

United States Department of the Interior
National Park Service

DT 66

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

Historic name Skagit River and Newhalem Creek Hydroelectric Projects

Other names/site number _____

2. Location

street & number Highway 20 Corridor not for publication

city or town Newhalem, Diablo, see Section 10 vicinity

State Washington code WA county Whatcom code 073 zip code 98283

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property X meets does not meet the National Register criteria. I recommend that this property be considered significant nationally statewide X locally. (See continuation sheet for additional comments.)


Signature of certifying official/Title

12-21-10
Date

WASHINGTON STATE HISTORIC PRESERVATION OFFICE
State or Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria. (See continuation sheet for additional comments.)

Signature of certifying official/Title

Date

State or Federal agency and bureau

4. National Park Service Certification

I, hereby, certify that this property is:

 entered in the National Register.
 See continuation sheet

 determined eligible for the
National Register.
 See continuation sheet

 determined not eligible for the
National Register.

 removed from the
National Register.

 other (explain:) _____

Signature of the Keeper

Date of Action

5. Classification**Ownership of Property**

(Check as many boxes as apply)

☐ private
☒ public-local
☐ public-State
☐ public-Federal

Category of Property

(Check only one box)

☐ building(s)
☒ district
☐ site
☐ structure
☐ object

Number of Resources within Property

(Do not incl. previously listed resources in the count.)

Contributing	Non-Contributing	
46	9	buildings
1	1	sites
10	3	structures
1	0	objects
58	13	Total

Name of related multiple property listing:

(Enter "N/A" if property is not part of a multiple property listing.)

Number of contributing resources previously listed in the National Register

29

6. Functions or Use**Historic Functions**

(Enter categories from instructions)

Industry/Processing/Extraction: Energy Facility

Recreation and Culture: Outdoor Recreation

Domestic: Institutional Housing

Landscape: Park

Current Functions

(Enter categories from instructions)

Industry/Processing/Extraction: Energy Facility

Recreation and Culture: Outdoor Recreation

Domestic: Institutional Housing

Landscape: Park

7. Description**Architectural Classification**

(Enter categories from instructions)

Other: Industrial

Late 19th & 20th Century Revival: Classical RevivalLate 19th & Early 20th Century American

Movements: Bungalow/Craftsman

Modern Movement: Moderne, International Style

Materials

(Enter categories from instructions)

foundation Concrete

walls Concrete, Wood

roof Metal

other

Narrative Description

(Describe the historic and current condition of the property.)

SEE CONTINUATION SHEET

8. Statement of Significance**Applicable National Register Criteria**

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- ☒ **A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- ☒ **B** Property is associated with the lives of persons significant in our past.
- ☒ **C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- ☐ **D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- ☐ **A** owned by a religious institution or used for religious purposes.
- ☐ **B** removed from its original location.
- ☒ **C** a birthplace or grave.
- ☐ **D** a cemetery.
- ☐ **E** a reconstructed building, object, or structure.
- ☐ **F** a commemorative property.
- ☐ **G** less than 50 years old or achieving significance within the past 50 years.

Areas of Significance

(Enter categories from instructions)

Engineering

Politics/Government

Entertainment/ Recreation

Community Planning

Landscape Architecture

Architecture

Period of Significance:

1917-1961

Significant Dates

1917, 1927, 1937, 1949, 1952, 1956, 1960

Significant Person

(Complete if Criterion B is marked above)

Ross, James Delmage

Cultural Affiliation**Architect/Builder**

City of Seattle Engineering Department/ Seattle City Light

L. H. Rose, Seattle City Light/ Seattle City Light

Constant Angle Arch. (Jorgensen, Lars)/

Winston Brothers Const. Co.

R. C. Storrie (1919), Merritt, Chapman and Scott with Savin Construction (1957-1960)

University of Washington / University of Washington Students

Baldwin Locomotive Works (builder)

Cascade Construction w/ Alton Phillips Company

"Ford" of Western Engineering Co./ Jones and Laughlin

Edwin Monk and Lorne Garden / Commercial Ship Repair Co.

Seattle City Light / Peter Kiewit and Sons, Guy P. Atkinson Co.

Linn Forrest, George Stewart/ Seattle City Light

Thorburn and Logozo

Narrative Statement of Significance

(Explain the significance of the property.)

SEE CONTINUATION SHEET

9. Major Bibliographical References**Bibliography**

(Cite the books, articles, and other sources used in preparing this form.) SEE CONTINUATION SHEET

Previous documentation on file (NPS):

- ☐ preliminary determination of individual listing
(36 CFR 67) has been requested
- ☒ previously listed in the National Register
- ☐ previously determined eligible by the National Register
- ☐ designated a National Historic Landmark
- ☐ # _____
- ☐ recorded by Historic American Engineering
- ☐ Record# _____

Primary location of additional data:

- ☐ State Historic Preservation Office
- ☐ Other State agency
- ☐ Federal agency
- ☒ Local government
- ☐ University
- ☐ Other

Name of repository: _____**10. Geographical Data****Acreage of Property** Approx. 177.4 acres combined**UTM References**

(Place additional UTM References on a continuation sheet.) See continuation sheet.

Verbal Boundary Description

(Describe the boundaries of the property.) See continuation sheet.

Boundary Justification

(Explain why the boundaries were selected.) See continuation sheet.

11. Form Prepared By

name/title Larry E. Johnson, Principal

organization The Johnson Partnership date August, 2010

street & number 1212 NE 65th Street telephone (206) 523-1618

city or town Seattle state WA zip code 98116

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets**Maps****USGS maps** (7.5 or 15 minute series) indicating the property's location.**Sketch maps** for historic districts and properties having large acreage or numerous resources.**List of Resources**A **List** of resources categorized by Historic Area.**Photographs**Representative **black and white photographs** of the property.**Historic Photographs**Photocopies of selected **historic photographs** with archive information.

Property Owner (Complete this item at the request of the SHPO or FPO.)

name Seattle City Light (Ela Esterberg, Senior Envir. Analyst)
street & number P.O. Box 34023 telephone (206) 386-4519
city or town Seattle state WA zip code 98124

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PHYSICAL DESCRIPTION

The Skagit River Hydroelectric Project is an interconnected system of three hydroelectric plants—Gorge, Diablo, and Ross—and two company towns—Newhalem and Diablo—that are located on the upper Skagit River, which runs through the Cascade Range in northern Washington State. Associated with the project is the Newhalem Creek Hydroelectric Project, located on a tributary of the Skagit River. The plants and towns are owned by the City of Seattle and operated by the municipal utility, Seattle City Light. Developed over a 50-year span beginning in 1918, the projects have a wide range of historic and non-historic resources, including structures, objects, sites, and buildings, with an even broader range of functions. They are inextricably linked, both historically and physically, to the development of hydroelectric power for the city of Seattle. Collectively, the resources possess sufficient integrity both to represent the evolution of hydroelectric power development in the west, and to display the creation and growth of a rare type of planned community—the municipally-owned company town. In addition, some features of the project, such as the Diablo Dam and Powerhouse, have high aesthetic value in their own right, and one resource, Ladder Creek Falls Gardens, is a uniquely designed landscape.

NATURAL FEATURES

The Cascade Range runs north-south, bisecting the state of Washington. It is characterized by high, snow-laden peaks, cirques, and vast snowfields that yield to dense evergreen forests on the western slopes and arid open pine forests on the east. The area between Snoqualmie Pass and the Canadian border, where the Skagit River Hydroelectric Project is located, is commonly referred to as the North Cascades. The Skagit Metamorphic Suite—the schists, gneisses, and migmatites exposed along SR-20 that runs through the project—was created during the Laramid orogeny that formed the major structural units of the Cascades, approximately 90 million years ago. Advancing and retreating, slow-moving glaciers during the Pleistocene Epoch created U-shaped valleys, sheer cliffs, and *arêtes* in the mountains, leaving behind lakes, ponds, and tarns.

The district is located within the boundaries of the Ross Lake National Recreation Area of the North Cascades National Park Service Complex, which consists of over a half-million acres of forestlands, alpine environments, and river systems. Until the North Cascades Park and two national recreation areas were created in 1968, with the exception of the transmission lines, the Skagit River Hydroelectric Project was located within the Mount Baker National Forest. It is near the center of over two million acres of recreational land spanning three Washington counties: Chelan, Skagit, and Whatcom, most of which are under the jurisdiction of the United States Forest Service. The project itself reaches across two counties: Whatcom and Skagit.

The principal mountain peaks visible from the district are Mt. Logan (9,080 feet); Jack Mountain (9,070 feet); Colonial Peak (8,000 feet); Pyramid Peak (7,600 feet); Davis Peak (7,150 feet); Ruby Mountain (7,408 feet); Ross Mountain (6,052 feet); and Sourdough Mountain (5,977 feet). Ladder Creek Falls, which originates in Snowfield Peak (8,350 feet), is a significant natural feature that drops over 3,000 feet during its six-mile run, and is incorporated into a designed landscape within the project.

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Five major rivers drain the North Cascades National Park Service Complex. The Skagit River, the second largest river in the state, is the most prominent of these. It originates at Beaver Lake in Canada and flows in a southerly direction through densely forested lowlands for more than 50 miles, before turning west towards the Pacific Ocean, ending its 140-mile course. The Skagit River basin's topography ranges from the high mountains of the North Cascades, with elevations of 8,000 and 9,000 feet, to tidal marshes and sloughs in the river delta prior to its entrance into Puget Sound. Between the Canadian border and the town of Newhalem, the river drops over 1,000 feet in approximately 40 miles. As it shifts to a westerly course just above the north end of the district, it is compressed into deep, narrow rock-walled canyons and gorges.

A series of creeks and rivers drains into the Skagit as it travels to the sound. The Skagit River Hydroelectric Project has altered the nature of the river from the Canadian border to Newhalem. Its three dams, Ross, Diablo and Gorge High Dam, have created three lakes, the largest of which is Ross Lake, 24 miles long, extending one-half mile into Canada; Diablo Lake reaches five miles, from Diablo Dam to Ross Dam; and Gorge Lake, a part of the Skagit impounded by Gorge High Dam, extends four and one-half miles to the town of Diablo. Among the Skagit tributaries are Ruby Creek, which enters the Skagit just above Ross Dam; Thunder Creek, which debouches into Diablo Lake; Stetattle Creek, joining just west of the town of Diablo; Gorge Creek and Gorge Falls, which enter Gorge Lake; Ladder Creek; Newhalem Creek, the location of the project's first dam and powerhouse; and Goodell Creek, the site of the project's first employee camp. Below the town of Newhalem, the Cascade, Sauk and Baker Rivers flow into the Skagit.

The terrain throughout the Skagit Gorge is rugged, with sheer granite cliffs and rock outcroppings framing the once rushing waters of the river below. The area supports a rich variety of flora and fauna. Native trees include a variety of maples, paper birch, Douglas fir, western hemlock, lodgepole pine, Western Red cedar, Red alder, western yew and mountain ash. Wildlife include blacktail deer, black and brown bear, beaver, marten, otters, osprey, eagles, and grouse.

HISTORIC DISTRICT AND RESOURCES

The boundaries of the historic district extend in a linear, but disconnected, fashion along the Skagit River, from the town of Newhalem to the Ross Powerhouse and Dam. The extensive nature of the district, which totals three miles in length – excluding reservoirs – is due to the sequence of towns and industrial resources located along the river, beginning at the relatively flat bar on which the town of Newhalem is located. It continues upriver to encompass the Gorge Powerhouse and Gorge High Dam, the Diablo Powerhouse, a portion of the town of Diablo, the Diablo Incline Railroad, and Diablo Dam, Ross Dam, and Ross Powerhouse. The lakes formed by the dams are not included within the district, since humans did not significantly influence their configurations. While headworks and powerhouses are

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generally considered as one resource, in this nomination they are evaluated separately, due to changes at the dams for several of the plants.¹

As the District is largely forestland and manmade lakes, five discrete Historic Areas have been created: "A," "B," "C," "E," and "F". There are additional dis-contiguous resources included as part of the District that are included in "D" below. Generally, the resources within the District that have been evaluated at the time of this writings as non-contributing either post-date the historic period or have been significantly altered, affecting their integrity. For example, the suspension bridge between Newhalem and the Trail of the Cedars (Resource #24) has been entirely rebuilt twice since its initial construction in 1920-21.

DESCRIPTIONS OF INDIVIDUAL CONTRIBUTING AND NON-CONTRIBUTING RESOURCES

The following is a list of the contributing and non-contributing resources within District, grouped by Historic Area, beginning generally at its westernmost (downstream) end, organized according to geographic location. For locations and Historic Area boundaries, see Section 10. The descriptions are based on fieldwork conducted on October 26, 27, and 28 of 2009.

TOWN OF NEWHALEM HISTORIC AREA "A" (PERIOD OF SIGNIFICANCE: 1917-1941)

Note: all directions assume east-west is parallel to SR 20.

Site ID #:	01	Classification:	Hist. Contributing
Hist. Name:	Silk Stocking Row House #8	Present Name:	Same
Hist. Use:	Housing	Present Use:	Housing
Date:	1921	Location:	South of SR 20, west of Main Street
Style:	Bungalow	Type:	Building

¹ Gray Fitzsimons of the Historic American Engineering Record staff has indicated that in the evaluation of historic engineering significance of storage lakes and reservoirs associated with hydroelectric projects for listing in the National Register the focus is ordinarily given to the significant engineering or technology employed in the creation of a reservoir or lake. In such cases as the construction of Gorge, Diablo, or Ross lakes, where trees are simply cut and removed, and the valley behind the dam is simply allowed to fill with water, the most significant engineering work concerns surveying, soils testing and hydraulic studies within the watershed. Other than tree removal, very little construction work was required to form the three lakes of the Skagit hydro system, and hence they were not considered eligible for listing in the National Register from an engineering or technological standpoint.

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Builder:	Seattle City Light	Architect:	L. H. Rose, Seattle City Light
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Description of Physical Appearance: This building is a rectangular, one-and-one-half-story wood-framed building with narrow lapped siding and shingles on the gable ends. The main gable roof has exposed rafter tails and plain fascia boards supported on cantilevered purlins. There is a shed-roofed dormer on the west façade. The principal entrance faces south toward the Skagit River, with raised hip-roofed porch, battered columns and vertical wood slat balustrade. The entry porch has non-original concrete stairs. A secondary entrance on the northern side has a gable roof supported on wood brackets and non-original concrete steps with pipe handrails. A basement access door is located adjacent and to the west of the secondary entrance porch. Windows are single and grouped multi-paned sashes. A concrete chimney is located on the west roof slope. The original cedar shingle roof was covered by ribbed metal in the 1950s, and replaced again in 1984. All windows, except in the basement, were replaced c. 1984 with double-glazed sash windows that mimic but do not match the original fenestration. The horizontal siding is painted dark gray, the upper shingles are painted light gray, and the porch columns, guardrails, and window and door trim are white. The metal roof is gray.

Significance: This house is one of nine “permanent” houses built along the Skagit River for Seattle City Light supervisors, foremen, and operators, part of an ensemble known as “Silk Stocking Row.” It is nearly identical to Houses #1 and #4. It is still used today as company housing. The building represents, both historically and architecturally, an early phase of the development of the company town of Newhalem. It has integrity of design, materials, workmanship, setting, location, feeling, and association and remains an integral part of both Silk Stocking Row and the historic town.

Site ID #:	02	Classification:	Hist. Contributing
Hist. Name:	Silk Stocking Row House #7	Present Name:	Same
Hist. Use:	Housing	Present Use:	Housing
Date:	1922	Location:	South of SR 20, west of Main Street
Style:	Bungalow	Type:	Building
Builder:	Seattle City Light	Architect:	L. H. Rose, Seattle City Light

Description of Physical Appearance: This building is a rectangular one-and-one-half-story wood-framed building with wood shingle siding laid in a decorative course pattern. The cross-gable roof has a plain cornice and boxed eaves. The principal entrance faces south toward the Skagit River, with a full-bay raised porch recessed beneath the main roof plane, battered wood columns and vertical wood slat balustrade. The entry porch has non-original concrete stairs. A secondary entrance on the north is

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reached via non-original concrete steps with pipe handrails. A basement access door is located adjacent to and west of the secondary entrance porch. Windows are single and grouped multi-paned sliding and fixed sashes. There is a concrete chimney on the west roof slope. The original cedar shingle roof was covered by ribbed metal in the 1950s, and replaced again in 1984. All windows, except in the basement, were replaced c. 1984 with double-glazed sash windows that mimic but do not match the original fenestration. The house siding is painted gray and all exterior trim, porch columns, and balusters are painted white. The metal roof is gray.

Significance: This house is one of nine “permanent” houses built along the Skagit River for Seattle City Light supervisors, foremen, and operators, part of an ensemble known as “Silk Stocking Row.” It is nearly identical to Houses #2 and #5. It is still used today as company housing. The building represents, both historically and architecturally, an early phase of the development of the company town of Newhalem. It has integrity of design, materials, workmanship, setting, location, feeling, and association and remains an integral part of both Silk Stocking Row and the historic town.

Site ID #:	03	Classification:	Hist. Contributing
Hist. Name:	Silk Stocking Row House #6	Present Name:	Same
Hist. Use:	Housing	Present Use:	Housing
Date:	1922	Location:	South of SR 20, west of Main Street
Style:	Bungalow	Type:	Building
Builder:	Seattle City Light	Architect:	L. H. Rose, Seattle City Light

Description of Physical Appearance: This building is a rectangular, one-and-one-half-story wood-framed structure with wood shingle siding laid in a decorative course pattern. The gambrel roof has plain fascia boards and boxed eaves. There are two hip-roofed dormers on the westerly façade, and one shed-roofed dormer on the easterly façade, with all sides covered with decorative shingle coursing. The principal entrance faces south toward the Skagit River, with a full-length shed-roofed porch supported by squared columns with flared capitals. The porch has a simple wood slat balustrade and non-original concrete stairs with recently installed wood handrails. A secondary entrance on the north is reached via non-original concrete steps with recently installed wood handrails. A basement access door is located adjacent to and west of the secondary entrance porch. There is a concrete chimney rising just off-center along the roof ridge. The original cedar shingle roof was covered by ribbed metal in the 1950s and replaced again in 1984. All windows, except in the basement, were replaced c. 1984 with double-glazed sash windows that mimic but do not match the original fenestration. The house siding is painted gray and all exterior trim, porch columns, and balusters are painted white. The metal roof is gray.

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Significance: This house is one of nine “permanent” houses built along the Skagit River for Seattle City Light supervisors, foremen, and operators, part of an ensemble known as “Silk Stocking Row.” It is still used today as company housing. The building represents, both historically and architecturally, an early phase of the development of the company town of Newhalem. It has integrity of design, materials, workmanship, setting, location, feeling, and association and remains an integral part of both Silk Stocking Row and the historic town.

Site ID #:	04	Classification:	Hist. Contributing
Hist. Name:	Silk Stocking Row House #5	Present Name:	Same
Hist. Use:	Housing	Present Use:	Housing
Date:	1922	Location:	South of SR 20, west of Main Street
Style:	Bungalow	Type:	Building
Builder:	Seattle City Light	Architect:	L. H. Rose, Seattle City Light

Description of Physical Appearance: This building is a rectangular one-and-one-half-story wood-framed building with wood shingle siding laid in a decorative course pattern. The cross-gable roof has a plain cornice and boxed eaves. The principal entrance faces south toward the Skagit River, with a full-bay raised porch recessed beneath the main roof plane, battered wood columns and vertical wood slat balustrade. The entry porch has central non-original concrete stairs. A secondary entrance on the north is reached via non-original concrete steps with pipe handrails. A basement access door is located adjacent to and west of the secondary entrance porch. Windows are single and grouped multi-paned sliding and fixed sashes. There is a concrete chimney on the west roof slope. The original cedar shingle roof was covered by ribbed metal in the 1950s, and replaced again in 1984. All windows, except in the basement, were replaced c. 1984 with double-glazed sash windows that mimic but do not match the original fenestration. The house siding is unpainted and all exterior trim, porch columns, and balusters are painted white. The metal roof is gray.

Significance: This house is one of nine “permanent” houses built along the Skagit River for Seattle City Light supervisors, foremen, and operators, part of an ensemble known as “Silk Stocking Row.” It is still used today as company housing. The building represents, both historically and architecturally, an early phase of the development of the company town of Newhalem. It has integrity of design, materials, workmanship, setting, location, feeling, and association and remains an integral part of both Silk Stocking Row and the historic town.

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Site ID #:	05	Classification:	Hist. Contributing
Hist. Name:	Silk Stocking Row House #4	Present Name:	Same
Hist. Use:	Housing	Present Use:	Housing
Date:	1921	Location:	South of SR 20, west of Main Street
Style:	Bungalow	Type:	Building
Builder:	Seattle City Light	Architect:	L. H. Rose, Seattle City Light

Description of Physical Appearance: A rectangular, one and one-half-story wood-framed structure with narrow lapped siding and shingles on the gable ends. A gable roof has exposed rafter tails and plain fascia boards. The principal entrance faces south toward the Skagit River with raised hip-roofed porch, battered columns, and vertical wood slat balustrade. An entrance on the east has concrete steps and pipe handrails. A secondary entrance on the north has a bracketed porch roof, non-original concrete steps, and pipe handrail. Windows are single and grouped multi-paned sashes. A concrete chimney is located on the west roof slope. The original cedar shingle roof was covered by ribbed metal in the 1950s and replaced again in 1984; all windows, except in the basement, were replaced c. 1984 with double-glazed sash windows that mimic but do not match the original fenestration. It is in good condition.

Significance: This house is one of nine "permanent" houses built along the Skagit River for Seattle City Light supervisors, foremen, and operators, part of an ensemble known as "Silk Stocking Row." It is nearly identical to Houses #1 and #8. It is still used today as company housing. The building represents, both historically and architecturally, an early phase of the development of the company town of Newhalem. It has integrity of design, materials, workmanship, setting, location, feeling, and association and remains an integral part of both Silk Stocking Row and the historic town.

Site ID #:	06	Classification:	Hist. Contributing
Hist. Name:	Silk Stocking Row House #3	Present Name:	Same
Hist. Use:	Housing	Present Use:	Housing
Date:	1922	Location:	South of SR 20, west of Main Street

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Style:	Bungalow	Type:	Building
Builder:	Seattle City Light	Architect:	L. H. Rose, Seattle City Light

Description of Physical Appearance: This building is a rectangular one-and-one-half-story wood-framed structure, with lapped horizontal board siding below a molded wood drip and coursed wood shingle siding above it. The gable roof has wide fascia boards supported on cantilevered purlins with flared ends and boxed eaves. The principal entrance faces south toward the Skagit River, with a single bay gable-roofed porch with an enclosed pediment, boxed wood columns, and non-original concrete steps with pipe handrails. Windows are single and grouped multi-paned sashes. A concrete chimney rises near the center of the house. The original cedar shingle roof was covered by ribbed metal in the 1950s and replaced again in 1984. All windows, except in the basement, were replaced c. 1984 with double-glazed sash windows that mimic but do not match the original fenestration. The lap siding and porch architrave are painted dark blue, the shingles are painted light blue, and the fascia boards, porch columns, balusters, and window trim are painted white. The metal roof is gray.

Significance: This house is one of nine “permanent” houses built along the Skagit River for Seattle City Light supervisors, foremen, and operators, part of an ensemble known as “Silk Stocking Row.” It is nearly identical to Houses #1 and #8. It is still used today as company housing. The building represents, both historically and architecturally, an early phase of the development of the company town of Newhalem. It has integrity of design, materials, workmanship, setting, location, feeling, and association and remains an integral part of both Silk Stocking Row and the historic town.

Site ID #:	07	Classification:	Hist. Contributing
Hist. Name:	Silk Stocking Row House #2	Present Name:	Same
Hist. Use:	Housing	Present Use:	Housing
Date:	1922	Location:	South of SR 20, west of Main Street
Style:	Bungalow	Type:	Building
Builder:	Seattle City Light	Architect:	L. H. Rose, Seattle City Light

Description of Physical Appearance: This building is a rectangular one-and-one-half-story wood-framed building with wood shingle siding laid in a decorative course pattern. The cross-gable roof has a plain cornice and boxed eaves. The principal entrance faces south toward the Skagit River, with a full-bay raised porch recessed beneath the main roof plane, battered wood columns, and vertical wood slat

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balustrade. The entry porch has a central non-original concrete stairs. A secondary entrance on the northern side of the east façade is reached via non-original concrete steps with pipe handrails. A basement access door is located near the center of the northern façade. Windows are single and grouped multi-paned sliding and fixed sashes. There is a concrete chimney on the west roof slope. The original cedar shingle roof was covered by ribbed metal in the 1950s, and replaced again in 1984. All windows, except in the basement, were replaced c. 1984 with double-glazed sash windows that mimic but do not match the original fenestration. The house siding is painted buff and all exterior trim, porch columns, and balusters are painted white. The metal roof is gray.

Significance: This house is one of nine “permanent” houses built along the Skagit River for Seattle City Light supervisors, foremen, and operators, part of an ensemble known as “Silk Stocking Row.” It is still used today as company housing. It is nearly identical to Houses #5 and #7. The building represents, both historically and architecturally, an early phase of the development of the company town of Newhalem. It has integrity of design, materials, workmanship, setting, location, feeling, and association and remains an integral part of both Silk Stocking Row and the historic town.

Site ID #:	08	Classification:	Hist. Contributing
Hist. Name:	Silk Stocking Row House #1	Present Name:	Same
Hist. Use:	Housing	Present Use:	Housing
Date:	1923	Location:	South of SR 20, west of Main Street
Style:	Bungalow	Type:	Building
Builder:	Seattle City Light	Architect:	L. H. Rose, Seattle City Light

Description of Physical Appearance: A rectangular, one and one-half-story wood-framed structure with narrow lapped siding and shingles on the gable ends. A gable roof has exposed rafter tails and plain fascia boards. The principal entrance faces south with raised hip-roofed porch, battered columns, and vertical wood slat balustrade. An entrance on the east has a shed-roofed porch supported by simple wood posts, concrete steps, and pipe handrails. Windows are single and grouped multi-paned sashes. A concrete chimney is located on the west roof slope. The original cedar shingle roof was covered by ribbed metal in the 1950s and replaced again in 1984; all windows, except in the basement, were replaced c. 1984 with double-glazed sash windows that mimic but do not match the original fenestration. It is in good condition.

Significance: This house is one of nine “permanent” houses built along the Skagit River for Seattle City Light supervisors, foremen, and operators, part of an ensemble known as “Silk Stocking Row.” It is nearly identical to Houses #4 and #8. It is still used today as company housing. The building represents,

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both historically and architecturally, an early phase of the development of the company town of Newhalem. It has integrity of design, materials, workmanship, setting, location, feeling, and association and remains an integral part of both Silk Stocking Row and the historic town.

Site ID #:	09	Classification:	Hist. Contributing
Hist. Name:	Schoolteacher's House, #222	Present Name:	Same
Hist. Use:	Housing	Present Use:	Housing
Date:	1938	Location:	South of SR 20, west of Main Street
Style:	Bungalow	Type:	Building
Builder:	Seattle City Light	Architect:	Seattle City Light

Description of Physical Appearance: This building is a square, one-and-one-half-story wood-framed structure on a concrete foundation. It has narrow lapped wood siding and a gable roof with chamfered cantilevered purlin ends supporting a simple fascia. A central pedimented gabled single-bay projects on the south with its roof supported by non-original round steel pipe columns. An original shed-roofed porch on the southern façade was removed in 1955, and a gable-roofed addition with a recessed entry on its eastern side was built to house a laundry room. Non-original round steel pipe columns support the entry roof. Windows are now four-over-one vertical sliding sash. An original brick chimney was removed. The original cedar shingle roof was covered by ribbed metal in the 1950s and replaced again in c. 1984. The lapped siding is painted mauve, and the fascia and window and door trim are painted white.

Significance: In July of 1939, Seattle City Light built a cottage for the town's schoolteacher, who had throughout the 1920s and 1930s lodged with families of employees, or resided in apartments carved out of "Silk Stocking Row" House Number 2, or in temporary cottages. The house is similar to those designed by the department's draftsman, L. H. Rose, for the "Poverty Row" houses on the western edge of town. The building represents, both historically and architecturally, a later phase of Newhalem's development, and is an integral part of the historic community. It has integrity of design, materials, workmanship, setting, location, feeling, and association.

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Site ID #:	11	Classification:	Hist. Non-Contrib.
Hist. Name:	Bunkhouse #23	Present Name:	The Hotel
Hist. Use:	Housing	Present Use:	Housing
Date:	1920	Location:	South of SR 20, on Main Street
Style:	Bungalow	Type:	Building
Builder:	Seattle City Light	Architect:	Seattle City Light

Description of Physical Appearance: This narrow rectangular one-story wood-framed building has a raised concrete foundation and measures approximately 81 feet 2 inches east-west (not including a 5-foot deep entry porch) and 26 feet north-south. The building currently has horizontal lapped siding with approximately 5-inch exposure with corner boards. The building siding is presently painted light blue and the porch architrave and columns are painted a darker blue. The building has a main gable roof pitched at a 10-in-12 slope with the ridge running east-west. A non-original full-width entry porch on the building's eastern side has a pedimented gable roof with a 6-in-12 slope supported by four equally-spaced square wood columns. Both roofs are covered with brown-colored ribbed metal and have vertical rectangular louvered gable-end vents. The eastern façade is primary and has a central non-original paneled entry door flanked by a pair of horizontal windows with sliding aluminum sashes. The northern façade has six horizontal windows with sliding aluminum sashes spaced along the façade, and two secondary doorways with non-original doors near the western end flanking the last two windows. The doors have shed roofs supported on brackets. The western façade has a central doorway with a non-original paneled door sheltered by a pedimented gabled porch roof supported by square wood posts. The porch is raised and accessed by concrete steps, and has wood guardrails and handrails. The southern façade is similar to the northern façade without the secondary doorways. The building's original gabled entry porch on the east was replaced c. 1970, and the original siding of vertical 6-inch wood boards and original wood-sash windows were replaced around the same time. The original building drawings called for a roof of Malthoid composition roofing secured by battens. The building is in good condition.

Significance: The building was initially intended as a bunkhouse for Seattle City Light employees working on the Skagit River Hydroelectric Project, and is one of four remaining structures dating from the first period of construction in City Camp. In the mid-1920s the building accommodated overnight visitors taking a tour of the project, and has been used to house transient employees and visitors from that time to the present. The building is significant for its association with the Skagit Project and the company town of Newhalem, representing the early years of the town's development. While it contributes to the historic core of the town – Main Street – changes, including the loss of the main entry

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roof, the original siding, the exterior doors and door hardware, and all fenestration, have eroded the building's integrity of design, materials, and workmanship. The building retains its physical integrity in setting, location, feeling, and association.

Site ID #:	12	Classification:	Hist. Contributing
Hist. Name:	Commissary	Present Name:	Commissary
Hist. Use:	Company store	Present Use:	Commercial store
Date:	1923	Location:	South of SR 20, on Main Street
Style:	Vernacular	Type:	Building
Builder:	Seattle City Light	Architect:	L. H. Rose, Seattle City Light

Description of Physical Appearance: This narrow rectangular one-story wood-framed building has a concrete foundation and measures approximately 96 feet north-south (not including a 6-foot deep entry porch on the western building face) and 26 feet east-west. There is a gable-roofed addition (c. 1950) on the northern side of the eastern façade. The building presently has coursed sidewall shingles with a 7/2-inch exposure (7 inches alternating with 2 inches), with corner boards. The building siding is presently painted light taupe on the north, east, and southern façades and the shingles on the western façade are natural/oiled. The building's fascia boards and window and door trim are painted dark green. Columns supporting the entry porch are stained or painted dark brown. The building has a main gable roof pitched at a 10-in-12 slope with the ridge running north-south. A full-width raised entry porch on the building's western side has a non-original shed roof with a 6-in-12 slope supported by ten equally spaced square steel tube columns. The porch roof has a gabled pedimented entry bay located slightly to the north of the center aligning with the main building entrance. All roofs are covered with taupe-colored ribbed metal. Rectangular louvered vents are located at all gable ends.

The western façade is primary and has a tripartite window group of what appear to be original wood-sash windows on its northern side, a main entry doorway with a pair of non-original store doors located slightly north of center, another tripartite window group, and what may be original nine-light fixed wood-sash window toward the southern end. A loading dock with doorway is located near the southern end. The foundation of the southern five feet of the façade is concrete block. The southern façade has a recessed on-grade doorway on its western side and a large electrical service box slightly east of center. The southern façade of the eastern addition has a doorway with a steel door near its western end. The remainder of the façade is blank. The eastern façade has a small shed roof supported on two square wood columns sheltering air compressors on its southern side. The remainder of the façade is

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blank. The northern façade has one what may be original fixed wood-sash horizontal window on its western side.

Plans for a "Commissary" drawn in 1920, called for a simple wood-framed building with vertical board and batten siding, a wood-shingled gable roof, 9-light fixed or hinged windows across the western façade, a shed roof overhanging only the main entry, and a planked walk running along western side of the building. The plans also called for a ridge skylight running over the central portion of the building. A shed roof addition on the building's southern side that was used as a butcher shop was removed prior to 1989. The original board and batten siding was replaced with horizontal lapped siding or shingles around 1930s, and remaining wall surfaces were shingled after 1989. A gable-roofed addition was added to the building's eastern side c. 1950. Approximately five feet were added to the building's southern side after 1989. The building is in good condition.

Significance: Designed and built in 1920, the Commissary is one of four extant structures on Newhalem's Main Street dating to the town's earliest development. The building served as the company store for Seattle City Light employees living on the Skagit—it was the source of clothing, food and staples for all community residents. Prices were competitive with other accessible stores (e.g., Rockport, which could be reached by train). Employees paid for items in scrip. In the 1950s an addition to the east was built to provide freezer locker storage for residents. It serves as dry storage for the store operation. While the building still functions as a company store, it now also serves tourists. The Commissary is significant for its association with the Skagit River Hydroelectric Project and the company town of Newhalem. Changes, including loss of the main entry roof, the original siding and roofing, the exterior doors and door hardware, and some fenestration; and later additions of the full-length entry roof and southern addition; have eroded the building's integrity of design, materials, workmanship. The building retains its physical integrity in setting, location, feeling and association.

Site ID #:	13	Classification:	Hist. Contributing
Hist. Name:	Bunkhouse #13, Pansy House	Present Name:	Bunkhouse #13
Hist. Use:	Housing	Present Use:	Housing
Date:	1934	Location:	South of SR 20, east of Main Street
Style:	Craftsman	Type:	Building
Builder:	Seattle City Light	Architect:	Unknown

Description of Physical Appearance: This rectangular one-and-one-half-story wood-framed building has a concrete foundation (with horizontal foundation vents at plate height) and measures approximately 60 feet east-west and 26 feet north south. The building is clad with narrow lapped siding

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painted brown-gray, with decorative patterned shingles in the gable ends and on the dormers that are painted taupe. Doors, window and door trim, brackets and cantilevered purlins, rafter tails and bargeboards are painted white. Window sashes are painted dark green. The building has a steeply pitched (12-in-12) gable roof with large low-slope (6-in-12) shed-roofed dormers on the north and the south. Roof overhangs are approximately 12 inches, with exposed rafter tails and with simple bargeboards supported on cantilevered purlins. The roofing is brown ribbed metal.

The southern façade is primary (facing Bachelor Lane). An entry doorway with a non-original paneled door is located slightly to the west of center on the main floor. The doorway is sheltered by a small gable roof supported by a pair of wood brackets. Two pair of wood-sash nine-light casement windows are located on the eastern side of the entry, a single wood-sash nine-light casement window is located on the western side of the entry, and another pair of wood-sash nine-light casement windows is located to the west of the single window. The eastern façade is blank on the main floor, although a large electrical service box is attached to the building slightly north of center. The upper floor has a central pair of wood-sash nine-light casement windows. The gable end has an upper vertical louvered attic vent. The northern façade has three pair of pair of wood-sash nine-light casement windows located on its western side of the main floor, with the most eastern window centered on the façade. The northern dormer has three pairs of wood-sash nine-light casement windows evenly spaced along its face, with the most western two centered over a corresponding window on the main floor. The western façade has a central doorway with a non-original paneled door. The doorway is accessed by a simple concrete stoop and stairs and is sheltered by a small gable roof supported on wood brackets. A wood-framed egress stairway extends from the south up to a central non-original doorway on the upper floor. The gable end has an upper vertical louvered attic vent. The original wood roof shingles were covered by a ribbed metal roof, c. 1958. The building was extensively renovated in 2009, including exterior renovation, general bathroom and kitchen upgrades, and the installation of a sprinkler system. The building is in excellent condition.

Significance: The building was designed as a bunkhouse for Seattle City Light employees working on the Skagit River Hydroelectric Project. It was one of several built over the course of the project to accommodate single men. It is similar in construction to Bunkhouse #10. In the 1940s, its interior was altered to house families, a response to the perennial shortage of family housing on the Skagit. It is still used periodically to house Seattle City Light crews. The name Pansy was appended to the building when it housed dishwashing crews – “pansy” referring to the men working on the crews. The structure is historically and architecturally significant for its association with the Skagit River Hydroelectric Project and the company town of Newhalem. It represents the second phase of the town’s physical development – the mid-1930s. The building was extensively renovated in 2009. It possesses integrity of design, location, materials, workmanship, setting, feeling and association.

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Site ID #:	14	Classification:	Hist. Contributing
Hist. Name:	New Cook's Bunkhouse, Bunkhouse #10	Present Name:	Bunkhouse #10
Hist. Use:	Housing	Present Use:	Office
Date:	ca. 1934	Location:	South of SR 20, east of Main Street
Style:	Craftsman	Type:	Building
Builder:	Seattle City Light	Architect:	Unknown

Description of Physical Appearance: This rectangular one-and-one-half-story wood-framed building has a concrete foundation, with horizontal foundation vents on the southern side and measures approximately 50 feet east-west and 26 feet north south. The building is clad with narrow lapped siding painted brown/gray, with decorative patterned shingles in the gable ends and on the dormers that are painted taupe. Doors, window and door trim, brackets and cantilevered purlins, rafter tails and bargeboards are painted dark green. Window sashes are painted white. The building has a steeply pitched (12-in-12) gable roof with large low-slope (6-in-12) shed-roofed dormers on the north and the south. Roof overhangs are approximately 12 inches, with exposed rafter tails and with simple bargeboards supported on cantilevered purlins. The roofing is brown ribbed metal.

The northern façade is primary (facing Bachelor Lane). An entry doorway with a non-original paneled door is located slightly to the west of center. The doorway is sheltered by a small gable roof supported by a pair of wood brackets. Two pair of wood-sash nine-light casement windows are located on the eastern side of the entry, a single wood-sash nine-light casement window is located on the western side of the entry, and another pair of wood-sash nine-light casement windows located to the east of the single window. The northern dormer has a pair of wood-sash nine-light casement windows located on its eastern and western ends; the easternmost is centered over its corresponding main floor window pair. The western façade is blank on the main floor, although the raised foundation has a central crawlspace access doorway. The upper floor has a central pair of wood-sash nine-light casement windows. The gable end has an upper vertical louvered attic vent. The southern façade has four pair of pair of wood-sash nine-light casement windows evenly spaced along the main floor wall. The southern dormer has a pair of wood-sash nine-light casement windows located on its eastern and western ends, each centered over its corresponding main floor window pair. The eastern façade has a central wood-sash nine-light casement window on the main floor, and a central pair of wood-sash nine-light casement windows on the second floor. The gable end has an upper vertical louvered attic vent. The original wood roof shingles were covered by a ribbed metal roof, c. 1958. The building was extensively renovated in 2009. The building is in excellent condition.

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Significance: The building was designed as a bunkhouse for Seattle City Light employees working on the Skagit River Hydroelectric Project. It was one of several built over the course of the project to accommodate single men. It is similar in construction to Bunkhouse #13. The cooks for the Seattle City Light Mess Hall (Resource #15) were housed in this building after construction – they were first housed in the original Cook's Bunkhouse, still extant (Resource # 16). The structure is historically and architecturally significant for its association with the Skagit River Hydroelectric Project and the company town of Newhalem. It represents the second phase of the town's physical development – the mid-1930s. The building possesses integrity of design, location, materials, workmanship, setting, feeling and association.

Site ID #:	15	Classification:	Hist. Contributing
Hist. Name:	Mess Hall	Present Name:	Gorge Inn
Hist. Use:	Dining and Kitchen	Present Use:	Vacant
Date:	1920	Location:	South of SR 20, end of Main Street
Style:	Vernacular	Type:	Building
Builder:	Seattle City Light	Architect:	Unknown

Description of Physical Appearance: This one-story wood-framed building is presently "T" shaped in plan, with the main section running adjacent to Riverside Way measuring overall approximately 138 feet east-west and 41 feet north-south. A wing measuring approximately 31 feet wide east-west and extends northward from the main building section approximately 34 feet. The southern portion of the building presently rests on a sub-standard concrete perimeter foundation, while the northern portion appears to rest on 4x6 sills resting directly on soil. The internal floor framing is supported by columns resting on soil or on pier blocks, or directly on pier blocks or soil. The original 1920s construction is classified as "Camp Construction," a modified version of balloon framing used for quickly built temporary buildings. The original framing consists of rough-cut net dimensional lumber produced on-site. The western and southern facades are presently covered with coursed (7/2 inch) shingles, with the east and north facades retaining their original vertical boards. All building siding is presently painted white, with the window sash painted dark green. The main portion of the building (the dining hall) and the northern extension have steeply pitched roofs (10-in-12), with the roof of the main portion made asymmetrical by the shed-roof (4-in-12) addition on the northern side. The ridge of the main portion (southern) runs east-west. A small hip-roof addition is located at the northern extension's northern end. The roof of the northern extension has several metal mechanical ventilators. The roofs are covered with ribbed metal.

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The western façade is primary, with the main entry doorway centered under the main ridge. The existing paneled door, with upper glazing, is sheltered by a simple shed roof supported by wood brackets. There is a similar doorway on the façade's northern end. Two pairs of nine-light wood-sash casement windows are located on the northern side of the main doorway, and another pair is located on the southern side. Above the later windows is a wooden sign with lettering ("Elevation 509"). A pair of horizontal six-light wood wood-sash fixed windows is centered on the gable end. A wooden sign with lettering ("Gorge Inn") hangs from a decorative hanger mounted perpendicular between the windows. The western façade of the northern extension has a former doorway that is now boarded-up, as is a former window located to the south of the doorway. A small gable roof that was a portion of a former addition (former butcher shop) is located above the doorway. The southern façade (adjacent to Riverside Drive) has a boarded up entry doorway located slightly to the west of center. Two nine-light wood-sash casement windows flank the former entry, now boarded up. Six pairs of nine-light wood-sash casement windows are located on the western side of the western window and four pairs of nine-light wood-sash casement windows are located on the eastern side of the eastern window. One nine-light wood-sash casement window is located at the eastern end of the façade and a single pair nine-light wood-sash casement windows is located to the west of this window. The eastern façade is almost identical, but a mirror image of the western façade. The grade rises on the northern side eliminating the northernmost pair of windows. The eastern façade of the northern extension has four blank horizontal windows. The northern façade's eastern end has two pairs of nine-light wood-sash casement windows on its eastern side, a single nine-light wood-sash casement window slightly to the west of center, and another pair of nine-light wood-sash casement windows on its western side. The northern façade of the northern extension has a pair of nine-light wood-sash casement windows on its eastern side and a single nine-light wood-sash casement window near its center. There are two windows that have been boarded up on the façade's gable end. The northern façade's western end has five windows that have been boarded up. The interior includes the former mess hall on the south and the kitchen is located in the northern extension. The eastern shed roof addition contains the former bakery.

The original "T" shaped building included a 30 foot by 99 foot mess room, with entries centered on the east, west and south; a 30 foot by 30 foot kitchen to the north of the mess room that had a small gable-roofed store room on the kitchen's northwest corner. The year after construction, a pantry, an L-shaped bakery and extensions to the east and west ends of the mess room were built. A new bakery gable-roofed bakery (demolished in 2009) was added in 1934, and a shed-roof addition was added to the mess hall (southern portion). By the late 1920s the most visible elevations, the west and south, were clad with wood shingles laid in a decorative pattern. The roofs were covered with ribbed metal in the 1950s. A shed-roofed addition on the south, which served as the main entrance to the dining room for some years, was removed in 1989. The building is in fair condition.

Significance: The building is one of four on Newhalem's Main Street dating to the first period of construction. It was designed by the City Engineer's Office as a mess hall and kitchen for Seattle City Light employees working on the Skagit Hydroelectric Project. The mess hall was expanded and an "L" shaped bakery addition was added on the western side of the kitchen in 1921. When the Skagit public

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tours were initiated in the 1927, tourists who stayed overnight in bunkhouses were also served three meals in the cookhouse, in addition to single "unmarried" Seattle City Light employees. The mess hall was expanded again in 1934, this time to the north; and the bakery was expanded, becoming the butcher shop. The bakery was moved to the eastern side of the side of the northern mess hall addition. The name off the building was changed to the "Gorge Inn" in 1940. When the tours stopped in 1942 because of World War II, the facility continued in use for workers. After the war, when construction activity recommenced, the building served as the primary cookhouse for administrative staff, official visitors, railroad crews, and Seattle City Light maintenance crews. When public tours resumed in 1953, they no longer included overnight accommodations, but the building was used for the preparation lunch and dinners for up to 600 tourists a day. In 1973, when project staffing was reduced due to automation, tourist activities shifted to Diablo. When Diablo School was closed, the school was converted to a visitor center and cookhouse. The subject building was last used in the late 1970s, and is presently vacant. The building is historically and architecturally significant for its association with the Skagit Hydroelectric Project, the company town of Newhalem, and the Skagit tours. It possesses integrity of design, materials, setting, location, workmanship, feeling and association.

Site ID #:	16	Classification:	Hist. Contributing
Hist. Name:	Old Cook's Bunkhouse	Present Name:	Cambridge House
Hist. Use:	Housing	Present Use:	Office
Date:	1921	Location:	South of SR 20, east of Main Street
Style:	Vernacular	Type:	Building
Builder:	Seattle City Light	Architect:	Unknown

Description of Physical Appearance: This rectangular one-story wood-framed building measures approximately 80 feet east-west and 26 feet north-south. The building has a post and pier perimeter foundation with metal skirting, with horizontal foundation vents at plate height. The building is clad with narrow lapped siding painted taupe and has corner boards. Window and door trim, corner boards, cantilevered purlins, and fascia boards are dark blue. Window sashes are painted white. The building has a steeply pitched (10-in-12) gable roof. Roof overhangs are approximately 12 inches, with exposed rafter tails and with simple fascia boards. The roofing is brown ribbed metal.

The northern façade is primary (facing Bachelor Lane). A central entry doorway with a non-original paneled door is sheltered by a small low-slope gable roof supported by a pair of cantilevered purlins. A vertical wood-sash nine-light double-hung window is located on the western side of the entry. Three pairs of horizontal wood-sash nine-light fixed windows are located on the remaining wall surfaces

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on either side of the entry. The eastern façade has a central doorway accessed by a simple concrete stoop and stairs with a non-original paneled door sheltered by a small low-slope gable roof supported by a pair of wood brackets. The gable end has an upper vertical louvered attic vent. The southern façade has an entry doorway accessed by a simple concrete stoop and stairs with a non-original paneled door located slightly to the east of center. The doorway is sheltered by a small low-slope gable roof supported by a pair of cantilevered purlins. A vertical wood-sash nine-light double-hung window is located on the eastern side of the entry. Three pairs of horizontal wood-sash nine-light fixed windows are located on the western side of the entry. A small shed roof located between the central and the easternmost windows of the group is supported on square wood posts and shelters mechanical equipment. Two pairs of horizontal wood-sash nine-light fixed windows are located on the façade's eastern end. The western façade mirrors the eastern façade.

The building's roof was originally covered with Malthoid secured by battens, which was replaced by ribbed metal in the 1950s. The original structure was 26 feet by 44 feet, and clad with vertical board siding. By 1935, an addition doubled the building's size, and the two parts were united visually through the application of the present siding. The building is in fair condition.

Significance: The building was built in 1921 as a bunkhouse for Seattle City Light workers, and is referred to on early maps as the "Cook's Bunkhouse." Later it served as a bunkhouse for tourists. It came to be referred to as the Cambridge House (reason unknown), possibly in the mid-1930s when the "New" Cook's Bunkhouse was built. It was used as a community library for a number of years; today it serves as offices for Skagit workers. The building is significant historically and architecturally for its association with the Skagit River Hydroelectric Project, the company town of Newhalem, and the Skagit tours. It represents the early years of Newhalem's development, and is the sole remaining bunkhouse of the first eighteen erected in the town in 1920-21. It has integrity of design, materials, workmanship, location, setting, feeling, and association.

Site ID #:	17	Classification:	Hist. Contributing
Hist. Name:	Tourist Dormitory #70	Present Name:	Bunkhouse #70
Hist. Use:	Tourist Housing	Present Use:	Housing
Date:	1920	Location:	South of SR 20, end of Main Street
Style:	Craftsman	Type:	Building
Builder:	Seattle City Light	Architect:	Unknown

Description of Physical Appearance: This rectangular one-and-one-half-story wood-framed building has a concrete foundation (with horizontal foundation vents at plate height) and measures

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approximately 60 feet east-west and 26 feet north south. The building is clad with narrow lapped siding painted dark gray. Doors, window and door trim, brackets and cantilevered purlins, and bargeboards are painted white. The window sashes are painted dark green. The building has a steeply pitched (12-in-12) gable roof with large low-slope (6-in-12) shed-roofed dormers on the north and the south. Roof overhangs are approximately 12 inches, with exposed rafter tails and with simple bargeboards supported on cantilevered purlins. The roofing is gray ribbed metal.

The northern façade is primary (facing Bachelor Lane). An entry doorway with a non-original paneled door is located slightly to the east of center on the main floor and accessed by a low concrete ramp. The doorway is sheltered by a small gable roof supported by a pair of wood brackets. Three pairs of wood-sash nine-light casement windows are located on the eastern side of the entry, a single wood-sash six-light window is located on the western side of the entry, and two pairs of wood-sash nine-light casement windows are located at the western end of the building. The northern dormer has five pairs of wood-sash nine-light casement windows spaced along the wall surface, with the middle window located slightly west of center. The outer-most dormer windows are centered over a corresponding main floor window pair. The western façade has a central main floor doorway with a non-original paneled door. The doorway is accessed by a wooden deck/porch supported on square wooden posts. A wood-framed stairway extends from the north up to a porch/deck supported by posts extending upward from the main floor. The upper floor has a central non-original doorway and a wood-sash nine-light casement window is located to the south of the doorway. The gable end has an upper vertical louvered attic vent. The southern façade has a secondary entry doorway with a non-original paneled door that is located slightly to the east of center. Because the grade slopes down from the north, the doorway is accessed by a wooden deck/porch supported on square wooden posts with stairs extending downward to the west. The main floor has two pairs of wood-sash nine-light casement windows located near the façade's westernmost end, and three pairs of wood-sash nine-light casement windows located near the façade's easternmost end. The façade has a daylight basement with an access doorway on the façade's westernmost end, and two pairs of wood-sash nine-light casement windows located near the façade's easternmost end. The southern dormer has two pairs of wood-sash nine-light casement windows located on its eastern and western ends, each centered over its corresponding main floor window pair. The eastern façade is nearly a mirror image of the western façade.

The original wood roof shingles were covered by a ribbed metal roof, c. 1958. The building was extensively renovated in 2009, including exterior renovation, general bathroom and kitchen upgrades, and the installation of a sprinkler system. The building is in excellent condition.

Significance: This building is the only extant tourist dormitory in Newhalem, dating from the mid-1930s, designed specifically to house the increasing numbers of overnight tourists visiting the Skagit Project. In the off-season Seattle City Light workers were allowed to live in the dorms. After the tours ended in 1941, workers could live in the buildings year-round. In 1943 the interior of this building was altered to provide apartments for families. In the 1950s the building was used to house Gorge Powerhouse operators; it is still used intermittently for housing today. The building is historically and architecturally significant for its association with the company town of Newhalem and the development

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and promotion of the hydroelectric project through the Skagit tours. It is representative of the second phase of physical development of the town. It possesses integrity of design, location, materials, workmanship, setting, feeling, and association.

Site ID #:	18	Classification:	Hist. Contributing
Hist. Name:	USGS Stream Gauging Station	Present Name:	USGS Stream Gauging Station
Hist. Use:	Water measuring station	Present Use:	Water measuring station
Date:	1923	Location:	South of SR 20, west of Main Street south of Res. #6
Style:	Vernacular	Type:	Building
Builder:	Unknown	Architect:	Unknown

Description of Physical Appearance: The stream gauging station is a 10-by-10-foot reinforced concrete structure built into the slope of the bank of the Skagit River, with steel steps leading down to the river where a wooden staff gauge is located at the water's edge. The structure has a concrete shed roof, an entry door on the east, and a square window on the west. The gauge has gradations marked every tenth of a foot. The station is in good condition.

A wood and steel cable car and its support system that was previously included in this resource was removed after 1991.

Significance: The United States Geological Survey selected this site along the Skagit River as one of its stream gauging stations, collecting data – including water depths – to ascertain the quantity of water expected to “run off” the mountains each year, beginning in November of 1908. The information gathered by the USGS was critical for Seattle City Light's Skagit Project and the production of hydroelectricity. F. E. Davis of the Davis Ranch took readings in the 1920s. On June 5, 1923, a staff gage and a Stevens Continuous Recorder in a concrete shelter was installed. In May of 1940 a water stage recorder was installed. The 1909 cable car that was used to take measurements from the center of the river was removed sometime after 1991 and is no longer a contributing resource. The site is significant for its historic association with Seattle City Light's Skagit River Hydroelectric Project.

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Site ID #:	19	Classification:	Hist. Contributing
Hist. Name:	Old Number Six	Present Name:	Old Number Six
Hist. Use:	Locomotive	Present Use:	Exhibit
Date:	1923	Location:	South of SR 20, east of Main Street
Style:	Vernacular	Type:	Building
Builder:	Baldwin Locomotive Works	Architect:	Unknown

Description of Physical Appearance: This steam engine is an oil-fired 2-6-2 Prairie type Baldwin clan 10-30-1/4-D, 61 locomotive. The wagon-type boiler weighs approximately 67 tons; the tender behind weighs approximately 32 tons. In September of 1973 the locomotive was refurbished for operation as a tourist excursion train. It presently serves as a permanent outdoor exhibit in Newhalem.

Significance: This locomotive played an important role in the construction of Diablo and Ross Dams, and served as the major means of transportation for tourists visiting the Skagit Project. It ran on Seattle City Lights' Skagit River Railway, which ran east from Rockport, 23 miles to Newhalem, and later was extended to Diablo. The railroad, under construction in 1920, was built to carry construction materials, equipment, and workers to the towns, dams, and powerhouses. Beginning in 1924, the railroad was also used to carry tourists, and did so until 1941, becoming a principal feature in the two-day Skagit tours. The railway operated steam, electric, and diesel-fired equipment. Old Number Six was built by the Baldwin Locomotive Works, which built steam engines in Philadelphia and Eddystone, PA, from 1832 until 1956. Old Number Six operated on the line until the railroad was removed in 1954. In 1973, the locomotive was removed to the town of Concrete, Washington, where it remained until February 5, 1986, when it was returned to Newhalem and installed in its present location. It is significant for its association with the construction of Diablo and Ross Dams, and for its association with the Skagit tours. It has integrity of design, materials, workmanship, setting, feeling, and association. (Note: In 1973, without approval by the Washington State Review Board, the locomotive was listed in the National Register of Historic Places. The Board determined it was not eligible for listing, and requested its removal on December 27, 1973, and it was "delisted" in January 1974. It remains listed on the Washington State Register of Historic Places.)

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Site ID #:	20	Classification:	Hist. Contributing
Hist. Name:	Fire Hall	Present Name:	Old Fire Hall
Hist. Use:	Fire engine storage	Present Use:	Storage
Date:	1956	Location:	South of SR 20, west of Main Street
Style:	Vernacular	Type:	Building
Builder:	Seattle City Light	Architect:	Unknown

Description of Physical Appearance: A rectangular one-story wood-framed gable-roofed structure measuring approximately 30 feet 2 inches east-west, 16 feet 2 inches north-south, and 15 feet from grade to the top of the ridge. Siding is painted horizontal board siding with an 11-inch exposure. Siding is off-white and trim is light blue. The roof slope is 8-in-12 with the ridge running east-west. The roofing is ribbed metal. A tilt-up nine-panel door is located on the western façade.

Significance: The fire hall was erected around 1956, on the site of demolished workers' cottages to house a fire truck for the Newhalem Volunteer Fire Department.

Site ID #:	21	Classification:	Hist. Contributing
Hist. Name:	Tourist Restroom	Present Name:	Restroom
Hist. Use:	Restroom	Present Use:	Restroom
Date:	1934	Location:	South of SR 20, east of Main Street
Style:	Vernacular	Type:	Building
Builder:	Seattle City Light	Architect:	Unknown

Description of Physical Appearance: A rectangular one-story wood-framed building measuring approximately 28 feet east-west, 34 feet north-south, and 17 feet from grade to the top of the ridge. The building is built on a raised concrete foundation. It is sided with horizontal lapped-wood siding with a 4.5-inch exposure and shingles with alternating courses of 2-inch and 7-inch exposure in the gable ends. The siding is painted mustard and the window and door trim is painted white. The building has a

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jerkinhead gable roof with extended eaves with simple fascia boards supported on wood corbels and overhangs, with exposed rafter tails. Extensions and overhangs are approximately 16 inches. The roof is covered with ribbed metal. There is a narrow vertical louvered wood gable-end attic vent on the south façade. The north gable end has a centrally placed tripartite window; the center window is now blank (wood) and the two outer windows have removable plywood panels. The entry door is centered on the north façade and is sheltered by a shed roof with exposed wood rafters supported by 8x8 brackets. Two square nine-light windows flank the entry doorway. The main floor window trim is cased with backbands, and the attic window and door trim is simple flat boards. A rectangular one-story flat-roofed addition built between the mid-1960s and early-1970s was removed subsequent to the 1990 National Register Nomination.

Significance: The building was built some time between 1932 and 1938, as J. D. Ross pushed for more tourist accommodations for his Skagit tours. It served as a public restroom for tourists who arrived daily by train during the summer months. A rectangular one-story flat-roofed addition built between the mid-1960s and early-1970s was removed subsequent to the 1990 National Register Nomination. The building presently possesses integrity of design, location, materials, workmanship, setting, feeling, and association. (Note: This building has been added as a Contributing Resource in the 2010 National Register Update.)

Site ID #:	22	Classification:	Hist. Contributing
Hist. Name:	Currier Hall	Present Name:	Currier Hall
Hist. Use:	Auditorium and Recreation	Present Use:	Auditorium and Recreation
Date:	1957-58	Location:	South of SR 20, west of Main Street
Style:	Modern	Type:	Building
Builder:	Seattle City Light	Architect:	Seattle City Light

Description of Physical Appearance: This building is a one-story rectangular building with an entry vestibule protruding from the northeastern corner. The building measures approximately 95 feet east-west and 50 feet 9 inches north-south. The building has a gable roof with the ridge running east-west. The building's walls are sheathed with vertical lap siding on the lower 7 feet, with horizontal beveled siding for the remaining wall surface up to the roof soffit and extending upward on the gable ends. The roof has an approximately 4-in-12 slope and the top of the ridge is approximately 18 feet 6 inches from the surrounding grade. The entry area on the eastern side has a wraparound shed-roof returning as a hip roof to the main gable. Roof overhangs are approximately 35 inches. The roof is covered with ribbed metal roofing. The building's entry foyer is glazed with a large nine-light glass

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curtain-wall on its southeastern corner and a long four-light window band on northern end of its eastern façade. The southern façade has two egress doors, the western façade is blank, and the northern façade has a recessed service doorway near its western end. The vertical siding and trim is painted light gray, the horizontal siding is painted light blue, and the existing metal roof is brown.

Significance: The building replaced the Big Hall, social center for the town of Newhalem since the 1920s, and later the location for presentations to tourists. It was named for Dana Currier, a long-time employee of Seattle City Light on the Skagit.

Site ID #:	23	Classification:	Hist. Contributing
Hist. Name:	Totem Pole	Present Name:	Totem Pole
Hist. Use:	Exhibit	Present Use:	Exhibit
Date:	1935	Location:	South of SR 20, west of Main Street
Style:	Native American/Folk	Type:	Building
Builder:	Unknown	Architect:	N.A.

Description of Physical Appearance: A small totem pole approximately 6 feet high is mounted on a field-stone base with an interpretive wooden sign located to its south. The exhibit is located on Newhalem's Main Street northeast of Currier Hall. The accompanying sign reads:

"Thunderbird Totem

Below the Thunderbird is the bear. Ears on top of the head signify animals, according to custom.

The long straight beak identifies the raven, subject of many Indian stories. Lowest on the totem pole is another bear."

Significance: This pole is located on Newhalem's Main Street north of Currier Hall and may originally been a gift to Seattle City Light. The exhibit dates from around the same time as Currier Hall. Totem poles were important to the Haida, Tlingit, Kwakiutl and some Alathabaskan tribes. There is no record of totem pole traditions for the Coastal Samish tribes that occupied the upper Skagit.

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Site ID #:	24	Classification:	Non-Hist. Non-Contributing
Hist. Name:	Trail of Cedars Suspension Bridge	Present Name:	Trail of Cedars Suspension Bridge
Hist. Use:	Pedestrian Bridge	Present Use:	Pedestrian Bridge
Date:	1975	Location:	South of SR 20, south of Main St.
Style:	Utilitarian	Type:	Structure
Builder:	University of Washington Students	Architect:	University of Washington

Description of Physical Appearance: A pedestrian suspension bridge spanning the Skagit River. The bridge is approximately 250 feet long. Two welded and bolted steel bents approximately 26 feet high support the stranded steel cables, which extend as backstays to dead man supports. Vertical cables drop down from the main cables to support a braced heavy-timber walkway with timber flooring and a guardrail of steel chain-link and steel.

