United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Name of Property
County and State
Name of multiple listing (if applicable)

Section number _____ Page 1

Supplementary Listing Record

NRIS Reference Number: BC100003608 Date Listed: 4/5/2019

Property Name: Cushman Substation (Boundary Increase and Decrease)

County: Pierce State: WA

This Property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation

Signature of the Keeper 4/5/2019 Date of Action

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Amended Items in Nomination:

Name of Property:
The corrected name of the submission reads: *Cushman Substation (Boundary Increase and Decrease)* [The National Register program does not process "Amendments." Such submissions should be labeled as either Additional Documentation, Boundary Increase, or Boundary Decrease, as appropriate.]

Geographical Data:
As a result of the destruction of the 16 power line towers, the Boundary Decrease reduces the boundary of the 2014 listing by removing the entire linear resource bounded by UTM points 1 through 16.

The WASHINGTON SHPO was notified of this amendment.

DISTRIBUTION:
National Register property file
Nominating Authority (without nomination attachment)

3608

NPS Form 10-900

OMB No. 1024-0018

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National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form*. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. **Place additional certification comments, entries, and narrative items on continuation sheets if needed (NPS Form 10-900a).**

1. Name of Property

historic name **Cushman Substation Amendment (Adams St. Substation)**

other names/site number

2. Location

street & number 1920 N Adams St. ☐ not for publication

city or town Tacoma ☐ vicinity

state Washington code WA county Pierce code 053 zip code 98406

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this _x_ nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property _x_ meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

___ national ___ statewide _x_ local

Applicable National Register Criteria

_X_ A ___ B _X_ C ___ D

Signature of certifying official/Title — Date: 2-21-19

WASHINGTON STATE SHPO
State or Federal agency/bureau or Tribal Government

In my opinion, the property ___ meets ___ does not meet the National Register criteria.

Signature of commenting official — Date

Title — State or Federal agency/bureau or Tribal Government

4. National Park Service Certification

I hereby certify that this property is:

☒ entered in the National Register

___ determined eligible for the National Register

___ determined not eligible for the National Register

___ removed from the National Register

___ other (explain:)

Signature of the Keeper — Date of Action: 4/5/2019

Cushman Substation Amendment
Name of Property

Pierce County, WA
County and State

5. Classification

Ownership of Property
(Check as many boxes as apply.)

	private
X	public - Local
	public - State
	public - Federal

Category of Property
(Check only **one** box.)

X	building(s)
	district
	site
	structure
	object

Number of Resources within Property
(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
1		buildings
		district
	1	site
		structure
		object
1	1	**Total**

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

N/A

Number of contributing resources previously listed in the National Register

2

6. Function or Use

Historic Functions
(Enter categories from instructions.)

Government: Public Works

Current Functions
(Enter categories from instructions.)

Industry/Processing/Extraction: Industrial Storage
Vacant/Not in Use

7. Description

Architectural Classification
(Enter categories from instructions.)

LATE 19TH & 20TH CENTURY REVIVALS:
Classical Revival

Materials
(Enter categories from instructions.)

foundation: Concrete
walls: Concrete
roof: Concrete
other:

Narrative Description

(Describe the historic and current physical appearance of the property. Explain contributing and noncontributing resources if necessary. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, setting, size, and significant features.)

Summary Paragraphs

The Adams Street (St.) Substation and its surrounding parcel are located at 1920 N Adams St. in Tacoma, Pierce County, Washington, in the southeast quadrant of the northeast quadrant of Section 36, Township 21 North, Range 2 East, of the United States Geological Survey Tacoma North Quadrangle, Willamette Meridian. The Adams St. Substation, located west across N Adams St. from the Cushman Substation (3713 N 19th St.), is nominated as a functionally related unit to the Cushman Substation. The original nomination was accepted into the National Register of Historic Places (NRHP) in 2014 and contained a contributing building with a functionally related structure (the transmission towers), as well as a noncontributing structure (switchyard).[1] Subsequently the transmission towers have been demolished.

The City of Tacoma Light Department designed and engineered the Adams St. Substation and hired Dougan & Chrisman in 1925 to construct the substation. They put it into service in 1926, when electricity was first transmitted from the Lake Cushman Dam to the Cushman Substation (which, along with its noncontributing switchyard, encompasses an entire city block at 3713 N 19th St.).[2] The Adams St. Substation was designed as a transformer house for the Cushman Substation. A two-story, poured-concrete building facing east, the Adams St. Substation is a relatively small auxiliary building with a now-empty (except concrete pads surrounded by a chain-link fence) switchyard to its west. Like the Cushman Substation, the Adams St. Substation was constructed of board-formed concrete. The building is square, features differing fenestration patterns on each elevation, and is a modest example of Classical Revival architecture. The building's primary façade (facing east) features five bays defined by square pilasters; an off-center entry door; and a modest, three-part, concrete entablature. The building's primary characteristics include its geometric form and modest Classical Revival ornament, as well as its industrial character, visible in its multi-light, steel windows and system of louvered vents, which were designed to assist with passive cooling for the massive transformers the building originally housed.

Narrative Description

Site:
The Adams St. Substation faces east on N Adams St. on parcel 7475021883, a square parcel in the northeast quarter of the block bound on the east by N Adams St., on the south by N 19th St., on the west by N Proctor St., and on the north by N 21st St. The substation is located in the southwest quarter of the parcel. West of the substation is a gravel path leading between the substation and the former switchyard, which is roughly four times the size of the Adams St. Substation. North of the substation are ornamental plantings and a grassy lawn; on the parcel's northeast corner sits a large, steel lattice tower, a remnant of the former transmission system that is already listed as a contributing element to the Cushman Substation. East of the Adams St. Substation are additional plantings and grass. The parcel's south end includes a graveled parking lot and graveled alley running east–west between N Adams St. and N Proctor St. Sidewalks line the parcel's north and east sides.

Substation Exterior:
The Adams St. Substation is a square, two-story reinforced-concrete building topped by a flat roof with a metal monitor for ventilation. The building, while a modest example of Classical Revival style, has a simple, concrete foundation (not an accentuated base, as is found on many similar buildings). A modest entablature at the roofline tops the building's concrete walls.

[1] Natalie Perrin, "Cushman Substation," National Register of Historic Places nomination form, March 17, 2014, National Park Service, Washington, DC, http://www.dahp.wa.gov/sites/default/files/WA_PierceCounty_CushmanSubstation_FINAL.pdf. As confirmed by the National Park Service, the Cushman Substation was accepted into the National Register of Historic Places on December 29, 2014, https://www.nps.gov/nr/listings/20150109.htm.
[2] As noted in the original Cushman Substation nomination, the City of Tacoma's Light Department was operating under the name Tacoma City Light by 1915, a name it would maintain until 1989, after which the organization continued doing business under the name Tacoma Power. The Adams St. Substation plans from 1925 still referred to "City of Tacoma Light Department."

The Adams St. Substation's façade is divided into five bays by six squared, concrete pilasters with no ornament at their bases or capitals. The building's entablature consists of a projecting architrave, no ornament in the frieze, and a simple projecting cornice with modest crenulation above. The building's façade includes no other ornament.

The primary entry to the Adams St. Substation is located in the façade's southernmost bay. Slightly recessed, the wood-paneled door is paired with a shallow concrete stair with no railings. Moving north, the second bay includes a single steel-framed nine-light window with a louvered vent above. The windows are boarded up, presumably to deter break-ins. The northern three bays include large, louvered vents directly below the cornice in each bay. Plywood covers large openings beneath the vents that were originally screened for ventilation.

Five square concrete pilasters divide the building's south elevation into four bays. The eastern bay includes a steel vent stack that projects from the wall surface and rises above the roofline. The two central bays include small, louvered vents in their bottom halves. Above are rows of projecting steel eye bolts and severed tubes, associated with connections for the former transmission system. The westernmost bay includes two plywood-covered windows. The lower window is a six-light, steel-framed window. The upper is a nine-light, steel-framed window. Both include projecting concrete sills.

The building's west elevation includes five bays defined by six square concrete pilasters and an exterior concrete stairway with pipe railings leading to a subterranean, steel entry door topped with a transom (covered with plywood) on the southwest corner. Above it, in the southernmost bay, is a nine-light, steel-framed window topped by louvers. The second bay has a similar window above and a six-light, steel-framed window below. A metal awning tops the lower window. All windows include concrete sills and are covered in plywood. The final three bays each include large, louvered vents directly below the entablature. Plywood covers large openings in the walls below the vents that were originally screened to provide ventilation.

The building's north elevation is divided into four bays by five square, concrete pilasters. The two central bays each include narrow, paired wood doors (covered in plywood) topped by a three-light transom. Each double door is accessed by a shallow, single, concrete stair.

