

CITY COUNCIL AGENDA ITEM

CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Discussion of Utility Undergrounding for the 175 th Street (Stone to I-5) Project		
DEPARTMENT:	Public Works		
PRESENTED BY:	Tricia Juhnke, City Engineer		
ACTION:	<input type="checkbox"/> Ordinance	<input type="checkbox"/> Resolution	<input type="checkbox"/> Motion
	<input checked="" type="checkbox"/> Discussion	<input type="checkbox"/> Public Hearing	

PROBLEM/ISSUE STATEMENT:

The 2021-2026 Capital Improvement Plan identifies a project along N 175th Street from Stone Avenue N to Interstate 5. The project will maintain levels of service and promote safety by widening the roadway, constructing multi-modal improvements along the full length of the corridor, revising traffic channelization and providing intersection improvements at N 175th Street and Meridian Avenue N.

Staff is requesting direction from Council on the staff recommendation to include undergrounding of existing overhead utilities as part of the project. If Council supports this recommendation, the Project will advance with design and construction of utility undergrounding.

RESOURCE/FINANCIAL IMPACT:

The 2021 – 2026 Capital Improvements Program includes a summary of funding for the N 175th Street Project. The table below provides an updated project budget reflective of the most current engineers estimates (30% Complete). City expenditures for utility undergrounding are included in the table to support Council’s decision-making process. Impacts to City utility rate payers is discussed in depth in other sections of this report.

EXPENDITURES**Design**

Staff and Other Direct Expenses	\$533,000.00
Design Contract	\$4,789,529.00

Right of Way	\$7,100,000.00
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Construction	\$41,301,373.70
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<i>Utility Undergrounding (Design + Construction)</i>	<i>\$1,870,000.00</i>
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TOTAL	\$55,593,902.70
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REVENUE

WSDOT Surface Transportation Program	\$3,546,500.00
Transportation Impact Fees	\$6,076,498.96
Future Funds	\$45,970,903.74
TOTAL	\$55,593,902.70

In addition to these project costs, the undergrounding of electrical system would result in an increase to rate payers of approximately \$1.00 per billing period (once every two months) for 25 years.

RECOMMENDATION

No action is required tonight; this item is for discussion purposes only. Staff is seeking Council direction on the staff recommendation to proceed with utility undergrounding as part of the 175th Street (Stone Avenue N to I-5) project.

Approved By: City Manager **DT** City Attorney **MK**

INTRODUCTION

On February 1, 2021, the City Council provided direction to proceed with the design of utility undergoing to the 30% design level. In summer 2021, 30% design was achieved. This staff report is a continuation of the discussion regarding the inclusion of utility undergrounding in the project scope with the additional information developed to date.

BACKGROUND

The N 175th Street Project, from Stone Avenue N to Interstate 5 (see Attachment A, Project Vicinity Map) is intended to support growth and promote safety by widening the roadway, constructing multi-modal improvements along the full length of the corridor, revising traffic channelization, and providing intersection improvements at N 175th Street and Meridian Avenue N. This project is also designated as one of seven growth projects in the City's Transportation Master Plan and is eligible to utilize Transportation Impact Fees (TIF) for local funding match against grant funds.

The N 175th Street Project will provide mobility and safety improvements to pedestrians, cyclists and drivers using this corridor. Planned improvements may include reconstruction of the existing street to provide two traffic lanes in each direction; medians and turn pockets; bicycle lanes; a multi-use path; curb, gutter, and sidewalk with planter strip where feasible; illumination; landscaping; and retaining walls. Intersections with high accident rates will also be improved as part of this project.

On July 13, 2020, staff presented a project update to the City Council which include a summary of the initial phase of project public outreach (Phase 1 Public Outreach) and presentation of the draft design concepts. The staff report for this Council presentation can be found at the following link:

<http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/council/staffreports/2020/staffreport071320-9b.pdf>.

The City has policies supporting undergrounding of overhead power and communications utilities on City projects in the Comprehensive Plan (Comp Plan), the Shoreline Municipal Code (SMC), and the Seattle City Light (SCL) franchise agreement. The Comp Plan calls for the City to “promote the undergrounding of new and existing electric distribution lines... as streets are improved and/or areas are redeveloped...”

SMC Section 13.20.050 designates that undergrounding will occur when (portion relevant to this issue):

- A. The City Council designates for undergrounding a capital improvement or public works project, including sidewalk project and roadway projects, which will disturb existing facilities or will facilitate the installation of a trench for undergrounding facilities.

