

**Kwigillingok Airport  
Improvements**

**Project No. 60118**

**Prepared by:**

**State of Alaska  
Department of Transportation  
and Public Facilities**

**for:**

**Federal Aviation Administration**

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**DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

**FINDING OF NO SIGNIFICANT IMPACT**

Kwigillingok Airport, Kwigillingok Alaska  
Kwigillingok Airport Improvements  
Environmental Assessment

**PROPOSED FEDERAL ACTION**

1. Federal funding for a proposed project through the Airport Improvement Program.
2. Approve a revision to the Airport Layout Plan.

**PROPOSED PROJECT**

Alternative A, the proposed action, consists of rehabilitation and reconstruction of the primary runway and apron at Kwigillingok, Alaska. Construction must take place 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 Long-Term (3-10 years).

Project Element	Existing Usable	Near-Term Usable	Long-Term Usable
		Category A-I	Category B-I
Runway (R/W) Length	2,510 ft	2,420 ft	3,000 ft*
R/W Width	50 ft	60 ft	60 ft
R/W Safety Length	2,900 ft	2,900 ft	3,480 ft*
R/W Safety Width	100 ft	120 ft	120 ft
Taxiway (T/W) Width	30 ft	30 ft	40 ft*
T/W Safety Width	40 ft	40 ft	80 ft*
Apron Dimensions	90x200 ft	90x200 ft	75,000 sf**
Future Equipment Storage Building Pad	none	50x90 ft	50x90 ft
Access Road	10x370 ft	14x370 ft	14x370 ft

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

\*\*The expanded apron footprint is irregular.

Only the Near-Term improvements are currently scheduled for funding. The Near-Term phase will provide the embankment for the Long-Term phase, when the embankment will be graded and surfaced. Additional improvements under the Near-Term phase include:

- 1) A new gravel surface for the existing runway, access road, apron, and taxiway.
- 2) The snow removal equipment storage building would be skidded to the new gravel pad. The building would receive a steel plate floor and a water/oil separator that would daylight to the outside to improve hazardous material spill containment capability.
- 3) A new rotating beacon constructed on the backside of the equipment storage building.
- 4) A new lighted windcone 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 as described below.

The airport is situated within a 109-acre tract of land, leased to the Alaska Department of Transportation and Public Facilities (ADOT&PF) by U.S. Fish and Wildlife Service (USF&WS). The lease is administered by Kwik, Inc., the Village Corporation. Proposed right-of-way acquisition would be approximately 109 acres. The form of the acquisition has not been determined yet. Final resolution will be made during the right-of-way land acquisition phase.

The existing apron would be expanded to the east, placing 31,000 cy of fill within an adjacent pond. It will take several years for the expanded apron embankment to settle because it is being constructed from local material. Therefore, a new gravel pad is proposed for the equipment storage building, which would require approximately 1,200 cy of imported gravel.

The stream on the west edge of the primary runway must be realigned slightly to eliminate erosion of the runway embankment. Dredging operations would remove approximately 9,450 cy of material from 825 linear feet, up to 60 feet wide. Additional protection would be provided by a 690-foot long concrete block armor mat placed along the runway embankment.

Altogether 123,000 yards of material would be excavated from approximately 12.5 to 15.5 acres of a delineated 25-acre material site along an intertidally influenced stream. Excavation would be accomplished so that ground levels would slope downward toward the stream. Mining operations would be conducted to 5-foot depths, the depth of the stream. This would maintain the hydrological connection and eliminate possible stranding of fish.

Long-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.



The revision of the Airport Layout Plan consists of the delineation of the proposed project elements.

## CONDITIONS OF APPROVAL

Conditions of approval associated with this project are:

1. Use of Best Management Practices (included in the construction contractor's Stormwater Pollution Prevention Plan) to minimize impacts to wetlands. The disturbed parts of the proposed borrow area would be rehabilitated per State requirements. Cross drainage will be maintained in the runway through culverts where necessary. The stream realignment and the material site will meet all Alaska Department of Fish and Game requirements for fish passage and habitat. All erodible slopes and disturbed surfaces would be revegetated. The Contractor will be required to accomplish the work in accordance with the conditions of the National Pollutant Discharge Elimination System (NPDES) General Permit.
2. The construction of embankment for airport improvements would be done in the winter when the ground is frozen. Winter construction is the only practicable way to handle the very saturated, soft, silty material. This would also avoid the nesting period of the spectacled eider, a sea duck listed as a threatened species. Gravel surfacing and hauling operations would be conducted during the summer. The USF&WS will be invited to a preconstruction meeting to discuss protocol for encountering threatened or endangered species and other concerns. The Department will provide eider identification cards to the construction contractor for distribution to employees. If spectacled eiders are observed within the project limits, the USF&WS will be contacted immediately.
3. The construction contractor will either back haul construction wastes or place the waste material in the Kwigillingok landfill. The Contractor will have to acquire approval from the village to utilize its landfill for waste disposal. All construction refuse will be handled according to the requirements of the Department of Environmental Conservation Solid Waste Program.
4. Airport users would be notified prior to construction activities to minimize inconvenience of travel.
5. The construction contract will contain the provision "should cultural or paleontological resources be discovered as a result of this activity, all work that would impact these resources will halt and the State Historic Preservation Officer shall be notified immediately at 762-2622."
6. The construction contract will contain the requirement, "should hazardous waste or suspected hazardous substances be encountered during construction, all work in the vicinity of these substances shall be halted and the Department of Environmental Conservation shall be notified immediately."
7. The construction contractor will be required to submit a hazardous material control plan addressing the handling and disposal of waste oil and other hazardous wastes generated and the cleanup of any accidental spills of hazardous wastes used during construction.

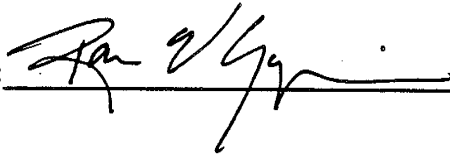
**DECISION CONSIDERATIONS**

Environmental Assessment (EA): After examination of the EA, the Federal Aviation Administration (FAA) has determined that, the EA addresses all issues adequately to demonstrate that no thresholds for significant impacts have been exceeded and an EIS is not required. In addition, with this and other information available, the FAA has determined that the proposed project is clearly beneficial in fulfilling the FAA's statutory mission of promoting a safe and efficient nationwide airport system.

Conclusion: Based on the EA, the FAA opts to use a finding of no significant impact based on its conclusion that the proposed project will not have a significant effect on the human environment.

**FEDERAL FINDING**

After careful consideration of the facts contained herein, the undersigned finds that the proposed Federal action is consistent with existing national environmental policies and 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:  DATE: 22 JAN 96

DISAPPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

**KWIGILLINGOK AIRPORT IMPROVEMENTS**

**Project No. 59779**

**ENVIRONMENTAL ASSESSMENT**

**PREPARED BY STATE OF ALASKA**

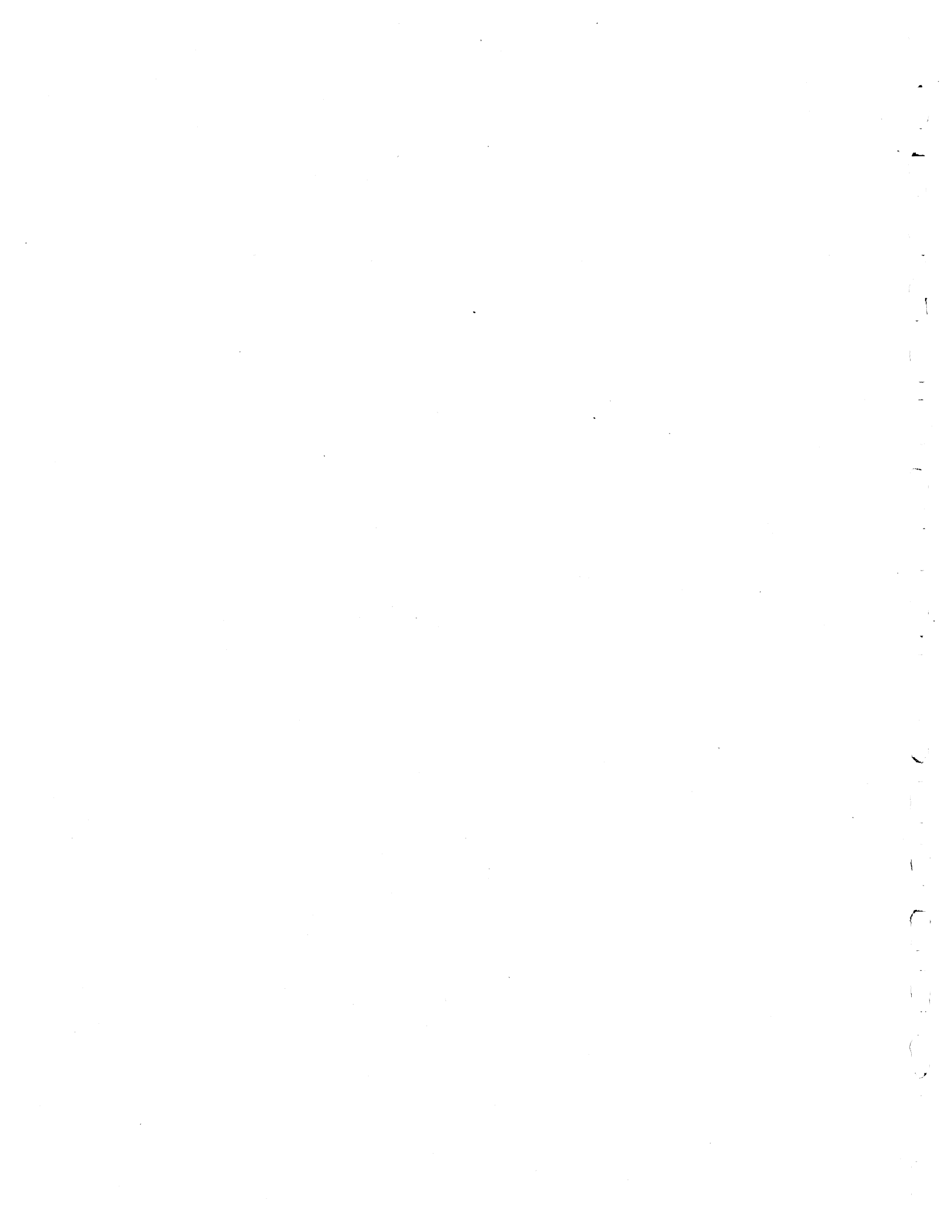
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**

**January 1996**

**This environmental assessment becomes a Federal document when evaluated and signed by the responsible FAA official.**

  
\_\_\_\_\_  
Responsible FAA Official

1-8-96  
\_\_\_\_\_  
Date



## SUMMARY

The ADOT&PF 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 into current federal and State standards for length, width, apron size, and setback (Figures 2 and 3). The following summary describes the proposed action, Alternative A.

**Table 1**  
**Proposed Improvements (Alternative A)**

Project Element	Existing Usable	Near-Term Usable	Long-Term Usable
		Category A-I	Category B-I
Runway (R/W) Length	2,510 ft	2,420 ft	3,000 ft*
R/W Width	50 ft	60 ft	60 ft
R/W Safety Length	2,900 ft	2,900 ft	3,480 ft*
R/W Safety Width	100 ft	120 ft	120 ft
Taxiway (T/W) Width	30 ft	30 ft	40 ft*
T/W Safety Width	40 ft	40 ft	80 ft*
Apron Dimensions	90x200 ft	90x200 ft	75,000 sf**
Future Equipment Storage Building Pad	none	50x90 ft	50x90 ft
Access Road	10x370 ft	14x370 ft*	14x370 ft*

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

\*\* The expanded apron footprint is irregular.

Construction must take place 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 Long-Term (3-10 years). Only the Near-Term improvements are currently scheduled for funding. The Near-Term

phase will provide the embankment for the Long-Term phase, at which time the embankment will be graded and surfaced. Additional improvements under the Near-Term phase include:

- 1) New gravel surfacing for the existing runway, access road, apron, and taxiway.
- 2) The snow removal equipment storage building would be skidded to the new gravel pad. The building would receive a steel plate floor and a water/oil separator that would daylight to the outside to improve hazardous material spill containment capability.
- 3) A new rotating beacon constructed on the backside of the equipment storage building.
- 4) A new lighted windcone 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 as described below.

The airport is situated within a 109 acre tract of land which is leased to ADOT&PF until 1999 by USF&WS. The lease is administered by Kwik, Inc., the Village Corporation to which the land was conveyed under the Alaska Native Claims Settlement Act (ANCSA). Proposed right-of-way acquisition would include approximately 105.6 acres in fee (42.6 acres from Native Allotments and 63 acres from Kwik, Inc.), 3.2 acres of avigation and hazard easement over a creek (ADNR) and 35 acres from ADNR under an Interagency Land Management Agreement (ILMA). Total property acquisition would be approximately 109 acres.

The form of the acquisition has not been determined yet. Leaders of the community have expressed the desire to retain all land holdings. The leasing issue is currently being addressed on a Statewide basis for its applicability to all rural airports. Final resolution at the Kwigillingok Airport will be made during the right-of-way land acquisition phase of the project.

The village prefers expanding the existing apron to the east. This requires placing 31,000 cy of fill within an adjacent pond that evolved from an old borrow cell. It will take several years for the expanded apron embankment to settle because it is being constructed from local material. Therefore, a new gravel pad is proposed for the equipment storage building. The pad would be adjacent to the Airport Access Road, approximately 350 feet east of the existing apron.

The stream on the west edge of the primary runway must be realigned slightly to eliminate erosion of the runway embankment. Altogether 123,000 yards of material would be excavated from approximately 12.5 to 15.5 acres of a delineated 25-acre material site. The proposed site is along an intertidally influenced stream (Figure 2). The village favors this location. The realignment and the material site will meet all ADF&G requirements for fish passage.

Long-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.

The proposed project is in the Ceñaliulriit Coastal Resource Management District. Approximately 24 acres of wetlands would be impacted by the proposed improvements and borrow activities under the Near-Term and Long-Term phases, including the stream realignment. ADOT&PF Best Management Practices would be used to minimize impacts to wetlands during construction activities. ADOT&PF will not designate a barge landing site. However, the Construction Specifications will require the Contractor to obtain all necessary permits for a barge landing once that site is identified.

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## **APPENDICES**

- A. Public and Agency Coordination
- B. Draft Airport Layout Plan
- C. USF&WS Field Report
- D. Permits and Certifications
- E. Best Management Practices
- F. Section 7 Documentation

## DEFINITIONS

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Aircraft Approach Category: A grouping of aircraft based on 1.3 times stall speed in landing configuration at maximum certificated landing weight. The categories are as follows:

Category A: Speed less than 91 knots.

**Category B: Speed 91 knots or more but less than 121 knots.**

Category C: Speed 121 knots or more but less than 141 knots.

Category D: Speed 141 knots or more but less than 166 knots.

Category E: Speed 166 knots or more.

Airplane Design Group: A grouping of airplanes based on wingspan. The groups are as follows:

**Group I: Up to but not including 49 feet (15 m).**

Group II: 49 feet (15 m) up to but not including 79 feet (24 m).

Group III: 79 feet (24 m) up to but not including 118 feet (36 m).

Airport Layout Plan (ALP): The plan of an airport showing the layout of existing and proposed airport facilities.

Airport Reference Code: A coding system used to relate airport design criteria to the operational and physical characteristics of the airplanes intended to operate at the airport. Example: Airports expected to accommodate single-engine airplanes normally fall into Airport Reference Code B-I. Airports serving larger general aviation and commuter-type airplanes are usually Airport Reference Code B-II or C-II.

Alaska Aviation System Plan (AASP): The State of Alaska's plan developed in the mid-1980's for the purpose of providing guidelines for developing, operating, and maintaining the Alaska Aviation System. The plan was developed by the ADOT&PF in accordance with FAA guidelines for "State Airport System Plans", and in response to a 1980 National Transportation Safety Board (NTSB) special study, "Air Taxi Safety in Alaska". That study indicated that accident rates among air taxi operators in Alaska are significantly higher than the rest of the United States. The NTSB identified several contributing factors and recommended that the State prepare an aviation system plan in addition to taking other direct actions to improve airport facilities. The AASP is currently being revised.

Crosswind Runway: An additional runway recommended when the primary runway orientation provides less than 95 percent wind coverage for any aircraft forecasted to use the airport on a regular basis. The length of the crosswind runway should be 80 percent the length of the primary runway. The 95 percent wind coverage is computed on the basis of the crosswind not exceeding 10.5 knots for Airport Reference Codes A-I and B-I, 13 knots for Airport Reference Codes A-II and B-II, etc.

Runway (R/W): A defined rectangular surface on an airport prepared or suitable for the landing or takeoff of airplanes.

Runway Length: The extent of a runway based on AC 150/5325 and airplane flight manuals or computer program "Airport Design (for Microcomputers) Version 4.1".

Runway Protection Zone: An area off the runway end to enhance the protection of people and property on the ground.

Runway Safety Area: A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway.

Taxiway (T/W): A defined path established for the taxiing of aircraft from one part of an airport to another.

Taxiway Safety Area: A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an airplane unintentionally departing the taxiway.

Wind Coverage: See definition of Crosswind Runway above. Wind coverage refers to the percent of time that crosswinds exceed the capability of aircraft to make safe landings

## LIST OF ABBREVIATIONS

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<b>AASP</b>	Alaska Aviation System Plan
<b>AC</b>	Advisory Circular (FAA Published)
<b>ADEC</b>	Alaska Department of Environmental Conservation
<b>ADF&amp;G</b>	Alaska Department of Fish & Game
<b>ADOT&amp;PF</b>	Alaska Department of Transportation & Public Facilities
<b>ALP</b>	Airport Layout Plan
<b>ANCSA</b>	Alaska Native Claims Settlement Act
<b>BA</b>	Biological Assessment
<b>COE</b>	U.S. Army Corps of Engineers
<b>CY</b>	Cubic Yards
<b>DGC</b>	Office of Management and Budget, Division of Governmental Coordination
<b>EA</b>	Environmental Assessment
<b>EPA</b>	Environmental Protection Agency
<b>FAA</b>	Federal Aviation Administration
<b>FAR</b>	Federal Aviation Regulations
<b>KW</b>	Kilowatt
<b>NPS</b>	National Park Service
<b>NMFS</b>	National Marine Fisheries Service
<b>NPDES</b>	National Pollution Discharge Elimination System
<b>NTSB</b>	National Transportation Safety Board
<b>R/W</b>	Runway
<b>SHPO</b>	State Historic Preservation Officer
<b>USDOI</b>	U.S. Department of the Interior
<b>USF&amp;WS</b>	U.S. Fish & Wildlife Service



## **I. PURPOSE AND NEED**

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### **A. 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 (ALP) in 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) 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 airport lease expires in 1999 (Figure 1). 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; and the existing maintenance building's penetration of the airport's navigable airspace 7:1 transition surface. A crosswind runway would solve the first mentioned problem, 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.

There has not been an Airport Master Plan study conducted for the Kwigillingok Airport, therefore, the airport design recommendations contained in the ALP identify areas presently conflicting with the airport design recommendations contained in the Alaska Aviation System Plan (AASP). Other problems which affect (or will affect in the future) safe aviation operations not addressed by the AASP are proposed to be corrected in accordance with the FAA published advisory circulars on airport design standards (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).

## **B. 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 which require airports, especially isolated community airports, to exceed these 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 Advisory Circular (AC) 150/5300-13.

The AASP classifies airports for communities such as Kwigillingok's based on population and the role of providing access to the community. If the airport is the primary means of access to the community, the AASP classification of the airport is a Community class airport which recommends a minimum 3,000-foot long runway. If the airport provides secondary access to the community, the AASP classification is a Local class airport which recommends a minimum 2,100-foot long runway. The Kwigillingok Airport is the primary means of access to the community.

The existing improvements, located on a 109-acre lease administered by Kwik, Inc., consist of the following:

- ▶ 2,900-foot long by 100-foot wide runway safety area encompassing a 2,510-foot by 50-foot gravel surfaced airstrip;
- ▶ 90-foot by 200-foot (18,000 square feet) gravel surfaced apron;
- ▶ 100-foot by 30-foot connecting gravel surfaced taxiway; and
- ▶ 24-foot by 46-foot maintenance storage building located on the apron, which houses a 1986 motor grader.



## **1. Runway Length/Width and Safety Area**

The present 2,510-foot long runway is deficient in length by 490 feet according to the AASP. Runway width is not addressed in the AASP, therefore, according to FAA AC 150/5300-13, the present 50-foot wide runway was also found to be deficient.

The AASP does not incorporate the recommended dimensions for taxiways, however, 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 nine feet.

## **2. Apron Dimensions**

The existing 90-foot by 200-foot apron (18,000 square feet) is deficient in minimum service level size by 32,000 square feet according to the AASP. The apron is presently located approximately 160-170 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. It was recently built and is serviceable for sometime to come.

## **3. Operational Surfaces**

The present operational surfaces do not conform with FAA AC 150/5300-13. This regulation 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.

#### **4. Airport Lighting**

According to the AASP, airport lighting is considered a high priority at all airports in Alaska. State owned airports which 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 Kwigillingok villagers 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.

#### **5. Lease Lot Space**

There is presently no lease lot space available. That 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. No requests to the ADOT&PF for lease lot space at the Kwigillingok Airport have been made to date. 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." By providing more than one lease lot, an exclusive right to use airport property is deterred.

#### **6. Realignment of Intertidal Stream**

The southwestern edge of airport embankment currently suffers from erosion from seasonal and intertidal stream activity. The proposed project would slightly realign the stream away from airport embankment and provide embankment armor.

#### **7. Airport Title**

The airport property is currently leased from the local village corporation (Kwik, Inc.). This corporation is a private entity. The 1982 Airport and Airway Act states "No project grant application

for airport development may be approved by the Secretary unless the sponsor, a public agency, or the United States or an agency thereof holds good title, satisfactory to the Secretary, to the landing area of the airport or site therefore, or gives assurance satisfactory to the Secretary that good title will be acquired."

### **C. 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. This community has a population of 278 (1990 Census Counts for Alaska Natives, July 26, 1991). A majority of the flights to Kwigillingok which include mail, supplies, and air taxi service, originate in Bethel, located 85 miles to the northeast. These include daily scheduled flights by Hageland Aviation, and Yute Air Service. Ryan Air also serves Kwigillingok approximately twice a week with mail service. Other charter operators are Kusko Aviation, Craig Air, Rob Air, Bush Aviation, Camai Air, and Yukon Aviation. 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 prop such as the Cessna 207, Piper and Cherokee Six, as well as light twin engine aircraft such as the piper Navaho or Cessna 402. An estimated 4,400 operations occur per year (based on a poll of airlines, see Appendix A). Based on a two percent annual population increase experienced statewide, operations were projected to increase proportionally to an estimated 6,670 operations by 2013. The two percent growth rate is in conformance with growth rates used in the US Bureau of Indian Affairs, Juneau Area Transportation Study, Bethel Agency Report Vol. II for Kwigillingok. Note that activity data such as numbers of operations do not dictate design standards.

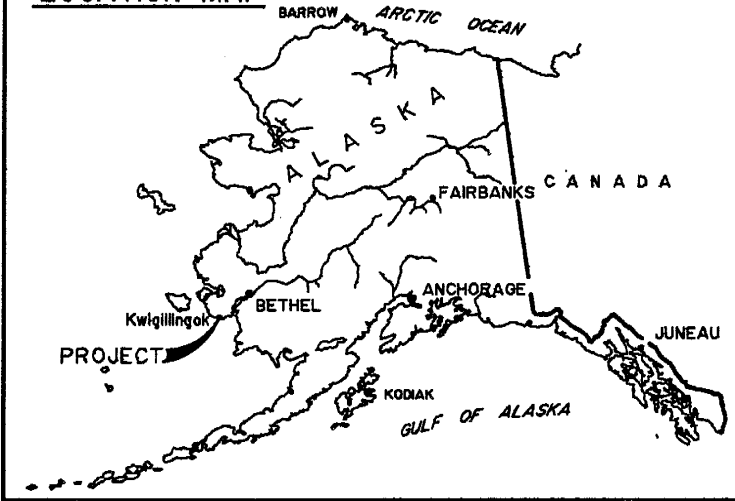
### **D. Purpose of Action**

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. A draft airport layout plan is provided in Appendix B.

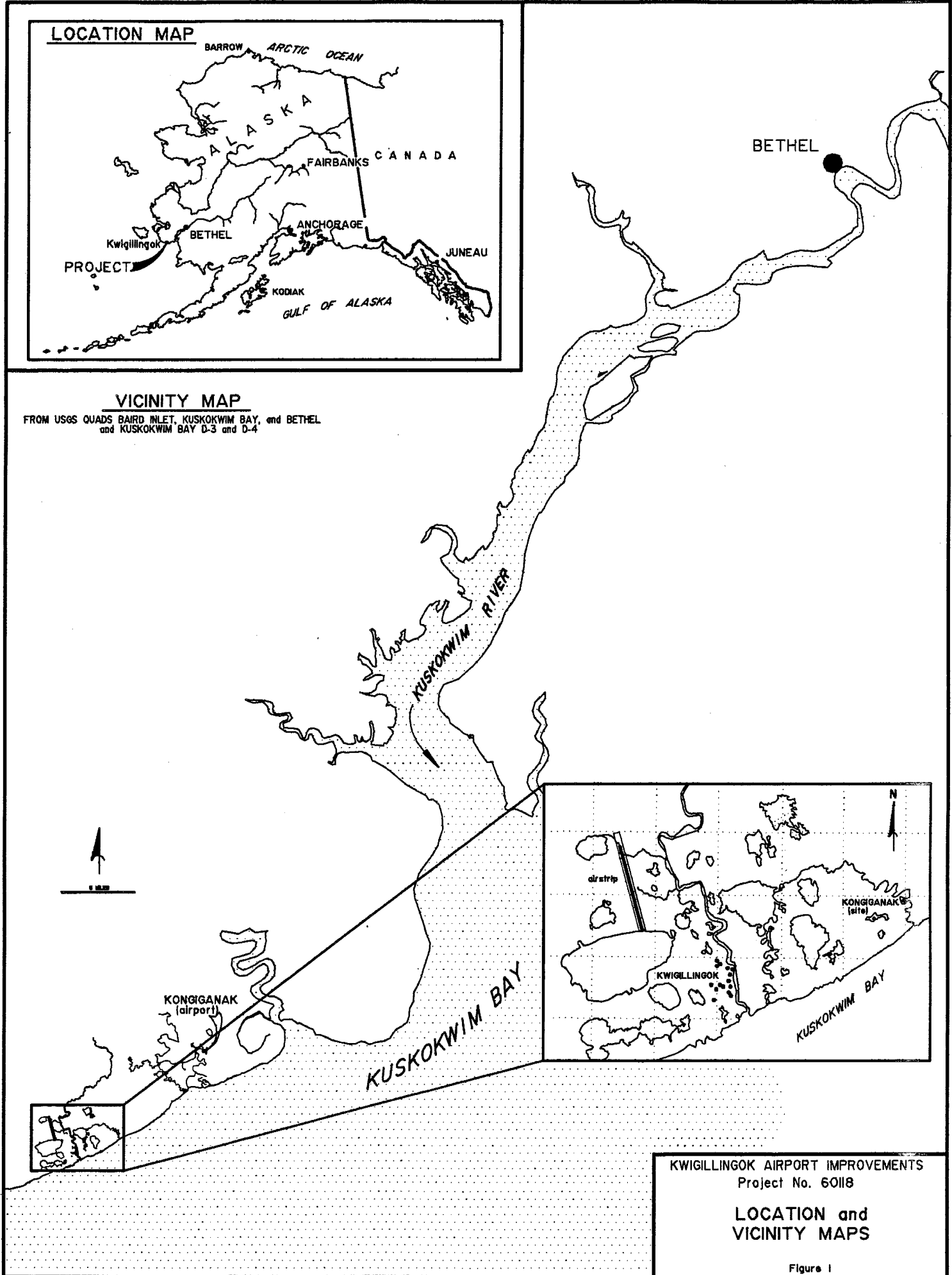
**Identification of Federal Action:** The formal requested federal action is for an Airport Improvement Program Grant providing funding for improvements to the airport. The cost of the proposed improvements is estimated at \$3.3 million. Near-Term improvements are programmed for FY 96. Long-Term improvements are not currently programmed. Improvements are listed in the preceding Summary and in Section II, Alternatives.

**LOCATION MAP**



**VICINITY MAP**

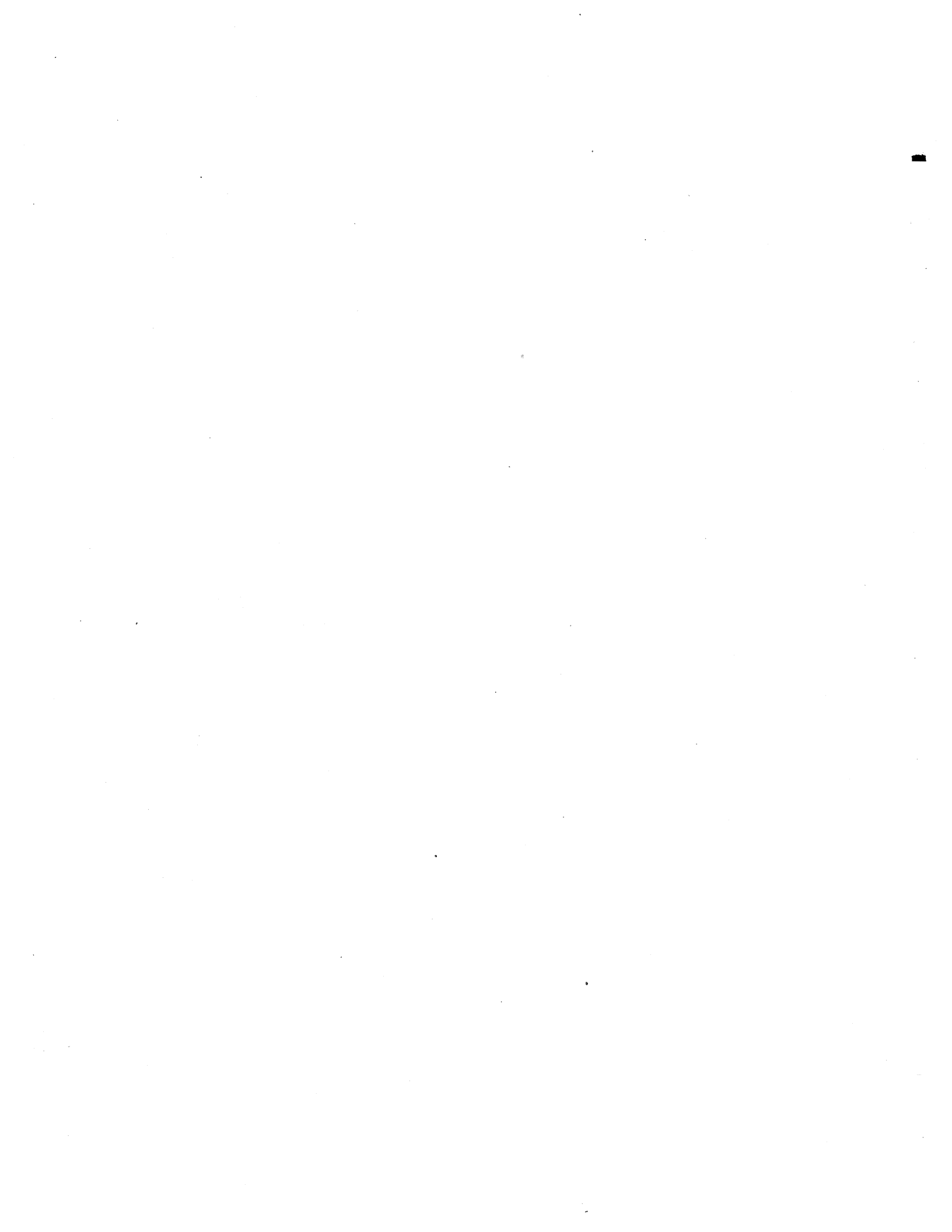
FROM USES QUADS BAIRD INLET, KUSKOKWIM BAY, and BETHEL  
and KUSKOKWIM BAY D-3 and D-4



KWIGILLINGOK AIRPORT IMPROVEMENTS  
Project No. 60118

**LOCATION and  
VICINITY MAPS**

Figure 1



## II. ALTERNATIVES CONSIDERED

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One build alternative was considered viable and carried through the environmental evaluation: the proposed action Alternative A, which would rehabilitate and reconstruct the existing runway. The No-Build Alternative was also evaluated. Alternative B, which would add a new crosswind runway, was not selected because it received negative public and agency response.

Any proposed improvement at Kwigillingok Airport would be in wetlands. It is usual to consider an all uplands alternative as well as other transportation alternatives to improvements in wetlands. Kwigillingok, however, is on the Kwigillingok River within a mile of the Kuskokwim Bay and is completely surrounded by wetlands. No uplands at all exist within a reasonable distance to the community. Vast areas of delta, river meanders, and pot-hole lake wetlands separate this community from the nearest neighbor with an airport, Kongiganak (approximately 9 air miles away). Given the wetlands situation, no additional investigation of an all or partial uplands alternative appears warranted. Measures to avoid and minimize wetlands are discussed in the Wetlands Impact Category of the Environmental Consequences Section.

A road connection between Kwigillingok and Kongiganak is outside the purview of the FAA. However, a road is feasible to build; constructed to "pioneer" standards (minimum width 20 feet); in a straight line from village to village; with bridges and culverts where appropriate. A straight line road could conceivably impact 30 or more acres of wetlands and cost \$5,000,000.00 at a minimum. Costs and impacts would undoubtedly be greater than those figures due to right-of-way acquisition, design and environmental costs as well as the fact that no road between these villages would be straight (and therefore, longer than 9 miles). Maintenance costs would be high, construction material is scarce, and there would be potentially significant impacts to rivers and streams from bridge construction and culvert installation. It is unknown how many people would want overland travel between Kwigillingok and Kongiganak nor would a road solve the transportation problem without airport improvements in Kongiganak (programmed for FY 96). Based upon the above considerations, this alternative was dismissed from serious consideration.

**ALTERNATIVE A: PROPOSED ACTION** consists of rehabilitation and reconstruction of the primary runway and apron at Kwigillingok, Alaska (Figure 2). Construction must take place 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 Long-Term (3-10 years) (Table 2).

Only the Near-Term improvements are currently scheduled for funding. The Near-Term phase will provide the embankment for the Long-Term phase, at which time the embankment will be graded and surfaced. The cost of the proposed Near-Term improvements is estimated at \$ 3.3 million, and are programmed for construction in FY 96.

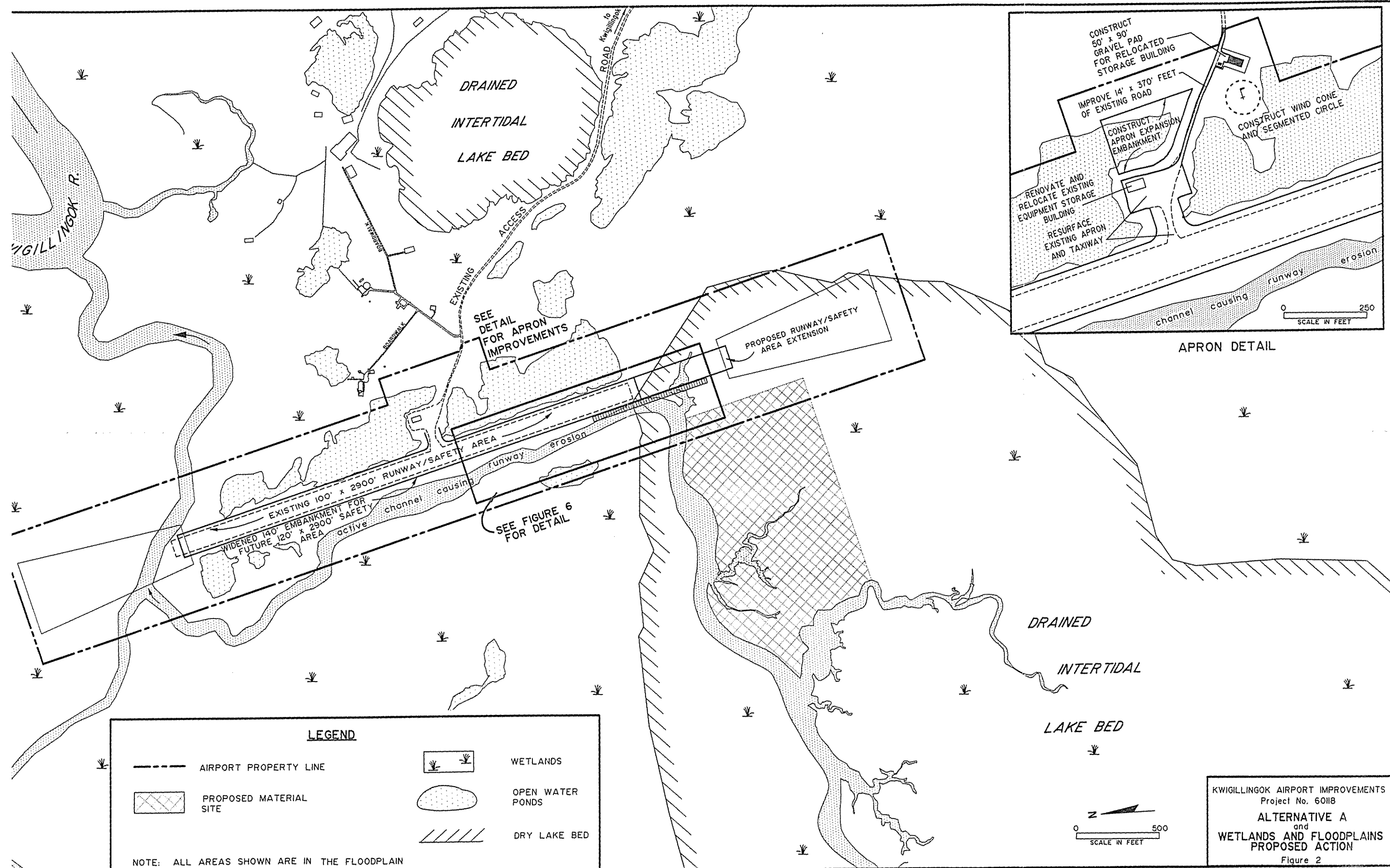
**Table 2  
Proposed Improvements (Alternative A)**

Project Element	Existing Usable	Near-Term Usable	Long-Term Usable
		Category A-I	Category B-I
Runway (R/W) Length	2,510 ft	2,420 ft	3,000 ft*
R/W Width	50 ft	60 ft	60 ft
R/W Safety Length	2,900 ft	2,900 ft	3,480 ft*
R/W Safety Width	100 ft	120 ft	120 ft
Taxiway (T/W) Width	30 ft	30 ft	40 ft*
T/W Safety Width	40 ft	40 ft	80 ft*
Apron Dimensions	90x200 ft	90x200 ft	75,000 sf**
Future Equipment Storage Building Pad	none	50x90 ft	50x90 ft
Access Road	10x370 ft	14x370 ft	14x370 ft

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

\*\*The expanded apron footprint is irregular.





Additional improvements under the Near-Term phase include:

- 1) New gravel surface for the existing runway, access road, apron, and taxiway.
- 2) The snow removal equipment storage building would be skidded to the new gravel pad. The building would receive a steel plate floor and a water/oil separator that would daylight to the outside to improve hazardous material spill containment capability.
- 3) A new rotating beacon constructed on the backside of the equipment storage building.
- 4) A new lighted windcone 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 as described below.

The airport is situated within a 109 acre tract of land which is leased to ADOT&PF until 1999 by USF&WS. The lease is administered by Kwik, Inc., the Village Corporation to which the land was conveyed under the Alaska Native Claims Settlement Act (ANCSA). Proposed right-of-way acquisition would include approximately 105.6 acres in fee (42.6 acres from Native Allotments and 63 acres from Kwik, Inc.), 3.2 acres of avigation and hazard easement over a creek (ADNR) and 35 acres from ADNR under an Interagency Land Management Agreement (ILMA). Total property acquisition would be approximately 109 acres.

The village rejected a proposed new apron site off the southeast end of the runway and prefers expanding the existing apron to the east. This requires placing 31,000 cy of fill within an adjacent pond that evolved from an old borrow cell. It is not tidally influenced. The expanded apron footprint is irregular and is about 75,000 square feet. It will take several years for the expanded apron embankment to settle because it is being constructed from local material. Therefore, a new gravel pad is proposed for the equipment storage building in the Near-Term. The pad would be

adjacent to the Airport Access Road, approximately 350 feet east of the existing apron. This would require approximately 1,200 cy of imported gravel.

The stream on the west edge of the primary runway must be realigned slightly to eliminate erosion of the runway embankment (Figure 6). Dredging operations would remove approximately 9,450 cy of material from 825 linear feet, up to 60 feet wide. Altogether this represents 1.13 acres. The dredged material would be used in the runway extension embankment. Additional protection would be provided by a 690-foot long concrete block armor mat placed along the runway embankment.

Altogether 123,000 yards of material would be excavated from approximately 12.5 to 15.5 acres of a delineated 25-acre material site. The proposed site is along an intertidally influenced stream (Figure 2). The village favors this location. Excavation of the borrow area would be accomplished so that ground levels would slope downward toward the intertidal slough. Mining operations would be conducted to 5-foot depths, the depth of the stream. This would maintain the hydrological connection and eliminate possible stranding of fish. The realignment and the material site will meet all ADF&G requirements for fish passage.

Long-Term development will consist of grading the expanded safety area and the expanded apron and then importing surface material for the runways, taxiway, and apron. ADOT&PF will not designate a barge landing site. Such designation could unduly restrict the contractor. However, the Construction Specifications will require the Contractor to obtain all necessary permits for a barge landing once that site is identified.

**Functional Analysis:** The proposed project will bring the airport into current federal and State standards for length, width, apron size and setback. This alternative meets the purpose (a safer airport) and satisfies most of the needs for the project. The runway length and width as well as safety area would be in conformance with the AASP recommendations after the Long-Term improvements are implemented. The apron would also be in conformance with recommended standards as would the taxiway, runway protection zone, building restriction line and approach slope angle. This

alternative would meet the runway obstacle free area, however, it does not address the need for a crosswind runway.

**Summary of Environmental Consequences:** No significant impacts have been identified for this alternative per the threshold analysis performed under paragraph 47(e) of FAA Order 5050.4A. The proposed action is within the Ceñaliulriit Coastal Management District. Approximately 24 acres of wetlands would be impacted by the proposed improvements and borrow activities under the Near-Term and Long-Term phases. ADOT&PF Best Management Practices would be used to minimize impacts to wetlands during construction activities. The community landfill is described as being "across the river and one mile south, adjacent to a slough" (US Bureau of Indian Affairs Juneau Area Transportation Study Report II, 1990, page 2). The landfill, therefore, is at least two miles from the airport and is not an incompatible land use.

A peregrine falcon was noted in the village during a July 29, 1993 field trip. The American peregrine falcon is an endangered species and coordination has taken place with respect to the falcon as well as the Spectacled Eider, the Short-tailed Albatross, the Steller Eider and other Category 1 and 2 species. Coordination under Section 7 was complete March 8, 1994 (Rappaport to Horn, Appendix A). The USF&WS concurred with the findings of the Biological Assessment (BA) which were that there would be no impacts to the listed or candidate species (Appendix C). Coordination was reinitiated October 17, 1994 due to the lapse of more than 90 days since the March 8, 1994 concurrence. The USF&WS responded on December 19, 1994, requesting participation in the pre-construction meeting to review identification of American peregrine falcon and spectacled eiders.

Changes in the proposed scope were the result of recent coordination with the village on the project. The village rejected the proposed new apron with lease lots off the southeast end of the runway, which was preferred by the Department. The site was at a prime berry picking locality. In addition, leaders of the community expressed the desire to retain all land holdings and do not support lease lots unless they have some control or authority over future lease holders. This is based on tribal sovereignty and was discussed during an October 1994 meeting between Kwigillingok

representatives and the ADOT&PF Commissioner. The form of the acquisition has not been determined yet. The leasing issue is currently being addressed on a Statewide basis for its applicability to all rural airports. Final resolution at the Kwigillingok Airport will be made during the right-of-way land acquisition phase of the project.

The village also requested that the location of the proposed material site be shifted north, along an intertidally influenced stream. The borrow material adjacent to the stream may be more suitable for construction use, as it is already “thawed” to a certain degree. The soil is exposed, draining into the slough. This condition could promote a more rapid settling of the embankments that are to be built with the material.

**Permits and Licenses:** Alternative A requires the following permits and certifications, several of which have already been received on behalf of this project (Appendix D). These will need to be modified to reflect recent changes in the project scope.

- 1) U.S. Army Corps of Engineers (COE) Section 404 permit, dated May 17, 1995;
- 2) Alaska Department of Environmental Conservation (ADEC) Section 401 Certificate of Reasonable Assurance, dated April 5, 1995;
- 3) Alaska Department of Environmental Conservation (ADEC) Air and Water Quality Certification of Reasonable Assurance per FAA Order 5050.4A; dated March 8, 1994;
- 4) Alaska Department of Fish and Game (ADF&G) Title 16, dated April 5, 1995;
- 5) Alaska Division of Governmental Coordination (ADGC) Coastal Zone Consistency Determination, dated April 6, 1995;
- 6) Kwigillingok Village Corporation Letter of Non-Objection;
- 7) Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Work in Alaska (to be obtained by the Contractor).

**ALTERNATIVE B: LENGTHEN RUNWAY AND ADD NEW CROSSWIND RUNWAY**

consists of rehabilitation and reconstruction of the primary runway at Kwigillingok, Alaska and possible construction of a crosswind runway (Figure 3). Table 3, below, shows length and width for the primary runway while Table 4 shows those statistics for the crosswind runway.

**Table 3  
Alternative B, Runway 15-33**

Project Element	Existing Usable	Near-Term Usable	Mid-Term Usable
		Category A-I	Category B-I
Runway (R/W) Length	2,510 ft	2,420 ft	3,200 ft*
R/W Width	50 ft	60 ft	60 ft
R/W Safety Length	2,900 ft	2,900 ft	3,680 ft*
R/W Safety Width	100 ft	120 ft	120 ft
Taxiway (T/W) Width	30 ft	30 ft	40 ft*
T/W Safety Width	40 ft	40 ft	80 ft*
Apron Dimensions	90x200 ft	90x200 ft	200x300 ft*
Future Lease Area	none	none	100x300 ft*
Future Access Road	none	none	24x825 ft*
Future Bldg. Pad	none	none	100x100 ft

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

Construction must take place in phases because the soil is wet and must settle and drain. Therefore, the proposed improvements are described as Near-Term (0-2 years) and Long-Term (3-10 years). Only the Near-Term improvements are currently scheduled for funding. The Near-Term phase will provide the embankment for the Long-Term phase, at which time the embankment will be graded and surfaced.

**Table 4**  
**Alternative B, Crosswind Runway**

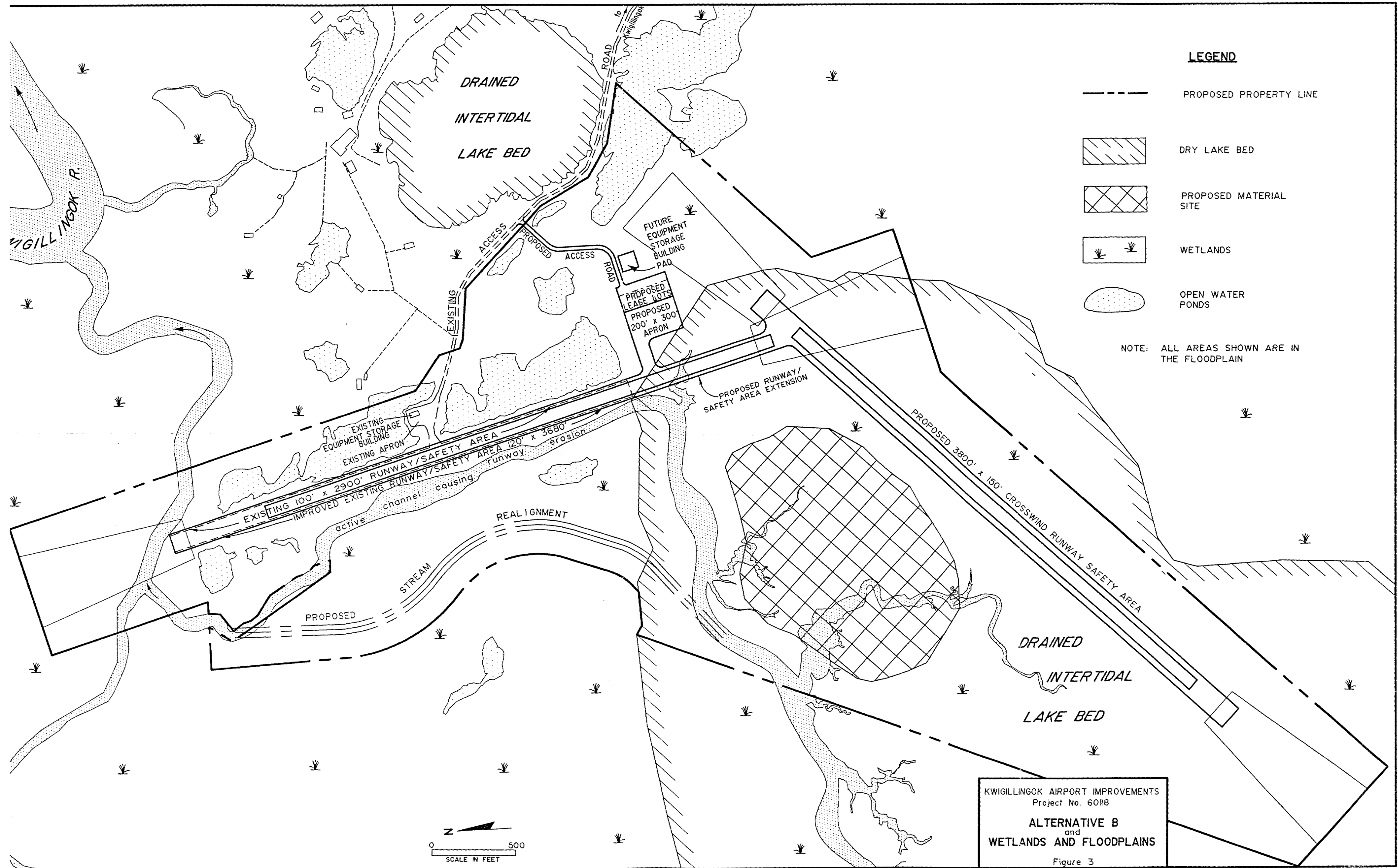
Project Element	Near-Term Unusable	Long-Term Usable
		Category B-II
Runway (R/W) Length	2,400 ft*	3,200 ft
R/W Width	75 ft*	75 ft
R/W Safety Length	3,000 ft*	3,800 ft
R/W Safety Width	150 ft*	150 ft

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

Additional improvements under the Near-Term phase include:

- 1) New gravel surface for the existing runway, taxiway and apron.
- 2) The existing snow removal equipment storage building will receive a steel plate floor and a water/oil separator that would daylight to the outside into the maintenance and equipment building's design to improve hazardous material spill containment capability.
- 3) A new rotating beacon will be constructed on the backside of the existing equipment storage building.
- 4) A new lighted windcone with a new segmented circle will be constructed.
- 5) A medium intensity runway and taxiway lighting system will be installed.
- 6) Embankment would be prepared for a future equipment storage building pad to be used after the existing building is obsolete (no time frame established for this).
- 7) Purchase a new motor grader for snow removal.
- 8) Property acquisition as described below.

The airport is currently situated within a 109 acre tract of land, leased to ADOT&PF until 1999 from the USF&WS, administered by Kwik, Inc. Proposed right-of-way acquisition for this alternative

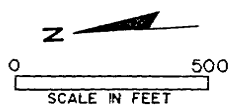


**LEGEND**

- PROPOSED PROPERTY LINE
- [Hatched Box] DRY LAKE BED
- [Cross-hatched Box] PROPOSED MATERIAL SITE
- [Wetland Symbol] WETLANDS
- [Dotted Oval] OPEN WATER PONDS

NOTE: ALL AREAS SHOWN ARE IN THE FLOODPLAIN

KWIGILLINGOK AIRPORT IMPROVEMENTS  
 Project No. 60118  
**ALTERNATIVE B**  
 and  
**WETLANDS AND FLOODPLAINS**  
 Figure 3







KWIGILLINGOK RIVER

School

EXISTING RUNWAY

PROPOSED ACCESS RD

PROPOSED APRON

PROPOSED EXTENSION



KWIGILLINGOK AIRPORT IMPROVEMENTS  
Project No. 60118  
OBLIQUE AERIAL  
Plate I





KWIGILLINGOK AIRPORT IMPROVEMENTS  
Project No. 6018  
AERIAL VIEW  
Plate 2



includes approximately 148 acres in fee, 186 acres of Interagency Land Management Agreement (ILMA) from Alaska Department of Natural Resources (ADNR), and 7 acres of avigation and hazard easement over a creek, also from ADNR.

The stream on the west edge of the primary runway must be realigned to eliminate erosion on the runway embankment. The realignment would meet all ADF&G requirements for fish passage.

Long-Term development would consist of grading the expanded safety area and new apron and then importing surfacing material for the runways, taxiway, apron and access road. Further Long-Term development would include extending the primary runway lights for its entire length and lighting the new taxiway and apron. The equipment storage building would remain on its current location. Future development may consist of reconstructing the entire 150-foot wide by 3,800-foot long crosswind runway and installing a medium intensity runway lighting system.

ADOT&PF will not designate a barge landing site. Such designation could unduly restrict the Contractor. However, the construction specifications will require the Contractor to obtain all necessary permits for a barge landing once that site is identified.

**Functional Analysis:** Alternative B meets the purpose and satisfies the need for the project to a fuller extent than Alternative A because it provides a crosswind runway. The runway length and width as well as safety area would be in conformance with or better than the AASP recommendations. The apron would also be in conformance with recommended standards as would the taxiway, runway protection zone, building restriction line and approach slope angle. However, this alternative would not address the incursion of the equipment storage building in navigable air space until the building is replaced on its new pad near the new apron. Alternative B impacts far more resources than Alternative A and was not chosen as the preferred because of lack of support from the community and resource agencies.

**Summary of Environmental Consequences:** No significant impacts have been identified for this alternative per the threshold analysis performed under paragraph 47(e) of FAA Order 5050.4A. Alternative B is within the Ceñaliulriit Coastal Management District. At least 60 acres of wetlands would be impacted by the proposed improvements and borrow activities under the Near-Term and Long-Term phases. ADOT&PF Best Management Practices would be used to minimize impacts to wetlands during construction activities.

The community landfill is described as being "across the river and one mile south, adjacent to a slough" (US Bureau of Indian Affairs Juneau Area Transportation Study Report II, 1990, page 2). The landfill, therefore, is at least two miles from the airport and is not an incompatible land use.

A peregrine falcon was noted in the village during a July 29, 1993 field trip. The American peregrine falcon is an endangered species and coordination took place with respect to the falcon as well as the Spectacled Eider, the Short-tailed Albatross, the Steller Eider and other Category 1 and 2 species. Coordination under Section 7 was complete March 8, 1994 (Rappaport to Horn, Appendix A). The USF&WS concurred with the findings of the Biological Assessment (BA) which were that there would be no impacts to the listed or candidate species (Appendix C). Coordination was reinitiated October 17, 1994 due to the lapse of more than 90 days since the March 8, 1994 concurrence if this were the preferred alternative.

Public and agency response to this proposal was negative. The community was not opposed to a crosswind runway but requested it be relocated to another site north of the existing runway. The local people felt the orientation and location to the north would better accommodate the prevailing winds. They requested a shorter runway because of impacts in the dry lake bed to berry picking and subsistence hunting areas. The community also desired to eliminate all lease lots unless they have some control or authority over future lease holders. This is based on tribal sovereignty and was discussed during an October 1994 meeting between Kwigillingok representatives and the ADOT&PF Commissioner. The leasing issue is currently being addressed on a Statewide basis for its applicability to all rural airports.

ADOT&PF reconfigured this alternative after receipt of letters and after reviewing the proposal in a public meeting in the village of Kwigillingok February 28, 1994. (The reconfiguration is now the Proposed Action, presented as Alternative A.) Alternative B is dismissed from further discussion in the environmental document. It is dismissed because of the opposition to it as well as the length of time required for additional studies to find the optimum location and orientation for a crosswind runway.

**Permits and Licenses:** Alternative B requires the following permits:

- 1) U.S. Army Corps of Engineers (COE) Section 404 permit,
- 2) Alaska Department of Environmental Conservation (ADEC) Section 401 Certificate of Reasonable Assurance,
- 3) Alaska Department of Environmental Conservation (ADEC) Air and Water Quality Certification of Reasonable Assurance per FAA Order 5050.4A
- 4) Alaska Department of Fish and Game (ADF&G) Title 16,
- 5) Alaska Division of Governmental Coordination (ADGC) Coastal Zone Consistency Determination,
- 6) Kwigillingok Village Corporation Letter of Non-Objection;
- 7) Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Work in Alaska

The cost of the proposed improvements is estimated at \$ 3.3 million. Costs for the crosswind runway would be at least \$0.6 million more.

**ALTERNATIVE C: NO-ACTION** is no improvements beyond normal maintenance. Under this alternative, the runway and safety area would continue to be below standards in width. Medium intensity runway lighting would not be provided. The runway would continue to offer only 77 percent of wind coverage, 18 percent below the FAA recommended coverage. No wetlands would be affected and no action would be taken in the coastal zone.

**Functional Analysis:** This alternative does not meet the purpose or satisfy the need for the proposed project. The runway length and width as well as safety area would not be in conformance with the AASP recommendations. The apron would also not be in conformance with recommended standards as would the taxiway, runway protection zone, building restriction line and approach slope angle. This alternative would not meet the runway obstacle free area.

**Summary of Environmental Consequences:** No construction would take place in the coastal zone and wetlands involvement would be avoided. None of the beneficial and/or adverse impacts of the proposed action would be realized.

**Permits and Licenses:** No-Action would not require any permits or clearances.

### **III. AFFECTED ENVIRONMENT**

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Kwigillingok is located in the Yukon Kuskokwim Delta approximately 460 air miles southwest of Anchorage and 75 air miles southwest of the city of Bethel (Figure 1, Plates 1 and 2).

