

ALASKA POWER AUTHORITY RESPONSE
TO AGENCY COMMENT ON LICENSE
APPLICATION; REFERENCE TO
COMMENT(S): I.92

SUSITNA HYDROELECTRIC PROJECT

WATANA AIRSTRIP

FEASIBILITY STUDY

PHASE I

TASK 39

SUSITNA HYDROELECTRIC PROJECT

WATANA AIRSTRIP FEASIBILITY STUDY PHASE I

TASK 39
SEPTEMBER 1983

HARZA-EBASCO
SUSITNA JOINT VENTURE

HARZA-EBASCO
Susitna Joint Venture
Document Number

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ALASKA POWER AUTHORITY

D. SITE INVESTIGATIONS

As part of the Phase I Feasibility Study, a site investigation was performed to determine soil properties and foundation requirements, borrow material sources along the proposed airstrip alignment, bearing capacity, drainage, preparation equipment requirements, and schedules of preparation costs.

This section of the report presents the results of the site investigation and laboratory testing program completed in early April 1983 at the Watana Camp Site as they relate to the conceptual planning activities for the proposed airstrip. It is not the detailed plan that is required for preparation of the airstrip. The detailed plan for the airstrip will be developed in Phase II of the program upon review and approval of this report. A temporary airstrip of 2500 feet will be the emphasis of this report with mention of extending the airstrip length to 4,000 and 6,000 feet as deemed necessary.

The airstrip location is as described by R & M Consultants in their October 1980 report, attached as Appendix A. This location has been chosen based on prevailing wind data that has been collected at the Watana Site. The prevailing winds are out of the northeast such that an orientation of north 60° east will provide good wind coverage under most weather conditions.

After determining the shortcut soil cement ratio, soil cement cylinders were prepared for wet-dry tests, freeze-thaw tests and compressive strength breaks at 7 days and 28 days.

The details of the trial mix program and test results are presented in Appendix D.

Evaluation of these test results indicates that the 7% soil cement mix selected by the short cut method is adequate to withstand continuous wetting and drying cycles as well as cycles of freezing and thawing. Strength increases with time to approximately 200 psi, providing a stable surfacing layer.

The results of tests performed at a lower 4% cement ratio show that 4% cement is not adequate to stabilize the site soils in question.

As a result of these test findings, a 7% soil cement ratio was used in the Cost Estimates presented later in this report.

4. RUNWAY EXPANSION

The 2500 foot airstrip described above is considered to be a temporary facility. A major expansion may be required before construction of the dam begins. To expand the airstrip to four thousand feet would require regrading the temporary airstrip from

station 0+00 to station 40+00. The soil between station 0+00 and 14+00 will require remedial treatment of a soft foundation area and would require the minor use of major earth moving equipment to excavate and regrade a constant slope airstrip.

If a still longer airstrip is required to support the camp operations and site construction activities, the east extension can be used, thus producing a runway of six thousand feet. This area of expansion would require major earthwork to take care of the very wet and soft area between station 41+50 and station 47+00. Also needed would be a borrow source of sand and gravel so that the airstrip can be adequately built to provide a good landing surface with free drainage.

5. COST AND SCHEDULE

Based upon the conceptual planning details previously discussed, preliminary cost and schedule estimates were developed. Estimates were based upon the preparation of two types of preliminary airstrip, both of which are 2,500 foot by 70 foot. The definition of each of these types of strips are defined below:

A. WINTER STRIP

The winter strip is proposed to be prepared to the standard dimensions without a runway surfacing. Preparation is based upon the availability of a D-7 Dozer, a one-yard frontend loader, a small

APPENDIX E

U.S. ARMY CORPS OF ENGINEERS APPLICATION FOR PERMIT



1983

US Army Corps
of Engineers

Alaska District
Regulatory Functions Branch
Pouch 898
Anchorage, Alaska 99506

Public Notice of Application for Permit

PUBLIC NOTICE DATE: August 17, 1983

EXPIRATION DATE: September 19, 1983

REFERENCE NUMBER: 071-OYD-4-830374

WATERWAY NUMBER: Susitna River 9

Interested parties are hereby notified that an application has been received for a Department of the Army permit for certain work in waters of the United States, as described below and shown on the attached plan.

