The City of Seattle

Landmarks Preservation Board

Landmark NOMINATION Application

Name:	SW Spokane Street Pump Station
Year Built:	1929
Street and Number:	3214/3216 SW Spokane Street
Assessor's File No.:	798740-0820
Legal Description:	Lots 17–20, Block 10, Steel Works Addition to West Seattle, as per plat recorded in Volume 12 of Plats, Page 5, in King County, Washington.
Plat Name:	Steel Works Addition to West Seattle **Block:** 10 **Lot:** 17–20
Present Use:	Pump station
Present Owner:	Seattle Public Utilities
Address:	700 5th Avenue, Seattle, WA 98124-4018
Original Owner:	Water Department, City of Seattle
Original Use:	Pump station
Architect:	Unknown (Station design credited to Engineer Joel M. Lowman)
Builder:	Unknown

Submitted By:

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Reviewed: _____ **Date:** _____

(Historic Preservation Officer)

Seattle Landmarks Nomination

The Southwest Spokane Street Pump Station

Submitted to:
Seattle Landmarks Preservation Board,
Seattle Department of Neighborhoods

Submitted by:
Seattle Public Utilities

Prepared by:
Historical Research Associates, Inc.
Chrisanne Beckner, MS

Seattle, Washington
August 2019

This project was implemented by HRA Principal Investigators Chrisanne Beckner, MS and Matt Sneddon, PhD, who meet the Secretary of the Interior's professional qualifications standards for architectural history. This report is intended for the exclusive use of the Client and its representatives. It contains professional conclusions and recommendations concerning the potential for project-related impacts to cultural resources based on the results of HRA's investigation. It should not be considered to constitute project clearance with regard to the treatment of cultural resources or permission to proceed with the project described in lieu of review by the appropriate reviewing or permitting agency. This report should be submitted to the appropriate state and local review agencies for their comments prior to the commencement of the project.

Table of Contents

1. Introduction

The SW Spokane St. Pump Station is located at the intersection of SW Spokane St. and 33rd Ave. SW in West Seattle. Designed by civil engineer and draftsman Joel M. Lowman for the City of Seattle, the SW Spokane St. Pump Station was constructed by the City of Seattle Water Department between 1928 and 1929 to pump potable water from Seattle reservoirs to storage facilities throughout West Seattle. The pump station's period of full-time operation was short lived. Completion of a long-planned but oft postponed reservoir in West Seattle and associated pump station at W. Trenton St. and 8th Ave. in the mid-1930s relegated the SW Spokane St. Pump Station to part-time duty, providing supplemental service during periods of high demand—a function it continues to perform. The SW Spokane St. Pump Station represents one part of the City of Seattle's multi-phased plan to provide potable water from its Cedar River supply to the growing population of West Seattle after its annexation in the early twentieth century.

1.1 Data for the SW Spokane St. Pump Station

Historic Name:	Spokane Street Pump Station
Year Completed:	1929
Address:	3214/3216 SW Spokane St.
Assessor's Parcel No.:	798740-0820
Present and Historic Owner:	Seattle Public Utilities; Water Department, City of Seattle
Present and Historic Use:	Potable water pump station
Designer:	City engineer Joel M. Lowman
Builder:	Contractor not identified

1.2 Research Methods

Principal investigators Chrisanne Beckner, MS, and Matthew Sneddon, PhD, both of whom meet the Secretary of the Interior's professional qualifications standards for architectural history, conducted field and archival research, documenting the SW Spokane St. Pump Station in digital photographs and researching its history through archival collections held by Seattle Municipal Archives, Puget Sound Regional Branch–Washington State Archives, Seattle Public Library, the Washington Department of Archaeology and Historic Preservation, in-house libraries, and online collections of historic essays, maps, and newspapers.

2. Description

2.1 Setting

The SW Spokane St. Pump Station is located at the northeast corner of the intersection of SW Spokane St. and 33rd Ave. SW in West Seattle. The pump station is a single-story building with a basement level constructed on a square, 0.23-acre parcel (parcel 7987400820) located on a slope rising to the west toward a low ridge in the northeast corner of the North Admiral neighborhood, on the border of what is known as the Delridge neighborhood, so called for the dells and ridges that make up its varied topography (Photo 1).[1] Parcel 7987400820 is found in the northwest quarter of Section 13, Township 24 North Range 3 East, Willamette Meridian (Figures 1–4).[2] To the east is West Seattle's industrial district, the Duwamish River, and the Port of Seattle. SW Spokane St. runs parallel to the West Seattle Bridge and connects the Delridge and North Admiral neighborhoods to the industrial districts of South Seattle. The SW Spokane St. Pump Station is surrounded by a small number of residential buildings, including a 1921 Craftsman (3206 SW Spokane St.) to the immediate east. The pump station faces south on a relatively flat site, but the land continues to rise steeply to the west where gridded residential neighborhoods include a mix of residential types dating from the early to the late decades of the twentieth century. To the pump station's north and south are small residential developments on the slope built in the last few decades (Photos 10–14).

The pump station's parcel is accessed by a narrow, steep stretch of roadway that curves around the southwest corner of the pump station. The paved roadway lacks curbs or sidewalks and is bordered by a rough edge of grass and gravel. The building is set back from the roadway by approximately 20 feet (ft) to the south and 26 ft to the west. parcel. A paved parking area to the building's immediate east wraps the building's southeast corner and extends diagonally in front of the building, allowing vehicles to park directly in front of the building's primary entrance. A line of trees defines the neighboring lot line. To the west of the pump station, the parcel's lawn includes a line of four deciduous trees along the parcel's western border. To the north of the pump station, the lawn surrounds a fire hydrant and electrical equipment on a rectangular concrete pad surrounded by chain-link fence with "high voltage" signage. Behind this enclosure, a stone wall with wood fencing defines the neighboring residential parcel to the north (Photo 13).

2.2 Building Exterior

The single-story pump station is built on a rectangular plan, approximately 36 ft long by 24 ft wide (Figure 4).[3] It sits atop a poured-concrete basement with stem walls extending up approximately 1 to 2 ft above grade. The stem walls provide a foundation for the pump station's unreinforced brick walls, which feature several types of pattern work. Above a base course of soldier bricks are laid a Flemish-running bond pattern, with three running bond courses atop every Flemish course.[4]

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[1] Judy Bentley, "Delridge History, Southwest Seattle Historical Society," accessed May 17, 2019, http://www.loghousemuseum.org/history/delridge-history/.

[2] Parcel 7987400820 is used by a public utility and does not have an official address number in King County Assessor records. It is known as 3216 SW Spokane St. in the City of Seattle's Historical Sites Database and as 3214 SW Spokane St. in Seattle Public Utilities' contemporary records. Historic records, including the original plans for the pump station, refer to it as the W Spokane St. pumping station at W Spokane St. and 33rd Ave. SW. To avoid confusion, this report follows the precedent set by Seattle Public Utilities and refers to the building by its intersection.

[3] J. M. Lowman, "City of Seattle Water Department W. Spokane St. Pumping Station, Ordinance No. 54627, Project 44-62," sheets 1 and 2, 1928, on file with the City of Seattle Water Department, Seattle, Washington.

[4] Stretcher or running bond consists of stretcher courses, each offset by one-half brick per course. Flemish bond consists of alternating header and stretcher bricks on all courses.

Another course of soldier bricks runs along the eaves line to accentuate the gables. Brick faces are raked or combed. The building is topped by a side-gabled, composite shingle roof with visible rafter tails under deep eaves and barge boards in the gables.

The building's primary façade faces south and was designed to be symmetrical. A central pair of double metal doors framed by stretcher bricks were originally flanked by one-over-one windows with projecting brick sills and soldier brick lintels. At an unknown date, the western window opening was enclosed with one recessed layer of smooth-faced brick in a running bond. The original sill and lintel remain. The eastern window has been enlarged and replaced with a metal door to a washroom. The original lintel remains. The entry doors are also topped by soldier bricks, and a course of soldier bricks runs along the building's cornice line (Photo 2).

Side elevations are symmetrical. On both the east and west elevations, symmetrical bands of three window openings have been sealed with one recessed layer of smooth-faced brick. Soldier brick lintels and projecting brick sills remain in place. Above these openings are additional window openings in each gable. The opening on the west elevation has been sealed and covered with a protective metal screen. The opening on the east elevation has been replaced with a vent that has also been covered with a metal screen. These openings also retain lintels and sills. Side elevations include ornamental brick patterns continued from the primary façade, including a soldier brick course at the base of the wall and another at the cornice line (Photos 3 and 4).

The building's north elevation includes identical brick work and two window openings, both of which have been sealed with a single recessed layer of smooth-faced brick in a running bond. Meters are installed near the eastern window. Patched wall penetrations and scarring near the window are remnants of an adjoining wooden transformer structure that was removed and the transformers relocated to a concrete pad enclosed by chain-link fencing approximately 30 ft to the north (Photo 5).

2.3 Building Interior

The SW Spokane St. Pump Station has two levels, the pump room on the ground floor and a basement level with piping connections to the water mains. On the ground level, two electric motor and pump sets stand on raised concrete foundations. Controls for the electric motors and pumps are contained in a metal case against the north wall. Other electrical controls, instruments, wire conduits, and air circulation equipment are attached to the painted brick walls on all sides. A 6,000-pound capacity gantry crane runs on a steel beam supported by stepped out sections of the brick walls. Florescent fixtures attached to drop ceilings provide interior lighting. A built-out restroom (accessed by an exterior door) extends into the pump room at its southeast end. The floor is finished with square vinyl tiles over two layers of tongue-and-groove boards. Pipes from the pump units drop down through the floor to the basement level (Photos 6 and 7).

The concrete walls of the basement are substantial, 8- to 15-inches (in) thick, to handle the loads of the pumping equipment. The unfinished walls show evidence of board forms used for pouring the concrete. The steel beams and the tongue-and-groove boards supporting the pump room floor are visible overhead. Some sections of the basement level piping and two wheel-operated gate valves are original, others were added more recently. A metal stair with pipe rails in the building's northeast corner provides access between the two levels (Photos 8 and 9).

2.4 Mechanics

When completed in 1929, the new SW Spokane St. Pump Station featured two separate pump and motor sets. The primary unit, composed of a 10-inch and a 12-inch De Laval centrifugal pump connected in series and driven by a 400-horsepower (hp) General Electric motor, had a maximum

capacity of 4,500 gallons per minute (gpm) at 290 ft head. According to city records, the secondary, "lesser unit" was bought "as a measure of economy" for use "during the wet weather when less water is needed."[5] It's likely this secondary unit consisted of two 8-inch Worthington volute pumps connected in series powered by a 150 hp motor.[6] Because of the great difference in elevation between the SW Spokane St. location and the standpipe built in 1927 at Charlestown St. to receive water from the pumps, the units were among the most powerful in the Seattle water supply system. Accordingly, they consumed the most power.

Pumps on the ground floor level connected to a 16-inch diameter cast iron water main in the basement level. The intake or suction line came in at an angle on the south basement wall, ran parallel to the north wall, and flowed through a 90-degree elbow up to the pumps. Discharge from the pumps flowed down through another 90-degree elbow to a parallel discharge pipe running along the south wall and out through a hole in the west wall where it continued underground up to the Charlestown St. standpipe. Both the intake and discharge lines could be isolated with a hand-operated gate valve, and a rotary cone valve was installed on the back end of each pump to protect the system from potential failures and to regulate flow during start-up and shut-down operations. Early photographs of the pump station interior show electrical controls and meters affixed to the unpainted brick walls.

The full-time operation of the SW Spokane St. Pump Station lasted just six years.[7] The short full-time service life of the pump station stemmed in part from the Water Department's increasing use of water-driven or hydraulic turbines to power pump stations in the early 1930s. Because of the high elevation of the Seattle water supply at its reservoirs and the Cedar River Watershed, Water Department engineers could take advantage of the elevation drop in its water mains to drive pumps. The Water Department experimented with its first hydraulic pump station at Lincoln Park in 1900, a Goulds Triplex Double-acting pump connected to a 90 hp Pelton water wheel, which was replaced in 1931 with reaction-type water turbine paired with a single-stage centrifugal pump. The performance of this unit provided the impetus and model for two additional hydraulic pump stations in short order, one at the Green Lake Reservoir in 1933, and another at West Trenton Street and 8th Ave. SW in West Seattle in 1934. The West Trenton Street Pump Station was part of a long-planned reservoir project at a high elevation in West Seattle to better serve the area.[8]

The savings in the cost of electricity realized from the new West Trenton St. Pump Station made operation of the electrical pump stations at Kenyon St. and SW Spokane St. uneconomical. The Water Department closed the Kenyon St. station and put the SW Spokane St. station on reserve duty for use when needed.[9]

Despite the SW Spokane St. station's back-up status, the Water Department secured funding to replace the pump and motor sets and upgrade the electrical controls in 1958. The replacement units, two Allis Chalmers single-stage centrifugal pumps, each paired with a 400-hp induction motor, were rated for 4,000 gpm at 290 ft head at 1,760 revolutions per minute—relatively close to the original performance specifications but at slightly higher efficiency. The new arrangement eliminated the two pumps connected in series of the original De Laval unit for a single pump. Two holes in the

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[5] John Lamb, "City of Seattle Water Department, 1913–1928," 38, on file at Seattle City Archives.
[6] Worthington Pump and Machinery Corporation, "Proposal," May 31, 1928, on file at Seattle Municipal Archives. The proposal and associated correspondence suggests, but not definitively, that these pumps and motor were installed at the SW Spokane St Pump Station.
[7] J. C. Lindsay, "Seattle's Hydraulic Turbine Driven Pumping Stations," 2, Reservoirs, Water Tanks, Standpipes, and Pumping Stations, 1931–1935, on file at Seattle Municipal Archives.
[8] Lindsay, "Seattle's Hydraulic Turbine Driven Pumping Stations," 1.
[9] Lindsay, "Seattle's Hydraulic Turbine Driven Pumping Stations," 3.

concrete pedestals supporting the pump foundation mark the path of the pipe that originally connected the De Laval 10- and 12-inch pumps on the primary unit. New automated controls were also installed as part of this project. The 1958 units are still in service.

Other major changes to the pumping and piping system at the SW Spokane St. Pump Station include further upgrades to the electrical controls, and a reconfiguration of the basement level piping. In addition to adding new meters, valves, strainers, and reducers, another, smaller discharge pipe was installed to provide a separate path for supplying the West Seattle water system.