Interior:
The building includes internal divisions that are not visible from the exterior: the building's south end is divided into two floors, one partially submerged by roughly 5.5 feet (7 feet with the foundation). The building's north end is a single, ground-level story. Metal stairs or ladders provide access between floors. Building plans from 1925 refer to the building's lower story on the south end as the regulator room and upper story as the switch room. The building's northern end, divided into two rooms by a north–south concrete wall, was referred to collectively as the transformer rooms.[3]

Regulator room: A single, open volume, the regulator room includes a concrete floor and board-formed concrete walls and ceiling (concrete left in its natural state after the removal of board forms). The room is accessed from the primary entry door on the east elevation, which leads to a metal-grate platform and metal ladder against the south wall that provides access down to the floor itself. As of this writing, the room is used for storage. From the interior, it is clear that original doors and steel-framed windows remain in place, although the windows, generally filled with safety glass, are damaged and boarded over. Although the building no longer includes any of the mechanical systems typically found in a substation, steel-doored electrical panels and connectors installed in the ceiling between the two floors remain visible.

The switch room, located above the regulator room, is also accessed by the primary door, which includes a stair from the entry platform to the second floor. The room is an open volume with board-formed concrete walls and ceiling and connectors projecting through floors and walls. A former electrical panel is located on the east wall.

The switch room provides access to the transformer rooms, which are located in the northern half of the building. A doorway in the switch room's northern wall leads to a metal stair descending a half-story to the first transformer room. Like the rest of the building, the transformer room is mainly empty, with concrete floors, board-formed concrete walls and ceiling, and some stored materials. From the interior, it is clear that double wood doors, safety-glass windows, wood-framed transoms, metal-screened panels, and steel louvers remain in place. A partial concrete room divider extends from the room's northern wall. Additional remnants of the building's former systems are visible in the severed tubing, eye bolts,

[3] City of Tacoma Light Department, Adams St. Substation, Reinforced Concrete, May 7, 1925, rev. March 6, 1974, Tacoma Power Headquarters, Tacoma, Washington (hereafter Tacoma Power).

and ceramic insulators that extend from the walls and ceiling and the opening in the ceiling that accessed the roof monitor (vent).

Accessed through a door near the building's north end, a second transformer room is located north of the first. The second transformer room is similar to the first, constructed as an open volume with concrete floor and board-formed concrete walls and ceiling. An opening in the ceiling accesses the roof monitor (vent). As in the first transformer room, windows, metal screens, and other original materials remain in place behind plywood.

2. Adams St. Substation Yard (noncontributing)

The substation switchyard is a level, square, graveled yard surrounded by a tall, chain-link fence with swinging doors on its southeast corner. Otherwise bare, one large concrete pad sits above the gravel surface. Planting strips along its perimeter with mature foliage obscure the fence and switchyard from view. Engineering plans and historical photographs show the switchyard as not original to the site but constructed sometime between 1962–1963; however, research could not confirm the precise timeframe of the switchyard's construction. Based on its estimated date of construction, the former switchyard does not appear to be functionally related to the Cushman Substation or the Adams St. Substation during the period of significance (1926–1949).[4]

[4] City of Tacoma, Department of Public Utilities, Light Division, Adams Street Substation Site Plan, 1962, Tacoma Power.

Cushman Substation Amendment
Name of Property

Pierce County, WA
County and State

8. Statement of Significance

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

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

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

Property is:

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

Areas of Significance
(Enter categories from instructions.)

Community Planning and Development

Architecture

Period of Significance

1926–1949

Significant Dates

1926: Date of Construction

1949: Date power was rerouted

Significant Person
(Complete only if Criterion B is marked above.)

Cultural Affiliation

Architect/Builder

Nightingale, Richard T. (Designer)

Ballock, Ralph H. (Designer)

Statement of Significance Summary Paragraphs
(Provide a summary paragraph that includes level of significance and applicable criteria.)

The Adams St. Substation, located west across N Adams St. from the Cushman Substation (3713 N 19th St.), is nominated as a functionally related unit to the Cushman Substation. The original nomination was accepted into the National Register of Historic Places (NRHP) in 2014 and contained a contributing building (the main substation) with a functionally related structure (the transmission towers), as well as a noncontributing structure (switchyard). Subsequently the transmission towers have been demolished.

Overall, the Cushman Substation is defined as "the urban embodiment of the City of Tacoma's achievement in hydroelectric power production" as it "housed the means for efficient and economical distribution of electricity, which enabled the region to grow and expand."[5] Eligible for listing in the NRHP at the local level for significance under Criteria A (associations with broad patterns of history) and C (an example of monumental Neoclassical Revival architecture), the Cushman Substation was listed with a period of significance dating from its completion in 1926 to 1949, when the transmission line was rerouted to terminate at Tacoma's Pearl St. Substation.

Although the Adams St. Substation was not included in the original nomination, it is significant as a functionally related unit to the Cushman Substation, as it was also critical to the efficient and economical distribution of electricity. The Adams St. Substation, constructed in the same year as the Cushman Substation and designed by engineers and draftsmen in the City of Tacoma's Light Department, was the first district substation constructed to serve the Cushman Substation. It was the final stop in a long journey between Lake Cushman and the Tacoma City Light customer. Electricity traveled from Lake Cushman to the Cushman Substation and then to the Adams St. Substation, where it was stepped down to a safe and efficient voltage for delivery to local homes and businesses. Access to inexpensive, reliable power was a significant catalyst for Tacoma's twentieth century growth and development. As such, the Adams St. Substation is significant under Criterion A for its association with broad patterns and trends in local history and deserves to be recognized along its neighbor and partner in power distribution, the Cushman Substation.

Although the Adams St. Substation does not possess the high-style architectural character of the Cushman Substation, it was designed to complement the Cushman Substation, featuring similar Classical Revival massing and incorporating many of the same materials as its larger counterpart, including board-formed concrete surfaces, classically defined bays, pilasters, and steel-sash windows. As a functionally related unit to the Cushman Substation, the Adams St. Substation is significant under Criterion C as an example of its type. Like the Cushman Substation, its period of significance dates from its completion in 1926 to the rerouting of the system in 1949.

Narrative Statement of Significance (Provide at least **one** paragraph for each area of significance.)

Criterion A:
The Adams St. Substation, added here to the nomination for the Cushman Substation, was the first distribution substations constructed as a tool for distributing power from the Cushman Substation to local customers. As noted in the original nomination, the Cushman Substation was designed by Portland and Seattle architectural firm Dougan & Chrisman as an impressive three-story building in a refined Neo-Classical Revival style. The power that entered the Cushman Substation at 100,000 volts was there stepped down to 50,000 volts and then down to 13,500 for distribution. Cushman could distribute power throughout the system at 13,500 volts, but for distribution to local residence or business, power needed to step down even further. The Adams St. Substation was a necessary intermediary between Cushman and the local power customer, as it staved off the tremendous power loss that occurred when high-voltage electricity was sent from a large, central substation like Cushman throughout a local 4,000-volt distribution system. As cost and reliability were key components of Tacoma City Light's plans, adding the Adams St. Substation to the distribution system ensured that power traveling through the city's distribution system was not lost en route. Furthermore, as electricity traveled through the distribution system at a lower voltage, equipment did not have to be of the high-voltage variety.

[5] Perrin, "Cushman Substation," 8-1.

While the Cushman Substation was under construction in 1925, engineers and draftsman at the City of Tacoma Light Department worked to design this final piece of the distribution puzzle, the smaller Adams St. Substation to be located across Adams St. from the Cushman Substation. The Adams St. Substation was constructed from their plans on a lot one-quarter the size of the Cushman Substation lot. Once completed, it took electricity from the Cushman Substation and stepped it down even further to 4,000 and 1,000 volts for residential and industrial use. Electricity was sent through the city's distribution system by the Adams St. Substation, and then small transformers attached to power poles stepped the electricity down once more for personal use, either to "120, 240, or 480 volts, depending upon the particular situation encountered."[6] The two stations were connected by cabling run through an underground trench, and with the Adams St. Substation in place, the Cushman Hydroelectric Project was able to function at peak efficiency, transforming the energy from Cushman's power plant into safe electricity for distribution to light residences, run shops and storefronts, and power local industries.[7] While the Cushman Substation reportedly cost roughly $500,000 to build, the Adams St. Substation was estimated to cost only $75,000.[8]

The Adams St. Substation was the first of the "distribution" substations built for the Cushman Hydroelectric System. It was constructed as a small concrete building in 1925 and was delivering power to the surrounding residential district by November of that year, even ahead of the Cushman Substation's grand opening in March 1926. Ultimately, the Adams St. Substation served the Cushman Substation in two ways: it stepped the Cushman substation's voltage down for the local customer, and it distributed power throughout a network of other distribution substations at 13,500 volts when it was tied to the system's second distribution station at N 45th St. and Gove St.[9]

While the Adams St. Substation's primary significance comes from the role it played in the efficient and safe distribution of electricity (no need for high voltage power lines throughout the city), it is also associated with trends in substation design and beautification. Plantings around the boundaries of the switchyard and the substation give the substation's parcel a park-like appearance. The landscaping onsite, which shields much of the building's façade and north elevation and presents a well-managed greenspace to traffic along N 21st St., is similar to that which cloaks Cushman's switchyard.

