

Hawken LLC

9720 Trappers Lane

Juneau, Alaska 99801

(907) 789-0740

hawken@mac.com

Date: September 11, 2009

Secretary

Federal Energy Regulatory Commission

888 First Street, NE. (PJ-12.2)

Washington, D>C> 20426

RE: Baranof Chinook Facility

Declaration of Intension

Dear Sir:

Enclosed please find an email transmission of the Declaration of Intention for the Baranof Chinook Facility for your consideration.

Thank you for your consideration in this matter.

Sincerely,

Dale Young

Hawken LLC

Declaration of Intention
for the
Baranof Chinook Facility

Submitted to

Federal Energy Regulatory Commission

September 11, 2009

Declaration of Intention

The location of the project:

State: Alaska

Town: Baranof

Street: N/A

County: Sitka Borough

Stream: USGS 15098000 Baranof R at Baranof AK

River Basin Name: Baranof Lake Watershed

Section 24, T55S, R66E, Copper River Meridian and

Section 19, T55S, R67E, Copper River Meridian

The exact name, business address, telephone number and E-Mail address of the applicant are: Hawken LLC, 9720 Trappers Lane, Juneau, Alaska 99801, (907) 789-0740, hawken@mac.com

The exact name, business address, telephone number and E-Mail address of the person authorized to act as the agent for the applicant are: Dale Young, 9720 Trappers Lane, Juneau, Alaska 99801, (907) 789-0740, hawken@mac.com

The exact name, business address, telephone number, FAX number and E-Mail address of the existing dam owner is: N/A

The exact name, business address, telephone number, FAX number and E-Mail address of the existing power house owner is: N/A

The exact name, business address, telephone number, FAX number and E-Mail address of the local electric utility company is: N/A

PROJECT DESCRIPTION (proposed):

This proposed hydro-electric power generation project is an integral part of a proposed three phase project to build and operate a salmon research, enhancement and rehabilitation facility. It will involve multiple intakes and multiple penstocks withdrawing water from two separate locations on the east end of Baranof Lake. Separate penstocks will deliver water to three separate locations for the three phases of the project. There will be shallow water intakes and deep water intakes in order to draw water of different temperatures from different thermal strata in the lake to control growth rates in the salmon. Initial conceptual design involves multiple penstocks in order to provide duplicity in the system for security and maintenance reasons. The project concept also involves multiple small turbine generators in banks rather than a single large generator.

The purpose of this project is to supply energy for the salmon facility and any associated support infrastructure. The project is in a remote location and is not connected to any power grid. This project proposes new facilities and new generators.

There are no proposed dams for the three phases of this project. It is possible that a simple low head dam may be desirable in the future when the project reaches full capacity, in order to increase the storage capacity of the lake for increased energy demands and fish rearing potential during the low flow winter months.

The Baranof Lake surface elevation is 145 feet. The lake is approximately 698 acres. The maximum operating pool level would be approximately 148 feet during seasonal high water, the average pool level would be 145 feet mid April through mid December and the minimum proposed operating pool level would be approximately 100 feet during a low flow seasonal winter

drawdown that could occur anytime from mid December through mid April.

Proposed Phase I will not involve any new turbines. Proposed Phase II will involve installation of a bank of 14 Cornel Pump Turbines with a normal combined output of 600 KW at 100 feet of gross head and a low head combined output of approximately 230 KW at 65 feet of gross head. Proposed Phase III, option one, will use a bank of 28 Cornell Pump Turbines with a normal combined output of 1200 KW at 100 feet of gross head and a low head combined output of approximately 460 KW at 65 feet of gross head. Proposed Phase III, option two, will use a pair of Francis turbines with a normal combined output of 1680 KW at 100 feet of gross head and a low head combined output of approximately 900 KW at 65 feet of gross head.

