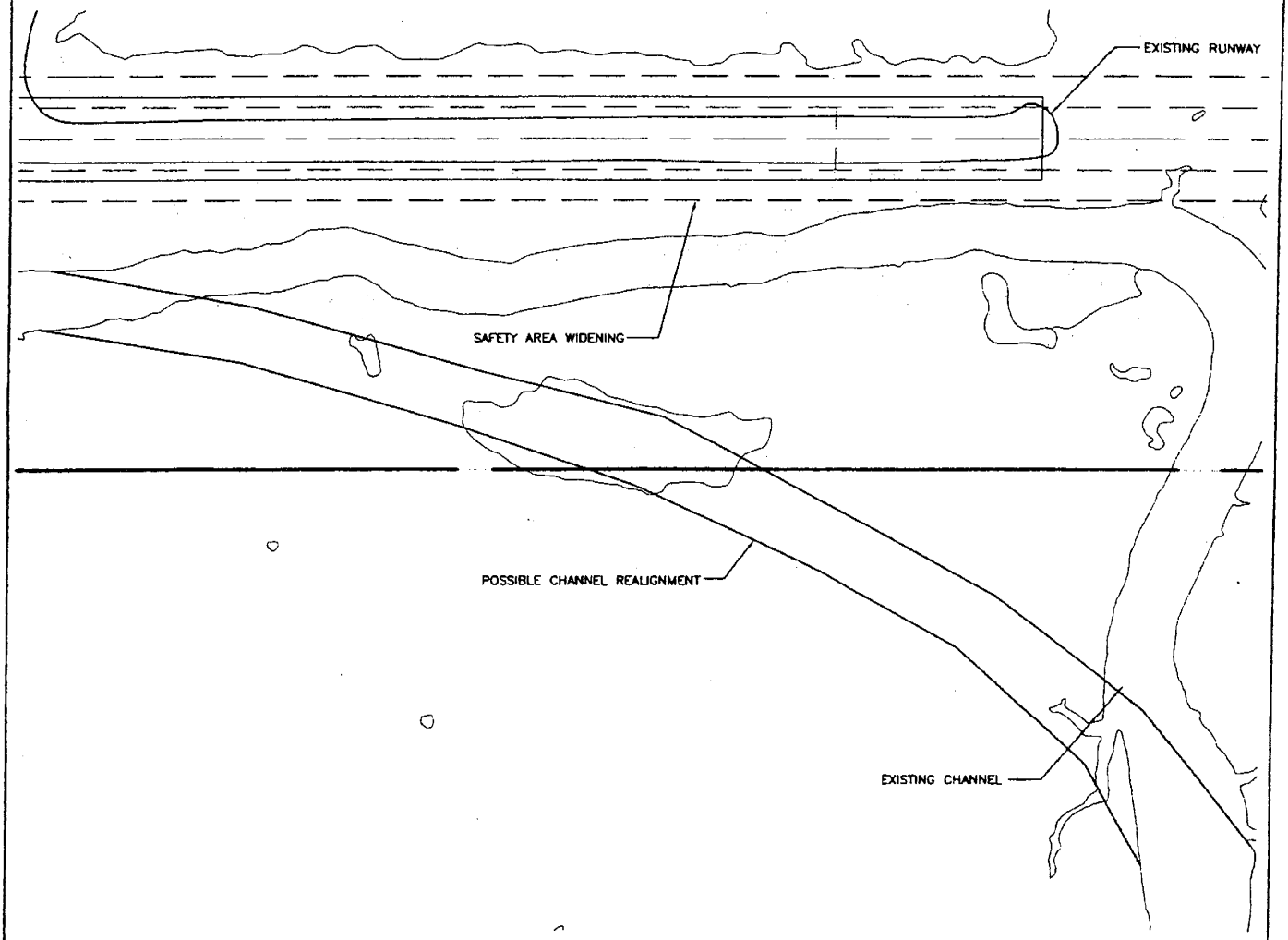
HDR Alaska, Inc.

Kwigillingok Airport

ORIGINAL ADOT TYPICAL SECTION

Date
JULY 2002

Figure
1



HDR Alaska, Inc.

Kwigillingok Airport

SLOUGH REALIGNMENT

Date
OCT 2002

Figure
2