In 1927, nearby residents complaining of the noise and "unsightliness" of the switchyard associated with the Cushman Substation brought a suit against Tacoma City Light. While the judge in that suit failed to award damages for the "unsightliness" of the substation in a residential area, he did award damages for noise, as all of the substations emitted a regular hum. To appease nearby property owners, the City of Tacoma not only performed experiments and learned to control the sound emanating from its substations but also launched an effort to beautify the site, grading the streets, creating "ornamental fences" of live plants around the switchyards, and establishing lawns and plantings on the grounds that would grow to screen portions of the development.[10] The results of those efforts almost a century ago continue to characterize the parcel around the Adams St. Substation and the Cushman Substation today, providing Tacoma with parklike settings.

Once completed and adorned by a landscaped site, the Adams St. Substation not only helped provide power to local homeowners and businesses throughout the City's distribution system but also powered public amenities for which Tacoma became known. By 1929, Tacoma City Light managed a distribution system covering approximately 25 square miles (mi), with 16,000 power poles and 3,000 mi of conduit running between them. The poles were primarily placed in alleys throughout the city, ostensibly to leave city streets clear, "materially assisting

[6] Ira. S. Davisson and Llewellyn Evans, *1928–29 Information Book*, City of Tacoma Department of Public Utilities, Light Division, 44, Tacoma Public Library, Tacoma, Washington (hereafter TPL).
[7] Ira. S. Davisson and Llewellyn Evans, *Report and Information Book of the Light Department of the City of Tacoma for the Years 1924–1925*, 23, TPL.
[8] "Getting Ready to Receive Cushman Current," *Tacoma Sunday Ledger*, October 11, 1924, Clippings Scrapbook, Tacoma Public Utilities Collection (hereafter TPU Collection), Washington State Archives-Puget Sound Regional Branch (hereafter PSRA).
[9] Davisson and Evans, *Report . . . for the Years 1924–1925*, 25.
[10] "Engineers Succeed in Silencing Noise at City Substation," *Tacoma Ledger*, August 28, 1927, Clippings Scrapbook, TPU Collection, PSRA.

in the creation of the 'City Beautiful.'"[11] By 1929, Tacoma's citywide electricity-distribution system allowed it to become an early leader in streetlighting, which had been found to decrease crime and accidents. By that year, the city boasted 530 arc lamps on cast-iron standards lighting the streets in downtown Tacoma. The outlying business district and residential districts included another 4,645 streetlights, installed in a staged pattern of four lights per block: "ornamental units consisting of series tungsten lamps in pear-shaped Monax globes mounted eleven feet above the walk on concrete standards."[12] As with the Cushman Substation, the Adams St. Substation served Tacoma's streetlighting program, ensuring that the city was both safe and well-lit.

Although Tacoma's growth in power consumption was modest during the Great Depression, directly after the Cushman and Adams St. Substations were constructed, Tacoma City Light continued to improve its transmission and distribution system. With the success of the Cushman and Adams St. Substations, Tacoma's urban distribution system included a second primary substation like Cushman and six secondary substations like the Adams St. Substation by 1933. By 1939, the system had grown to include fourteen secondary substations, with more on the way. One secondary substation in South Tacoma served Western Washington State Hospital, Fort Lewis, McChord Field, and the Veteran's Hospital, a system further supported by a Spanaway Substation. Additional secondary substations at Henderson Bay, N K St., and N 45th and Gove streets served the surrounding city, while the Old Tacoma Substation provided power for the flour mills and other industrial users along Tacoma's waterfront. Additional substations served south and west Tacoma.[13]

Industrial development throughout the Puget Sound ramped up during the run up to World War II. By the end of the war, it was clear that Tacoma City Light needed a strategy to face increasing demand. Between 1943 and 1953, Tacoma City Light implemented a plan designed to provide each area of the city with substations located at or near the center of every square mile of its service area. Called "unit" or "package" substations, the new stations were a departure from monolithic substations like Cushman and even Adams St. Designed to fit compactly into developed areas (residential, commercial, and industrial), the substations were unobtrusive and included underground feeders. During these years, Tacoma City Light prepared to increase its system from what had grown to 16 distribution substations with a total capacity of 76,000 kva to 47 distribution substations, 42 of which would be compact "package" substations with a total capacity of 190,000 kva.[14]

By 1949, the system's redesign allowed for power to be rerouted away from the Cushman Substation, and, presumably, away from the distribution substation at Adams St., leaving the buildings separate from Tacoma's upgraded transmission and distribution system.

In the intervening years, Tacoma City Light used the Adams St. Substation for storage, removing the transformers and other electrical equipment that regulated electricity. While the building's interior no longer contains operating electrical equipment, the building's exterior remains relatively intact, featuring the original materials, finishes, and features with which the building was constructed. Many of the building's original openings (including many original windows and screens) have been covered with plywood, but these coverings are removable.

From historic-period photographs and plans, the noncontributing switchyard appears to have been added to the site in 1962, suggesting that the Adams St. Substation may have maintained a role in the local distribution of power, even if the facility was no longer distributing power from the Cushman Substation.[15]

Between the years 1926 and 1949, the earliest years of the innovative public project, the Cushman Hydroelectric Project, the Cushman Substation was the primary distributor of Cushman electricity within Tacoma, but this electricity could not be distributed to businesses and residences without a further step-down in voltage. As the Cushman Substation stepped down and distributed power from the Cushman Hydroelectric Project, the Adams St. Substation stepped down and distributed power from the Cushman Substation, completing the complex process of managing and delivering local electricity to the City of Tacoma in one of the nation's most efficient

[11] Davisson and Evans, *1928–29 Information Book*, 44.
[12] Davisson and Evans, *1928–29 Information Book*, 47.
[13] Ira. S. Davisson and Verne Kent, *Report and Information Book of the Light Division, Department of Public Utilities, City of Tacoma, Washington. September 30, 1939*, Washington State Library, Olympia, Washington (hereafter WSL).
[14] Tacoma City Light, Annual Report, 1952, 21, TPL.
[15] Adams Street Substation Site Plan, 1962, Tacoma Power.

public power systems. As an integral part of the Cushman distribution network, and one that was critical to Tacoma's uninterrupted flow of inexpensive power, the Adams St. Substation deserves recognition under Criterion A as a functionally related unit to the Cushman Substation, as it is here nominated.

Criterion C:
While Adams St. Substation derives its greatest significance under Criterion A for its association with the Cushman Hydroelectric Project's system of power generation and distribution, the building is also significant under Criterion C as an example of its type (a substation). As a modest example of Classical Revival architecture designed in the same mode as the Cushman Substation, the Adams St. Substation is a complimentary structure with modest references to the adjacent building, visible in its smooth concrete façade, unfinished, board-formed treatment on the interior walls, modest Classical ornament (including the entablature, pilasters, and divided bays), and open interior spaces designed for industrial uses.

Plans for the Adams St. Substation were prepared by the City of Tacoma Light Engineering Department, and are therefore known to be associated with the same planning, design, and construction process as the Cushman Substation. The plans include two names under "designer": Nightingale and Ballock. Nightingale likely refers to Richard T. Nightingale, who was described in the 1920 U.S. census as an electrical draftsman for the Puget Sound Navy Yard living in Tacoma.[16] Born in Nebraska to English parents in June 1879, Nightingale raised four children in Tacoma with his wife, also born in Nebraska, Hilda Beatrice Nightingale.[17] According to the 1940 census, Richard Nightingale completed the seventh grade and never attended college.[18] By 1938, Richard Nightingale, whose name sometimes appears in Tacoma City Light records as "Nightengale," was serving as Chief Electrical Engineer for Tacoma's Electrical Engineering Department, where his office was responsible for producing designs and overseeing electrical engineering for new construction and improvements to electrical plants. Between 1938 and 1939, Nightingale's office issued drawings and specifications for a 60,000 kva bank of transformers with high-voltage switching apparatus at Cushman Power Plant No. 2; a distribution substation at S 36th and Cedar Sts.; additions to the Tide Flats industrial substation; and at least two other new substations.[19] Richard Nightingale died in 1965 at the age of 85, and is buried with his wife in Gig Harbor, Washington.[20]

Ballock may refer to Ralph H. Ballock, born in 1894, who is described in the 1930 U.S. census as a divorced electrical engineer for "Public Utilities," a naturalized citizen born in Sweden and a veteran of the first world war.[21] The 1940 U.S. census finds him working as an electrical engineer and draftsman at the U.S. Navy Yard and living in Tacoma with his wife, Alice C. Ballock, and two young children.[22] Not much more is known about his professional career.