PROJECT HISTORY:

This project was originally proposed in 1976 by the Alaska Department of Fish and Game, but it was not built at that time due to lack of funding. It was subsequently proposed by Jerry McCutcheon in 1981, the Alaska Department of Fish and Game in 1985, Northern Southeast Aquaculture Association, Inc. in 1985 and Wilderness Acquisitions, Inc. in 1985. The available funding was used on other projects and none of these prospective proponents were able to build the project. The Alaska Department of Fish and Game and Northern Southeast Aquaculture Association have since decided against proceeding with their plans to construct the project. Currently, Hawken LLC hopes to build the project and make the aquaculture facilities available to the Sustainable Salmon Institute for rearing Chinook and Coho salmon and conducting research on salmonids.

JURISDICTIONAL ANALYSIS:

1. It is believed that the stream is not considered commercially navigable. It consists of approximately 1800 feet of rapids,

whitewater and waterfalls. It originates at the outlet of Baranof Lake and terminates in a 97 foot barrier waterfall directly into saltwater in Warm Springs Bay. There are no connecting highways. The waterfall is a barrier to marine navigation. Historically there was a sawmill located at the base of the falls that used the river source for hydro-power to run the sawmill. This sawmill was abandoned in the early 20th century. Natural forces have reclaimed the sawmill site, and there is no remaining evidence of this enterprise. The applicant does not know if logs were ever floated on the river. Log floating was unlikely for two reasons. The watershed and lake is in extremely steep, rocky alpine terrain with scattered alpine meadows, muskegs and jack pine. There is little or no marketable timber surrounding the lake. Much of the watershed is glacial and above the natural tree line. Therefore, if there were no harvestable trees in the watershed, it is unlikely that logs would have been floated down the river. Secondly, the severe rapids and waterfalls interspersed with large protruding rocks would have made it very difficult to float logs without dangerous log-jams. If any logs were able to make it down the river without jamming, they would have posed a significant hazard to the intake structure for the sawmill penstock. It is logical to assume the saw logs for the mill were floated into the Bay via saltwater and the mill was located near the waterfalls because of the hydro-power source.

2. The land and patented tidelands for Phase I and Phase II are privately owned, and the proposed penstock route is on easements from the City of Sitka and the State of Alaska. Hawken LLC has filed applications for these easements. Phase III is located entirely on State owned land. Hawken LLC has filed applications for land lease, tideland lease and easements from the State of Alaska. The project does not occupy any Federal property.

3. The project is in a remote area, and there is no Surplus Water or Government Dam involved.
4. The project does not affect Interstate Commerce. There is no power company involved. There is no power grid intertie. There is no existing power transmission infrastructure. There is no road.

PROFILE OF THE RIVER, DURATION CURVE AND HYDROGRAPH:

The proposed project will draw water from Baranof Lake. There is thirty years of water flow data spanning a period of sixty years for this watershed. The USGS number assigned to this data set is: USGS 15098000 Baranof R at Baranof AK. Baranof Lake has a surface area of 698 acres and the watershed spans 32 square miles. The Lake elevation is 145 feet. The Lake Depth is 300 feet. The USGS datum point is 140 feet. The 30 year average daily flow is 417 cfs.

Phase I and II combined, will draw up to 125 cfs from Baranof Lake. Phases I, II and III combined, will draw up to 250 cfs.

The waterfall at the terminus of the Baranof River is a barrier falls. Thus, there are no anadromous fish in the river. However, the waterfall is highly regarded for scenic value during the summer tourist season. For this reason, Hawken LLC chose to limit the scale of the project in order to maintain flow of water over the waterfall for the entire tourist season of May through October. After the Phase III portion of the project is completed, and during the winter months, the project will start to draw on the lake storage capacity. Attached is a graph of the average monthly flows for 30 years of USGS data. The graph shows low flows, mean flows, high flows overlaid on proposed maximum project flow demand.

The proposed project anticipates the possibility of a mitigation pipeline that would be capable of providing water to the waterfall on a year round basis even during a period of winter lake

drawdown if the public deems this important enough to spill stored water. This is not expected to be a significant issue because winter visitors are rare due to the severe winter climate and difficulty accessing the site. The local occupants are currently limited to two residents and two winter property caretakers. During the winter months, the waterfalls is shrouded with heavy deposits of ice and snow. The visual impression of a frozen waterfalls with a natural low water flow condition is very similar to a frozen waterfalls with no water flowing. It will resemble a small glacier with or without flowing water.