Significance: This is the third suspension bridge spanning the Skagit River in this location. The bridge site was originally developed to provide access, primarily for tourists, to the nearby Newhalem Creek Powerhouse (See #26), and linked the northern and southern banks of the Skagit River. The bridge also serves as a terminus of the north-south axis of Main Street. The southern end leads to a path through a cedar grove on the south bank of the river, developed by University of Washington forestry students in 1970 as part of Newhalem's 50th anniversary celebration. The trail then follows the historic path to the Newhalem Powerhouse. Although the site is significant, this bridge was entirely rebuilt in the mid-1970s, and its construction post-dates the historic period and therefore is not eligible for listing in the National Register. (Note: Only the northern portion of the bridge lies within the Town of Newhalem National Register District.)

Site ID #:	43	Classification:	Non-Hist. Non-Contributing
Hist. Name:	Skagit Information Center	Present Name:	Skagit Information Center
Hist. Use:		Present Use:	Interpretive Center
Date:	2001	Location:	South of SR 20, west of Main Street

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Style:	Northwest Modern	Type:	Building
Builder:	Seattle City Light	Architect:	Seattle City Light

Description of Physical Appearance: This wood-framed building measures approximately 24 feet wide east-west and 100 feet long north-south. The building has two sections: a museum space housing an interpretive display on the south, and public restrooms on the north. The two sections are separated by a covered walkway open on the east and west. The building has horizontal tongue-and-groove siding painted gray. The building has a high-slope (12-in-12) roof with the ridge running north-south. A shed roof supported by a wide-flange steel beam and three wide-flange steel columns extends eastward over the eastern entry walkway. The roof is covered by gray metal standing-seam roofing.

Significance: This building is located on the site of the old Seattle City Light administrative office. The building was constructed between 2000 and 2001 and houses an interpretive exhibit and restrooms. The building does not meet minimum age requirements and is not eligible for listing in the National Register. A turbine runner removed from the Gorge Powerhouse (NHR 27a) that is mounted adjacent to the building is not eligible for listing in the National Register.

Site ID #:	44	Classification:	Non-Hist. Non-Contributing
Hist. Name:		Present Name:	Temple of Power
Hist. Use:		Present Use:	Exhibit
Date:	2000	Location:	South of SR 20, west of Main Street
Style:	Contemporary	Type:	Structure
Builder:		Artist:	

Description of Physical Appearance: This sculpture/art installation consists of six "recycled" electrical bushings used as columns arranged in a hexagonal group, each topped with a lighting arrestor. An open web steel dome mounted to the top of the lightening arrestors arches over a bare concrete pad. Three steel benches are placed on the perimeter.

Significance: This large sculpture/art installation was installed in 2000 on the site of an earlier gazebo identified as NHR 23. The structure does not meet minimum age requirements and is not eligible for listing in the National Register.

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GORGE POWERHOUSE AND DAM COMPLEX HISTORIC AREA "B" (PERIOD OF SIGNIFICANCE: 1920-1960)

Note: all directions assume the Gorge Powerhouse is aligned north-south with the non-public entry (closest to the former railroad bridge) on the north and the public entry on the east.

Site ID #:	27	Classification:	Hist. Contributing
Hist. Name:	Gorge Powerhouse	Present Name:	Gorge Powerhouse
Hist. Use:	Hydroelectric power plant	Present Use:	Hydroelectric power plant
Date:	1924, 1949	Location:	East end of Newhalem
Style:	Neoclassical	Type:	Building
Builder:	Seattle City Light	Architect:	Seattle City Light

Description of Physical Appearance: This large rectangular reinforced-concrete building measures approximately 280 feet long north-south and 120 feet wide east-west, and is 60 feet tall. The building has a flat roof. An addition in 1949 lengthened the original building by six bays on the northern side. The original portion's exterior is a stripped-down industrial version of Neoclassic design, with ten bays of tall, multi-paned industrial sash windows on the west, divided by concrete piers with ornamental capitals, topped by a concrete cornice above which is an attic story with smaller paired multi-paned windows. The original building corners terminated in projecting bays that give the illusion of towers, rising above the parapet and neatly enclosing the window bays on the western primary (public) facade. The "towers" have narrow industrial sashes recessed in an arched niche running from the window base to the attic story. When the addition was built, the rhythm of the bays was respected through the use of large steel doors on the west, and the attic story with paired windows was extended. The original northwestern tower was removed for the addition, and replaced at the west end of the addition. The public entrance to the building is on the eastern side, accessing the second floor of the building by paved ramps or steps from the lower portions of Ladder Creek Falls Gardens.

The interior second-floor lobby offers a view of the generators on the floor below. The equipment includes two original Westinghouse generators, initially rated at 30,000 KVA, and since rewound; and two additional units added in 1929 and 1951. The turbines were modified to use a gross head of 380 feet after completion of Gorge High Dam in late 1960. Two were installed in 1924, and in 1959, were given new runners with a rating of 45,000 horsepower. Two additional turbines were installed in 1929 and 1951. The building is in good condition.

Since 1991, the generators have been modified for solid-state excitation (old excitation remains in

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place) and gravity lubrication is no longer used, although the original butterfly valve pumps remain in place.

The building is in good condition. (Note: For further information on equipment, refer to the National Register of Historic Places Multiple Property Documentation Form, *Hydroelectric Power Plants in Washington State, 1890-1938*, prepared by Lisa Soderberg, and approved by the National Register on December 15, 1988. Please note that errors and omissions contained in that nomination were rectified in this nomination. Also see HAER W-24B.)

Significance: The Gorge Powerhouse is historically significant for its role in the development of the Skagit River Hydroelectric Project; it was the first of three major power plants constructed on the Skagit. It is representative of hydroelectric technology of the 1920s, and is significant for being the first powerhouse designed with a long power tunnel, with a surge tank before the penstocks, rather than the typical forebay with surge tanks. The building's exterior is a prominent visual feature, terminating the east-west axis of the town of Newhalem. The 1949 addition is sympathetic to the original building.

Site ID #:	28	Classification:	Hist. Contributing
Hist. Name:	Gorge Railroad Bridge	Present Name:	Gorge Railroad Bridge
Hist. Use:	Railroad Bridge	Present Use:	Automobile Bridge
Date:	1937	Location:	East end of Newhalem
Style:	Utilitarian, Pratt Truss	Type:	Structure
Builder:	Seattle City Light	Architect:	Seattle City Light

Description of Physical Appearance: This automobile bridge is a two-span Pratt truss steel bridge with concrete abutments, measuring approximately 308 feet long, and 16 feet 11 inches between the top and bottom chords. It is one lane wide, approximately 12 feet 8 inches wide between bull rails, with a cantilevered pedestrian walkway running on its southern side. The structure is built above the westerly turn of the Skagit River, linking the Gorge Powerhouse and Ladder Creek Falls to the town of Newhalem. The structure is in good condition.

Significance: The present structure dates from the second period of development of the town of Newhalem, and was installed to accommodate service automobiles and trucks carrying materials for the powerhouse and further up the valley. It replaced an earlier two-span Howe truss railroad bridge, 250 feet long, built by 1921. The earlier bridge was designed for trains to carry equipment and materials for construction of the Gorge Power Plant.

This structure was built in 1937, utilizing salvaged single-track railroad trusses originally

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fabricated in 1898 for the Oregon Railroad and Navigation Company by the Keystone Bridge Works of the Carnegie Steel Co., Ltd., of Pittsburgh, Pennsylvania. The bridge was converted to automobile use around 1958, when the railroad rails were removed and replaced with steel deck panels. In 1966, a cantilevered concrete panel walkway was added on the downstream side.

The construction of this bridge is related to the Stetattle Creek Bridge, also built at the same time with salvaged railway trusses. It is historically significant for its association with the Skagit River Hydroelectric Project, and retains its integrity of design, workmanship, setting, location, feeling, and association.

Site ID #:	29	Classification:	Hist. Contributing
Hist. Name:	Gravity Oil Tank House	Present Name:	Gravity Oil Tank House
Hist. Use:	Oil Storage, Music Control	Present Use:	Storage
Date:	1924	Location:	East end of Newhalem
Style:	Utilitarian	Type:	Building
Builder:	Seattle City Light	Architect:	Seattle City Light

Description of Physical Appearance: A reinforced concrete structure, approximately 10-feet square, located within the Ladder Creek Falls Gardens. There is one entry door on the easterly side. Oil tanks in the interior were removed in the mid-1980s. The building is in fair condition.

Significance: The structure was used to store oil for the gravity oil lubrication system for the equipment in Gorge Powerhouse until the mid-1980s. However, by the 1930s it served double-duty as a "sound studio." During tours, a Seattle City Light employee was relegated to sit in the structure with a clock, record player, records, and a list of music to be played according to a strict timetable, prepared by J. D. Ross. The recorded music was amplified throughout the park grounds, timed to coincide with various highlights of the park viewed by parties of tourists as they were guided through the park. The building is now used for storage. It is historically associated with the Skagit tours and the Gorge Power Plant, and retains its integrity of design, workmanship, setting, location, and association.

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Site ID #:	30	Classification:	Hist. Contributing
Hist. Name:	Ladder Creek Gardens	Present Name:	Ladder Creek Gardens
Hist. Use:	Strolling Garden	Present Use:	Strolling Garden
Date:	1928	Location:	East of Gorge Powerhouse
Style:	Rustic	Type:	Rustic
Builder:	Seattle City Light	Architect:	Seattle City Light

Description of Physical Appearance: The Ladder Creek Falls Gardens occupy approximately two acres of steep terrain that rise to a comparatively flat area about 80 feet above Gorge Powerhouse. Unpaved paths with spurs wind up the slope in serpentine fashion to concrete steps, which lead to a viewpoint of Ladder Creek Falls. Stone steps are set into the hillside in places to facilitate walking. There are level areas for resting and viewing spaced throughout. The landscape includes native trees and plants, although some exotics such as bamboo are woven into the scheme. The gardens contain artificial ponds and pools of concrete and stone; fountains; and three rustic wood benches dating to the mid-1930s. There are several wooden bridges, designed in a "Rustic" fashion, which span small streams or dry gullies. A lighting system once illuminated the gardens at night, and colored lights illuminate the falls. Since no site plan of the original designed garden exists, it is not known how many changes in specific plant material have occurred to impact the integrity of the original garden, designed and planned by James D. Ross. It is known that some exotic plants, carefully tended in winter months, died from neglect after the tours ceased in 1941. The garden today has over 150 species of flowers and plants. In the 1930s, tourists viewing the gardens at night were treated to a light show, created by an illumination scheme of plants and the falls, created by Ross, and a sound show, with selections by Ross. The gardens and walkways are in fair condition.

Significance: James D. Ross was responsible for the development and design of the gardens, and began to plan them in 1928. Each year the scheme expanded, eventually encompassing a rock garden at the base of the gardens, which included such exotic plants as banana trees and palms. The unique combination of gardens, sound, and light appears to have precedents only in World's Fairs of the prior three decades, most particularly the Panama Pacific Exposition. The illuminated tour of the gardens was the highlight of the Skagit tours, and a major promotional tool in drawing the public to the Skagit. The gardens are significant for their association with Ross and for the promotion of the Skagit River Hydroelectric Project through the Skagit tours.

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Site ID #:	31	Classification:	Hist. Contributing
Hist. Name:	Gorge Pedestrian Bridge	Present Name:	Gorge Pedestrian Bridge
Hist. Use:	Pedestrian Bridge	Present Use:	Pedestrian Bridge
Date:	1937	Location:	South of Gorge Powerhouse
Style:	Utilitarian	Type:	Structure
Builder:	Seattle City Light	Architect:	Seattle City Light

Description of Physical Appearance: A steel suspension bridge with steel towers and wood deck, spanning the Skagit River, approximately 300 feet. An iris pool and resting area are located at its east terminus, south of the Gorge Powerhouse. The bridge is in good condition.

Significance: This bridge provided pedestrian access to the Gorge Powerhouse for workers and tourists. Although the bridge deck and guardrails were replaced recently, the bridge retains integrity of design, materials, workmanship, setting, location, feeling, and association.

Site ID #:	32	Classification:	Hist. Contributing
Hist. Name:	Gorge High Dam	Present Name:	Gorge High Dam
Hist. Use:	Dam	Present Use:	Dam
Date:	1919, 1924, 1929, 1960	Location:	Approx. 3 miles east of Newhalem
Style:	Gravity-arch Dam	Type:	Structure
Builder:	R. C. Storrie (1919), Merritt, Chapman and Scott with Savin Construction (1957-1960)	Engineer:	

Description of Physical Appearance: This large structure is a thin arch dam with a gravity section: the arch is approximately 450 feet long and 70 feet thick at its base, and the gravity section is approximately 220 feet long and 170 feet thick at its base. Spillgates and spillways are located in the gravity portion of the dam. The crest is 16 feet wide; the dam is 300 feet high from bedrock. The dam replaced a concrete diversion dam, built in 1950, which in turn had replaced the original timber dam

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(1924), which had initially been projected to last five or six years. The reservoir behind the dam, Gorge Lake, is 4.5 miles long, with a normal elevation of 875 feet, capable of storing 5,000 acre feet. The 1921 horseshoe-shaped pressure tunnel, driven through solid granite, is approximately 11,000 feet long. This concrete-lined tunnel, with an internal diameter of 20.5 feet, was built by R. C. Storrie and Company of San Francisco. The lower end of the tunnel has a surge tank and a riser with a restricted orifice. There are four penstocks, each approximately 1,600 feet long, three of which date to the historic period: 1919, 1924, and 1929. The fourth was built in 1951. The vertical lift fixed-wheel headgate weighs 200 tons, and is raised with a hydraulic hoist.

The dam is in good condition. (Note: For further information on equipment, refer to the National Register of Historic Places Multiple Property Documentation Form, *Hydroelectric Power Plants in Washington State, 1890-1938*, prepared by Lisa Soderberg, and approved by the National Register on December 15, 1988. Also see HAER W-24C.)

Significance: The initial plan for the first Gorge dam called for a 240-foot-high dam with two 11,000-foot long power tunnels. However, construction costs and time constraints led to the erection of a temporary rock-filled timber crib diversion dam with a 285-foot head. Water was diverted through an intake into one long power tunnel, which took more than two years to build: jackhammers were supplied with compressed air via an 8-inch pipe linked to air compressors in a specially constructed compression plant at the east end of Newhalem. The timber dam was replaced in 1950 by a low concrete structure. At this time an additional generator was added to an enlarged Gorge Powerhouse. The new dam was designed by the consulting firm of J. L. Savage and built by Merritt-Chapman and Scott Corporation of New York. Construction on the higher dam began 1957, and was substantially complete by December 1960, and dedicated on January 6, 1961. The earlier masonry dam is now below the reservoir waters. The structure now conforms to the original design intentions for the power plant.

Site ID #:	33	Classification:	Hist. Contributing
Hist. Name:	Gorge Diversion Dam	Present Name:	Gorge Diversion Dam
Hist. Use:	Dam	Present Use:	None
Date:	1950	Location:	Approx. 3 miles east of Newhalem
Style:	Gravity Dam	Type:	Structure (Submerged)
Builder:	Cascade Construction w/ Alton Phillips Company	Engineer:	

Description of Physical Appearance: A low concrete diversion dam now submerged beneath waters impounded by Gorge High Dam.

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Significance: A "temporary" rock-filled timber crib dam was built in 1923 to raise the Skagit River 30 feet, and divert the flow into an 11,000-foot-long, concrete-lined power tunnel serving Gorge Powerhouse. In 1929 the City raised the existing crib dam two feet in height to help alleviate problems with gravel sweeping into the intake, and with low water levels that affected the plant's efficiency. At this time a third generator was installed in the powerhouse. In 1950 a concrete diversion dam was built to replace the original wooden crib dam for Gorge Powerhouse, which had lasted far longer than its anticipated life of five or six years. The same year, a fourth generator was added to the Gorge Powerhouse, increasing the plant's capacity to 108,000 kW. The dam was submerged after completion of Gorge High Dam in 1961. The dam's present physical integrity is unknown.

DIABLO POWERHOUSE AND DAM COMPLEX HISTORIC AREA "C" (PERIOD OF SIGNIFICANCE: 1926-1954)

Note: all directions assume the Diablo Powerhouse and the related street grid are aligned north-south and east-west with the long side of Diablo Powerhouse running north-south, with the northern end nearest to building entry, and the Skagit River located on the west.

Site ID #:	35	Classification:	Hist. Contributing
Hist. Name:	Diablo Powerhouse	Present Name:	Diablo Powerhouse
Hist. Use:	Hydroelectric power plant	Present Use:	Hydroelectric power plant
Date:	1936	Location:	Diablo
Style:	Moderne	Type:	Building
Builder:	Seattle City Light	Architect:	Seattle City Light

Description of Physical Appearance: A large rectangular reinforced-concrete building, measuring approximately 94 feet 8 inches overall east-west, by 230 feet 8 inches north-south, and 60 feet tall from the surrounding grade to roof parapet. Steel trusses and "I"-beam purlins support the reinforced concrete slab roof. The exterior walls are of unfinished concrete. Projecting concrete piers on the north, west, and south facades extend from grade to above the roofline, creating a crenulated parapet, with the intervening wall surfaces nearly filled with multi-paned steel-sash windows extending upwards nearly to the parapet, broken by spandrels approximately two-thirds up their length. The western façade is composed of eight bays formed by the piers, with the outer bays projecting, and the northern and southern facades each have three bays. The eastern façade, originally designed as a temporary wall, is built of brick

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masonry, with steel sash windows between the piers, and was sheathed with aluminum in 1954. A pair of steel entry doors on the western façade's northern end leads to the building's interior lobby.

The interior lobby is located in the building's northwestern corner extending upwards the full height of the building. A staircase with wrought-iron railing and aluminum handrails is located on the eastern side of the lobby accessing administrative and monitoring space on the northeastern building corner, as well as second-level viewing galleries. The lobby floor is laid with terrazzo in an ornamental pattern. A tiled fishpond is located against the staircase, with the Seattle City Light logo of the 1930, laid in mosaic tile on the eastern fountain wall. The main equipment room is located to the south of the lobby. It holds two Westinghouse 82,000 KVA generators that were highest rated in the world when built (initially rated at 66,700 KVA, but rewound in 1958), and two 108,500 horsepower turbines (then rated at 90,700 horsepower), also the largest built to that time. The main generating units are placed on pedestals and reached by catwalks with brass railing. A 300-ton, two-trolley travelling crane with seven motors was installed to move the large generator and turbine parts. The crane was also the largest of its type to be built at that time. Other equipment includes two house unit turbines and generators (located south of the main generators), Westinghouse transformers, exciters, oil pumps, and tanks. A reinforced concrete tailrace on the westerly edge of the powerhouse also serves to support transformers, switching apparatus, and a cross for a single-track railroad. A second-level viewing area is located on the northern and eastern side of the main equipment room. The powerhouse is in good condition.

(Note: For further information on equipment, refer to the National Register of Historic Places Multiple Property Documentation Form, *Hydroelectric Power Plants in Washington State, 1890-1938*, prepared by Lisa Soderberg, and approved by the National Register on December 15, 1988. Please note that errors and omissions contained in that nomination were rectified in this nomination. Also see HAER WA-24D, sheets 1-6)

Significance: The powerhouse is a historically significant example of hydroelectric technology of the 1930s, particularly the large generators, turbines, and crane. The building's interior features, especially the lobby and the raised generators, were specifically designed to showcase the Skagit River Hydroelectric Project and were a special feature of the tours used to promote it. The Diablo Dam and Powerhouse are inextricably linked with the growth and development of the Skagit River Hydroelectric Project. The structure has integrity of design, workmanship, setting, location, feeling, and association.

Site ID #: 36

Classification:

Hist. Contributing

Hist. Name: Incline Waiting Station

Present Name:

Incline Waiting Station

Hist. Use: Restroom and shelter

Present Use:

Vacant

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Date:	1934	Location:	Diablo, East edge of Reflector Bar
Style:	Vernacular	Type:	Building
Builder:	Seattle City Light	Architect:	Seattle City Light

Description of Physical Appearance: A one-story rectangular wood-framed building measuring approximately 100 feet north-south and 19 feet 4 inches east-west. The northern and southern portions are enclosed, with the central portion open to the east and west. The northern portion measures approximately 27 feet north-south and the southern portion measures approximately 11 feet 4 inches north-south. Both enclosed ends are used as restrooms. The central portion was used as a covered waiting area for visitors using the adjacent funicular railroad located to the east. The two enclosed areas sat on perimeter concrete foundations. The waiting area has a concrete slab. The building restrooms are clad with combed cedar shingles with an approximately 12-inch exposure painted yellow. A doorway with a flush door is located on the southern side of the southern portion's eastern façade. Two doorways with flush doors are located on the northern side and near the center of the northern portion's eastern façade. Two boarded-up pass-through windows are located on the southern façade of the northern portion. A timber frame supports the roof of the central waiting area, with three 8x8 bents with knee braces creating four bays. The bents support a timber plate supporting exposed 2x6 rafters spaced at 24 inches on center. The roof has exposed beaded ceiling sheathing. The gable roof has a north-south ridge with a 6-in-12 slope and is clad with ribbed metal roofing. The roof has extended eaves with approximately 24-inch overhangs and a simple fascia.

Physical changes to the building include replacement of the original cedar roof shingles with metal roofing; lattice wood screens at restrooms entries have been removed; the original horizontal 1x4 cedar siding has been covered by combed cedar shingles; and the pass-through windows facing onto the waiting area have been barded up. The building is in good condition.

Significance: The waiting room was built as a shelter and rest stop for tourists on the Seattle City Light Skagit Tours. Situated at the base of the incline railroad, once an integral part of the Skagit Railway system that provided the means for transporting construction materials to the dam site, the waiting shelter was added during the height of the promotional activities for the project. By 1936, the rest area and trip up the incline was enhanced by amplified music played as tourists rode the Incline. The tours, halted in 1941, began again in 1953, and it is believed the alterations were made at this time. The structure is significant as an integral part of the Skagit Tours program, which in turn was significant in public support for the hydroelectric project. It has integrity of design, workmanship, setting, location, feeling, and association.

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Site ID #:	37	Classification:	Hist. Contributing
Hist. Name:	Incline Lift and Powerhouse	Present Name:	Incline Lift and Powerhouse
Hist. Use:	Funicular railroad	Present Use:	Disabled
Date:	1928	Location:	Diablo, East edge of Reflector Bar
Style:	Utilitarian	Type:	Structure and building
Builder:	Seattle City Light	Architect:	Seattle City Light

Description of Physical Appearance: A 563-foot-long funicular railway running east-west, with a vertical lift of 313 feet, originally lifting freight cars up a 68 percent grade by way of a moving platform. The railway consists of three standard-gauge tracks, with a total width of 42 feet. The center track is used by a 45-ton counterweight passing under a transfer platform at the midpoint. The counterweight cables return by a pair of upper pulleys to the outer platform tracks. A recently-added accessible ramp leads up from the adjacent waiting station.

The moving steel platform, now equipped with newer guardrails, is 60 feet long and approximately 10 feet wide. The platform is supported by four 4-wheel standard gage trucks, weighs approximately 55 tons, and is capable of carrying 79 tons.

The hoist is a Model D Lilly Hoist Controller, powered by a 400-horsepower Allis-Chalmers motor, which is housed in a gable-roofed one-story building located at the top of the incline. The machinery building measures approximately 48 feet north-south and approximately 20 feet east-west and rests on a concrete foundation. The building's exterior walls are clad with corrugated metal siding. The building's western façade has two wood-framed platforms projecting from its northern and southern ends, allowing access to the counterweight pulleys. Each platform has a doorway accessing the interior. The central portion of the western façade has a pair of vertical wood-sash double-hung windows. The southern façade has a central projecting wood-framed platform with a doorway. This platform originally had a stairway leading down to grade on the west. This stairway has been removed and recently replaced with a wood-framed stairway leading up to the southern pulley access platform. A steel ladder leads down to the railway from the northern side of the same platform. The gable roof has an approximately 12-in-12 slope with the ridge running north-south. The western roof projects westward over the two pulley platforms and adjacent pulleys. The roof is covered with corrugated metal roofing and has exposed rafter-tails.

The Incline and associated building are in fair condition and last operated in 2004.

Significance: The Incline was built as a permanent feature of the project, and used in the construction of both Diablo and Ross Dams. It was also a highlight of the Skagit Tours, transporting

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tourists to the upper level Diablo Dam. The Incline transferred railway cars bringing equipment and materials from Newhalem, Rockport, and beyond to the top of the dam, without having to move or transfer materials to special cars. The structure is significant, both as an engineering feature and historically, as an integral part of the development of the Skagit River Hydroelectric Project and the Skagit Tours. It has integrity of design, materials, workmanship, setting, location, feeling, and association.

Site ID #:	38	Classification:	Hist. Contributing
Hist. Name:	Diablo Commissary	Present Name:	Diablo Commissary
Hist. Use:	Company store	Present Use:	Storage
Date:	1952	Location:	Diablo, East edge of Reflector Bar
Style:	Vernacular	Type:	Building
Builder:	Seattle City Light	Architect:	Seattle City Light

Description of Physical Appearance: This large one-story rectangular building measures approximately 90 feet north-south and 48 feet east-west. The building rests on a perimeter concrete foundation and basement, with a high stem-wall resulting in the floor being located 3 feet 8 inches from the surrounding grade. There are large concrete entry porches on the western and eastern sides and smaller entry porches on the northern and southern sides. The exterior is clad with combed cedar shingles with an approximately 12-inch exposure painted olive green. The building has a hip-gable roof with extended eaves over the entire western side, wrapping around top over the entry porches on the southern and northern sides, and also extending out over the entry porch on the eastern side. The roof extensions are supported on steel pipe-columns. The roof is covered with ribbed metal roofing with boxed soffits.

The western façade is the primary façade and was the main public entry to the building. A concrete entry porch is located south of center and measures approximately 5 feet 8 inches deep and approximately 22 feet wide. The porch has concrete steps leading down on either side. The western exterior wall is recessed approximately 3 feet at the center of the porch. The recess contains a pair of doors on the north and a single door on the south. Another doorway is located to the south of the recess, and a large two-light window is located north of the recess. The southern façade has a small concrete entry porch near its center with a single entry door. Stairs lead down to the west. There is a large two-light window located west of the door. The eastern façade has a large concrete porch/loading dock extending along most of its width. Concrete steps lead down from the southern and northern ends. Two large two-light windows are located on the southern end and doors provide access to the interior from the porch/loading dock. The northern façade has a small concrete entry porch near its center with a single

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entry door. A row of three high horizontal two-light casement/fixed aluminum-sash windows is located on the façade's eastern side. The building is in good condition.

Significance: The present building replaced an earlier commissary built in 1928 (destroyed in 1934). The existing building was built to serve the residents of Diablo, and was part of a larger construction project in the 1950s, when a number of the present residences in Reflector Bar and Hollywood were erected. The building is currently serving as a storage building.

The building represents the last phase of the town's physical development – the mid-1950s. It possesses integrity of design, location, materials, workmanship, setting, feeling, and association.

Site ID #:	39	Classification:	Hist. Contributing
Hist. Name:	Diablo schoolhouse	Present Name:	Communications Building
Hist. Use:	School, communications	Present Use:	Storage
Date:	ca. 1935, moved ca. 1952	Location:	Diablo, East edge of Reflector Bar
Style:	Vernacular	Type:	Building
Builder:	Seattle City Light	Architect:	Seattle City Light

Description of Physical Appearance: A one-story rectangular wood-framed structure resting on a concrete foundation. The structure, originally clad with narrow lapped siding, is now clad with combed cedar shingles with an approximately 12-inch exposure painted white. There is a bank of nine-light hinged wood sashes on the western facade, and additional double-hung windows on the southern, northern, and eastern facades. A glazed and paneled door is also located at the southern end of the eastern façade. The gable roof has a north-south ridge and is clad with ribbed metal roofing. The roof has extended eaves with exposed rafter ends. The building is in good condition.

Significance: The building was built in the late-1930s as an addition to the original Diablo School and was used as a classroom for Diablo-based employees' children until the new school was built in 1949. The building was moved from the west side of Reflector Bar in 1952, and adapted for office use. The building was built within the period of significance, and later it was relocated from its original site and altered. Since the date of the relocation and alteration lies within the period of significance, the building is a contributing resource in the Diablo Powerhouse and Dam Complex Historic Area.

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Site ID #:	41	Classification:	Hist. Non-Contributing
Hist. Name:	Incline Man-lift	Present Name:	Incline Man-lift
Hist. Use:	Small funicular	Present Use:	None
Date:	1953	Location:	Diablo, East edge of Reflector Bar
Style:	Utilitarian	Type:	Structure
Builder:	Seattle City Light	Architect:	Seattle City Light

Description of Physical Appearance: The remains of an eight-man lift that ran parallel to #37 Incline Lift and Powerhouse. Only the concrete entry tunnel, the corrugated metal entry portico, and the lift foundation remain. The operating machinery and covered railway have been demolished.

Significance: The man-lift was built to provide transportation for small groups of employees during the winter, when snow prevented the use of the Incline. Although the original structure was built within the period of significance, it no longer has sufficient physical integrity to qualify for listing as a contributing resource in the Diablo Powerhouse and Dam Complex Historic Area.

Site ID #:	42	Classification:	Hist. Contributing
Hist. Name:	Diablo Dam	Present Name:	Diablo Dam
Hist. Use:	Dam	Present Use:	Dam
Date:	1930	Location:	East of the town of Diablo
Style:	Constant-Angle Single Arch	Type:	Structure
Builder:	Winston Brothers Const. Co.	Engineer:	Constant Angle Arch Dam Company (Lars Jorgenson)

Description of Physical Appearance: This massive structure is a constant-angle single arch dam with two gravity abutments, approximately 389 feet high from bedrock to crest. The crest is 16 feet wide and approximately 1,170 feet long. The arch portion is approximately 540 feet long and the gravity abutments total approximately 630 feet. The dam has 19 Tainter-type spill gates, three of which were

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motorized in the mid-1960s; the rest are lifted by means of a rail-mounted hydraulic hoist. A reinforced-concrete valve house, supported by concrete brackets, is located on the downstream face of the dam and is accessible by elevator or ladder; the interior contains four relief valves. The head gate is a 15-foot by 20-foot Broome-gate. The power tunnel was finished in 1931. The 1,900-foot-long tunnel is 19.5 feet in diameter and concrete lined, except the last 190 feet, which are steel lined. The tunnel feeds into two 290-foot-long penstocks, each 15 feet in diameter. Prior to the tunnel splitting, a smaller 5-foot penstock taps into the tunnel to supply water to two house units. The differential-type surge tank, completed in 1931, is located at the steel-lined portion of the tunnel. A reinforced concrete slab bridge connects the piers between the spillway gate openings, and carries track for a travelling gate-hoist that operates most of the Tainter-gates. Sixteen reinforced-concrete arches with 32-foot clear spans support a roadway on the dam lined with ornamental lighting standards. (The arches were not necessary for construction of the roadbed, but were added for aesthetic reasons.) The dam impounds approximately 90,000 acre-feet of water, and creates Diablo Lake, 4.5 miles long and approximately 390 feet at its deepest point behind the dam.

(Note: For further information on equipment, refer to the National Register of Historic Places Multiple Property Documentation Form, *Hydroelectric Power Plants in Washington State, 1890-1938*, prepared by Lisa Soderberg, and approved by the National Register on December 15, 1988. Please note that errors and omissions contained in that nomination were rectified in this nomination. Also see HAER W-24F)

Significance: This structure was designed by the Constant Angle Arch Dam Company, a firm established by engineer Lars Jorgensen, and built by Winston Brothers Construction Company of Minneapolis. The dam is a historically significant example of hydroelectric technology from the 1930s. The construction of the facility, with its remote location and topography, ideal for an arch dam but difficult to build, was a major engineering feat requiring innovative approaches to both the excavation and construction. When completed, it was briefly the highest thin arch dam in the world. The Diablo Dam and power plant are inextricably linked with the growth and development of the Skagit River Hydroelectric Project. The structure has integrity of design, materials, workmanship, setting, location, feeling, and association.

Site ID #:	45	Classification:	Non-Hist. Non-Contributing
Hist. Name:	Incline Garage	Present Name:	Incline Garage
Hist. Use:	Garage	Present Use:	Storage
Date:	ca. 1980	Location:	Diablo, at top of Incline Lift and east of Powerhouse
Style:	Vernacular	Type:	Building

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Builder: Seattle City Light	Architect: Seattle City Light
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Description of Physical Appearance: This wood-framed rectangular garage measures 32 feet north/south and 14 feet east/west. The building sits on a perimeter concrete foundation and has a concrete slab. The building's exterior walls are clad with corrugated metal siding. The southern facade has a large central garage door. All other facades are blank. The building has a gable roof with a 10-in-12 slope with a north/south ridge. The roof is covered with corrugated metal roofing.

Significance: This building was built around 1980, and does not qualify for listing as a contributing resource in the Diablo Powerhouse and Dam Complex Historic Area.

Site ID #: 52	Classification: Hist. Contributing
Hist. Name: Windy Gap Railroad Bridge	Present Name: Windy Gap Bridge
Hist. Use: Railroad Bridge	Present Use: Automobile Bridge
Date: ca. 1937	Location: East of Incline Lift Powerhouse
Style: Utilitarian	Type: Structure
Builder: Seattle City Light	Engineer: Seattle City Light

Description of Physical Appearance: This bridge uses two steel-web beams supported by concrete abutments to span a ravine. The bridge is approximately 100 feet long and 14 feet wide the bridge deck is steel grate with a concrete walkway on the southern side. The steel pipe guardrails may be latter additions.

Significance: This steel-web bridge was built in the location of an earlier railroad bridge used for the construction of Diablo Dam. This bridge was probably built in anticipation of the construction of Ross Dam. The bridge was also used by Seattle City Light Skagit Tour tourists who road up the incline railway and walked to a pier on Diablo Lake to catch a boat to Ross Dam. The structure has integrity of design, materials, workmanship, setting, location, feeling and association.

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SINGLE DIS-CONTIGUOUS RESOURCES HISTORIC AREA "D"

Site ID #:	25	Classification:	Hist. Contributing Site
Hist. Name:	Ross Crypt	Present Name:	Ross Crypt
Hist. Use:	Burial Site	Present Use:	Burial Site
Date:	1939	Location:	North of SR 20, east end of Newhalem
Style:	Landscape-naturalistic style	Type:	Structure/Site
Builder:	Seattle City Light	Engineer:	Seattle City Light

Description of Physical Appearance: A narrow, semi-circular concrete path, lined with native and non-native plants—including flowering Japanese cherry trees—leads from a sidewalk bordering Highway 20 to the base of Ross Mountain. Rather than a freestanding object, the crypt is recessed into the rock face of the mountain, protected by a painted decorative iron gate. Two large rectangular brass plaques, placed one above the other, are mounted in a recessed niche. The top plaque reads: "James Delmage Ross. Born November 9, 1889, 'J. D.' Died March 14, 1939. J. D. Ross, one of the greatest Americans of our generation was an outstanding mathematician and an equally great engineer. He had also the practical ability to make things work in the sphere of public opinion and successful business. More than that he was a philosopher and a lover and student of trees and flowers. His successful career and especially his long service in behalf of the public interest are worthy of study by every American boy. Franklin D. Roosevelt, President of the United States." The bottom plaque reads: "Alice Maud Ross. Born September 10, 1883, Died April 5, 1956. Devoted and loving wife to 'J. D.'"

Significance: The crypt is significant for design value; rather than a freestanding object, it was built into the base of Ross Mountain, designed to harmonize with the natural rock, becoming one with the site. As an integrated element in the natural environment, augmented by an informal approach and plantings, the crypt stands as a symbol of the design aesthetic its occupant envisioned—but only occasionally realized—for the entire Skagit Project. It is also significant because it is the grave of James Delmage Ross, superintendent of the Lighting Department for the City of Seattle's municipally-owned power company between 1911 and 1939, the principal developer of the Skagit River Hydroelectric Project, and its most zealous promoter. Ross was an outstanding figure in the development of Seattle's municipally-owned utility, and a figure of national significance in the public power movement between 1918 and 1939. For a more complete discussion of Ross's life, refer to the significance section of this nomination. After his death in 1939, he was entombed in the crypt. Then-president of the United States,

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and a personal friend of Ross's, Franklin D. Roosevelt donated the brass plaques and prepared the testimonial inscribed on J. D. Ross's plaque. It is unclear when Ross was actually entombed in the crypt, although he was located there by June of 1940, when *Harper's Magazine* published an article noting his ashes had been buried there. Alice Ross, James. D. Ross's wife, died in 1956, and was placed in the crypt soon after.

Site ID #:	26	Classification:	Hist. Contributing Site
Hist. Name:	Newhalem Creek Powerhouse	Present Name:	Newhalem Creek Powerhouse Site
Hist. Use:	Hydroelectric power plant	Present Use:	Hydroelectric power plant
Date:	1921, 1970	Location:	South of SR 20 and Skagit River on Newhalem Creek
Style:	Utilitarian	Type:	Structure
Builder:	Seattle City Light	Engineer:	Seattle City Light

Description of Physical Appearance: The plant consists of a powerhouse (a), concrete diversion dam (b), and power tunnel and penstock. The wood-framed powerhouse, with vertical board siding and a gable roof, and the 9-foot-high, 4.5-foot-thick, 47-foot-wide concrete diversion dam were built in 1969 after a fire destroyed the original power house, erected in 1921. The diversion dam, part of the rebuilding, was located near the site of the original crib dam. The new powerhouse encloses the original machinery, which survived the fire. This includes two Pelton impulse turbines and a 2,000 kVA horizontal shaft Westinghouse generator, all installed in the original 1921 building. The original 2,770-foot power tunnel, approximately 5 by 7 feet, built in 1920, is still in use, as is the 500-foot-long steel penstock, which bifurcates just outside the powerhouse to supply water to the two Pelton wheels. The rebuilt plant went back on line in February of 1970. In 1984 the diversion dam, apron, and gatehouse of the plant were substantially rebuilt. (Note: See HAER WA-24A)

Significance: Initially intended as a temporary plant for construction purposes, the Newhalem plant is the first and earliest of four hydroelectric plants built by Seattle City Light in the Skagit River area. It began operation in August of 1921, and was semi-automated in the early 1950s. The plant remained in operation, supplying Newhalem with 2,000 kVA until July of 1966 when the powerhouse burned. After its reconstruction the turbines and generator were placed under remote control from the Gorge Powerhouse's control room. The Newhalem Creek Hydroelectric Project is licensed and operated independently of the Skagit Project, but is staffed by Seattle City Light personnel from the Gorge Powerhouse. It is significant for its association with the Skagit River Hydroelectric Project and the town of Newhalem.

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Site ID #:	40	Classification:	Hist. Contributing
Hist. Name:	Diablo Water Tower	Present Name:	Diablo Water Tower
Hist. Use:	Water storage	Present Use:	Water storage
Date:	1934	Location:	Southwestern area of Reflector Bar
Style:	Utilitarian	Type:	Structure
Builder:	Jones and Laughlin	Engineer:	"Ford" of Western Engineering Co.

Description of Physical Appearance: A standard design water tower, approximately 115 feet tall and 37 feet square at the base. It has a circular storage tank with a conical top and rounded bottom, on a diagonally-braced steel frame, with the principal vertical supports anchored to raised concrete piers. The tank holds 50,750 gallons of water. The structure is virtually unaltered.

Significance: The water tower was built to serve the residents of the Seattle City Light company town of Diablo. Jones and Laughlin manufactured it in 1934, from designs prepared by "Ford" of Western Engineering Company of Seattle. The structure was an integral part of the town's infrastructure, and retains integrity of design, materials, workmanship, location, setting, feeling, and association.

Site ID #:	92	Classification:	Hist. Contributing
Hist. Name:	Newhalem Communications Building	Present Name:	Newhalem Communications Building
Hist. Use:	Communication office	Present Use:	Hazardous material storage
Date:	ca. 1951	Location:	Northeastern area Newhalem
Style:	Utilitarian	Type:	Building
Builder:	Seattle City Light	Engineer:	Seattle City Light

Description of Physical Appearance: This one-story concrete building measures approximately 18 feet 4 inches east/west and approximately 18 feet north/south. The building has a flat roof with a small overhang supported by a minimum molding. The building sides have vertical inset stripes at approximately 36-inches on center, and a horizontal band of grouped moldings running around the

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building approximately 30 inches from grade. The entrance door is located to the west of center on the northern facade and has a paneled door with upper glazing. The doorway is framed by a protruding surround with a simple pediment. The entrance is accessed by stairway of concrete steps leading upward from SR 20.

Significance: This simple building was built around 1951 when the current Gorge Switch Yard was built. It is associated with the development of the Skagit Hydroelectric Project.

Site ID #:	94	Classification:	Hist. Contributing
Hist. Name:	Monkey Island Navigation Light	Present Name:	Monkey Island Navigation Light
Hist. Use:	Navigation Light	Present Use:	Navigation Light
Date:	ca. 1930	Location:	Diablo Lake approximately ¼ mile east of Diablo Dam
Style:	Utilitarian	Type:	Structure
Builder:	Seattle City Light	Engineer:	Seattle City Light

Description of Physical Appearance: The navigational signal rests on a concrete base built on bare rock. The signal is approximately 10 feet high and was built of three tapered round hollow steel sections fastened together at their widened end flanges. The light is mounted to the upper steel section.

Significance: After Diablo Dam was completed in late 1929, Diablo Lake was created behind the dam and two higher rock peaks became islands, now known as Monkey and Deer Islands. This navigational aid was placed in 1930 on Monkey Island to guide work boats and tour boats away from the islands.

Monkey Island is likely named after a group of rhesus monkeys that Seattle City Light placed on the island during early Skagit Tours, providing peanuts to throw at the monkeys as the tour vessel sailed by. The monkeys are thought to have only lasted one tourist season as the island conditions turned out to be too harsh.

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Site ID #:	95	Classification:	Hist. Contributing
Hist. Name:	Diablo Lake Boatyard	Present Name:	Diablo Lake Boatyard
Hist. Use:	Boatyard	Present Use:	Boatyard
Date:	ca. 1937	Location:	Diablo Lake
Style:	Utilitarian	Type:	Structure
Builder:	Seattle City Light	Engineer:	Seattle City Light

Description of Physical Appearance: This rectangular heavy timber shed measures approximately 28 feet 8 inches wide east/west and 86 feet 8 inches north/south and is approximately 48 feet high at its southern end. The western side wall consists of seven creosote treated poles (light poles) resting on poured concrete footings, while the eastern side consists of four creosote treated poles (light poles) resting on poured concrete footings. The poles support seven steel Howe roof trusses spanning between the row of poles. The eastern ends of the even-numbered trusses are supported by steel diagonals springing upward from the odd-numbered poles. The western and northern sides of the building are clad with corrugated steel siding fastened to girts (horizontal framing members). X-bracing on the southern and northern ends of the western wall, and by steel tension cables extending outward/downward to grade on the east and west from the top of the poles provide lateral stability. The roof trusses support north/south purlins with corrugated roofing spanning between. The upper roof chords and roof are pitched at a 12-in-12 slope. A marine railway runs the length of the building and extends southward to the adjacent lake. A northern shed-roof extension measuring 24 feet north/south and 12 feet east west is also clad and r

The existing concrete footings for the wood piers appear newer than the rest of the construction indicating that the building was originally constructed as a "pole building," with the support poles embedded below grade providing lateral stability through cantilever.

Significance: After Diablo Dam was completed in late 1929, Diablo Lake was created behind the dam. This building was constructed to provide shelter for a marine railway used to build and maintain vessels operating on Diablo Lake. The wooden vessel ALICE ROSS used in early Seattle City Light Skagit Tours was built here between 1936 and 1937.

The structure has integrity of design, materials, workmanship, setting, location, feeling and association.

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Site ID #:	98	Classification:	Hist. Contributing
Hist. Name:	Tug BOUNDARY	Present Name:	Tug BOUNDARY
Hist. Use:	Tug	Present Use:	Tug
Date:	1949	Location:	Diablo Lake
Style:	Utilitarian	Type:	Structure
Builder:	Commercial Ship Repair Co.	Naval Architect:	Edwin Monk and Lorne Garden

Description of Physical Appearance: This steel-hulled tug is approximately 40 feet long and 9 feet in beam. A small cabin is located forward of the wheelhouse. The towing cleat is located just aft of the wheelhouse. The rear deck is nearly flush with the gunnels.

Significance: One of three steel-hulled tug boats designed by Seattle Naval architects Edwin Monk and Lorne Garden and built in the late 1940s by Commercial Ship Repair of Winslow as work boats on Diablo and Ross Lakes related to Ross Dam construction. All measure 40 feet in length and 12 feet 6 inches in Beam. The size was determined by the limitations of the incline railway. The vessels were designed with an unusual propeller ring to work in debris filled waters. BOUNDARY is nearly identical to DIABLO II.

Site ID #:	98	Classification:	Hist. Contributing
Hist. Name:	Tug Diablo II	Present Name:	Tug Diablo II
Hist. Use:	Tug	Present Use:	Tug
Date:	1949	Location:	Diablo Lake
Style:	Utilitarian	Type:	Structure
Builder:	Commercial Ship Repair Co.	Naval Architect:	Edwin Monk and Lorne Garden

Description of Physical Appearance: This steel-hulled tug is approximately 40 feet long and 9 feet in beam. A small cabin is located forward of the wheelhouse. The towing cleat is located just aft of the wheelhouse. The rear deck is nearly flush with the gunnels.

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Significance: One of three steel-hulled tug boats designed by Seattle Naval architects Edwin Monk and Lorne Garden and built in the late 1940s by Commercial Ship Repair of Winslow as work boats on Diablo and Ross Lakes related to Ross Dam construction. All measure 40 feet in length and 12 feet 6 inches in Beam. The size was determined by the limitations of the incline railway. The vessels were designed with an unusual propeller ring to work in debris filled waters. DIABLO II is nearly identical to BOUNDARY.

Site ID #:	100	Classification:	Hist. Contributing
Hist. Name:	Tug SKAGIT	Present Name:	Tug SKAGIT
Hist. Use:	Tug	Present Use:	Tug
Date:	1949	Location:	South bank of Diablo Lake, near Dam
Style:	Utilitarian	Type:	Structure
Builder:	Commercial Ship Repair Co.	Naval Architect:	Edwin Monk and Lorne Garden

Description of Physical Appearance: This steel-hulled tug is approximately 40 feet long and nine feet in beam. A small cabin is located aft of the forward wheelhouse. The towing cleat is located just aft of the cabin. The rear deck is nearly flush with the gunnels.

Significance: One of three steel-hulled tug boats designed by Seattle Naval architects Edwin Monk and Lorne Garden and built in the late 1940s by Commercial Ship Repair of Winslow as work boats on Diablo and Ross Lakes related to Ross Dam construction. All measure 40 feet in length and 12 feet 6 inches in Beam. The size was determined by the limitations of the incline railway. The vessels were designed with an unusual propeller ring to work in debris filled waters.

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ROSS POWERHOUSE AND DAM COMPLEX HISTORIC AREA "E" (PERIOD OF SIGNIFICANCE: 1937-1961)

Site ID #:	46	Classification:	Hist. Contributing
Hist. Name:	Ross Powerhouse	Present Name:	Ross Powerhouse
Hist. Use:	Hydroelectric power plant	Present Use:	Hydroelectric power plant
Date:	1952	Location:	3.5 miles east of Diablo Dam
Style:	International Style	Type:	Structure
Builder:	Peter Kiewit and Sons, Guy P. Atkinson Co.	Architect:	Seattle City Light

Description of Physical Appearance: This large rectangular reinforced-concrete building measures approximately 280 feet long north-south and 130 feet wide east-west, and is approximately 60 feet tall on its eastern side and stepping down to approximately 30 feet tall on the western side of the tail race structure. The building has a flat roof. The building is a stripped-down industrial version the International Style, constructed on monolithic concrete with banding of windows.

Equipment includes four 100,000 kVA three-phase Westinghouse generators. Three of the turbines were designed and built by Baldwin Locomotive Corporation, and one by Newport News Corporation. The generators' efficiency varies between ninety-two and ninety-four percent, when operating near their rated load.

Since 1991, the generators have been modified for solid-state excitation and gravity lubrication is no longer used. The building is in good condition.

Significance: The powerhouse and dam are the third and final phase of hydroelectric development on the Skagit River, although construction of the plant was first proposed by J. D. Ross at the inception of the entire Skagit Project.

Work on the foundations for Ross Powerhouse began in 1948, and three generators were ordered from Westinghouse in 1949. Late in 1949 construction of the building began, but was halted in 1951 when the contract with the construction firm of Peter Kiewit and Sons was broken by City Light. A new contract with Guy P. Atkinson Company was signed later in 1951, and this firm completed the building by the end of 1952. With one generator operating, it was, by the end of that year, supplying power. The second and third generators were installed in 1953 and 1954. The fourth generator was installed in 1956.

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Site ID #:	47	Classification:	Hist. Contributing
Hist. Name:	Ruby Dam	Present Name:	Ross Dam
Hist. Use:	Dam	Present Use:	Dam
Date:	1937-1949	Location:	3.5 miles east of Diablo Dam
Style:	Variable Arch	Type:	Structure
Builder:	Peter Kiewit and Sons, Guy P. Atkinson Co.	Engineer:	Seattle City Light

Description of Physical Appearance: Ross Dam is a variable arch dam, 540 feet high. The crest is 1300 feet long and thirty-three feet wide. The dam includes two fixed wheel headgates, each weighing 210 tons; twelve tainter gates which pivot on a 21.5 foot radius, and two butterfly relief valves with a six foot diameter and Broome gates on the upstream side. The dam has two 1,900-foot long power tunnels, twenty-four and one-half feet in diameter. The face of the dam is waffled. The reservoir behind the dam—Ross Lake—stores 1.43 million-acre feet of water.

Significance: This dam, along with the powerhouse, is the third and final phase of hydroelectric development on the Skagit River, although construction of the plant was first proposed by J. D. Ross at the inception of the entire Skagit Project.

The site at Ruby Creek, where Ross Dam is located, was the location where J. D. Ross wanted to build the first dam on the Skagit project, because it was here that the gorge widened to form a large natural storage reservoir. However, the logistical problems of building at that remote site were too challenging, and too expensive for the City to surmount in 1917-18, and the Gorge site was selected as the first power plant location. It wasn't until 1936, when the City received three million dollars from the Public Works Administration, enabling it to float an additional four million dollars in bonds, that work began at the Ruby site. By 1937 crews were at work on site, drilling test holes for the dam, and building the new transmission line. City Light crews, lodged in Diablo, were put to work building a floating cookhouse and bunkhouses on Diablo Lake to service a construction camp site to be located near the dam site.

It was decided to build the dam in stages. Preliminary design work of Ross Dam was done by Lars Jorgensen's firm, The Constant Angle Arch Dam Company, which designed Diablo Dam. Additional designs were prepared by the consulting firm of J. L. Savage after Jorgensen's death in 1937. The construction contract was awarded to General Construction Company in mid-1937, which included construction of the first stage of the dam, of a by-pass tunnel, and of a work camp for the crew at Ruby

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(later renamed Ross Dam). In January of 1940, the first stage of the dam, three hundred feet high, was completed. After City Light crews built a fifteen foot high timber crib dam atop the first stage, the lake behind it backed up nine miles. Construction of the second stage was halted by the War, but, in 1943, with assistance of the federal government, construction at Ruby Creek began again, with a consortium of three companies – General, Shea, and Morrison-Kundsen – working at the site. After the war, three hundred additional men were brought in to speed construction, and the third stage was contracted for, using the contractors already on site. On August 18, 1949, the dam, re-named in honor of J.D. Ross, was dedicated. In 1953, when spillway gates were added, the reservoir reached its full height of 1,600 feet above sea level.

Site ID #:	48	Classification:	Hist. Contributing
Hist. Name:	Ross Lake Suspension Bridge	Present Name:	Ross Lake Suspension Bridge
Hist. Use:	Pedestrian Bridge	Present Use:	Pedestrian Bridge
Date:	1954	Location:	3.5 miles east of Diablo Dam
Style:	Utilitarian	Type:	Structure
Builder:	Seattle City Light	Architect:	Seattle City Light

Description of Physical Appearance: This pedestrian suspension bridge spans the Skagit River/Diablo Lake near Ross Dam. The bridge is approximately 248 feet between towers, with two steel X-braced towers supporting a pedestrian walkway suspended on steel cables. The upper cross-member of the tower supports three power cables crossing the Skagit River.

Significance: This pedestrian bridge was built in the mid-1950s, for the U.S. Forest Service to provide trail access to the upper Skagit River and Ross Lake. It replaced an earlier bridge crossing the Skagit River that had been constructed in the late 1930s, which was associated with the Ross Dam and Powerhouse construction. This bridge was associated with construction of Ross Dam and the Ross Powerhouse. It also serves as a support for electrical cables. The bridge is owned by the National Park Service and is now used primarily by hikers.

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Site ID #:	49	Classification:	Non-Hist. Non-Contributing
Hist. Name:		Present Name:	Ross Powerhouse Access Tunnel
Hist. Use:	Access tunnel	Present Use:	Access tunnel
Date:	ca. 1975	Location:	3.5 miles east of Diablo Dam
Style:	Utilitarian	Type:	Structure
Builder:		Architect:	

Description of Physical Appearance: This tunnel entrance and tunnel is constructed of poured concrete and extends from the Ross Powerhouse boat moorage to the Ross Powerhouse.

Significance: This tunnel entrance was constructed around 1975, to provide year-round access to the powerhouse from the adjacent moorage.

Site ID #:	50	Classification:	Non-Hist. Non-Contributing
Hist. Name:		Present Name:	Powerhouse Moorage
Hist. Use:		Present Use:	Moorage
Date:	ca. 1980	Location:	3.5 miles east of Diablo Dam
Style:	Utilitarian	Type:	Structure
Builder:		Architect:	

Description of Physical Appearance: This floating moorage facility has an open bay on one end and an open covered area supported by a heavy-timber Howe truss on the other. The wood-frame building is supported by concrete floats and is clad with ribbed metal siding. The building has approximately 8-in-12 gable roofs with the ridge running the length of the building. The roofs are covered with ribbed metal roofing.

Significance: This moorage facility, including a floating covered moorage was constructed around 1985, to serve vessel traffic to and from the Diablo Work Boat Moorage Facility.

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Site ID #:	51	Classification:	Non-Hist. Non-Contributing
Hist. Name:		Present Name:	Ross Lake Work Boat Moorage
Hist. Use:		Present Use:	Moorage
Date:	ca. 1980	Location:	3.5 miles east of Diablo Dam
Style:	Utilitarian	Type:	Structure
Builder:		Architect:	

Description of Physical Appearance: This floating moorage facility has an open bay on one end and an open covered area supported by a heavy-timber Howe truss on the other. The wood-frame building is supported by concrete floats and is clad with ribbed metal siding. The building has approximately 8-in-12 gable roofs with the ridge running the length of the building. The roofs are covered with ribbed metal roofing.

Significance: This moorage facility, including a floating covered moorage was constructed around 1985, to serve vessel traffic to and from the Diablo Work Boat Moorage Facility.

HOLLYWOOD / DIABLO RESIDENTIAL AREA HISTORIC AREA "F" (PERIOD OF SIGNIFICANCE: 1937-1954)

Site ID #:	34	Classification:	Hist. Contributing
Hist. Name:	House #2	Present Name:	H-6
Hist. Use:	Housing	Present Use:	Housing
Date:	1938	Location:	Western end of Diablo
Style:	Rustic Craftsman	Type:	Building
Builder:	Seattle City Light	Architect:	Linn Forrest, George Stewart

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Description of Physical Appearance: This one-and-a-half-story wood-framed building has an L-shaped plan with a longer gabled portion on the south and a shorter gabled section extending northward from the larger section's northeastern corner. The building measures overall approximately 36 feet 3 inches north-south and 32 feet 2 inches east-west. The building rests on a perimeter foundation with roughly coursed stone facing. The building is clad with wide clapboard siding painted taupe with an 11-inch exposure. The gable ends are clad with scalloped vertical boards painted a light taupe. The gable roofs have north-south ridges with plain fascia boards and no overhangs. The roofs are covered with brown ribbed metal roofing. A brick chimney rises from the center of the principal gable ridge. All windows, doors, window and door trim, exterior porch columns, and fascia boards are painted white.

The eastern façade is primary. The roof of its recessed entry porch is supported by three 8x8 wood posts (the northernmost a pilaster) with upper curved braces. Stone steps on the north lead to a stone stoop covered with a thin layer of concrete. The entry doorway is located on the porch's northern side, and the door is paneled with an upper nine-light glazed panel. A one-over-two wood-sash double-hung window is located south of the entry door and another similar window is located on the northern entry façade. The northern section of the eastern façade has a pair of one-over-two wood-sash double-hung windows symmetrically placed on the façade. The house's southern façade has a central tripartite group of one-over-two wood-sash double-hung windows and single one-over-two wood-sash double-hung window to the west. The gable end of the façade has a central pair of one-over-one wood-sash double-hung windows. The southern section's western façade has a single one-over-two wood-sash double-hung window on its southern side and a smaller one-over-one wood-sash double-hung window on the northern side. There is a small entry porch in the ell which has a shed roof supported by a corner 8x8 with an upper curved brace. The porch stoop is faced with stone, as are the steps. A one-over-one wood-sash double-hung window is located on the northern side of the entry porch. The southern section's northern façade has an entry doorway with a paneled door with upper nine-light glazed panel on its eastern side sheltered by the porch roof. There is a single one-over-two wood-sash double-hung window located west of the doorway. The northern extension's northern façade has a central one-over-two wood-sash double-hung window.

The interior has a living room in the southeastern corner with a dining room located to the west. The kitchen is located to the north of the dining room in the northwestern corner of the main section of the building, and the stairway to the upper-floor is located to the east of the kitchen opposite the back doorway. Two bedrooms are located in the northeastern corner of the building with the bathroom to the west of the bedrooms. The upper floor has two rooms, a larger room to the south and a smaller one to the north. The interior finishes are minimal with simple casings. The building is in good condition.

Significance: One of two extant buildings dating to the first planned period of development of Hollywood, the other being the partially demolished Ross Lodge, making this the sole complete example of 1930s Rustic architecture in the hydroelectric project. Seattle City Light cooperated with the US Forest Service in the design of this "new" residential section in Diablo. Seattle City Light restored the building in 2009. It is presently listed as a single dis-contiguous resource (Resource #34) within the Skagit River and

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Newhalem Creek Hydroelectric Projects. The building reflects the US Forest Service's traditional design ethic, and retains integrity of design, materials, workmanship, setting, location, feeling, and association.

Site ID #:	53	Classification:	Hist. Contributing
Hist. Name:	Ross Lodge	Present Name:	H-27
Hist. Use:	Housing (apartment)	Present Use:	Vacant
Date:	1938	Location:	Western end of Diablo
Style:	Rustic Craftsman	Type:	Building
Builder:	Seattle City Light	Architect:	Linn Forrest, George Stewart

Description of Physical Appearance: This Rustic style one-and-a-half-story wood-frame building is the extant eastern portion of what originally was a larger building, which also included a western dormitory building connected to this building by a central breezeway (now the eastern porch). The building measures approximately 48 feet 11 inches wide east/west and 42 feet 8 inches north/south. The building is basically L-shaped with a larger/main gable roofed section located on the north, and a smaller gabled southern extension that is nearly flush with the eastern façade of the northern section. A narrow extension running westward is located on the southwestern corner of the northern section. The building rests on a perimeter concrete foundation, with the southern and eastern portions faced with fieldstone. The building is clad with horizontal clapboard with a 10.5-inch exposure. The upper portion of the exterior walls (at the second-floor line) is clad with vertical boards, scalloped at the lower edge. The roofs have a 10-in-12 slope and are covered with ribbed metal roofing. The roofs have simple bargeboards and no overhangs. All clapboard siding is painted mint green, the vertical scalloped boards are painted brown, and window and door trim is painted white.

The southern façade was originally the primary façade providing the main entry at the breezeway facing the street. The remaining breezeway located on the western side of the southern façade has a central doorway with glazed (now boarded-up) upper panel. The entry has a small concrete stoop with concrete steps and metal pipe guardrails. Three boarded up windows flank each side of the entry doorway. The eastern portion of the southern façade is composed of the southern extension and has a central stone-faced chimney and boarded-up windows flush with the corner posts. The eastern façade has a pair of boarded-up windows, the southernmost flush with the corner post, on the southern side of the southern extension. The main section's eastern façade has a central entry doorway with a paneled door a glazed (now boarded-up) upper section. The door retains its original hardware. The entry has a wide concrete stoop with concrete steps and a pair of metal pipe guardrails. Four 8x8 wood columns with upper curved braces support a gable porch roof sheltering the entry. Two pairs of boarded-up windows flank the doorway. The upper gable-end has a central pair of one-over-one wood-sash double-hung

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windows. The northern façade has a small central boarded-up window and a boarded-up window flush with the western corner post. The western façade of the main portion has a boarded-up window flush with the northern corner post and a higher horizontal boarded-up window on its southern side. There is a doorway on the eastern side of the breezeway extension with the remaining westward wall surface recessed. The original header over the recess which rested on the eastern end of the western dormitory wing is now supported by a narrow pipe-column.

