



**MEMO TO:** Members of the City Council

**FROM:** Mayor John Marchione

**DATE:** August 28, 2018

**SUBJECT: Sound Transit Light Rail Extension to Downtown: Street Closures During Construction and Marymoor Village Station**

**I. RECOMMENDED ACTION**

Consider staff recommendations concerning street closures during light rail construction, and the layout of the Marymoor Village station. Staff will seek Council direction on these topics at the August 28 study session.

**II. DEPARTMENT CONTACTS**

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**III. DESCRIPTION/BACKGROUND**

**Link Light Rail to Redmond Project Summary**

Sound Transit is extending light rail from Seattle to Redmond, with four stations in Redmond. Two stations, Overlake Village Station and the Redmond Technology Station, will open in Overlake in 2023. These stations are now under construction. Two stations will open in 2024, one in Southeast Redmond and another in Downtown Redmond. The Downtown extension is in design, with Sound Transit preparing to solicit proposals from design-build teams this fall to complete design and construct the extension.

**Light Rail Extension to Downtown**

The Downtown Redmond Link Extension is the 3.4-mile extension of light rail from the future Redmond Technology Station at NE 40th St. to the terminus station in Downtown Redmond. Staff last updated the City Council on the Downtown Redmond Link Extension on April 10, 2018. At the April 10 study session, City staff described key activities during 2018 and described agreements and code amendments that staff would bring forward to Council as part of the project.

Major project activities since April include:

- Ongoing development of project requirements and drawings
- Second and third reviews of complete design-build procurement documents (April and August 2018, respectively)
- Continued development and negotiation of Project Administration Agreement

- Planning Commission review of zoning code amendment concerning development agreements for high capacity transit facilities (July and August 2018)

### **Development Agreement for Downtown Light Rail Extension**

City staff anticipate bringing two agreements with Sound Transit to the City Council for approval. One of these is a development agreement (formerly “design and construction agreement”), the purpose of which is to memorialize the project scope and identify the parties’ commitments related to the scope. For example, the development agreement will identify the City’s commitments to fund elements determined to be enhancements (“betterments”) that are not part of Sound Transit’s light rail project.

Although the development agreement is not expected to be finalized until early 2019, there are two topics on which staff are seeking early Council input so that Sound Transit can provide clear direction to design-build teams proposing on the project. Those topics are: street closures during construction, and the Marymoor Village station layout.

### **Street Closures During Construction**

While most light rail construction for the Downtown extension will be along SR 520, limiting impacts to city streets, there are five areas that will be significantly impacted by construction (see Attachment A):

#### **The Overlake “Triplets”**

1. NE 40<sup>th</sup> St. at the eastbound SR 520 ramps
2. NE 51<sup>st</sup> St. at the eastbound SR 520 ramps
3. NE 60<sup>th</sup> immediately east of SR 520

#### **Downtown Streets**

4. NE 76<sup>th</sup> St. between 164<sup>th</sup> and 170<sup>th</sup> Aves. NE
5. 166<sup>th</sup> Ave. NE between NE 76<sup>th</sup> St. and Cleveland St.

The Redmond Municipal Code states that the City Traffic Engineer has the authority to close city streets (RMC 10.24.045 and .047). The Traffic Engineer must notify the City Council, and the Council has the authority to modify or reject the Traffic Engineer’s decision. Because the parameters for street closures may impact the light rail project schedule and cost, staff is seeking early direction from the City Council on street closure parameters.

The light rail extension is a major construction project and all construction alternatives will result in impacts to the community. For all alternatives, the City and Sound Transit will work together to develop proactive communication plans so that people who live, work, and travel in the affected areas are well aware of the closures, detour routes, how to access businesses, and what travel options are available. Staff’s recommendation on the closure schedule and timing considered safety, mobility, resident and business impacts, and project schedule.

### Recommendation for Overlake Street Closures

In Overlake staff recommends allowing Sound Transit's contractor to close or restrict travel on one crossing at a time to ensure alternate routes are available. The proposed schedule is outlined below.

- Close NE 60<sup>th</sup> St. between SR520 and 156<sup>th</sup> Ave NE for up to 2.5 months while school is out in summer 2020
- Phase construction at NE 51<sup>st</sup> St. between SR520 and 154<sup>th</sup> Ave NE for up to 12 months in 2020-21, starting after the NE 60<sup>th</sup> St undercrossing is completed and opened to traffic.
- Close NE 40<sup>th</sup> St between SR520 and 156<sup>th</sup> Ave NE. for up to 2 months in July-August 2021, after the NE 51<sup>st</sup> undercrossing is completed, and after completion of mass excavation work for the Microsoft Campus Refresh project which is expected to be completed in 2020.

Staff recommends requiring Sound Transit to maintain pedestrian and bicycle access through construction zones.