2.5 History of Alteration

The pump station's exterior has undergone several alterations over the years. The original doors and roofing material have been replaced, the windows filled in, and an additional door installed in place of one of the windows. Similarly, the pump station's original pumping systems have been generally replaced and upgraded. None of the pumps, motors, controls, valves, and pump piping in the pump room are original. The basement level pipe mains have been reconfigured as well, except for a few sections pipe and two valves. Although these alterations altered and improved the pump station's performance, they have diminished the building's historic integrity.

Changes to the Exterior

- Original single-hung windows removed and openings filled in with brick.
- Original doors replaced with metal doors.
- One original window on the façade replaced with a door to provide access to a new washroom.
- Original gable windows filled in (north end) or replaced with vent (south end).
- Roofing material replaced.
- Original adjoining wooden transformer structure removed and transformers relocated approximately 30 ft away in a metal fenced enclosure.

Changes to Interior

- In 1958, a major upgrade project replaced the original pump and motor sets and changed the pump piping. Whereas one of the two-stage pump sets originally had a four pipe connection arrangement, the new design eliminated two of the pipes that connected under the pump room floor. New automated controls were also installed as part of this project (Figure 9).
- In 1974, a steel "stile" was constructed over one of the very large water pipes in the basement, allowing staff to cross from one side of the pipe to the other (Figure 10).[10]
- In 1978, the pump station's electrical system was upgraded and improved. Service was expanded, and new lights, a new panel, and new timers were installed).[11]

[10] Seattle City Water Department, "SW Spokane St. Pump Station Stile, job no. 6245, drawing no. 66-224," 1974, on file with the City of Seattle, Seattle Public Utilities.
[11] Seattle City Water Department, "West Seattle Pump Station Electrical Remodel (33rd and Spokane), job no. 7082, drawing no. 60-129," 1978, on file with the City of Seattle, Seattle Public Utilities.

- In 1984, SPU reconfigured the basement level piping, adding new meters, valves, strainers, and bypass sections (Figure 11).[12]
- Drop ceiling and florescent lighting added.
- Built-out restroom added to pump room.

[12] Seattle City Water Department, "SW Spokane Street Pump Station Install PRV and Meters, job no. 882508, drawing no. 871-90," 1984, on file with the City of Seattle, Seattle Public Utilities.

3. Statement of Significance

3.1 Historic Significance

The SW Spokane St Pump Station is part of a public water system over one hundred and ten years in the making. Whereas early West Seattle residents relied on local wells and springs as sources of water, today West Seattle is supplied primarily by the Cedar River watershed and the vast interconnected water system of Seattle Public Utilities. The integration of West Seattle into the larger City of Seattle, in fact, was driven in part by water. Fed up with poor service by private utility, West Seattle residents campaigned for annexation of their independent city as the best hope for a reliable water supply.[13] The subsequent expansion and refinement of the West Seattle water system paralleled the development of peninsular community as it grew from some 7,100 in 1907 to approaching 100,000 in 2019.[14]

3.1.1 Brief Description of the Seattle Water System

Today, Seattle's water system functions consistently throughout the city, including previously independent communities like West Seattle. Seattle captures most of its water from the foothills of the Cascade Mountains. The Cedar River watershed, approximately 35 miles southeast of Seattle, funnels snowmelt and rainwater to Chester Morse Lake and the reservoirs associated with Masonry Dam. The water from the Cedar River drops 620 ft at Cedar Falls, driving Seattle City Light's hydroelectric powerplant. From the power plant, water continues flowing to a diversion dam where a portion of the river is funneled into two large pipelines flowing to Renton's Lake Youngs. This system provides approximately 70 percent of greater Seattle's drinking water. The remainder comes from the Tolt River watershed in eastern King County, which captures Cascade snowmelt and rainwater in the South Fork of the Tolt River, where a portion is diverted for hydroelectric use and then to the Tolt Water Treatment Facility for treatment and distribution.[15]

Seattle's water system is shaped by its topography, with "zones" assigned by various elevations. When the Spokane St Pump Station was coming on line in 1929, the Assistant Superintendent of the Water Department John Lamb described the distribution within the zones in the following terms:

> For distribution purposes the city is divided into three zones. The lower zone is all that section of the city below elevation 225. This is supplied by gravity from reservoirs having an elevation 316 feet. The intermediate zone is all that portion of having an elevation between 225 and 325. This section is supplied by gravity from reservoirs having an elevation of 420 feet. The high service zone includes all elevation higher than 325 feet. This district is supplied by pumping from the reservoirs, and in some cases directly from the main into the standpipes, from which the water is conveyed by gravity to consumers. These standpipes have various elevations.[16]

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[13] "West Seattle Suffers From Lack of Water," *Seattle Daily Times*, July 14, 1906; "Puget Mill Co. In Line," *Seattle Daily Times*, May 3, 1907, 8.
[14] "Seattle's Neighborhoods," seattle.gov, accessed June 19, 2019, http://seattlecitygis.maps.arcgis.com/apps/MapSeries/index.html?appid=bf93420ee86147e9ba6de9cadecfc57e
[15] Seattle Public Utilities (SPU), "Water System Overview," accessed May 29, 2019, http://www.seattle.gov/utilities/services/water/water-system-overview.
[16] John Lamb, "The Seattle Water System," *Journal of the American Water Works Association* 21 (March 1929): 363–64.

Although the number and elevation of the zones has changed since 1929, the basic design has not: reservoirs supply lower elevations by gravity, and pump stations are used to fill standpipes for high service. From the tanks and reservoirs, water travels through some 1,700 miles of underground mains. Smaller water service pipes access the mains and provide water to individual taps. According to the City of Seattle, this system currently serves approximately 1.4 million people and provides them with 140 million gallons of water daily.[17]

3.1.2 Development in West Seattle

Seattle's first Euroamerican settlers, known as the Denny Party, arrived at Alki Point in today's West Seattle in 1851, but quickly moved east to the future site of Seattle, a sheltered landing along today's Elliott Bay. They left a small number of settlers, including Charles Terry, who tried to grow the settlement on Alki Point, platting the town of Alki in 1853, building cabins, a store, and even a saw mill. However, even Terry found the conditions on the point inhospitable. By 1856, he too had moved to the future site of Seattle. Although Alki Point was slow to develop, the eastern, sheltered side of West Seattle developed a sawmill, ship building, and a cannery by 1880. West Seattle was platted in 1885, and Alki slowly grew into a popular resort area for Seattle residents.[18] South and east of Alki Point, the Delridge and North Admiral neighborhoods began to welcome settlers from Italy, Sweden, Russia, England, Germany, Japan, and Yugoslavia, many of whom worked for early industries in the area.[19]

In the late 1880s, the West Seattle Land and Improvement Company purchased most of today's West Seattle, including the northern tip of today's North Admiral neighborhood, re-platted the area, and began investing in transportation between the peninsula and the growing city of Seattle.[20] In the late nineteenth century, water travel was easier than overland travel, and the region relied on independent steam or gasoline-powered boats to deliver news, mail, and passengers to the small communities along the Puget Sound. For their ubiquity, these busy haulers became known as the "Mosquito Fleet," swarming the waters of the Sound during their heyday between the 1880s and the 1920s.[21] The Mosquito Fleet maintained only sporadic service between West Seattle and Seattle, so the West Seattle Land and Improvement Company launched the first official Seattle ferry in 1888, providing a consistent eight-minute boat ride between Seattle and a dock near today's Seacrest Marina.[22]

By 1890, the West Seattle Land and Improvement Company was advertising that "a perfect system of water works is in complete operation, furnishing at low rates the purest of spring water," for its lots on the north end of the West Seattle peninsula.[23] The water source was a spring and creek in the

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[17] SPU, "Water System Overview."
[18] Cassandra Tate, "Seattle Neighborhoods: West Seattle — Thumbnail History," HistoryLink.org Essay #3428, July 8, 2001. http://www.historylink.org/File/3428.
[19] Judy Bentley, "Coming of Age in Delridge," Delridge History, accessed June 5, 2019, http://www.southseattle.edu/delridge-history/narrative/narrative.htm.
[20] Eshelman, Llewellyn & Co., *Plat of West Seattle Land and Improvement Company's Platted Lands*, 1890, https://cdm16118.contentdm.oclc.org/digital/collection/p16118coll2/id/61.
[21] Jean Cammon Findlay and Robin Paterson, *Mosquito Fleet of South Puget Sound* (Charleston, SC: Arcadia Publishing, 2008), 7.
[22] Tate, "Seattle Neighborhoods: West Seattle."
[23] "Look! Now Is the Time!," *Seattle Post-Intelligencer*, June 8, 1890, 13.

area now known as Fairmount Gulch on the northeast end of the peninsula. The water was pumped up the hill to tanks and then distributed by gravity through pipes to residents in the vicinity.[24]

Like West Seattle, Seattle initially relied on private utility companies for water service. One of these early private utilities, the Spring Hill Water Company incorporated in 1881, provided some 1,000,000 gallons of water to its customers from a spring on First Hill. By 1886, the company had tapped additional springs, doubling capacity. When this could not keep up with demand, Spring Hill built a pumping station at Lake Washington and began pumping lake water to a reservoir on Beacon Hill.[25] Constructed privately by J. A. McWilliams, the pump station increased capacity enough to handle day-to-day needs, but even this would prove insufficient during emergencies.[26]

By 1889, the City of Seattle was already considering moving to a publicly held water system rather than relying on Spring Hill and other small suppliers. In the summer of that year, the city suffered a devastating loss during what was called the Great Fire of 1889. A lack of available water was one of the reasons the fire was so destructive, destroying wood and brick buildings throughout the central city. Due to the water system's poor performance, Seattle leadership seized the opportunity to establish a permanent solution to the city's insufficient supply. In 1889, the city purchased the Spring Hill Water Company, which served roughly 12,000 of Seattle's 42,000 citizens by that time, as a first step in establishing a publicly held water system. However, greater advancement was soon underway. In 1892, influential engineer Reginald H. Thomson took over as the City's chief engineer. Noting that Lake Washington was already showing signs of pollution, Thomson established a new plan, to follow the advice of previous engineers and build a gravity flow system from the Cedar River, 29 miles away, to Seattle. In 1895, with Thomson's support and the support of Seattle progressives, voters agreed to use utility bonds to build the City's new gravity water system.[27]

Throughout the 1880s, the early communities of the West Seattle peninsula also struggled to grow, working to establish consistent utility service and strengthen its relationship to neighboring Seattle. In 1890, the Northern Pacific built the first trestle bridge over the Duwamish River, providing a consistent transportation link between Seattle and West Seattle. By 1895, the Army Corps of Engineers was dredging the Duwamish River and creating the East and West Waterways, with Harbor Island between them. This would establish a new industrial district shared by both Seattle and West Seattle.[28]

Peninsula communities like Alki Point, West Seattle, North Admiral, and Delridge (originally known as Youngstown) attracted new residents at the turn of the century, but infrastructure development lagged behind. In 1902, only a year after Cedar River water began to fill Seattle's reservoirs, West Seattle residents grew impatient with the West Seattle Land and Improvement Company, which had sold many new lots but its water system and electric service were sources of many complaints. In the summer of 1906, the company was compelled to shut off its water between 8:00 pm and 8:30 am

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[24] M.N. Baker, ed., *Manual of American Water-Works* (New York: Engineering News Publishing Co., 1890), 608.
[25] Paul Dorpat, "Seattle Now & Then: Seattle Community Water – A History to ca. 1996," January 2, 2010, http://pauldorpat.com/2010/01/02/seattle-community-water-a-history-to-ca-1996/; Alan J. Stein, "Spring Hill Water Company is incorporated in Seattle on August 20, 1881," HistoryLink.org Essay #2099, January 1, 2000, http://www.historylink.org/File/2099.
[26] "Pioneer Pump Station Will Be Torn Down," *Seattle Daily Times*, March 22, 1925, 32.
[27] Dorpat, "Seattle Now & Then: Seattle Community Water"; Mary McWilliams, *Seattle Water Department History: 1854–1954* (Seattle, Washington: Seattle Water Department, 1955), 55.
[28] Tate, "Seattle Neighborhoods: West Seattle."

due to lack of sufficient supply at its pumping station in Fairmount Gulch.[29] In response, West Seattle incorporated as a fourth-class city and began to build up its own infrastructure. Through bonds, the city was able to construct the nation's first municipally-owned street railway, which ran for one mile between the ferry terminal and neighborhoods to the south.[30] To establish a reliable water source, West Seattle, looked to neighboring Seattle, considering annexation so as to share in that city's new Cedar River supply. In 1907, after first annexing the neighboring communities of Youngstown (Delridge) and Alki Point, West Seattle voted to join Seattle. It was one of six cities that voted for annexation in 1907, thereby nearly doubling the city's geographic area. Most communities joined Seattle for the same reasons: their growing populations and increasing urbanization led to higher demands for services. Small communities struggled with debt and with the increasing need for expensive infrastructure improvements.[31] In West Seattle, annexation did solve some of these infrastructure problems. In 1909, the Seattle City Council passed Ordinance No. 2052 to improve West Seattle's water system by improving Spokane St. between 13th and 35th Avenues, constructing watermains, bridges, piling, channel crossings, pumps, motors, and tanks, and to purchase rights of way and sites for a new pump station and distribution tanks. Later that year, professional journals began reporting on the City's efforts to bring water from the Cedar River through 4 miles of additional pipe to West Seattle.[32] These early efforts resulted in the pump station constructed at Harbor Ave. SW and W Spokane St., which was completed in 1910 and would serve West Seattle until being replaced by the SW Spokane St. Pump Station in 1929.[33]

By 1911, a new bridge was constructed over the Duwamish waterways, and it carried West Seattle's new water mains. However, the new bridge was a swing bridge, designed to swing open for water traffic. For the bridge to be activated, the water mains had to be disconnected, leading to an unreliable water supply in West Seattle.[34] Other efforts to improve reliability included the construction of additional pump stations and storage tanks, and Seattle continued to improve the system for West Seattle residents.

