

BROAD STREET Substation Inductor Project

Upgrading our power grid to meet growing demand and reduce outages NOV. 2017

Seattle City Light has partnered with Puget Sound Energy and the Bonneville Power Administration to improve the reliability of the regional electric transmission grid. Since the early 2000s, the transfer of electricity around the Puget Sound area sometimes has been limited because of congestion in this grid. The Broad Street Substation Inductor Project is one of a number of projects that will reduce congestion and upgrade the reliability of the transmission system, lessening the risk of regionwide customer power outages in the future.

The Broad Street Substation is located just east of Seattle Center, in a corner of the Uptown Neighborhood that is undergoing change due to the Alaskan Way Viaduct Replacement Project.

What are the planned improvements?

Broad Street Substation improvements consist of installing new electrical equipment called inductors. Inductors are large electrical wire coils that store and help regulate the flow of electricity on the transmission line. They improve reliability by balancing the electrical load that travels through the regional power grid.

Where will the new equipment go?

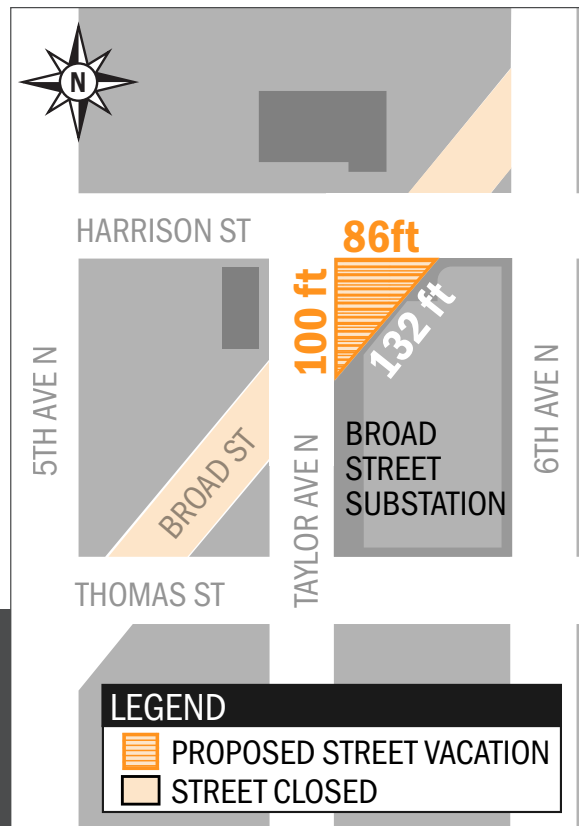
The Broad Street Substation was built in 1951 and has been modified over the years to meet our region's growing demand. Past modifications, in addition to the development that has occurred around the substation, limit the ability to install the new inductors within the existing fence line of the substation. The size, weight and layout requirements of the new equipment dictate the need for a significant amount of space. Seattle City Light determined that placing the new equipment within the substation's current footprint is technically infeasible and would constrain any future improvements. Given this challenge, City Light looked at options to expand the substation. Because of the street grid and surrounding land uses, options for substation expansion are severely limited.



Seattle City Light

seattle.gov/light

Translations available upon request at 206-684-3000
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Finding a design solution to the space challenge

As part of the Alaskan Way Viaduct Replacement Project, a section of Broad Street between Mercer Street and 5th Avenue N has been permanently closed in order to reconnect the street grid across Aurora Avenue N.

The Broad Street closure at Taylor Avenue N and Harrison Street effectively made a small triangular area at the northwest corner of the substation available for the new equipment. The area is large enough to accommodate the new equipment,

and City Light has designed the improvements to fit within that area and to integrate with the rest of the substation.

Even though Broad Street is no longer in use, City Light is still required to go through what's called "street vacation." Street vacation would transfer ownership of the portion of what was Broad Street from the Seattle Department of Transportation (SDOT) to Seattle City Light.

What is a "street vacation"?

Street vacation refers to the process whereby a property owner (in this case, City Light) petitions City Council to acquire adjacent street

right-of-way for use other than as a public roadway. The portion of Broad Street proposed for street vacation is a permanently closed road that is no longer in use and would be used for substation expansion. Public right-of-way is any property the City has a right to use for street purposes whether the right-of-way is used as a street or not. Street vacations require that the property owner provide a long-term public benefit to compensate for the loss of use of the public right-of-way. For more information about street vacations, go to: www.seattle.gov/transportation/streetvacations.htm

Staying involved

City Light is reaching out to area stakeholders early in the process to provide information about the project and to get input on the public benefits for the proposed street vacation. There will be additional opportunities for involvement, including open houses and a formal hearing that's part of the street vacation approval process.