Staff proposes this schedule because:

- Safety. Full closures minimize potential work zone conflicts.
- Mobility for people and goods. The physical space exists at NE 51<sup>st</sup> St. to conduct phased construction while maintaining similar vehicle capacity. NE 40<sup>th</sup> St and NE 60<sup>th</sup> St do not have adequate space to safely provide for phased construction and vehicle traffic.
- Resident and business impacts.
  - This scenario combines the shortest construction duration with the fewest number of full closures.
  - The closure of 40<sup>th</sup> St. would coincide with reduced Microsoft head-count on the main campus due to the Microsoft Campus Refresh project, reducing traffic impacts.
  - Predictable closures are simplest to communicate and present the best opportunity for demand management.
  - Closures would occur during the summer when traffic volumes are lighter and school is out.
- Schedule. This proposal provides the shortest duration for impacts and keeps the light rail project on schedule.

A timeline showing how these closures would relate to other construction projects in Overlake is provided as Attachment B.

### Background and Alternatives Considered

Sound Transit will construct light rail under 40<sup>th</sup>, 51<sup>st</sup>, and 60<sup>th</sup> Sts. in Overlake. The likely method for this work will be “cut and cover” where the contractor cuts open the street, constructs a light rail tunnel, and puts a new street over the light rail infrastructure. To complete this work, the contractor could: fully close street segments for a period of about two months each, or work in phases for periods of up to 12 months each. The following table summarizes three scenarios.

<b>Scenario</b>	<b>Timing</b>	<b>Likely Duration of Impact</b>	<b>Target End Date</b>
2-month full closures in summer	51 <sup>st</sup> : 2020 40 <sup>th</sup> : 2021 60 <sup>th</sup> : 2022	2 months 2 months 2 months	Fall 2022
51 <sup>st</sup> phased; 40 <sup>th</sup> and 60 <sup>th</sup> full closures	60 <sup>th</sup> : 2020 51 <sup>st</sup> : 2020-21 40 <sup>th</sup> : 2021	2 months 12 months 2 months	Fall 2021
All phased	2020-23 in any order	30-36 months total	Early 2023

*40<sup>th</sup> targeted for 2021 to coincide with reduced employee count at Microsoft campus due to campus refresh*

Staff evaluated these scenarios considering safety, mobility for people and goods, resident and business impacts, and schedule. In general, full closures have higher traffic impacts for shorter durations, while phased work results in lower impacts over longer periods of time. Full and predictable closures have the fewest potential work zone conflicts and present the best opportunities for travelers to plan around construction closures.

#### Anticipated Traffic Impacts while NE 40<sup>th</sup> St. is Closed

Sound Transit analyzed the traffic impacts of closing NE 40<sup>th</sup> St. for two months during the summer. The analysis showed that afternoon peak-period congestion would increase by 1-3 minutes in the NE 51<sup>st</sup> St. corridor and by 2-3 minutes in the 156<sup>th</sup> Ave. NE corridor. Encouraging drivers to shift their travel patterns mitigates the impact, but is not expected to eliminate construction impacts.

#### Recommendation for Downtown Street Closures

In Downtown staff recommends allowing Sound Transit's contractor to:

- Modify NE 76<sup>th</sup> St. while maintaining two travel lanes
- Close 166<sup>th</sup> Ave. NE between Cleveland St. and NE 76<sup>th</sup> St. to set girders and construct the Downtown Redmond station, within the following parameters:
  - On weekdays only, Monday through Friday afternoon
  - Expected duration 14-24 months
  - Street must be open during the holiday season (late November to early January)

Staff recommends this approach because:

- Safety. Full closures minimize potential work zone conflicts.
- Mobility for people and goods.
  - The recommendation maintains two-way traffic on NE 76<sup>th</sup> St.
  - Past improvements to the Downtown grid minimize traffic impacts.
- Resident and business impacts.
  - Access to Redmond Town Center via 166<sup>th</sup> Ave. NE is maintained on Friday evening throughout the weekend.
  - Predictable closures are simplest to communicate and present the best opportunity for demand management.
- Schedule. This alternative keeps the light rail project on schedule.

### Background and Alternatives Considered

Sound Transit will construct elevated light rail in the Redmond Central Connector corridor from 164<sup>th</sup> Ave. NE to east of 170<sup>th</sup> Ave. NE. The Downtown Redmond station will be located over 166<sup>th</sup> Ave. NE. To complete this work, the contractor could: plan partial or full street closures on a regular schedule for about 14-24 months, or intermittently close streets on an irregular schedule over about the same period.

Staff evaluated these scenarios considering safety, mobility for people and goods, resident and business impacts, and schedule. As in Overlake, full and predictable closures result in the fewest potential for work zone conflicts and the best opportunities for travelers to plan around construction closures. The alternative proposed by staff keeps NE 76<sup>th</sup> St. open in both directions in front of Redmond Town Center, and keeps access to Redmond Town Center open via 166<sup>th</sup> Ave NE each weekend and during the holiday season.

Sound Transit also analyzed the traffic impacts of closing one block of 166<sup>th</sup> Ave. NE and found that the Downtown grid network provides sufficient redundancy to avoid unacceptable levels of congestion.