Integrity:
The Adams St. Substation retains integrity of location and setting, as it remains on its original parcel and retains its relationship with the Cushman Substation and with its switchyard and steel lattice tower, although these resources are no longer functioning as originally planned. Alterations, including the removal of interior systems like transformers and control mechanisms, as well as exterior alterations, including the removal of cast iron sconces and hardware from the façade, have diminished the integrity of the building's design and materials, but the building retains integrity of workmanship due to the craftsmanship visible in the treatment of its concrete surfaces. From the exterior, the building retains integrity of feeling and association, as it continues to face the

[16] U.S. Bureau of the Census, Fourteenth Census of the United States, 1920 (Washington, DC: National Archives and Records Administration, 1920), T625, 2076 rolls, www.ancestry.com.
[17] Washington State Department of Health, Washington, Birth Records, 1870–1935 for Richard T Nightingale, Washington State Department of Health Birth Index: Reel 4 1939, www.ancestry.com.
[18] U.S. Bureau of the Census, Sixteenth Census of the United States, 1940 (Washington, DC: National Archives and Records Administration, 1940), T627, 4,643 rolls, www.ancestry.com.
[19] Davisson and Kent, *Report . . . September 30, 1939*, 44.
[20] Find A Grave, Richard Nightingale, Haven of Rest Cemetery, Gig Harbor, Washington, www.findagrave.com.
[21] United States of America, Bureau of the Census. Fifteenth Census of the United States, 1930 (Washington, DC: National Archives and Records Administration, 1930), T626, 2,667 rolls, www.ancestry.com.
[22] U.S. Bureau of the Census, Sixteenth Census of the United States, 1940 (Washington, DC: National Archives and Records Administration, 1940), T627, 4,643 rolls, www.ancestry.com.

Cushman Substation, maintains its industrial character, and provides a tangible reminder of how the original Cushman transmission system in Tacoma worked and distributed power.

Conclusion:

The Adams St. Substation, associated with important trends in the history of Tacoma's electricity generation and distribution system, is locally eligible for listing in the NRHP under Criterion A as a functionally related unit to the Cushman Substation with a period of significance dating from its completion in 1926, the same year the Cushman Substation was completed, to 1949, when power was routed away from the Cushman Substation. The Adams St. Substation is also locally eligible under Criterion C as an example of an industrial building designed in a modest Classical Revival style complimenting the Cushman Substation. Its period of significance dates from its completion in 1926 to its decommissioning along with the Cushman Substation, in 1949.

Cushman Substation (Amendment) Pierce County, WA
Name of Property County and State

9. Major Bibliographical References

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

City of Tacoma Light Department. Adams St. Substation, Reinforced Concrete, May 7, 1925, revised March 6, 1974. On file with Tacoma Power, Tacoma, Washington.

-------. Adams Street Substation Site Plan. 1962. On file with Tacoma Power, Tacoma, Washington.

Davisson, Ira S., and Llewellyn Evans. Report and Information Book of the Light Department of the City of Tacoma for the Years 1924–1925. Tacoma Public Library, Tacoma, Washington.

-------. 1928–29 Information Book, City of Tacoma Department of Public Utilities, Light Division. Tacoma Public Library, Tacoma, Washington.

Davisson, Ira S., and Verne Kent. Report and Information Book of the Light Division, Department of Public Utilities, City of Tacoma, Washington. September 30, 1939. Clippings file, Washington State Library, Olympia, Washington.

Perrin, Natalie. Cushman Substation, National Register of Historic Places Nomination Form. March 17, 2014, accepted into the National Register of Historic Places December 29, 2014. http://www.dahp.wa.gov/sites/default/files/WA_PierceCounty_CushmanSubstation_FINAL.pdf.

Tacoma City Light. Annual Report, 1952. Tacoma Public Library, Tacoma, Washington.

Tacoma Ledger. “Getting Ready to Receive Cushman Current.” October 11, 1924. Clippings Scrapbook, Tacoma Public Utilities Collection, Washington State Archives-Puget Sound Regional Branch.

-------. “Engineers Succeed in Silencing Noise at City Substation.” August 28, 1927. Clippings Scrapbook, Tacoma Public Utilities Collection, Washington State Archives-Puget Sound Regional Branch.

U.S. Bureau of the Census. Sixteenth Census of the United States, 1940. Washington, DC: National Archives and Records Administration, 1940.

------. Fourteenth Census of the United States, 1920. Washington, DC: National Archives and Records Administration, 1920.

Previous documentation on file (NPS):

____preliminary determination of individual listing (36 CFR 67 has been requested)
____previously listed in the National Register
____previously determined eligible by the National Register
____designated a National Historic Landmark
____recorded by Historic American Buildings Survey #_____
____recorded by Historic American Engineering Record # _____
____recorded by Historic American Landscape Survey # _____

Primary location of additional data:

__X__State Historic Preservation Office
____Other State agency
____Federal agency
__X__Local government
____University
____Other
Name of repository: _____

Historic Resources Survey Number (if assigned):

Cushman Substation (Amendment) — Name of Property
Pierce County, WA — County and State

10. Geographical Data

Acreage of Property .83 acres
(Do not include previously listed resource acreage)

UTM References ____**NAD 1927 or** ____**NAD 1983**
(Place additional UTM references on a continuation sheet.)

	Zone	Easting	Northing		Zone	Easting	Northing
1				3			
2				4			

Or Latitude/Longitude Coordinates
(enter coordinates to 6 decimal places)

	Latitude	Longitude		Latitude	Longitude
1	47.267245°	-122.488199°	3	47.266796°	-122.487392°
2	47.267256°	-122.487378°	4	47.266780°	-122.488155°

Verbal Boundary Description (Describe the boundaries of the property.)

The Cushman Substation Amendment incorporates Pierce County Tax Parcel 7475021883 (Adams St. Substation) into an adjusted footprint of the Cushman Substation nomination. The parcel is a rectangular parcel one-quarter the size of a city block. The boundary addition begins at the northwest corner of Parcel 7475021883, midblock on the south side of N 21st St. between N Proctor St. and N Adams St. The boundary then travels 125 feet east to the parcel's northeast corner at the intersection of N 21st St. and N Adams St. The boundary then travels 120 feet south along N Adams St. to the parcel's southeast corner on N Adams St., mid-block between N 21st St. and N 19th St. The boundary then travels east 125 feet to the parcel's southwest corner, mid-block between N Adams St. and N Proctor St. The boundary then travels 120 feet north to the parcel's northwest corner.

Boundary Justification (Explain why the boundaries were selected.)

The amendment adds the Adams St. Substation to the nomination as a functionally related unit to the Cushman Substation and removes the transmission tower lines from the original nomination. The Adams St. Substation was constructed at the same time as the Cushman Substation, was connected to it by trenching, and was necessary for stepping down power for distribution. The revised boundary includes the entirely of the parcels, which was historically owned and used by Tacoma Power and once included an associated switchyard associated with power distribution.

11. Form Prepared By

name/title Chrisanne Beckner, MS
organization Historical Research Associates, Inc. date January 2019
street & number 1904 Third Ave., Ste 240 telephone 206.343.0226
city or town Seattle state WA zip code 98101
e-mail cbeckner@hrassoc.com

Cushman Substation (Amendment) Pierce County, WA
Name of Property County and State