After annexation, West Seattle continued to promote its location as ideal for families, preparing brochures that compared it favorably to neighboring Seattle. A promotional brochure praised the region as "the most picturesque and beautiful of Seattle," claiming that because its waterfront was dominated by parks and the city's only saltwater bathing beach, and because the winds rarely blew from the tide flats to the east, the community would always be free of the dust and noise and soot of industry. "It will always provide a place for the man who loves a pretty home and Nature in her most attractive garb."[35]

West Seattle residents may have appreciated the picturesque location, but the growing population still desired easy access to the commercial, entertainment, and business districts of Seattle, along with urban amenities like a mature water system. West Seattle residents advocated for a permanent high bridge that could continually carry people and water between Seattle and West Seattle above the Duwamish River and its shipping traffic. In 1917–1918, however, Seattle engineers built yet another

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[29] "West Seattle Suffers From Lack of Water," *Seattle Daily Times*, July 14, 1906, 2.
[30] Tate, "Seattle Neighborhoods: West Seattle."
[31] Seattle Municipal Archives, "Online Exhibits: Annexed Cities," accessed May 29, 2019, http://www.seattle.gov/cityarchives/exhibits-and-education/online-exhibits/annexed-cities.
[32] "Water Supply: W. Seattle, Washington," *Engineering and Contracting* 32, no. 19 (Sept. 1, 1909).
[33] City of Seattle, "Resolution No. 2052," adopted March 15, 1909, http://clerk.seattle.gov/search/resolutions/2052.
[34] Tate, "Seattle Neighborhoods: West Seattle."
[35] Federated Clubs of the Fourteenth Ward, "Beautiful West Seattle," 1910, on file at the Washington State Library, Olympia.

bascule bridge over the Duwamish. Seattle did not give up on improving water systems in West Seattle, however.

In 1917, the journal *Water and Sewage Works* published a description of a new project that would bring water to West Seattle from further south:

> This contemplates the construction of a pipe line [sic] of 50,000,000 gals. per day capacity extending from the proposed controlling tower at the south city boundary, a distance of five miles to a commanding site in West Seattle, where a two-basin reservoir of an aggregate capacity of 220,000,000 gals. is to be constructed. This development will not only meet all future requirements of West Seattle, but will also protect our downtown district and will guarantee a safe water supply for the rapidly expanding industrial district south of Elliott Bay.[36]

World War I temporarily stalled major improvement projects by reallocating materials and manpower to the war effort, but as the war came to a close, West Seattle's water system again took priority. According to a 1955 history of Seattle's water department, "the 1923 annual report of George F. Russell, Superintendent of Water, made it plain that West Seattle had the poorest and most unreliable supply of any portion of the city, coming from a twenty-inch low service main in West Spokane Street and from pumps in the West Seattle station at Harbor Avenue Southwest and West Spokane Street, in part repumped to the high service system by pumps at California Avenue and West Orchard Street."[37]

3.1.3 Improving Water Supply in West Seattle

By 1924, Seattle was looking past the Spokane St. bridge for a solution to West Seattle's water supply problems. The City contracted with Puget Sound Bridge and Dredging Co. to construct an 8-foot, concrete-lined tunnel under the Duwamish waterway to encase water mains bringing water from the reservoir at Beacon Ave. and August St. to West Seattle. This tunnel project was completed as part of a project that also included "six miles of steel and cast iron pipe, a pump station, [and] tanks for low and high service."[38] Other planned improvements included a new steel, 1,000,000-gallon water tower to be constructed at SW Charlestown St. and 39th Ave. SW that would improve water pressure and double the storage capacity of the leaky, wooden tanks from 1910 that were in place at the time.[39]

While these projects began to gain steam, West Seattle suffered from low water pressure, an insufficient supply, and hot summer weather. In summer 1926, residents of West Seattle complained to the Seattle City Council that they could not water their gardens or run water in their homes because their pipes would simply dry up in the late afternoons. "Pressure in the Fauntleroy hillside was reported to be very low, water merely dribbling from faucets in many homes. Too many users on small pipes was said by the Water Department to be the cause for this condition."[40] Residents continued to protest, and by January 1927, a second steel tank was under construction at SW Barton

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[36] Joseph Jacobs, "Projects Embraced in the Program for Expanding Seattle Municipal Water System: 4. West Seattle Project," *Municipal Engineering* 52–53 digest (Oct. 17, 1917): 167.
[37] McWilliams, *Seattle Water Department History*, 55.
[38] McWilliams, *Seattle Water Department History*, 24.
[39] McWilliams, *Seattle Water Department History*, 55.
[40] "Many Homes in Fauntleroy are Short of Water," *Seattle Times*, July 15, 1926, 1.

St. and 38th Ave. SW in the Fauntleroy area of West Seattle.[41] Two large tanks remain at these locations today.

The city water department also decided to replace the aging pump station at the foot of SW Spokane St. and Harbor Ave. SW with a new station. In 1928, Seattle purchased the land for the SW Spokane St. Pump Station from King County for $800 and began to construct the new station.[42] The SW Spokane St. Pump Station, designed by J. M. Lowman and approved by the Board of Public Works, cost $12,057 to build, with an additional $11,845 for the equipment (Figures 12–18). When completed, it pumped up to 6,500 gpm.[43] The water it drew from the Beacon Hill Reservoir was distributed to both the original wood tanks and the new steel tanks located at SW Charleston St. and 40th Ave. SW for high zone service.

3.1.4 Pump Stations in Seattle

The SW Spokane St. Pump Station added to Seattle's many pump stations built to deal with the city's hilly topography. Some of the earliest were located at the Lincoln Park reservoir (1900) and in Volunteer Park at 12th Ave. E and E Prospect St. (8,400 gpm; 1907); Maple Leaf at 12th Ave. NE and E 82nd St. (2,000 gpm; 1910)[44]; Interbay at 23rd Ave. W and W Dravus St. (9,400 gpm; 1915). Other stations constructed in the 1920s were completed in West Seattle at 6th Ave. SW and SW Kenyon St (1924); and in Queen Anne at 4th Ave. N and Ward St. (1,050 gpm; 1926).[45] After the SW Spokane St. Pump Station was complete, additional pumping facilities followed at Foy (1932), Trenton St. (1947), Northgate (1950), West Barton (1941 and 1942), Roosevelt Way (1953), and Burien (1954) to keep the supply of city water apace with the growth of the city.[46]

The SW Spokane St. Pump Station was similar in size and massing to earlier examples but varied greatly in architectural style and detail. While the Volunteer Park, Maple Leaf, and Interbay stations employed decorative brick patterns and high-style Classical Revival ornament including pedimented porticos, pilasters, and dentilled cornices, the Queen Anne and SW Spokane St. Pump Stations were much simpler, responding to a change in architectural style, but also responding to their respective sites. Whereas some Seattle stations were highly visible and associated with large public parks and large reservoirs (some of which are now lidded or located underground with open space above), the Queen Anne and Spokane St. Pump Stations sat on smaller, neighborhood sites and were designed to be comparatively unobtrusive. In the case of the SW Spokane St. Pump Station, it is almost vernacular in style, having been designed without many of the character-defining Classical Revival features of its predecessors, although it too retains some decorative brick work, was constructed with bilateral symmetry, and retains some ornament at the cornice line.

The SW Spokane St. Pump Station successfully increased capacity in West Seattle, but it was soon supplanted by a new pump station associated with the West Seattle Reservoir. The reservoir had first

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[41] "Building Water Tanks for West Seattle," *Seattle Times*, January 25, 1927, 8.
[42] City of Seattle, "Ordinance Number 54459," adopted January 9, 1928, http://clerk.seattle.gov/search/ordinances/54459; McWilliams, *Seattle Water Department History*, 250.
[43] McWilliams, *Seattle Water Department History*, 255.
[44] Although McWilliams quotes 1910 as the date the Maple Leaf pump station was constructed, it was apparently completed in 1911, as it includes the 1911 date on its signage.
[45] McWilliams, *Seattle Water Department History*, 255.
[46] In *Seattle Water Department History*, Mary McWilliams produced a table of all electric pump stations operating in Seattle in 1955. While this table showed that only four electric pump stations were completed before the SW Spokane St. Pump Station, temporary stations like the Kenyon St. Pump Station, which has since been sold and converted into a single-family residence, were not listed, suggesting that the list only included those still in operation.

been envisioned in 1916 as one of two reservoirs planned for West Seattle.[47] The City planned to extend the Cedar River gravity system to Lake Youngs in South King County and then pipe the water to West Seattle, providing sufficient storage in the southern portions of West Seattle to serve the growing population in the twentieth century.

Not until 1932 did the city finally complete the long-planned reservoir at 8th Ave. SW and SW Trenton St., a project that included construction of two large standpipes for "high service" nearby. The large reservoir had a storage capacity of 68,000,000 gallons, and the standpipes each had a capacity of 1,193,000 gallons.[48] According to the *Seattle Times*, the reservoir was supplied by a new 66-inch diameter steel pipeline from the Leo St. standpipe on Beacon Hill. The Beacon Hill supply would be supplemented by a similar pipeline directly from Lake Youngs.[49] A hydraulic pumping station featuring two De Laval hydraulically driven turbine pumping units, was completed in 1935 adjacent to the reservoir to pump water to a standpipe at 36th Ave SW and W Myrtle St. (overflow elevation 575) formerly served by the Kenyon St electric pumping station and to another standpipe (overflow elevation 488) at 39th Ave SW and W. Charlestown St. formerly served by the SW Spokane St electric pump station. According to the Seattle Water Department, the water turbines saved the Water Department $1,260 per month in electricity. Consequently, the Water Department shut down the Kenyon St. Pump Station and reduced the SW Spokane St Pump Station to partial operation, relying on it for supplemental duty during peak summer use.[50]

A further expansion of Seattle's water system followed the substantial increase in the city's population during World War II. After completing a 5,500,000-gallon reservoir in the Magnolia neighborhood in 1945, the Water Department added another West Seattle reservoir (overflow elevation 488) and high service standpipe (overflow elevation 575) at W. Myrtle Street and another electrical pump station at 8th Ave. SW adjacent to the W Trenton St reservoir in 1947.[51] Located at a higher elevation, the 8th Ave. SW facility required less power to supply the W. Charlestown St tanks than the SW Spokane St. Pump Station, further reducing the operational need for the older pump station. Given its greater role in supplying the West Seattle water system, the 8th Ave. SW station became known as the "West Seattle" Pump Station.

As population exploded post-war, Seattle reconsidered a plan from the 1930s to diversify its water system. In 1932, the City had gained the right from King County to develop a Tolt River water pipeline, but the Great Depression and World War II stalled further consideration of the development until the 1950s, when engineers devised a plan to add a dam on the South Fork Tolt River and to construct a 25-mile long pipeline to carry water to a 60,000,000-gallon reservoir at Lake Forest Park.[52] Construction on the project began in 1959, and by 1962 water from the Tolt River

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[47] DON, "Summary for 3216 SW Spokane ST SW / Parcel ID 7987400820 / Inv # SPU020," Seattle Historic Sites Database, accessed May 31, 2019, http://web6.seattle.gov/DPD/HistoricalSite/QueryResult.aspx?ID=1631521496.
[48] McWilliams, *Seattle Water Department History*, 254.
[49] "Improved Water is Assured for City," *Seattle Times*, August 11, 1929, 2; C. Wickwire, "Historic Property Inventory Form for SW Spokane Street Pump Station," on file at the Department of Archaeology and Historic Preservation, Olympia, Washington.
[50] Lindsay, "Seattle's Hydraulic Turbine Driven Pumping Station," 1–3.
[51] McWilliams, *Seattle Water Department History*, 254.
[52] Lake Forest Park incorporated as a city in 1961.

was flowing to into the larger system. The Lake Forest Park reservoir's high elevation at 540 ft eliminated the need for the pumping stations for local service required in other parts of the city.[53]

At that time, Seattle leadership predicted that with increasing population, increasing water use would lead to a need for a third water source, possibly as early as 1980. However, water conservation efforts began reducing usage in the late twentieth century, and additional wells and an additional pipeline from the Tolt River, completed in 2002, have pushed that date back to the mid-twenty-first century.[54]

Although supplanted by later pump stations, the SW Spokane St. Pump Station continues to provide back-up support for West Seattle's water system, particularly during the summer. That the Superintendent of the Water Department approved replacement of the pump and motor sets and upgraded the controls at this station in 1958 testified to the pump station's continued importance.[55] Further repairs and upgrades to the station continued into the 1980s. In 2019, as one of SPU's 31 potable water pump stations, the SW Spokane St. Pump Station plays a small role in the city's vast interconnected system developed to meet the growth of a major metropolitan area since the days of the first private water companies.[56]

3.1.5 Pump Station Design and Type

Plans for the SW Spokane St. Pump Station were signed by "J. M. Lowman" or Joel M. Lowman in March 1928. Not much appears in historic records regarding Lowman, except that he supervised the Water Department's drafting division in 1928 and was promoted to Senior Draftsman in 1929.[57] Joel M. Lowman, presumed to be one and the same, is listed as a "civil engineer" in both the 1930 and 1940 U.S. censuses.[58]

The SW Spokane St. Pump Station is one of approximately five pump stations that represent the early period of municipal water development between 1889 and 1930.[59] The four older extant pump stations share some characteristics with the SW Spokane St. Pump Station, including overall massing and materials, but in many cases, feature a higher level of architectural ornament. A description of Seattle's remaining pre-1930s pump stations follows below.

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[53] Kit Oldham, "Dedication ceremony marks delivery of first water from Seattle Water Department's Tolt River supply system on December 17, 1962," HistoryLink.org Essay #10973, November 24, 2014, http://historylink.org/File/10973/; SPU, "Water System Overview."
[54] Oldham, "Dedication ceremony marks delivery of first water."
[55] Seattle City Clerk, "Comptroller File No. 235036," City of Seattle Legislative Information Service, 1958, http://clerk.seattle.gov/.
[56] Young Kim, "Chapter 11 – Pump Stations, SPU Design Standards and Guidelines," 2016, http://www.seattle.gov/Documents/Departments/SPU/Engineering/11PumpStationsFinalRedacted.pdf.
[57] "Water Employs [sic] Reorganized by New City Plans," *Seattle Times*, June 28, 1929, 7.
[58] U.S. Bureau of the Census, "Fifteenth Census of the United States," Sheet No. 89A, Block No. 3501, Seattle, King County, Washington, 1930, http://www.ancestry.com; U.S. Bureau of the Census, "Sixteenth Census of the United States," Sheet No. 20A, Block No. 76, Seattle, King County, Washington, 1940, http://www.ancestry.com.
[59] These five pump stations were Seattle's only electric stations, but Seattle also constructed hydraulic stations, including four at Lincoln Park, Green Lake, W Trenton St., and Foy, constructed between 1899 and 1945, according to McWilliams (*Seattle Water Department History*). While these stations relied on different mechanical systems, they were similar in design and ornament to the city's electric pump stations.

