The City of Seattle
Landmarks Preservation Board
Mailing Address: PO Box 94649 Seattle WA 98124-4649
Street Address: 700 5th Ave Suite 1700

Landmark NOMINATION Application

Name: East Pine Substation
Year Built: 1967 (modifications 1998-2000, 2004)

Street and Number: 150123rd Avenue, Seattle 98122

Assessor's File No.: 722850-0465
Legal Description: Renton Hill Addition, Block 8, Lots 1-6 and the north 30 feet of Lot 7. Recorded in Book of Plats Volume 8, page 68.
Plat /Block/Lot: Noted above

Present Owner: Seattle City Light
Present Use: Substation with Control Building
Owner's Address: 700 5th Avenue, Suite 3200
PO Box 34023
Seattle, WA 98124

Original Owner: Seattle City Light
Original Use: Substation with Control Building

Architect: Fred Bassetti of Fred Bassetti & Company Architects
Richard Haag of Richard Haag Associates Landscape Architect
Builder: Robert E. Bayley Construction, Inc., Seattle

Description and Statement of Significance: See attached

Submitted by: Susan D. Boyle, AIA, Principal
Address: BOLA Architecture + Planning
3800 Ashworth Avenue North
Seattle, WA 98103
Phone: (206) 447-4749

Completed for: Maureen Barnes, Real Estate Manager
Rebecca Ossa, Historic Resource Specialist
Seattle City Light Environment Land & Licensing Business Unit
P. O. Box 34023
Seattle, WA 98124-4023

Date: January 19, 2018

Reviewed (historic preservation officer): ____________________ Date: ____________

Landmark Nomination
Seattle City Light East Pine Substation
1501 23rd Avenue
Seattle

JANUARY 19, 2018

Landmarks Nomination Form (1 cover page)

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Cover: A 2016 view of the perimeter brick wall (BOLA) and 1967 King County Tax Assessor's photo of the original Control Building (Puget Sound Regional Archives)

BOLA **Architecture + Planning**
3800 Ashworth Avenue North
Seattle, Washington 98103
206.447.4749

Seattle City Light East Pine Substation
Landmark Nomination
BOLA Architecture + Planning
January 19, 2017

1. INTRODUCTION

Background

This landmark nomination report on the East Pine Substation (EPS), at 1501 23rd Avenue, was prepared at the request of the property owner, Seattle City Light (SCL) and its prime consultant, HDR Engineering, Inc. (HDR). The property is a half-block parcel, located in the Minor neighborhood in the Central Area. The substation is surrounded by a series of brick masonry walls, including "high wall" and "corrugated" sections, viewing grille panels, and metal gates that enclose the electrical switchyard, and integrate a small control building. The original substation, which dates from 1966-1967, also provided a children's play area and viewing tower at its northwest corner. It was designed by Seattle architect Fred Bassetti of Fred Bassetti & Company Architects.

This nomination has been developed for review by the Seattle Landmarks Preservation Board to determine the historic status of the property prior to a SCL proposal to increase the substation's capacity, security and reliability for the surrounding Central Area, First Hill, and Capitol Hill neighborhoods.

Research

This nomination report includes an architectural description and a historic context statement, along with property data, a bibliography, and illustrations. Research was undertaken in spring and summer 2017 and the report was prepared by Principal Susan Boyle, AIA, with initial research assistance from Planning Interns Meagan Scott and Michelle Yellin. Original drawings by Fred Bassetti & Company Architects, dating from 1965 and 1966, with SCL updates, and drawings for later projects, and explanations about the substation functions were provided by SCL and HDR. Additional information and valuable review comments were provided by SCL Historic Resource Specialist/Architectural Historian Rebecca Ossa.

Historical materials also came from other sources: permit records from the Seattle Department of Construction and Inspections (SDCI); Historical Site Inventories, a 2001 "Context Report on City Owned Properties" and nomination reports for other properties from the Department of Neighborhoods (DON); SCL annual reports and record documents about the EPS and photos from the Seattle Municipal Archives (SMA); and property data from King County Assessor's reports and archival tax records from the Puget Sound Regional Archives. Additional information was found in historic directories and archival *Seattle Times* newspaper articles; records from the American Institute of Architects; online sources and publications about SCL and substation designs, including articles in *Progressive Architecture* and *Art In America*; HistoryLink.org essays; Sanborn and Kroll Company maps; the Society of Architectural Historian's Archipedia entry on the property; and biographies on the Washington State Department of Archaeology and Historic Preservation's website. Research included several site visits to view and photo-document the site, its features, and the surrounding neighborhood context, as well as the control building and switchyard.

2. ARCHITECTURAL DESCRIPTION

The Setting and Urban Context

The EPS is situated on a rectangular, half-block site at 1501 23rd Avenue in Seattle, Washington (King County Parcel No. 722850-0465, also identified with the address of 1501-1537 23rd Avenue). The block is bordered by 23rd Avenue – a major arterial – on the east, E Pine Street to the north, 22nd Avenue to the west, and E Union Street to the south **(Figure 1)**. While 23rd Avenue and E Union Street have seen intermittent commercial development, the surrounding blocks to the west, north, and east largely contain single family residences, most of which appear to date from the early 20th century when the neighborhood was first developed, along with some infill of low-scale, newer multi-family and single family residences (**Figures 3-22**). The development pattern is evident in the neighborhood's residential structures and is visible in historic maps and aerial photographs (**Figures 70A – 70B, 73-74**).

Forty years ago, an urban inventory of the Central Area neighborhood, sponsored by Historic Seattle, identified the EPS as "Significant to the city – warrant(s) further evaluation for designation as historic landmark" along with other buildings in the vicinity (Nyberg and Steinbrueck). For comparative purposes, the City of Seattle (since 1975) has designated the following properties in the Central Area as Seattle Landmarks:

- 23rd Avenue Houses Group, 812-828 23rd Avenue (1892-93)
- Victorian House, 1414 S Washington Street (1900)
- Immaculate Conception Church, 820 18th Avenue (1904)
- Yesler House, 103, 107 and 109 23rd Avenue (1905)
- Firehouse #23, CAMP, 722 18th Avenue (1909)
- Langston Hughes Cultural Arts Center (Bikur Cholim Synagogue) 104 17th Avenue (1912)
- First African Methodist Episcopal Church, 1522 14th Avenue at E Pine Street (1912)
- James Washington Jr. Residence and Studio, 1816 26th Avenue (1918)
- Yesler/Douglass Truth Library, 23rd Avenue and Yesler Way (1914)

Recent decades have seen the designation of two buildings on the Providence Hospital campus at 528 17th Avenue (1910), as well as Fire Station No. 6 at 101 23rd Avenue (1932) and the Mt. Zion Baptist Church at 1634 19th Avenue (1918-1975).

A block south of the EPS, at the intersection of 23rd Avenue and E Union Street, recent activity has resulted in several developments, among them a six-story commercial/residential building at 2203 E Union Street (the southwest corner of 23rd Avenue and E Union Street). Across the street to the north (and on the same long block on which the EPS is located), Lake Union Partners, in association with Forterra and Africatown, is completing construction of a mixed-use project on the 2.5-acre site of a former service station (2220 E Union Street) (CHS Capitol Hill Blog) (**Figure 21**).

Within several blocks of the EPS, there are also several institutional buildings, which serve to anchor the neighborhood. Among them there are three churches – the Lutheran Church of the Good at 2112 E Union Street (ca. 1900 and 1980), Ebenezer African Methodist Episcopal Zion Church at 1716 23rd Avenue (ca. 1900), and Mt. Calvery Christian Church at 1412 23rd Avenue (1933). Additionally, the Seattle World School/Thomas Taylor (T. T.) Minor Elementary School is situated seven blocks

west at 1698 E Union Street, and Garfield High School, several blocks to the south, at 500 23rd Avenue.
Surrounding the EPS to the west, north, and east (across 23rd Avenue), are several small one- and two-story homes. Two dating from ca. 1900 at 1603 23rd Avenue and 1600 22nd Avenue (remodeled in 2007) are illustrated herein (**Figures 11-12)**. Construction on the south end of the block illustrates current development in the immediate area. Directly adjacent to the EPS's south property line there is a single-family residence at 1438 22nd Avenue, and a duplex at 1419 23rd Avenue that appears to have commercial occupants (**Figures 7, 19**).

The EPS property is zoned SF 5000 on the northern half and a combination of SF 5000, NC2P-55(M), NC2-65 and NC2P-65 on the southern half. Some of the blocks to the south are within the 23rd & Union-Jackson Residential Urban Village, which extends several blocks along E Union Street. The block on which the substation is located is surrounded on three sides by streets, along with wide paved sidewalks and parking strips landscaped with grass and trees.

The Site, Landscaping and Sidewalk Features

<u>The Site</u> - The EPS is on a large level area consisting of 62,010 square feet or 1.42 acres. Largely rectangular, it is made up of six lots and one partial lot, and has a depth (east-west) of 158' on the north property line and 153' along the south and a length (north-south) of approximately 395' on the east and west sides (**Figures 2A-2B**). The control building, the main structure on the site, and adjoining perimeter brick walls face east toward the major arterial of 23rd Avenue. The perimeter walls on the north and west face residential streets – E Pine Street and 22nd Avenue, respectively. The south property line abuts privately-owned properties.

<u>Original Landscaping</u> – The January 4, 1966 drawings by Bassetti & Company and landscape architect, Richard "Rich" Haag of Richard Haag Associates, called for perimeter plantings, brick pavers and broom finish concrete nestled around the exterior of the new substation's perimeter walls (**Figures 2A, 112)**. Street trees, cited as caucasian maples planted typically at 8'-foot centers, were provided in grassy parking strips along the paved sidewalks in the right-of-way surrounding the three sides of the site, along with some smaller trees on the northwest corner and along the southern portion of the west setback (**Figures 13-14, 16-17**). A later drawing dated June 24, 1966, titled "Landscape Plan – Shrubbery," noted Japanese cherry, English oak, katsura trees, and azalea. It appears that these trees remain.

<u>Current Landscaping</u> – Presently, the perimeter of the site consists of low ground covers, overgrown shrubbery, grass areas, and mature street trees on the outside of the perimeter walls, while the switchyard is treated with gravel. A landscape scheme, designed by Osborn Pacific Group, Seattle, in 2003, called for additional groundcover – ajuca and epimedium, sweet woodruff and turf – as well as shrubs, such as viburnum, rhododendron, laurel, holly, beauty berry and barberry and perennial yarrow, montbretia, day lilies, lysimachia, and coltsfoot. Some new small-scale trees were added – stewartia, Japanese snowbell, and fruit trees – in addition to transplanted paperback maple and Chinese dogwood. Existing street trees and some of the original cherry and katsura trees set in the deep plant beds along the southern portion of the west wall remain (**Figure 44**).

<u>Sidewalks/Paving</u> – The original site plan shows the sidewalk in straight and expanded width sections within the street right-of-way, ranging from 16.5' on the east, to 20' on the north and 24' on the west. Most of this remains. Within the EPS property itself, the site plan indicated deep,

wedge-shaped paved areas leading to viewing setbacks near the middle of the north end, and to the south of the Control Building that also could accommodate vehicle parking. Four driveway aprons are on the west side and still extant. Historically, a concrete planter and brick-paved terrace were provided on the south side of the original control building footprint. On the original plan a large extent of paving and planting beds were set also around the irregular-shaped, 16'-tall children's viewing tower and play area (described further in the report). The landscaping, viewing tower, and play amenities were described in many SCL Annual Reports, local newspaper articles and national publications, such as *Progressive Architecture* and *Art in America*.

<u>Exterior Lighting</u> - An electrical drawing from the original drawings shows that the lighting consisted of a series of utilitarian fixtures set into the grade within concrete tiles, some of which were angled to illuminate the perimeter walls. Similar utilitarian fixtures were mounted on the roof or atop the tall wall sections, while other night lighting was provided by recessed step lights set into the masonry walls. Most of these lights suffered repeated damage. All of the perimeter lighting was replaced in ca. 2003 by large, square-shaped fixtures, set recessed into the grade, which feature heavy glass covers and energy efficient lamps.

<u>Original Play Area</u> – This was located outside the perimeter substation walls on the west side and consisted of a hardscape of cobbles, broom-finished concrete, and brick pavers around a small, irregular hexagonal-shaped sand box surrounded by low, 1'-6" wide concrete seat walls. Nearby there were benches made of chamfered wood boards on low concrete slab supports. (Wood planters, shown in the drawing were noted "NIC" or not-in-contract.) It also included planting beds in the same hexagonal shape but smaller in size. Subgrade hose bibs were provided originally, later augmented by an irrigation system. The play area was removed in 2003 when the switchyard was expanded to encompass the site.

The EPS Perimeter – Configuration, Parts and The Whole

Looking at the substation from an aerial perspective **(Figure 73)**, the rectangular regularity of the lots on which this substation is built, and where its neighbors reside, belies the complex rectangular, hexagonal, and trapezoidal like configurations that create the substation and its perimeter walls. Each shape composes an important element to the substation – the control building, the children's viewing tower, and the perimeter walls. The use of brick masonry also adds to the richness of the design. Each is described below, followed by a description of the EPS as a whole.

<u>Brick and Concrete</u> - In using brick as the primary material, Bassetti expressed both the romanticism and modernism of masonry, working in traditions established in load-bearing masonry and unadorned veneer in the post-war era projects by architects such as Le Corbusier, James Stirling, James Gowan, Louis Kahn, Mies van der Rohe, and especially Alvar Aalto. The designs by these architects made the brick masonry "an even more explicit medium for the play of sensuality, imperfection, and historic reference" (Ochshorn, p. 170-173). Architect Fred Bassetti was also so inspired. The original brick was custom designed for the EPS. Newer brick, installed in the 2003 expansion, appears largely similar, which was deliberate. It was selected to match the original, including the custom cap sections to the original, but is simpler with flush surfaces (**Figures 52-54**). It also had reinforcing within the masonry and cast-in-place footings and foundations, in contrast to the original unreinforced masonry and exposed precast bases. The original concrete design for the original brick walls were cast-in-place, crisply formed and fitted to the brick walls **(Figures 52-54).**

Perimeter Brick Walls (high yard, corrugated, and modern) - The EPS's perimeter brick walls are arguably the most visible and expressive feature of the substation. They include three very distinct configurations all primarily made of brick. The high yard walls consist of a series of four 18'-11"-tall, pylon-like forms whose vertical edges bend back at an approximate 90-degree angle to form a shallow brick "fin" which gives the appearance of supporting the pylon in an upright manner. The tops of these "fins" taper down about a dozen courses giving it an elegant pointed sculptural appearance. The inner two pylons are the same width while the outer two appear similar yet are wider due to bends/turns which create a roughly trapezoidal shape/footprint. These outer and wider pylons were constructed in specific locations to protect and obscure views of tall equipment within the switchyard (**Figures 28, 38, 40, 45**). The center pylons are separated by tall framed metal grilles fitted with precast concrete lintels (**Figures 23, 25-27**). There are three of these high yard wall groupings at the EPS, one on the east side (south of the control building); a second at the north elevation (corner of E Pine Street and 23rd Avenue); and a third, on the west side, centrally placed at the site and in between two driveways. They are all similar except for the west side; its two center pylons appear to be half the size of the others. All extend outward from the lower corrugated wall run/alignment.

The lower corrugated walls, approximately 9'-6" tall, are made up of straight and custom-made curved brick, each 2'-0" wide by 3'-4" long, laid to create a vertically oriented undulating pattern, capped by a special soldier course of custom masonry coping, 8" tall (**Figures 24, 37, 49-51**). (These walls are cited as *serpentine* in some descriptions, but this report uses the term *corrugated* as cited by architect.) As Bassetti explained, the construction of these complicated corrugated masonry walls were aided by the precast base sections, which set up the pattern for the masons. Bassetti was interested in simplifying the construction process, and the original drawings cited the vertical dimensions of the brick courses as well as in dimensioned feet and inches.

The straight or traditional brick wall sections date from 2003 during a switchyard expansion project. They make up portions of the north and west elevations.

Viewing Grille Panels - Interspersed along the perimeter masonry wall are openings of varied widths and heights (e.g., tall and narrow; rectangular or square) that contain metal grilles, allowing views into the substation switchyard. These were designed with fixed heads created by precast concrete lintels with brick coping in wider openings within the lower corrugated walls. The grille panels set in the tall and relatively narrow openings between the high yard wall sections were topped by sloped caps. Grilles were made with bronze tubes and bars, with fine-scaled vertical and horizontal bars (**Figures 25-27, 30, 41, 43, 48**).

Children's Viewing Tower – Located on the northwest corner of the site, this 16'-tall viewing tower was made up with a series of angled walls, planters, at five levels with connecting steps and landings set atop a sloped plant bed. The drawing shows a display pedestal with a bronze plaque at the top level of the viewing tower. This tower was surrounded by foundation planting and ground-covers. Due to vandalism, unsupervised activity, and unauthorized access into the switchyard, the viewing tower was closed in late 1976, and sometime after (date unknown), the open landings were filled in. An SCL renovation and expansion of the switchyard undertaken in 2003, designed by architect Donn Hogan of HDR, resulted in the demolition of portions of the original perimeter walls and construction of new, similar masonry walls on the north and west sides of the expanded switchyard. The expansion required elimination of the play area, and removal of the observation tower base and infilling the former landings (**Figures 42-43, 104-106, 109-110, 114**).

Vehicle Gates - Vehicle access into the switchyard is provided through pairs of metal gates, located in four recesses on the west elevation (22nd Avenue). These secure the site and allow for movement of taller equipment to and from the yard. The original gates were made of bronze tube bars, with vertical bars, set in frames and supported by precast concrete gate posts. In ca. 1980, the bronze gate sections were replaced with bronze-colored anodized aluminum gates fitted with expanded metal wire panels, due to corrosion of the originals and need for security. As part of the later expansion of the switchyard and reconstruction of walls, the posts supporting the sides of two gates on the west side were revised. Despite these changes, the appearance of the current gates is like the original ones (**Figures 46-47**).

Signature Brick Signage - These signs are individually sculpted letters and numbers on a wide horizontal stripe background all in slight relief on the face of the brick. The individual letters spell out "EAST PINE SUBSTATION" in capital letters with the spaces in between and one at each end filled-in with the horizontal striped bricks. The year "1966" is also treated similarly but without the end horizontal bricks. The "EAST PINE SUBSTATION" line is located on all three of the high yard walls, while the "1966" line is only on the northeast corner high yard wall (on the east elevation, facing the 23rd Avenue/sidewalk). The high yard wall directly south of the control building has an additional inscription in very small capitalized font (three rows down and spread across four bricks), the name of the architect "FRED BASSETTI & COMPANY ARCHITECTS." It has been noted that this brick appears similar to the work of Northwest artist Richard S. Beyer's work in sculpted brick. Bassetti was a known admirer of his work, having written the forward to the book *The Art People Love -Stories of Richard S. Beyer's Life and His Sculpture*. According to a local newspaper article, Bassetti may have tapped Beyer to work with the brick to create the figurative bas relief "signature lettering" (*Seattle Times*, December 24, 1967). However, further research is needed to confirm this connection (**Figures 28-29, 39**).

Understanding the EPS Perimeter

The following is a description of the EPS, starting from the southeast corner, heading north along 23rd Avenue. The first visible presence of the EPS is the corrugated wall along the east facade, which extends northward for approximately 46' where it meets the northernmost high yard wall group, which makes up approximately a 40' run. The corrugated wall picks up from there and continues south into the viewing area setback (and driveway), partially enclosing the approximate 35'-deep and 90'+ wide setback ending at the south elevation of the control building. (Note: This setback is not completely visible since the control building occupies approximately two-thirds of the space, and whose west and north elevations [facing the switchyard] make up the "wall" in this area.) This short-corrugated wall run is interrupted by a rectangular viewing grille centrally located/aligned with the driveway. It has a concrete and brick coping.

The corrugated wall picks up on the north side of the control building (along the east property line) and continues for a long run to the corner of 23nd Avenue and E Pine Street where it ends at the second high yard wall grouping. A single rectangular grille panel is centrally located within this run and it also has a concrete and brick coping.

