US Army Corps
of Engineers
Seattle District

Public Notice of Application for Permit

Regulatory Branch
Post Office Box 3755
Seattle, Washington 98124-3755
Telephone (206) 764-6960
ATTN: Olivia Romano, Project Manager

Public Notice Date: March 2, 2015
Expiration Date: April 1, 2015
Reference: NWS-2014-00897
Name: Snohomish County Public Utility ` District No. 1

Interested parties are hereby notified that the U.S. Army Corps of Engineers (Corps) has received an application to perform work in waters of the United States as described below and shown on the enclosed drawings dated October 21, 2014.

The Corps will review the work in accordance with Section 404 of the Clean Water Act (CWA).

APPLICANT: Snohomish County Public Utility District (PUD) No. 1
P.O. Box 1107
Everett, Washington 98206-1107
ATTN: Mark Flury
Telephone: (425) 783-1722

LOCATION: Calligan Creek, a tributary of North Fork Snoqualmie River, near the City of Snoqualmie, in King County, Washington.

WORK: Construction of a new run-of-the-river 6.0 megawatt (MW) hydroelectric facility. The facility would consist of Diversion/Intake, Penstock, Powerhouse, and Tailrace structures.

The Diversion/Intake structure would be constructed in Calligan Creek about 2,060 feet downstream of the outlet of Calligan Lake. The Diversion/Intake structure would consist of a low spillway, intake box containing fish screens and penstock inlet, a sluiceway to keep sediment out of the intake, and integral fishway. Construction of the diversion weir and abutment walls would require work within the creek channel and wetlands. The work area would be isolated using a temporary cofferdam and bypass culvert to allow the weir construction to occur in the dry. Up to 858 cubic yards of sand and cobbles would be excavated from stream channel below Ordinary High Water (OHW) line to prepare the weir foundation. The diversion weir would be constructed of riprap with a reinforced concrete vertical wall, made from cast-in place concrete pumped into forms. Up to 936 cubic yards of sand, native material, concrete, and riprap fill would be placed below the OHW line of Calligan Creek (see sheet 3 of 11) and in wetlands to the construction of the diversion weir and abutment walls. Up to 0.01 acres of wetlands would be filled and 0.04 acres of wetlands would be temporary impacted during construction (see sheet 6 of 11). Up to 0.01 acres of stream channel below the OHW line would be permanently impacted and 0.03 acres of stream channel below the OHW line would be temporarily impacted during construction (see sheet 7 of 11).

The Tailrace structure would return the water discharged from the turbine to Calligan Creek. The Tailrace structure consists of a reinforced concrete box that discharges into a riprap lined open channel about 135 feet long before

entering Calligan Creek. The tailrace would include a barrier for fish exclusion. This barrier would be a 2-foot vertical drop and concrete apron without backwater with a slope exceeding 5 percent. Construction of tailrace outfall, including the fish barrier, would include the excavation of up to 10 cubic yards of stream channel, and the placement of up to 10 cubic yards of riprap and pour-in-place concrete below the OHW line of Calligan Creek (see sheet 5 of 11 and sheet of 8 of 11). The project is designed to automatically deflect flows from the penstock to the tailrace channel, bypassing the turbine, should a problem occur with the turbine.

Work outside the Corps jurisdiction: The penstock would convey water from the intake to the powerhouse. The entire penstock corridor is within a commercial tree farm. The 6,325 linear feet long penstock would be installed in a trench and backfilled, except in areas of high groundwater or close bedrock contact, where it would be placed at grade. The penstock would connect to the Powerhouse/Tailrace structures. These structures would be located down slope of the Diversion/Intake structure and about 100 feet from the OHW line of Calligan Creek. The Powerhouse would consist of a 48-foot by 60-foot reinforced concrete/concrete masonry structure with outdoor electrical switchyard. The building would house a 2-jet horizontal Pelton turbine generator, associated equipment, office, and storage space.

PURPOSE: Provide additional renewable energy resources to meet Snohomish County PUD customers' winter electrical demand.

MITIGATION: The applicant proposed on-site mitigation that includes restoration/preservation for both temporary and permanent impacts to stream channel and wetlands. See sheet 10 of 11 for location of wetlands proposed for preservation and 10 of 10 for details on proposed mitigation ratios and wetland restoration planting plan.

ADDITIONAL INFORMATION: Ecology has initiated their water quality certification process in response to the Federal Energy Regulatory Commission (FERC) license process and is currently evaluating the proposed project. Ecology will determine whether to certify or deny certification for the proposed project. The Corps will not issued Section 404 permit until Ecology has issued water quality certification for the proposed project.

Copies of this public notice which have been mailed or otherwise physically distributed feature project drawings in black and white. The electronic version features those drawings in color, which we think more accurately communicates the scope of project impacts. To access the electronic version of this public notice, go to the Seattle District's web page at http://www.nws.usace.army.mil/ and under the heading Open Public Comment Periods select Regulatory Public Notices. Recently-issued public notices are listed in chronological order of the date of issuance. Select and view the listing for this project.

ENDANGERED SPECIES: The FERC, as the lead agency for Endangered Species Act (ESA) consultation, will consult with the National Marine Fisheries Service (NMFS) and/or the U.S. Fish and Wildlife Service as required under Section 7 of the ESA. They have determined that the project would have no effect on proposed and/or listed species and their designated critical habitat due to Snoqualmie Falls, an existing anadromous fish passage barrier.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). The proposed action would impact EFH in the project area.

The FERC, as the lead agency for a determination regarding EFH, will consult with the National Marine Fisheries Services if necessary. They have determined that the project the project area does not contain essential fish habitat due to the existing anadromous fish passage barrier, Snoqualmie Falls.

CULTURAL RESOURCES: The FERC, as the lead agency for determining compliance with Section 106 of the National Historic Preservation Act, will consult with the State Historic Preservation Officer and Native American Tribes as appropriate.

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.