The proposed annual rule of operations for Phase I and Phase II is to operate the hydro and the salmon enhancement facility with no lake drawdown using a constant flow of 125 cfs. In the rare instances that winter water supply does not meet the project demand, water conservation measures will be used in an attempt to maintain flow through the river. If the condition exceeds the limits of conservation efforts, water may be supplied to the river directly upstream from the waterfalls by a mitigation pipeline supplied by the lake.

When Phase III is completed, water from all three phases combined, will be regulated to a constant flow of 250 cfs. During the low flow winter months the lake will go into a drawdown mode in order to meet the project demand. If it becomes economically or politically important for water to flow over the falls during the winter months, the water will be supplied from the lake via the mitigation pipeline.

MAPS, HYDROGRAPHS, PLANS & PROFILES (attached):

Project Area Map

Project Site Plan

USGS TOPO Map

Baranof River Profile

Phase I Pipeline Profile

Phase II Pipeline Profile

Phase III Pipeline Profile

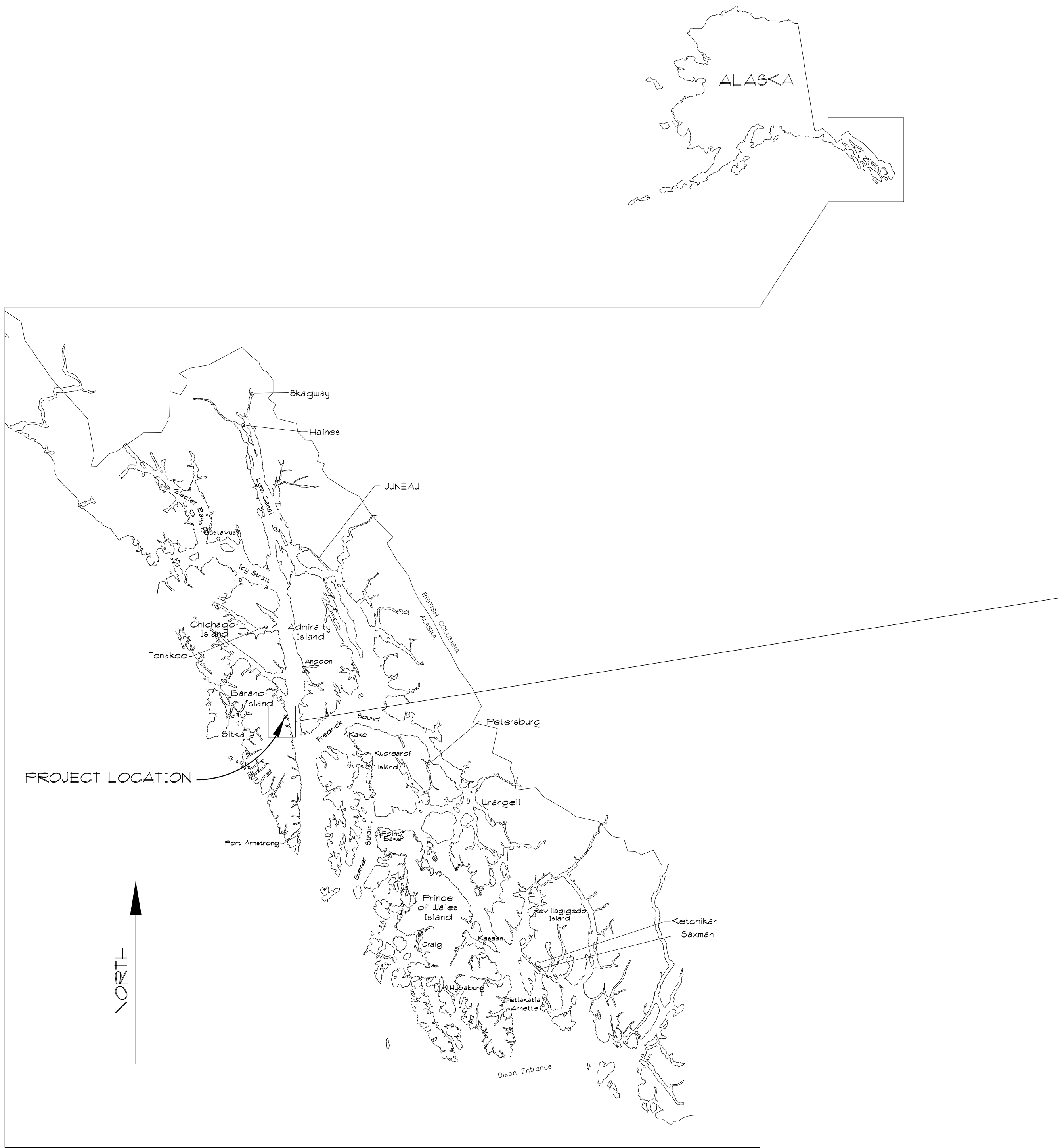
Baranof River 30 Year Average Monthly Hydrograph