Volunteer Park at 12th Ave. E and E Prospect St. (1907)

Volunteer Park Pump Station is the oldest remaining electric pumping station in Seattle (Figure 19). Constructed in 1907, it is an oblong masonry building of fabricated stone at the southern corner of Volunteer Park's reservoir. The building is Neoclassical in design, featuring a central, arched entry with keystone, flanked east and west by arched windows that wrap around the building and include sills and keystones. All window openings have been filled. The building is topped by a dentilled cornice with decorative parapet. The building was listed in the Washington Heritage Register (WHR) and NRHP as part of Volunteer Park, significant under Criterion C, in 1976.[60]

Maple Leaf at 12th Ave. NE and E 82nd St. (1911)

The Maple Leaf Pump Station likely provided a basic model for both the Interbay and SW Spokane St pump stations. (Figure 20). Attached to the Maple Leaf Reservoir and Maple Leaf Reservoir Park and Baseball Fields, the Maple Leaf Pump Station is a high-style example of the Classical Revival, featuring a pedimented portico at its central entry supported by a pair of square columns on enlarged bases and topped by an ornamental frieze at the fully articulated cornice. Above the entry, the frieze reads "19 – MAPLE LEAF RESERVOIR – 11." The entry's double doors are flanked by terra cotta pilasters; there are pilasters at each corner, and the filled windows are framed by wide, ornamental, terra cotta frames. Above the entry doors is a dentilled lintel topped by a highly ornamented semi-circular window with ornamental metal grille. The reservoir, along with the pump station, was surveyed in 2000 and recommended eligible under NRHP Criterion C for its association with the development of the Cedar River water system and with the growth of Seattle's water system. However, no formal determination of eligibility has been made.[61]

Interbay at 23rd Ave. and W Dravus St. (1915)

The Interbay Pump Station may have provided one model for the SW Spokane St. Pump Station (Figure 21). The building is rectangular, side-gabled, and constructed of Flemish bond brick. Unlike the Spokane St. example, the Interbay Pump Station is highly ornamented, featuring ornamental brick, a classical central entry on the west elevation with dentilled pediment, a ribbon of three, tall, brick-filled windows separated by brick mullions on the highly visible south elevation, a ribbon of three shallow windows on the north elevation, pilasters at the corners, and a simple, classical cornice featuring dentils both at the cornice line and in the ornamented gables. While the SW Spokane St. Pump Station may be called an example of a restrained, vernacular style, the Interbay Pump Station is a good example of the Classical Revival and retains many of its character-defining features. The Interbay Pump Station was found eligible for listing in the NRHP in 2008 under Criterion C for its architectural character and for its association with the development of the Magnolia area and the City of Seattle's water system.[62]

Queen Anne at 4th Ave. N and Ward St. (1926)

Plans for the interior of the SW Spokane St. Pump Station include a note from the designer indicating that the SW Spokane St. Pump Station is an enlarged version of the Queen Anne Pump

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[60] DAHP, "Volunteer Park—Seattle, Register Status: National Register; Washington Heritage Register, Listing No. 76001894, Resource ID 674609," Washington Information System for Architectural and Archaeological Records Data, accessed May 29, 2019, http://secureaccess.wa.gov/dahp/wisaardp3/.
[61] DAHP, "Maple Leaf Reservoir, Resource ID 35575," Washington Information System for Architectural and Archaeological Records Data, accessed May 29, 2019, http://secureaccess.wa.gov/dahp/wisaardp3/.
[62] DAHP, "Interbay Pump Station, Property ID 45771," Washington Information System for Architectural and Archaeological Records Data, accessed May 29, 2019, http://secureaccess.wa.gov/dahp/wisaardp3/.

Station (Figure 22). Similar to previous examples, the Queen Anne Pump Station is a rectangular, single-story tall, brick structure. Unlike previous examples, the shell of the Queen Anne Pump Station is now open to the public as part of the surrounding Ward Springs Park. In contrast to the other early pump stations, the Queen Anne Pump Station retains its wood-framed, divided light windows. The building is similar in plan and massing to previous examples but lacks the classical ornament. Like the SW Spokane St. Pump Station, it features a minimal amount of brick ornament, limited to lintels and sills, and is constructed of the combined Flemish-running bond courses. A pair of wooden barn doors face the park under a simple gable with modest eaves and unornamented barge boards. The Queen Anne Pump Station was surveyed in 2000 and recommended eligible for listing in the NRHP under Criterion C for its design and for its association with the growth and development of Seattle's water system. However, no formal determination of eligibility has been made.[63]

Additional Pump Stations

After completion of the SW Spokane St. Pump Station, the City of Seattle constructed additional stations. The Foy Pump Station (1932) is similar, in massing, to previous stations but is constructed of smooth concrete with a standing-seam metal roof and no ornament. It was found not eligible for the NRHP in 2013. The two West Barton pump stations (1941 and 1942) appear to have been demolished. The Northgate Pump Station (1950) is square with rounded Art Moderne corners, a recessed ribbon of filled windows, and a slightly recessed doorway under an off-center awning. It was found not eligible for listing in the NRHP in 2008. The Roosevelt Way Pump Station (1953), altered since its original construction, is a modest masonry building with a recessed entry topped by a standing-seam metal, gabled roof with shingles in the gable and a veneer on the façade and no visible windows (Figure 23). It was found not eligible for listing in the NRHP in 2008. The Burien Pump Station (1954) resembles the Roosevelt Way Pump Station. The rectangular building with fabricated stone cladding, a recessed entry, and minimal ornament under a metal roof, has not been evaluated for listing in the NRHP.[64]

Evolution of Type

As pump stations were placed in neighborhood settings, apart from large public spaces like public parks, in the 1920s, they were designed with the massing of their predecessors but with fewer ornamental details, possibly to help them blend more seamlessly into their surroundings, but also to accommodate a trend toward Modernism and away from the heavily ornamented revival styles of the earlier twentieth century. In general, with the rise of streamlined architectural styles like the Art Moderne and the International Style, geometric forms with clean lines and simple facades replaced the ornate woodwork of the Arts & Crafts, and the elaborate cornices, pilasters, and pediments common on Neoclassical and Classical Revival styles. This accounts for some of the variations between, for instance, the modest Queen Anne and SW Spokane St. Pump Stations and the highly ornamented examples found in Volunteer Park and at Maple Leaf. It also accounts for the further evolution of the type, found in pump stations at Foy and Roosevelt Way, which include new materials like structural concrete and standing-seam gable roofs, but lack fenestration and façade details all together, following trends common to, for instance, contemporary designed for electrical substation buildings or comfort stations that blend into their surroundings.

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[63] DAHP, "Queen Anne Water Pumping Station, Property ID 45060," Washington Information System for Architectural and Archaeological Records Data, accessed May 29, 2019, http://secureaccess.wa.gov/dahp/wisaardp3/.
[64] DAHP, Washington Information System for Architectural and Archaeological Records Data, accessed May 29, 2019, http://secureaccess.wa.gov/dahp/wisaardp3/.

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5. Photographs

All photographs of the SW Spokane St. Pump Station were taken by HRA staff in May and August 2019 and are held on file by Seattle Public Utilities and Historical Research Associates, Inc.

Photo 1. SW Spokane St. Pump Station site, May 23, 2019, view northwest.

Photo 2. SW Spokane St. Pump Station, May 23, 2019, view north.

Photo 3. SW Spokane St. Pump Station, May 23, 2019, view east.

Photo 4. SW Spokane St. Pump Station, May 23, 2019, view west.

Photo 5. SW Spokane St. Pump Station, May 23, 2019, view southeast.

Photo 6. SW Spokane St. Pump Station, May 23, 2019, interior of the main floor, view west.

Photo 7. SW Spokane St. Pump Station, May 23, 2019, interior of the main floor, view east.

Photo 8. SW Spokane St. Pump Station, May 23, 2019, interior, basement floor, view southwest.

Photo 9. SW Spokane St. Pump Station, May 23, 2019, interior of basement floor, view east.

Photo 10. Neighborhood context: view west up SW Spokane St.; subject building on the right.

Photo 11. Neighborhood context: view south from subject property across SW Spokane St.

Photo 12. Neighborhood context: view southeast from subject property.

Photo 13. Neighborhood context: view east from subject property.

Photo 14. Neighborhood context: view north from subject property.

Photo 1. SW Spokane St. Pump Station site, May 23, 2019, view northwest.

Photo 2. SW Spokane St. Pump Station, May 23, 2019, view north.

Photo 3. SW Spokane St. Pump Station, May 23, 2019, view east.

Photo 4.SW Spokane St. Pump Station, May 23, 2019, view west.

Photo 5. SW Spokane St. Pump Station, May 23, 2019, view southeast.

Photo 6. SW Spokane St. Pump Station, May 23, 2019, interior of the main floor, view west.

Photo 7. SW Spokane St. Pump Station, May 23, 2019, interior of the main floor, view east.

Photo 8. SW Spokane St. Pump Station, May 23, 2019, interior, basement floor, view southwest.

Photo 9. SW Spokane St. Pump Station, May 23, 2019, interior of basement floor, view east.

Photo 10. Neighborhood context: view west up SW Spokane St.; subject building on the right.

Photo 11. Neighborhood context: view south from subject property across SW Spokane St.

Photo 12. Neighborhood context: view southeast from subject property.

Photo 13. Neighborhood context: view east from subject property.

Photo 14. Neighborhood context: view north from subject property.

6. Figures

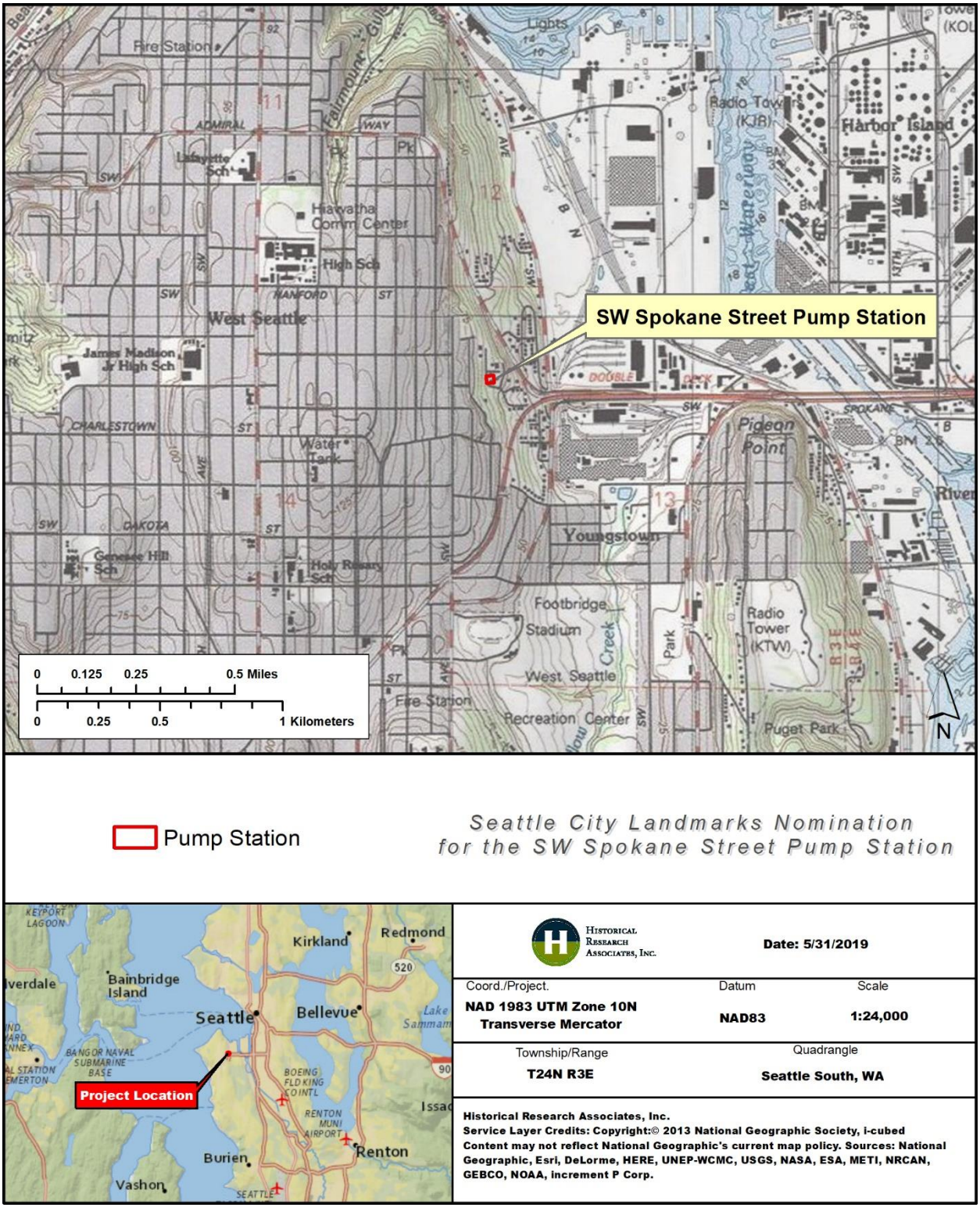

Figure 1. Map of SW Spokane St. Pump Station, West Seattle.