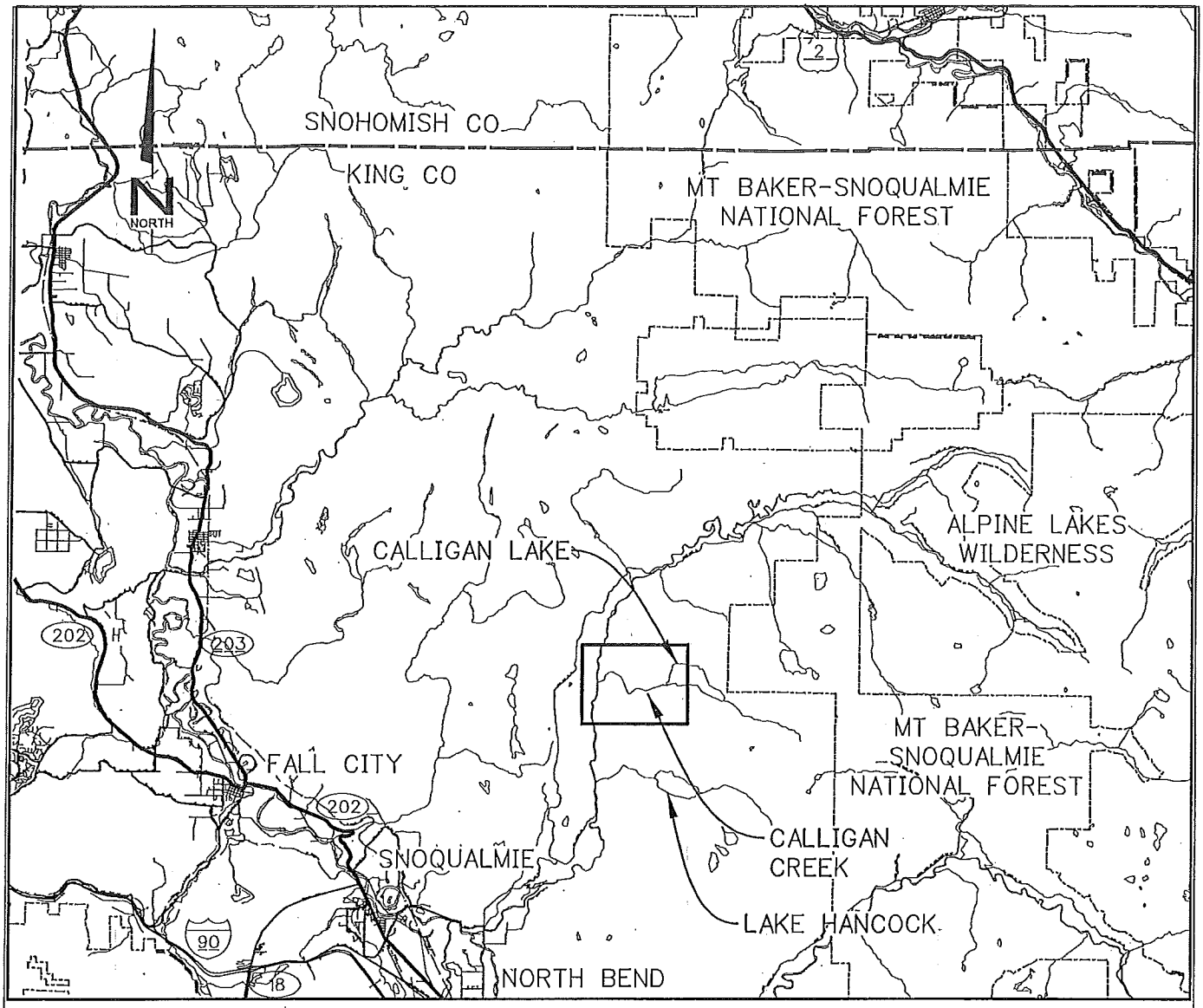
EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, 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 those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

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

COMMENT AND REVIEW PERIOD: Conventional mail or e-mail comments on this public notice will be accepted and made part of the record and will be considered in determining whether it would be in the public interest to authorize this proposal. In order to be accepted, e-mail comments must originate from the author's e-mail account and must include on the subject line of the e-mail message the permit applicant's name and reference number as shown below. All e-mail comments should be sent to olivia.h.romano@usace.army.mil. Conventional mail comments should be sent U.S. Army Corps of Engineers, Regulatory Branch, P.O. Box 3755, Seattle, Washington 98124-3755. Either conventional mail or e-mail comments must include the permit applicant's name and reference number, as shown below, and the commentator's name, address, and phone number. All comments received will become part of the administrative record and are subject to public release under the Freedom of Information Act including any personally identifiable information such as names, phone numbers, and addresses. All comments whether conventional mail or e-mail must reach this office, no later than the expiration date of this public notice to ensure consideration. Please include the following name and reference number:

Snohomish County PUD No. 1, NWS-2014-00897

Encl: Figures 11

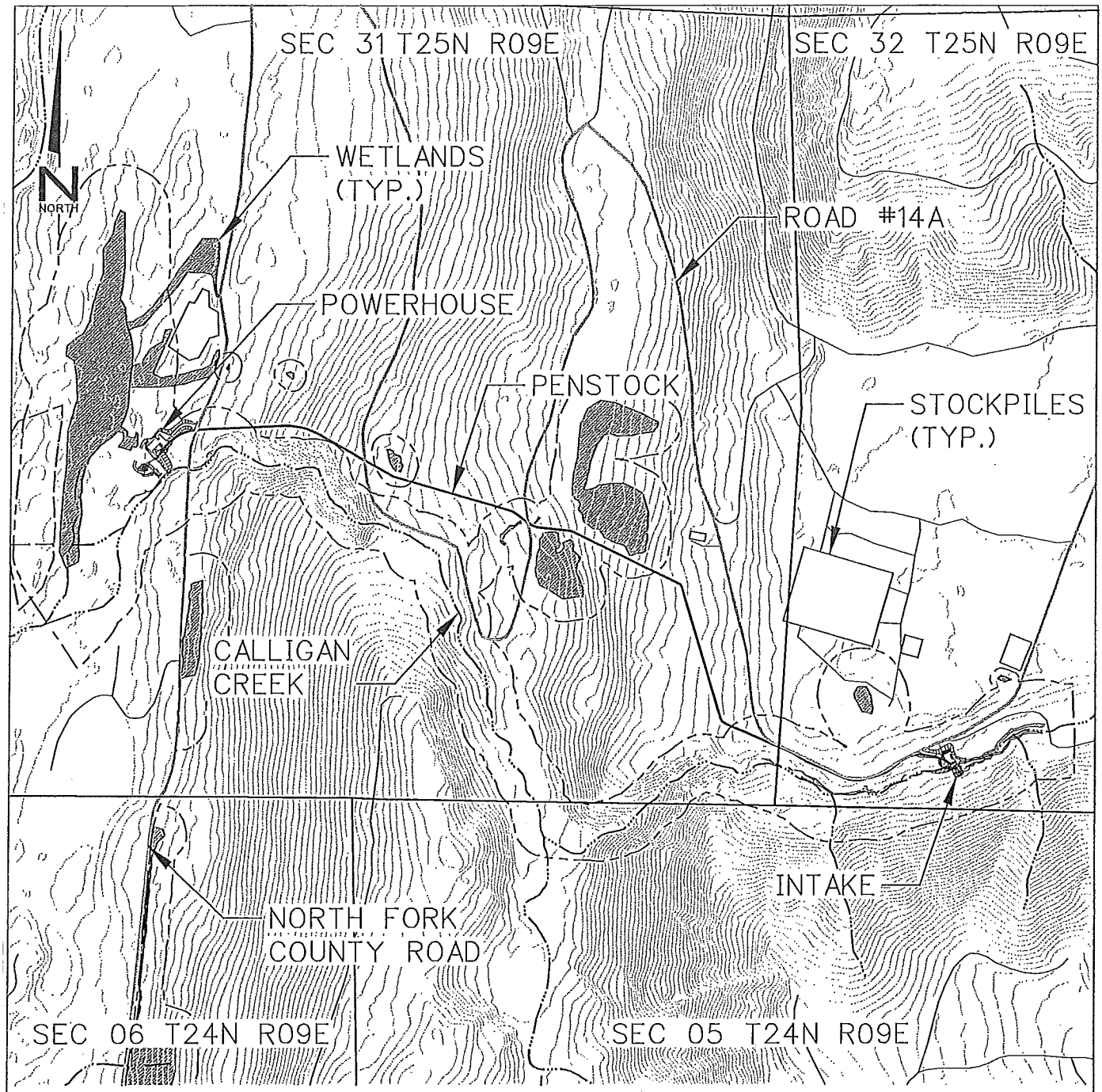


VICINITY MAP

TOWNSHIP 25 NORTH, RANGE 9 EAST, W.M.
KING COUNTY, WASHINGTON
PROJECT GEODETIC LOCATION:
47° 36'03" N, 121° 41'19" W

20K 10K 0 20,000
1" = 20,000' SCALE IN FEET

PROPOSED: Construct diversion/intake structure, penstock and powerhouse tailrace. **PURPOSE:** Calligan Creek Hydroelectric Project **APPLICANT:** Snohomish County PUD No. 1 **REFERENCE #:** NWS-2014-897	**SITE LOCATION:** Northeast of Snoqualmie, WA **COUNTY:** King **NEAR:** North Fork County Road **IN:** Calligan Creek **DATE:** October 21, 2014 **SHEET** 1 OF 11



GENERAL PLAN

1,000 500 0 1,000

1" = 1,000' SCALE IN FEET

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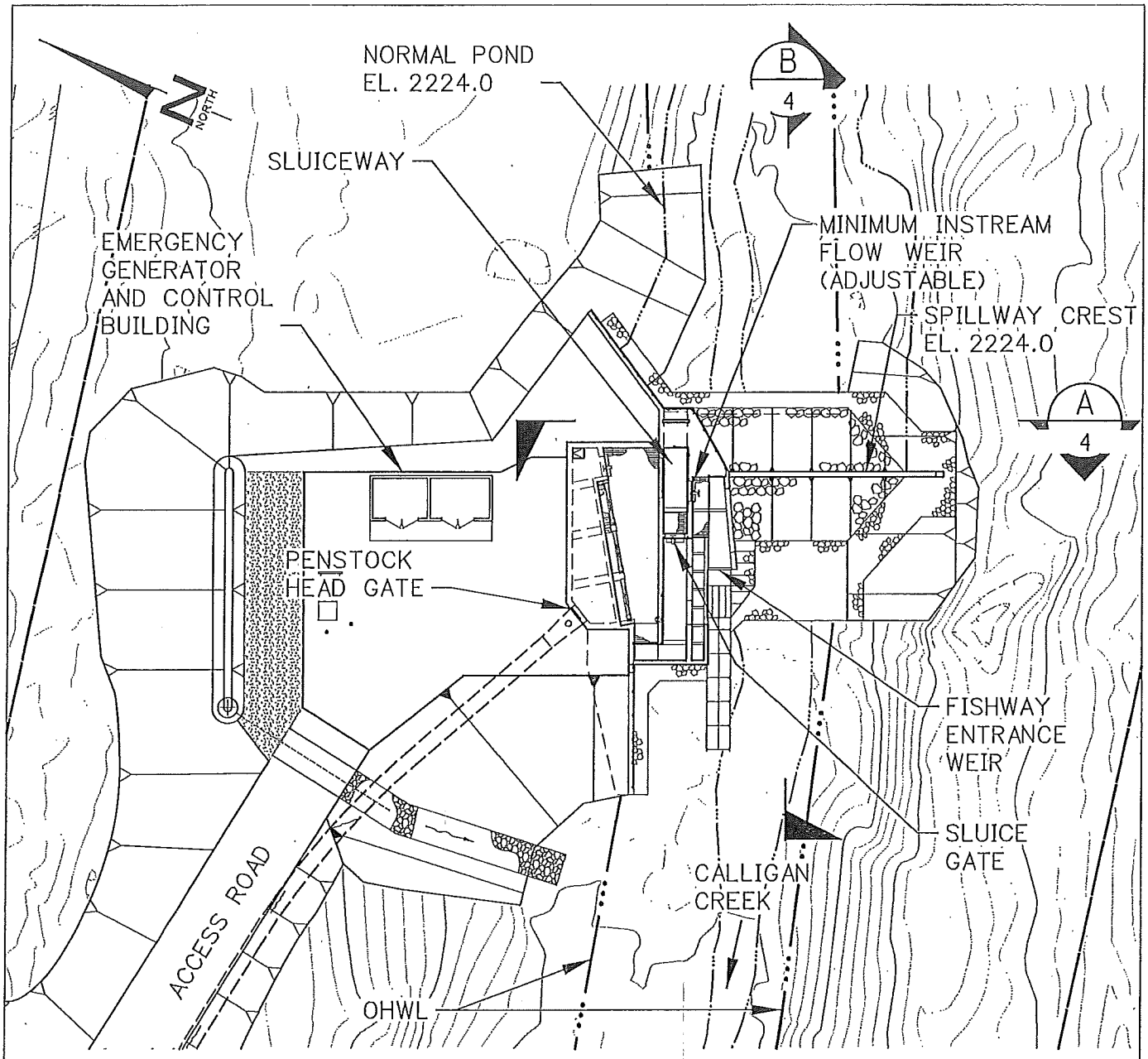