On March 16, 2020, the Council discussed and defined criteria to use in evaluating projects for undergrounding of overhead utilities. The March 16, 2020 staff report can be found at the following link:

<http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/council/staffreports/2020/staffreport031620-9a.pdf>.

On February 1, 2021, staff presented a recommendation to include undergrounding of the existing overhead utilities as part of the Project. Guidance from Council included advancing the design of undergrounding to the 30% design level and continuing the discussion when the 30% design is available. The staff report for this discussion item can be found at the following link:

<http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/council/staffreports/2021/staffreport020121-8a.pdf>.

DISCUSSION

The undergrounding criterion discussed with the City Council on March 16, 2020 has been applied for the N 175th Project with the Project separated into two segments – Stone Avenue N to Meridian Avenue N and Meridian Avenue N to I-5. The same discussion criteria was provided in the February 1, 2021 staff report; however, the data and tables below have been updated based on the 30% design. Table 1 below summarizes the information. The criteria are not weighted but provide a visual for discussion.

Takeaways from the criterion and project features include:

- The Project meets the City’s requirements for undergrounding.
- The Project is eligible to use the City’s SCL franchise agreement for undergrounding.
- The project will require relocation of the existing overhead utilities.
- The project will require trenching for (at a minimum) the installation of stormwater conveyance.
- The project is not within an area anticipating re-development, but the segment between Stone Avenue N and Meridian Avenue N has mix of uses including single and multi-family residential, a school, City property and a church.
- The project would continue the undergrounding completed as part of the Aurora project that terminates at Shoreline City Hall.

Table 1 – Evaluation of Undergrounding Criteria

Undergrounding Criterion N 175th Street (Stone Avenue N to I-5)		
1.	Meet City Code?	
	a. Is there an associated capital project?	Y
	b. Electrical carrying facilities over 35kV?	N
2.	Eligible for use of Seattle City Light Franchise Undergrounding Agreement?	Y
3.	Sufficient size?	
	a. Length greater than 500’ or one block?	Y
	b. Estimated cost over \$1.5M?	Y

4.	Estimated surcharge cost to Shoreline residents	
	a. Project surcharge less than \$1.00/2-mo.?	\$1.00 (\$0.0012/KWH)
	b. Cumulative surcharge less than \$10.00/2-mo.?	\$6.55 (\$0.0081/KWH)
5.	Support redevelopment?	
	a. Within or adjacent to a high-density zoning?	N
	b. Is the project on a principal or minor arterial?	Principal
	c. Facilitate structures closer to the property line?	N
	d. Will it support needed electrical system upgrades?	N/A
6.	Other reasons to support or preclude undergrounding?	
	a. Can the project schedule accommodate undergrounding?	Y
	b. Adjacent to roadways with no overhead utilities?	Y
	c. Opportunity to coordinate with other undergrounding projects	Y
	d. Other items for consideration?	None

Note 1: The coloring in the table provides a visual cue to help show where the criterion supports or does not support moving forward with undergrounding. Green color coding signifies strong support, yellow signifies medium support and red signifies low or no support.

Projected Undergrounding Cost

Undergrounding costs for utilities fall into two categories – Seattle City Light (SCL) and other overhead utilities, such as Comcast, Lumen and Zply.

Seattle City Light (SCL)

The City’s franchise agreement with SCL provides a framework for passing undergrounding costs to utility ratepayers in Shoreline’s city limits. The repayment schedule is generally a 25-year period with adjustable rates set by SCL. For this and previous discussions with Council, a 5% interest rate is assumed. Actual interest rates will not be determined until a later date. Staff will continue coordinating with SCL on design and rates.

The SCL franchise agreement reduces the total cost of SCL undergrounding by the cost if the utility were relocated overhead. Staff presented rate payer impacts of \$1.10 per billing period to Council in the February 1, 2021 Council presentation. Ratepayer impacts have been updated based on the 30% design and current SCL revenue projections. The total estimated cost to rate payers is now \$5,900,000, and the total increase on each ratepayer bill is estimated to be \$1.00 (rate payers are billed once every two months.) This estimated increase, when combined with existing undergrounding charges, would result in a cumulative surcharge of \$6.55 per billing cycle through December 2032 when the existing surcharge for the North City undergrounding project sunsets.