At the north end, the corrugated wall picks up again from the high yard wall's west side and continues west along a second-deep setback, approximately 55'+/- wide and 23' deep. A square grille panel is set between the recessed corrugated wall and the modern wall which is to the west of it (**Figure 41**). It also has a concrete and brick coping. The modern wall picks up on the west side of the grille, heading west, then bending north and then west again to the children's viewing tower. From the tower, heading south along the west facade, is the first of the four vehicle entries/ driveways with a paired metal gate. The gate's northern end post is attached to the tower and the southern end post is attached to the 2003 modern wall. From there, it bends west, before turning south, parallel to 22nd Avenue along the property line, for a short run before bending east and terminating at the next vehicle driveway/gatepost. This run has no grilles. Directly connected to the south of this vehicle entry's gate is the third high yard wall grouping, centrally placed on the west wall elevation. To the south of this high yard wall, is a very short corrugated wall run connecting it with the third vehicle driveway/gate's northern end post. The corrugated wall picks up from this gate's southern end post and heads west along part of the driveway edge, and then bends south, parallel to 22nd Avenue within the property line to the fourth and final vehicle driveway/gates on the west facade. Portions of this wall have been rebuilt. The corrugated wall then continues south for a very short and straight run and then bends approximately 90 degrees to the east, parallel and set back 5' from the southern property line, extending the width of the property to link with the southeast corner (**Figure 51**).

The Control Building

Situated on the east side of the site, the control building was the only building constructed on the site of the EPS in 1966-1967 **(Figures 31-33).** (Note: A metal utility structure was added in 1994 within the southwest corner of the switchyard.) The original 946 square foot building, which is shown in the King County Assessor's property record card, was an irregular hexagonal (six-sided) shape with longitudinal sides set parallel to the street. With outermost dimensions of approximately 37' by 31', it featured a flat roof, with a slightly canted exterior cap section of cast concrete, originally finished with a polymer roof coating. The interior was utilitarian, and featured the utilitarian use of elemental materials, such as concrete and masonry, with exposed walls and waffle-slab roof structure. The building's estimated height is approximately 13', with floor-to-floor heights set at 10' at the main floor and 8' in the basement (**Figure 115).**

Features of the original control building expressed its Brutalist design style, notably the simple abstract massing with angled walls, and distinctive "hat-shaped" roof, along with the pattern of brick masonry walls, and the south facade, which containing framed panels and glazed transom windows in its slightly angled walls (**Figure 108A-108B**).

The building's original features are largely still visible with exception of the south facade. The current south facade (and a small portion of the east facade) was designed in 1998 by architect Robert C. Wagoner of Boyle Wagoner Architects, later Koppe Wagoner Architects. This addition extended the original southern footprint and form/mass of the building further south. The design took cues from the original building shape and materials with distinguishing details. A perforated metal screen at the roof rises to meet the original roof level and obscures mechanical equipment, and the cast-in-place concrete mass has smooth-finished surfaces containing small-diameter circular form imprints. On the south facade the new mass is split in the center with a slightly inset recess for the entry metal flush door below a small, flat, square-shaped metal roof. Two small rectangular clerestory windows are located on either side of the entry, placed horizontally high on the wall plane. The shallow width east facade is similar to the south, but without any windows. The short transition between the addition and original walls is noted by grey metal panels on the east façade, and on the south between the corrugated wall and the building. The addition appears somewhat bunker-like, due largely to the solid concrete walls with minimal fenestration (**Figures 31-36**).

When the addition was completed, the original six tall windows set into the south wall (allowing views into the original control building) were removed. The windows had been problematic from the beginning by allowing too much heat into the building, making it an uncomfortable workspace; and persistent broken windows necessitated immediate repairs to maintain a secure building. The change also shifted the main entry from the east to the south facade, and it included a raised concrete landing.

These secondary north and west facades, which face into the switchyard, are more utilitarian. A newer fixed window is set into the brick masonry north facade, while the west facade contains a recessed opening with paired doors, along with another double set of paired doors to a small transformer room to the north of the west entry (**Figures 62-64**). The door assemblies consist of painted, hollow metal louver and flush types set with steel frames along with solid core flush wood doors in steel frame on the interior (**Figures 65-66**).

The interior of the present control building contains an office, kitchen area, control room, bathroom, the aforementioned transformer room (accessible from the exterior only), storage room, janitor space, and the old entry vestibule. A stair to the basement is on the north side. The basement contains two large rooms roughly on either side of the stairs. The northern space, having been recently added, is set up generally as an office. The southern space contains electrical equipment. Some of the original finishes remain in the original section: exposed brick walls below the concrete waffle-slab at the ceiling, and concrete and quarry tile flooring. The newer south side interior of the first floor and the basement features gypsum wallboard finishes (**Figures 66-69**).

The EPS Switchyard

The June 23, 1967 open house brochure cited the EPS as "the first urban substation in the state of Washington to be supplied completely by high voltage underground transmission. It is connected with a 230,000-volt underground transmission line to a terminus on Beacon Hill, and with an 115,000-volt underground line to the Broad Street Substation." Despite this operation, the EPS shares many of the same components with other substations, along with functional variations in the arrangement and specific equipment types, and its unique perimeter wall. (All present-day substation facilities are secured by perimeter fences or walls, many much higher than at the subject property.)

Within the EPS, cables and wires are supported by metal or steel support structures, consisting typically of tubular steel, lattice types made up by trusses in rectangular or tall, pyramidal-shaped support structures as well as custom-designed precast concrete supports, which are set both individually and in assemblies (**Figure 55 - 56**). Designed by architect Fred Bassetti, these concrete supports contrast with the riveted and welded steel supports seen in some earlier electrical switchyards, and with larger, steel plate supports that have been added for seismic reinforcement to other supports.

Within the present switchyard, there is an array of electrical distribution equipment and support structures for transmission lines. Among these is the covered switchgear structure that extends along the west side of the site. The switchgear includes the sub-grade service and cable access tunnel for equipment (**Figure 59**).

Originally, there was a slight slope near the center of the site to accommodate the approximate 16" grade change. Presently, grades are set at two relatively flat levels which are partially separated near the center of the site by a low concrete block retaining wall. The balance of the switchyard is covered with gravel, except for concrete pads, which serve as a base for heavy transformers and other equipment (**Figures 57- 58**).

Documented Changes through Time

Access to the children's viewing tower at the northwest corner of the substation was closed in late 1976 following security problems and other unmonitored activities. Subsequent changes resulted in the relocation and reconstruction of portions of the north and west perimeter walls, removal of the original play area to accommodate more equipment within an enlarged switchyard, a southern expansion of the control building in 1998-2001, and a recent expansion of its basement space (email correspondence between Rebecca Ossa, SCL and Susan Boyle, BOLA, August-September 2017).

SCL records also note the following conditions:

- November 1967 – May 1969: "Cooling problem identified inside the control room. High temperatures, D-25781 and D-25648 referenced. Intake fan and exhaust louver installed." (SCL Project File – EPS Cooling Room Ventilation, multiple dates between 1967-1969). Bronze shade cloth discussed as an alternative.

- April 1968 – June 1968: "Discussion re: cleaning and waterproofing EPS wall after efflorescence was observed" (SCL project file, multiple dates). Ultimately SCL issued Spec #2084 in late 1968 for repairs.

- October 1968: "Heat and vandalism problems at the station. One of the large windows had already been broken and boarded up. Discussion re: removing glass and replacing with matching brick or contrasting stone panel. Noted that the suggested Kool Shade if installed would be mutilated due to the on-going vandalism" (SCL project file, multiple dates).

- June – July 1970: Ongoing problem with the east exterior metal door to the control building. "The metal door warps and difficult to close and latch it. Adjusted door strike and resolved by summer 1970" (SCL Project Files, multiple dates).

- July 1974: "Children observed entering the EPS, climbing over the walls and/or the diagonal brace in the entry gate. SCL personnel suggested modifying the gate (referring to a drawing but not included), and further study to address the brick wall issue. Later memo noted that an operator had asked the kids to demonstrate how they got in. Further suggestion was made to modify the top frames of the gate so they could not be used as a hand hold. Urgent due to upcoming work for the 26 KV bus and 240 KV cable" (SCL project file, multiple dates).

- October 1975 – January 1976: Bassetti undertakes special studies with options, and submits an estimate for preparation of schematic drawings for modifications to the substation.

- November 1976: SCL terminates its contract with Bassetti, noting appreciation for his efforts in December 1975 to provide design solutions for multiple problems. The contract was ended due to budget curtailments. Principal Civil Engineer G. W. Bishop noted, "Thank you for your assistance in helping us to preserve the beauty of an extremely attractive substation."

- December 1976: A memo regarding security at the facility notes that "expanded anodized aluminum [are] to be installed on the bars in all of the viewing bays at EPS. Also expanded metal to be installed on all vehicle and pedestrian gates. Closed off viewing tower with a brick wall using the same brick as used in the existing wall."

- April 1978: SCL memo, from J. Wheelock to G. W. Bishop of April 20, 1978, calls for improvements in two areas, at walls and driveway: "Brick and concrete walls have been settling causing the gates to sag, difficult to open and close. Part of the wall is cracked and broken. Gates shimmed to work properly. Brass covering on the gates is splitting from the build-up of corrosion on the inner steel of the gate frame. Driveway bordering 23rd Ave needs improving. Workman can no longer park, open the vehicle gates from outside and must enter thru a man-gate at the SW corner of the station or a door in the control building." A suggested solution was made to remove the steps to allow for more parking.

- September 1978: "Design solution was an aluminum gate to replace the bronze steel existing gates; and anodize the aluminum gates to match bronze. Existing gates showed excessive corrosion" (SCL Work Assignment Sheet, Dated September 19, 1978).

- January 1980: [New] Gates installed.

- Summer/Fall 1989: Floor hatches (with matching red tile) installed inside substation building (SCL Project File-East Pine Floor Hatch, multiple dates in 1989).

In addition to these incremental changes, King County Assessor records note the presence of concrete and asphalt paving, fences and gate, and the addition of a new metal maintenance shop structure within the switchyard as of July 25, 1995. These improvements were assessed at a value of $155,900.

A Master Use Permit application, issued in early 2011, called for a 450-square foot building addition. It included the alteration of the Control Room with a seismic upgrade of the existing building with (new) basement, per plan, for a cost of $30,000 in alterations and $70,000 in new construction. The basement extension (to the north of the original basement), is identifiable by the slightly raised, rectangular shaped concrete slab, which is visible in the switchyard.

In 2015, a transformer was replaced based on an SCL review and evaluation of transformers within the system that had the highest risk of failure, and/or those presenting substation capacity limits. Factors examined included: dissolved gas concentration, aging insulation, oil leakage, maintenance costs, service stress, and fault-interruption history ("2011-2016 Adopted Capital Improvement Program," p. 98).

3. HISTORIC CONTEXT AND SIGNIFICANCE

Historic Overview of Seattle City Light

[Note: the history of Seattle City Light and the development of municipal, publicly-owned utilities is a rich subject, which is described in detail in many publications as well as in another report, the "National Register of Historic Places Nomination, Skagit River and Newhalem Creek Hydroelectric Projects, Whatcom County, Washington." This subject was addressed also in a historic survey sponsored by the City of Seattle Department of Neighborhoods. The survey, by Cathy Wickwire, is summarized in the "Survey Report: Comprehensive Inventory of City-Owned Historic Resources, Seattle, Washington," May 20, 2001." Much of the following overview has been derived from these reports.]

Seattle's 1869 charter authorized the municipal government to provide street lighting, and its first coal gas-powered streetlights were lit on December 31, 1873. The first electric light bulb arrived eight years later in 1881, but only as an artifact. Their use had to wait another five years until representatives from the Edison Electric Light Company demonstrated illumination by light bulb in the city (Wilma & Crowley, p. 8). Conditions quickly changed, however, as electricity came into common use in the late 19th century. In 1886, the Seattle Electric Light Company acquired a permit for street lighting, and several years later Seattle became the fourth city in the world to establish an electric "street railway" system. Newly developed alternating current also enabled the transmission of power over long distances. This technology and numerous inventions and patents led to the manufacture of electric cars, appliances, telegraphs, and "wireless telegraphy" around the turn of the century. Such inventions – particularly domestic appliances, the telegraph and telephone, and electric motors – were quickly embraced by the marketplace.

By the early 1890, there were four electric light companies, two light and power transmission machinery firms, and an electric railway machinery and supply company listed in the local *Polk Directory*. These included Edison General Electric. Two of the local firms merged to form the Union Electric Company in Seattle, which soon dominated the local market, while many small operators established local steam plants, some located in downtown building basements. Many mergers and reorganizations followed, and by 1900 Stone & Webster, in conjunction with prominent Seattle resident Jacob Furth, consolidated operations of virtually all the existing lighting, traction, and related subsidiary businesses in Seattle (nearly 20 locally-based utility companies) as the Seattle Electric Company. In 1902, this company acquired a 50-year franchise to operate a private electric utility system within the City of Seattle. The Seattle Electric Company, predecessor of Puget Sound Power & Light, also obtained a franchise from the city for the street railway system, gaining the firm exclusive rights to operate the system. Despite opposition and concerns about private utility monopolies and Seattle Electric Company, the consolidated system was improved and extended under the new management.

However, populist political sentiment and support for a municipal utility system was growing. In 1902, Seattle residents approved a $590,000 bond issue to develop a hydroelectric facility on the Cedar River, inaugurating public power. In 1905, under the direction of James Delmage (J. D.) Ross (1872–1939) and City Engineer R.H. Thomson, Seattle built its first Cedar River plant, some 30 miles southeast of the city, and began to generate power from the first municipally-owned hydroelectric project in the country. The downtown distribution station was located near Yesler Way and 7th Avenue.

On April 1, 1910, a City Charter amendment created a separate Light and Power Department, which was led by J. D. Ross beginning in 1911. The benefits of hydro power (electricity from the energy of falling water) over steam power production were apparent to customers who received low rates from the new department. By the end of that year, the City's two-year-old project of installing ornamental street lighting was completed, with the illumination of downtown and neighborhood streets throughout Seattle (Crowley, "Seattle Voters"). The Lighting Department offered Seattle residents, businesses, and industries low electric rates, and its competition with Seattle Electric Company resulted in its low rates as well. However, until 1914, the City had only one plant and transmission line. As a result, it continued to struggle with service interruptions.

The Lighting Department constructed a Hydro House on the southeast edge of Lake Union in 1912 and the adjacent Lake Union Steam Plant incrementally in 1914, 1918, and 1921 as auxiliary facilities. It also completed a masonry dam on the Cedar River in 1914, and continued to search for another hydropower site. When the privately-owned Puget Sound Traction, Light & Power attempted to block the City of Seattle from developing such a site, the federal government revoked the private utility's access to the Skagit River in late 1917, allowing instead development of its hydro power by Seattle by 1924. The North Substation, at 8^{th} Avenue NE and NE 75^{th} Street, which opened in September 1924, was built to receive power from the Gorge Plant on the Skagit River. The South Receiving Substation was subsequently added to the system in 1937.

In the early years, the City of Seattle Lighting Department and Seattle Electric Company had a controlled connection between their systems, and at times they would share power distribution. This cooperation ended in 1912 when Stone & Webster merged its Seattle Electric Company with the Seattle-Tacoma Power Company (Snoqualmie Falls), Pacific Coast Power Company, Puget Sound Power Company, and Whatcom County Railway and Light Company. The new corporation – Puget Sound Traction, Light & Power – soon established regional electrical service throughout western Washington. Within the city limits, the relationship between the public and private power entities became one of bitter rivalry while consumers continued to benefit from low rates.

Both utilities promoted consumption of electrical power through displays and direct sales of appliances, as well as print and radio advertisements, and billboards. "By 1930, more Seattle residents cooked on electric ranges than did residents in any other large city in the nation. They consumed twice the electricity for half the average cost. Across the United States, seven homes in 10 had electricity, but in Seattle, virtually every home was connected" (Wilma & Crowley, p. 52). Meanwhile, the battle over the public versus private provision and control of electric power in Seattle continued. In 1934, the Stone & Webster "cartel" was broken up by the federal government, and Puget Sound Power & Light was reorganized under a local board of directors. By this late date, Seattle's hydroelectric sites outside the city were assured. However, delays in resolving the conflict between public and private utilities extended throughout the Great Depression and World War II, to be finalized in the post-war period (Hirt, p. 103-23, and p. 316-7).

In the two decades following 1920, the increased number of residential accounts held by the Light Department reached nearly 40 percent, while the population increased less than 17 percent. In September 1936, the construction Skagit River Diablo Power Plant was finished with the completion of the Power House. This project resulted in an increased power output at the Gorge Powerhouse with the addition of 33,000 kW to its capacity. By this time the City's power generation had increased from 59 million kilowatts in 1917, to over 384 kW. This was followed by the construction of the Ross Power Plant, built in part with WPA funds. The Ross Dam was the third and largest dam on the river, and its completion in 1949 realized the original design vision of SCL's Skagit River Hydroelectric Project (Skagit River NRHP, p. 46-48).

By 1940, Seattle was said to be "…the best lighted city, not only in America, but in the world. It is the world's most modernized city electrically, and the largest user of electric ranges of any city in this or any other country" (Schmidt, p. 35). To take advantage of the low-cost power, Seattle also converted its electric streetcar system to electric trolley buses in the 1940s. The Lighting Department even supplied 3,568 electric ranges and water heaters to the Seattle Housing Authority's Yesler Housing Project in ca. 1940 (Berner, 1999, p.46).

In 1943, the Seattle City Council resolved to buy Puget Sound Power & Light (PSP&L) properties when the company's urban franchise expired in 1952. Seattle voters narrowly approved a proposition in November 1950, supporting municipal acquisition of private power assets within city limits and thereby unifying service under the Department of Lighting. In March 1951, the City agreed on a price for all Puget Sound Power & Light's Seattle properties, including its distribution system, but excluding the hydro plants. Under this agreement, Seattle acquired three transmission substations and ten distribution substations. Because of deferred maintenance, much of the old system was gradually dismantled and some replaced.

The early 1950s was a period of rapid growth for the City of Seattle and its electrical utility. After the end of the war, the Lighting Department had plans prepared for additional transmission lines, substations and equipment in anticipation of rising demands by new customers. These included the new Broad Street Substation, which would be connected by new 115,000-volt transmission lines to another new substation in Bothell, as well as to the older North Substation. The Bothell Substation was built to receive electricity from the existing Skagit River dams as well as the Ross Dam, which was then under construction. The Bothell Substation would transmit electricity at a lower voltage to the receiving stations in the city.

The Yesler Substation was retired on February 7, 1951, though the building on Yesler, between 6th and 7th Avenues, continued to serve as headquarters of the operating division. The Broad Street and Bothell Substations were completed and put into service also in 1951. That same year City Light completed a project at its Gorge Plant, with an additional 48,000-kilowatt generator, and from 1952 to 1954 installed three 90,000-kilowatt generators at Ross Dam. In 1953 SCL was one of many utilities to initiate the "Live Better Electrically Program" to increase residential use of electricity (Winther, p. 1).

The Duwamish Receiving Substation went into service October 28, 1955 to supply power to Seattle's south end, and north of the city a substation was constructed in Shoreline. Between 1951 and 1955, equipment was also added at existing facilities and seven new rectifier substations were constructed. By 1956, the Department also had established customer offices in Ballard, University District, Lake City, West Seattle, Burien, and White Center, and a new downtown headquarters on 3rd Avenue (Wilma & Crowley, p. 79). It also consolidated maintenance and built a new service center at 1300 N 97th Street (1956-58) after assuming ownership of all electrical facilities within the city limits from PSP&L (Wickwire, p. 24-25). Eventually seven receiving substations were built between the late 1960s and the early 1970s: Viewland-Hoffman, University, East Pine, Union, Massachusetts, Delridge and Creston-Nelson. (Wickwire, p. 24-25).

The period between 1950 and 1967 not also saw additional growth but also planning for the future by SCL. The utility had noted in 1957 that "1950 was the last year in which … generating capability was equal to peak consumer demands. The years which saw the largest and most efficient generating units added to City Light's Skagit plants also saw City Light's purchases of energy from outside the system reach unprecedented levels" ("1957 SCL Annual Report," p. 4). SCL was forecasting both future growth and customer needs and it estimated that by 1967 the average customer load would increase by two-thirds, which would surpass the capability of all its existing generation facilities. To meet Seattle's needs, the utility sought to balance the economic impacts of purchasing power from the Bonneville Power Administration (BPA) and building additional generation facilities.