Additional Documentation

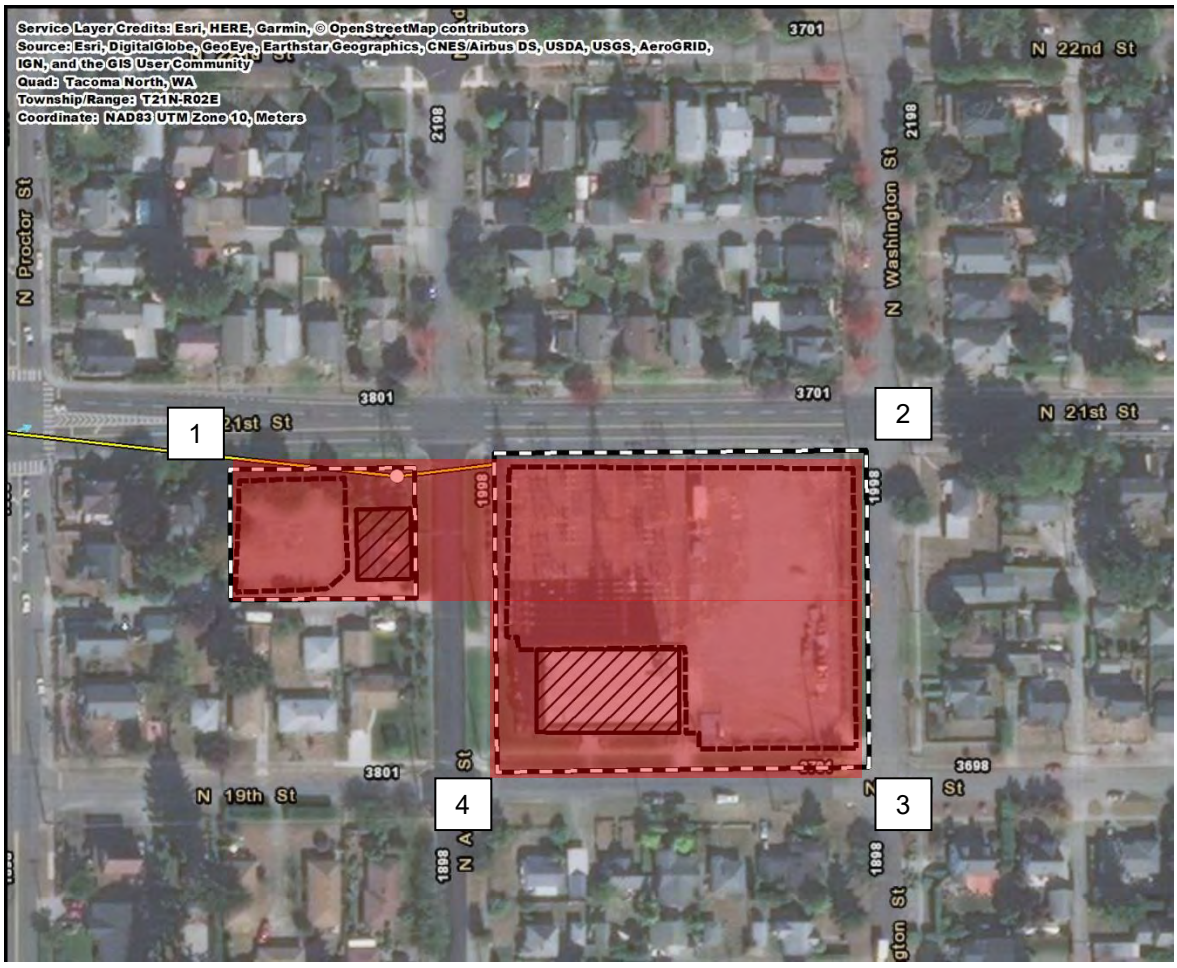
Submit the following items with the completed form:

- **Maps:** A **USGS map** (7.5 or 15 minute series) indicating the property's location.
  A **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- **Continuation Sheets**
- **Additional items:** (Check with the SHPO or FPO for any additional items.)

Map 1. Boundaries of amendment/added property - Adams St. Substation

1	47.267245°	-122.488199°		3	47.266796°	-122.487392°	
	Latitude	Longitude			Latitude	Longitude	
2	47.267256°	-122.487378°		4	47.266780°	-122.488155°	
	Latitude	Longitude			Latitude	Longitude	

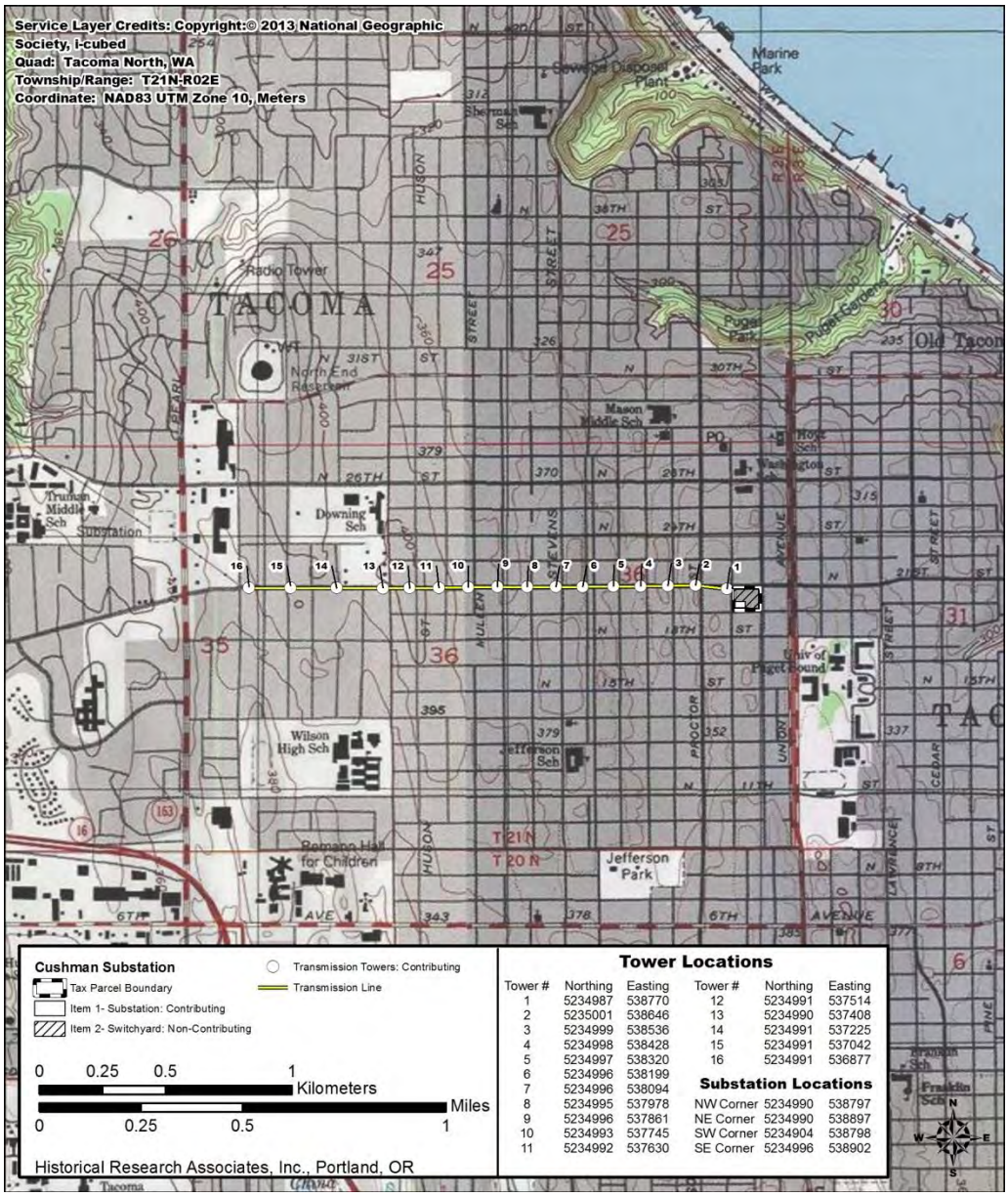
Cushman Substation (Amendment) Pierce County, WA
Name of Property County and State



Map 2. Revised combined boundaries of Cushman Substation and Adams St. Substation

1	47.267275°	-122.488177°	3	47.266341°	-122.485676°
	Latitude	Longitude		Latitude	Longitude
2	47.267266°	-122.485673°	4	47.266332°	-122.487282°
	Latitude	Longitude		Latitude	Longitude

Cushman Substation (Amendment) Pierce County, WA
Name of Property County and State



Map 3. Previously listed topographical map of Cushman substation and Tower locations showing UTM reference points.

Cushman Substation (Amendment)
Name of Property

Pierce County, WA
County and State

Map 4. Site plan of Cushman Substation and Adams St. Substation

Figure 1. The site of the Adams St. Substation as construction begins, view north, 1925. Courtesy of Tacoma Power.

Figure 2. Construction of the Adams St. Substation continues, view north, 1925. Courtesy of Tacoma Power.

Figure 3. Adams St. Substation, nearing completion, view southeast, 1925. Courtesy of Tacoma Power.

Figure 4. Steel lattice tower, constructed adjacent to the Adams St. Substation, view south, 1925. Courtesy of Tacoma Power.

Figure 5. Adams St. Substation, nearly complete, view northwest, 1925. Courtesy of Tacoma Power.

Figure 6. Adams St. Substation, shown beside Cushman Substation, view northeast, 1925. Courtesy of Tacoma Power.