APPLICANT: Alaska Power Authority, 334 West 5th Avenue, 2nd Floor, Anchorage, Alaska 99501

LOCATION: Wetlands adjacent to Susitna River, Alaska, T. 32 N., R. 5 E., S.M., sec. 27 and 28.

WORK: The applicant proposes to construct an airstrip by grading onsite material. Approximately 2' of peat [5,350 cubic yards (cy)] would be removed and stockpiled along the edge of the runway to be used during rehabilitation of the area after the project use. Approximately 4,620 cy of fill materials would be placed by grading within the project area. No additional fill material would be brought to the site. A filter fabric would be used as required to stabilize the foundation and facilitate drainage. The airstrip would be approximately 2,500' long, and 50' wide, with 2-foot-wide shoulders and a centerline grade close to 2% to utilize natural topography.

PURPOSE: To support field activities conducted to collect data during the Watana Dam Detailed Design Phase of the Susitna Hydroelectric Project.

ADDITIONAL INFORMATION: No refueling facilities or structures would be erected. All support activities would be conducted from Watana Base Camp located north of the proposed strip. Natural drainage is towards Tsusena Creek located over a mile to the west.

AUTHORITY: This permit will be issued or denied under the following authorities:

(X) Discharge dredged or fill material into waters of the United States.-
Section 404, Clean Water Act (33 U.S.C. 1344).

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

COASTAL ZONE MANAGEMENT ACT CERTIFICATION: Section 307(c)(3) of the Coastal Zone Management Act of 1972, as amended by 16 U.S.C. 1456(c)(3), requires the applicant to certify that the described activity affecting land or water uses in the Coastal Zone complies with the Alaska Coastal Management Program. A permit will not be issued until the Division of Policy Development and Planning has concurred with the applicant's certification.

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

CULTURAL RESOURCES: The latest version of the National Register of Historic Places has been consulted and no properties listed on or known to be eligible for inclusion on the Register are located in the permit area.

ENDANGERED SPECIES: Preliminarily, this described activity will not affect endangered species, or their critical habitat designated as endangered or threatened, under the Endangered Species Act of 1973 (87 Stat. 844). Formal consultation under Section 7 of the Act is not required for the described activity.

FLOOD PLAIN MANAGEMENT: Evaluation of the described activity will include conformance with appropriate State or local flood plain standards; consideration of alternative sites and methods of accomplishment; and weighing of the positive, concentrated and dispersed, and short and long-term impacts on the flood plain.