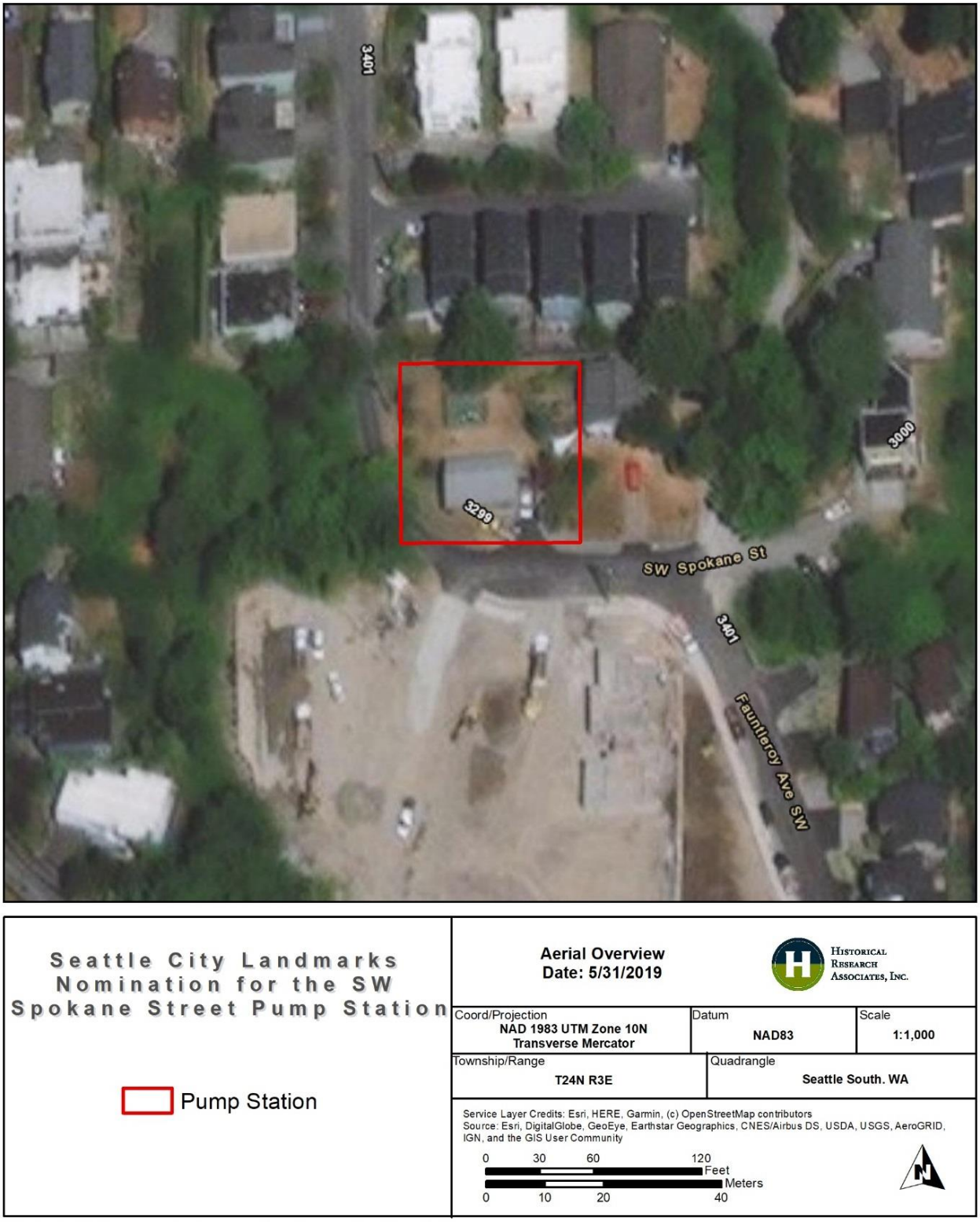

Figure 2. Aerial of SW Spokane St. Pump Station, West Seattle.

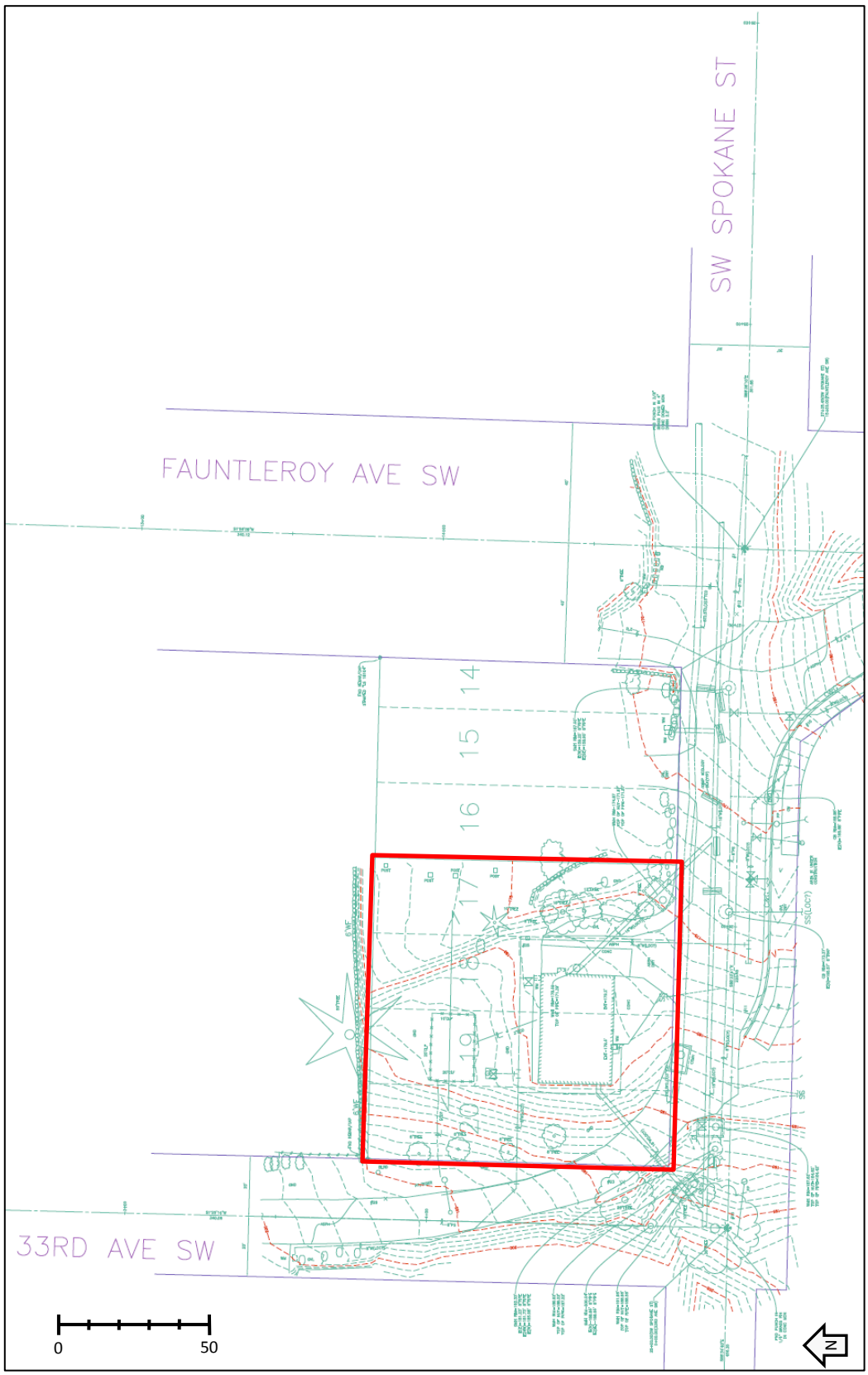

Figure 3. Site layout, showing subject property boundary in red.

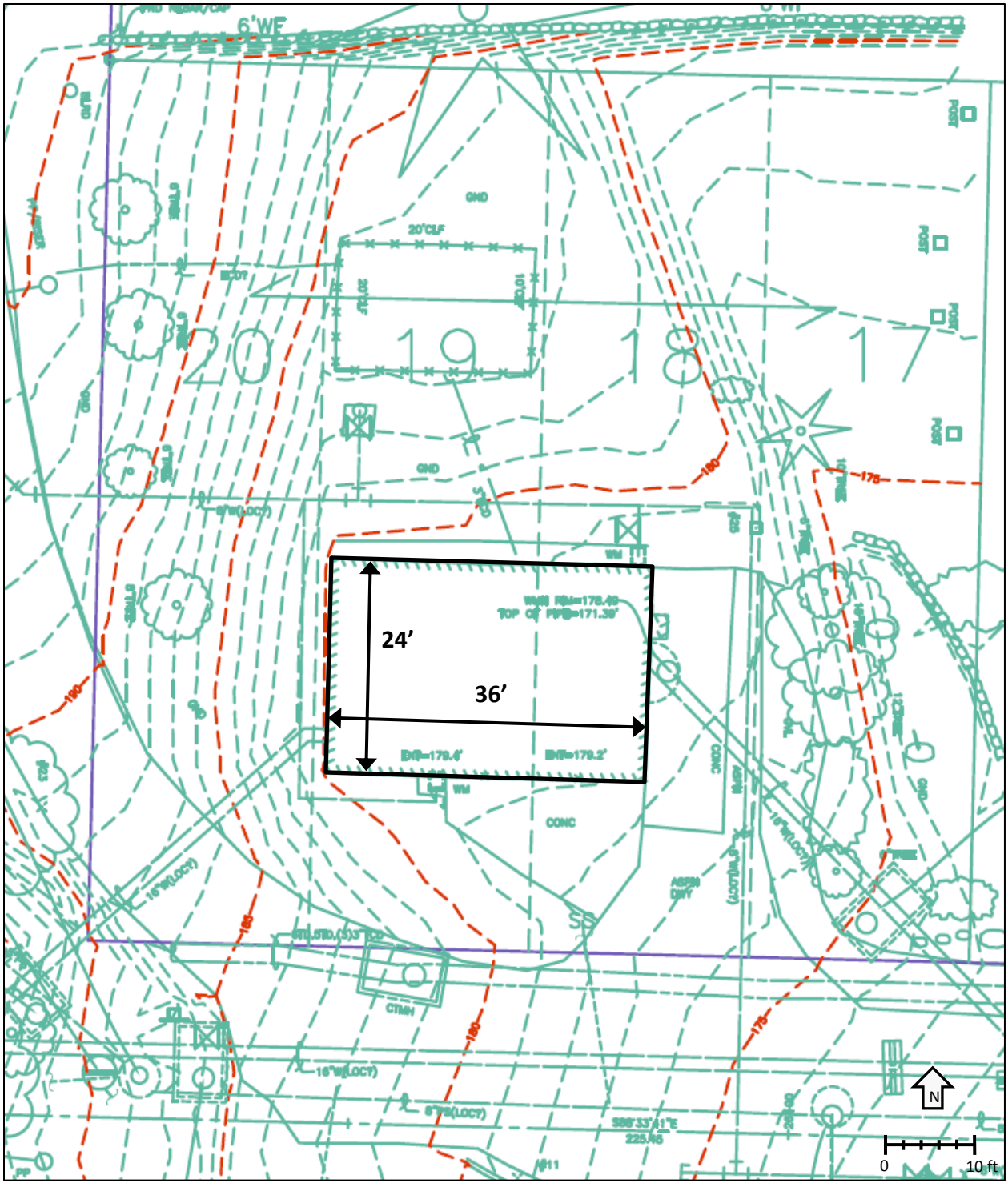

Figure 4. Subject property layout showing building footprint in black.

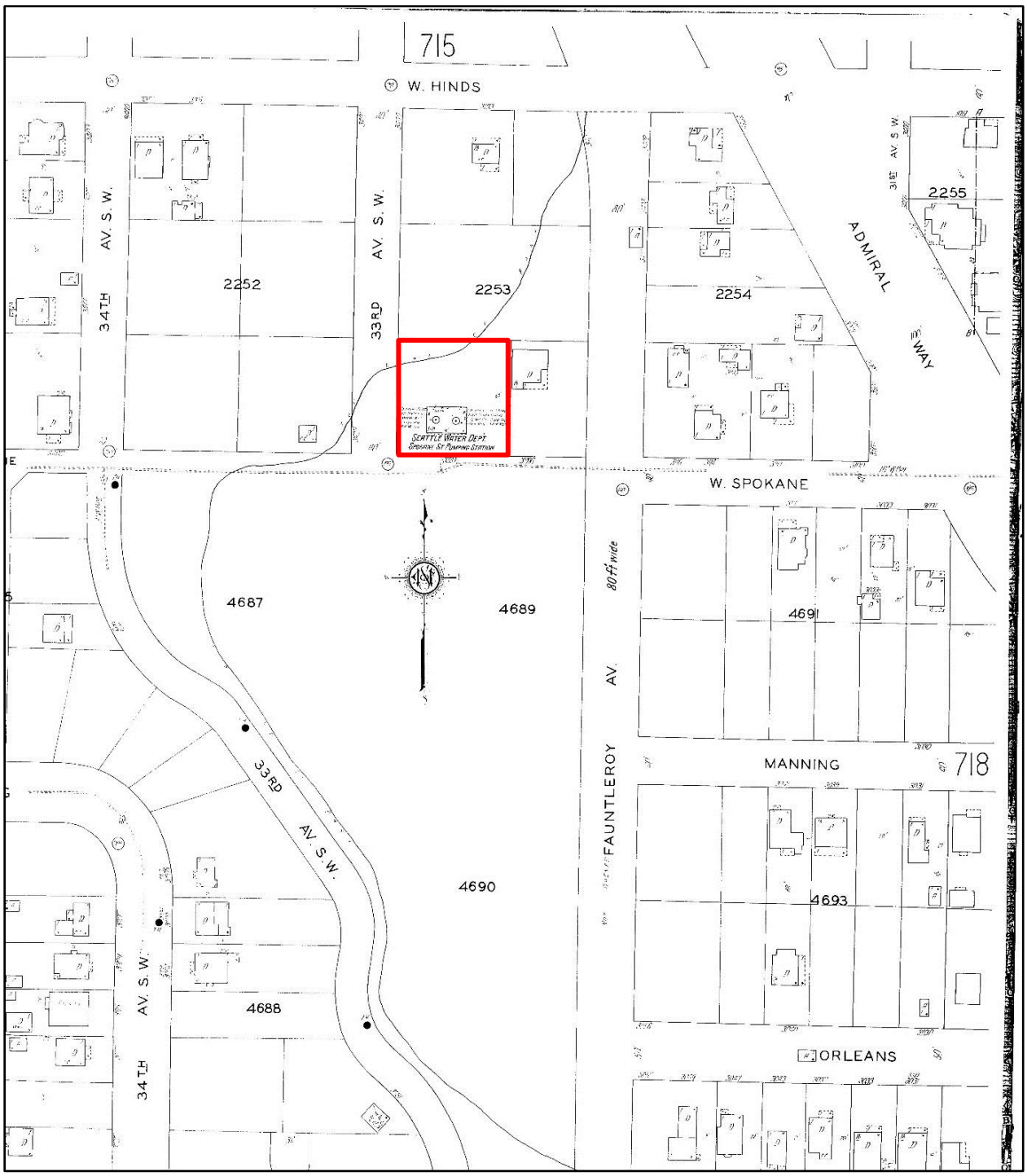

Figure 5. Sanborn Fire Insurance map, 1929, volume 7, sheet 717, indicating the location of the SW Spokane St. Pump Station, courtesy of Seattle Public Library.