Significance: In 1936, Seattle City Light began planning to replace the approximately 20 shacks remaining from Davis Ranch near Stetattle Creek with new housing. As the Reflector Bar vicinity was also the location of a U.S. Forest Service station, the Forest Service claimed jurisdiction over planning and construction in the area. The Forest Service, and the closely aligned National Park Service, had by this time embraced the "Rustic" style for new construction. Linn Forrest, an assistant architect for the Forest Service's North Pacific Region provided Seattle City Light with plans for three housing schemes for four-room residences and one for a ten-man apartment, all designed in the Rustic style. F. V. Horton, an assistant regional forester based in Portland, provided a site plan for the area. The plans were altered somewhat by Seattle City Light's architect, George Stewart prior to the commencement of construction in the early summer of 1937. Construction continued through early 1938. A total of five houses were built, in addition to an apartment building, referred to as "The Lodge." The Lodge, originally designed by Seattle City Light as a two-story building, was built as a one-and-a-half-story building to house single men, who would share common eating and lounging facilities. In the 1940s, it was converted to apartments housing families.

Although slightly difference in appearance, each of the completed houses had two bedrooms, a bath, a kitchen, a dining room and a living room, as well as an unfinished attic space in which laundry facilities could be located. They all shared steeply-pitched gable roofs with scalloped vertical board siding on the gable ends and horizontal board siding. All foundations were faced with stone, and all houses had central stone chimneys. The five houses were originally thought of as prototypes, apparently with the idea that future structures based on the different plan types already built would be erected later. The houses were located near the apex of a triangular road, whose base followed the Skagit to the south, and were grouped in an informal cluster, reflecting the prevailing rustic architecture planning philosophy of informal schemes adjusting to the site. The lodge was located on the eastern side of the triangular road, near the southern end of Hollywood.

Hollywood remained a partially-built housing project until 1952, when 26 new Colonial revival houses were built. The older rustic houses deteriorated and were demolished when maintenance was deemed too costly. The sole remaining house from the 1938 period is Number 2, now referred to as H-6 (Resource #34). The eastern portion of the Lodge remains, although the former dormitory area was demolished around 1980. The original street plan was altered in the 1950s, when the new residences were erected.

The building has lost physical integrity due to the loss of its western portion.

(Note: the following 22 residential buildings are nearly identical and only the first one is described in detail. The remaining buildings include only orientation descriptions of changes made since the

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original construction. The significance of all these buildings is equal.)

Site ID #:	54	Classification:	Hist. Contributing
Hist. Name:	House #1	Present Name:	H-1
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: This small house is one of 25 nearly identical houses built in 1952. Of the 22 extant houses of this type, 12 have entrances on the right-hand side of the primary street façade, and 10 have reversed floor plans with entries on the left-hand side. They are identified here as right and left-hand plans respectively.

The subject house has a left-hand plan and faces east, diagonal to Stetattle Creek Street. The house has a concrete walkway leading to the main entry and is surrounded by a lawn. It has a fenced area to the west, and mature trees beyond to the west. The house is located near on the west side of the Hollywood residential area surrounded by a large lawn and trees. Similar houses are located to the east and across the street to the south.

This 1-1/2 story building is of wood frame construction measuring approximately 36 feet wide and 28 feet deep, with the principal façade (36 feet) facing east. The building rests on an approximately 24-inch high perimeter concrete foundation. The house is sided with combed cedar shingles with a 14-inch exposure. All windows are single pane aluminum, and appear to be original. The Gable roof runs parallel with the frontage street and has a 10-in-12 roof slope. The roof is covered with ribbed metal roofing and has an approximately 24-inch overhang on the front and rear façades. Roofs have simple bargeboards. A brick chimney protrudes near the center of the roof.

The primary façade has a large centrally placed six-light picture window. There is a vertical fixed sash over awning window located to the right of the central window. The left façade has a gabled-roof entry located the side nearest to the street. 4x4 wood posts support the entry porch roof, and the concrete stoop has a plain wood railing and the three steps have a metal pipe handrail. The entry door is paneled with upper glazing. A large four-light fixed sash window is located rearward from the door, and a smaller fixed sash over awning window is located at the rearward building corner. The rear façade has a central secondary entrance door sheltered by a roof extension. Two vertical fixed sash over awning windows flank the entry door. A small centrally placed gable dormer is located above the secondary entry. The dormer has a small fixed sash over awning window. The right façade has two small horizontal

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sliding windows located at the main-floor outer corners and a central vertical fixed sash over awning window in the gable.

The main floor has a living/ dining room (adjacent to the main entry door) with a fireplace, and a kitchen to the rear. A stairway located at the rear and center leads to the second floor and cellar. Two bedrooms and a central bathroom are located opposite of the living/ dining room. The second floor has two bedrooms located at the outer ends and a bathroom located within the centrally placed rear dormer. The basement has a laundry area and storage. The interior finishes include wallboard and asbestos tile of various colors on all the floors, including the stairs.

Significance: In 1917, Seattle City Light Superintendent J. D. Ross obtained a permit from the U.S. Forest Service for dam construction on the Skagit River, 120 miles northeast of Seattle. A construction camp was built and the first powerhouse and a timber crib dam near Gorge Creek were completed in 1924. In 1927 a new construction camp was built upriver for the construction of the second dam, at Diablo Creek. It is located approximately 7.5 miles upstream from Newhalem, the first construction site. This dam was completed in 1930, after delays in financing the powerhouse, and it finally became operational in 1936. The construction camp for the project developed into the company town of Diablo. Planning for the third dam at Ruby Creek (now called Ross Dam) also began in the mid-1930s, with the completion of the first phase in 1940. World War II delayed completion of the second phase until 1949, and the powerhouse construction continued from 1951 until 1959. Final project construction took place between 1955 and 1961, with the construction of the Gorge High Dam, replacing two older and lower dams in generally the same location.

Because of the narrowness of the canyon, Diablo has two distinct residential areas with the powerhouse on a narrow strip of land between them. The need for additional housing continued, however, and during the late 1930s, extensive negotiations were undertaken with the Forest Service about the number, design and arrangement of new houses at what became known as Hollywood, a small flat area owned by the Forest Service downstream from Reflector Bar. Finally, in 1937, five houses and an apartment building ("The Lodge") were constructed in Hollywood, using the rustic style suggested by the Forest Service.

After World War II the state highway (SR 20) was improved to provide the first good vehicle access to Newhalem. The railroad line to Diablo was removed in 1955, and the first road to the town was completed between 1954 and 1957. In 1950, when preparing for the completion and operation of Ross Dam and Powerhouse, Seattle City Light saw the need for additional new housing in Diablo, at both the Reflector Bar and Hollywood. Construction required new roads, sidewalks, a street lighting system and reconstruction of the sewer and water lines. Work began in 1951, demolishing the old construction camp shacks and adding the necessary infrastructure. In Hollywood, all except two of the rustic cottages were demolished. The only one that survives today is Residence H-6, whose restoration was substantially complete in 2009.

Housing and other support facilities at Diablo evolved over the decades as needs changed. By the early 1970s, microwave communications technology had progressed enough that many power plant operations could be performed from a central power control center in Seattle. This development, along

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with the lack of large on-going construction, meant that significantly fewer employees and their families needed to live in Newhalem or Diablo. This loss of population resulted in vacancies in most of the houses, the closure of the school, reduced support services and a decline in the sense of community that had existed for decades.

The subject building is one of approximately 25 generally identical houses built in the Hollywood area of Diablo in 1952, by Seattle City Light for employees. The contractor was the Seattle firm of Thorburn and Logozo. The residences as a group are significant for their association with the construction and operation of Ross Dam and Powerhouse, with the development of Diablo as a company town, and with the growth of City Light and Seattle.

Site ID #:	55	Classification:	Hist. Contributing
Hist. Name:	House #2	Present Name:	H-2
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a right-hand plan and faces south, diagonal to Stetattle Creek Street. The house has a concrete walkway leading to the main entry and is surrounded by a lawn. It has minimum foundation planting and a small deciduous tree in the yard to the south. Other similar houses are located on either side and to the south across the street. The house is located in the western portion of the Hollywood residential area.

Significance: See above.

Site ID #:	56	Classification:	Hist. Contributing
Hist. Name:	House #3	Present Name:	H-3
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo

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Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a right-hand plan and faces southeast towards Stetattle Creek Street. The house has a concrete walkway leading to the main entry and is surrounded by a lawn. It has an associated garage and driveway located to the rear on the northeast side. Other similar houses are located on either side and across the street to the south. The house is located in the western section of the Hollywood residential area surrounded by a large lawn and trees. Similar houses are located on each side and across the street.

Significance: See above.

Site ID #:	57	Classification:	Hist. Contributing
Hist. Name:	House #4	Present Name:	H-4
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a left-hand plan and faces southeast towards Stetattle Creek Street. The house has a concrete walkway leading to the main entry and is surrounded by a lawn. There is an associated garage and driveway to the rear at the southeast. Other similar houses are located on either side and across the street. The house is located in the northwestern section of the Hollywood residential area.

Significance: See above.

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Site ID #:	58	Classification:	Hist. Contributing
Hist. Name:	House #5	Present Name:	H-5
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a right-hand plan and faces south, diagonal to Stetattle Creek Street. The house has a concrete walkway leading to the main entry and is surrounded by a lawn dotted with mature coniferous trees. Other similar houses are located to the southwest and across the street. The house is located between the eastern and northern portions of the Hollywood residential area.

Significance: See above.

Site ID #:	59	Classification:	Hist. Contributing
Hist. Name:	House #7	Present Name:	H-9
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a left-hand plan and faces southwest towards Stetattle Creek Street. The house has a concrete walkway leading to the main entry and is surrounded by a lawn. A similar house is located to the south, and others are located across streets nearby. The house is located in the northern central portion of the Hollywood residential area.

Significance: See above.

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Site ID #:	60	Classification:	Hist. Contributing
Hist. Name:	House #8	Present Name:	H-10
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a right-hand plan and faces west to Stetattle Creek Street. The house has a concrete walkway leading to the main entry and is surrounded by a lawn. Other similar houses are located to the north and to the south. The house is located in the north central portion the Hollywood residential area. Similar houses are located on each side and across the street.

Significance: See above.

Site ID #:	61	Classification:	Hist. Contributing
Hist. Name:	House #9	Present Name:	H-11
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a right-hand plan and faces south to Stetattle Creek Street. The house has a concrete walkway leading to the main entry and is surrounded by a lawn and a mature coniferous tree in the front to the northeast. Other similar houses are located to the north and across the street to the south. The house is located in the central portion of the Hollywood residential area.

Significance: See above.

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Site ID #:	62	Classification:	Hist. Contributing
Hist. Name:	House #22	Present Name:	H-12
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a left-hand plan and faces north to Stetattle Creek Street. The house has a concrete walkway leading to the main entry and is surrounded by a lawn with two mature coniferous trees, one to the east and one to the west. An associated garage and driveway is located to the rear at the southwest. Other similar houses are located nearby. The house is located in the east central portion of the Hollywood residential area.

Significance: See above.

Site ID #:	63	Classification:	Hist. Contributing
Hist. Name:	House #21	Present Name:	H-13
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a left-hand plan and faces north to Stetattle Creek Street. The house has a concrete walkway leading to the main entry and is surrounded by a lawn. An associated garage and driveway is located to the rear at the southeast. Similar houses are located on each side, across the street and to the rear. The house is located in the central portion of the Hollywood residential area.

Significance: See above.

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Site ID #:	64	Classification:	Hist. Contributing
Hist. Name:		Present Name:	H-14
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a left-hand plan and faces north to Stetattle Creek Street. The house has a concrete walkway leading to the main entry and is surrounded by a lawn. An associated garage and driveway is located to the rear at the southwest. Other similar houses are located nearby. The house is located in the central portion of the Hollywood residential area.

Significance: See above.

Site ID #:	65	Classification:	Hist. Contributing
Hist. Name:	House #20	Present Name:	H-15
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a right-hand hand plan and faces north to Stetattle Creek Street. The house has a concrete walkway leading to the main entry and is surrounded by a lawn with mature trees located to the south and to the west. An associated garage and driveway is located to the rear at the southeast. Similar houses are located on each side, across the street and to the rear. The house is located in the central portion of the Hollywood residential area.

Significance: See above.

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Site ID #:	66	Classification:	Hist. Contributing
Hist. Name:	House #17	Present Name:	H-17
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a left-hand plan and faces northwest to Stetattle Creek Street. The house has a concrete walkway leading to the main entry and is surrounded by a lawn. A wooden fence encloses a northern section of the site. An associated garage and driveway is located to the south and screened from the house by a stand of trees. The house is located southwestern portion of the Hollywood residential area. Similar houses are located on each side and across the street.

Significance: See above.

Site ID #:	67	Classification:	Hist. Contributing
Hist. Name:	House #16	Present Name:	H-18
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house is located at the western corner of Diablo Road and Stetattle Creek Street. It has a right-hand plan and faces south to Diablo Road. The house has a concrete walkway leading to the main entry and is surrounded by a lawn, with a mature coniferous tree on the northeast corner of the house and one to the west at the intersection. Other similar houses are located to the east and north. The house is located in the southwest portion of the Hollywood residential area.

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Significance: See above.

Site ID #:	68	Classification:	Hist. Contributing
Hist. Name:	House #28	Present Name:	H-19
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a right-hand plan and faces south to Diablo Road. The house has a concrete walkway leading to the main entry and is surrounded by a lawn; mature trees are in a fenced area to the north at the rear of the house. An associated garage and driveway is located to the northeast. Similar houses are located on each side and to the rear. The house is located in the southwest portion of the Hollywood residential area.

Significance: See above.

Site ID #:	69	Classification:	Hist. Contributing
Hist. Name:	House #27	Present Name:	H-20
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a left-hand plan and faces south to Diablo Road. The house has a concrete walkway leading to the main entry and is surrounded by a lawn. An associated garage and driveway is located to the northeast. Other similar houses are located to either side and to the rear. The house is located central south portion of the Hollywood residential area.

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Significance: See above.

Site ID #:	70	Classification:	Hist. Contributing
Hist. Name:	House #26	Present Name:	H-21
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a right-hand plan and faces south to Diablo Road. The house has a concrete walkway leading to the main entry and is surrounded by a lawn. An associated garage and driveway is located to the northwest. Other similar houses are located on either side and to the rear. The house is located in the central south portion of the Hollywood residential area.

Significance: See above.

Site ID #:	71	Classification:	Hist. Contributing
Hist. Name:	House #25	Present Name:	H-22
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a left-hand plan and faces south to Diablo Road. The house has a concrete walkway leading to the main entry and is surrounded by a lawn. An associated garage and driveway are located to the northeast at the rear of the house. Other similar houses are located on either side and to the rear. The house is located in the central southern portion of the Hollywood residential area.

Significance: See above.

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Site ID #:	72	Classification:	Hist. Contributing
Hist. Name:	House #24	Present Name:	H-23
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a right-hand plan and faces south to Diablo Road. The house has a concrete walkway leading to the main entry and is surrounded by a lawn. An associated garage and driveway are located to the northwest at the rear of the house. Other similar houses are located on either side and to the rear. The house is located in the east southern portion of the Hollywood residential area.

Significance: See above.

Site ID #:	73	Classification:	Hist. Contributing
Hist. Name:	House #23	Present Name:	H-24
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a left-hand plan and the primary façade faces west to Rumsey Creek Road, although the entry is off Diablo Road to the south. The house has a concrete walkway leading to the main entry and is surrounded by a lawn. Other similar houses are located to the west and north. An associated

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single garage is located to the north, with its driveway off Rumsey Creek Road. The house is located in the east edge of the southern portion of the Hollywood residential area.

Significance: See above.

Site ID #:	74	Classification:	Hist. Contributing
Hist. Name:	House #12	Present Name:	H-32
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

The subject house has a right-hand plan and faces east towards Rumsey Creek Road. It is located on the eastern edge of the Hollywood residential district. The house has a concrete walkway leading to the main entry and is surrounded by a small lawn. The house is set back from the road by approximately 50 feet and has an elevation gain of approximately 5 feet from the road. A driveway approaching from the north accesses it. There is an associated garage at the north end of the driveway, and an associated storage/woodshed across the alley to the east. The street side (western) landscaping consists of shrubbery and deciduous trees. A mature coniferous forest surrounds the eastern side. Other similar houses are located across the road to the west, and one similar to the north.

Significance: See above.

Site ID #:	75	Classification:	Hist. Contributing
Hist. Name:	House #10	Present Name:	H-36
Hist. Use:	Housing	Present Use:	Housing
Date:	1952	Location:	Western end of Diablo
Style:	Stripped Colonial Revival	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

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Description of Physical Appearance: See above.

The subject house has a left-hand plan and faces east to the cul-de-sac at the north end of Rumsey Creek Road. The house has a concrete walkway leading to the main entry and is surrounded by a lawn with forest to the north at the rear of the house. Other similar houses are located nearby. The house is located northern portion of the Hollywood residential area.

Significance: See above.

(Note: the following 12 garage buildings are nearly identical and only the first one is described in detail. The remaining buildings include only orientation descriptions of changes made since the original construction. The significance of all these buildings is equal.)

Site ID #:	76	Classification:	Hist. Contributing
Hist. Name:	Garages 1 & 2	Present Name:	Garage H-1 & H-2
Hist. Use:	Automobile Garage	Present Use:	Automobile Garage
Date:	1954	Location:	Western end of Diablo
Style:	Utilitarian	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: It is located south of House #1. This small one-story building is of wood frame construction measuring approximately 26 feet wide (principal and rear facades) and 24 feet deep (side facades), with the principal façade with two garage doors facing the street. It is located south of House #1. Each side façade contains one flush panel man-sized door, located to the rear end of the side façade. The building rests on a perimeter concrete foundation and has a concrete slab floor. The garage is sided with combed cedar shingles with a 14-inch exposure. The gable roof runs perpendicular with the frontage street and has an approximately 8-in-12 roof slope. The roof is covered with ribbed metal roofing and has an approximately 12-inch overhang with soffits on the side facades. The gable end on the primary and rear facades overhangs the wall plane by approximately 4 inches. Each gable end contains two symmetrically placed rectangular louvered attic vents.

Significance: This double garage is one of 12 of its type of double garage built in the Hollywood housing area in 1954, by Seattle City Light in the Hollywood area of the town of Diablo for Seattle City Light employees as a result of the construction of a new road from Newhalem. Each double garage appears to have been shared by two houses. The garages along with the residences as a group may be significant for their association with the construction and operation of Ross Dam and Powerhouse, with the development of Diablo as a company town, and with the growth of City Light and Seattle. However

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many alterations, including replacement of the original garage doors, and the replacement of the original roof by metal ribbed roofing, have decreased the physical integrity of the buildings.

Site ID #:	77	Classification:	Hist. Contributing
Hist. Name:	Garages 3 & 4	Present Name:	Garage H-3 & H-4
Hist. Use:	Automobile Garage	Present Use:	Automobile Garage
Date:	1954	Location:	Western end of Diablo
Style:	Utilitarian	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

This two-car garage is located between and to the rear of Houses #3 and #4.

Significance: See above.

Site ID #:	78	Classification:	Hist. Contributing
Hist. Name:	Garages 29 & 10	Present Name:	Garage H-5 & H6
Hist. Use:	Automobile Garage	Present Use:	Automobile Garage
Date:	1954	Location:	Western end of Diablo
Style:	Utilitarian	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

This two-car garage is located between Houses #6 and #36, and adjacent on the north of the Diablo Fire Department building.

Significance: See above.

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Site ID #:	79	Classification:	Hist. Contributing
Hist. Name:	Garages 7 & 33	Present Name:	Garage H-9 & H27
Hist. Use:	Automobile Garage	Present Use:	Automobile Garage
Date:	1954	Location:	Western end of Diablo
Style:	Utilitarian	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

This two-car garage is located between and to the rear of Houses #9 and #10.

Significance: See above.

Site ID #:	80	Classification:	Hist. Contributing
Hist. Name:	Garages 8 & 9	Present Name:	Garage H-10 & H-11
Hist. Use:	Automobile Garage	Present Use:	Automobile Garage
Date:	1954	Location:	Western end of Diablo
Style:	Utilitarian	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

This two-car garage is located between and to the rear of Houses #3 and #4.

Significance: See above.

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Site ID #:	81	Classification:	Hist. Contributing
Hist. Name:	Garages 21 & 22	Present Name:	Garage H-12 & H-13
Hist. Use:	Automobile Garage	Present Use:	Automobile Garage
Date:	1954	Location:	Western end of Diablo
Style:	Utilitarian	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

This two-car garage is located between and to the rear of Houses #12 and #13.

Significance: See above.

Site ID #:	82	Classification:	Hist. Contributing
Hist. Name:	Garages 19 & 20	Present Name:	Garage H-14 & H-15
Hist. Use:	Automobile Garage	Present Use:	Automobile Garage
Date:	1954	Location:	Western end of Diablo
Style:	Utilitarian	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

This two-car garage is located between and to the rear of Houses #14 and #15.

Significance: See above.

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Site ID #:	83	Classification:	Hist. Contributing
Hist. Name:	Garages 17 & 28	Present Name:	Garage H-17 & H-19
Hist. Use:	Automobile Garage	Present Use:	Automobile Garage
Date:	1954	Location:	Western end of Diablo
Style:	Utilitarian	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

This two-car garage is located between and to the rear of Houses #19 and #20.

Significance: See above.

Site ID #:	84	Classification:	Hist. Contributing
Hist. Name:	Garages 26 & 27	Present Name:	Garage H-20 & H-21
Hist. Use:	Automobile Garage	Present Use:	Automobile Garage
Date:	1954	Location:	Western end of Diablo
Style:	Utilitarian	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

This two-car garage is located between and to the rear of Houses #20 and #21.

Significance: See above.

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Site ID #:	85	Classification:	Hist. Contributing
Hist. Name:	Garages 24 & 25	Present Name:	Garage H-22 & H-23
Hist. Use:	Automobile Garage	Present Use:	Automobile Garage
Date:	1954	Location:	Western end of Diablo
Style:	Utilitarian	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

This two-car garage is located between and to the rear of Houses #22 and #23.

Significance: See above.

Site ID #:	86	Classification:	Hist. Contributing
Hist. Name:	Garages 31 & 32	Present Name:	Garage H-31 & H-32
Hist. Use:	Automobile Garage	Present Use:	Automobile Garage
Date:	1954	Location:	Western end of Diablo
Style:	Utilitarian	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

This two-car garage is located on the northern end of the Hollywood Residential Area adjacent to and east of Garage H-35 & 36.

Site ID #:	87	Classification:	Hist. Contributing
Hist. Name:	Garages 11 & 12	Present Name:	Garage H-35 & H-36

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Hist. Use:	Automobile Garage	Present Use:	Automobile Garage
Date:	1954	Location:	Western end of Diablo
Style:	Utilitarian	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

This two-car garage is located on the northern end of the Hollywood Residential Area adjacent to and west of Garage H-31 & 32.

Significance: See above.

(Note: the following 12 garage buildings are nearly identical and only the first one is described in detail. The remaining buildings include only orientation descriptions of changes made since the original construction. The significance of all these buildings is equal.)

Site ID #:	88	Classification:	Hist. Contributing
Hist. Name:	Garage 18	Present Name:	Garage H-16
Hist. Use:	Automobile Garage	Present Use:	Automobile Garage
Date:	1954	Location:	Western end of Diablo
Style:	Utilitarian	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

This small one-story building is of wood frame construction measuring approximately 13 feet wide (principal and rear facades) and 24 feet deep (side facades), with the principal façade with one garage door facing the street. It is located to the southwest of House #15. The north side façade contains two flush panel man-sized doors, one located to the rear end of the side façade, the other in the center of the façade. The building rests on a perimeter concrete foundation and has a concrete slab floor. The garage is sided with combed cedar shingles with a 14-inch exposure. The gable roof runs perpendicular with the frontage street and has an approximately 8-in-12 roof slope. The roof is covered with ribbed metal roofing and has an approximately 12-inch overhang with soffits on the side facades. The gable end on the primary and rear facades overhangs the wall plane by approximately 4 inches. Each gable end contains two symmetrically placed rectangular louvered attic vents. The roof has simple bargeboards. A small 2x4 and plastic corrugated roof has been added connecting garage H16 to the garage to the south.

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Significance: This single garage is one of 3 of its type built in the Hollywood housing area in 1954, by Seattle City Light in the Reflector Bar area of the town of Diablo for Seattle City Light employees as a result of the construction of a new road from Newhalem. The garages along with the residences as a group may be significant for their association with the construction and operation of Ross Dam and Powerhouse, with the development of Diablo as a company town, and with the growth of City Light and Seattle. However many alterations, including replacement of the original garage doors, and the replacement of the original roof by metal ribbed roofing, have decreased the physical integrity of the buildings.

Site ID #:	89	Classification:	Hist. Contributing
Hist. Name:	Garage 16	Present Name:	Garage H-18
Hist. Use:	Automobile Garage	Present Use:	Automobile Garage
Date:	1954	Location:	Western end of Diablo
Style:	Utilitarian	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

This one-car garage is located between Houses #17 and #18.

Significance: See above.

Site ID #:	90	Classification:	Hist. Contributing
Hist. Name:	Garage 23	Present Name:	Garage H-24
Hist. Use:	Automobile Garage	Present Use:	Automobile Garage
Date:	1954	Location:	Western end of Diablo
Style:	Utilitarian	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: See above.

This one-car garage is located to the rear of House #24.

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Significance: See above.

Site ID #:	91	Classification:	Hist. Non-Contributing
Hist. Name:	Garages 5 & 6	Present Name:	Diablo Fire Dept.
Hist. Use:	Automobile Garage	Present Use:	Automobile Garage
Date:	1954, ca. 1965	Location:	Western end of Diablo
Style:	Utilitarian	Type:	Building
Builder:	Thorburn and Logozo	Architect:	

Description of Physical Appearance: This one-story building is of wood frame building measures approximately 40 feet wide (principal and rear facades) and 30 feet deep (side facades), with the principal façade with a garage door facing the street. The left-hand facade contains one flush panel man-sized door, located toward the street side. The building rests on a perimeter concrete foundation and has a concrete slab floor. The garage is sided with combed cedar shingles with a approximately 14-inch exposure. The gable roof runs perpendicular with the frontage street and has an approximately 8-in-12 roof slope. The roof is covered with ribbed metal roofing and has an approximately 12-inch overhang with soffits on the side facades. The gable end on the primary and rear facades overhangs the wall plane by approximately 4 inches. Each gable end contains two symmetrically placed rectangular louvered attic vents. Roofs have simple bargeboards.

Significance: This garage is presently used to house firefighting equipment for the Diablo Volunteer Fire Department, and is a modified version of the residential garages built in the Hollywood housing area in 1954.

Site ID #:	96	Classification:	Hist. Contributing
Hist. Name:	Stetattle Creek Railroad Bridge	Present Name:	Stetattle Creek Bridge
Hist. Use:	Railroad Bridge	Present Use:	Automobile Bridge
Date:	ca. 1938	Location:	Western end of Diablo
Style:	Utilitarian	Type:	Structure

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Builder: Seattle City Light

Architect:

Seattle City Light

Description of Physical Appearance: This automobile bridge is a one-span Pratt truss steel bridge with concrete abutments, measuring approximately 70 feet long and approximately 16 feet 11 inches between the top and bottom chords. It is one lane wide, approximately 12 feet wide between bull rails. The structure is built above Stetattle Creek on the Diablo access road from Highway State Route 20.

Significance: Late in 1927 or early in 1928 a railroad bridge was erected to cross Stetattle Creek during the extension of the line from Newhalem to Reflector Bar, below the Diablo Dam site. To handle the steep grade and heavy construction material loads, the line was electrified, although a steam locomotive—Old Number Six (Resource #19)—purchased in 1928—was also used to negotiate the grade and haul equipment, materials and tourists to the dam site. The railroad served as the only transportation link to the town of Diablo and the dam for several years.

This structure was built around 1938, utilizing salvaged single track railroad trusses originally fabricated for the Oregon Railroad and Navigation Company by the Keystone Bridge Works of the Carnegie Steel Co., Ltd. of Pittsburgh, Pennsylvania in 1898. The bridge was converted to solely highway use around 1958, when the railroad rails were removed and replaced with steel deck panels.

Site ID #: 97

Classification:

Hist. Non-Contributing

Hist. Name: Hollywood Sewage Pump Station

Present Name:

Hollywood Sewage Pump Station

Hist. Use: Sewage Pump Station

Present Use:

Sewage Pump Station

Date: 1952

Location:

Western end of Diablo

Style: Utilitarian

Type:

Building

Builder:

Architect:

Seattle City Light

Description of Physical Appearance: This utility building is approximately 10 feet by 10 feet concrete flat-roof sewage pump

Significance: This small utility building was built at the time of the later Hollywood housing development.

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RESOURCE SUMMARY

A. TOWN OF NEWHALEM (1917-1954)

Contributing Resources: 21

Non-Contributing Resources: 4

Number	Historic Name	Type of Resource	Date	Status/Rank
01	Silk Stocking Row House #8	Building	1921	Hist. Contrib.
02	Silk Stocking Row House #7	Building	1922	Hist. Contrib.
03	Silk Stocking Row House #6	Building	1922	Hist. Contrib.
04	Silk Stocking Row House #5	Building	1922	Hist. Contrib.
05	Silk Stocking Row House #4	Building	1921	Hist. Contrib.
06	Silk Stocking Row House #3	Building	1922	Hist. Contrib.
07	Silk Stocking Row House #2	Building	1922	Hist. Contrib.
08	Silk Stocking Row House #1	Building	1923	Hist. Contrib.
09	Schoolteacher's House (House #222)	Building	1938	Hist. Contrib.
11	The Hotel (Bunkhouse #23)	Building	1920	Hist. Non-Contrib.
12	Commissary	Building	1920	Hist. Contrib.
13	Bunkhouse #13 (Pansy House)	Building	ca. 1934	Hist. Contrib.
14	New Cook's Bunkhouse (Bunkhouse #10)	Building	ca. 1934	Hist. Contrib.
15	Mess Hall (Gorge Inn)	Building	1920	Hist. Contrib.
16	Old Cook's Bunkhouse (Library)	Building	1921	Hist. Contrib.
17	Tourist Dormitory #70 (Bunkhouse #70)	Building	1935	Hist. Contrib.
18	USGS Stream Gauging Station	Structure	1909/1923	Hist. Contrib.
19	Old # Six, Locomotive	Object	1928	Hist. Contrib.
20	Fire Hall	Building	ca. 1956	Hist. Contrib.
21	Tourist Restroom (Visitor's Center)	Building	ca. 1934	Hist. Contrib.
22	Currier Hall	Building	1957	Hist. Contrib.
23	Totem Pole	Object	1957	Hist. Contrib.
24	Trail of the Cedars Suspension Bridge	Structure	ca. 1975	Non-Hist. Non-Contrib.
43	Skagit Information Center	Building	2001	Non-Hist. Non-Contrib.
44	Temple of Power	Structure	2000	Non-Hist. Non-Contrib.

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B. GORGE POWERHOUSE AND DAM COMPLEX (1917-1961)

Contributing Resources: 6

Non-Contributing Resources: 1

Number	Historic Name	Type of Resource	Date	Status/ Rank
27	Gorge Powerhouse	Building	1924	Hist. Contrib.
28	Gorge Railroad Bridge	Structure	ca. 1935	Hist. Contrib.
29	Gravity Oil Tank House	Building	ca. 1928	Hist. Contrib.
30	Ladder Creek Falls Gardens	Site	1928	Hist. Contrib.
31	Gorge Pedestrian Suspension Bridge	Structure	1951	Hist. Contrib.
32	Gorge High Dam	Structure	1961	Hist. Contrib.
33	Gorge Diversion Dam	Structure	1950	Hist. Non-Contrib.

C. DIABLO POWERHOUSE COMPLEX (1927-1960)

Contributing Resources: 7

Non-Contributing Resources: 2

Number	Historic Name (Present Day Name)	Type of Resource	Date	Status/ Rank
35	Diablo Powerhouse	Building	1936	Hist. Contrib.
36	Incline Waiting Station	Building	1934	Hist. Contrib.
37	Incline Lift and Powerhouse	Structure	1928	Hist. Contrib.
38	Diablo Commissary	Building	1952	Hist. Contrib.
39	Diablo Communications Building	Building	ca. 1935	Hist. Contrib.
41	Incline Manlift	Site	1953	Hist. Non-Contrib.
45	Incline Garage	Building	ca. 1990	Non-Hist. Non-Contrib.
42	Diablo Dam	Structure	1930	Hist. Contrib.
52	Windy Gap Railroad Bridge	Structure	ca. 1937	Hist. Contrib.

D. SINGLE NON-CONTIGUOUS RESOURCES

Contributing Resources: 8

Non-Contributing Resources: 1

Number	Historic Name	Type of Resource	Date	Status/ Rank
25	Ross Crypt, Newhalem	Site	ca. 1939	Hist. Contrib.
26	Newhalem Creek Powerhouse Site, Newhalem Creek	Site	1921	Hist. Contrib.
40	Diablo Water Tower, Diablo	Structure	1934	Hist. Contrib.

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92	Diablo Schoolhouse (Communications Building)	Building	Ca. 1951	Hist. Contrib.
94	Monkey Island Navigation Light	Structure	ca. 1930	Hist. Contrib.
95	Diablo Lake Boatyard	Building	ca. 1936	Hist. Contrib.
98	Tug BOUNDARY, Diablo Lake	Structure	1948	Hist. Contrib.
99	Tug DIABLO II, Diablo Lake	Structure	1948	Hist. Contrib.
100	Tug SKAGIT, southern shore Ross Lake	Structure	ca. 1938	Hist. Contrib.

E. ROSS POWERHOUSE COMPLEX (1937-1961)

Contributing Resources: 3

Non-Contributing Resources: 3

Number	Historic Name	Type of Resource	Date	Status/ Rank
46	Ross Powerhouse	Building	1952	Hist. Contrib.
47	Ross Dam and Intake	Structure	1937-49	Hist. Contrib.
48	Ross Lake Suspension Bridge	Structure	1954	Hist. Contrib.
49	Ross Powerhouse Access Tunnel	Building	c. 1985	Non-Hist. Non-Contrib.
50	Ross Powerhouse Moorage	Building	c. 1985	Non-Hist. Non-Contrib.
51	Ross Lake Work Boat Moorage	Building	c. 1985	Non-Hist. Non-Contrib.

F. HOLLYWOOD/DIABLO RESIDENTIAL AREA (1937-1954)

Contributing Resources: 40

Non-Contributing Resources: 2

Number	Historic Name (Present Day Name)	Type of Resource	Date	Status/ Rank
34	Hollywood House #2 (Hollywood House H-6)	Building	1938	Hist. Contrib.
53	Hollywood House H27	Building	1938	Hist. Contrib.
54	Hollywood House H1	Building	1952	Hist. Contrib.
55	Hollywood House H2	Building	1952	Hist. Contrib.
56	Hollywood House H3	Building	1952	Hist. Contrib.
57	Hollywood House H4	Building	1952	Hist. Contrib.
58	Hollywood House H5	Building	1952	Hist. Contrib.
59	Hollywood House H9	Building	1952	Hist. Contrib.

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60	Hollywood House H10	Building	1952	Hist. Contrib.
61	Hollywood House H11	Building	1952	Hist. Contrib.
62	Hollywood House H12	Building	1952	Hist. Contrib.
63	Hollywood House H13	Building	1952	Hist. Contrib.
64	Hollywood House H14	Building	1952	Hist. Contrib.
65	Hollywood House H15	Building	1952	Hist. Contrib.
66	Hollywood House H17	Building	1952	Hist. Contrib.
67	Hollywood House H18	Building	1952	Hist. Contrib.
68	Hollywood House H19	Building	1952	Hist. Contrib.
69	Hollywood House H20	Building	1952	Hist. Contrib.
70	Hollywood House H21	Building	1952	Hist. Contrib.
71	Hollywood House H22	Building	1952	Hist. Contrib.
72	Hollywood House H23	Building	1952	Hist. Contrib.
73	Hollywood House H24	Building	1952	Hist. Contrib.
74	Hollywood House H32	Building	1952	Hist. Contrib.
75	Hollywood House H36	Building	1952	Hist. Contrib.
76	Hollywood Garage H1&2	Building	1954	Hist. Contrib.
77	Hollywood Garage H3&4	Building	1954	Hist. Contrib.
78	Hollywood Garage H5&6	Building	1954	Hist. Contrib.
79	Hollywood Garage H9&27	Building	1954	Hist. Contrib.
80	Hollywood Garage H10&11	Building	1954	Hist. Contrib.
81	Hollywood Garage H12&13	Building	1954	Hist. Contrib.
82	Hollywood Garage H14&15	Building	1954	Hist. Contrib.
83	Hollywood Garage H17&19	Building	1954	Hist. Contrib.
84	Hollywood Garage H20&21	Building	1954	Hist. Contrib.
85	Hollywood Garage H22&23	Building	1954	Hist. Contrib.
86	Hollywood Garage H31&32	Building	1954	Hist. Contrib.
87	Hollywood Garage H35&36	Building	1954	Hist. Contrib.
88	Hollywood Garage H16	Building	1954	Hist. Contrib.
89	Hollywood Garage H18	Building	1954	Hist. Contrib.
90	Hollywood Garage H24	Building	1954	Hist. Contrib.
91	Diablo Fire Dept.	Building	1954, ca. 1965	Hist. Non-Contrib.
96	Stetattle Creek Railroad Bridge	Structure	1938	Hist. Contrib.
97	Hollywood Sewage Pump Station	Building	1952	Hist. Non-Contrib.

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STATEMENT OF SIGNIFICANCE

The Skagit River Hydroelectric Project is a physically and historically linked system of four power plants—Newhalem, Gorge, Diablo, Ross—and two company towns—Diablo and Newhalem—that are owned and operated by the City of Seattle. The dams and powerhouses of the Skagit River and Newhalem Creek Hydroelectric Projects were built over a period of 43 years, from 1917 to 1960. As an ensemble owned by a single public power agency in one geographic area, they clearly illustrate the patterns, variations, evolution, and transitions of hydroelectric technology between the 'teens' and the 1960s. In addition, the project was a nationally known showcase promoting hydroelectricity and municipal ownership, reflected in various features of its design.

As a whole, the Skagit Hydroelectric Project qualifies for listing in the National Register of Historic Places under Criteria A, B, and C.

A. That are associated with events that have made a significant contribution to the broad patterns of our history. (Areas of Significance include: Politics and Government) The entire project is representative of American utility politics and development, spanning over 50 years, beginning near the end of the Progressive Era of American city government and the era of standardization in hydroelectric plants. Its development ensured the existence of the City's Lighting Department, engaged in direct competition with an investor-owned utility for 50 years, and influenced the public power movement in the 1920s and beyond.

B. That are associated with the lives of significant persons in or the past. (Areas of Significance include: Politics and Government, Entertainment/Recreation, and Landscape Architecture) The project is inextricably intertwined with the aspirations of James Delmage Ross, the City's superintendent of the Lighting Department for 28 years. The project was a nationally known showcase promoting hydroelectricity and municipal ownership of hydroelectric power. The Diablo Dam and Powerhouse were intentionally outfitted with unique features, such as a goldfish pond in the powerhouse lobby, that were designed to appeal to the public for tours. Thousands of tourists flocked to the Skagit each summer to participate in two-day tours of the project by rail and boat, including visits to an unusual designed landscape created by Ross, which featured tropical and native plants displayed in a carefully orchestrated *son e lumière* show.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction. (Areas of Significance include: Community Planning and Development, Engineering, Architecture, and Transportation.) The project represents the general trend of developing more costly and remote hydroelectric sites in the 1920s. Its construction in the rugged terrain of the Skagit Gorge required new solutions for significant engineering problems. Its 120-mile distance from Seattle required the construction of two towns developed over decades with dozens of buildings for employees. Both are rare examples of municipally-owned towns, still in operation today. Also, a rail transportation system extending 30 miles from Rockport to Diablo along the rough terrain of the Upper Skagit Valley was constructed for this work and tours. The three plants on the Skagit River are representative of the technology developed in the West to

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store water in isolated and remote locations, utilizing the thin arch design in dam construction to reduce amount and cost of materials, high heads, and sophisticated long, high voltage, point-to-point transmission. Many of the engineering procedures used to build the dams were unique solutions to construction problems posed by the rugged terrain. While the plants are generally representative of typical hydroelectric technology of the 1920s and 1930s, with features common to other plants built during the same period, some features in the Skagit plants are significant for being the first of their type. Some of the country's best-known engineers were associated with the planning, design, and construction of the plants.

The Period of Significance of the Skagit River Hydroelectric Project is 1917, the year that the project was initiated and work began in the Upper Skagit, to 1961, the year that the project as conceptualized by Seattle City Light was completed with the construction of the Gorge High Dam.

This Nomination is derived from a previous Nomination prepared by Patricia C. Erigero, dated October 1990, as part of a Settlement Agreement ("Skagit River Hydroelectric Project, No. 553") negotiated with the Federal Energy Regulatory Commission (FERC) and dated April 1991. The Cultural Resources Agreement is between the City of Seattle, the National Park Service; Upper Skagit Tribe, the Sauk-Suiattle Tribe, and the Swinomish Indian Tribal Community. The nomination was referenced in the "Historic Resources Mitigation and Management Plan" (HRMMP) dated April 1991, and a Memorandum of Agreement (MOA) with the Washington State Historic Preservation Officer dated April 26, 1991. The HRMMP calls for "periodic updating of Nation Register Listing," beginning in 1999, and occurring "every ten years thereafter."

The text from the previous nomination was edited to reflect changes to the area and resources between October 1990 and March 2010, and is a "New" nomination prepared under the same requirements of the HRMMP and MOA. Minor errors found in the original document were corrected in this nomination, and minor grammatical and punctuation changes were made at the discretion of the present author. This nomination uses the original resource numbers from the previous nomination, and adds new resources beginning with #43. The nomination adds 57 additional resources (43-100). Some are newly constructed resources within historic areas, and some are dis-contiguous resources whose significance has been revaluated and are now older than the minimum 50 years of age required for listing in the National Register. Other resources within historic areas have been reclassified as contributing or non-contributing depending upon their existing physical integrity, age, or revaluation of significance in light of additional information not available to the author in 1990. Some resources have disappeared from the District and their resource numbers have been retired.

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HISTORIC PHYSICAL DEVELOPMENT OF THE SKAGIT HYDROELECTRIC PROJECT

The Upper Skagit Prior to Seattle City Light

Prior to the 1880s, miners seeking gold were the principal Euro-American occupants of the Upper Skagit valley. The principal route through the future site of the hydroelectric project was a narrow trail with crude bridges spanning creeks. Miners lived in log cabins near their claim sites. In 1895, the Washington Board of State Road Commissioners was created to survey routes through the North Cascades in an attempt to establish a road linking the eastern and western parts of the state. In July of that year, an engineer and three commissioners set out from Marblemount, the easternmost community along the Skagit at that time, southwest of the present town of Newhalem. They described what development existed at that time:

The trail to Slate Creek from Marble Mount runs for seventeen miles through the forest and along the Skagit River, over a fairly-level country, but after the first four miles some rock is found. In the tenth mile the "Devil's Dream" (a trail made in front of a rock wall by rude bridges above the Skagit River to avoid rock work) is reached. The trail then runs along level bottomland mostly until the end of the seventeenth mile is reached. The eighteenth mile begins with a rock point, where the Skagit Canyon and rapids are first encountered. The trail here passes along a very high rock bluff, and the work is heavy for the first mile, but some lighter in the nineteenth mile, which brings us to the site of the old goat trail bridge, which washed away in the floods of 1894. At this point the celebrated "Goat Trail" begun and extended to Cedar Bar, a distance of 2½ miles; and, up to within a few days of our arrival, the only mode of travel over it was on foot, using a ladder to scale the most difficult points. The volunteer work done in the spring of 1895 by blasting half tunnels through perpendicular cliffs and constructing rude bridges across chasms made it passable for small horses, but still the grades, in places are excessive, and the bridges and trail dangerous and difficult for even the lightest pony traffic...It is a picturesque place and rugged enough for the most ardent mountain climber.¹

In 1897, 21 million acres of public domain lands in the northwest were withdrawn by Executive Order to create the federal forest reserves in Washington, of which the North Cascades National Park Service Complex is now a part. Nearly 3.6 million acres on both sides of the North Cascades became known as the Washington Forest Reserve, the largest of the reserves created by the Presidential Proclamation. In 1905, the administration of the reserves was transferred from the General Land Office and the Department of the Interior to the Bureau of Forestry in the Department of Agriculture, and that year the US Forest Service was created to administer these lands. In 1907, the Washington Forest Reserve

¹ Washington Board of State Road Commissioners, Records 1895-1896, Washington State Library Manuscripts, Olympia, Washington: 1896, p. 2, as cited in Gretchen Luxenberg, Historic Resource Study: North Cascades National Park Service Complex, Washington (USDI: Cultural Resources Division, Pacific Northwest Region, National Park Service, 1986), pp.45-46.

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became the Washington National Forest; a year later the vast acreage it encompassed was subdivided into smaller forests, of which the Washington National Forest was one, administered by a regional office established in Portland, Oregon. In 1924, the name of the forest in which the Skagit River Hydroelectric Project is located was changed to the Mount Baker National Forest. The City of Seattle was to deal frequently with representatives of the US Forest Service over the years, and the Forest Service was to have an influence on many decisions affecting the development of the City's project, including the design of some extant buildings within it.

A second federal agency had a presence within the future Skagit River Hydroelectric Project: the United States Geological Survey (USGS). This agency was, by the early years of the twentieth century, building and maintaining stream-gauging stations along the rivers and snow survey courses in the high country. Stream gauging stations were sited along the Skagit River at Reflector Bar and Stetattle Creek, although neither lasted past 1916. However, one site, established in 1909, at the south end of the future town of Newhalem, was not abandoned, and in the late teens or early 1920s, Seattle City Light took over the operation of the station, designed to measure water depths. In 1923, a concrete structure was built near the river on the site established by the USGS (Resource #18). It had a Stevens Continuous Recorder and a wood staff gauge, still extant, to measure the height of the river along the bank. In addition, after the City took possession of the site in 1918, it maintained a cable car built by the USGS in 1909. (Note: This cable car and its supporting structure were removed after 1991.)

By the late 1890s, ten known homesteaders had settled along the banks of the Skagit River north and east of Marblemount. The settler furthest east was August Dohne, who in 1897 purchased several log buildings on the north side of the Skagit River, west of Newhalem Creek. Situated on the trail leading upriver, and at almost the last site before the Skagit canyon walls narrowed, the site had been the location of a store for miners, established by N.E. Goodell in the late 1870s. Goodell's Landing, as it was called, had passed through several hands, turning into a roadhouse where miners could obtain lodging, food, and supplies when Dohne purchased it.² After a fire destroyed the structures in 1901, Dohne rebuilt, erecting two houses and a barn. When Dohne died in 1918, the court sold his probated land to a Sedro Woolley Investment company, which in turn sold it—under condemnation—to the City of Seattle, which by then was exploring the Skagit for dam sites.

Gorge Camp and Goodell Creek City

By the spring of 1918, the City of Seattle had survey and drilling crews exploring possible dam sites for hydroelectric development on the Skagit. By March of 1919, the Diamond Drilling Company, operated by three brothers—Dick, Dan and Pat Lynch, was under contract with the city to bore cores for bedrock analysis at various sites along the river. Their crew of forty men was housed in tents above Gorge Creek. The first structure built in connection with the Skagit River Hydroelectric Project was a two-story rectangular log building that served as the company office, dining room, kitchen, and warehouse. It was located near Gorge Creek. Workers for the company referred to the building and tents as Gorge

² Luxenberg, pp. 95-96.

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Camp.³ The camp was abandoned when the drilling crew finished their work in the early 1920s. The log building lasted until the late 1930s, gradually falling into ruin.

In November of 1919, the city engineer's office negotiated a permit with the US Forest Service district forester for permission to erect a sawmill and to cut timber necessary for construction on the Skagit Project. The request also included permission to use the buildings left on Dohne's claim at Goodell Creek, south of the present state highway through Newhalem. These included several cabins and a large barn, which the City planned to use to house a 12-man sawmill crew. One of two large cabins was used as a dining room and cookhouse, and the other as sleeping quarters. The City's agent stationed in Marblemount, W. F. Paddock, was instructed to evaluate the furnishing needs, ranging from stoves to utensils and bedding.⁴

In February of 1920, the construction crew completed a timber-framed sawmill with a 25,000 board-foot capacity and a millpond near the foot of Goodell Creek. The creek's course shifted several hundred feet to the east during flooding in the 1940s. The sawmill and later buildings associated with the sawmill camp were erected on the west side of the present creek's former course, north of the present state highway. By May of 1920, plans had been drawn by the Seattle City Engineering Department for two large wood gable-roofed buildings to serve as a mess house and additional bunkhouse. The latter additions housed additional construction crews engaged in erecting the "temporary" power plant on Newhalem Creek and the first building crews for the construction camp rising further east, nearer the site of the proposed Gorge Powerhouse. Some of the buildings at Goodell Creek "City" lasted into the 1950s, although the sawmill had vanished by the late 1930s. Today, there are no buildings dating from this period of development still standing near Goodell Creek, and no above-ground remains of Dohne's structures are believed to be extant, although a few aged lilacs are present near the site.

Newhalem Creek Powerhouse

In the summer of 1918, the City Engineer's Office sent a hydrographer and an assistant to the Skagit to determine the location of a temporary generating station which would supply power for construction of the future dam and the camp that would have to be built to house workers.⁵ Newhalem Creek, which fed into the Skagit from the south, between Goodell Creek and the future site of the Gorge Powerhouse, was selected. In 1920 a 2,770-foot power tunnel, about 5 feet by 7 feet, was bored through gneiss to bring the waters of Newhalem Creek from a low log crib dam, about 3,000 feet upstream, to the vicinity of what would be a small powerhouse. A 500-foot-long steel penstock was installed to connect the power tunnel to the small powerhouse; it split in two just outside the building to supply water to two

³ Will D. Jenkins, *Last Frontier in the North Cascades: Tales of the Wild Upper Skagit*. Skagit County Historical Series, no. 8 (Mount Vernon, WA: Skagit County Historical Society, 1984), pp. 126-141.

⁴ C. F. Uhden to W. F. Paddock, 22 November 1919, Engineering Subject Files, Record Series #RA 2627-03, Skagit River Power Supply Correspondence, Seattle Municipal Archives.

⁵ Willis T. Batcheller, "The Skagit River Power Project," (Seattle: Seattle Lighting Department, 1918), p. 41, Box 13, Willis T. Batcheller Papers, Accession 195, University of Washington. Libraries.

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Pelton wheels. The powerhouse was a wood-framed, gable-roofed rectangular structure, enclosing a two-story volume, with board and batten siding. Wood-sash windows with six-over-six lights were located at the first story and below the roof eaves. A pair of oversized swinging doors was located near the southerly end of the building. In 1921 the two Pelton impulse turbines and a 2,000 kVA horizontal shaft Westinghouse generator were installed. The plant began operation in August of 1921. In the early 1950s, the plant was semi-automated, allowing it to operate unmanned, except for start-up and shut-down.

Although initially intended as a temporary plant for construction purposes, the Newhalem Powerhouse and Dam remained in operation, supplying City Camp (later Newhalem) with 2,000 kVA until July of 1966, when the powerhouse burned down. During the fire, which fed rapidly on the dry cedar siding and old timber of the powerhouse, a flange gasket in one line of the bifurcated penstock behind the powerhouse blew out, creating a 60 to 70-foot high sheet of water behind the powerhouse. It was this curtain of water that prevented the spread of the fire and loss of trees and timber on the hill behind the powerhouse.⁶

The power plant was rebuilt, utilizing the original power tunnel and penstock. During the fire, the machinery continued to run, which kept the shaft of the generator from warping from the heat. Thus, the only major repair required on the Westinghouse unit was rewinding. The Pelton wheels also survived the fire, and underwent minor welding repairs. The turbines and generator are still operating in the plant, although they have been controlled remotely from Gorge Powerhouse's control room since the early 1970s.⁷

After the fire, a new 9-foot-high concrete diversion dam was built, 4½-feet thick and 47-feet wide, near the site of the original crib dam. A new wood-framed powerhouse was built, with vertical board siding and a gable roof. The power tunnel was cleaned out, and some routine maintenance was performed on the original penstock. The plant, officially titled the Newhalem Creek Hydroelectric Project, went back on line in February of 1970. In 1984, the Newhalem diversion dam and apron, damaged from bedload abrasion, received major structural repairs, and the gatehouse, destroyed by a floating tree during an unusually high freshet, was replaced at the same time. The plant is licensed and operated independently of the Skagit Project, but is staffed by Seattle City Light personnel from the Gorge Powerhouse.

Gorge Hydroelectric Power Plant

The Gorge Powerhouse, completed in 1924, is located at the east end of the town of Newhalem, on the opposite side of the Skagit River. The Gorge High Dam, built between 1955 and 1961, is several miles upstream, below Gorge Creek, and now submerged underwater in the lower part of the narrow 14-mile gorge through which the Skagit flows.

When the Lynch crew had identified the site for the first dam on the Skagit, the Lighting Department proceeded with construction of the power plant. In October of 1921, R. C. Storrie Company

⁶ Unrecorded interview with T. N. Bucknell, retired Manager of Generation, City of Seattle. 1 September 1989.

⁷ Bucknell, 1 September 1989.

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of San Francisco was awarded the contract to build the Gorge power tunnel. City crews began to work on the powerhouse, which was completed on time, although the work on the power tunnel fell behind schedule. Storrie Company used jackhammers connected to 8-inch pipes that carried compressed air from air compressors installed in a building in Newhalem. The compressors were electrically powered by the Newhalem Power Plant, which was also supplying electricity for construction of the powerhouse, Newhalem buildings, and living quarters. The electrical demands were too much for the small plant, and squabbles arose over priority rights to power, as the City Camp and construction projects experienced shortages. By August of 1924, almost three years after work started, the power tunnel was completed. By that time, two 30,000 kVA Westinghouse generators powered by S. Morgan Smith turbines, rated at 38,800 horsepower each, had been installed in the powerhouse. A third unit was installed in 1929, giving the plant a capability of 60,000 kVA, although it didn't achieve that rating until later.

The "temporary" rock-filled timber crib dam was built in 1923, to raise the river thirty feet and divert the flow into an 11,000-foot-long concrete-lined power tunnel with a head of 270 feet. With the project already over budget and behind deadlines, the City opted to build a wood weir, rather than a masonry dam. By October of 1920, the Skagit Project's chief engineer, C. F. Uhden, and the city engineer, A. H. Dimock, had determined that the high dam originally planned at Gorge, which they felt would increase the head over 25 percent, would not be built at that time, due to time and money constraints, nor would a low masonry dam, which had been inserted into the plan later. Instead, Dimock reported, they had decided to build a "...temporary timber crib dam which will serve for the present to divert the water to the pressure tunnel and will later serve as a diversion weir during the construction of the high dam."⁸ City crews also erected a transmission line to a substation north of Seattle. On September 14, 1924, the first electric power from the Skagit River Hydroelectric Project was sent to Seattle.

In 1929 the City raised the existing crib dam two feet in height to help alleviate problems with gravel sweeping into the intake and low water levels that affected the plant's efficiency. At this time the third unit was installed in the powerhouse. In 1950 a concrete diversion dam was built to replace the wooden crib dam, which had lasted far longer than its anticipated life of four or five years, and a fourth generator was added, increasing the plant's capability to 108,000 kW.

In the summer of 1948, work began on a 100-foot extension to the Gorge Powerhouse, which would house the new generator and provide additional operation space. The reinforced concrete addition is architecturally sympathetic to the original Neo-classic concrete and steel building. By October of 1949, the plant was back in operation. Also in 1948-49, an additional power tunnel was built to carry water to the new generating unit, and a new transmission line was built from Gorge to Seattle. In 1959, during Gorge High Dam construction, work began on modernizing the four generators, bringing the plant's capability to 173,000 kW; further work on the fourth generating unit in 1961 brought the Gorge Power Plant's capability to 178,000 kW.

⁸ A. H. Dimock to A. P. Davis, 4 October 1920, Engineer Subject Files, Record Series #RA 2627-03, Skagit River Power Supply Correspondence, Seattle Municipal Archives.

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The present dam is the third to be located in roughly the same area. The 1950 masonry dam is still extant, but covered by the impounded waters behind the new dam. Gorge High Dam's construction, with a gross head of 385 feet, increasing the capacity of the plant by 70,000 kW, was envisioned in 1920, although its development to full capacity could only be accomplished after Ross Dam—also anticipated by that date—was completed. In 1920, C. F. Uhden anticipated the final Gorge High Dam would be 240 feet high, with two 11,000-foot-long power tunnels. The dam is in fact 300 feet high from bedrock, and utilizes the one original 11,000-foot long tunnel.⁹

(Note: For additional information on the plant, refer to the National Register of Historic Places Multiple Property Documentation Form, *Hydroelectric Power Plants in Washington State, 1890-1938*, prepared by Lisa Soderberg, and revised by Leonard Garfield, and approved by the National Register on December 15, 1988. Please note that errors or inconsistencies in that nomination have been corrected in this present nomination.)

Newhalem (City Camp)

The town of Newhalem is located on a relatively flat bar encompassing approximately 31 acres. It has a roughly linear shape, bounded by gorge cliffs on the north and the Skagit River on the south and east. The formal western boundary has shifted several times since its establishment, as temporary buildings have been built and razed. Its present western gateway begins approximately three-quarters of a mile west of the town center. The Gorge Powerhouse is located across the Skagit River to the east, visually terminating the east-west axis of the town.

On October 1, 1919, C. F. Uhden was appointed chief engineer in charge of the Skagit project. By January 26, 1920, he began assembling a staff of draftsmen to prepare plans and specifications for the system.¹⁰ By early summer, his staff, apparently operating under the supervision of the city engineer, A. H. Dimock, had prepared plans for principal construction of camp buildings that were to be built in the forested flat land between Goodell City and the site of the future Gorge Powerhouse. The staff also began to design and draw Gorge Power Plant features, including the Gorge penstocks. While this work was going on in Seattle, the sawmill crews on the Skagit were clearing timber from the site for construction of the buildings. When the sawmill began operation in the spring, the logs were milled for use in the buildings.

Construction on a railroad from Rockport, 23 miles southwest of the Gorge Power Plant site, began in early spring of 1920. The City purchased the rails from the Great Northern Railway Company. At this time, Dimock noted that the new line was only to be used for construction of the power plant, anticipating that after construction, the City would sell the railroad "... to anyone desiring to operate it as a common carrier."¹¹ However, the City continued to operate the railroad until its removal in 1954.

⁹ C. F. Uhden, "Seattle Building Large Hydro-Electric Development," *Engineering News Record* 85:994-996, p. 995.

¹⁰ A. H. Dimock to C. B. Fitzgerald, 20 January 1920, *Engineering Subject Files, Record Series #RA 2627-03*, Skagit River Power Supply Correspondence, Seattle Municipal Archives.

¹¹ *Ibid.*

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The City Engineering Department, under Uhden, prepared a general layout of the construction camp, which would accommodate City workers erecting the powerhouse and dam, and provide general services to other construction crews in the camp, including the contractor hired to drill the power tunnel connecting the powerhouse and dam. The general design scheme appears to have been determined initially by functional considerations. The topography of the site, sandwiched between the Skagit River to the southeast and sheer granite cliffs to the northwest, required a linear organization of buildings that were placed along a grid of unpaved "streets" perpendicular to an east-west spine as defined by the planned railroad alignment. The railroad, soon to be the principal means of access to the camp from Rockport for workers, equipment, and supplies, was built along the base of the cliffs. Its location at the northerly edge of the flatland was the most direct route, heading east from Goodell Creek along the cliffs, branching across the Skagit upriver from its westerly bend, with one line continuing to the Gorge Dam site and across a railroad bridge to the Gorge Powerhouse.

Upper Camp

There were two major interrelated groups of buildings in City Camp—the easterly end of the camp, which occupied roughly two-thirds of the flatland, was referred to as the Upper Camp. It was bisected by Main Street, which began at the railroad tracks and ran perpendicular to them towards the river, terminating at a suspension bridge crossing the Skagit River, built in 1920 (Resource #24 is a newer bridge at that location).

The principal town buildings were to be located along both sides of Main Street. The buildings were designed between June and August of 1920, and by November they were built and in use. They included: the 24-man bunkhouse, Bunkhouse #23 (later referred to as the Hotel, Resource #11) on the northwesterly corner of Main Street; the Office, south of the bunkhouse; the Warehouse, on the northeasterly corner of Main Street, next to and parallel to the tracks; the Commissary (Resource #12), south of the Warehouse; and the Mess Hall (now the Gorge Inn, Resource #15), located at the southeast corner of the street. These structures were wood-framed buildings, sided with 1x12 vertical boards and 1x3 battens. They had two-ply Malthoid roofing, secured by battens, and multi-light wood-sash double-hung windows. In March of 1921, two additional buildings, the Theater and Amusement Hall, were designed for the camp, and construction on both began simultaneously in April. Located at the southwest end of Main Street, they became the center of the camp's, and later the town's, social activities. The Theater, later referred to as the Big Hall, measured 37 by 81 feet, and was located on the southwesterly corner of Main Street. It was to serve both the town residents and tourists, who, in years to come, would gather there in summer evenings to view colored lantern (slide) shows, narrated by the superintendent of the Lighting Department, J. D. Ross, and later, movies about the project, and to participate in or watch skits produced on its stage. The Amusement Hall, also referred to as the Club Room and later the Little Hall, measured 26 by 72 feet. The Little Hall served as a gathering place for small groups of townspeople. For some years it also served as a library, and between 1927 and 1952, was to be used as a school for younger grade school children. Both halls were gable-roofed buildings with board and batten siding, multi-light double-hung wood-sash windows, and wood shingled roofs.

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In the summer of 1921, the warehouse was extended eastward, making it one of the largest structures in camp, measuring 40 by 100 feet. It was later extended another 84 feet. The warehouse, with a platform extending along its northerly edge for unloading materials and supplies from the railroad, contained all items needed to operate and build the camp. It also housed the Skagit Project's railroad dispatchers, and included an office for Dana Currier, the superintendent of the project's general division.