#### **A. Natural Environment**

The discussion of "Region" which follows in this part of the environmental document centers on the Yukon-Kuskokwim Delta. The discussion of "Vicinity" focuses on the area around Bethel to the coast (Kuskokwim Subregion). The Region and Vicinity discussions will be very similar. The "Project Location" discussion centers on the community of Kwigillingok and the area around the airport.

##### **1. Wetlands**

###### **a. Yukon-Kuskokwim Delta/Kuskokwim Region**

The delta is essentially a large, marshy, estuarial system. Its surface is generally low lying and flat, punctuated by innumerable ponds and lakes of different sizes and drained by numerous sluggish and meandering streams and rivers (Selkregg 1974). Heath, moist and wet tundra abound.

###### **b. Kwigillingok**

The Kwigillingok airport is situated on the Kwigillingok River approximately one mile west of the village of Kwigillingok and 75 miles southwest of Bethel and is located entirely within an area of mixed moist, wet and heath tundra.

## **2. Vegetation**

### **a. Yukon-Kuskokwim Delta/Kuskokwim Bay Subregion**

There are six basic vegetation communities.

- 1) High Brush: alder, devil's club, willow, various berries, bluejoint grass, ferns and mosses;
- 2) Moist Tundra: willow, dwarf birch, Labrador tea, alder, blueberry, cotton grass, horsetail, sedges and mosses;
- 3) Wet Tundra: willow, labrador tea, shrubby cinquefoil, bog cranberry, Lyme grass, lichens and mosses;
- 4) Alpine Tundra: dwarf arctic birch, willow, crowberry, Labrador tea, mountain heather, dwarf and arctic blueberry, sedges, lichens and mosses;
- 5) Bottomland Spruce Hardwood: white spruce, balsam poplar, and tall shrubs; and
- 6) Upland Spruce Hardwood: white spruce, birch, aspen and black spruce.

### **b. Kwigillingok**

The dominant vegetation communities in the Kwigillingok area are wet, moist and heath tundra. There are numerous grasses, sedges, mosses, berries and lichens. The dry lake bed is covered more with grasses such as bluejoint and Poa, rushes, mare's tail, yellow rattle and sedges (Carex) than the surrounding tundra. Grasses and sedges also predominate around the runway proper. The virgin tundra has species such as cloudberry, labrador tea, crowberry, lingonberry, and cotton grass.

## **3. Climate**

### **a. Yukon-Kuskokwim Delta**

The Yukon-Kuskokwim Delta has been characterized as being part of a "transition" climatic zone (Selkregg 1974). It is neither continental nor maritime and weather is highly variable. Summers are



moderated by maritime influences and are often subject to extended periods of precipitation. The presence of pack ice over much of the eastern Bering Sea during winter reduces the marine influences and continental climatic patterns are noted. Extreme temperatures for the area range from -25 to 79 degrees Fahrenheit.

**b. Kuskokwim Bay Subregion**

The Bethel area experiences more severe and extreme temperatures than those recorded for the Delta (-46 to 86 degrees Fahrenheit). Otherwise, climatic influences are as stated above.

**c. Kwigillingok**

Kwigillingok's climate is heavily influenced by maritime climatic features. It is very close to the coast and experiences recorded January temperatures to minus 40 degrees Fahrenheit. Precipitation is 16 inches annually with 50 inches of snow. Extreme winds can be 54 knots (100 kilometers per hour).

**4. Geology, Soil and Subsurface Conditions**

The Yukon-Kuskokwim Delta is a low, marshy area. There are small mountains of basaltic origin, including the Nelson Island Mountains, the Askinuk Mountains north of Hooper Bay, Kusilvak Mountain east-north-east of Scammon Bay and the Ingakslugwat Hills southeast of Hooper Bay.

The soil deposits are unconsolidated coastal deposits of interlayered alluvial and marine sediments. Modern floodplains, alluvial fans and terrace deposits border major streams and rivers. Bedrock includes quaternary volcanics and areas of intrusives, tertiary, jurassic, cretaceous and paleozoic rock. The area is generally underlain with permafrost.

**b. Kuskokwim Bay Subregion**

This area differs from the above description only in that there are no mountains in the vicinity.

**c. Kwigillingok**

Kwigillingok differs from the above regional description only in that there are no mountains in the vicinity. The coastline in this area is relatively straight and bounded to the south by extensive tidal flats and punctuated by sandbar islands near Cape Avinor to the northwest. The land surface is relatively uniform in elevation rarely exceeding 30 feet above sea level. The land is dotted by lakes and ponds and most of the rivers and sloughs draining the area are short in length and extremely shallow. Subsidence is common as is periodic flooding and dangerous ice movements.

**5. Transportation Facilities**

**a. Yukon-Kuskokwim Delta**

Most villages are served at least part of the year by barges and other sea and ocean going craft. Intra village transportation during summer is by boat or airplane and in winter by snow machine or airplane. All villages are served by airports that are usable most, if not all year round. There are few roads, mostly confined to within individual villages. These are usually access roads or trails to the airports.

**b. Kuskokwim Bay Subregion**

Bethel has an extensive city road system but is not connected by road to any other community. Brown's Slough provides barge and boat access from Kuskokwim Bay. The airport is large and paved. It is served by jet aircraft as well as smaller commuter and individually owned aircraft. Bethel serves as the regional hub for dissemination of goods and services for approximately 25

villages. The transportation for villages in the Bethel area is as stated for the Yukon-Kuskokwim Delta above. There is an airport 9 air miles to the east of Kwigillingok at Kongiganak, one approximately 25 air miles to the west at Kipnuk and one approximately 40 air miles to the northeast at Tuntutuliak.

**c. Kwigillingok**

Kwigillingok is dependent upon air transportation year round. Kwigillingok has a 2,510-foot airstrip and receives barge service until freeze-up. There is only one road in the village that traverses the tundra between the airport and the northern half of the village. An extensive boardwalk system provides surface transportation within the village, as the village is distributed for about two miles up and down the west bank of the Kwigillingok River.

**6. Fish and Wildlife Resources and Subsistence Activity**

**a. Yukon-Kuskokwim Delta**

Many species of fish and wildlife inhabit the Yukon-Kuskokwim Delta. A partial list of species is as follows: black brant; cackling and emperor geese; ptarmigan; swans; hawks; falcons; wolves; caribou; moose; bison; foxes; black bear; salmon; seal; walrus; and beluga whale. Subsistence is the lifestyle for the vast majority of inhabitants. People in the area hunt, fish and collect food resources extensively.

**b. Kuskokwim Bay Subregion**

Many of the species named above are found in the Bethel area. Moose are rare in the area and bison do not occur there. However, there are large herds of caribou. As with the region, the Bethel area relies heavily on the subsistence lifestyle. Commercial fishing is also a large part of the economy.

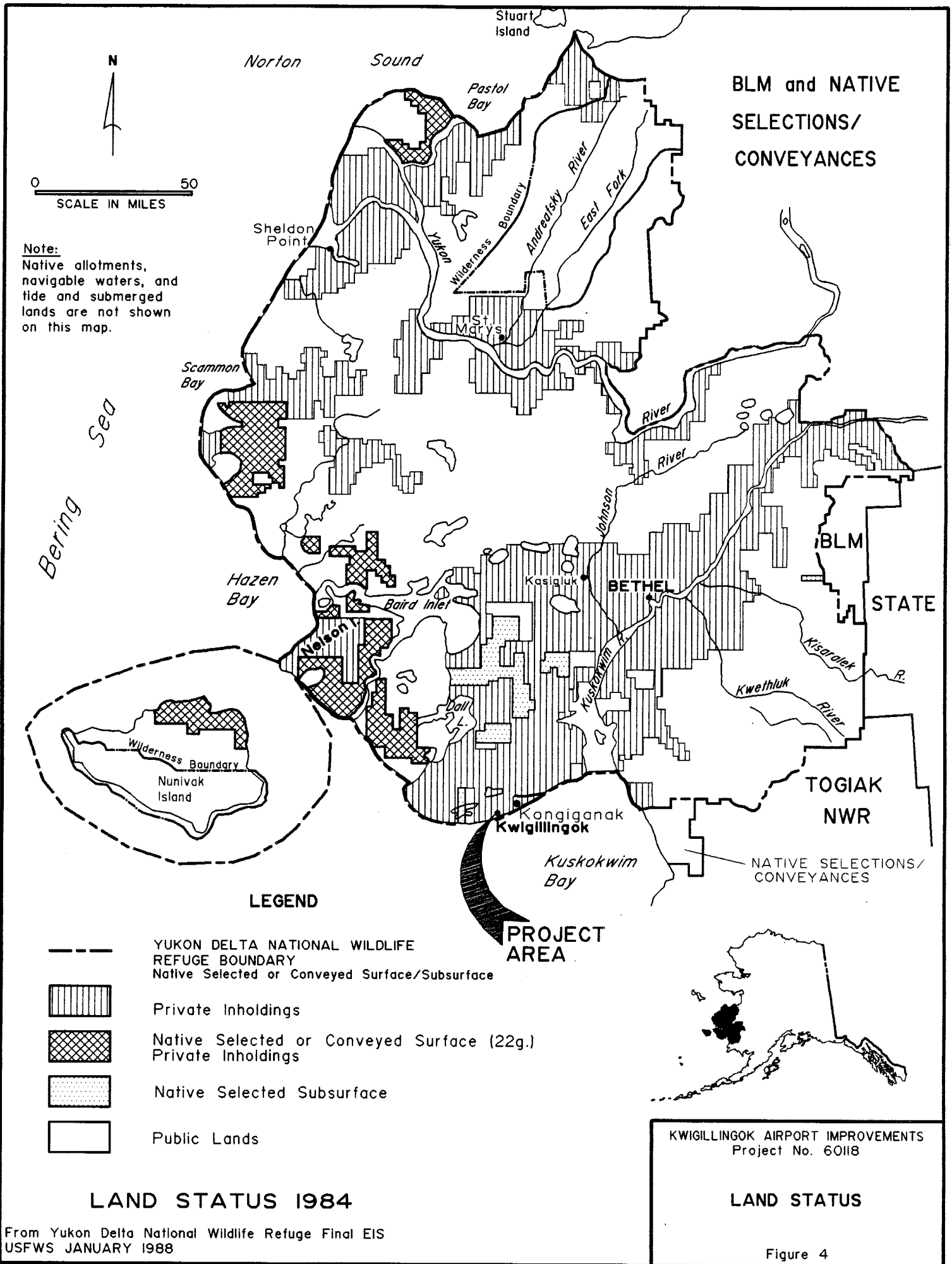
### **c. Kwigillingok**

Kwigillingok fish and wildlife are as described for above. The subsistence lifestyle is the major economic force in the community, although commercial fishing plays a large role as well. Mike North, biologist for the USF&WS, reports that there are arctic terns, mew gulls and pacific loons nesting near the airport. He noted red-throated loons, western sandpipers and sanderlings in the active channel on the west side of the airport. Dunlins, greater yellowlegs and dowitchers were found in the village along with a lone peregrine falcon. Anadromous arctic char, whitefish, sheefish, blackfish, slimy sculpins, threespine sticklebacks and ninespine sticklebacks can be found in the surrounding waters. A peregrine falcon was noted at Kwigillingok during a July 29, 1993 field trip. American peregrine falcons are listed as an endangered species. Spectacled Eider, an endangered species, could inhabit the area as well as Steller Eiders which are a Category 1 species.

## **B. Local Environment**

### **1. Population/Socio-Economics**

The present population of Kwigillingok is listed as 278. This figure is based on the 1990 Census Counts for Alaska Natives July 26, 1991, produced by the Alaska Area Native Health Service (AANHS). The AANHS based their estimates on the Bureau of Census 1990 counts. Of these, 264 are Native Americans, primarily Yupik Eskimo. The most recent demographic data comes from Greg Williams, State Demographer, who bases estimates of population on the permanent fund dividend applications. His 1993 estimate of population is 291 (Williams to Gliva, pers. comm.). The villagers have been heavily influenced by the Russian presence as well as Moravian missionaries. Subsistence is the most prevalent lifestyle along with commercial fishing. The clinic, post office, stores and school represent the major employment opportunities. The City is unincorporated. There is an Indian Reorganization Act (IRA) council and the local village corporation, Kwik, Inc., provides input. The regional corporation is Calista Corporation (Figure 4).



**BLM and NATIVE SELECTIONS/ CONVEYANCES**

**Note:**  
 Native allotments, navigable waters, and tide and submerged lands are not shown on this map.

0 50  
 SCALE IN MILES

**LEGEND**

- YUKON DELTA NATIONAL WILDLIFE REFUGE BOUNDARY
- [Cross-hatched box] Native Selected or Conveyed Surface/Subsurface
- [Vertical lines box] Private Inholdings
- [Diagonal lines box] Native Selected or Conveyed Surface (22g.) Private Inholdings
- [Dotted box] Native Selected Subsurface
- [White box] Public Lands

**PROJECT AREA**

**LAND STATUS 1984**

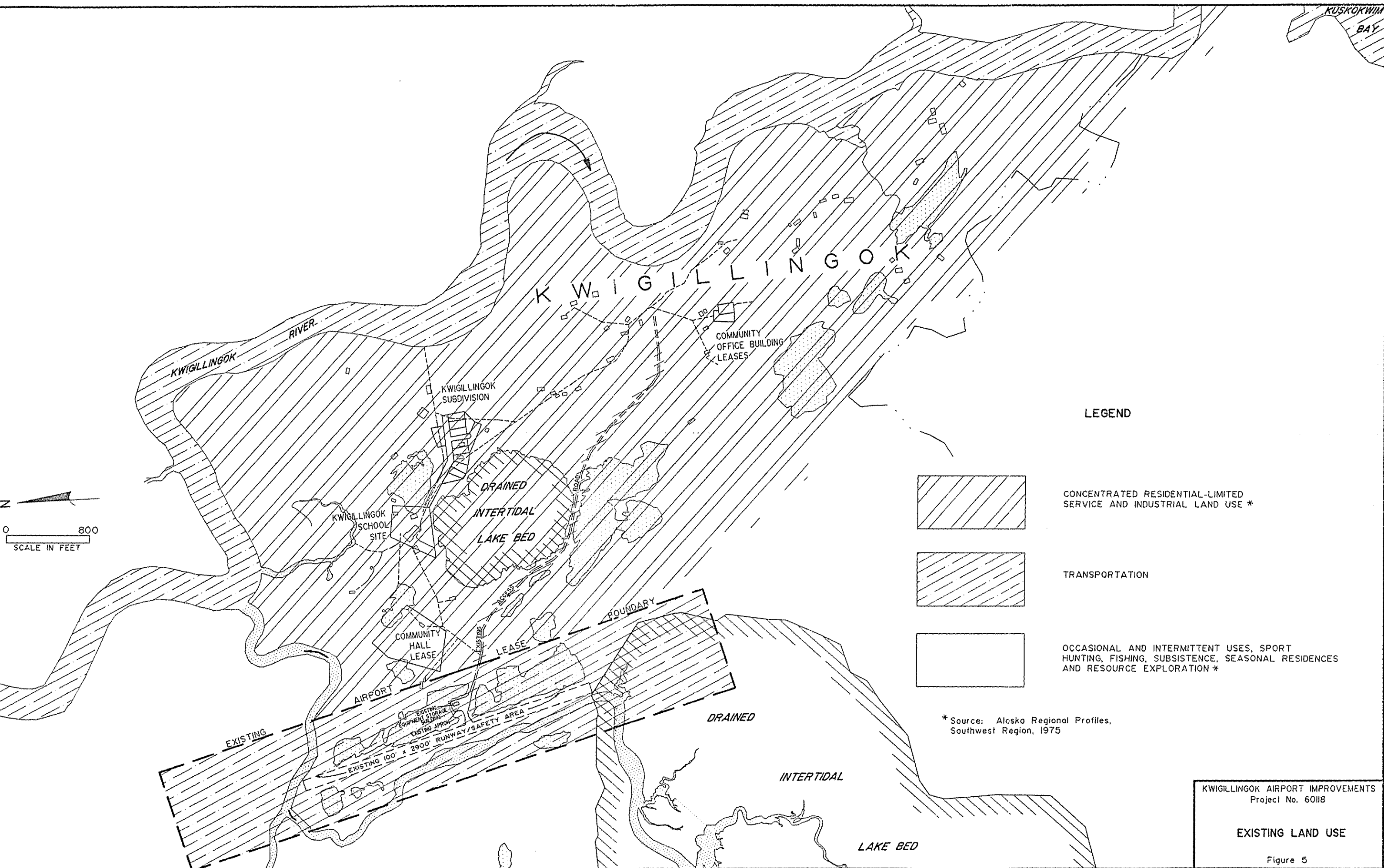
From Yukon Delta National Wildlife Refuge Final EIS  
 USFWS JANUARY 1988

KWIGILLINGOK AIRPORT IMPROVEMENTS  
 Project No. 60118

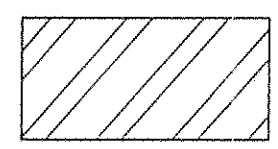
**LAND STATUS**

Figure 4

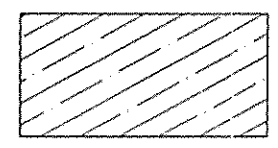




LEGEND



CONCENTRATED RESIDENTIAL-LIMITED SERVICE AND INDUSTRIAL LAND USE \*



TRANSPORTATION



OCCASIONAL AND INTERMITTENT USES, SPORT HUNTING, FISHING, SUBSISTENCE, SEASONAL RESIDENCES AND RESOURCE EXPLORATION \*

\* Source: Alaska Regional Profiles, Southwest Region, 1975

KWIGILLINGOK AIRPORT IMPROVEMENTS  
Project No. 60118

EXISTING LAND USE

Figure 5

## **2. Land Use**

Both private and public entities control land in the project vicinity. The Kwigillingok Village Corporation, Calista Corporation, Native Allotments (oversite by BIA), the Kuskokwim School District all own or manage property in the vicinity of the airport (Figure 5).

## **3. Public Assembly**

The school is located close to the airport as well as is the community hall (within 2,000 feet). The Post Office, the Russian Orthodox Church, the Moravian Church, the health clinic and the Village Council office are all within two miles of the airport.

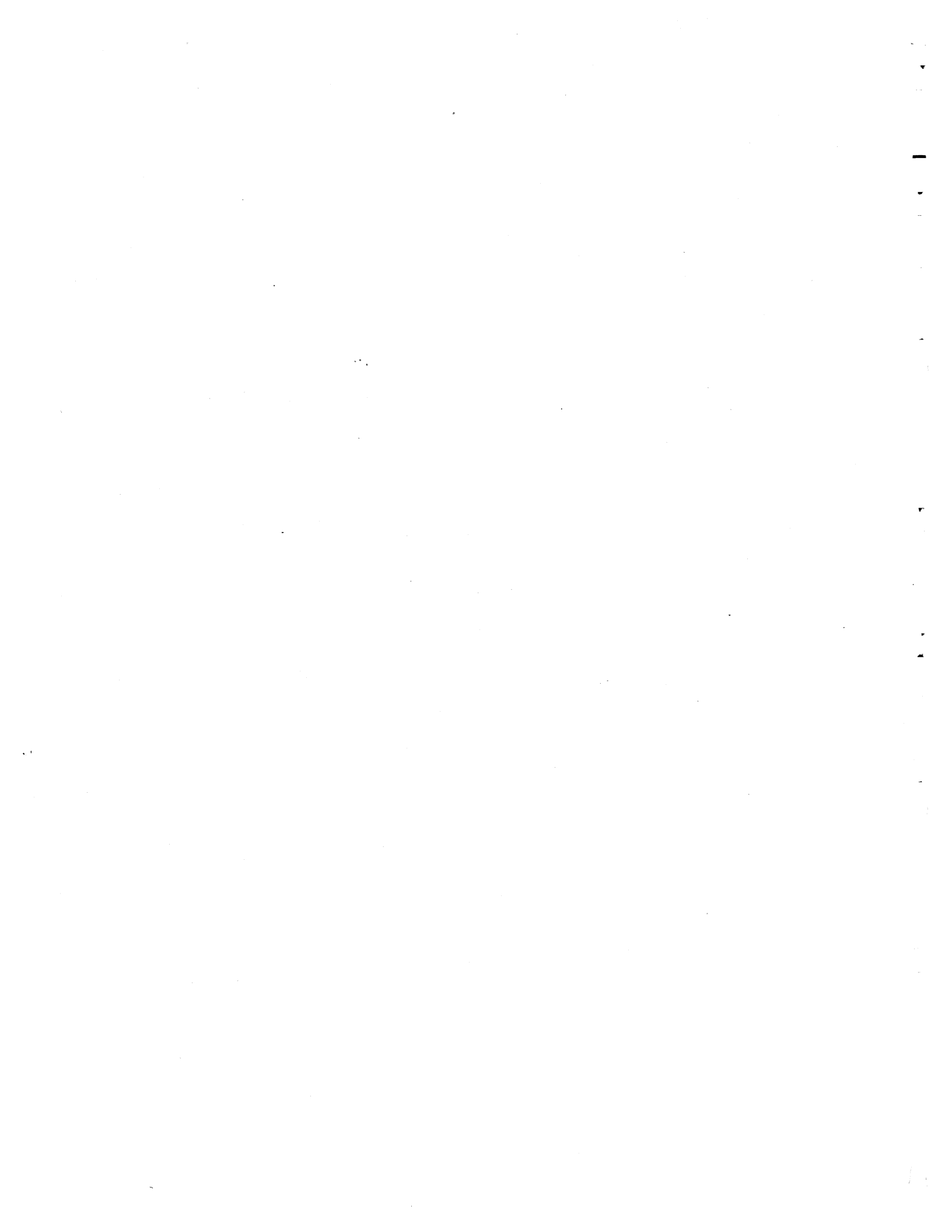
## **4. Other Airport Actions/Plans**

ADOT&PF has no plans for additional airport projects at Kwigillingok beyond returning to the village after the embankment has settled to surface the new runway length and apron. However, there is a proposal to use Federal Highway Administration money to fund an airport access road improvement project (FY 95-96). ADOT&PF is also working with the Public Health Service on development of a Rural Sanitation Road project (FY 95-96).

## **5. Off Airport Actions/Plans**

The Department of Community and Regional Affairs (DCRA) keeps a database called Rural Alaak Project Identification and Delivery System. Version 3, revised June 1994 contains a brief description of the proposed ADOT&PF airport project as well as a proposed electrical distribution upgrade project (DCRA), preparation of an ANSCA 14(c) map (DCRA), clinic replacement (Department of Health and Human Services), and a water treatment upgrade (ADEC).





## IV. ENVIRONMENTAL CONSEQUENCES

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### A. Noise

Proposed Action - No additional increase in air traffic would result from the proposed improvements. According to FAA Order 5050.4A, no noise analysis is required for the proposed project since forecasted operations are well below the threshold 90,000 annual adjusted propeller operations or the 700 annual adjusted jet operations. The Kwigillingok Airport experiences less than 5,000 operations per year; therefore, no significant noise impacts are inferred. If population trends continue, no substantial changes in aircraft operations are expected during the design life of the facility - 6,150 estimated operations in the year 2013.

Under Alternative A, heavy equipment operations during construction would temporarily increase noise levels at the airport. The nearest residential development is within 1,000 feet of the airport. However, noise increases would be temporary daytime noises occurring only during the construction season when many villagers are at fish camps or at sea, commercial fishing. Construction related noise impacts are further discussed in the Construction Impacts Section.

No-Action - Alternative C, the No-Action Alternative, would have no noise impacts.

### B. Compatible Land Use

Proposed Action - Alternative A would place fill in wetlands and is located in the Ceñaliulriit Coastal Management District. Development in wetlands and the coastal zone are considered incompatible use. More information on these uses can be found in the Environmental Consequences Section under the Wetlands and Coastal Zone impact categories. The community landfill is outside the 10,000-foot setback required by FAA.

The airport is situated within a 109 acre tract of land which is leased to ADOT&PF until 1999 by USF&WS. The lease is administered by Kwik, Inc., the Village Corporation to which the land was conveyed under the Alaska Native Claims Settlement Act (ANCSA). Proposed right-of-way acquisition would include approximately 105.6 acres in fee (42.6 acres from Native Allotments and 63 acres from Kwik, Inc.), 3.2 acres of avigation and hazard easement over a creek (ADNR) and 35 acres from ADNR under an Interagency Land Management Agreement (ILMA). Total property acquisition would be approximately 109 acres.

The form of the airport land acquisition has not been determined yet. Leaders of the community have expressed the desire to retain all land holdings and do not support lease lots unless they have some control or authority over future lease holders. This is based on tribal sovereignty and was discussed during an October 1994 meeting between Kwigillingok representatives and the ADOT&PF Commissioner. The leasing issue is currently being addressed on a Statewide basis for its applicability to all rural airports. Final resolution at the Kwigillingok Airport will be made during the right-of-way land acquisition phase of the project.

No-Action - No impacts to existing land use would result. Alternative C would not result in incompatible land use.

### **C. Social and Induced Socioeconomic Impacts**

Proposed Action - The proposed action would enhance air service safety to the community through greater reliability of air service into Kwigillingok. The local economy would then benefit from these improvements. The proposed taxiway and expanded apron would alleviate any aircraft congestion and provide space for cargo storage, passenger waiting and vehicle parking. The airport runway would remain open during construction, however, minor airport delays could result during construction. Adequate public notice of construction activities would be given. During 1995, the

Department had several meetings with the Village Council on this project's development, and will continue this coordination through final design and construction.

Improvements would not change pedestrian or vehicle traffic patterns. There are no existing trails around the southern end of the airport. There is no evidence to suggest the southern end of the airport is used as a transportation corridor, however, four wheelers and snow machines could use that area. The small extension into the dry lake bed may cause snow machines and four wheelers to avoid that area by driving into the lake bed a few more hundred feet.

A local contractor currently maintains the airport and would continue to do so after the project is complete. The new snow removal equipment will facilitate snow removal and general airport maintenance and would offset the need for additional maintenance personnel to accommodate the increase in maintainable airport area.

No relocations would occur as a part of the proposed action. The proposed action would not divide or disrupt the community. No increase in employment opportunities other than temporary construction jobs is expected for the proposed action. The medium intensity runway lighting would be hooked up to the community's electrical power supply, but as stated in the Energy Impacts category, the community power source can accommodate the proposed airport improvement (Appendix A, Joe Manchuak to Dougherty, Trip Report, October 28, 1992).

The proposed action should not affect existing subsistence activities to a great degree, as most such activities occur away from the village and the airport. The project has been designed to avoid the prime berry picking area located southeast of the runway. Fall bird hunting occurs in the dry lake bed, and extending the runway and safety area 600 feet into it would reduce waterfowl feeding habitat by approximately 1.3 acre. The dry lake bed covers approximately 784 acres.

No-Action - No-Action would result in the continued operation of the airport without adequate apron space and runway length. Temporary construction employment opportunities would not be created.

#### **D. Air Quality**

Kwigillingok is in an attainment area for air quality (State Implementation Plan). The proposed action is not expected to increase aircraft operations and there would be little or no change in local or regional air quality. Temporary decreases in air quality are expected from the proposed action during construction from heavy equipment exhaust fumes and dust. Impacts from dust would be controlled by regular watering and exhaust fumes would be mitigated by keeping construction equipment in good running condition.

A certificate of reasonable assurance that the project will be designed, constructed and operated in accordance with applicable state air quality regulations as required by FAA Order 5050.4A, page 34, paragraph (5)(e)2 was obtained March 8, 1994 (Appendix D).

No Action - The No-Action alternative would not result in any impacts.

#### **E. Water Quality**

The proposed action would not result in substantial long term degradation of existing water quality. The number of airport operations is not expected to increase substantially in the future, therefore, water quality degradation associated with regular airport operations would not occur. Appropriate measures would be used during construction to assure water quality is maintained in adjacent wetlands and waterbodies. All ADF&G permit stipulations will be adhered to during construction of the stream realignment to maintain water quality. No drinking water wells would be impacted under the Proposed Action. The community water source is approximately two miles north of the airport and is a surface source. Water is piped to a holding tank in village.

The existing gravel floor maintenance and equipment building at the airport would be upgraded as part of this project. As agreed to with ADEC, the Department would design and construct a steel plate floor and a water/oil separator that would daylight to the outside. This is to satisfy ADEC'S concerns over an earlier proposal which would place a membrane liner beneath the building to prevent leaching of any oil or other contaminants.

The Contractor will require a barge landing site for on and off-loading equipment and supplies. The construction specifications will require the Contractor to obtain all appropriate permits for a barge landing site. Permit stipulations and Best Management Practices will ensure maintenance of water quality.

A Certificate of Reasonable Assurance that the project will be designed, constructed and operated in accordance with applicable state water quality regulations as required by FAA Order 5050.4A, page 34, paragraph (5)(e)2 was obtained March 8, 1994 (Appendix D). An ADEC Section 401 Certificate of Reasonable Assurance was issued for the project on April 5, 1995, but will need to be reevaluated to reflect recent changes in the project scope (Appendix D).

The proposed action would be constructed under the NPDES General Permit for construction activities in Alaska. The Contractor would be required to comply with the NPDES requirements, and prepare and implement the Storm Water Pollution Prevention Plan (SWPPP) and the Notice of Intent (NOI). No NPDES permit for discharging storm water from industrial activity is required at Kwigillingok. The airport does not have a permanent fueling facility, any lease holders conducting covered industrial activities, or any permanent buildings within airport property except the airport equipment storage building. The NPDES storm water permit would be required if any of these conditions change in the future.

No-Action - No-Action would not alter the water quality or supplies near the airport.

## **F. Department of Transportation Act, Section 4(f)**

Proposed Action The Kwigillingok Airport and the village are in-holdings within the Yukon Delta National Wildlife Refuge. The land for the lease for the existing 109 acre airport parcel was conveyed to the local native corporation, Kwik, Inc. Kwik, Inc. administers the lease at this time. ADOT&PF proposes to purchase the airport from Kwik, Inc., and to purchase additional right-of-way from Native Allottees, whose allotments were recently under the control of the USF&WS. Native Allottees must have land conveyed from the USF&WS to them through the BLM prior to our right-of-way purchase. Conveyance of the allotments was made by BLM April 21, 1994. Since right-of-way will be acquired from a private party, the proposed acquisition would not require a physical taking of Refuge land or affect the normal activities of the Refuge. Therefore, Section 4(f) is not applicable.

No Action - No-Action would have no impacts on Section 4(f) lands.

## **G. Historic, Archaeological and Cultural Resource**

Proposed Action - The proposed project was cleared by the State Historic Preservation Office (SHPO) November 27, 1992 (Appendix A, Bittner to Horn). However, should cultural or paleontological resources be located during construction, all work which would disturb such resources would stop and the SHPO would be notified immediately.

No Action - There would be no impacts to historic, archaeological, architectural or cultural resources under this alternative.

## **H. Biotic Communities**

Wildlife are not especially abundant near the existing airport except in the fall due to human activities. Small numbers of arctic terns, loons and mew gulls nest on ponds near the airport and

migratory waterfowl use the dry lake bed in the fall. The proposed project would not impact critical habitat of any particular fish or wildlife species.

The ADF&G responded to the scoping request that the Kwigillingok River supports anadromous whitefish species and that the tributary streams in the vicinity of the airport are highly probable for fish as well. Resident blackfish probably also occupy these waters. This is true for the tributary that runs by the Kwigillingok Airport. This intertidally influenced stream supports both resident and anadromous fish populations.

Approximately 9,450 cy of material would be dredged from 825 linear feet, up to 60 feet wide, of the west streambank (Figure 6). This would move the stream away from the runway, where the stream hits the runway at a right angle, and eliminate erosion of the embankment. Altogether this represents 1.13 acres. Additional protection would be provided by a 690-foot long concrete block armor mat placed along the runway embankment. The dredged material would be used in the runway extension embankment.

Instream operations would occur only during low tide periods, to be accomplished within one week's time. It would require that a large backhoe with a bucket operate within the stream, and it may not be possible to isolate the work area from the flowing water of the stream. The Department met with ADF&G on December 16, 1994, to discuss design concepts of the proposed slough realignment. The ADF&G issued a Title 16 permit for this project, dated April 5, 1995 (Appendix D). This permit will need to be modified to include changes to the proposed material site.

The proposed material site could involve up to 1,900 linear feet of streambank. Excavation of the borrow area would be accomplished so that ground levels would slope downward toward the intertidal slough, as recommended by ADF&G and USF&WS. Mining operations would be conducted to 5-foot depths, the depth of the stream. This would maintain the hydrological connection and eliminate possible stranding of fish.

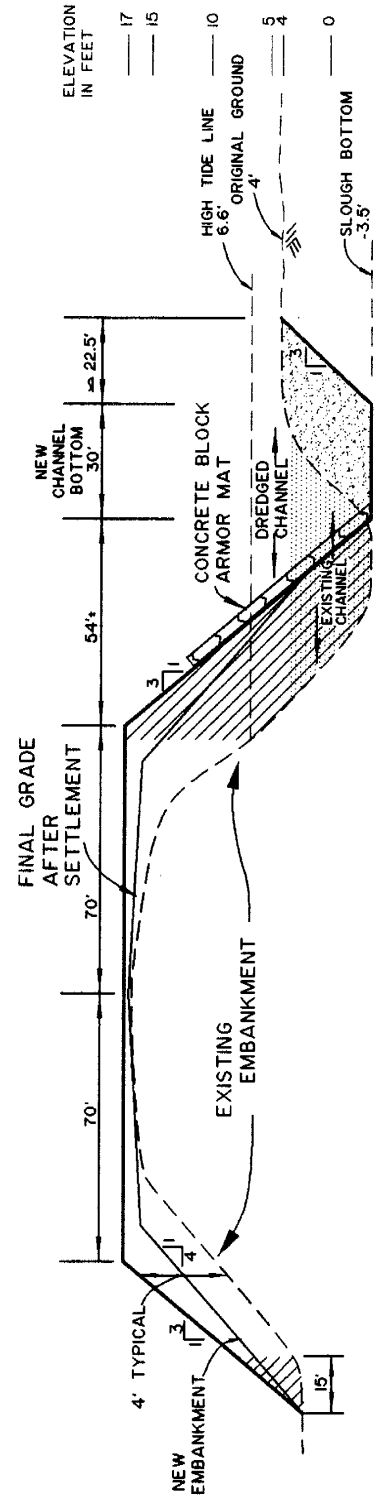
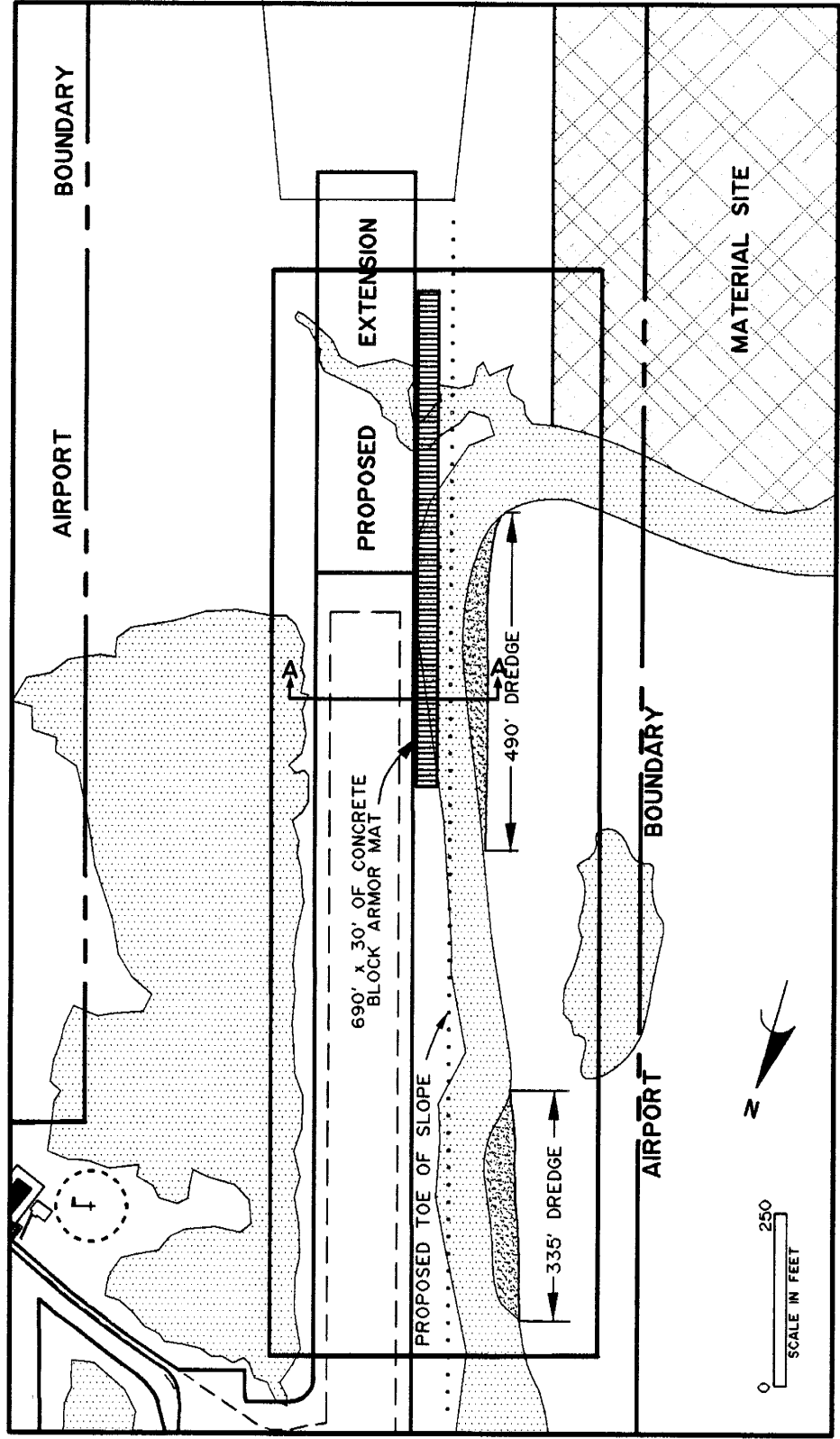


The village rejected a proposed new apron site off the southeast end of the runway and prefers expanding the existing apron to the east. This requires placing 31,000 cy of fill within an adjacent pond that evolved from an old borrow cell. It is not tidally influenced. The expanded apron footprint is irregular and is about 75,000 square feet. The Department is coordinating the design and construction concepts with the village and also with USF&WS, who participated on a site visit on September 5, 1995.

The USF&WS responded to 1993 project scoping that the dry lake bed was probably important bird habitat (see below). They further recommended additional alternatives' analysis of widening the runway but not lengthening it, and the location of the apron and lease lots as well as an analysis of their size (see Wetlands Section). They requested material sites be identified (see Figures 2 and 3). They also stated that parts of Native Allotments near the airport were selected but not conveyed and were, in effect, still part of the Yukon Delta National Wildlife Refuge. Property acquisition would not occur until after the property is conveyed to the Native Allottee.

ADOT&PF sponsored a field trip to the Kwigillingok Airport July 29, 1993 to review the wetlands and familiarize agency representatives with the site. A representative from the USF&WS participated in the field trip. Mike North, Biologist, produced a report on the trip found in Appendix D. He noted during the visit that the dry lake bed was apparently not being used very heavily by the many bird species in the area at that time. However, he concluded that the dry lake bed had high habitat potential. There are numerous open water ponds on airport property that provide habitat for migratory waterfowl nesting as noted in the USF&WS report (Appendix C).

A letter was sent to the Kwigillingok IRA Council January 3, 1994 requesting their input on local concerns with the expansion of the runway and habitat loss and quality. Although no specific response to the letter was received, it became apparent through the Public Meeting held February 28, 1994 and subsequent communications that the villagers consider the dry lake bed very valuable habitat. In particular, the dry lake bed was used by migratory waterfowl (primarily geese) in the fall and many villagers hunt them during that time. During 1995, the Department had several meetings



**SECTION A - A**  
**EXISTING RUNWAY WIDENING AND STREAM RECHANNELIZATION**  
 HORIZONTAL SCALE 1" = 50'  
 VERTICAL SCALE EXAGGERATED

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with the Village Council on this project's development. The current location of the proposed material site and the expanded apron is favored by the village.

Impacts under the proposed action are not expected to be significant to the fish and wildlife resources in the vicinity of the airport. The project would also incorporate Best Management Practices (Appendix E) to mitigate construction impacts at the airport. As stated previously, the runway extension into the dry lake bed is expected to impact approximately 1.3 acres of the total 784 acre lake bed. The proposed material site would be another 12.5 to 15.5 acres of lake bed impact.

No Action - No-Action would avoid any of the impacts to biotic communities associated with the proposed project.

#### **I. Endangered and Threatened Species**

The USF&WS stated there were no Endangered or Threatened species in the immediate project vicinity in their December 14, 1992 letter (Appendix A, Meehan, December 14, 1992). They are not aware of any bald eagles in the area, however, the proposed project is located in the potential breeding range of the spectacled eider. The American peregrine falcon, an endangered species, was noted at the village during a July 29, 1993 field trip.

A letter was sent to USF&WS December 20, 1993 requesting formal review of the project under Section 7 of the Endangered Species Act (TESA). Coordination per Section 7 of TESA was requested by USF&WS in their January 18, 1994 letter and is ongoing (Appendix A). The list of species to consider under Section 7 was included.

A peregrine falcon was noted at Kwigillingok during a July 29, 1993 field trip. Brian Anderson, Biologist with USF&WS, stated that it is unlikely there is peregrine falcon nesting activity near the airport (Appendix A, Rigg to Anderson telephone log). He reviewed the USF&WS files concerning the nearest nesting area and stated there may be some restrictions on construction if the nearest

nesting is within 15 miles of the project. No restrictions were placed on the project as a result of noting the falcon in the area. American peregrine falcons are listed as an endangered species. Spectacled Eider, an endangered species, could inhabit the area as well as Steller Eiders which are a Category 1 species - those the USF&WS feel may be placed on the lists in the near future.

A Biological Assessment for the proposed project was sent to the USF&WS February 16, 1994 and was accepted March 18, 1994 (Appendix F). The scope of the project at that time included a crosswind runway. The results of coordination were that the project would not impact any known threatened or endangered species. Embankment for airport improvements would be constructed in the winter to avoid the nesting period of the spectacled eider. The USF&WS will be invited to a preconstruction meeting to discuss protocol for encountering threatened or endangered species and other concerns. The Department will provide eider identification cards to the construction contractor for distribution to employees. If spectacled eiders are observed within the project limits, the USF&WS will be contacted immediately.

Subsequent coordination with the local village and agencies resulted in the current proposal which also requires Section 7 consultation because the altered design and the prior consultation documentation is more than 90 days old. Consultation was reinitiated October 17, 1994. The USF&WS responded on December 19, 1994. There were no new areas of concern. Consultation will again be reinitiated when applying for permit modifications to reflect the recent changes in the proposed apron and material site.

No-Action - There would be no impacts to threatened or endangered species under this alternative.

## **J. Wetlands**

Wetlands, as defined under Executive Order 11990, Protection of Wetlands, would be impacted by Alternative A (Figure 2). A wetlands Jurisdictional Determination was received from the COE November 23, 1992 (Kasper, November 23, 1992, Appendix A). The palustrine wetlands around

the airport probably function best for water retention, and nesting and feeding habitat for migratory waterfowl and other birds. Large mammals do not use the area intensively or in great numbers. Small mammals like rodents find both shelter and food in these wetlands. These wetlands are wet and moist tundra and have moderate to high functional value for wildlife habitat for migratory waterfowl. Those wetlands adjacent to the airport have been impacted by prior development and local traffic patterns. There are abundant and similar unimpacted wetlands adjacent to Kwigillingok.

The Department has already received permits and certifications for this project which will need to be modified to reflect recent changes in the proposed apron and material site, discussed below (Appendix D): COE Section 404 permit, dated May 17, 1995; ADF&G Title 16 permit, dated April 5, 1995; ADEC Section 401 Certificate of Reasonable Assurance, dated April 5, 1995; and ADGC Coastal Zone Consistency Determination, dated April 6, 1995. Current permit stipulations are listed in the Minimization discussion.

Changes in the proposed scope were the result of additional coordination with the village on the project. The village rejected a proposed new apron with lease lots, which was preferred by the Department. The site was at a prime berry picking locality. In addition, leaders of the community have expressed the desire to retain all land holdings and do not support lease lots unless they have some control or authority over future lease holders. The leasing issue is currently being addressed on a Statewide basis for its applicability to all rural airports. Final resolution at the Kwigillingok Airport will be made during the right-of-way land acquisition phase of the project.

The village also requested that the location of the proposed material site be shifted north, along an intertidally influenced stream. The borrow material adjacent to the stream may be more suitable for construction use, as it is already "thawed" to a certain degree. The soil is exposed, draining into the slough. This condition could promote a more rapid settling of the embankments that are to be built with the material.

Approximately 24 acres of moderate to high value wetlands would be impacted by all construction activities for the proposed action (excavation at the material site, temporary storage of material, replacement of fill in the material site, placement of fill for new embankment, and stream realignment). Table 4 provides a summary of the current scope of the project.

**Table 4  
Wetlands Involvement**

Development	Wetlands	Dredge/Fill Amounts
Material Site	12.5-15.5 acres	dredge: 123,000 cy fill*: 23,000 cy
New Embankment (Runway, Storage Bldg. Pad, Apron, Taxiway, 200 feet of Armor Mat), Segmented Circle and 2 Wind Cones	7.37 acre	fill**: 111,855 cy
Stream Rechanneling (including 490 feet Armor Mat along stream)	1.13 acres	dredge: 9,500 cy fill: 9,725 cy
<b>TOTALS</b>	24 acres	dredge: 132,500 cy fill: 144,580 cy

\* Estimated 1 foot depth of overburden (computed on 14 acres) to be replaced after excavation activities are completed.

\*\* Includes surface course.

The stream on the west edge of the primary runway must be realigned slightly to eliminate erosion of the runway embankment (Figure 6). Dredging operations would remove approximately 9,450 cy of material from 825 linear feet, up to 60 feet wide. Altogether this represents 1.13 acres. The dredged material would be used in the runway extension embankment. Additional protection would be provided by a 690-foot long concrete block armor mat placed along the runway embankment.

Altogether 123,000 yards of material would be excavated from approximately 12.5 to 15.5 acres of the delineated 25-acre site. The variance depends on the amount of unusable material encountered.

The delineated area includes roughly 1,900 linear feet of stream bank. Mining operations would be conducted to 5 foot depths, the depth of the stream, to eliminate possible stranding of fish after high tides. Dredging operations will be scheduled for winter months. Instream operations would occur only during low tide periods. It may not be possible to isolate the work area from the flowing water of the stream.

The use of the dry lake bed impacts high value wetlands for fall migratory waterfowl feeding. The 24-acre total includes up to 16.8 acres of dry lake bed. It also includes 0.9 acre of a pond that would be involved to expand the existing apron. The pond evolved from an old borrow cell. It is not tidally influenced. Wetlands adjacent to the airport are moderately valued for nesting and rearing areas for waterfowl and for anadromous and resident fish populations.

### **AVOIDANCE ALTERNATIVES**

The proposed improvements are within an area completely comprised of wetlands. The USF&WS states that these are all moderate to high value wetlands. Only the No-Action Alternative would completely avoid impacts to wetlands. This option would not meet the purpose and need for the project and is not considered practicable. With the exception of the Apron Expansion discussion, the following avoidance alternatives were suggested by the USF&WS.

Runway Lengthening: The proposed runway expansion is from 2,510 feet to 3,000 feet with a safety area from 2,900 feet to 3,480 feet. The USF&WS suggested that wetlands could be avoided if the length of the runway was not extended. Approximately 3.64 acres of wetlands would be avoided by this alternative. It is not considered practicable to reduce this length. This is considered the minimum acceptable length due to several factors: the minimum service level criteria for Community Class airports as stated in the AASP is 3,000 feet minimum length; the existing runway offers only 77 percent of wind coverage; there is no proposed crosswind runway and; a desire to provide additional length for the next generation of aviation fleet. The newer airplanes are faster, but heavier, than most of those currently in the fleet and require a longer runway for landing and



takeoff. The proposed action was designed to accommodate the average aircraft using the runway, not the most demanding aircraft.

Runway Widening: As stated in the Purpose and Need section of this document, the primary runway width is established according to the type of aircraft. In this case, single engine aircraft require a 60-foot runway with a 120-foot runway safety area. Total widening is 20 feet over the existing condition. The USF&WS suggested that wetlands could be avoided if the runway were not widened. Approximately 1.3 acres would be avoided by this alternative. It is not considered practicable to eliminate runway widening given the low percent wind coverage and that there is no proposed crosswind runway. The added width is necessary to bring the runway into conformance with desirable standards and insure maximum safety.

Apron Expansion: This would place 31,000 cy of fill within 0.9 acre of wetlands, which includes a portion of an adjacent pond that evolved from an old borrow cell. The pond is not tidally influenced. The expanded apron size would eventually be 75,000 square feet, but the Near-Term usable dimensions would continue to be 90 feet by 200 feet. This size is recommended to accommodate aircraft parking, loading and offloading and other airport dependent activities. It will take several years for the expanded apron embankment to settle because it is being constructed from local material. Therefore, a new 50 by 90-foot gravel pad is proposed for the equipment storage building. The pad would be adjacent to the Airport Access Road, approximately 350 feet east of the existing apron. This would require approximately 1,200 cy of imported gravel.

The village rejected the proposed new apron site with lease lots that was preferred by the Department (subsequently discussed). However, the apron needs to be brought into conformance or replaced for several reasons. It is deficient in minimum service level size by 32,000 square feet according to the AASP. FAA safety standards do not allow aircraft to park closer than 250 feet from the runway centerline. The apron is approximately 160 feet from the centerline. The existing equipment storage building penetrates approximately one foot into the airport's navigable airspace. It was recently built and is serviceable for sometime to come. For reasons of safety, the Department does not consider

it prudent to eliminate apron improvements. Elders requested that USF&WS support the village with the expanded apron alternative during a village meeting (September 5, 1995).

New Apron Location with Lease Lots: These project elements were originally included as part of the preferred Alternative 1, but were not supported by the village. The apron size was set by current standards (minimum service level criteria) at 60,000 square feet. This is recommended as the minimum for a community class airport to accommodate aircraft parking, loading and offloading and other airport dependent activities. The USF&WS suggested that wetlands could be avoided if the apron were reduced or eliminated and if no future lease lots were provided. Elimination of the apron and lease lots would avoid 3.11 acres of impact and elimination of the taxiway would avoid 0.33 acres.

This action is no longer being proposed. As previously discussed, the leasing issue is currently being addressed on a Statewide basis for its applicability to all rural airports.

### **MINIMIZATION ALTERNATIVES**

ADOT&PF would use the following measures to minimize impacts to wetlands. Cross drainage would be maintained in the runway through culverts where necessary. The stream realignment would be designed to provide fish passage and habitat. All erodible slopes and disturbed surfaces would be revegetated and ADOT&PF Best Management Practices would be implemented during construction.

The following stipulations are collectively required for the project by the COE Section 404 permit, ADF&G Title 16 permit, ADEC Section 401 Certificate of Reasonable Assurance, and the ADGC Coastal Zone Consistence Determination. The permits need to be modified to reflect the changes in the project scope for the apron and the material site. The ADGC determination and the ADEC certification will be reevaluated when permit modifications are requested.

- 1) That all dredging operations shall be conducted from the bank.
- 2) That all in-water work shall occur during periods of low water.
- 3) To stabilize the new channel adjacent to the runway and to prevent erosion, the west side stream bank shall be recontoured, and planted during the growing season with native vegetation or replanted with original vegetative mats that have been properly stored to ensure viability.
- 4) Material such as sorbent pads or booms are to be available on-site to contain and clean up any petroleum product spilled as a result of construction activity.

### **COMPENSATION ALTERNATIVES**

Although these are moderate to high value wetlands, no compensatory mitigation for wetlands impacts is proposed due to the abundance of similar wetlands in the vicinity and region.

No-Action - There would be no impact to wetlands under this alternative.

#### **K. Floodplains**

Proposed Action - Floodplains as defined by Executive Order 11988, Floodplain Management, are known to exist in Kwigillingok. However, the COE scoping comment letter states that they have no information with respect to the base flood plains, regulatory floodways or special flood hazard areas for the Kwigillingok area (Kasper, November 23, 1992, Appendix A). The COE Alaska Communities Flood Hazard Data book, July 1990 gives the following information: there has been no flood insurance study but flood hazard at Kwigillingok is high and the source of flooding is high tides and high winds (page 195). There are no records of floods at the airport and no damage reported as a result of floods.

Floodplain impacts in Kwigillingok from the proposed action are not considered significant according to the criteria in FAA Order 5050.4A, page 50 (12)(g)(3). Proposed reconstruction would not involve a considerable probability of loss of human life, likely future damage to the airport or a notable adverse impact on natural and beneficial floodplain values.

No-Action - No-Action would avoid impacts to the floodplain.

#### **L. Coastal Management Program**

Proposed Action - The proposed action is within the Ceñaliulriit Coastal Management District (Coastal Management Plan dated March 1985). No scoping response or comments on the draft EA were received from the Coastal District representative.

The project completed a coastal zone review and received a Final Consistency Determination from ADGC on April 6, 1995 (Appendix D). The State found the proposed project consistent with the Alaska Coastal Management Program. This determination will be reevaluated when permit modifications are requested for the ADF&G Title 16 permit and the COE Section 404 permit to reflect the recent proposed changes in the apron and material site. At that time, the ADEC will also reevaluate their Section 401 Certification.

No-Action - No-Action would have no impacts in the coastal zone.

#### **M. Coastal Barriers**

There are no barrier resources along Alaskan coasts as defined in the Coastal Barriers Resources Act of 1982, P.L. 97-348.

No-Action - There would be no impacts to coastal barrier systems under this alternative.

## **N. Wild and Scenic Rivers**

There are no Wild and Scenic Rivers within the project area (Alaska Rivers in the National Wild and Scenic Rivers System, National Park Service).

No-Action - There would be no impacts to any river listed or proposed for listing in the National Wild and Scenic River catalog under this alternative.

## **O. Farmland**

No farmland exists in the project area. There are no unique or prime agricultural lands as defined by the Farmland Protection Policy Act of 1981, Public Law 97-98 in the State of Alaska (Appendix A, Probst, Soil Conservation Service, March 16, 1993).

No-Action - No impacts to prime or unique agricultural lands would occur under this alternative.

## **P. Energy Supply and Natural Resources**

The proposed action would not significantly increase air traffic and/or fuel consumption. Energy demand from the community would increase slightly (minimum 5 Kilowatts, maximum 15 Kilowatts - per use) from electricity consumption for the proposed building and medium intensity runway lighting. Locally owned and operated generators supply power to Kwigillingok and have sufficient capacity to add the expected need for the airport improvements (Appendix A, Dougherty, Trip Report, October 28, 1992). Other natural resources for fuels, minerals, etc., are nonexistent locally or are untapped (Selkregg, 1976).

Extraction of material for the proposed project should not significantly affect the sand and gravel resources in the area as there are none. The proposed improvements would be built with local silt, of which there is an inexhaustible supply, and surface gravel would be imported.

No-Action - No-Action would have no impacts on local resources.

**Q. Light Emissions**

The proposed action includes the provision of medium intensity runway lights, rotating beacon, and wind cone light. Runway lighting would be radio controlled which would limit light emissions to aircraft landing and takeoff periods - approximately 15 minutes. A rotating beacon flashes a green and white 1,000 watt light continuously during hours of darkness. This light would be located 25-30 feet above ground and would be tilted up. A 100 watt lighted wind cone would also shine during hours of darkness.

The proposed apron is located approximately 1,000 feet from the nearest residence and is at approximately the same elevation as or lower than the airport. The increase in light emissions is not expected to cause significant impacts to adjacent residents under the proposed action due to its infrequent and short duration of use and because lights will not shine directly into homes.

The proposed action would not result in any unusual circumstances such as when high intensity strobe lights shine directly into a home. Consequently, no special study of impacts from light emissions appears warranted.

No-Action - Light emissions would not increase under this alternative.

**R. Solid Waste**

The proposed action would not generate increased needs for solid waste disposal in Kwigillingok. The proposed project does not include those facilities likely to increase solid waste needs such as terminals.

Appreciable amounts of construction related solid waste are not expected to be generated by the proposed project. The Contractor would either back haul construction wastes or place the waste material in the Kwigillingok landfill. The landfill has an ADEC Letter of Non-objection (Appendix A, Wien, Telephone Log, December 3, 1993). The landfill is located across the Kwigillingok River from the airport, more than two miles away. The contractor would have to acquire approval from the village to utilize it's landfill for waste disposal.

No-Action - Construction related solid waste would not be generated and no impacts would occur.

### **S. Construction Impacts**

Airport users would be notified prior to construction activities to minimize inconvenience of travel. Construction impacts associated with the proposed project would be limited to the immediate project vicinity for the proposed action. Residential areas are located within 1,000 feet of the proposed construction area. Construction impacts on the local community are expected to be minimal and temporary. The community is entirely east of the airport and construction activities would occur away from most areas of local transportation and land use.

Increased dust and construction vehicle emissions could result in temporary degradation of air quality. Watering for dust control would be required by the contract specifications and the Contractor would be required to maintain proper exhaust systems on equipment to control emissions. There may be temporary degradation of water quality in the wetlands around the airport, however, ADOT&PF's Best Management Practices (Appendix E) would reduce such degradation to a minimum. Also, the Contractor would be required to accomplish the work in accordance with the conditions of the NPDES General Permit for construction activities in Alaska. The Contractor will develop and implement a Storm Water Pollution Prevention Plan.

All earth moving activities, except placement of gravel on the runway, would be done in the winter. Winter construction is considered the only practicable way to handle the very saturated, soft, silty

material. The above described impacts associated with the proposed project are temporary. Applicable measures to reduce construction impacts, such as the use of ADOT&PF's Best Management Practices, would be incorporated into project plans. In addition, the Contractor would be required to prepare and implement a hazardous material control plan as described in Section T, Hazardous Waste.

No-Action - No-Action would have no construction related impacts.

#### **T. Hazardous Waste**

There appears to be little potential to encounter contamination during material extraction or construction of airport improvements. These activities will be located well away from the landfill and in areas where no obvious evidence of hazardous waste or other contamination (such as dumps, debris, barrels, cans, stained soil, or stressed vegetation) were noted. ADEC records contain no information on suspected or known contamination in the area (Appendix A, Telephone Log, Saupé, December 9, 1992). Fuel storage tank installation would be in accordance with all ADEC regulations.