City Light used the intervening 10-year period to plan and put into operation another generation facility, the Boundary Dam and powerhouse on the Pend Oreille River in northeast Washington. This project, along with growing demand from the City, also led to upgrades and new construction throughout the system, including transmission lines, additional substations, and other infrastructure (Ibid, p. 4). The Boundary Project involved long-range planning for the required engineering, licensing and permitting and construction. Completed with four generators in 1967, it was the fifth and largest of the SCL's generation plants. (Two additional generators were added in 1986.)

As part of its other planning City Light anticipated the "creation of new substation capacity to permit expansion of distribution facilities to serve industrial loads; the extension of distribution systems, both underground and above ground; the installation of lines to eliminate service duplications and to accommodate [the 1962] freeway routing; and promotion of … more economic utilization of electric energy by customers…" (*ibid*, p. 7).

The 1957 Annual Report noted the enlargement of the Broad Street Substation to serve the new underground distribution network in the "uptown" area of the central business district. More than a decade would pass between the construction of the Duwamish Substation in 1955 and the EPS in 1968, and with it a change in architectural styles and a shift to a more integrated approach to locating and building substations in residential neighborhoods. The utility did not have to find a new location, however, as it chose the former PSP&L's East Pine Substation site in Seattle's Central Area, which it had acquired in 1951. This property had a sizable unused portion of land on which it could expand or initiate the design of a new substation.

The utility continued to promote consumption, selling electrical appliances through showrooms, and offering free appliance repairs. As environmental concerns increased, however, City Light adjusted its policies. Beginning in August 1973 it promoted conservation rather than consumption. In August 1978, it was renamed Seattle City Light (SCL). "A major drought hit the area in 1977, which was followed by additional droughts in the 1980s. Along with unprecedented demand from customers and increased environmental concern from residents, City Light redoubled its conservation efforts, launching a series of conservation programs that offered free home energy checks, financial incentives for weatherization, and installation of energy saving measures" ("2011 Power Systems Handbook," p. 1).

As of 2011, SCL is currently the nation's tenth largest publicly-owned power system, and is responsible for all electrical and streetlight services and residential and commercial / industrial conservation within the city (Seattle City Light, "Public Power: A Tradition"). It provides low-cost power to nearly 700,000 people in a 130 square mile area made up of Seattle and the neighboring municipalities of Burien, Lake Forest Park, Normandy Park, Renton, SeaTac, Shoreline, Tukwila, and parts of unincorporated King County (Seattle City Light, "2011-2016 Adopted Capital Improvement Program," n.p.).

Seattle's Generation and Substation Facilities

As of 2017, development by SCL has resulted in construction of its current six generation plants and fourteen major substations:

Generation Plants	Built	Notes
1. Cedar Falls Power House	1904	2 generators, online 1921
2. Gorge Power House	1924	4 generators, online 1924 (2), 1929, & 1951
3. Diablo Power House	1936	2 generators, online 1936 & 1937
4. Ross Power House	1952-1956	4 generators, online 1952, 1953, 1954 & 1956
5. Boundary Power House	1967	6 generators, online 1967, 1968 (3), 1986 (2)
6. South Folk Tolt Power House	1995	1 generator, 1995

Major Substations

SCL records also cite the following buildings designed by consulting architects and engineers and in-house architects or engineers:

	Name	Built	Notes
1.	North	1924	Built by SCL, oldest substation in the system, designed in-house in a Spanish-Mission Revival style (DON, HPI, 2000)
2.	Canal	1928	Designed/built by Puget Sound Power and Light (aka Puget Power); purchased by SCL in 1951
3.	South	1937	Art Moderne, designed in-house, concrete building; PWA funded
4.	Bothell	1951	Moderne, designed by architect Ivan Palmaw, concrete Control Building; outside the City limits
5.	Broad	1951	Moderne, designed by architect Ivan Palmaw, concrete Crane Building and Control Building; designated a Seattle Landmark 2017
6.	Shoreline	1954	Moderne, designed in-house, concrete Control Building; outside City limits
7.	Duwamish	1955	Moderne, designed in-house, concrete Control Building; outside City limits
8.	**East Pine**	**1967**	**Brutalist, brick and concrete building, Fred Bassetti design, landscaped site**
9.	University	1968	Brutalist style, designed in-house, concrete Control Building
10.	Massachusetts	1969	Designed in-house, concrete building, landscaped (**Figure 92**)
11.	Delridge	1971	Designed in-house, concrete or metal building
12.	Union	1973	Designed in-house, concrete Control Building
13.	Viewland-Hoffman	1977	Designed by Hobbs/Fukui, Architects, concrete Control Building
14.	Creston-Nelson	1981	Designed by Benjamin F. McAdoo & Company, AIA, Architects, concrete Control Building

Historic Development of the Central Area and its Minor and Mann Neighborhoods

The subject property is in the middle of Seattle's Central Area, which is known also as the Central District. The Central Area of Seattle is quite large, making up an estimated four square miles. Geographically it extends south of Madison Street to the I-90 corridor and east from 12th and Rainier Avenues S to the ridge along 31st Avenue to encompass the Mann, Minor, Atlantic, Madrona, Harrison, and Denny Blaine neighborhoods, and western part of Madrona and Leschi (Seattle City Clerk's Geographic Index Atlas). The EPS is situated on the eastern edge of the Minor neighborhood, which extends south from E Madison Street to E Yesler Way, and from 15th and 23rd Avenues; to the east of it is the Mann neighborhood (City of Seattle Municipal Archives, Neighborhood Index Maps) (**Figures 70A-70B**). EPS is also located on the eastern edge of the Renton Hill addition, platted in 1892, and bounded by Madison Street, E Olive Street, 23rd Avenue, and Marion Street.

Unlike neighborhoods such as Ballard, Fremont, or Georgetown, which emerged originally as separate towns, the Central Area never existed as an independent municipality, and was not developed systematically through real estate planning and public improvements. Rather, its neighborhoods were shaped largely by its residents and changing urban and social conditions (Nyberg and Steinbrueck, 1975, n. p.).

Early development in the area centered on logging, with logs slid down Yesler Way (Skid Road) to sawmills near Elliott Bay. In 1870, a large area was platted to make up approximately 40 blocks between Cherry and Union Streets and 10th to 20th Avenues. By 1884, a hack wagon line ran daily on Jackson Street to Lake Washington, and by 1889 the city's first cable car line set out along Yesler Way to the lake, returning on Jackson Street. Development during the late 19th and early 20th centuries were linked to transportation routes, including 23rd Avenue, which served as the route for a five cent jitney as early as 1918 (MOHAI photo 2002.3.1452). The area rapidly grew into a working and middle class residential neighborhood, with religious institutions, hospitals, schools, fire stations, and a public library **(Figures 75-80)**.

Early residents were diverse. They included Scandinavians whose presence is represented by the St. Johannes Dansk Evangelisk Lutherske Kirke on 24th and E Spruce (1920, later the Eritrean Community Center and Church in 2001), and the Danish Brotherhood Hall (1908, Washington Hall) at 14th Avenue and E Fir Street. Japanese immigrants began arriving in Seattle in the late 1880s, and settled initially in the Chinatown/International District. As their numbers grew dramatically between 1890 and 1920, the community spread gradually eastward to the Central Area where they operated grocery stores, barbershops, gas stations, dry cleaners, and other shops along Yesler Way. The blocks between 14th and 18th Avenues S, and Yesler Way and Jackson Street, still retain a strong Japanese presence with the Buddhist Church, Seattle Koyasan Church, Konko, Wisteria Park Japanese Congregational Church, Keiro Nursing Home, and the Kawabe Memorial House (Veith).

Census data from as early as the 1890s indicates the Central Area was home to many other early immigrants, including Ashkenazi Jews, and German and later Polish-speaking residents, many of whom were parish members of the Immaculate Conception Catholic Church, built on 18th Avenue, near E Marion Street, in 1904. By 1914, the Sephardic Jewish community had established three synagogues in the area: Bikjur Holim Congregation, Ezra Bessaroth Congregation, and Ahavath Achun Congregation, founded by Balkan immigrants, and by the 1920s their community numbered 3,000 residents (Harris). The Judkins neighborhood in the Central Area emerged as home to many Italian immigrants, and by 1940, the Central Area held a concentrated Russian immigrant population. Early African American settlement in the area is attributed to William Grose (1835–1898), a pioneer businessman, landowner, and leader in the community. In 1890, Grose acquired a large tract of land on "Madison Hill" between 21st and 23rd Avenues near Madison Street (four blocks north of the substation property), where he opened and operated a hotel and restaurant. Between 1900 and 1910, the city's African American population grew from 406 to 2,296, and in the 1920s, two important churches relocated, with the African Methodist Church moving to 14th and Pine, and the Mt. Zion Baptist Church purchasing property at 19th Avenue and Madison Street (Schmidt, p. 137-140).

Segregation in Seattle's housing market began by 1910, and by the 1930s, the residential makeup of the area grew more distinct as restrictions and covenants in other parts of Seattle prevented leases and home purchases by African Americans, Jews, and Asian Americans (Taylor, pp. 82-85). As a result, the Central Area became demographically diverse while the balance of the city remained largely homogeneous (Taylor, citing the 1940 *Sixteenth Census of the U.S*., p. 108). By this date, the African American residential neighborhood was well established, along with its businesses concentrated along 23rd Avenue between Yesler Way and E Roy Street (Mumford, p. 90-116). World War II saw the incarceration of all Japanese and Japanese Americans living in Pacific Coast States and their relocation to internment camps in California and Idaho. Their forced removal from Seattle coincided with an increased demand for military-industrial workers, and the rise in African Americans migrating from the East and Southeast, many of whom settled in the Central Area.

The Depression impacted residents throughout the city, but particularly those in the Central Area where housing conditions continued to deteriorate. Fewer than four percent of all new dwelling units constructed between 1930 and 1940 were built in the Central Area. With the delayed maintenance resulting in housing blight, as it was then called, neighborhood conditions deteriorated (Schmidt, p. 222-224 and Chart 86, p. 224). In the post-war era disinvestment continued, in the form of redlining, and poverty in the Central Area increased. However, planning efforts in the 1950s and 1960s saw impacts to the neighborhood, including proposed urban renewal plans ("Yesler-Atlantic Neighborhood Improvement Project," July 1967). As the city's housing programs changed and federal funds were eliminated, development slowed, leaving empty lots interspersed with older single family and low-scale multi-family dwellings throughout (*Seattle Times*, March 18, 1993).

In 1968, improvements to local social and economic conditions were initiated by the Model Cities Program and community groups. While these efforts largely did not focus on the physical environment, they helped bring about some renewed development, accompanied by the passage of the first fair housing ordinance by the Seattle City Council. By this date, the African American population of the Central Area had peaked at 79% of all residents in the area (Thomas, n.p.).

By the 1990s, a renaissance in the Central Area was well established, generated by a combination of general economic prosperity, community efforts to increase investment in housing and businesses, and historic preservation. Acquired by the City of Seattle, the former Herzl Congregation was transformed into the Odessa Brown Neighborhood Health Center with funds from the Model Cities Program. The Seattle Landmarked Bikur Cholim Congregation, at 17th and Yesler, was rehabilitated as the Langston Hughes Performing Arts Center in 1971. The City of Seattle constructed a new Central Neighborhood Service Center at 23rd Avenue and S Jackson Street in 1996, and expanded and renovated the Seattle landmarked Yesler/Douglass Truth Library, at 2300 E Yesler Way. New construction resulted in Washington Junior High School, at 2101 S Jackson Street, along with a vocational retraining center; Bryant Manor, an assembly of 58 federally-funded townhouses at 1801

E Yesler Way; the 162-unit Kawabe House for low-income elderly residents at 18th Avenue and S Main Street, and the Sixteenth Avenue Townhomes built by the Central Area PDA in 1984. Community non-profit organizations, such as the Northwest African American Museum housed in the old Colman School, the Central Area Development Association, and Historic Seattle, have continued to sustain the neighborhoods (**Figures 75-80**).

The decades between 1980 and 2000 also saw dramatic declines in African American residents, with the population in some parts of the neighborhood decreasing from more than 90 percent to less than 25 percent. Anti-discrimination legislation may have encouraged this movement by opening housing choices, resulting in changes in recent decades to urban and suburban communities. Bellevue, Renton, Kent and other areas in south King County have experienced increases in their residential diversity in the past two decades (Thomas). This shift in the neighborhood's demographics appears to be part of an overall metropolitan gentrification, and economic changes from an earlier trade and manufacturing-based economy to a service and technology economy. "This process has seen the transformation of what was once a predominately African American community into an area of high income dwellers made largely up by white, Asian American and African American professionals" (McGee, n.p.).

Property values in this neighborhood have increased dramatically in the past three decades as they have throughout the city. Between 1986 and 2000 when this shift occurred, median housing prices in the Central Area increased from $62,000 to $286,000 (*Seattle Times*, July 22, 2001), while current indexes for the city at large note an increase of nearly 13% in the last year to over $650,000 (*Seattle Times*, May 30, 2017). The impact of this increase can be seen in the many houses in the area that have been rehabilitated and upgraded, as well as the apparent loss and replacement of some older and smaller dwellings by larger, newer ones. Site visits to the immediate blocks surrounding the EPS indicate that most of the new construction is occurring along E Union Street where zoning encourages larger, denser mixed-use development.

Renton Hill Addition

The Renton Hill addition **(Figure 70B)** mostly located within the Minor neighborhood encompasses approximately a three block by five block area, with E Olive Street on the north, 18th Avenue on the west, a half block into the east along 23rd Avenue, and E Union Street to south as boundaries. The land that became the Renton Hill addition was first purchased by James Campbell in 1865. He bought approximately 165.5 acres in the area and in the later years sold the land to various Seattle residents, among them Captain William Renton, the namesake of the coal mining town of Renton.

Born in 1818 in Pictou, Nova Scotia, Renton was the son of a ship's captain. As a young man he spent time in Philadelphia, and would later became a U.S. citizen in 1841. By 1850, he had moved his family to San Francisco where he became a lumber broker and a shipping merchant. In 1852, he moved to the Puget Sound area and ultimately established a sawmill in Port Orchard. By 1862, Renton moved to Blakely Harbor where he began the Port Blakely Mill Company. His success there allowed him to influence other Seattle businesses, such as the coal mining interests at the south end of Lake Washington. He also invested in the real estate market in Seattle and eventually purchased the land that would become the Renton Hill plat. Captain Renton died in 1891 at the age of 73 (History Link/File/1053).

The multiple lots that became the first substation on the site were purchased by the Puget Sound Power and Light Company (PSP&L) starting ca. 1925 and completed by 1931. In brief (and from the PSE website timeline), Puget Sound Energy (PSE), the current name for PSP&L, began in 1873 under the name of the Seattle Gas Light Company. The company introduced manufactured gas lighting to the Seattle area. By the year 1886, the Puget Sound region received electrical power from a central power plant run by Seattle Electric Light Company, a PSE predecessor. The region's first hydroelectric plant was built by the company at Snoqualmie Falls in 1898. During the next century the company went through two name changes and continued to supply the Seattle area with power made from various energies such as wind, solar, and natural gas. PSP&L's purchase of the seven Renton Hill lots allowed the company to building their two-story classically influenced East Pine Substation and switchyard **(Figures 71-72)**.

First Substation on the Block – PSP&L's East Pine Substation (1925-1965)

Situated at the north end of the block, PSP&L substation was built o the site in 1925. (Note: The King County Assessor's property record card from 1937 cited the address of this substation, parcel 722850-0465, as 2201-15 E Pine Street, and noted in the record as "P.S. Tower.") The earlier substation building was a two-story, 5,670 square foot, L-shaped building clad in brick with terra cotta or cast stone trim. It was designed in a formal manner - a Classical Revival style that was then common for electrical substation facilities, and featured a flat roof and large, arched window openings on the tall upper floor, projecting cornice and parapet ornamented with gable shapes on the outermost bays on the front (east) facade, surmounted by metal poles (**Figures 71-72**).

The dimensions of the earlier substation building were 40' by 133', and the site, according to the Assessor's archival property record card, was 62,010 square feet, which is consistent with the current site. The accompanying photo in this record shows the northeast corner of the block with the substation building. Landscaping featured foundation plantings of shrubs and conifer trees along with turf. The 1937 photo does not show the switchyard, but there are several early 20th century houses in the background. It remained in operation during the sale of the substation to SCL in 1951 (due to PSP&L's 50-year lease ending with the City) and until it was demolished in 1965. During SCL's ownership, the substation received improvements to the switchyard, and a new roof on the two-story building.

Second Substation on the Block – Seattle City Light's East Pine Substation (1967-present)

SCL's 1967 East Pine Street Substation was the result of long term system planning started in the mid-1950s. Between 1957 and 1967, there was a shift in thinking about the value of design and a growing desire to better integrate facilities with their surrounding neighborhoods. Starting with their smaller substations, they began to take on a park like appearance with low landscaping and benches, making them more inviting areas, as shown at the Seward Park Substation (**Figure 91**). The following excerpts from multiple SCL annual reports from 1958-1967 note this shift:

> Image of a landscape architect's model of a low profile unit substation designed by SCL engineers design featured "quiet operation, inviting appearance, [and] low maintenance cost" (1958, *Annual Report*, p. 18).
>
> As the community filled up its vacant spaces with pleasing new homes, City Light's substations were less isolated than they used to be – and there had to be many

more of them. First landscaping, then a whole new design approach was adopted by City Light to gain neighborhood acceptance for distribution substations. The new park-like substation installations are the result; they are inconspicuous and simple in appearance, quiet and safe to be around (1959 *Annual Report*, p. 32).

Growing concentration of population and customer electric loads in most of City Light's service area in the decade after 1950 made the expansion and strengthening of distribution systems mandatory … Population growth also led to a scarcity of building sites that made it almost impossible to isolate distribution substations. To gain neighborhood acceptance for installations that had to be dispersed as service-area load patterns required, City Light relied on landscaping and eventually on new design concepts. Recent substations, quiet and inconspicuous, utilized small sites which City Light turned into inviting little public parks (1960 *Annual Report*, p. 5).

The continued construction of low-profile substations on sites landscaped to serve as accessible neighborhood parks. Underground feeders, quiet operation and decorative fences have made the newer substations attractive and inconspicuous. Landscaping and architectural treatment of two substations and the North Service Center earned for City Light in 1961 one of the five "industrial beautification" awards presented by the Men's Garden Club of Seattle (1961 *Annual Report*, p. 10).

Increasingly concentrated land-use in City Light's service area has made suitable substation sites difficult as well as costly to acquire in recent years (1962 *Annual Report,* p. 14).

On the basis of engineering studies, construction of a new East Pine Receiving Substation was proposed: a centrally-located facility supplied at 230,000 volts which would reinforce the 115,000-volt transmission system – through a tie-line to Broad Street Substation – for growing electric loads. Detailed planning of the proposed $1.8 million station was in progress in 1963 toward getting the station energized by 1966 (1963 *Annual Report*, p. 12).

The other important new project is East Pine Receiving Substation, for which major equipment items were ordered in 1964. A unique feature of the installation will be the large pipe-type underground cables that supply the station at 230,000 volts from a transmission line crossing Beacon Hill, four miles south of the new substation, and interconnect it at 115,000 volts with Broad Street Receiving Substation, which is supplied from the north. As the link between the portion of City Light's local system supplied from the north and the portion supplied from the south, East Pine Substation will be able to relieve both portions with an installed transformer capacity of 150,000 kilovolt-amperes in two banks. By getting the new station into operation in advance of the 1966-1967 peak load, City Light expects to be able to postpone installation of additional capacity at Bothell Transmission Substation and reconductoring of the 115,000 volt lines between Bothell and North End receiving substations … The new East Pine Substation will be located on the site of a former distribution substation of the same name, now retired from service, at 22 Avenue East and East Pine Street. Estimated cost of the substation is $1.9 million; of the underground transmission cables, $2.8 million. An architect has been retained to prepare a site-development plan that will meet with the approval of the municipal planning and art commissions (1964 *Annual Report*, p. 8).