Five north-south rows of 24-man bunkhouses, a total of eighteen bunkhouses, were located to the northeast of Main Street. With the exception of the row closest to Main Street, each row consisted of four rectangular 26 by 80-foot gable-roofed buildings with ridges oriented east-west. The westernmost row had two standard bunkhouses, and a smaller 44 by 26-foot gable-roofed "Cook's Bunkhouse" (Resource #16), located northeast of the Mess Hall (now called the Gorge Inn). Small 27 by 8-foot gable-roofed washhouses were located between the first and second, and third and fourth, bunkhouse in each row. All of the one-story bunkhouses were sided with rough-sawn vertical boards and roofs sheathed with two-ply roll roofing secured by battens. They had pairs of multi-light wood-sash windows flanking centrally-located doors on the side façades, and each end had a central door. The interior had double-loaded corridors leading to rooms that were each 12 by 12 feet and equipped with two beds and a table.

A gable and shed-roofed building north of one of the bunkhouse rows served as a heating plant, providing steam heating to the bunkhouses and principal service buildings. By the fall of 1921, all of the bunkhouses were built, and an addition had been made to the western end of the Cook's Bunkhouse that made it virtually identical to the other bunkhouses in the group. In addition, a "Foremen's" bunkhouse, similar to the others, was built about 50 feet southeast of the Mess Hall.

A gabled hospital building was built approximately 100 feet southwest of the Office on Main Street in the summer of 1920. By 1927, a concrete slab for a tennis court had been poured to the south of it, and nets had been installed.

Four streets running parallel to Main Street were originally planned, although only two were actually developed: First Street, directly west of Main Street, and Second Street, further west. A portion of Third Street was built in the 1960s. A total of 19 three-room wood-framed cottages were built on rectangular lots along both sides of both streets in the summer of 1920, designed to house families of men working on construction, and later for families of workers at the power plant. The cottages had 1x12 rough-sawn vertical-board siding without battens, and like most of the other structures in camp, Malthoid roll roofing. Outhouses were placed behind the buildings.

Functional structures were built along the railroad tracks, which split into two lines just west of Bunkhouse #23 (the Hotel), and split again into spurs north of the steam plant. Designed and built in 1920 and 1921, most of these structures were erected on the northerly side of the tracks. From west to east, they included the Speeder House and a coalhouse, two 40 by 14-foot gable-roofed structures; a gable-roofed building with a shed-roofed wing that served as an oil house; and a T-shaped cross-gable-roofed car barn and engine house that terminated a short spur directly north of the warehouse. A horse barn, a machine and blacksmith shop, and a second car barn were built in the northeastern area of the flat, interspersed with structures built by R. C. Storrie and Company, which had been hired to drill the power tunnel for the Gorge plant. The Storrie buildings included a warehouse and carpenter's shop, a blacksmith shop, a combination office and boarding house, and a large compression plant housing

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electrically-powered air compressors connected to 8-inch pipes that carried compressed air to jack hammers at the power tunnel site. A large gable-roofed car barn measuring 62 by 156 feet, with four railroad spurs leading into it, was built just south of the Storrie and Company compression plant. The car barn was later converted to use as a machine shop, and was not demolished until the present-day service center on the east end of Newhalem was built in the 1960s.

By July of 1921, a two-span Howe truss railroad bridge, 250 feet long, was built above the westerly turn of the Skagit River, connecting City Camp with the site of the Gorge Powerhouse and the dam beyond. The bridge was replaced in 1938 by a two-span Pratt truss bridge 308 feet long (Resource #28).

Lower Camp

Approximately 450 feet southwest of the last row of cottages on Second Street, the City erected a one-room schoolhouse in the fall of 1921. The school was one of the few structures in camp at that time with some ornamental detailing and finished siding. It still stands in Newhalem, although it has been much altered (and now called the Administration Building). To the west of the school was Lower Camp. Its streets, Fifth through Ninth, were parallel to each other, but at a slight angle, approximately 25 degrees, to the grid established by Main Street and the bunkhouses, reflecting the westerly curve of the river and the railroad that began in the vicinity of the school. Lower Camp consisted of a total of 14 two-room wood-framed cottages, and 35 additional three-room cottages, arranged on lots perpendicular to the "streets." People living in these structures had no indoor plumbing, relying, like the cottages in upper camp, on outhouses.

Silk Stocking Row

In early September of 1921, Dimock sent J. D. Ross, the superintendent of the Seattle City Lighting Department, a layout for what he referred to as "...permanent houses for operators at the Skagit," along with drawings for one of them. Ross had apparently asked the engineering department to prepare designs for such buildings, already planning for the time when dam construction would be finished and permanent housing would be necessary. Asking Ross for suggestions, Dimock advised that "...we should try to make them (the houses) as attractive and pleasant as may be possible within the limits of reasonable expense."¹²

An April 1921 drawing of the layout showed 12 proposed buildings, arranged along a southwest-northeast axis, between where Sixth and Third Streets would end near the river. In this drawing, the buildings were arranged in response to the axis of the streets. The drawing sent to Ross in September had a plan for ten cottages, extending between where Third Street would terminate and an area to the east of the end of First Street. The structures still served as the spatial termination of the streets, but they were arranged in a gentle curve, responding more to the orientation of the Skagit and the change in topography than to the grid imposed by the streets. Their front façades faced the river rather than the

¹² A. H. Dimock to J. D. Ross, 2 September 1921, Engineering Subject Files, Record Series #RA 2627-03, Skagit River Power Supply Correspondence, Seattle Municipal Archives.

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town. House Design Number 1, drawn in March of 1921, was to be used in two houses, numbers Four and Eight, the numbering system extending from east to west. Ross apparently approved of the designs, for by the late fall these two houses were under construction per the plans submitted to Ross in September (Resources #1 and #4). According to Dimock, the houses would be built "...in the interim of other work, thus keeping our forces employed to better advantage."¹³

That is how both design and construction proceeded on the permanent cottages that came to be known as Silk Stocking Row, a common construction camp term for the most desirable housing assigned to managers and key personnel. The bungalows on this row "...were built for the operators and not for any other class of men and were brought there in the hope of making a more contented operating force...when operators are changed the new man should take the home of the one leaving or at least take one of the homes built for this purpose."¹⁴

Design Number 3, drawn in May of 1921, was used in cottage numbers Three (Resource #6) and Nine, built in 1922. Design Number 2, drawn in May of 1922, was used in houses Two, Five and Seven (Resources #2, #4, and #7). In June, Design Number 4 was drawn, the only cottage with a gambrel roof. The only cottage built with this design, number Six (Resource #3), was completed by June of 1923. Cottage number One, using design number 1 (Resource #8) was also completed in 1923.

The Silk Stocking Row houses were built in the "Bungalow" style, and until the late 1920s, they and the school building were the only Newhalem buildings exhibiting a finished appearance, with shingled roofs, milled siding, daylight concrete basements, and ornamental detailing. Until the 1960s, they were the most sought-after housing in Newhalem, sheltering families of the project's top managers.

By early summer of 1923, two additional three-room cottages, identical to others built in the camp, had been built east of the first Silk Stocking Row buildings, and south of the Theater. With the exception of a few rail-related structures along the tracks, including a large car barn near the east end of town and the upgrading and remodeling of some of the Main Street structures, Newhalem's first building program was essentially complete.

By the late 1920s, twelve of the construction camp bunkhouses had been removed. The two easternmost rows were demolished, and three bunkhouses in the next row to the west were torn down. The washhouses were left standing. The town, now operating on electricity provided by Gorge Powerhouse, relied on electric heaters, and the steam plant was demolished. Five R. C. Storrie buildings, including the compression plant building, had been removed. In 1925, the City purchased the R. C. Storrie office and boarding house on the northern side of the tracks, and used it to house approximately 15 single men. Five three-room cottages in Upper Camp had been removed—one or two of these had burned down in accidental fires. In Lower Camp, the two-room cottages had all been demolished, as well as the first easterly row of three-room cottages. Seven additional three-room cottages in Lower Camp were also gone, including four nearest the river and subject to flooding. No additional changes were

¹³ Ibid.

¹⁴ J. D. Ross to T. F. Kane, 29 December 1925, SCL 33-1, 12-27.

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effected in the town until the early 1930s, when J. D. Ross's vision of the town as a tourist resort and public relations tool spurred new development.

There were approximately 70 individuals employed at the powerhouse and in camp in 1927, all requiring housing. There were 48 units in camp available for housing families, including the nine structures on Silk Stocking Row. Individuals without families lived in the remaining bunkhouses. With limited numbers of family housing units, a policy of housing seniority was applied to employees in different "classes" of work on the project. Recently hired employees, particularly laborers, were unable to bring their families to the Skagit, due to lack of housing. The housing policy, frequently revised and increasingly complex over the years, was to become a major source of dissatisfaction for workers on the Skagit, exacerbated by the growing emphasis on facilities for tourism.

Newhalem: Tourist Town

Small tours comprised of Seattle politicians, influential businessmen, and organized clubs, usually accompanied by J. D. Ross, had been visiting the Skagit River Hydroelectric Project since 1918. Ross used these tours to promote support for development of the project, at first with key opinion makers, and later with the general public. Seattle City Light began advertised one-day excursions to the Skagit in the *Seattle Times* in 1924, and in 1925, Ross was publicly promoting the project in national magazines as a future summer resort.¹⁵

In the summer of 1927, as construction on Diablo Dam got underway, hundreds of Seattle's citizens took "... the opportunity to get acquainted with the wonders of the scenery and incidentally to inspect their own giant hydroelectric development and watch construction of one of the greatest water power projects in the world."¹⁶ Some construction camp bunkhouses east of Main Street and Bunkhouse Number 23, now the "Hotel," were used to house overnight visitors, who arrived by train from Rockport in the afternoon. The tourists were served dinner, breakfast, and lunch in the Newhalem Mess Hall (later called the Gorge Inn).

The two-day tours, with continuously increasing numbers of sites to visit as project construction advanced, first at Diablo, and later at the Ruby Dam (later renamed Ross Dam) site, eventually brought thousands of people to the Skagit every summer. They continued until 1941, when the project, considered a vital wartime-associated industry, was closed to outsiders. The seasonal influx of people increased the population of Newhalem many times over during each tour, and became a major factor in the development of the town. In 1928, Ross had ornamental iron light standards with five globe clusters installed along Main Street and Silk Stocking Row, along the railroad tracks where visitors disembarked from the train, and along paths in the bunkhouse complex east of Main Street. This lighting system was not installed on the streets where the three-room cottages were built—and the bulk of Seattle City Light employees and their families lived—either in the upper or lower camp areas. The iron standards and fixtures were removed and replaced in the 1950s.

¹⁵ Thomas R. Horner, "The Mountains Light a City," *Scientific American*, August 1925, p.113.

¹⁶ Department of Lighting, City of Seattle, *Annual Report for 1927* (Seattle: City of Seattle, 1927), p. 38.

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By May of 1928, Ross had begun to develop additional plans for beautifying the project, where "... Skagit admits of being a fairyland though it would cost money." He told T. F. Kane, the project's chief operating engineer, that he wanted to "... make the place more livable and likeable." His plan included painting the houses and mobilizing "the ladies" who lived in Newhalem into a sort of landscape auxiliary to advise on locations for planting trees, shrubs, flowers, and bulbs near the cliffs behind Gorge Powerhouse, near the site of the Diablo plant, and along the river's bank. He also asked for suggestions from them on the types of plants and trees to install, including fruit, nut, and ornamental trees, and for lists of shrubs, flowers, and seeds they might use for their own houses. Ross planned to do *"...a lot of work myself and get all the plants needed if I can get care and cooperation from them (the ladies)."*¹⁷

Ross had also by this time secured the interest of Jake Umlauff, head gardener for the City of Seattle, for in the following years the Skagit was to receive many trees and plants, transplanted from the City's greenhouses. Within a year of his initial correspondence with Kane on making the project more livable, Ross was looking upon the horticultural projects as tourist draws, asking Umlauff to consider tree planting schemes *"... so that all those who go up there (the Skagit) will admire them ..."* and that Seattle City Light was *"... getting out a little pamphlet for the visitors and will tell them how we got the trees."*¹⁸

Also in May of 1928, Ross had a City Building Department draftsman prepare sketches for the future development of Newhalem, clearly oriented towards developing the town into a major resort, a goal which, for the rest of his life, Ross pursued for the entire project as assiduously as he pursued the development of hydroelectricity there. The design shifted the emphasis of the entire town from Main Street to the west, in the area then occupied by family cottages between First and Third Streets. Here, a formal oval-shaped drive, picking up the curved layout of Silk Stocking Row to the south, enclosed a bilaterally symmetric arrangement of lawns, gardens, and structures. At the north center was a rectangular hotel, flanked by wings perpendicular to the easterly-westerly ridgeline of the main building. A path from the southern side of the hotel led to a circular path, sixty feet in diameter, in the center of the oval, within which was a fountain and rock garden. The oval was bisected by another path, running along an east-west axis, terminating in a ring path that ran around the edge of the oval. Lawns would fill the spaces between the paths, and a ring of shrubs would run between the perimeter path and the oval-shaped drive. A new railroad station would be located north of the hotel, beyond a new east-west service road and the railroad tracks. The hotel would have a rustic Chateausque design, with clipped gable ends and gable-roofed dormers, similar in style, form, and massing to major lodgings built in western national parks during the 1920s. The sketch indicated that the warehouse, office, theater, commissary, and recreation buildings on Main Street would remain, but the mess hall and hotel would be gone, presumably replaced by the chateau. There was no indication of what would replace the family housing, already in short supply on the project.

¹⁷ Ross to T. F. Kane, 7 May 1928, SCL 33-1, 11-31.

¹⁸ Ross to Jake Umlauff, 20 September 1929, SCL 33-1, 19-22.

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In May, Ross was planning to start work on the "... oval gardens where there are no houses to interfere," however, the scheme was never realized.¹⁹ Construction delays on Diablo Dam and political battles in Seattle regarding future development on the Skagit—including city council's refusal to vote for funding appropriations for completion of the Diablo Powerhouse—may have prevented its early implementation. The stock market crash in 1929, and a subsequent collapse of the bond market was to delay completion of the powerhouse until 1936, although the dam was finished in 1930.

This particular grand scheme of chateau and formal gardens was set aside. It did not, however, prevent Ross from developing other features on the project that would attract thousands of visitors. By July of 1929, Ross reported, "*Of course I think the power project is the thing to be sought after but in addition I think all of the people should keep in mind that we also have a tremendous asset in the Skagit as a playground of Seattle...and anything that we can do to add beauty and ease of transportation...will be well worth while. Since the power is well on its way, perhaps we should begin to think of these things also at this time and to this end I have planted about 100 trees and will plant several hundred more this fall.*"²⁰ That summer he began to develop Ladder Creek Falls, a combined arboretum and *son et lumière* show (a form of nighttime entertainment presented in an outdoor venue that includes lighting effects synchronized with music) rarely seen or heard in the United States to that time, outside of world's fairs and expositions.

By the 1930 tourist season, Newhalem could accommodate 150 overnight tourists. They were housed in six of the eight remaining construction camp bunkhouses east of Main Street, and in the Hotel. Tent cabins were erected to the east and north of the bunkhouses, in rows with their ridges running north-south. Single men working for Seattle City Light were assigned quarters in the tents during the summer months, and in the winter months, during non-tourist season, they were allowed to live in the bunkhouses.

By 1933, the number of overnight tourists had grown to 250. By this time, they were housed in the former Storrie and Company bunkhouse, in the Hotel, and three to a room in the bunkhouses. In October of that year, sketch plans were made for 11 new bunkhouses to be erected on the sites of the old construction camp bunkhouses on the eastern side of Main Street, to serve as dormitories for tourists. A new recreation hall south of them, on the riverbank, was also proposed. The recreation hall appears to have been a substitute for Ross's unrealized chateau scheme, as plans for the building surfaced again in 1936, when the City asked for WPA funding assistance for a \$10,475 recreation hall—never received—and again in 1937. In March of 1937, sketches of a low rectangular recreation building in the Rustic style, with stone and shingled walls, board and batten gable ends, and recessed porches and terraces were prepared by Seattle City Light's chief architect, George Stewart. The design was clearly related to housing then under construction in the Hollywood section of Diablo that had been influenced by Forest Service architects. Later that year there was some debate regarding the proposed new hall's sitting, with William McKeen and Glen Smith, Ross's principal directors, favoring a site at the easternmost end of the town,

¹⁹ Ross to T. F. Kane, 7 May 1928, SCL 33-1, 11-31.

²⁰ Ross to A. M. Lewis, 22 July 1929, SCL 33-1, 19-12.

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diagonally across from the Gorge Powerhouse, that would allow a view of the waterfalls and mountain.²¹ The new recreation building was never built.

In November of 1934, Ross told his managers that a dormitory for single men was one of the “*most important in the building program*,” probably because a number of single workers were being lodged in tent cabins during the summer.²² In 1934, two additional structures were built in Newhalem. These were bunkhouses, but smaller than those dating from the construction camp period, and apparently not intended to house tourists.²³ They were located between Main Street and the first row of construction camp bunkhouses, and were similar although not identical in appearance. One, now referred to as the “Pansy House” (Resource #13), was built just east of the Commissary; the second, now referred to as the “Cook’s Bunkhouse” (Resource #14), was built east of the northerly projecting kitchen wing of the Mess Hall, and west of the older construction camp Cook’s Bunkhouse. Both buildings have steeply-pitched gable roofs with exposed rafter tails, nine-light wood-sash windows, shingled, shed-roofed dormers, and shingled gable ends. The walls were clad with lapped siding. The “Cook’s Bunkhouse” was somewhat smaller, with a gable roof sheltering the entry doors, centered on the longitudinal façades. The “Pansy House,” about twelve feet longer, had entry doors on the western end and in the center of the south façade.

Ross also told his managers that arrangements needed to be made for housing at least 500 tourists. By July of 1935, there were four new tourist dormitories on the sites of the early construction camp bunkhouses, west of the westernmost row of existing bunkhouses. Their footprints were close or identical in size to the original bunkhouses, and their roof pitches were similar, however, each had long shed-roofed dormers that created eight second-story rooms (not present in the original bunkhouses), and doors in the gable ends leading to exterior wood stairs. One, Bunkhouse #70 (Resource #17), had a raised daylight basement facing south, due to its location on a slight slope. The buildings had nine-light wood-sash windows, lapped board siding, and principal entry doors centered on the longitudinal façades, with gable-roofed and bracketed porch roofs. With three beds to a room, the new dormitories could accommodate around 50 people each, or about 200 more tourists per tour. The remaining seven tourist dormitories shown on the 1933 scheme were never erected. However, House #1 (Resource # 8) on Silk Stocking Row was converted into a six-person bunkhouse. Some time between 1932 and 1938, a small building with a clipped gable roof was built directly west of the Hotel. Located near the railroad platforms, it served as a public restroom for the tourists (Resource #21). In 1938, a small tourist bunkhouse, called Bunkhouse “D,” was built to the west of the Main Street office. It was to serve as a residence for important transient visitors. The building was demolished in the 1970s.

²¹ G. Smith and W. McKeen to J. D. Ross, 1 May, 1937, SCL 33-1, 145-8.

²² Ross to Smith, McKeen, et. al., 23 November 1934, SCL 33-2, Box 84.

²³ Maps in various tourist brochures do not show them as tourist lodging.

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Landscaping

In the fall of 1929, Ross received a large shipment of ornamental and evergreen trees and shrubs from the City Parks Department, apparently in exchange for lighting schemes Ross prepared for the City's golf course. These included: over two dozen each of barberries, spiraea, cotoneasters, laburnum, pyracantha, viburnums; and trees including a wide variety of cypress, junipers, cedars, elms, sycamores, mountain ash, willows, chestnuts, flowering cherries, and maples. In 1930, the US Forest Service, in cooperation with Oregon State College (now Oregon State University) at Corvallis, offered a variety of deciduous and coniferous shade trees to various forest supervisors for planting at administrative sites. L. B. Pagter, forest supervisor for Mount Baker National Forest, forwarded to Ross a suggestion for cedar trees from Oregon State for Ladder Creek or for the construction camp at Diablo.

Planting of trees and shrubs in Newhalem, at Ladder Creek Falls, and in Diablo continued throughout Ross's tenure as superintendent of the Lighting Department. In 1935, Ed Kemoe, who conducted the Skagit Tours, put out a department-wide memo requesting seeds from mountain ash, cotoneaster, barberry, and pyracantha for planting on the Skagit, specifying "...Trees or bushes that have seeds for the birds, preferred."²⁴ In the spring of that year, Ross convinced Seattle nurserymen and florists to donate hundreds of flats of flowers and plants for the Skagit.

By 1930, a small greenhouse had been built north of the Gorge Power Plant, in which tender plants and flowers were grown. By 1936 two large nurseries had been established in Newhalem near the car barn. In them a total of almost 400 trees from the U. S. Department of Agriculture, including five varieties of Asiatic chestnut trees, were growing in seven rows, apparently in some kind of reciprocal arrangement Ross had made with J. L. Bedwell of the Division of Forest Pathology of the USDA in Portland. The nurseries also contained butternuts, Lawson cypress, hybrid walnut trees, barberries, juglans, and *Castanea tamba*. However, landscaping on the Skagit generally suffered after Ross's death and in the wake of the World War II. Eight years after he sent the trees, Bedwell wrote for information on the survival, growth, and nut production of the various species sent, and was told by Ross's successor, E. R. Hoffman, that all had been planted in permanent locations, and that some had survived and a few bore nuts. However, he reported, "... a good many ... have failed to survive," and, further, that the tags identifying the variety of each tree were unreadable. By 1939, a third nursery had been built in the area behind the schoolhouse, in which flowering cherries, white mulberry, apple, and plum trees were grown.

Ross received trees, plants, cuttings, and seeds from all over the country; donated whenever he could arrange it, and usually purchased from his personal funds when he could not. He worked closely with the City's head gardener, who provided advice on where and how to plant the trees and assistance in grafting. In 1937, a box of 18 to 20 trees, including oaks and elms, arrived at the Skagit from the Roosevelt compound at Hyde Park. Two of them—named Franklin and Eleanor—were set out near the suspension bridge at the foot of Main Street, although apparently both have since died. One story, repeatedly recounted by long-time residents of Newhalem, tells of Ross frequently standing at the rear of the train from Rockport, tossing out wildflower seeds along the railroad right of way, as the train traveled

²⁴ Ed Kemoe to Bulletin Boards and Foremen, 30 October 1935, SCL 33-1, 52-4.

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into town. Anecdotal or not, the story gains credence from the lists of seeds—California poppies, asters, and coreopsis—Ross was known to have frequently ordered from such outlets as Wayside Gardens, then in Ohio.

By 1935, Ross had had a grape arbor installed at the head of Main Street, in the approximate location of the old main office building (now the location of the new visitor center). The arbor was a place where townspeople would meet, and a focal point terminating the axis of Main Street from the suspension bridge at its south end. The grapevines were started in the greenhouse west of the car barn. The arbor was removed when the office building was erected in 1954.

The landscape of Newhalem has been altered with the removal of buildings, boardwalks, railroad tracks, and the re-sodding of many areas. The greenhouses are gone, with the exception of a more recently constructed greenhouse and cold frames near the site of the original greenhouse north of the Gorge Powerhouse, where flowers and plants for the project are presently nurtured. However, many of the trees grown and planted during the historic period are extant within the town's boundaries. There is an allée (walkway lined with trees) along the former railroad right-of-way, both east and west of Main Street, which is a landscape feature defining the historic route of the railroad. There are also allées north of Silk Stocking Row and west of the Tourist Restroom (Visitor's Center), which define the location of unpaved streets in Upper Camp. These allées are historically associated with the development of the municipally-owned town of Newhalem, although the streets they lined and the buildings they shaded have since been removed. In addition, there are informal and formal plantings of trees, both exotic and native, along the riverbank behind Silk Stocking Row, and east of the Commissary, which appear to date to the historic period. No planting plans have been found to indicate the extent to which the landscape was designed, or produced "ad-hoc," and there is evidence to indicate that some trees have been added and removed since the historic period. Nonetheless, the extant patterns are significant for their association with the town of Newhalem and the railroad, and contribute to the understanding of the town's circulation and organization.

Poverty Row

In response to a critical housing shortage, in 1936 and 1937 Seattle City Light prepared plans for additional houses in both Newhalem and Diablo. In the spring of 1937, L. H. Rose, a Seattle City Light draftsman, prepared a sketch for nine new houses in Newhalem that were to be built under the supervision of the General Division supervisor, Dana Currier. These would be the first family housing units to be erected in the town since the early 1920s. They initially were to be located on lots left vacant after demolition of some of the three-room cottages west of the schoolhouse. In May, it was decided to build seven new houses on the schoolhouse ball ground, west of Upper Camp, and two in the vicinity of the three-room cottages. Ross, however, redirected the location of five of the houses to a strip of land west of the Lower Camp cottages on the southern side of the railroad tracks. They were slated for construction in the 1938-39 budget. In December 1938, Glen Smith, one of Ross's two top assistants based in Seattle, pointed out to Ross the small incremental increase in costs if the original number of seven were to be built, and soon construction began for seven houses, each with four or five rooms. The buildings were aligned in a row facing the tracks. They were completed in May of 1939, two months after Ross's death.

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Two other houses, using the same basic plan, were built in the fall of 1938. One was located north of Sixth Street, in the Lower Camp area, and one was sited at the eastern end of Silk Stocking Row (Resource #9).

The row of houses west of Lower Camp came to be referred to as Poverty Row.²⁵ Five years after completion, although the newest houses in Newhalem, The City rated them as "Type 2" houses:

*Their general condition is good; however, they do not meet the minimum requirements of any family who might live in them. The design is poor, laundry facilities are not adequate, there is not sufficient storage space, the kitchen does not contain enough cupboards, there has been no consideration of dining requirements and they need to be insulated.*²⁶

They received the Poverty Row appellation, according to one source, because the houses had no furnishings and families spent "... more than they could afford" to make the structures habitable. Poverty Row houses were moved or demolished as Seattle City Light employees have vacated the buildings. Several of these residences remain in the Skagit Valley, west of Newhalem.²⁷

Ross Crypt

North of Highway 20, on the eastern end of Newhalem, is a narrow, curving concrete path, lined with native and non-native trees and plants, which leads to a crypt built into the native rock base of Ross Mountain. The front of the crypt is recessed into a niche, protected by simple wrought-iron gates. Two brass plates bearing inscriptions regarding the occupants are mounted on the crypt. The crypt holds the remains of James Delmage Ross, superintendent of the Lighting Department for the City of Seattle between 1911 and 1939, and his wife, Alice. Ross's cremated remains were interred in the crypt some time prior to 1940. After her death in April 1956, Alice's remains were also placed there.

The 1940s and Later

The Skagit Project was closed to tourists in 1941, due to the project's security designation during World War II as a vital wartime industry. A security fence was installed along the western boundary, and two gates were erected. In the early 1940s, the tourist dormitories were subdivided into apartments to house Skagit workers, and by 1943, ten such apartments had been created in the old Storrie and Company bunkhouse, in the four 1935 dormitories, and the bunkhouse now referred to as the "Pansy House." In the dormitories, the first floors were divided in half, and the former bunkrooms in each half were converted to a kitchen with a sink and some cupboards, and a dining room. The families occupying each apartment shared the sole bathroom on the first floors. During the war, around thirty Italian prisoners-of-war, employed in construction of Ruby Dam (now Ross Dam), were housed in bunkhouses in Newhalem.

²⁵ F. Forsander to E. R. Hoffman, 23 December 1948, SCL 33-2, Box 84.

²⁶ Survey of Diablo and Newhalem houses, 10 October, 1944. SCL 33-2, Box 84.

²⁷ Unrecorded interview by Patricia Erigero with Jack Roper, retired Superintendent, Ross Powerhouse, 14 August 1989.

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After the war ended, six inexpensively-built apartment houses were erected at the southeastern end of Newhalem. The occupants of apartments on each floor shared the laundry and shower facilities. The apartments were used throughout their 15-year existence to house some construction workers from various companies working on Ross Dam, the extension to the Gorge Powerhouse, and the new concrete Gorge Dam; as well as Seattle City Light employees. The apartments were built on the tailings from the construction of the Gorge Powerhouse tunnel, in the general location of the present day machine shop. The rocky tailings gave the housing area its name, "Rock Hill." The buildings were torn down in 1960.

In 1948, six new wood-framed houses were added to the western end of Poverty Row. These gable-roofed buildings, somewhat more substantial than their neighbors to the east, were called Engineer's Row. Most housed powerhouse engineers and their families. Most of these structures were sold and moved or demolished in the late 1970s and early 1980s.

When preliminary surveys and drilling for Gorge High Dam began in 1952 and 1953, a construction camp for the contractors was built just east of Goodell Creek, north of the present state highway. The camp included bunkhouses, a mess hall, several small cottages, and a construction camp commissary, garages, and a gas station. A Whirley Crane for unloading heavy material was located north of most of the construction camp buildings. A trailer court was established west of Engineer's Row for additional crew housing. The buildings and structures associated with this camp were removed in the 1970s. In 1954, the Gorge High Dam engineer's field office was built at the head of Main Street, where the grape arbor had stood. The building served as the Main Office for the entire Skagit Project. A road for hauling equipment to the Gorge High Dam was built along the base of the cliffs, between the camp and the Gorge Railroad Bridge.

In 1946, the Seattle City Council finally approved funds to construct a schoolteacher's house in Newhalem. For years the schoolteacher had lived in various apartments throughout the town, including one carved out of one of the Silk Stocking Row houses. The hip-roofed duplex located on the eastern edge of the school field could house two teachers. In 1950, a Quonset hut was erected southwest of the Newhalem School to serve as an indoor gymnasium. In 1955, a second room was added to the original school building, with a new entry room connecting the two. That year Seattle City Light provided materials, Skagit engineers provided the plans, and over 100 men from Diablo, Newhalem, and the contractor's camp provided the labor to prepare and install the Newhalem ball field, northeast of the school, complete with grandstand, backstop, lights, and drinking fountain.

For years the railroad was the principal means of access to Newhalem from Rockport and points west. By the end of the 1930s, a passable US Forest Service road from Marblemount provided access for bolder drivers, but most Newhalem occupants still used the railroad for the journey in and out of the project. After World War II, an improved 23-mile State Highway allowed greater access to the site, and employees began to bring their private cars to Newhalem. In 1939 the first garages for residential use were built on the western side of Second Street (Resource #10), the site of several three-room cottages that had been demolished. The garages had shed roofs and were clad with corrugated iron. In the 1940s, additional garages were built on the northern side of the road. Today all the garages are used for material storage.

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Seattle City Light Superintendent Hoffman announced in May of 1953 that operation of the railroad would cease in the spring of 1954, because the proposed new high dam would flood the railroad track between Gorge Creek and Diablo, and relocation of the tracks was deemed both expensive and unnecessary. In April of 1954, contractors began removing the tracks, after the last Skagit Tour by railroad, held on April 3 for the Northwest Resources Group of the Seattle Public Schools.²⁸ The tracks, long a principal functional and spatial element in the town, were gone by 1955. The present state road follows much the same alignment as the old right-of-way east of Goodell Creek. Between 1954 and 1957, a road was blasted into the hillside well above the railroad right-of-way between Newhalem and Diablo. The single-lane road required three tunnels and a new bridge to span Gorge Creek. In 1962 the road was widened to two lanes, and a little over a decade later one of the three tunnels was removed entirely.

Between 1960 and 1962, work began on the Skagit Service Center at the southeastern end of camp. The Rock Hill apartments were demolished, and a new machine shop, garage, paint shop, and paved yard were built to house support functions for the hydroelectric project and both towns.

The Main Street area of Newhalem experienced some changes after the war. In 1957, both the Big and Little Halls were demolished and replaced with a new theater-meeting hall on the southwesterly corner of Main Street, named Currier Hall. The office building, which had served over the years as the post office and later as a first aid station operated by nurses living in town, became an engineers office in the early 1950s, until the new engineer's office was built at the head of Main Street. Following that, the Women of the Episcopal Church Mission were allowed to use the building to sell Skagit souvenirs to tourists driving through Newhalem. It was demolished in the 1970s. The long warehouse at the north end of the street, which had served as the central warehouse for thousands of items, and as an office for Currier and the railroad dispatchers, had outlived its usefulness. With the removal of the railroad in 1954, it was no longer a viable facility, and had also suffered from lack of maintenance. It was demolished in 1967-68 after completion of the new service center. Other functional buildings in the vicinity of Main Street, north of the tracks, such as the carpenter's shop and paint shop, had been removed several years earlier.

As Seattle City Light began planning to automate the hydroelectric project, it became evident that fewer personnel would be needed to operate the facilities, and further, that fewer employees would have to be housed at the project. Fewer employees would require maintenance on fewer houses. Initially, Seattle-based Seattle City Light planners proposed that all existing housing be demolished, and new low-maintenance quadraplexes be built. Skagit-based personnel objected. In 1961 eleven new single-family wood-framed houses with low-pitched gable roofs were built along the river in a semi-circular loop around the school grounds. The street was lined with flowering cherry trees, and a sidewalk and curbs were installed. One quadraplex was built in 1963, near the east end of the circular road, and three additional residences were built on the loop in 1965.

Fifteen three-room cottages in Upper Camp along First and Second Streets remained in use until the early 1970s, when ten were demolished. The last five survived until the late 1970s, when they also

²⁸ *Last Skagit Tour with the Seattle Skagit River Railway*, 3 April 1954 (Seattle: Seattle City Light, 1954).

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were removed. The vacant lots and the streets themselves were replanted in lawn. Today there are three structures along the First Street alignment: the 1939 garages, and a small gable-roofed garage built in the 1950s to house the volunteer fire department's fire truck. While the construction camp-era cottages are gone, the spatial organization and circulation patterns of Upper Camp are still evident in the alignment—along the vanished streets—of the numerous varieties of trees, many of them planted in the 1930s to beautify the town and “make it livable.”

In the 1960s, all the remaining construction camp-era bunkhouses, with the exception of the original Cook's Bunkhouse (Resource #16) were demolished, one by one, along with their washhouses. Their sites were seeded with lawn. By 1979, three of the four tourist dormitories east of Main Street, except Building #70 (Resource # 17), and the 1938 Tourist Bunkhouse “D,” west of the old office building, had suffered the same fate. The old Storrie and Company Office-Bunkhouse on the northern side of the road was also demolished. The last three remaining three-story cottages in Lower Camp were leveled in the mid-1970s, and a picnic area installed.

The main office building on Main Street was demolished around [1998], and the new Skagit Information Center was built on the site in 2001 (Resource #43) with a large sculpture titled “Tower of Power” (Resource #44) built a year later directly to the west. Frank Young Park, complete with tennis courts, named for a long-time Seattle City Light employee, was dedicated on the Lower Camp site on the western end of the town in July of 1989.

Ladder Creek Falls Gardens

Ladder Creek is a glacier-fed stream originating on Snowfield Peak. It spills down the granite cliffs in a series of waterfalls, several of which cascade in sheer drops several hundred feet above and to the east of Gorge Powerhouse. The stream debouches into the Skagit River just south of the pedestrian suspension bridge (Structure #31) leading to the powerhouse. The creek drops approximately 3,000 feet during its six-mile run to the Skagit.

The Ladder Creek Falls Gardens occupy approximately two acres of land that are adjacent to the powerhouse, to the east and southeast. The terrain of the gardens is steep, rising to a comparatively flat area about eighty feet above the powerhouse. Their heavily wooded slopes of old and new growth timber are periodically interrupted by granitic outcroppings. A series of paths wind up the slopes behind the powerhouse, leading to the garden's highest point, a concrete staircase affording a view of the lower falls, spilling down granite-faced walls less than sixty feet away. The paths, most of which are historic, have a variety of surfaces, with several rustic wood bridges crossing streams that run through the gardens. Paths in the lower area of the gardens (once referred to as the rock gardens) have granite steps. Some steps of concrete appear to be later additions. Several rest areas adjacent to the paths have benches. Three of these, made of rustic wood logs, appear to date to the historic period. Periodically along the paths, streams have been diverted to form small waterfalls spilling into granite-lined and concrete pools.

There are a variety of native trees within the gardens, including fir, cedar, hemlock, spruce, dogwood, vine maple, alder, and birch. Non-native trees, some dating to the historic period, include Japanese maple, Colorado blue spruce, hawthorn, and holly. Native shrubs are planted along paths and appear in natural groupings beyond the paths: these include rhododendron, azaleas, salal, and Oregon

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grape. There are some remnants of historic exotic plants introduced by J. D. Ross, including a species of bamboo. The lowest area of the gardens, near the western side of the powerhouse, is planted with annual flowers and maidenhair and sword ferns. It is not clear whether the annual bedding plants are true to the historic period.

Today the gardens may be reached by three different paths: by stone stairs located near the northeast end of the powerhouse, by an asphalt path leading past a non-historic "iris pool" on the south end of the powerhouse, and from a concrete platform projecting from the center of the east side of the powerhouse that is on axis with the visitors gallery at the second level within the powerhouse. The falls, and some parts of the garden, are illuminated at night, in keeping with the spirit of the original concept of the gardens. How closely the present lighting scheme reflects the historic design has not been determined. A major refurbishing of the lighting and signage is planned for 2010-2011, and later for some of the original pools.

The lower falls' proximity to the powerhouse provided Seattle City Light's Superintendent J. D. Ross with an opportunity to create a unique mountain arboretum, showcasing two of his principal interests, horticulture and artistic illumination. By 1924, he was conducting visitors up the paths behind the powerhouse to view the falls, and by 1928, he had turned his attention to the installation of gardens on the cliffs. In January of 1929, he wrote of his plans to surpass the illuminated shows he had created in Seattle, stating *"I expect to produce something at Skagit in the coming summer that will eclipse anything else we have done in illumination..."*²⁹ In May he asked L. B. Pagter for a way for the City to gain control of the lower portion of Ladder Creek, explaining that he wished to protect the falls' vegetation, where increased use due to Seattle City Light tours, numbering at that time around 150 people per week, was threatening such fragile plants as orchids. He also indicated he wished to install a special illumination system along the canyon where *"... we could make it a wonderful sight, but we would have no control of the public who might go there."*³⁰ In June the US Forest Service granted the City permission to use two acres around Ladder Creek as a park, authorized construction of trails and bridges to make *"... the natural beauty easily accessible,"* and granted permission to light the area from the Gorge Powerhouse. By early July, Ross had installed six lamps in the canyon to light the falls, and had directed Theodore Kane and Dana Currier to submit plans to him for bridges and other permanent developments for consultation with the US Forest Service before installation. By the end of September, he had added six additional lamps to illuminate the falls and trees along the canyon paths, which, he reported to Umlauff, *"... many have said ... is the most beautiful thing they ever saw, without any exception."*³¹

While no documentation has been found regarding when Ross first began to plant trees and other vegetation in the Ladder Creek Falls area, it is almost certain he appropriated at least part of the shipment from the City Parks Department to the Skagit in 1929 for use at Ladder Creek. His correspondence with the City gardener, Jake Umlauff, is full of references to Ladder Creek.

²⁹ Ross to Charles Poulson, 4 January 1929, SCL 33-1,18-10.

³⁰ Ross to L. B. Pagter, 27 May 1929, SCL 33-1, 19-3.

³¹ Ross to Umlauff, 20 September 1929, SCL 33-1,19-22.

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By the 1930 tourist season, thousands of tourists were visiting the Skagit, taking night tours of Ladder Creek Falls, illuminated "... in all the varying colors of the rainbow, a spectacle never to be forgotten."³² By 1933, Ross had established rock gardens behind the powerhouse, at the base of the trail to the falls, and although he had begun to collect and display exotic plants, the emphasis in tourist literature that year was still on native plants and flowers along the trail. Tourists were cautioned not to pick the flowers; however, brochures noted the lighting department would help secure plants from other locations for people who wished to have their own live transplanted Skagit souvenir.³³

In 1933 or 1934, Ross had City crews install a sound system in the Ladder Creek area, operated out of the Gravity Oil Tank House (Resource #29) located behind the powerhouse. Members of the power plant's operating crew were assigned to sit in the structure and play recordings following a pre-arranged schedule which coincided with an evening walk up to the falls through the rock gardens. The earliest records played were primarily organ recordings of such songs as "Dawn of Tomorrow," "Meadow Lark," "Diane," and "When the Organ Played at Twilight," interspersed with some vocals, including tenor John McCormack's "I Hear You Calling Me," and the "Gypsy Love Song." By 1934, the ascent began with recorded birdcalls—canaries—and a record called *Dawn in the Old World Garden* that was a recording of native birds. When the falls were reached, "The Holy City" boomed from a hidden speaker. One observer noted, "You may expect to find it all faintly distasteful, but you will, on the contrary, fall into the spell and want with all your heart to join in that song which so perfectly suits this setting."³⁴

In 1935, Umlauff sent Seattle landscape architect E. Soderquist to Ross with an introduction noting that Soderquist "... has a very wide knowledge of plants and is expert in rock work." It is not clear whether Ross hired Soderquist to work on the Ladder Creek rock gardens, but it was in this year that Ross began to step up the introduction of exotic plants at the base of the falls and to tout that area of Ladder Creek as a tropical jungle. One palm variety had been brought to the Skagit in 1934, and had survived the winter there. Several other varieties were added the following year.³⁵ Ross continued to experiment with lighting arrangements at the Falls, and in 1936, his managers reported to him that the falls had been lit without any white lights, apparently a goal of Ross's for some years.

In 1936, a newspaper columnist described the appearance of the "tropical jungle" during the daytime visit:

I was all prepared to complain at the tropical plantings up here when there was so rare an opportunity to mass our native shrubs and flowers and show them off as they still wait to be shown off. But I came off my high horse when I saw how skillfully this versatile genius, Ross, has combined the exotic with the native plants. Goats beard, elderberry, wild columbine, buttercups and wild iris look fully as exotic as the tropical

³² *Your Seattle City Light and Power*, pamphlet (Seattle: Seattle City Light, 1930), p. 8.

³³ *Your Seattle City Light*, pamphlet (Seattle: Seattle City Light, 1933).

³⁴ June Burn, "Week-End at Diablo," *The Puget Sounder*, July 1936, p. 7.

³⁵ "Skagit Power Plants Combine Art with Commerce," press release, July 1935, SCL 33-1, 144-21.

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plants whose names I do not know! Indeed, I think a stranger would be hard put to it to say which are tropical and which native.³⁶

The evening walk attracted the most attention. A 1938 tourist described it:

...we were directed up the hillside along paths to the illuminated ladder falls. It was completely dark out except for small stars which couldn't have been brighter shining down through openings in those tall, spreading trees. Up in the branches it was quiet and mysteriously dark while down below, the path wound up and around a veritable fairyland. Small rocks and waterfalls had colored glows about them and under bridges rushed colored torrents (sic). Leaving the paths, we climbed the stairs above the tropical gardens. Up and up toward the singing ahead of us. At last we reached the top and looked over the side. It was breathtaking. With cool spray on our faces we looked down on the unforgettable (sic) wonder of the illuminated falls. They rushed down through huge boulders and down 4,000 feet over a series of drops in a swirl of rainbow colors. It ran down under the bridge where the color flowed into a deep blue and on into the darkness of the mountains.³⁷

Maintenance of the Ladder Creek Falls garden went into decline after the tours ceased in 1941. The falls illumination succumbed to blackout conditions imposed by the war. When tours resumed in 1953, the City began to refurbish the gardens. Many of the exotic species had failed without special care and they were replaced with hardier plants. Today the gardens contain over 150 species of flowers and plants. In 1962, Seattle City Light attempted to recreate the spirit of the illuminated evening walks, relying on surviving historic lighting diagrams and pieces of damaged colored glass from lamps and equipment found in the gardens. The falls have, since that time, been illuminated with colored lights in the evening, and foliage and pools along the paths have been relit with ground-based illumination.

Diablo Hydroelectric Power Plant

Although initially intended to be the last of the three Skagit plants, the Diablo Power Plant was built following the Gorge power complex. By 1925, Ross was reporting: "The most economical unit and the one most easily constructed at this time is made up of a dam at Diablo Canyon, creating a reservoir to supply 54,000 H.P. addition at the present power house."³⁸ Despite some opposition to Diablo on the Seattle City Council, led by Oliver T. Erickson, who believed the City should erect a concrete buttress dam at what was called the Hanging Rock location to replace the Gorge crib dam, and then cease development of the Skagit, construction on an extension of the railroad to Diablo began in 1926.

In the spring of 1927 the design contract for the dam was let to the Constant Angle Arch Dam Company, a consulting firm whose principal was Lars Jorgensen, and in September of 1927, a contract for construction of the dam (Resource #42) was let to Winston Brothers of Minneapolis. The constant-angle

³⁶ Burn, "Week-End at Diablo," p 7.

³⁷ Areta Ferguson, Skagit Tour Letter Contest, May 12, 1938, SCL 33-1, 49-7.

³⁸ *Annual Report of the Seattle Lighting Department* (Seattle: 1925) p. 35.

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arch was eminently suitable for Diablo Canyon, which rose to 200 feet above the river because: it used significantly less materials than an arch dam, and even less than the massive gravity dams. Its structure was especially applicable to narrow canyons, and the savings in materials affected both direct costs and the costs of transportation into remote sites. At the time of its construction it was, at 389 feet, the tallest thin arch dam in the world.

The Skagit River Railroad was extended up the canyon from Newhalem, and electrified to assist in moving cars laden with construction materials. At Reflector Bar, six miles from Newhalem, the line connected with a funicular railroad, the Incline (Resource #37), which lifted the rail cars up a 68 percent grade for almost 600 feet, where they connected to tracks leading to the dam site. On August 27, 1930, the dam was complete and a dedication ceremony was held. The 1,170 foot-long dam—the arch is 540 feet long, and the gravity abutments total 630 feet in length—has a 16-foot-wide crest, and a base thickness of 140 feet. There are 19 Tainter spill gates, three of which were motorized in the mid-1960s; the others are lifted with a rail-mounted hydraulic hoist. A valve house is located at the 1,045-foot elevation on the downstream side of the dam, and is reached via an elevator or ladder. There is one Lerner-Johnson valve and three butterfly valves, all provided by the Pelton Water Wheel Company.

Construction of the Diablo Powerhouse (Resource #35) was halted in 1930. Its foundations, as well as the penstocks, surge tank, and power tunnel had already been built as part of the dam project, and generators and other equipment had been ordered. However, the bond market had dried up in the wake of the 1929 stock market crash, and the City was unable to sell its bonds, although it tried in both 1932 and 1933. Ross applied to obtain 7.5 million dollars in loans from the Reconstruction Finance Corporation, which was denied, but countered with an offer of purchasing 1.6 million dollars of City bonds if the City would clear outstanding warrants from its construction fund. When this offer was made in December of 1930, the City had over 1.8 million dollars in outstanding warrants, and was unable to meet the conditions of the loan. By 1933, the federal government was engaged in building two other major dams in the state, Grand Coulee and Bonneville, and its general sentiment was that Washington State was already receiving a generous share of public money. It was not until 1934 that the City was able to find purchasers for 4.9 million dollars in bonds to complete the powerhouse. The contract for the dam was let to Rumsey and Company of Seattle.

The powerhouse, with a Moderne exterior, is representative of the type of architecture applied to industrial buildings of this period. The interior lobby features terrazzo floors, a brass water fountain, a wrought-iron staircase railing with aluminum top rails, and a unique tiled goldfish pond with Seattle City Light's logo, in tile, incorporated into the design. These were all installed in anticipation of public viewing—the powerhouse was a showcase for the City's hydroelectric project, and a promotional tool for completion of the final power plant, Ruby Dam (re-named Ross Dam). The generators were installed on pedestals on a single floor, accessible from the lobby, rather than dropping between two floors, making

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them a prominent visual feature. They are the largest, and possibly the last, generators ever installed in this manner, a good example of technology in transition.³⁹

The equipment used in the powerhouse was state of the art, when delivered. The generators were the highest rated in the country for the time, with ratings of 66,700 kVA. An enormous overhead power crane—reputedly the largest ever built to that time—was installed in the powerhouse to move the large generators and turbines. It had two crabs, each with a main hoist capacity of 150 tons, and an auxiliary hoist capable of lifting 25 tons. The powerhouse was dedicated on September 23, 1936.

(Note: For further information on the Diablo Power Plant, refer to the National Register of Historic Places Multiple Property Documentation Form, *Hydroelectric Power Plants in Washington State, 1890-1938*, prepared by Lisa Soderberg, and approved by the National Register on December 15, 1988. Please note that errors or inconsistencies in that nomination have been corrected in this present nomination.)

Diablo

The town of Diablo is 7.5 miles upstream from Newhalem, located just above the confluence of Stetattle Creek with the Skagit River, where the river makes a sweeping horseshoe bend. The present town has three distinct areas, defined by the river, creek, and cliffs. The area furthest upstream, situated on a gravel bar created by the river's bend, is Reflector Bar, encompassing approximately 20 acres. A narrow strip of land between the cliffs and the river, on which Diablo Powerhouse is located, connects Reflector Bar to Hollywood (downstream), which is on a relatively flat peninsula formed by the juncture of Stetattle Creek and the river.

By the spring of 1927, the design contract for the Diablo Dam had been awarded to the Constant Angle Arch Dam Company, and by fall the Federal Power Commission had approved its design, and the construction contract had been awarded to Winston Brothers of Minneapolis, Minnesota.

Towards the end of 1926, construction had begun on an extension of the railroad line from Newhalem, six miles upriver to its future terminus at Reflector Bar, below the dam site. By early March 1927, the railroad grade had been completed to two miles upstream from the Gorge intake on the southern side of the river. It was here that the first railroad bridge crossing the Skagit was built, in April.⁴⁰ The railroad line had a steep grade, following the rise in elevation up the gorge, crossing the river several times, and hugging the walls of the canyon on roadbeds blasted out of the granite cliffs. To handle the grade and heavy loads of construction material, the line was electrified, but a steam locomotive, "Old Number Six," purchased by the Lighting Department in 1928, was also used to negotiate the grade and haul equipment, materials, and tourists to the dam site (Resource #19).

When the railroad line reached the north edge of Reflector Bar in the early spring of 1928, it split into several spurs. The main line, with two sidetracks, continued south, near the base of the cliffs. A spur branched to the east, running parallel to the main line, rising along the base of the cliff. This easterly spur

³⁹ Pedestal-mounted generators were a transitional feature in powerhouses of the 1920s, for example, at the Cushman Number Two plant of Tacoma, Washington, as the industry moved from horizontal to vertical shafting. As generators increased in size, concerns about vibration and stress led to in-floor placement of the equipment.

⁴⁰ Letter to S. J. Sanders, 2 March 1927, SCL 33-1, 66-2.

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split in two, with one line serving as a storage track, and a second spur continuing across a trestle to the base of the Incline railroad, and then dropping back down to the grade of the main line along another trestle. The Incline (Resource #37), completed in March of 1928, was designed to haul loaded freight cars up a 68 percent grade. A second spur off the main line branched to the west as the line entered Reflector Bar, servicing a gravel plant on the northwestern edge of the Bar. A coalbunker was built at the end of the gravel plant spur.

Reflector Bar

Reflector Bar, which had been originally cleared by the US Forest Service for a ranger station, included a cabin and barn and three large fenced pastures when the City began surveying at the Diablo Dam site. Initially the City had applied to the Forest Service for permission to occupy only a portion of the bar, but by September of 1927, Winston Brothers had notified the City that the buildings necessary to house and service the construction crews would require the entire area of the bar, including the ranger station. Construction on bunkhouses, cabins, and a mess hall began that month, northwest of the ranger enclosure, while the City negotiated with the Forest Service for occupancy of the entire bar, and including the area down river as far as the Davis Ranch boundary, west of Stetattle Creek. On October 25, the US Forest Service granted the City permission to occupy the entire area.⁴¹

By May of 1928, the bar was covered with wood-framed buildings, most of which were built by Winston Brothers, standing in uneasy proximity to the Forest Service house and barn, which were hemmed in on all sides by construction camp buildings.

The camp was laid out in a U-shaped pattern, with the open end of the U facing east, towards the cliffs, rail line, and Incline. Each leg of the U consisted of several long, low gable-roofed latrines, with their ridges running on an east-west axis. These were flanked on both sides by a row of six small cottages housing construction camp workers. Three latrine buildings formed the base of the U, closest to the river, with their ridges running north-south, flanked on the east by twelve cottages and on the west by eleven cottages. The southernmost cottage in the westerly row served as a hospital. A double T-shaped, cross-gable-roofed structure, the largest in camp, was located in the center of the U, and served as the camp mess hall.

Across the top of the U, running parallel to the railroad line, were three long gable-roofed buildings, with their ridges running north-south. They were, from north to south, a commissary, the camp's construction office, and a hotel for visiting engineers, functionaries, and overflow workmen.

The Forest Service buildings were flanked on the south by the innermost row of the cottages on the south leg, and on the east by the mess hall. At that time the pasture fences were still partially in place, but no longer complete enough to house pack animals.

Sandwiched between the main railroad line and the storage track at the base of the cliff were a gable-roofed warehouse for camp materials and supplies, located just east of the commissary, and a

⁴¹ C.H. Morse to Pagter, 22 September 1927, Engineering Subject Files, Record Series #RA 2627-03, Skagit River Power Supply Correspondence, Seattle Municipal Archives.

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steeply pitched, gable-roofed building, erected by the City, which served as a substation for the electrified line. A transformer yard was located just north of the substation.

The City also built three steeply pitched gable-roofed bunkhouses to the south of the U, running in a row perpendicular to the main rail line. Each bunkhouse sheltered ten men. One bunkhouse stood alone, the other two were connected by breezeways to a smaller gable-roofed washhouse located between them. These structures were referred to as the Engineer's Camp. They and the substation building were larger and better built than the construction camp buildings, with shingled roofs and finished siding. All four City buildings were whitewashed, contrasting sharply with the unfinished vertical board-sided construction camp buildings, which had Malthoid roofs secured by battens.

In the summer of 1928, as a result of an agreement between the US Forest Service and the City, the contractors erected a new house and barn for the Forest Service, west of Engineer's Camp and south of the construction camp. The area selected was full of scrub and logging debris, unlike the cleared area formerly occupied by the Forest Service buildings. This became a minor point of contention beginning in May of 1928, with one Forest Service representative agitating for a larger barn, in exchange for the removal of the buildings to a less desirable site, and continuing through April of 1930, when L. B. Pagter, the Mount Baker Forest supervisor, wrote the Seattle city engineer: "In our old location the ground was clear of old logs and debris, but in the new location there is quite a lot of old logs and the like which should be cleaned up, as it is more or less a fire menace, and not at all attractive to the setting. It is my opinion that the City should clean up this debris, especially as the old location was free of the same."⁴²

Also in the summer of 1928, the City began to build a series of larger cottages on the southern and western edges of the Bar, located within a still relatively heavily forested site. These four-room buildings were better built than any others in Reflector Bar and included indoor plumbing. They became Diablo's scaled down equivalent of Silk Stocking Row in Newhalem. The houses were intended for the top managers of the Diablo project, and, after its completion, would house the City's operating engineers and other managerial staff. They were referred to as the City Engineers' and Contractors' Residences. Unlike Silk Stocking Row, the building sites had no formal organization. In plan they were organized in rows, ringing the south and west sides of the new Forest Service pasture. When viewed three-dimensionally, it could be seen that they were generally placed where cleared spots occurred near the river's edge, adjusting to some extent to the changes in topography and the ragged configuration of the bar. Most had gable roofs with shed-roofed porches on both front and rear facades, double-hung windows, and finished siding. There were a total of six located along the southern end of the bar, overlooking the river, and four along the western edge of the bar. They were built entirely of two-by-four materials, with studs, rafters and joists all on 24-inch centers, and with plasterboard partitions.

In 1929, Reflector Bar looked like a rough construction camp, enclosed on two sides by rail lines and filled with rude shacks. The principal circulation paths, other than the railroad lines, were a 20-foot wide road that ran along the interior of the U, and an equally wide dirt road that ran at the base of the U, extending south to the ranger station and north to the gravel plant. Secondary dirt paths ran between

⁴² Pagter to Ross, 20 April 1930, SCL 33-1, 97-9.

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buildings in the legs and base of the U, with diagonal paths leading to the centrally located mess hall. With the exception of the perimeter of the bar, and the engineers' and contractors' residential areas, almost all native trees and vegetation had been removed. The one built amenity in camp was a tennis court, which was located at the southeastern end of the bar, next to the terminus of the railroad.

In March 1932, two years after completion of the dam, the City had many of the construction camp buildings razed. Unlike Newhalem, an on-going need for housing, however primitive, was not envisioned at the time. In fact, J. D. Ross was already beginning to consider alternative uses for the site, unmistakably oriented towards his vision of the Skagit as a resort. But first, it was necessary to finish the Diablo plant, which meant completion of the powerhouse, long on hold due to lack of funding. The City retained the southernmost leg of the U, including the hospital shed, all ancillary buildings—such as the commissary, contractor's office, mess hall, hotel, and warehouse—and one latrine from the northern leg of the U. All other residential structures and latrines were demolished.

In September of 1932, anticipating funding for completion of the powerhouse from the Reconstruction Finance Corporation (RFC), the City moved an immense power crane, built by the Harnischfeger Corporation, onto Reflector Bar, temporarily locating it in the northwestern corner of the bar. The 300-ton crane had two crabs, each capable of hoisting 150 tons, and an auxiliary hoist with a 25-ton capacity. The crane was purchased to move the two massive Westinghouse generators and other heavy equipment the City had already purchased for the Diablo Powerhouse.

Surrounding the crane and a derrick located next to it, the City erected four shed-roofed warehouses in a semi-circle, designed to store the equipment until completion of the powerhouse. At that time the building's foundations, the power tunnel, the surge tank, and penstocks were all that had been completed when the money ran out. The RFC offered an unacceptable counterproposal to the City's request for a loan in December, and it was not until the summer of 1935 that the installation of the equipment stored in these temporary sheds began.

When the City was finally able to sell bonds to complete the Diablo plant in 1934, a new construction crew, this time belonging to Rumsey and Company, moved into Reflector Bar to finish the powerhouse and the tailrace, assemble the powerhouse machinery, install the equipment necessary to bring the plant on line, and build a transmission line to connect with the Gorge line six miles down river. With many of the earlier housing units destroyed, Rumsey and Company was forced to lodge some of their men in tent cabins clustered around the surviving latrine building on the former northerly leg of the U. The contractor's office near the railroad line was converted to two apartments.

In 1934, the tracks to the crane and gravel plant were relocated. The spur that branched west along the northerly end of the bar was moved towards the center of camp just north of the mess hall building, where it branched to the south to pick up the side tracks and to the north where it joined the main line past the powerhouse. The spur's relocation led to the demolition of the original commissary building. The mess hall was converted into a commissary, a carpenter's shop, a storeroom and a recreational hall reserved for City employees. The mess hall was moved into the former hotel building. Also in 1934, Diablo's water system was improved and a water tower (Resource #40) was erected west of the City's "Engineer's Camp" buildings, serviced by a water pipe line located on a suspension bridge at the southwestern corner of the bar that drew water from a creek on the south side of the Skagit. The tower

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remains in service today. In 1935, two additional four-room houses were added to the Contractors' and Engineers Residences on the edge of the bar.

Unrealized Diablo

In March of 1934, Ross had his drafting department prepare plans for two structures in Diablo, neither of which were built.⁴³ They were part of his vision of the Skagit as a resort and tourist center. Surviving drawings – there are also two plans for Diablo – demonstrate that Ross always intended Diablo to serve principally as another highlight for tourists on their trip up the Skagit.

One 1934 design was for a visitor's restroom. Its exact location is unknown, however it appears to have been planned for the trail between the top of the Incline and Diablo Dam. The second building was a gatekeeper's house at Diablo. Again, its intended location is unknown, but it also was probably to be sited near the dam. Both structures reflected Ross's continuing interest in Rustic architecture, and the influence of National Park and US Forest Service designs on his vision for the Skagit.

The visitor's restroom was to be a concrete structure partially set into the cliff. The building had a low-pitched gable roof, hidden by a parapet. Faced with uncoursed cyclopean stone, the structure would appear, from a distance, to be rubble left from a rockslide. The gatekeeper's house had steeply-pitched cross-gable roofs. The entry porch was arched, and an exterior brick chimney rose along one wall. It was sheathed entirely with wood shingles. Atypically, it was Ross himself who signed the plans as having been checked.

By 1934, the Skagit Tour attendance was growing rapidly. The following year, additional tourist dormitories were built in Newhalem, and Ladder Creek's tropical garden installation was well underway. Also, Ross had begun to assemble his "zoo," with its Mexican black squirrels, swans, parakeets, and other exotic animals not native to the Pacific Northwest. The real zoo – which actually existed in Diablo – was built in 1934 or 1935 west of the construction camp mess hall. It consisted of an enclosure for native deer and a white deer Ross had imported, a large wire-enclosed aviary, and two small buildings – one gable-roofed and one shed-roofed – for the care and treatment of the animals. The zoo lasted until Ross's death, and the advent of World War II, when it was demolished and some of the surviving animals were sent to the Seattle Zoo.

But the existing zoo was clearly, in Ross' mind, a stop-gap measure, for in 1935, a schematic plan for the future development of Reflector Bar was prepared under his direction. In this plan, tourists would disembark at a waiting station directly below the Incline, and would either wend their way up stairs or ramps past a pool to the Incline car, or would cross the railroad tracks and head west down a wide street, at the end of which was a game reserve with enclosures for deer and whatever else that Ross planned to purchase, borrow, or receive as a gift. Gardens were to be located beyond the game reserve, and a path led down to the Skagit River. To the south of this street, just after crossing the tracks, the tourists could enter a U-shaped community lodge that held a store, a dining room, and men's and women's dormitory

⁴³ The Lighting Department got its own engineering department in March of 1931; until this time the engineering and drafting were handled by the City's engineering department.