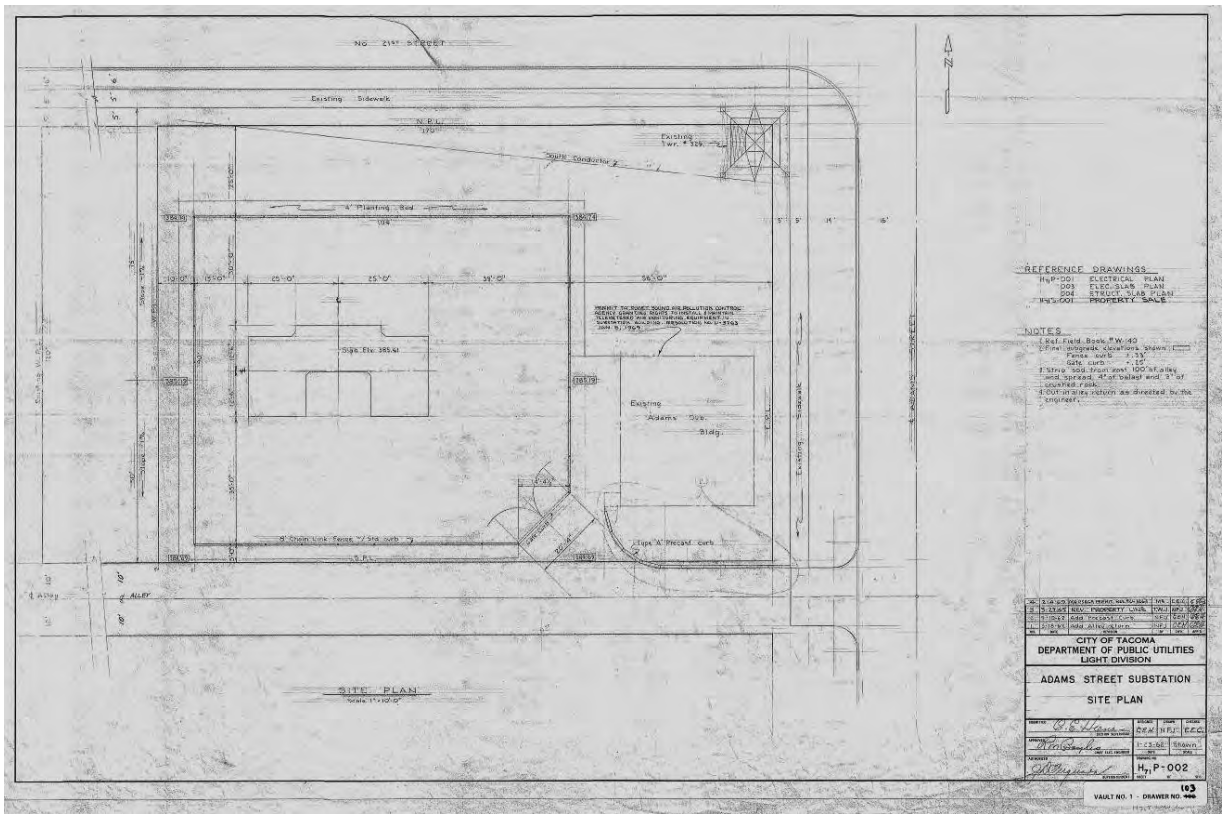


Figure 7. Adams St. Substation, site plan, 1968. Courtesy of Tacoma Power.

Figure 8. Adams St. Substation, elevation drawings, 1925. Courtesy of Tacoma Power.

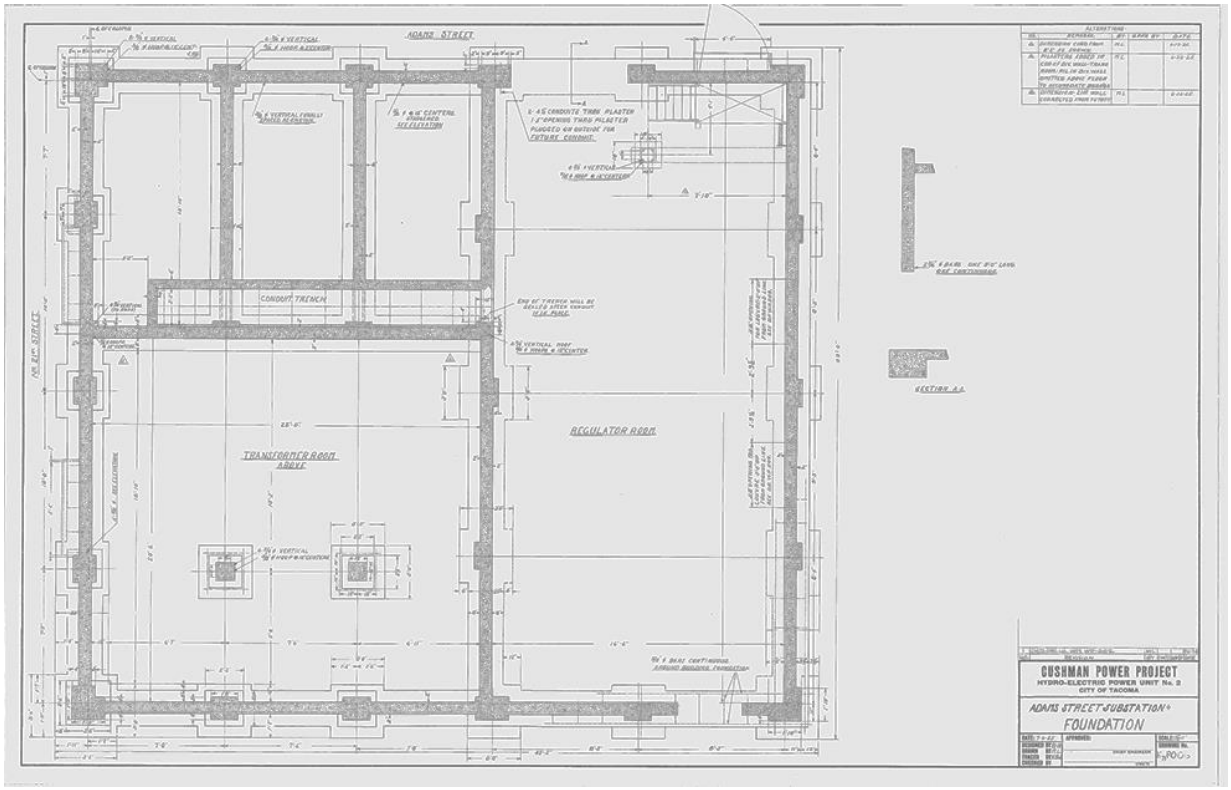


Figure 9. Adams St. Substation, foundation plan, 1925. Courtesy of Tacoma Power.

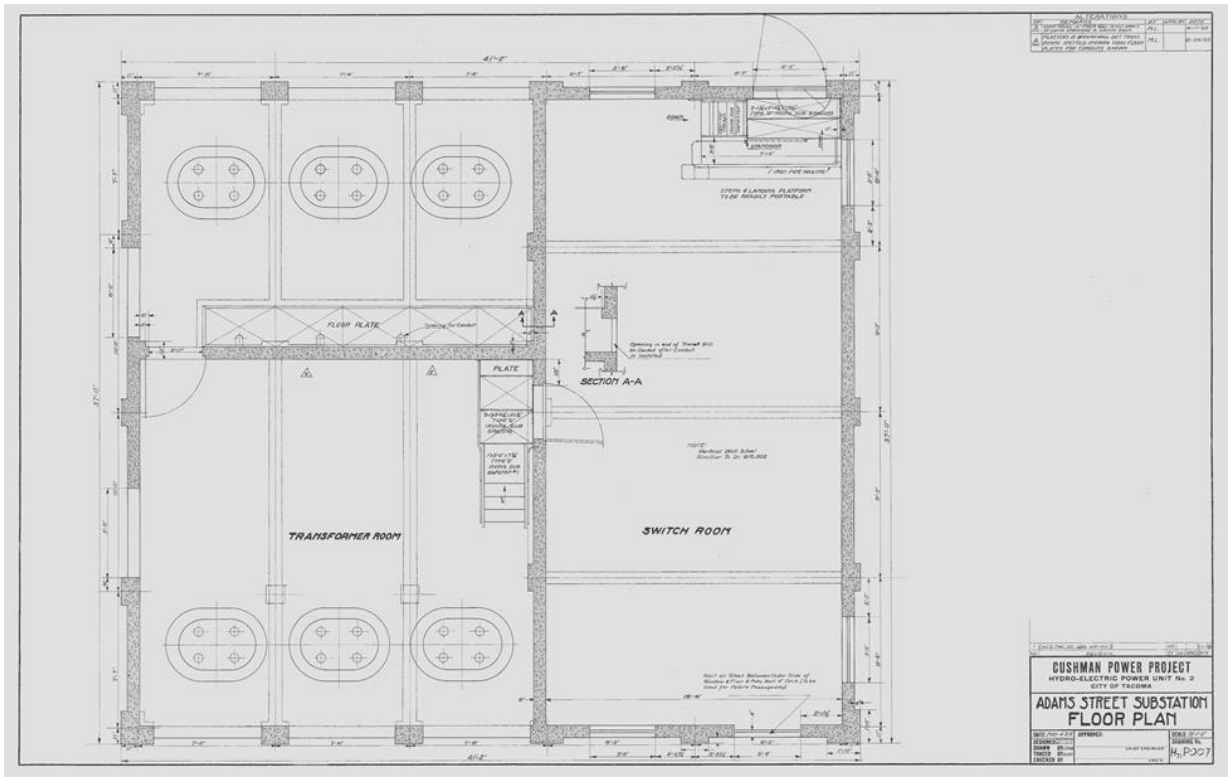


Figure 10. Adams St. Substation, floor plan, 1925. Courtesy of Tacoma Power.