City Light engineers decided on pipe-type underground installations for the 230,000-volt circuits which were to supply the projected East Pine Receiving Substation from an aerial transmission line crossing Beach Hill, over four miles distant, and for the 115,000-volt circuits which were to connect East Pine with the existing Broad Street Receiving Substation, more than two miles away … Site preparation, ordering of major equipment units, and structural engineering and architectural design work were essentially completed last year toward 1966 construction of the receiving substation City Light's underground transmission lines will serve. East Pine Receiving Substation, located on a former distribution substation site at 22nd Avenue East and East Pine Street, is to have an installed firm capacity of 110,000 kilowatts, initially, provided at a cost of approximately $2 million. Visual, recreational and educational values were all considered in planning the architectural treatment and landscaping of the site (1965 *Annual Report*, p. 10).

Energization of City Light's new $2.22 million East Pine Receiving Substation in December 1966 linked together for the first time the sub-transmission systems supplying the two halves of City Light's service area. This meant that, if necessary, at times of winter peak loads or in an emergency, either portion of the system could lend support to the other portion. The station's 110,000-kilowatt installed firm capacity also provides a needed source for local distribution in the central part of the city. As an example of what can be done to fit a large-capacity, high-voltage facility acceptably into a residential neighborhood, East Pine is an impressive achievement. Too large to be effectively screened from public view, the substation was so arranged as to display its functioning components to some degree in a harmonious, well-designed setting. The floodlighted brick wall which protects the site is of an unusually decorative pattern which has won the commendation of the Northwest Brick Association. These appearance features added about $200,000 – roughly ten per cent – to the cost of the facility … Three heavily insulated conductors are simultaneously fed from reel trailer into buried oil-tight pipeline during construction of City Light's East Pine-Broad Street 115,000-volt transmission line, which runs through city streets. Materials, equipment and methods used in installation were all "special" … (The) East Pine Receiving Substation exhibits array of functional shapes over low brick wall. Both facilities will receive further landscaping (1966 *Annual Report*, p. 13-14).

At City Light's new East Pine Receiving Substation, energized at the end of 1966, the few uncompleted equipment installations were taken care of early in 1967 and the entire station site was landscaped. Construction of the new University Receiving Substation, for which engineering design work and equipment ordering had begun in 1966, got under way in 1967 and was 97 percent complete by year-end. Additionally, a photo caption referenced the "EPS's prize winning design showcas(ing) a functional

> array of electrical apparatus inside its unusual brick protective wall and provid(ing) places for playing or relaxing all around the outside" (1967 *Annual Report*, p. 26).
>
> East Pine Receiving Substation's prize-winning design showcases a functional array of electrical apparatus inside its unusual brick protective wall and provides places for playing or relaxing all around the outside (1968 *Annual Report*, p. 22).
>
> Beautification Awards – Our East Pine Substation received an Honor Award "for the discernment exhibited by the client in pursuing the highest of architectural standards," from the Northwest Region, American Institute of Architects. This is the seventh award received for this station since its completion in 1967… A general award was presented to City Light by the Seattle Men's Garden Club for the 'useful display of plantings at the many substations' (1971 *Annual Report*, p. 20).

Preparation of the EPS site began in 1965 with the demolition of the old PSP&L substation by Iverson Construction & Co., which was completed by August 1965. Investigative ground studies were done at the site by Shannon and Wilson for Bassetti & Company's design. The site was excavated and graded for subsurface infrastructure and footings, followed by construction of support slabs and foundations, the new single-story Control Building and brick perimeter walls, the viewing tower and landscaping. Robert E. Baley Construction was the contractor and work was completed by late May 1967. The EPS opened officially in July 1967 (**Figures 98-103**).

The substation cost was higher than anticipated. According to the SCL Annual Reports, a budget of $1,800,000 was noted in 1962, which was revised to $2,200,000 in 1966. The final construction cost was noted as $2,333,000 in 1966. Of this, SCL estimated the floodlighted brick wall and other enhancement features added roughly ten percent to the cost (1966 *Annual Report*, p. 13). SCL lauded the completed project in its annual reports and advertisements, and documented it with professional photographs, as did the architect (**Figures 104-110**).

The EPS eventually received seven awards for its design:

1. February 1967 – Received design award from the <u>Northwest Brick Association</u>. (Seattle Times, February 5, 1967, p. 87).
2. June 1967 – SCL and Fred Bassetti share honors from the <u>Washington State Chapter National Society of Interior Designers Inc.</u> (Seattle Times, June 7, 1967, p. 71).
3. July 1967– <u>Seattle Beautiful, Inc's Industrial Award</u> issued to SCL for EPS (SCL Collection).
4. February 1968 – Received one of the <u>Seattle Chapter of the American Institute of Architects "Top Honor" awards</u>.
5. 1968 May – Received the <u>National Honor Award from the American Institute of Architects</u>. There were 377 entries that year and only 20 awards s were given out.
6. 1969 May – Awarded the <u>American Public Power Association's First Honor Award</u>, the highest for the design.
7. 1969 October – Received one of the <u>Northwest Regional American Institute of Architect's Honor</u> awards.

The Original Designers and Contractor

The original design team was made up by Fred Bassetti & Company/Architects, and Richard Haag, of Richard Haag Associates, landscape architect. Robert E. Bayley Construction, Inc. was the general contractor.

Architect Fred Bassetti

The substation's building, perimeter walls, and equipment supports were designed by noted mid-century architect Fred Bassetti (1917 – 2013), of Fred Bassetti & Company, Seattle. Bassetti was born in Seattle, and educated at the University of Washington (UW), where he received a B. Arch degree in 1937, and at Harvard, where he was awarded a Masters in Architecture in 1946. He apprenticed with Paul Thiry, Alvar Aalto, and NBBJ after graduating.

In January 1947, Fred Bassetti and Seattle architect Jack Morse formed the firm of Bassetti and Morse. Morse, like Bassetti, was a graduate of Harvard. According to interviews with the two in a 1952 issue of *House and Home*, their practice "was devoted largely to residential design, from custom homes to development and public housing projects." The partnership lasted for over 15 years, until April 1962. The firm's early work was primarily residential with commissions for single-family residences, multi-family projects, public housing, and suburban developments. Notable too during this period was the primary role of both Morse and Bassetti in the planning and design of two unique residential suburbs, the Hilltop Community (1946) and Norwood Village (1951) in Bellevue.

During the early 1950s, the Bassetti and Morse's award-winning projects included the G. J. Armbruster House on Lake Stevens (recipient of an Honor Award from the Seattle Chapter AIA); the Gamma Rho Apartments in Seattle's Fremont neighborhood (recipient of a 1952 National AIA Honor Award) (**Figure 80**); the Martin House and Lakeview Elementary School, both on Mercer Island (1954, each a recipient of an National AIA Honor Award); and the Forrest Residence in Bellingham and Isaacs House in Bellevue's Hilltop Community (both recipients of the 1953 National AIA Merit Awards).

The partnership's work extended beyond the residential market in the ensuing decade to include schools for the Mercer Island, Highline, and Seattle School Districts; educational buildings for Western Washington University (WWU) in Bellingham, the UW in Seattle, Central Washington College in Ellensburg; and the entry gates to the Century 21 Exposition. It was during this period that Morse, with structural Engineer Jack Christiansen, designed buildings at Boeing Field, including the West Coast Airlines hangar (demolished). In April 1962, Jack Morse and Fred Bassetti ended their partnership, dividing the firm's work into two independent practices. Many design projects by Bassetti & Morse were recognized by AIA awards:

1963: Honor Award for Ridgeway Dormitories Western Washington College, Bellingham
1962: Honor Award for the Georgia-Pacific Idea House (recognized also by *House & Home*, and a *Life* Magazine Merit Award)
1961: Honor Awards for Central Washington State College Library, Ellensburg
1960: Honor Award for Western Washington College Student Union Building, Bellingham
1958: Honor Award for Island Park School
1957: Church Architecture Guild Honorable Mention, East Shore Unitarian Church, Bellevue
1956: Honor Award for Schlosser Residence

1955: Honor Award for the Benton County PUD Administration Building
1955: Honor Award for Theo. Caldwell Residence
1954: Honor Awards for the Gerald Martin Residence, and John O'Brien Residence
1954: American Association of School Administrators Award for the Lakeview School
1954: A National Honor Award for the Gerald Martin Residence
1953: National Merit Awards for the Marshall Forrest Residence and Walter F. Isaacs Residence
1952: Honor Award for Gamma Rho Apartments (Bassetti & Morse with Wendell Lovett, Assoc.)
1951: Honor Award for the G. J. Armbruster Residence

As his work grew larger in scale, Bassetti's career matured (**Figures 81-86**). His projects were increasingly cited in professional publications, and he and his partners and firms won numerous design awards over the years, with the EPS alone being recognized by seven. Fred Bassetti & Co. Associates received recognition for the following:

1978: Awards of Merit for the Seattle Aquarium
1977: Honor Awards for the Seattle Mental Health Institute
1976: Honor Awards for the Federal Office Building, Seattle (John Graham & Company and Fred Bassetti & Company)
1970: Honor Awards for KIRO Broadcast House, and the Architect's Office
1969: Honor Award for UW Engineering Library & Loew Hall
1967: Honor Award for the East Pine Substation
1966 Honor Award for Central Washington University (CWU) Dormitories, Ellensburg (also recognized by AIA National Honor Award)

Bassetti was very active in professional and civic organizations throughout his life. He served as the president of the Seattle Chapter of the AIA in 1967, and was a member of the Institute's Honors Committee in 1964 and its chairman in 1965. Locally, he was highly engaged in civic and historic preservation activities, having established Action: Better Cities, and worked to save Pike Place Market. He served as president of Allied Arts of Seattle and King County, and was also a member of Seattle's Landmarks Preservation Board and Design Commission.

Bassetti manifested his increased interest in urban design in the substation property when he addressed the perimeter walls, which had been overlooked as a design opportunity in some of the earlier substation designs. During the 1960s it appears he was influenced by Finnish architect Alvar Aalto, with whom he had worked with after graduate school, as he turned away from the International Style and Northwest Modernism to create large scale buildings with human-scaled proportions and detailing, typically in brick/masonry. Others who he cited as having been influential in his career included professors Lionel Pries, Alec McLaren, and Bissell Alderman at the UW; Walter Gropius at Harvard; Louis Kahn; local colleagues, such as Perry Johanson, Jack Morse, and Walter Isaacs, a UW art professor, who he worked with on the Hilltop Community; and his father-in-law, architect Joe Wilson (Woo, 2008).

Bassetti's interest in organic shapes in precast concrete emerged in the design of the electrical equipment support elements within the switchyard; and later gave rise to expression in his design for the KIRO Broadcasting building at 2807 3rd Avenue (1970).

The substation commission was awarded to Fred Bassetti's firm several years after the 1962 dissolution of his partnership with architect Jack Morse, as he began taking on larger projects.

These included several dormitories at CWU (1962-1963) and WWU (beginning in 1963), and later the Engineering Library and Lowe Hall on the UW Campus (1969), and the 37-story Federal Office Building (1964-1971, with John Graham Architects), Seattle. Each of these buildings embodies an aspect of Brutalism, but each is detailed with chamfered corners and trimmed with stained wood.

In a 2008 interview, Bassetti noted the EPS was one of his favorite projects, and described its design process:

> I think there's no project that I've ever done that was as carefully studied by myself and with directions, the draftsman who worked on it. It, all it is a sub station where they bring in high powered, high voltage electricity from the generating plants … [It] comes in underground because such high voltage probably comes in at 4,000, 400, whatever it is, 8,000 volts, and it comes up into various areas within … this is Seattle City Light project. I worked with one of their engineers all the way through it, and it's very dangerous, high power you get within it, you touch it, of course, you're killed immediately with high power like that. So it's kept away from anybody and they wanted a 10 foot high wall that could not be gotten over easily. So I was, I designed several plans of it, several different ways to do that. And I finally, I wanted this 10-foot high wall …
>
> I designed a curved brick, and actually, it's an L-shaped brick. One end turns rather sharply, compared to the other. And if you, so it was built this way. If you turn over one brick on the other, it makes a deep corrugation all the way along. That's all I can think of to call it, a corrugated wall. Because it's corrugated, it's very strong … Then we, we tapered the, a special block on top of it. It seems like it would be very expensive to do that, and normally it would, but I developed a, a special base for it. These were cast in concrete with a ridge coming up from the flat concrete on the bottom and sloping slightly up … and this ridge was corrugated … and they are laid down as a foundation. Then they, the block slopes slightly so the top of this raised portion sets down as the wall comes down eight inches or so, every ten feet to accommodate the slope …
>
> [This] meant that the, the brick layers wouldn't have to figure out exactly where these bricks come, they just lay them on top of this raised portion on the foundation. It's easy to make … And it didn't take too many forms. Maybe it took a hundred of these six foot long forms all the way around the whole project … At any rate, it made it very easy for the masons to raise this and it looks very complicated and expensive, so in actuality it isn't … (and) where the, where the wires are with this high tension separated from the ground, there's a tower of concrete in between … So the, the wires above the concrete in between, and all that shows the actual character of the, of the electricity as it's used … (Woo, 2008).

Richard Haag of Richard Haag Landscape Architects

Richard "Rich" Haag (b. October 23, 1923) was born in Louisville, Kentucky, and raised by his nurseryman father. He received an undergraduate degree in landscape architecture in 1950 from the University of California, Berkley, and a masters in landscape architecture from Harvard

University in 1952. After studying in Kyoto on a Fulbright grant (1954-1955) and working in San Francisco for Theodore Osmundson (1956) and Lawrence Halprin (1957), Haag opened his own office in 1957. The following year, however, he moved to Seattle to create a new landscape architecture program at the UW, as well as opening a Seattle office, Richard Haag Associates. He initially taught site planning in the UW architecture school; the UW Department of Landscape Architecture opened in 1964.

Haag's "work ranged from residential gardens to regional parks. Recognizable elopements typical of his work include geometric landforms creating sculptural space definition, proximity to water, and use of signature tree species, such as the katsura and the locust" (Dietz, p. 347). He was a prolific designer and is best known for Gas Works Park (1970-1988) in Seattle's Wallingford neighborhood, on the site of a former coal gas plant. Other local and regional projects by Haag include the Battelle Institute Research Center/Telaris, Seattle, with Naramore, Bain, Brady & Johnson (1965-1971, 1991-1992, altered); the UW's Engineering Library, and Henry M. Jackson Federal Building (1972) (**Figure 85**), both with Fred Bassetti & Company Architects (1966-1968); Evergreen Washelli Memorial Park, Seattle, with NBBJ and Bumgardner Associates (1968-1969); Marymoor Park, Redmond (1969-1975); Magnolia Branch Seattle Public Library (1972) and the bird Sanctuary (1979-1984, partially destroyed). In 1986 he completed designs for a series of well known gardens – including the Moss Garden, Garden of Planes (destroyed), Reflection Pool, and others at the Bloedel Reserve, Bainbridge Island. Gas Works Park, the Battelle Institute and Magnolia Public Library in Seattle have been recognized and designated Seattle Landmarks.

Haag served as the chair of the UW Department of Landscape Architecture for ten years (1964-1974) and taught until his retirement from academia in 2004. Richard Haag Associates closed in 2016, after 59 years in existence, and completed over 500 projects (Richard Haag Associates Inc).

<u>General Contractor, Robert E. Bayley Construction, Inc.</u>

The EPS was constructed by general contractor, Robert E. Bayley Construction, Inc. The company was awarded the contract for the perimeter walls and Control Building with a bid of $436,407 (Seattle Times, February 17, 1966). Subcontractors for the project included Ballon & Sons, Plumbing & Heating; Frodesen & Hensen, Inc., Mason Contractor; Pioneer Masonry Restoration Co., Masonry; Seattle Bronze, Co., Metalwork; Crow Roofing & Sheet Metal, Inc., Roofing; Sunset Tile Company, Tile Work; Professional Painters & Decorators, Painters; Parker-Henry Co., Glass; and Bayley Electric Co., Electrical (SCL Open House brochure, 1967*)*. The project's masons included a grandfather and grandson team, Charlie Jenkins and Bill Brokaw, both members of the Bricklayers Union Local 2 (*Seattle Times*, September 25, 1966).

The Substation's Modern Brutalist Style

The design of the station represents a clear departure from the earlier Moderne and Modern styles of other SCL facilities of the 1950s and earlier. Its brick and concrete walls and solid massing recall aspects of a variation on Modern styles known as Brutalism.

Early precedents for Brutalism came from European practitioners including Le Corbusier, with his Unité d'Habitation in Marseilles in southern France (1947-52) and Berlin (1957), along with projects by English architects Peter and Allison Smithson, such as Robin Hood Gardens in London (1972), and many other English examples in the 1960s and early 1970s. Using rough, unfinished, board-formed concrete in massive forms with unusual angular shapes and relatively small, repetitive windows, these designers created a new architectural vocabulary for multi-family housing. In America, Brutalism was used to creative ends by Paul Rudolph on the Yale and Harvard campuses.

Brutalism was also expressed in brick. After World War II, the use of brick, in both load-bearing walls and exterior cladding, was revitalized by a new interest in raw materials of construction that could be expressed in an aggressively straightforward manner. Of several such projects by Le Corbusier in France and India, the most influential was his pair of houses, the Maisons Jaoul at Neuilly-sur-Seine (1955), consisting of brick load-bearing walls supporting concrete- covered — but brick-faced — Catalan vaults. This so-called Brutalist aesthetic, in which brick was juxtaposed against deliberately exposed steel or concrete structural members, reappeared in buildings such as the Langham House Development at Ham Common, London, by James Stirling and James Gowan (1958) and in several projects by Louis Kahn, including the Phillips Exeter Academy Library in Exeter, New Hampshire (1972), and the Indian Institute of Management at Ahmedabad, India (1974). It is only with these projects by Kahn that the traditional load-bearing brick arch was finally permitted to enter the vocabulary of 20th-century architecture (Ochshorn, p. 170-173).

Locally, Brutalism is a style embodied in several regional buildings dating from the late 1960s and the 1970s, such as CWU's Psychology Building (1972); Christ Episcopal Church in Tacoma (1969); the Prosser Public Library (1969); and, Schmitz Hall (1970), and the Nuclear Reactor Building (1961, designed by Architect Artist Group – architects Wendell Lovett, Dan Streissguth, and Gene Zema, demolished), on the UW Seattle campus. Particularly relevant to the subject property are two buildings designed by architect Fred Bassetti on the UW campus – Lowe Hall and the Engineering Library, which date from 1968-1969 (**Figures 83-84**). Set adjoining a brick-clad plaza, with landscaping designed by Richard Haag, these two buildings represent the interests of the original designers in this style and in building a brick and concrete mass in a complex way to humane manner.

Functions within a Substation

A substation functions to transform power from high voltage to low voltage or the reverse, provide switching and control to manage the system ("grid") power flow, and to switch, regulate, receive and distribute the output power feeders at the desired voltage(s).

> A substation serves the start or end-point of a transmission line, and is part of an overall generation and transmission system. All substations include switching mechanisms or circuit breakers that allow line elements to be energized or switched off for maintenance, or automatically, as the result of a fault.

> Substations are typically arrayed around a switchyard, a steel superstructure and buss-construct framing a series of large metal box-like transformers at ground level… Beyond their primary electrical role … substations often house additional functions that include a wide array of specialized buildings …[ranging from] a small manufactured control house all the way to a large, multiple structure installations that service multiple lines in association with maintenance and administration uses (Kramer, p..49-50).

Thus, the switchyard layout is a specific and proscribed arrangement of switchgear components governed by their function and rules of spatial separation. An open space, with gravel yard, a switchyard contains lightning arrestors, buses; disconnect switches, potential transformers, coupling capacitors and conductors (**Figures 94-97**). Some redundancy is provided to assure consistent delivery of power.

From the supply transmission lines, the power is switched and transformed for distribution at the desired voltages. Disconnect switches or circuit breakers are provided to interrupt the current, along with transformers and other equipment to manage, control, and protect the power system. Once past the switchgear, the power is carried by outgoing feeders, or transmission lines, typically of a lower voltage. Indoor and outdoor substations may utilize gas-insulated switchgear at high voltages, or metal-enclosed switchgear at lower voltages, to minimize the space necessary for the substation and the associated electrical equipment.