Other ways to stay involved include:

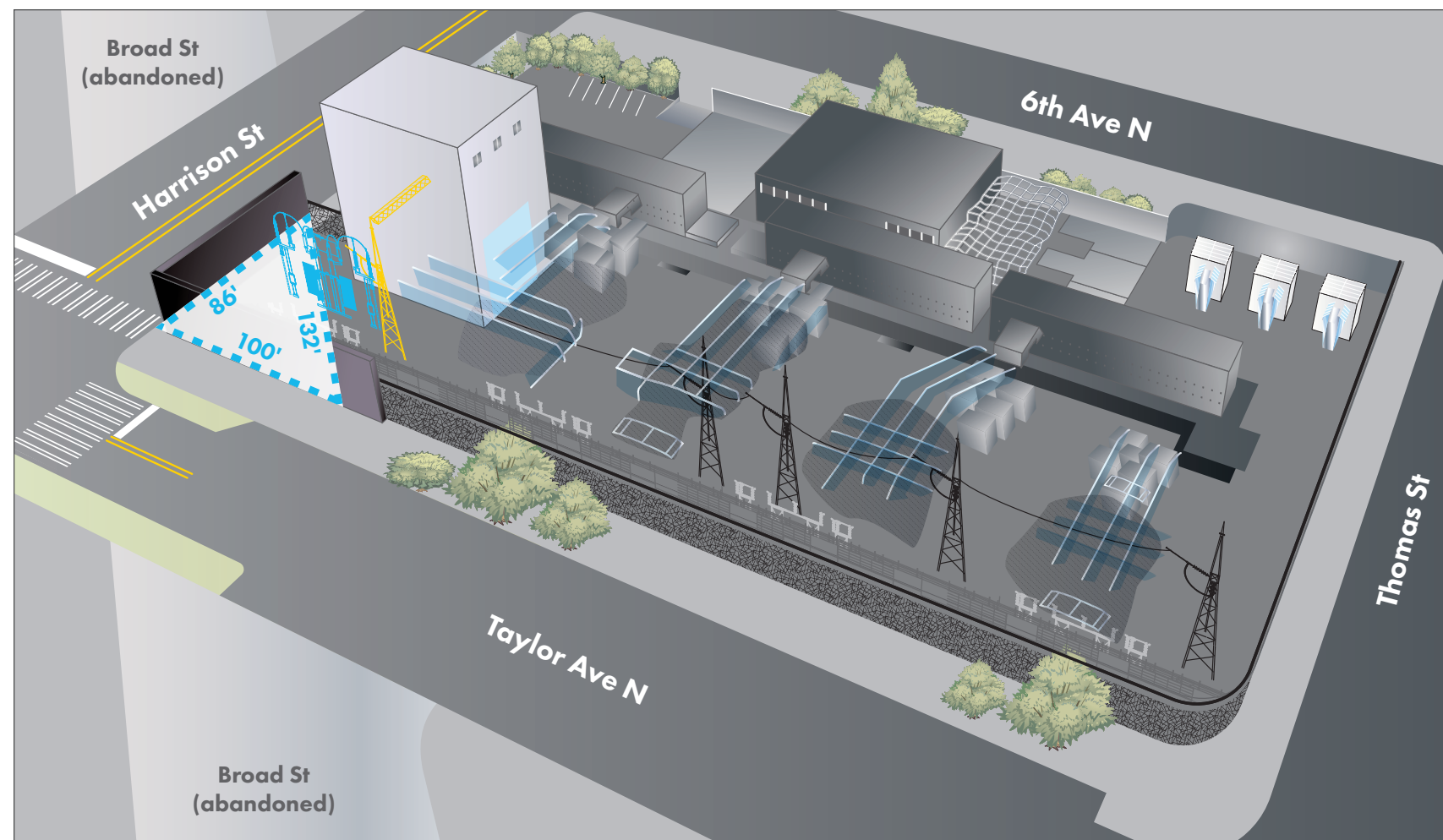
- Requesting a briefing for your group or organization
- Signing up for our listserv to receive email updates
- Calling our project hotline
- Visiting our website
- Following City Light on social media

City Light plans to install the new equipment in a 4,000-square-foot area in the northeast corner of the block. The existing substation is about 78,000 square feet.

Project schedule

City Light is preparing the technical designs for the substation improvements and has submitted a proposal to the Seattle Department of Transportation to begin the street vacation process. Design and permitting will continue through early 2018, and construction is planned to begin in late 2018.