Table 2 below provides an overview of the SCL undergrounding cost estimates by undergrounding project:

Table 2 – Seattle City Light Undergrounding Project Cost Estimate

Project	Surcharge (\$/KWh)	Avg Residential Charge	Sunset Date
North City Undergrounding	0.0007	\$0.56	Dec-32
Aurora Phase 1 Undergrounding	0.0017	\$1.37	May-33
Aurora Phase 2 Undergrounding	0.0018	\$1.45	Dec-37
Aurora Phase 3A Undergrounding	0.0005	\$0.40	Jul-40
Aurora Phase 3B Undergrounding	0.0022	\$1.77	Dec-41
Current Total	0.0069	\$5.55	
<i>175th (Stone to I-5) Potential Undergrounding</i>	<i>0.0012</i>	<i>\$1.00</i>	
Total (at Implementation) if 175th Undergrounding Project is Added	0.0081	\$6.55	

Note 1: This table assumes average power consumption and forecasting provide by SCL in February 2021.

Note 2: The Sunset Date Estimated Average Cumulative Monthly Surcharge is the end of the 25-year financing period when the amount after the project rolls off rate payer bills. (e.g. with 175th Street included, in December 2032, the average surcharge will drop by \$0.56 from \$6.55 to \$5.99, then drop again to \$4.62 in May 2033, etc.).

Note 3: Future rate payer impacts from undergrounding on the 145th Street corridor are not included in this table.

Other Overhead Utilities

The City’s franchise agreements with Comcast and Lumen require that the City provide trenching, backfill, restoration, traffic control and service conversions. Each utility company is required to furnish and install the conduit and structures/vaults and wires. The utilities are also responsible for permitting costs. Other requirements are also included in the franchise; however, these items have a minimal cost impact and, thus, will not be discussed in greater detail. Costs of additional requirements are included in design and construction cost contingencies.

The City’s franchise agreement with Ziplly does not include a prescribed cost share agreement. Ziplly’s historic use of the right-of-way prior to statehood affords the company (Per RCW 80.36.040) the right to maintain their use of the right of way without providing compensation to the City. However, in the situation where utilities are required to relocate or underground for a City transportation project, court cases indicate that the Utility must pay for the cost of relocation overhead (relocation project) or the difference between relocating overhead and undergrounding (undergrounding project). For this project, it is assumed that the City will pay the difference between overhead relocation and undergrounding. The difference is assumed to be approximately 33% (1/3) of the total cost to underground Ziplly facilities.

The distribution or responsibility for costs between the City and utilities based on franchise agreement requirements are summarized in Table 3 below:

Table – 3 Franchise Summary of responsibility for costs

	Engineering by City	Engineering by Utility	Permits	Earthwork	Conduit, Vaults, & Wire	Service Conversions	Traffic Control
SCL	Rate Payers	Rate Payers	City	Rate Payers	Rate Payers	City	Rate Payers
Comcast	City	Utility	Utility	City	Utility	City	City
Lumen	City	Utility	Utility	City	Utility	City	City
Ziply	See Note 1	See Note 1	See Note 1	See Note 1	See Note 1	See Note 1	See Note 1

Note 1 – Assumes that the City pays the difference in cost between overhead relocation and undergrounding.

Based on these cost responsibilities the City capital project will need to incur approximately \$1,870,000 in additional costs for undergrounding associated with Comcast, Lumen and Ziply. Undergrounding costs are summarized in Table 4 below:

TABLE 4 -City Expenditures by Franchise Utility

SCL	NA
Comcast	\$668,000
Lumen	\$668,000
Ziply	\$534,000
TOTAL	\$1,870,000

Based on the analysis of the City’s undergrounding criteria, SCL rate payer impacts, and City capital expenditures, staff recommends that undergrounding be included in N 175th Street Project.

COUNCIL GOAL(S) ADDRESSED

This project supports Council Goal 2: “Improve Shoreline’s infrastructure to continue the delivery of highly-valued public service,” and Council Goal 3: “Continue preparation for regional mass transit in Shoreline.”