Incoming supply at EPS is provided by underground transmission, but within the switchyard there are wires supported by steel support structures. These supports, once made of wood, may be tubular steel or lattice types (made up by trusses in rectangular or tall, pyramidal-shaped support structures), or of reinforced concrete, set singly or in assemblies. EPS features several precast concrete support structures designed by the original architect, Fred Bassetti (**Figures 55-56).** Over time, some of the supports have been replaced and/or upgraded with stronger, seismic-resistant steel plates. The EPS switchyard shares many of the same components with other substations, along with variations in the arrangement and specific equipment types.

All present-day substation facilities are secured by perimeter fences or walls and grades are finished with gravel to minimize maintenance. Concrete support foundation slabs are common within the yards. Basic control buildings have similar functions, and they are typically placed on grade, as they are with this property (U.S. Department of Energy, p. 10-14).

4. PROPERTY DATA

Historic / Current Name: East Pine Substation
Address: 1501 23rd Avenue
Seattle, Washington, 98122
Site Location: The property is situated on west side of 23rd Avenue, south of East Pine Street. It extends to east side of 22nd Avenue; E Union Street, a major east-west arterial, is one-half block to the south

Tax Parcel Number: 722850-0465
Legal Description: Renton Hill Addition, Block 8, Lots 1-6 and the north 30 feet of Lot 7

Original Construction Dates: 1966-1967, 1998-2000
Original / Present Use: Substation with Control Building
Original Designer: Fred Bassetti, Fred Bassetti & Company Architects, Seattle
Richard Haag, Richard Hagg Associates, Landscape Architects
Original Contractor: Robert E. Bayley Construction, Inc., Seattle

Site Area: 62,010 square feet (1.42 acres)
Building Sizes: 1,400 gross square feet
(Site area and building sizes from King County i-Map property record)

Original Owner: City of Seattle Department of Lighting (Seattle City Light after 1978)
Present Owner: Seattle City Light

Owner's Representatives: Maureen Barnes, Real Estate Manager
Rebecca Ossa, Historic Resource Specialist
Seattle City Light
Environment, Land & Licensing Business Unit
P. O. Box 34023
Seattle, WA 98124-4023

Owner's Project Manager Bikas Pande, Project Manager
Seattle City Light
Seattle Municipal Tower, #3200,
700 5th Avenue
Seattle, Washington 98104

Owner's Prime Consultant: Michael P. Blanchette, P.E., Senior Project Manager
HDR Engineering, Inc.
500 108th Avenue NE, # 1200
Bellevue WA, 98004

5. SEATTLE'S LANDMARK PROCESS

Note: This information is provided for interested parties and individuals who are not familiar with the local landmark process.

Local Landmarks

Designated historic landmarks are those properties that have been recognized locally, regionally, or nationally as important resources to the community, city, state, or nation. Official recognition may be provided by listing in the State or National Registers of Historic Places or locally by the City's designation of the property as a historic landmark. The City of Seattle's landmarks process is a multi-part proceeding of three sequential steps involving the Landmarks Preservation Board:

1) submission of a nomination and its review and approval by the Board
2) a designation by the Board
3) negotiation of controls and incentives by the property owner and the Board staff

A final step in Seattle's landmarks process is approval of the designation by an ordinance passed by the City Council. These steps occur with public hearings to allow input from the property owner, applicant, the public, and other interested parties. Seattle's landmarks process is quasi-judicial, with the Board ruling rather than serving as an advisory body to another commission, department, or agency.

Under this ordinance, more than 450 individual properties have become designated landmarks in the City of Seattle. Landmark properties in Seattle include individual buildings and structures, building assemblies, landscapes, objects, publicly-owned schools, parks, office buildings, boulevards, and industrial properties. Several hundred other properties are designated by their presence within one of the City's eight special review districts or historic districts, which include the Harvard-Belmont, Ballard Avenue, Pioneer Square, Columbia City, Pike Place Market, Fort Lawton, and Sand Point Naval Air Station Historic Districts, and the International Special Review District.

Designation Criteria

The City of Seattle's Landmarks Preservation Ordinance (SMC 25.12.350) requires a property to be more than 25 years old and to "have significant character, interest or value, as part of the development, heritage or cultural characteristics of the City, State or Nation." The language calling for significant character has been described as a standard of integrity. *Integrity* is a term used to indicate that sufficient original building fabric is present to convey the historical and architectural significance of the property. Seattle's landmarks ordinance also requires a property meet one or more of six designation criteria:

<u>*Criterion A.*</u> *It is the location of, or is associated in a significant way with, an historic event with a significant effect upon the community, City, state, or nation.*

<u>*Criterion B.*</u> *It is associated in a significant way with the life of a person important in the history of the City, state, or nation.*

<u>*Criterion C.*</u> *It is associated in a significant way with a significant aspect of the cultural, political, or economic heritage of the community, City, state or nation.*

<u>*Criterion D.*</u> *It embodies the distinctive visible characteristics of an architectural style, or period, or of a method of construction*

<u>*Criterion E.*</u> *It is an outstanding work of a designer or builder.*

<u>*Criterion F.*</u> *Because of its prominence of spatial location, contrasts of siting, age, or scale, it is an easily identifiable visual feature of its neighborhood or the City and contributes to the distinctive quality or identity of such neighborhood or the City.*

In Seattle, a landmark nomination may be prepared by a property owner, the City's Department of Neighborhoods (DON) Historic Preservation Program, or by an interested party or individual. The ordinance requires that if the nomination is adequate in terms of its information and documentation, the Landmarks Preservation Board must consider it.

There is no local ordinance that requires an owner to nominate its property. Such a step may occur if an owner proposes substantial development requiring a Master Use Permit (MUP). Since July 1995, SDCI and DON have had an agreement that calls for a review of potentially eligible landmarks as a part of the MUP process for sizable commercial and multi-family projects. This interagency agreement is described in DON Client Assistance Memo (CAM) 3000. Seattle's SEPA policies also require consideration of the historic significance of buildings over 50 years old that may be eligible for landmark designation.

In contrast to some other jurisdictions, the City's landmark process does not require owner consent. Seattle's designation ordinance does not include consideration of future changes to a property, the merits of a development proposal, or continuance of any specific occupancy, as these are separate land use issues.

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"City Light Looks Ahead" (editorial), December 3, 1965.
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"Variety Is a Splicer's Life, Project Electricians Learn," May 19, 1966, p. 39.
"Wires We Won't Have to See" (editorial), June 12, 1965
"Wiring Going Underground for 6.6 Miles," June 16, 1966, p. 11.
"City Light's 'Operation Underground – Phase Two," June 19, 1966.
"College Student Learns Trade: Grandfather Teaches Craft of Bricklaying," September 25, 1966, p.79.
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"Two Firms Will Share Top Honors," June 4, 1967, p. 56.
"Substation Wins Award," June 7, 1967, p. 71
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7. ILLUSTRATIONS

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NEIGHBORHOOD VICINITY & SITE PLANS

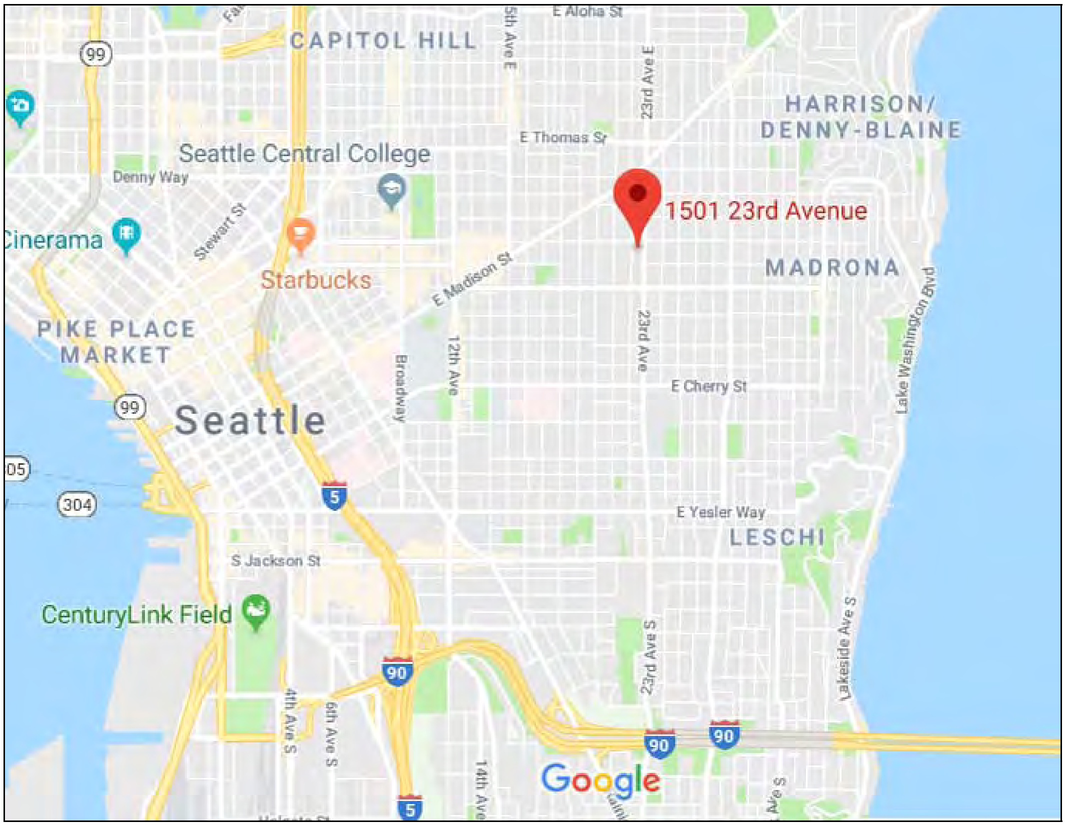
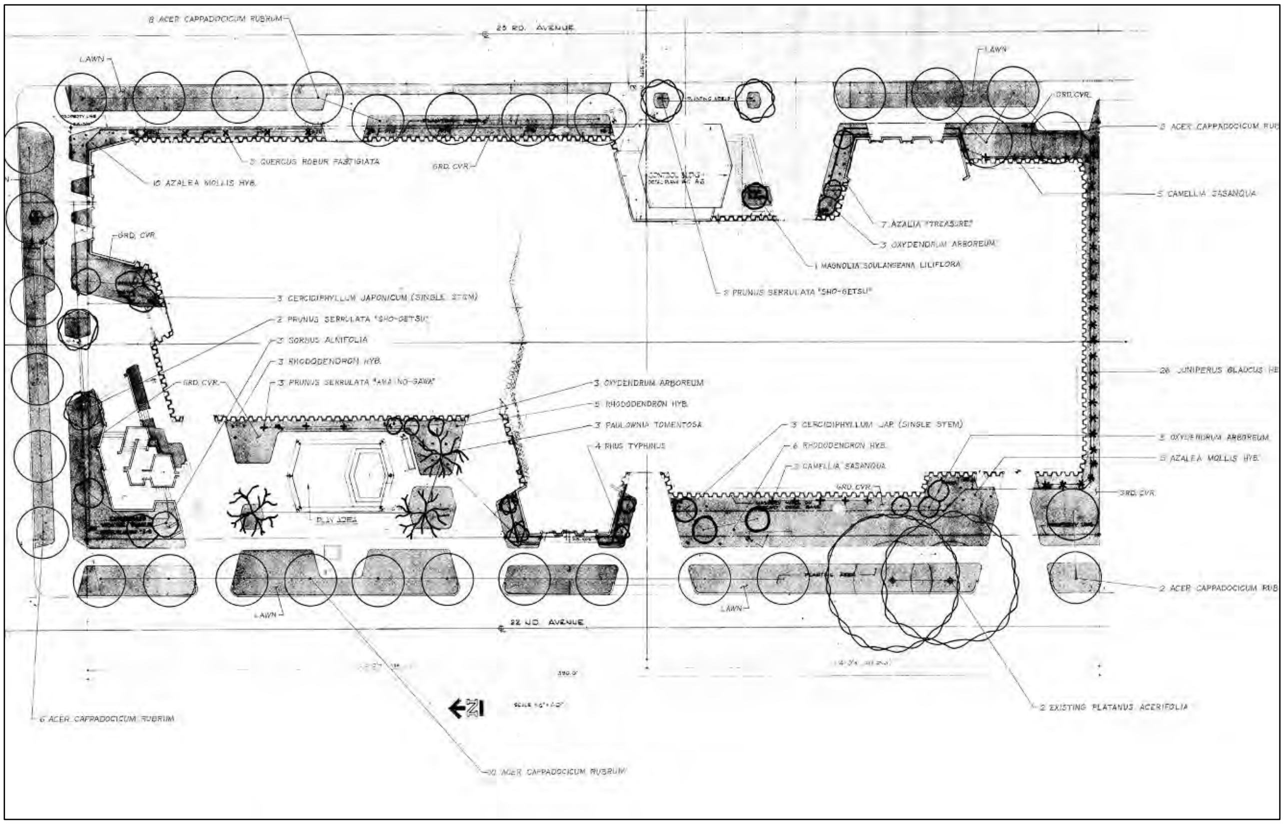


Figure 1 and inset. Above, a 2017 Google map showing the location of EPS in the city's Minor neighborhood. This neighborhood, which is part of the Central Area, is defined by E Madison Street on the north, Yesler Way on the south, and 23rd and 12th Avenues on the east and west respectively. The Mann neighborhood is to the east.

Inset, right, shows a 2015 aerial view of the substation property, identified by the red border (King County GIS, Parcel Viewer). North is oriented up in both views. EPS is situated between 23rd and 22nd Avenues, south of E Pine Street, where it is surrounded by small-scale, single family and multi-family residences along with newer, larger development along E Union Street at the south end of the block.



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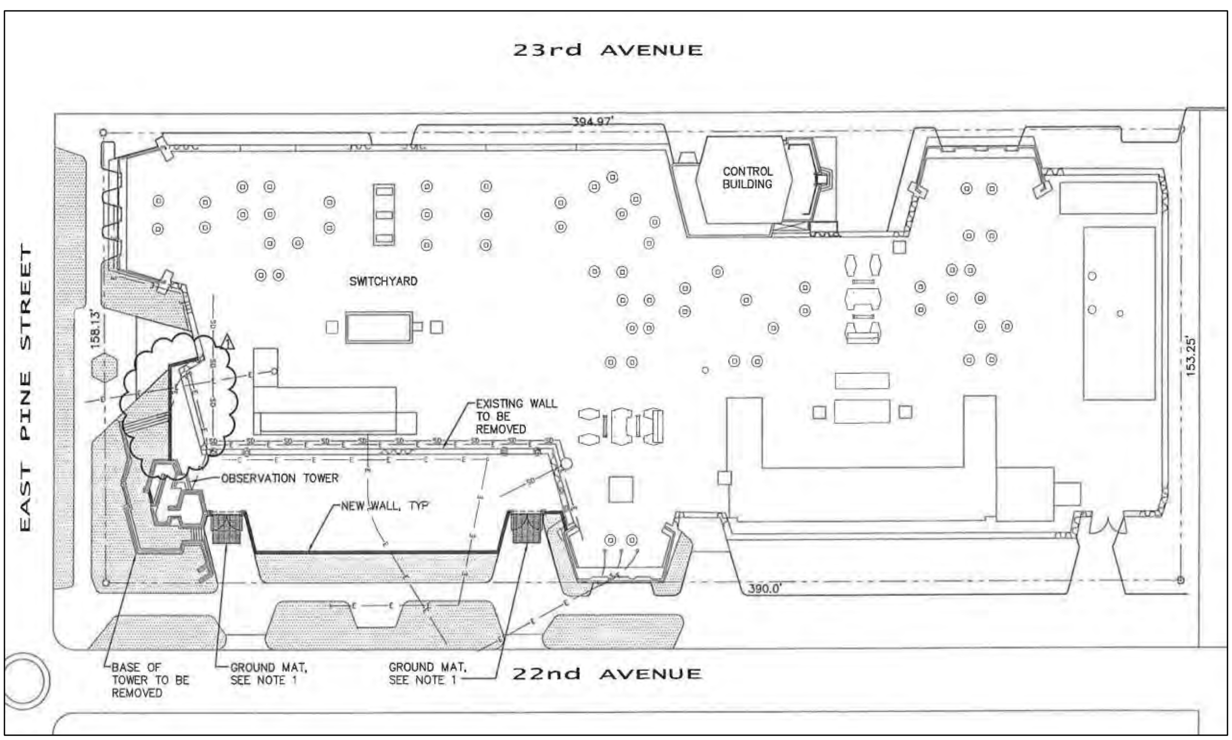

CURRENT CONTEXT VIEWS

Unless noted otherwise, photos are by BOLA and date from August and November 2017.

Figures 3 and 4. Above and below, views looking generally north along 23rd Avenue with EPS to the left (shadow and building). Upper photo shows residential character nearest E Pine Street. Lower photo shows houses across from the substation on 23rd Avenue, mid-block (photo below, Rebecca Ossa, SCL, October 2017).

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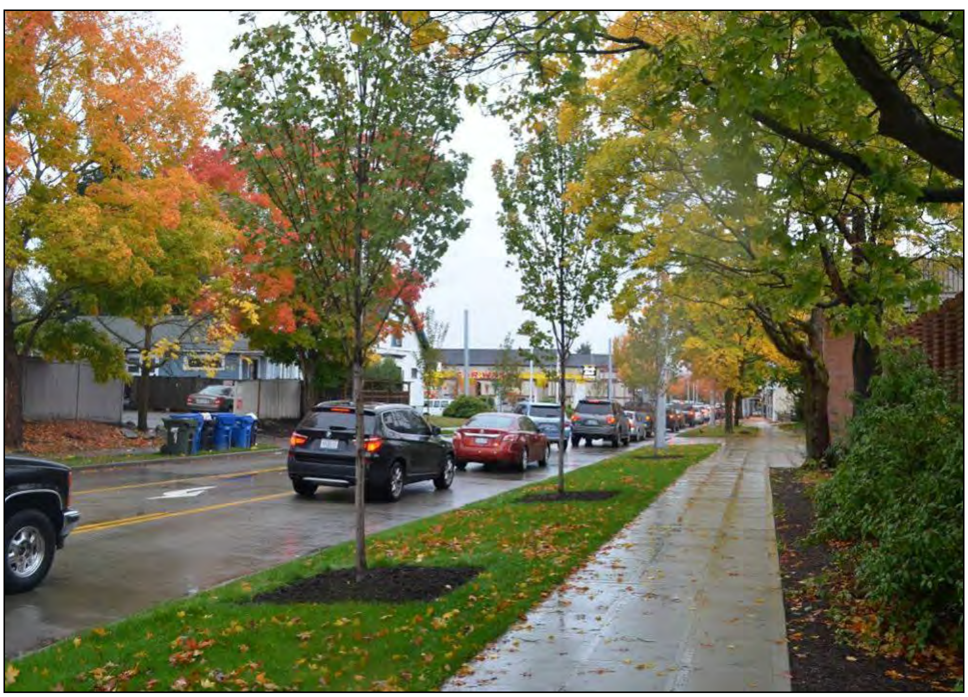

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Figure 12. Below, looking generally east from 22nd Avenue, with EPS to the right and residences to the left (Rebecca Ossa, SCL, October 2017).