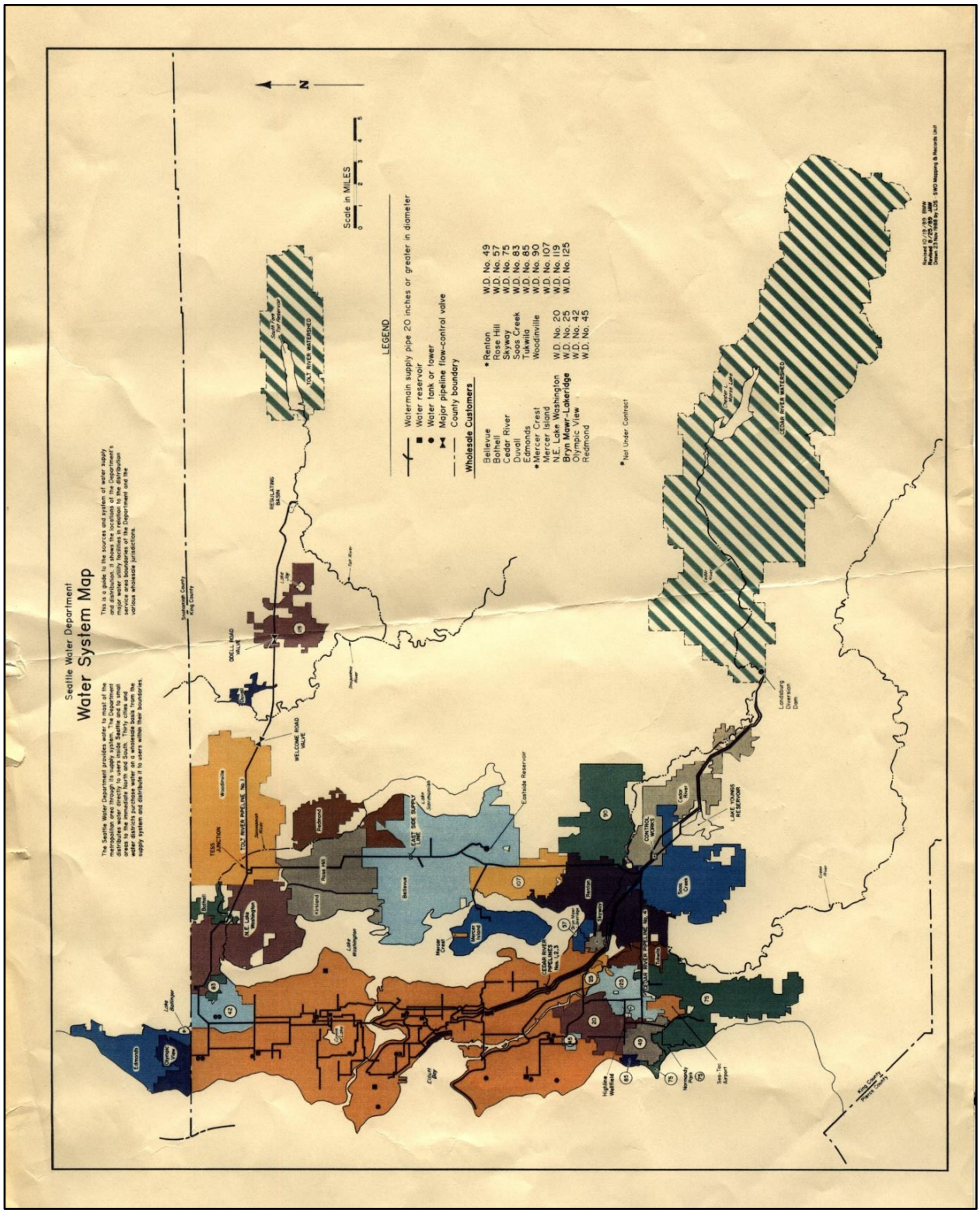

Figure 6. Map of Seattle's Water System, with Cedar River and Tolt Watersheds, 1989, courtesy of SPU.

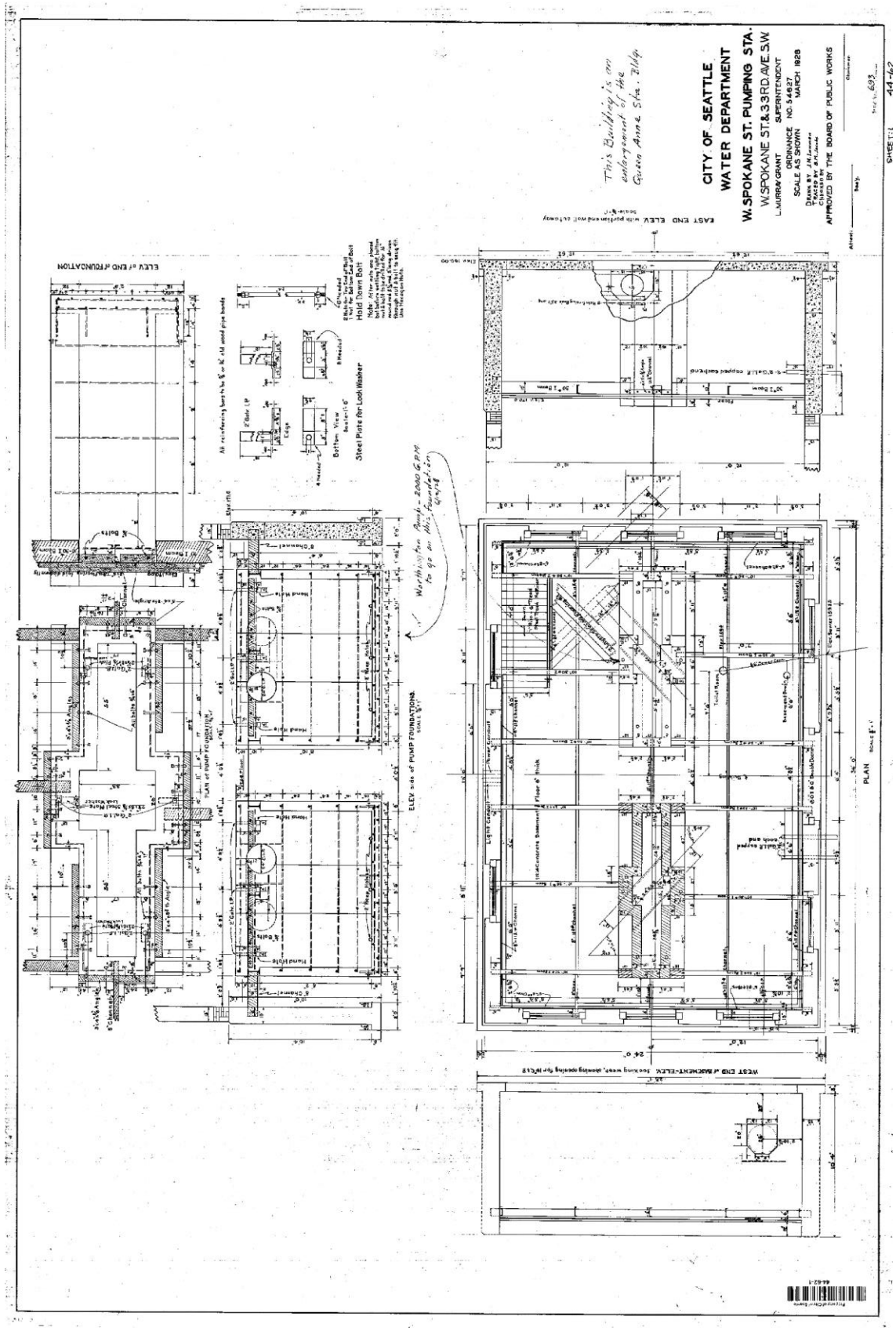

Figure 7. Original Seattle Water Department plans for the SW Spokane St. Pump Station, 1928. On file with Seattle Public Utilities.

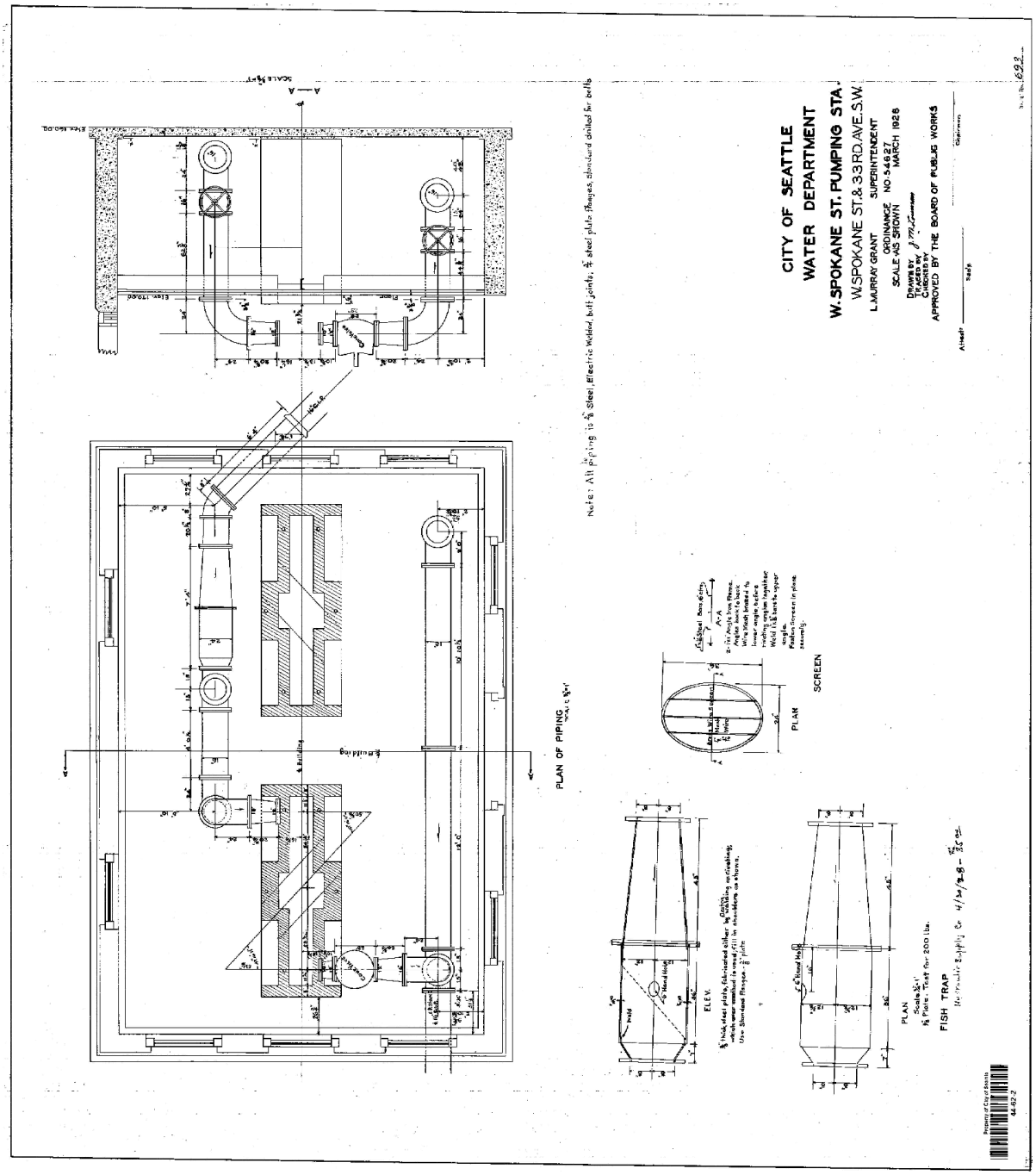

Figure 8. Original Seattle Water Department plans for the SW Spokane St. Pump Station, 1928. On file with Seattle Public Utilities.

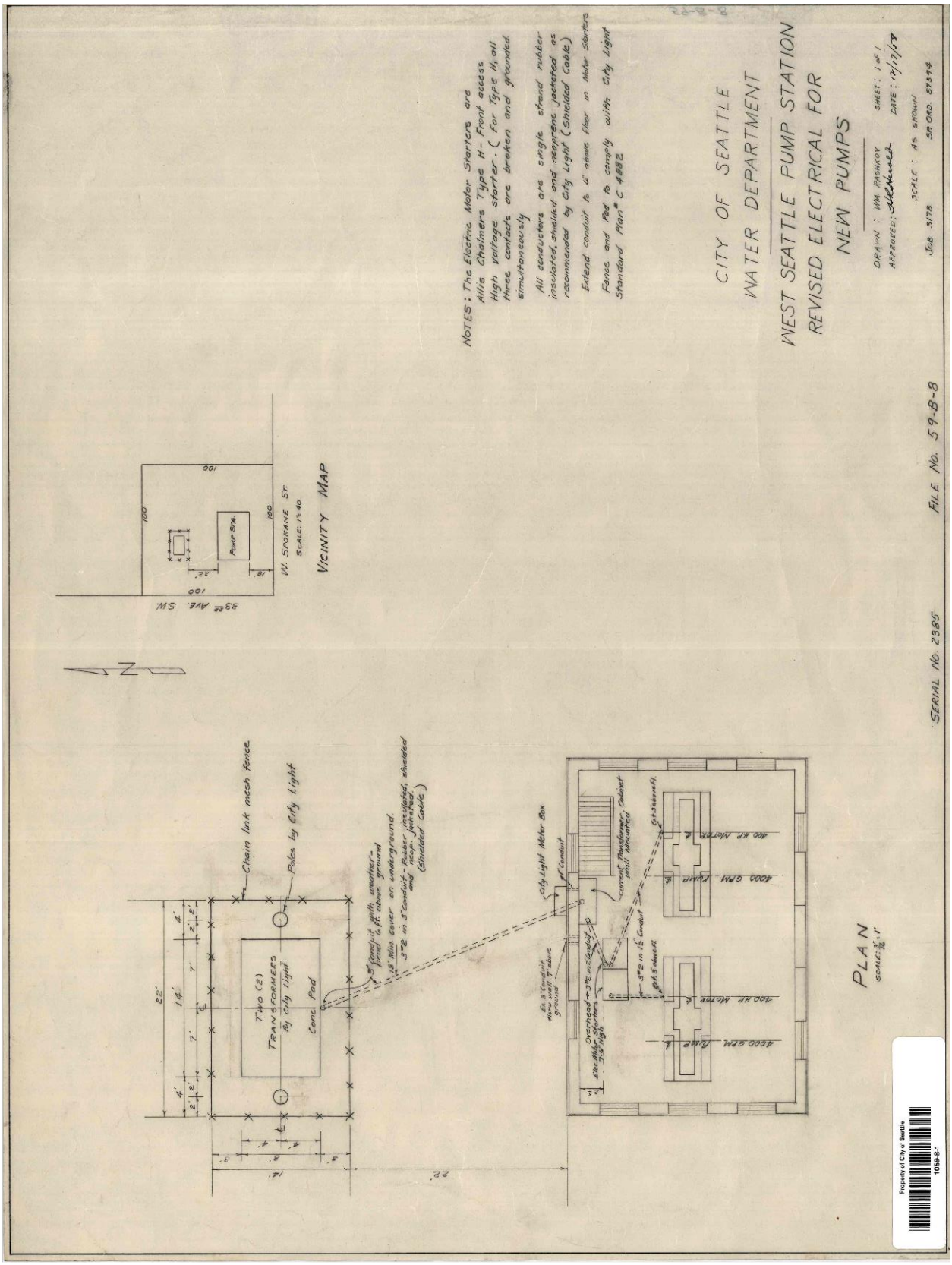

Figure 9. Seattle Water Department plans for upgrading the SW Spokane St. Pump Station's electrical system (1958). On file with Seattle Public Utilities.