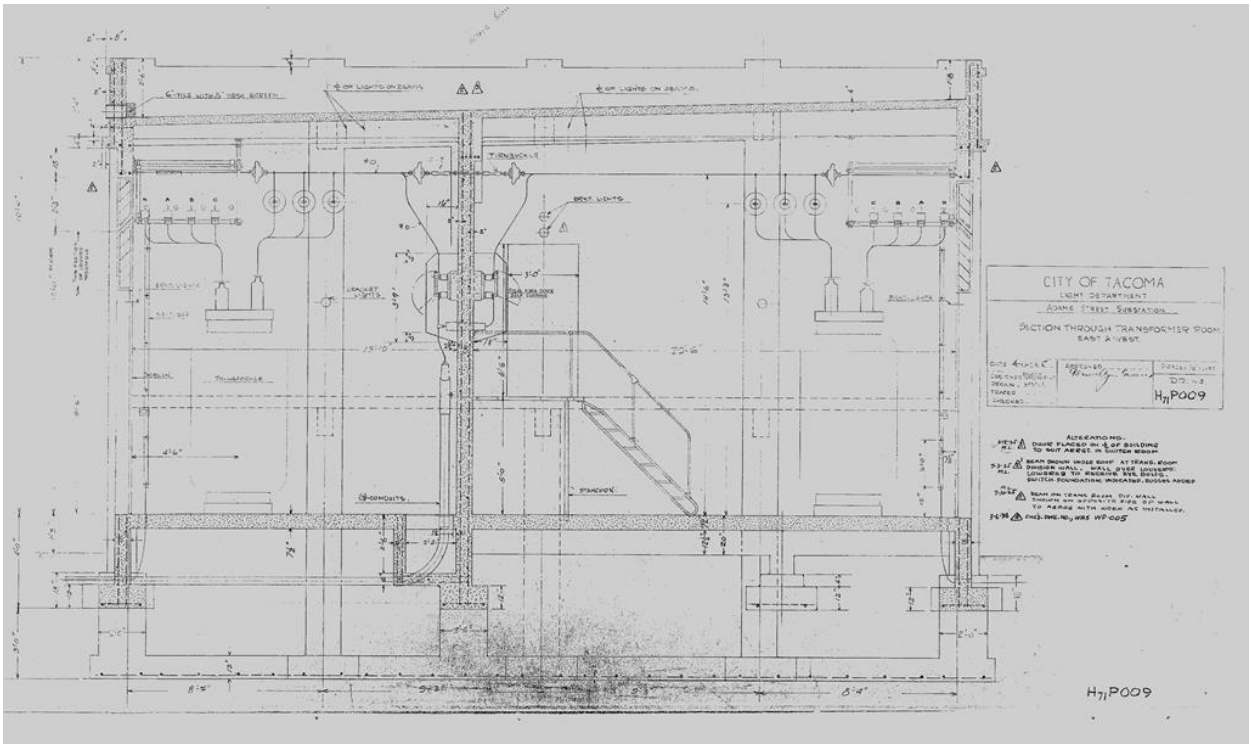


Figure 11. Adams St. Substation, east–west section, transformer room, 1925. Courtesy of Tacoma Power.

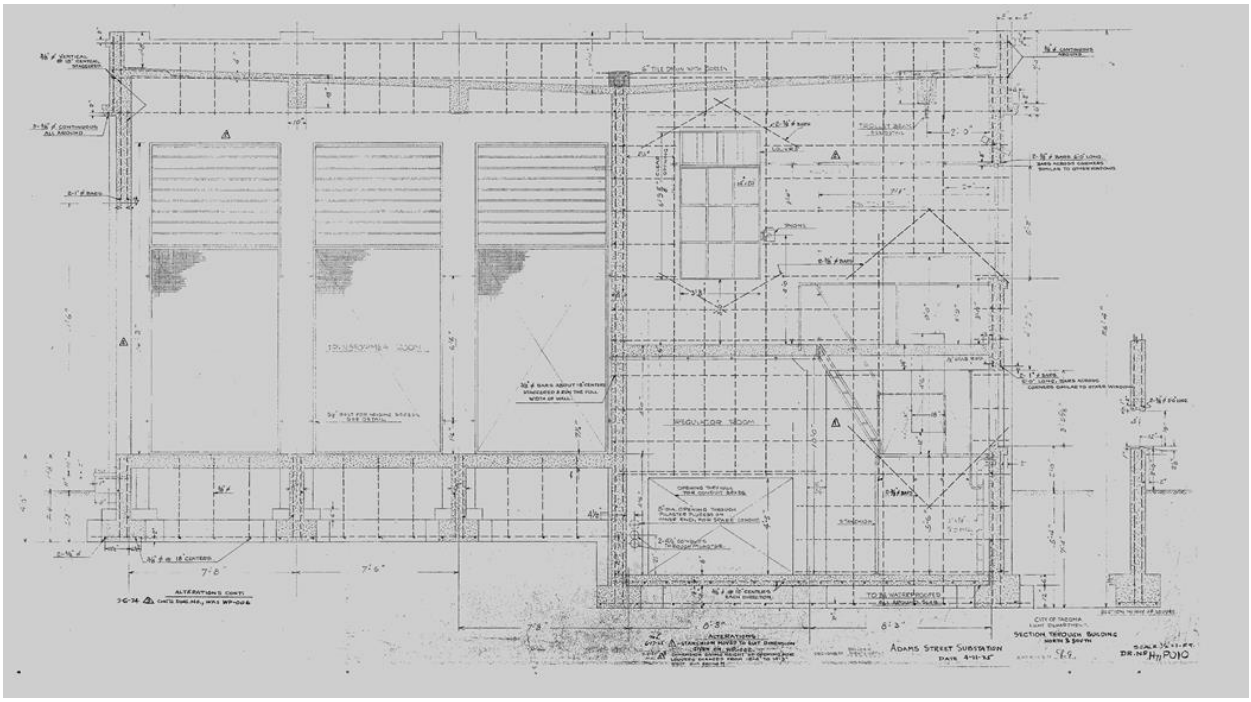


Figure 12. Adams St. Substation, north–south section, 1925. Courtesy of Tacoma Power.

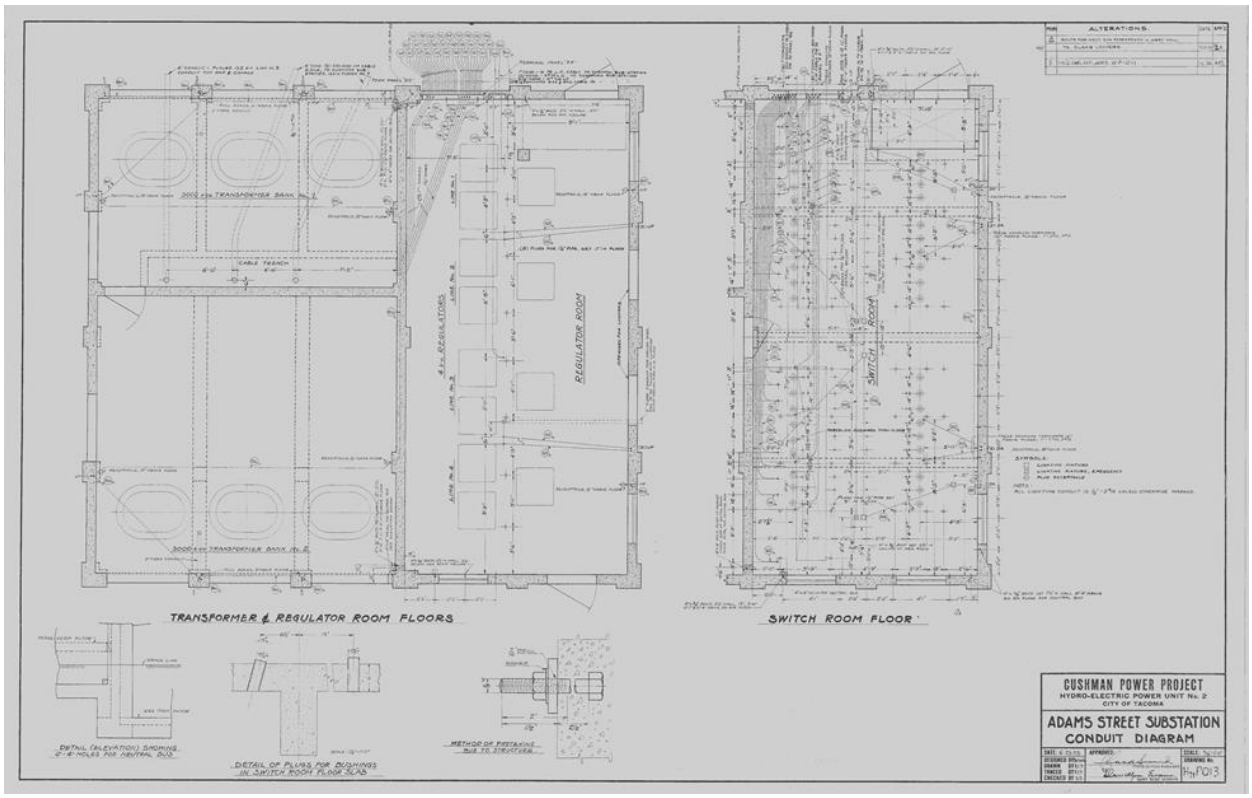


Figure 13. Adams St. Substation, conduit diagram, 1925. Courtesy of Tacoma Power.