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CURRENT VIEWS – PERIMETER WALL, VIEWING GRILLES AND VEHICLE GATES

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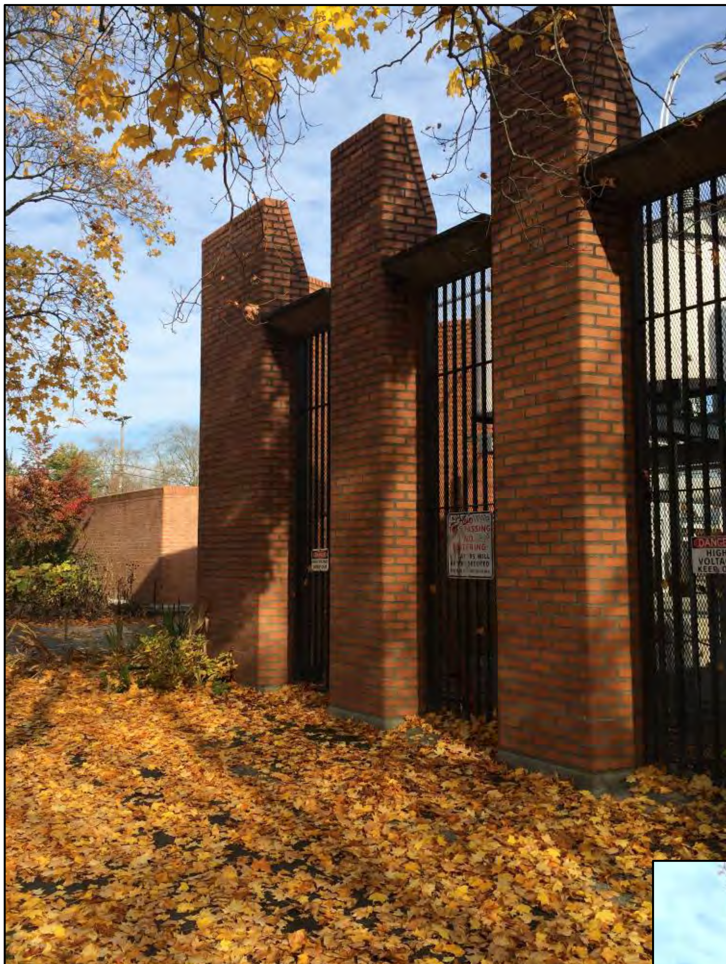
Figure 24. Below, Frontal view of the high yard wall along 23rd Avenue perimeter. Note the grilles between the wall sections, designed for viewing into the substation switchyard (Rebecca Ossa, SCL, October 2017).



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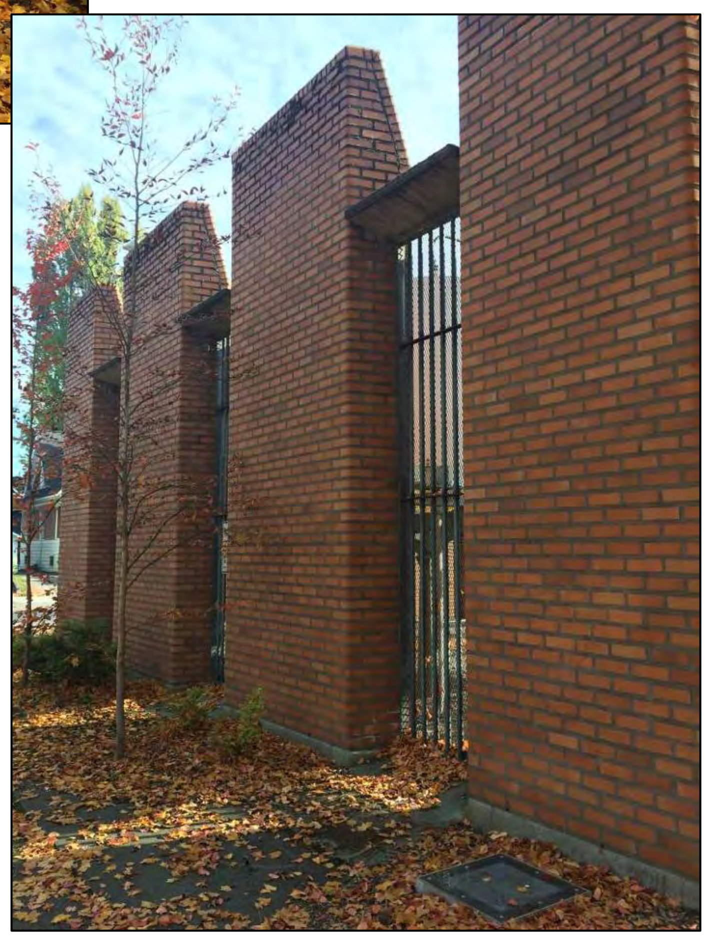

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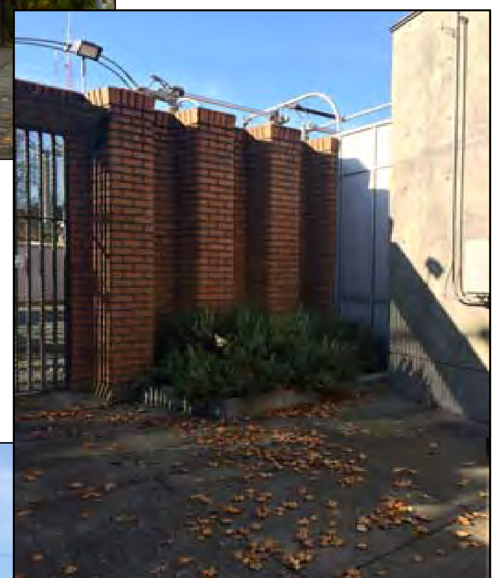
Figure 29. Below, detail views showing the signature brick units showing lettering and numbers. Furthest down are the four bricks with the designer's name, "Fred – Bassetti - & Company – Architects." (Rebecca Ossa, SCL, October 2017).

Figure 30. Below, looking southwest at the east setback off 23rd Avenue showing the same high yard wall from the above photo, and a section of corrugated wall (center left) and a grille section, provided for viewing into the switchyard (Rebecca Ossa, SCL, October 2017).



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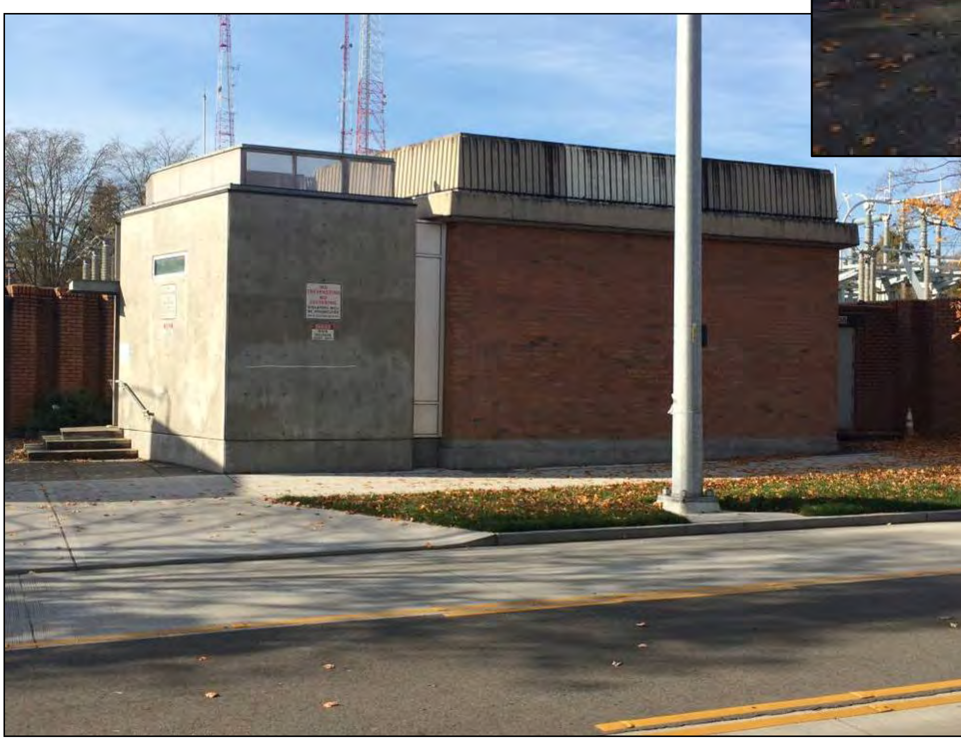

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Figure 35. Below, detail view looking southwest at the north and east facades of the control building. Note the original corrugated patterned concrete roof "cap."

Figure 36. Left, detail view of the original entry, currently a secondary entry at the north end, east facade of the control building (Rebecca Ossa, SCL, October 2017).

Figure 37. Below, oblique view to the north of the control building of a rectangular grille set in the corrugated wall section along 23rd Avenue.

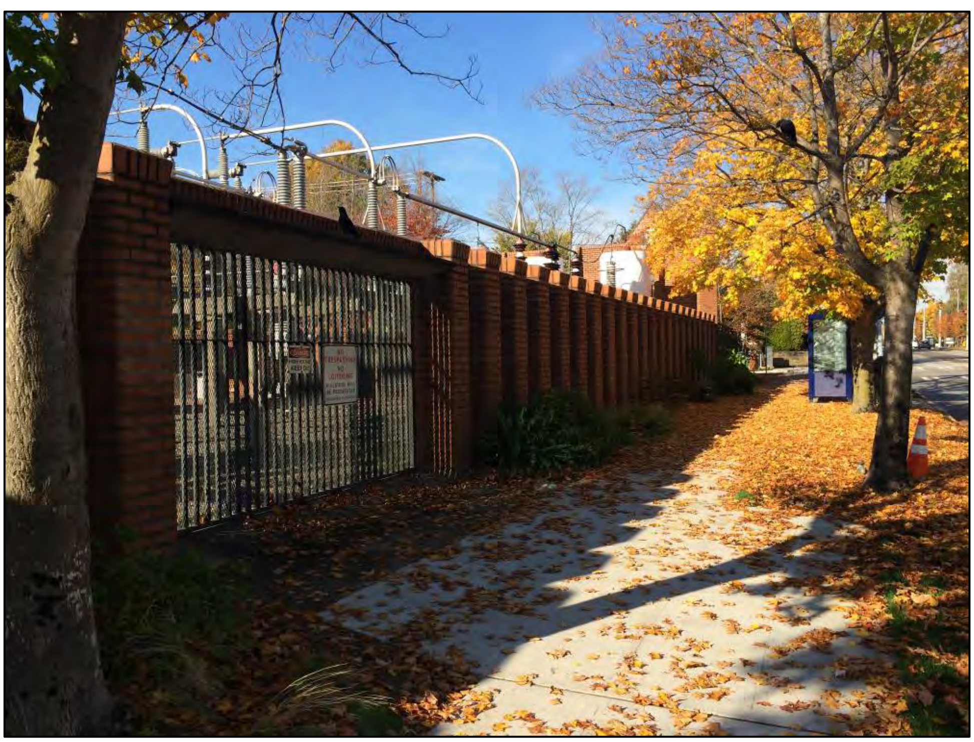

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Figure 44. Above, looking southeast toward the west perimeter contemporary brick wall. The tower is to the left, and the high yard wall is to the right, behind the mature trees.

Figure 45. Below, looking east at a second vehicle entry gate (from the north) along 22nd Avenue and adjoining the high yard wall to the right.

Figures 46 and 47. Above and below, detail views of two of the four vehicle gates in the west wall showing details of concrete posts and adjacent wall conditions. (See figure 106 for comparable original view to the photo below.)

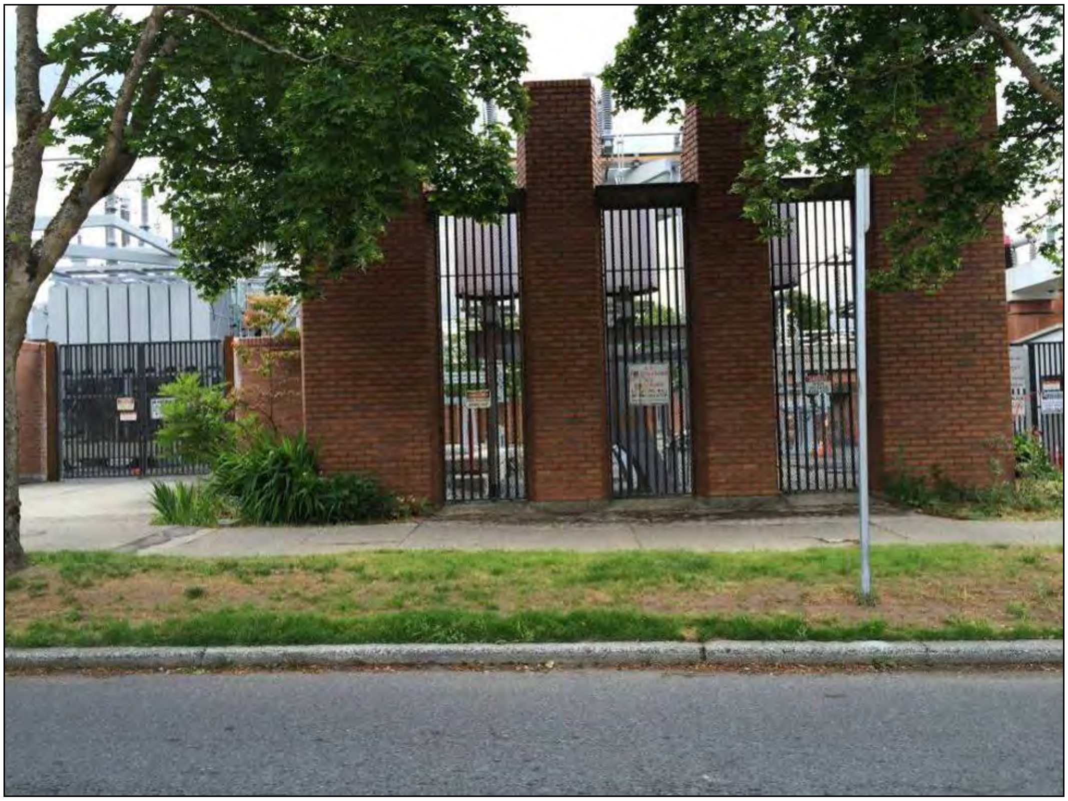


Figure 48. Above, additional view looking east at the west perimeter high yard wall. Note the slender pylons in the center.

Figure 49. Below, looking east at the west perimeter corrugated wall (22nd Avenue is behind the photographer).

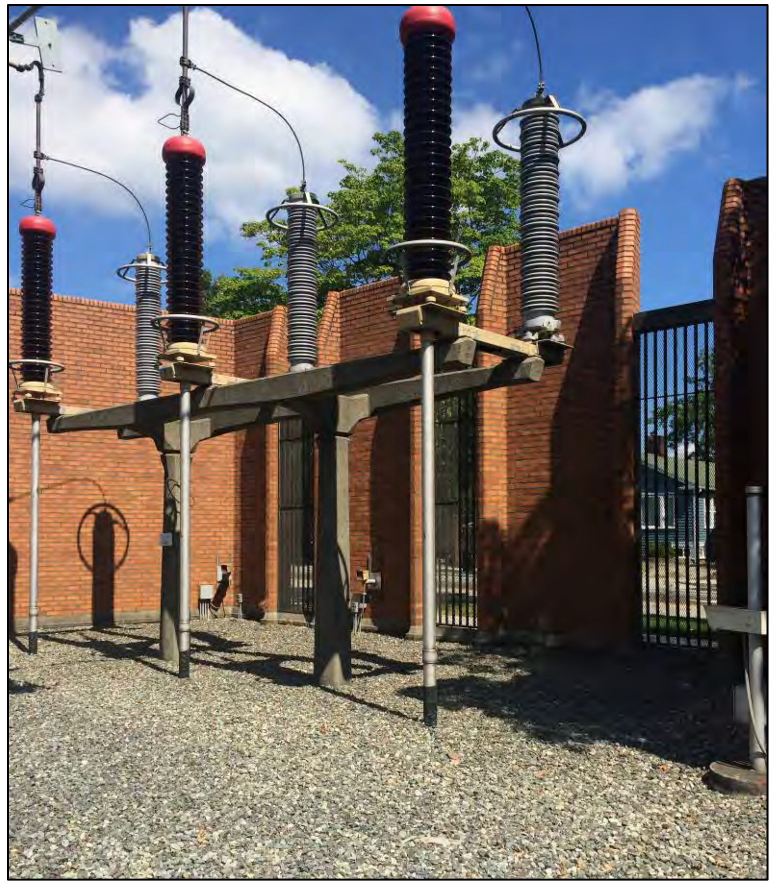
Figure 50. Above, looking east at corrugated walls and fourth set of vehicle entry gates near the south end of the west wall.

Figure 51. Below, looking east along the narrow setback on the south property line.

Figures 52 and 53. Above right and left, detail views of the original masonry wall sections, with straight and curved pieces, and precise precast concrete lintels and base sections, constructed above the cast-in-place concrete footings. These photos also show a portion of a newer exterior light fixture, set flush into the grade, which provides dramatic up-lighting on the brick walls.

Figure 54. Below left and inset, detail views of the original masonry perimeter wall and typical cast-in-place base and footing with some curved brick (lower left photo, Rebecca Ossa, SCL October 2017). Lower right corner, a newer section of the 2003 masonry wall.

CURRENT VIEWS WITHIN THE SWITCHYARD



Figures 55 and 56. Above, detail views of some of the original pre-cast concrete equipment supports, and the northeast corner of the switchyard.

Figure 57. Below, typical equipment on concrete pads in the southern, lower section of the switchyard.

Figure 58. Above, looking north at the newer installed steel equipment supports, concrete block retaining wall in the middle of the switchyard and gravel groundcover.

Figure 59.Below, looking northwest at a recently installed steel clad workshop and covered switchgear equipment, located along the southern portion of the west wall, parallel to 22nd Avenue (out of frame to the left).

Figure 60. Above, looking northeast from within the switchyard at the square viewing grille with concrete lintel and custom cast brick soldier course cap. The viewing grilles are distinguished from the vehicle gates by the continuous pre-cast bases visible in this interior view.

Figure 61. Below, looking northwest at the former viewing tower from within the switchyard showing the original northeast corner of this element. A portion of the vehicle gate in the west wall is visible on the left.

THE CONTROL BUILDING WITHIN THE SWITCHYARD and ITS INTERIOR

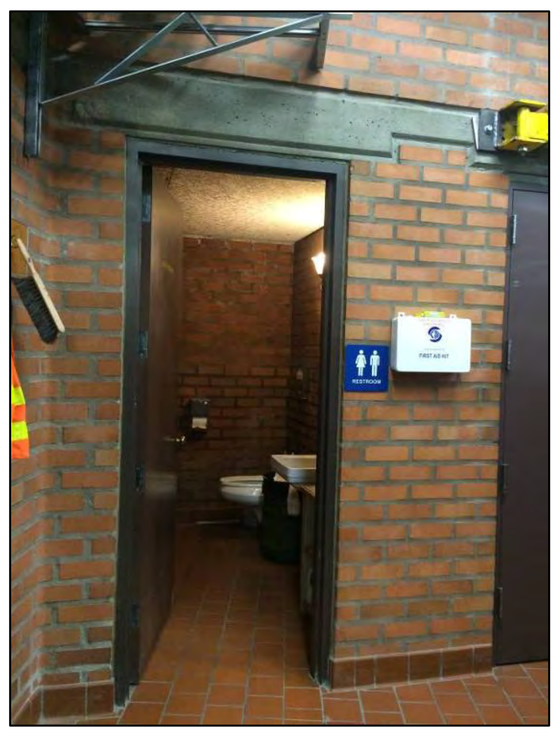
Figure 62. Above, oblique view looking southeast at the west facade of the control building. The metal louvered doors access a transformer room; the entry doors are adjacent and recessed. Note the original cast control roof cap.

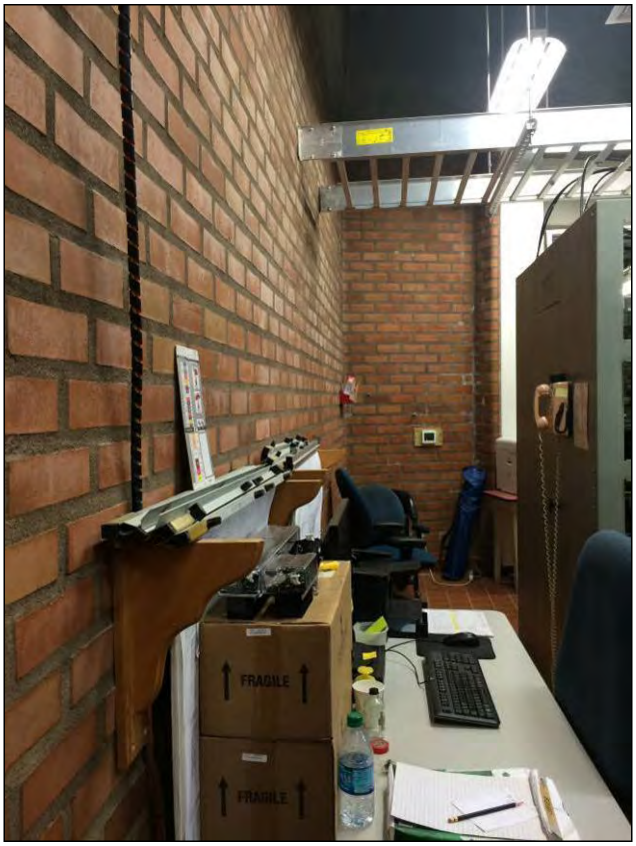
Figure 63. Below, detail view of the original west facade, left, and the later addition, right. Note the lighter brick and mortar differences.