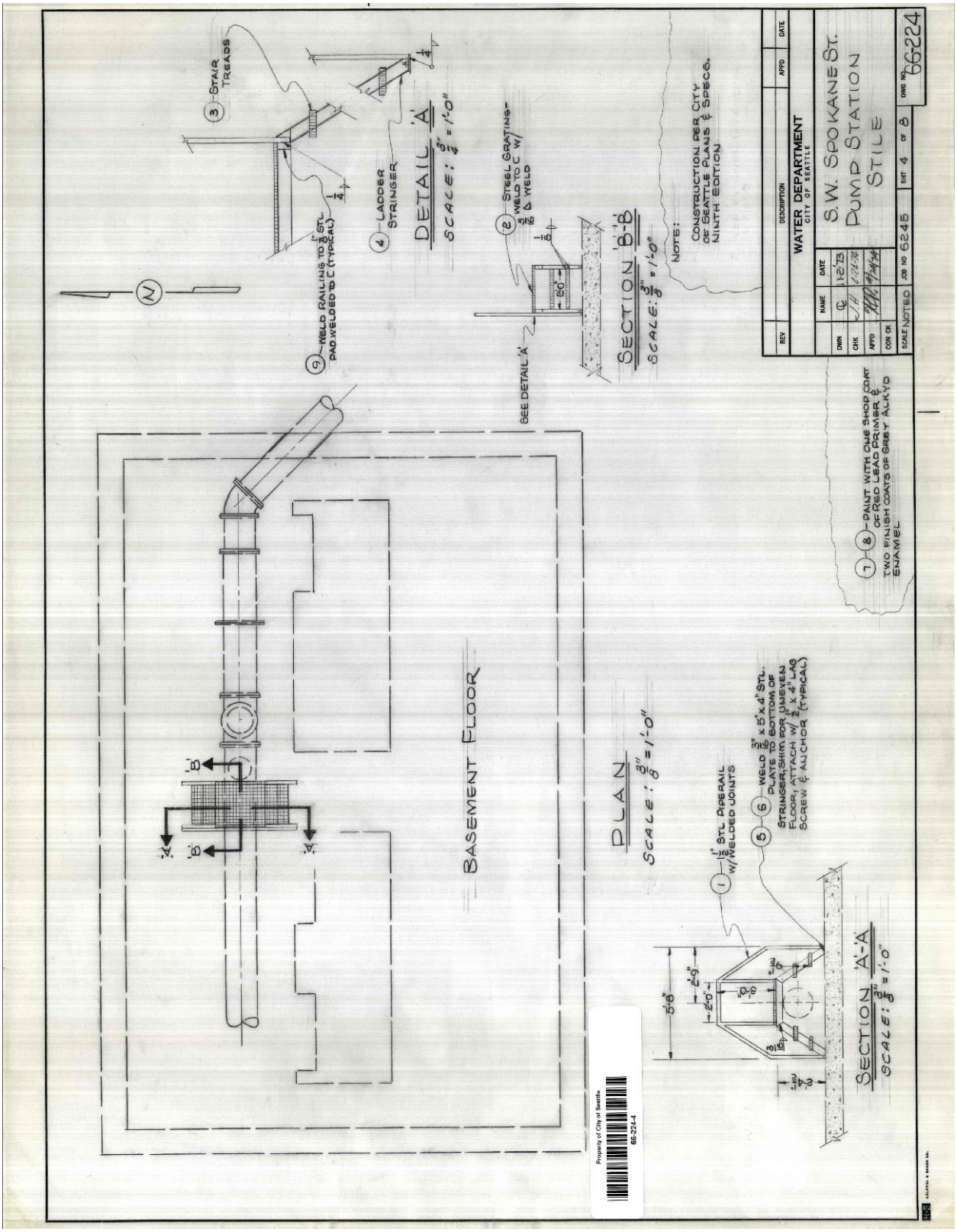

Figure 10. Seattle Water Department plans for adding a stile to the basement floor of the SW Spokane St. Pump Station (1974). On file with Seattle Public Utilities.

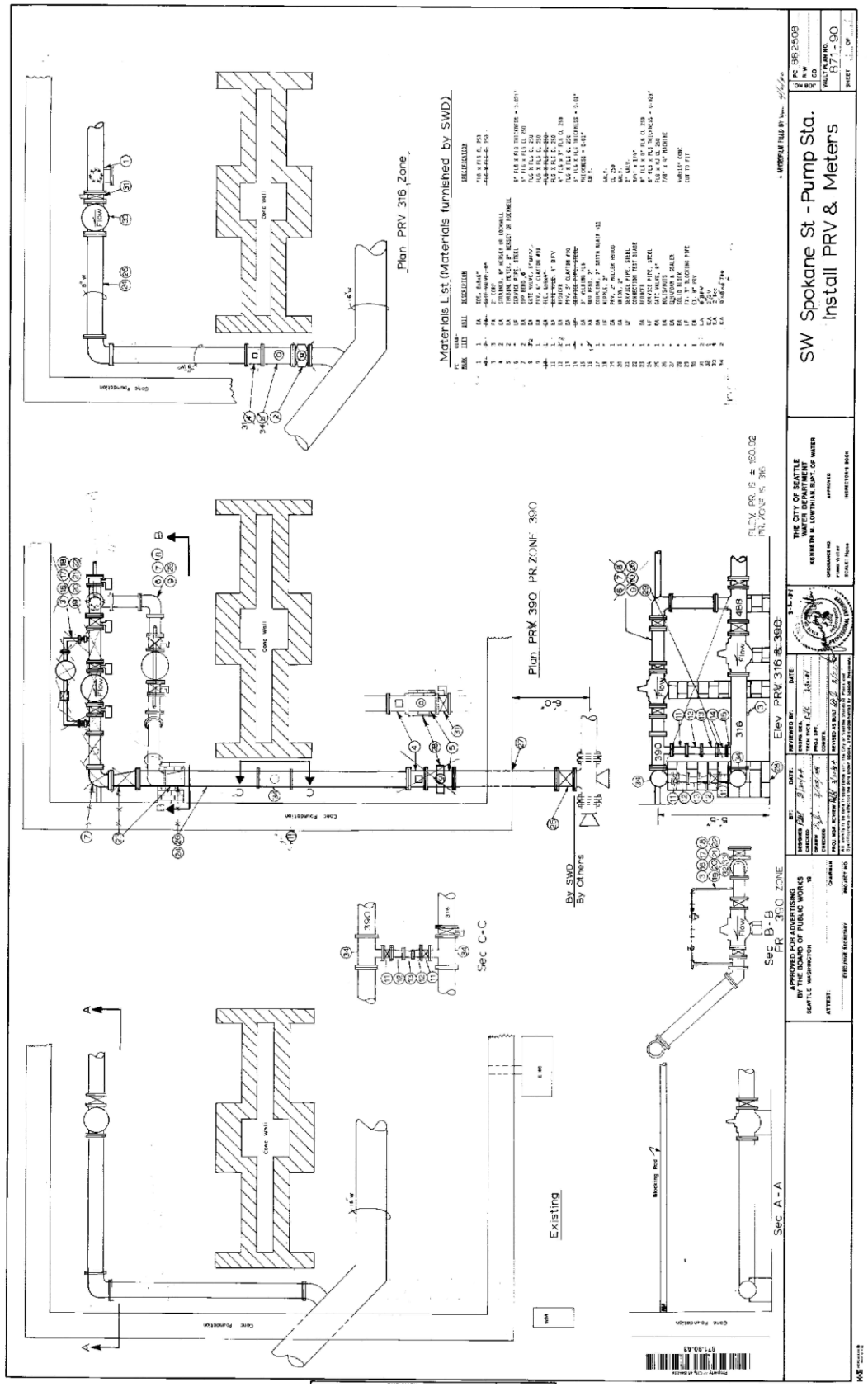

Figure 11. Seattle Water Department plans for replacing piping and installing new meters in the SW Spokane St. Pump Station (1984).

Figure 12. City of Seattle photo of the SW Spokane St. Pump Station, view northwest (May 8, 1931). Photo on file with Seattle Municipal Archives, Seattle.

Figure 13. King County Assessor's photo of the SW Spokane St. Pump Station, view northwest (undated, ca 1936). On file at the Puget Sound Regional Branch of the Washington State Archives, Bellevue.

Figure 14. City of Seattle photo of the SW Spokane St. Pump Station, view northeast (May 8, 1931). Photo on file with Seattle Municipal Archives, Seattle.

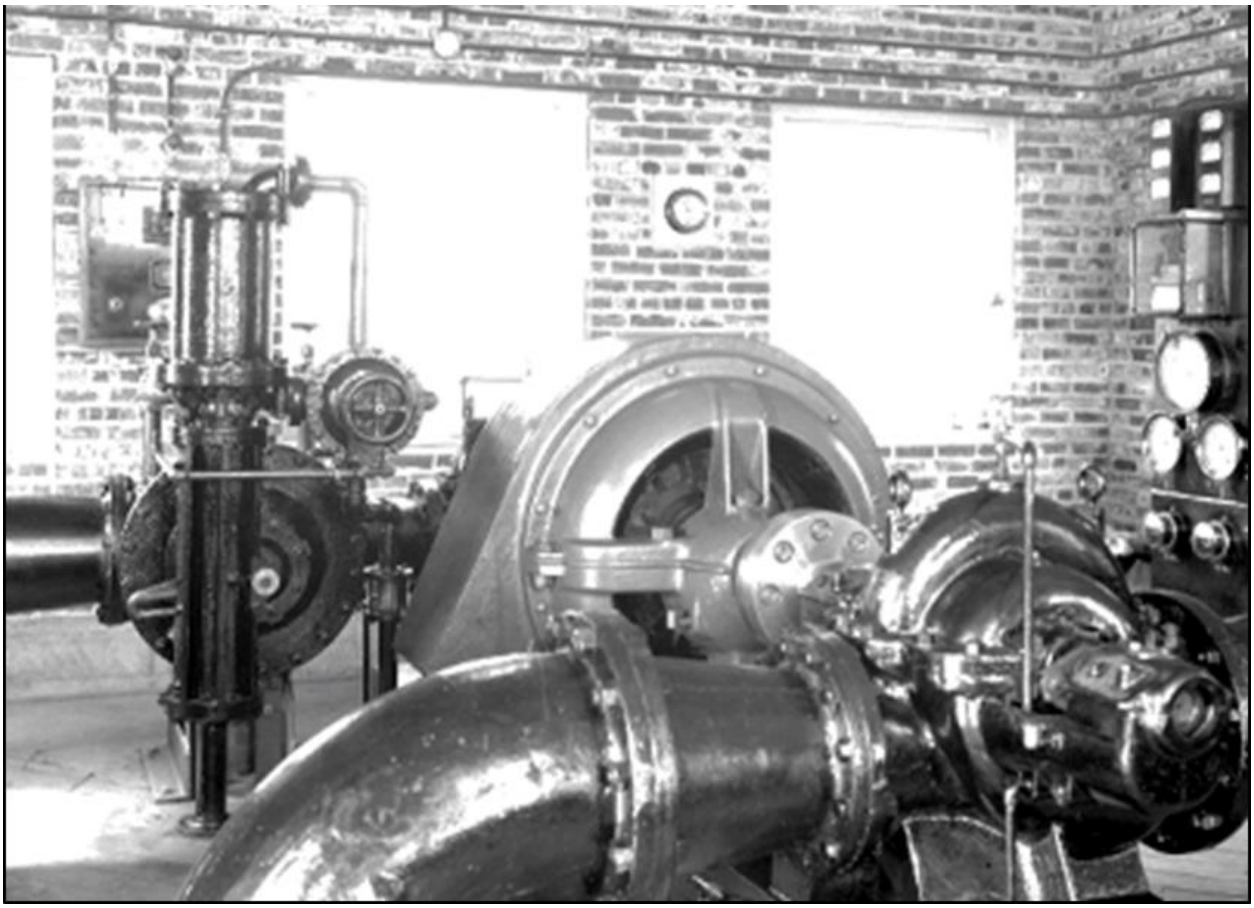

Figure 15. Original pump on the main floor of the SW Spokane St. Pump Station (May 2, 1929). Photo on file with Seattle Municipal Archives, Seattle.