Should hazardous waste or suspected hazardous substances be encountered during construction, all work in the vicinity of these substances would be halted and the ADEC would be contacted immediately. The contractor is required to develop and implement a Hazardous Material Control Plan which explains how the disposal of waste oil and other hazardous wastes generated during construction would be handled. In addition, the plan would detail how the contractor plans to handle the clean up of any accidental spills of hazardous materials, substances or wastes which could occur during construction. The plans would also specify that embankment and surface material will be free from contaminants. Any storage, cleanup and/or disposal of contaminated material would be in accordance with an ADEC approved corrective action plan.

No-Action - There is no danger of encountering contamination under this alternative.



## **U. Material Sites and Waste Disposal Areas**

Material from airport property for the proposed action will come from airport property. The Material Site is location within the dry lake bed. Surface material will be imported. The Contractor would be responsible for obtaining all required permits and clearances for other material sites.

ADOT&PF geologists determined that the best location for material extraction was in an area where permafrost had thawed out (pers. comm). It was also determined that winter excavation and construction of embankment was the most viable method for construction. The material would be too wet and sloppy to work with if not frozen. Best Management Practices would be used during all material extraction activities and the disturbed parts of the proposed borrow area would be rehabilitated per State requirements.

No-Action - No-Action would not impact local material sites.

## **V. Environmental Consequences - Other Considerations**

Based on the evaluations and coordination conducted to date, there do not appear to be any significant issues that would cause the proposed action to be elevated to an Environmental Impact Statement. There are no substantial conflicts between the proposed action and the objectives of Federal, regional, State and local land use plans, policies and controls for the area concerned.

The community does not support constructing the new apron with lease lots. They do not want lease lots unless they have some control or authority over future lease holders. This is based on tribal sovereignty and was discussed during an October 1994 meeting between Kwigillingok representatives and the ADOT&PF Commissioner. The leasing issue is currently being addressed on a Statewide basis for its applicability to all rural airports. Final resolution of lease lots at the Kwigillingok Airport will be made during the right-of-way land acquisition phase of the project.

## V. COMMENTS AND COORDINATION

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Relevant letters and contacts from the agencies and the public are in Appendix A. The following is a summary of the comments and ADOT&PF's coordination. Scoping requests were sent to agencies and interested parties November 17, 1992. Several project development meetings were held with agencies during 1993.

During the December 8, 1993 preapplication meeting with agency representatives, several suggestions were made on how to discuss alternatives to wetlands impacts in the permit application as well as in the environmental document. Barge landing and material sites were discussed in detail and the stream realignment concepts were also discussed. The Department agreed to contact the local community to find out their feelings about the quality of habitat around the airport. The need for the crosswind runway was discussed as well as its location.

The draft EA was made available for agency and public review on January 19, 1994. A Public Meeting was held in Kwigillingok on February 28, 1994. The Department redesigned the proposed improvement project subsequent to the February 28, 1994 meeting. The runway extension was shortened and the crosswind proposal was deleted. Consideration of a crosswind runway may come up at a later date when wind data are available for the local area. Revised draft EAs were distributed to the agencies and the Kwigillingok community for review on November 18, 1994.

Lease lots were included in the proposed action and would provide an opportunity for economic development should an individual or business wish to take advantage of them. The FAA requires provision for economic pursuits on public airports. They also require that passenger waiting and baggage storage occur behind the building restriction line, off the apron. However, the community does not support constructing the new apron with lease lots. They do not want lease lots unless they have some control or authority over future lease holders. This is based on tribal sovereignty and was discussed during an October 1994 meeting between Kwigillingok representatives and the ADOT&PF Commissioner. The leasing issue is currently being addressed on a Statewide basis for

its applicability to all rural airports. Final resolution of lease lots at the Kwigillingok Airport will be made during the right-of-way land acquisition phase of the project.

Permits and certifications for the project were obtained during April and May 1995. Subsequent coordination with village representatives through a series of meetings in 1995 resulted in changes to the preferred action, which have been incorporated into the conceptual plans. Permitting agencies have been advised and coordination has been initiated to modify the project permits. This will be completed after the project receives a Finding of No Significant Impact from FAA.

The **U.S. Fish and Wildlife Service (USF&WS)** requested additional alternatives discussion and that all material sites be identified in the environmental document. Materials sites are identified on the environmental document figures and alternatives discussions have been expanded to cover the USF&WS concerns. They included the information that the proposed project site is within the potential breeding range of the spectacled eider and that some lands in the vicinity of Kwigillingok have not yet been conveyed. There are no known bald eagle nests near the site and that land ownership should be discussed with Bob Rice of the USF&WS Realty Office. A peregrine falcon was noted at Kwigillingok during a July 29, 1993 field trip. Based on the known range of the American peregrine falcon, the USF&WS felt that the falcon was of this species.

Coordination per Section 7 of the Endangered Species Act (TESA) was requested by USF&WS in their January 18, 1994 letter and is ongoing (Appendix A). A Biological Assessment for the proposed project was sent to the USF&WS February 16, 1994 and was accepted March 18, 1994 (Appendix F).

The USF&WS provided comments on the draft and revised draft EAs, and also on permits required for this project. The results of coordination were that the project would not impact any known threatened or endangered species. ADOT&PF agreed to request USF&WS presence at the preconstruction conference, to provide eider identification cards to construction staff, construct

embankment during winter months, and to provide any information on Spectacled Eiders to USF&WS if such are noted in the Kwigillingok area by construction staff.

The **U.S. Army Corps of Engineers (COE)** responded November 23, 1992 that a Section 404 permit would be required and that the project is located in the floodplain of the Kwigillingok River. File number 4-920772, Kwigillingok River 1, has been assigned to this project. Subsequent coordination with the COE resulted in a Section 404 permit, dated May 17, 1995.

The **National Marine Fisheries Service (NMFS)** responded December 10, 1992 that ADOT&PF should investigate additional design alternatives. The alternatives discussions have been expanded since the scoping process was initiated. The NMFS provided comments on the draft and revised draft EAs, and also on the permits. Their concerns are over potential impacts to fishery resources with the stream realignment. They recommended several conditions and supported close coordination with ADF&G in developing the scope of work.

The **Alaska Department of Fish and Game (ADF&G)** responded December 18, 1992 stating that there were anadromous fish in the streams as well as resident fish, that there were no legislatively designated special areas near the project site and that a Title 16 permit would likely be required. The Department met with ADF&G on December 16, 1994, to discuss design concepts of the proposed slough realignment. A Title 16 permit for the stream operations was issued on April 5, 1995.

The **Alaska Department of Environmental Conservation (ADEC)** responded December 9, 1992 and answered the questions posed in the scoping letter: there are no recorded contaminated sites; the project should include methods utilized to insure minimal impacts on natural water bodies; material sites should not impact surface or ground water; the solid waste site is east of the airport; public water is from a surface water source northeast of the project; there are no registered underground storage tanks; there are no approved waste water sites within the proposed project area; and probable permits include temporary construction camp permits, subdivision permits and the

ADEC Section 401 water quality certification. The Section 401 certification for this project was issued on April 5, 1995.

The ADEC provided comments on the revised draft EA regarding the proposed upgrades to the existing maintenance and equipment building at the airport. They wanted a collection system that would discharge to the outside of the building. There were concerns that any oil or other contaminants might pass through a proposed membrane liner to be placed beneath the building. It was agreed to incorporate a steel plate floor and a water/oil separator that would daylight to the outside into the building's design.

The **State Historic Preservation Officer (SHPO)** responded November 27, 1992 that the project was "cleared" for cultural resources.

**Willi Atti, Kwigillingok Village IRA Council (Kwik, Inc.)** President, called December 15, 1993 to state that the community was in support of the project, wondered who would likely desire a lease lot, and discussed rechanneling the outlet of the dry lake bed.

The IRA Council requested a public meeting in Kwigillingok so that the elders could review the proposed project. ADOT&PF staff met with the village elders in Kwigillingok February 28, 1994. The elders expressed concern for the size of runway proposed and stated they did not necessarily object to a crosswind runway, but felt that it was in the wrong alignment. The proposed apron was not in a good location and they requested consideration of blocking drainage in the tidally influenced stream adjacent to the runway. The villagers also requested elimination of all lease lots.

Kwigillingok representatives met with Commissioner Michael Barton to discuss issues over land ownership status at the airport in October 1994 meeting. The Council has reviewed and provided comments on the draft and revised draft EAs, and continue to have concern over the proposed new apron with the lease lots.

Changes in the proposed scope during 1995 were the result of further coordination with the village on the project. The village rejected the proposed new apron with lease lots off the southeast end of the runway, which was preferred by the Department. The site was at a prime berry picking locality. In addition, leaders of the community expressed the desire to retain all land holdings and do not support lease lots unless they have some control or authority over future lease holders. The village also requested that the location of the proposed material site be shifted north, along an intertidally influenced stream. The Kwigillingok Village Council has reviewed the current proposal for the apron location and has no objections to proceeding with the design and right-of-way acquisition for the project.

James Atti, **Kwigillingok** resident, replied December 14, 1992 that he would like to see road reconstruction in Kwigillingok. The Department responded in a letter January 6, 1993 that different funding sources would be responsible for roads versus airports: Federal Aviation Administration funds cannot necessarily be used for road development. Mr. Atti was given the name of the Area Planner to discuss future programming of Federal Highway Administration funding for a road project.



## VI. BIBLIOGRAPHY

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Alaska Department of Community and Regional Affairs, *Certification of Population*, December 15, 1992.

Alaska Department of Fish and Game, *Coastal Ecology and Wild Resource Use in the Central Bering Sea Area: Hooper Bay and Kwigillingok*, Technical Paper 85 by Alice Stickney, September 1984.

Alaska Office of the Governor, *Alaska Regional Profiles, Southwestern Region*, ed. Lidia Selkregg, 1975.

Joint Federal-State Land Use Planning Commission, *Statewide Inventory: Community Profiles by Native Region*, Volume 1 by Art Patterson, October 1973.

U.S. Army Corps of Engineers, *Alaskan Communities Flood Hazard and Pertinent Data*, July 1990.

U.S. Department of the Interior, National Park Service, *Alaska Rivers in the National Wild and Scenic Rivers System*, Alaska Regional Office (on file), November 1990.

*Classification of Wetlands and Deepwater Habitats of the United States*, December 1979.

U.S. Department of Transportation, Federal Highway Administration, *A Method for Wetland Functional Assessment*, Vol. 1, Final Report, March 1983.





## VII. LIST OF PREPARERS

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<u>Coordination &amp; Supervision</u>		
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John Wahl, P.E. B.S. Civil Engineering	Preliminary Engineering & Document Review	<u>Airport Design Project Manager</u> 21 yrs ADOT&PF
Tom Dougherty, P.E. B.S. Civil Engineering B.S. Forestry	Preliminary Engineering & Document Review	<u>Design Engineer</u> 5 yrs ADOT&PF; 6 yrs private sector
Ken Sun, P.E. B.S. Civil Engineering	Preliminary Engineering & Document Review	<u>Design Engineer</u> 4 yrs ADOT&PF; 4 yrs private sector
<u>Text and Organization</u>		
Jerry O. Ruehle B.S. Wildlife Management	Environmental Coordination and Document Review	<u>Environmental Team Leader</u> 12 yrs ADOT&PF; 2 yrs USF&WS; 1 year ADF&G
Diana Rigg B.A. Anthropology M.A. Anthropology	Environmental Research and Author	<u>Environmental Analyst</u> 5.5 yrs ADOT&PF; 5 yrs Alaska SHPO; 2 yrs private sector archaeologist, 2 yrs Idaho SHPO
Laurie Mulcahy B.S. Anthropology	Environmental Research and Author	<u>Environmental Analyst</u> 6 yrs ADOT&PF; 4 yrs historian; 2 yrs archaeological experience
LaVonne Rhyneer A.A. Liberal Arts B.S. Natural Science	Graphic Artist	<u>Drafting Technician</u> 6 yrs ADOT&PF; 1.5 yrs drafting; 1 yr engineering drafting



**APPENDIX A**

**Public and Agency Coordination**



## LIST OF CORRESPONDENCE AND CONTACTS

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Dec. 7, 1993	Public Notice, Proof of Publication		A-16
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### FEDERAL AGENCIES

#### U.S. Environmental Protection Agency

No scoping response

#### Soil Conservation Service

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#### U.S. Army Corps of Engineers

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#### **Alaska Department of Environmental Conservation**

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#### **Alaska Department of Fish and Game**

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Dec. 16, 1994	Mulcahy to File	Permit Meeting	A-90
Jan. 25, 1995	Mulcahy to Dolezal	Permit Application	A-92
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#### **Alaska Department of Natural Resources**

No scoping response

#### **Alaska State Historic Preservation Officer**

Nov. 27, 1992	Bittner to Horn	Scoping Response	A-98
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#### **Alaska Department of Governmental Coordination**

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#### **Community of Kwigillingok**

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November 17, 1992

Re: Kwigillingok Airport  
Improvements  
Project No. 60118

Scoping Letter

Mr. Richard Thompson  
Regional Manager  
Division of Land  
Dept. of Natural Resources  
P.O. Box 107005  
Anchorage AK 99510-7005

Dear Mr. Thompson:

The Alaska Department of Transportation and Public Facilities (ADOT&PF) is soliciting comments and information on its proposed plans to reconstruct the Kwigillingok Airport, Kwigillingok, Alaska. The runway safety area and apron size do not meet current State and Federal standards for length and size, respectively. The existing apron does not have room for future lease lots. There is no lighting on the runway, the existing snow removal equipment is outdated and the existing equipment storage building requires reconditioning.

The purpose of the proposed project is to bring the Kwigillingok Airport up to current State and Federal Standards, to provide room for future growth with lease lots, to provide lighting for night and emergency access, and to provide adequate equipment with which to keep the runway operational.

#### ALTERNATIVE A

The proposed action would lengthen the existing runway safety area approximately 700 feet to the south (from 2,900 to 3,600) and widen it 25 feet on both sides (from 100 to 150). The runway would be lengthened 100 feet and widened 25 feet. Medium intensity runway lighting would be provided. In addition, the existing 95 by 160-foot apron would be increased to 200 by 300 feet with three 100 by 100-foot lease lots. The existing taxiway (50 by 120 feet) would be reconstructed to 80 by 200 feet. The existing storage building (located on one of the lease lots) would be reconditioned.

#### ALTERNATIVE B

The No-Action alternative would not bring the airport up to standards and only ongoing maintenance would occur.

## ADDITIONAL AREA INFORMATION

Fill material for the proposed improvements would come from the dry lake bed south of the runway. Surface course will come from an approved source outside Kwigillingok. The entire improvement project is located in the floodplain of the Kwigillingok River and is in wetlands.

A new channel, created when a lake at the south end of the runway drained, requires rechannelization due to its proximity to the airport. The channel cuts into the south and western edges of the runway and parallels it for most of the runway length. It curves to the west but crosses the runway safety area on the north end. The channel is actively eroding the southern airport embankment and may soon impact other sections of embankment. The channel drains into the Kwigillingok River and may contain fish.

We would appreciate your response by December 10, 1992. If you have any questions, please contact Diana Rigg, Environmental Analyst, at 266-1448.

Sincerely,

Steven R. Horn, P.E.  
Supervisor

/DR

Enclosures: Project Map

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Anchorage AK 99501

USF&WS

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

1. Any information on known threatened and/or endangered species in the project area and vicinity,
2. Any information identifying National Wildlife Refuge lands in or adjacent to the project area. If refuge lands are in the vicinity, would the normal activities occurring there be affected by the proposed project,
3. Any information or data on important fish and wildlife habitats potentially affected by the proposal,
4. Any information on known active or inactive eagle nests in the project vicinity and,
5. Identify any permits and/or clearances to be obtained from your agency for the project.

COE

1. Any information and/or data with respect to the base floodplains, regulatory floodways and/or special flood hazard areas of drainages that may be affected by the proposed project,
2. Identify any permits and/or clearances to be obtained from your agency for the proposed project.

SHPO

Please review the proposed project and provide clearance, if appropriate. If cultural resources sites are known or suspected in the vicinity of the proposed project, please provide specific recommendations needed for clearance.

ADF&G

1. Any information and/or data on anadromous or resident fish streams in the vicinity of the proposed project.
2. Identify any State Game Refuges and/or Critical Habitat Areas in the vicinity of the project. If these areas exist in the vicinity, then would the normal activities of these areas be affected by the proposed project?
3. Identify any permits and/or clearances to be obtained from your agency for the proposed project.

ADEC

1. Identify any known or suspected contaminated sites, and registered underground storage tanks that may affect or be affected by the proposed project,

2. Identify any (ter quality concerns,

3. Any information and/or data on existing (permitted and unpermitted) solid waste landfill/dumps/discharges in the project area,

4. Any information and/or data on existing drinking water supplies in the project area, and

5. Identify any permits and/or clearances to be obtained from your agency for the proposed project.

#### EPA

1. Identify any sole source or principal drinking water sources that may be affected by the proposed project,

2. Identify any known contaminated areas or sites in the project area, and

3. Identify any permits and/or clearances to be obtained from your agency for the proposed project.

#### Local or State CZM

1. Identify any potential conflicts with the goals or objectives of the local coastal management program, and

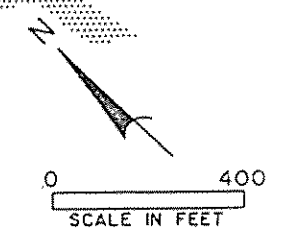
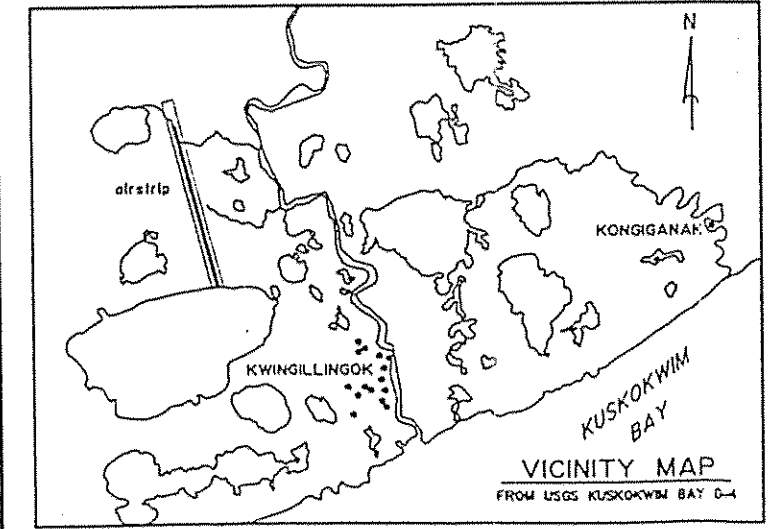
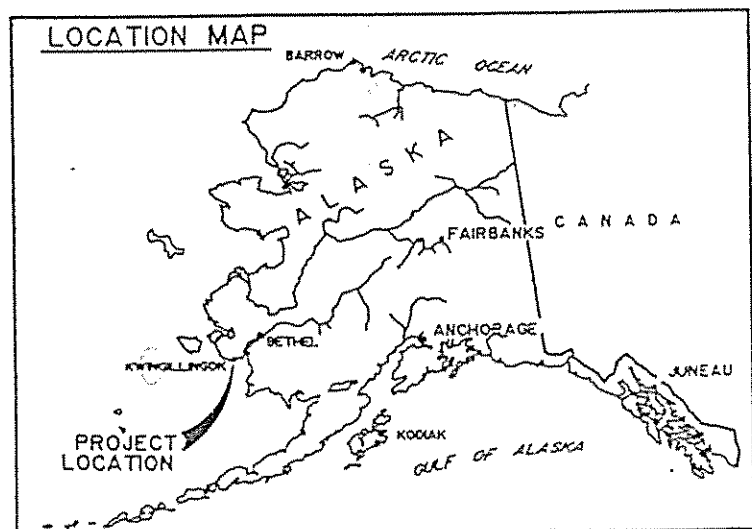
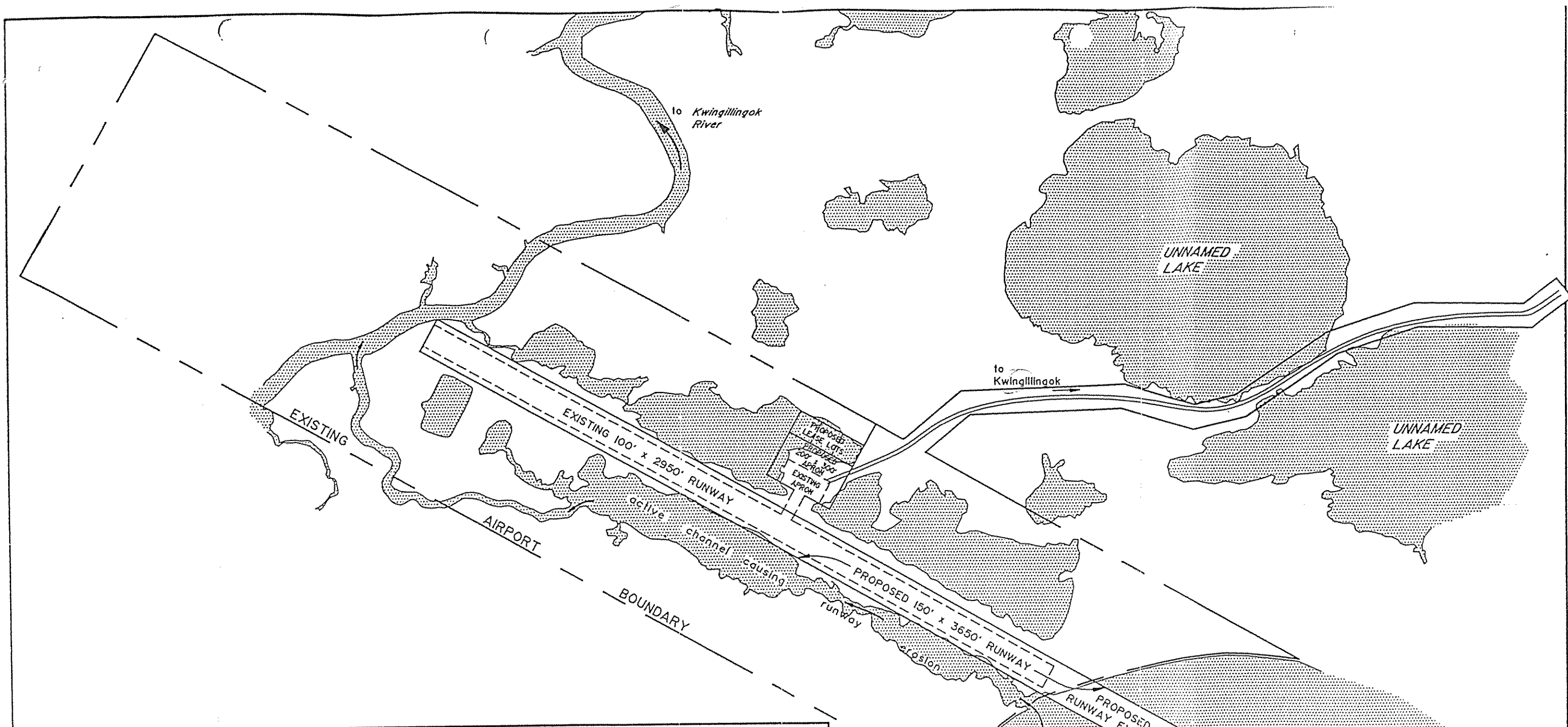
2. At the present time, does your agency have any objections to the proposed project.

#### Village or City

1. Identify any existing and/or proposed zoning requirements and/or land use controls in the project area,

2. Identify any other local improvement projects under construction or proposed in the vicinity of the airport within the foreseeable future.

3. Is the project supported by the community?



KWINGILLINGOK AIRPORT IMPROVEMENTS  
 Project No. 60018  
**LOCATION and VICINITY MAPS**  
 Figure 1

# 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

September 8, 1993

Re: Kwigillingok Airport Improvements  
Project No. 60118

Project Update

Mr. Lance Trasky  
Dept. of Fish & Game  
333 Raspberry Road  
Anchorage, AK 99518-1599

Dear Mr. Trasky:

The Alaska Department of Transportation and Public Facilities (ADOT&PF) sent out a scoping letter on the proposed improvements at Kwigillingok Airport November 17, 1992. Several agencies provided preliminary comments at that time. This letter is intended to provide you with additional information on the project.

The proposed improvements at Kwigillingok are within the FY 94 Capital Improvement Program budget, meaning that construction could begin as early as late summer, 1994. The majority of construction would occur during 1995. It may be prudent to conduct most ground disturbing activities during the winter. The method of construction will consist of pushing up the silty material in the areas of airport expansion to a level higher than required for the finished grade. This material will need to settle for a few years before being graded and surface course laid on.

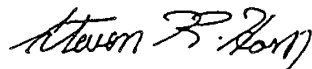
ADOT&PF staff have conducted geotechnical studies on the proposed improvement areas and a formal survey has also been completed. ADOT&PF contracted with a photogrammetric service to have the area flown for new aerial photography. ADOT&PF sponsored an agency field trip to Kwigillingok July 29, 1993 and U.S. Fish and Wildlife Service staff have conducted limited biological studies of the proposed improvement areas.

We propose to develop an environmental assessment (EA) for the project with agency review expected by the end of the year. Applications for all appropriate permits will be made by February of 1994. At this time, we anticipate that a Corps of Engineers (COE) Section 404 permit and an Alaska Department of Fish and Game Title 16 permit will be required. A stream west of the airport is tidally influenced and, if affected by project development, may require a COE Section 10 permit as well.



We are not formally soliciting comments at this time. However, if you have additional information to provide, comments to make, or concerns to express, please take this opportunity to do so. Please call Diana Rigg, Environmental Analyst, at 266-1448 if you have questions.

Sincerely,



Steven R. Horn, P.E.  
Supervisor

/DR

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

Mr. Lance Trasky  
Dept. of Fish & Game  
333 Raspberry Road  
Anchorage AK 99518-1599

Mr. Dan Robison  
Environmental Protection 222  
W. 7th Ave., #19  
Anchorage AK 99513-7588

Ms. Ann Rappoport  
U.S. Fish & Wildlife Service  
605 W. 4th Ave., Room 62  
Anchorage AK 99501

Mr. Don Kohler  
U.S. Corps of Engineers  
Box 898  
Anchorage AK 99506-0898

Mr. Willi Ahi  
Kwik Inc.  
General Delivery  
Kwigillingok AK 99622

Mr. Tim Rumfelt  
Environmental Conservation  
3601 C St., Suite 1332  
Anchorage AK 99503

Mr. David O. David  
Kwigillingok IRA Council  
P.O. Box 49  
Kwigillingok AK 99622

Greg Roczicka  
Cenaliulriit CRSA  
P.O. Box 219  
Bethel AK 99559

Mr. Mike Neimyer  
Calista Regional Corporation  
601 West 5th Ave.  
Anchorage AK 99501-2295

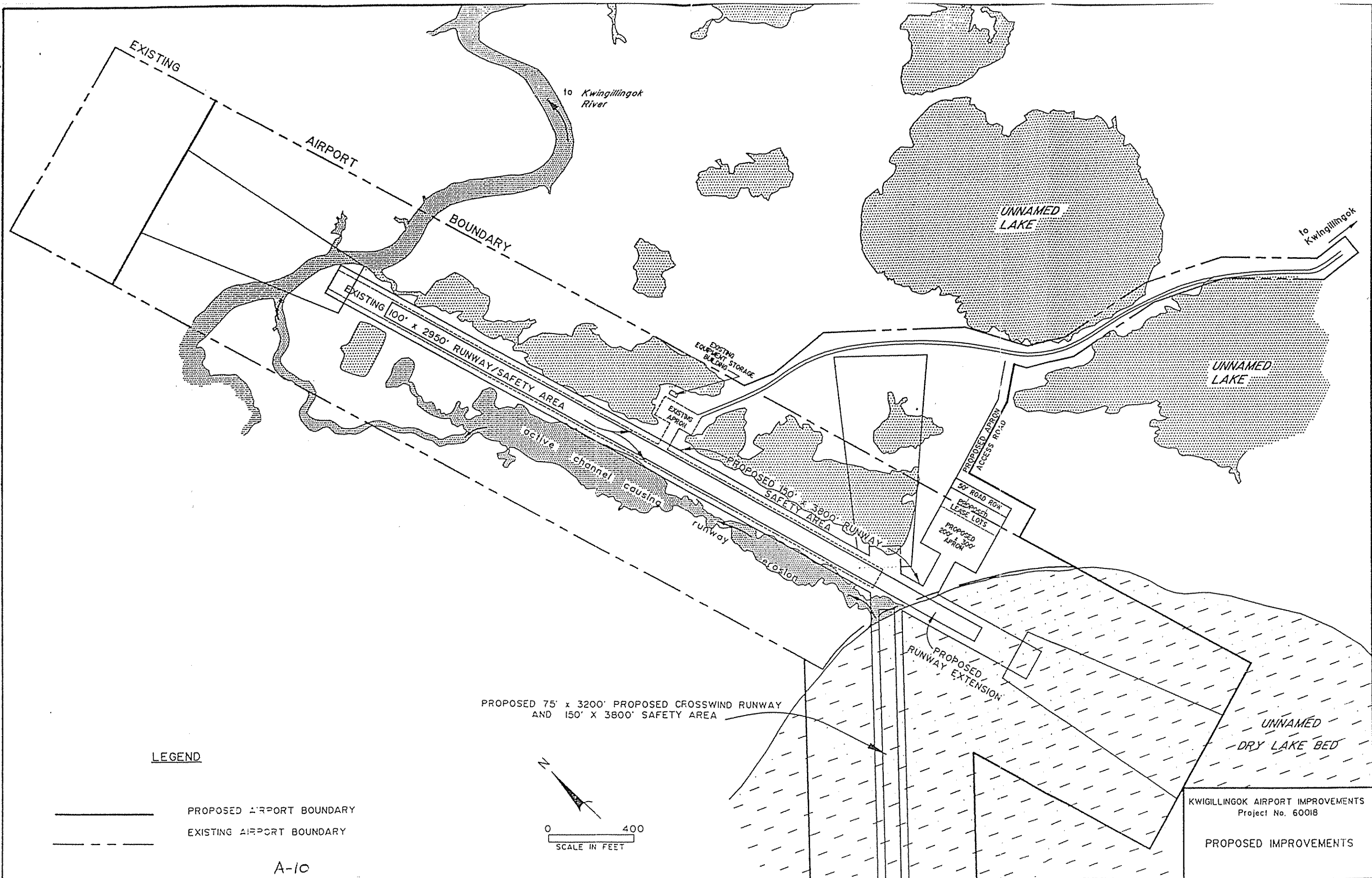
Mr. Ron Morris  
Nat'l Marine Fisheries Service  
701 C St., Box 43  
Anchorage AK 99513

Ms. Judith Bittner  
DNR, SHPO  
P.O. Box 107001  
Anchorage AK 99510-7001

Mr. Richard Thompson  
Dept. of Nat'l Resources, Land  
P.O. Box 107005  
Anchorage AK 99510-7005

Mr. Larry Wright  
National Park Service  
2525 Gambell St., Room 107  
Anchorage AK 99501





**LEGEND**

- PROPOSED AIRPORT BOUNDARY
- - - - - EXISTING AIRPORT BOUNDARY

A-10

KWIGILLINGOK AIRPORT IMPROVEMENTS  
Project No. 60018  
PROPOSED IMPROVEMENTS

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

MEETING RECORD

DATE: 8 Dec 93 TIME: 9:00 am  
PROJECT: Kwigillingok Airport PROJECT NO.: 60118  
SUBJECT: Preapplication Meeting for Agencies  
PRESENT: See Attached  
NOTED BY: Diana Rigg

I briefly explained the proposed project and changes, identifying many of the potential environmental concerns. I stated that permits would be applied for within 2-3 weeks, depending on available graphics support.

Wayne Dolezal asked when designs for the stream realignment would be available. Tom Dougherty indicated that plans would be available after the first of the year. Wayne then asked if excavated material from the stream channel would be used on the crosswind embankment. Tom stated that some could be used, however, there were concerns with equipment on the tundra transferring material between the two locations. He felt that, where the stream realignment and the crosswind runway were close, material excavated for the stream channel could easily be used. ADOT&PF will specify low ground pressure vehicles for this project.

Gary Saupe asked what would be done with the old apron and the building. I told him that the pad, access road and building would stay and that the building would have a rehabilitated floor installed with containment capability for spills. Tom stated that gravel would be stockpiled on the old apron once the new apron was usable.

We discussed barge landing sites and access. Tom explained that ADOT&PF cannot unduly restrict the Contractor for access and that there were several possible areas available for a landing. The Contractor would probably barge gravel to the area in late fall and winter haul to the construction site. We anticipate placing contract language in the Specifications notifying the Contractor of permit requirements for barge landings, haul routes (if not winter), etc. Wayne Dolezal asked if we knew the source of the gravel. Surface course is Contractor supplied, but would probably come from Platinum or Goodnews.

We explained that there were several right-of-way issues to be resolved before implementation of the project.

Mark Jen asked about a needs assessment. Skip explained the planning process that ADOT&PF uses prior to implementation of a project. I informed Mark that Purpose and Need were explained on the environmental document and that section identifies the deficiencies in the existing facility and what is required to bring the airport into standards.

Mike North asked if we had conducted an analysis of possible increase in bird hazard from construction of the crosswind runway. Tom asked Mike how one would conduct such an analysis. Mike asked if the villagers could provide some input on the spring and fall use of the dry lake bed that could shed some light on this issue. I told Mike I would write the IRA Council and ask them to respond to that question.

We plan to conduct a public meeting/hearing in Kwig sometime before March. Wayne D. will talk to the ADF&G Subsistence people to see if they have any information on the area.

Mike N. indicated he has concerns for the crosswind runway. Is it really necessary, is the village concerned for habitat? These need to be discussed in the EA. Tom indicated that the concern for having a crosswind at Kwig comes from the air carriers. Generally, safety issues come to ADOT&PF's attention from air carriers, not the public. Air carriers that have been contacted say that a crosswind would be beneficial.

Mike then asked is the location for the crosswind could be changed. Alternatives to the development and location of the crosswind should be addressed in the EA. Skip stated that there is a community planning document from the 1970's that identified both the primary and crosswind runways at Kwig in their approximate locations. Mike concluded that a Section 7 letter needs to be sent to the USF&WS - spectacled eiders.

Terry Kasper asked for more clarification on the stream realignment. Both Skip and Tom stated that the purpose was to keep the stream as far away from the runway as possible - but not to drain too many of the ponds in the area doing it.

Mike N. indicated the Native Allotments were not yet conveyed and were a part of the Yukon Delta National Wildlife Refuge. We need to coordinate with the USF&WS Realty Division at Tudor Road regarding this issue.

Action Items for Diana:

1. Letter to IRA Council
2. Letter to USF&WS Realty Division
3. Enhance Alternatives Section in wetlands discussion
4. Investigate need for Section 7 Analysis for Endangered Species  
-- Spectacled Eider

cc: Skip Barber, Hydrologist, Materials Section  
Jerry Ruehle, Environmental Team Leader, PD&E  
John Wahl, P.E., Project Manager, Aviation Design

Project: Kwigillingok Airport

DGCIPRC: FH

Applicant: \_\_\_\_\_

Agent: \_\_\_\_\_

Date: 12/8/93

Time: 9:00 am

Place: DGC Conference Room

## PLEASE PRINT

NAME	REPRESENTING	PHONE
<u>FAYE HEITZ</u>	<u>DGC</u>	<u>5616131</u>
<u>[Signature]</u>	<u>DOT / PF FAX / local</u>	<u>333-0616</u>
<u>Terrence W. Kasper</u>	<u>COE</u>	<u>753-2716</u>
<u>Gary L. Sawyer</u>	<u>DEC</u>	<u>563-6529</u>
<u>MIKE NORTH</u>	<u>USFWS</u>	<u>271-2789</u>
<u>C. Wayne Dolezal</u>	<u>ADFEG</u>	<u>267-2284</u>
<u>[Signature]</u>	<u>NMES</u>	<u>271-5006</u>
<u>TOM DOUGHERTY</u>	<u>DOT / PF</u>	<u>266-1699</u>
<u>Diana Rigg</u>	<u>DOT / PF</u>	<u>266-1442</u>
<u>Mark Jew</u>	<u>EPA AA/A</u>	<u>271-3413</u>

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- CLIP -

BARBARA PRICE

being first duly sworn on oath  
deposes and says that she  
is the Billing Clerk of  
the Anchorage Daily News, a  
daily newspaper. That said  
newspaper has been approved as  
a proof of publication and it now  
and has been published in the  
English language continually as a  
daily newspaper in Anchorage,  
Alaska, and it is now and during  
all said time was printed in an  
office maintained at the aforesaid  
place of publication of said  
newspaper. That the annexed is  
a copy of a

Display Ad

as it was published in regular  
issues and not in supplemental  
forms of said newspaper on

NOV. 19, 1992

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and that such newspaper was  
regularly distributed to its  
subscribers during all of said  
period. That the full amount of  
the fee charged for the foregoing  
publication is not in excess of  
the rate charged private  
individuals.

signed \_\_\_\_\_

## NOTICE

### Notice of Preliminary Engineering and Environmental Studies and Wetlands and Floodplains Development

Kwigillingok Airport, Kwigillingok, Alaska  
Project No. 60118

The Alaska Department of Transportation and Public Facilities (ADOT&PF) is proceeding with preliminary engineering and environmental studies for the proposed improvements at Kwigillingok Airport, Kwigillingok, Alaska. The proposed project would involve placement of fill in wetlands and floodplains as defined by Executive Order 11990, Protection of Wetlands and Executive Order 11988, Floodplain Management. The existing runway and runway safety area require lengthening and widening. The apron does not meet current standards for size. The purpose of the project is to bring Kwigillingok Airport up to current standards.

The proposed project consists of lengthening the runway safety area approximately 700 feet to the south and widening it approximately 50 feet (25 feet on both sides). The existing apron will be expanded to 300 feet by 200 feet (60,000 square feet) with three 100 by 100-foot lease lots. Additional actions include upgrading the existing equipment storage building (located on one of the lease lots), purchasing a new motor grader and adding medium intensity runway lighting. A new channel formed when a lake south of the airport drained, has affected the southern and western edges of the runway and will be channelized approximately 200 feet to the west to avoid future impact to the runway embankment.

To insure that all possible factors are considered in the design of the proposed project, ADOT&PF is requesting public comments and recommendations. Please send your comments to the following address by December 15, 1992.

Steven R. Horn, P.E.  
Supervisor

Preliminary Design and Environmental  
Alaska Department of Transportation and Public Facilities  
P.O. Box 195900  
Anchorage, Alaska 99519-6900

If you have any questions or require additional information, please contact Diana Rigg, Environmental Analyst at 266-1448.

232595

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**ADVERTISING ORDER**

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T O P U B L I S H E R  
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AGENCY CONTACT: Mara Rigg  
 DATE OF A.O.: 11/17/92  
 PHONE: (907) 266-1446  
 DATES ADVERTISEMENT REQUIRED:  
11/19/92  
12/16/92  
 SPECIAL INSTRUCTIONS:

**AFFIDAVIT OF PUBLICATION**

UNITED STATES OF AMERICA  
 STATE OF Alaska SS  
South DIVISION.

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC THIS DAY  
 PERSONALLY APPEARED South Shacklett WHO,  
 BEING FIRST DULY SWORN, ACCORDING TO LAW, SAYS THAT  
 HE/SHE IS THE Vice President of Tundra News  
 PUBLISHED AT Bethel IN SAID DIVISION  
Town AND STATE OF Alaska AND THAT THE  
 ADVERTISEMENT, OF WHICH THE ANNEXED IS A TRUE COPY, WAS  
 PUBLISHED IN SAID PUBLICATION ON THE 17<sup>th</sup> DAY OF  
November 1992, AND THEREAFTER FOR 1  
 CONSECUTIVE DAYS, THE LAST PUBLICATION APPEARING ON THE  
16<sup>th</sup> DAY OF December 1992, AND THAT THE  
 RATE CHARGED THEREON IS NOT IN EXCESS OF THE RATE  
 CHARGED PRIVATE INDIVIDUALS.

SUBSCRIBED AND SWORN TO BEFORE ME  
 THIS 13<sup>th</sup> DAY OF December 1992  
[Signature]  
 NOTARY PUBLIC FOR STATE OF Alaska  
 MY COMMISSION EXPIRES My Commission Expires  
October 15, 1996

**Notice of Preliminary Engineering and Environmental Studies and Wetlands and Floodplains Development**

Kwigillingok Airport,  
 Kwigillingok, Alaska  
 Project No. 60118

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The proposed project consist of lengthening the runway safety area approximately 700 feet to the south and widening it approximately 50 feet (25 feet on both sides). The existing apron will be expanded to 300 feet by 200 feet (60,000 square feet) with three 100 by 100-foot lease lots. Additional actions include upgrading the existing equipment storage building (located on one of the lease lots), purchasing a new motor grader and adding medium intensity runway lighting. A new channel formed when a lake south of the airport drained, has affected the southern and western edges of the runway and will be channelized approximately 200 feet to the west to avoid future impacts to the runway embankment.

To insure that all possible factors are considered in the design of the proposed project, ADOT&PF is requesting public comments and recommendations. Please send your comments to the following address by December 15, 1992.

Steven R. Horn, P.E.  
 Supervisor  
 Preliminary Design and Environment  
 Alaska Department of Transportation  
 and Public Facilities  
 P.O. Box 196900  
 Anchorage, Alaska 99519-6900

If you have any questions or require additional information, please contact Diana Rigg, Environmental Analyst at 266-1448.

# PROOF OF PUBLICATION

JAN 11 1993

- CLIP -

CENTRAL ACCOUNTING

BARBARA BRICE

being first duly sworn on oath  
 deposes and says that she  
 is the Billing Clerk of  
 the Anchorage Daily News, a  
 daily newspaper. That said  
 newspaper has been approved as  
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 and has been published in the  
 English language continually as a  
 daily newspaper in Anchorage,  
 Alaska, and it is now and during  
 all said time was printed in an  
 office maintained at the aforesaid  
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 newspaper. That the annexed is  
 a copy of a

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as it was published in regular  
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 form of said newspaper on

DEC. 07, 1992

and that such newspaper was  
 regularly distributed to its  
 subscribers during all of said  
 period. That the full amount of  
 the fee charged for the foregoing  
 publication is not in excess of  
 the rate charged private  
 individuals.

signed

*Barbara Brice*

# 255595

STOF0220

## NOTICE

### Notice of Preliminary Engineering and Environmental Studies and Wetlands and Floodplains Development

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 Project No. 60118

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To insure that all possible factors are considered in the design of the proposed project, ADOT&PF is requesting public comments and recommendations. Please send your comments to the following address by December 15, 1992.

Steven R. Horn, P.E.  
 Supervisor

Preliminary Design and Environmental  
 Alaska Department of Transportation and Public Facilities  
 P.O. Box 196900  
 Anchorage, Alaska 99519-6900

If you have any questions or require additional information, please contact Diana Rigg, Environmental Analyst at 266-1448.

**KWIGILLINGOK AIRPORT IMPROVEMENTS  
PROJECT NO 60118**

**NOTICE OF PUBLIC MEETING**

The Alaska Department of Transportation and Public Facilities (ADOT&PF) will conduct a Public Meeting in Kwigillingok, Alaska to discuss the proposed improvements at the Kwigillingok Airport.

**DATE:** February 28, 1994  
**TIME:** 1:00 pm  
**LOCATION:** Kwigillingok IRA Council Office Building  
Kwigillingok, Alaska

This meeting is to apprise the public of ADOT&PF's plans for design, right-of-way acquisition and reconstruction of the Kwigillingok Airport. ADOT&PF is proposing to lengthen and widen the runway safety area to 120 by 3,680 feet. Other proposed improvements include construction of a 60,000 square foot apron with an 80 by 220-foot taxiway. A 24 by 825-foot access road will connect the apron to the existing access road. Construction of a 3,000 by 150-foot crosswind runway is an Additive Alternate for the proposed project. The Additive Alternate will be built if there are sufficient funds after the lengthening and widening of the existing runway. Medium intensity runway lighting, a new floor for the equipment storage building, a new rotating beacon and a new lighted windcone are also proposed.

Individuals with a hearing impairment can contact the Department at our Telephone Device for the Deaf (TDD) number, 266-1442. We are also able to offer, upon request, reasonable accommodations for other special needs related to disabilities. Contact John Wahl, P.E., Project Manager, 266-1560 for additional design information. If you wish to express concerns regarding environmental aspects or would like to review the project Environmental Assessment, please call Diana Rigg, Environmental Analyst at 266-1448.

Alaska Department of Transportation and Public Facilities  
Steven R. Horn, P.E., Supervisor  
Preliminary Design and Environmental  
P.O. Box 196900  
Anchorage, Alaska 99519-6900

Pub: Feb. 24, 1994

AO 25-9148

REIVE

FEB 18 '94

	COPY	ACTION
Prelim. Design		
Environmental Section		
PE&E Engr.		
Project Mgr.		
Survey Mgr.		
Env. Leader		
Staff		
Project File		
Print File		

To: Diana  
From: Karen - ANI - 272-9830

- as
- bt
- ct
- SW
- td
- vv
- cm

td/ads/Feb 24, 94 pg 2



United States  
Department of  
Agriculture

Soil  
Conservation  
Service

949 E 36th Avenue - Suite 400  
Anchorage, AK 99508-4362  
Telephone: (907) 271-2424



January 3, 1994

Steven R. Horn, P.E., Supervisor  
State of Alaska, Department of Transportation  
& Public Facilities  
Central Region  
P.O. Box 196900  
Anchorage, AK 99519-6900

Dear Mr. Horn:

In response to your December 21 request for information regarding Alaska prime or unique agricultural lands:

Prime or unique agricultural lands are excluded from Alaska by definition because of cold soils. The definition of "important farmlands" has been used in Alaska as agricultural lands of statewide importance as defined in Departmental Regulation 9500-3, Farmland Protection Policy Act of 1981, PL 97-98.

I hope this is helpful for your information file on Alaska prime or unique farmlands. If you have any questions on these materials, please feel free to contact me.

Sincerely,

CALVIN A. MILLER  
State Resource Conservationist

cc: Steven A. Probst, State Conservationist, Anchorage AK

RECEIVED

JAN 05 '94

	COPY	ACTION
Prelim. Design & Environmental Section		
PD&E Engr.		<i>AR</i>
Project Mgr.		
Survey Mgr.		
Env. Leader		
Staff	<i>DR</i>	X
File	X	
Project File		
Intro. File		





REPLY TO  
ATTENTION OF:

DEPARTMENT OF THE ARMY  
U.S. ARMY ENGINEER DISTRICT, ALASKA  
P.O. BOX 898  
ANCHORAGE, ALASKA 99506-0898

NOVEMBER 25 1992

FIVE

NOV 27 '92

Regulatory Branch  
Project Evaluation Section - North  
9-920772

Mr. Steven R. Horn  
Alaska Department of Transportation  
and Public Facilities  
4111 Aviation Avenue  
Post Office Box 196900  
Anchorage, Alaska 99519-6900

	COPY	ACTION
Prelim. Design Environmental Section		
S&E Engr.		<i>WAHL</i>
Project Mgr.		<i>WAHL</i>
Survey Mgr.		
Inv. Leader		
Staff		<i>WAHL</i>
Project File		
Administrative		

Dear Mr. Horn:

Your November 17, 1992, letter of inquiry on behalf of the Alaska Department of Transportation and Public Facilities concerning the upgrade of the Kwigillingok Airport has been received. The proposals are for the lengthening of the existing runway safety area approximately 700' to the south (from 2,900' to 3,600') and the widening of it 25' on both sides (from 100' to 150'). The runway would be lengthened 100' and widened 25'. Medium intensity runway lighting would be provided. The existing 95' by 160' apron would be increased to 200' by 300' with three 100' by 100' lease lots. The existing taxiway (50' by 120') would be reconstructed to 80' by 200'. The existing storage building would be reconditioned.

The Department of Army (DA) has regulatory jurisdiction over discharges of dredged or fill material into waters of the U.S., including wetlands, pursuant to Section 404 of the Clean Water Act. Your proposed project would require a DA permit because the entire improvement project is located in the floodplain of the Kwigillingok River and is in wetlands.

Furthermore, you requested any information with respect to the base floodplains, regulatory floodways, and/or special flood hazard areas of drainages that may be affected by the proposed project. Corps Floodplain Section personnel have indicated that there is no information available concerning floodplains in the Kwigillingok area.

Should you have questions, please contact me at (907) 753-2716, FAX (907) 753-5567, or by mail at the address above.

Sincerely,

Terrence W. Kasper  
Project Manager  
Project Evaluation Section - North



DEPARTMENT OF THE ARMY  
 U.S. ARMY ENGINEER DISTRICT, ALASKA  
 P.O. BOX 898  
 ANCHORAGE, ALASKA 99506-0898

REPLY TO  
 ATTENTION OF:

FEBRUARY 18 1994

FEB 23 '94

Regulatory Branch  
 Project Evaluation Section - North  
 4-920772

Ms. Diana Rigg  
 Alaska Department of Transportation  
 and Public Facilities  
 Post Office Box 196900  
 Anchorage, Alaska 99519-6900

	COPY	ACTION
reim. Design & Environmental Section		
PD&E Engr.		
Project Mgr.		<i>Wahl</i>
Survey Mgr.		
Env. Leader		
Staff		<i>GRV</i>
		<i>BSV</i>
Project File		
Arch File		

Dear Ms. Rigg:

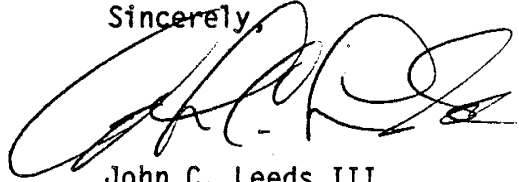
Your application on behalf of the Alaska Department of Transportation and Public Facilities dated January 18, 1994, for a Department of the Army (DA) permit to discharge fill material into waters (wetlands) of the United States, in conjunction with airport improvements at Kwillingok, Alaska, has been received. It has been assigned number 4-920772, Kwillingok River 1, which should be referred to in all future correspondence with this office.

We have received your signed Certification of Consistency with the Alaska Coastal Management Program and will issue a 30-day public notice to solicit comments in regard to your proposed work. The Corps of Engineers is authorized to issue permits at the District level in those cases in which all substantive objections have been resolved to the satisfaction of the District Engineer. Periodically, letters from reviewing agencies or interested parties may be forwarded to you for your information or appropriate action. Since unresolved objections to your proposed work would result in delay or denial of the requested permit, it is suggested that you respond as soon as possible to avoid processing delay.

Also, a DA permit can be issued for your work only after you have obtained a Certificate of Reasonable Assurance, or waiver of certification, as required by Section 401(a)(1) of the Clean Water Act. This certification or waiver thereof is issued by the Alaska Department of Environmental Conservation (ADEC). For your convenience, we have forwarded a copy of your application to ADEC which they accept as an application for a Certificate of Reasonable Assurance. There should be no delay in processing your application as the review processes of ADEC and the Corps of Engineers run concurrently. If you have any questions about ADEC's certification process, please contact them at 3601 C Street, Suite 1350, Anchorage, Alaska 99503, telephone (907) 563-6529.

If you have questions, please contact me at (907) 753-2716, by FAX at (907) 753-5567, or by mail at the address above.

Sincerely,

A handwritten signature in black ink, appearing to read "John C. Leeds III". The signature is stylized with large, sweeping loops and a prominent initial "J".

John C. Leeds III  
Project Manager  
Project Evaluation Section - North



DEPARTMENT OF THE ARMY  
 U.S. ARMY ENGINEER DISTRICT, ALASKA  
 P.O. BOX 898  
 ANCHORAGE, ALASKA 99506-0898

- 1 V -

MARCH 03 1994

MAR 07 '94

REPLY TO  
 ATTENTION OF:

Regulatory Branch  
 Project Evaluation Section - North  
 4-920772

	COPY	ACTION
Prelim. Design Environmental Section		
PC&E Engr.		
Project Mgr.		LOAH
Survey Mgr.		
Team Leader		
Staff		
Project File		
Final File		

60118

Ms. Diana Rigg  
 Alaska Department of Transportation  
 and Public Facilities  
 Post Office Box 196900  
 Anchorage, Alaska 99519-6900

Dear Ms. Rigg:

This concerns your application on behalf of the Alaska Department of Transportation and Public Facilities (ADOT) for a Department of the Army (DA) permit to discharge fill material into waters (wetlands) of the United States, in conjunction with airport improvements at Kwillingok, Alaska, file number 4-920772, Kwillingok River 1.

In accordance with telephone conversation with Mr. John C. Leeds, III, on March 3, 1994, in which you stated that ADOT/PF was withdrawing their permit application, we have closed your permit application file for the referenced work as of the date of this letter. Closure of the file at this time will not preclude your submitting the application at a later date should you wish to do so.

If you have any questions, please contact Mr. Leeds, of my staff at (907) 753-2716, or by using our FAX number (907) 753-5567.

Sincerely,

*for William A. Kelly*  
 Kevin D. Morgan

Chief, Southern Unit  
 Project Evaluation Section - North



# STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

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

TONY KNOWLES, GOVERNOR

4111 AVIATION AVENUE  
P.O. BOX 196900  
ANCHORAGE, ALASKA 99519-6900  
(FAX 243-6927 - TDD 266-1442)  
(907) 266-1508

January 25, 1995

Re: Kwigillingok Airport  
Improvements  
Project No. 60118

DOA Permit Application  
9-920772

John Leeds, III  
Project Manager  
Corps Of Engineers  
Regulatory Branch  
P.O. Box 898  
Anchorage, Alaska 99506-0898

Dear Mr. Leeds:

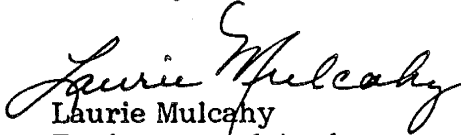
The Alaska Department of Transportation and Public Facilities (ADOT&PF) proposes to improve the airport at Kwigillingok, Alaska. Kwigillingok is on the Kwigillingok River near Kuskokwim Bay (USGS map Kuskokwim Bay D-4: T3S, R81W, Sec 27, 26, 34, and 35). The proposal is detailed in the November 1994 Draft Environmental Assessment (EA) on file in your office. The Final EA/Draft FONSI was sent to the Federal Aviation Administration (FAA) for review and approval on January 17, 1995.

We hereby resubmit our revised application for a Department of the Army, Corps of Engineers (COE) Section 404 Permit for construction activities involving a total of 24.30 wetlands acres, to dredge approximately 192,500 cubic yards (cy) of material and to place 227,625 cy of fill. Dredge and fill quantities, and involved acreages, are further broken down, as shown in the attached project description (Appendix A). The completed permit application, project description, project location map, and plan sheets are enclosed.

For your information, a copy of the signed Coastal Project Questionnaire is enclosed. A General Waterway/Waterbody (Title 16) Permit is required and we are submitting an application for it. By copy of this letter, we are advising the Division of Governmental Coordination of our Section 404 permit

application for their Coastal Consistency Review. Should you have any questions or need additional information, please call me at 266-1760.