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rooms that looked out onto a central court. East of the game reserve, flanking the east-west road, would be a tennis court and a thirty-man dormitory, presumably for Seattle City Light employees. The plan also included a field house, apparently the hub of public sports activities, and a 30-by-80-foot swimming pool. Approximately two-thirds of the bar's entire area was devoted to these tourist structures. The remaining southerly third was to be retained for housing employees and accommodating the US Forest Service, which was allowed to retain its barn, house, and enclosure. Seven additional residences were to be added to the Engineers' and Contractors' Residences on the southern and western edges of the bar, and a new warehouse was to be erected south of the new waiting room.

This plan was not specious, drawn on the spur of the moment to satisfy Ross. It—or a variation of it—was discussed with the US Forest Service in late 1937, where it was understood that a large part of the bar would change "... into a combination park and zoological gardens." However, it was decided to lodge a portion of the Ruby Dam (later renamed Ross Dam) construction crew at Diablo early in 1938, and Diablo was destined to continue as a combination construction camp and employee town for years to come.⁴⁴

Of this scheme, only four buildings were to be realized. Three additional houses were built in the westerly row of the Engineers' and Contractors' Residences, and the Incline Waiting Station was erected in the summer of 1935 (Resource #36).

The Incline Waiting Station was strictly a tourist structure, designed for visitors who, after spending the night in Newhalem, would re-board the train for a trip up the gorge to Diablo. They would first visit the Diablo Powerhouse and the zoo. They would then meet at the Incline waiting station, where the restrooms were located, and board an open freight car for the trip up the Incline, one of the highlights of the tour. They would disembark and walk along the trail to Diablo Dam, and, following that, board a boat—for years, the *Alice Ross*—for a trip up Diablo Lake to the site of Ruby Dam (later renamed Ross Dam). As with Ladder Creek Falls, Ross had wired a portion of the edge of the lake for sound, and as the boat headed towards Ruby Dam (later renamed Ross Dam), visitors would hear the sounds of the "Indian Love Call" and other inspirational music echoing across the water.

In 1939, shortly before Ross' death, Glen Smith prepared a sketch map of yet another plan for Reflector Bar. This scheme, more elaborate than the 1935 plan, indicates Ross was considering the time when Ruby Dam (later renamed Ross Dam) would be completed and Diablo left free of construction camp restraints. In this plan the Incline Waiting Room, barely four years old, was eliminated, replaced by a rock garden that was flanked by two restrooms. The "lodge," now the "hotel," was moved further south and reoriented, so that its principal facade faced the track. The game reserve had become a swan pen, surrounded by marsh and "wild gardens." All engineers' and contractors' houses were to be removed, and the area planted in "wild garden." The southern end of the bar would serve as a deer park, with the exception of the existing tennis courts, which were to be retained. The US Forest Service enclosure was allowed to stand where it was. Other features included a large bowling green or croquet field, which, the plan noted, could be converted to a skating rink in the winter; wide expanses of lawn;

⁴⁴ Charles Flory to Department of Lighting, 25 January 1938, SCL 33-1, 97-17.

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and a rock garden located in the powerhouse tailrace. A dense hedge of cypress would screen the northerly railroad tracks from the gardens and tourist buildings, and, on the other side of the tracks, employee housing would be located, "if necessary." Lawns and formal plantings of rhododendrons and other flowering shrubs would surround principal buildings.

The entire scheme appears to have been organized on the basis of formal attributes that gradually faded into a natural, "wild" look closer to the river. Some of what could be considered the least important parts of this plan were actually realized in the 1970s, when the engineers' houses were torn down, although the area was seeded in lawn, rather than planted as a wild garden.

Hollywood

Downstream from Reflector Bar is a small, flat area of land, nestled at the base of Sourdough Mountain. Due to the river's circuitous course through the area, Hollywood, as this area is called, is north of Reflector Bar, and east of Stetattle Creek, which forms Hollywood's western boundary. Hollywood was part of a ranch owned by the Davis family, who had moved to the Diablo canyon from a site on the river near Marblemount in 1898, after a flood destroyed their homestead there.

The Davis ranch, established near Stetattle Creek, became a stopping place for miners traveling into the North Cascades. Their roadhouse served hundreds of backcountry visitors during the years of its operation. Known as Cedar Bar, the ranch and roadhouse were owned and operated by Lucinda Davis and her three children, brothers Glee and Frank, and a daughter Idessa. When the Forest Homestead Act passed in 1906, the Davis' applied for homestead entry on the land they had improved. Their claim for 100 acres was reduced by the Forest Service, who wanted forty acres for a ranger station and land on and around Reflector Bar. After years of wrangling, the claim went to patent in 1910, and title papers were finally signed in 1917. When the City began to cast its eye on the areas above the Gorge for future development, it began condemnation proceedings against the Davis Ranch. Despite the Davis' resistance, Seattle succeeded in acquiring the homestead for \$15,000 in 1929. The ranch at Cedar Bar continued to be used to house employees and guests for a number of years, although the structures were removed in the late 1950s, when the lake behind a higher Gorge Dam began to flood the property, most of which is now underwater.

Sometime in the mid-1920s, around 20 shacks were erected in the Hollywood area. It is not certain who built the structures, but it appears that they were erected by the Davis family to rent to Seattle City Light workers, prior to the condemnation and purchase of their ranch by the City. They were scattered about the Hollywood area in an apparently random fashion, accompanied by small outbuildings, such as woodsheds. Most were situated along Stetattle Creek. By 1937 Seattle City Light employees were recorded as living in these buildings, almost all of which appear to have been crudely constructed. None had sewer or water connections.

As a result of agitation for more and better housing in both Diablo and Newhalem, Seattle City Light began planning new housing in 1936. A row of over 20 houses was to be built along the bank of the river between the powerhouse and Stetattle Creek. The scheme ran into several roadblocks. Financing the buildings was a problem, and the Forest Service intervened, since, as Smith and McKeen reported to Ross in November of that year:

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As you know from our telegram, they (the Forest Service) claim jurisdiction over the entire layout of housing and accommodations for the public at Reflector Bar. They say they are only anxious to get the best development possible, and to give us the benefit of their long experience and special study. They don't like the idea of a long row of houses, nor the idea of painting each one a different color (sic). They say the houses should blend into the background of forest, and that Reflector Bar seems a much better place for them, unless we have other plans for it, in which case they would favor the Stetattle Creek area, or even the upper end of Davis Ranch below Stetattle Creek. They suggest that the Forest Ranger station be moved from the Bar to Stetattle Creek...if the proper layout of the Bar would be helped thereby. We told them that you were our landscape architect, and that we would not be able to give them our plan for the Bar until we heard from you.⁴⁵

Within a few days, James Frankland, assistant regional forester for the North Pacific Region of the US Forest Service, wrote to Ross to complain about the agency's lack of involvement in the development plan, and to confirm the Service's architects and landscape architect's visit to the site, offering their services in the development of a "... well defined plan for Reflector Bar." Frankland noted that the US Forest Service had developed "... a very satisfactory style of architectural treatment of the exteriors of our buildings located in such rugged country and I have been hoping that this, or an adaption of it, might be selected by the City for their permanent buildings."⁴⁶

Ross availed himself of the US Forest Service's offer for design assistance, although he did not seriously reconsider his ultimate plans for developing the Reflector Bar area as a tourist-oriented facility, and therefore did not entertain the suggestion to build the new houses at the Bar. Hollywood, it was determined, would be the location of the new permanent houses. In March 1937, McKeen, acting as superintendent of the Lighting Department—Ross was then at Bonneville—received scale drawings of the new buildings from Linn Forrest, an assistant architect for the US Forest Service's North Pacific Region. There were three housing schemes for four-room residences and one for a ten-man apartment. The drawings, Forrest noted, "... show that type of architecture which we have found to be harmonious in rugged surrounds similar to those at Diablo."⁴⁷

Two weeks later F. V. Horton, an assistant regional forester based in Portland, sent Seattle City Light a plan for the entire development at Hollywood that included both four- and five-room residences, a bachelors' quarters, a school, and a railroad waiting shelter. The scheme was designed to take advantage of the topography of the area, and was organized by a series of loop roads, where buildings were "... oriented on the ground for their best adaptability to the immediate site for topography, trees and views. A landscape feature was planned for the drainage area, dividing the residence groups, as a water course featuring a

⁴⁵ Smith and McKeen to Ross, 23 November 1936, SCL 33-1, 145-12.

⁴⁶ James Frankland to Ross, 27 November 1936, SCL 33-1, 97-14.

⁴⁷ Linn Forrest to McKeen, 6 March 1937, SCL 33-1, 97-15.

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*stream and pools.*⁴⁸ The scheme included approximately 20 new houses, but by this time, the number of houses to be built had been reduced to five.

Two days later, McKeen sent the plans to Ross, telling him the survey crew was going to Hollywood to stake out the buildings as suggested by the Forest Service, and asking him to make his comments as soon as possible. By May, the location of the houses had been staked out, and McKeen was reporting to Ross that they were planning to start two of the buildings that had been redrawn and probably altered to some extent by Seattle City Light's architect George Stewart. McKeen also sent a Mr. McMonies to the Skagit to select rock for use in the foundations and chimneys of the buildings, as suggested by the Forest Service.

Construction began on the houses in the early summer of 1937, and continued through early 1938. A total of five were built, in addition to an apartment building, referred to as "The Lodge." Disputes over housing policy, pressure on the Lighting Department to cut its budget, and the funneling of resources to begin construction on Ruby Dam (later renamed Ross Dam) were some of the factors intervening to reduce the number of much-needed houses. The railroad station and pool suggested by the Forest Service were not built. The Lodge, which had also been reviewed and altered by the Forest Service—the initial design by Seattle City Light had been for a two-story building, emphatically vetoed by the Forest Service—was designed to house single men, who would share common eating and lounging facilities. In the 1940s it was converted to apartments housing families.

The houses each had two bedrooms, a bath, a kitchen, dining room, and living room, and an unfinished attic space in which laundry facilities could be located. They had steeply-pitched gable roofs and horizontal board siding, with vertical board siding with scalloped ends located in the gable ends. The foundations were faced with stone, and stone chimneys were located near the center of each structure, projecting from the gable roofs. Several plans were prepared, each slightly different, and a prototype of each plan was erected, apparently with the idea that future structures based on the different plan types already built would be erected later. They were located near the apex of a triangular road whose base followed the Skagit River to the south. They were grouped in an informal cluster, reflecting the prevailing planning philosophy for Rustic architecture, namely, informal schemes adjusting to the site. The lodge was located on the eastern side of the triangular road, near the southern end of Hollywood.

By 1938, only five of the old shacks that had first occupied Hollywood were still standing. In April of 1938, a draftsman from Seattle City Light, J. R. King, who had been directed to conduct a survey of housing on the Skagit, prepared a report suggesting that 20 new houses be built in Hollywood. He drew a scheme following the general layout originally proposed by the Forest Service in 1936. It included 20 new houses along the triangular road, and incorporated a pool—but not the railroad station or the school—into his design, opposite the lodge. King's proposal was never acted upon.

In December 1938, Charles Flory, the supervisor of the Mount Baker National Forest, made an attempt to intervene one final time in the development of Hollywood. The Forest Service apparently failed to appreciate the irony of the name, "Hollywood," which had been appended to the area when the

⁴⁸ F. V. Horton to Seattle City Light, 26 March 1937, SCL 33-1, 97-17.

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small shacks were built in the late 1920s and early 1930s. In April, Flory's assistant, R. L. Fromme, met with McKeen, and an agreement was reached to change the name of the area from Hollywood to Stetattle. However, in December, Seattle City Light was still referring to it as Hollywood, as were all the occupants on the Skagit. Flory wrote to Seattle City Light about this, in association with rental payments for occupied houses in the area, which Seattle City Light was required to remit to the US Forest Service. He noted:

Preference for this change in names (Hollywood to Stetattle) was based on the fact that the name Stetattle is unusual and distinctive as well as being the geographic name for the stream on which this development is being made. The name Hollywood, on the other hand, is foreign to the Skagit locality, and the contemplated development has nothing in common with the over-publicized Hollywood, California.⁴⁹

Hollywood languished as a partially built housing project until 1952, when a number of new houses were built. Gradually the 1938 rustic houses fell into disrepair, and were removed, one by one, when maintenance was deemed too costly. The sole remaining house from this era is Number 2, now referred to as H-6 (Resource #34). The lodge also survives, in part, although half of it—the former dormitory area—was demolished around 1980. The original street plan was altered in the 1950s, when the new residences were erected.

Diablo During and After the War

In the late 1930s, General Construction Company, hired to build Ross Dam, erected a camp area at the northern end of Reflector Bar, in the former location of the crane and circular warehouse sheds. There were two H-shaped bunkhouses with gable roofs, some storage buildings, a boiler room, and a small construction office. In 1952, a Butler building was erected to the west of these structures. While the Butler building still stands, the construction camp buildings have been demolished and the site is currently being paved for a parking lot. Top managers of the construction project and their families were housed in the Engineers' and Contractors' Camp, along with Seattle City Light's top operators.

In 1935, the City donated a building in Diablo for use as a school to teach eight children within School District #105 of Whatcom County. In addition, Seattle City Light provided living quarters for a teacher, who lodged with a Seattle City Light family until the 1940s, when a schoolteacher's cottage was finally built near the southeastern corner of the bar. The school was located in a small gable-roofed building near the water tower. A second building was later connected to it via a small hall that served as a cloakroom. This second building was detached from the original school building in 1952, and moved south of the Incline Waiting Room, where it was reused as a communications building (Resource #39). While the second building (communications building) dates to the historic period, it has been significantly altered, and moved from its original location.

⁴⁹ Charles Flory to Seattle City Light, 13 December 1938, SCL 33-1, 97-17.

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In 1940, then Seattle City Light Superintendent E. R. Hoffman consulted with a representative of Naramore, Bain and Brady, a Seattle architectural firm specializing in school construction. Floyd Naramore, in fact, had been the Seattle School District's architect for over ten years and was responsible for designing many of the junior high and high schools still standing in Seattle, as well as a number of masonry elementary schools. In May of 1940, the firm recommended that Hoffman build a 22-by-30-foot building that would adequately house fifteen children, and offered general advice on the location of windows, ceiling heights, and furniture arrangement. It was not until 1946 that Seattle City Light actually engaged the firm to design a school building in Diablo—the war had intervened—and by then the population of Diablo, swollen by the construction crews working on Ross Dam, required more than a small building for the education of its children. The new school was located west of the old mess hall, since converted to a commissary and carpenter's store. It had a T-shaped plan, with cross-hip roofs, and was faced with brick. This structure, which still stands, has been altered by additions, and presently serves as the dining hall for City employees, for tours, and as a visitor center and museum.

In October of 1944, anticipating the push for construction of Ruby Dam (later renamed Ross Dam), and under pressure to provide adequate housing, Hoffman had a survey of Diablo houses prepared. The survey reported a total of seventeen houses in Reflector Bar, and eight houses plus the "Lodge" in Hollywood. Three of the pre-1938 shacks were still standing, one sheltering a Seattle City Light employee and his family of five, and one a US Forest Service employee and his wife and two children. In the Lodge, one City employee, Orville Look, lived with his wife and two daughters, and three additional families were housed in apartments that Seattle City Light had carved out of the single men's rooms in the bunkhouse wing.

Of the Reflector Bar houses, twelve were part of the original Contractors' and Engineers' Residences along the south and west edges of the bar, only five of which were considered to be in good condition, although poorly constructed. Five were construction camp shacks left from the southerly leg of the U; the rest had been demolished. Only two of the construction camp shacks were occupied at the time of the survey: one by the schoolteacher and one by a General Construction Company employee. Four of these were considered useable, "... but they are useable only for a few more years." When a new evaluation of houses on the bar was completed in 1951, in preparation for new housing for Ross Powerhouse employees, three construction camp shacks were recommended for removal. The remaining houses, Contractors' and Engineers' Residences, were:

...standing on wooden blocks and some of these houses are settling badly, and ...they are not located in the center of the lots or the proper distance from the (proposed) sidewalk or the road...Some of these houses have only four rooms, therefore we should consider the advisability of adding a room to each house before we move it to its permanent location.⁵⁰

⁵⁰ M. E. Fahlstrom to E. R. Hoffman, SCL 33-2, Box 75.

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In 1950 Hoffman had told Phil Bradner, the Mount Baker Forest supervisor, that Seattle City Light planned to build 60 houses for the Ross Powerhouse operators and boatmen plying Diablo Lake, and to install a narrow road to Diablo. However, by April of 1952, when the contract for new residences in Diablo was let to the Seattle firm of Thorburn and Logozo, the number of houses to be built had almost been halved, to 35. Of these, 11 were to be built in Reflector Bar, and the remaining number in Hollywood.

The decision was made to retain the older engineer's houses in Reflector Bar on their original sites, anticipating their replacement in *"five or ten years, when material and labor would be more available than it is now."* If moved, it was argued, Seattle City Light would be spending money for new foundations and moving, and *"... we would still have old houses with not too good arrangement and not well built."*⁵¹ So the structures stayed until the 1970s, when most were demolished or moved from the project.

In the summer of 1952, construction began on the Reflector Bar houses and on a new hip-roofed Commissary (Resource #38), located to the immediate north of the Incline Waiting Station. Most of the new houses were located in the US Forest Service enclosure, on three new east-west streets converging on a road running north-south along the edge of the railroad tracks, soon slated for removal. The Forest Service house, which was deemed built well enough to move, was shifted to a new site slightly southwest of the corner of the school. The barn was torn down, and a new combination barn and warehouse was built for the US Forest Service on the southwestern corner of the bar. Two additional houses were located just east of the easternmost Contractors' and Engineers' Residence. The old mess hall-turned-commissary was demolished, however Seattle City Light's "Engineer's Camp" buildings, still in use as bunkhouses, with one of the three converted to a mess hall, were retained for a few more years.

The new houses, in both Diablo and Hollywood, were one-and-one-half story wood-framed structures with steeply pitched, aluminum-sheathed gable roofs. They had gable-roofed front and rear porches, and a gable-roofed dormer located in the center of one elevation. The structures had large fixed glass multi-paned windows and fixed glass over awning windows. All were built with basements and sheathed with vertical board siding. Most of these houses are extant and in use.

In Hollywood, the Skagit had overflowed its banks in the winter of 1949-50, flooding part of the low lying area and killing a number of trees along the bank. In conjunction with the plan for additional housing for Ross Powerhouse operators, Seattle City Light decided to fill in the low areas of Hollywood, raising the elevation to 890 feet. This increase in elevation was partially to counter the effects of future flooding, and partially in anticipation of the rise in water level when the new dam at Gorge was completed. The plan was to fill along the railroad line and shape it so that it rose in a gentle slope upstream on Stetattle Creek.

The scheme for an additional 24 houses in Hollywood required new roads, sidewalks, a street lighting system, and reconstruction of the sewer and water lines installed in 1938, when the five rustic houses and lodge had been built. In September of 1951, the Hollywood re-grading began. The remaining pre-1938 shacks were demolished, and the western leg of the triangular road was raised, following the

⁵¹ Ibid.

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original alignment to its apex at the north. The road along the river next to the tracks, slated for removal in several years' time, was also re-graded. The angle of the east side of the original triangular road was altered, and an east-west link was installed, forming a loop at the peak of the triangle. It continued to the east, connecting to the former easterly leg of the triangular road, which was extended north and terminated in a cul-de-sac. Plank walks were installed, later replaced by concrete sidewalks, and, after completion of construction, trees were planted along the streets and in yards. With completion of this construction, Hollywood appeared much as it does today. Four of the five 1938 structures were gradually demolished, roads were paved, and trees have matured. The rail right-of-way was covered with asphalt, and became part of the present road leading to Reflector Bar and the Diablo Powerhouse.

Late in 1927 or early in 1928, a railroad bridge was erected to cross Stetattle Creek during the extension of the line from Newhalem to Reflector Bar, below the Diablo Dam site. To handle the steep grade and heavy loads of construction material, the line was electrified, although a steam locomotive, Old Number Six (Resource #19), was also used to negotiate the grade and haul equipment, materials, and tourists to the dam site. The bridge was replaced with a steel bridge in 1938. When the railroad tracks were removed in the 1950s, the roadbed of the bridge was repaved.

The present town of Diablo bears little resemblance to the construction camp town of 1928. A road from State Highway 20 runs along the river to the bridge across Stetattle Creek, and along the former railroad right-of-way next to the river, through Hollywood, where the 1952 houses are located on broad expanses of lawn planted with various shade trees. The road turns and continues south, past the Diablo Powerhouse, following the former railroad line past the 1952 Commissary, the Incline Waiting Room, and the relocated Communications Building, and continuing for a short way before terminating at the south end of Reflector Bar. A paved road leads from the entrance to Reflector Bar west, to a parking area and the 1952 Butler building. West of the Incline and road is a large area seeded in lawn, formerly the location of the old mess hall, and west of it, is the 1940s Diablo School, now serving as a visitor center, and beyond it, across a lawn, is the 1950s US Forest Service barn and warehouse. South of the school and lawn are the 1952 residences. The southern and western edges of the bar are now seeded in lawn, with some older trees and shrubs interspersed along the grounds. The 1934 water tower rises like a beacon above the town, an immediately visible landmark.

Ross Powerhouse and Dam

Ross Dam and Ross Powerhouse are the third and final phase of hydroelectric development on the Skagit River—construction of the plant was first proposed by J. D. Ross at the inception of the entire Skagit Project. Ross Dam is a variable arch dam, 540 feet high. The crest is 1,300 feet long and 33 feet wide. The dam includes two fixed wheel headgates, each weighing 210 tons; twelve Tainter gates which pivot on a 21.5 foot radius; two butterfly relief valves with a six-foot diameter; and Broome gates on the upstream side. The dam has two 1,900-foot-long power tunnels, 24.5 feet in diameter. The face of the dam is waffled. The reservoir behind the dam, Ross Lake, stores 1.43 million acre-feet of water.

The site at Ruby Creek where Ross Dam is located was the location where J. D. Ross wanted to build the first dam on the Skagit project, because it was here that the gorge widened to form a large natural storage reservoir. However, the logistical problems of building at that remote site were too

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challenging and too expensive for the City to surmount in 1917-18, and the Gorge site was selected as the location for the first power plant. It was not until 1936, when the City received three million dollars from the Public Works Administration, enabling it to float an additional four million dollars in bonds, that work began at the site. By 1937 crews were at work on site, drilling test holes for the dam and building the new transmission line. Seattle City Light crews, lodged in Diablo, were put to work building a floating cookhouse and floating bunkhouses on Diablo Lake to service a construction camp site to be located near the dam site.

It was decided to build the dam in stages, or steps. Lars Jorgensen's firm, The Constant Angle Arch Dam Company that had designed Diablo Dam, did preliminary design work of Ross Dam. The consulting firm of J. L. Savage completed additional design work after Jorgensen's death in 1937. The construction contract was awarded to General Construction Company in mid-1937. It included construction of a by-pass tunnel, a work camp for the crew at Ruby Creek, and the first step of the dam. In January of 1940, the first step of the dam, 300 feet high, was completed. After Seattle City Light crews built a 15-foot-high timber crib dam atop the first step, the lake behind it backed up nine miles. World War II halted construction of the second step, but with assistance of the federal government, construction of the second step at Ruby Creek began again in 1943. A consortium of three companies, General, Shea, and Morrison-Knudsen, worked at the site. After the war, 300 additional men were brought in to speed construction, and the third step was contracted for, using the contractors already on site. On August 18, 1949, the dam, re-named in honor of J. D. Ross, was dedicated. In 1953, when spillway gates were added, the reservoir reached its full height of 1,600 feet above sea level.

Work on the foundations for Ross Powerhouse began in 1948, and three generators were ordered from Westinghouse in 1949. Construction of the building began late in 1949, but was halted in 1951, when Seattle City Light broke the contract with the construction firm of Peter Kiewit and Sons. A new contract with Guy P. Atkinson Company was signed later in 1951, and this firm completed the building by the end of 1952. With one generator operating, it was supplying power by the end of that year. The second and third generators were installed in 1953 and 1954, and the fourth generator in 1956.

The powerhouse is 200 feet high, from sump floor to generator room ceiling. There is a 29-foot concrete bulkhead between the electrical gallery and the turbine pit walkway. The building is 288 feet long and includes an observation deck. Equipment includes four 100,000 kVA three-phase Westinghouse generators. Three of the turbines were designed and built by Baldwin Locomotive Corporation, and one by Newport News Corporation. Their efficiency varies between 92 and 94 percent, when operating near the rated load.

SEATTLE CITY LIGHT AND THE DEVELOPMENT OF MUNICIPAL-OWNED ELECTRICAL UTILITIES

The Skagit River Hydroelectric Project, initiated in 1917, is the City of Seattle's culminating symbol of the Progressive Era of American city government. Its establishment ensured the survival of a weak municipal power system engaged in direct competition with a strong investor-backed utility, after a fifteen-year struggle characterized by municipal reform themes, particularly the fight against vested interests, which swept the country. The issues surrounding its development during the 1920s and 1930s

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were representative of the national trend in utility politics, where privately-owned utilities—the “Power Trust”—attempted to discredit, thwart, and assume control of publicly-owned power companies, and public utilities and their supporters sought to extend their services.

Reform

Between 1881 and 1900, the number of electrical utility systems in the United States grew from eight to over 3,200. In the last decade of the nineteenth century, the percentage of municipally-owned systems expanded significantly to 22 percent of the total by 1900. The growth of municipally-owned utility systems was in keeping with the expansion of other City services generally placed under the aegis of Progressivism—fire protection, transportation, water, public health, and the like—necessitated by increasing urbanization in the years following the Civil War, and the dislocations associated with rapid industrialization and technologic development.

Seattle’s population almost doubled from 42,837 in 1890 to 80,670 in 1900, and increased over 100 percent in the first decade of the twentieth century, as did the populations of other West Coast cities, such as Oakland, Los Angeles, Portland (Oregon), Spokane, and Tacoma. Seattle faced the problems of urban transition typical of the time including: political corruption and accountability, limited democratic franchise, social and economic inequality, lack of a sense of community, inefficient funding, labor exploitation, control of the “natural monopolies,” and so forth. As the civic reform movement swept the country, the City adopted measures that placed it in the mainstream of Progressivism. The establishment of the City of Seattle Lighting Department—later called Seattle City Light—was one of these.

Establishment of City Light

Seattle was the site of early pioneering efforts in the use of electricity. In 1886, the Seattle Electric Light Company built the first Edison incandescent central station lighting plant on the West Coast. Three years later the Seattle Electric Railway and Power Company began operation of an electrified street railway, the fourth such system in the world. During the 1890s, the electric industry expanded. In 1899, the Boston-based electrical engineering and management firm of Stone and Webster organized several competing Seattle utilities to form the Union Electric Company, later reorganized as the Seattle Electric Company. That same year, the Snoqualmie Falls Power Company, under the direction of a civil engineer, Charles Baker, used the 268-foot falls on the Snoqualmie River east of Seattle to bring the first hydroelectric power to the state and Seattle. By 1902, through a series of political, legal, and illegal machinations, the Snoqualmie Falls Company was selling power to the Stone and Webster company, which did the retail distribution to Seattle, effectively establishing a distribution monopoly. Until its later incarnation as the Puget Sound Power and Light Company, the Seattle Electric Company was to compete with the City of Seattle in providing electric power to its citizens for the next half century. The City’s development of the Skagit River Hydroelectric Project in the ‘teens was key to the City’s young public power system’s survival and ultimate triumph.

In the 1890s, the notion of municipal ownership of a lighting plant for the city surfaced periodically, with committee reports generally stressing the economy and apparent lower prices of City-owned plants. However, the City was embarked on expansion of other services, including streets and

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sewers, and in 1890, purchase of its own water system. In searching for additional water supply sources for its new system, the City determined that the Cedar River, flowing into Lake Washington from Cedar Lake, forty miles southeast of Seattle, was the best source, and that the excess water could possibly be used to generate electricity. At the same time, private interests were attempting to raise capital to develop both the power and water resources of the river. When, in 1895, the financially-strapped City determined that, like the City of Spokane, it could issue bonds based solely on the revenue of the water system, and not on its general credit, Seattle politicians moved to place an ordinance on the December ballot allowing a 1.25 million dollar bond issue to develop the water supply.

In the ensuing campaign for passage of Ordinance 3990, the anti-corporate, anti-monopoly sentiment that characterized the Progressive theme of taming the utility came to the fore. The forces in favor of municipal ownership coalesced during this campaign, setting the tone of public debate on the “natural monopolies” in Seattle for the next 25 years. This campaign foreshadowed many of the better-known battles for municipal ownership across the country – in Cleveland, Toledo, Chicago, and San Francisco. It was also in this campaign that public ownership of a lighting system became an issue in Seattle, setting the stage for the establishment of the Lighting Department, because, although the ordinance did not provide for power development, its supporters stressed its potential should the Cedar River water supply be developed under municipal ownership.

The pro-ordinance forces, included a loose coalition of some populists, a few prominent Republican businessmen, and City bureaucrats – notably City Engineer R. H. Thomson and his assistant George Cotterill. The principal theme was summed up in a resolution presented by a city councilman, J. Eugene Jordan, that stated “... no city should be under tribute for its light, for its heat, and for its water, to any corporation.”⁵² Further, the corporation under question – the Seattle Power Company, formed to develop the Cedar River by private interests – was a “foreign corporation,” with capital and control resting, according to pro-ordinance groups, outside of Seattle. Other pro-ordinance propaganda stressed the relatively new notion of “city building,” in which development of the river would lead to the establishment of hydroelectric power owned and operated by the City, which would in turn lead to lower rates and inexpensive power that would draw industry to Seattle. The opponents of the ordinance used the City’s indebtedness as the principal reason for opposing the plan. The ordinance passed on December 10, 1895.

The following spring, a City charter amendment was submitted to the voters to streamline City government. Included in the provisions was an article forcing the city council to place before the voters a proposal for the City to construct or buy a light and power system, at the first City election following the extension of the Cedar River water system. Another provision reserved the right to the City to own its own transit system. Following a campaign that included anti-corporate and city building rhetoric similar to that of the ordinance debate, the charter amendment passed.

The years between 1896 and 1901, when the Cedar River water system was completed, were characterized by increasing antipathy towards the private electrical concerns operating – or attempting to

⁵² Seattle Post-Intelligencer, November 16, 1895.

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operate—in Seattle. It was generated: by allegations of bribery in the granting of franchises for electric power and operation of a street railway; by perceived threats to the City's water supply and potential for developing its own power system; by political machinations and legal maneuvers in battles between competing private interests; and by high rates and poor service. By 1900, the Seattle Electric Company, the consolidation of smaller private companies controlled by Stone and Webster, had become a symbol of the evils of monopoly operated by an out-of-town syndicate. In 1902, the city council placed the question of a lighting plant on the ballot, as required by the 1896 charter. The proposal was to establish a dam below Cedar Falls and build a plant that could generate electricity for both commercial and public use. The ballot favoring municipal ownership, submitted during a general city election, was supported by all leading candidates and political parties, who correctly read the tenor of public sentiment and who differed only in the scope of services to be provided by a City-owned lighting plant.⁵³ General public support of the measure was attributed to the public's view of the private systems operating in Seattle; the fact that the City was already operating its own water system and that the system had a potential for hydroelectricity; the general expansion of City services during this period; the sense of civic pride and city building—SEATTLE SPIRIT—growing in the city, and the notion of the use of the City plant as a "yardstick" to regulate the rates of the private systems. The measure carried by a seven to one margin.

The 1902 ordinance determined that the City would build a municipally-owned plant. However, the scope of the project was yet to be determined. In December 1902, a bond issue for \$250,000 was submitted to the voters, for the purpose of building a plant that would supply both business and residential consumers. Despite revisions in the operation of the private electric systems late in 1904, in an attempt to compromise support for the public plant by reducing rates, the bond issue passed.⁵⁴ At that time, it was anticipated that hydroelectric power furnished by the Cedar River development would provide the city with energy for many years into the future. In fact, by the end of the decade the city would be searching for additional power sites to offset shortages.

On October 14, 1904, the City's first generators powered by hydroelectricity were started. By the end of January 1905, the City began to light its own streets, and in September, the City began to provide power to the private sector, primarily residences. A series of bond issues increased the plant's initial 1,400-kW capacity, to a 10,400-kW output in 1910. By the end of the decade the municipally-owned system provided Seattle with one of the lowest electrical costs in the country, at \$0.085 per kilowatt-hour (kWh) as the maximum residential rate charged by the City. The private companies followed suit, averaging generally \$0.01/kWh higher, compared to the \$0.20/kWh the Seattle Electric Company had

⁵³ The Socialist Party had some reservations, considering the proposal a palliative measure that did not address deeper social ills.

⁵⁴ In 1903 the Snoqualmie Company succeeded in removing franchise restrictions that had made it fiscally impossible to compete with the Seattle Electric Company; by 1904 the Snoqualmie Company, now the Seattle-Tacoma Power Company, had terminated its wholesale contract with the Seattle Electric Company, and was advertising that it was ready to enter the market and provide competition in service and rates to the Seattle Electric Company. The latter firm reduced its rates in October of 1904, as the bond issue headed towards a vote.

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charged until 1904, and the reduction to \$0.12/kWh during the 1904 bond issue debate. The street lighting system, with a 600 percent candlepower increase between 1905 and 1910, made Seattle, according to the City, the "Best Lighted City in America."⁵⁵ In addition, the City had extended its service, competing with the private firms, to 15,000 residents and businesses by 1910, outnumbering the number of customers served by the Seattle Electric Company. The City had also extended power to suburban areas not served by the private concerns. By the end of 1910, the City was reporting surplus revenues of \$103,427.⁵⁶

The Early Years

In 1910, the citizens of Seattle approved an ordinance establishing a lighting department, whose functions had previously been lodged under the supervision of the water department. The mayor, Hiram Gill—soon to be recalled for alleged corruption—appointed Richard Arms as superintendent of the new Lighting Department. Arms' appointment provoked some unease in the community, since he had been an employee of the City's chief competitor, the Seattle Electric Company, for nine years. In October, as pressure mounted for investigation of vice and corruption within Gill's administration, one anti-administration newspaper, the *Seattle Star*, began a campaign asserting that Arms' appointment was the result of an agreement between Gill and Seattle Electric, exchanging political support for the appointment of a superintendent who would work for the Stone and Webster interests. The administration of the City's Lighting Department became one of the major issues in the recall campaign against Gill. Charges by anti-administration activists against Arms included allegations of turning down profitable business contracts that would balance the cost of extending service to sparsely populated areas producing low revenues; refusing service to two recently annexed suburbs—Ballard and Georgetown—where the Seattle Electric Company was charging higher rates because it did not compete with the City; and failing to aggressively compete for new business. Late in 1910, a city council investigating committee attributed Arms' actions to inexperience, not lack of integrity. Anti-Gill forces, however, kept the lighting department issue in front of the public throughout the recall election, held in February of 1911. George Dilling, who had campaigned heavily on the lighting department issue, replaced Gill.

When Arms resigned following the recall, Dilling appointed James Delmage ("J. D.") Ross to head the Lighting Department. Ross, a self-trained engineer, had been in charge of construction of the City's electrical facilities between 1903 and 1905, and served as an electrical engineer for the City until his appointment by Dilling in 1911. Ross had gained public attention with an article published in the *Seattle Post Intelligencer* in 1905, defending the City's new utility against attacks by adversaries of municipal ownership who claimed the new electric facility was a failure. In the article, Ross set forth a vision of a greater Seattle, noting "*What a city needs for her industrial growth is plenty of power at reasonable rates, and if this is given by a municipality, or if a municipal plant can hold prices at a reasonable figure, as it does ... then the*

⁵⁵ City of Seattle, Annual Report of the Department of Lighting, 1911, p. 66.

⁵⁶ City of Seattle, Annual Report of the Department of Lighting, 1922, p. 40.

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*object of the people in instituting such a concern is attained.*⁵⁷ His ideas of “city building” – one of the principal Progressive Era themes – were part of the agenda leading to expansion of the City’s power system under his superintendence, culminating in the development of the Skagit River Hydroelectric Project. In the 1911 Annual Report of the Lighting Department, Ross stated that one of the primary uses of the City’s utility was to establish Seattle as a manufacturing center by offering plenty of power at low rates to attract new industries. The program for city building was adopted in cities across the country between 1905-15, spurred by intra-city competition. The program was manifested in developing municipal services, such as streets, parks, sewers, schools, waterworks, and so forth, and in competition to attract industry to broaden the tax base, provide jobs, and generally contribute to the city’s growth and development. The city building theme, an integral part of the Progressive Era, was one that J. D. Ross was to refer to again and again in his efforts to develop and expand Seattle’s electric utility. The municipal program for city building picked up again after the World War I. The expansion of Seattle’s lighting department through the Skagit River Hydroelectric Project is representative of the post-World War I city building programs enacted throughout the country.

Ross was one of the city’s most enthusiastic boosters in a period characterized by widespread, optimistic expectations of rapid development of the West Coast’s principal cities, spurred by the anticipated opening of the Panama Canal. In annual reports of the Lighting Department, in advertisements in local newspapers, and in interviews, Ross continuously stressed the great future awaiting Seattle in the “new industrial era,” to be furthered by inexpensive hydroelectric power. In 1914, he wrote, *“The City plant has pioneered the way to cheap light and power and now is the time for our citizens to reap the advantage of the favorable position they hold in this new industrial era because of the public ownership of this splendid public utility.”*⁵⁸ A wide range of political and economic leaders shared Ross’ vision of Seattle’s bright industrial future, sustained by inexpensive power. The City’s competitor Puget Sound Traction, Light and Power Company (formerly Seattle Electric Company) even established a department to attract new industry in 1913. America’s entry into World War I and the subsequent stimulus to economic activity in Puget Sound, particularly in maritime-related industries, bolstered the “city building” visions, and reinforced Ross’ efforts to secure additional hydroelectric sites for the city.

Seattle’s electric rates were among the lowest in the nation in the pre-war years. The competition provided by the City plant contributed to a reduction of the maximum residential rates from \$0.20 per kWh to \$0.08 between 1900 and 1910, and they were reduced further to \$0.07 per kWh in 1911, and again to \$0.06 in 1912. As the City lowered its rates, its competitor did likewise, in a race to extend service and increase customers. In 1915 rates were lowered again to \$0.055. The leader for the rate reductions was Oliver T. Erickson, a businessman serving on the city council. Ross opposed every reduction, which he viewed to be at the expense of servicing industrial customers, as well as a subsidy by taxpayers to consumers, since street light rates were raised during this period.

⁵⁷ J. D. Ross, Seattle Post-Intelligencer, February 15, 1905.

⁵⁸ J. D. Ross, Seattle Sun, February 3, 1914.

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In the war year of 1918—when cities were directed to confine construction to war-related projects—the federal government gave the City permission to float bonds to finance the Skagit River Hydroelectric Project. The chairman of the Capital Issues Committee of the Federal Trade Commission, in granting the City permission to pursue development of the project, noted that the municipally-owned system was “... a very important factor in the fixing of rates for power in the district.”⁵⁹ The City’s system was, in effect, nationally recognized as a “yardstick” for setting electric rates.

The development and administration of the City’s electric system had a direct effect on both state and city government and politics. After Washington established a state Public Service Commission in 1911, Seattle’s municipal ownership champions, including Ross, Oliver Erickson, civil engineer and politician George Cotterill, and University of Washington professor J. Allen Smith, spent years battling legislative attempts, prompted by Puget Sound Power, to empower the Commission to fix rates for all utilities. Their successful campaigns against extension of the Commission’s power were centered on two typical Progressive Era issues—home rule and municipal ownership. Municipal ownership advocates believed the Commission was under the control of private companies, who influenced appointments.

The Lighting Department also had a significant impact on local politics, as noted earlier in relation to the recall of Mayor Gill. Ross, who rose to prominence as a result of a recall in part due to the battle over municipal ownership, was to become the central figure in the city’s next mayoral recall election, twenty years later, while the Skagit project was undergoing expansion. Between 1910 and 1918, the Lighting Department was a frequent front-page and editorial topic in Seattle’s newspapers—the forum for debates regarding the management and expansion of the City system waged between municipal ownership forces and those who sought, for a variety of reasons, to limit the development of the City’s system. Much of the debate focused on increasing the capacity of the City’s electrical system, as residential and industrial demands continued to rise.

Even before 1910, it was apparent that the Cedar River dam, a rock-filled timber crib weir that had always been viewed as a temporary dam, was not sufficiently exploiting the potential power available from the river. In 1908 the height of the weir was raised, and the City installed two 4,000 kW generators to boost the power to 10,400 kW. Recognizing the need for a permanent structure, plans for a plant that would provide enough water storage to produce 45,000 kW were developed, and in 1910 Seattle voters approved a 1.4 million dollar bond issue for construction of a masonry dam downstream from the crib dam. That same year, however, a board of geologists asked to investigate the site’s feasibility noted that the presence of glacial moraine could make the site unsuitable for a masonry dam, and their report recommended extensive preliminary testing.

While preliminary work began on the dam, the city council appointed a special investigating committee of engineers in the spring of 1912 to evaluate the site, and this committee recommended that the crib dam be repaired to last several more years while investigations on the suitability of the site were conducted. A Board of Public Works committee, consisting of Ross; A. H. Dimock, the city engineer, and

⁵⁹ C.E. Hamlin memorandum, August, 1918, in Federal Trade Commission, Capital Issues Committee papers, University of Washington Library.

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A. L. Valentine, the superintendent of Public Utilities, overrode the engineer's report, minimizing the perceived seepage problem raised by both the geologists and the engineers, and stressing the loss in revenues and prestige to the City plant if work on the new dam were halted. Their report and further publicity in the local papers intimated that opponents of municipal ownership – particularly the Seattle Electric Company – were seeking to limit the City system's expansion. Throughout 1912, the debate was waged in public, with additional issues, such as allegations of inefficiency and excessive costs, fueling opponent's arguments. Work on the dam proceeded and was completed in November of 1914.

By the spring of 1915, it was apparent that the reservoir was leaking. Seepage increased the size of Rattlesnake Lake below the dam, flooding the town of Moncton. While various efforts to seal it were tried, the City, now growing short of electricity, added an additional steam generator as a back-up system to its 1914 Lake Union steam plant, and erected a small hydroelectric plant using water from the Volunteer Park reservoir. In 1918, the City allowed water to accumulate behind the repaired plant, resulting in a wash out of the north bank and a flood that washed down the Boxley Creek valley, destroying railroad tracks, a small town, and sawmills.

The "Cedar Dam Blunder" provided fodder for anti-municipal ownership propaganda. The "Boxley Blowout" politically jeopardized the principal supporters of public ownership, and affected elections in the city in the mid-teens. Oliver Erickson, inextricably linked with the Cedar River fiasco, was defeated in his bid for mayor in 1916 by Hiram Gill, who had been recalled from that post only five years earlier. Municipal ownership proponents were referred to in the conservative press as socialists and cranks, and Erickson as a "slobbering demagogue." Ross, too, was subjected to bitter attacks. Ironically, it was the lack of sufficient electric power and the reliance on precious fuels at the steam plant, due to the Cedar River fiasco, which helped sway the federal government during World War I to approve the City's plans to develop the Skagit River.

Expansion

Near the end of his first year as superintendent, J. D. Ross began searching for a second hydroelectric site to ensure survival of the municipal system. Although the Cedar River dam was scheduled for enlargement, and the auxiliary steam plant on Lake Union was soon to be built, Ross, with his city building vision, was anticipating great development in Seattle, and he wanted the City's system positioned to help create it. In 1913 he reported: *"The city plant has passed the experimental stage, and has proved its efficiency as a rate maker in competition with a powerful private corporation. Its field should ... broaden into that of a city builder, winning and holding commercial supremacy of the Pacific Coast and Seattle."*⁶⁰ But by the end of 1916, the City was relying on the expensive auxiliary power supplied by the steam plant, due to the Cedar River "blunder," and the municipal system was unable to supply its industrial customers with the low rates previously agreed upon. The principal issue became one of supplying enough current to stay ahead of demand, and to stay in competition with Puget Sound Traction Light and Power Company (Seattle Electric Company), which had sufficient power.

⁶⁰ Municipal League News, January 18, 1913.

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Throughout the 'teens, Ross endeavored to secure and develop an additional hydroelectric site for the city. In 1912, voters approved a bond issue for the purchase of one of two sites: the Hebb site on the White River, which would divert the river's waters via conduit to a reservoir and power site near Buckley, Washington; and Lake Cushman on the Skokomish River, which would divert water to a power house site on the Hood Canal. When Cushman proved the more attractive site, and it was determined that condemnation was the best way to secure it, City Light instigated proceedings for condemnation and the plan was placed on the ballot in March of 1914. The proposal failed, resulting in a serious setback for Ross and the Seattle Lighting Department, facing deepening power shortages, and a victory for anti-municipal ownership forces, which had campaigned heavily against it. With the Cedar River Dam crisis in 1915 and the ballot defeat for condemnation of the Cushman site, it took the city council until December 1916 to authorize three million dollars in bonds to construct a new hydroelectric facility. Bids were called for in March of 1917, due for opening in July. In those few months the Puget Sound Traction, Light and Power Company had purchased the two most promising sites the City had been considering, Hebb and Sunset Falls, and had tied up the possibility of pursuing condemnation of the Cushman site with court injunctions.

In August of 1917, Ross began to seriously lobby the federal government to release a site on the Skagit River that the City had studied in 1915 as a possible hydroelectric site, but had not pursued because permits for its development had already been issued to the Skagit Power Company, which had since been absorbed by the Puget Sound Traction, Light and Power Company. Using the wartime demands of Seattle's shipyards and other war-related industries as a wedge, and noting that the City's municipal electric system was approaching its maximum production and was relying heavily on precious fuels, Ross and other City representatives were able to secure permission to apply for a permit on the Skagit, and in 1918, the City was issued a permit, superseding Puget Sound Traction, Light and Power Company permit, to build a hydroelectric facility in the Skagit Gorge.

By securing the Skagit River, the City ensured the survival of its municipal plant. The plant had been established to serve as a rate regulator, a "yardstick" to control the perceived rapaciousness of the private utilities. It had been successful in fulfilling that role, but its ability to maintain it depended on securing additional power sources. With the development of the Skagit River, Seattle—and eventually the entire region—became the nation's yardstick against which power rates were measured.

Public Versus Private Power: The 1920s and 1930s

In the months it took to secure all the federal approvals necessary to build on the Skagit, the Lighting Department had the support of the City's leading politicians. Both candidates for mayor in 1918 supported the project, although some members of the city council opposed pursuing development beyond the first power plant. The permit was delayed by the Capital Issues Committee of the Federal Trade Commission, which had jurisdiction over the ability of municipalities to issue bonds during the war. Its subcommittee, which was considering the project, received letters from the Puget Sound Traction, Light and Power Company opposing the issuance of the bonds, and then later proposing that the City's system be interconnected with the company, if the City were short of power. The subcommittee adopted the proposal, and through the intervention of Washington's senator Wesley Jones, the Capital Issues

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Committee reconsidered the Skagit bond approval. Based on projected power shortages by both the City and the company, the City received the bond issuance approval it needed.

This political maneuvering by the City and the Puget Sound Traction, Light and Power Company was one aspect of the private versus public power issue that characterized the debate on the operation of utilities in this country in the 1920s. Throughout the decade, electrical utilities were consolidated into large concerns throughout the country. The public ownership took a back seat to the spirit of private enterprise. To counter this, the Super Power League was organized in Washington, D.C., by Senator George Norris of Nebraska, and Samuel Gompers, president of the American Federation of Labor (AFL), with the goal of public ownership of all electric utilities. Ross, Oliver Erickson, and state representative Homer Bone headed the League's organization in Washington State. Ross and Bone favored a link between the municipally-owned Seattle and Tacoma plants and rural power districts, which would distribute the current. In 1923, Seattle and Tacoma established a tie line to interconnect their two systems, allowing an exchange of 15,000 kW. The local league sought to enable cities to sell power beyond the city limits, and the Bone bill, as it came to be known, was drawn up to allow this. During this same period, the private companies introduced a bill to place municipal utilities under the jurisdiction of the state's public utilities commission. The effort to place the Bone bill on the ballot was resisted by the private companies – to the extent of hiring people to collect signatures in favor of the ballot, and then destroying them.⁶¹ When the bill was finally placed on the ballot, the private companies propagandized heavily against it throughout the state, beating the drums of private enterprise and questioning the benefits that would supposedly accrue to farmers and other rural residents if the bill passed. It failed statewide in the November 1924 election, but passed in both Seattle and Tacoma.

Following the defeat of the Bone bill, Ross began to counsel the owners of small municipal plants in the state relating to their struggles with private companies, and tried to assist other small towns in establishing their own plants, looking forward to establishing a tie-line linking all the public plants in the state. Small plants throughout the state had been established in the first decade of the twentieth century, when no private firm would undertake the costs. In the 1920s, large private companies were gobbling up the small municipal plants, many of which could not meet the demands for electric power. Ross hoped to forestall these takeovers until a tie-line could be established between municipal plants. Tie-lines were indeed ultimately established between many small towns, but they were between and within private utilities, as one small town after another opted to purchase power from the large private companies, which initially offered substantially reduced rates.

During the 1920s, Seattle was one of a small number of cities that upheld the role of municipal ownership in a period generally dominated by the enlargement and expansion of private utility firms. The Skagit River Hydroelectric Project had ensured the municipal plant's survival, where many other, albeit smaller, towns and cities succumbed.

Towards the end of the decade, the Federal Trade Commission began an investigation of power company activities throughout the nation. The findings revealed a story of politician chicanery, bribery,

⁶¹ William Sparks, J. D. Ross and Seattle City Light, Master of Arts Thesis (Seattle: University of Washington), p. 89.

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and illegal financial deals. In Washington State, the FTC revealed that the Voter's Information League of Seattle was financed by Puget Sound Power and Light Company (formerly Puget Sound Traction, Light and Power), and the principal purpose of this purportedly non-partisan organization was to discredit the Lighting Department. Ross countered such attacks in 1926 by establishing The Friends of City Light, a loose coalition of municipal ownership advocates, and later by the creating the Citizen's Municipal Utilities Protective League. In the propaganda released by these groups, Puget Sound Power and Light was referred to as THE POWER TRUST. Ross, in advertisements and literature released by PSPL, was "full of hokum," and a zealot. "Seattle," Washington's senator C. C. Dill noted, "... is a hotbed of the national fight. The power interests will stop at nothing in their dying struggle to gain control of the great natural resources."⁶²

During this period, the organizations that had initially supported municipal ownership – the Chamber of Commerce and the Municipal League – shifted allegiance. Following the general trends in the country, and reacting against such proposals as the Bone bill, these two business-based organizations withdrew support from the Lighting Department.

In 1930, Ross, long dissatisfied with having to work with the City Engineer's Office, asked the city council to place a charter amendment measure on the ballot that would allow the Lighting Department to establish its own engineering department, answerable to the superintendent. With the support of a report by an independent engineering firm hired by the City to assess the Lighting Department, Ross was able to persuade the council to place the measure on the ballot in spring 1931. Ross's opponents attacked the plan as a self-serving power ploy, and expressed fears and accusations regarding the measure's ability to give Ross the power to distribute patronage and create a political machine. The amendment was opposed by the City's mayor, Frank Edwards, who saw it as a costly addition to the City payroll. There was enough disincentive – and no perceived measurable incentive – in the issue to predict a defeat at the polls.

Then, on the eve of the election, Mayor Edwards dictated a letter of dismissal of Ross, charging him with inefficiency. The letter was leaked to Ross that evening – it was not to be sent until the day of the election, after the newspapers had been published – and in a special edition of the liberal *Seattle Star*, which had supported Ross throughout his political career, the news of his firing was made public. With news of Ross' dismissal, the voters on their way to the ballot box passed the charter amendment that had seemed only the day before to be doomed to defeat. In addition, supporters of Ross running for city council were elected by large margins. Even before the results were in, the Citizen's Municipal Utilities Protective League began planning for Edwards' recall.

The recall issue was front-page news until the election was held in July. The League, along with its supporters, was characterized as a stooge for the private utility companies and as a representative of the privileged elite Edwards. The grounds for the recall were based on the mayor's firing of Ross for false reasons. While the recall campaign continued, Ross left for New York in the capacity of consulting engineer on the St. Lawrence hydroelectric project, laying the foundations for future appointments at the

⁶² Seattle Post Intelligencer, 15 April 1931.

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national level when he and then-Governor of New York, Franklin Roosevelt, became friends. The recall drew support from labor, from the county Democratic organization, the first time it had been drawn into a conflict on the public power, and from the most of Seattle's daily newspapers. On July 13, 1931, Edwards was recalled from office by an overwhelming majority of the voters. When City Councilman Robert Harlin was elected to serve as interim mayor the following day, he immediately reappointed Ross as superintendent of the Lighting Department.

The recall battle had become inextricably associated with the issue of private power – the “Power Trust” – and municipal ownership. In the wake of the successful recall, a number of principal supporters of public ownership came into leadership positions in Seattle politics. *“It is City Light's victory,”* commented Superintendent Ross. *“The success of the recall serves notice on friends and foes of public ownership that Seattle is definitely committed to protection and progress for its city-owned utility.”*⁶³

The River of a Million Horsepower

Even before the City of Seattle was granted permission to apply for hydroelectric development on the Skagit, J. D. Ross had considered the site at Ruby Creek to be the key to development, because the gorge widened there to form a natural large storage reservoir. The first plan for Skagit development proposed by Ross included one dam, located at Ruby Creek, and one powerhouse ten miles down river, connected by a long 20-by-20-foot power tunnel. However, as preliminary survey work proceeded on the Skagit in 1917, it became clear that the logistics involved in building a dam miles upriver from even the future site of Newhalem, still only accessible by means of a pack-horse trail, would preclude the Ruby (later renamed Ross Dam) site's early development. Ross adjusted his proposal to a three-stage development of the Skagit: a dam and powerhouse would first be built below Gorge Creek, followed by the second dam, at the Ruby (later renamed Ross Dam) site, which would create the large storage reservoir, and then a third powerhouse downstream, somewhere in Diablo Canyon. After the Gorge plant was completed in 1924, transportation to the Ruby (later renamed Ross Dam) site was still a major problem, and the Diablo Canyon site, only six miles upriver from Gorge, was selected as the second stage of development. A dam built there, it was reasoned, would provide means of water transportation to the Ruby (later renamed Ross Dam) site, rather than the much more costly measure of building a railroad through the precipitous canyon above Reflector Bar. Thus, the sequence of construction of the plants started with Gorge, the furthest downstream, proceeding to the Diablo site, and finally to Ruby (later renamed Ross Dam). It was not until Gorge High Dam was completed in 1961 that the “River of a Million Horsepower” reached its full potential, as envisioned by Ross forty years before.

As early as 1908, with completion of the Cedar River project, city power proponents realized the plant would soon be loaded to its maximum capacity, and that another source of power would be necessary if the City were to continue to compete with the private power company. In the years following, up to 1917, the Lighting Department scrambled to develop sources within its control, including: the establishment of the Lake Union steam plant in 1914; the establishment of the small

⁶³ Robert L. Hill, “Power and Politics in Seattle,” *The Nation* (March 2, 1932), p. 253.

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hydroelectric facility at the Volunteer Park Reservoir; and the hasty decision to build the new Cedar River dam, which was completed in 1914. The City began simultaneously to investigate the possibilities of more remote hydroelectric sites throughout the state. In March of 1912, voters approved the purchase of the Hebb site on the White River and the Lake Cushman site on the Skokomish. Investigations in the following months showed Cushman to be the preferable site, and that acquisition by condemnation was more feasible than purchase. The condemnation plan, however, failed in a March 1914 vote.

The City, with Ross pushing for the site, continued to survey Cushman as well as to evaluate additional hydroelectric sites, including: Sunset Falls on the Skykomish River; Packwood Lake, south of Mount Rainier; the Stillaguamish River; the Elwha River, with an extant hydroelectric plant operated by the Olympic Power Company; and several other sites. These latter included the Skagit River, on which the Skagit Power Company, controlled by Stone and Webster, had filed a claim. In 1915, Seattle City Light exchanged letters with the United States Forest Service, which retained jurisdiction over the site, in an attempt to determine if the site were available, since the Skagit Power Company had made no move to develop it. With additional information available on other sites, Ross dropped the idea of pursuing the Skagit site in December of 1915.

With the 1914 ballot defeat, and struggling with the fallout from the Cedar River Dam failure, it was not until December 1916 that the city council authorized issuance of three million dollars in bonds to construct a hydroelectric facility. In March of 1917 bids were called for the project, due on July 20, 1917. Within weeks of opening the bids for a hydroelectric facility on one of the principal sites, municipal ownership proponents learned, to their dismay, that the Puget Sound Traction, Light and Power Company had purchased both the Hebb site and the Sunset Falls site in June of 1917, effectively blocking the City's plans for the two most promising sites.⁶⁴ Almost simultaneously, both Seattle and the City of Tacoma were served with injunctions, preventing them from acquiring or developing the Cushman site, in large part due to the private company's squatter's claim and the legalities of the condemnation proceedings. The bid openings were postponed.

In early August of 1917, the City posted a notice of filing at the Skagit site and on August 2, 1917, Ross wired the State Hydraulic Engineer, Marvin Chase, asking for a state permit to "... appropriate the waters of the Skagit River to the extent of fifty thousand cubic feet per second at a point just below the Thunder Creek trail bridge ..."⁶⁵. Between August and December, Ross and other City officials lobbied officials in the US Forest Service and the U. S. Department of Agriculture to release the Skagit site, since Puget Sound Traction, Light and Power Company had failed to develop it over the years it had held a permit to do so (since 1913), and had since purchased other sites (i.e., Hebb and Sunset Falls) for development. In September, Ross and the City's corporate council, Hugh Caldwell, went to Washington, D.C., to meet with the Secretary of Agriculture regarding acquisition of the Skagit site. One of the persuading strategies was the fact that the City was mainly relying on the Lake Union Steam Plant for power, and was rapidly

⁶⁴ Willis T. Batcheller, "The Skagit River Power Project" (Seattle: Seattle Lighting Department, 1918), p. 41, Box 13, Willis T. Batcheller Papers, Accession 195, University of Washington Libraries.

⁶⁵ Telegram from J. D. Ross to State Hydraulic Engineer, Olympia, Washington, 2 August, 1917. Folder 8-25, Seattle Lighting Department 33-1.

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approaching its power limits, and that Ross was funneling as much power as possible into the city's shipyards, operating on double shifts due to the war effort. On December 25, 1917, the City received permission to apply for a permit, and in January, Caldwell returned from Washington with a letter from the Secretary authorizing the City to call for bids for construction of a hydroelectric plant and granting a preliminary permit for the site.

Although the City called for bids in January, and opened them in March 1918, it was determined that detailed surveys and drillings would have to be performed before an adequate design could be prepared, and these first bids were rejected. The Diamond Drilling Company, owned and operated by the Lynch Brothers, was hired to drill test holes in the area of Gorge Creek, which had been identified as the location of the first dam, when it became clear the Ruby (later renamed Ross Dam) site was simply too remote. The City also had survey crews in the field, and had sent the city hydrographer to the Skagit to identify a location for a temporary power station to provide construction electricity. Ultimately, Newhalem Creek was selected, and the Newhalem plant was built. The plan in 1918 was to build a 100-foot high masonry gravity dam at the Gorge site, with an unlined 10,000-foot-long tunnel, terminating in a surge chamber, with penstocks leading to a powerhouse containing six generators. The second step was to build a dam at Ruby Creek, necessary to maximize the capacity of the Gorge plant, which at that time was also envisioned as a gravity dam. The final development would be the Diablo plant. The cost estimates prepared in 1918 were based on the prices of contracts recently let by New York City for the Shandaken Tunnel, by San Francisco for the Hetch Hetchy project, and by Los Angeles for the Los Angeles Aqueduct.⁶⁶ After several months of local and national political machinations, the City on August 2, 1918, was granted permission by the Capital Issues Committee of the Federal Trade Commission to sell utility bonds to finance the Skagit Project. The decision was based on reports by three different investigators, all of whom assumed the war could last until 1920, and that the city would experience a shortage of power by the end of the year.

In the summer of 1919 drilling crews were able to locate bedrock that would support dam construction in both the Gorge and Ruby (later renamed Ross Dam) sites, and the Seattle City Council issued an ordinance to allow construction. Along with the ordinance, the City passed a resolution to hire the best available engineer in the country to supervise construction. Carl F. Uhden, a former employee of the Washington Water Power Company, was hired for the job, and he in turn hired A. P. Davis, chief engineer of the Reclamation Service, as an advisor for the project. The development of the Skagit was underway.

Newhalem Creek Power Plant

The history of the physical development of the Newhalem Creek Hydroelectric Project, the first Seattle City Light dam to be constructed in the Skagit River area, was to provide temporary power for construction of the first dam and City Camp (Newhalem). Although rebuilt after a fire in 1966, the powerhouse still uses the original machinery, and the original penstock and power tunnel were retained

⁶⁶ Batcheller, "The Skagit River Power Project," p. 41

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when the dam was rebuilt. Since these elements and features are in place and functioning today, the plant qualifies as a contributing site. Its significance lies in the role it played in the development of the first dam on the Skagit River—Gorge High Dam—and in its development of the company town of Newhalem. Further, the plant has continued to play an important part in the operation of the City of Seattle's principal hydroelectric facility, providing an additional source of power to Newhalem, and serving as station service power for Gorge Powerhouse, providing backup for the larger plant. Until it was automated in the early 1970s—the first plant on the Skagit to undergo automation—it was a training aid for all new operators who came to the Skagit. It is the oldest operating power plant in the Skagit area.