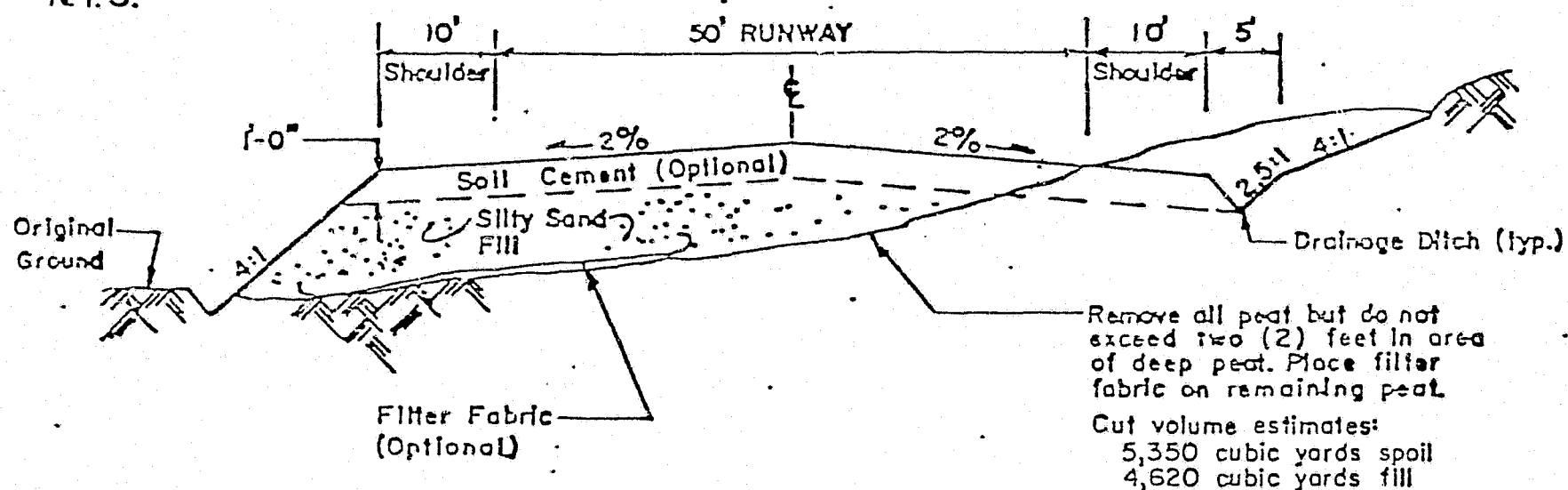
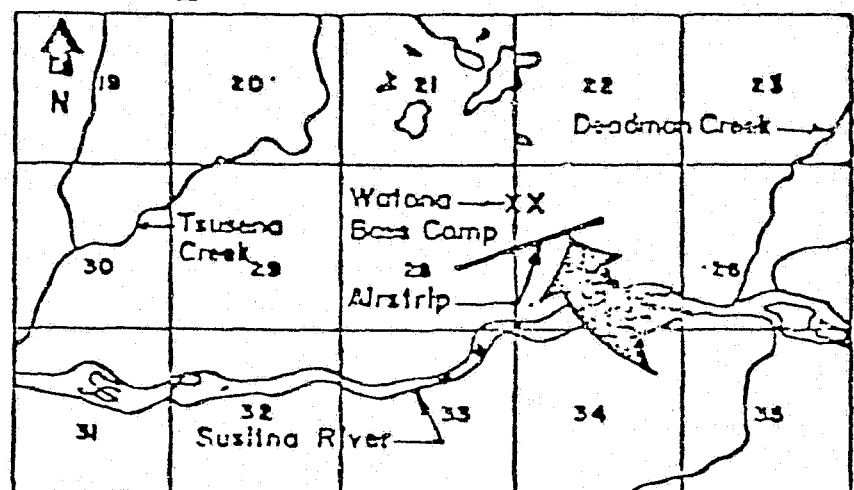
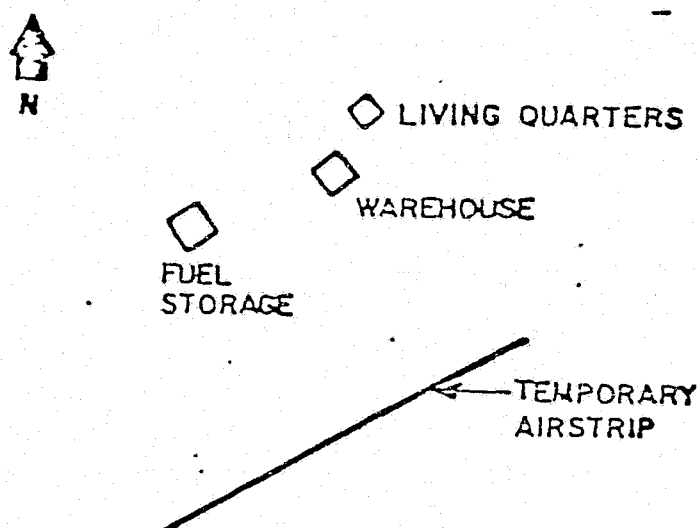
EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposals must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among these are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, and, in general, the needs and welfare of the people.