SUSTAINABLE SALMON INSTITUTE SALMON ENHANCEMENT FACILITY

AT BARANOF LAKE, WARM SPRINGS BAY, ALASKA

SHEET INDEX:

- H-1: COVERSHEET
- H-2: PHASE I SITE PLAN
- H-3: PHASE I FACILITY PLAN
- H-4:



PROJECT LOCATION

PRELIMINARY

HAWKEN LLC

9720 Trappers Lane
Juneau, Alaska 99801
(907) 789-5070

REVISION #	DATE	RELEASED FOR	REVISION DESCRIPTION
1	X	X	X

SUSTAINABLE SALMON INSTITUTE

SALMON ENHANCEMENT FACILITY

PROJECT LOCATION
BARANOF WARM SPRINGS

DRAWN BY
SRY

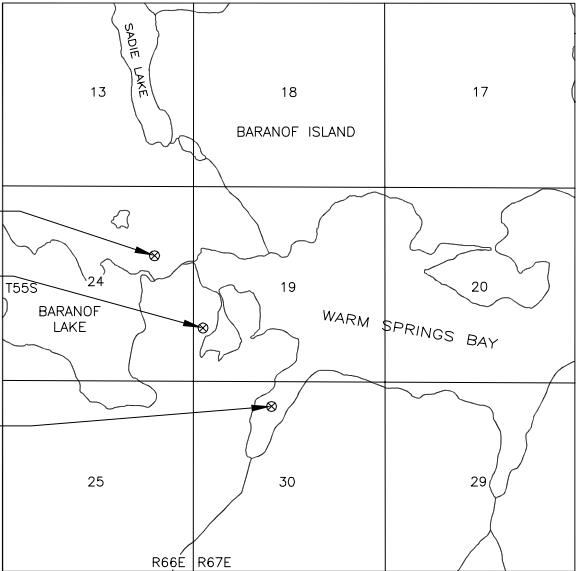
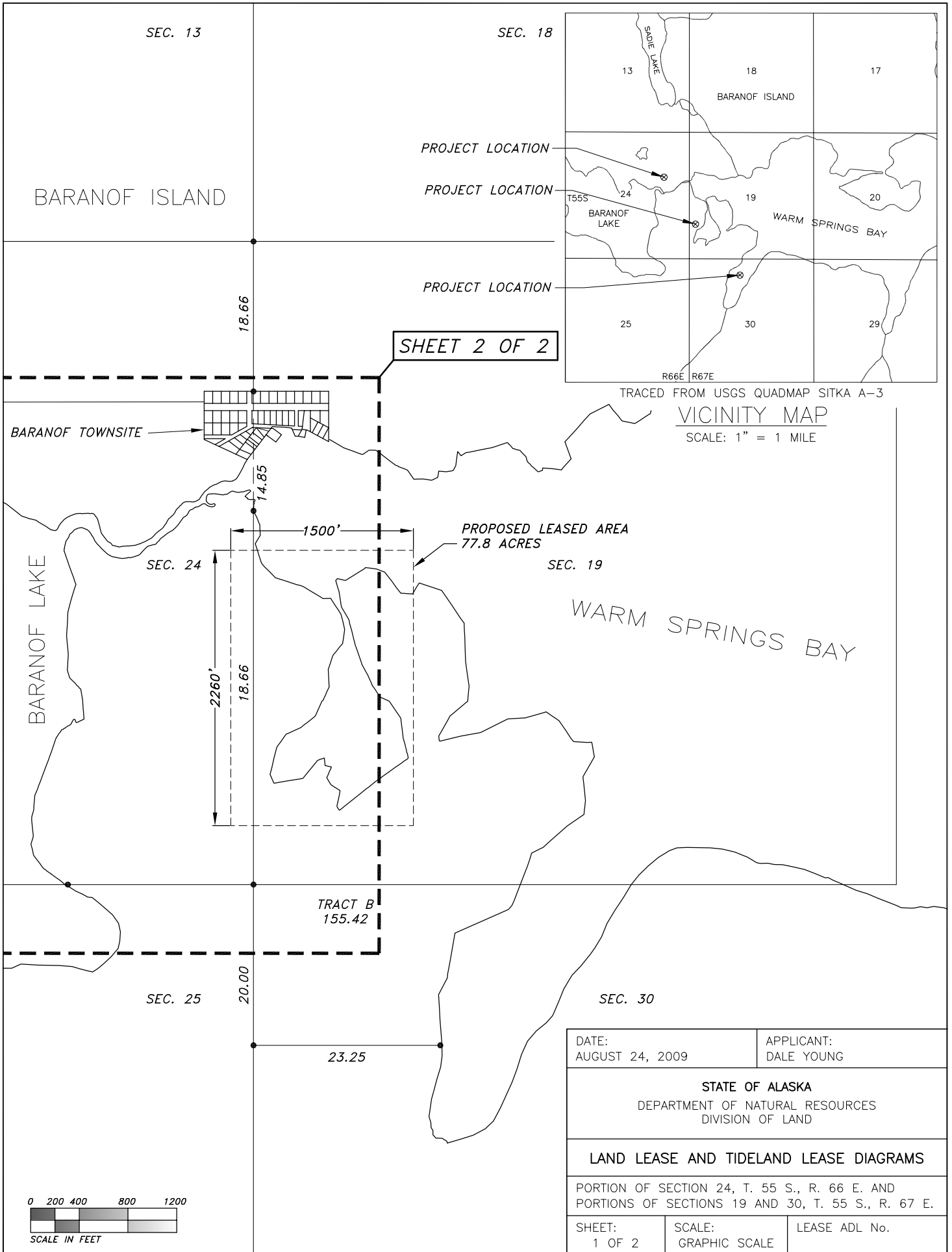
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DATE
6/28/09