SITE PLAN

APPROX. 858 CY EXCAVATION BELOW OHWL
APPROX. 29CY SAND, 356CY NATIVE, 330CY CONCRETE AND 221CY RIPRAP FILL BELOW OHWL

40 20 0 40
1" = 40' SCALE IN FEET

DIVERSION / INTAKE

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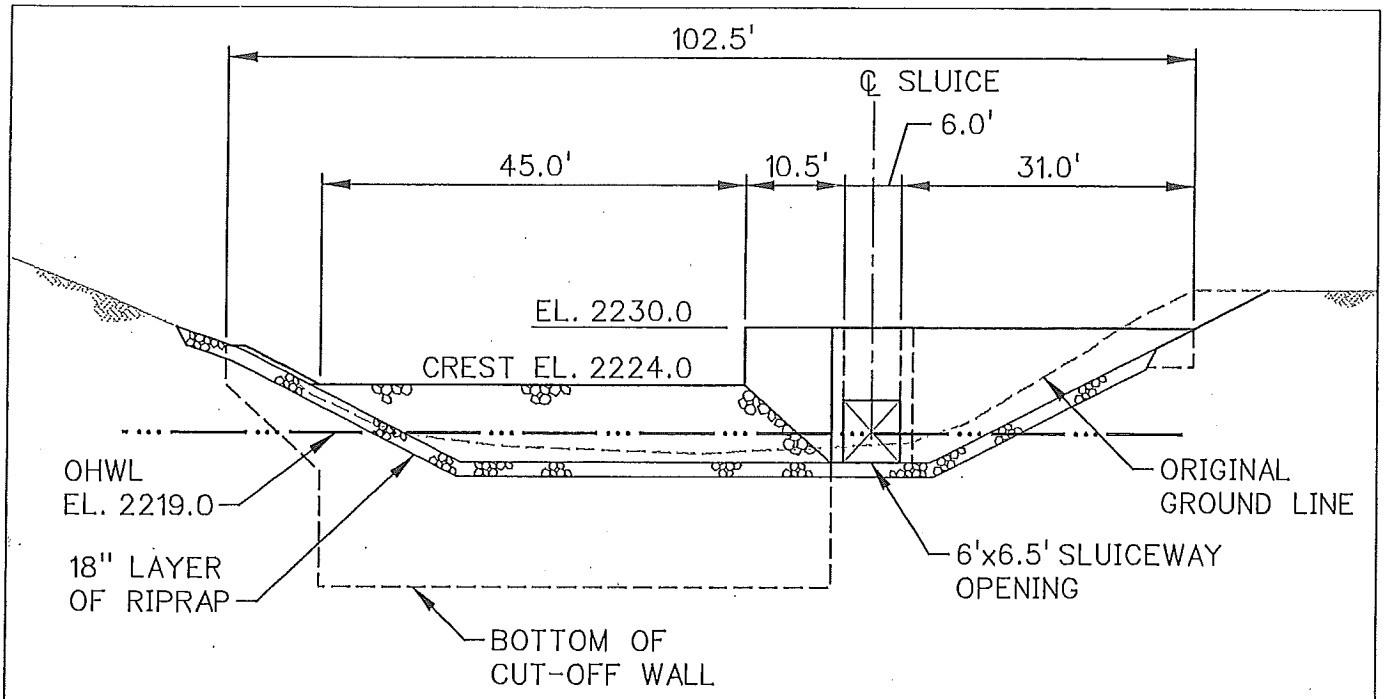
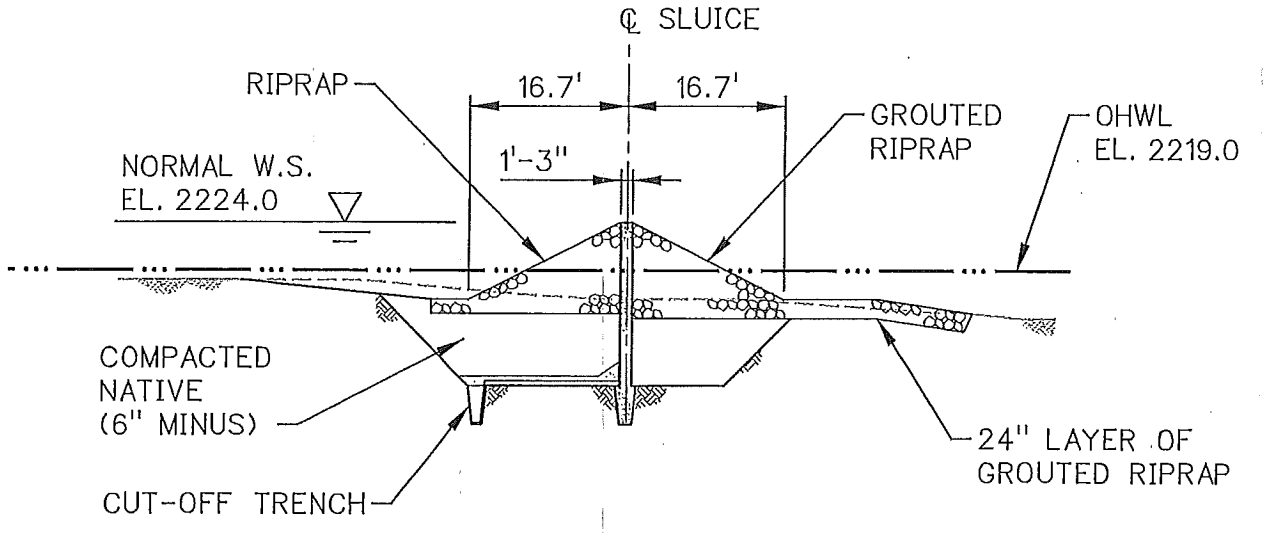