	2016				2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Design	Preliminary Design								Final Design							
Street Vacation	Two Options				One Option				30% 60% 90%							
Permitting									(If Option A selected)							
Construction																
Public Outreach	[Continuous bar across all quarters]															



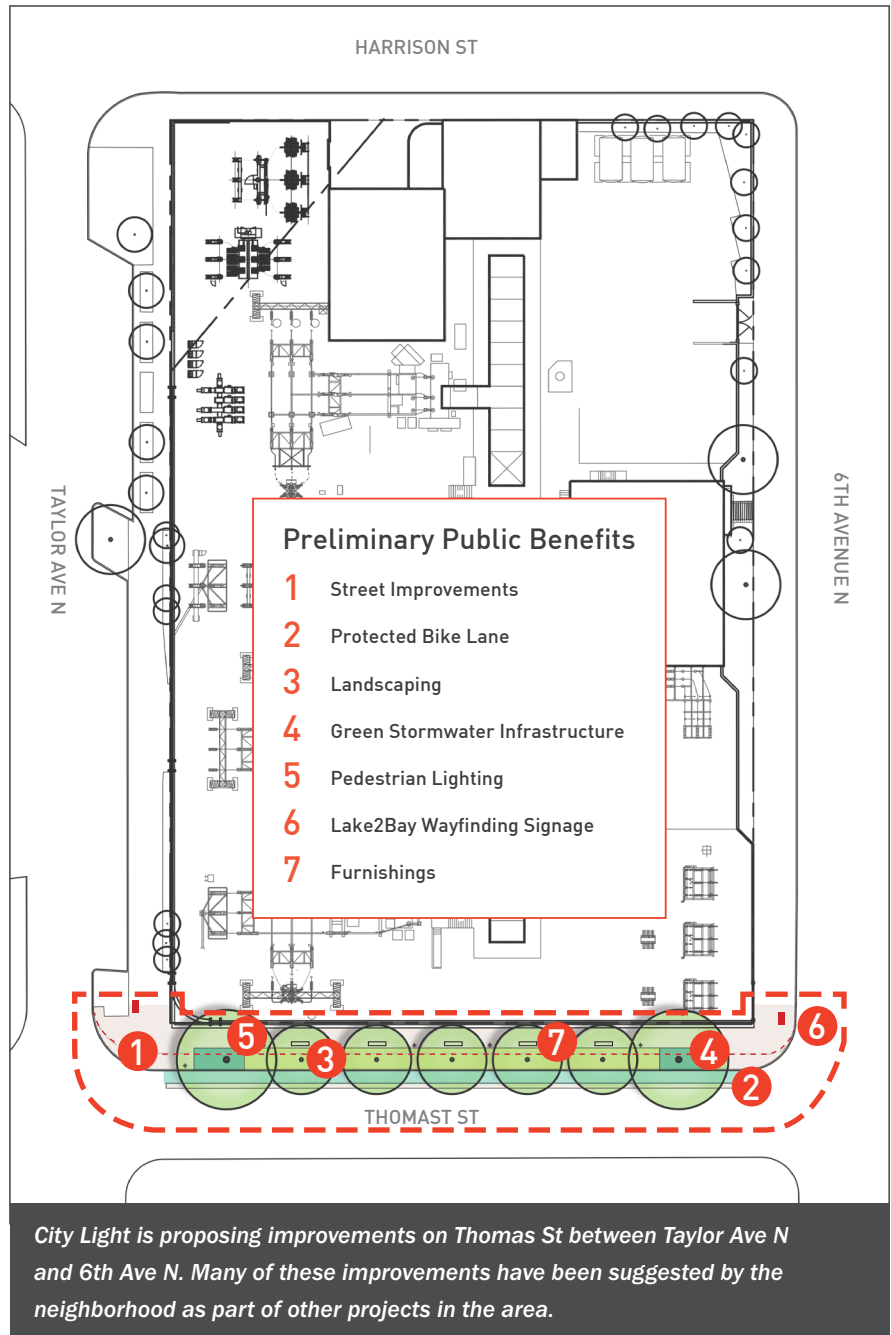
Expanding the substation keeps the height of the new equipment consistent with the existing substation, avoiding the visual impacts that would result from installing equipment on top of the substation's building.

Public benefits will be part of the design

Because City Light is proposing to remove a formerly public area from public use, it must provide public benefits that are equal to the value of that area. In its street vacation proposal, City Light will propose public benefits that it feels are in alignment with the value of the vacated area. Seattle City Council will ultimately determine if the proposal is sufficient.

Options for public benefits

The Alaskan Way Viaduct Replacement Project includes connecting Thomas and Harrison streets over Aurora Avenue N. SDOT has developed plans with the help of neighborhood stakeholders to improve both of these streets, and specifically to make Thomas a “Green Street.” Green Streets give priority to pedestrian circulation and open space over other transportation uses, and may include sidewalk widening, landscaping, traffic calming, and other pedestrian-oriented features. The Broad Street Substation Project could fund elements of the Thomas Green Street to satisfy the public benefit requirement.



Public help needed to determine public benefits

Helping to make Thomas Street a Green Street is just one example of the public benefits that could be provided. Public benefits have

not been determined, and we'd like to hear your ideas. Are there other improvements we could make that would help the neighborhood? Tell us what you think!



Seattle City Light

STAY CONNECTED

Sign up for our listserv: SCL_Broadsub@seattle.gov | Project Hotline: **206-801-3528**

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