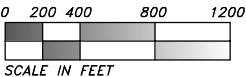
DRAWING TITLE
COVERSHEET

DRAWING NO.
H-1

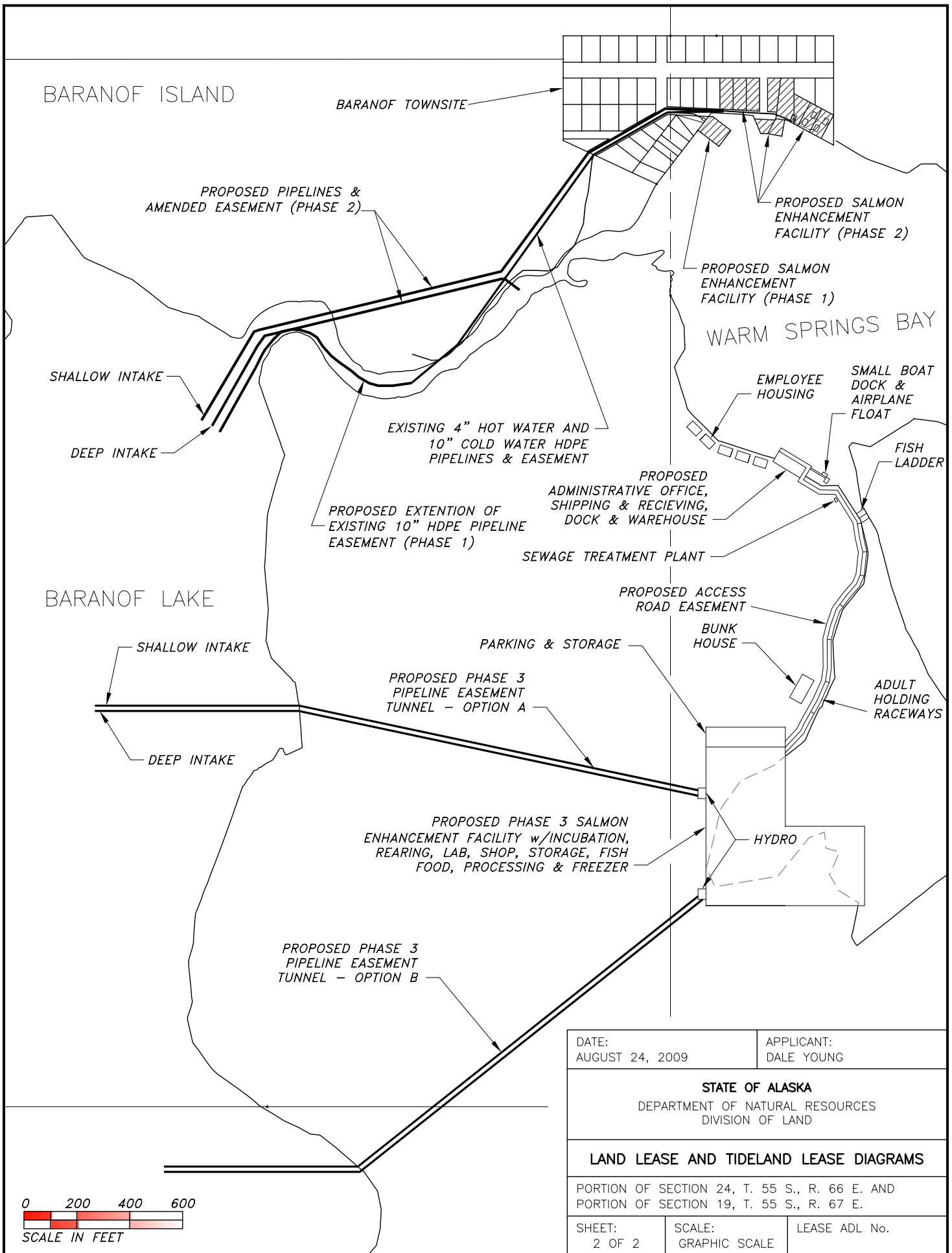


TRACED FROM USGS QUADMAP SITKA A-3

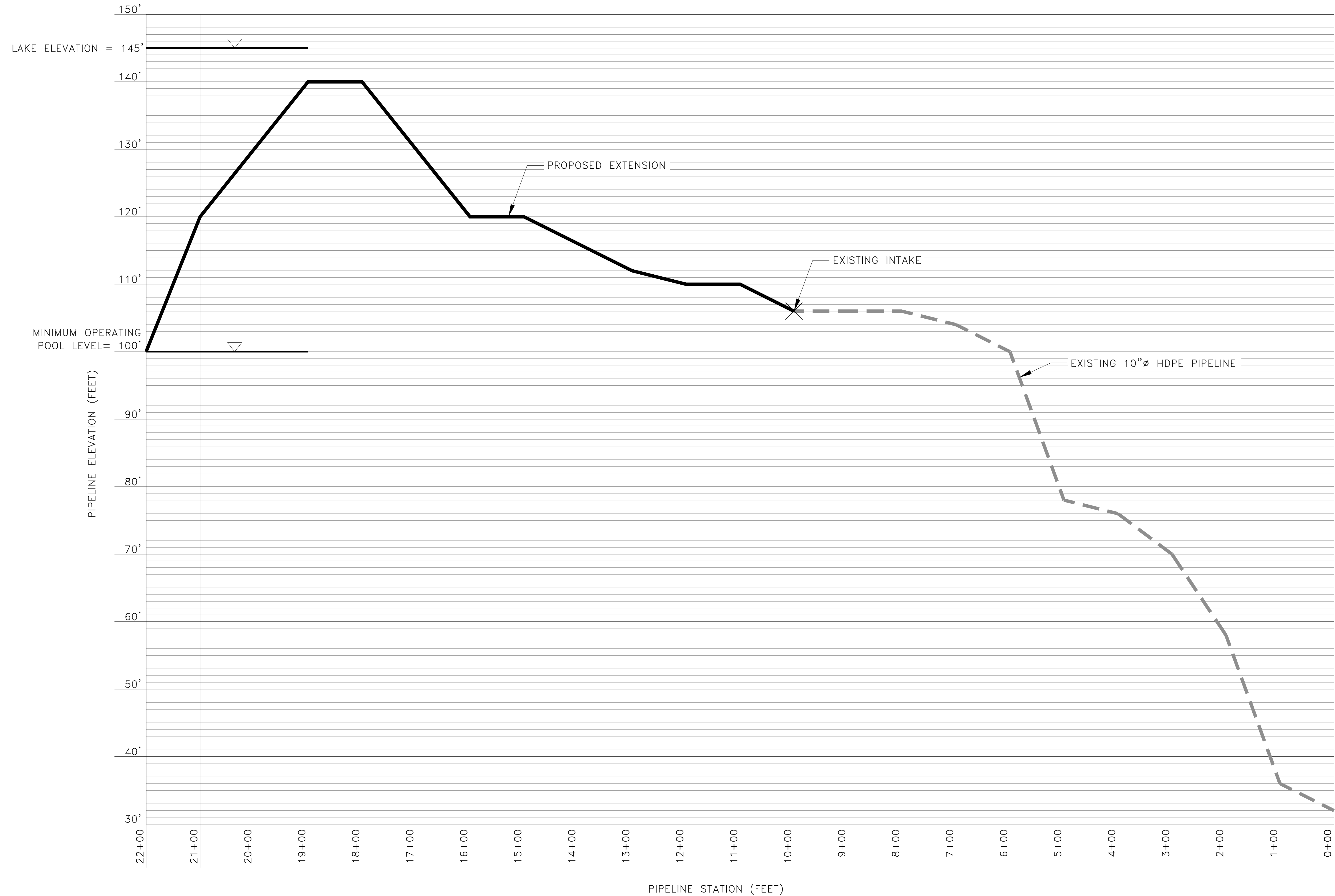
VICINITY MAP
SCALE: 1" = 1 MILE



DATE: AUGUST 24, 2009	APPLICANT: DALE YOUNG	
STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES DIVISION OF LAND		
LAND LEASE AND TIDELAND LEASE DIAGRAMS		
PORTION OF SECTION 24, T. 55 S., R. 66 E. AND PORTIONS OF SECTIONS 19 AND 30, T. 55 S., R. 67 E.		
SHEET: 1 OF 2	SCALE: GRAPHIC SCALE	LEASE ADL No.



DATE: AUGUST 24, 2009		APPLICANT: DALE YOUNG	
STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES DIVISION OF LAND			
LAND LEASE AND TIDELAND LEASE DIAGRAMS			
PORTION OF SECTION 24, T. 55 S., R. 66 E. AND PORTION OF SECTION 19, T. 55 S., R. 67 E.			
SHEET: 2 OF 2		SCALE: GRAPHIC SCALE	
		LEASE ADL No.	