Sincerely,

  
Laurie Mulcahy  
Environmental Analyst

Enclosures: COE Section 404/10 Permit Application  
ACMP Coastal Zone Consistency Application  
ADF&G Title 16 Permit Application

cc: Steven R. Horn, P.E., Supervisor, PD&E  
Jerry Ruehle, Environmental Team Leader, PD&E  
Carol Sanner, Permits Officer, PD&E  
John Wahl, P.E., Project Manager, Aviation Design

**VICINITY MAP**

FROM USGS QUADS BARD INLET, KUSKOKWIM BAY, and BETHEL  
and KUSKOKWIM BAY D-3 and D-4

K W I G I L L I N G O K

RIVER

KWIGILLINGOK

ROAD ACCESS

DRAINED  
INTERTIDAL  
LAKE BED

SCHOOL

COMMUNITY  
HALL  
LEASE

LIBRARY

EXISTING  
ROAD  
TO  
EXISTING  
TUNNEL

EXISTING  
TUNNEL  
TO  
I 2900

BOUNDARY

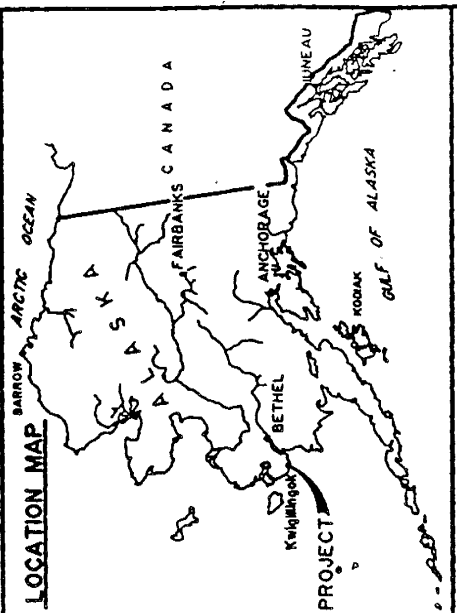
LEASE

DRAINED

INTERTIDAL

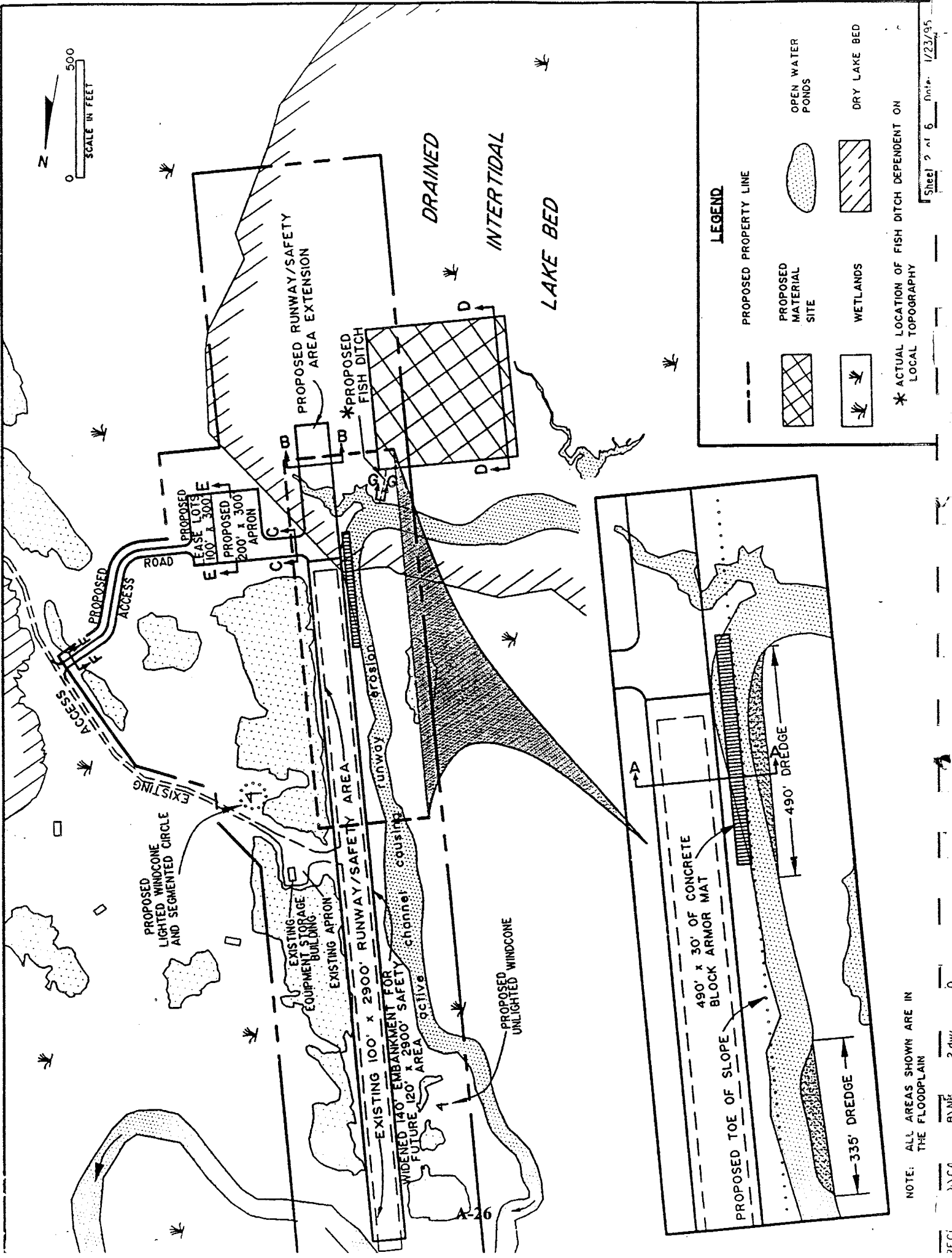
LAKE BED

**LOCATION MAP**

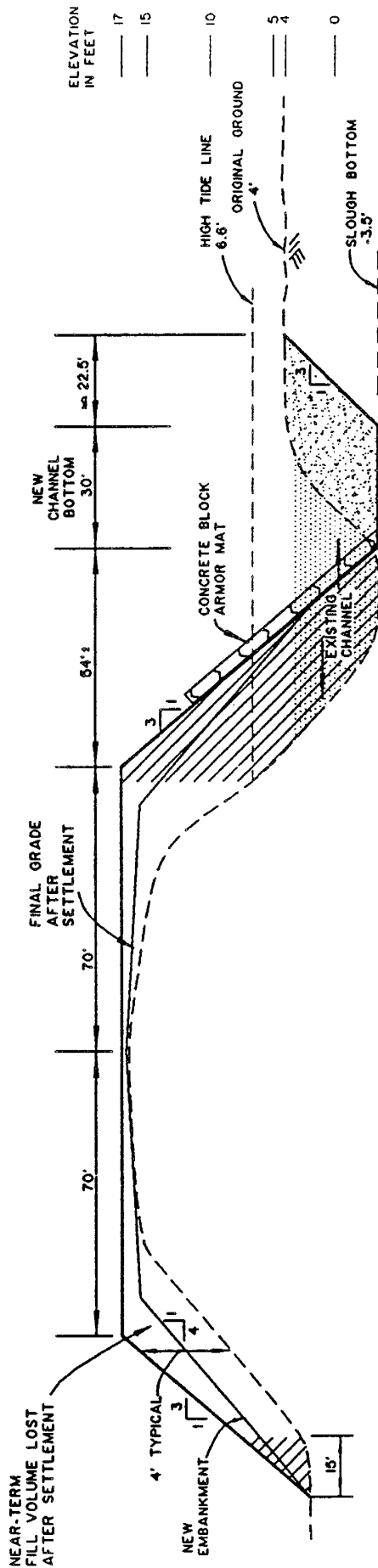


PROPOSED: KWIGILLINGOK  
AIRPORT IMPROVEMENTS  
NEAR: BETHEL, ALASKA  
BY: ADOT&PF  
P.O. BOX 196900  
ANCHORAGE, AK 99519-6900  
Sheet 1 of 6 Date: 1/23/95

A-25



NOTE: ALL AREAS SHOWN ARE IN THE FLOODPLAIN

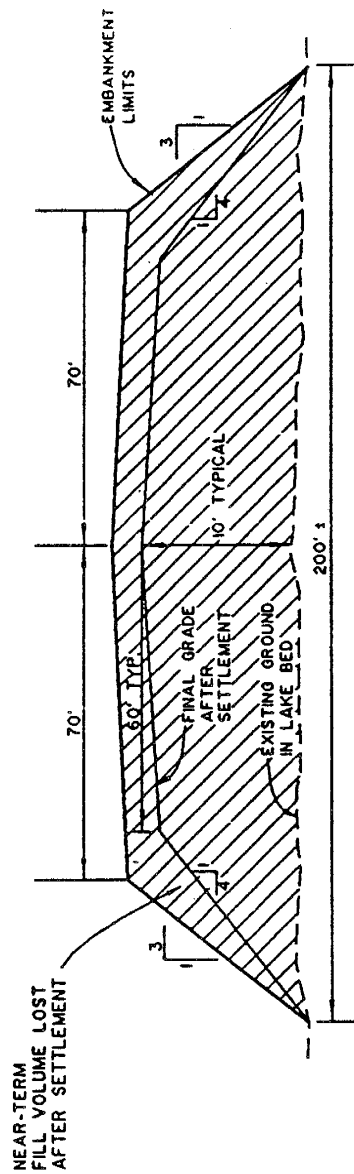


### SECTION A - A

## EXISTING RUNWAY WIDENING AND STREAM RECHANNELIZATION

HORIZONTAL SCALE 1" = 40'  
VERTICAL SCALE EXAGGERATED

A-27



### SECTION B - B

## EXISTING RUNWAY EXTENSION EMBANKMENT

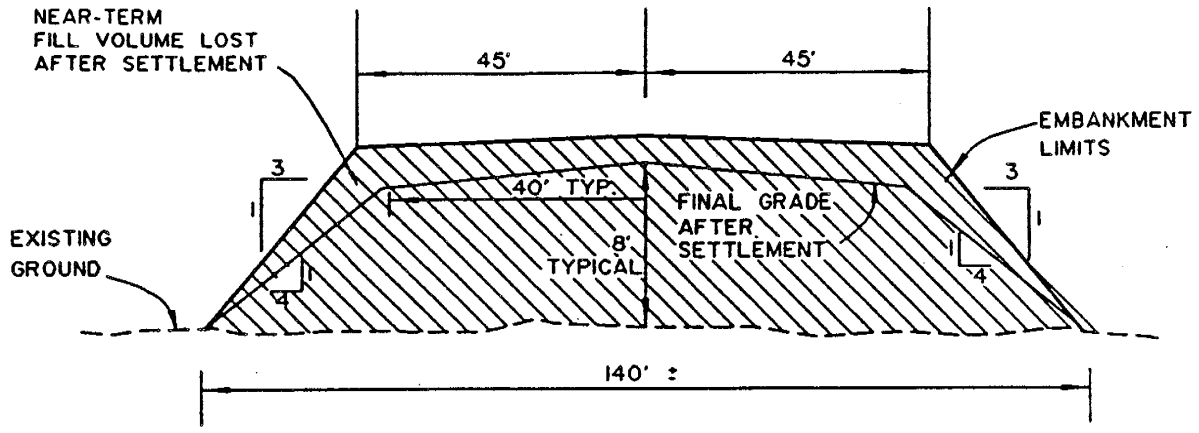
HORIZONTAL SCALE 1" = 40'  
VERTICAL SCALE EXAGGERATED

EXCAVATION IN WETLANDS



FILL IN WETLANDS

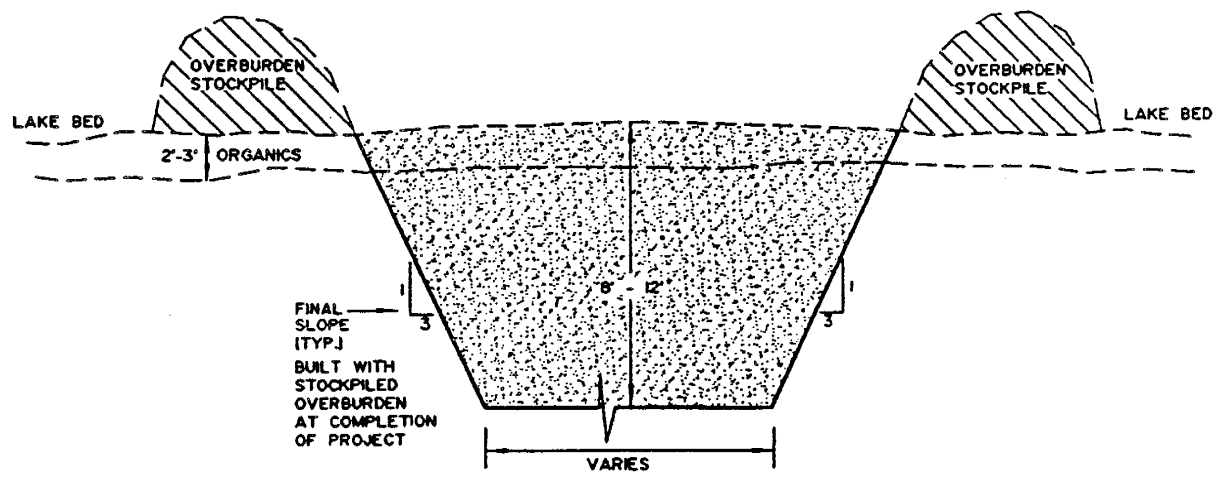




**SECTION C - C**  
**TAXIWAY EMBANKMENT**


HORIZONTAL SCALE 1" = 30'  
 VERTICAL SCALE EXAGGERATED

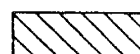
 FILL IN WETLANDS

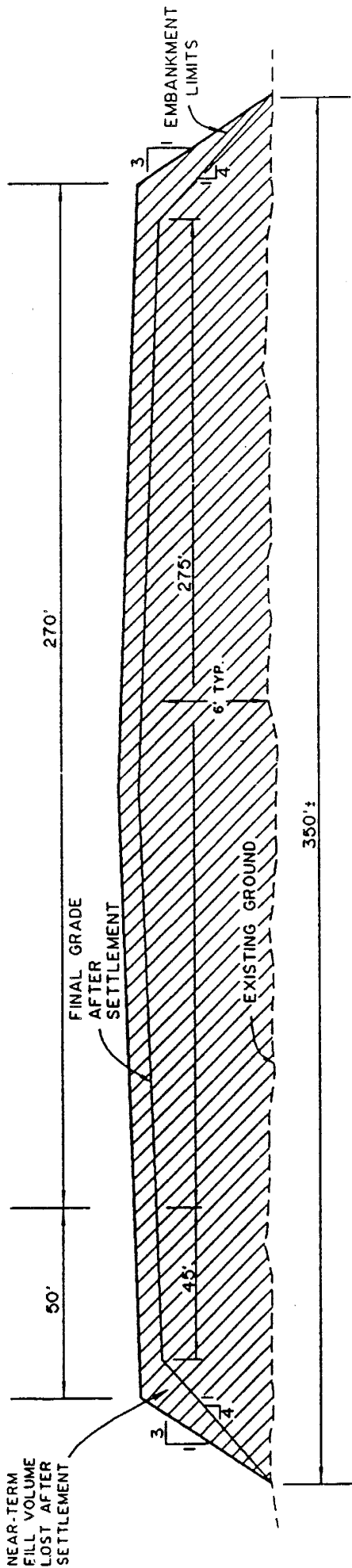


**SECTION D - D**  
**BORROW AREA TYPICAL SECTION**

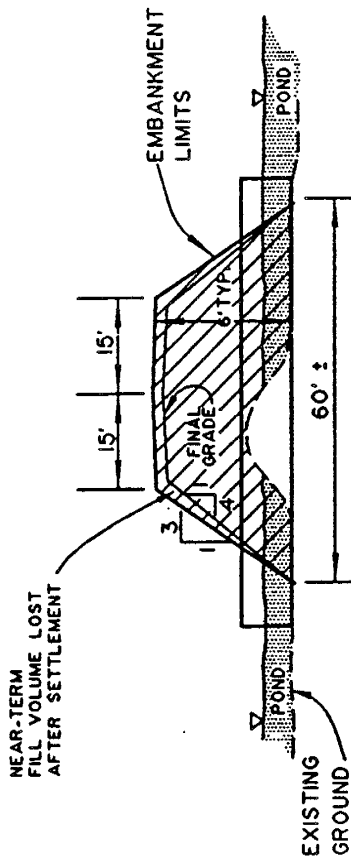
HORIZONTAL SCALE 1" = 40'  
 VERTICAL SCALE EXAGGERATED

 EXCAVATION IN WETLANDS

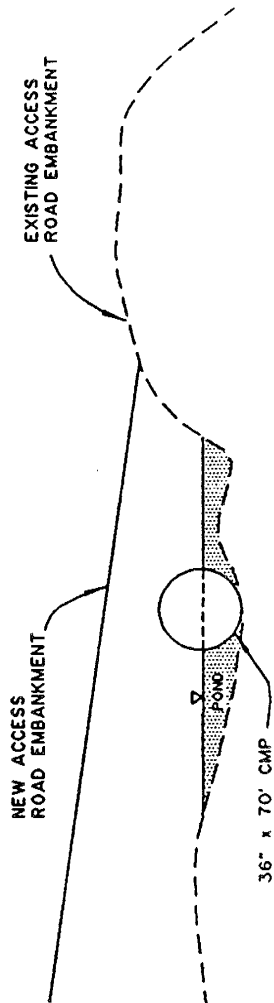
 FILL IN WETLANDS



**SECTION E - E**  
**APRON AND LEASE LOT EMBANKMENT**  
 HORIZONTAL SCALE 1" = 40'  
 VERTICAL SCALE EXAGGERATED

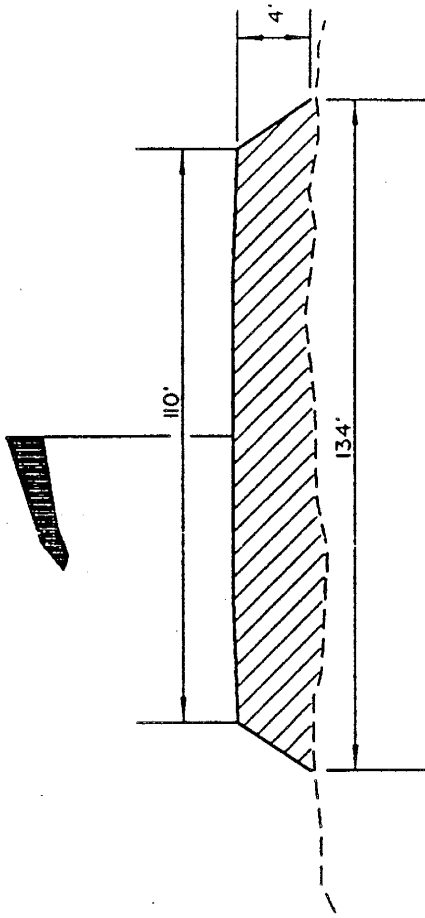


**SECTION F - F**  
**ACCESS ROAD TYPICAL SECTION (with culvert)**  
 HORIZONTAL SCALE 1" = 30'  
 VERTICAL SCALE EXAGGERATED

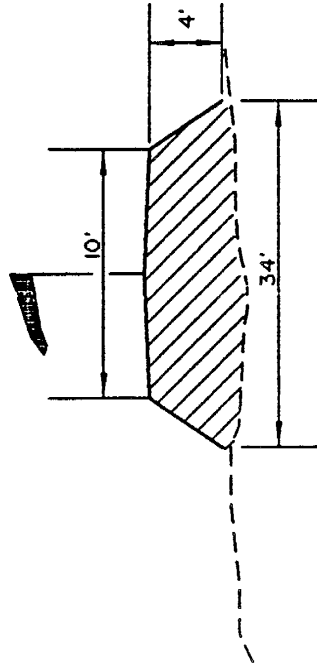


FILL IN WETLANDS

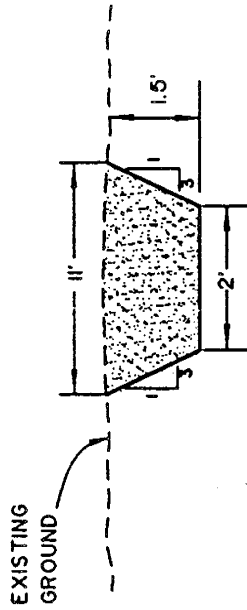




**LIGHTED WINDCONE**  
DIMENSIONS AS SHOWN



**UNLIGHTED WINDCONE**  
DIMENSIONS AS SHOWN



**SECTION G - G**

**FISH DITCH**  
DIMENSIONS AS SHOWN

DREDGED MATERIAL WILL BE SIDECAST

-  EXCAVATION IN WETLANDS
-  FILL IN WETLANDS



**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.	2.
Name of Applicant Dept. of Transportation & Public Facilities	Agent (or responsible party if other than applicant) Laurie Mulcahy
Address P.O. Box 1196900	Address P.O. Box 196900
City Anchorage, AK State 99519-6900 Zip Code	City Anchorage, AK State 99519-6900 Zip Code
Daytime Phone (907) 266-1508	Daytime Phone (907) 266-1760
Fax Number (907) 243-6927	Fax Number (907) 243-6927

■ **PROJECT INFORMATION**

1. This activity is a:  new project  modification or addition to an existing project. Yes No  
 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
SHEQ	n/a		
FAA FONSI	Pending		

2. Has this project ever been reviewed by the State of Alaska per the ACMP?    
 Previous State I.D. Number: AK \_\_\_\_\_ Previous Project Name: \_\_\_\_\_

■ **PROJECT DESCRIPTION**

1. Attach the following: • a detailed description of the project and all associated facilities; • a project timeline for completion of all major activities in the proposal; • a site plan depicting 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 activities on the site plan.  
 Proposed starting date for project: Summer 1995 Proposed ending date for project: Fall 1997. All dredging and fill operations to take place during the winter months.

2. Provide a brief description of your entire project and ALL associated facilities (access roads, caretaker facilities, waste disposal sites, etc.).  
The proposed project consists of reconstructing the existing runway, adding an apron, taxiway and access road, stream realignment, and developing a material site. As part of this project, application is also being made to ADNR for InterAgency Land Management Agreements on four parcels.

SEE ATTACHED APPENDIX A, PROJECT SUMMARY, AND FIGURES 1 THROUGH 6.

■ **PROJECT LOCATION**

1. Attach a copy of the topographical map with the project location marked on it.
2. Location of project (include nearest community or name of land feature or body of water. Identify township, range and section): Kwigillingok Airport, Kuskokwim Bay.

Township 3S Range 81W Section 26,27,34,35 Meridian Seward Latitude/Longitude 163°07'52"

3. The project is on:  State Land\*  Federal Land  Private Land  Municipal Land  
\*State land can be uplands, tidelands, or submerged lands to 3 miles offshore. See Question #1 in DNR section.
4. The project is located in which region (see attached map):  
 Northern  Southcentral  Southeast  State Pipeline Coordinator's Office  
Yes No
5. Is the project located in a coastal district? . . . . .    
If yes, please contact the district representative listed on the attached sheet
6. Identify the communities closest to your project location: Kwigillingok

■ **FEDERAL APPROVALS**

1. Is the proposed project on U.S. Forest Service (USFS) land or will you need to cross USFS lands for access? . . . . .   Yes No  
Does the cost of the project exceed \$250,000? . . . . .    
If yes, have you applied for a USFS permit or approval? . . . . .    
Date of submittal: \_\_\_\_\_
2. Is the proposed project on Bureau of Land Management (BLM) land or will you need to cross BLM lands for access? . . . . .    
Does the cost of the project exceed \$250,000? . . . . .    
If yes, have you applied for a BLM permit or approval? . . . . .    
Date of submittal: \_\_\_\_\_
3. Will you be constructing a bridge over tidal (ocean) waters, or navigable rivers, streams or lakes? . . . . .    
If yes, have you applied for a U.S. Coast Guard permit for a bridge? . . . . .    
Date of submittal: \_\_\_\_\_
4. 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 U.S. Army Corps of Engineers (COE) permit? . . . . .    
Date of submittal: January 25, 1995

(Note: Your application for this activity to the Corps of Engineers also serves as your application to DEC)

\*If you are not certain whether your proposed project is a wetlands, contact the U.S. Corps of Engineers, Regulatory Branch at (907) 753-2720 for a wetlands determination (outside the Anchorage area call toll free 1-800-478-2712).

5. Have you applied for a U.S. Environmental Protection Agency National Pollution Discharge Elimination System (NPDES) permit? We will apply for a NPDES General Permit for Construction . . . . . Yes  No

Date of submittal: Summer 1995  
 (Note: For information regarding the need for an NPDES permit, contact EPA at (907) 271-5083.)

6. Will you have a putrescible waste discharge within 5 miles of any public airport? . . . . .    
 If yes, please contact the Airports Division of the Federal Aviation Administration at (907) 271-5440.

7. Does the project include a nonfederal power project affecting any navigable body of water or located on federal land? Or, is utilization of surplus water from any federal government dam proposed? . . . . .    
 (Power projects consist of dams, water conduits, reservoirs, powerhouses, and transmission lines.)  
 If yes, have you applied for a permit from the Federal Energy Regulatory Commission (FERC)? . . . . .    
 Date of submittal: \_\_\_\_\_  
 (Note: For information, contact FERC, Office of Hydropower Licensing, at (202) 208-0200.)

8. Have you applied for permits from any other federal agency? . . . . .    
 AGENCY APPROVAL TYPE DATE SUBMITTED

■ DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC) APPROVALS

	Yes	No
1. Will a discharge of wastewater from industrial or commercial operations occur? . . . . .	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the discharge be connected to an already approved sewer system? [ ]	<input type="checkbox"/>	<input type="checkbox"/>
Will the project include a stormwater collection/discharge system? [ ]	<input type="checkbox"/>	<input type="checkbox"/>
2. Do you intend to construct, install, modify, or use any part of a wastewater (sewage or greywater) disposal system? . . . . .	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a) If so, will the discharge be 500 gpd or greater? . . . . .	<input type="checkbox"/>	<input type="checkbox"/>
b) If constructing a domestic wastewater treatment or disposal system, will the system be located within fill material requiring a COE permit? . . . . .	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

- 1) How deep is 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.)

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. Do you plan to store or dispose of any type of solid waste resulting from this project? . . . . .    
 (Note: Solid waste means drilling wastes, garbage, refuse, sludge, and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, and agricultural operations, and from community activities.)

- |    |  | Yes | No  |
|----|--|-----|-----|
| 5. | Will your project require the application of oil, pesticides, and/or any other broadcast chemicals to the surface of the land and/or the waters of the state? . . . . .  | [ ] | [X] |
| 6. | a) Will you have a facility that will generate air emissions from processing greater than five tons per hour of material? . . . . .  | [ ] | [X] |
|    | b) Will you have one or more units of fuel burning equipment, including flaring, with a heat input rating of 50 million Btu per hour or more? . . . . .  | [ ] | [X] |
|    | c) Will you have a facility containing incinerators with a total charging capacity of 1,000 pounds per hour or more? . . . . .   | [ ] | [X] |
|    | d) Will you incinerate sludge? . . . . .   | [ ] | [X] |
|    | e) Will you have any of the following processes: . . . . .   | [ ] | [X] |
|    | [ ] Asphalt plant                      [ ] Coal preparation facility   |     |     |
|    | [ ] Petroleum refinery              [ ] Portland cement plant  |     |     |
|    | [ ] Petroleum Contaminated Soils Cleanup   |     |     |
|    | f) Will your facility use the following equipment? . . . . .   | [ ] | [X] |
|    | [ ] diesel internal combustion engines? (Total capacity equal to or greater than 1,750 kilowatts or total rated brake specific horsepower greater than 2,350 bhp)  |     |     |
|    | [ ] gas fired boilers (Total heat input rating of 100 million Btu per hour)  |     |     |
|    | [ ] oil fired boilers (Total hear input rating of 65 million Btu per hour)   |     |     |
|    | [ ] combustion turbines (total rated power output of 8,000 Hp)   |     |     |
|    | g) Will your facility burn more than the following per year in stationary equipment? . . . . .   | [ ] | [X] |
|    | [ ] 1,000,000 gallons of fuel oil      [ ] 35,000 tons of coal   |     |     |
|    | [ ] 900 million cubic feet of natural gas  |     |     |
|    | h) If you have answered "yes" to any of the above questions (7 a-g), have you installed, replaced or modified any fuel burning or processing equipment since 1977? . . . . .   | [ ] | [ ] |
| 7. | Will you be developing, constructing, installing, or altering a public water system? . . . . .   | [ ] | [X] |
| 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? . . . . . | [ ] | [X] |
|    | 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? . . . . .                    | [ ] | [X] |
|    | c) Will you be operating facilities on the land or water for the exploration or production of hydrocarbons? . . . . .  | [ ] | [X] |

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 regional office for information and application forms. Please be advised that all new DEC permits and approvals require a 30-day public notice period.

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

Approval Type: \_\_\_\_\_ Date Submitted: \_\_\_\_\_  
ADEC Section 401 Certification January 25, 1995 (concurrent with the COE  
Section 404 Permit Application

9. Does your project qualify for a general permit for wastewater or solid waste? . . . . . [ ] [X] Yes No
10. If you answered yes to any questions and are not applying for DEC permits, indicate reason below:  
[ ] \_\_\_\_\_ (DEC contact) told me on \_\_\_\_\_ that no DEC approvals are required on this project. Reason: \_\_\_\_\_  
[ ] Other: \_\_\_\_\_

■ DEPARTMENT OF FISH & GAME (DFG) APPROVALS

1. Will you be working in, or placing anything in, a stream river or lake? (This includes work in running water or on ice, within the active flood plain, on islands, the face of the banks or the tidelands down to mean low tide.) (Note: If the proposed project is located within a Federal Emergency Management Agency Zone, a Floodplain Development Permit may be required. Contact the local municipal government for additional information and a floodplain determination.) . . . . . [X] [ ] Yes No
- Name [ ] stream, [ ] river, or [ ] lake: Near Kwigillingok River
2. Will you do any of the following: . . . . . [X] [ ]
- Please indicate below:
- |   |  |
|---|--|
| [ ] Build a dam, river training structure or instream impoundment?  | [X] Alter or stabilize the banks?  |
| [ ] Use the water?  | [X] Mine or dig in the beds or banks?  |
| [ ] Pump water out of the stream or lake?   | [ ] Use explosives?  |
| [X] Divert or alter the natural stream channel?   | [ ] Build a bridge (including an ice bridge)?  |
| [ ] Block or dam the stream (temporarily or permanently)?   | [ ] Use the stream as a road (even when frozen), or crossing the stream with tracked or wheeled vehicles, log-dragging or excavation equipment (backhoes, bulldozers, etc.)? |
| [X] Change the water flow or the water channel?   | [ ] Install a culvert or other drainage structure?   |
| [X] Introduce silt, gravel, rock, petroleum products, debris, chemicals, or other organic/inorganic waste of any type into the water? | [ ] Construct a weir?  |
|   | [ ] Use an in-stream structure not mentioned here?   |
3. Is your project located in a designated State Game Refuge, Critical Habitat Area or State Sanctuary? . . . . . [ ] [X]
4. Does your project include the construction/operation of a salmon hatchery? . . . . . [ ] [X]

5. Does your project affect, or is it related to, a previously permitted salmon hatchery? . . . . .  [ ] Yes  [X] No
6. Does your project include the construction of an aquatic farm? . . . . .  [ ] Yes  [X] No

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 DFG Habitat Division Office for information and application forms.

If you answered "Yes" to questions 4-6, contact the DFG at the CFMD division headquarters for information and application forms.

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

Approval Type: \_\_\_\_\_ Date Submitted: \_\_\_\_\_  
 ADF&G Title 16 January 25, 1995

7. If you answered yes to any questions and are not applying for DFG permits, indicate reason below:  
 [ ] \_\_\_\_\_ (DFG contact) told me on \_\_\_\_\_ that no DFG approvals are required on this project. Reason: \_\_\_\_\_  
 [ ] Other: \_\_\_\_\_

■ DEPARTMENT OF NATURAL RESOURCES (DNR) APPROVALS

1. Is the proposed project on State-owned land or will you need to cross State Owned land for access? . . . . .  [X] Yes  [ ] No  
 ("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.

2. Do you plan to dredge or otherwise excavate/remove materials on State-owned land? From ADOT&PF owned and managed land . . . . .  [X]  [ ]  
 Location or dredging site if other than the project site: \_\_\_\_\_  
 Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_ Meridian \_\_\_\_\_

3. Do you plan to place fill or dredged material on State-owned land? From ADOT&PF owned and managed land . . . . .  [X]  [ ]  
 Location of fill disposal site if other than the project site: \_\_\_\_\_  
 Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_ Meridian \_\_\_\_\_  
 Source is on:  [ ] State Land  [ ] Federal Land  [ ] Private Land  [ ] Municipal Land

4. Do you plan to use any of the following State-owned resources: . . . . .  [X]  [ ]  
 [ ] Timber: Will you be harvesting timber? Amount: \_\_\_\_\_  
 [X] Materials such as rock, sand or gravel, peat, soil, overburden, etc.:  
 Which Material? Silt from ADOT&PF owned and managed land Amount: 227,625 cy  
 Location of source:  [X] Project site  [ ] Other, describe: \_\_\_\_\_  
 Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_ Meridian \_\_\_\_\_

5. Are you planning to use or divert any fresh water? . . . . .  [ ] Yes  [X] No  
 Amount (gallons per day): \_\_\_\_\_  
 Source: \_\_\_\_\_ Intended Use: \_\_\_\_\_

- |    |   | Yes | No  |
|----|---|-----|-----|
| 6. | Will you be building or altering a dam? . . . . .   | [ ] | [X] |
| 7. | Do you plan to drill a geothermal well? . . . . .   | [ ] | [X] |
| 8. | At any one site (regardless of land ownership), do you plan to do any of the following? . . . . .                         | [X] | [ ] |
|    | [ ] Mine five or more acres over a year's time?   |     |     |
|    | [X] 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 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? . . . . . [X] [ ]

- |     |   |     |     |
|-----|---|-----|-----|
| 9.  | Will you be exploring for or extracting coal? . . . . .   | [ ] | [X] |
| 10. | Will you be drilling for oil/gas? . . . . .   | [ ] | [X] |
| 11. | Will you be investigating or removing historical or archaeological resources on State-owned land? . . . . . | [ ] | [X] |
| 12. | Is the proposed project located within a known geophysical hazard area? .                                   | [ ] | [X] |
| 13. | Is the proposed project located in a unit of the Alaska State Park System?                                  | [ ] | [X] |

If you answered "No" to ALL questions in this section, continue to certification statement.

If you answered "Yes" to ANY questions in this section, contact DNR for information.

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

Approval Type: ILMA Date Submitted: January 18, 1994

14. If you answered yes to any questions and are not applying for DNR permits, indicate reason below:
- [ ] \_\_\_\_\_ (DNR contact) told me on \_\_\_\_\_ that no DNR approvals are required. Reason: \_\_\_\_\_
- [ ] Other: \_\_\_\_\_

Please be advised that the CPW identifies permits subject to a consistency review. You may need additional permits from other agencies or local governments 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 activity complies with, and will be conducted in a manner consistent with, the Alaska Coastal Management Program.

*Jessie Mulcahy*  
\_\_\_\_\_  
Signature of Applicant or Agent

*25 Jan 95*  
\_\_\_\_\_  
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.

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.



**Appendix A  
Project Summary**

**Kwigillingok Airport Improvements  
Project No. 60118**

The proposed action consists of rehabilitation and reconstruction of the runway at Kwigillingok, Alaska, and is in the Cenaliurrit Coastal Zone Resource Service Area (Figures 1 through 6). Construction must take place 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 (3-10 years). Only the Near-Term improvements are currently scheduled for funding. The Near-Term phase will provide the embankment for the Mid-Term phase. As shown on Figures 3 through 5, fill volumes will be reduced as the embankment settles. During the Mid-Term, the embankment will be graded and surfaced.

**Runway 15-33**

Item	Existing Usable RW	Near-Term Usable RW	Mid-Term Usable RW
		Cat. A-I	Cat. B-I
Runway Length	2,510 ft	2,420 ft	3,000 ft*
Runway Width	50 ft	60 ft	60 ft
R/W Safety Length	2,900 ft	2,900 ft	3,480 ft*
R/W Safety Width	100 ft	120 ft	120 ft
Taxiway Width	30 ft	30 ft	40 ft*
T/W Safety Width	40 ft	40 ft	80 ft*
Apron Dimensions	90x200	90x200	200x300*
Future Lease Area	none	none	100x300*
Access Road	N/A	N/A	24x870*

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

Approximately 24.30 acres of wetlands would be impacted by the proposed improvements and borrow activities under the Near-Term and Mid-Term phases, including the stream realignment, as shown in the following table. Dredging and fill placement operations will be scheduled for winter months. ADOT&PF Best Management Practices would be used to minimize impacts to wetlands during construction activities.

### Wetlands Involvement

Development	Wetlands	Dredge/Fill Amounts
Material Site (including Fish Ditch)	8.31 acres	dredge: 183,075 cy fill*: 39,075 cy
Temporary Storage	4 acres	fill: 39,000 cy
New Embankment (Runway, Armor Mat, Apron, Taxiway, Culverted Access Road, 2 Wind Cones)	10.76 acres	fill**: 139,850 cy
Stream Rechanneling (including Armor Mat)	1.13 acres	dredge: 9,500 cy fill: 9,725 cy
TOTALS	14.81 acres 24.30 acres	dredge: 192,575 cy fill: 227,625 cy

\* Overburden to be replaced after excavation activities are completed.

\*\* Includes surface course.

Improvements under the Near-Term phase which require a Section 404 Permit include:

1. New gravel surface for the existing runway, taxiway and apron.
2. A new lighted wind cone with a new segmented circle will be constructed.
3. A culvert would be installed beneath the new section of access road to equalize drainage between two old borrow ponds. The embankment would consist of imported granular fill where the road crosses the ponds.
4. A shallow ditch (approximately 1 foot wide) will be excavated around the southern end of the airport to facilitate drainage away from the embankment.
5. A ditch will be excavated between the borrow area and the intertidal slough to provide a hydrological connection between the two to eliminate possible stranding of fish.

Both ditches will be field located after excavation/construction activities are completed depending on local topography. Additional Mid-Term development will consist of a new steel plate floor and water/oil separator to the existing snow removal equipment storage building, a new rotating beacon, a medium intensity runway and taxiway lighting system, and right-of-way acquisition totalling approximately 144 acres.

An intertidally influenced (unnamed) stream along the west side of the airport intercepts the runway embankment at a right angle, eroding the embankment. The

stream must be realigned slightly and reinforced to eliminate erosion of the runway embankment (Figures 2 and 3). This would require that a large backhoe with a bucket operate within the stream. Instream operations would occur only during low tide periods, to be accomplished within one week's time. It may not be possible to isolate the work area from the flowing water of the stream.

Dredging operations would remove material from 825 lineal feet and up to 60 feet wide (1.13 acres) of the west streambank opposite the runway. The dredged material would be used in the runway extension embankment. Additional protection would be provided by a 490-foot long by 30-foot wide concrete block armor mat placed along the runway embankment. The realignment will meet all ADF&G requirements for fish passage.

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. Further Mid-Term development would include extending the existing runway lights for the entire length and lighting the new taxiway and apron. The equipment storage building would remain at its current location.

ADOT&PF will not designate a barge landing site. However, the Construction Specifications will require the Contractor to obtain all necessary permits for a barge landing once that site is identified.

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT  
(33 CFR 325)

OMB APPROVAL No.  
0702-0036  
Expires 30 June 1992

Public reporting for this collection of information is estimated to average 5 hours per response for the majority of cases, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Applications for larger or more complex projects or those in ecologically sensitive areas, will take longer. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information, Operations and Reports 1215 Jefferson Davis Highway, Suite 1204 Arlington, VA 22202-4302, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

The Department of the Army permit program is authorized by Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act and Section 103 of the Marine Protection Research and Sanctuaries Act. These laws require permits authorizing activities in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Information provided on this form will be used in evaluating the application for a permit. Information in this application is made a matter of public record through issuance of a public notice. Disclosure of the information requested is voluntary; however, the data requested are necessary in order to communicate with the applicant and to evaluate the permit application. If necessary information is not provided, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

<p>1. APPLICATION NUMBER (To be assigned by Corps)</p> <p>#4-920772 Kwigillingok River 1</p>	<p>3. NAME, ADDRESS, AND TITLE OF AUTHORIZED AGENT</p> <p>Laurie Mulcahy Same Telephone no. during business hours</p> <p>A/C( ) _____ (Residence) A/C(907) 266-1760 _____ (Office)</p>
<p>2. NAME AND ADDRESS OF APPLICANT</p> <p>DEPARTMENT OF TRANSPORTATION &amp; PUBLIC FACILITIES P.O. BOX 196900 ANCHORAGE, AK 99519-6900</p> <p>Telephone no. during business hours</p> <p>A/C( ) _____ (Residence) A/C(907) 266-1508 _____ (Office)</p>	<p>Statement of Authorization: I hereby designate and authorize _____ to act in my behalf as my agent in the processing of this permit application and to furnish, upon request, supplemental information in support of the application.</p> <p>SIGNATURE OF APPLICANT _____ DATE _____</p>

4. DETAILED DESCRIPTION OF PROPOSED ACTIVITY: See attached transmittal letter for project details which are summarized here.

4a. ACTIVITY

The proposed project will reconstruct the existing runway; and provide a 60,000 square foot apron, a taxiway, access road, and borrow area. A portion of an intertidally influenced stream would be realigned, dredging operations would remove material from 825 lineal feet up to 60 feet wide (1.13 acres). A project description is in the attached Appendix A.

4b. PURPOSE

The runway reconstruction, apron, taxiway and access road will bring the runway and apron into compliance with current standards. The stream realignment will eliminate erosion on the southwest side of the existing runway.

4c. DISCHARGE OF DREDGED OR FILL MATERIAL

See attached Appendix A.

5. NAMES AND ADDRESSES OF ADJOINING PROPERTY OWNERS, LESSEES, ETC., WHOSE PROPERTY ALSO BOUNDS THE WATERWAY

Calista Corporation  
601 W. Fifth Ave., #200  
Anchorage, AK 99501-2295

ADNR  
Division of Land  
P.O. Box 107005  
Anchorage, AK 99510-7005

Kwik, Inc.  
General Delivery  
Kwigillingok, AK 99622

Eva Friend  
General Delivery  
Kwigillingok, AK 99622

Kate Avigeak  
General Delivery  
Kwigillingok, AK 99622

Lena J. Atti  
General Delivery  
Kwigillingok, AK 99622

6. WATERBODY AND LOCATION ON WATERBODY WHERE ACTIVITY EXISTS OR IS PROPOSED

Near Kwigillingok River on Kuskokwim Bay

7. LOCATION ON LAND WHERE ACTIVITY EXISTS OR IS PROPOSED

ADDRESS:

Kwigillingok Airport  
STREET, ROAD, ROUTE OR OTHER DESCRIPTIVE LOCATION

\_\_\_\_\_  
COUNTY STATE ZIP CODE

Kwigillingok IRA Council  
LOCAL GOVERNING BODY WITH JURISDICTION

8. Is any portion of the activity for which authorization is sought now complete?  YES  NO  
If answer is "yes" give reasons, month and year the activity was completed. Indicate the existing work on the drawings.

9. List all approvals or certificates and denials received from other federal, interstate, state or local agencies for any structures, construction, discharges or other activities described in this application.

ISSUING AGENCY	TYPE APPROVAL	IDENTIFICATION NO.	DATE OF APPLICATION	DATE OF APPROVAL	DATE OF DENIAL
State Historic Preservation Office	Clearance	n/a		11/27/92	n/a
Federal Aviation Administration	FONSI	n/a	1/17/95	pending	

10. Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in the application, and that to the best of my knowledge and belief such information is true, complete and accurate. I further certify that I possess the authority to undertake the proposed activities or I am acting as the duly authorized agent of the applicant.

Laurie Mulcahy 25 Jan 95  
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 3 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 device 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 statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: 2-6-95 TIME: 9:00 am  
TO/FROM: Bill Keller PHONE: 753-2712  
REPRESENTING: COE LOCATION: Anchorage  
TO/FROM: Laurie Mulcahy  
PROJECT: Kwigillingok Airport Improvements PROJECT NO.: 60118  
SUBJECT: Questions on Section 404 Permit application

Bill had some questions about our Kwigillingok Airport Improvements project Section 404 permit application (January 25, 1995), specifically the Wetlands Involvement Table contained within Appendix A.

1) Temporary storage involved 4 acres, but did not indicate a site location.

After consulting with John Wahl, the 4 acres for temporary storage were eliminated from the proposal. The 39,000 cy of fill will be incorporated into the new embankment and not be temporarily stockpiled. The revised total fill amount for new embankment is 178,850 cy.

2) Armor mat was listed in two rows, as part of the new embankment and the stream rechanneling.

The fill amount for the armor mat was calculated into the stream rechanneling fill. Therefore, the listing for armor mat was eliminated from the new embankment. This revision did not alter the fill amounts for either row.

3) There were two wetlands acreage totals and this needed to be clarified.

The totals represented different areas involved with dredge and fill amounts. To clarify the total impact acreage, I decided to list only one amount. Since we were now eliminating the 4 acres for temporary storage, this reduced the overall total to 20.2 acres of wetlands.

The Appendix A was revised per Bill Keller's comments and resubmitted (revision dated February 1995 is attached). The revision was sent by courier to Bill on February 6, 1995. (I also faxed and mailed revisions to Wayne Dolezal at ADF&G and to Vicki Burkovic at DGC.)

cc: Steven R. Horn, P.E., Supervisor, PD&E  
Bill Keller, Project Manager, COE  
Jerry Ruehle, Environmental Team Leader, PD&E  
John Wahl, P.E., Project Manager, Airports Design

**Appendix A  
Project Summary**

**Kwigillingok Airport Improvements  
Project No. 60118**

The proposed action consists of rehabilitation and reconstruction of the runway at Kwigillingok, Alaska, and is in the Cenaliulriit Coastal Zone Resource Service Area (Figures 1 through 6). Construction must take place 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 (3-10 years). Only the Near-Term improvements are currently scheduled for funding. The Near-Term phase will provide the embankment for the Mid-Term phase. As shown on Figures 3 through 5, fill volumes will be reduced as the embankment settles. During the Mid-Term, the embankment will be graded and surfaced.

**Runway 15-33**

Item	Existing Usable RW	Near-Term Usable RW	Mid-Term Usable RW
		Cat. A-I	Cat. B-I
Runway Length	2,510 ft	2,420 ft	3,000 ft*
Runway Width	50 ft	60 ft	60 ft
R/W Safety Length	2,900 ft	2,900 ft	3,480 ft*
R/W Safety Width	100 ft	120 ft	120 ft
Taxiway Width	30 ft	30 ft	40 ft*
T/W Safety Width	40 ft	40 ft	80 ft*
Apron Dimensions	90x200	90x200	200x300*
Future Lease Area	none	none	100x300*
Access Road	N/A	N/A	24x870*

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

Approximately 20.2 acres of wetlands would be impacted by the proposed improvements and borrow activities under the Near-Term and Mid-Term phases, including the stream realignment, as shown in the following table. Dredging and fill placement operations will be scheduled for winter months. ADOT&PF Best Management Practices would be used to minimize impacts to wetlands during construction activities.

### Wetlands Involvement

Development	Wetlands	Dredge/Fill Amounts
Material Site (including Fish Ditch)	8.31 acres	dredge: 183,075 cy fill*: 39,075 cy
New Embankment (Runway, Apron, Taxiway, Culverted Access Road, 2 Wind Cones)	10.76 acres	fill**: 178,850 cy
Stream Rechanneling (including Armor Mat)	1.13 acres	dredge: 9,500 cy fill: 9,725 cy
TOTALS	20.20 acres	dredge: 192,575 cy fill: 227,650 cy

\* Overburden to be replaced after excavation activities are completed.

\*\* Includes surface course.

Improvements under the Near-Term phase which require a Section 404 Permit include:

1. New gravel surface for the existing runway, taxiway and apron.
2. A new lighted wind cone with a new segmented circle will be constructed.
3. A culvert would be installed beneath the new section of access road to equalize drainage between two old borrow ponds. The embankment would consist of imported granular fill where the road crosses the ponds.
4. A shallow ditch (approximately 1 foot wide) will be excavated around the southern end of the airport to facilitate drainage away from the embankment.
5. A ditch will be excavated between the borrow area and the intertidal slough to provide a hydrological connection between the two to eliminate possible stranding of fish.

Both ditches will be field located after excavation/construction activities are completed depending on local topography. Additional Mid-Term development will consist of a new steel plate floor and water/oil separator to the existing snow removal equipment storage building, a new rotating beacon, a medium intensity runway and taxiway lighting system, and right-of-way acquisition totalling approximately 144 acres.

An intertidally influenced (unnamed) stream along the west side of the airport intercepts the runway embankment at a right angle, eroding the embankment. The stream must be realigned slightly and reinforced to eliminate erosion of the runway embankment (Figures 2 and 3). This would require that a large backhoe with a



bucket operate within the stream. Instream operations would occur only during low tide periods, to be accomplished within one week's time. It may not be possible to isolate the work area from the flowing water of the stream.

Dredging operations would remove material from 825 lineal feet and up to 60 feet wide (1.13 acres) of the west streambank opposite the runway. The dredged material would be used in the runway extension embankment. Additional protection would be provided by a 490-foot long by 30-foot wide concrete block armor mat placed along the runway embankment. The realignment will meet all ADF&G requirements for fish passage.

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. Further Mid-Term development would include extending the existing runway lights for the entire length and lighting the new taxiway and apron. The equipment storage building would remain at its current location.

ADOT&PF will not designate a barge landing site. However, the Construction Specifications will require the Contractor to obtain all necessary permits for a barge landing once that site is identified.



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration

National Marine Fisheries Service  
222 W. 7th Avenue, #43  
Anchorage, Alaska 99513-7577

DEC 92

December 10, 1992

Steven R. Horn, P.E.  
Supervisor, Central Region  
Alaska Department of Transportation  
& Public Facilities  
4111 Aviation Avenue  
Anchorage, Alaska 99519-6900

Re: Kwigillingok Airport  
# 60118

Re: Ms. Diana Rigg

SEARCHED	INDEXED
SERIALIZED	FILED
DEC 10 1992	
FBI - ANCHORAGE	
WALL	
DC	
Project File	
Control	

Dear Mr. Horn:

This is in response to your scoping letter dated November 17, 1992 requesting our review of your proposal to bring the Kwigillingok airport up to current State and Federal Standards, to provide room for future growth with lease lots, to provide lighting for night and emergency access, and to provide adequate equipment with which to keep the runway operational.

From the information provided, it would appear that additional design alternatives are possible, and should be considered prior to permit submission. From our perspective it would be helpful if the alternative analyses addressed what types of impacts if any would be expected to occur to fishery resources.

Should you require additional information on this matter, please contact Ms. Jeanne L. Hanson of my staff at the above address, or by telephone at 271-5006. Thank you for the opportunity to comment.

Sincerely,

*Ronald J. Morris*  
Ronald J. Morris  
Western Alaska Office Supervisor  
Protected Resources Management Division

cc: USFWS, DGC, ADFG, ADEC, EPA - Anchorage





UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration

National Marine Fisheries Service  
222 W. 7th Avenue, #43  
Anchorage, Alaska 99513-7577

ETM

FEB 24 '94

February 15, 1994

Mr. Steven R. Horn  
Supervisor,  
Central Region  
Alaska Department of Transportation  
& Public Facilities  
4111 Aviation Avenue  
Anchorage, Alaska 99519-6900

RE: Kwigillingok Airport  
Reconstruction  
Project No. 60118

	COPY	ACTION
Prelim. Design		
Environmental Section		
PD&E Engr.		
Project Mgr.		
Survey Mgr.		
Env. Leader		

Attn: Diana Rigg

Dear Mr. Horn:

This is in response to your letter requesting our review and comment of your draft environmental assessment for the proposed improvements to the Kwigillingok airport.

The National Marine Fisheries Service has reviewed the project proposal and believes the described construction activities could have an adverse impact on the anadromous fishery resources of the project area. As you are aware, the waters of the Kwigillingok River support a population of anadromous whitefish.

It is our understanding from your document, that you are coordinating with the Alaska Department of Fish and Game. We support this effort. In addition, in order to reduce the impacts to anadromous fishery resources we recommend you include the following conditions in your proposed scope of work.

- 1. The stream shall be placed in a channel whose length, measured from the upstream to the downstream limits of the reroute, is no shorter than the original length of the stream channel over the same boundaries and whose total area should equal original area of stream section before diversion.
- 2. In order to stabilize the new stream channel, and prevent erosion back into the old channel, all disturbed areas will be recoultured and planted with seeds or

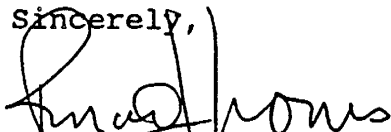


cuttings from native vegetation to accelerate the recovery of the area.

3. The new channel shall be constructed in its entirety prior to blocking off the existing channel.

Thank you for the opportunity to comment.

Sincerely,



Ronald J. Morris  
Field Office Supervisor  
Protective Resources  
Management Division

NMFS Contact Person: Jeanne L. Hanson

cc: ADFG, DEC, DGC, EPA, FWS - Anchorage  
Applicant



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
**National Marine Fisheries Service**  
 222 West 7th Avenue, Box 43  
 Anchorage, Alaska 99513-7577

RECEIVED

JAN 03 '95

December 23, 1994

	COPY	ACTION
Prelim. Design & Environmental Section		
PD&E Engr.		
Project Mgr.	WAAL	
Locations		
Env. Team Leader	DR	
Staff	LM	
Project File		/
Central File		/

Mr. Steven R. Horn  
 Supervisor,  
 Central Region  
 Alaska Department of Transportation  
 & Public Facilities  
 4111 Aviation Avenue  
 Anchorage, Alaska 99519-6900

RE: Kwigillingok Airport  
 Reconstruction  
 Project No. 60118

Attn: Laurie Mulcahy

Dear Mr. Horn:

This is in response to your letter requesting our review and comment of your revised environmental assessment for the proposed improvements to the Kwigillingok airport.

The National Marine Fisheries Service has reviewed the project proposal. It would appear from the information in the document that this proposal also entails realignment of the stream on the west edge of the primary runway. Therefore, are concerns over adverse impacts to fishery resources remains the same.

We recognize and support your coordination with the Alaska Department of Fish and Game. In addition, we continue to recommend that you include the following conditions in your proposed scope of work:

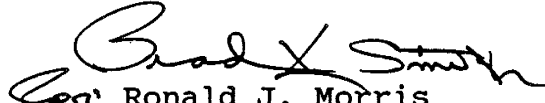
1. The stream shall be placed in a channel whose length, measured from the upstream to the downstream limits of the reroute, is no shorter than the original length of the stream channel over the same boundaries and whose total area should equal original area of stream section before diversion.
2. In order to stabilize the new stream channel, and prevent erosion back into the old channel, all disturbed areas will be recontoured and planted with seeds or cuttings from native vegetation to accelerate the recovery of the area.



3. The new channel shall be constructed in its entirety prior to blocking off the existing channel.

Thank you for the opportunity to comment.

Sincerely,

  
Ron. Ronald J. Morris  
Field Office Supervisor  
Protective Resources  
Management Division

NMFS Contact Person: Jeanne L. Hanson

cc: ADFG, DEC, DGC, EPA, FWS - Anchorage  
Applicant



IN REPLY REFER TO  
WAES

# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Anchorage Field Office  
Ecological Services and Endangered Species  
605 West 4th Avenue, Room 62  
Anchorage, Alaska 99501



DEC 14 1992

Steven R. Horn, P.E.  
Preliminary Design and Environmental Supervisor  
Alaska Department of Transportation and Public Facilities  
Post Office Box 196900  
Anchorage, Alaska 99519-6900

Dear Mr. Horn:

We reviewed your letter of November 17, 1992, requesting scoping-level comments on the Kwigillingok Airport expansion project (Project No. 60118). The proposed action would lengthen the existing runway safety area 700 feet to the south into a "dry lake bed" and widen it 25 feet on both sides. The 95'x160' parking apron would be increased to 200'x300' to allow room for three 100-ft<sup>2</sup> lease lots, and the 50'x200' taxiway would be increased to 80'x200'.

The dry (drained) lake bed is potentially important bird habitat. The Yukon-Kuskokwim Delta hosts 24 million waterbirds each year (Minerals Management Service 1985), including 1-2 million shorebirds that use the intertidal habitats of the central Yukon-Kuskokwim Delta (Gill and Handel 1990). Many of those shorebirds will stage in coastal wetlands as they migrate away from the delta each fall. The drained lake basin most likely contains an attractive foraging substrate for shorebirds (M. North, personal observation) and is close enough to the coast that it likely hosts large numbers of shorebirds in the fall. Depending on the water regime of the drained lake basin, large numbers of ducks may also stage in the basin (see Bergman et al. [1977] for an analagous situation on the North Slope). Fall bird use is likely greater than spring use because the lake basin would be frozen and unavailable to most spring migrants, and bird populations are always substantially higher in the fall following the reproductive season.

We note that your agency has thus far identified only two alternatives for analysis in your Environmental Assessment (EA). As you prepare your EA, we recommend you consider alternatives that address runway lengths and widths; parking apron and lease lot sizes, locations, and configurations; and material sites. Alternatives analyses will be required for subsequent permits.

First, we recommend your analysis include the alternative of widening the runway but not extending it. As part of that analysis, the EA should document the frequency and seasonality of flooding in, and waterbird use of, the dry (drained) lake bed. If waterbird use is high, we question whether the runway should be extended into prime bird habitat where bird/aircraft strikes will be more likely.

	COPY	ACTION
Prelim. Design		
Environmental Section		
SF Engr.		
W. Leader		
File		
Project File		
Control		

#60118

Other alternatives that should be assessed involve the sizes and locations of the parking apron and lease lots. We believe the parking apron could be reduced in size to fit on the isthmus between the two unnamed ponds, and the lease lots could be located along the access road near the parking apron, instead of adjacent to the parking apron. Furthermore, you should analyze a no-build alternative versus a need for 1, 2, and 3 lease lots. These analyses should be independent of the runway length analysis.

All probable material sites should be identified in the EA, and/or a mechanism identified that will assure material sites selected by the contractor are evaluated under NEPA. We recommend you evaluate alternative material sites both within and out of the dry (drained) lake basin, as well as winter versus summer excavation of the material site. It may be appropriate to locate the material site within the dry (drained) lake basin but well away from the runway, and to design the material site to retain water permanently. This analysis should also be independent of the runway length analysis.

Answers to your five questions follow.

1. The proposed project is located within the potential breeding range of spectacled eiders (*Somateria fischeri*), a Category 1 candidate proposed to be formally listed as threatened by May 1993. We have no information to suggest whether spectacled eiders nest near Kwigillingok or not. We recommend you coordinate with our office to arrange for a private consultant or our agency to conduct a site inspection between June 5-20, 1993, to look for breeding eider pairs.
2. Virtually all of the surface and subsurface lands in the vicinity of Kwigillingok have been conveyed to village and regional native corporations. A few native allotments remain that have been selected but not yet been conveyed, however, and in effect remain part of the Yukon Delta National Wildlife Refuge. Portions of the existing runway occupy parts of these allotments.
3. This question has been answered above.
4. We are not aware of any bald eagle (*Haliaeetus leucocephalus*) nests near the project site.
5. We recommend you contact Bob Rice of our Realty Office, 1011 E. Tudor Road, Anchorage, Alaska, 99503 (telephone: 786-3372) to discuss the ownership status of the native allotments, necessary permits, and other preliminary actions (i.e., obtaining a letter of non-objection from the allotment applicants) necessary before obtaining a permit.

In summary, we recommend you analyze the three basic components of the airport expansion project (i.e., runway length, parking apron and lease lots, and borrow sites), separately, and that you analyze several alternatives for each component. Also, if you intend to proceed with the proposed alternative, we recommend you document 1) the habitat using color photographs in the EA, and 2) spring, summer, and fall bird use of the dry (drained) lake basin. We also would like to take part in a joint site inspection with your staff, preferably in August.



If you have questions or need further technical assistance, please contact Michael North at 271-2789.

Sincerely,



Field Supervisor

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Literature Cited

Bergman, R. D., R. L. Howard, K. F. Abraham, and M. W. Weller. 1977. Water birds and their wetland resources in relation to oil development at Storkersen Point, Alaska. U.S. Fish and Wildlife Service Resource Publication 129, Washington, D.C. 38 pages.

Gill, R. E., Jr., and C. M. Handel. 1990. The importance of subarctic intertidal habitats to shorebirds: A study of the central Yukon-Kuskokwim delta, Alaska. Condor 92:709-725.

Minerals Management Service. 1985. Norton Basin Sale 100. Final environmental impact statement, volume I.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: 15 Dec 93 TIME: 8:45 am  
TO/ : Brian Anderson PHONE: \_\_\_\_\_  
REPRESENTING: USF&WS, T&E Species LOCATION: Anchorage  
/FROM: Diana Rigg  
PROJECT: Kwigillingok Airport PROJECT NO.: 60118  
SUBJECT: Peregrine Falcons

Peregrine falcons are on the threatened list of species administered by the USF&WS. Mike North, USF&WS biologist noted a falcon in the village of Kwigillingok during the July 29, 1993 field visit. Therefore, we need to coordinate with the USF&WS under Section 7 of the Threatened and Endangered Species Act.

I called Brian Anderson to find out what we would need to send to the USF&WS for their consideration under Section 7. Brian indicated he did not feel that there were nesting peregrines in the area. It is the nesting activity that is of importance to the USF&WS and all restrictions on proposed projects are invoked for the nesting period (April 15 - August 30). Peregrines nest in bluffs - not on level ground even in the Y-K Delta. Brian felt, from the description given of the area, that the falcon noted on July 29 was using the area for feeding.