Gorge Power Plant

The Gorge Power Plant is the first of the three plants built on the Skagit River by the City of Seattle. The erection of the Gorge plant ensured the survival of the municipal utility, which in 1918 had almost reached maximum capacity, and was for a time threatened by the specter of joint operation with the private company, Puget Sound Traction, Light and Power Company, under wartime conditions laid out by the federal government. Its plan of development—to be on-line within eighteen months of the start of construction, as projected repeatedly by J. D. Ross—secured the necessary federal approvals to initiate construction and thereafter to develop the subsequent phases of the project, including the additional two power plants, despite many local political battles. That construction took over twice as long as predicted by Ross is in part due to the nature of one of its then unique features: the 11,000 foot-long, horseshoe-shaped power tunnel and its associated surge tank, which is significant for being the first of its type, and necessitated the development of a special tool that used a nozzle to shoot mixed concrete into the area between the forms and the rock walls of the tunnel.

The plant itself was typical of hydroelectric technology of the 1920s, although the realization of the originally planned high dam took over forty years. The machinery used in the plant, S. Morgan Smith Company vertical Francis turbines and Westinghouse generators, is representative of the type used in other plants dating from this period of hydroelectric development. Today these generators, rewound, are still in use, driven by the water from the Gorge High Dam. The high dam also employed new engineering techniques, particularly an engineering procedure used to freeze water that had percolated through gravel under the existing diversion dam to de-water the channel for construction.

The plant is significant for its role in the development of a major regional power supply system. Its construction ensured the survival of Seattle City Light, a municipal utility engaged in competition with the private company, Puget Sound Traction, Light and Power Company. The powerhouse (Resource #27) and High Dam (Resource #32) have integrity of design, materials, workmanship, setting, location, and association.

Diablo Power Plant

By 1924, Ross had come to the conclusion that the development of the site at Ruby Creek—with its great potential for water storage and high head—would have to be the last phase of development. Despite the completion of the Gorge plant, power demand continued to outstrip output by the City's facilities. In 1926, an upsurge in demand required the City to connect a small hydroelectric unit to the

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overflow of one of the City's reservoirs. The Diablo plant was the next logical, practical, accessible and least expensive step in the Skagit Project.

In explaining the final development plan, including Gorge, Diablo with its own powerhouse, and Ruby (later renamed Ross Dam), Ross declared:

Our whole City Light System must double in a little over three years and its activities acquired over twenty years must be doubled in the next three and a half years ... City Light has passed its small town stage. Its future construction must be of the most enduring and dependable kind. Large units are cheaper per kilowatt to operate. Interruptions to service through inferior plants or through shortage of power are fatal to our success. All this points to Skagit as the dependable source ... This plan lends itself well to construction and financing steadily over the time that the rising demand for power will allow for completion.⁶⁷

Despite some opposition to Diablo on the city council, led by Oliver T. Erickson, who believed the City should erect a concrete buttress dam at the Hanging Rock location to replace the Gorge crib dam, and then cease development of the Skagit, construction on an extension of the railroad to Diablo began in 1926.

In the spring of 1927, the design contract for the dam was let to The Constant Angle Arch Dam Company, a consulting firm whose principal was Lars Jorgensen. In September of 1927, the construction contract was let to Winston Brothers of Minneapolis. Educated in engineering in Germany, Jorgensen had worked for General Electric in Schenectady, Edison Electric in Los Angeles, Pacific Gas and Electric in San Francisco, and the consulting firm of F. G. Baum. He formed his own firm in 1914. He patented the concept of the constant-angle arch dam, a thin arch dam based on a conical geometry, rather than a cylindrical geometry. The Salmon Creek Dam in Alaska in 1914, designed by Jorgensen, was the first constant-angle arch dam built in the world, and is considered one of the most important early twentieth-century dams.

The constant-angle arch was eminently suitable for Diablo Canyon, which rose to 200 feet above the river, for three reasons. It used significantly less material than an arch dam, and even less than the massive gravity dams. Its structure was especially applicable to narrow canyons. Using less material would result in savings in the cost of materials and reduction in other direct costs arising from the expense of transportation into remote sites.

While the Diablo Dam (Resource #42) is not one of the first constant-angle arch dams built, it is representative of the structural dams erected in the first 30 years of the twentieth-century, and particularly of concrete arch dams that, like Diablo, were frequently located in canyons where rock walls could resist the lateral thrust of the arches. At the time of its construction, it was the tallest thin arch dam in the world at 389 feet. The roadbed over the dam on raised arches is unique, clearly an aesthetic design decision rather than a structural one, and the ornamental light standards that line the roadway reinforce the attention paid to visual details, apparent throughout the plant.

⁶⁷ Report of the Superintendent of Lighting, 31 October 1925, as cited in Annual Report of the Seattle Lighting Department (Seattle: 1927), p. 35.

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The construction of the dam presented significant engineering challenges. One of these was access to the site. The Skagit River Railroad was extended up the canyon from Newhalem, replacing the narrow mule trail, a construction process that in itself was no small feat, with blasting of the steep canyon walls required to create a standard-gauge rail bed. The rail line was electrified to accommodate powerful electric-powered locomotives able to manage the steep grades of the canyon. Even so, it took both a steam and electrified locomotive to haul some heavily-laden cars to Reflector Bar. The rail line terminated at Reflector Bar, where a funicular railway was built to transport the cars up a 68 percent grade for almost 600 feet, to connect with additional rail tracks laid at the top of the mountain. Winston Brothers erected a 1,985-foot-high cableway of 2.25-inch wire rope, spanning the width of the canyon. The cableway was anchored in 20-ton concrete cylinders, reinforced with 60-pound rails embedded in the mountain walls. It was used to transport the pipes, gates, and other dam elements to their location in the dam and was capable of carrying 15 tons. At the time, the cableway was one of the longest ever used with such a large capacity.⁶⁸ Other unique or impressive construction techniques included a series of belt conveyors and hoist towers to move concrete from the mixing plant at the upper level near the dam to the dam site, and an elephant trunk at the end of the conveyor to allow continuous delivery directly to its intended location on the dam, minimizing hand labor. On August 27, 1930, the dam was complete and a dedication ceremony was held.

The penstocks, surge tank, and 1,990-foot-long power tunnel, as well as the powerhouse foundations, had been built and financed during the dam construction. Also, the generators and other powerhouse equipment had been ordered and stored in sheds on Reflector Bar. However, in the wake of the 1929 stock market crash, the bond market fell, and construction on the powerhouse was stalled until 1934, when the City was able to find purchasers for 4.9 million dollars in bonds. The Moderne style powerhouse (Resource #35) is representative of the type of architecture applied to industrial buildings of this period. However, its interior features are unusual, if not unique, including the terrazzo floors, the tiled fish pond, the wrought-iron staircase with its curved aluminum handrail, the elevated generators, all installed in anticipation of public viewing. The powerhouse was a showcase for the City's hydroelectric project, and a promotional tool for future project development.

When delivered, the equipment used in the powerhouse was state of the art. The generators were the highest rated in the country for the time, with ratings of 66,700 kVA, and the crane was reputed to be the largest in the world. The powerhouse was finally completed in September of 1936.

Completion of the Diablo Dam altered the flow of the Skagit, and guaranteed an increased output of power at the Gorge Powerhouse, adding approximately 33,000 kW of capacity to the Gorge plant. At this stage of the Skagit Project development, the City had increased its generation of power from 59 million kilowatts in 1917, to over 384 kW. Seattle City Light had become a major public utility.⁶⁹

The Diablo Power Plant is a historically significant example of hydroelectric technology of the 1930s. While none of the technology was new, some elements were the largest or tallest ever built to that

⁶⁸ Diablo: Highest in the World (Seattle: W.R. Harrison Company, 1929), n. p.

⁶⁹ Annual Report of the Seattle Lighting Department (Seattle: 1931), p. 51.

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time. The construction of the dam rectified irregular water flow to Gorge Powerhouse, and the entire plant contributed to the growth of power output by the City, which enabled it to stay in competition with the private company operating in Seattle. A number of unique and innovative construction techniques were used to build the dam. Both the dam and the powerhouse, with the attention to architectural and engineering details, served as a showcase for hydroelectric technology, for the Skagit Project, and for promotion of further development on the river. The dam and funicular railway were highlights of the Skagit Tours. The structure has integrity of design, workmanship, setting, location, feeling, and association.

Ross Power Plant

Ross Dam is the third and largest dam on the Skagit River, and its completion in 1949 was the fulfillment of the original design intention of the Skagit River Hydroelectric Project.

Construction at Diablo was delayed during the Depression of the 1930s, but as early as 1933, when Ross was searching for government funding to help finish the project, he also asked for money to begin work at Ruby Creek. Those funds were never forthcoming, but in November of 1936, Seattle City Light did receive three million dollars from the Public Works Administration for clearing timber from Ruby Basin and for building a new transmission line to Seattle. In December, with the commitment of the federal grant, Seattle City Light was also able to sell over four million dollars in bonds to begin the Ruby Creek project (later renamed Ross Dam). Jorgensen's firm, the Constant Angle Arch Dam Company, which had designed Diablo Dam, had already done some preliminary design work for the project. Additional designs were provided by the consulting firm of J. L. Savage and by the Seattle City Light staff. In August of 1937, General-Shea-Columbia Company, a consortium of contracting firms, was awarded the contract to build the first step of the planned three-step construction of the dam. There were some delays associated with construction of the first step, as the level of bedrock was approximately forty feet lower than anticipated. This slowed excavation, and in 1939, the contractor was hit with a strike, which delayed construction by several months. The first step, 300 feet high, was completed in January of 1940. By May of that year the new lake behind the reservoir was nine miles long.

Because the dam was slated for erection in stages, the design called for construction of vertical and horizontal keys on the downstream face of the dam, giving the structure its "waffle face," and allowing for an interlocking system as the different stages were built.⁷⁰ During its construction, approximately 350 million board feet of merchantable timber was removed from the basin behind the dam. By 1951, the timber was being towed to a loading dock upstream, and loaded onto trucks that hauled them through Canada to the Fraser River, where they were dumped and floated in rafts to Puget Sound. Construction materials for the dam were transported by barge up Diablo Lake. When the third step of the dam was

⁷⁰ Glen Smith, "General-Shea-Columbia Work on Ruby Dam Progresses," *Pacific Road Builder and Engineering Review* (June 1938): p. 20.

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finished in 1949, over 20,554 railroad gondolas full of gravel and 2,558 car-loads of cement had been moved by water to the dam site.⁷¹

The second step raised the dam an additional 195 feet. Work began in 1943, funded in part by a grant from the federal government. The contract, with General-Shea and Morrison-Knudsen companies, also included the construction of the 1,900-foot-long power tunnels. After World War II, 300 additional workers joined the construction force, and the work was completed in 1946. With the work force in place on the Skagit, the third step, raising the dam to a total height of 540 feet, was begun that same year and completed in 1949. The reservoir reached its full height of 1,600 feet above sea level in 1953, when the spillway gates were added. The dam was re-named Ross Dam, in honor of J. D. Ross, who had died in March of 1939. The plan to add an additional 121 feet to the dam, as a fourth and final stage, was abandoned in the 1980s, after intense opposition from various public interest groups and the Canadian government.

Construction of the Ross Powerhouse began in 1948, and was completed in 1952. It reached its full operational capacity in 1956, when the fourth generator was installed.

J. D. Ross and others were attracted to the Skagit by the enormous potential they could see in Ruby Canyon. The possibilities for a million-horsepower project were evident in the steep canyon walls, with the potential for impounding over a million acre feet (0.295928 cubic miles) of water. When closer, smaller sites that the City had investigated in the 'teens became unavailable, the Skagit's potential was appealing. Lacking the funds and means to develop that high and remote site, Ross opted for developing the Gorge site first, but it was Ruby (later renamed Ross Dam) to which he looked over the years to meet the needs of a rapidly growing urban center. Ross Dam was the key to developing the "River of a Million Horsepower," a slogan which appeared in almost all City Light literature.

Showcase

The entire Skagit Project was on display to the public, almost from its inception. J. D. Ross would frequently take politicians, engineers, club presidents, and other "opinion makers" up the Skagit canyon to sell its potential. In 1924, the first publicized tours were held on the Skagit, consisting of one-day excursions. By 1938, the tours, now two-day events complete with meals and transportation to and from Rockport, served thousands of people every summer. However, it was the power plants Ross wanted to sell, and it was the plants that served as the backbone of the tours. The trip up the Incline in an open-air gondola; the evening slide shows on the project, frequently conducted by J. D. Ross himself; the visit to the attractive and impressive Diablo Powerhouse and Dam; the boat tour up Diablo Lake accompanied by amplified music from the lake's edge to view the Ruby Dam (later renamed Ross Dam) site—all were highlights of the tours, introducing or confirming the belief in technology as the solution to the problems of humankind.

A typical two-day tour in the 1930s would include an afternoon arrival at Newhalem via Seattle City Light's private railroad; lodging assignment; dinner at the Commissary ("Gorge Inn"); an evening

⁷¹ Paul Pitzer, *Building the Skagit* (Portland, Oregon: The Gallery Press, 1978), p. 88.

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walk across the pedestrian suspension bridge to the Newhalem Powerhouse; a slide show (later a color film) of the project in the Newhalem Recreation Hall; and an evening walk in Ladder Creek Falls Garden. The second day included breakfast; a six-mile train ride to Diablo; a tour of the Diablo Powerhouse, and, in later years, a visit to the zoo; the trip up the Incline to view the dam; a boat ride on Diablo Lake to the Ruby (later renamed Ross Dam) site, and later to see the progress on the dam there; lunch back in Newhalem; a daylight visit to the rock gardens at Ladder Creek Falls; and a visit to Gorge Powerhouse; with a departure in mid-afternoon. Frequently, organized groups would take up part of the tours, or be given special tours. These ranged from the Seattle Plumbing Supply Salesmen's Association, to the Public Ownership League of America, which visited Diablo Dam in 1928.

The tours not only attracted support of Seattle and Washington State residents, but also made the project nationally famous. They served as a perfect vehicle for attracting national attention to the plants. A writer for *American City* noted:

The Skagit, owned by the city of Seattle, Wash., might have been just another big hydroelectric development. Instead, it has been so dramatized and socialized that it has become a major tourist attraction and a famed community adventure. The project alone, with its ultimate installed capacity of 1,120,000 horsepower, in its wild mountain setting in the high Cascades 100 and more miles north of Seattle, is well worth a visit. But it has been so embellished ... that it has taken on unreal, thrilling, beauty.⁷²

A special correspondent for the *Engineering News-Record* stated, in 1935, "... Seattle is doing a very excellent job of getting its citizens to believe in municipal ownership of power ... In all this (the tours) the citizen of Seattle is made to feel personal ownership, and he has pointed out to him the economies of municipal management."⁷³ Collier's, Harper's, and Public Ownership were other national magazines and journals that featured stories on the Skagit Project in the 1920s and 1930s, all mentioning the Skagit Tours.⁷⁴

Thus, while the technology of the hydroelectric plants, in general, may have been typical of the times in which they were built, and perhaps not as significant for engineering breakthroughs as some other plants built during that period, they achieved popular recognition on a national scale, through the implementation of the Skagit Tours.

The tours recommenced after an eight-year hiatus after World War II. They continue today, in a more abbreviated format. They start at Diablo, in the remodeled 1940s school building, where a small museum displays the history of the Skagit Project, and continue with a bus ride to Diablo Dam, a boat tour of Diablo Lake, and a visit to Ross Dam and the Ross Powerhouse.

⁷² Kate Mullen Archibald, "Selling the Skagit to the People," *The American City* 54 (November, 1939): pp. 22-23.

⁷³ "Current Issues in the Pacific Northwest States," *Engineering News-Record* (July 4, 1935): p. 6.

⁷⁴ The project was covered by the national press before the elaborate two-day tours were instituted: in 1925, for example, *Scientific American* devoted two pages to the project; see Thomas R. Homer, "Mountains Light a City," *Scientific American* (August, 1925): p. 112.

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THE MUNICIPALLY-OWNED COMPANY TOWNS

The two company towns associated with the Skagit Project, Newhalem and Diablo, began as construction camps housing and servicing the workers and engineers who built the hydroelectric plants. Although some early public buildings, including the Commissary in Newhalem, were clearly intended for longer-term use by operational crews after project completion, most were not. Early housing was also considered temporary, built for construction workers during the term of the project. The bunkhouses and three-room cottages were not initially intended to house permanent employees. In fact, there were only a few periods throughout the history of the project when construction was not underway somewhere, and housing availability throughout most of the project's history was limited. Both towns, despite periodic attempts by J. D. Ross to alter their physical appearance and function to conform to his idea of mountain resorts showcasing the City's hydroelectric facility, evolved into an architectural mélange of "temporary" and "permanent" structures in which the residents of the town lived, did their business, and developed their communities.

The company town of Newhalem, although altered, retains integrity of location, setting, materials, workmanship, feeling, and association. The site retains both historic buildings and historic patterns of land use, spatial organization, and circulation. The buildings and structures dating from the historic period continue to provide a strong sense of the place as it appeared in the 1920s and 1930s. The principal buildings serving the town from its earliest years, the Commissary, Mess Hall, and Hotel, still provide the spatial organization of the Main Street axis, which still terminates at a pedestrian suspension bridge over the Skagit River, located in the same site as the original bridge. The houses on Silk Stocking Row, the "permanent cottages," are substantive reminders of the grand plans Ross had for development of the town.

The historic growth and development of the town are recorded in several extant structures: the old Cook's Bunkhouse, never intended to last beyond the construction camp period, represents the earliest period of development on the site; the new Cook's Bunkhouse, the "Pansy House," and Bunkhouse #70, built in the 1930s to serve the thousands of tourists who visited the Skagit, all reflect the town's role as a promotional tool for the hydroelectric project. Although the town's original recreation halls are gone, they have been replaced by a building in the same location serving the same purpose. While the temporary construction camp cottages, never intended to last as long as they did, and unpaved streets serving them have been removed, a sense of how the Upper Camp area was organized is evident in the tree planting patterns from the historic period, which remain intact, adding to our understanding of the historic landscape.

The company town of Diablo representing a dam and powerhouse construction camp, no longer retains its visual integrity. Newer buildings representing later development have replaced all historic residential structures from the earlier period, with the exception of House #2 (Resource #34) and the remnants of the "Lodge." All historic service buildings and structures, with the exception of the water tower, have also been removed, replaced, or moved: the original Diablo school building, now the Communications Building (Resource #39), was moved; both its function and appearance were altered; and its replacement post-dates the historic period. Additionally, the present 1950s commissary near the Incline replaced the earlier camp commissary. The spatial organization of the present town at Reflector

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Bar is almost a figure-ground reversal of its original configuration, with lawns replacing building sites, and buildings located where there was once open space. The organization of Hollywood retains some sense of the historic plan, although most of the existing development dates from between 1952 and 1954.

The Skagit towns are rare—perhaps unique—examples of municipally-owned company towns in the United States. While there are a number of examples of construction camp towns owned by cities in association with the development of municipal utilities—specifically, water, and power—none lasted much past the construction period of the project, as far as we know. A few houses would be left for operators, but support facilities and amenities, such as stores, recreation halls, hospitals, and schools were rarely, if ever, built to last beyond the projected construction end date in such camps. In many cases, such as some of the hydroelectric projects developed in Utah, it was because there already were existing towns near the construction project, providing the services required to support a construction camp. Even those municipally-owned construction towns in remote locations surviving beyond their construction periods did not last more than a decade, for example Camp Mather, built for workers employed on San Francisco's Hetch-Hetchy Dam. Diablo and Newhalem are still operating as company towns, with some employees still living on site, although the automobile has irrevocably altered the towns' self-sufficient characters, and automation of the powerhouses has reduced the workforce and the subsequent need for housing.

Even within the realm of publicly-owned company towns, the Skagit communities are rare. Most of the towns associated with the big, federally-funded hydroelectric projects of the 1930s, such as Bonneville and Hoover (Boulder City), have long since been released into the private domain.

The company town—a community built to support the operation of a single company—was an institution that rose rapidly in the West in the late nineteenth century, as entrepreneurs began to identify and exploit natural resources in remote locations. The growth of the institution slowed, and possibly even declined in the 1930s—with the exception of the large federal projects and their associated company towns—but picked up again, in a limited fashion, after the outbreak of World War II, and the identification of minerals and other resources that could be used in the war effort. Since the 1950s, with improved transportation and communication links, many company towns have been sold to employees, abandoned, or razed. There were over 200 private company towns built and operated between the late 1800s and the early 1950s, in Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Oregon, and Washington.⁷⁵ In addition, company towns were built in association with the federal projects of the 1930s—Boulder (Hoover) Dam on the Colorado River; Bonneville and Grand Coulee Dams on the Columbia, and Fort Peck Dam on the Missouri River in Montana. Of these, the town of Fort Peck is still administered by a public agency, the Corps of Engineers.

The administration, operation, social life, education, housing issues, and general functioning of the Skagit towns were similar to company towns owned by private companies, based on lumber, coal, and copper, operating in the western states during the same period. There were, however, some critical differences that had a significant impact on the communities. The most important of these were related to

⁷⁵ James Allen, *The Company Town in the American West* (Norman, OK: University of Oklahoma Press, 1966), p. 5.

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the public ownership of the towns and the nature of the work done by the employees. Such common company town issues as substandard housing, management responsibility, and education were exacerbated by the reliance on the City of Seattle's ability, or inability, to fund both the towns and the massive construction projects underway throughout the historic period. With limited funding, particularly in the 1930s, the dams and powerhouses received top priority. To enlist and retain public support for the project, at least in J. D. Ross's opinion, any additional available funds in the 1930s went to pay for tourist facilities in the towns. The needs and welfare of the communities' residents came last.

A second difference was the establishment of a rigid two-class society, which rose in part from the nature of the project that led to the establishment of the towns. One "kind" of project personnel was the people employed by the City to operate the powerhouses. Generally, they were engineers or had had some form of advanced education, they were hired in Seattle, they were civil service employees, and they were paid better than the second group. The second "kind" of employees was hired to build and maintain the town and project infrastructure, operating the railroad, serving as grounds crew, plumbers, electricians, operating the boats on Diablo Lake, serving in the commissary and mess hall, and so forth. Some, but not all, of these employees were civil service, but were mostly in categories with lower pay and fewer privileges. Periodically, there would be a huge influx of a third group of people who would live on the Skagit for a period of years: the engineers and construction crews working for the contractors building the dams and powerhouses, who would tend to split along the same lines. While the two-tiered class organization in these towns—"managers" and "laborers"—was not unusual in company towns, on the Skagit it became a major issue, affecting almost every aspect of the lives of everyone in the community, from housing to social activities.

Administration and Operation

In 1924, when the Gorge Power Plant became operational, there were approximately 60 permanent employees working at the Skagit, all under the supervision of Theodore Kane, chief operator of the Gorge plant, who reported directly to J. D. Ross. These included plant operators, oilers, machinists, linemen, carpenters, a storekeeper, cook, kitchen helpers, and laborers. Kane was responsible for the operation of the entire day-to-day operation of the Skagit Project, including running the railroad from Rockport, the commissary, and warehouse, as well as the power plant. Assignations for housing were also under his control. Late in 1926 or early in 1927, Kane fired Dana Currier, one of the employees under his control. The stories now told of the circumstances of the firing differ widely, but it is generally agreed that the two men just did not get along well together. Currier, who has been described by those who knew him as one of the most masterful politicians ever met, drew on political support from allies in Seattle, and a few days later he returned to the Skagit, not only re-hired, but with new orders from Ross that split the camp's operation in two. Kane was relieved of all responsibilities beyond the operation of the Powerhouse, and, oddly, the school, and Currier was now in charge of everything else: the general maintenance, the railroad, the commissary, the mess hall, and so forth. Currier, like Kane, would report directly to Ross. This administrative split was potentially disruptive to the efficient and harmonious operation of the camp. Any disagreement between the two administrative units would now be forwarded to Ross for arbitration. With one administrator on site, such references would be less frequent. With the

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personalities involved, from all accounts, the split was disastrous, and reverberated through the communities until the 1960s, when a single on-site manager was placed in charge of all the operations on the Skagit.

The town divided into two camps: those who worked for Kane, and those under Currier's supervision. There was some bickering over responsibilities, and in March of 1927, Ross sent both Kane and Currier a memo outlining the responsibilities of each. On what was already becoming the touchiest issue, housing, Ross told his Skagit managers to refer all changes to him "personally" before being put into effect. The complaints to Ross had apparently become so specific that, in his memo, he specified that the operating division (under Kane) would be required to "... maintain their own lawns and houses. The general maintenance of the Camp will rest with Mr. Currier." The split created some challenging dilemmas for Ross, who specified that the operation of the intake for the power plant was under the construction division (Currier), but that the worker charged with closing the intake gates would do so only on the orders of the station operator, who reported to Kane. Regarding the recreation hall, Ross stated, *"The hall should be applied to the fullest educational and recreational uses possible and in this you are requested to help by an unselfish cooperation. It is for the children as much as the older ones and they look to you to protect their use of it."*⁷⁶

This organization led to a social division of the town. Education and income level already tended to divide the town, with better educated and paid workers mostly employed in the power plant. With the administrative split, the division became even more pronounced. Employees tended to take the "side" of their particular supervisor — there were "Kane's men," and "Currier's men." There was little socializing between the two groups, and families from the different camps did not tend to mingle. In a small community, this led to some bitterness. Even today, people who grew up in Newhalem speak with rancor over the actions of "the other side."

While the split most seriously affected the community's operation in regards to housing (see below), it frequently disrupted other aspects of community life. Each manager tended to favor his own employees over the other's. With Currier in charge of the railroad, the only means of access to Newhalem from the outside world, disputes over seats for trips to Rockport would occur. Currier often gave priority to his employees, generally less well paid, regarding requests for materials for repairing or improving their cottages. As late as 1942, when 70 percent of the employees on the project were under Currier's jurisdiction, the rivalry was still in full force. One employee of Kane's stated that the construction section employees, whom he called "tarheels," were not interested in education, and because of that, the school board was manned by Kane's employees.

Ross was to directly supervise Kane and Currier until he left for Washington, D.C., in 1931. Thereafter he delegated this responsibility to his two subordinates, Bill McKeen ("Mac") and Glen Smith. Smith was appointed temporary superintendent when Mayor Edwards fired Ross, but in effect, he and McKeen operated together to administer Seattle City Light and the Skagit Project, under Ross, who still made every major decision — and many small ones — even when he had been removed from his post. In

⁷⁶ Ross to Kane and D. Currier, 14 March 1927, SCL 33-2, Box 84.

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the 1930s, Ross was frequently out of the state, and later administering Bonneville, while retaining superintendence of Seattle City Light. He therefore came to rely more and more on McKeen and Smith, but the almost daily letters and wires to him and from him are full of references to some of the smallest details of the project—for example, where to set out certain trees on the grounds.

Generally, the day-to-day operations of Newhalem, and later Diablo, were similar to those of many company towns in the 1920s and 1930s. The store was operated on the basis of scrip, a method of credit based on future earnings of the employee. Cold locker storage was provided to employees. Transportation via the railroad to Rockport was free. The Newhalem School became part of the Whatcom County school system, and when the Diablo school began operation, it also became part of the system. Seattle paid the salaries of the teachers, and Seattle City Light provided housing for them. Seattle City Light also built, maintained, and enlarged the Newhalem School at its own expense, and later the more substantive brick school building in Diablo. When children reached high school age, a Seattle City Light employee had to decide whether to send his family to town without him, or to quit his job. After World War II, the county operated a school bus that would take high school age children to the town of Concrete to attend classes.

City Light employed nurses for medical care, based in Newhalem. The nearest doctor was in the town of Concrete, and any severe emergency required train transportation. After World War II, one of the nurses was the wife of a powerhouse employee. Later, when roads became more reliably passable, the Seattle Fire Department provided emergency medical training to the volunteer fire department in Newhalem.

It appears life was rugged in the towns. Apparently many wives would not stay beyond one or two years. The isolation of the communities, and the limited schooling opportunities for children were too much for some to face. However, despite the tensions between the Currier and Kane factions, there appears to have been a strong sense of community. Both groups would attend frequent dances held in the recreation hall in Newhalem, and later, movies. In the 1930s, Diablo and Newhalem each had a small band that would play at community events. Typical activities included card parties, crafts groups and the like, and many families took advantage of the setting to hunt and fish.

Some time in the early 1940s, the citizens of Newhalem formed the Newhalem Improvement Association, to provide some sort of united voice for negotiating with Seattle about improvements to the community. Prior to that, any concerns were expressed either by petition to Ross directly, or through the union representative. The school board had some power, since Seattle City Light was required to meet with them and consider their demands.

Housing

Sufficient housing was not a major issue in the Skagit towns until construction began on the completion of the Diablo Powerhouse. Adequate housing was another matter. The construction camp structures, both in Newhalem and Diablo, were thrown up quickly, with no attention to basic amenities. As late as the 1940s, in the three-room cottages still standing in Newhalem, snow would drift through the

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exterior boards and into rooms, driven by the wind, despite attempts by occupants over the years to improve the structures.⁷⁷ Until the 1940s and later, workers would build their own breadbox heaters to run on the power supplied by Seattle City Light. The construction camp houses were small—three rooms for a family of four or five.

The architecture and physical organization of privately-owned company towns varied wildly, according to geography, time built, and the interest of the company in community planning. However, there seemed to be some “typical” features, many of which the Skagit towns shared. One of these was the use of rectangular blocks in platting the town. To the extent possible, given the nature of the bar, Newhalem was partially laid out in this fashion. The beautification projects undertaken by Ross, to encourage residents to plant trees and shrubs in Newhalem, were similar to inducements offered by a few other companies owning towns. The Union Pacific Coal Company hauled carloads of trees to its town of Hanna, Wyoming, in 1915, giving them away to any resident willing to plant them.⁷⁸ The early housing in many company towns appears comparable to Newhalem’s and Diablo’s construction camp period—small wood-framed buildings with board siding and composition paper roofs. In the 1920s, a survey of company houses in coal-mining towns revealed that only 13 percent had running water and only three percent had flush toilets inside, a situation similar to that of Newhalem during the same period. However, at the Skagit, housing became the principal community issue.

By the end of 1934, the inadequate housing situation had reached crisis proportions on the Skagit, both in Newhalem and in Diablo. Successful sale of the 1934 bond issue to complete Diablo Powerhouse had brought more workers to the Skagit, both Seattle City Light crews to build transmission lines and install equipment, and Rumsey and Company construction crews to erect the powerhouse. Workers faced a complicated housing allocation policy, further tangled by the ill feelings between Kane’s operating crews and Currier’s construction men. There were not enough houses for married men, and the quality of existing houses, everyone agreed, was inadequate. In addition, Seattle City Light, under Ross, appeared to place public relations above the needs of the people who worked for the agency, especially as it became known that new housing construction on the Skagit would be for tourists. When the dissatisfaction was reported to Ross, he responded by asking his advisors—McKeen, Smith, Currier, and Kane—to evaluate a proposal to charge those living on the Skagit for rent and electrical service, the proceeds of which, he said, could fund housing. Ross was facing tight budgets in the midst of the Depression, and his eyes were already on completion of the hydroelectric system through construction of the final dam. Ross wrote his managers:

There seems no doubt that the greatest satisfaction to everyone is to pay for what they get, but once in possession of free housing and light those having these privileges think they have something for nothing. We meter the current of all our customers because that is cheaper for everyone.

⁷⁷ Unrecorded interview with Jack Roper by Patricia Erigero, 14 August 1989.

⁷⁸ Ibid., p. 84.

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Some of our people have said that we should have facilities for them instead of building for those making up the tours. They forget that the tourist pays his way. Tell them that any time they wish to do likewise we will have a reason to build for them.

Therefore, make a survey of the number of houses needed, their size, and where they might be located. And last but not least, the rental that should be charged for them, and all existing houses, and submit these details and details of cost in metering power.

I will then see what can be done to add this amount to the salaries and if it can be done we can start right and settle the housing problem and wasteful uses of current, and we can then build all houses needed.⁷⁹

Construction of two new bunkhouses in Newhalem in the winter of 1934-35 alleviated some of the worst of the housing crunch, at least for single men, but a number of married workers arriving at the Skagit were forced to leave their families in Seattle. The agitation for housing appears to have subsided somewhat, possibly because Seattle City Light began to plan for single-family houses in the Hollywood area of Diablo in the fall of 1936. However, in the spring of 1937, a large new influx of construction crews arrived at the Skagit to begin work on Ruby Dam (later renamed Ross Dam). While most of the dam workers, over 250, ranging from laborers and "jackhammer men" to commissary clerks and timekeepers, were expected to be housed in new dormitories built near the construction site by the contractor, General Construction Company, those buildings were not erected until late in the year. In the spring Ross received a letter signed by 34 Lighting Department employees living on the Skagit, in response to his solicitation for discussion of community problems. The request for worker input was apparently released in conjunction with a renewal of his proposal to charge for rent and electricity when the new houses were completed, partially due to pressure from the City to cut thousands of dollars per month from the Lighting Department's budget. The Department's Skagit employees attempted to address two issues:

First is the definite need for good houses. We realize that Diablo has been, until now, a construction camp, and have not expected to see things in a finished state, but even at Newhalem things have been far from satisfactory. A few families have livable houses; more have not. Some of the houses are so poor that unless one has seen them he would not believe the descriptions. Then there are those of us who have no place for our families and have had to live apart from them. Together with unmarried men we have been crowded into quarters that are not fit for the purposes to which they have been put... Since the winter is long and rather severe the houses should be well built and should be large enough to afford a small measure of social activity during the months when everything we do must be done indoors.

The second point... is that these houses, or their equivalent in cash or board for unmarried men, should be furnished to us. The Skagit camps are beautifully located and we like it here, but in living here we incur many additional expenses and give up numerous advantages enjoyed by those in town... Some of the additional expenses are these: the cost of maintaining our Seattle homes, cost of traveling between Seattle

⁷⁹ Ross to McKeen, Smith, et. al. 23 November 1934, SCL 33-2, Box 84.

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and Rockport, cost of keeping our cars in Rockport, higher prices paid for food, higher cost of fire insurance, and many other things ... True, there are a few things we have here that those in town do not enjoy, but we have nothing they could not reach in a short drive.⁸⁰

Housing in general was clearly substandard. Employees who wished to improve their houses over the years were usually allowed to do so, on their own time, and generally at their own expense. Ross's concern regarding, ironically, excessive use of electricity, was due to the poor construction of all Skagit housing. Dana Currier, manager of the Lighting Department construction crews, noted that "...the plumbing is installed in such condition that at least from the 1st of December to the latter part of March, it is necessary to keep electric heaters in the bathrooms and under the kitchen sinks ... I have not figures to bear out the statement, but I would estimate that during the winter months it would take at least 800 kW a month in a great many houses. I would suggest that the electric current be free up to this amount."⁸¹

In July, as draftsmen prepared sketch plans for family housing in Newhalem and Diablo, Ross asked Dana Currier for his opinion on the housing situation. Currier reported on reactions to the proposal for charging rent:

The essence of the whole question in the camp is an harmonious personnel. The question of rental of houses and the payment of electric current did not originate with the rank and file living at Newhalem. Since the question has arisen it has caused more dissension and breaking down of the morale than any other thing in the history of the camp ...

After all Mr. Ross, you can get as many different opinions as to what is fair as the number of people you request them of. I have come to the point in life where I am convinced that what the world needs is more of the milk of human kindness, and to impress the men working for the Department that we have their interest at heart also; and I have arrived at the conclusion that the most convincing way of doing so is to keep our hand out of their pocket as much as possible.⁸²

A survey taken by McKeen and Smith early in 1938 indicated 15 Skagit employees would be willing to pay rent for new houses, if they were available— five were in the process of completion at Hollywood in Diablo at the time. The survey also indicated that people living in the three-room cottages in Lower Camp in Newhalem insisted the department repair foundations and "... make the houses livable if they are to pay rent, even as much as \$8 per month."⁸³

By February 1938, McKeen and Smith had prepared a plan to provide additional housing by charging rent and billing for electricity. The monthly rental fees would be partially offset by raising employee wages. Ross's managers had hoped the adjustments in pay and rent would balance, and would

⁸⁰ Potter, Reid, et. al. to Ross, 2 June 1937, SCL 33-2, Box 84.

⁸¹ Currier to Ross, 5 August 1937, SCL 33-2, Box 84.

⁸² Ibid.

⁸³ McKeen and Smith to Ross, 25 January 1938, SCL 33-1 Box 49, F2.

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solve the housing issues raised by the department's Skagit employees. However, an analysis of the proposed budget showed an overall monthly increase of \$2,395.00 in costs to the Lighting Department, due principally to wage increases. Taking note of the City's financial conditions, the bond payments and the "... heavy construction program we are carrying on during the depression," they concluded the plan to raise wages and "... charge a small part of it back in rental," should be deferred. To solve the housing situation, they included a provision for twenty new houses in the construction budget that included the five Hollywood houses under construction at the time of the report. This, they reported, "... should relieve the situation and provide livable quarters for everyone." In addition, they noted, the Diablo cookhouse, which the department had been trying to close, would remain in operation to provide board for single men living in bunkhouses in Diablo. Only fourteen houses, nine in Newhalem and five in Diablo, and one bunkhouse—"The Lodge" in Diablo—were built.⁸⁴

The issue of adequate housing was far from closed. Within days of E.R. Hoffman's appointment as the new superintendent of the Lighting Department following Ross's death in March 1939, the debate resumed on the housing problem including: inadequacy of existing houses; lack of sufficient houses; and fairness in allocation. With completion of the new houses on Poverty Row in the spring of 1939, the now years-old grievances regarding housing policy fairness resurfaced, along with their allocation. In this instance, the question was whose employees—Kane's operating division or Currier's general division—would "get" the new houses. A survey commissioned by Smith and McKeen showed that of the 151 Lighting Department employees living on the Skagit, both in Newhalem and Diablo, 67 were living in houses with their families and 84 in bunkhouses. Of those living in bunkhouses, 29 employees desired housing so their families could join them. At that time only nine new houses at Newhalem were available.⁸⁵ Subsequently, J. R. King, on the department's architecture staff, designed a four-room house. He proposed the Department build twenty of these, at an estimated construction cost of \$4,000.00 each, to be funded by inclusion in a bond issue or from a \$1,000.00 per month allotment to a housing program capitalized directly from the Lighting Fund. The proposal was not acted upon.

In June of 1939, barely two months after assuming the superintendence, Hoffman received a letter from City Councilman Hugh DeLacy, who had been contacted by the Skagit laborers, members of the Building Laborers' and Hod Carriers' Union regarding wages, board, and room at the project. DeLacy wrote Hoffman:

I know of my own knowledge that the housing provided for many of the Skagit workers is not one whit better than that in Hooverville. Built in the early days of construction as temporary shelter for crews then employed, their foundations rotted, their stringers sagging, their ceilings cracked, their walls and doors out of line, these houses, however ingeniously patched and papered by their present occupants, are unfit to be lived in...

⁸⁴ McKeen to Ross, 4 February 1938, SCL 33-1, Box 49, F3.

⁸⁵ By this time, the Hollywood houses had been allocated.

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One bunkhouse...is divided into small, ugly, unpainted rooms and has no showers or toilets in it. In sunshine, rain or four feet of snow, its occupants are forced to use outside bath and toilet facilities.

Nearly ten months ago, I reported these facts to the City Utilities Committee which agreed to take up the housing problem with the Superintendent of City Light to see what could be worked out to put an end to these shocking conditions.

So far nothing has been done; nothing, that is, except to take from City Light's 1938 Budget as a departmental saving, the \$28,000.00 originally earmarked for Skagit housing improvements.

I hope you will make it one of your first items of business to relieve the intolerable Skagit housing conditions...so that people of Seattle, who are justly proud of owning one of the finest municipal power plants in the country, may be equally proud of the conditions under which the producers of our light and power live and work.⁸⁶

It is possible that some of DeLacy's concerns may have been addressed in the following years. Two weeks after Hoffman's receipt of his letter, Glen Smith prepared a \$16,000.00 budget for repair of nineteen of the three-room cottages in Newhalem, and for upgrading and installation of sewer and water systems. The budget also included over \$1,500 worth of work on the foreman's bunkhouse, to which DeLacy had specifically referred. The plan was to move each family into a designated vacant cottage while repairs were made on their house. It appears that some minor repairs, including painting and partitioning, were done on the houses. However, new houses on the Skagit would not be built until the late 1940s.

In June of 1939, Hoffman formulated a housing policy based on seniority of residence at the project, seniority as an employee of Seattle City Light, and on salary. There was a long list of exceptions, including supervisory personnel. Of a total of 76 houses in both towns, 40 were assigned to the general division under Currier, 33 to the operating division under Kane, and three to the transmission line division, operating under a Mr. Harney. The policy was revised in May of 1941, and was to undergo subsequent revisions in the next decade. The policy did little to alleviate the bitter competition for housing, since foremen were exempted from the house bidding process, and given preference for houses as they became vacant. On at least two occasions, Dana Currier used the foreman clause to appropriate housing for his employees by temporarily raising their status to foreman, bumping Kane's employees down the list. On the other hand, because the bidding "points" were in part based on salary, Kane's better educated powerhouse crews, who generally made more money than the general division staff of Currier's, were often able on the basis of salary to obtain the "better" houses. The rivalry did not end until the position of Manager of Generation was created around 1962, creating an on-site senior manager with authority over the entire project.⁸⁷

⁸⁶ Hugh DeLacy to R. Hoffman, 9 June, 1939, SCL 33-2, Box 84.

⁸⁷ Unrecorded interviews by Patricia Erigero with T. N. Bucknell, 10 August 1989, and Jack Roper 14 August 1989.

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With the nation's entry into World War II, and restrictions on building materials in effect, housing opportunities at the project became even more precarious. During the war, six tourist dormitories were altered to provide apartment housing for Seattle City Light families. After the war, the Rock Hill apartments were built in the southeastern end of Newhalem to provide additional housing for Seattle City Light employees and construction crews, and finally in 1948, six new wood-framed houses were built to the west of Poverty Row, which, because they were new, were among the first to be bid for. Powerhouse engineers, with salary points, occupied most of the houses, which came to be referred to as Engineer's Row.

The company towns of Newhalem and Diablo are rare—perhaps unique—examples of extant municipally-owned towns. The history of the towns, from construction camp to continuously functioning community, deepens our understanding of the development, planning, and operation of company towns of the 1920s and 1930s. The vernacular architecture is typical of towns of this type, and in Newhalem, one can still see examples of both the construction camp buildings (Resource #16) and the “permanent” cottages (Resources #1-8). The bunkhouses built for workers (Resources #11, 13, 14 and 16) are typical examples of company town institutional housing of the period. The tourist dormitory (Resource #17), while similar in type and style to the other bunkhouses, is a rare example of a large structure whose function was to house tourists at minimal cost.⁸⁸ The sole remaining house in Hollywood (Resource #34) is a good example of Rustic architecture of the period, as practiced by the US Forest Service, and stands as an example of the type of architecture J. D. Ross envisioned for the project in the 1930s.⁸⁹

POST WORLD WAR II HOUSING IN THE SKAGIT HYDROELECTRIC PROJECT

The later development of permanent housing for Seattle City Light employees working primarily to operate and maintain the system's dams, powerhouses, and transmission lines in the early 1950s, marks the transition of the town from a construction camp to a longer-term company town. Although this development in some ways parallels the development of the company town of Newhalem, Diablo's transition was in the waning years of the paternalistic company town. Additionally, due to its relative size, Diablo should be viewed as a residential area related to the company town of Newhalem, not as a distinct self-contained community, as many of the required services were located in the larger community of Newhalem.

Between 1952 and 1953, 35 nearly identical, minimal, Colonial Revival-style houses were built in Diablo; 11 in the southwestern end of the Reflector Bar area, and 24 in the Hollywood area. The new houses, in both Diablo and Hollywood, were one-and-one-half story wood-frame buildings with steeply pitched, aluminum-sheathed gable roofs. They had minimal gable-roofed front and rear porches, and a

⁸⁸ Compared to, for example, the small cold-water cabins or the comparatively well-equipped and architecturally-styled tourist hotels in National Parks of the period.

⁸⁹ This house—one of five, with the partially ruined “Lodge”—should be viewed with the drawings Ross had prepared for the Chateausque lodge in Newhalem, and a restroom and gatekeeper's house in Diablo, as an indication of the architectural plans Ross had for the project (See “Unrealized Diablo” and “Newhalem: Tourist Town” sections of this nomination).

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gable-roofed dormer located in the center of the rear façade, and large fixed-glass, multi-paned windows facing the street. All were sheathed with combed-shingles and were built with basements.

The houses resemble many that were built in contemporary post-World War II housing developments, and are particularly reminiscent of the earliest of the houses constructed in Levittown on Long Island near Hempstead, NY, in the late 1940s.

Although Seattle City Light's houses in Diablo had basements and didn't incorporate the assembly-line methods of Levittown, the houses were clearly modeled after the Levittown prototypes, as were many other contemporary housing developments built throughout North America. The Hollywood houses with their straightforward parallel streets oriented as a triangle particularly pay homage to the street layouts found in Levittown, abandoning earlier more rustic layout proposed in 1937, which featured a scheme designed to take advantage of the topography of the area, and was organized by a series of loop roads, with the houses clustered around a water feature.⁹⁰

Although the new housing in Diablo did provide needed permanent housing for Seattle City Light employees, and even with the addition of a commissary building (Resource #38) near the incline and a new school, several factors led to the decline of community over the years. As the powerhouses were automated in the early 1970s, the number of required operational personnel declined, as did the number of employees wishing to live in Diablo. Additionally, as a company town, employees rented their homes. As the automobile increased Diablo's accessibility, it also allowed employees to live at a greater distance from their jobs at the powerhouses. The final blow to Diablo as a community was the closure of the commissary in late 1950s, ending the paternalist society initiated as early as the early 1920s in Newhalem. Today, Diablo's remaining housing is underutilized, with many tenants not employees of Seattle City Light.⁹¹

Diablo housing, especially that still extant in Hollywood, is significant in that it is a representation the last stage of company town housing built as the system fell into decline. Hollywood is reflection of contemporary suburban bedroom communities built in the early 1950s, but because of its relative isolation, and physical size, lacks the vitality to sustain itself as a viable residential community.

JAMES DELMAGE ROSS: "FATHER OF CITY LIGHT"

J. D. Ross served as superintendent of the Seattle Lighting Department—later Seattle City Light—from 1911, to his death in March of 1939. Under his aegis, the small municipal utility, competing with a privately-owned company backed by one of the most powerful firms in American hydroelectric history, grew to such strength that it eventually purchased the Seattle interests of the competing firm—Puget Sound Power and Light—in 1950.

During his tenure as superintendent, Ross had a significant effect on Seattle politics. He rose to prominence due, in part, to recall of a Seattle mayor when municipal ownership of a power plant was a

⁹⁰ F. V. Horton to Seattle City Light, 26 March 1937, SCL 33-1, 97-17.

⁹¹ Linda Carlson, *Company Towns of the Pacific Northwest*, (Seattle, WA: University of Washington Press, 2003), p. 207.

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significant recall issue. Thirty years later he was involved in another mayoral recall—in fact, his retention of the superintendence of Seattle City Light was the issue in the recall. His reinstatement heralded a period in Seattle when many principal politicians were firm supporters of municipal ownership. His agenda for expansion placed him squarely in the center of Seattle politics, and he was both a frequent contributor to and feature of many stories in the Seattle press.

During his superintendence, the power rates in Seattle were among the lowest in the nation—half the national average in the 1930s. The municipal utility's competition forced the competing private firm to match every downward rate adjustment. Seattle City Light became nationally recognized as a "yardstick" for power rates, and helped to keep the Pacific Northwest the region with the lowest power rates in the country. He used his position as superintendent to influence statewide power issues, both directly, through lobbying against a private utility-controlled utilities commission, and indirectly, through the perceived success of Seattle's municipal system, which Grange leaders viewed as a model when pushing for public utility districts.

When Mayor Frank Edwards fired Ross in 1931, Ross moved into a more prominent national spotlight. He had been a contributor to *The Journal of Public Ownership* for years, and was widely known in national municipal ownership circles, as well as by private utility organizations waging a bitter war against public ownership. When Senator Homer Bone sponsored a bill to allow Washington cities to sell power beyond the city limits in 1924, Seattle—and Ross—became a symbol of municipal ownership. The National Electric Light Association, an organization of private utilities, recognized that the "Seattle situation is of national importance." When Ross was fired, he took a consulting job where he advised New York Governor Franklin D. Roosevelt concerning the St. Lawrence public power project. Ross was back in his superintendent's seat by the end of 1931, however, the meetings with Roosevelt were to bear fruit a few years later, when Ross was hired as a consulting engineer for the Federal Power Commission's national power survey and the power division of the Public Works Administration, which he did while retaining his superintendence of Seattle City Light.

In August 1935, Roosevelt, now President, appointed Ross to the Securities and Exchange Commission, in charge of utility restriction and regulation. "Almost as surprising as a banana plant in the State of Washington is a Republican in the high councils of the New Deal, but such is Mr. Ross," *Time* magazine noted.⁹² In October of 1937, Ross resigned from the SEC to take the job as first administrator of the new Bonneville hydroelectric project on the Columbia River in Oregon, a position he held simultaneously with his continuing superintendence of Seattle City Light. His responsibilities at Bonneville including both managing the project and promoting the sale of power at rates approved by the Federal Power Commission. Holding both positions, he began to agitate for a tie-up between Grand Coulee Dam, Bonneville, the Skagit, Tacoma, and other public plants, looking forward to a national network originating from the Columbia River basin. With Ross, it appears, the grand visions never stopped. From Cedar Falls to Gorge to Diablo to Ruby (later renamed Ross Dam), from individual

⁹² "Bonneville's Bananaman," *Time* (October 25, 1937), p. 59.

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consumers to cooperatives for distribution, from independent federal power plants to regional networks, each accomplishment was a step towards a greater goal of his.

Ross had a wide range of interests and hobbies, several of which he brought to bear on the development of the Skagit Project. One, already mentioned, was his interest in artistic illumination, an outgrowth of his passionate and lifelong interest in physics in general, and the nature of electricity in particular. He never received an engineering degree, although by 1934 the notation, "Fellow, American Institute of Electrical Engineers," was appended to his name on articles he wrote for magazines and journals. His formal education consisted of attendance at Chatham Collegiate Institute in Ontario, the equivalent of a two-year college-degree. Ross was born in Chatham in 1872. He taught school in Ontario for six years, and then spent some time prospecting in the Northwest Territories. Contemporary accounts of his life said he spent time outdoors hiking and exploring to overcome tuberculosis. He arrived in Washington in 1900, and began an electrical contracting business in Seattle. In 1903, he was hired by then Seattle City Engineer Reginald H. Thomson to serve as electrical engineer of the City lighting system. His career progression from that point has already been discussed.

In 1907, Ross returned to Ontario to marry Alice Wilson, who participated in a supporting role in many of his professional and personal activities. Among these was his enthusiasm for horticulture and gardening. He raised a variety of figs, experimenting with grafting and breeding, and was a lily breeder. His direction of the creation of Ladder Creek Falls Gardens and the landscaping of Newhalem and Diablo has been discussed. Alice, according to Ross's nephew, shared Ross's horticultural enthusiasm, and participated in the design and planting of the Ladder Creek Falls Gardens. The Rosses were childless, but raised several informally adopted children in their home, including Ross's nephew, James.

Ross's home included a large laboratory where he performed a number of experiments in physics, magnetism, and photography. He took many slides and films of the Skagit, almost all of which, when found in his home after his death, were deteriorated beyond the point of restoration. In 1931, he published *New Views of Space, Matter and Time*, a 400-page book providing a "new viewpoint in science."

Ross's contribution to the public power movement and the development of Seattle City Light received national press during his lifetime, but has been overlooked since. He was a nationally prominent spokesman for public power, and the Skagit Project is significant for its association with him. Ross's remains, and those of his wife, are entombed in Ross Crypt (Resource #25), at the east end of Newhalem. The crypt is built into the native rock base of Ross Mountain, and is significant for its design, which was deliberately developed to blend with the natural environment, rather than stand as an isolated monument. The understated and beautifully integrated crypt tends to imply that the entire Skagit Project is the true monument to Ross, and it may be that was the intent of his wife when approving the design.

Garden of Sound and Light

Individual features of the gardens were rarities when Ross designed them—in combination they produced a unique landscaped garden, the patterns of which survive today. The "Jungle," the rock gardens, the artistic illumination, and the amplified sound effects were cited in almost every nationally-published popular magazine article on the Skagit River Hydroelectric Project, and even in engineering journals. Washington State journalists invariably mentioned the gardens in their write-ups on the project,

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and they prompted gushing reports by tourists who visited them. In at least one instance, a Skagit visitor, Mrs. S. Morgan Smith of York, Pennsylvania, told William McKeen that she had "been everywhere, but just hadn't seen nuthin' " until visiting the gardens, and was so thrilled she sent Ross some weeping flowering cherry trees.⁹³

By the mid-1930s, Ladder Creek Falls Gardens had become a highlight of the tours. It was a measure of the city's own recognition of the success of the gardens that a propaganda piece published by Seattle City Light announced:

Every year droves of Seattleites and thousands of visitors from all over the world visit the upper basin of the Skagit river to gasp in amazement at fantastic spectacles – palm trees and huge tropical jungle plants growing luxuriantly in high mountain canyons where blizzards howl and snow piles six feet deep in winter; majestic organ music pouring out of rugged pine-covered cliffs...

In the course of their two-day trip to Skagit, these thousands of visitors get an incidental eyeful of powerhouses, dams, reservoirs, giant generators and transformers.

It's for the sake of that incidental look the visitors get at Seattle's million-horsepower Skagit project...that J. D. Ross planted a tropical jungle in these northwest mountains and made the cliffs reverberate with mighty organ tones.

"People are funny that way," chuckles the City Light superintendent. "They wouldn't make a trip of that kind just to see a dam or a powerhouse, even tho it belongs to them. So we lure 'em with a display of beautiful growing things they've always been taught couldn't thrive in regions this far north...When they get here, they see the dam and the powerhouses – and that's what we want 'em to see,"⁹⁴

The "Jungle," which referred to a part of the gardens in which Ross had planted such exotics as bamboo, palm trees, elephants' ears and banana plants, attracted quite a bit of press. The notion of seeing such species growing in the Cascades was startling to most observers. Ross apparently told Jim Marshall of Collier's that "Tropical things don't die in cold climates because of the cold, but because they can't get their natural food ... the trick is to reproduce, for the plant, its natural food ... Ross' (sic) success with tropical plants lies in reproducing for them the sort of soil from which they are accustomed to draw their nourishment."⁹⁵ While Ross probably did amend the soil for the exotics, and while he may have believed the climate wouldn't affect them, he in fact took the precaution of having the most tender plants moved into the Gorge Powerhouse each winter to ensure their survival.

Ross, not content with horticultural experiments, also experimented with exotic animals. Many found homes at the Diablo "zoo," but Ross actually released orange and gray Brazilian squirrels and black Mexican squirrels he had imported into the Ladder Creek Falls Gardens. Some articles also noted

⁹³ "Steve" Stevens to Ross, 2 June 1938, SCL 33, Box 49, FI0.

⁹⁴ Gilbert Brown, Romance of City Light (Seattle: Seattle Star, 27 January 1937), p. 39.

⁹⁵ Jim Marshall, "It Can't Be Done, Can't It?" Collier's (March 7, 1936), p. 36.

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the presence of parakeets, parrots, macaws, and other tropical birds, and documentation exists proving the purchase of such birds, however, it is believed that these creatures were not released into the gardens, and were probably displayed in cages at the "zoo."

The combination of native plants, exotics adapted to the climate, and the tropical exotics in a designed landscape where winter temperatures often fell to zero degrees was unique in its time. But the plant material was only one aspect of the gardens. Relying on the Rustic architecture theme, which Ross, judging from his design schemes for the un-built hotels, clearly admired, the gardens were furnished with rustic bridges, granite steps set in winding paths, artificially diverted mountain "streams," and rustic benches placed in locations affording views of the Gorge Power Plant and Newhalem.

To augment this, Ross created his much remarked upon artistic illumination of the gardens, and of Ladder Creek Falls, around which the gardens were built. Early in his superintendence, Ross had exhibited an interest in artistic illumination, and had colored lights mounted on the Lake Union Steam Plant soon after its construction to illuminate steam issuing from urns at night during special city-wide events. The precedent for artistic, electrically-powered illumination had its roots in the world's fairs and expositions held in America, perhaps most notably the outline illumination of buildings at the 1892 World's Fair in Chicago, and the much-vaunted incandescent outlining used at the Pan-American Exposition at Buffalo, New York. But it was the Panama-Pacific Exposition in San Francisco in 1915, where W. D'A. Ryan created a new concept of indirect illumination of structures and gardens, which clearly influenced Ross. Ryan's illumination scheme at the Exposition utilized colored lanterns, floodlights, luminaires spray-painted various colors, open projectors, searchlights with lenses, and an array of other appliances to integrate the buildings and grounds of the exposition, creating "moods" according to the themes that each of the fair's courts expressed. General Electric Company's illumination department in Schenectady, New York, donated much of the experimental work for the fair under Ryan's direction.⁹⁶ In 1916, the American Institute of Electrical Engineers published a paper by Ryan, *The Illumination of the Panama-Pacific International Exposition*, that was widely distributed. It detailed the technical aspects of the lighting design, and while it is problematic to speculate on what Ross may or may not have read, it appears likely, given his enthusiasm for artistic lighting, that he had seen a copy of this book, or, at the very least, was familiar with this new style of illumination through promotional literature for the fair.

The lighting scheme in the gardens began with illumination of the falls, and, over the years, spread to indirect illumination of particular plant specimens, and artistic lighting of selected features. A bank of maidenhair fern would be illuminated with cerise light; a grotto would appear "... cold and azure, then suddenly warm and orange ..."⁹⁷ At the time of Ross's death in 1939, the falls' lighting had become extremely elaborate, with a gnarled stump illuminated to appear as a dragon's head, and with multi-colored lights in shades of violet, purple, orange, and red illuminating the falling water. This "fairyland" was certainly a unique feature of any hydroelectric facility in the country, and was probably

⁹⁶ Frank Morton Todd, *The Story of the Exposition*, vol. 2 (New York: Putnam, 1921), p. 343.

⁹⁷ Kate Archibald, "Selling the Skagit to the People," p. 22.

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unique to any recreational spot as well. Ross's artistic illumination almost certainly influenced lighting at other hydroelectric facilities. In 1933, officials at the Tennessee Valley Authority expressed an interest in decorative illumination, and B. B. Bessesen, superintendent of the Wilson Dam Power Plant, wrote to Glen Smith at Seattle City Light, asking about using a revolving colored screen Ross had developed to illuminate the dam's large spillways.

Ross's use of amplified sound further distinguished this designed landscape from any other of the period. Ross not only used music, such as "The Holy City," timed to coincide with the tourists' climb to the falls, but also recorded bird sounds, to enhance the effect of passing through a forest—tropical or Cascadian.

The Ladder Creek Falls Garden site is significant in its own right as a unique designed landscape associated with recreation. It is also historically significant for its association with the Skagit River Hydroelectric Project. Although the gardens were allowed to fall into disrepair during World War II, over the years they have been refurbished. After the war Seattle City Light repaired some of the lighting in an attempt to capture the spirit of the place Ross created. Much of the site's infrastructure—altered topography, pools, streams, steps, benches, and the like—are extant, and the native plants have thrived and matured.

A LIVING SYMBOL OF ITS TIME

The Skagit River and Newhalem Creek Hydroelectric Projects embody distinctive characteristics of that time in our history when "progress" was linked to a belief in the promise of technology. The driving force behind the project, J. D. Ross, believed in harnessing the "River of a Million Horsepower" to serve and create what he hoped would be the premier city on the West Coast, one rich with industry operating on municipal power. He looked forward to a time when "... power will be as free as the air."

The Skagit Project reflects that belief in its physical appearance. The power plants are each representative of hydroelectric technology of their time. Diablo Dam and Powerhouse go beyond merely housing representative technology to symbolizing the era's faith in progress, as reflected in the powerhouse's "showcase" interior and the dam's aesthetic features. The town of Newhalem contains buildings, structures, and sites that provide a physical record of the infrastructure needed to support the dams, from the old Cook's Bunkhouse dating to the era of the construction camp, to the schoolteacher's house of 1938. The Incline Waiting Station, the tourist bunkhouses in Newhalem, and Ladder Creek Falls Gardens all are physical reminders of the drive to get the project built, by getting the public to come and see it. The combination of towns, power plants, and landscape is a living, operating system, with principal features from the project's past still intact and contributing to our present understanding.

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UTM COORDINATES (continued)

UTM Coordinates describe a polygonal boundary encompassing the historic areas and discontiguous resources.

1-A	Index to areas D, A & B-1	628598.0866	5392620.482
1-B	Index to areas D, A & B-1	629737.6713	5393229.765
1-C	Index to areas D, A & B-1	629906.9165	5392868.708
1-D	Index to areas D, A & B-1	629051.1389	5390693.572
2-A	Index to area B2	631444.4423	5395505.456
2-B	Index to area B2	631914.4431	5395886.655
2-C	Index to area B2	632163.5219	5395336.516
2-D	Index to area B2	631823.4752	5395113.428
3-A	Index to areas F & C	635814.949	5398169.51
3-B	Index to areas F & C	637938.4679	5398094.341
3-C	Index to areas F & C	637904.0155	5397013.79
3-D	Index to areas F & C	636068.6438	5397192.316
4-A	Index to area E	641366.2886	5398941.221
4-B	Index to area E	641857.0973	5399905.677
4-C	Index to area E	642464.6018	5399524.7
4-D	Index to area E	642032.141	5398910.331

VERBAL BOUNDARY DESCRIPTION:

The boundaries of the historic district extend in a linear, but disconnected, fashion along the Skagit River, from the town of Newhalem to the Ross Powerhouse and Dam. The extensive nature of the district, which totals three miles in length—excluding reservoirs—is due to the sequence of towns and industrial resources located along the river, beginning at the relatively flat bar on which the town of Newhalem is located. It continues upriver to encompass the Gorge Powerhouse and Gorge High Dam, the Diablo Powerhouse, a portion of the town of Diablo, the Diablo Incline Railroad, and Diablo Dam, Ross Dam, and

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Ross Powerhouse. The lakes formed by the dams are not included within the district, since humans did not significantly influence their shapes, which reflect the natural topography.