PHASE I PIPELINE PROFILE

HAWKEN LLC
9720 Trappers Lane
Juneau, Alaska 99801
(907) 789-5070

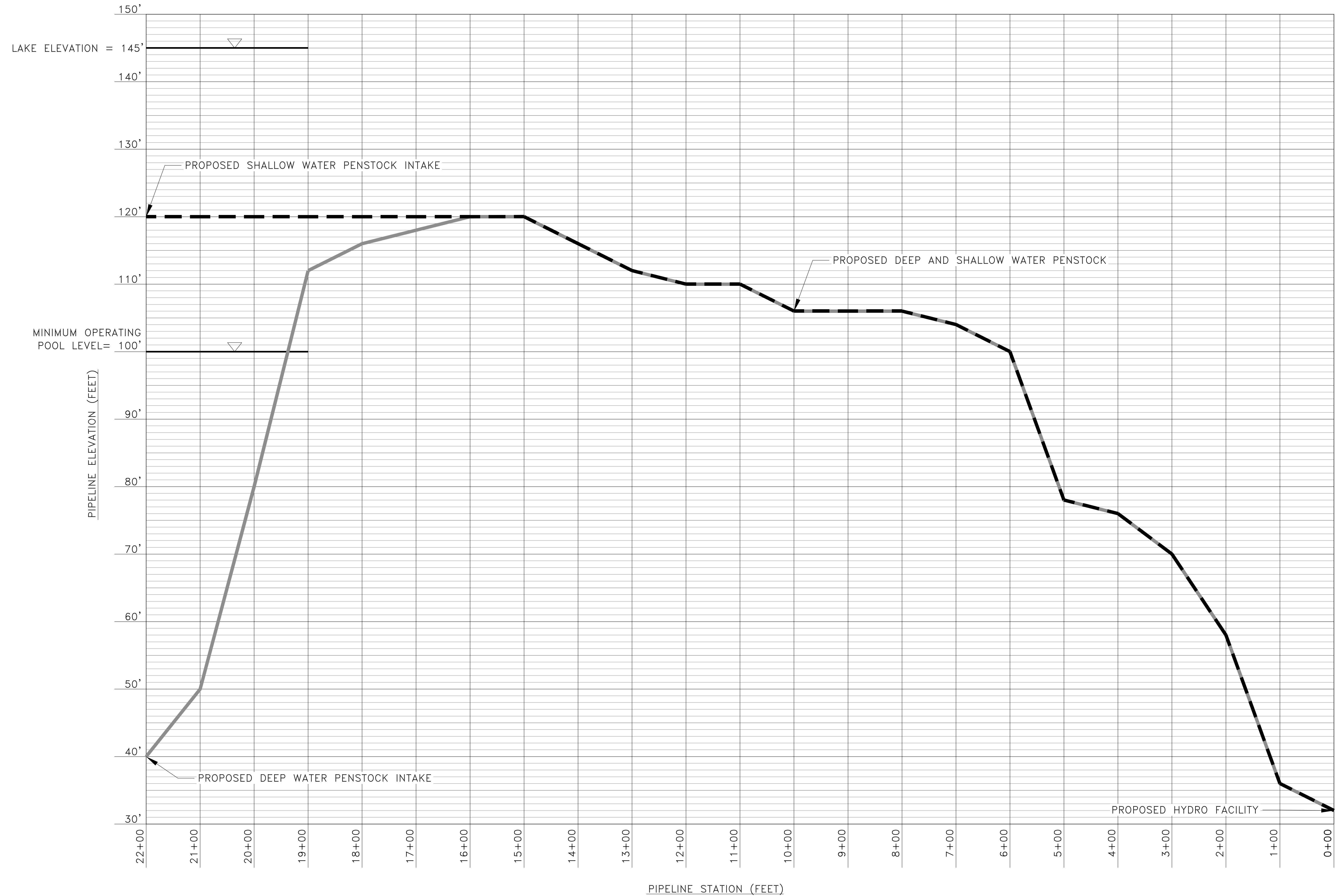
SUSTAINABLE SALMON
INSTITUTE
AT BARANOF WARM SPRINGS

PROJECT LOCATION
BARANOF WARM SPRINGS
DRAWN BY
SRY
CHECKED BY
DEY
SCALE
NOT TO SCALE
DATE
9/8/09

DRAWING TITLE
PHASE I PENSTOCK
EXTENSION

DRAWING NO.
PH-1

REVISION #	DATE	RELEASED FOR	REVISION DESCRIPTION
1	9/8/09	X	X



PHASE II PIPELINE PROFILE

HAWKEN LLC
9720 Trappers Lane
Juneau, Alaska 99801
(907) 789-5070

REVISION #	DATE	RELEASED FOR	REVISION DESCRIPTION
1	X	X	X

**SUSTAINABLE SALMON
INSTITUTE
AT BARANOF WARM SPRINGS**

PROJECT LOCATION
BARANOF WARM SPRINGS
DRAWN BY
SRY
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DEY
SCALE
NOT TO SCALE
DATE
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DRAWING TITLE
PHASE II PENSTOCK
EXTENSION

DRAWING NO.
PH-2