Possible restrictions if nesting is within

One Mile: prohibit air traffic to 1500 feet altitude during nesting;  
prohibit ground disturbing activity during nesting;  
prohibit habitat alteration like a new R/W.

Two Miles: prohibit high noise activities during nesting;  
prohibit habitat alteration like a new R/W.

Between 2 and 15 Miles: prohibit alteration of high quality wetlands habitat

I informed Brian I would send as much information as possible for his consideration. Having Mike North as a resource at the USF&WS will be helpful for Brian in his assessment of impacts to falcons.

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

# STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

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

WALTER J. HICKEL, GOVERNOR

4111 AVIATION AVENUE  
P.O. BOX 196900  
ANCHORAGE, ALASKA 99519-6900  
(FAX 243-6927)  
(907) 266-1508

December 20, 1993

Re: Kwigillingok Airport  
Improvements  
Project No. 60118

Peregrine Falcons

Ann Rappaport  
Field Supervisor  
US Fish & Wildlife Service  
Anchorage Enhancement Divisions  
605 W. 4th Ave., Room 62  
Anchorage, Alaska 99501


Dear Ms. Rappaport:

The Alaska Department of Transportation and Public Facilities (ADOT&PF) proposes improvements to the Kwigillingok Airport as described in the attached Summary. This correspondence is made pursuant to Section 7 of the Endangered Species Act because a field review of the area, conducted July 29, 1993 with Mike North, Biologist, of your staff, noted a peregrine falcon (probably P. f. anatum) pursuing and catching dunlins in the village. The peregrine falcon is currently on the Threatened Species list.


We request your review of the proposed improvements and your assessment of likely impacts to peregrine falcon nesting and prey habitat areas. Note that the majority of habitat impacts would occur if the Additive Alternate, the crosswind runway, is built.

We would appreciate your comments by January 15, 1994. If you have any questions, please call Diana Rigg, Environmental Analyst, at 266-1448.

Sincerely,

  
Steven R. Horn, P.E.  
Supervisor

Enclosure: Summary

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

## SUMMARY

The proposed action consists of rehabilitation and reconstruction of the existing runway at Kwigillingok, Alaska and possible construction of a cross wind runway. Construction must take place 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), Mid-Term (3-10 years) and Future (11-20 years). Only the near-Term improvements are currently scheduled for funding. The Near-Term phase will provide the embankment for the Mid-Term phase, at which time the embankment will be graded and surfaced.

### EXISTING RUNWAY 15/33

ITEM	Existing Usable RW	NearTerm Usable RW	MidTerm Usable RW	Future Usable RW
		Cat. A-I	Cat. B-I	Cat. B-I
Runway Length	2,510 ft	2,420 ft	3,200 ft*	Same
Runway Width	50 ft	60 ft	60 ft	Same
R/W Safety Length	2,900 ft	2,900 ft	3,680 ft*	Same
R/W Safety Width	100 ft	120 ft	120 ft	Same
Taxiway Width	30 ft	30 ft	40 ft*	Same
T/W Safety Width	40 ft	40 ft	80 ft*	Same
Apron Dimensions	90x200	90x200	200x300*	Same
Future Lease Area	none	none	100x300*	Same
Access Road	N/A	N/A	24x825*	Same

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

Construction of the cross wind runway embankment will be included in the proposed Near-Term phase as an Additive Alternate item and is described below. An Additive Alternate is an item of work for which the proposed budget is not sufficient. However, the work will be added if ADOT&PF receives bids for the primary work such that sufficient funds are available for the Additive Alternate.

CROSS WIND RUNWAY 3/21

ITEM	NearTerm	MidTerm	Future
	Unusable Embankment	Cat. A-II	Cat. B-II
Runway Length	2,400 ft*	2,400 ft	3,200 ft
Runway Width	75 ft*	75 ft	75 ft
R/W Safety Length	3,000 ft*	3,000 ft	3,800 ft
R/W Safety Width	150 ft*	150 ft	150 ft

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

Additional improvements under the Near-Term phase include:

1. New gravel surface for the existing runway, taxiway and apron.
2. The existing snow removal equipment storage building will receive an improved floor system with hazardous material spill containment capability.
3. A new rotating beacon will be constructed on the backside of the existing equipment storage building.
4. A new lighted windcone with a new segmented circle will be
5. constructed.
6. A medium intensity runway and taxiway lighting system will be installed.

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. Further Mid-Term development would include extending the primary runway lights for the entire length and lighting the new taxiway and apron. The equipment storage building would remain on its current location.

Future development may consist of constructing the entire 150-foot wide by 3,800-foot long crosswind runway and installing a medium intensity runway lighting system. This will only occur if the Additive Alternative under the Near-Term is constructed.

The airport is currently situated within a 109 acre tract of land, leased to ADOT&PF until 1999. Proposed right-of-way acquisition includes approximately 84 acres in fee, 14 acres of avigation and hazard easement over land, 73 acres of Interagency Land Management Transfer (ILMT) from Alaska Department of Natural Resources, 30 acres of avigation and hazard easement over dry lake bed and 2.5 acres of avigation and hazard easement over a creek.

The proposed project is in the Cenaliulriit Coastal Zone Resource Service Area (CCZRSA). Approximately 60 acres of wetlands would be impacted by the proposed improvements and borrow activities under the Near-Term and Mid-Term phases, including the stream realignment. The Future expansion of the crosswind runway, would impact approximately 4 additional acres of wetlands for embankment and borrow activities. ADOT&PF Best Management Practices would be used to minimize impacts to wetlands during construction activities.

The stream on the west edge of the primary runway must be realigned to eliminate erosion on the runway embankment. The realignment will meet all ADF&G requirements for fish passage.

ADOT&PF will not designate a barge landing site. However, the Construction Specifications will require the Contractor to obtain all necessary permits for a barge landing once that site is identified.



# United States Department of the Interior

TAKE PRIDE IN AMERICA  
 [REDACTED]  
 [REDACTED] 0 '94

FISH AND WILDLIFE SERVICE  
 Anchorage Field Office  
 Ecological Services and Endangered Species  
 605 West 4th Avenue, Room 62  
 Anchorage, Alaska 99501

IN REPLY REFER TO:

WAES

Mr. Steven Horn, P.E.  
 Department of Transportation and Public Facilities  
 P.O. Box 196900  
 Anchorage, Alaska 99519-6900

JAN 18 1994

Admin. Design		
Environmental Section		
PD&E Engr.		
Project Mgr.		
Survey Mgr.		
Env. Leader		
Staff		
Project File		

60118

Dear Mr. Horn:

This responds to your letter of December 20, 1993 regarding the proposed improvements to the Kwigillingok Airport, as described by the project information you included with your letter.

In accordance with Section 7(c) of the Endangered Species Act of 1973, as amended (ESA), we have determined that the following listed and proposed threatened or endangered (T/E) species may be present in the following project areas.

LISTED SPECIES	STATUS		EXPECTED OCCURRENCE
Spectacled eider	T	<u>Somateria fischeri</u>	Potential migrant Potential breeding
American peregrine falcon	E	<u>Falco peregrinus anatum</u>	Migrant within project area
Short-tailed albatross	E	<u>Diomedea albatrus</u>	Potential migrant; although sightings of this species in this area have been few, any sightings near or in Kwigillingok or the surrounding area would be significant.

### CATEGORY 2 SPECIES

Category 2 candidate species that may occur within the project area are identified below, unless indicated otherwise. A Category 2 species is one that may be declining but the Service lacks sufficient biological information to warrant consideration for listing. Therefore, any information agencies can provide about these species is appreciated.

Many federal agencies have instituted policies to protect candidate species. Your consideration of these species is important in preventing their inclusion on the Endangered Species list.

Mammals

North American lynx             Felis lynx canadensis             Alaska-wide<sup>1</sup>

Birds

Harlequin duck                   Histrionicus histrionicus             Alaska-wide<sup>1</sup>  
Bristle-thighed curlew         Numenius tahitiensis             Western Alaska

Plants

No common name                 Artemisia glomerata             Cape Newenham/Kagati  
  subglabra                         Lake/Togiak area

<sup>1</sup> Although common in Alaska, these species have shown declines in their ranges outside of Alaska

Thank you for your inquiry and we look forward to working with you. If you have any additional questions, you may direct them to project biologist, Michael North, or endangered species specialist, Virginia Moran, at 271-2888.

Sincerely,



Ann Rappoport  
Field Supervisor

enclosures (2)



## Enclosure

Section 7(c) of the Endangered Species Act requires that federal agencies proposing major construction actions (as identified in Section 1508.18 of the National Environmental Policy Act of 1969, as amended) complete a biological assessment to determine the effects of the proposed action on listed and proposed species. If a biological assessment is not required (i.e., all other actions), your agency is responsible for review of proposed activities to determine whether listed species will be affected.

When it is necessary to determine impacts to species within a project area, a biological assessment should be completed. The biological assessment should be completed within 180 days of initiation, but can be extended by mutual agreement between your agency and the Fish and Wildlife Service (Service).

If the assessment is not initiated within 90 days, the list of threatened/endangered species should be verified with the Service prior to initiation of the assessment. The biological assessment may be undertaken as part of your agency's compliance of Section 102 of the National Environmental Policy Act (NEPA), and incorporated into the NEPA documents. We recommend that biological assessments include:

1. Full description of the project;
2. A description of the specific area that may be affected by the action;
3. Current status, habitat use, and behavior of T/E species in the project area;
4. Discussion of the methods used to determine the information in item 3;
5. Direct and indirect impacts of the project to T/E species; (note, consultation for candidate species is not required under Section 7; however, federal agencies are encouraged to prevent impacts to these species to prevent eventual listing).
6. Analysis of the effects of the action on listed and proposed species and their habitats including cumulative impacts from other federal, state, or private projects that may be occurring in the project area;
7. Coordination measures that will reduce/eliminate adverse impacts to T/E species;
8. The expected status of T/E species in the future (short and long term) both during and after project completion;
9. Determination of "is likely to adversely affect" or "is not likely to adversely affect" critical habitat (if applicable) [Section 7(a)(2)], or
10. Determination of "is likely to jeopardize" or "is not likely to jeopardize" the continued existence of any endangered or threatened

- species [Section 7(a)(2)]; and
11. Citation of literature and personal contacts used in the assessment.

If it is determined that any agency program or project "is likely to adversely affect" or "likely to jeopardize" any listed species, formal consultation should be initiated with the Service. If it is concluded that the project "is not likely to adversely affect" or "not likely to jeopardize" listed species, the Service should be asked to review the assessment and concur with the determination of no adverse effect.

A federal agency may designate a non-federal representative to conduct informal consultation or prepare biological assessments. Written notice should be provided to the Service upon such a designation. However, ultimate responsibility for Section 7 compliance remains with the federal agency. The Service recommends that federal agencies provide their non-federal representatives with proper guidance and oversight during preparation of biological assessments and evaluation of potential impacts to listed species.

Section 7(d) of the ESA requires that the federal agency and permit/license applicant not make any irreversible or irretrievable commitment of resources which would preclude formulating of reasonable and prudent project alternatives, until consultation on listed species is completed.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: 28 Jan 94 TIME: ~3:45pm  
TO/ : Virginia Moran PHONE: 271-2871  
REPRESENTING: USF&WS, T&E Species LOCATION: Anch  
/FROM: Diana Rigg  
PROJECT: Kwig Airport PROJECT NO.: 60118  
SUBJECT: Wetlands Impacts and T&E Species

I returned Ms. Moran's call. She explained she was working with Mike North on review of the environmental assessment. She expressed extreme disapproval of the document and the project. According to her, Mike North was also upset that the document "did not address his December 14, 1992 scoping letter comments." Both he and Ms. Moran will be submitting comments that reference that letter and will be attaching another copy to their comments.

Ms. Moran indicated that she believed the project was "overblown" for the size of community. She mentioned that Kongiganak was only 9 miles away, that the community of Kwig did not receive the numbers of aircraft operations we indicate in the document (FAA Statistics Section told her that there were only 1,200 operations to Kwig per year) and that the population was declining - thus calling into question our use of a 2% growth rate for the 20-year design life of the project.

I told Ms. Moran that the number of operations was based on surveys of actual air carriers and their estimate of how many operations they had. I requested that Ms. Moran give us details on the declining population and we would change the growth rate after doing some research.

Ms. Moran was concerned about why we did not design to FAA minimum standards. I deferred to the design engineers and requested she put these concerns into her letter. I informed her of the recent meeting between ADOT&PF and resource agency personnel that discussed these issues and that USF&WS had been unable to send anyone. She suggested a handout may be useful.

Ms. Moran wanted to know what wind coverage was. I told her that it concerned crosswinds not wind shear as she thought. She stated that she felt safety was a bogus reason for upgrading the airport because there had been no accidents at Kwig and because a local resident had laughed when she told him that we considered the apron too small and that it got crowded.

I asked her if someone had to die in an accident before an airport was upgraded. I also told her that absolutely no statistics are kept for these airports: wing tips touching the ground or bent landing gear would not always be reported. The information on accidents is anecdotal and comes from the Airport Manager in

Bethel. There is no on-site supervision of such things. I told Ms. Moran that no statistics were kept that could tell us how many times an operator had tried to land at Kwig and not been able to due to crosswinds, weather, and/or runway conditions.

Also, Ms. Moran stated that she had worked with FAA before and understood that they felt they did not have to comply with environmental regulations because of threats to human safety.

I directed the conversation to the Threatened and Endangered Species and Section 7 consultation, asking Ms. Moran what our next step should be. Ms. Moran indicated that we could probably use Mike North's report as our biological assessment. We then decide what effect our project would have on the listed species and request USF&WS concurrence. If they do not concur, we then meet to discuss alternatives.

Ms. Moran indicated we would probably be reluctant to meet with them. I tried to reassure her that ADOT&PF is never reluctant to meet with resource agency personnel. She again stated her personal opinion that the project was "overblown".

cc: Steven R. Horn, P.E., Supervisor, PD&E  
Jerry Ruehle, Environmental Team Leader, PD&E  
Steve Van Horn, P.E., Section Chief, Aviation Design  
John Wahl, P.E., Project Manager, Aviation Design



# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Anchorage Field Office

Ecological Services and Endangered Species

605 West 4th Avenue, Room 62

Anchorage, Alaska 99501

IN REPLY REFER TO:

WABS

MAR 08 '94

Steven R. Horn, P.E.  
 Preliminary Design and Environmental Supervisor  
 Alaska Department of Transportation and Public Facilities  
 Post Office Box 196900  
 Anchorage, Alaska 99519-6900

MAR 7 1994

	COPY	ACTION
Elim. Design Environmental Section		
PD&E Engr.		
Project Mgr.	Wah	X
Survey Mgr.		
Env. Leader	JR	X
Staff		
Project File		
Control File		

Dear Mr. Horn:

We have reviewed the draft environmental assessment (EA) for the proposed expansion of the airport at Kwigillingok, submitted to us January 18, 1994, and have the following comments.

### General Comments

Our project biologist, Michael North, visited the Kwigillingok airport with your staff on July 29, 1993 (North 1993). That visit allowed a general assessment of habitat values in the area, including consideration of bird species in the area at that time. Three ponds lie in former borrow sites along the east side of the runway. A pair of arctic terns (*Sterna paradisaea*) and two pairs of Pacific loons (*Gavia pacifica*) had territories on these ponds, and one of the loon pairs had a chick at the time of our 1993 visit. One borrow site pond and two small natural ponds exist west of the north end of the runway. One of these ponds supported a pair of mew gulls (*Larus canus*) with two chicks. The habitat proposed to be developed in the drained lake basin contains a mosaic of wetland species including at least four species of *Carex*, *Juncus castaneus*, *Hippuris vulgaris*, *Calamagrostis canadensis*, *Poa* sp., and *Rhinanthus minor*. We consider this habitat high value, although the only wildlife observed during the site visit was one Baird's sandpiper (*Calidris bairdii*), because it appeared to be suitable feeding and brood-rearing habitat for shorebirds and songbirds. The active channel and adjacent habitat in the drained lake basin provided foraging habitat for seven red-throated loons (*G. stellata*), a few dozen western sandpipers (*C. maurii*), and two sanderlings (*C. alba*). We consider the active channel and its intertidal margins to be high value foraging habitat for loons and shorebirds.

We note that the airstrip was originally constructed in 1972, with maintenance in 1975, 1981, and 1984. Please provide in the EA any information you have on barge landing and construction camp locations for those activities.

It does not seem appropriate to request authorization for a crosswind runway until there are available funds to complete the project. According to the EA, the foundation of the crosswind runway would be built in the near-term phase of the project if bids come in low enough to accommodate available funding. There is no guarantee that funding would be available to complete the project. Therefore, such a fill appears speculative, and would likely be prohibited by

the 404(b)(1) guidelines. If there is a need for a 150' x 3800' runway to accommodate cargo planes, it seems prudent to incorporate those dimensions into the existing primary runway.

There are several alternatives that should be thoroughly evaluated. For example, in addition to your proposed alternative, there is the alternative of limiting improvements to the primary runway. Alternative dimensions of a primary runway that could be evaluated include widths of 120' and 150', and lengths of 2900', 3200', 3480', and 3600'. Multiple length/width alternatives and locations could be designed for a crosswind runway also. We can identify at least four alternative locations to the proposed crosswind runway that appear to have less environmental impact, and we would like to see them evaluated. There are also alternatives available for locations of borrow sites and parking aprons, numbers and sizes of lease lots, layouts and dimensions of access roads, and for solving the "problem" of the active channel adjacent to the runway. We can identify at least one other alternative routing for the proposed stream location. An additional alternative is for your agency to fund some of the improvements yourself, such as installing medium intensity lighting, or widening or extending the primary runway, but at dimensions below FAA minimum standards. We note that of the projected project cost of \$3.1 million, ADOT would be responsible for providing about \$186,000. That should allow for some airport improvements, such as installing runway lighting.

#### Specific Comments

Page 1, paragraph 1. Please provide statistics to demonstrate that there is indeed overcrowding. We contacted the Federal Aviation Administration (FAA) for their data on airport use, which indicates there are approximately 1200 flights/year into Kwigillingok, or 3.3/day. This would not seem to indicate overcrowding.

Page 1, paragraph 2. Please provide information on what criteria define a category A-1 airport.

Page 1, paragraph 5. If a crosswind runway is planned only if the bid by the winning contractor is low enough to allow sufficient funds to remain, we do not see how there can be a demonstrated need to construct a crosswind runway that exceeds the widths and lengths (i.e., 150' x 3800') of the primary runway. It seems prudent to construct the primary runway to accommodate category B-2 aircraft if there is a demonstrated need.

Figure 1. As depicted here, the runway is mislocated and exaggerated in length. Based on indicated section lines, the runway appears to be approximately 1.5 miles long and in no need of being extended.

Page 3, paragraph 1. We contacted the FAA and were informed there are about 1200 flights/year into Kwigillingok. This is far less than your estimate of 4400 flights/year. Furthermore, extrapolation of your own data (i.e., 6 flights/day) yields an estimate of only 2190 flights/year, or half of your estimate of 4400 flights/year. Please provide the data (i.e., the results of your poll) upon which your estimates are based. Please provide the basis for

an estimate of 2 charters per day. That seems extreme if there are four scheduled flights a day, unless the charters bring in supplies only.

Page 3, paragraph 2, sentence 1. Please indicate what the design aircraft is.

Figure 2. We disagree that the active channel is causing runway erosion. We will agree that there is the potential for future runway erosion. However, the east side of the channel has rounded banks, not cut banks, and there is a well developed buffer of wetland vegetation between the runway and the channel. If you have information to the contrary, please provide it in the EA. Also, it appears that there is an opportunity to reduce impacts of the crosswind runway to the high-value drained lake basin by 35% by shifting the proposed crosswind runway 1000 feet towards the west, reducing the length and width of the safety area to no more than 3000 feet and 120 feet, respectively.

Page 8, paragraph 4. We believe claims of erosion affecting the existing runway are exaggerated. Regardless, other alternatives for solving the "problem" should be explored. We acknowledge that erosion would be a problem at one point along a runway extension.

Page 8, paragraph 7, sentence 1. We disagree. See our following comments.

Page 9, Alternative B. Please indicate what improvements, such as installation of runway lighting, could be made using only the state's share of funding for this project.

Page 12, last paragraph. The vegetation at Kwigillingok deserves more attention than given here. A list of species present in the proposed fill and borrow areas, a measure of their diversity, and a description of their salt tolerance (i.e., whether or not they are estuarine species) should be presented. We have a staff botanist who will can assist you in this effort.

Page 15, paragraph 4. The information this office provided you (i.e., North 1993) described the wildlife present at Kwigillingok at one point during the annual cycle. This section should be expanded to include available information on bird use especially during spring and fall migration, bird use during the winter, and mammal use throughout the year. This can probably best be accomplished by interviewing knowledgeable people in the village, at the Alaska Department of Fish and Game (ADFG) office in Bethel, and at Yukon Delta National Wildlife Refuge. Although we discourage contacting our refuge offices to discuss the merits of a project, the refuge is an excellent contact for information about resources present in an area. Also, please provide a reference for the information on fish presence/absence.

Page 20, paragraph 4. The justification for the lease lots seems exaggerated. For example, there is no data to support the idea that there is demand for lease lots by businesses. Also, we are aware of no vehicles (trucks/cars) in Kwigillingok, only all-terrain vehicles.

Page 21, last paragraph, sentence 3. The EA should provide detailed information on what measures would be used during construction to assure water quality is maintained in adjacent wetlands.

Page 22, paragraph 2, sentence 3. Please elaborate on how this would be accomplished.

Page 22, paragraph 4, sentence 2. Please elaborate on how this would be accomplished.

Page 22, paragraph 6. If culverts are needed, please indicate how many there will be, and where and what diameter they will be.

Page 23, paragraph 5. This statement is erroneous. Large numbers of birds were observed near the airport on July 29, 1993, and there is potential for even greater numbers during spring and fall migration. In particular, numerous loons, shorebirds, larids (gulls, terns, jaegers) and songbirds were observed near the runway. Many birds, particularly loons, were observed flying over the area proposed for a crosswind runway, and represent a potential bird-strike hazard for aircraft.

Pages 23-24, section H (Biotic Communities). This section does not address the impacts of the project on biotic communities. We recommend it be rewritten and expanded. In our letter of December 14, 1992, we identified several issues, including the need for breeding pairs surveys of spectacled eiders (a threatened species under the Endangered Species Act) and the issue of creating a bird-strike hazard by placing the runway in high-value bird habitat. These issues have not been addressed. Furthermore, during the scoping process the crosswind runway was presented as a distant additive feature; it was not proposed as part of the project. Therefore, you were unlikely to receive many concerns about it. We do have concerns about the need, location, size, and safety of the crosswind runway.

Page 24, paragraph 7. This paragraph contains several errors or misinterpretations of Service statements. Our letter of December 14, 1992, clearly indicated spectacled eiders (*Somateria fischeri*) could be present in the study area, and we recommended surveys be conducted. We are not aware of any follow-up coordination that revealed spectacled eiders were not a concern in the project area, as implied in the paragraph. Furthermore, a peregrine falcon was documented in Kwigillingok by North (1993). FAA Order 5050.4A (e)(10)(b)(2) requires you to prepare a biological assessment if the Service indicates threatened or endangered species may be present in the project area. We recommend you conduct the surveys we suggested earlier, over an area large enough to survey waterbodies from which nesting female spectacled eiders may move their broods (i.e., within a 10 mile radius of Kwigillingok and Kongiganak). We have received the draft biological assessment you sent us, and will be providing comments on it shortly.

Page 26, paragraph 1. Please elaborate on how this would be accomplished.

Page 26, paragraph 2, sentence 1. The wetlands around the Kwigillingok airport have demonstrated high values for waterbirds such as loons, shorebirds, and larids, but not for waterfowl. The wetlands have potential high value for waterfowl, but no data has been presented to demonstrate actual use. We recommend you revise this sentence.



Page 27, paragraph 1. The document does not provide any information on which side/sides of the existing runway is/are proposed for widening, or what the impacts will be of widening each side. This phase of the construction project needs to be discussed in detail.

Page 28, paragraph 3, sentence 4. The document does not provide adequate justification to assume increased air safety would be gained by adding a crosswind runway. First, there has been no documented accident at Kwigillingok. Second, the document fails to assess the increased potential for bird-aircraft strikes. During our brief visit on July 29, 1993, we noted many flocks of western sandpipers and other shorebirds flying about the drained lake basin. Numerous arctic terns and gulls were also flying about, as were common and red-throated loons. Red-throated loons typically nest on small fish-free ponds near the coast and fly to the ocean to find food for themselves and their young (Bergman and Derksen 1977, Douglas and Reimchen 1988, Reimchen and Douglas 1984). The common loons appeared to be doing the same. The layout of the crosswind runway parallel to shore makes it likely that loons will be flying over frequently as they move to the ocean to feed, whereas the orientation of the primary runway (i.e., perpendicular to shore) reduces the frequency that loons fly over it. We believe you would achieve a greater overall amount of safety by diverting funds for the crosswind runway to bring some other village's primary runway up to FAA standards.

Page 28, paragraph 3, last sentence. Please provide data to show how the wetland under consideration for filling is not unique or in short supply. We are aware of no other wetlands on the delta that have been created by recent draining (although there probably are some), and with such a unique diversity of wetland vegetation.

Page 28, paragraph 4. Please explain why it is not practicable to bring the primary runway up to these proposed standards, and why the crosswind runway cannot be reduced in size accordingly.

Page 28, paragraph 5, sentence 4. The document does not provide any data to verify such a statement. Please provide data on the setbacks of these ponds and the stream.

Page 29, paragraph 1, sentences 2-3. In our field report (North 1993), we made no mention of the value of the heath tundra wetlands. It is not appropriate to imply that we classified them as high value. We typically classify tundra dominated by heath vegetation and lichens as medium to low value, and that is how we believe those at Kwigillingok rate. We believe there are opportunities to avoid and/or reduce impacts from this project by siting proposed facilities on heath tundra to the maximum extent possible. However, you have not evaluated such alternatives yet. We recommend you undertake a rigorous evaluation of such alternatives before revising the EA or applying for a Corps permit.

Page 29, paragraph 2. Please provide data to justify the information presented.

Page 29, paragraph 3. No information has been provided to show the need for culverts, the number of culverts, the location of culverts, why the proposed route of the stream diversion is the only alternative considered, how the stream will be reconstructed, what the shape and dimensions of the stream will be, or where the dredged material will be deposited. These details need to be worked out before the final EA is approved.

Page 29, last paragraph. Please provide data to show that these wetlands are not unique. There are few lake basins on the Yukon-Kuskokwim Delta that are tidally influenced in the same manner as the one at the south end of the existing runway. We believe the crosswind runway would constitute a significant loss of that type of habitat, and compensatory mitigation is required to replace those habitat values if the impacts cannot be avoided or minimized.

Page 30, paragraph 2 (Floodplains; Proposed Action). Data should be collected on the frequency of flooding in the drained lake basin (i.e., at what tide stages), the circumstances under which flooding occurs (e.g., regularly under normal high tides, semi-regularly under normal extreme-high tides, only when high tides are coupled with storm events), the likelihood that flooding and ebbing flows would erode the proposed runway additions (especially during the stages where the highly erodible silts would be settling), impacts to the surrounding wetland community if substantial quantities of silts are eroded, and the impacts flooding would have on mining the proposed borrow site. The fact that the tidal gut is growing at the point where the primary runway would be extended suggests flooding is frequent enough to cause erosion. We note that ADFG also advised you of this concern in their letter of December 18, 1992.

Page 30, paragraph 4. According to the FAA regulations cited in the EA [FAA Order 5050.4A(12)(g)(1-6)]: 1) mitigation measures for base floodplain encroachments may include locating nonconforming structures and facilities out of the floodplain, and minimizing fill in the floodplain, and 2) the EA should indicate if encroachment would result in likely damage associated with the encroachment that could be substantial in cost and extent, or a notable adverse impact on natural and beneficial floodplain values. We believe there are practicable measures to minimize fills in the floodplain, and that encroachment into the floodplain is likely to result in the damages indicated in the previous paragraph.

Pages 33-34 (Construction Impacts). We believe this section should discuss likely scenarios for locations of barge landings, equipment staging/storage, fuel depots, and construction camps/living quarters. We realize the contractor will have the responsibility of locating and obtaining permits for these features, but certainly information must exist as to where these features were located during previous construction events.

Page 35, paragraph 4, sentence 4. Please elaborate on how this would be accomplished.

Page 35, paragraph 5. Rehabilitation of the borrow site should be part of the project for which detailed plans are developed and presented in the EA.

Page 35, paragraph 7. We disagree. As presented in this document, this project has not been designed to comply with Executive Order 11990, Executive Order 11988, the 404(b)(1) guidelines, the National Environmental Policy Act, or the Endangered Species Act of 1973, as amended. Additional measures to minimize or avoid impacts to high-value wetlands need to be evaluated and specific project designs need to be formalized. Also, the ongoing coordination under the Endangered Species Act should be presented in the final EA.

Page 35, paragraph 8. Please provide the coordination that forms the basis for this statement. According to pages 37-38, only one letter and two incoming telephone calls were received from the community of Kwigillingok on this issue. Furthermore, all of this input was prior to October 1993. We note that as of October 11, 1993 (letter from ADOT to USFWS), a crosswind runway was still not proposed for this project. We believe it is inappropriate to imply that the project as proposed is approved of by the community when they have not yet had an opportunity to respond to the proposed crosswind runway. We believe a public hearing in Kwigillingok is necessary to solicit village input on the proposed project.

Page A-21 (Call from W. Atti). If Mr. Atti was informed on September 28, 1993, that the crosswind was a "far future plan" we do not understand how you can state on page 35 that the project as proposed has village support. We believe it is imperative that the full plan be presented to the village for their comments, and those comments be included in the document. Also, Mr. Atti suggested that the channel (created because of the earlier FAA/ADOT project) draining the lake be plugged so that the lake can refill. Mr. Atti's suggestion has merit, and the environmental advantages and disadvantages of such a measure should be evaluated in the document. If appropriate, the lake could be recreated as mitigation. Regardless, cumulative impacts should be addressed in the document.

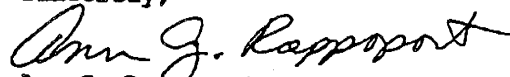
Pages A-42 to A-44. Three public notices in November and December 1992 in newspapers with a questionable amount of distribution in the village seems to be insufficient effort at involving the community of Kwigillingok in the airport project.

We recommend that a meeting be held with the Service, FAA, ADFG, EPA, NMFS and community leaders from Kwigillingok to discuss this project in detail. We recommend that: 1) the crosswind runway be deleted from the plans or relocated to lower value habitat; 2) the potential danger from bird strikes on the crosswind runway be evaluated and presented in the EA; 3) compensatory mitigation be identified if you propose to go forward with the crosswind runway in its current location; and 4) detailed plans for ancillary project features (the access road, borrow pits, the stream diversion) be prepared and distributed for review.

8

Thank you for the opportunity to comment on the EA. If you have questions or need further technical assistance, please contact Michael North at 271-2789.

Sincerely,

  
Ann G. Rappoport  
Field Supervisor

cc: Yukon Delta NWR - Bethel  
EPA, NMFS, FAA, ADFG - Anchorage  
Kwigillingok IRA Council

---

References

- Bergman, R.D., and D. V. Derksen. 1977. Observations on arctic and red-throated loons at Storkersen Point, Alaska. *Arctic* 30:41-51.
- Douglas, S. D., and T. E. Reimchen. 1988. Habitat characteristics and population estimate of breeding red-throated loons, *Gavia stellata*, on the Queen Charlotte Islands, British Columbia. *Canadian Field-Naturalist* 102:701-704.
- North, M. R. 1993. Wildlife habitat values at the Kwigillingok airport. Memorandum dated October 26, 1993, U.S. Fish and Wildlife Service, Anchorage Field Office. 16 pages.
- Reimchen, T. E., and S. Douglas. 1984. Feeding schedule and daily food consumption in red-throated loons (*Gavia stellata*) over the pre fledging period. *Auk* 101:593-599.



# United States Department of the Interior

TAKE PRIDE IN AMERICA  
09 '94

FISH AND WILDLIFE SERVICE  
Anchorage Field Office  
Ecological Services and Endangered Species  
605 West 4th Avenue, Room 62  
Anchorage, Alaska 99501

IN REPLY REFER TO:  
WAES

Steven Horn, P.E.  
Department of Transportation and Public Facilities  
P.O. Box 196900  
Anchorage, Alaska 99519-6900

MAR 8 1994

Elim. Design		
Environmental Section		COPY ACTION
S&E Engr.		
Project Mgr.		
Survey Mgr.		
Env. Leader JR		
Staff		
Project File		
Final File		

60118

Dear Mr. Horn:

This responds to your Biological Assessment for the Kwigillingok Airport received by this office via a fax on February 16, 1994. Biological Assessments (BA) enable the Service to determine if formal consultation is necessary under the Endangered Species Act of 1973. 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. However, we make this finding based on the following recommendations:

1. We strongly recommend that surveys for this species be conducted within the project site and vicinity. We recommend surveys because suitable habitat for nesting spectacled eiders is present in the project area, this project is within the historic range of the spectacled eider, and, as stated in the BA, spectacled eiders have been "seen in the vicinity" of Kwigillingok. Surveys could commence the first through the third week of June. In addition to cited observations of the spectacled eider, a peregrine falcon, potentially an endangered American peregrine falcon, was observed in the project area during the July 1993 field trip.

Should you chose not to conduct surveys, be aware that any unregulated taking of a threatened or endangered species is considered a violation under Section 9 of the Endangered Species Act, as amended.

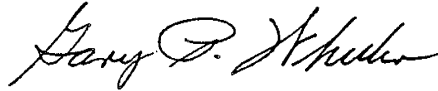
2. If you choose not to conduct eider surveys, the coordination measures outlined in the BA should be implemented. We would like to participate in a pre-construction meeting to instruct all on-the-ground staff (including the operators of heavy machinery) how to identify these species.
3. If spectacled eiders or peregrine falcons are observed in the project area anytime immediately prior to or during construction, we request notification, in particular if it appears nesting activity by spectacled eiders is occurring. However, most observations on or near the project area thus far have been of migrant or transient individuals.

To clarify two points in the BA, the Steller's eider is currently a Category 1 species. A Category 1 species is one for which the Service has enough information on file to list the species as threatened or endangered.

On September 30, 1993, a proposed rule to delist 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 delisted. The American peregrine falcon will remain on the list for the foreseeable future.

In summary, thank you for your prompt and thorough response to our request for a BA on this project. We would appreciate a follow-up meeting to discuss your decisions concerning this project, and we look forward to our continued work with you. For additional questions or to make meeting arrangements, please contact Endangered Species Specialist, Virginia Moran, at 271-2871.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gary P. Wheeler".

Gary P. Wheeler  
Acting Field Supervisor

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN AND ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE 17 Nov 94

TIME 1:30 AM/PM

TO/FROM Virginia Moran PHONE 271-2871

REPRESENTING USF+WS LOCATION Arch

TO/FROM Dara Riggs

PROJECT Kwigillingok Airport / 60118

SUBJECT Endangered Species

Recommendations - pb continue with them  
& please let them know about the  
preconstruction.

There are no new areas of concern  
to be addressed re threatened  
and endangered species. No further  
coordination needed at this time  
the original Biological Assessment stands.

cc: Mulcahy  
Ruehle  
Wahl

ok 12-17-94

Virginia called on 1-4-95 @ 3:30 pm

Mike North's review included their  
endangered species review. Laurie Mulcahy



# United States Department of the Interior

TAKE PRIDE IN AMERICA  
DEC 2 1994

FISH AND WILDLIFE SERVICE  
Anchorage Field Office  
Ecological Services and Endangered Species  
605 West 4th Avenue, Room 62  
Anchorage, Alaska 99501

IN REPLY REFER TO:  
WAES

Steven R. Horn, P.E.  
Preliminary Design and Environmental Supervisor  
Alaska Department of Transportation and Public Facilities  
Post Office Box 196900  
Anchorage, Alaska 99519-6900

DEC 19 1994

Prelim. Design & Environmental Section	COPY	ACTION
1994 Engr.		✓
Project Mgr. WJH		✓
Survey Mgr.		
Env. Leader		✓
Staff		✓
Project File		✓
General File		✓

60118

Dear Mr. Horn:

We have reviewed the revised draft environmental assessment (EA) for the proposed airport improvement project at Kwigillingok submitted to us November 18, 1994, and have the following comments.

### General Comments

We commend you for selecting a new alternative (runway extension only) and for assessing the rejected alternative (crosswind runway), rather than deleting all mention of the rejected alternative. The document thoroughly addresses alternatives, affected environment, environmental consequences, and comments and coordination. We should have few concerns if the project proceeds as planned.

The crossing of the borrow pond by the new apron access road should be discussed in more detail. A culvert is insufficient protection for the pond that formed in the old borrow cells. During the field trip on July 29, 1993, your project engineer and Michael North of my staff discussed how this pond would be crossed. They concluded that if dredged silt were used it would spread widely in the pond and subside, impacting water quality and aquatic vegetation. Instead, your project engineer indicated that the same type of gravel to be imported for runway resurfacing would work very well there. The EA does not adequately discuss what type of fill material will be used, nor how much will be required. Furthermore, a bridge might be the most appropriate means of crossing the pond, since other intertidal channels that run through Kwigillingok are crossed by wooden bridges. We realize, however, a culvert and fill would be the easiest crossing to design and construct.

For threatened and endangered species concerns, as stated in your March 22, 1994, letter, please contact Virginia Moran to schedule a pre-construction meeting to review identification of American peregrine falcon and spectacled eiders. Ideally, on-the-ground staff should attend this meeting.

### Specific Comments

Page ix, List of Figures. The title for figure 3 indicates alternative B is the proposed action. This is erroneous and should be corrected to show alternative A is the proposed action.



Page 10, paragraph 1, sentence 2. Change "avigation" to "navigation".

Page 11, line 5. The American peregrine falcon was more likely the endangered subspecies than the recently de-listed, formerly threatened subspecies (i.e., arctic peregrine falcon).

Page 30, paragraph 2, sentence 2, and page 31 (Figure 6). The document should indicate where material dredged from 490 feet of streambank will be disposed. It would seem appropriate to use the material in the extension embankment or dispose of it in the proposed borrow site. The minimized amount of dredging proposed along the opposite bank of the channel appears justifiable. We do not believe erosion control or channelization is necessary farther north along the channel, and we will scrutinize the plans more closely when the Section 404 public notice is issued to assure only necessary instream work is allowed.

Page 31, paragraph 5, last sentence. The American peregrine falcon is still listed as an endangered species. Only the more northern arctic peregrine falcon was delisted. This sentence should be changed to read, "An American peregrine falcon, an endangered species, was noted ..."

Thank you for the opportunity to comment on the EA. If you have questions or need further technical assistance, please contact Michael North at 271-2789.

Sincerely,



Ann G. Rappoport  
Field Supervisor

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

MEETING RECORD

DATE: September 5, 1995

TIME: 10:30 am

PROJECT: Kwigillingok Airport Road Improvements

PROJECT NO.: STP-0001(92)/51613

SUBJECT: Project Scoping

PRESENT:

**Kwigillingok IRA Council**

Andrew Beaver, President  
Willie Atti, Vice President  
Johnny Friend, Secretary/Treasurer  
Roland Phillip, Member  
Arthur Lake, Village Administrator

**Kwigillingok Village Elders**

Benny Cook  
Frank Andrew  
Peter John  
Owen Beaver  
Otto Friend  
David O. David  
Joe Manchuak

Gary Wheeler, USF&WS Habitat Biologist  
Laurie Mulcahy, ADOT&PF Environmental Analyst

NOTED BY: Laurie Mulcahy *JM*

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Gary Wheeler, U.S. Fish and Wildlife Service (USF&WS), and I traveled to Kwigillingok to meet with the IRA Council and Village Elders as requested by Art Lake, Kwigillingok Village Administrator. The Village was concerned over the USF&WS determinations of "sensitive wetlands" that were discussed within the Kwigillingok Road (and boardwalks) Improvements project scoping letter (August 7, 1995). Arthur said that agencies were not consulting/coordinating with the Council, and thus, did not benefit from the Village's knowledge and viewpoints. Decisions were being made that may not be appropriate for the Village.

*For the record*, Arthur had also requested that the meeting address unresolved issues of the Airport Improvements project (which would include the apron and the adjacent pond, public access right-of-way, and lease lots). This required that ADOT&PF Airport Design and Right of Way and the Federal Aviation Administration (FAA) also be present. I recommended to Arthur that we separate the FAA and the Federal Highway Administration (FHWA) project field trips. It was my opinion that the airport issues were more complex and would probably monopolize the discussions. Resolutions to airport issues would take more than this field trip. Although Gary and I would have opportunity to look at the wetlands/habitat areas at the airport during this field trip, I preferred to concentrate on the Village's issue of wetlands habitat on the FHWA road project. Bird habitat appeared to be the sole concern and could be resolved during this field trip if we focused on the issue. My

goal was to complete the environmental evaluation and send it to FHWA for location approval after the scoping period concluded on September 11, 1995.

During the meeting, Village Elders and Council members stressed that USF&WS should wait to make comments on village projects until after they are aware of village concerns. The USF&WS comments and concerns could adversely impact projects that are desired and needed within the village. Kwigillingok wants to have greater communication with USF&WS and ADOT&PF, as well as other agencies on a government to government basis.

The community prefers to participate in meeting settings "face to face" where many can participate rather than relying mostly on telephone contacts. Agencies and ADOT&PF thereby have the opportunity to hear "firsthand" what might benefit or concern the community. Although agency representatives have formal technical training, Village Elders have intimate, first-hand knowledge and understand the area and its resources. They are willing to share this information and their ideas, and will advise us if projects are harmful to the surroundings. Elders are of the opinion that sensitive bird/waterfowl nesting habitat is not found within the community because it is under the influence of existing human activities and developments. They note that the region contains extensive wetlands which provide for prime bird nesting/sensitive sites away from the immediate village area. Needed development within the community should not impact wildlife. Elders consider the road and boardwalk improvements project to benefit the community.

### **Kwigillingok Airport Road Improvements Project**

The Department currently has a project programmed in FY 1996 to improve airport access from the Barge Landing and the community to the airport. A Kwigillingok Community Boardwalk Improvements Project will be evaluated and ranked on a statewide basis and included on the Department's "Needs List." Following the review of the "Needs List," highest priority projects will be selected for the FY 1996-1998 Statewide Transportation Improvement Program (STIP).

*Airport Access Road:* When the road was originally built, the fill borrow sites were along the road alignment. These borrow sites are now filled with water, connected/captured by the lakes. The road is in rough condition, especially at two sections where the embankment has subsided considerably. These sites are adjacent to lakes and are so low that ponding has occurred within the embankment. During high water events and spring thaw, water overtops the road. Several Elders recommended that we place culverts at these two locations. They believe this would alleviate the problems of settlement and erosion, and also provide for water passage through the embankment.

*Boardwalks:* Existing boardwalks are set up for pedestrians and not for bicycles and 4-wheelers. These boardwalks are narrow with sharp turns and contain blind spots where kids on bikes collide. Overall, the boardwalks are in desperate need of repair. There is village-wide support to have them fixed and improved to make them safer. Four-wheelers are the primary mode of transportation within Kwigillingok, but they are too wide for the boardwalks. Building wider boardwalks would help stop 4-wheelers from damaging the tundra. In addition, the narrow boardwalks present problems for emergency personnel because they are not wide enough to accommodate passage with stretchers.

The village prefers heavy duty, 8 to 10-foot wide boardwalks, similar to those constructed in Tuntutuliak. These would be wide enough for 4-wheeler traffic as well as pedestrians and bicyclists. There should be straight tangents without any sharp turns in the alignments. Elders favor boardwalks that are designed to be up, off the ground and constructed away from wetter areas so that they will last longer. A low maintenance type of design is ideal. Project recommendations also include improving the walk-ways/approaches to adjacent houses and buildings .

The Village does not want to build in areas where wildlife/habitat would be impacted. One Elder stressed that as long as he remembered, the Yupik never wasted or destroyed land or intentionally harmed habitat or the environment. Boardwalks, which are important for the village, had not been constructed in important bird habitat. He felt that there was enough territory/habitat for birds outside of the village. Building boardwalks should not hurt wildlife in anyway.

Viewing the boardwalk typicals, Elders noted that curbs lined the boardwalks. During winter, the main boardwalks need to accommodate snow machine crossings. Curbs should not be placed at these crossing. The boardwalks could be damaged or conversely cause damage to the snowmobiles. Elders will identify crossing sites when the project is in final design.

It was pointed out that it may make more sense to widen existing boardwalks, rather than constructing new alignments within the community. An existing segment between the post office and the church (adjacent to the Village Co-op) was identified as a possible alternative in lieu of the *Village Center Boardwalk* alignment. (I estimate this segment at about 2,500 linear feet.) The Council and Elders said that this was something they needed to further discuss. They were not certain which alignment would best serve the needs of the village. I said that I would need to include both alignments within the environmental documentation for the project. However, should the *Village Center Boardwalk* be constructed on the alignment currently proposed, it impacts a steam bath at the home of one of the Elders. He recommends that we move the alignment approximately 75 feet to the east so that it is 30 or 40 feet behind the steam bath.

Prior to construction of the Kwigillingok Airport Access Road Improvements project, the Village Corporation will need to issue a *letter of non-objection* to the Department. In addition, we will also need a *letter of non-objection* from the school.

*USF&WS Response:* Gary Wheeler said that the USF&WS would not have concerns over loss of habitat from widening existing boardwalks. He agreed that the best bird nesting habitat was found outside of the village. He noted that within the village there are some low areas under tidal influence that birds (shorebirds) will use to feed, but these are not critical nesting areas. For proposed projects in the villages, Gary agreed that it was in the best interest of all to set up project meetings in the villages with the agencies.

### **Other Potential Kwigillingok Projects**

Someone wondered if this boardwalk project was a one-time deal. I said that there could be other opportunities. As other needed projects are identified, the village must pass a resolution and send

it to ADOT&PF Planning so that the project(s) could be ranked on a statewide basis and identified in the "Needs List." High priority projects will be included in the STIP.

A new boardwalk segment to the Kwigillingok Subdivision/Community Store was identified. A tangent alignment to the northeast would leave about midpoint on the Kwigillingok Airport Road and connect to the existing main boardwalk. (Estimated length of approximately 1,500 feet). This would require a new bridge site to cross a slough.

Another suggested alignment would extend south of the community, paralleling the Kwigillingok River, to the Kuskokwim Bay. It was estimated that 85 to 90 percent of the community use 4-wheelers on this trail/route to bring in catch from the seal hunts when the river ice is not safe to travel on. Damage by 4-wheelers is quite evident, disturbing the tundra down to the permafrost. The community wants to reduce the damage that is being done.

### Kwigillingok Airport Improvements Project

This project continues to be a major issue with the community. I said that I was not current on the latest coordination and efforts on the project. This was being done by ADOT&PF Airport Design and the Right of Way Sections. John Wahl would continue as the Project Manager. I would be the analyst for the airport project and Gary Wheeler the USF&WS contact.

Elders explained that in the beginning, the village only wanted a small project that would install lights along the runway. The ADOT&PF said that this would require a large upgrading project to extend the runway and a build new apron. As one Elder stated, his mother-in-law got sick and they needed to take her to the hospital. It was dark. Without the lights, aircraft can not use the runway. The next day she was taken to the hospital but it was too late.

There was also discussion about the drained lake at the south end of airport. The Elders explained that the lake had drained as a result of the original airport construction. When the village realized what was happening, they asked for help to block the lake, but agencies did not respond. They would like the lake restored.

Arthur Lake had just talked to John Wahl, ADOT&PF Project Manager. They were setting up a meeting schedule for John to come out to Kwigillingok. Arthur said that the lease lot issue had been resolved. The village majority voted that they want to expand the existing apron and not construct a new apron. The village stands on this decision. Arthur said that this would require draining the lake behind the apron to expand the apron. He added that the apron does not comply with the safety setback standards, but this was not a problem with the Elders. As he explained to Gary, lakes along airport are old borrow sources and don't contain sensitive birds habitat. The site of the new apron on the south side of the road would impact a prime berry picking locality. Elders requested that USF&WS support the village with this apron alternative.

cc: Kwigillingok IRA Council  
Shirley Horn, Coordinator, ROW  
Steve Horn, P.E., Supervisor, PD&E

John Wahl, P.E., Project Mgr, Airport Design  
Leslie Mitchell, Area Planner  
Gary Wheeler, Habitat Biologist, USF&WS

**DEPT. OF ENVIRONMENTAL CONSERVATION**

SUITE 1334  
3601 C STREET  
ANCHORAGE, AK 99503

**SOUTHCENTRAL REGIONAL OFFICE**

DEC 1 92

December 9, 1992

Mr. Steven R. Horn, P. E.  
Dept of Transportation & Public Facilities  
Central Region - Div. of Design & Construction  
Preliminary Design & Environmental  
4111 Aviation Ave.  
P O Box 196900  
Anchorage, Ak. 99519-6900

Re: Project No. 60118  
Kwigillingok Airport Improvements

Prelim. Design	
Environmental	
Section	
EE Engr.	<input checked="" type="checkbox"/>
roil	<input checked="" type="checkbox"/>
trves. Wgr.	
nv. Louder	<input checked="" type="checkbox"/>
.loff	<input checked="" type="checkbox"/>
Permit File	<input checked="" type="checkbox"/>
Cont. E	<input checked="" type="checkbox"/>

Dear Mr. Horn:

Per your request of 17<sup>th</sup> of November 92, we are providing the following comments and information:

**CONTAMINATED SITES**

The Department doesn't have any record of contaminated sites listed on our database for this area. That doesn't necessarily mean there are no sites though. We advise that your department survey the proposed fill and excavation sites and access routes prior to construction for contaminated soils. If said soils are found, contact this Department and obtain a soil remediation plan approval prior to construction.

**WATER QUALITY**

1) Planning efforts should include methods utilized to insure minimal adverse impacts upon natural bodies of water during the construction and operational phase of the airport and access road. This would include, ditch alignment and drainage, slope stability, erosion control, methods of culvert installation, etc. Ditching and drainage of surface runoff should be directed away from the drainages emptying into the Kwingillingok River and other surface waters.

2) The location and operation of the project material sites shall not impact surface or ground water.

### **SOLID WASTE SITES**

The community's landfill is to the east of the proposed project and should not affect the project.

### **DRINKING WATER**

The village's public water system is supplied from a surface water source northeast of the proposed project. The Lower Kuskokwim School District (LKSD) for Kwigillingok schools has a public water system that is from a surface source closer to the project. You may want to check with LKSD staff at the Bethel office for additional information. There may be other sources which we don't have a record of. We don't track individual, non-public, wells or water sources.

As with most Native communities, drinking water may be obtained from the river and tundra ponds in the area. You should contact the village elders for information on these drinking water sources.

### **UNDERGROUND STORAGE TANKS**

The department doesn't have any underground storage tanks (UST) registered from the area of the proposed project. Not all underground storage tanks are required to be registered, however.

### **WASTEWATER SITES**

There are no approved wastewater sites located within the proposed project area. The village washeteria is located to the east of the project and is the nearest wastewater site.

### **PERMITS / CLEARANCES**

1) If a temporary camp is built to house construction personnel during the airport reconstruction, drinking water and wastewater disposal facility design plans for the camp must be approved **PRIOR TO CONSTRUCTION** by the ADEC's Alaska Western District Office. Please contact Mike Lewis at 349-7755 for specific information.

2) Any camp housing more than 10 people at one time **MUST** secure a food service permit from Cory Willis at ADEC's Environmental Health Division, 563-0318.

- 3) The camp drinking water sources must be tested for total coliform bacteria, and the drinking water must be properly treated (boiled or disinfected) if bacterial contamination is found in the water.
- 4) Subdivision approval must be obtained from this Department for the creation of all new airport lease lots and transfer of property prior to disposal of the lots and property. Contact Mike Lewis, ADEC, ph. 349-7755 for submittal requirements.
- 5) If an U. S. Army Corps of Engineers 404 permit is required for dredge or fill activities, an application for a DEC 401 water quality certification will automatically be processed with the Corps 404 permit application.

Thank you for giving ADEC the opportunity to comment on this matter.

A technical note about the project map is that in the title block "Kwigillingok" is spelled without a "n" which is different from its spelling on the remainder of the map.

Sincerely



Gary L. Saupe  
Environmental Specialist



STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: 3 Dec 93 TIME: 3:00 pm  
/FROM: Alan Wien PHONE: \_\_\_\_\_  
REPRESENTING: ADEC, Solid Waste LOCATION: Anch  
TO/ : Diana Rigg  
PROJECT: Kwig Airport PROJECT NO.: 60118  
SUBJECT: Kwig Landfill

Alan checked the ADEC files and reported that the Kwigillingok Solid Waste site received a letter of non objection in August 1990. This letter is issued under the Rural Solid Waste Management Policy. The Kwigillingok Solid Waste site is not permittable under ADEC regulations.

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

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: 12/19/94

TIME: 10:45 am

TO/FROM: Tim Rumfelt & Gary Saupe'

PHONE: 563-6529

REPRESENTING: DEC

LOCATION: Anchorage

TO/FROM: [REDACTED]

PROJECT: Rwigillingok Airport Improvements

PROJECT NO.: 60118

SUBJECT: Comments on revised Draft EA

Tim called because he had some concerns on the proposed upgrades to the existing maintenance and equipment building at the airport. The existing structure has a gravel floor. Tim was concerned that the proposed membrane liner to be placed beneath the building would not stop oil or other contaminants from eventually passing through. Should the gravel floor become contaminated, it would have to be dug out. Tim wanted to see some sort of collection system that would discharge to the outside of the building.

John Wahl spoke with Tim. John agreed to incorporate into the building's design a steel plate floor and a water/oil separator that would daylight to the outside. This satisfied DEC'S concerns.

cc: Steven R Horn, P.E., Supervisor, PD&E  
Jerry Ruehle, Environmental Team Leader, PD&E  
John Wahl, P.E., Project Manager, Airport Design

# MEMORANDUM

# State of Alaska

DEPARTMENT OF FISH & GAME

**TO:** Diana Rigg  
 Div. of Design and Construction  
 Alaska Dept. of Transportation  
 and Public Facilities

**DATE:** December 18, 1992  
**FILE NO.:**  
**TELEPHONE NO.:** 267-2284

*C. Wayne Dolezal*  
**FROM:** C. Wayne Dolezal  
 Habitat Biologist  
 Region II  
 Habitat Division  
 Department of Fish and Game

**SUBJECT:** Kwigillingok Airport  
 Improvements  
 Project Numbers  
 60118  
 Scoping Comments

The Alaska Department of Fish and Game (ADF&G) has begun review of the Kwigillingok airport improvement project. As discussed during several telephone conversations, there appears to be a drainage problem that could significantly affect both the construction and long term maintenance of the runway. Before making final comments on the scoping document, we believe it would be appropriate to meet with other state and federal agencies to discuss the situation in more detail. An on site visit would also be appropriate.

In response to your specific questions, in the vicinity of the proposed work, the Kwigillingok River is the nearest waterbody specified pursuant to AS 16.05.870(a) as supporting anadromous whitefish species. However, given the near proximity of the river to the airport and the tributary stream patterns in the area, it is highly probable that anadromous whitefish will also be found adjacent to the airstrip. Likewise, resident species of fish such as Alaska blackfish probably occupy these waters. There are no legislatively designated special areas (i.e. State Game Refuges, Sanctuaries, or Critical Habitat Areas) near the project site. Depending on final construction plans, including material extraction operations in or affecting fish bearing waters, a Fish Habitat Permit may be required.

We appreciate the opportunity to comment and look forward to participating in discussions leading to a more detailed project design and environmental assessment document. Should you have any questions, please do not hesitate to contact me at 267-2284.

- cc:** K. Francisco, ADF&G  
 R. Kacyon, ADF&G  
 M. Coffing, ADF&G  
 M. North, USFWS  
 J. Hanson, NMFS  
 H. Dean, EPA

RECEIVED

DEC 21 '92

Prelim. Design & Environmental Section	COPY	ACTION
PO&E Engr.		
Project Mgr.		
Survey Mgr.		
Env. Leader		
Staff		

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

MEETING RECORD

DATE: December 16, 1994

TIME: 9:00 am

PROJECT: Kwigillingok Airport

PROJECT NO.: 60118

SUBJECT: Title 16 Permit

PRESENT: Wayne Dolezal, ADF&G Habitat Biologist  
John Wahl, P.E., Project Manager, Airport Design  
Laurie Mulcahy, Environmental Analyst, PD&E

NOTED BY: Laurie Mulcahy

We met with Wayne Dolezal to discuss design concepts of the proposed slough realignment to determine any possible ADF&G concerns and the type of stipulations which might be required for our Title 16 permit.

John Wahl said that we were planning on a winter schedule for dredging operations and placing fill. A lengthier stream realignment previously supported by the Department was no longer preferred. There were greater impacts with the larger footprint and the channel realignment took out a Native allotment. The diminished scope removes approximately 825 linear feet from the west streambank. Widening would be done so as to maintain the current stream width. John thought that the equipment could cross the slough on an ice bridge, probably off the lake (south) end of the runway.

There was some discussion over the hydrology of the area. Wayne said that the channel had captured borrow cells along the runway and wondered if airport construction attributed to the draining of the lake. John did not believe this to be the case. Considering the area hydrology and topography, he thought that the channel was created when saturated soils surrounding the adjacent lake weakened and just let go. John furthered that icing conditions were not a problem at the site.

Wayne was concerned over velocities and the rate of flow during tidal changes at the slough. If the velocities were high, increases could introduce scour at the toe of the embankment slope. He asked if we had considered "hydraulic brakes" to slow velocities, otherwise there might be eventual erosion at the south end extension. He thought that we might need additional treatment to stabilize the embankment so that we don't have to go back for later maintenance or protection. (I later called Skip who estimated the rates during tidal changes at 1/2 foot per second.) Wayne and John agreed that it may be necessary to lengthen or slide the armor mat to the south.

The draft Title 16 permit application and letter stated that we would temporarily stockpile materials on the west side bank until dredging operations were completed. It would then be deposited along the east bank of the old stream channel at the foot of the runway embankment. John said that this would probably not be the case and

that we would probably use the material in the embankment extension. Wayne indicated that we would need to clarify where we were placing the dredged material for our permit.