Designated historic areas within the overall historic district define boundaries of places of interest in addition to the discontinuous resources. The point label for each UTM coordinate on the accompanying maps is coded to the corresponding historic area by the first letter of the label.

- A. Town of Newhalem. The area encompasses 17.21 acres. The period of significance for this area is from 1917-1954.

Label	Area	N	E
A-A	Newhalem	628795	5392560
A-B	Newhalem	629190.8196	5392719.99
A-C	Newhalem	629257.4442	5392564.849
A-D	Newhalem	628965	5392440
A-E	Newhalem	628829.357	5392470.768

- B. Gorge Power Plant Complex. Area B-1 is 13.64 acres, area B-2 is 10.25 acres. Combined the area encompasses 23.89 acres. The period of significance for this area is from 1936-1960.

Label	Area	N	E
B-A	Gorge - Powerhouse and Dam Complex	631660.8042	5395470
B-B	Gorge - Powerhouse and Dam Complex	631855	5395540
B-C	Gorge - Powerhouse and Dam Complex	631998.7122	5395388.9
B-D	Gorge - Powerhouse and Dam Complex	631970.8767	5395358.9
B-E	Gorge - Powerhouse and Dam Complex	631855	5395300
B-F	Gorge - Powerhouse and Dam Complex	629775	5392980
B-G	Gorge - Powerhouse and Dam Complex	629575	5392820
B-H	Gorge - Powerhouse and Dam Complex	629455	5392760
B-I	Gorge - Powerhouse and Dam Complex	629365	5392860
B-J	Gorge - Powerhouse and Dam Complex	629515	5392970
B-K	Gorge - Powerhouse and Dam Complex	629685	5393070

- C. Diablo Power plant Complex. The area encompasses 57.34 acres. The period of significance for this area is from 1927-1960.

Label	Area	N	E
C-A	Diablo - Powerhouse Complex	636635	5397520
C-B	Diablo - Powerhouse Complex	636715	5397580
C-C	Diablo - Powerhouse Complex	637444.2532	5397507.162
C-D	Diablo - Powerhouse Complex	637491.5115	5397158.792
C-E	Diablo - Powerhouse Complex	636795	5397300

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- D. Discontiguous Resources. The area of the Newhalem Creek Powerhouse site encompasses 21.35 acres. All other resources are counted as point data, with no area. The period of significance for this area is from 1917-1960.

Label	Area/Resource	N	E
D-A	Ross Crypt	629307.3268	5392783.474
D-B	Newhalem Creek Powerhouse	628889.4675	5392246.997
D-C	Newhalem Creek Powerhouse Site	628825	5392140
D-D	Newhalem Creek Powerhouse Site	629065	5391110
D-E	Newhalem Creek Powerhouse Site	629145	5391140
D-F	Newhalem Creek Powerhouse Site	628905	5392150
D-G	Stetattle Creek Bridge	636086.2743	5397662.69
D-H	US Forest Service Barn	636604.8773	5397304.077
D-I	Diablo Water Tower	636684.1861	5397214.391
D-J	Monkey Island	637975.6221	5397821.796
D-K	Diablo Lake boat Yard	638487.4039	5397784.295
D-L	Communications Bldg	629304.0806	5392737.281
D-M	Greenhouse - Ladder Creek Garden	629457.6691	5393035.822
D-N	Tug - DIABLO II	642197.5422	5399222.546
D-O	Tug - BOUNDARY	637985.4009	5397922.547
D-P	Tug - SKAGIT	638017.8425	5397934.909

- E. Ross Powerhouse Complex. The area encompasses 46.65 acres. The period of significance for this area is from 1937-1960.

Label	Area	N	E
E-A	Ross Dam Complex	636236	5397959
E-B	Ross Dam Complex	636407	5397727
E-C	Ross Dam Complex	636125.4612	5397663.508
E-D	Ross Dam Complex	636097.0662	5397701.219

- F. Town of Diablo, Hollywood Residential Area. The area encompasses 10.96 acres. The period of significance for this area is from 1937-1954.

Label	Area	N	E
F-A	Diablo - Hollywood	641933	5399654
F-B	Diablo - Hollywood	642268	5399451
F-C	Diablo - Hollywood	642040	5399118
F-D	Diablo - Hollywood	641644	5399048

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BOUNDARY JUSTIFICATION:

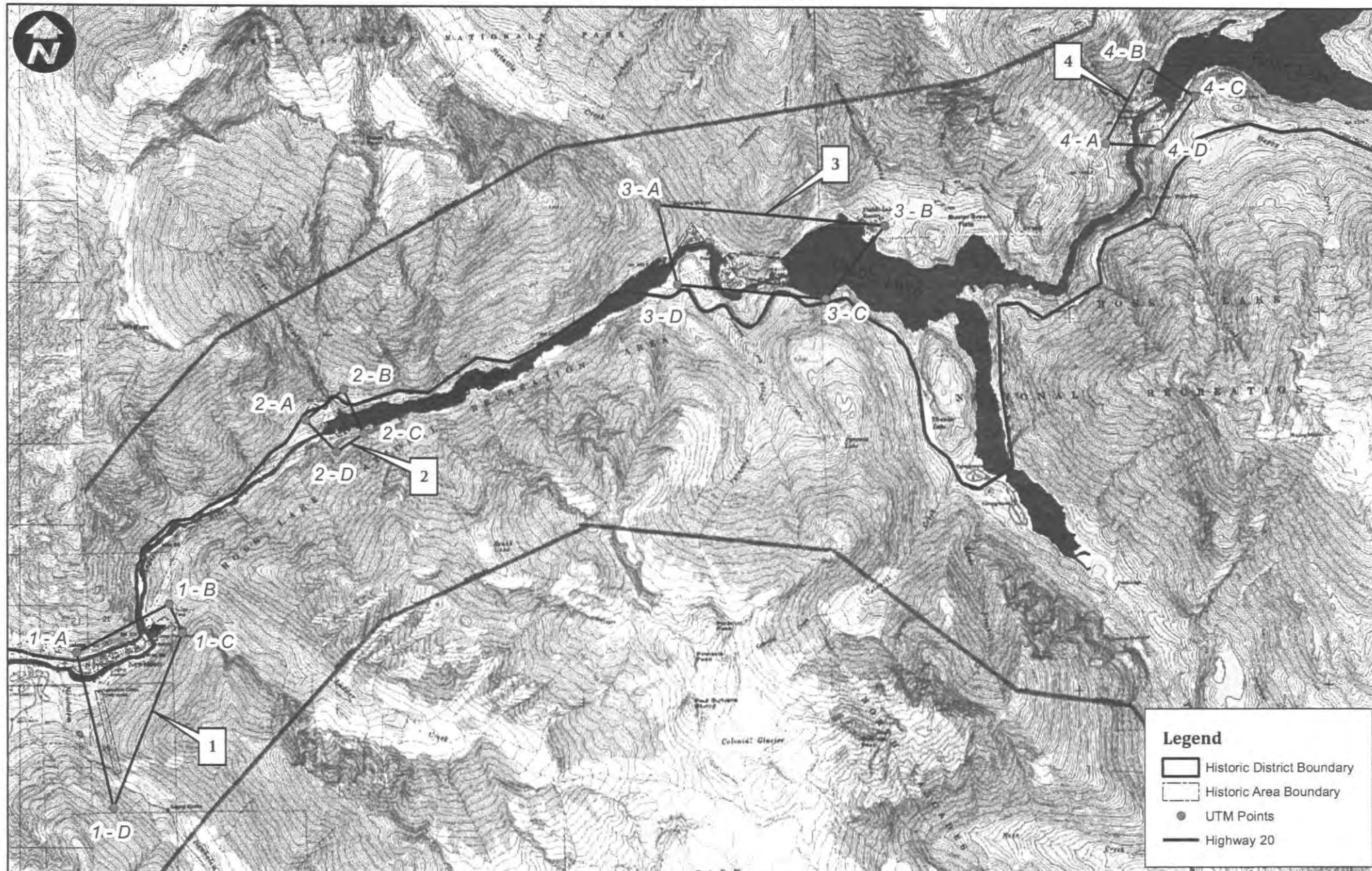
The boundaries of the historic areas were chosen to encompass areas with the most significant resources, such as powerhouses and dams, or areas with a high proportion of contributing resources, such as the residential areas of Newhalem and Diablo.



Historic District Boundaries - UTM Map

Skagit River & Newhalem Creek Hydroelectric Projects

National Historic Districts



Imagery: USGS

Coordinate System: NAD_1983_UTM_Zone_10N
Projection: Transverse_Mercator_Linear Unit: Meter

0 1.25 2.5 5 Miles

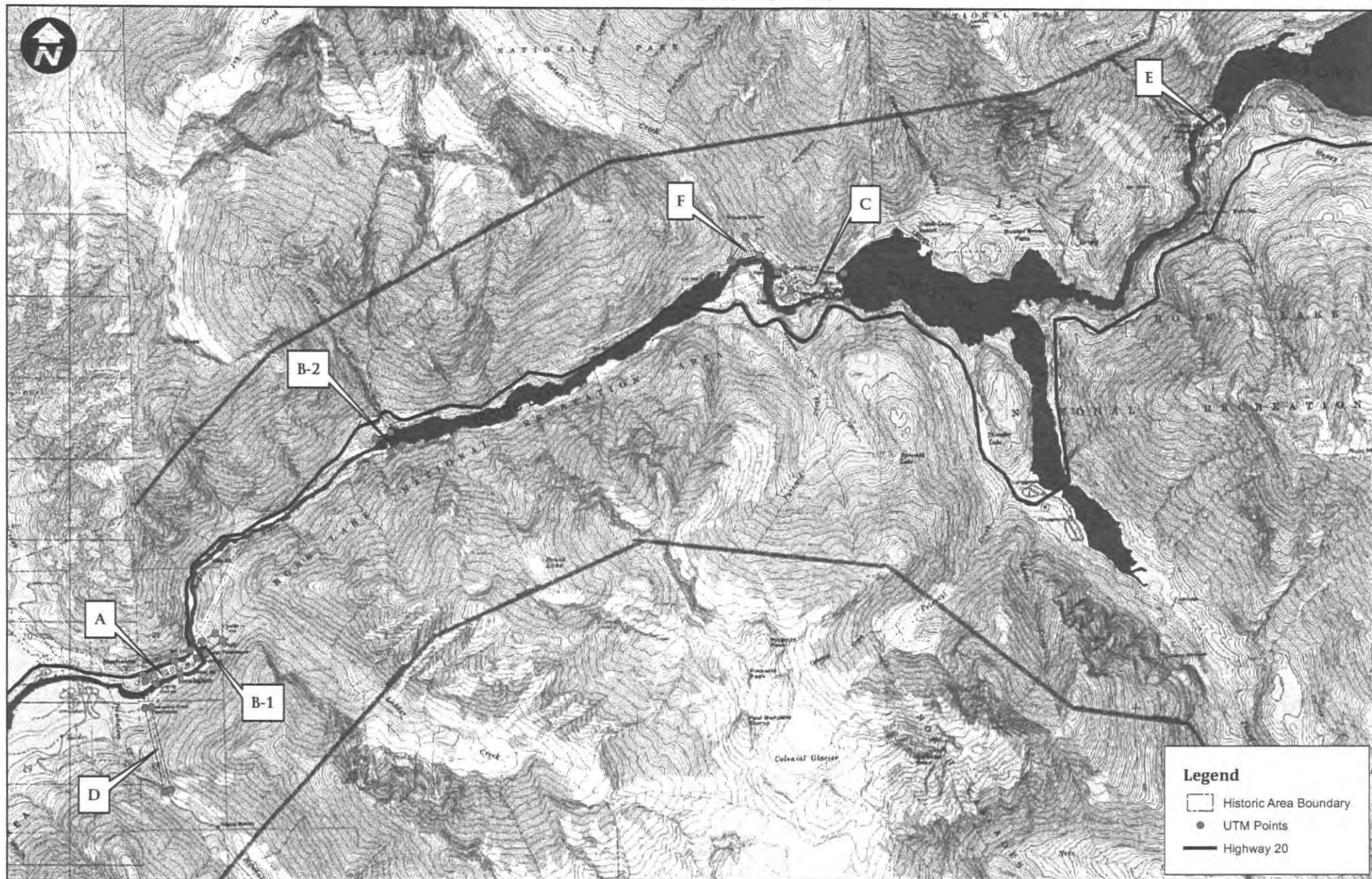
1 in = 1 mile 1:53,360



Historic Area Boundaries - UTM Map

Skagit River & Newhalem Creek Hydroelectric Projects

National Historic Districts



Imagery: USGS
Coordinate System: NAD_1983_UTM_Zone_10N
Projection: Transverse_Mercator, Linear Unit: Meter

0 1.25 2.5 5 Miles

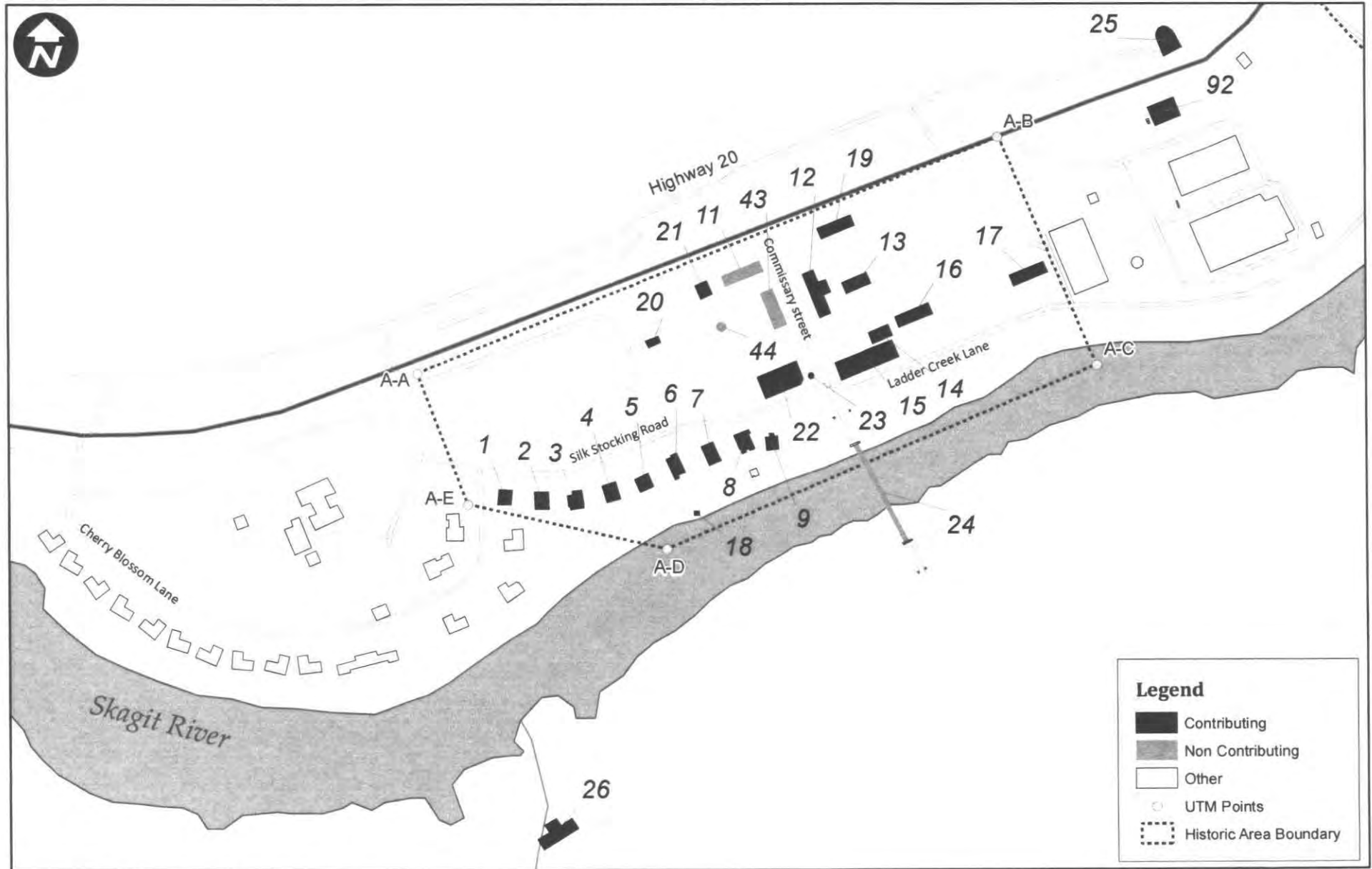
1 in = 1 mile 1:63,360



Town of Newhalem - (Historic Area "A")

Skagit River & Newhalem Creek Hydroelectric Projects

National Historic Districts



Disclaimer: Building/structure footprint & street dimensions are approximate and not based on a survey.

0 500 1,000 2,000 Feet

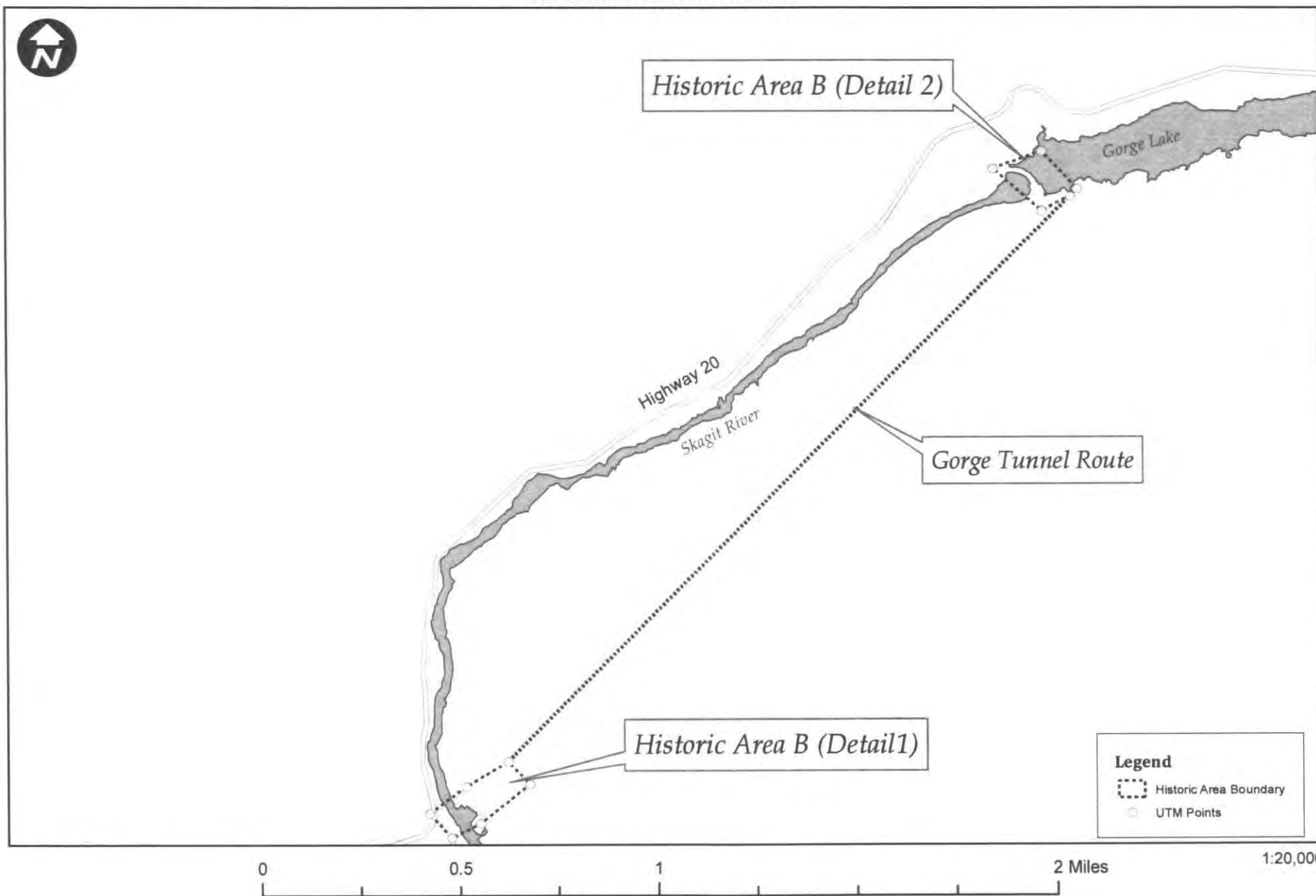
1:3,475



Gorge Powerhouse & Dam Complex - (Historic Area "B")

Skagit River & Newhalem Creek Hydroelectric Projects

National Historic Districts

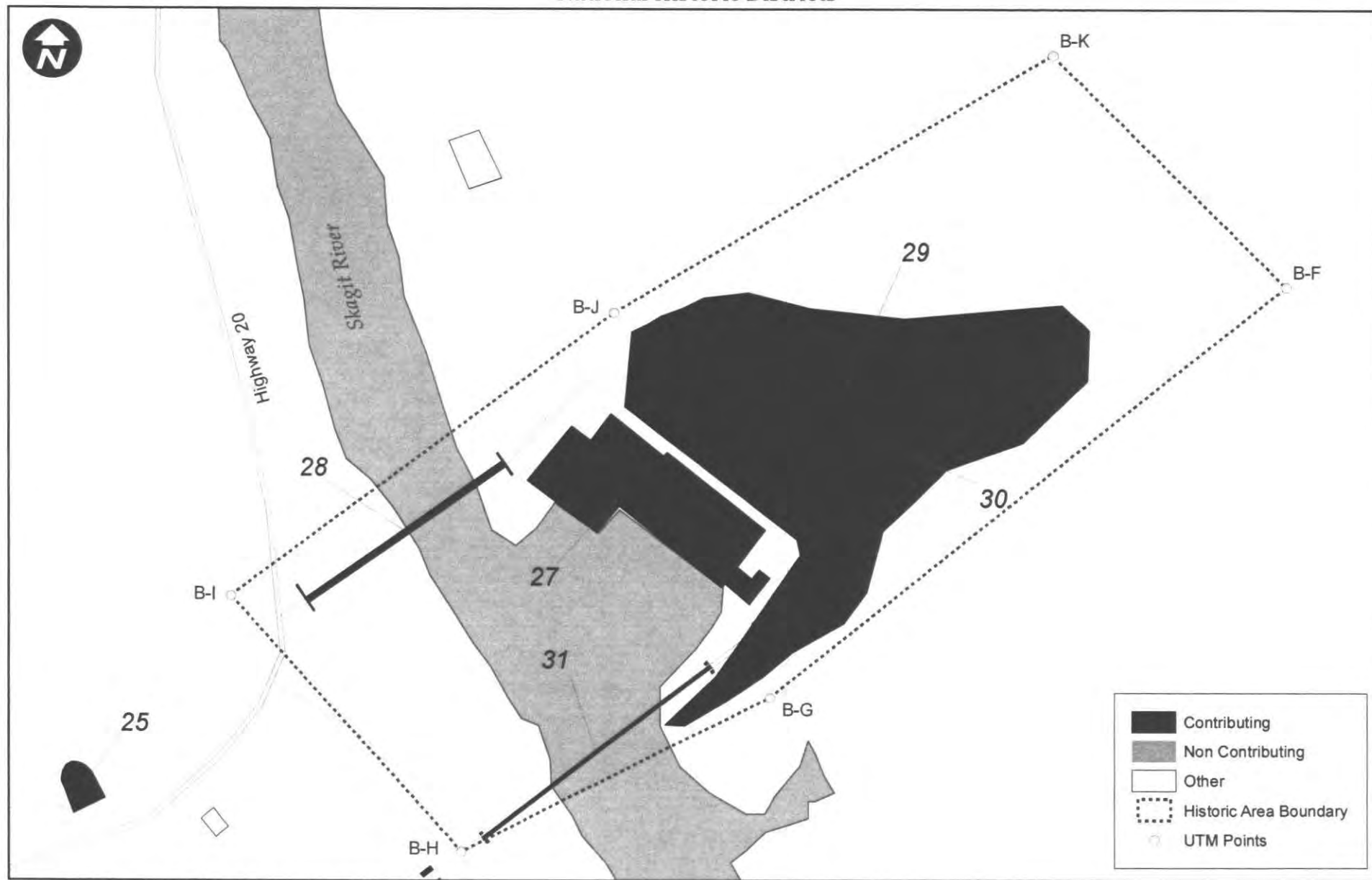




Gorge Powerhouse & Dam Complex - (Historic Area "B", Detail 1)

Skagit River & Newhalem Creek Hydroelectric Projects

National Historic Districts



Disclaimer: Building footprint & street dimensions are approximate and not based on a survey.

0 250 500 1,000 Feet

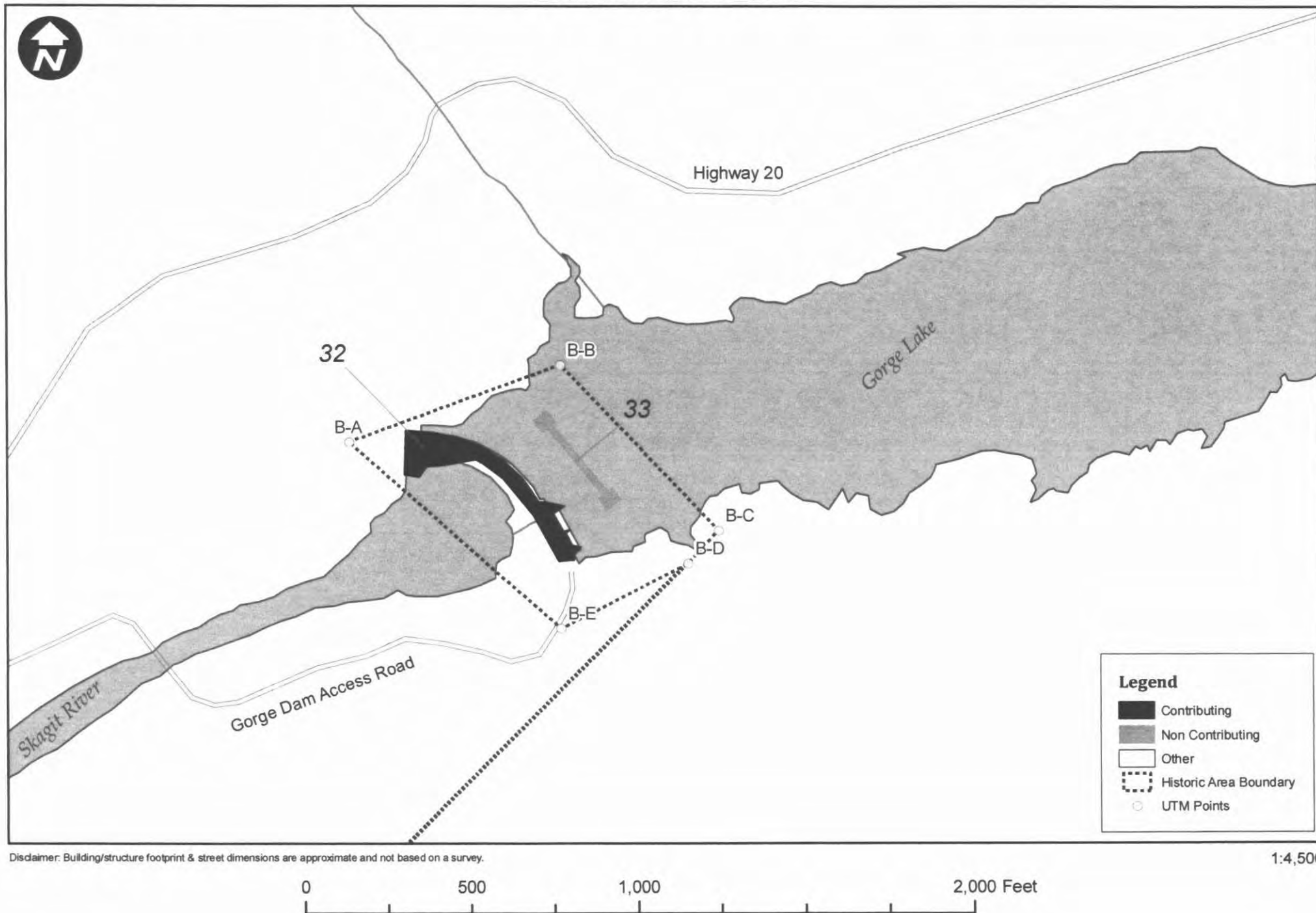
1:2,000



Gorge Powerhouse & Dam Complex - (Historic Area "B", Detail 2)

Skagit River & Newhalem Creek Hydroelectric Projects

National Historic Districts

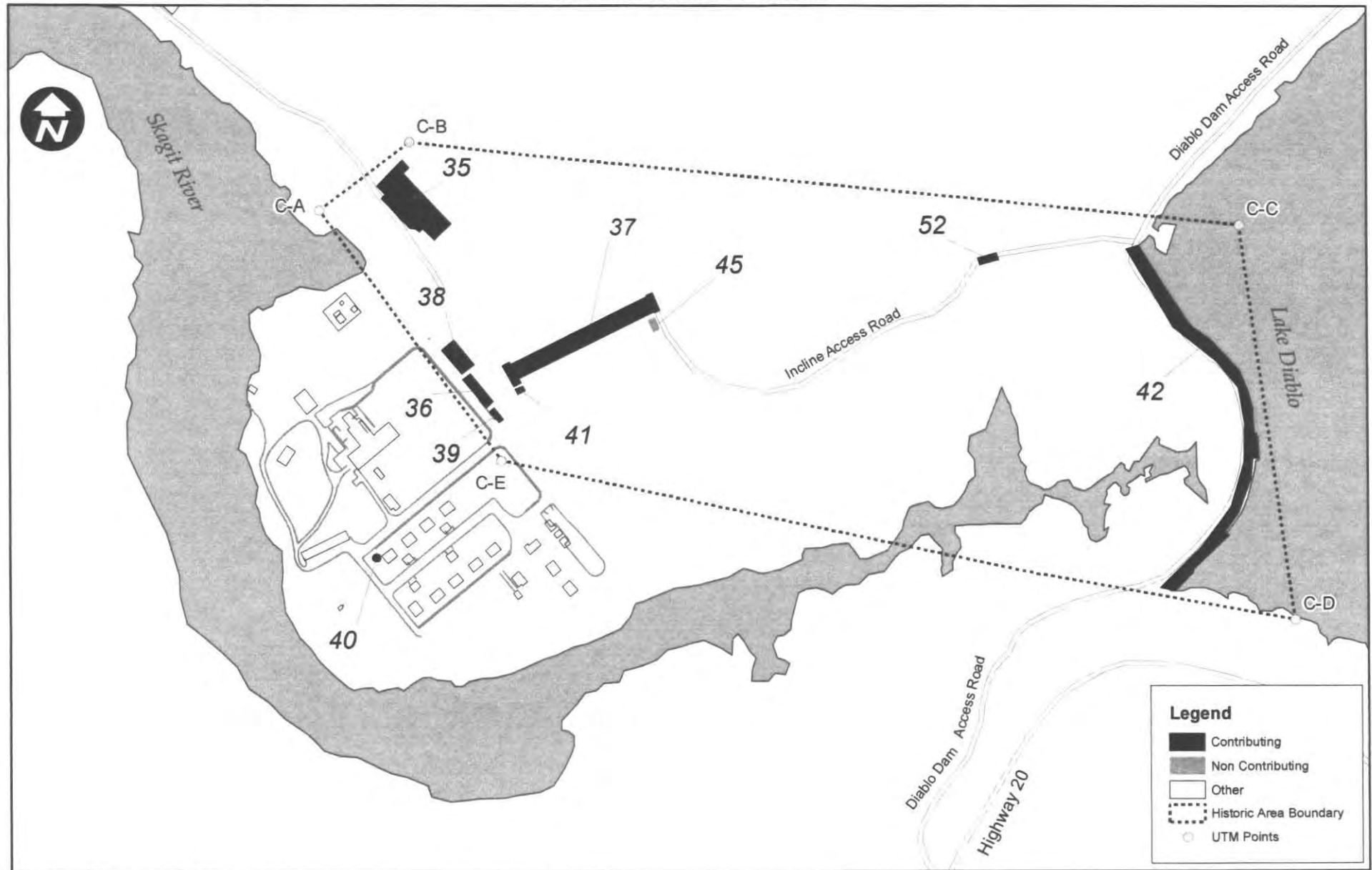


Disclaimer: Building/structure footprint & street dimensions are approximate and not based on a survey.



Diablo Powerhouse Complex - (Historic Area "C")

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic Districts



Disclaimer: Building footprint & street dimensions are approximate and not based on a survey.

1:4,500

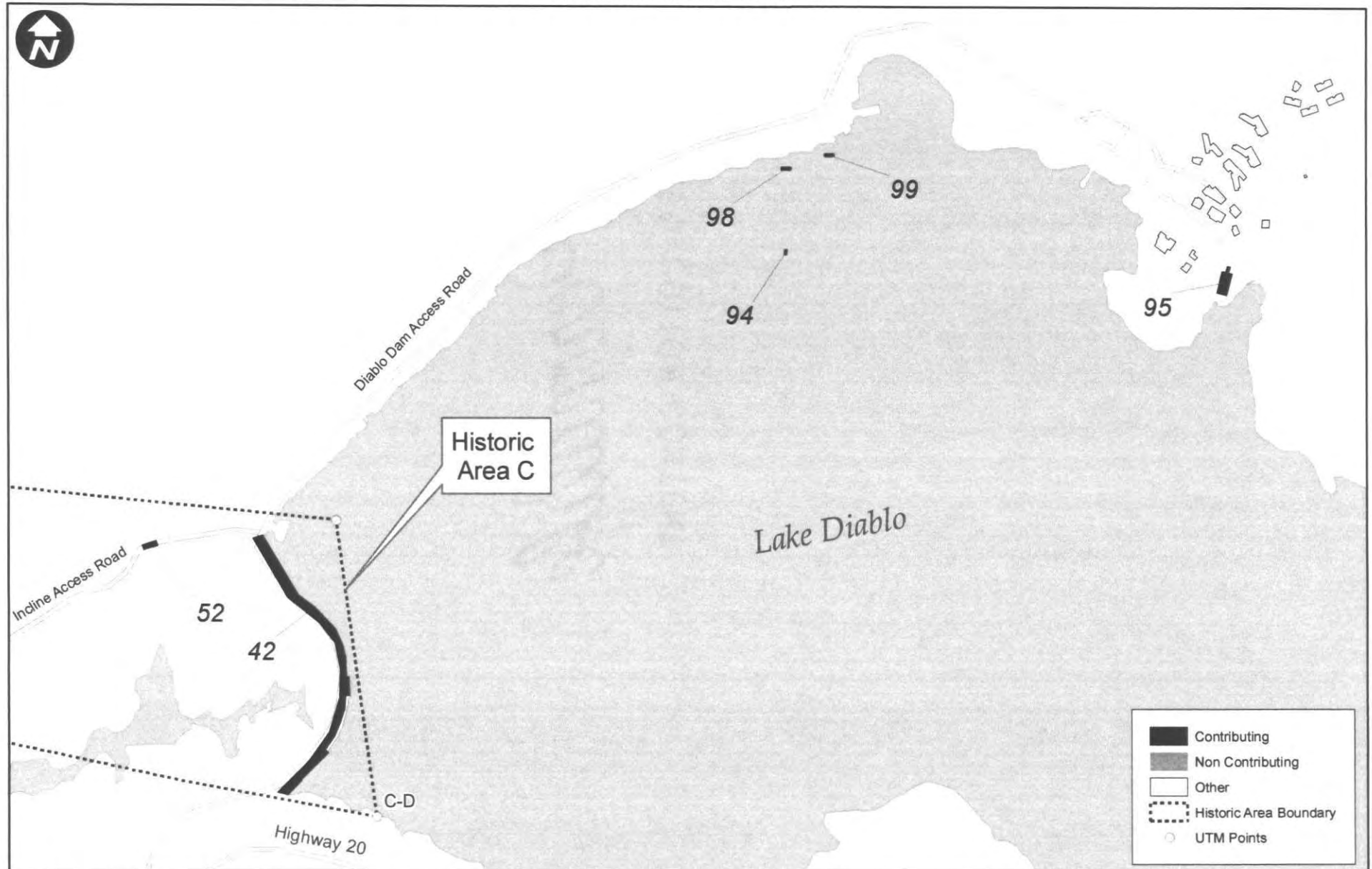
0 500 1,000 2,000 Feet



Diablo Lake - Area "D" Discontiguous Resources

Skagit River & Newhalem Creek Hydroelectric Projects

National Historic Districts



Disclaimer: Building footprint/structure & street dimensions are approximate and not based on a survey.

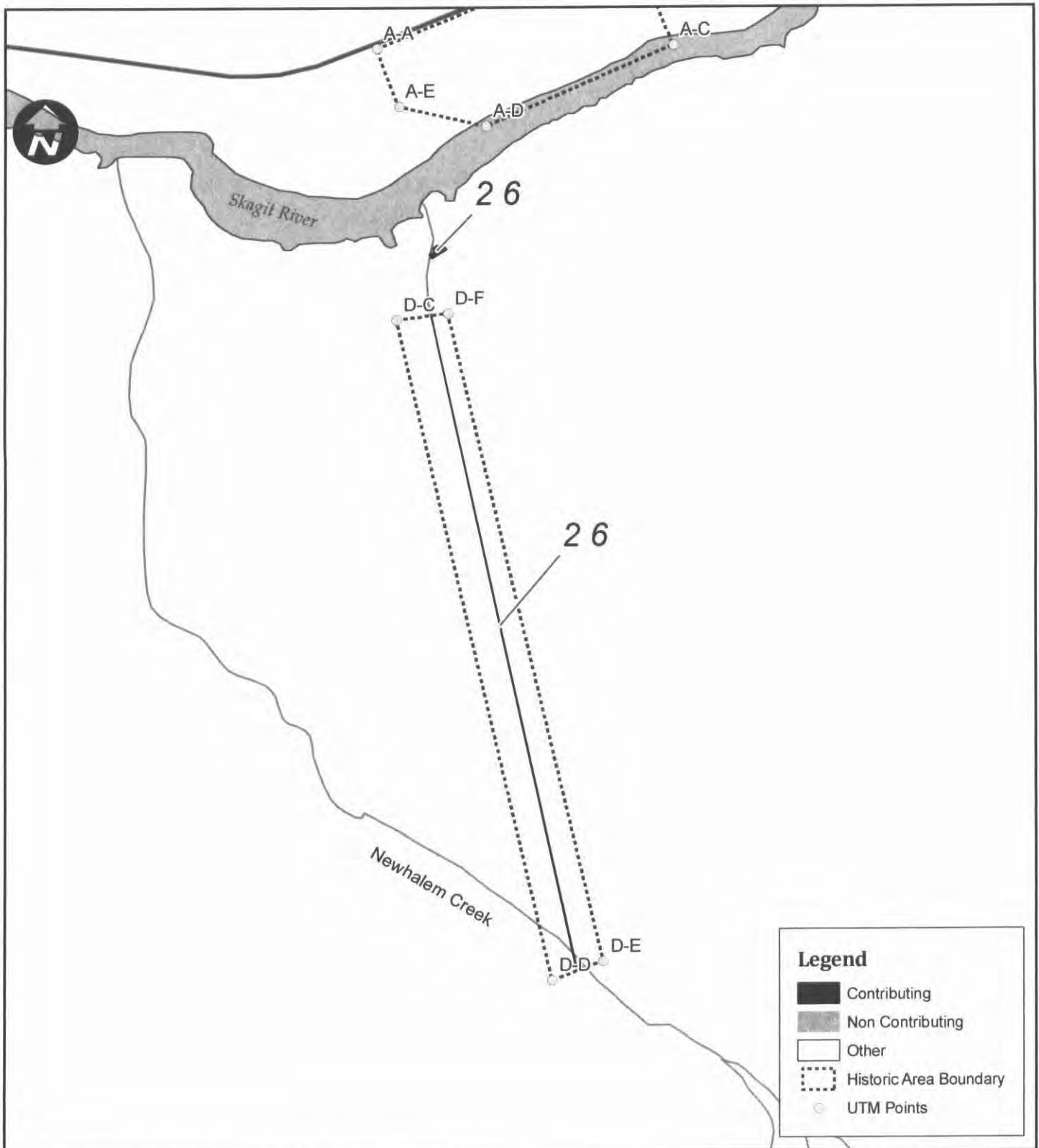
0 500 1,000 2,000 Feet

1:6,000



Newhalem Creek Powerhouse Site Area "D" Discontiguous Resources.

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic Districts



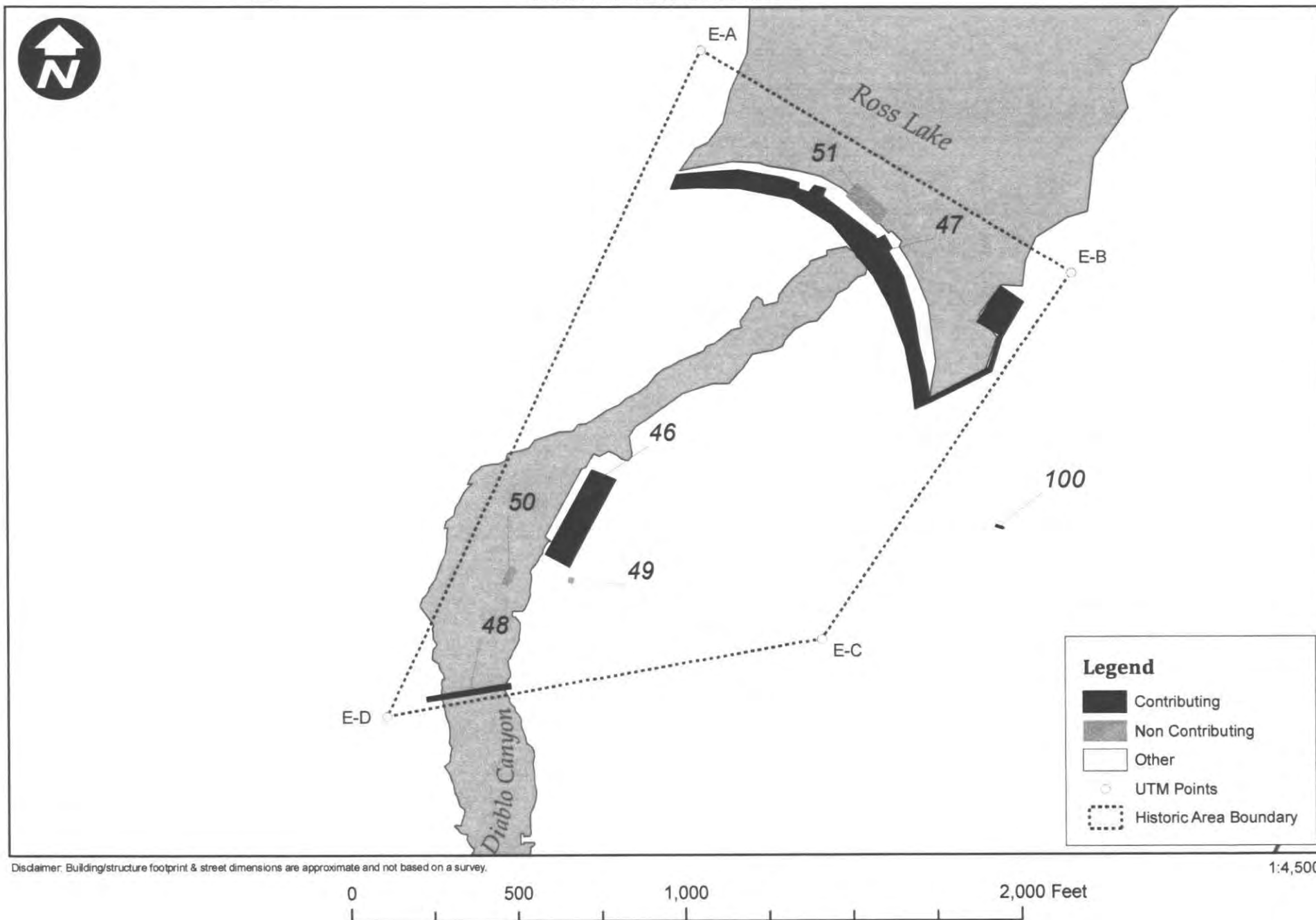
Disclaimer: Building/structure footprint & street dimensions are approximate and not based on a survey.



Ross Powerhouse Complex - (Historic Area "E")

Skagit River & Newhalem Creek Hydroelectric Projects

National Historic Districts

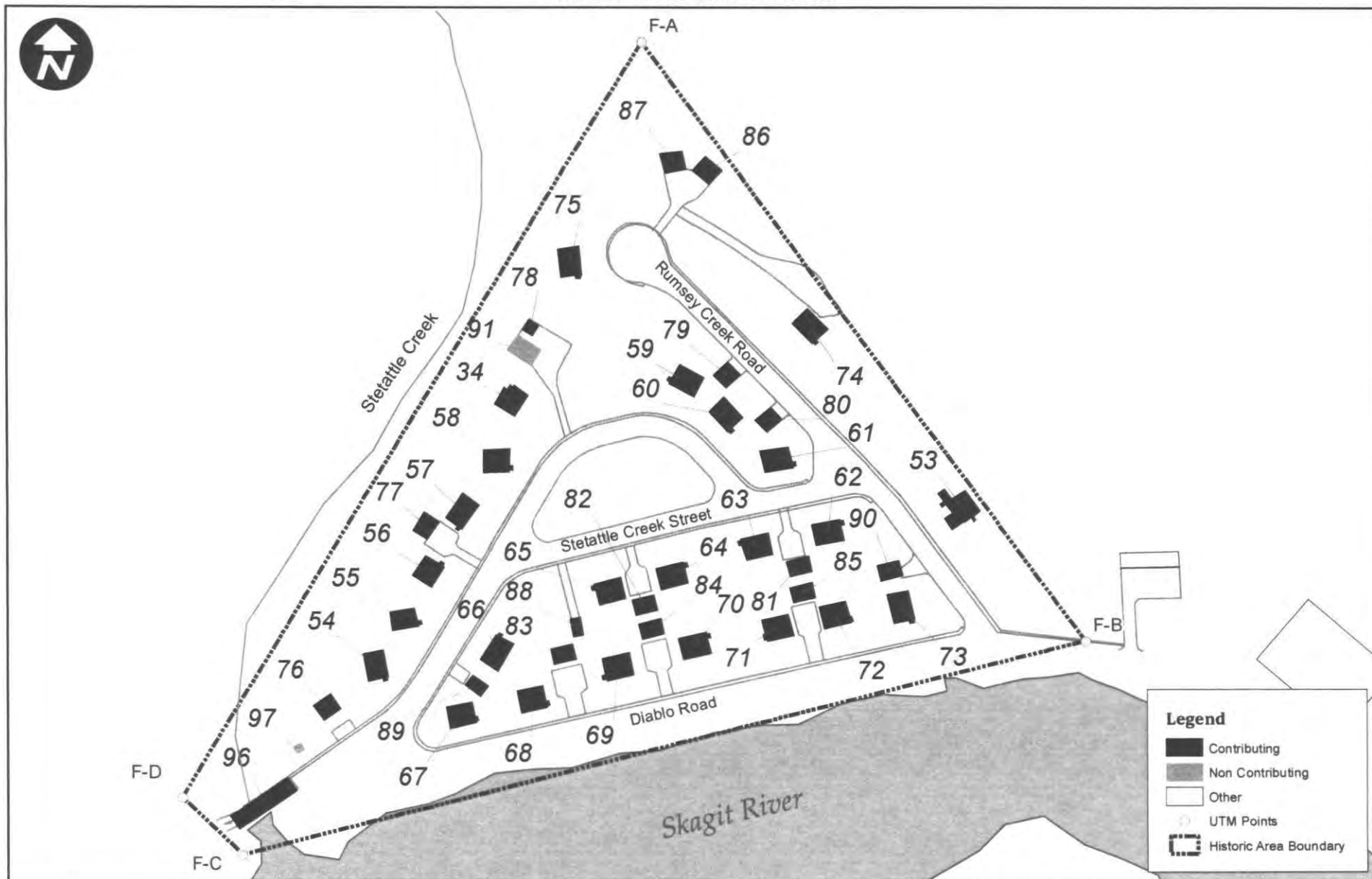




Hollywood Residential Area - (Historic Area "F")

Skagit River & Newhalem Creek Hydroelectric Projects

National Historic Districts



Disclaimer: Building/structure footprint & street dimensions are approximate and not based on a survey.

1:2,000

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WHATCOM COUNTY, WASHINGTON

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MAPS:

USGS Maps: Mount Triumph Quadrangle, Diablo Dam Quadrangle and Ross Dam Quadrangle.
Sketch Maps:

1. Historic District Boundaries–UTM Map, Skagit River & Newhalem Creek Hydroelectric Projects National Historic District
2. Historic Area Boundaries–UTM Map, Skagit River & Newhalem Creek Hydroelectric Projects National Historic District
3. Town of Newhalem – (Historic Area “A”) Skagit River & Newhalem Creek Hydroelectric Projects National Historic District
4. Gorge Powerhouse & Dam Complex – (Historic Area “B”) Skagit River & Newhalem Creek Hydroelectric Projects National Historic District
5. Gorge Powerhouse & Dam Complex – (Historic Area “B”, Detail 1) Skagit River & Newhalem Creek Hydroelectric Projects National Historic District
6. Gorge Powerhouse & Dam Complex – (Historic Area “B”, Detail 2) Skagit River & Newhalem Creek Hydroelectric Projects National Historic District
7. Diablo Powerhouse Complex – (Historic Area “C”) Skagit River & Newhalem Creek Hydroelectric Projects National Historic District
8. Diablo Lake – (Historic Area “D” Discontiguous Resources) Skagit River & Newhalem Creek Hydroelectric Projects National Historic District
9. Newhalem Creek Powerhouse Site – (Historic Area “D” Discontiguous Resources) Skagit River & Newhalem Creek Hydroelectric Projects National Historic District
10. Ross Powerhouse Complex – (Historic Area “E”) Skagit River & Newhalem Creek Hydroelectric Projects National Historic District
11. Hollywood Residential Area – (Historic Area “F”) Skagit River & Newhalem Creek Hydroelectric Projects National Historic District

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WHATCOM COUNTY, WASHINGTON

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PHOTOGRAPHS:

<u>Number</u>	<u>AREA A</u>	<u>File #</u>
01	Silk Stocking Row House #8 (Resource #01) Whatcom County 8 Silk Stocking Row, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	0578
02	Silk Stocking Row House #7 (Resource #02) Whatcom County 7 Silk Stocking Row, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	0571
03	Silk Stocking Row House #6 (Resource #03) Whatcom County 6 Silk Stocking Row, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	0570
04	Silk Stocking Row House #5 (Resource #04) Whatcom County 5 Silk Stocking Row, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	0559
05	Silk Stocking Row House #4 (Resource #05) Whatcom County 4 Silk Stocking Row, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	0552
06	Silk Stocking Row House #3 (Resource #06) Whatcom County 3 Silk Stocking Row, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	0547
07	Silk Stocking Row House #2 (Resource #07) Whatcom County 2 Silk Stocking Row, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	0546

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- | | | |
|----|--|------|
| 08 | Silk Stocking Row House #1 (Resource #08)
Whatcom County
1 Silk Stocking Row, Newhalem, WA 98283
Larry E. Johnson, photographer, October 28, 2009 | 0537 |
| 09 | Schoolteacher's House /House #222 (Resource #09)
Whatcom County
Silk Stocking Row, Newhalem, WA 98283
Larry E. Johnson, photographer, October 28, 2009 | 0534 |
| 10 | Newhalem Garages #1-11
Whatcom County
Highway 20, Newhalem, WA 98283
Larry E. Johnson, photographer, October 28, 2009
(no longer existing as of August 2010) | 0514 |
| 11 | The Hotel/Bunkhouse #23 (Resource #11)
Whatcom County
Main Street, Newhalem, WA 98283
Larry E. Johnson, photographer, October 28, 2009 | 4191 |
| 12 | Commissary/Newhalem General Store (Resource #12)
Whatcom County
Main Street, Newhalem, WA 98283
Larry E. Johnson, photographer, October 28, 2009 | 4189 |
| 13 | Bunkhouse #13/Pansy House (Resource #13)
Whatcom County
Bachelor Lane, Newhalem WA 98283
Larry E. Johnson, photographer, October 28, 2009 | 4173 |
| 14 | New Cook's Bunkhouse/Bunkhouse #10 (Resource #14)
Whatcom County
Bachelor Lane, Newhalem WA 98283
Larry E. Johnson, photographer, October 28, 2009 | 4171 |
| 15 | Mess Hall /Gorge Inn (Resource #15)
Whatcom County
Bachelor Lane, Newhalem WA 98283 | 4180 |

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	Larry E. Johnson, photographer, October 28, 2009	
16	Old Cook's Bunkhouse/Cambridge House (Resource #16) Whatcom County Main Street, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	4166
17	Tourist Dormitory #70 /Bunkhouse #70 (Resource #17) Whatcom County Bachelor Lane, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	4162
18	USGS Stream Gauging Station and Cable Car Site (Resource #18) Whatcom County Highway 20, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	4156
19	Old Number Six (Resource #19) Whatcom County Highway 20, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	4149
20	Tourist Restroom/Visitor's Center (Resource #21) Whatcom County Highway 20, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	0437
21	Fire Hall (Resource #20) Whatcom County Highway 20, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	0478
22	Currier Hall (Resource #22) Whatcom County Main Street, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	0484
23	Totem pole (Resource #23) Whatcom County Main Street, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	0485

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WHATCOM COUNTY, WASHINGTON

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24	Trail of the Cedars Suspension Bridge (Resource #24) Whatcom County Main Street, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	4181
25	Skagit Information Center (Resource #43) Whatcom County Main Street, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	4194
26	Temple of Power (Resource #44) Whatcom County Main Street, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	4155
<u>Number</u>	<u>AREA B</u>	<u>File #</u>
27	Gorge Powerhouse (Resource #27) Whatcom County Highway 20, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	4098
28	Gorge Railroad Bridge (Resource #28) Whatcom County East of Highway 20, west of Gorge Powerhouse, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	0402
29	Gravity Oil Tank House (Resource #29) Whatcom County Ladder Creek Falls Park, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	0800
30	Ladder Creek Falls Gardens (Resource #30) Whatcom County East of Gorge Powerhouse, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	4118
31	Gorge Pedestrian Suspension Bridge (Resource #31) Whatcom County Ladder Creek Lane, Newhalem, WA 98283	0392

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	Larry E. Johnson, photographer, October 28, 2009	
32	Gorge High Dam (Resource #32) Whatcom County Approx. 3 miles east of Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	4086
	<u>AREA C</u>	
33	Diablo Powerhouse (Resource #35) Whatcom County Diablo Road, Diablo, WA 98283 Larry E. Johnson, photographer, October 28, 2009	3994
34	Incline Waiting Station (Resource #36) Whatcom County Diablo Road, Diablo, WA 98283 Larry E. Johnson, photographer, October 27, 2009	0146
35	Incline Lift and Powerhouse (Resource #37) Whatcom County Diablo, WA 98283 Larry E. Johnson, photographer, October 27, 2009	0148
36	Diablo Commissary (Resource #38) Whatcom County Diablo Road, Diablo, WA 98283 Larry E. Johnson, photographer, October 27, 2009	0140
37	Diablo Dam (Resource #42) Whatcom County East of Newhalem, WA 98283 Larry E. Johnson, photographer, October 29, 2009	0586
38	Windy Gap Railroad Bridge (Resource #52) Whatcom County East of Diablo, WA 98283 Larry E. Johnson, photographer, October 29, 2009	0594
39	Diablo Communications Building/Radio Shack (Resource #39) Whatcom County Diablo Road, Diablo, WA 98283	0155

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40	Larry E. Johnson, photographer, October 27, 2009 Incline Manlift (Resource #41) Whatcom County Diablo, WA 98283 Larry E. Johnson, photographer, October 28, 2009	0788
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41	Incline Garage (Resource #45) Whatcom County Incline Access Road, Diablo, WA 98283 Larry E. Johnson, photographer, October 29, 2009	0589
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<u>Number</u>	<u>DISCONTIGUOUS RESOURCES</u>	<u>File #</u>
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42	Ross Crypt (Resource #25) Whatcom County Highway 20, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	4144
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43	Newhalem Creek Powerhouse Site (Resource #26) Whatcom County Newhalem Creek, Highway 20, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	4234
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44	Newhalem Creek Powerhouse Site (Resource #26) Whatcom County Newhalem Creek, Highway 20, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	4242
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45	Diablo Water Tower (Resource #40) Whatcom County Reflector Bar Section of Diablo, WA 98283 Larry E. Johnson, photographer, October 28, 2009	3986
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46	Newhalem Communications Building/Hazmat Building (Resource #92) Whatcom County Highway 20, Newhalem, WA 98283 Larry E. Johnson, photographer, October 28, 2009	4141
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47	Ladder Creek Garden Greenhouse (Resource #93) Whatcom County Highway 20, Newhalem, WA 98283	4121
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	Larry E. Johnson, photographer, October 28, 2009	
48	Monkey Island Navigation Light (Resource #94) Whatcom County Monkey Island, Diablo Lake, WA 98283 Larry E. Johnson, photographer, October 28, 2009	0690
49	Diablo Lake Boat Yard (Resource #95) Whatcom County Diablo Lake, WA 98283 Larry E. Johnson, photographer, October 28, 2009	0730
50	Stetattle Creek Bridge (Resource #96) Whatcom County Near Hollywood section, Diablo, WA 98283 Larry E. Johnson, photographer, October 27, 2009	0202
51	U.S. Forest Service Barn Whatcom County Reflector Bar Section of Diablo, WA 98283 Larry E. Johnson, photographer, October 28, 2009	0130
52	Tug BOUNDARY (Resource #98) Whatcom County Lake Diablo Larry E. Johnson, photographer, October 28, 2009	0733
53	Tug DIABLO II (Resource #99) Whatcom County Lake Diablo Larry E. Johnson, photographer, October 28, 2009	0735
54	Tug SKAGIT (Resource #100) Whatcom County Vicinity of Ross Dam Larry E. Johnson, photographer, October 28, 2009	0751

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– SKAGIT RIVER AND NEWHALEM CREEK HYDROELECTRIC PROJECTS
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<u>Number</u>	<u>AREA E</u>	<u>File #</u>
55	Ross Powerhouse (Resource #46) Whatcom County Diablo Lake, WA 98238 Larry E. Johnson, photographer, October 28, 2009	0692
56	Ross Dam Intake (Resource #47) Whatcom County Ross Lake, WA 98238 Larry E. Johnson, photographer, October 28, 2009	0755
57	Ross Dam (Resource #47) Whatcom County Ross Lake, WA 98238 Larry E. Johnson, photographer, October 28, 2009	0752
58	Ross Lake Suspension Bridge (Resource #48) Whatcom County Ross Lake, WA 98238 Larry E. Johnson, photographer, October 28, 2009	0392
59	Ross Powerhouse Access Tunnel (Resource #49) Whatcom County Diablo Lake, WA 98238 Larry E. Johnson, photographer, October 28, 2009	0720
60	Ross Powerhouse Moorage (Resource #50) Whatcom County Diablo Lake, WA 98238 Larry E. Johnson, photographer, October 28, 2009	0718
61	Ross Lake Work Boat Moorage (Resource #51) Whatcom County Ross Lake, WA 98238 Larry E. Johnson, photographer, October 28, 2009	0761
<u>Number</u>	<u>AREA F</u>	<u>File #</u>
62	House #2/House H-6 (Resource #34) Whatcom County H6 Stetattle Creek Street, Diablo, WA 98238	0232

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	Larry E. Johnson, photographer, October 27, 2009	
63	Hollywood House H27/Ross Lodge (Resource #53) Whatcom County H27 Rumsey Creek Road, Diablo, WA 98238 Larry E. Johnson, photographer, October 28, 2009	0352
64	Hollywood House H3 (Resource #56) Whatcom County H3 Stetattle Creek Street, Diablo, WA 98238 Larry E. Johnson, photographer, October 27, 2009	0216
65	Hollywood House H4 (Resource #57) Whatcom County H4 Stetattle Creek Street, Diablo, WA 98238 Larry E. Johnson, photographer, October 27, 2009	0224
66	Hollywood House H5 (Resource #58) Whatcom County H5 Stetattle Creek Street, Diablo, WA 98238 Larry E. Johnson, photographer, October 27, 2009	0226
67	Hollywood House H11 (Resource #61) Whatcom County H11 Stetattle Creek Street, Diablo, WA 98238 Larry E. Johnson, photographer, October 28, 2009	0263
68	Hollywood House H12 (Resource #62) Whatcom County H12 Stetattle Creek Street, Diablo, WA 98238 Larry E. Johnson, photographer, October 28, 2009	0349
69	Hollywood House H13 (Resource #63) Whatcom County H13 Stetattle Creek Street, Diablo, WA 98238 Larry E. Johnson, photographer, October 28, 2009	0341
70	Hollywood House H14 (Resource #64) Whatcom County H14 Stetattle Creek Street, Diablo, WA 98238 Larry E. Johnson, photographer, October 28, 2009	0340

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71	Hollywood House H15 (Resource #65) Whatcom County H15 Stetattle Creek Street, Diablo, WA 98238 Larry E. Johnson, photographer, October 28, 2009	0333
72	Hollywood House H19 (Resource #68) Whatcom County H19 Diablo Road, Diablo, WA 98238 Larry E. Johnson, photographer, October 28, 2009	0311
73	Hollywood Garage H10&11 (Resource #80) Whatcom County Rumsey Creek Road, Diablo, WA 98238 Larry E. Johnson, photographer, October 28, 2009	0264
74	Hollywood Garage H24 (Resource #90) Whatcom County Rumsey Creek Road, Diablo, WA 98238 Larry E. Johnson, photographer, October 28, 2009	0276
75	Hollywood Garage H35&36 (Resource #87) Whatcom County Rumsey Creek Road, Diablo, WA 98238 Larry E. Johnson, photographer, October 27, 2009	0247
76	Diablo Volunteer Fire Department (Resource #91) Whatcom County H5-6 Stetattle Creek Street, Diablo, WA 98238 Larry E. Johnson, photographer, October 27, 2009	0238

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HISTORIC PHOTOGRAPHS:

- H-1 Title: Permanent cottages built at Newhalem for Gorge Dam workers, looking east, June 25, 1923
University of Washington Libraries Special Collections Division, Digital Collections
Date: 1923
Order No: WWDL0335
Item No: PH Coll 45 Album 1.72a
Collection: Seattle Power and Water Supply Collection
Repository Collection: Seattle City Light Albums. PH Coll 45
- H-2 Title: Winston Brothers Construction Company workers camp, Diablo Dam site, May 12, 1928
University of Washington Libraries Special Collections Division, Digital Collections
Date: 1928
Order No: WWDL0382
Item No: PH Coll 45.133
Collection: Seattle Power and Water Supply Collection
Repository Collection: Seattle City Light Albums. PH Coll 45
- H-3 Title: Diablo Dam Incline [laborers posing]
Seattle Municipal Archives Photograph Collection
Date: Aug 27, 1930
Item No: 2306
Orig No: 5387
Collection: Engineering Department Photographic Negatives
Location: 24
- H-4 Title: Diablo Boats, Boat before launching [boat house]
Seattle Municipal Archives Photograph Collection
Date: Sept 7, 1935
Item No: 14244
Orig No: LD-75
Collection: City Light Photographic Negatives
Location: 96
- H-5 Title: Diablo Powerhouse and Camp, Reflector Bar, Skagit River, October 1, 1935
University of Washington Libraries Special Collections Division, Digital Collections
Date: 1935
Order No: WWDL0597
Item No: PH Coll 627.164
Collection: Seattle Power and Water Supply Collection
Repository Collection: Historic American Engineering Record No. WA-24 (Skagit River and
Newhalem Creek Hydroelectric Projects)

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- H-6 Title: Aerial view of Newhalem showing tourist dormitories under construction, 1935
University of Washington Libraries Special Collections Division, Digital Collections
Date: 1935
Order No: WWDL0618
Item No: PH Coll 627.220
Collection: Seattle Power and Water Supply Collection
Repository Collection: Historic American Engineering Record No. WA-24 (Skagit River and
 Newhalem Creek Hydroelectric Projects)
- H-7 Title: Newhalem Taken From Bridge Tower
Seattle Municipal Archives Photograph Collection
Date: 1935
Item No: 16664
Orig No: L-122
Collection: City Light Photographic Negatives
Location: 116
- H-8 Title: Railroad bridge/gorge at Newhalem
Seattle Municipal Archives Photograph Collection
Date: Oct 20, 1938
Item No: 136331
Orig No: RD-84
Collection: City Light Photographic Negatives
Location: 95
- H-9 Title: Ross Dam
Seattle Municipal Archives Photograph Collection
Date: April 11, 1940
Item No: 13260
Orig No: L-805
Collection: City Light Photographic Negatives
Location: 93
- H-10 Title: Gorge Powerhouse View From Bridge
Seattle Municipal Archives Photograph Collection
Date: Oct1, 1951
Item No: 23346
Orig No: LT-32-17
Collection: City Light Photographic Negatives

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Location: 133

H-11 Title: Gorge Swtichyard and Newhalem
Seattle Municipal Archives Photograph Collection
Date: Dec 12, 1951
Item No: 23121
Orig No: LT-3174
Collection: City Light Photographic Negatives
Location: 132

H-12 Title: Area between A line streets in Hollywood
Seattle Municipal Archives Photograph Collection
Date: Oct 12, 1954
Item No: 27057
Orig No: SP-59-GSO
Collection: City Light Photographic Negatives
Location: 142

H-13 Title: General view of Reflector Bar
Seattle Municipal Archives Photograph Collection
Date: Oct 21, 1954
Item No: 27079
Orig No: SP-81-GSO
Collection: City Light Photographic Negatives
Location: 142

H-14 Title: General view of Hollywood
Seattle Municipal Archives Photograph Collection
Date: Nov 3, 1954
Item No: 27108
Orig No: SP-110-GSO
Collection: City Light Photographic Negatives
Location: 142

H-15 Pacific Motor Boat September 1948, pp. 21-22



Property of Special Collections, University of Washington Libraries

H-1

Title: Permanent cottages built at Newhalem for Gorge Dam workers, looking east, June 25, 1923

University of Washington
Libraries Special Collections
Division, Digital Collections

Date: 1923

Order No: WWDL0335

Item No: PH Coll 45 Album
1.72a

Collection: Seattle Power and
Water Supply Collection

Repository Collection: Seattle
City Light Albums. PH Coll 45



Property of Special Collections, University of Washington Libraries

H-2

Title: Winston Brothers
Construction Company workers
camp, Diablo Dam site, May 12,
1928

University of Washington
Libraries Special Collections
Division, Digital Collections

Date: 1928

Order No: WWDL0382

Item No: PH Coll 45.133

Collection: Seattle Power and
Water Supply Collection

Repository Collection: Seattle
City Light Albums. PH Coll 45



H-3

Title: Diablo Dam Incline
[laborers posing]

Seattle Municipal Archives
Photograph Collection

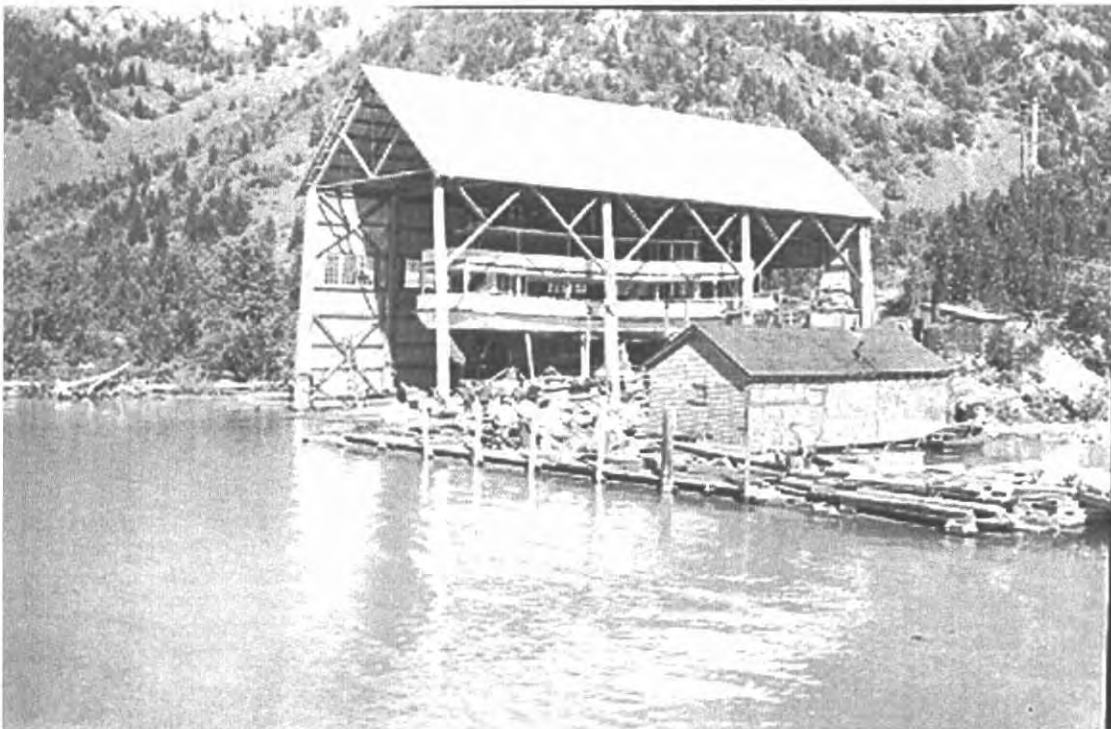
Date: Aug 27, 1930

Item No: 2306

Orig No: 5387

Collection: Engineering
Department Photographic
Negatives

Location: 24



H-4

Title: Diablo Boats, Boat before
launching [boat house]

Seattle Municipal Archives
Photograph Collection

Date: Sept 7, 1935

Item No: 14244

Orig No: LD-75

Collection: City Light
Photographic Negatives

Location: 96



Property of Special Collections, University of Washington Libraries.