Figure 64. Above, looking south at the original north facade of with a newer single window. The slab in the foreground is part of a basement addition, dating from 2011.

Figure 65. Below left, detail of the west facade and paired access doors.

Figure 66. Below right, detail of an original flush metal interior door with concrete lintel.





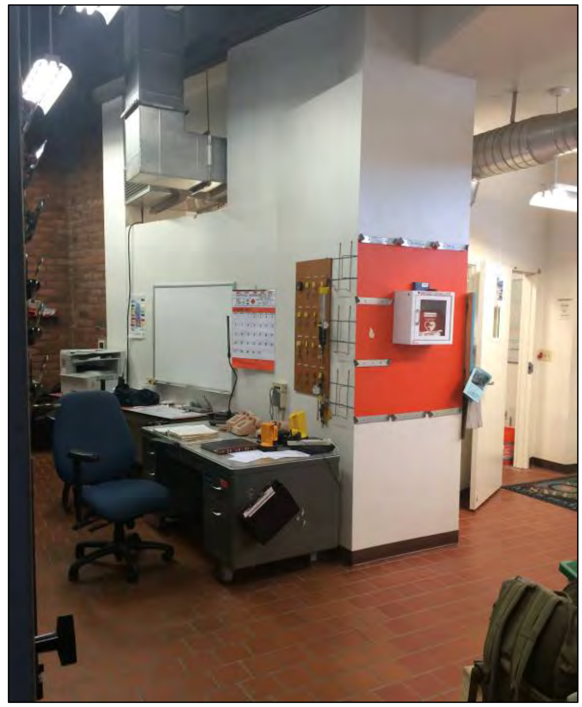
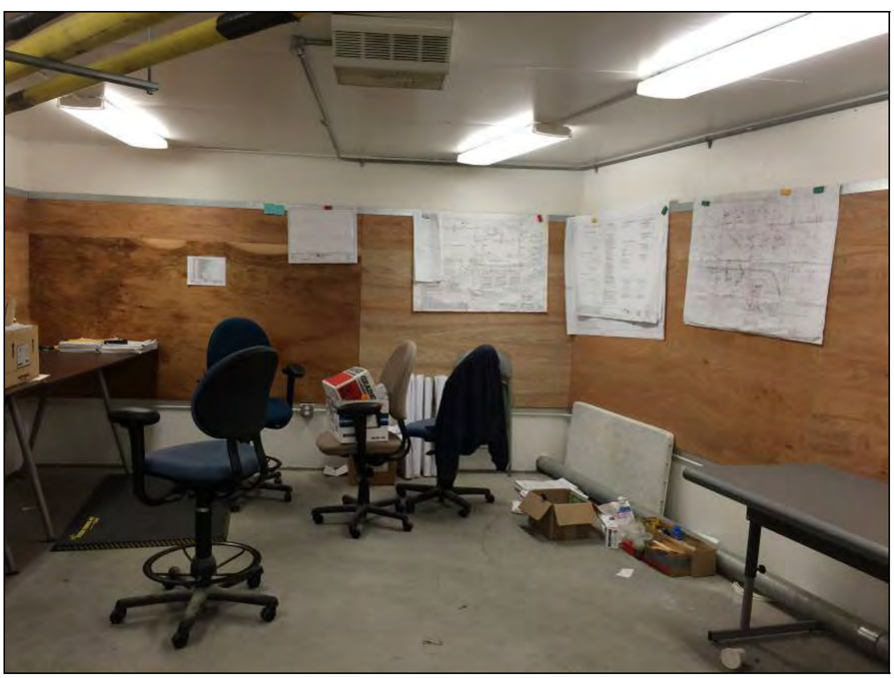


Figure 67. Above left, looking south at an original interior masonry wall, first floor of the control building

Figure 68. Above right, looking southeast into the expanded area of the building.

Figure 69. Below, the recently constructed basement addition to the control building.



HISTORIC MAPS & PHOTOS

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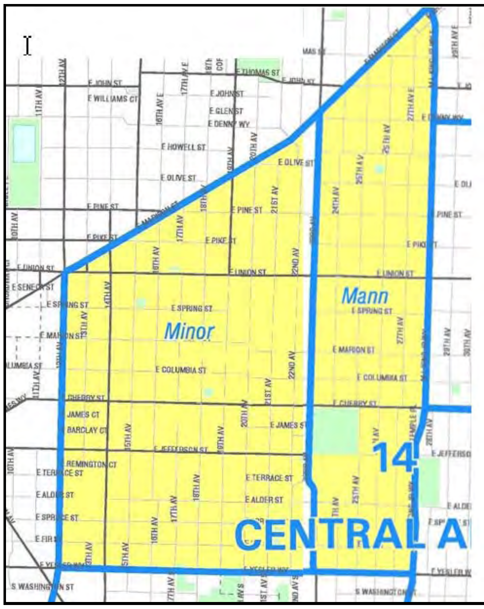
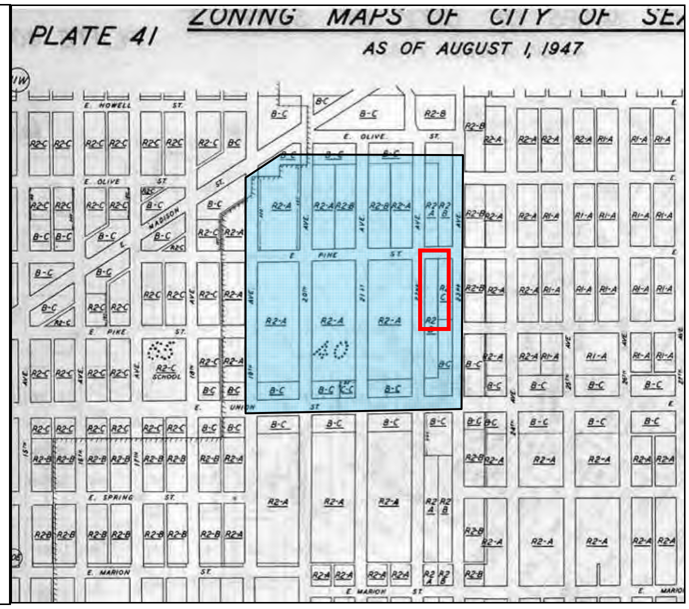
Figures 70A and 70B. Below left, a map showing the approximate locations of the Mann and Minor neighborhoods within the Central Area (Seattle City Clerk). Below right, an excerpt from the August 1947 zoning map of the area (plate 41) (Seattle Municipal Archives [SMA] 534), noting the location of the Renton Hill Addition (light blue) and substation (red outline).





Figures 71 and 72. Below, the former East Pine Substation, constructed by PSP&L in 1925. Left, a view looking southwest in 1937 (King County Assessor). Right, a later view from 1950 (SMA 22436).

Figure 73. Above, an aerial view to the northeast from 1969, showing a pattern of residential neighborhood development around the E Pine Substation (center) (SCL Collection).

Figure 74. Below, another aerial view from 1975, showing residential development to the west and slightly north of the substation (center) and 23rd Avenue in the lower half (SCL Collection).

HISTORIC DEVELOPMENT OF THE MINOR & MANN NEIGHBORHOODS

Figures 75-80. The neighborhood's historic development is represented by residences and institutional buildings. Above and below, are historic and contemporary photos of nearby buildings. Above left, the single-family residence at 1600 23rd Avenue shown in a ca. 1936 photo (King County Assessor's record photo) and above right, in 2017 (SCL Collection). Below left, another house in the block north of EPS, at 1600 22nd Avenue (King County GIS photo, 2015). Below right, the Ebenezer AME Church at 1716 23rd Avenue (Ebenezer AME Church website, current photo). Bottom left, Mt. Zion Baptist Church at 19th and Madison Street (Google street view, 2017). Bottom right, the James Washington House at Studio, a nearby designated landmark at 1816 26th Avenue (King County GIS photo, n.d.)

MID-CENTURY BUILDINGS BY ARCHITECT FRED BASSETTI

Figure 81. Above, the Gamma Rho Apartments, at 4400 Fremont Avenue, by Bassetti & Morse, with Wendell Lovett, associated architect, 1950-1951 (UWLSC, Dearborn Massar Collection DM464). The building is wood framed and clad.

Figure 82. Below, Phase 2 of the Ridgeway Dormitories at Western Washington University in Bellingham, built 1963-1970 (Ochsner, p. 336). These buildings featured heavy timber, concrete slabs, and wood and brick cladding.

Figure 83. Above, the University of Washington Engineering Library, Seattle 1964-1968 (BOLA, 2016).

Figure 84. Below, a 1969 view of Loew Hall, a concrete and brick classroom building with an adjoining terrace to the Engineering library on the UW Seattle campus. Dating from 1964-1968 it was designed with landscape architect Richard Haag. The Engineering Library is also visible on the left (University of Washington Libraries Special Collections, UWC0226).

Figure 85. aBOVE, the 37-story reinforced concrete Henry M. Jackson Federal Office Building at 915 2nd Avenue, Seattle, 1964-1971 (Joe Mabel, Wikimedia).

Figure 86. Below, Pier 60, 1971-1976 (left in the photo with the rehabilitated Seattle Aquarium in the background (MarmadukePercy, Wikimedia).

MODERNE & MODERN STYLE SUBSTATIONS

SCL's substations featured varied architectural styles in response to different eras of construction and their locations.

Figure 87. Above left, the Art Moderne style, First Hill Substation (1949), designed by architect Ivan Palmaw, as seen in 1952 (demolished) (SMA 23345). **Figure 88.** Above right, South Substation (1937), as seen in 2017 (SCL Collection).

Figure 89. Below left, the functionalist Modern style Bothell Substation's control building (1949-1951), a simple cubic massing featuring a grid scored pattern on the concrete walls, small circular window and large corner window, and cantilevered entry canopy (SCL Collection). **Figure 90.** Below right, the Moderne style Crane Building at the Broad Street Substation, 1951 (BOLA, 2017). Theses two facilities were also designed by architect Ivan Palmaw.

Figure 91. Above, a view of a children's play area at an earlier and smaller substation, shown in the 1959 *City Light Annual Report*, which was captioned, "City Light's unobtrusive new Seward Substation illustrates latest refinements" (p. 19).

Figure 92. Below, an architect's rendering of the Massachusetts Street Receiving Street Substation, shown in the 1968 SCL Annual Report (SMA).

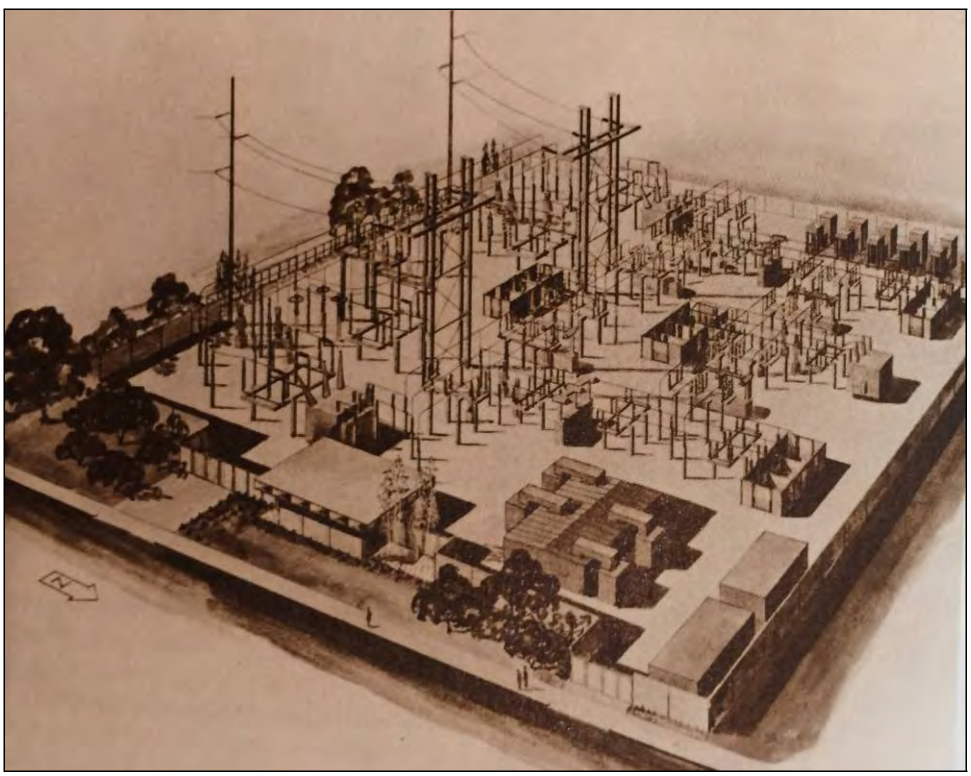
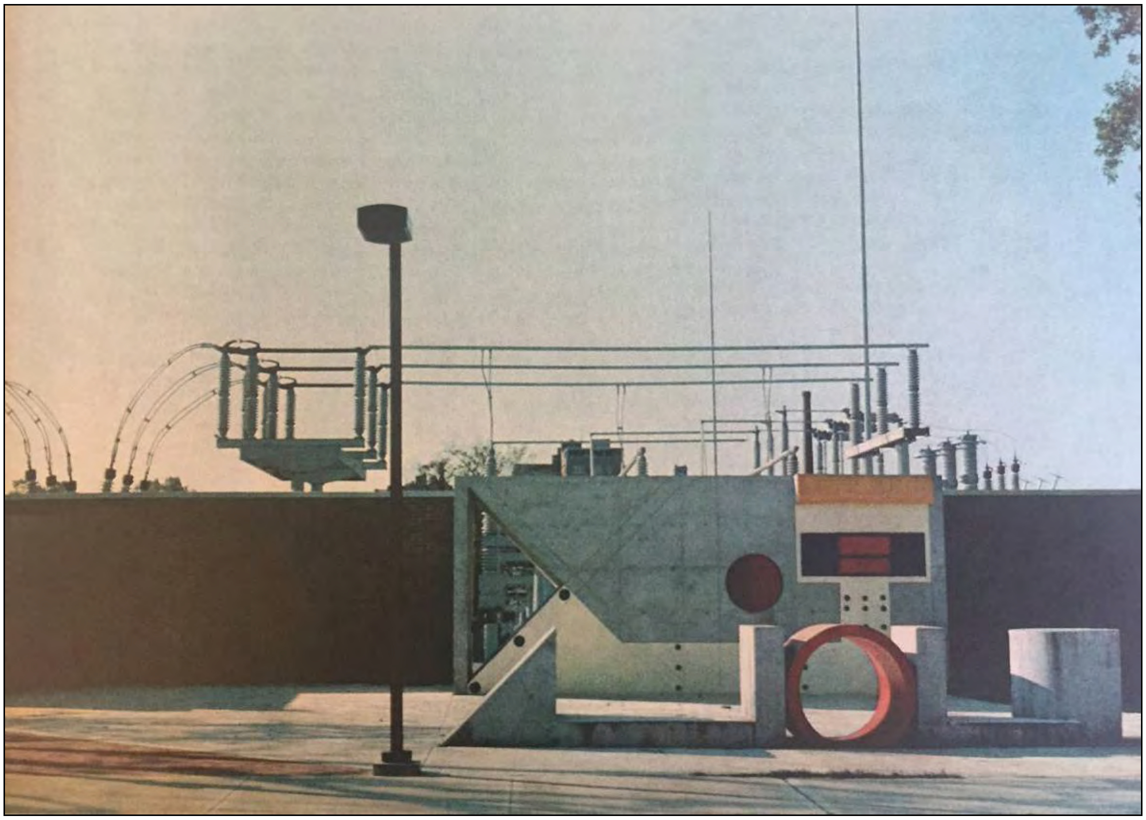
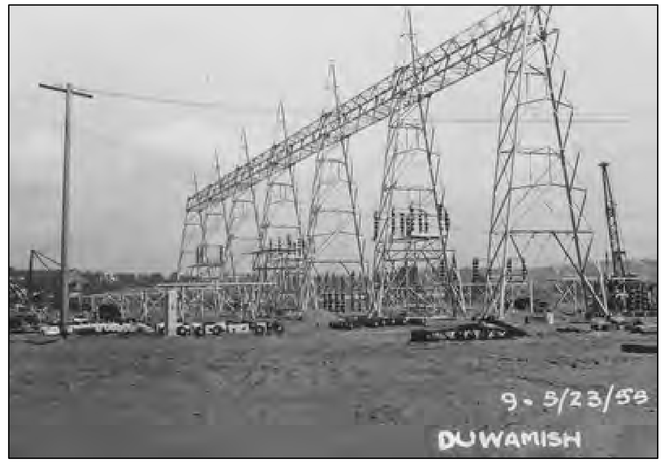


Figure 93. Below, a comparable mid-century substation design resulted in the Crosstown Substation in Kansas City, designed by Kivett & Myers Architects, which featured screened opening in brick masonry walls and painted concrete elements (McCue, *Art in America*, September-October 1973, p. 98). This facility has been greatly altered.

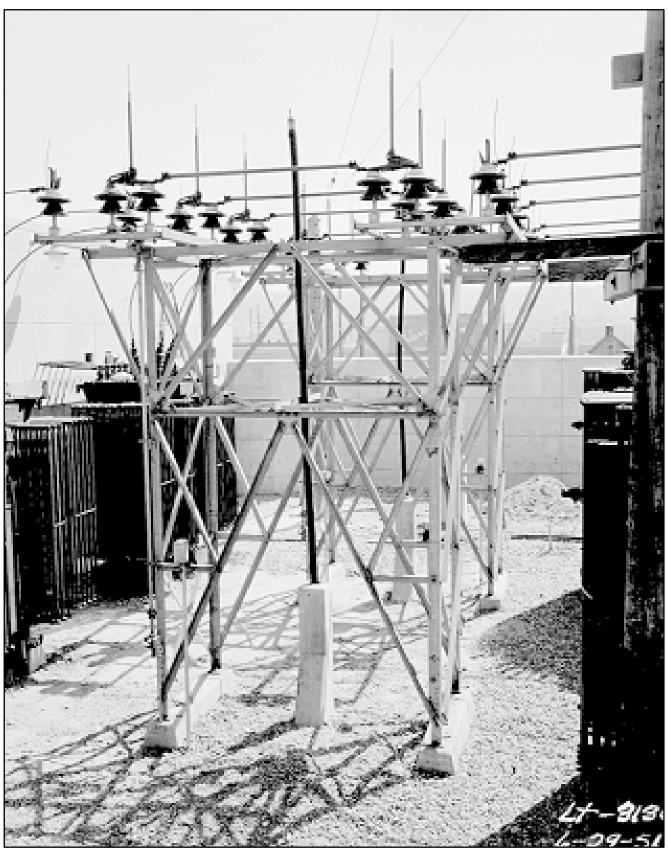


TYPICAL ELECTRICAL SWITCHYARD COMPONENTS



Figures 94 and 95. Photos of other substations illustrate the relative consistency in design as switchyard layouts became more based on manufactured components than customized or shop-built equipment. Above left, the bus fork at the Bothell Substation, 1964 (SMA 168190). Above right, larger lattice type supports at the Duwamish Substation, 1955 (SMA 172931).

Figures 96 and 97. Below left, concrete footings and steel structure at the Broad Street Substation, 1951 (SMA 23020). Below right, the Broad Street switchyard, 1952 (SMA 24199).