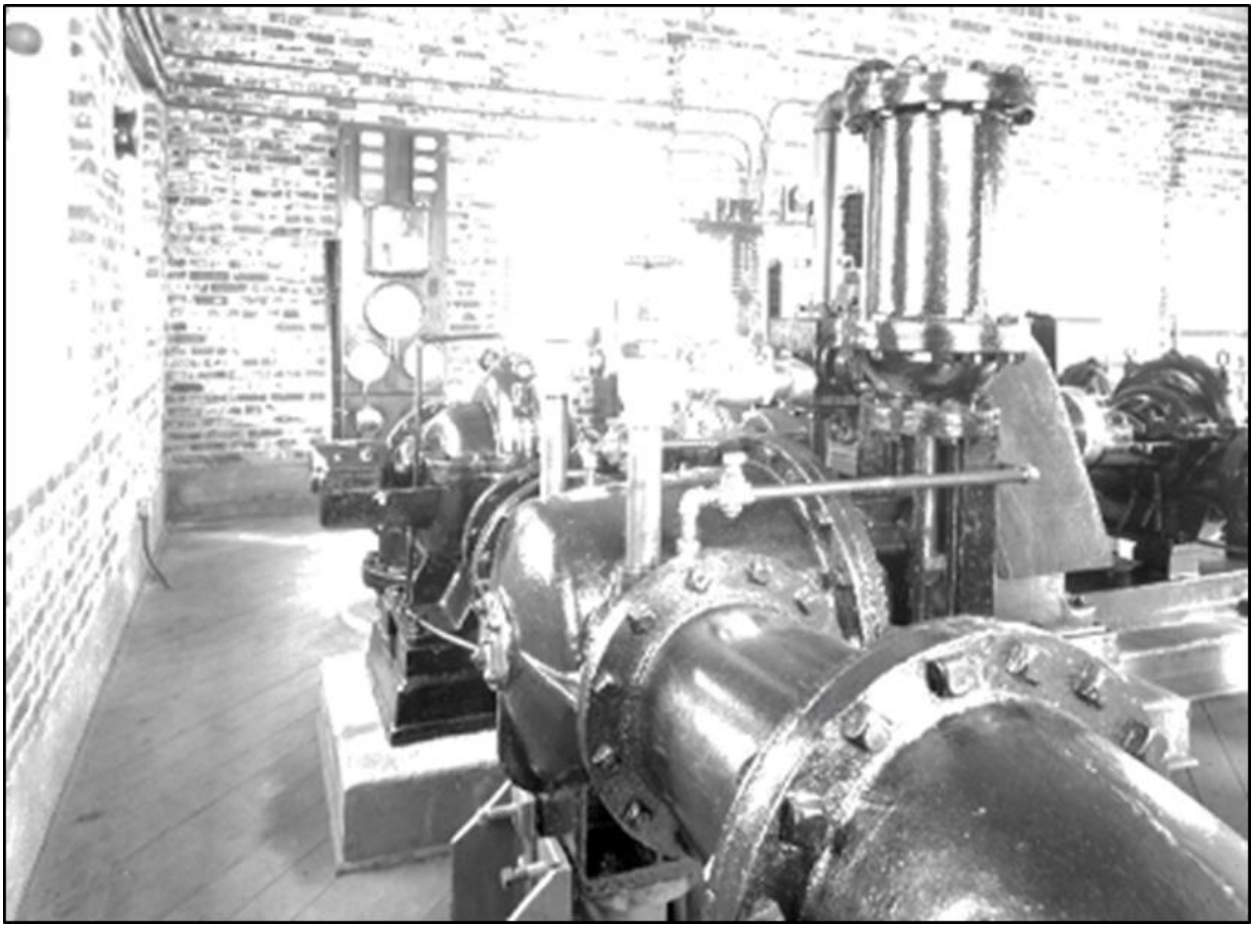

Figure 16. Original pumps on the main floor of the SW Spokane St. Pump Station (May 2, 1929). Photo on file with Seattle Municipal Archives.

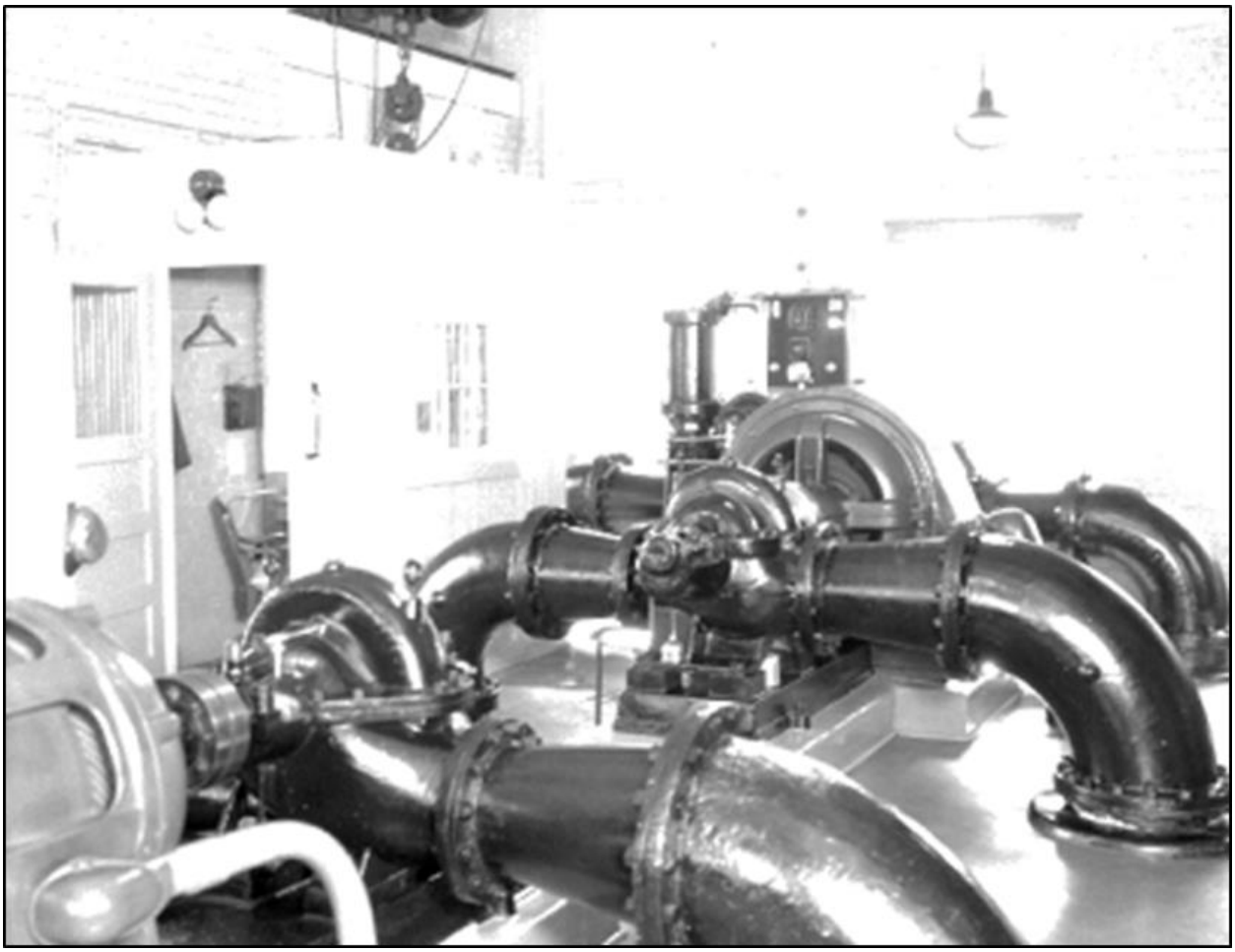

Figure 17. Original pump on the main floor of the SW Spokane St. Pump Station (May 8, 1931). Photo on file with Seattle Municipal Archives.

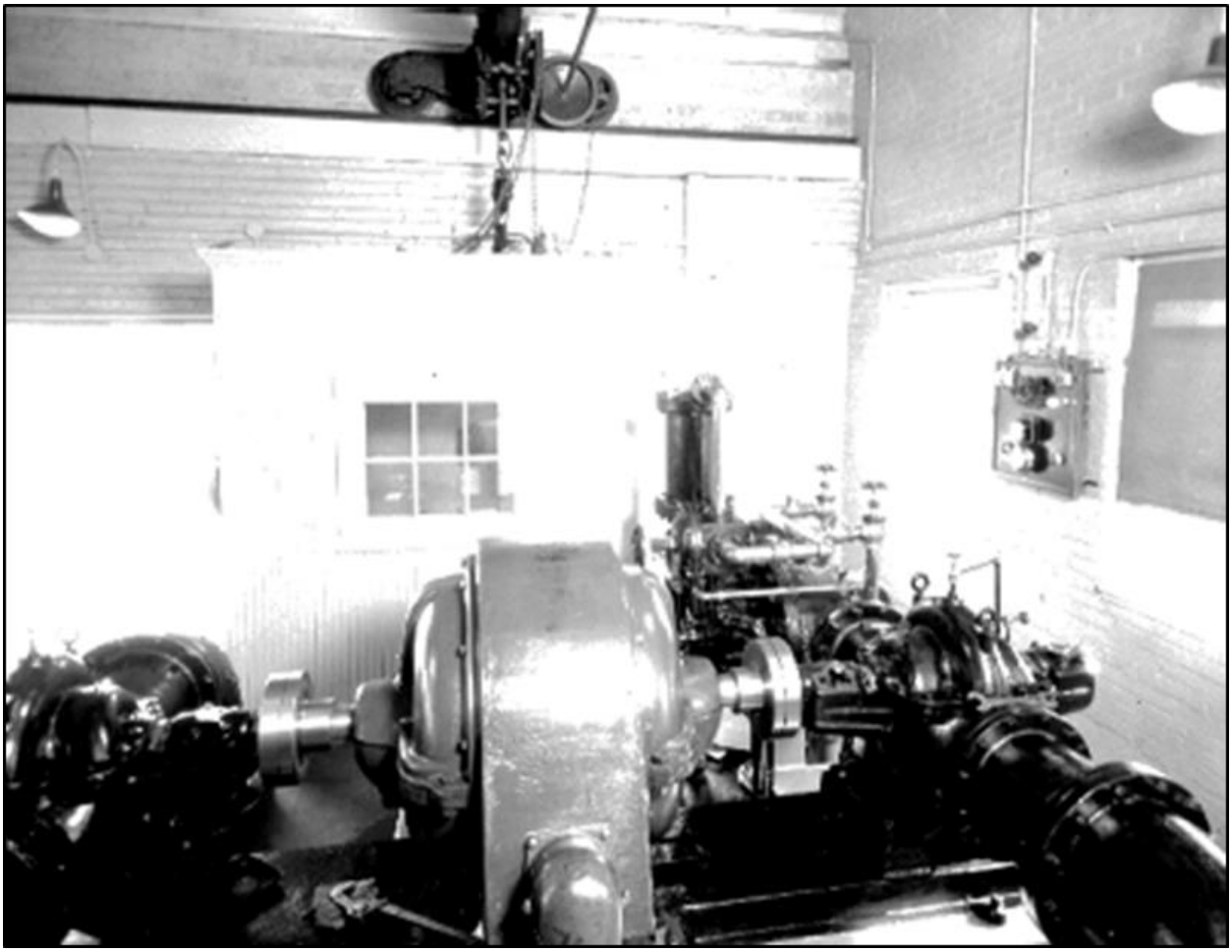

Figure 18. Original pump on the main floor of the SW Spokane St. Pump Station (May 8, 1931). Photo on file with Seattle Municipal Archives.

Figure 19. Examples of Seattle pump stations: Volunteer Park Gate House and Standpipe (photographed April 23, 1910). Photo on file with Seattle Municipal Archives, Seattle.

Figure 20. Examples of Seattle pump stations: Maple Leaf Pumping Station (photographed April 29, 1935). Photo on file with Seattle Municipal Archives, Seattle.

Figure 21. Examples of Seattle pump stations: Interbay Pump Station (photographed October 5, 1911). Photo on file with Seattle Municipal Archives, Seattle.

Figure 22. Examples of Seattle pump stations: Queen Anne Pump Station (photographed in 2000). Photo on file with the City of Seattle Department of Neighborhoods, Seattle.

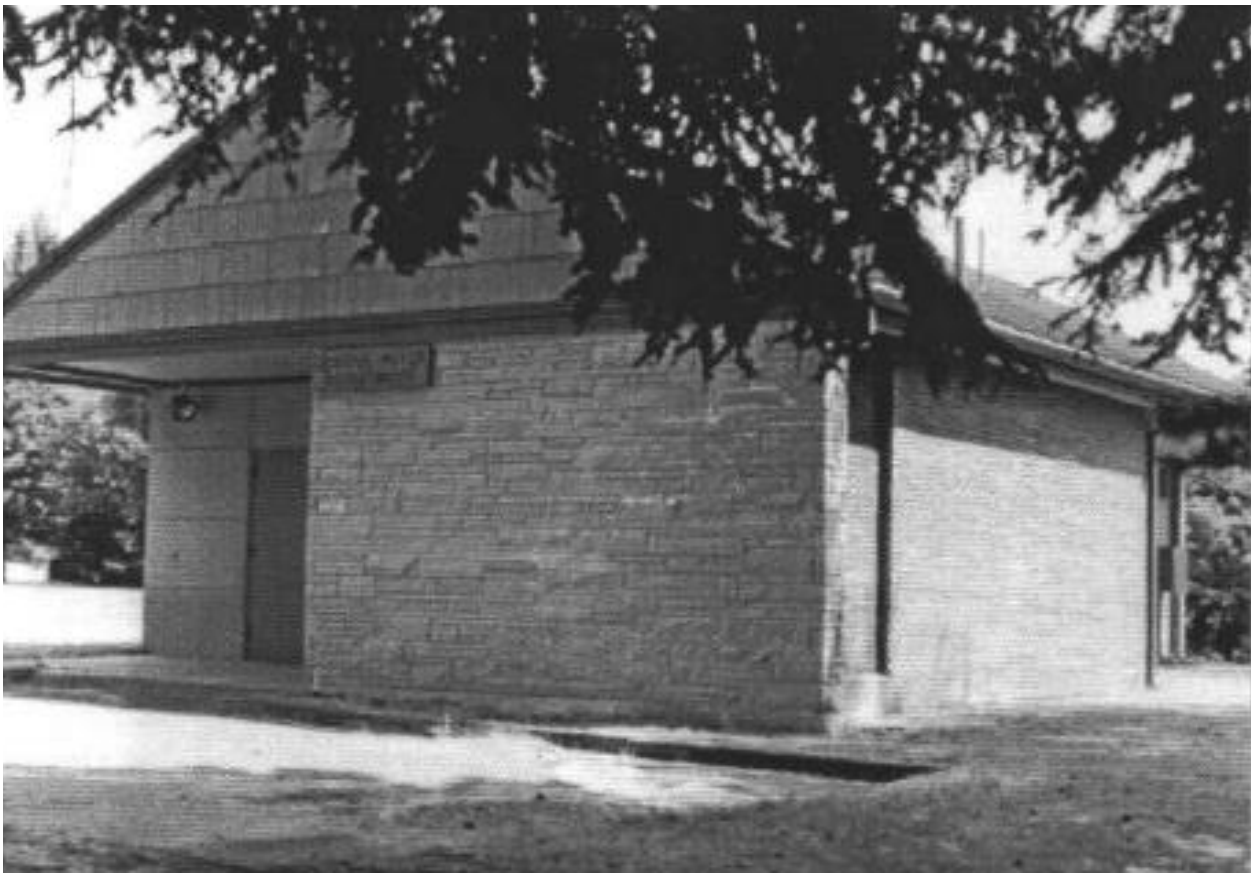

Figure 23. Examples of Seattle pump stations: Roosevelt Way Pump Station (photographed in 2000). Photo on file with the Washington State Department of Archaeology and Historic Preservation.