SECTION A 3



SECTION B 3

20 10 0 20

1" = 20' SCALE IN FEET

DIVERSION / INTAKE

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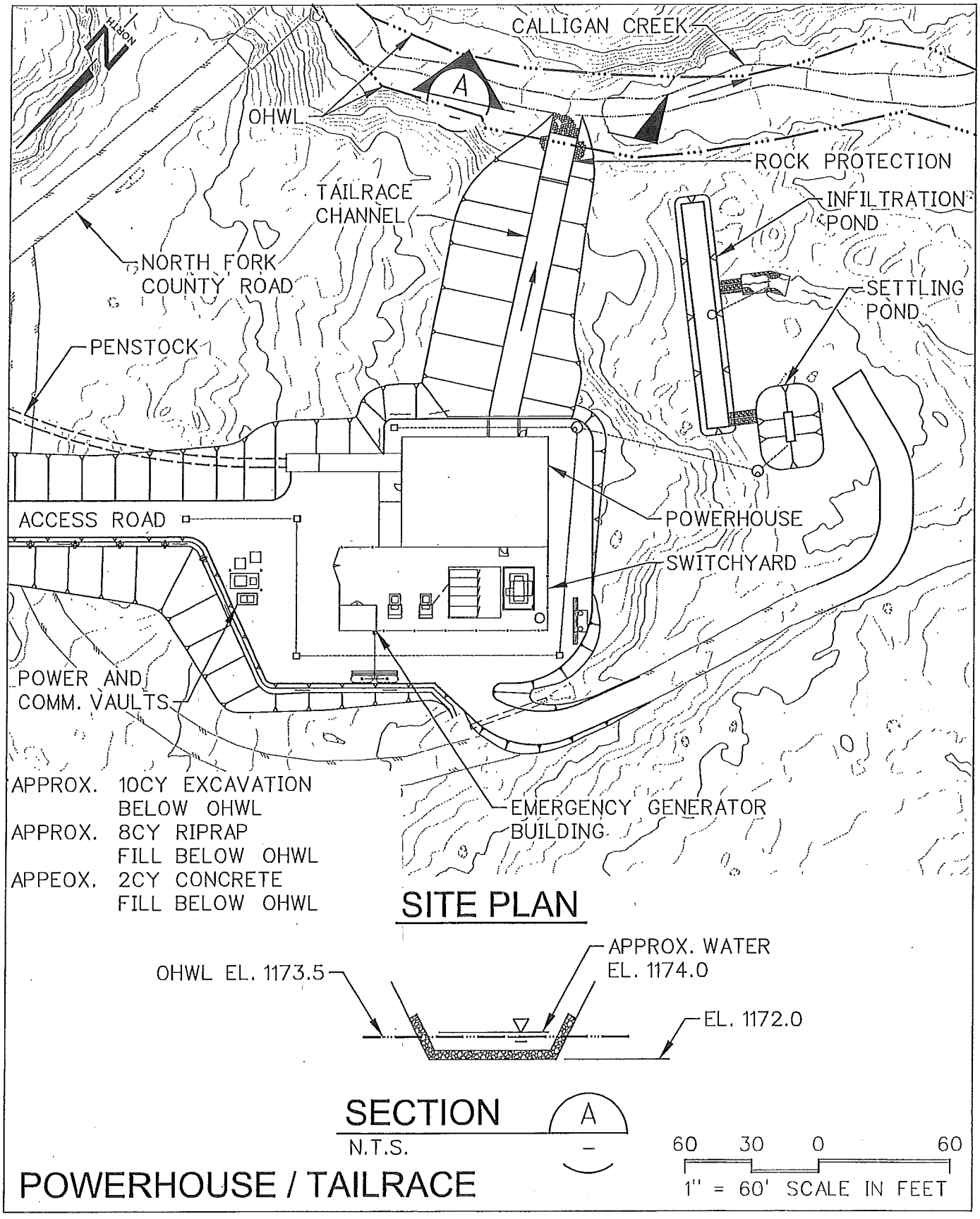

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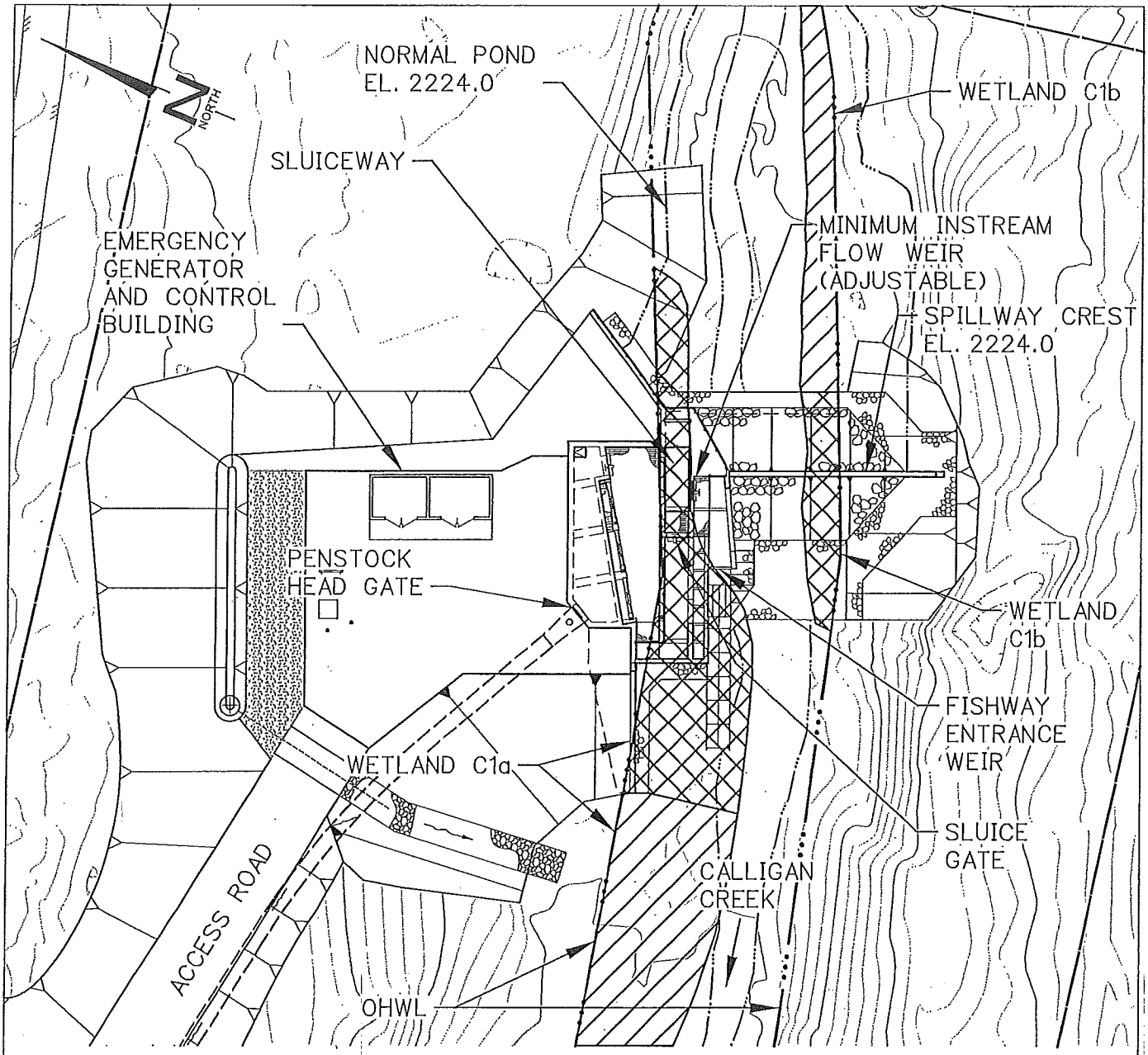