I mentioned that we were also proposing to excavate a channel between the material site and the intertidal slough. This would eliminate possible stranding of fish after high tides. The location of the channel would be field located after excavation at the material site was completed. Wayne agreed and thought that we could tie into one of the natural drainages to the material site.

cc: Steve Horn, P.E., Supervisor, PD&E  
Jerry Ruehle, Environmental Team Leader, PD&E  
John Wahl, P.E., Project Manager

**MEMORANDUM****STATE OF ALASKA**

Department of Transportation and Public Facilities

**To:** Wayne Dolezal  
Habitat Biologist  
Department of Fish and Game

**Date:** January 25, 1995

**File No.:** 60118

**Phone No.:** 266-1760

**From:** Laurie Mulcahy *LM*  
Environmental Analyst  
Preliminary Design & Environmental  
Dept. of Transportation & Public Facilities

**Subject:** Kwigillingok Airport  
Improvements  
Title 16 Permit Application

At this time we are submitting an application for the Department of Fish and Game (ADF&G) Title 16 permit. The Alaska Department of Transportation and Public Facilities (ADOT&PF) proposes to improve the airport at Kwigillingok, Alaska (See attached Appendix A and Figures 1 through 6). Kwigillingok is on the Kwigillingok River near Kuskokwim Bay (USGS map Kuskokwim Bay D-4: T3S, R81W, Sec 27, 26, 34, and 35). The proposal is detailed in the November 1994 Draft Environmental Assessment (EA) on file in your office. We hereby submit the completed permit application for construction activities. Plan sheets are also enclosed.

The proposed project would upgrade the Kwigillingok Airport to provide a airport meeting with current design standards for runway length, width, current apron size, and setback. Construction must take place in phases over several years because the soil is wet and must settle and drain. Dredging and fill placement operations will be scheduled for winter months.

An intertidally influenced (unnamed) stream along the west side of the airport intercepts the runway embankment at a right angle, eroding the embankment. Earlier scoping comments provided by your office indicate that this stream probably supports anadromous whitefish species and resident blackfish.

As part of the Near-Term Development Phase (0-2 years), a small portion of the stream would be rechannelized away from the runway (Figures 2 and 3). This would require that a large backhoe with a bucket operate within the stream. Instream operations would occur only during low tide periods, to be accomplished within one week's time. It may not be possible to isolate the work area from the flowing water of the stream.

Dredging operations would remove approximately 9,500 cubic yards (cy) of material from 825 lineal feet, up to 60 feet wide, of the west streambank opposite the runway. Altogether this represents 1.13 acres. The dredged material would be used in the runway extension embankment. Additional protection would be provided by a 490-foot long (75 cy) concrete block armor mat placed along the runway embankment.

An additional Near-Term improvement would excavate a channel between the material site and the intertidal slough to provide a hydrological connection. This would eliminate possible stranding of fish after high tides. The location of the channel will be field located after excavation is completed.

Kwigillingok Airport  
Improvements

January 1995

For your information, a copy of the Coastal Project Questionnaire Application is enclosed. If you have any questions or need additional information, please call me at 266-1760.

Attachments:

Figures 1 through 6  
ADF&G Title 16 Permit Application  
COE Section 404 Permit Application  
ACMP Coastal Zone Consistency Application

cc: Steven R. Horn, P.E., Supervisor, PD&E  
Jerry Ruehle, Environmental Team Leader, PD&E  
Carol Sanner, Permits Officer, PD&E  
John Wahl, P.E., Project Manager, Aviation Design

GENERAL WATERWAY / WATERBODY APPLICATION  
ALASKA DEPARTMENT OF FISH AND GAME

A. APPLICANT

1. Name: Alaska Department of Transportation and Public Facilities
2. Address: P.O. Box 196900 Anchorage, Alaska 99519-6900  
Telephone: (907) 266-1760, Laurie Mulcahy
3. Project Contractor Name: N/A  
Address: \_\_\_\_\_  
Telephone: \_\_\_\_\_

B. TYPE AND PURPOSE OF PROJECT:

As described in the attached Appendix A project summary, the proposed project will reconstruct the runway at Kwigillingok Airport, Kwigillingok. An intertidally influenced stream, parallel along the west side of the runway, is actively eroding the runway embankment. To protect the runway, part of the project would rechannelize a small portion of this stream away from the runway. This requires dredging approximately 825 lineal feet from the opposite side of the stream. A 490-foot long concrete block armor mat would be placed along the runway embankment to provide additional protection.

C. LOCATION OF PROJECT SITE:

1. Name of River, Stream, or Lake: Near Kwigillingok River, Unnamed Stream  
or Anadromous Stream #: \_\_\_\_\_
2. Legal Description: Township 3S Range 81W Meridian Seward  
Section 27 & 34 USGS Quad Map: Kuskokwim Bay D-5, 1:63,360
3. Plans, Specifications, and Aerial Photograph (See specific instructions.)  
See Attached

D. TIME FRAME FOR PROJECT: (dates) Summer 1995 through Fall 1997, all dredging and fill operations to take place during the winter months.

E. CONSTRUCTION METHODS:

- |                                 |          |       |
|---------------------------------|----------|-------|
|                                 | Yes      | No    |
| 1. Will the stream be diverted? | <u>X</u> | _____ |

How will the stream be diverted? The stream will be realigned. Material will be dredged from the west side streambank. The dredged material will be used in the runway extension embankment. It may not be possible to isolate the work area from the flowing water of the stream.

How long? Equipment will operate within the stream during low tide periods, not to exceed one week's time. The channel will establish itself over time.



- |   | Yes   | No            |
|---|---|---------------|
| 2. Will stream channelization occur?  | <u>X</u>  | <u>      </u> |
| 3. Will the banks of the stream be altered or modified?   | <u>X</u>  | <u>      </u> |
| Describe:   | <u>See the attached plans and transmittal letter for B and E.1.</u>   |               |
| 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).  |   |               |
| <u>The new stream channel will be constructed with a large backhoe and bucket.</u>  |   |               |
| How long will equipment be in the stream?   | <u>Not more than one week</u>   |               |
| 5. a. Will material be removed from the floodplain or bed of the stream or lake?  | <u>      </u>   | <u>X</u>      |
| Type:   | <u>Organic overburden and silt from the streambed and streambank.</u> |               |
| Amount:   | <u>9,500 cy</u>   |               |
| b. Will material be removed from below the water table?   | <u>      </u>   | <u>X</u>      |
| If so, to what depth?   | <u>      </u>   |               |
| Is a pumping operation planned?   | <u>      </u>   | <u>X</u>      |
| 6. Will material (including spoils, debris, or overburden) be deposited in the floodplain or in the stream or lake?                     | <u>X</u>  | <u>      </u> |
| If so, type:  | <u>Organic overburden and silt in the streambed.</u>                  |               |
| Amount:   | <u>9,725 cy</u>   |               |
| Disposal Site Location(s):  | <u>      </u>   |               |
| 7. Will blasting be performed?  | <u>      </u>   | <u>X</u>      |
| Weight of charges:  | <u>      </u>   |               |
| Type of substrate:  | <u>      </u>   |               |
| 8. Will temporary fills in the stream or lake be required during construction (e.g., for construction traffic round construction site)? | <u>      </u>   | <u>X</u>      |
| 9. Will ice bridges be required?  | <u>      </u>   | <u>X</u>      |

F. SITE REHABILITATION / RESTORATION PLAN: On separate sheet present a site rehabilitation / restoration plan (see specific instructions).

See Attached Figures

G. WATERBODY CHARACTERISTICS:

Width of Stream: The old channel is approximately 60 feet across at the top. The new channel will also be approximately 60 feet across at the top.

Depth of Stream of Lake: Varies with the tide. See attached COE permit application.

Type of Stream or Lake Bottom: Silt  
(e.g., sand, gravel, mud)

Stream gradient: Less than 1 percent

H. HYDRAULIC EVALUATION:

Yes No

1. Will a structure (e.g., culvert, bridge support, dike) be placed below ordinary high water of the stream?

X \_\_\_\_\_

If yes, attach engineering drawings or 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 increase bank erosion, if applicable.

See Attached

2. Will more than 25,000 cubic yards of material be removed?

\_\_\_\_\_ X

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

See Attached

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

Laurie Mulcahy  
Signature of Applicant

25 Jan 95  
Date

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: 4-3-95

TIME: 2:00 pm

TO/FROM: Wayne Dolezal

PHONE: 267-2333

REPRESENTING: ADE&G

LOCATION: Anchorage

~~TO/FROM: [REDACTED]~~

PROJECT: Kwigillingok Airport

PROJECT NO.: 60118

SUBJECT: Kwigillingok Airport ADGC Coastal Consistency Stipulations

Wayne Dolezal, Alaska Department of Fish and Game (ADF&G) had a concern over the wording of an Alaska Division of Governmental Coordination (ADGC) Coastal Consistency Review stipulation. He requested that it be changed to read, "To stabilize the new channel adjacent to the runway and to prevent erosion, the west side stream bank shall be recontoured, and during the growing season planted with native vegetation, or replanted with original vegetated mats that have been property stored to insure viability. According to Wayne, the intent of the revised stipulation is :

- 1) Any recontouring of the stream bank will occur during the winter months when the ground is frozen.
- 2) Proper storage of the mats means that during the winter operations the 8 to 10-inch thick frozen vegetative matting - which may be in chunks - will be set/pushed aside, away from the immediate dredging area. After dredging is completed, the frozen vegetative matting will be pushed back onto the disturbed slough bank.
- 3) During the following growing season, should the vegetative matting not adequately regenerate, native grass and/or sedge seed would be broadcast on the disturbed slough bank to supplement the revegetation.

cc: Wayne Dolezal, Habitat Biologist, ADF&G  
Faye Heitz, Project Review Coordinator, ADGC  
Steven R. Horn, P.E., Supervisor, PD&E  
Jerry Ruehle, Environmental Team Leader, PD&E  
John Wahl, P.E., Engineering Manager, Aviation Design

WALTER J. HICKEL, GOVERNOR

DEC 6 1992

**DEPARTMENT OF NATURAL RESOURCES**

**DIVISION OF PARKS AND OUTDOOR RECREATION**  
*Office of History and Archaeology*

November 27, 1992

File No.: 3130-2R DOT/PF

Subject: Project No. 60041 Aniak Airport Improvements  
Project No. 60043/60078 Bethel Airport  
Project No. 60079 Grayling Airport Improvements  
Project No. 60118 Kwigillingok Airport Improvements

3601 C STREET, Suite 1278  
ANCHORAGE, ALASKA 99503  
PHONE (907) 762-2622

MAILING ADDRESS:  
P.O. Box 107001  
ANCHORAGE, ALASKA 99510-7001

BRADLEY WAHL

Environmental	Section	
J&E Engr.	Project Mgr.	
Survey Mgr.		
Inv. Leader		
Staff		
DR		
DR		
RB		
Project File		
Contr. Is		

COPY

Mr. Steven R. Horn, P.E.  
Preliminary Design and Environmental  
Central Region - Division of Design and Construction  
Department of Transportation and Public Facilities  
4111 Aviation Ave.  
P.O. Box 196900  
Anchorage, AK 99519-6900

Dear Mr. Horn:

There are 2 historic properties near the Aniak airport (RUS-013, a Russian Orthodox church, and RUS-099, the White Alice site) but they are outside of the area of potential effect. "Clearance" is provided.

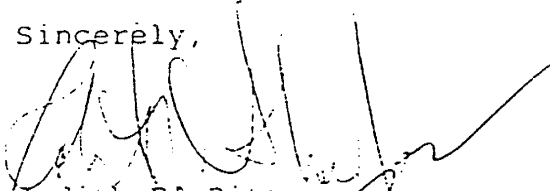
The Bethel Airport projects are free of cultural resource concerns. "Clearance" is provided.

Expansion of the Grayling runway may impact a portion of XHC-001 known as Old Grayling. Available information is enclosed. No map was included with this review package. We do not know if any of Old Grayling still exists; the airport appears to be built near to or on top of it. An archaeological survey is recommended.

The Kwigillingok Airport project is free of cultural resource concerns. "Clearance" is provided.

Please call Tim Smith at 762-2625 if there are any questions or if we can be of further assistance.

Sincerely,

  
Judith E. Bittner  
State Historic Preservation Officer

JEB:tas

**OFFICE OF THE GOVERNOR**  
**OFFICE OF MANAGEMENT AND BUDGET**  
**DIVISION OF GOVERNMENTAL COORDINATION**

RECEIVED

**SOUTHCENTRAL REGIONAL OFFICE**  
 3601 "C" STREET, SUITE 370  
 ANCHORAGE, ALASKA 99503-5930  
 PH: (907) 561-6131/FAX: (907) 561-6134

**CENTRAL OFFICE**  
 P.O. BOX 110030  
 JUNEAU, ALASKA 99811-0300  
 PH: (907) 465-3562/FAX: (907) 465-3075

**PIPELINE COORDINATOR'S OFFICE**  
 411 WEST 4TH AVENUE, SUITE 2C  
 ANCHORAGE, ALASKA 99501-2343  
 PH: (907) 278-8594/FAX: (907) 272-0690

February 14, 1995

Laurie Mulcahy  
 Alaska Department of Transportation  
 and Public Facilities  
 PO Box 196900  
 Anchorage, AK 99519-6900

Dear Ms. Mulcahy:

**SUBJECT: START OF REVIEW**  
**Kwigillingok River 1**  
**STATE I.D. NO. AK 9502-04AA**

	COPY	ACTION
Prelim. Design & Environmental Section		
PD&E Engr.		
Project Mgr.	WCH	
Locations		
Env. Team Leader		
Staff	UN	
Project File		✓
Central File		✓

6018

The Division of Governmental Coordination (DGC) received the coastal project questionnaire, applications, required public notice(s), and supporting information you submitted for the State of Alaska's project consistency review. Included in that packet was a consistency certification submitted for our concurrence under Section 307(c)(3)(A) of the Federal Coastal Zone Management Act as per 15 CFR 930, Subpart D. The Alaska Coastal Management Program (ACMP) requires a public notice in the coastal district(s) that may be affected by the proposed activity. The U.S. Army Corps of Engineers /ACMP public notice was made on February 10, 1995.

The project is to dredge approximately 192, 575 cubic yards of material and discharge approximately 227,650 cubic yards of material to improve the airport at Kwigillingok, Alaska. The project will impact approximately 20.20 acres of waters of the United States, including wetlands.

Components of the proposed work include:

- |  |             |                  |            |
|--|-------------|------------------|------------|
| 1) Material Site Excavation:<br>(Includes Fish Ditch connected to intertidal slough)                 | 8.31 acres  | Dredge:          | 183,075 cy |
|  |             | Overburden Fill: | 39,075 cy  |
| 2) New Embankment:<br>(Includes : Runway, apron, taxiway, culverted access road, and two wind cones) | 10.76 acres | Fill:            | 178,850 cy |

Kwigillingok River 1  
AK9502-04AA

-2-

February 14, 1955  
Start Up

3) Stream Rechanneling (Includes armor mat)	1.13 acres	Dredge:	9,500 cy
		Fill:	9,725 cy
TOTALS:	20.20 ACRES	DREDGE:	192,575 CY
		FILL:	227,650 CY

The overburden will be stockpiled and replaced after excavation is completed. The totals include the placement of the surface course material. The purpose of the project is to upgrade the existing airport at Kwigillingok, Alaska. The runway reconstruction, apron, taxiway and access road will bring the runway and apron in compliance with current airport standards. The stream realignment will eliminate erosion on the southwest side to the existing runway. The proposed project will be phased over ten years to allow for runway settling due to wet soil conditions. Dredging and fill placement operations will be scheduled for winter months. As a result of early project planning, the applicant has incorporated into the proposed project the following mitigation efforts to reduce impacts to the aquatic environment: A channel will be excavated between the material site and the intertidal slough to provide a hydrological connection. This will eliminate possible stranding of fish after high tides. The location of the channel will be field-located after the excavation is complete.

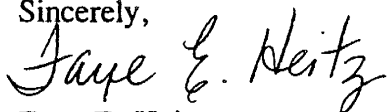
Appropriate materials have been distributed to participants in the Alaska Coastal Management Program for their review and comments. Review participants, milestones, and the associated permits are indicated on the enclosed project information sheet and distribution list. The enclosed project information sheet includes a State I.D. number AK 9502-04AA; please refer to this number in any future reference to the project.

Pursuant to AS 46.40.094 (d)(1), we have requested consistency review comments on the proposed project from State resource agencies, affected coastal resource districts, the public and any other interested parties. Persons with rights to file a petition seeking review by the Coastal Policy Council of the proposed consistency determination (under AS 46.40.100 (b)(1)) must submit their comments by the appropriate deadline. The comment deadline specified on the project information sheet is **March 20, 1995**.

By a copy of this letter we are informing the U.S. Army Corps of Engineers that the State's review has begun.

Thank you for your cooperation in this review process.

Sincerely,



Faye E. Heitz  
Project Review Coordinator

Kwigillingok River 1  
AK9502-04AA

-3-

February 14, 1995  
Start Up

Enclosure

cc: Cenaliulriit CRSA Distribution List  
Bill Keller, COE

(n:\wpdocs1\kr1.su)

CENALIULRIIT CRSA  
DISTRIBUTION LIST

February 14, 1995

*Tim Smith, State Historic Preservation Office, Department of Natural Resources, Anchorage*

*Larry Bullis, ACMP Liaison, Department of Natural Resources, Anchorage*

*Carol Jo Sanner, Permits Officer, Department of Transportation/Public Facilities, Anchorage*

*Don McKay, Division of Habitat & Restoration, Department of Fish and Game, Anchorage*

*Elaine Pistoressi, PIC, Department of Environmental Conservation, Anchorage*

*Mike Neimeyer, Calista Corporation, Land and Natural Resources, Anchorage*

*Billy Atseriak, Coastal Management Coordinator, Cenaliulriit CRSA, Bethel*



DEC Tim Rumpfelt 563-6529  
DFG Don McKay 267-2284  
DNR Larry Bullis 762-2249  
COE Bill Keller 753-2712

PROJECT INFORMATION SHEET

PROJECT TITLE: Kwigillingok River 1

STATE I.D. NUMBER: AK 9502-04AA

DGC CONTACT: Faye E. Heitz Phone: 561-6131 Fax: 561-6134

APPLICANT/PROPONENT: ADOTPF

AGENT: Laurie Mulcahy Phone: 266-1760 Fax: 243-6927

DIRECT FEDERAL ACTION: NO

REVIEW TYPE: CONSISTENCY

ACTIVITY TYPE:  
PUBLIC UTILITIES AIRPORT

PROJECT LOCATION:

Nearest Coastal District: CENALIULRIIT  
Project is INSIDE/LANDWARD the District Boundary  
District Plan Approved: Y  
Latitude 0D 0M 0S Longitude 163D 7M 52S  
Township 3S Range 81W Section 26 27 34 35 Meridian SM USGS Map

REVIEW SCHEDULE: 50 DAYS

REVIEW MILESTONES:

Day 1: 02/14/95  
Reviewer Request for Add'l Info: 03/11/95  
Comments Due To DGC: 03/20/95  
Notification To Applicant: 03/30/95  
Decision Deadline: 04/05/95

PROJECT PREVIOUSLY REVIEWED UNDER STATE I.D. NO. AK

**STATE APPROVALS (AGENCY, APPROVAL TYPE AND NUMBER):**

DFG FISH HABITAT PERMIT  
DEC CERTIFICATION

**NOTICE TO REVIEWERS:** Distribution of applications for appropriation of water constitutes DNR's agency notice under AS 46.15. Separate notice from DNR discontinued beginning January 1991.

**FEDERAL APPROVALS (AGENCY, APPROVAL TYPE AND NUMBER):**

COE SECTION 404 2-920772  
COE SECTION 10 2-920772

**REQUESTOR FOR EXTENSION:**

**ELEVATION TO: ELEVATED BY:**

**ACTION AT CLOSEOUT:**

Closeout Date:

District Comments Received:

For Conclusive Consistency Determinations:

For Other Reviews: Comments Submitted:

**ADDITIONAL COMMENTS:**

Point of contact for the Cenaliulriit CRSA is Billy Atseriak at 543-3521.

**OFFICE OF THE GOVERNOR**  
**OFFICE OF MANAGEMENT AND BUDGET**  
**DIVISION OF GOVERNMENTAL COORDINATION**

**SOUTHCENTRAL REGIONAL OFFICE**  
 3601 "C" STREET, SUITE 370  
 ANCHORAGE, ALASKA 99503-5930  
 PH: (907) 561-6131/FAX: (907) 561-6134

**CENTRAL OFFICE**  
 P.O. BOX 110030  
 JUNEAU, ALASKA 99811-0300  
 PH: (907) 465-3562/FAX: (907) 465-3075

**PIPELINE COORDINATOR'S OFFICE**  
 411 WEST 4TH AVENUE, SUITE 20  
 ANCHORAGE, ALASKA 99501-2343  
 PH: (907) 278-8594/FAX: (907) 272-0690

SECRET  
 MAR 23 '95

March 24, 1995

Certified Mail  
 Return Receipt Requested  
 #P 479 042 893n

Laurie Mulcahy  
 Alaska Department of Transportation  
 and Public Facilities  
 PO Box 196900  
 Anchorage, AK 99519-6900

	COPY	ACTION
Plan. Section & Environmental Section		
PD&E Engr.		
Project Mgr. <i>WHL</i>		
Locations		
Env. Team: <i>LSA</i>		
Staff <i>WHL</i>		
Project File		<input checked="" type="checkbox"/>
Central File		<input checked="" type="checkbox"/>

*60118*

Dear Ms. Mulcahy:

**SUBJECT: PROPOSED CONSISTENCY FINDING**  
**Kwigillingok River 1**  
**STATE I.D. NUMBER AK 9502-04AA**

The Division of Governmental Coordination (DGC) is currently coordinating the State's review of your project for consistency with the Alaska Coastal Management Program (ACMP) and has developed this proposed consistency finding based on reviewers' comments. The project is to dredge approximately 192,575 cubic yards (cy) of material and discharge approximately 227,650 cy of material to improve the airport at Kwigillingok, Alaska. The project will impact approximately 20.20 acres of waters of the United States, including wetlands.

Components of the proposed work include:

- |   |             |  |
|---|-------------|--|
| 1) Material Site Excavation:<br>(Includes fish Ditch connected to intertidal slough)                | 8.31 acres  | Dredge: 183,075 cy<br>Overburden Fill: 39,075 cy |
| 2) New Embankment:<br>(Includes: Runway, apron, taxiway, culverted access road, and two wind cones) | 10.76 acres | Fill: 178,850 cy                                 |
| 3) Stream Rechanneling<br>(Includes armor mat)  | 1.13 acres  | Dredge: 9,500 cy<br>Fill: 9,725 cy               |

TOTALS:	20.20 Acres	Dredge:	192,575 cy
		Fill:	227,650 cy

The overburden will be stockpiled and replaced after excavation is completed. The totals include the placement of the surface course material. The purpose of the project is to upgrade the existing airport at Kwigillingok, Alaska. The runway reconstruction, apron, taxiway and access road will bring the runway and apron in compliance with current airport standards. The stream realignment will eliminate erosion on the southwest side to the existing runway. The proposed project will be phased over ten years to allow for runway settling due to wet soil conditions. Dredging and fill placement operations will be scheduled for winter months. As a result of early project planning, the applicant has incorporated into the proposed project the following mitigation efforts to reduce impacts to the aquatic environment: A channel will be excavated between the material site and the intertidal slough to provide a hydrological connection. This will eliminate possible stranding of fish after high tides. The location of the channel will be field-located after the excavation is complete. Location of the project is sections 25, 26, 27 and 34, T. 3 S., R. 81 W., Seward Meridian, at the Kwigillingok Airport near Kwigillingok, Alaska.

This proposed consistency finding, developed under 6 AAC 50, applies to the following State and federal authorizations:

U.S. Army Corps of Engineers (COE) - Section 10 and Section 404 Permit (2-920772)

Alaska Department of Environmental Conservation (DEC) - Certification of Reasonable Assurance

Alaska Department of Fish and Game (DFG) - Fish Habitat Permit

Your project was reviewed for consistency by the Alaska Departments of Natural Resources, Environmental Conservation, and Fish and Game, and the Cenaliulriit Coastal Resource Service Area. Based on the following modifications to your project that represent a consensus between you as the applicant and the reviewing State agencies, as provided for under 6 AAC 50.070(k), the State concurs with your certification that the project is consistent with the ACMP. These modifications will appear as stipulations on the State permits noted:

1. To stabilize the new channel adjacent to the runway and to prevent erosion, the west side stream bank shall be recontoured and planted during the growing season with seeds and cuttings from native vegetation.

**RATIONALE:** This stipulation is necessary to prevent erosion and to prevent degradation of water quality.

2. Material such as sorbent pads or booms are to be available on-site to contain and clean up any fuel spilled as a result of construction activity.

**RATIONALE:** This stipulation is necessary to protect against the destruction of important habitat by the accidental discharge of a toxic material.

These modifications are necessary to ensure consistency with the Habitat Standard of the ACMP (6 AAC 80.130) and Standard 8.9 of the Cenaliulriit Coastal Management Program.

A copy of the relevant ACMP standard and Cenaliulriit standard is enclosed.

Please contact me within five days of your receipt of this proposed finding to indicate whether or not you concur with this finding. If you are not prepared to concur within the five-day period, you may either:

- (a) request an extension of the review schedule, if you need more time to consider this finding, or
- (b) request that the State reconsider this finding, by submitting a written statement requesting "elevation" of the finding, describing your concerns, and proposing an alternative consistency finding. This alternative finding must demonstrate how your project is consistent with the referenced standards of the ACMP and district policies without the stipulations included in this proposed finding.

If I do not receive your request for extension or an elevation statement from you, or any other reviewing party with elevation rights as per 6 AAC 50.070(j), within five days of receipt of this letter, this proposed finding will be issued as a final consistency finding.

**Other Concerns/Advisories**

DFG advises that the project package does not identify the site to be used as the materials source for the surface capping material on the runway. Neither does the package identify the site and means of offloading equipment that will be used during project construction. In the event that structures (e.g., barge offloading ramps, bulkheads, ice roads, ice bridges, etc) are to be placed below the ordinary high water level of the Kwigillingok River or other anadromous fish bearing waters during project mobilization and demobilization, or if the gravel for the surface cap will be mined from

an anadromous fish stream, a Fish Habitat Permit issued by DFG would be required.

DEC is advising you of the following non-ACMP requirement: The proposed airport lease lots shall not be leased to the public prior to DEC subdivision approval for said lot development. Contact the DEC Bethel District Office, phone 907-543-3215, for said approval.

Please be advised that although the State has found the project consistent with the ACMP, based on your project description and any modifications contained herein, you are still required to meet all applicable State and federal laws and regulations. Your consistency determination may include reference to specific laws and regulations, but this in no way precludes your responsibility to comply with other applicable laws and regulations.

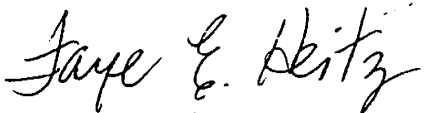
If changes to the approved project are proposed prior to or during its siting, construction, or operation, you are required to contact this office immediately to determine if further review and approval of the revised project is necessary. If the actual use differs from the approved use contained in the project description, the State may amend the State approvals listed in this consistency determination.

Should cultural or paleontological resources be discovered as a result of this activity, we request that work which would disturb such resources be stopped, and that the State Historic Preservation Office (762-2626) and the U.S. Army Corps of Engineers (COE) (753-2712) be contacted immediately so that consultation per section 106 of the National Historic Preservation Act may proceed.

By copy of this letter we are informing the COE of our proposed determination.

If you have any questions regarding this process, please contact me at 561-6131.

Sincerely,



Faye E. Heitz  
Project Review Coordinator

cc: C. Wayne Dolezal, DFG  
Gary Saupe, DEC  
Tim Smith, DNR, SHPO  
Larry Bullis, DNR, DOL  
Bill Keller, COE

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STATE OF ALASKA  
DIVISION OF GOVERNMENTAL COORDINATION  
STANDARD OF THE  
ALASKA COASTAL MANAGEMENT PROGRAM  
6 AAC 80.130 HABITATS

- (a) Habitats in the coastal area which are subject to the Alaska Coastal Management Program include:
- (1) offshore areas;
  - (2) estuaries;
  - (3) wetlands and tideflats;
  - (4) rocky islands and seacliffs;
  - (5) barrier islands and lagoons;
  - (6) exposed high energy coasts;
  - (7) rivers, streams, and lakes; and
  - (8) important upland habitat.
- (b) The habitats contained in (a) of this section must be managed so as to maintain or enhance the biological, physical, and chemical characteristics of the habitat which contribute to its capacity to support living resources.
- (c) In addition to the standard contained in (b) of this section, the following standards apply to the management of the following habitats;
- (1) offshore areas must be managed as a fisheries conservation zone so as to maintain or enhance the state's sport, commercial, and subsistence fishery;
  - (2) estuaries must be managed so as to assure adequate water flow, natural circulation patterns, nutrients, and oxygen levels, and avoid the discharge of toxic wastes, silt, and destruction of productive habitat;

- It has an element necessary for a wildlife species' well-being, such as a migration corridor or a specialized feeding area.
  - It is used by an endangered species.
  - It has a measurable concentration of species utilized by local residents.
  - It is an essential pupping, calving, rookery nesting, spawning, rearing, wintering, migratory, feeding, or hauling-out area.
  - It is a high-density breeding, rearing, or nesting area.
- 8.2. All essential habitat will be managed to maintain or enhance the biological, physical, and chemical characteristics that contribute to its capacity to support life.
- 8.3. Essential offshore habitat will be managed as a fisheries conservation zone so as to maintain or enhance the state's sport, commercial, and subsistence fishery.
- 8.4. Essential estuary habitat will be managed to assure adequate water flow, natural circulation patterns, nutrients, and oxygen levels.
- 8.5. Essential wetland and tideflat habitat will be managed to assure adequate water flow, nutrients, and oxygen levels and avoid adverse effects on natural drainage patterns.
- 8.6. Essential rocky island and seacliff habitat will be managed to avoid the harassment of wildlife, to avoid its destruction, and to avoid the introduction of competing or destructive species and predators.
- 8.7. Essential barrier island and lagoon habitat will be managed to maintain adequate flows of sediments, detritus, and water; to avoid the alteration or redirection of wave energy, which could lead to the filling in of lagoons or the erosion of barrier islands; and to discourage land uses that could decrease the use of barrier islands by coastal species, including polar bears and nesting birds.
- 8.8. Essential high-energy coastal habitat will be managed to assure the adequate mix and transport of sediments and nutrients and avoid redirection of transport processes and wave energy.
- 8.9. Essential river, stream, and lake habitat will be managed to protect natural vegetation, water quality, and natural water flow.



James Atti  
P.O. Box 62  
Kwigillingok, Alaska 99622

December 14, 1992

Steven R. Horn, P.E.  
Supervisor  
Preliminary Design and Environment  
Alaska Department of Transportation  
and Public Facilities  
P.O. Box 196900  
Anchorage, Alaska 99519-6900

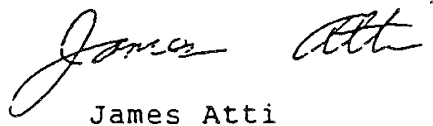
Dear Mr. Horn:

I would like to comment on the project proposal for the improvement of Kwigillingok Airport. However, this comment is not on the airport, its for the improvement of the airport road and the parking area at the end of the road on the village side.

The road needs to be paved/graded and in some areas refilled due to the sinking and erosion of the land, and because of the increased use of four wheel ATV's the road is getting rough. The end of the road does not have enough parking area and the tundra is getting torn apart by four wheel vehicles making turns and parking in an area that is too small. Airport agents find difficulty delivering mail and passengers because of the congestion.

In closing, I am suggesting that Kwigillingok not only needs runway improvements but also airport road improvements.

Sincerely,

  
James Atti

DEC 14 1992

Prelim. Design		
Environmental		
Section		
SE Engr.	<input checked="" type="checkbox"/>	COPY
Survey Mgr.	<input checked="" type="checkbox"/>	ACTING
Inv. Leader	<input checked="" type="checkbox"/>	
Off.	<input checked="" type="checkbox"/>	
Project File	<input checked="" type="checkbox"/>	
Central	<input checked="" type="checkbox"/>	

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
CENTRAL REGION  
AVIATION DESIGN

TELEPHONE RECORD

NAME: Willie Atti

REPRESENTING: Village Council President  
President of Kwik Inc.

Telephoned  
 I Called

Date: December 15, 1992  
Time: 10:30 a.m.

AIRPORT: Kwigillingok

SUBJECT: Response to Scoping letter from Environmental

Received a call from Mr. Atti with comments to the scoping letter sent by Environmental. Mr. Atti is currently president of the Village Council and president of Kwik Inc., the village corporation.

- \* He was in support of the project. The village especially liked the idea of lighting the runway.
- \* He inquired about the types of businesses which may use the lease lots. I told him that likely businesses include air taxi, fish haul, temporary operations such as survey crews with helicopters.
- \* He suggested that the rechanneling of the outlet of the dry lake bed be accomplished using the stream that originally was the outlet of the lake. This is located approximately 500 to 500 feet west of the runway. I told him we would check the stream next summer when we do the design survey.
- \* I told him that we would do the design survey and materials investigation sometime next summer. At that time we would investigate and survey the new channel from the dry lake.

NAME: John Wahl *JW*

cc: Diana Rigg, Environmental Analyst

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

January 6, 1993

Re: Kwigillingok Airport  
Improvements  
Project No. 60118

Scoping Comments

James Atti  
P.O. Box 62  
Kwigillingok, Alaska 99622

Dear Mr. Atti:


I would like to take this opportunity to respond to your December 14, 1992 letter regarding the proposed Kwigillingok Airport Improvements Project. This response has been coordinated with both the Aviation Design and Planning Sections of the Department of Transportation and Public Facilities (ADOT&PF).

The Federal Aviation Administration (FAA) is providing the funding for the proposed improvements at the Kwigillingok Airport through an Airport Improvement Program Grant (AIP). AIP funding cannot be used for improvements off airport property. Since most of the access road is off airport property, another source of funding would be required for access road improvements.

Two other potential sources of funding for access road improvements are the State of Alaska General Fund appropriations and Federal Highway Administration (FHWA) funding. Due to the State's declining revenues, General Fund appropriations are difficult to obtain. FHWA funding may be more likely but obtaining this funding is highly competitive. The ADOT&PF Planning Section will evaluate access road improvements when developing its future FHWA program priorities. If you would like to discuss access road improvements in more detail, please contact Roger Maggard, Area Planner at 266-1653.

Thank you for your interest in the Kwigillingok Airport Improvements project. If you have any further questions or require additional information, please contact Diana Rigg, Environmental Analyst, at 266-1448.

Sincerely,



Steven R. Horn, P.E.  
Supervisor

cc: Roger Maggard, Area Planner, Planning Section  
Diana Rigg, Environmental Analyst, PD&E  
Jerry Ruehle, Environmental ~~Team~~ Leader, PD&E  
John Wahl, P.E., Project Manager, Aviation Design

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: 28 Sept 93 TIME: 11:30 am  
/FROM: Willi Atti PHONE: 588-8112  
REPRESENTING: Kwig, Inc. LOCATION: Kwiqillingok  
TO/ : Diana Rigg  
PROJECT: Kwigillingok Airport PROJECT NO.: 60118  
SUBJECT: Proposed Airport Improvements

Mr. Atti called to get an update on the project. He asked about the crosswind runway shown on the map sent September 8, 1993. I informed him that was a far future plan and would not happen soon. He asked about the change in apron location and who could lease the lease lots. I explained the change in location and described potential lessees such as the City, air charter operators or local airplane owners.

He is concerned about what we are going to do with the tidally influenced stream next to the airport. I indicated that we had not finalized any plans and that plans would have to be approved by the Alaska Department of Fish and Game. He suggests blocking off incoming sources of water from the creek and allowing the lake to fill up again.

Ha asked if gravel would have to be imported and I said yes. His final question was whether the runway lights would be installed with the project. Again the answer is yes.

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

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
CENTRAL REGION  
DESIGN SECTION II

TELEPHONE RECORD

NAME: William Igkurak, Utilities Director

REPRESENTING: Kwig Power Company

Telephoned  
 I Called

Date: October 7, 1993

Time: 9:00 am

AIRPORT: Kwigillingok

SUBJECT: Power for the runway lighting system

I asked about the existing power connection to the Equipment Storage Building. He said there is a 15KVA transformer at 3 poles back from the apron which serves 2 other buildings. In addition, there is a primary power line stubbed to the building.

I asked about the villages capacity to serve the airport and he said that currently the village requires approximately 100 KW and he has 2 150 KW generators.

Mr. Igkurak has requested we contact him when we have more details so he can plan on upgrading the service if necessary. He can be contacted at:

Mr. William Igkurak  
Utilities Director  
Kwigillingok Power Company  
P.O. Box 49  
Kwigillingok, Alaska 99622  
Phone (907) 588-8626

NAME: Tom Dougherty

cc: Clyde Dahle  
Diana Rigg

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# **Native Village of Kwigillingok**

Kwigillingok I.R.A. Council  
P.O. Box 49  
Kwigillingok, Alaska 99622  
(907) 588-8114/8212

October 26, 1993

John G. Wahl, P.E.  
Project Manager, Aviation Design  
Ak. Department of Transportation and  
Public Facilities  
4111 Aviation Avenue  
P.O. Box 196900  
Anchorage, Alaska 99519-6900

**RE: Kwigillingok Airport Runway, Taxi Way and Apron  
Improvements. Project No. 60118**

Dear Mr. Wahl:

In response to your correspondence of October 11, 1993 in reference to the above named project, the Kwigillingok I.R.A. Council (Council) is requesting that representatives from the Alaska Department of Transportation and Public Facilities (Department) meet with the Council and it's Tribal membership (Membership) at a general Tribal meeting at the convenience of the Department to discuss this important project in further detail and to receive comments and to hear concerns of the Council and Membership.

This is in response to solicitation of comments concerning the proposed project from Kwigillingok Airport users. We would appreciate representatives that would provide concrete and direct responses to questions or concerns of the village and not those that would have to approach others in the hierarchy for a response or clarification, for instance, decision makers for the Department.

Your serious consideration of this request would be greatly appreciated. I will be representing the Council on this matter in setting up this meeting should it be forthcoming and I have been requested to communicate this matter to you.

Your immediate response would be greatly appreciated and I can be

Mr. John G. Wahl, P.E.

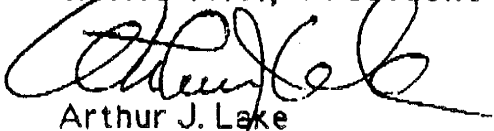
page two

reached at 588-8114/8212. For your information our Fax number is 588-8429.

Sincerely:

NATIVE VILLAGE OF KWIGILLINGOK

Willie Atti, President



Arthur J. Lake

Tribal Administrator

cc: Bruce Campbell- Commissioner, DOT/PF, Juneau  
Mike Mckinnon- Chief of Planning, DOT/PF, Juneau  
Edgar Blatchford- Commissioner, DCRA, Juneau  
Steven R. Horn, P.E.- Supervisor, Design and Construction, Anchorage  
Senator George Jacko, Jr.- Pedro Bay  
Rep. Lyman Hoffman- Bethel  
file

# 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

November 10, 1993

Re: Kwigillingok Airport  
Improvements  
Project No. 60118

Air Photos & Biological Study


Art Lake  
Tribal Administrator  
Kwigillingok IRA Council  
P.O. Box 49  
Kwigillingok, Alaska 99622

Dear Mr. Lake:

Enclosed per your request are color copies of two sets of aerial photos showing the airport and Kwigillingok and the biological report prepared by Mike North, Biologist, US Fish and Wildlife Service. You will be notified as soon as we have determined a date for a public meeting in Kwigillingok.

Thank you for your interest in the project. If you have any questions, please feel free to call me at 266-1448 or John Wahl, P.E., Project Manager at 266-1560.

Sincerely,

  
Diana Rigg  
Environmental Analyst

Enclosures: Color Air Photos (2)  
Biological Report

cc: Steven R. Horn, P.E., Supervisor, PD&E  
Jerry Ruehle, Environmental Team Leader, PD&E  
John Wahl, P.E., Project Manager, Aviation Design



STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN AND ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE 25 Jan 94

TIME 11:15 (AM/PM)

TO/FROM Arthur Lake PHONE \_\_\_\_\_

REPRESENTING Kwig IRA Council LOCATION Kwigillingok

TO/FROM Diana Reig

PROJECT Kwig Airport / 60118

SUBJECT Public Hearing

Mr. Lake called to formally request a Public Hearing in Kwigillingok to discuss the project. The council would very much like the opportunity to speak directly to ADOT & PF staff.

CC: Steve Horn  
Roger Maggard  
Jerry Ruelle  
John Wahl

This is their 2<sup>nd</sup> request for a meeting.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

MEETING RECORD

DATE: 28 Feb 94 TIME: 1:00 pm  
PROJECT: Kwigillingok Airport PROJECT NO.: 60118  
SUBJECT: Public Meeting  
PRESENT: Diana Rigg, PD&E; Leslie Mitchell, Planning; John Wahl, Aviation Design; Bob Luch, Right-of-Way; and see attached  
NOTED BY: Diana Rigg

I opened the meeting with introductions. John Wahl began explaining the project with interpretive assistance by Willi Atti. John explained the lengthening, widening and construction methods as well as that there would be lights provided on the existing runway. He opened the meeting for questions and concerns.

Mr. Beaver asked why we had not come to the village before this time to get their advice. He stated that the village only wanted lights on the runway and instead of lights, the State says there is no money. Then you (ADOT&PF) come to the village and say there will be an extension. Why hasn't the villagers' concerns for airport lights been heard?

John Wahl responded that there was now a Capitol Improvement Project and that the funding was coming from the Federal government. The State has no funds for projects like this.

Mr. Beaver again asked why we had not sat down earlier to talk about the extension and why was the cross wind runway not located on the north end of the airport.

John Wahl stated that drainage was a big concern and that the location of the cross wind was dictated by drainage.

Mr. Beaver explained that the cross wind location would interfere with traditional travel paths in winter and that birds feed there in the summer.

Willi Atti stated that the extension was OK but that we should move the cross wind runway to the north because of the migratory water birds that use the dry lake bed in the fall. He also informed us that the drainage channel should be directed south instead of north.

John Wahl told Mr. Atti that we would investigate a new location for the cross wind runway and look at draining the creek to the south.

Willi Atti then stated that the cross wind runway does not comply with the real direction of the winds.

John W. indicated that the wind data we used came from a nearby community: Eek.

Willi Atti told us that there was higher ground north of the airport and not so many birds.

Mr. Beaver explained that since the cross wind runway was only an "if" (may not be built unless there are extra funds) then we should approach the village first to get their concerns before going on with building the cross wind runway.

John agreed with that approach.

Unknown Speaker 1 asked if we would purchase the land. The answer is yes. Unknown Speaker then asked how the price would be set. Bob Luch indicated that an independent appraiser would set the fair market value.

Unknown Speaker 1 went on to ask "What if the village says no to the purchase?"

John W. tried to explain that the Federal Aviation Administration (FAA) requires that the State own the property before they will let Federal money be spent on the airport. We can own the property or lease it from a State, Federal or local agency (such as a city) but once the lease is up in 1999, we can't continue to lease from Kwik, Inc. That lease was originally with Bureau of Indian Affairs (BIA) and is being administered by Kwik, Inc.

Again, the Unknown Speaker asked what would happen if village still said no purchase?

John W. stated the project may go away.

Unknown Speaker 1 asked if the money comes from the State or Feds?

John responded that 93.5 percent or 15 out of every 16 dollars would come from the Federal government.

Roland Phillip asked if there is a document that says this.

Bob Luch said there was and that he did not have a copy with him. He will fax a copy to the IRA Council Office tomorrow on March 1, 1994.

Dale Lymon, Association of Village Council Presidents (AVCP) asked if the document were cast in stone.

Bob Luch stated it was and that the only other way to spend the Federal dollars on the airport would be under 14C3 in which the land would be administered by Department of Community and Regional Affairs (DCRA) until Kwigillingok becomes incorporated as a city.

At this time in the meeting, David O. David stood up and gave an impassioned speech in Yupik to the assembled elders of the community. When he was finished, he turned to the ADOT&PF staff at

the front of the room and stated that he would now tell us (in English) what he had told the elders, asking the elders to let him know if he left anything out. The following is as close an approximation of his speech as was possible without a recording.

Since your people came to this land, which is ours, (we are the original people) you white people played around with them: our fathers and grandfathers, your people strip them of everything. This village is going to be run by the State regardless of what we want. You white people have gotten all our land. I've been to these meetings to represent my people. You will strip our corporation of land and they will not have money to pay taxes. I can see the reason of what you said clearly (speaking to Bob Luch in reference to the discussion of 14C3), you want to purchase land so anyone can use it, can have Feds and ADF&G come in here to starve us. If we say no, you'll tell us the land belongs to State and we can 't do anything we want. USF&WS has already done this - have come here to watch us and cite us for our subsistence activity in springtime. Many of us know it and fight it cause that's our grandfather's food and our food and we want to pass it along to children and grandchildren. If we stop fight, white people will play around with our grandchildren. We never said yes to being a State or part of the United States. \$900,000,000.00 - what has that bought us? We already have 2,500-foot runway - we have been crying for lights and you say no money and all of a sudden, there is millions of dollars for runway improvements. It is only maintained during the winter and it needs maintained in the summer. The Maintenance guy doesn't get paid for summer. I have told these people I would like to see runway left as it is and give us lights. The project is good and bad - some people would work during construction but once over, it's gone. All the rest is bad. Service will not get better - just give us lights and repair the road.

John Wahl stated that a lights only project would only cost about \$200,000.00. However, FAA pays for this and the runway has to be brought into standards. We are building the project to last 20 years.

David O. David: Since Kwig is the longest runway on the coast here, can you just do some repairs to meet standards? Can you lease land from the corporation?

Mr. Beaver then spoke up: We've been crying for airport lights. My mother-in-law got sick and wanted to get her to hospital, but couldn't use airport after dark. She suffered all night and next day took her to hospital but it was too late.

Unknown Speaker 2 addressed the assembly in Yupik to talk about the Kwig people in general.

Unknown Speaker 3 stated that the airport extension was not important and that the important thing was the location of the cross wind runway. It should be in the north the way the wind blows.

Unknown Speaker 4 asked about the lease and wanted to know how much land is covered by it. John W. stated that 500 feet either side of the runway was the current lease. But we would only be buying 400

feet on each side of the runway. Unknown Speaker 4 went on to explain that the erosion on the south end of the runway needed repairing now - cover all the creek. He disagreed that the extension was needed but wanted a cross wind runway.

Roland Phillip stated that recently a Ute Air plane had a mishap on the runway and that FAA may be investigating it.

Mr. Beaver asked why we didn't make the runway right (to standards) the first time?

John Wahl explained that the original runway was built to the standards of the time. Standards change over time and now the runway would have to be built to the newer standards.

David O. David stated that he had tried to block the channel to prevent the erosion at the south end of the runway. Bill Christovich (former M&O foreman in Bethel) said the state would come and look at it. When are you going to do that? John Wahl responded that we were there.

Dave Sterns, USF&WS Y-K Delta National Wildlife Refuge Manager was asked to give his opinions. He stated that USF&WS has also expressed concern for the location of the cross wind runway. Mike North had identified the dry lake bed as high value habitat (all the habitat in the vicinity of Kwig has been identified as high value - October 26, 1993 report by Mike North). He further indicated that mitigation is required and that ADOT&PF would have to replace the lost habitat or provide new habitat.

Unknown Speaker 3 stated that birds, ducks and geese feed in the dry lake bed and if the cross wind is put on the north side, the slough will be cut off (which is desirable).

David O. David stated that he doesn't want the land sold and wants to continue to lease it.

Unknown Speaker 3 doesn't like the extension into the dry lake bed either because of the potential erosion problems when the water is diverted south.

Roland Phillip stated that once the surface is disturbed, it sinks so once water starts to run into the dry lake bed, the area will sink and then the problem is solved. Just put a drainage in there and one spring thaw will probably be enough.

John W. stated that's a possibility.

Roland Phillip insisted it was not a possibility, it will happen, "I've lived here 50 years".

David O. David restated that the north side was good for the cross wind.

Unknown Speaker 5 asked if we widen the runway, if we would still have to buy land from Kwik, Inc.

John W. said yes.

David O. David said that since the airport is Kwik, Inc. involved, there were not enough shareholders at the meeting to approve acquisition or disapprove. They will have to have a shareholders' meeting to decide if Kwik, Inc. will sell land. "I doubt we will authorize sale of land." He asked if we would meet with them again after the shareholders' meeting. "I don't think we will allow you to build the cross wind to the south - need cross wind on north side. Most cross winds from east.

John Wahl asked if Mr. David had a problem with the rechannelization we proposed. Mr. David responded no, but indicated that it was not the long term fix "If drainage goes south, then in 5-10 years there will be no problem".

Willi Atti summed up the meeting by saying that after this meeting the Kwik, Inc. shareholders will have a meeting to decide if they will allow us to acquire the property and you will come to Kwig for another meeting. He went on to say that it took several months to have this meeting from their first request and wondered how long it would take to get us to Kwig a second time.

John Wahl answered that they could set a date and we would be there.

cc: Steven R. Horn, P.E., Supervisor, PD&E  
Bob Luch, Right-of-Way Agent, Right-of-Way Section  
Leslie Mitchell, Area Planner, Planning Section  
John Wahl, P.E., Project Manager, Aviation Design

Project No. RS-0380(06)/59603

**SIGN-IN-SHEET  
PUBLIC MEETING  
February 28, 1994**

**KWIGILLINGOK AIRPORT IMPROVEMENTS**

NAME: (please print)	ADDRESS:
1. Dave Stearns	P.O. Box 2025 Bethel Ak 99559
2. WILLIE ATTI	P.O. Box 50 KWIGILLINGOK, AK 99622
3. Roland J. Lewis	P.O. Box 4 Kwigillingok, AK 99622
4. John Lewis	P.O. Box 35 " " "
5. Joseph Manolukah	P.O. Box 56 " " "
6. <del>own name</del>	Box 75 Kwig. AK 99622
7. Benny Cook	Kwig. AK
8. Peter John	Box 66 Kwigillingok
9. Aaron Amik	Box 66 Kwig. AK 99622
10. <del>Walter B. Ash</del>	P.O. Box 47 Kwigillingok, AK 99622
11. W.B. Lewis	P.O. Box 33 Kwigillingok, AK 99622
12. Jesse R. Igkook	P.O. Box 64 Kwigillingok AK 99622
13. Roland Phillip	P.O. Box 22 Kwigillingok AK 99622
14. Lenore Belmer	Box 75 Kwigillingok AK 99622
15. Jean Simon	Box 67 Kwigillingok AK 99622
16. Arma Alice	Box 5 Kwigillingok AK 99622
17. TONY PHILIP	Box 3 Kwigillingok, AK 99622
18. MOSES S. MARTIN	BOX 57 KWIGILLINGOK, AK 99622
19. David Beaman	PO BOX 75 KWIG. AK. 99622
20. Edward George A	PO BOX 13 Kwig. AK 99622 99622
21. Dale Lyman	AUCP Inc. P.O. Box 219 Bethel 99559
22. Steven David	P.O. BOX 38 Kwigillingok AK 99622
23. <del>Bill</del>	Box 58 Kwig. AK 99622

NAME: (please print)

ADDRESS:

Samuel Atti	Box 42 Kwigillingak AK 99622
Johann Freund Johann C. Freund	Box 46 Kwigillingak, AK 99622 Box 78 Kwigillingak, Ak. 99622
David O. David	Box 78 " "
Jon F. Lewis	Box 43 Kwig, AK 99622
Richard John	Box 72 Kwig, AK 99622
David John	Box 24 Kwigillingak, Ak. 99622-C 24
Alan H. Pet	Box 29 Kwigillingak, AK 99622
Janet Sand	Box 32 Kwigillingak, AK 99622
Ernest Brown	P.O. Box 59, Kwigillingak, Ak 99622
ARTHUR J. LAKE	Kwig. IRA Council - TRUST ADMIN.
Ernest Brown	Kwigillingak, Ak. 99622



STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: 9 Mar 94 TIME: 3:40 pm  
TO/ : Willi Atti PHONE: 588-8888  
REPRESENTING: Kwigillingok LOCATION: Kwig  
/FROM: John Wahl, Ken Sun and Diana Rigg  
PROJECT: Kwig Airport PROJECT NO.: 60118  
SUBJECT: Changes to Airport Design

John explained that we could establish the drainage to the southeast as requested but there may be problems due to tidal actions at the houses in the southern part of the village.

Willi stated that was understood in Kwigillingok. Houses are constantly moving from one high spot to the next. Personally, Willi didn't see any problems putting the channel there.

John asked how the people would feel about the lake being flooded again.

Willi replied that he didn't feel the lake would become full of water because there is a natural channel on the west end of the dry lake bed.

John asked if the people were happy having the dry lake bed as it is.

Willi stated that he felt the lake bed may fill up for awhile but that a channel would develop and drain it again. We could dredge a small channel south of the runway and connect to the existing drainage system.

John indicated that ADOT&PF needed to consider and wanted the local people to understand that there is not much difference in elevation in Kwig. The bottom of the lake is 4.5 feet and is not much higher than the Kuskokwim River or Bristol Bay.

Willi stated that if we block off the drainage north of the dry lake bed, the channel will fill with material naturally because there would not be any flow or tidal influence.

Diana asked if Willi felt the people would be comfortable with the dry lake bed filling up temporarily with water - losing the goose feeding area used for hunting in the fall.

Willi responded that they were comfortable with that because they know it will be temporary.

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

# Native Village of Kwigillingok

Kwigillingok I.R.A. Council  
P.O. Box 49  
Kwigillingok, Alaska 99622  
(907) 588-8114/8212

RECEIVED  
MAY 04 1994

May 2, 1994

*John G. Wahl*  
John G. Wahl  
Project Manager, Aviation Design  
Department of Transportation and Public Facilities  
411 Aviation Avenue  
P.O. Box 196900  
Anchorage, Alaska 99519-6900

Aviation Design  
Central Region

Dear Mr. Wahl:

The Kwigillingok I.R.A. Council and staff met on April 25, 1994 to discuss the Kwigillingok Airport Reconstruction Project No. 60118 and your synopsis of the major points presented by the residents and the corresponding responses.

The Kwigillingok I.R.A. Council has the following comments and input to the airport project:

1. The extension and widening of the runway is acceptable as proposed. They agree that the crosswind runway is an acceptable component of the overall project based on funding availability, but has reservations concerning the positioning of the runway due to locally known wind factors. This component should be revisited at a later date when sufficient wind analysis has been conducted exclusive to the Kwigillingok location.
2. Propose that the existing apron be enlarged and used instead of constructing a new apron in the south end of the runway, this would save construction dollars that could be used elsewhere within the confines of the Kwigillingok Airport. The village and the governing body wants to keep the existing apron and not the apron proposed by the Department. Also, the lease lots are requested not to be incorporated into the overall airport infrastructure.
3. Refilling of the lake is not an option and should be allowed to remain as is at this time.
4. Purchase of Village lands by the State of Alaska in order to upgrade the airport is unacceptable at this point. The village is working with local village leaders, Congressional and State

Mr. John G. Wahl  
Page Two

Legislators to address this issue. It is hoped that this issue will be resolved in a timely manner so as not to disrupt or delay any construction start up plans.

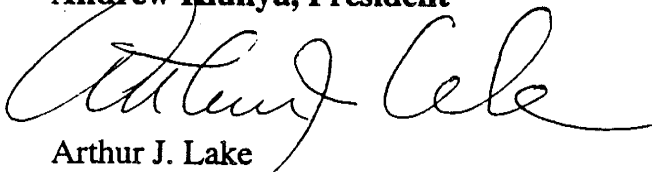
The village will contact your office when a date has been established for a follow up meeting to further discuss above issues concerning the airport project.

Should you have any questions or concerns on the above issues, please do not hesitate to contact us.

Sincerely:

**NATIVE VILLAGE OF KWIGILLINGOK**

**Andrew Kiunya, President**

A handwritten signature in cursive script, appearing to read "Arthur J. Lake".

Arthur J. Lake  
Tribal Administrator

cc: Willie Atti- President, Kwik, Inc.  
Representative Lyman Hoffman  
Senator George Jacko  
file

AVIATION DESIGN  
(907) 266-1785

May 10, 1994

RE: Kwigillingok Airport  
Reconstruction  
Project No. 60118

Mr. Arthur J. Lake  
Tribal Administrator  
Kwigillingok I.R.A. Council  
P.O.Box 49  
Kwigillingok, AK 99622

Dear Mr. Lake:

Thank you for arranging the meeting at Kwigillingok on February 28 and giving us the opportunity to present our proposed project for reconstruction of the Kwigillingok Airport to the residents of the community. We were pleased by the turnout for the meeting and the depth of interest expressed by those attending. We also wish to thank Willie Atti for the translations he provided.

We listened with interest to the views expressed on the dealings of the Native peoples with the State and Federal governments. While we are sympathetic, these issues are beyond the areas which the Department of Transportation and Public Facilities is involved. We hope to work with you on airport improvements in a way which reflects cooperation between our Department and the community of Kwigillingok.

The residents brought up several points and made some requests for revisions to the project which required further review by DOT&PF design personnel before a meaningful answer could be given. The major points presented by the residents and later confirmed in a conversation with Willie Atti last on March 8, included the following:

1. The residents thought that the natural draining of the lake has been beneficial to wildlife, especially goose stop over. Refilling of the lake on a temporary basis would be acceptable, but permanent refilling is not acceptable.

2. The crosswind runway should be placed at the north end of the runway, and be oriented in a northwest-southeast direction.
3. The channel on the west side of the runway should be blocked and a new drainage established either at the west end of the drained lake or possibly through the previous outlet south of the airport.
4. Construction of any runway into the drained lake south of the airport was not acceptable.

The proposals were evaluated by the design staff and reviewed by the DOT&PF, Central Region's hydrologist. Our conclusion was that while the blocking of the drainage channel on the west side of the runway could be possible, it is a more complicated undertaking than the simple filling of a slough. The consequences of this action cannot be anticipated with certainty and are considered to be beyond the scope of the airport reconstruction project.

The following will outline our reasoning for this conclusion and offer a compromise project with a less ambitious scope of work which would complete much needed improvements to the airport.

#### Alternatives Proposed by the Community

The consensus from the meeting was to construct a crosswind runway at the north end of the airport. The embankment would be constructed across the channel running along the west side of the runway. This would block drainage of the lake bed and some of the surrounding area. If nothing were done, the lake would refill and drain through its previous outlet. It is difficult to locate the outlet, however, it appears to be at the east end of the lake and drained through another drained lake to the Kwigillingok River south of the village.