H-5

Title: Diablo Powerhouse and Camp, Reflector Bar, Skagit River, October 1, 1935

University of Washington
Libraries Special Collections
Division, Digital Collections

Date: 1935

Order No: WWDL0597

Item No: PH Coll 627.164

Collection: Seattle Power and Water Supply Collection

Repository Collection:
Historic American Engineering
Record No. WA-24 (Skagit
River and Newhalem Creek
Hydroelectric Projects)



Property of Special Collections, University of Washington Libraries.

H-6

Title: Aerial view of Newhalem showing tourist dormitories under construction, 1935

University of Washington
Libraries Special Collections
Division, Digital Collections

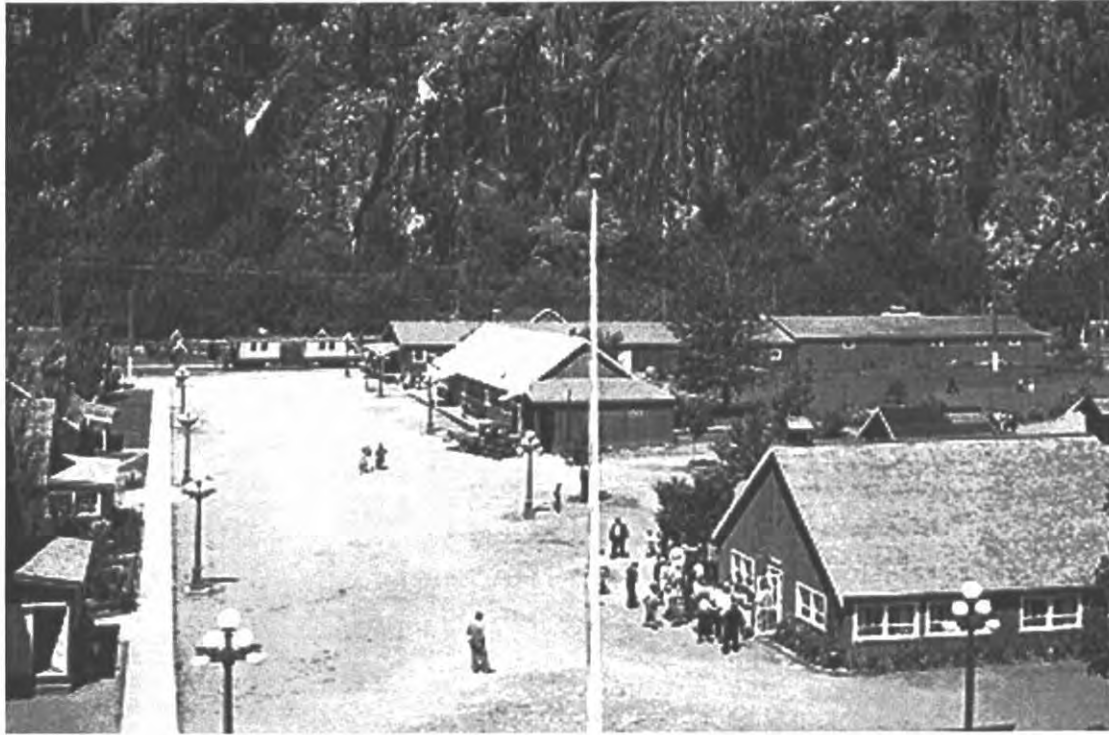
Date: 1935

Order No: WWDL0618

Item No: PH Coll 627.220

Collection: Seattle Power and Water Supply Collection

Repository Collection:
Historic American Engineering
Record No. WA-24 (Skagit
River and Newhalem Creek
Hydroelectric Projects)



H-7

Title: Newhalem Taken From Bridge Tower

Seattle Municipal Archives
Photograph Collection

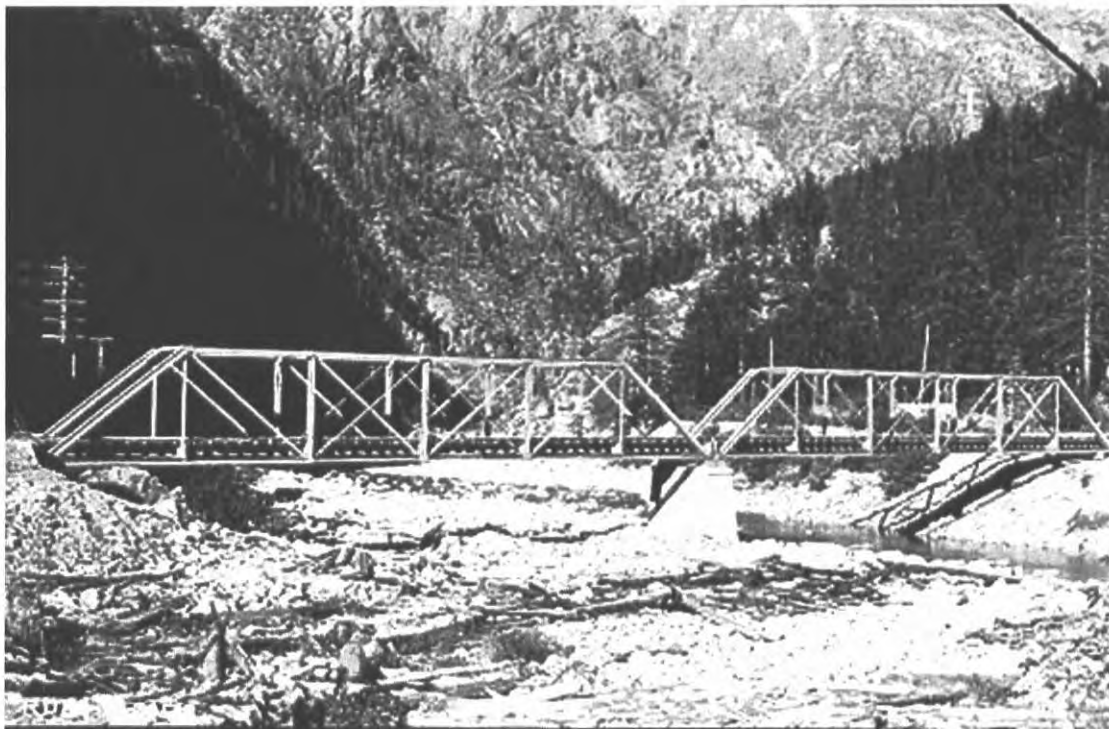
Date: 1935

Item No: 16664

Orig No: L-122

Collection: City Light
Photographic Negatives

Location: 116



H-8

Title: Railroad bridge/gorge at Newhalem

Seattle Municipal Archives
Photograph Collection

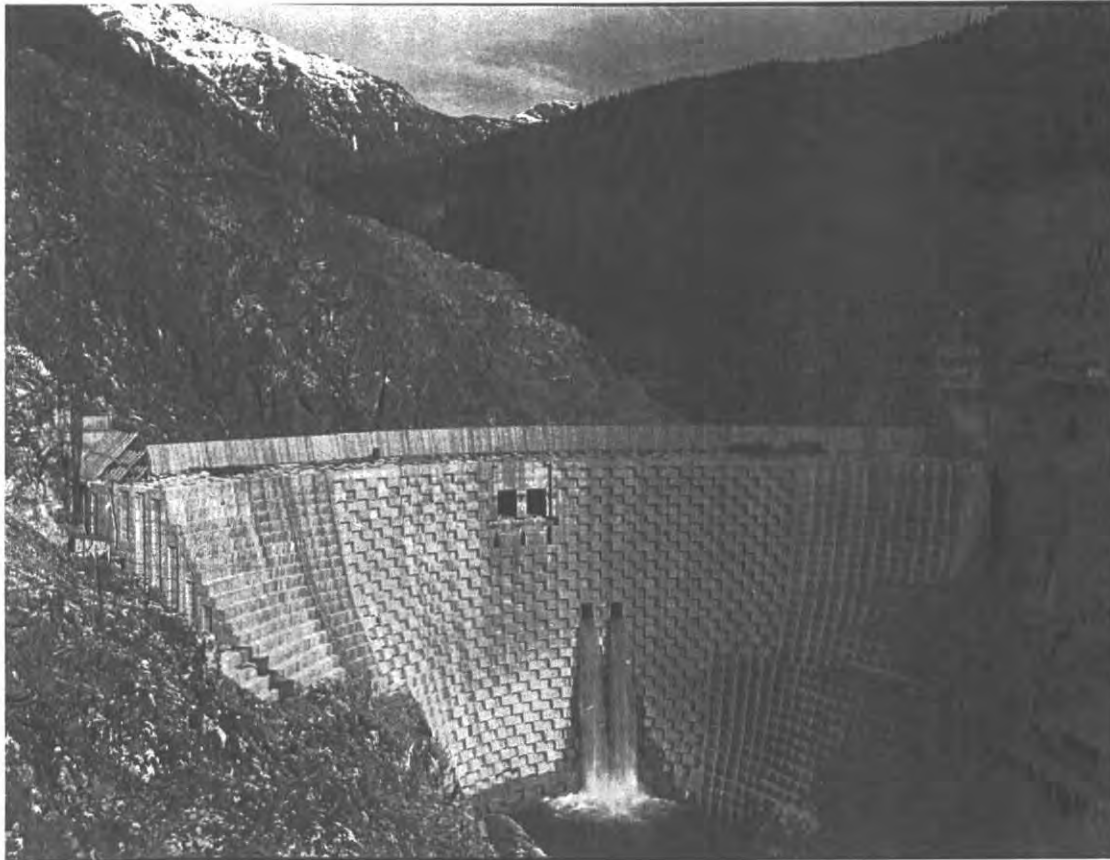
Date: Oct 20, 1938

Item No: 136331

Orig No: RD-84

Collection: City Light
Photographic Negatives

Location: 95



H-9

Title: Ross Dam

Seattle Municipal Archives
Photograph Collection

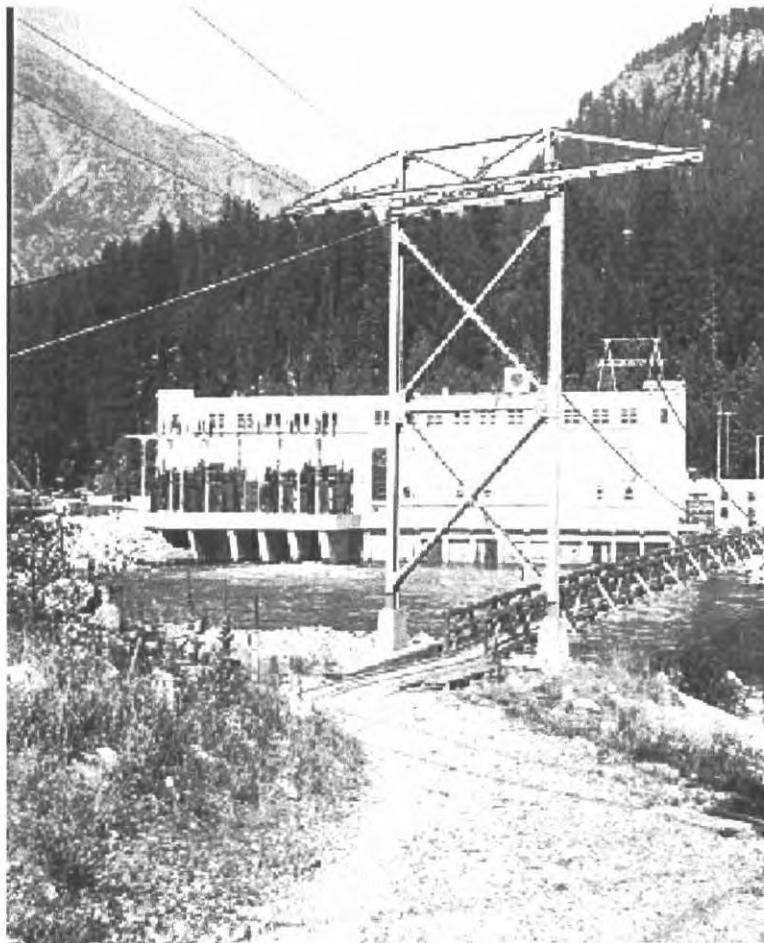
Date: April 11, 1940

Item No: 13260

Orig No: L-805

Collection: City Light
Photographic Negatives

Location: 93



H-10

Title: Gorge Powerhouse View
From Bridge

Seattle Municipal Archives
Photograph Collection

Date: Oct1, 1951

Item No: 23346

Orig No: LT-32-17

Collection: City Light
Photographic Negatives

Location: 133



H-11

Title: Gorge Switchyard and Newhalem

Seattle Municipal Archives
Photograph Collection

Date: Dec 12, 1951

Item No: 23121

Orig No: LT-3174

Collection: City Light
Photographic Negatives

Location: 132



H-12

Title: Area between A line streets in Hollywood

Seattle Municipal Archives
Photograph Collection

Date: Oct 12, 1954

Item No: 27057

Orig No: SP-59-GSO

Collection: City Light
Photographic Negatives

Location: 142



H-13

Title: General view of Reflector Bar

Seattle Municipal Archives
Photograph Collection

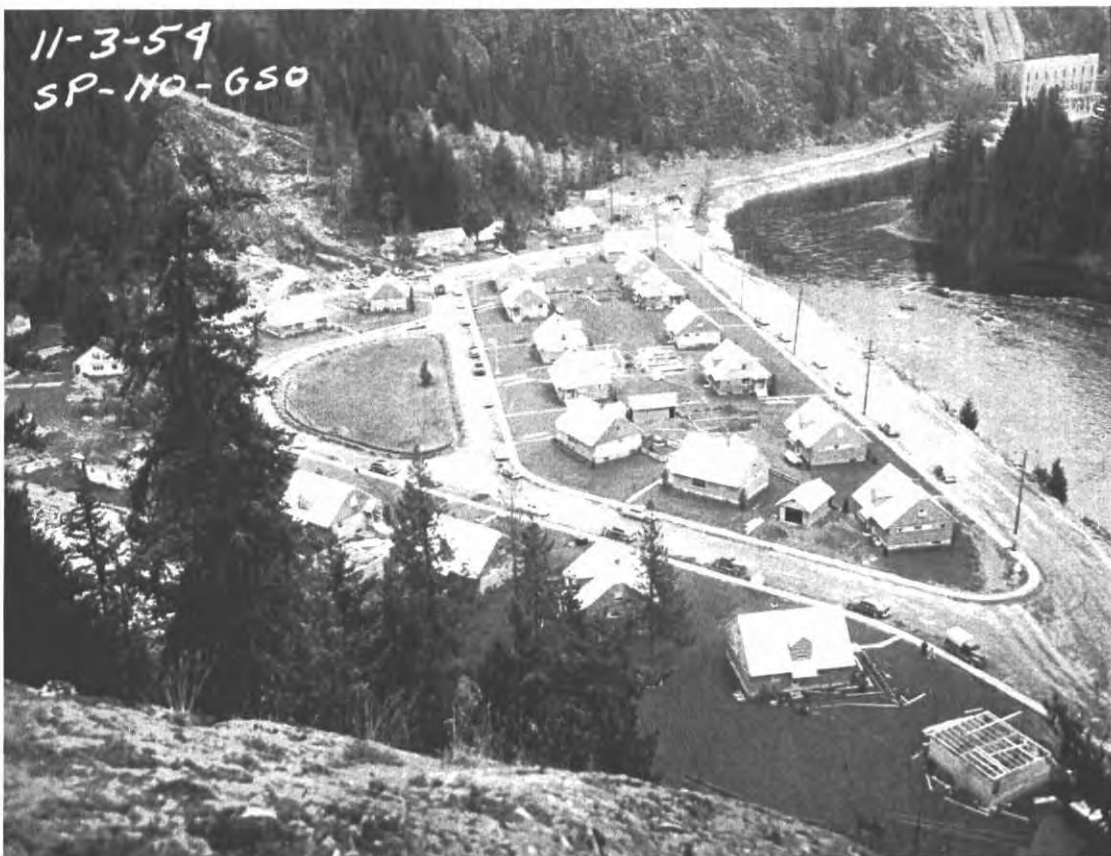
Date: Oct 21, 1954

Item No: 27079

Orig No: SP-81-GSO

Collection: City Light
Photographic Negatives

Location: 142



H-14

Title: General view of Hollywood

Seattle Municipal Archives
Photograph Collection

Date: Nov 3, 1954

Item No: 27108

Orig No: SP-110-GSO

Collection: City Light
Photographic Negatives

Location: 142

Diablo II, one of three new steel tug and service craft to join Seattle City Light's fleet on Ross Lake, high in Washington's Cascades



H-15

Pacific Motor Boat September
1948, pp. 21-22



10/28/2009 17:29

01 Silk Stocking Row House #8

Whatcom County

8 Silk Stocking Row, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects

National Historic District Resource #01



10/28/2009 17:27

02

file #
0571

Silk Stocking Row House #7

Whatcom County

7 Silk Stocking Row, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource #02



10/28/2009 17:27

03

File #

0570

Silk Stocking Row House #6

Whatcom County

6 Silk Stocking Row, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource #03



10/28/2009 17:23

04

Silk Stocking Row House #5

File #
0559

Whatcom County

5 Silk Stocking Row, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

SkaGit River & Newhalem Creek Hydroelectric
Projects National Historic District Resource #04



10/28/2009 17:20

05

File #

0552

Silk Stocking Row House #4

Whatcom County

4 Silk Stocking Row, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource #05



06

File #

0547

Silk Stocking Row House # 3

Whatcom County

3 Silk Stocking Row, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource #06



10/28/2009 17:18

07

File#
0546

Silk Stocking Row House #2

Whatcom County

2 Silk Stocking Row, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 07



08

file #

0537

Silk Stocking Row House #1

Whatcom County

1 Silk Stocking Row, Newhalem, WA

Larry E Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects

National Historic District Resource # 08



10/28/2009 17:14

09

0534

Schoolteacher's House / House #222

Whatcom County

Silk Stocking Row, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 09



10/28/2009 16:53

Newhalem Garages #1-11

Whatcom County

Highway 20, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 10



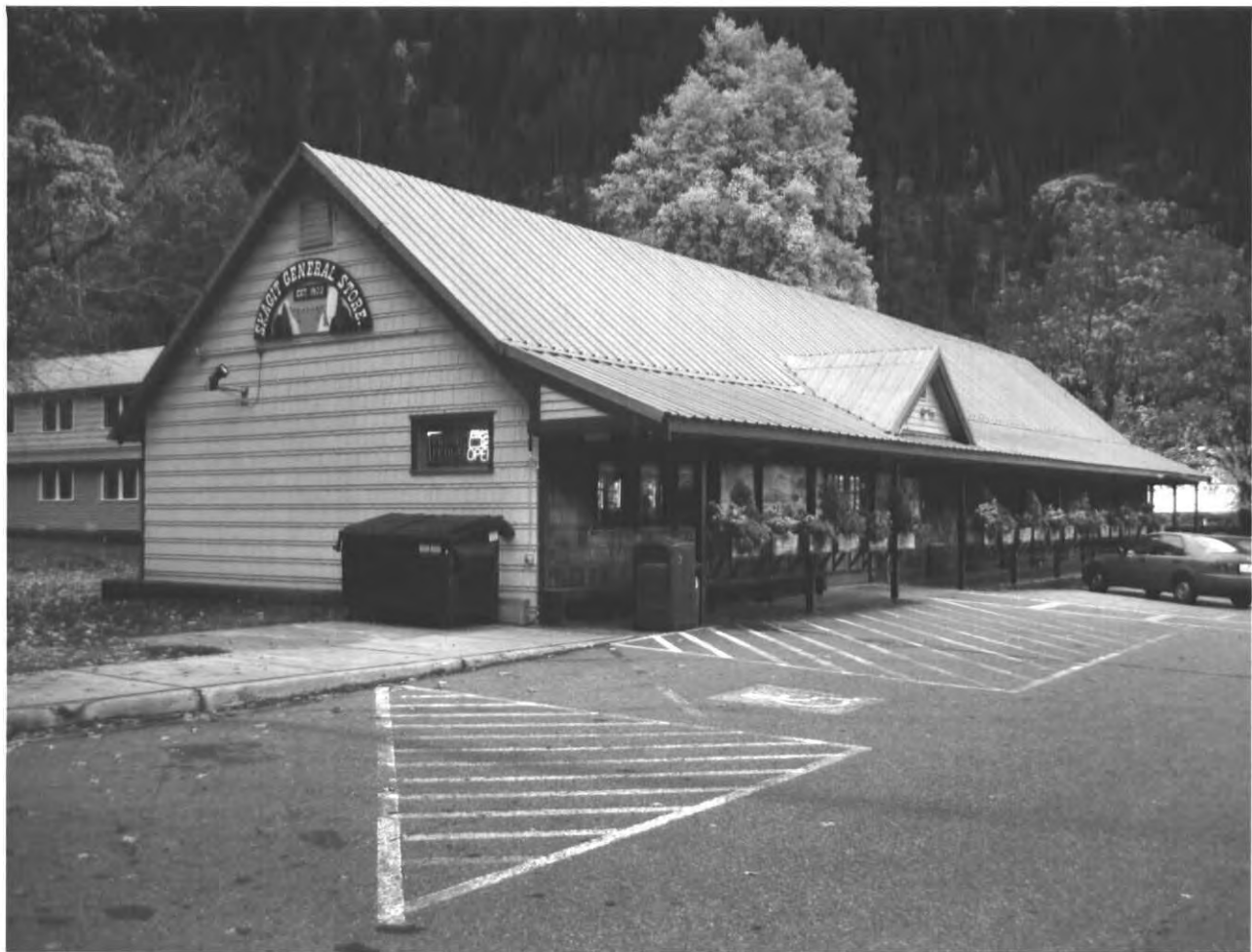
The Hotel / Bonkhouse #23

Whatcom County

Main Street, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource #11



12

File#

4189

Commissary / Newhalem General Store
Whatcom County
Main Street, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource #12



Bunkhouse #13 / Pansy House
Whatcom County
Bachelor Lane, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skaqit River & Newhalem Creek Hydroelectric
Projects National Historic District Resource #13



14

File# 4171

New Cook's Bunkhouse / Bunkhouse #10

Whatecom County

Batchelor Lane, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource #14



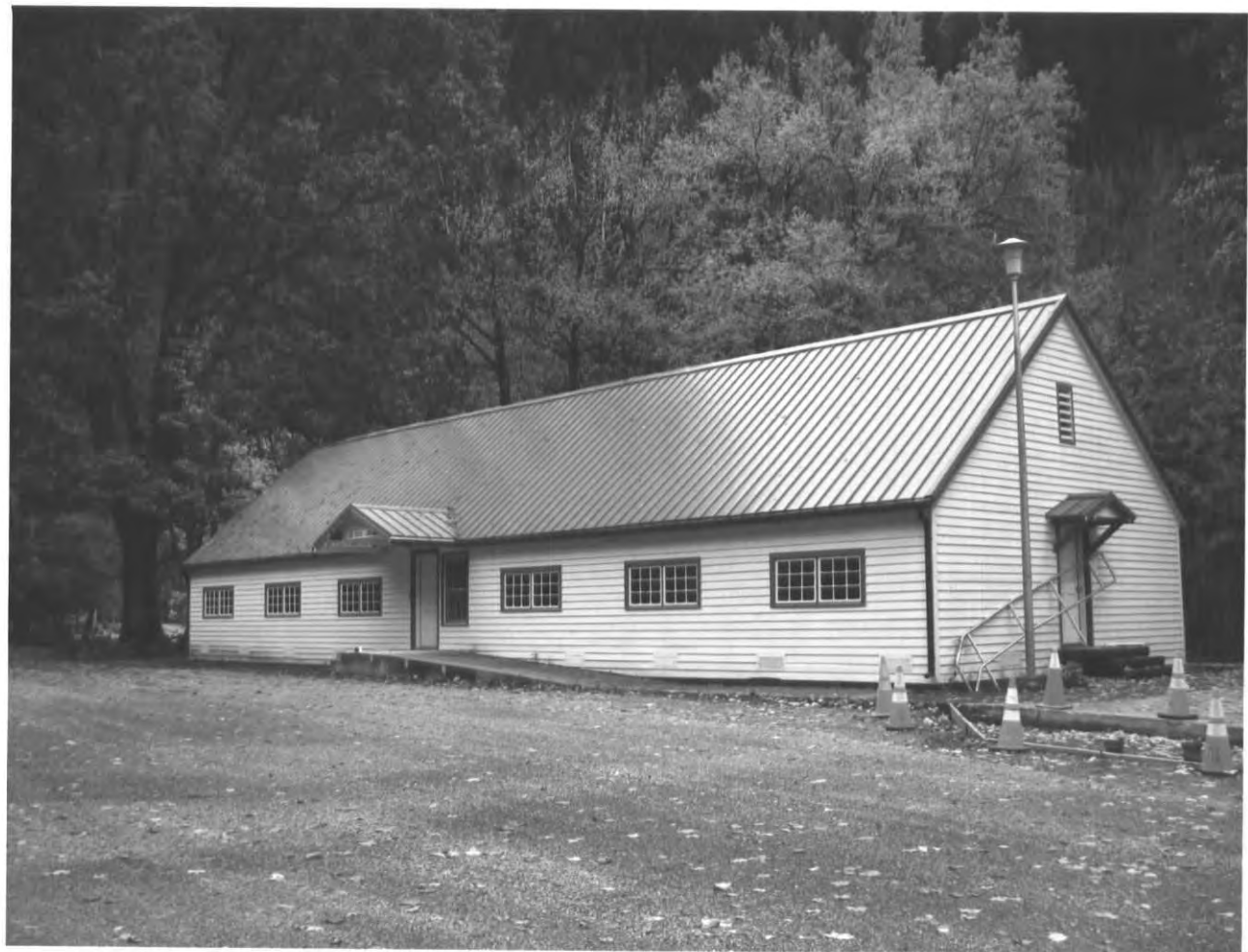
Mess Hall / Gorge Inn

Whatcom County

Batchelor Lane, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource #15



16

File# 4166

Old Cook's Bunkhouse / Library
Whatcom County
Main Street, Newhalem, WA
Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource #16



Tourist Dormitory #70 / Bunkhouse #70
Whatcom County

Bachelor Lane, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource #17



18

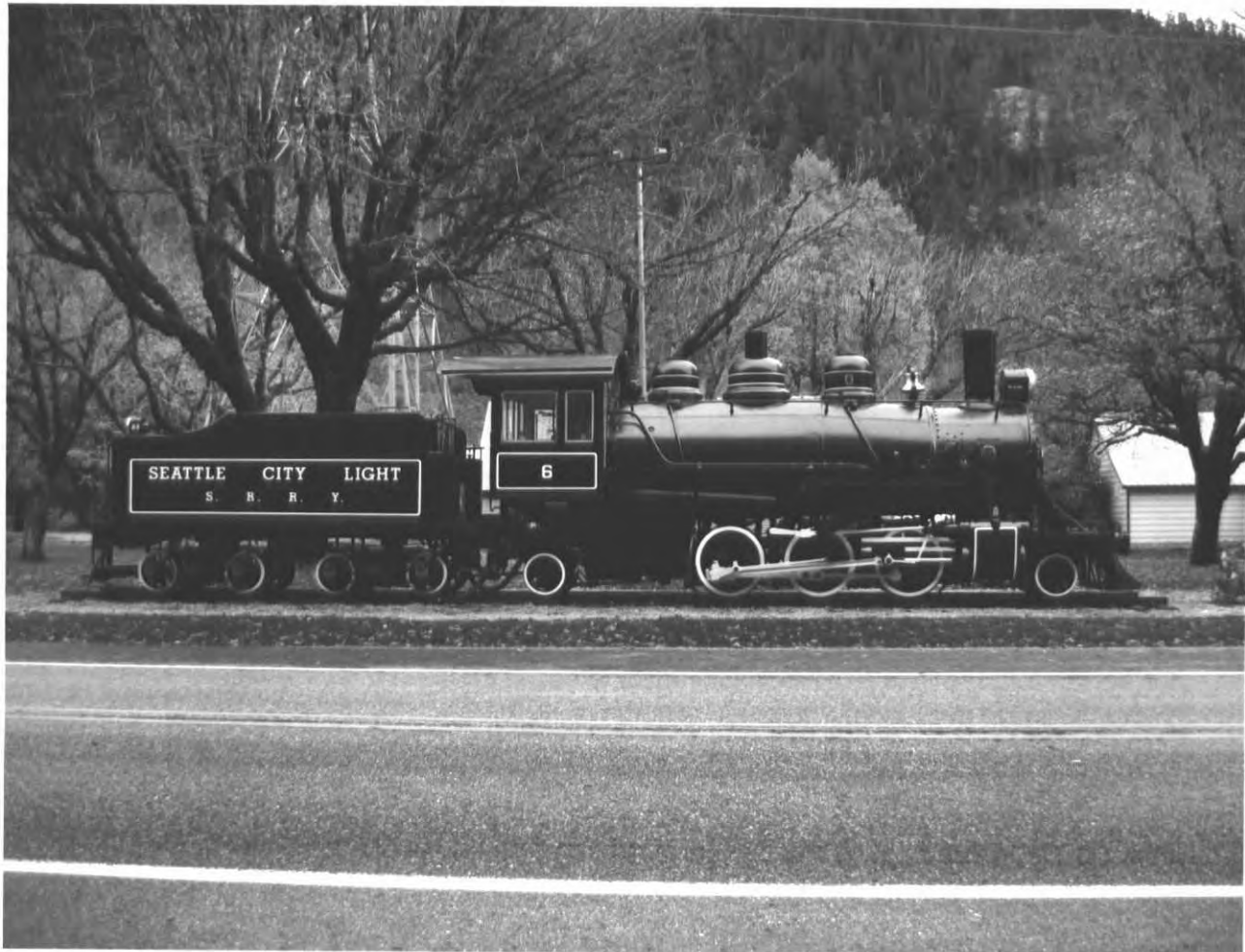
File # 4156

USGS Stream Gauging Station and
Cable Car site

Whatcom County
Highway 20, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 18



Old Number Six
Whatcom County
Highway 20, Newhalem, WA
Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 19



10/28/2009 14:20

20

File#
0437

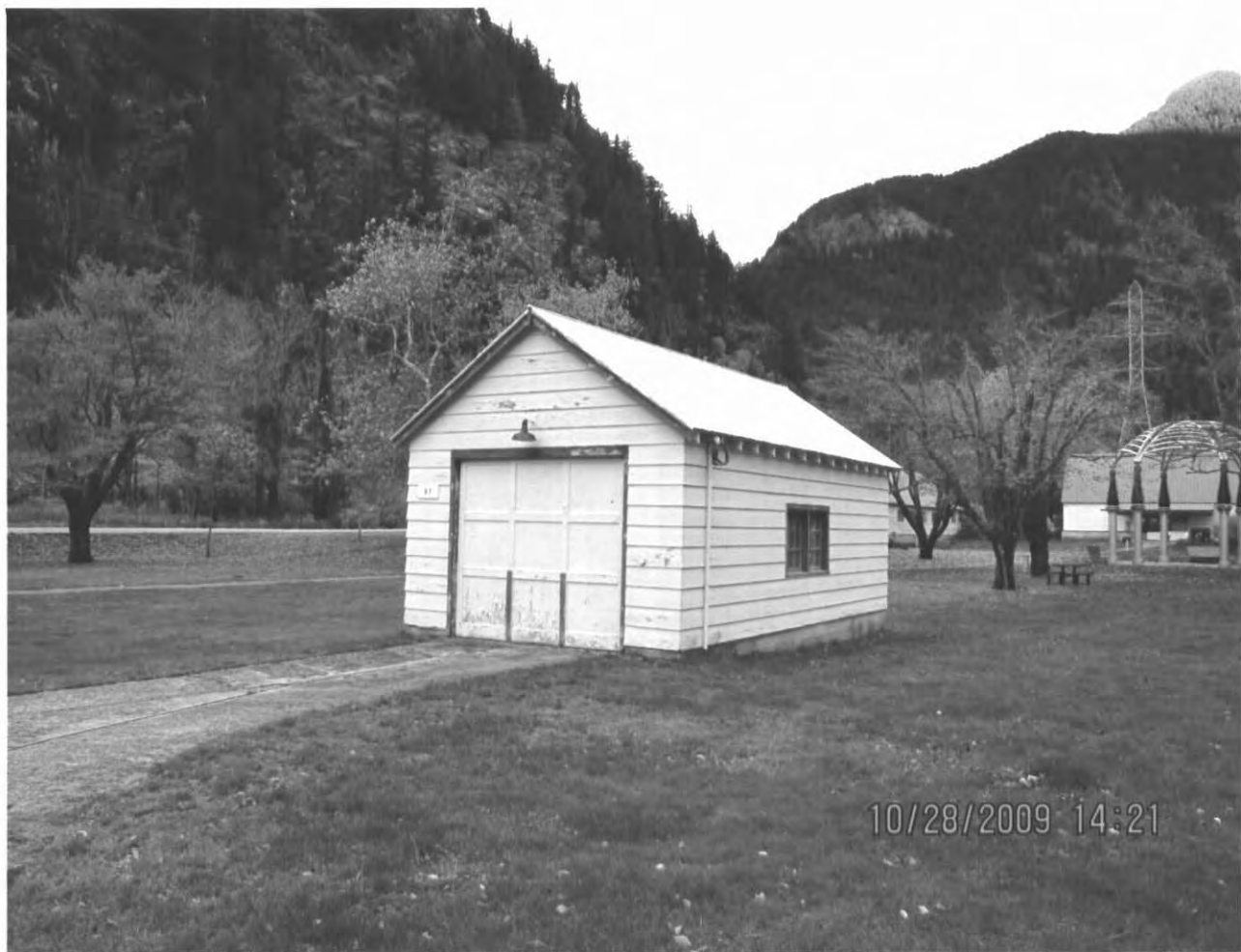
Tourist Restroom / Visitor's Center

Whatcom County

Highway 20, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 20



10/28/2009 14:21

21

File# 0478

Fire Hall

Whatcom County

Highway 20, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skaagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 21



22

File# 0484

Currier Hall

Whatcom County

Main Street, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skaagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 22



10/28/2009 14:34

23

File #

0485

Totem Pole

Whatcom County

Main Street, Newhalem, WA

Larry E Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric
Projects National Historic District
Resource # 22A



24

File # 4181

Trail of the Cedars Suspension Bridge

Whatcom County

Main Street, Newhalem, WA

Larry^E Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 24



Skaagit Information Center
Whatcom County

Main Street, Newhalem, WA

Larry^F Johnson, photographer, October 28, 2007

Skaagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 43



Tower of Power
Whatcom County
Main Street, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skaagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 44



Gorge Powerhouse

Whatcom County

Highway 20, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skaagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 27



28

File #
0402

Gorge Railroad Bridge

Whatcom County

East of Highway 20, West of Gorge Powerhouse,
Newhalen, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalen Creek Hydroelectric Projects
National Historic District Resource # 28



Gravity Oil Tank House

Whatcom County

Ladder Creek Falls Park, Newhalem, WA

Larry E Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 29



Ladder Creek Falls Gardens

Whatcom County

East of Gorge Powerhouse, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skaqit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 30



Gorge Pedestrian Suspension Bridge

Whatcom County

Ladder Creek Lane, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 31



32

File #

4086

Gorge High Dam

Whatcom County

Approximately 3 miles east of Newhalem, WA

Larry E Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 32



33

File#
3994

Diablo Powerhouse

Whatcom County

Diablo Road, Diablo, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 35



10/27/2009 16:33

34

File #
0146

Incline Waiting Station

Whatcom County

Diablo Road, Diablo, WA

Larry E. Johnson photographer, October 27, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource #36



Incline Lift and Powerhouse
Whatcom County
Diablo, WA

Larry E. Johnson, photographer, October 27 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 37



10/27/2009 16:31

36

File #
0140

Diablo Commissary

Whatcom County

Diablo Road, Diablo, WA

Larry E Johnson, photographer, October 27, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 38



10/29/2009 08:37

Diablo Dam

Whatcom County
east of Newhalem, WA

Larry F. Johnson, photographer, October 29, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource #42



10/29/2009 08:48

38

File #
0594

Upper Diablo Railroad Bridge

Whatcom County

East of Diablo, WA

Larry E. Johnson, photographer, October 29, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 52



10/27/2009 16:35

39

File #
0155

Diablo Communications Building / Radio Shack
Whatcom County
Diablo Road, Diablo, WA

Larry E. Johnson, photographer, October 27, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 39



40

File #
0788

Incline Manlift

Whatcom County

Diablo, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 41



10/29/2009 08:41

41

File #
0589

Incline Garage

Whatcom County

Incline Access Road, Diablo, WA

Larry E. Johnson, photographer, October 29, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource #45



42

File# 4144

Ross Crypt

Whatcom County

Highway 20, Newhalem, WA

Larry E Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 25



43

File #
4234

Newhalem Creek Powerhouse Site

Whatcom County

Newhalem Creek, Highway 20, Newhalem, WA

Larry E Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 26



Newhalem Powerhouse Site

Whatcom County

Newhalem Creek, Highway 20, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skaagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource #26



45

File #

3986

Diablo Water Tower

Whatcom County

Reflector Bar Section of Diablo, WA

Larry E Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects

National Historic District Resource #40



46

File #
4141

Newhalem Communications Building / Hazmat Building

Whatcom County

Highway 20, Newhalem, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects

National Historic District Resource # 92



47

Ladder Creek Garden Greenhouse

File #

4121

Whatcom County

Highway 20, Newhalem, WA

Larry E Johnson Photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric
Projects National Historic District
Resource # 93



48

file#

0690

Monkey Island Navigation Light

Whatcom County

Monkey Island, Diablo Lake, WA

Larry E Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 94



49

File #
0730

Diablo Lake Boatyard

Whatcom County

Diablo Lake, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 95



10/27/2009 17:29

50

File #

0202

Stetattle Creek Bridge

Whatcom County

Near Hollywood section of Diablo, WA

Larry E Johnson, photographer, October 27, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 96



10/27/2009 16:25

US Forest Service Barn

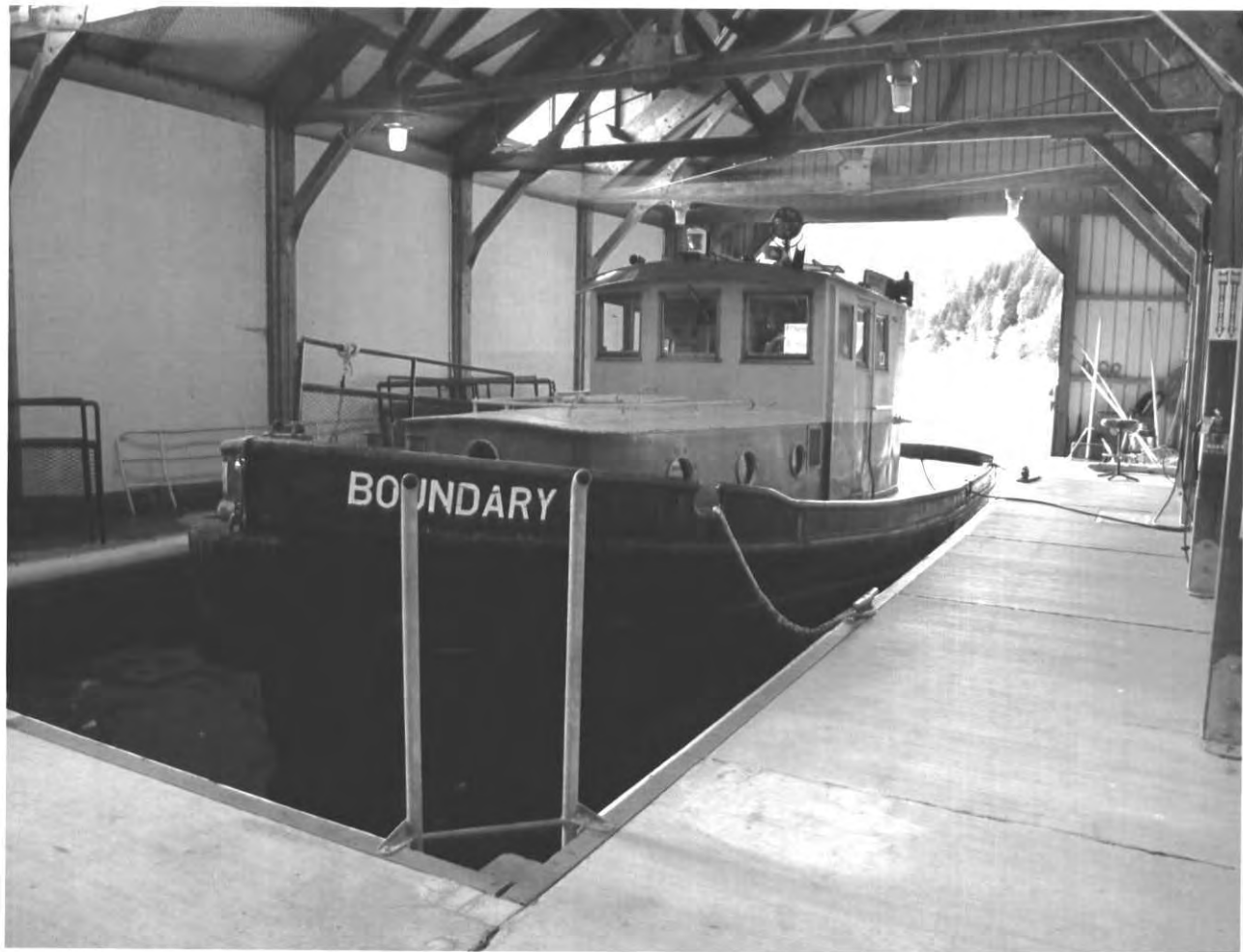
Whatcom County

Reflector Bar Section of Diablo, WA

Larry E Johnson, Photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric
Projects National Historic District

Resource # 97



Tug BOUNDARY

Whatcom County

Lake Diablo

Larry F. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydro electric

Projects National Historic District

Resource # 98



Tug DIABLO II

Whatcom County

Lake Diablo

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District

Resource # 99



Tug SKAGIT

Whatcom County

vicinity of Ross Dam

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects

National Historic District

Resource #100



Ross Powerhouse

Whatcom County

Diablo Lake, WA

Larry E Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric
Projects National Historic District

Resource # 46



56

file #
0755

Ross Dam Intake
Whatcom County

Ross Lake, WA

Larry E Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District
Resource # 47



Ross Dam

Whatcom County

Ross Lake, WA

Larry E. Johnson, photographer, October 28, 2009

Skaqit River & Newhalem Creek Hydroelectric Projects

National Historic District

Resource # 47



10/28/2009 10:52

5B

File #

0392

Ross Lake Suspension Bridge

Whatcom County

Ross Lake, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 48



59

File #
0720

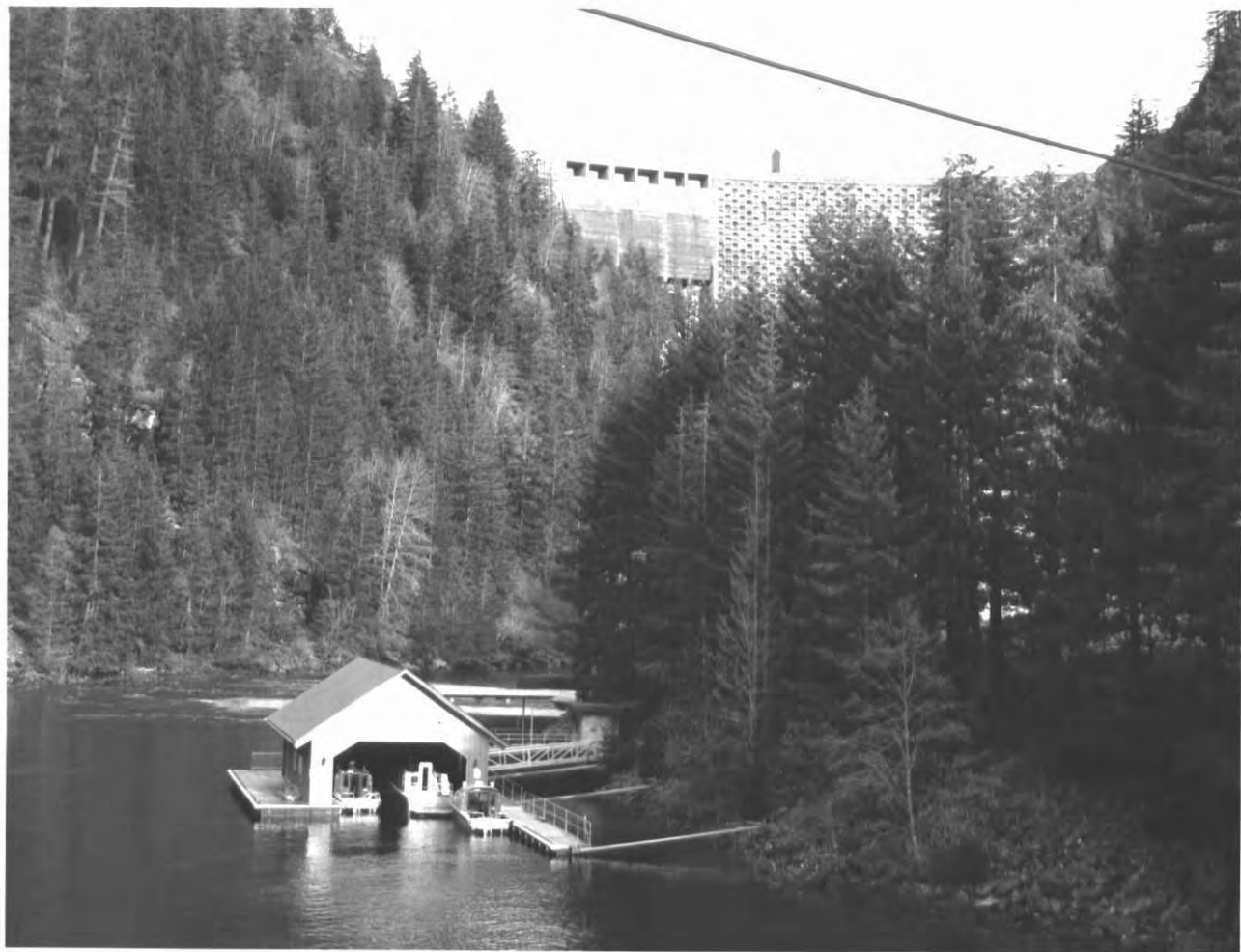
Ross Powerhouse Access Tunnel

Whatcom County

Diablo Lake, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 49



Ross Powerhouse Moorage

Whatcom County

Diablo Lake, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 50



Cel

File# 0761

Ross Lake Work Boat Moorage
Whatcom County
Ross Lake, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource #51



62

File#
0232

House # 2 (House H-6)

Whatcom County

H6 Stetattle Creek Street, Diablo, WA

Larry. E. Johnson, photographer, October 27, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 34



63

File #

0352

Hollywood House H27 / Ross Lodge

Whatcom County

H27 Rumsey Creek Road Diablo, WA

Larry E. Johnson, photographer October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 53



10/27/2009 17:37

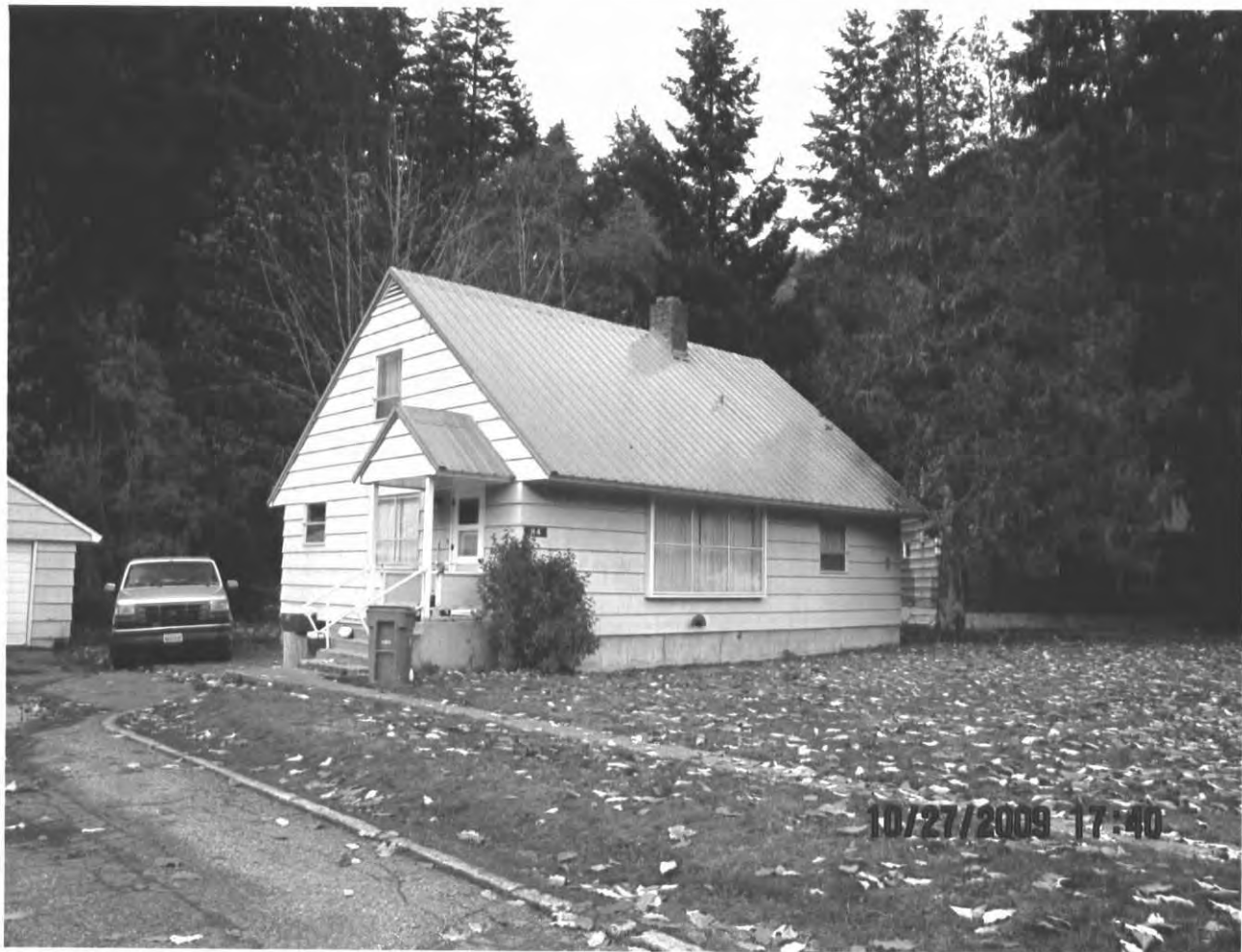
Hollywood House H3

Whatcom County

H3 Stetattle Creek Street, Diablo, WA

Larry E. Johnson, photographer, October 27, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 56



65

File #
0224

Hollywood House H-4

Whatcom County

H4 Stetattle Creek Street, Diablo, WA

Larry E. Johnson, photographer, October 27, 2009

Skaqit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 57



66

File #
0226

Hollywood House #5

Whatcom County

H5 Stetattle Creek Street, Diablo, WA

Larry E. Johnson, photographer, October 27, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource #58



10/28/2009 08:16

67

File #
0263

Hollywood House H-11

Whatcom County

H11 Stetattle Creek Street, Diablo, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 61



10/28/2009 10:02

68

File #
0349

Hollywood House H12

Whatcom County

H12 Stetattle Creek Street, Diablo, WA

Larry E. Johnson, photographer, October 28, 2009

Skaagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource #62



Hollywood House H-13

Whatcom County

H13 Stehatle Creek Street, Diablo, WA

Larry E. Johnson. photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects

National Historic District Resource # 63



Hollywood House H-14

Whatcom County

H14 Stetattle Creek street, Diablo, WA

Larry E. Johnson photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 64



71

File #

0333

Hollywood House H-15

Whatcom County

H15 Stetattle Creek Street, Diablo, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 65



10/28/2009 09:49

72

File #

0311

Hollywood House H-19

Whatcom County

H19 Diablo Road, Diablo, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource #68



73

File #
0264

Hollywood Garage H10 & 11

Whatcom County

Rumsey Creek Road, Diablo, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 80



74

File #
0276

Hollywood Garage #24

Whatcom County

Rumsey Creek Road, Diablo, WA

Larry E. Johnson, photographer, October 28, 2009

Skagit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 90



Hollywood Garage #35 & 36
Whatcom County

Rumsey Creek Road, Diablo, WA

Larry E. Johnson, photographer, October 27, 2009

Skaqit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 87



10/27/2009 17:45

76

file #
0238

Diablo Volunteer Fire Department
Whatcom County

H5-6 Stetattle Creek Street, Diablo, WA

Larry E. Johnson, photographer, October 27, 2009

Skaqit River & Newhalem Creek Hydroelectric Projects
National Historic District Resource # 91