SYM.	TYPE	ACRES (AC)
	TEMPORARY WETLAND IMPACT	0.04
	PERMANENT WETLAND IMPACT	<0.01

SITE PLAN

DIVERSION / INTAKE WETLAND IMPACTS

40 20 0 40

1" = 40' SCALE IN FEET

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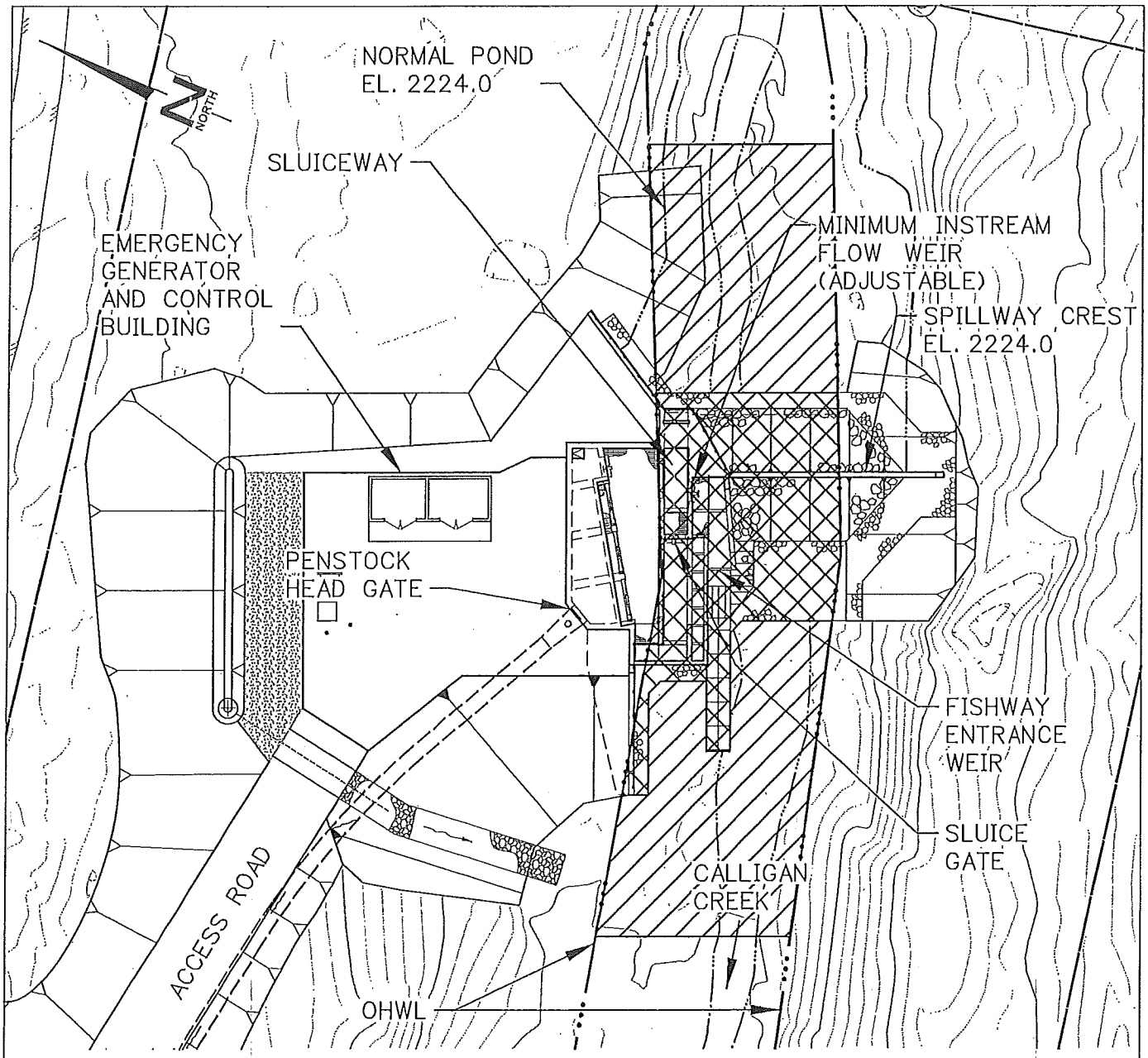
SHEET 6 OF 11