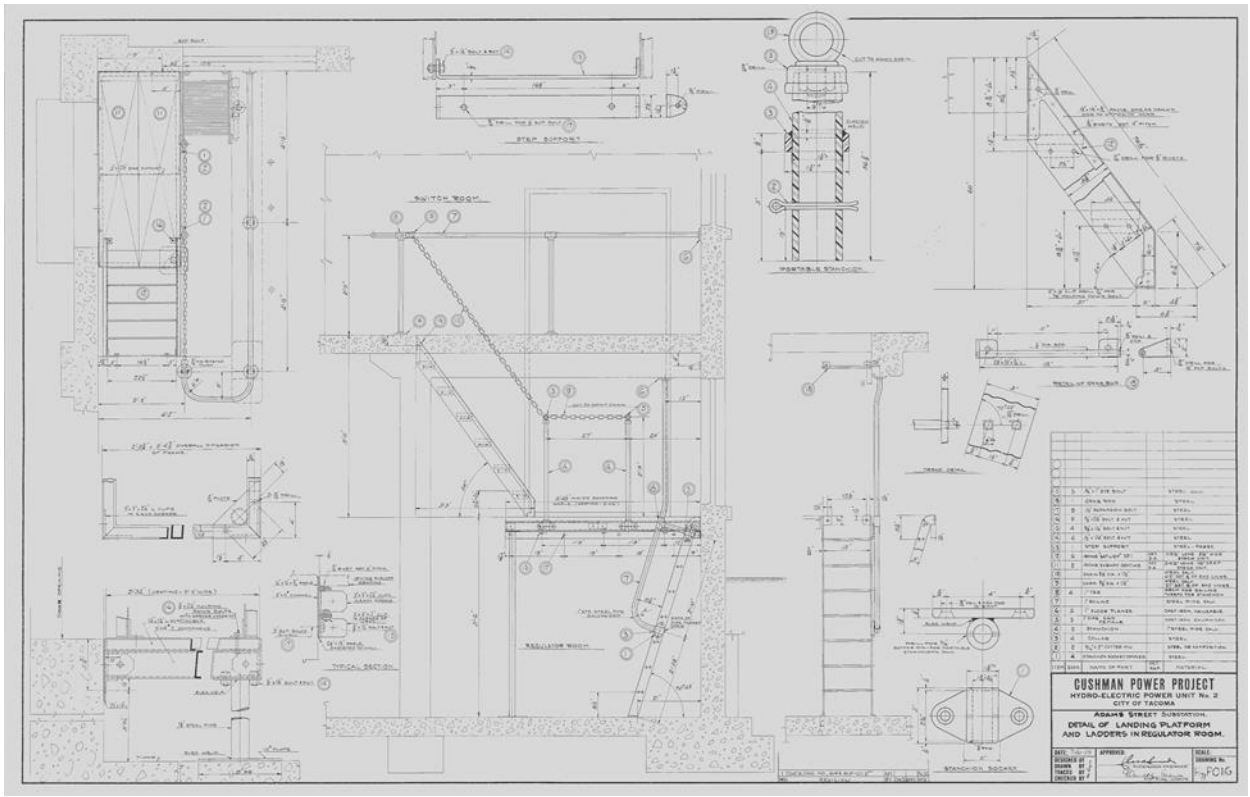


Figure 14. Adams St. Substation, detail drawings, 1925. Courtesy of Tacoma Power.

Photographs:

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map.

Name of Property: Adams St. Substation
City or Vicinity: Tacoma
County: Pierce
State: Washington
Photographer: Chrisanne Beckner, MS, and Heather Lee Miller, MS
Date Photographed: September 2017–April 2018

Photo 1 of 13. WA_PierceCounty_AdamsSt.Substation_0001. Adams St. Substation, primary façade, view west.

Photo 2 of 13. WA_PierceCounty_AdamsSt.Substation_0002. Adams St. Substation, oblique, view northwest.

Photo 3 of 13. WA_PierceCounty_AdamsSt.Substation_0003. Adams St. Substation, south elevation, view north.

Photo 4 of 13. WA_PierceCounty_AdamsSt.Substation_0004. Adams St. Substation, oblique, view northeast.

Photo 5 of 13. WA_PierceCounty_AdamsSt.Substation_0005. Adams St. Substation, west elevation, view southeast.

Photo 6 of 13. WA_PierceCounty_AdamsSt.Substation_0006. Adams St. Substation, north elevation, view south.

Photo 7 of 13. WA_PierceCounty_AdamsSt.Substation_0007. Adams St. Substation, oblique, view southwest.

Photo 8 of 13. WA_PierceCounty_AdamsSt.Substation_0008. Adams St. Substation, interior, regulator room, lower level, view east.

Photo 9 of 13. WA_PierceCounty_AdamsSt.Substation_0009. Adams St. Substation, interior, regulator room, lower level, view west.

Photo 10 of 13. WA_PierceCounty_AdamsSt.Substation_0010. Adams St. Substation, interior, switch room, upper level, view west.

Photo 11 of 13. WA_PierceCounty_AdamsSt.Substation_0011. Adams St. Substation, interior, transformer room, view west.

Photo 12 of 13. WA_PierceCounty_AdamsSt.Substation_0012. Adams St. Substation, interior, transformer room, view south.

Photo 13 of 13. WA_PierceCounty_AdamsSt.Substation_0013. Adams St. Substation, interior, transformer room, view north.

Cushman Substation (Amendment) Pierce County, WA
Name of Property County and State

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

name City of Tacoma (Pat McCarty, Generation Manager, Tacoma Power)

street & number 3628 South 35th Street telephone 252-502-8600

city or town Tacoma state WA zip code 98409

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management. U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.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UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

Requested Action:	Boundary Update
Property Name:	Cushman Substation (Boundary Increase and Decrease)
Multiple Name:	
State & County:	WASHINGTON, Pierce

Date Received:	Date of Pending List:	Date of 16th Day:	Date of 45th Day:	Date of Weekly List:
2/25/2019	3/14/2019	3/29/2019	4/11/2019	

Reference number:	BC100003608
Nominator:	SHPO

Reason For Review:

__ Appeal	__ PDIL	__ Text/Data Issue
__ SHPO Request	__ Landscape	__ Photo
__ Waiver	__ National	__ Map/Boundary
__ Resubmission	__ Mobile Resource	__ Period
X Other	__ TCP	__ Less than 50 years
	__ CLG	

__X__ Accept _____ Return _____ Reject __**4/5/2019**__ Date

Abstract/Summary Comments: The Cushman Substation (Boundary Increase and Decrease) documentation supports corrections to the 2014 listing for the Cushman Substation, reflecting the loss of the 16 contributing North 21st Street power line towers and the addition of the adjacent Adams Street Substation, a transformer house for the Cushman facility. The 1925 Adams St. substation, put into service in 1926, is a two-story, poured board-form concrete building with minimalist Classical detailing. Unlike the prominent, highly styled Cushman Substation the Adams Street station was utilitarian in character and acted as an important support facility to the larger station allowing the necessary step down in power voltage to serve the company's customers. The boundary of the 2014 listing is decreased to remove the entire powerline length as a result of the demolition and removal of the steel latticework towers.

Recommendation/ Criteria: Accept Boundary Increase and Decrease; NR Criteria A and C

Reviewer Paul Lusignan Discipline Historian

Telephone (202)354-2229 Date 4/5/2019

DOCUMENTATION: see attached comments : No see attached SLR : **Yes**

Allyson Brooks Ph.D., Director
State Historic Preservation Officer

Paul Lusignan
Keeper of the National Register
National Register of Historic Places
1849 "C" Street NW, MS 7228
Washington, D.C. 20240

February 21, 2019

RE: **Washington State NR Nomination**

Dear Paul:

Please find enclosed an amendment for:

- **Cushman Substation - Amendment – Pierce County, WA**
  (an all-electronic nomination)

Note this is a revision of a previously listed resource in which the boundaries are being adjusted to eliminate one section (which has been demolished) and add an additional section for a functionally related resource.

Should you have any questions regarding this nomination please contact me anytime at (360) 586-3076. I look forward to hearing your final determination on this property.

Sincerely,

Michael Houser
State Architectural Historian, DAHP
360-586-3076
E-Mail: michael.houser@dahp.wa.gov