Comments on the described work, with the reference number, should reach this office no later than the expiration date of this Public Notice to become part of the record and be considered in the decision. If further information is desired concerning this notice, contact Georgina Akers at (907) 552-4942 or 279-4123.

A plan, Notice of Authorization for Certification of Consistency with the Alaska Coastal Management Program, and Notice of Authorization for State Water Quality Certification are attached to this Public Notice.

District Engineer
U.S. Army, Corps of Engineers

Attachments



NOTES:

1. Temporary airstrip will be 2500 feet long with a centerline grade as close to 2% as possible.
2. A minimum of two feet of peat will be removed and stockpiled along the edge of the runway for use during restoration upon airstrip closure.
3. Materials during construction will balance out and no additional borrow material is required. Filter fabric will be used as required.
4. Natural drainage is toward Tsusena Creek located over a mile to the west.
5. Watana Base Camp is located just north of the proposed site.
6. Construction is proposed for August 1983.

LAND OWNERSHIP:

1. Section 27, T32N, R5E, S.M. is owned by Knikatu, Inc., Box 2130, Wasilla, Alaska 99645.
2. Section 28, T32N, R5E, S.M. is held in interim conveyance for Knikatu, Inc., by Cook Inlet Region, Inc., 2525 C Street, Anchorage, Alaska 99503.

PROPOSED WATANA AIRSTRIP
SUSITNA HYDROELECTRIC PROJECT
Submitted by

SUSITNA
RIVER 9

STATE OF ALASKA

OFFICE OF THE GOVERNOR

DIVISION OF POLICY DEVELOPMENT AND PLANNING

BILL SHEFFIELD, GOVERNOR

Phone 465-3512

Pouch AD - Juneau 99811

STATE OF ALASKA

DIVISION OF POLICY DEVELOPMENT AND PLANNING

Notice of Application for Certification of Consistency with the Alaska Coastal Management Program

Notice is hereby given that a request is being filed with the Division of Policy Development and Planning for concurrence, as provided in Section 307 (c)(3) of the Coastal Zone Management Act of 1972, as amended [P.L. 94-370; 90 Stat. 1013; 16 U.S.C. 1456 (c)(3)], that the project described in the Corps of Engineers Public Notice No. 071-0YD-4-830374 will comply with the Alaska Coastal Management Program and that the project will be conducted in a manner consistent with that program.

Any person desiring to present views on considerations pertaining to the project's compliance or consistency with the Alaska Coastal Management Program may do so by providing his views in writing to the State Clearinghouse, Division of Policy Development and Planning, Office of the Governor, Pouch AD, Juneau, Alaska 99811, within 20 days of publication of this notice.

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

465-2601

BILL SHEFFIELD, GOVERNOR

FOUCH 0 - JUNE 1977

NOTICE OF APPLICATION FOR STATE WATER QUALITY CERTIFICATION

Any applicant for a Federal license or permit to conduct any activity which may result in any discharge into the navigable waters must first apply for and obtain certification from the Alaska Department of Environmental Conservation that any such discharge will comply with the Clean Water Act of 1977 (PL 95-217), the Alaska Water Quality Standards and other applicable State laws. By Agreement between the U.S. Army Corps of Engineers and the Alaska Department of Environmental Conservation application for a Department of the Army Permit may also serve as application for State Water Quality Certification when such certification is necessary.

Notice is hereby given that the application for a Department of the Army Permit described in the Corps of Engineers Public Notice No. 071-0YD-4-830374 also serves as application for State Water Quality Certification from the Alaska Department of Environmental Conservation, as provided in Section 401 of the Clean Water Act of 1977 (PL 95-217).

The Department will review the proposed activity to insure that any discharge to waters of the United States resulting from the referenced project will comply with the Clean Water Act of 1977 (PL 95-217) the Alaska Water Quality Standards and other applicable State laws.

Any person desiring to comment on the water quality impacts of the proposed project may do so by writing to:

Alaska Department of Environmental Conservation
Southcentral Regional Office
437 "E" Street, Second Floor
Anchorage, Alaska 99501
Telephone: 274-2533

within 30 days of publication of this notice.