SYM.	TYPE	ACRES (AC)
	TEMPORARY STREAM IMPACT	0.03
	PERMANENT STREAM IMPACT	<0.01

SITE PLAN

DIVERSION / INTAKE STREAM IMPACTS

40 20 0 40

1" = 40' SCALE IN FEET

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PURPOSE: Calligan Creek Hydroelectric Project
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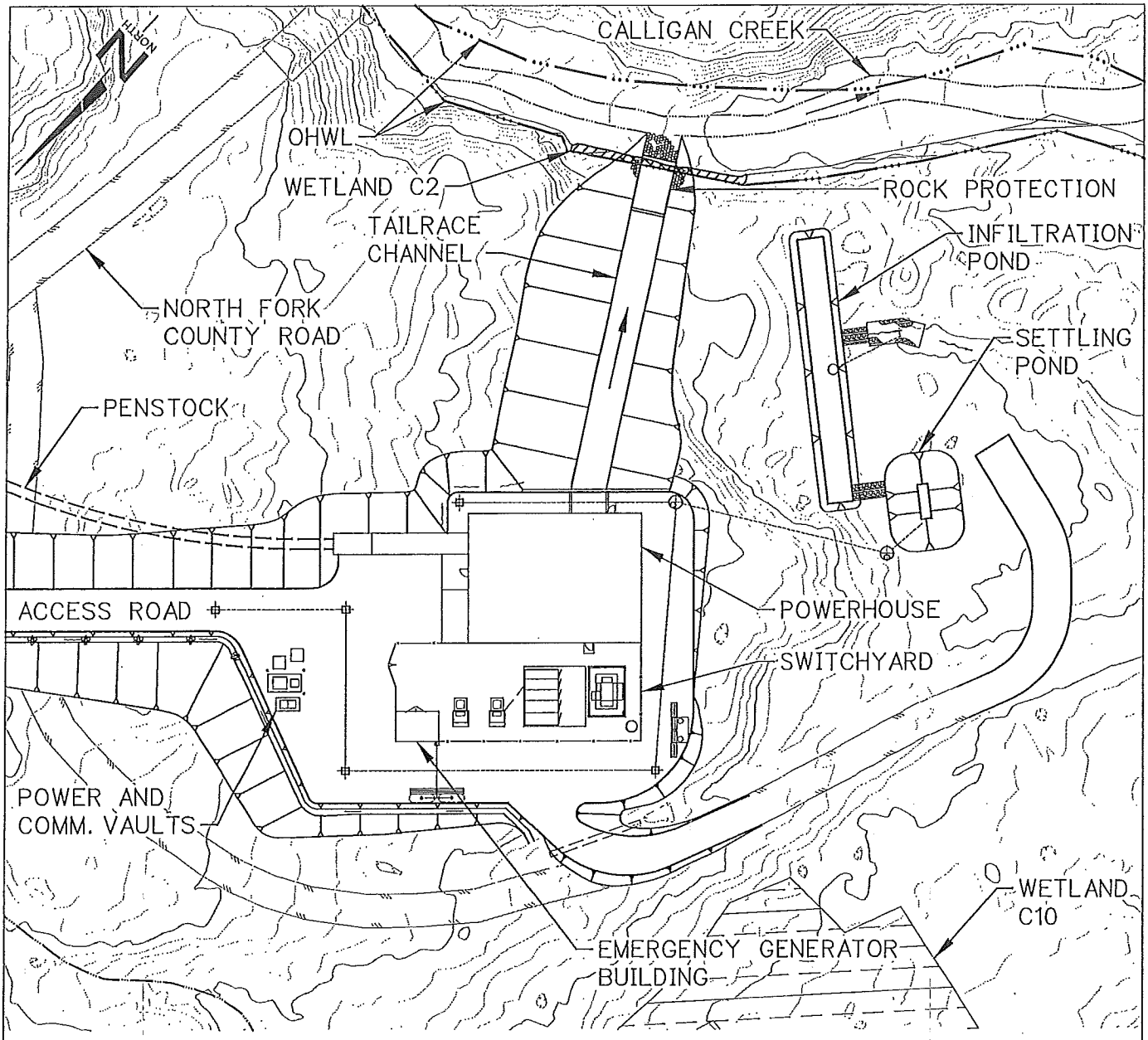
SHEET 7 OF 11



SYM.	TYPE	ACRES (AC)
	TEMPORARY WETLAND IMPACT	0.01
	PERMANENT WETLAND IMPACT	<0.01

SITE PLAN

POWERHOUSE / TAILRACE WETLAND IMPACTS

60 30 0 60

1" = 60' SCALE IN FEET

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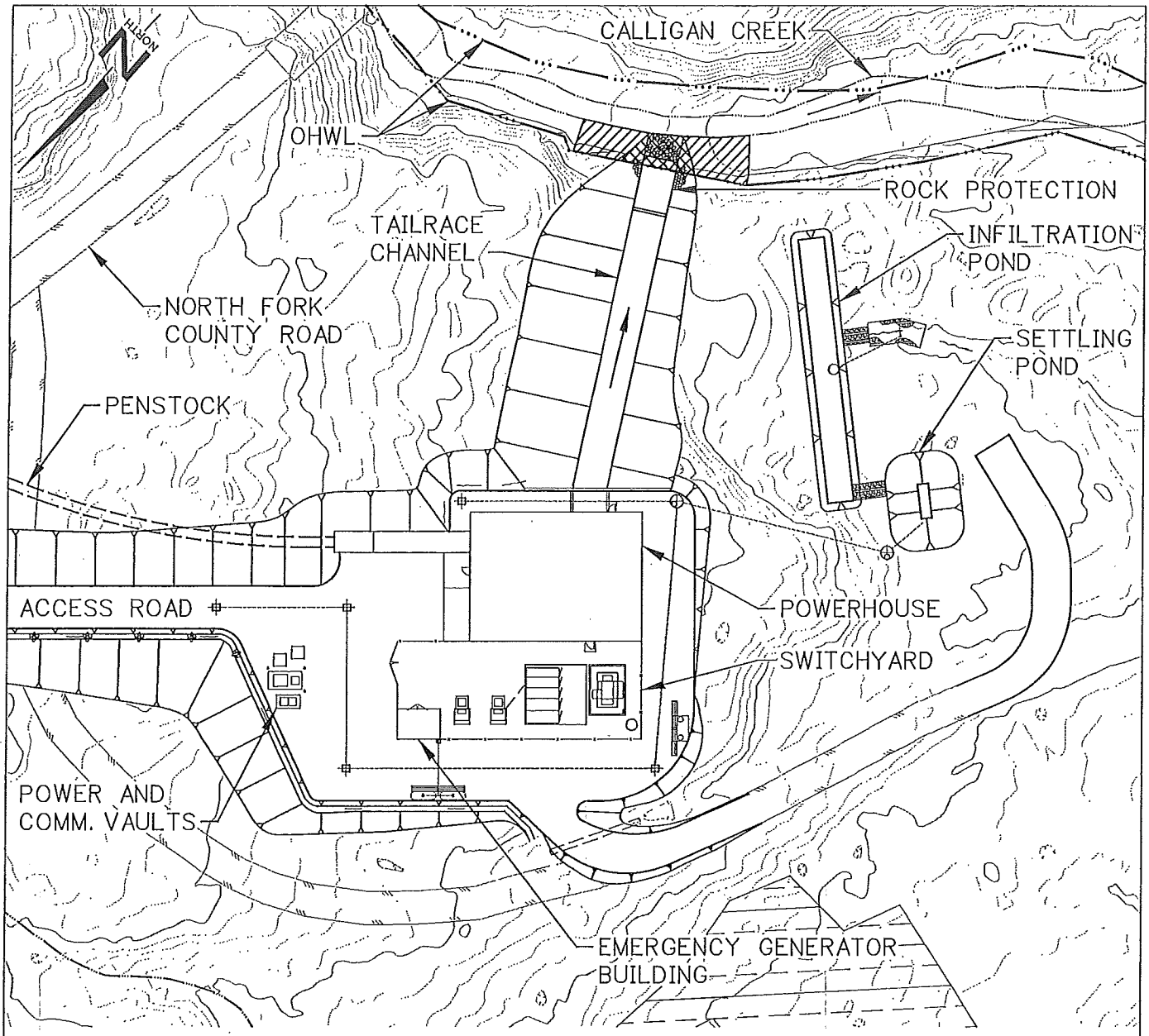
SHEET 8 OF 11