The survey conducted in 1993 established that the elevation of the drained lake bed was at 4.5' above mean sea level (MSL). When taking tidal observations, the survey crew determined that the tide range for the time they were in Kwigillingok was from elevation -4.5 to elevation +4.5. Extreme tides would be higher or lower than these elevations. This means that the level of the drained lake is below the high tide level of the Bering Sea. The surveyors confirmed that there was up to 0.5 to 1 foot of water in the lake. We researched the original construction drawings for the airport and determined that the surface of the lake was elevation 7' MSL.

We investigated four possible schemes to provide drainage to the lake. Two of the schemes would refill the lake and two would leave the lake drained. The four are as follows:

1. Reestablish the lake as it was prior to draining.
2. Place a culvert through the future crosswind embankment.
3. Establish a new drainage channel at the east end of the lake.
4. Establish a new drainage channel at the west end of the lake

The first alternative would refill the lake up to its previous level. Drainage would return to its original outlet. The elevation would be approximately 7' MSL. There would be 2' to 3' of water in the lake.

The second alternative would continue drainage in the channel at the airport. To do this, a culvert would be placed through the crosswind runway embankment. One end of the culvert must be higher than the highest tide in the channel. If it were not, water from the tides would constantly back up through the culvert and then drain at low tide. Due to the type of soil in the embankment, the chances of the culvert washing out are great. The upper end of the culvert would be at approximately elevation 6 feet. The result will be the flooding of the lake to elevation 6 feet. The lake would have 1' to 2' of water.

The residents at the meeting proposed another alternative. This was to drain the lake in either into its old channel at the east end of the lake or creating a new channel at the west end of the lake. The channel at the east end of the lake appears to have been the original outlet for the lake. To provide drainage for the lake without refilling, the channel must be deepened. Deepening of the channel would subject the channel to greatly increased flows from the tides. This would in turn create erosion problems. There are at least ten buildings and numerous other structures at the south end of the village near this channel. While we understand that the village is accustomed to moving buildings due to erosion, causing additional erosion in the village is not desirable.

The second drainage is a stream at the west end of the drained lake. This stream drains into the Bering Sea and provides local drainage to an area west and north of the drained lake. It doesn't appear that the stream was ever connected to the drained lake. To drain the lake to this stream will also require deepening the stream. This would subject the stream to increased erosion. The area drained by the stream includes several very large lakes. These lakes are larger than the lakes whose draining formed the Kwigillingok River. Erosion could cause these lakes to drain and form a new river.

From the Department of Transportation and Public Facilities' standpoint, none of these options is acceptable. The first two alternatives would refill the lake on a permanent basis, which the residents indicated was not acceptable. The third and fourth alternatives would require new deep drainage channels to the sea which could cause further changes in the

drainage patterns in the area which could not be controlled. We are not authorized to reengineer drainage for a large area surrounding the airport and village which these alternatives would require. A major drainage study would be required under the probable direction of the U. S. Army Corps of Engineers

#### Proposed Change to Scope of Work

We wish propose the following option so that the project can proceed to construction. The existing runway safety area (embankment) will be widened to 120'. The embankment will be extended a short distance to the south into the drained lake bed by approximately 600' to allow construction of a 3,000' runway. A new apron will be constructed at the location originally proposed at the meeting. A medium intensity lighting system will be installed on the existing runway. Construction of a crosswind runway will be eliminated from the current project so that we can further study the need and the options available. Land purchase would be reduced to cover only the extended runway and new apron. The channel along the west side of the runway would receive some form of shore protection and minimal realignment at its present location.

The extension into the lake would involve the disturbance of approximately 3.5 acres of the lake bed. The original proposal for the crosswind runway in the lake would have involved less than 20 acres. We estimate that the lake contains 780 acres. We feel that impacts would be minimal.

The need for a longer runway has not changed. Lengthening of the runway will allow twin engined aircraft to use the airport safely. As an example, the medevac aircraft currently used cannot currently land at Kwigillingok. The longer runway would permit it to land. The Department is in the process of extending the runways in the Bethel area. Scammon Bay and Napaskiak have each received the longer 3,000' runways. Longer runways are now planned for Kongiganak, Eek, Newtok, Kasigluk, Quinhagak and Tooksook Bay. The goal is to provide a longer runway for all villages in the area. Having Kwigillingok as one of the few villages with shorter runways is not in the best interest of the Department or the village.

Eliminating the crosswind runway from the current project would allow further study of the winds in the area. The Department has been collecting wind data at Eek for the past two years. Preliminary data shows that the runway proposed in the lake bed south of the present runway provides the best crosswind coverage for the combination of two runways. This was the reason for the original project design.

Will you please distribute this letter and information to the I.R.A. Council. Please use it in your review of the project. We hope that the council will respond favorably to the revised project scope. We require the Council's support to proceed with the project. We have also sent a copy of this letter to Kwik, Inc., for their review.



Mr. Arthur J. Lake

5

May 10, 1994

I am looking forward to returning to Kwigillingok for another council meeting. Please let me know when a meeting is scheduled.

If you have any questions, please call me.

Sincerely,

John G. Wahl, P.E.  
Project Manager  
Aviation Design

JGW

cc: Mr. Willie Atti, President, Kwik Inc.

Diana Rigg, Environmental Analyst, Preliminary Design, Central Region, DOT&PF

Leslie, J. Mitchell, Area Planner, Central Region Planning, DOT&PF

William F. Barber, Hydrologist, Central Region Materials, DOT&PF

Robert J. Luch, Right of Way Agent, Central Region, DOT&PF

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: 12-16-94

TIME: 10:45 am & 1:00 pm

TO/FROM: Willi Atti, President

PHONE: 588-8112

REPRESENTING: Kwik Inc.

LOCATION: Kwigillingok

TO/FROM: Laurie Mulcahy *LM*

PROJECT: Kwigillingok Airport EA

PROJECT NO.: 60118

SUBJECT: EA Comments

I called Willi Atti to ask if he had any comments on the revised Draft Kwigillingok Airport project Environmental Assessment (EA).

Willi noted that we were still proposing to construct a new and larger apron with lease lots. He said that the village was opposed to this part of the airport project, and that the State would save money by enlarging the existing apron. Willi was aware that the building encroached the runway setback for the runway, but thought that the apron could be expanded to the east. There was an estimated 75 feet between the foot of the embankment and an adjacent pond.

Village opposition to the lease lots and new apron is based on a primary issue, the need to maintain village harmony. There was concern that after construction there would be potential for some form of business developing on the lease lots that could disrupt the community. The village did not want lease lots unless they had some control or authority over future lease holders.

Apparently there was an October 1994 meeting between Kwigillingok representatives and Commissioner Michael Barton. Willi wondered why the meeting was not included within the EA. I checked on this and called him back. Apparently "official minutes" were not taken, but the issue discussed was land ownership status. I told Willi that we would write in the Final EA that the meeting did occur and that the village's land ownership concerns were made known to the Commissioner. The Department would address the issues of the apron and lease lots before the project was constructed.

Willi said the process was very frustrating and said that Arthur Lake, Kwigillingok IRA Council Administrator, was also concerned about the lease lots and the new apron. (I subsequently called Arthur at the IRA Office and he confirmed this.) The village had written a number of letters and participated in several meetings. The same concerns were voiced and there were not any new issues. Willi was not sure what another letter would do. I told him that I would document his concerns in a telephone log for the project file and provide a copy to him.

cc: Willi Atti, President, Kwik Inc.  
Steven R. Horn, P.E., Supervisor, PD&E  
Jerry Ruehle, Environmental Team Leader, PD&E  
Steven Van Horn, P.E., Chief, Aviation Design  
John Wahl, P.E., Project Manager, Aviation Design  
Jonathan Widdis, Director STW Aviation

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

MEETING RECORD

DATE: April 12, 1995

TIME: 10:30 am

PROJECT: Kwigillingok Airport Road Improvements

PROJECT NO.: STP-0001(92)/51613

SUBJECT: Project Scoping

PRESENT:

Arthur J. Lake, Native Village of  
Kwigillingok

Fred K. Phillip, Kwik Inc., Kwigillingok

George David, Kwik Inc., Kwigillingok

Andrew Kiunya, Kwigillingok IRA Council

Willi Atti, Kwigillingok IRA Council and  
Kwik Inc.

Denman Ondelacy, U.S. Public Health Service

Carla Follett, FAA, Airports Division

Vince Rhea, ADOT&PF, PD&E (Project  
Manager)

Leslie J. Mitchell, ADOT&PF, Planning

John Jensen, ADOT&PF, ROW

Shirley Horn, ADOT&PF, ROW

Robert Luch, ADOT&PF, ROW

John Wahl, P.E., ADOT&PF, Airport Design

Jerry Ruehle, ADOT&PF, PD&E

Laurie Mulcahy, ADOT&PF, PD&E

NOTED BY: Laurie Mulcahy

---

Vince Rhea provided an overview of the proposed road project. He explained that the Kwigillingok Airport Road and the Kwigillingok Airport projects used separate Federal Highway Administration and Federal Aviation Administration funds. He envisioned that the projects would be constructed sequentially by one contractor. The road project would be first. The Department favored summer construction for the road project. More favorable weather conditions provided flexibility in road design options.

As conceptually designed, the Airport Road Improvements project would provide a six-foot deep embankment with a 12-foot wide single lane. Five 100-foot long pullouts would be constructed along the road's length. Fill material would be barged in and either directly placed on the road embankment or temporarily stockpiled. The existing 35-foot wide right-of-way easement was not wide enough to accommodate the improved embankment. The Department was investigating whether or not the improvements could be contained within a 75-foot wide easement. The existing road ends at the boardwalk near the Alascom Building. We would extend it to the barge landing if desired by the community. An intertidal slough would be crossed to access the barge landing. The extension would require a temporary construction easement from the village.

Arthur Lake agreed that it would be best to coordinate the two projects to reduce overall construction costs. He was concerned that the Airport Road project only addressed the road from the village and [east] barge landing to the airport. It was his belief that we also needed to look at improving the existing village transportation boardwalk infra structure. Boardwalks existed in the village because soil conditions inhibited standard road/pathway embankment designs; embankments tended to settle and higher construction costs were incurred in rural communities. Several boardwalk segments were in disrepair and/or needed upgrading.

He said that village residents did not believe that it was a good idea to extend the road to the [east] barge landing. The vicinity has lower ground elevations and floods during storms when high winds are combined with high water conditions. High tides inundate the east barge landing. Instead, the village recommends improvements along the boardwalk that passes by the school to the village's primary [west] barge landing. Arthur suggested that it may be possible to design the boardwalk using heavy timbers or to place embankment to accomplish the road. The west barge landing is located on higher ground. (The new proposal is referred to as the Barge Access Road.)

Willi Atti said that the Barge Access Road would provide access for materials from the airport and the west barge landing to the school. The community store and washateria are also along this boardwalk. Arthur noted that a tramway and an oil pipeline follow the boardwalk. The oil line, which is leaking at spots, extends from the west barge landing to the school and the washateria.

According to Willi, it would benefit the village to establish a new Barge Access Road past the school to the river. The Airport Road only goes to the shared Alascom/post office building. He agreed that periods of combined high water and wind inundate areas in the vicinity of the building. However, he also cautioned that there was a lot of riverbank erosion upriver of the primary barge site, south of existing bend. An estimated 20 to 30 feet of riverbank erodes each summer season.

Vince thought that an Environmental Assessment rather than the Categorical Exclusion planned for this project would be required to construct a road on a new alignment. This would increase project development time and could impact the project scheduling. FY 1996 funds were earmarked for the Airport Road. He understood that the community had identified improving this road as a priority project.

Leslie Mitchell wondered if the village considered the Barge Access Road project in lieu of or in addition to the Airport Road project. She said that residents requested Airport Road improvements when ADOT&PF met with the community in February 1994.

Arthur said that the village listed transportation improvement projects with the Bureau of Indian Affairs (BIA) five years ago. Altogether three road projects are on the BIA list: rehabilitation of Airport Road, a new Barge Access Road, and a new road to south Kwigillingok. Boardwalk construction was also identified. He said that when ADOT&PF identified the airport project, it made

sense to the community to look at improving the existing road during airport construction.

Leslie explained that the BIA transportation improvements list was separate from the ADOT&PF State Transportation Improvement Program (STIP) list. To program the Barge Access Road into the STIP required that the community identify the project to ADOT&PF. The Village Council needed to send a letter and a resolution to the Planning Department, outlining the village's transportation improvement priorities. The Airport Road project was STIP listed, and funded and scheduled as a FY 1996 project. Funds were project specific and were not transferred from one project to another. If project specified funds were not used, they were made available to other already prioritized fiscal year projects. The new Barge Access Road proposal could not be included as a FY 1996 project and it would have to compete for funding with other identified projects.

Vince said that he would need to check on what funds were allocated for the Airport Road Improvements project. The funds were limited. Additional project scoping was needed to see if anything could be done to the Barge Access Road/boardwalk alignment in conjunction with the existing project. It may be determined that the Barge Access Road would have to be a separate project. Vince summarized the road project alternatives: 1) improve the existing Airport Road and not extend to the east barge landing, which would require stockpiling; 2) construct a new Barge Access Road to the west barge landing; and 3) improvements to Airport Road with limited upgrades to the boardwalk.

To reduce costs of the Airport Road project, Arthur suggested that we decrease the number of pulloffs and only construct one mid-way and another at the post office. Five pulloffs along the road were not needed. He requested that design standards be waived to fit the needs and requirements of the community and existing conditions of the village.

The village representatives were unanimous in their belief that the community should be included in the planning of any development project in the village. This would benefit both the village and ADOT&PF. Residents are concerned that previous ADOT&PF project development has been one sided and that the public process has not been embraced. It was their opinion that village concerns voiced during the development of the airport project were not addressed or incorporated into the design of the proposed apron, lease lots, and ROW acquisition. A cost analysis comparing various apron locations/designs was requested by community, but never completed by ADOT&PF.

Fred Phillip said that they met with Commissioner Joe Perkins in Juneau to discuss the community's position over the proposed airport project. As originally requested, the community wanted an airport project to install runway lights. This arose from concerns over medical emergencies. The nearest health facility is 100 miles away in Bethel. There have been instances where medical attention required airlifts. Pilots cannot land at the runway at night or under conditions when visibility is limited because the runway is not lighted. Recently, this situation prohibited an emergency airlift and the Elder who needed medical attention died.

The Tribal government does not have funds for lighting along the runway. The community took the initiative to install powerline poles with lights along Airport Road, but needs State funding assistance for runway lights. They did not request the additional upgrades to the airport that are included with the project. Elders have advised leaders of the community to retain all land holdings, "Don't give away anything."

Willi acknowledged that the residents of Kwigillingok are the primary beneficiaries of these development projects. The community needs the improvements, but conversely the ADOT&PF needs to listen to the community to understand their needs to provide what is best for the village. The community does not want a new apron at the proposed site, and recommend extending the existing apron eastward, placing fill in an open water pond, or constructing a new apron along existing road.

Arthur asked that ADOT&PF and FAA waive design standards at the airport, including set back requirements. He said that the Tribal government will work directly with the FAA if it became necessary to satisfy these issues. The village wants to maintain ownership of their lands which will soon transfer from the Village Corporation to the Tribal government.

Shirley Horn agreed that ADOT&PF needed to further identify community needs and resolve land issues to insure that the projects will continue as scheduled for next year. The ROW Section has prepared a draft lease agreement and wanted to consult with the village on it. Bob Luch will attend a meeting between the village and BIA, scheduled in early May.

cc: Meeting participants  
Steve Horn, P.E., Supervisor, PD&E

# DRAFT

Date: September 27, 1995

Project: Kwigillingok Airport Improvements

Subject: Finalize Apron Improvements Location and Extent

Present:

Kwigillingok IRA Council:

Andrew Beaver, President  
Willie Atti, Vice President  
Johnny Friend, Secretary/ Treasurer  
Roland Phillip, Member  
Aurther Lake, Village Administrator

Kwigillingok Village Elders

Benny Cook  
Frank Andrew  
Peter John  
Owen Beaver  
Octo Friend  
David O. David  
Joe Manchuak

State of Alaska, DOT, Aviation Design  
Steve Van Horn, Design Chief  
John G. Wahl, Project Manager  
Kenneth Sun, Design Engineer

Federal Aviation Administration, Planning and Programming  
Sharon Daboin, Manager  
Laurie Hymen, Airport Planner

The chairman of the meeting, Mr. Andrew Beaver opened the meeting. The meeting was attended by representatives of the Kwig. IRA Council, The Village Corporation, Kwig. Inc. and the Elders. Mr. Beaver informed us that they were opposed to any apron expansion other than expansion of the existing apron. The design initially proposed by the Department was an entirely new apron constructed at the south of the existing apron. The village identified the area as an easily accessible, valuable, subsistence berry producing area. They suggested that we drain the area adjacent to the existing apron and fill along the existing roadway that serves the existing apron.

The village council told us that they had only requested lighting improvements to the runway. Mr. Wahl explained how the improvements were part of an effort throughout the Y-K Delta to widen and extend the runways to 3000'. This would allow the use of larger aircraft such as the ones commonly used for medivacs. Mr. Wahl and Ms. Daboin explained that FAA financial participation occurred when airports were constructed to FAA standards. It was possible for the airport to be constructed with FAA participation with minimum improvements if the classification of the airport was reduced. If this happened, other airports in the Y-K Delta could be served by larger aircraft where the Kwigillingok Airport would not have this ability. The Village Representatives did not entertain the option. The village indicated that they had no objection to the runway widening and extension. We confirmed that no crosswind was to be

included in this project. It would be considered in the future when more wind data was available.

The Elders suggested that the embankment material be excavated from the slough bank. They indicated that his material was drained and thawed.

The village requested that FAA confirmed that they had no objections to the plans discussed in the meeting. This was confirmed by Ms. Daboin.

We had planned to sound the depths of the lakes adjacent to the apron on this trip. The village indicated that they would check the depths for the Department and fax the information to us. Mr. Van Horn promised that we would provide design alternative based on the elder suggestions in two weeks.

The council was informed of the project Schedule. The construction contract is expected to be awarded in 1996 with construction to begin in 1997.

H:\DATA\KWIG\WP\TR92795.WPD



STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
CENTRAL REGION  
DESIGN SECTION II

TELEPHONE RECORD

NAME: James Atti

REPRESENTING: Kwigillingok Village Council

Telephoned  
 I Called

Date: December 13, 1995

Time: 9:50 a.m.

AIRPORT: Kwigillingok Airport

SUBJECT: Kwigillingok Council response to apron location proposal

James Atti called to inquire about the project status for Kwigillingok. He stated that the Village Council had reviewed our proposal for the apron location and had no comments. I told him that we would send a letter to the Council confirming our conversation and proceed with design and right-of-way acquisition for this apron location.

NAME: John Wahl 

cc: Shirley Horn, ROW  
Laurie Mulcahy, Environmental Analyst

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: 27 Oct 93 TIME: 1:00 pm  
TO/ : Ron Norling PHONE: 543-2495  
REPRESENTING: M&O, Airport Manager LOCATION: Bethel  
/FROM: Diana Rigg  
PROJECT: Kwigillingok Airport PROJECT NO.: 60118  
SUBJECT: Aircraft Accident Records

No formal records are kept of aircraft accidents at Kwigillingok Airport. However, I contacted Ron Norling, Bethel Area Airport Manager, to find out if he had any anecdotal information regarding accidents or problems at Kwigillingok. There have been no problems at Kwigillingok except in 1991, a fueling plane (DC-3) became stuck at the end of the runway while turning around. The wheel got off the runway surface onto the softer embankment.

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

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE 2-18-94 TIME \_\_\_\_\_  
TO Nancy in Flight Operations PHONE 266-6800  
REPRESENTING Mark Air Express LOCATION 266-3643

PROJECT Kwigillingak PROJECT NO. \_\_\_\_\_  
SUBJECT airport bird conflicts

COMMENTS: Jeff Latta of 266-6705 (left message 11:05a)  
Birds are everywhere in the Delta. He doesn't  
think that the additional runway would  
cause an impact one way or the other.  
In fact, he said, that a crosswind runway  
would be welcomed.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: 2-18-94 TIME \_\_\_\_\_  
TO Mike Haglund PHONE 522-8684  
REPRESENTING Haglund Aviation LOCATION Bethel office  
543-3800

PROJECT \_\_\_\_\_ PROJECT NO. \_\_\_\_\_  
SUBJECT \_\_\_\_\_

COMMENTS: (left message 11:15a) only go on a charter  
once or twice a month, not sure if there is  
a bird conflict.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE 2-18-94 TIME 243-1011  
TO Bob Le Blanc PHONE 562-7778 (Anch.)  
REPRESENTING Yute Air Alaska LOCATION 543-3003 (Bet)  
PROJECT Kwigillingok Airport PROJECT NO. \_\_\_\_\_  
SUBJECT Bird Conflicts  
COMMENTS: left message on recorder - 10:45a - He says there are no bird problems at Kwig.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: 2-18-94 TIME \_\_\_\_\_  
TO Dean Cully PHONE 543-4041  
REPRESENTING Comair Air LOCATION \_\_\_\_\_  
PROJECT Kwigillingok Airport PROJECT NO. \_\_\_\_\_  
SUBJECT \_\_\_\_\_

COMMENTS: the wind sock needs to be installed on the maintenance bldg. It is now in a field and it doesn't stand up straight and doesn't give the correct readings. Who can fix it? Haven't had bird problems in the last few years. Don't think there will be problems if the crosswind runway is put in the drained lake. He will ask other pilots.  
A-146  
is it said out different.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE 2-15-94 TIME \_\_\_\_\_  
TO Ken Whitton PHONE 543-3280  
REPRESENTING Yukon Aviation LOCATION \_\_\_\_\_  
PROJECT \_\_\_\_\_ PROJECT NO. \_\_\_\_\_  
SUBJECT \_\_\_\_\_

COMMENTS: *no bird strikes, there are swans & geese that nest along the existing runway but he doesn't believe that the crosswind runway proposed location should be a problem.*

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: \_\_\_\_\_ TIME \_\_\_\_\_  
TO \_\_\_\_\_ PHONE \_\_\_\_\_  
REPRESENTING \_\_\_\_\_ LOCATION \_\_\_\_\_  
PROJECT \_\_\_\_\_ PROJECT NO. \_\_\_\_\_  
SUBJECT \_\_\_\_\_

COMMENTS:

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE 3/18/94 TIME \_\_\_\_\_  
TO Ken Anton PHONE 800-478-2513  
REPRESENTING Ryan Air Service LOCATION 562-2237

PROJECT Kwigillingok Airport PROJECT NO. 60118  
SUBJECT How often do you have regular flights into Kwig? How many charters?  
COMMENTS: only go down there is when there is mail —  
about once a week.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: \_\_\_\_\_ TIME \_\_\_\_\_  
TO Scott Bailie PHONE 243-1011 (encl)  
REPRESENTING yate Air Alaska LOCATION 543-3003 (Bethel)

PROJECT Kwigillingok Airport PROJECT NO. 60118  
SUBJECT How often do you have regular flights into Kwig? How many charters?  
COMMENTS: regular 9:30 am & 3:30 pm daily  
seldom do charters

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE 3/18/94 TIME \_\_\_\_\_  
TO Carol Bradley PHONE 266-6800  
REPRESENTING Mar-kair LOCATION Arctic

PROJECT Kwigillingok Airport PROJECT NO. 60118

SUBJECT How often do you have regular flights into Kwig?

COMMENTS: How many charters/or often

*regular - 1 per day out of Bethel. In May it  
will be 2 per day until fall  
Charters - 3 or 4 per month*

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: \_\_\_\_\_ TIME \_\_\_\_\_  
TO Mike Hageland PHONE 522-~~878~~8684  
REPRESENTING Hageland Aviation LOCATION Anchorage

PROJECT Kwigillingok Airport PROJECT NO. 60118

SUBJECT How often do you have regular flights into Kwig? How many charters.

COMMENTS: not on their regular schedule. They fly  
there approximately once or twice every  
2 or 3 months

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE 3/18/94 TIME \_\_\_\_\_  
TO Fuzzy Le Page PHONE 543-3279  
REPRESENTING Kusko Aviation LOCATION Bethel

PROJECT Kovgilligok Airport PROJECT NO. 60118  
SUBJECT How often do you have regular flights into Kovig? How many charters?  
COMMENTS: only charters  
did 4 or 5 in November  
none in 1994 yet.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: \_\_\_\_\_ TIME \_\_\_\_\_  
TO Johnny Watts PHONE 543-4040  
REPRESENTING Comair Air LOCATION Bethel

PROJECT Kovgilligok Airport PROJECT NO. 60118  
SUBJECT How often do you have regular flights into Kovig? How many charters?  
COMMENTS: 2 reg flights per day - morning & late afternoon  
charters: a couple to Kovig in the last 6 months



STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE 3/18/94 TIME \_\_\_\_\_  
TO Steve Andersen Tracy PHONE 243-1380  
REPRESENTING Arctic Circle Air LOCATION Anchorage

PROJECT Kwigillingok Airport PROJECT NO. 60118  
SUBJECT How often do you have regular flights into Kwig? How many Charters?

COMMENTS: Regular flights: 1 per day

Frank or Paul - 543-5906 (Bethel)

Fly into Kwig approx 3x per day

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: \_\_\_\_\_ TIME \_\_\_\_\_  
TO Kerry and Ed PHONE 543-3905  
REPRESENTING Alaska Airlines (ERA) LOCATION Bethel

PROJECT Kwigillingok Airport PROJECT NO. 60118  
SUBJECT How often do you have regular flights into Kwig? How many Charters?

COMMENTS: 1 daily @ 1205 →

Charters depend on availability of planes.  
very few Charters, maybe once a month.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE 3/13/94 TIME \_\_\_\_\_  
TO Craig or Emily Emery PHONE 543-2575  
REPRESENTING Craig Air LOCATION Bethel

PROJECT Kwigillingok Airport PROJECT NO. 60118  
SUBJECT How often do you have regular flights into Kwig? How many charter  
COMMENTS: 10:50 am - no answer

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: \_\_\_\_\_ TIME \_\_\_\_\_  
TO Sam Ralledge or Cynthia Anderson PHONE 543-5280  
REPRESENTING Yabson Aviation LOCATION Bethel

PROJECT Kwigillingok Airport PROJECT NO. 60118  
SUBJECT How often do you have regular flights into Kwig? How many charter  
COMMENTS: only do charter work and they do anywhere from one to twenty per month.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE 3/18/94 TIME \_\_\_\_\_  
TO Rob Goethals PHONE 543-2003 or 543-2504  
REPRESENTING Rob Air LOCATION Bethel

PROJECT Kwigillingak Airport PROJECT NO. 60118  
SUBJECT How often do you have regular flights into Kwig? How many charters?  
COMMENTS: do not fly into Kwig unless there is a charter. usually 2 or 3x month

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: \_\_\_\_\_ TIME P.C. disconnected  
TO Ren Peltola PHONE 543-2424  
REPRESENTING Bush Air LOCATION Bethel

PROJECT Kwigillingak Airport PROJECT NO. 60118  
SUBJECT How often do you have regular flights into Kwig? How many charters?  
COMMENTS:

# MEMORANDUM

# STATE OF ALASKA

Department of Transportation and Public Facilities

To: <sup>Steve</sup> Steve Van Horn, P.E.  
Section Chief  
Airport Design Section

Thru: John G. Wahl, P.E. <sup>JW</sup>  
Project Manager  
Airport Design

From: Tom Dougherty <sup>TD</sup>  
Airport Design Engineer  
Airport Design

Date: October 28, 1992

File No.: 60118

Phone No.: 266-1699

Subject: Kwigillingok Airport  
Reconnaissance Trip

## Trip Summary

On October 23, 1992 the following group made a pre-design field trip to Kwigillingok Airport:

John Wahl  
Tom Dougherty  
Don Holland  
Diana Rigg  
Roger Maggard

Aviation Design  
Aviation Design  
Regional Materials  
Environmental Section  
Planning

The group left Anchorage at 7:00am via Markair Flight 21 and arrived in Bethel at 8:10 am. The group then chartered a Kusko Aviation Piper Cherokee Six with pilot Doug Doherty leaving Bethel at 9:50 am after sunrise. The Kusko charter went to Kwigillingok, Kongiganak, Kasigluk, Atmaultluk, Napakiak, Napaskiak and back to Bethel at 4:30pm. The group returned to Anchorage via Markair Flight 24 arriving at 8:00pm.

## Kwigillingok

The Kusko Charter flight arrived in Kwigillingok at 10:25 am. The temperature was approximately 20 degrees F with a 10 mile per hour wind. The runway was generally in good condition. The gravel surface measures 46 feet wide and the safety area is approximately 100 feet wide. The full length was usable. The safety area and most of the fill slopes had a good cover of grass.

The gravel surfacing is thin and much dust is generated during aircraft takeoff and landing. The runway profile undulates but according to the charter pilot it is adequate.

A BLM Native Allotment survey performed in July 1992 by LCMF, Ltd. established survey control for the area.

The big problem with Kwigillingok Airport is erosion along the east side and with the biggest problem at the north end of the existing runway on the east side. A drainage channel runs parallel to the runway from north to south and connects into a larger drainage which runs east to west adjacent to the south end of the runway and to the Kwigillingok River which drains into Kuskokwim Bay approximately 3/4 of a mile from the village.

The construction of the airport created many borrow cells along the east side. These borrow cells were connected by erosion and high water action and eventually a drainage channel formed and drained the 1.5 square mile lake which was north and east of the airport. Airphotos from 1976 show the large lake abutting the north end of the runway. Airphotos from 1983 show dry lake bed with a distinct drainage channel running along the east side. The drainage channel makes a right angle bend at the northeast corner and this is the area of greatest erosion. There are large chunks of silty material that are cracking off. The old lake bed appears to consist of fairly dry silty sand material.

The DOT group was met at the airport by Joe Manchuk, the Kwigillingok Airport Manager. Joe indicated that the large lake drained about 10 years ago and that the old lake area floods periodically but does not get as high as the old lake level anymore. He also said there are no fish in the new drainage channel adjacent to the runway. The drainage channel has tidal influence. The borrow cells on the west side of the runway start a approximately 80 feet from the runway centerline.

Joe Manchuk was interested in upgrading his maintenance building. The existing building is a 24' by 46' uninsulated metal clad metal frame building and is located 230 feet from the runway centerline. The village of Kwigillingok has extended the power to the apron area but has not hooked up the building. The Village has 125 KW capacity and Joe said providing 12 KW for airport lighting would not be a problem. The building has lights which can be powered by a portable generator. The building floor is in very poor condition. The dirt floor was frozen with deep ruts and many wooden planks. The bifold front door was in good working condition but the hinges do not have grease fittings and are binding. The building houses a 1986 Caterpillar grader with plow blade on the front. The grader appeared to be in good condition. Joe said the grader is too heavy for the runway shoulders during the thaw time. He will wait until November to get out on the shoulders and blade the grass and perform general maintenance. There is a standard issue fuel tank on skids at the apron which is no longer used.

Joe showed us the barge landing site on the Kwigillingok River which was used for the last airport improvement project. An Alascom building and extensive boardwalk construction has taken place since the last project. A new haul route from the landing site to the airport will have to be used. A stockpile on the shore and winter haul to the airport will be the probable method of getting gravel to the airport.

The 3500 foot access road from the airport to the village is in fairly good shape but it only receives ATV traffic. The gabion baskets placed along the access road at the lake shore are in good condition and functioning well. Joe said he can not travel on it with the grader. The access road is within a 17(b) easement across native land and will not be part of the airport project.

#### Proposed Kwigillingok Airport Upgrade Plan

- Expand runway safety area 600 feet to the north onto the old lake bed.
- Use the old lake bed as a material source. Obtain borrow from areas at least 300 feet from embankment location. No side borrow. ✓ GOOD.
- Dig a new channel along the east side of the runway approximately 300 feet from the proposed toe of the new embankment. Widen the safety area to 120 feet wide by widening 10 feet on each side. ✓
- Expand the existing 100' by 200' apron area to 200' by 300' by filling on the old borrow cell on the west side. The borrow cell appears to be shallow and there is an unlimited amount of sandy silt available in the lake bed.
- Provide erosion protection along the south end of the runway.
- Remove approximately 2 feet of dirt from the equipment storage building floor and replace with a layer of insulation, geotextile membrane, NFS gravel and a plank floor system to distribute the wheel loads of the grader.
- Install runway, taxiway and apron lighting. Construct a rotating beacon and lighted windcone. Connect the equipment storage building to electricity. Do not insulate the building because it should remain unheated due to the soft foundation.
- Place a 1 foot layer of gravel surfacing on the runway and apron.

The group left Kwigillingok at 12:45 pm.

#### Kongiganak

We arrived in Kongiganak at 1:00 pm. There were two other small airplanes on the apron when we arrived and a Markair Twin Otter was circling while waiting for a Markair single engine airplane to leave. The small apron was extremely crowded. The Twin Otter landed within ten minutes of our arrival.

The equipment storage building floor is in very poor condition. The Champion grader was stuck in mud ruts inside the building. The D3 Caterpillar dozer was in working condition. The wood sill at bifold door was badly splintered. This building needs the same floor upgrade as the one at Kwigillingok.

The boardwalk to the apron consists of 4 each treated 4" by 12" planks running longitudinally on 12" by 12" treated timbers at a spacing of 4 feet on center. This boardwalk typical will be used to extend the boardwalk to the new apron area.

The Materials Section Geologist and Driller were on site performing a subsurface investigation. The drilling was going very slow due to frozen ground and subsurface ice. They were using a Haines portable auger.

The group left Kongiganak at 1:40 pm.

#### Kasigluk

The group arrived in Kasigluk at 2:10 pm.

The Kasigluk Airport had been shut down for approximately a week prior to our arrival because of very soft surface conditions. The surface was firm on this day

because it was frozen. There were frozen mud ruts on the east shoulder from the apron and running to the south for about 300 feet. This soft surface appeared after an early season snow fall that melted in place. The cross slopes on the runway are not continuous and surface drainage is poor.

Roger Maggard viewed the area for possible bridge locations over the Johnson River to connect Old Kasigluk with Kasigluk.

A electrical transformer was noticed on the back side of the apron behind the passenger weather shelter. The transformer appears to have been fed from underground service. The conductor has been cut.

The group left Kasigluk at 2:50 pm.

#### Atmautluak

The group arrived in Atmautluak at 3:00 pm.

There is power to the apron. The existing buildings at the apron are in poor condition. The buildings have settled and the equipment doors are not usable. The runway was in fair condition. The pilot mentioned that there is ponding on the runway in wet weather. The apron had a frozen pond.

The group left Atmautluak at 3:15 pm.

#### Napakiak

The group arrived in Napakiak at 3:25 pm.

The northeast end of the runway has soft spots and the southwest end has a bump. The safety area has brush which is 6 to 10 feet tall.

The group left Napakiak at 3:55 pm.

#### Napaskiak

The group arrived at Napaskiak at 4:05 pm.

There was no construction activity on this day. The runway was open 40 feet wide and 2000 long. There is a lot of borrow site grading to be done along installing the lighting system, seeding the disturbed areas and constructing the segmented circle and lighted windcone.

The new apron appeared to be in good condition but had some erosion gullies on the fill slopes. The equipment storage building is complete. The new type freezer door looks good but we could not operate it as it was locked. The advantage of the freezer type door is that it has grease fittings on the hinges.

The group left Napaskiak at 4:25 pm and arrived in Bethel at 4:30 pm.

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
CENTRAL REGION - DESIGN & CONSTRUCTION  
PRELIMINARY DESIGN & ENVIRONMENTAL SECTION

TELEPHONE RECORD

DATE: 14 Feb. 94 TIME: 3:10 pm  
TO : Terry Barber PHONE: 269-6211  
REPRESENTING: Geologist, ADOT&PF Materials LOCATION: Anch.  
FROM: Diana Rigg  
PROJECT: Kwigillingok Airport PROJECT NO.: 60118  
SUBJECT: Material Site

I asked Terry about his material investigations. Terry stated that he recommends winter excavation at the material site because of the type of material. I asked him if he had looked other places for material then north of the proposed crosswind runway.

Terry said their investigations extended south of the crosswind runway but not further afield than adjacent to the existing and crosswind runways. This is because the material everywhere out there is very homogeneous and the further away you get, the longer the haul and the greater the impacts. Terry recommends getting material from North of the crosswind because the area is thawed. Excavation would be easier (cheaper) and the resulting hole would fill with water and become a more natural environment more quickly. Digging South of the crosswind would be in permafrost and the resulting hole would be a bigger scar on the land.

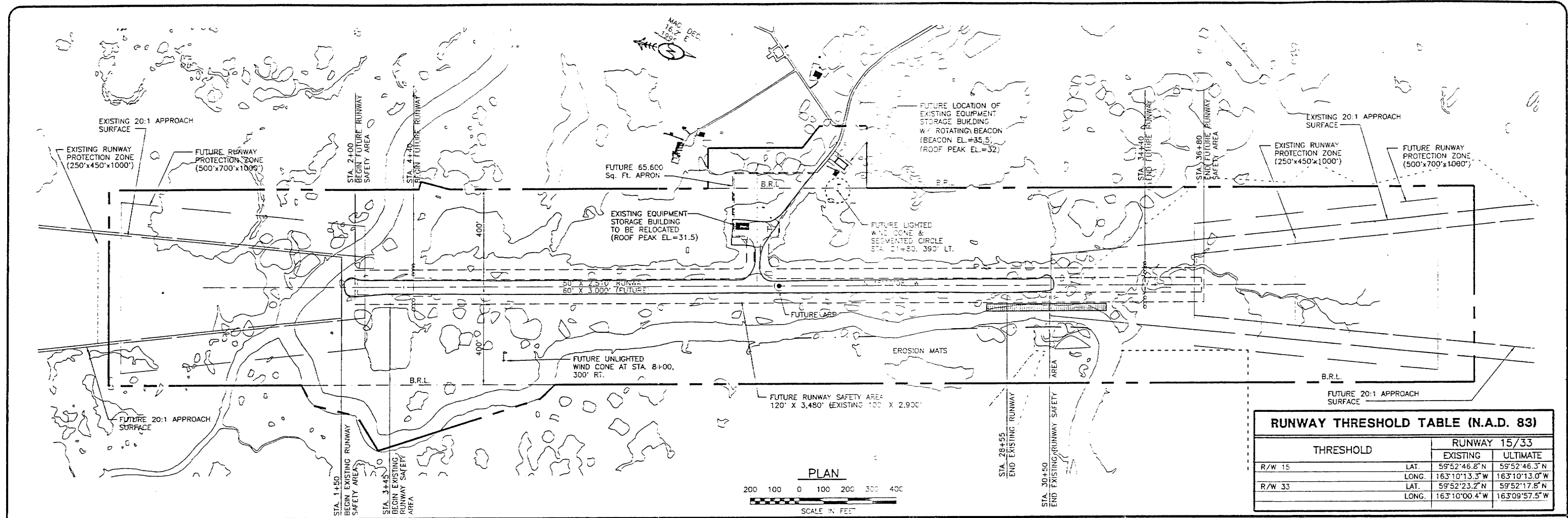
cc: Jerry Ruehle, Environmental Team Leader, PD&E  
John Wahl, P.E., Project Manager, Aviation Design



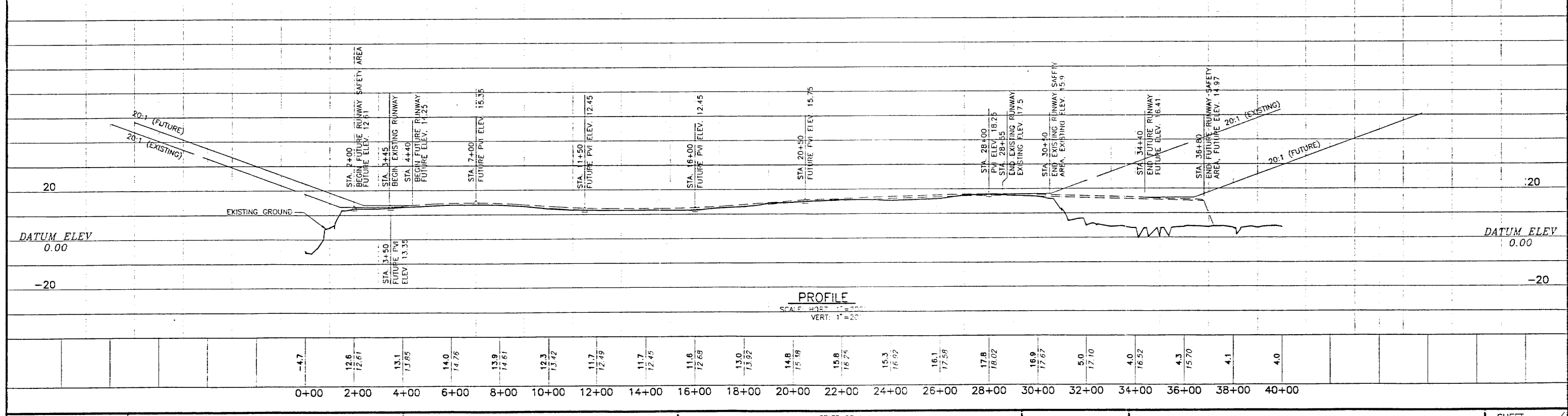
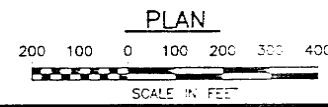
**APPENDIX B**

**Draft Airport Layout Plan**





RUNWAY THRESHOLD TABLE (N.A.D. 83)		
THRESHOLD	RUNWAY 15/33	
	EXISTING	ULTIMATE
R/W 15	LAT. 59°52'46.8"N	59°52'46.3"N
	LONG. 163°10'13.3"W	163°10'13.0"W
R/W 33	LAT. 59°52'23.2"N	59°52'17.8"N
	LONG. 163°10'00.4"W	163°09'57.5"W



FILE: G:\data\kwwg\alp\oct95alp DATE: 11/27/95 1=1 daveb	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>BY</th> <th>DATE</th> <th>REVISIONS</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	BY	DATE	REVISIONS							STATE OF ALABAMA <b>DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES</b> CENTRAL REGION—DESIGN AND CONSTRUCTION—AVIATION  APPROVED: STEVE VAN HORN, P.E. DESIGN SECTION CHIEF APPROVED: JOHN G WAHL, P.E. PROJECT MANAGER	DATE _____ DESIGN _____ DRAWN _____ CHECKED _____	<b>KWIGILLINGOK AIRPORT</b>  AIRPORT LAYOUT PLAN	SHEET <b>3</b> OF <b>7</b>
BY	DATE	REVISIONS												

**APPENDIX C**

**USF&WS Field Report**





# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Anchorage Field Office  
Ecological Services and Endangered Species  
605 West 4th Avenue, Room 62  
Anchorage, Alaska 99501

IN REPLY REFER TO:  
WAES

OCT 26 1993

## Memorandum

To: Files

Through: Field Supervisor  
Ecological Services Anchorage

From: Michael R. North  
Fish and Wildlife Biologist  
Ecological Services Anchorage

Subject: Wildlife Habitat Values at the Kwigillingok Airport

On 29 July 1993, I accompanied Alaska Department of Transportation (ADOT) personnel (Diana Rigg and Tom Dougherty) on a site inspection of the Kwigillingok airport. Kwigillingok is located on the south coast of the Yukon-Kuskokwim Delta, about 38 km west of the mouth of the Kuskokwim River. ADOT proposes to extend the runway south into a drained lake basin, and relocate the parking apron. We were on the ground at the airport and in the village from 10:30-13:15. The tide was high upon our arrival, and was ebbing upon our departure. Originally I was concerned the lake basin was intertidal, but only the tidal channels were flooded at high tide during the site visit.

The airport lies 0.75 km northwest of the village in a north-south orientation (Figure 1). The north end of the runway abuts a wide tidal slough and the south end abuts a drained lake basin. Three ponds lie in former borrow sites along the east side of the runway. A pair of arctic terns (*Sterna paradisaea*) and two pairs of Pacific loons (*Gavia pacifica*) had territories on these ponds (Figure 2). One of the loon pairs had a chick. An active channel connecting the drained lake basin with the tidal slough parallels much of the runway on the west (Figure 1). The active channel takes a sharp turn to the west upon entering the drained lake basin. One borrow site pond and two small natural ponds exist west of the north end of the runway (Figure 1). One of these ponds supported a pair of mew gulls (*Larus canus*) with two chicks (Figure 2).

ADOT's proposed project involves extending the runway south several hundred feet into a drained lake basin (Figure 3). Some ADOT personnel felt the lake was drained accidentally as a result of earlier airport construction. The runway extension would fill in a tidal slough that formed recently in the drained basin (Figures 3-4). Aerial photography from 10 June 1983 shows this tidal slough was only beginning to form then. The habitat proposed to be developed contains a mosaic of wetland species including at least four species of *Carex*, *Juncus castaneus*, *Hippuris vulgaris*, *Calamagrostis canadensis*, *Poa* sp., and *Rhinanthus minor* (Figures 5-7). I consider this habitat high value, although the only wildlife observed during the site visit was one Baird's

sandpiper (Calidris bairdii), because it appeared to be suitable feeding and brood-rearing habitat for shorebirds and songbirds.

The active channel and adjacent habitat in the drained lake basin (Figure 8) provided foraging habitat for 7 red-throated loons (G. stellata), a few dozen western sandpipers (C. maurii), and 2 sanderlings (C. alba). I consider the active channel and its intertidal margins to be high value foraging habitat for loons and shorebirds. ADOT plans to include a crosswind runway in their Airport Layout Plan. The crosswind runway would be constructed sometime in the future (perhaps within the next 20 years) and would be located in the drained lake basin. The existing runway alignment apparently affords 70% wind coverage, below the 95% required by Federal Aviation Administration standards. ADOT has the latitude to shift the location of the crosswind runway north or south, but not the latitude to change its orientation.

The current parking apron and equipment building is located near the center of the runway. ADOT proposes to relocate the apron, but not the building, near the south end of the runway (Figure 3). Most of the apron and the access road would be located in "upland" heath tundra dominated by Rubus chamaemorus, Ledum palustre, Empetrum nigrum, Vaccinium vitis-idaea, Eriophorum spp., and lichens. Some saturated low lying areas containing Carex spp. would also be filled. A pond along the existing airport access road would have to be crossed by the new access road (Figures 3 and 9). I do not believe the parking apron or road would have any significant impact in the heath tundra, but there will be habitat values lost where the access road crosses the pond.

The proposed construction method is to construct the foundation of the runway, parking apron, and access road with silt from a borrow site to be developed in the drained lake basin. All work would be conducted in the winter. The silt would take up to five years to settle and would require annual maintenance work. When settled, the silt fill will be capped with imported gravel. I proposed to ADOT that silt not be used in crossing the pond adjacent to the road, since it would settle throughout the pond. ADOT agreed they could use gravel for construction of the access road at that point. The borrow site would be scraped to a depth of about five feet and would become a pond. I requested the contractor be required to establish a single haul route between the borrow site and construction site, rather than drive at random through the drained lake basin; ADOT agreed. We need to be careful to make sure the proposed borrow site does not limit where the crosswind runway can be located, so that we have the latitude to locate the crosswind runway away from the most valuable habitat (i.e., as far south as possible), if the crosswind runway is ever proposed.

Prior to the site visit, I was concerned that large numbers of shorebirds may be staging in the drained lake basin during fall migration. Fewer than 100 shorebirds were observed using the drained lake basin. However, I found large numbers of shorebirds staging in the village, about 1.5 km from the airport. There, I observed 5700-8300 dunlins (C. alpina) and 300 greater yellowlegs (Tringa melanoleuca) foraging on high intertidal flats dominated by stunted graminoids (see attachment). Also, 150 long-billed dowitchers (Limnodromus scolopaceus) were foraging along the bend of the Kwigillingok River, across from the village and barge landing area.

An unknown factor in predicting use of the drained lake basin by shorebirds is how shorebird densities change in August and September in Kwigillingok. Based on the type of habitat shorebirds were using 29 July, 50% of the available shorebird habitat was being used then. According to Ernst (1988), shorebird numbers along the south coast of the Yukon-Kuskokwim Delta at their peak in late August can be 2-42 times greater than numbers at the end of July, however, the peak count for the segment containing Kwigillingok was 21,000 shorebirds (27-28 August 1987). Given the large numbers of shorebirds present in Kwigillingok 29 July, I believe it is reasonable to predict a two- or three-fold increase in total numbers staging near Kwigillingok. A two-fold increase could likely be accommodated by the habitat in Kwigillingok, but a three-fold increase would likely result in birds spilling over into the drained lake basin. Other factors to consider are 1) interspecific differences in habitat preference, and 2) seasonal differences in habitat use by a species. Longer-legged species, such as bar-tailed godwits (Limosa lapponica), may be more likely to use the vegetated drained lake basin when they migrate through the area. Conversely, most shorebirds shift from vegetated habitats to intertidal habitats following breeding (Gill and Handel 1990). I believe ADOT and the Federal Aviation Administration should carefully evaluate the safety gained by constructing a crosswind runway versus the safety lost by increasing the hazard of bird strikes.

The Kwigillingok River and its tributaries support anadromous arctic char (Salvelinus alpinus), whitefish (Coregonus spp.), and sheefish (Stenodus leucichthys) according to the Alaska Department of Fish and Game (1982). These species probably occur in the channel in the drained lake basin. Alaska blackfish (Dallia pectoralis), slimy sculpins (Cottus cognatus), threespine sticklebacks (Gasterosteus aculeatus), and ninespine sticklebacks (Pungitius pungitius) are widespread on the Yukon-Kuskokwim Delta (Morrow 1980), and probably occur in most of the ponds, lakes, and tidal channels in the project area.

ADOT is also considering blocking and moving the active channel that parallels the runway because of erosion problems. It is my assessment that there are currently no erosion problems on the airport side of the channel. The near bank is rounded and consists of mud, with extensive lush wetland vegetation between the runway embankment and the mud bank. Some erosion is evident on the opposite bank. However, erosion could be a problem along the proposed runway extension at the point where the active channel turns west upon entering the drained lake basin. ADOT should be required to show photographic documentation of erosion problems before we agree to allow the channel be moved in the future.

The village itself has done an excellent job of preserving habitat. A well kept boardwalk circles intertidal graminoid meadows and the intertidal channels are crossed by single-span wooden bridges. All terrain vehicles are apparently confined to a small road system and not allowed on the boardwalk. Virtually no litter was observed.

Attached is an account of the species I observed during the site visit.



#### Literature Cited

Alaska Department of Fish and Game. 1982. An atlas to the catalog of waters important for spawning, rearing and migration of anadromous fishes. Western region.

Ernst, R. D. 1988. Yukon Delta National Wildlife Refuge coastal survey. Unpublished report, U.S. Fish and Wildlife Service, Bethel, Alaska.

Gill, R. E., Jr., and C. M. Handel. 1990. The importance of subarctic intertidal habitats to shorebirds: a study of the central Yukon-Kuskokwim delta, Alaska. *Condor* 92:709-725.

Morrow, J. E. 1980. The freshwater fishes of Alaska. Alaska Northwest Publishing Company, Anchorage. 248 pages.



Figure 1. The existing runway at Kwigillingok. Note the active channel on the left (west), the tidal slough at the top (north), borrow site ponds to the right of the runway and at the upper left end of the runway, and the drained lake basin at the bottom of the photo.

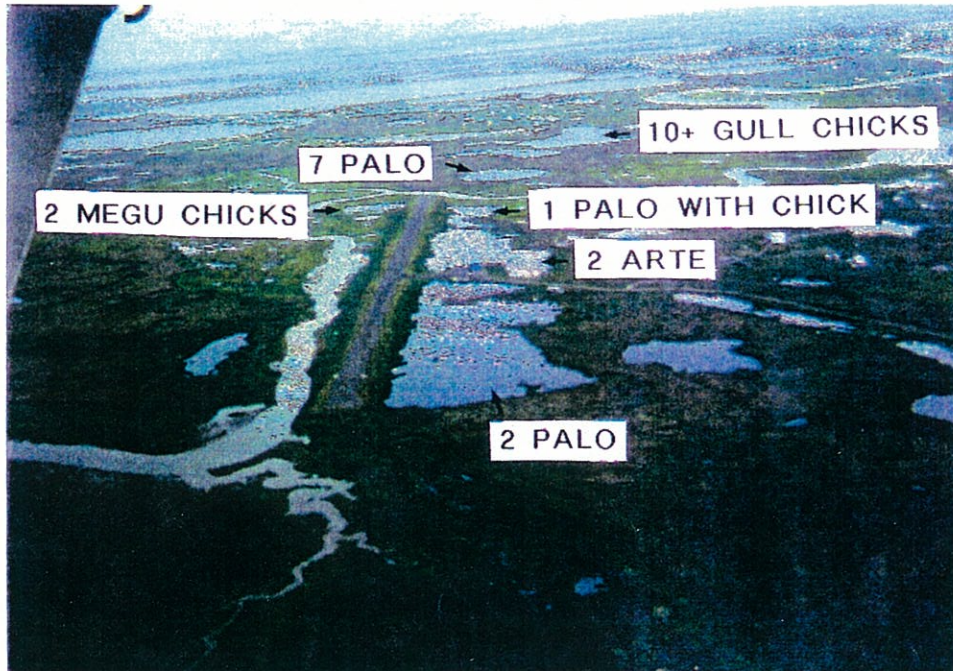


Figure 2. Locations of waterbodies used by Pacific loons (PALO), arctic terns (ATRE), and mew (MEGU) and other gulls, Kwigillingok, Alaska, 29 July 1993.





Figure 3. Proposed runway extension, parking apron (approximate), and access road at Kwigillingok, Alaska.



Figure 4. Proposed runway extension, looking from the end of the existing runway, Kwigillingok, Alaska.





Figure 5. Diverse wetland vegetation in the area proposed to be filled for the runway extension, Kwigillingok, Alaska, 29 July 1993.



Figure 6. Diverse wetland vegetation in the area proposed to be filled for the runway extension, Kwigillingok, Alaska, 29 July 1993.

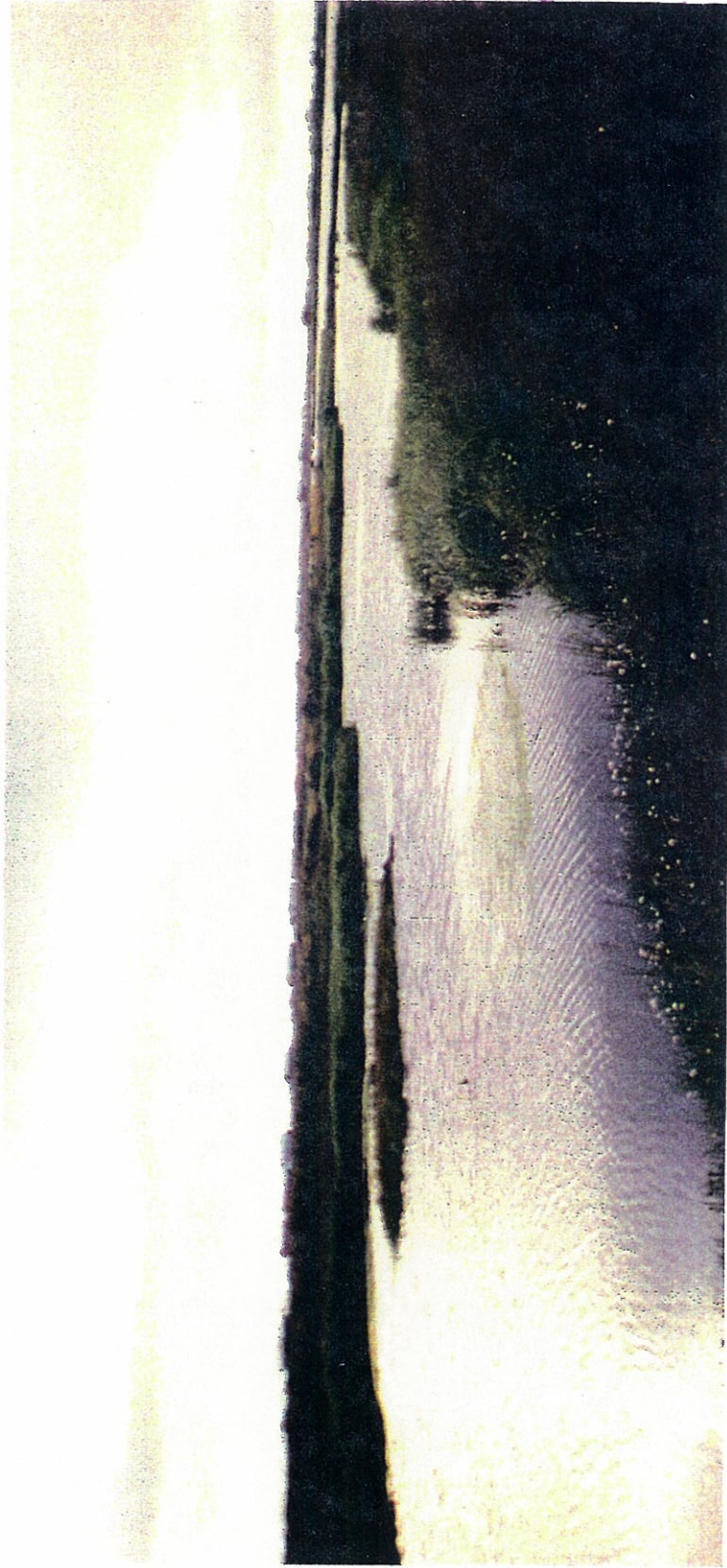




Figure 7. Diverse wetland vegetation in the area proposed to be filled (foreground) for the runway extension, Kwigillingok, Alaska, 29 July 1993.



Figure 8. The active channel and adjacent habitat in the drained lake basin provided foraging habitat (indicated by arrows) for red-throated loons and shorebirds, Kwigillingok, Alaska, 29 July 1993.



C-9

Figure 9. Pond proposed to be crossed by the new access road to the parking apron, Kwigillingok, Alaska.



Birds Observed at Kwigillingok, Alaska, 29 July 1993

Trip Report and Species Accounts

By

Michael R. North

U.S. Fish and Wildlife Service  
Anchorage Field Office, Ecological Services  
605 W. 4th Avenue  
Anchorage, Alaska 99516

August 1993



1880

On 29 July 1993 I accompanied Alaska Department of Transportation personnel on a site inspection of a proposed expansion project at the Kwigillingok airport. Kwigillingok is located on the south coast of the Yukon-Kuskokwim Delta, about 38 km west of the mouth of the Kuskokwim River. We were at the village and airport from 10:30-13:15. The tide was high upon our arrival, and was ebbing when we departed.