CONSTRUCTION & EXPANSION OF THE EAST PINE SUBSTATION

Figures 98 - 103. Below, construction views showing preparation, excavation, grading, concrete work, installation of foundations, switchyard support structures, perimeter wall, and framing of the control building, with the neighborhood in the background. The completed project is shown on the following page.

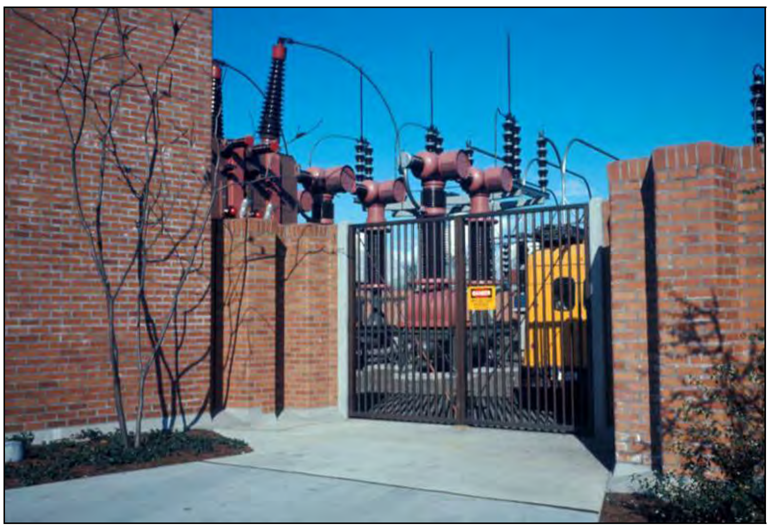
Above left, looking south in March 1966 (SMA 175359). Above right, looking northeast in March 1966 (SMA 175356).

Above left, looking south with 23rd Avenue to the left in March 1966 (SMA 175364). Above right, looking to the northwest toward 22nd Avenue in May 1966 (SMA 175358).

Above left, looking northeast with 23rd Avenue in the background and concrete supports (insert, July 1966) in May 1966 (SMA 175356 and 175630). Above right, looking southeast of the switchyard with 22nd Avenue in upper right in May 1966 (SMA 175353).

Figure 104. Above, looking west at the children's viewing tower after completion, taken in 1969 (SMA 123758).

Figure 105. Below, looking southeast at the substation after completion, taken in 1969 (SMA 123757).

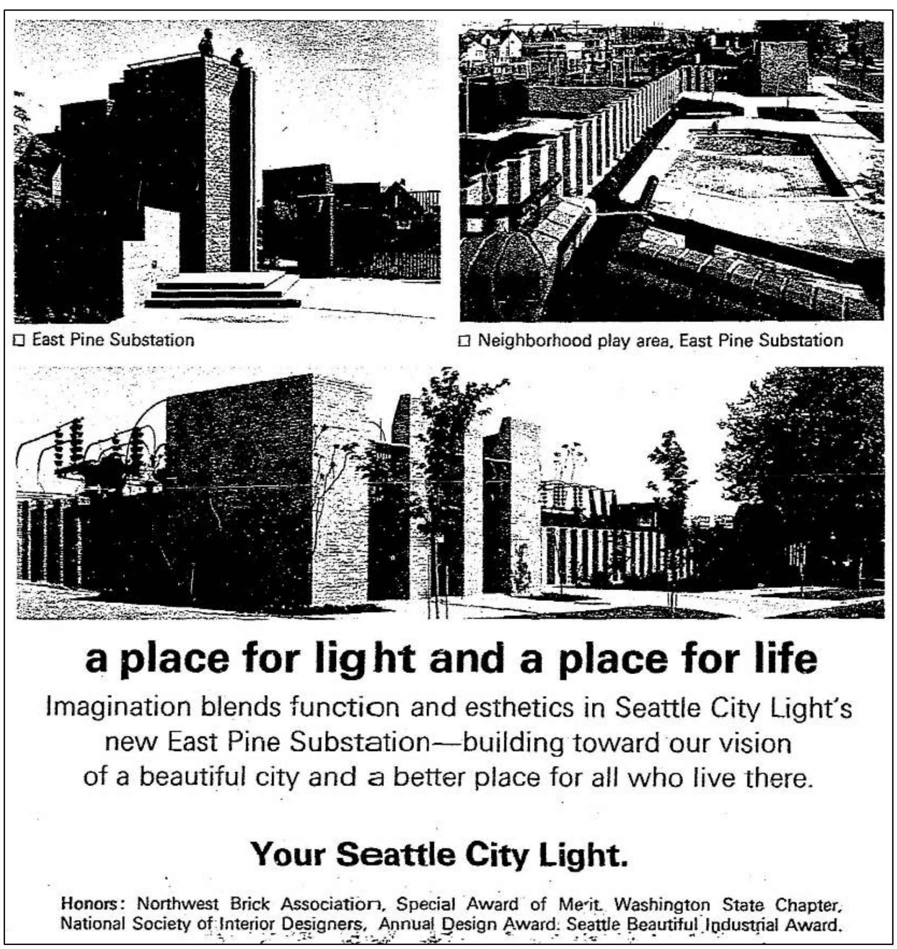


Figures 106 and 107. Views of the completed substation, dating from 1969. Above left, looking south at the play area and west perimeter wall (SMA 123758). Left, looking east at a vehicle gate in the west wall (SMA 123841)

Figures 108A and 108B. Below left and right, excerpt from a photo album, these two snapshot views show the control building's original south facade, adjacent paving, and the nearby corrugated wall in 1978 (SCL Collection, SMA 8726).

Figure 109. Above, a view looking southeast at the children's viewing tower in 1967 (Bassetti & Company).

Figure 110. Below, a SCL advertisement, which identified some of the many awards won by the project (*Seattle Times*, September 10, 1967).



EAST PINE SUBSTATION

The East Pine Receiving Substation is part of City Light's never-ending construction program to provide additional facilities to take care of Seattle's growing power needs.

The substation, costing $2,333,000, is the first urban substation in the state of Washington to be supplied completely by high voltage underground transmission. It is connected with a 230,000-volt underground transmission line to a terminus on Beacon Hill, and with a 115,000-volt underground line to the Broad Street Substation.

It has been designed to serve a double purpose in assuring City Light customers of reliable electric service. First, it will provide an initial capacity of 150,000 kilovolt-amperes at 26,000 volts to serve the east-central part of Seattle, bounded by South Dearborn Street on the south, Lake Washington Canal on the north, the freeway on the west, and Lake Washington on the east. This is enough capacity to serve about 50,000 all-electric homes. Looking towards the future, the station has been designed with adequate space to double its capacity which, at Seattle's present rate of growth, will be needed by 1979.

The second purpose of the facility is to provide an additional source of 115,000-volt power to the north end of Seattle. The north end of Seattle is presently served by four substations receiving power at 115,000 volts from the Bothell Substation, located six miles northeast of the town of Bothell. The 150,000 kva underground tie from East Pine to Broad Street will permit sending of power from the high voltage lines serving the south of Seattle to the north end of Seattle.

The station has sixteen 26,000v draw-out circuit breakers especially designed by Westinghouse Electric Corporation for the station. City Light engineers participated in the developmental testing of these circuit breakers. The compactness of these switches made it possible to erect a station this size in the limited area available.

Particular attention was paid to design the station as an asset to the community. It marks the first major improvement in substation construction since the development of the park-like distribution substations. Instead of hiding the substation behind landscaping and shrubbery, it has been given an architectural treatment which dramatizes electricity.

As a result, the Pine Street station not only provides the community with a much needed park area, but creates a point of interest where visitors can learn something of the glamour and excitement in the distribution of electric power. It includes a 16-foot high platform from which the substation can be viewed by visitors, and several ornamental bronze gates through which passers-by may see the equipment. A descriptive plaque explaining the various devices in the substation will be installed at the top of the viewing tower.

The design of the station has obtained for City Light two awards: the Northwest Brick Association's "Special Award of Merit," and the Washington State Chapter of the National Society of Interior Designers' annual design award.

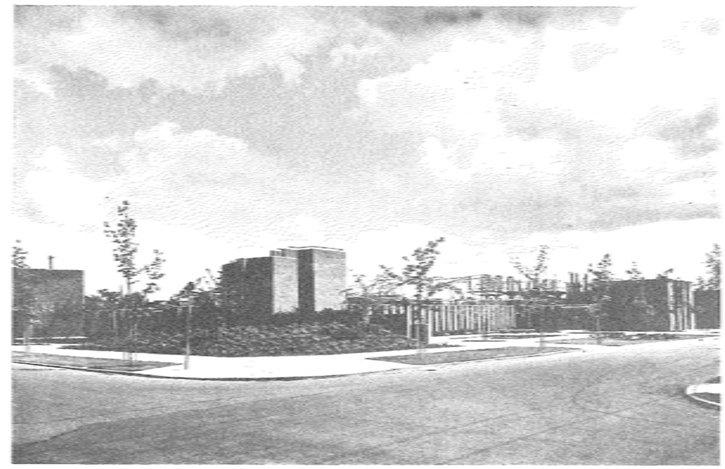
City Light engineers designed and supervised the construction of the substation under the direction of chief engineer Herbert V. Strandberg, chief electrical engineer Robert L. Skone, and project engineer Arthur L. Talbott. Allen L. Meyer was project engineer on the underground transmission line.

Major contractor on the substation was Robert E. Bayley Construction, Inc., of Seattle. City Light crews did the installation of the equipment.

Architectural and landscape planning was done by Fred Bassetti & Company, Seattle architects.

John M. Nelson
Superintendent of Lighting

SEATTLE CITY LIGHT



AWARD WINNING

EAST PINE

substation

1555-23rd AVENUE

Open House

JUNE 23, 1967

2:00 P.M.-5:00 P.M.

Figure 111. Above, the front page of the brochure for the open house in mid-1967.

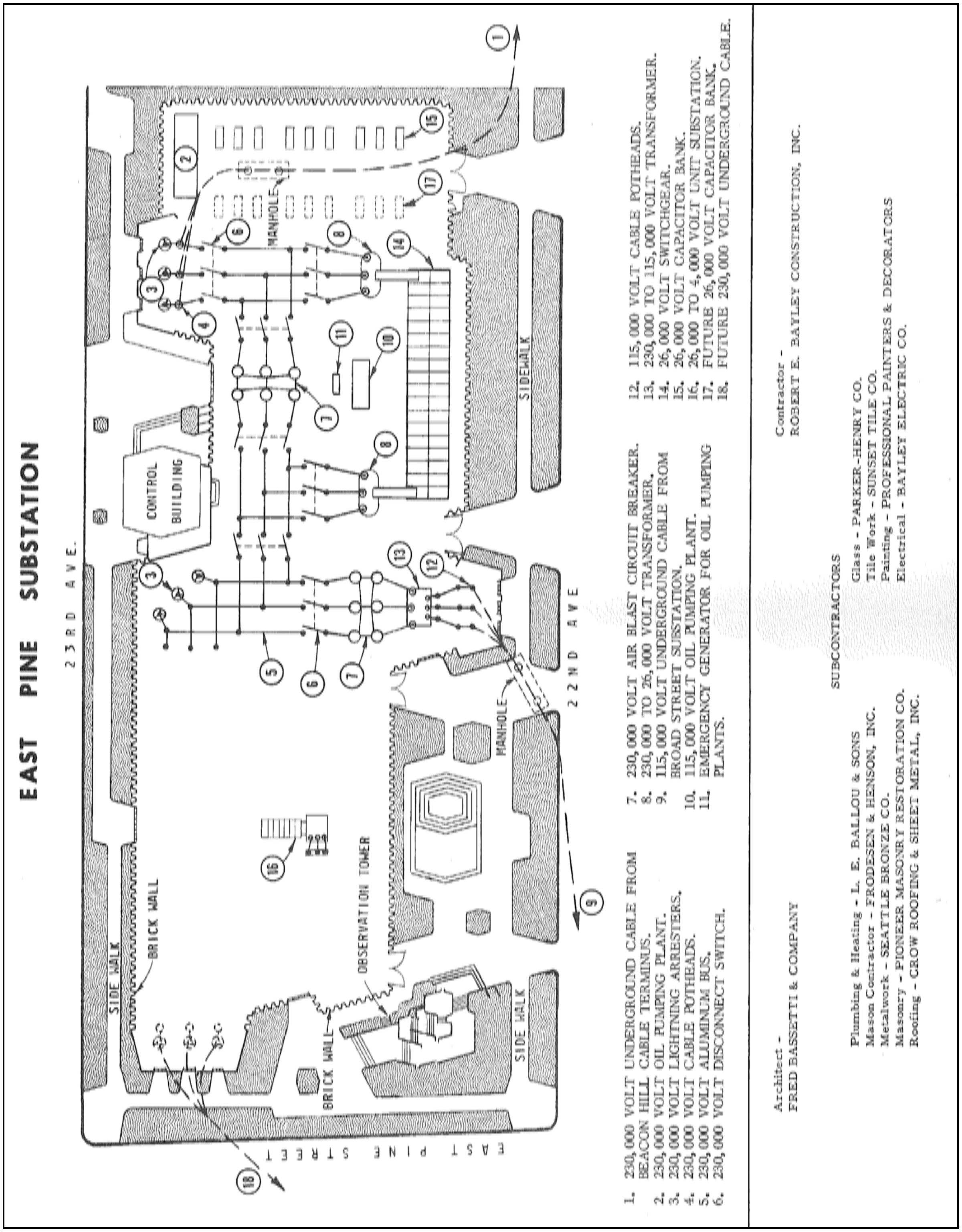
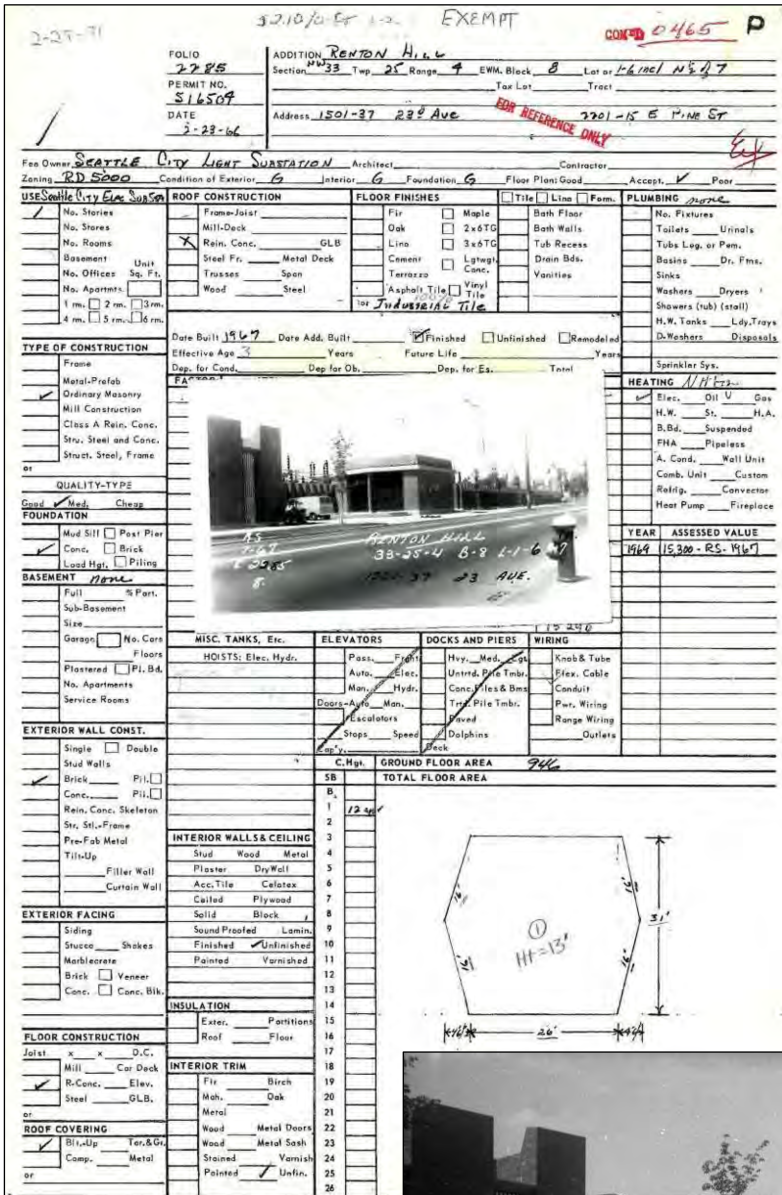


Figure 112. Above, the back page of the brochure for the open house in mid-1967. On the plan, north is oriented to the left. The plan shows the original north and west walls, viewing tower and play area.

Figure 113. Left, a view toward the north, showing the northwest corner of the switchyard in ca. 2005, with the new straight masonry wall, placed west of the original wall (SCL Collection, ca. 2005).

Figure 114. Left, a view looking generally south at the outer walls of the children's viewing tower on November 26, 2001. By this date, new landscaping had been planted around its base to obscure the former steps (SCL Collection).


EXEMPT

CON'D 0465 P

FOLIO 2285

PERMIT NO. S16504

DATE 5-28-66

ADDITION RENTON HILL

Section NW 33 Twp 25 Range 4 EWM. Block 8 Lot or 1-6 incl N 5 4 7

Address 1501-37 23rd Ave 2201-15 E Pine St

FOR REFERENCE ONLY

Fee Owner SEATTLE CITY LIGHT SUBSTATION

Zoning RD 5000 Condition of Exterior G Interior G Foundation G Floor Plan: Good Accept. ✓

USE Seattle City Elec Substa

Date Built 1967 Finished

Effective Age 3 Years

TYPE OF CONSTRUCTION: Ordinary Masonry ✓

FOUNDATION: Conc. ✓

BASEMENT none

ROOF CONSTRUCTION: Rein. Conc. X

FLOOR FINISHES: Industrial Tile

PLUMBING none

HEATING N/H

YEAR ASSESSED VALUE 1969 15,300 - RS - 1967

EXTERIOR WALL CONST.: Brick ✓

GROUND FLOOR AREA 946

FLOOR CONSTRUCTION: R-Conc. ✓

ROOF COVERING: Blt.-Up ✓

KING COUNTY ASSESSOR'S PROPERY RECORD CARD

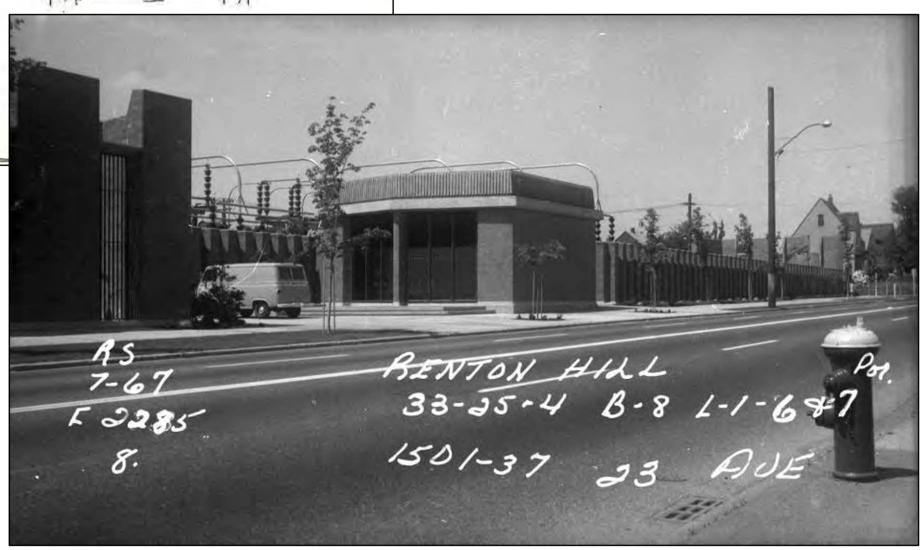


Figure 115 and 116. The 1966 Assessor's record card, above. Right, the property record card photo depicts a view looking northwest on 23rd Avenue at the original south and east facades of the control building (King County Assessor's property record card photo, July, 1967).

The following pages contain copies of original 1965-1966 original drawings (some with CAD updates), ca. 2000 drawings from the control building expansion, and ca. 2003 drawings of the wall expansion project (SCL).