SYM.	TYPE	ACRES (AC)
	TEMPORARY STREAM IMPACT	0.01
	PERMANENT STREAM IMPACT	<0.01

SITE PLAN

POWERHOUSE / TAILRACE STREAM IMPACTS

60 30 0 60

1" = 60' SCALE IN FEET

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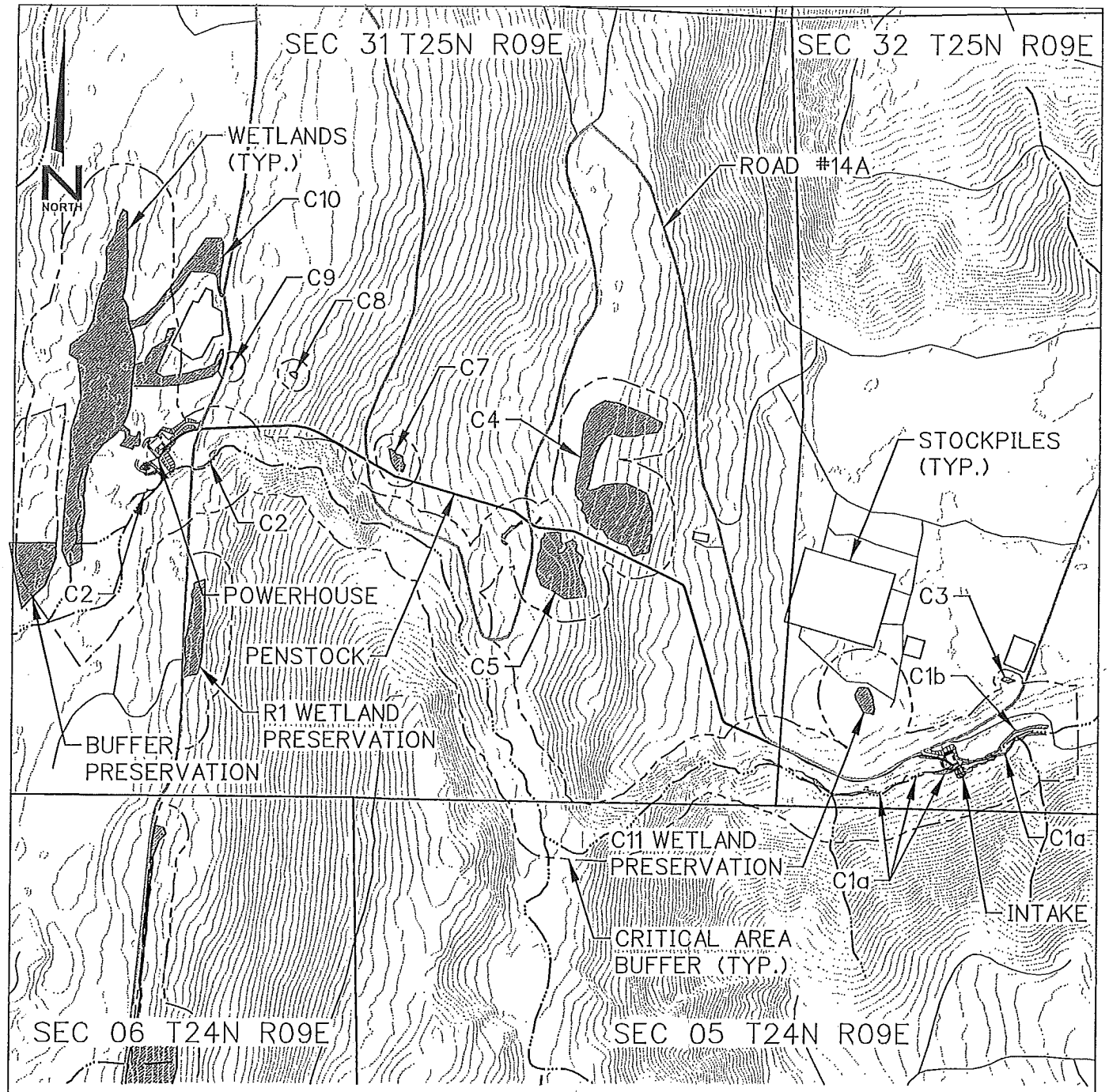
SHEET 9 OF 11



WETLAND MITIGATION PLAN

1,000 500 0 1,000

1" = 1,000' SCALE IN FEET

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Table 2. Wetland impacts.

Wetland Impacts	Area (acres)	Mitigation Ratio	Mitigation Area (acres)	Type of Mitigation
Temporary	0.05	2:1	0.10*	Restoration/ Preservation
Permanent	<0.01	195:1	>1.95	Preservation

*0.05 Restoration/0.05 Preservation

Table 3. Stream impacts.

Stream Impacts	Area (acres)	Mitigation Ratio	Mitigation Area (acres)	Type of Mitigation
Temporary	0.04	2:1	0.08	Buffer Preservation
Permanent	0.01	5:1	0.20	Buffer Preservation

5. WETLAND RESTORATION PLANTING PLAN

During the excavation of the diversion dam and the tailrace, wetland soils will be stockpiled separately. Wetland restoration will be accomplished by returning the soil to roughly its original structure, planting shallow rooted shrub species similar to what was found within these wetland areas prior to disturbance. Trees will not be planted within the temporary impact areas over the top of the penstock. In addition, given the potential seed source surrounding these impacts, a significant component of native regeneration is expected to occur. A total of 0.05 acres of temporary wetland impacts will be planted as identified in Table 5.

Table 5: Temporary wetland impacts replanting.

Common Name	Latin Name	Size	Spacing	Quantity
Salmonberry	*Rubus spectabilis*	1 gallon	5 feet	47
Twinberry	*Lonicera involucrata*	1 gallon	5 feet	40
Slough sedge	*Carex obnupta*	sprig	1.5 feet	968

MITIGATION DETAIL