The airport lies 0.75 km northwest of Kwigillingok in a north-south orientation. The north end of the runway abuts a tidal slough and the south end abuts a drained lake basin. Some ADOT personnel felt the lake was drained accidentally as a result of earlier airport construction. The habitat in the drained lake basin contains a mosaic of wetland species including at least four species of Carex, Juncus castaneus, Hippuris vulgaris, Calamagrostis canadensis, Poa sp., and Rhinanthus minor.

Three ponds lie in former borrow sites along the east side of the runway. One borrow site pond and two small natural ponds exist west of the north end of the runway. An active channel connecting the drained lake basin with the tidal slough parallels much of the runway on the west. The active channel takes a sharp turn to the west upon entering the drained lake basin. A small tidal tributary continues south 100-200 m, however. Aerial photography from 10 June 1983 shows this tidal tributary was only beginning to form then.

Heath tundra, dominated by Rubus chamaemorus, Ledum palustre, Empetrum nigrum, Vaccinium vitis-idaea, Eriophorum spp., and lichens, occurred between the airport and the village. Within the tundra were some saturated low lying areas containing Carex spp. The village is primarily situated on heath tundra, but within the village there are several high, tidally-influenced areas dominated by stunted graminoids which received extensive shorebird use.

#### Species Accounts

Common loon (Gavia immer). A flock of 5 common loons flew along the runway and over the drained lake basin towards the coast. Later two common loons giving the tremolo call flew past the airport.

Pacific loon (G. pacifica). One pair of Pacific loons occupied a pond adjacent to the runway and south of the parking apron, and another adult accompanied a chick on a pond east of the north end of the runway (Figure 1). A flock of 7 Pacific loons rested on a pond north of the runway and on the other side of a tidal slough.

Red-throated loon (G. stellata). A flock of 7 red-throated loons staged and foraged on the tidal slough channel within the drained lake basin southwest of the runway (Figure 2), and another 5-10 were seen flying over the area towards the ocean.

Green-winged teal (Anas crecca). One female flew past the airport.

Peregrine falcon (Falco peregrinus). One falcon was observed chasing dunlins (and catching one) in Kwigillingok. Based on the known range of the three subspecies in Alaska, the falcon was probably the endangered subspecies (P. f. anatum).

Long-billed dowitcher (Limnodromus scolopaceus). A flock of 150 was observed on exposed mud banks of the Kwigillingok River (Figure 3), and one was observed in the drained lake basin southwest of the airport runway. Two small flocks also flew over, accompanied by godwits.

Hudsonian godwit (Limosa haemastica). A positive identification was made of one individual flying through the area with long-billed dowitchers. Three other unidentified godwits flew overhead with a flock of dowitchers.

Greater yellowlegs (Tringa melanoleuca). A dispersed flock of 300 was observed feeding with dunlins in a tidally-influenced graminoid meadow and in a small pond in Kwigillingik (Figure 3).

Dunlin (Calidris alpina). Large flocks, totalling 5700-8300 birds, were feeding in tidally-influenced graminoid meadows in Kwigillingik (Figures 3-4).

Western sandpiper (C. mauri). At least 300 western sandpipers were observed in small flocks flying past the end of the runway, in and flying over the drained lake basin (Figures 1-2), and in and flying over a tidally-influenced graminoid meadow east of the south end of the runway (Figure 5). None were noted among the flocks of dunlins.

Baird's sandpiper (C. bairdii). One bird was positively identified feeding along the intertidal channel in the drained lake basin.

Sanderling (C. alba). Two birds were observed feeding along the intertidal channel in the drained lake basin.

Arctic tern (Sterna paradisaea). Six to 10 birds were observed. One pair was observed sitting on an island in a pond along the runway (Figure 1), another pair was observed sitting on the edge of the runway fill, and a third pair was observed flying over heath tundra west of the runway.

Bonaparte's gull (Larus philadelphia). Two hatch-year birds were observed sitting on a pond in the village.

Mew gull (L. canus). Common. One or two pairs had at least 2 chicks in a borrow site pond west of the north end of the runway (Figure 1).

Glaucous gull (L. hyperboreus) and glaucous-winged gull (L. glaucescens). Glaucous gulls were positively identified, but glaucous-winged gulls were likely present also (Ernst 1988). The large-bodied gulls were very common, but concentrated on the east side of the Kwigillingok River. At least 10 unidentified gull chicks were observed on a pond that straddled sections 26 and 27, T. 3 S., R. 81 W., Seward Meridian, approximately 1 km north of the runway (Figure 1). Based on their large size, the chicks were probably glaucous or glaucous-winged gulls.

Parasitic jaeger (Stercorarius parasiticus). Three parasitic jaegers were observed hunting over the drained lake basin. One attempted to catch a long-billed dowitcher.

Cliff swallow (Hirundo pyrrhonota). Common, nesting on the maintenance building on the airport parking apron.

Yellow wagtail (Motacilla flava). Four birds in winter plumage were observed along the margins of the runway.

Common redpoll (Carduelis flammea). One individual was observed along the road to the airport.

Savannah sparrow (Passerculus sandwichensis). Very common, especially along the runway margins and in the introduced grasses planted for erosion control.

Lapland longspur (Calcarius lapponicus). One bird was observed along the road to the airport.

THE UNIVERSITY OF CHICAGO LIBRARY

**APPENDIX D**

**Permits and Certifications**

U.S. Army Corps of Engineers Section 404 Permit, dated May 17, 1995 ..... D-1

Alaska Department of Fish and Game Title 16 Permit, dated April 5, 1995 ..... D-15

Alaska Department of Governmental Coordination  
Coastal Zone Consistency Determination, dated April 5, 1995 ..... D-18

Alaska Department of Environmental Conservation  
Section 401 Certificate of Resonable Assurance, dated April 5, 1995 ..... D-23

Alaska Department of Environmental Conservation  
Air and Water Quality Certification of Reasonable Assurance per FAA Order 5050.4A;  
dated March 8, 1994 ..... D-26





REPLY TO  
ATTENTION OF:

DEPARTMENT OF THE ARMY  
U.S. ARMY ENGINEER DISTRICT, ALASKA  
P.O. BOX 898  
ANCHORAGE, ALASKA 99506-0898

RECEIVED

MAY 19 '95

MAY 17 1995

Regulatory Branch  
Project Evaluation Section - North  
2-920772

Ms. Laurie Mulcahy  
Alaska Department of Transportation  
and Public Facilities  
Post Office Box 196900  
Anchorage, Alaska 99519-6900

	COPY	ACTION
Prelim. Design & Environmental Section		
PD&E Engr.		
Project Mgr.	✓	✓
Locations		
Env. Team Leader	✓	✓
Staff	✓	✓
Project File	✓	✓
Central File	✓	✓

60118

Dear Ms. Mulcahy:

Enclosed is the signed Department of the Army permit, file number 2-920772, Kwigillingok River 1, authorizing the upgrade of the airport at Kwigillingok, Alaska. Also enclosed is a Notice of Authorization which should be posted in a prominent location near the authorized work.

If changes in the location or plans of the work are necessary for any reason, plans should be submitted to this office promptly. If the changes are unobjectionable, the approval required by law before construction is begun will be issued without delay.

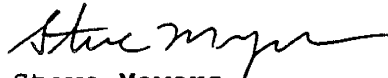
Nothing in this letter shall be construed as excusing you from compliance with other Federal, State, or local statutes, ordinances, or regulations which may affect the proposed work.

In an effort to determine the level of customer satisfaction with the processing of Department of the Army permit applications, the Corps of Engineers, Regulatory Branch asks that you take a few moments to provide us with any constructive comments you feel are appropriate by filling out the enclosed questionnaire. Our interest is to see if we need to improve our service to you, our customer, and how best to achieve these improvements. Additional comments may be provided through the use of an oral exit interview, which is available to you upon request. Your efforts and interest in evaluating the regulatory program are much appreciated.



Please contact me at 1-907-753-2716 toll free in Alaska at 1-800-478-2712, or by mail at the letterhead address, if you have questions.

Sincerely,



Steve Meyers  
Project Manager  
Project Evaluation Section - North

Enclosures



**This notice of authorization must be  
conspicuously displayed at the site of work.**

United States Army Corps of Engineers  
KWIGILLINGOK RIVER 1

MAY 17 1995  
19 \_\_\_\_\_

A permit to UPGRADE THE KWIGILLINGOK AIRPORT  
at KWIGILLINGOK, ALASKA  
ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
has been issued to \_\_\_\_\_ on MAY 17 1995  
Address of Permittee POST OFFICE BOX 196900, ANCHORAGE, ALASKA 99519-6900

Permit Number

2-920772

*Steve Meyers*

FOR: **District Commander**  
STEVE MEYERS

PROJECT MANAGER

PROJECT EVALUATION SECTION - NORTH

ENG FORM 4336, JUL 81 (33 CFR 320-330) EDITION OF JUL 70 MAY BE USED

(Proponent: CECW-O)

DEPARTMENT OF THE ARMY PERMIT

Permittee Alaska Department of Transportation & Public Facilities

Permit No. 2-920772, Kwigillingok River 1

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: To dredge approximately 192,575 cubic yards of material and discharge approximately 227,650 cubic yards of material to improve the Kwigillingok airport. The project will impact approximately 20.2 acres waters of the United States, including wetlands. Components of the proposed work include:

Material Site Excavation:	8.31 acres	dredge:	183,075 cy
(includes Fish Ditch connected to intertidal slough)		overburden fill:	39,075 cy

Continued on 1A

Project Location: Kwigillingok Airport near Kwigillingok, Alaska, in sections 25, 26, 27, and 34, T. 3 S., R. 81 W., Seward Meridian, USGS Quad Kuskokwim D-4.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on May 31, 1998. 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 good condition and 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.



Project Description Continued:

New Embankment (includes: Runway, Apron, Taxiway, Culverted Access Road, and 2 Wind Cones)	10.76 acres	fill: 178,850 cy
Stream Rechanneling (includes Armor Mat)	1.13 acres	dredge: 9,500 cy fill: 9,725 cy
TOTALS	20.20 acres	dredge: 192,575 cy fill: 227,650 cy

Note: The overburden will be stockpiled and replaced after excavation is completed. The totals include the placement of the surface course material. The purpose of the proposed project is to upgrade the existing airport at Kwigillingok, Alaska. The runway reconstruction, apron, taxiway and access road would bring the runway and apron in compliance with current airport standards. The stream realignment will eliminate erosion on the southwest side to the existing runway.

All work will be performed in accordance with the attached plans, 9 sheets, sheets 1-6 dated January 23, 1995, and sheets 7-9 dated February, 1995.

Special Conditions Continued:

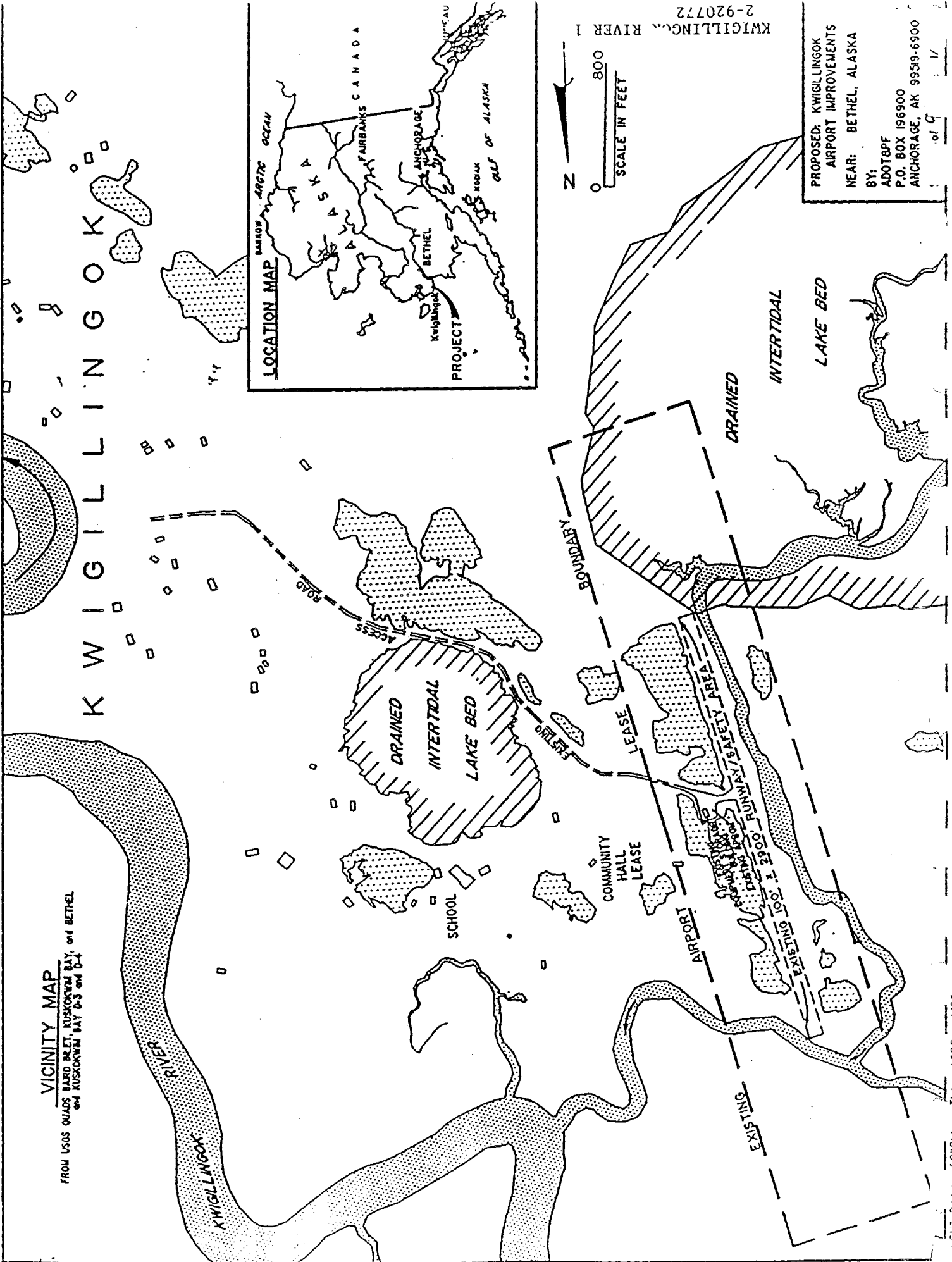
2. That all dredging operations shall be conducted from the bank.
3. That all in-water work shall occur during periods of low water.
4. To stabilize the new channel adjacent to the runway and to prevent erosion, the west side stream bank shall be recontoured, and planted during the growing season with native vegetation or replanted with original vegetative mats that have been properly stored to ensure viability.
5. That lease lots will be restricted to airport related uses only.

SPECIAL INFORMATION:

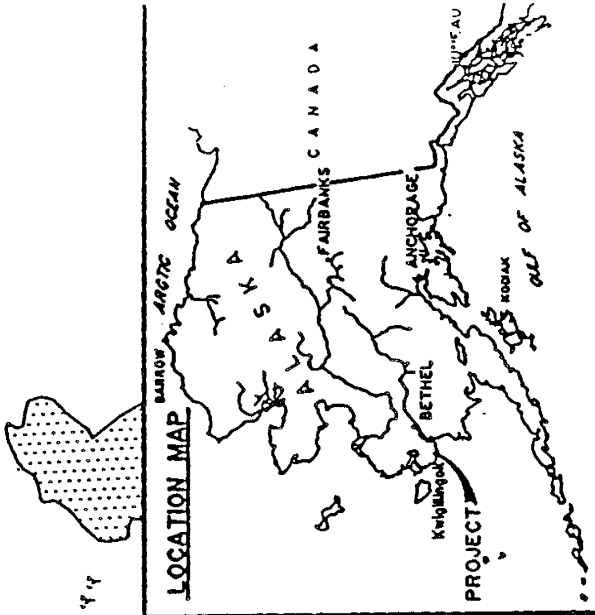
Any condition incorporated by reference into this permit by Special Condition or by General Condition 5, remains a condition of this permit unless expressly modified or deleted, in writing, by the District Engineer or his authorized representative.

**VICINITY MAP**

FROM USGS QUADS BARD BLET, KUSKOKWIM BAY, and BETHEL  
and KUSKOKWIM BAY D-3 and D-4



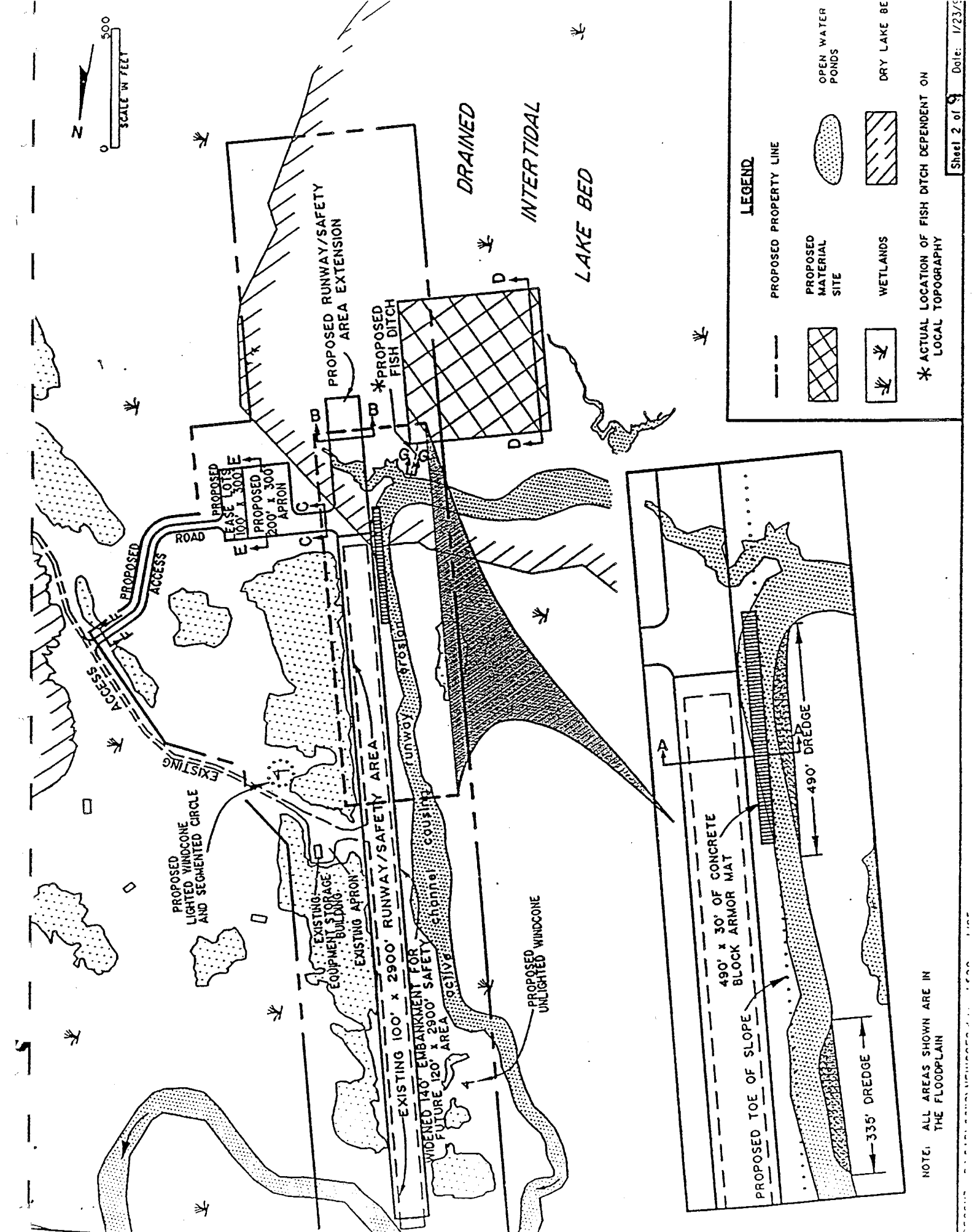
**LOCATION MAP**



K W I G I L L I N G O K

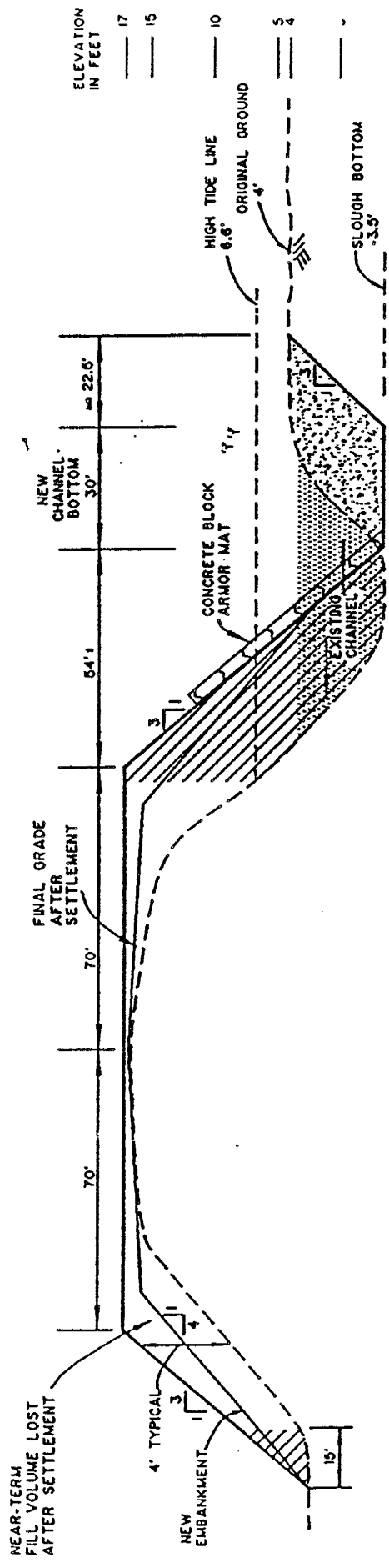
KWIGILLINGOK RIVER 1  
2-920772

PROPOSED: KWIGILLINGOK  
AIRPORT IMPROVEMENTS  
NEAR: BETHEL, ALASKA  
BY: ADOT&PF  
P.O. BOX 196900  
ANCHORAGE, AK 99519-6900



NOTE: ALL AREAS SHOWN ARE IN THE FLOODPLAIN



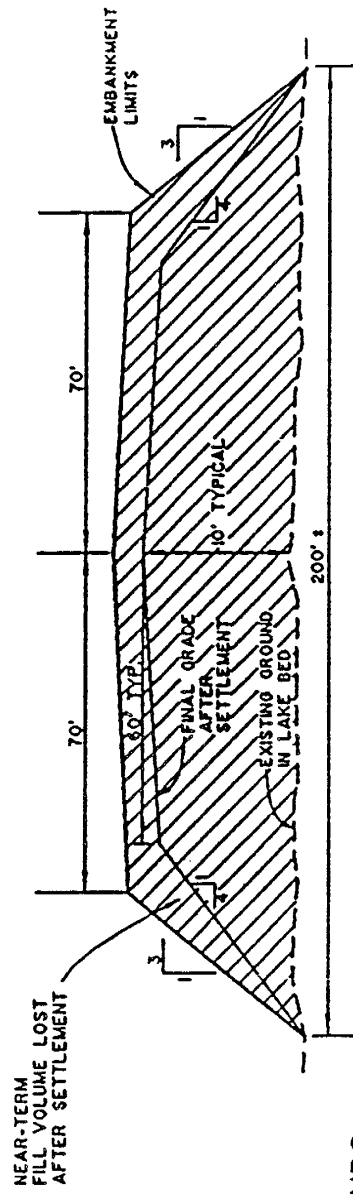


SECTION A - A

EXISTING RUNWAY WIDENING AND STREAM RECHANNELIZATION

HORIZONTAL SCALE 1" = 40'

VERTICAL SCALE EXAGGERATED



EXCAVATION IN WETLANDS

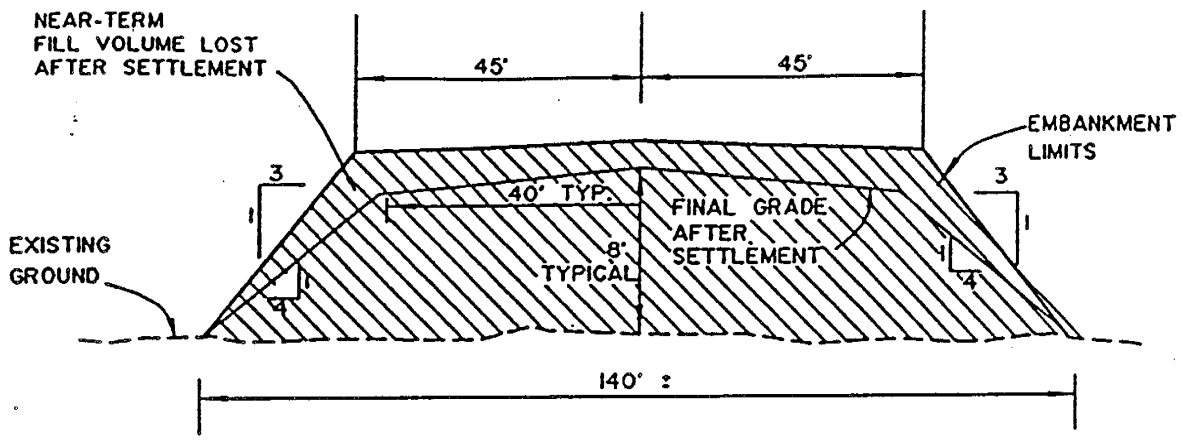
FILL IN WETLANDS

SECTION B - B

EXISTING RUNWAY EXTENSION EMBANKMENT

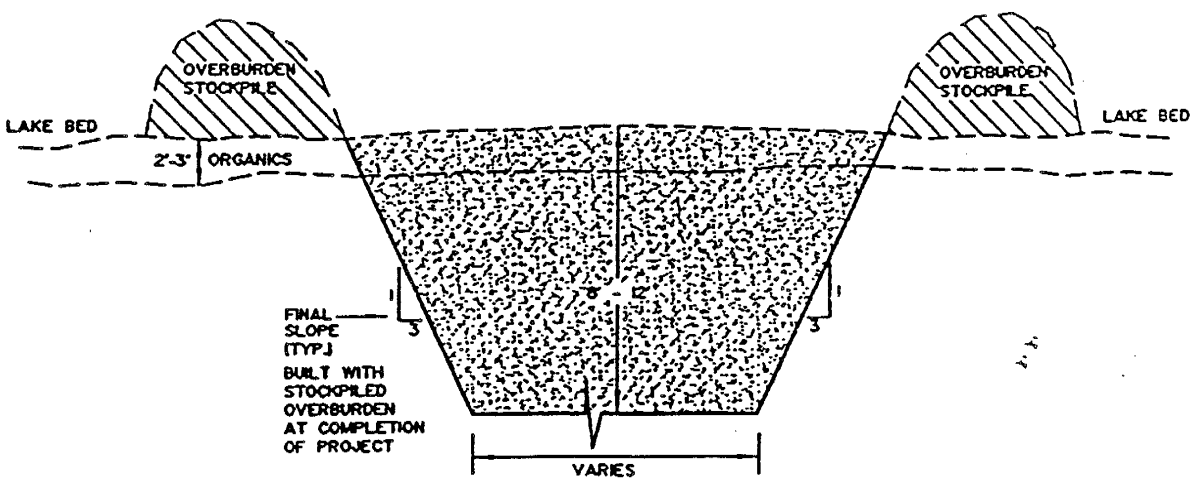
HORIZONTAL SCALE 1" = 40'

VERTICAL SCALE EXAGGERATED



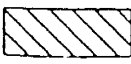
**SECTION C - C**  
**TAXIWAY EMBANKMENT**  
 HORIZONTAL SCALE 1" = 30'  
 VERTICAL SCALE EXAGGERATED

 FILL IN WETLANDS

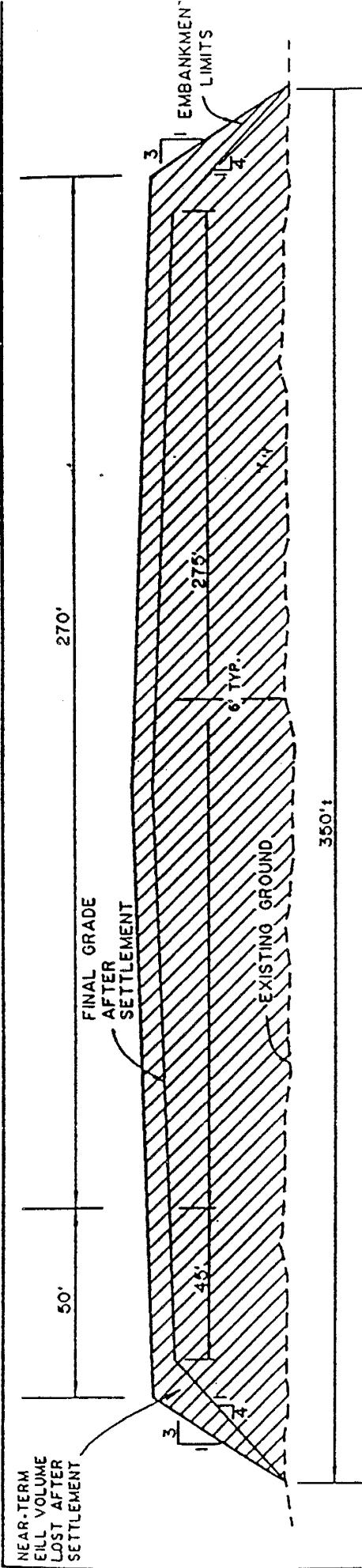


**SECTION D - D**  
**BORROW AREA TYPICAL SECTION**  
 HORIZONTAL SCALE 1" = 40'  
 VERTICAL SCALE EXAGGERATED

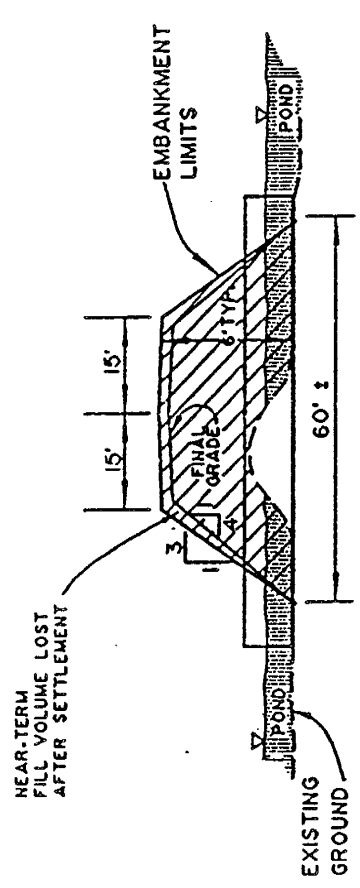
 EXCAVATION IN WETLANDS

 FILL IN WETLANDS

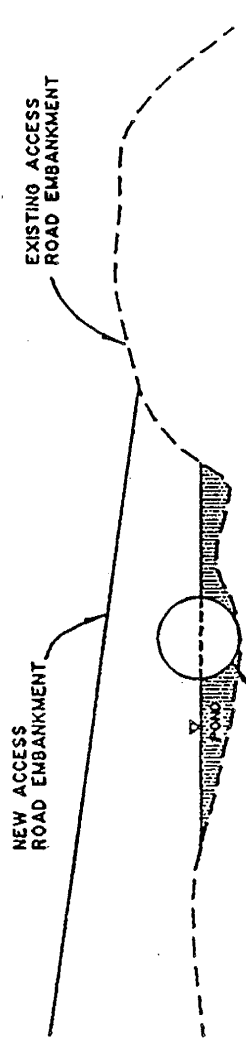
**D-11**



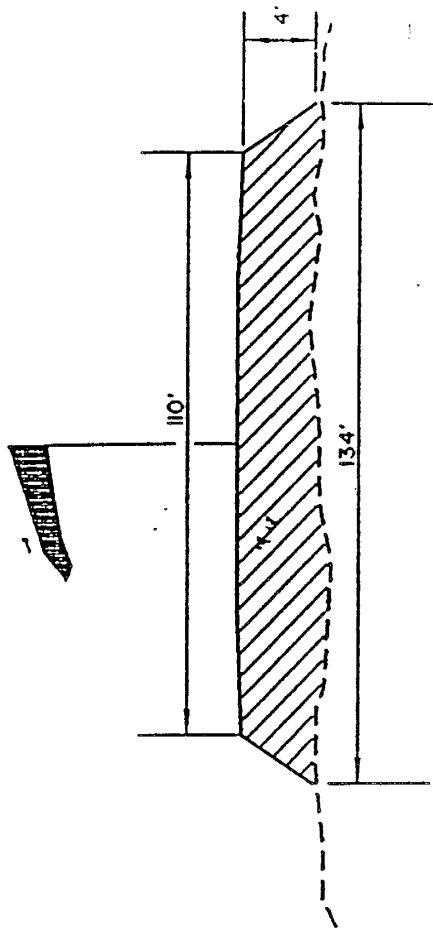
**SECTION E - E**  
**APRON AND LEASE LOT EMBANKMENT**  
 HORIZONTAL SCALE 1" = 40'  
 VERTICAL SCALE EXAGGERATED



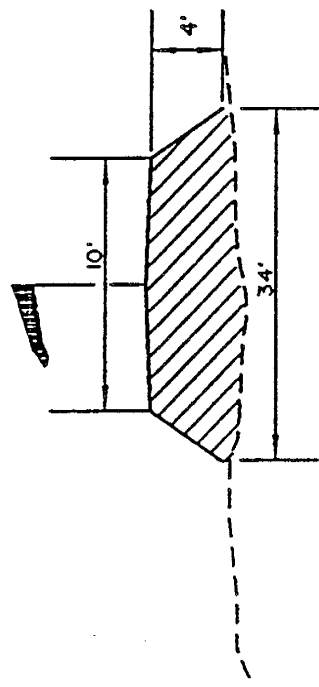
**SECTION F - F**  
**ACCESS ROAD TYPICAL SECTION (with culvert)**  
 HORIZONTAL SCALE 1" = 30'  
 VERTICAL SCALE EXAGGERATED



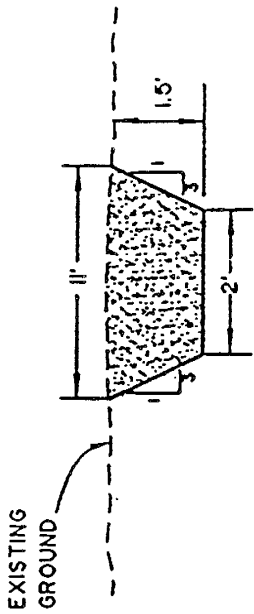
FILL IN WETLANDS



LIGHTED WINDCONE  
DIMENSIONS AS SHOWN



UNLIGHTED WINDCONE  
DIMENSIONS AS SHOWN



SECTION G - G

FISH DITCH  
DIMENSIONS AS SHOWN

DREGGED MATERIAL WILL BE SIDECAST

-  EXCAVATION IN WETLANDS
-  FILL IN WETLANDS

**DEPARTMENT OF FISH AND GAME**  
**HABITAT AND RESTORATION DIVISION**

333 RASPBERRY ROAD  
 ANCHORAGE, ALASKA 99518-1599  
 PHONE: (907) 344-0541

RECEIVED

FISH HABITAT PERMIT FG 95-II-0095

APR 6 '95

ISSUED: April 5, 1995  
 EXPIRES: December 31, 1997

Ms. Laurie Mulcahy  
 Alaska Dept. of Transportation  
 and Public Facilities  
 Post Office Box 196900  
 Anchorage, Alaska 99519-6900

	COPY	ACTION
Prelim. Design & Environmental Section		
PD&E Engr.		
Project Manager		/
Locations		
Env. Team Leader		/
Staff	LM	/
Project File		/
Central File		/

Dear Ms. Mulcahy:

Re: Channel Modification  
 Unnamed Stream adjacent to Kwigillingok Airstrip  
 Sections 27 and 34, T. 3 S., R. 81 W., S.M.  
 SID AK9502-04AA; COE No. 2-950722; Kwigillingok River 1

6018

Pursuant to AS 16.05.840, the Alaska Department of Fish and Game (ADF&G) has reviewed your proposal to improve the airport facilities at the referenced location. The project entails lengthening and widening the existing runway, increasing the size of the existing apron, eventually adding a lease lot area to the airstrip, and constructing an access road. In total, approximately 20.2 acres of wetlands will be impacted by dredging and filling activities that will be conducted during the winter months. About 8.31 acres will be disturbed during overburden storage and borrow site dredging of 183,075 cubic yards (cy) of material. An outlet channel from the borrow site to the unnamed stream flowing along the west side of the runway will be installed to allow for unobstructed fish movements in case flood tides place fish in the materials pit. About 178,850 cy of fill will be placed in 10.76 acres of wetlands during runway, taxiway, apron, and road construction. A total of about 1.13 acres of an unnamed stream running along the west side of the airstrip will be affected by the runway expansion. The impacts to the stream will occur when the west side of the runway is widened and armored by placing 9,500 cy of fill and armor form matting along 825 lineal feet of the east stream bank. In addition, to prevent hydrologic changes to the stream channel, the west stream bank opposite the fill and armor form work is to be excavated and widened to compensate for the narrowed stream channel. To accomplish this goal, about 9,725 cy will be dredged during low water periods while the site is dewatered. The dredged material will be used as fill for the runway. We understand that the project is to be conducted during the winter months while the waterbody is frozen. Explosives will not be used to mine the material. The project was reviewed for consistency with the

standards of the Alaska Coastal Management Program (ACMP) and a final consistency determination was received from the Division of Governmental Coordination on April 4, 1995.

The Kwigillingok River has been specified as being important for the spawning, rearing, or migration of anadromous whitefish pursuant to AS 16.05.870(a). The proposed project is located adjacent to a second order tributary of the river. The unnamed stream flowing along the west side of the runway supports resident species of fish. As an advisory note the project package does not identify the site to be used as the materials source for the surface capping material on the runway. Neither does the package identify the site and means of off-loading equipment that will be used during project construction. In the event that structures (e.g., barge off-loading ramps, bulkheads, ice roads, ice bridges, etc.) are to be placed below the ordinary high water level of the Kwigillingok River or other anadromous fish bearing waters during project mobilization and demobilization or if the gravel for the surface cap will be mined from an anadromous fish stream, a Fish Habitat Permit issued by the ADF&G would be required.

In accordance with AS 16.05.840, project approval is hereby given. No stipulations are required if conducted according to the project plans submitted for review as summarized in paragraph one above.

In addition, the following stipulations were adopted pursuant to 6 AAC 50 (Project Consistency with the ACMP) and are necessary to ensure that your project is consistent with the ACMP.

1. To stabilize the new channel adjacent to the runway and to prevent erosion, the west side stream bank shall be recontoured, and planted during the growing season with native vegetation or replanted with original vegetative mats that have been properly stored to ensure viability.
2. Material such as sorbent pads or booms are to be available on-site to contain and clean up any petroleum product spilled as a result of construction activity.

The permittee is responsible for the actions of contractors, agents, or other persons who perform work to accomplish the approved plan. For any activity that significantly deviates from the approved plan, the permittee shall notify the ADF&G, Habitat and Restoration Division, and obtain written approval in the form of a permit amendment before beginning the activity. Any action taken by the permittee or an agent of the permittee that increases the project's overall scope or that negates, alters, or minimizes the intent or effectiveness of any stipulation contained in this permit will be deemed a significant deviation from the approved plan. The final determination as to the significance of any deviation and the need for a permit amendment is the responsibility of the ADF&G, Habitat and Restoration Division. Therefore, it is recommended that ADF&G, Habitat and Restoration Division, be consulted immediately when a deviation from the approved plan is being considered.

This letter constitutes a permit issued under the authority of AS 16.05.840 and 6 AAC 50. This permit must be retained on site during stream dredging activity. Please be advised that this approval does not relieve you of the responsibility for securing other permits: state, federal, or local.

This permit provides reasonable notice from the commissioner that failure to meet its terms and conditions constitutes violation of AS 16.05.860; no separate notice under AS 16.05.860 is required before citation for violation of AS 16.05.840 can occur.

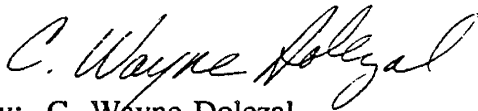
Pursuant to 6 AAC 80.010 (b), the conditions of this permit are consistent with the Standards of the Alaska Coastal Management Program and the Ceñaliulriit Coastal Management Program.

In addition to the penalties provided by law, this permit may be terminated or revoked for failure to comply with its provisions or failure to comply with applicable statutes and regulations. The department reserves the right to require mitigation measures to correct disruption to fish and game created by the project and which were a direct result of the failure to comply with this permit or any applicable law.

The recipient of this permit (the permittee) shall indemnify, save harmless, and defend the department, its agents, and its employees from any and all claims, actions or liabilities for injuries or damages sustained by any person or property arising directly or indirectly from permitted activities or the permittee's performance under this permit. However, this provision has no effect if, and only if, the sole proximate cause of the injury is the department's negligence.

Sincerely,

David Benton, Acting Deputy Commissioner



By: C. Wayne Dolezal  
Habitat Biologist  
Habitat and Restoration Division  
(907) 267-2284

cc: D. Kohler, COE  
L. Bullis, DNR/DL  
K. Francisco, ADF&G  
J. Hanson, NMFS  
M. North, USFWS  
C. Denny, Ceñaliulriit CRSA

**OFFICE OF THE GOVERNOR**  
**OFFICE OF MANAGEMENT AND BUDGET**  
**DIVISION OF GOVERNMENTAL COORDINATION**

**SOUTHCENTRAL REGIONAL OFFICE**  
 3601 "C" STREET, SUITE 370  
 ANCHORAGE, ALASKA 99503-5930  
 PH: (907) 561-6131/FAX: (907) 561-6134

**CENTRAL OFFICE**  
 P.O. BOX 110030  
 JUNEAU, ALASKA 99811-0300  
 PH: (907) 465-3562/FAX: (907) 465-3075

**PIPELINE COORDINATOR'S OFFICE**  
 411 WEST 4TH AVENUE, SUITE 201  
 ANCHORAGE, ALASKA 99501-2343  
 PH: (907) 278-8594/FAX: (907) 272-0690

APR 5 '95

April 4, 1995

Laurie Mulcahy  
 Alaska Department of Transportation  
 and Public Facilities  
 PO Box 196900  
 Anchorage, AK 99519-6900

Dear Ms. Mulcahy:

Subject: FINAL CONSISTENCY DETERMINATION  
Kwigillingok River 1  
 STATE I.D. NUMBER AK 9502-04AA

	COPY	ACTION
Prelim. Design & Environmental Section		
PD&E Engr.		
Project Manager		/
Locations		
Env. Team Leader		/
Staff	LM	/
	CS	/
Project File		/
Central File		/

The Division of Governmental Coordination (DGC) has completed coordinating the State's review of your project for consistency with the Alaska Coastal Management Program (ACMP). On March 24, 1995 you were issued a proposed consistency finding for your project. You requested conference with the Alaska Department of Fish and Game on March 28, 1995 to change the wording for stipulation #1. I was informed on April 3, 1995 that you had worked out the wording and I could complete the final determination. The project is to dredge approximately 192,575 cubic yards (cy) of material and discharge approximately 227,650 cy of material to improve the airport at Kwigillingok, Alaska. The project will impact approximately 20.20 acres of waters of the U.S., including wetlands.

Components of the proposed work include:

- |   |             |                  |            |
|---|-------------|------------------|------------|
| 1) Material Site Excavation<br>(includes fish ditch connected to intertidal slough)                 | 8.31 acres  | Dredge:          | 183,075 cy |
|   |             | Overburden Fill: | 39,075 cy  |
| 2) New Embankment:<br>(includes: runway, apron, taxiway, culverted access road, and two wind cones) | 10.76 acres | Fill:            | 178,850 cy |
| 3) Stream Rechanneling<br>(includes armor mat)  | 1.13 acres  | Dredge:          | 9,500 cy   |
|   |             | Fill:            | 9,725 cy   |





**RATIONALE:** This stipulation is necessary to prevent erosion and to prevent degradation of water quality.

2. Material such as sorbent pads or booms are to be available on-site to contain and clean up any fuel spilled as a result of construction activity.

**RATIONALE:** This stipulation is necessary to protect against the destruction of important habitat by the accidental discharge of a toxic material.

These stipulations will be carried on the DFG Fish Habitat Permit and the DEC Certificate of Reasonable Assurance.

These modifications are necessary to ensure consistency with the Habitat Standard of the ACMP (6 AAC 80.130) and Standard 8.9 of the Cenaliulriit Coastal Management Program.

As provided under 15 CFR 930.64(c), federal authorization of your project will be made with the full understanding that your original project proposal has been modified as described above.

If changes to the approved project are proposed prior to or during its siting, construction, or operation, you are required to contact this office immediately to determine if further review and approval of the revised project is necessary.

The State reserves the right to enforce compliance with this final consistency finding if the project is changed in any significant way, or if the actual use differs from the approved use contained in the project description. If appropriate, the State may amend the State approvals listed in this final consistency finding.

Other Concerns/Advisories:

DFG advises that the project package does not identify the site to be used as the materials source for the surface capping material on the runway. Neither does the package identify the site and means of off loading equipment that will be used during project construction. In the event that structures (e.g., barge off loading ramps, bulkheads, ice roads, ice bridges, etc.) are to be placed below the ordinary high water level of the Kwigillingok River or other anadromous fish bearing waters during project mobilization and demobilization, or if the gravel for the surface cap will be mined from an anadromous fish stream, a Fish Habitat Permit issued by DFG would be required.

DEC is advising you of the following non-ACMP requirement: The proposed airport lease lots shall not be leased to the public prior to DEC subdivision approval for said lot development. Contact the DEC Bethel District Office, phone 907-543-3215, for said approval.

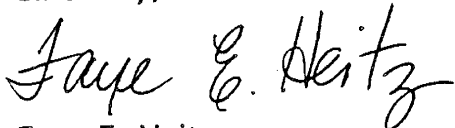
If cultural or paleontological resources are discovered as a result of this activity, we request that work which would disturb such resources be stopped and that the State Historic Preservation Office (762-2626) and the U.S. Army Corps of Engineers (COE) (753-2712) be contacted immediately so that consultation per section 106 of the National Historic Preservation Act may proceed.

Please be advised that although the State has found your project consistent with the ACMP, based on your project description and any stipulations contained herein, you are still required to meet all applicable State and federal laws and regulations. Your consistency determination may include reference to specific laws and regulations, but this in no way precludes your responsibility to comply with other applicable laws and regulations.

By a copy of this letter we are informing the COE of our determination.

If you have questions regarding this determination, please contact me at 561-6131.

Sincerely,



Faye E. Heitz  
Project Review Coordinator

cc: Wayne Dolezal, DFG  
Tim Smith, DNR, SHPO  
Bill Keller, COE

Gary Saupe, DEC  
Larry Bullis, DNR, DOL

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## STATE OF ALASKA

TONY KNOWLES, GOVERNOR

## OFFICE OF THE GOVERNOR

OFFICE OF MANAGEMENT AND BUDGET  
DIVISION OF GOVERNMENTAL COORDINATION

SOUTH CENTRAL REGIONAL OFFICE  
3801 "C" STREET, SUITE 370  
ANCHORAGE, ALASKA 99503-5930  
PH: (907) 561-6131/FAX: (907) 561-6134

CENTRAL OFFICE  
P.O. BOX 110090  
JUNEAU, ALASKA 99811-0300  
PH: (907) 485-3682/FAX: (907) 485-3075

PIPELINE COORDINATOR'S OFFICE  
411 WEST 4TH AVENUE, SUITE 2C  
ANCHORAGE, ALASKA 99501-2343  
PH: (907) 278-8594/FAX: (907) 272-0880

April 6, 1995

Laurie Mulcahy  
Alaska Department of Transportation  
and Public Facilities  
PO Box 196900  
Anchorage, AK 99519-6900

Dear Ms. Mulcahy:

Subject: Rewording of Stipulations #1 and #2  
Kwigillingok River 1  
STATE I.D. NUMBER AK 9502-04AA

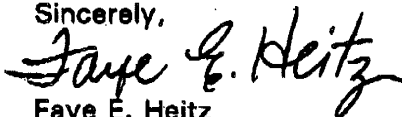
This letter pertains to your verbal request as of April 5, 1995 to re-word conditions #1 and #2 listed on the final consistency determination that was issued on April 4, 1995. After discussing your request with the Alaska Department of Fish and Game, I have changed the wording of the stipulations as listed below:

**#1. To stabilize the new channel adjacent to the runway and to prevent erosion, the west side stream bank shall be recontoured, and planted during the growing season with native vegetation or replanted with original vegetative mats that have been properly stored to ensure viability.**

**#2. Material such as sorbent pads or booms are to be available on-site to contain and clean up any petroleum product spilled as a result of construction activity.**

Thank you for your cooperation with the Alaska Coastal Management Program.

Sincerely,



Faye E. Heitz  
Project Review Coordinator

cc: Wayne Dolezal, DFG  
Tim Smith, DNR, SHPO  
Bill Keller, COE

Gary Saupe, DEC  
Larry Bullis, DNR, DOL

**DEPT. OF ENVIRONMENTAL CONSERVATION**

SOUTHCENTRAL REGIONAL OFFICE  
 3601 C ST., SUITE 1350  
 ANCHORAGE, AK 99503

Telephone: (907) 563-6529  
 Fax: (907) 562-4026

RECEIVED

CERTIFIED MAIL  
 RETURN RECEIPT  
 REQUESTED P 521 090 380

APR 7 '95

April 5, 1995

Laurie Mulcahy  
 Dept. of Transportation & Public Facilities  
 P O BOX 196900  
 Anchorage, Alaska 99519-6900

Re: Kwigillingok River 1, NPACO No. 071-OYD-2-920772  
 State I.D. No. AK 9502-04AA

Dear Ms. Mulcahy:

	COPY	ACTION
Prelim. Design & Environmental Section		
PD&E Engr.		
Project File		
Locations		
Env. Team		
Staff		
Project File		
Central File		

60113

In accordance with Section 401 of the Clean Water Act of 1977 and provisions of the Alaska Water Quality Standards, the Department of Environmental Conservation is issuing the Certificate of Reasonable Assurance to excavate material for fill to improve the airstrip, rechannel a stream encroaching on the airstrip, and place armor matting along the stream bank to protect the airstrip from further eroding. The project is located at Kwigillingok, Alaska.

This department action represents only one element of the overall project level coastal management consistency determination issued by the Office of Management and Budget under AS 44.19 and 6 AAC 50.070.

Department of Environmental Conservation regulations provide that any person who disagrees with any portion of this decision, may request an adjudicatory hearing in accordance with 18 AAC 15.200-310. The request should be mailed to the Commissioner of the Alaska Department of Environmental Conservation, 410 Willoughby Ave, Suite 105, Juneau, AK 99801-1795 or delivered to his office. Please also send a copy of the request for hearing to the undersigned. Failure to submit a hearing request within thirty days of receipt of this letter shall constitute a waiver of that person's right to judicial review of this decision.

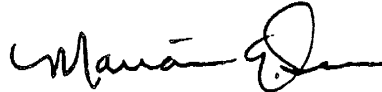
Ms. Laurie Mulcahy, DOT&PF  
Kwigillingok River 1

-2-

April 5, 1995

By copy of this letter, we are advising the Corps of Engineers and the Division of Governmental Coordination of our actions and enclosing a copy of the certification for their use.

Sincerely,



Marianne G. See  
Regional Administrator

GLS/jcb/(SCRO-wq\kwig-r.1)

Enclosure: Certificate of Reasonable Assurance

cc: William A Keller, Corps of Engineers (w/enc.)  
Larry Bullis, DNR/DOL, Anchorage (w/enc.)  
Faye E Heitz, DGC, Anchorage (w/enc.)  
EPA, AK Operations (w/enc.)  
Ann Rappoport, F&WS (w/enc.)  
Don McKay, ADF&G, Anchorage (w/enc.)  
Susan Braley, ADEC/Juneau (w/enc.)  
Bethel District Office, ADEC (w/enc.)  
Elaine Pistoresi, ADEC (w/enc.)

STATE OF ALASKA  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
CERTIFICATE OF REASONABLE ASSURANCE

A Certificate of Reasonable Assurance, as required by Section 401 of the Clean Water Act, has been requested by the Alaska Department of Transportation and Public Facilities, P O BOX 196900, Anchorage, Alaska 99519-6900, to reconstruct a runway with an apron, taxiway, and access road. In addition, the applicant will realign a stream west of runway and armor the stream banks to keep it from eroding the runway.

The proposed activity is located within Sections 26, 27, 34, & 35, T 3 S, R 81 W, Seward Meridian, Kwigillingok , Alaska.

Public notice of the application for this certification has been made in accordance with 18 AAC 15.180.

Water Quality Certification is required for the proposed activity because the activity will be authorized by a Corps of Engineers permit identified as Kwigillingok River 1, NPACO No. 071-OYD-2-920772 and a discharge may result from the proposed activity.

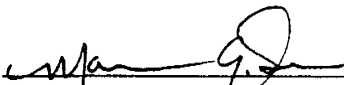
Having reviewed the application and comments received in response to the public notice, the Alaska Department of Environmental Conservation certifies that there is reasonable assurance that the proposed activity, as well as any discharge which may result, is in compliance with the requirements of Section 401 of the Clean Water Act which includes the Alaska Water Quality Standards, 18 AAC 70, and the Standards of the Alaska Coastal Management Program, 6 AAC 80., provided that the following stipulation is adhered to. The stipulation was adopted pursuant to 6 AAC 50 (Project Consistency with the Alaska Coastal Management Program) and is necessary to ensure that your project is consistent with the ACMP:

- 1) Material such as sorbent pads or booms are to be available on-site to contain and clean up any fuel spilled as a result of construction activity.
- 2) To stabilize the new channel adjacent to the runway and to prevent erosion, the west side stream bank shall be recontoured during the growing season and planted with native vegetation or replanted with original vegetation mats that have been properly stored to ensure viability.

The applicant should be advised of the following non-ACMP requirement:

The proposed airport lease lots shall not be leased to the public prior to ADEC subdivision approval for said lot development. Contact the ADEC Bethel District Office, phone 907-543-3215, for said approval.


5 April 1995  
Date

  
Marianne G. See  
Regional Administrator

**AIR AND WATER QUALITY CERTIFICATION**

In accordance with the 1982 Airport Act, "reasonable assurance" is hereby given that the proposed airports listed below will be located, designed, constructed and operated in compliance with the applicable air and water quality standards.

Bethel Airport Project No. 60043  
Kongiganek Airport Project No. 59794  
Kwigillingok Airport Project No. 60118  
New Koliganek Airport Project No. 59941  
Newtok Airport Project No. 58158  
Saint Paul Airport Project No. 50678  
Twin Hills Airport Project No. 59550

  
\_\_\_\_\_  
John D. Horn, P.E.  
Regional Director  
Central Region

Date 3/8/94

For

Commissioner Bruce Campbell  
Department of Transportation and Public Facilities

As Delegated By

Governor Walter J. Hickel  
December 27, 1993





**APPENDIX E**

**Best Management Practices**



## ADOT&PF BEST MANAGEMENT PRACTICES

1. Construction camps shall be located at upland sites whenever practical.
2. Materials stored for use in the construction project shall be stored at an upland site and out of floodplains.
3. Excavated materials shall be disposed of at upland sites unless otherwise approved.
4. Existing access trail, natural corridors, pipeline rights-of-way, and ditches shall be utilized whenever possible.
5. "Dry" dredging, leaving a dike or earth plug between open water and dredge area, is required.
6. Drainage of an area that is hydrologically linked with, or in close proximity to, other wetland areas shall be avoided if out of permitted area.
7. Diverted or construction-related water shall not be directed into receiving waters unless sediment retention structures and water quality control devices are used prior to discharge.
8. Channelization shall be restricted to existing stream channels or to existing drainage ditches unless otherwise shown on the plans.
9. Culverts shall be installed such that they do not create a barrier to fish in designated fish waters under all flow conditions.
10. The duration and area of exposed soil shall be minimized to reduce erosion potential.
11. Existing drainage patterns shall be retained by installing culverts or other drainage features.
12. Soils or fill shall not be placed near streambanks where it may be transported into the watercourse.
13. Where feasible, tracked vehicles shall be used rather than wheeled vehicles to reduce the impact on soils.
14. For projects within the Municipality of Anchorage, vegetation shall be retained along the shorelines of all waterbodies and ephemeral drainages per AMC 21.45.210. Hand clearing is recommended whenever possible to minimize loss of natural vegetation.

15. Runoff from the site after project completion shall have the same water quality as would have occurred following rainfall under preconstruction conditions.
16. Erosion and sedimentation control devices shall be installed between the construction area and water bodies, watercourses, and wetlands prior to grading, cutting, or filling.
17. Land cleared for development and upon which construction has not commenced shall be protected from erosion by appropriate techniques designed to stabilize soils and revegetate the area.
18. Limit equipment encroachment within the floodplain of any watercourse to that necessary to complete the project.
19. Do not service construction equipment within floodplains or runoff zones.
20. Do not wash equipment in water bodies or in floodplains.
21. Permanent and temporary storage of petroleum products shall be kept a minimum of 100 feet from wetlands or waterbodies. Spill containment and cleanup supplies shall be stored within a 15-minute transport time to spill sites.
22. Permanent and temporary storage of excavated or fill materials must be placed at least 25 feet from wetlands or waterbodies unless otherwise stipulated in the contract.
23. Stream crossings that require channel diversions shall use the culvert "flume" technique as developed by ADF&G, unless otherwise approved by the Engineer. Flumes will be armored at inlet and outlet with rock or sandbags and will include a culvert(s) large enough to pass peak normal flows. Stream channel restoration includes regrading banks, gravel lined channels, and revegetating banks (25 feet per side) with native materials. Erodible materials shall not be exposed to flowing water during construction.
24. Vegetation removal in wetlands, for the purpose of clearing only, should be accomplished by hand clearing rather than hydroaxing.

**APPENDIX F**

**Section 7 Biological Assessment**



# STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

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

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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



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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.

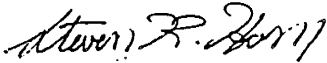
Recommendation 3: We will request that the ADOT&PF Project Engineer, the on-site State presence, notify the Preliminary Design and Environmental Section staff of any noted spectacled eiders or falcons. PD&E staff will pass this information to your office.

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

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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 overwintering. 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