RESOURCE/FINANCIAL IMPACT

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ATTACHMENTS

Attachment A: Project Vicinity Map

N 175th St Stone Ave N to I-5

Map Feature

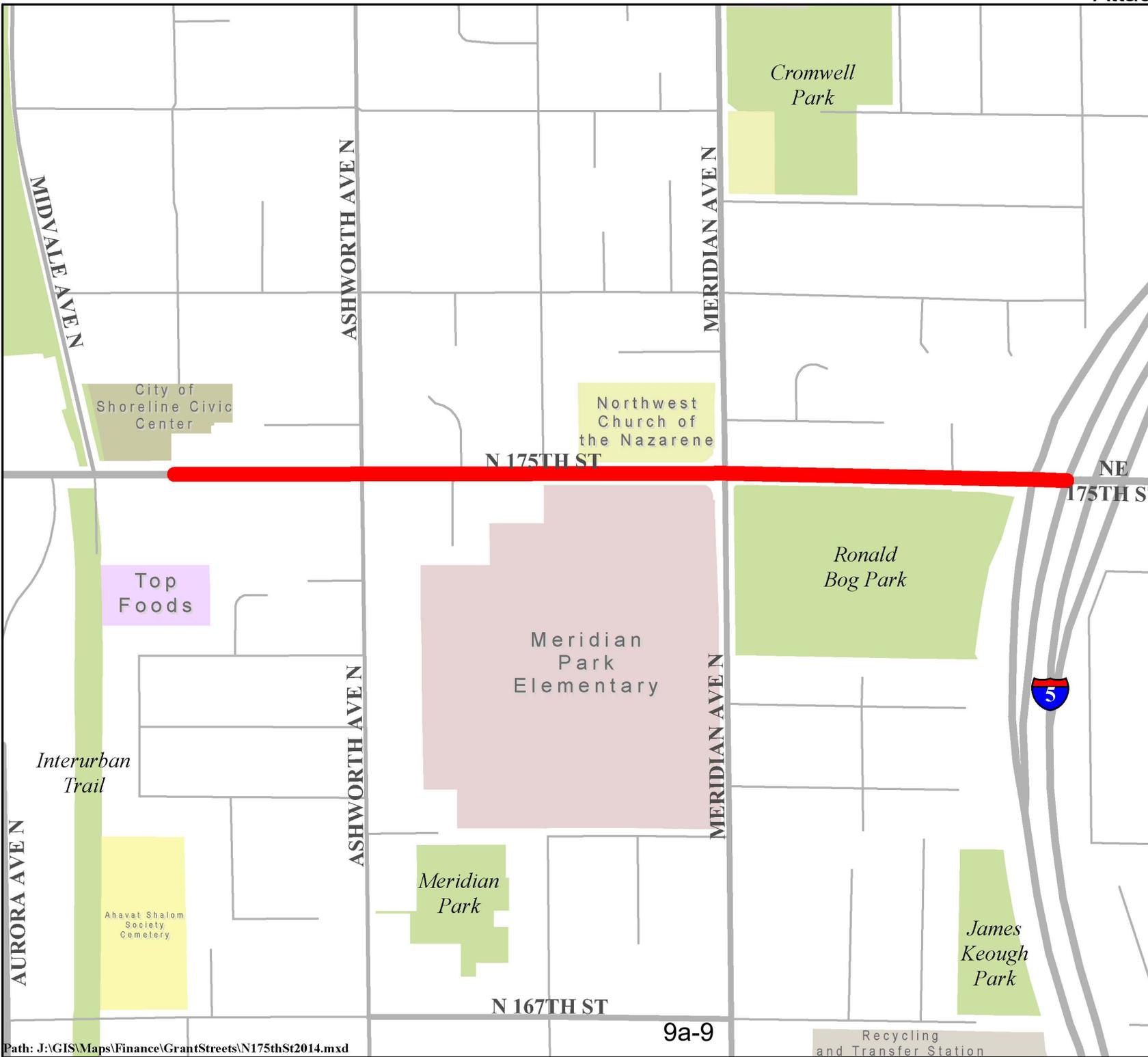
-  N 175th St Project
-  Other City Park
-  City of Shoreline Park

Landmark

-  Cemetery
-  Commercial
-  Facility
-  Golf Course
-  Government
-  Library
-  Open Space
-  Other
-  Recreation
-  Religious
-  School
-  Transportation



User: jclark
Date: 3/11/2014



Town of Woodway

City of Edmonds

City of Mountlake Terrace

Point Wells

Lake Ballinger

Echo Lake

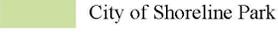
Puget Sound

City of Lake Forest Park

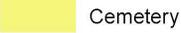
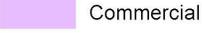
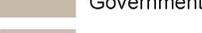
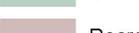
City of Seattle

N 175th St Stone Ave N to I-5

Map Feature

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0 485 970 1,940 2,910 3,880 Feet



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