### Marymoor Village Station Layout

Since last fall when Sound Transit shared conceptual station layouts for Marymoor Village, both at a Council study session and at a community open house, Sound Transit has been exploring ways to optimize station functions and meet Sound Transit, City, and other stakeholder objectives.

### City Council Direction on Station Design

Staff has understood the Council's top priority for Marymoor Village station design to be placemaking. That is, Marymoor Village is a neighborhood first, and the light rail station must fit within that context. Within that framework, the Council identified the following objectives:

- Manage traffic impacts to Marymoor Village
- Ensure garage aesthetics fit the context of an urban village
- Facilitate transit-oriented development, including affordable housing, through station and parking layout

### Parking Alternatives and Staff Recommendation

Sound Transit has developed two alternatives for accommodating parking (Attachment C):

1. Structure + surface lot. This is the alternative shared with Council last fall. It includes an 1,100-stall parking structure east of the station platform and a 300-stall surface parking lot south of the platform, adjacent to Marymoor Park.
2. Single structure. This is a new alternative that accommodates all parking in a single structure east of the station platform.

Staff evaluated the two alternatives in light of previous Council direction and recommends supporting a single larger structure under the following conditions:

- The affordable housing outcome is maximized.

- Sound Transit requires the design-build teams proposing on the project to advance garage design earlier in the design schedule than would ordinarily be required to provide certainty to the City that aesthetic and traffic interests are addressed.
- A mechanism is developed to include superior materials, additional art investment, or other design elements, to ensure the character of the garage fits the City's vision for the neighborhood.
- Sound Transit includes the construction of an interim 173<sup>rd</sup> Ave. NE in its project to aid neighborhood circulation.
- Sound Transit designs the garage to facilitate the ingress/egress of 300 additional vehicles.

Staff's rationale is described in more detail below.

Managing traffic impacts. The key attraction of a two-facility concept from a neighborhood traffic standpoint was that the two facilities would serve two distinct markets: the surface lot would serve those traveling to/from the south – entering Marymoor Village via NE 65<sup>th</sup> St., while the structure would serve those traveling from the east and north and entering the area from NE 70<sup>th</sup> St.

The proposed single structure also accomplishes the objective of accommodating traffic entering via NE 65<sup>th</sup> St. or NE 70<sup>th</sup> St. Sound Transit has demonstrated that an additional dedicated southbound left-turn lane from the garage to NE 70<sup>th</sup> St. would be sufficient to facilitate the ingress/egress of 300 additional vehicles that would be relocated from the conceptual surface lot.

Also, staff recommends requiring Sound Transit to build 173<sup>rd</sup> Ave. NE at the west end of the station, connecting NE 70<sup>th</sup> St. and NE 67<sup>th</sup> Ct. and providing additional circulation options in Marymoor Village. This would especially improve the pick-up and drop-off function, as those picking-up/dropping-off could continue west of NE 70<sup>th</sup> St. and exit Marymoor Village via NE 65<sup>th</sup> St. or NE 70<sup>th</sup> St.

Ensuring excellent garage aesthetics. City staff have been closely involved with developing the documents that Sound Transit is producing to guide the design-builder's final design of the parking structure, whether it is 1,100 or 1,400 stalls. These documents include garage functional and architectural requirements, preliminary architectural drawings, and illustrative photographs of garage exteriors. City staff have advocated for a design that responds to the Marymoor Village vision context, including:

- A major modulation feature to break-up the south (NE 70<sup>th</sup> St.) façade
- A landing/lobby feature on the west façade overlooking the station plaza
- Additional emphasis and visibility of the elevator and stair to the station plaza
- Architectural repetition on the south façade that mimics an urban storefront pattern
- Awnings, glazing, and landscaping along the south façade
- Techniques to visually break-up the north (SR 520) façade
- Windows or other treatments to mitigate blank walls on the south façade
- Screening all exterior openings to minimize impacts to neighbors
- Using at least three screening materials

Accommodating 1,400 stalls in the garage is likely to add length and height to the structure. While the garage has not been fully designed, Sound Transit believes the design-builder may be able to reduce such impacts through a more efficient design.

Staff recommends requiring the design-builder to advance the garage design during procurement beyond what would ordinarily be required and to include a mechanism for including superior materials, additional art investment, or something similar to ensure excellent garage aesthetics.

Several views of the conceptual 1,400-stall garage are provided as Attachment D.

Facilitating Transit-oriented Development. Under the structure + surface lot scenario, the surface lot would be an interim lot that would be redeveloped at a future date to transit-oriented development (TOD) with structured parking both for TOD residents/patrons and transit customers. Under the authorizing legislation for the ST3 ballot measure, the TOD would consist mainly of housing affordable to individuals or families earning up to 80 percent of area median income (AMI).

Closer analysis of this option casts doubt on its economic feasibility. Replacing 300 surface stalls in a structure would cost in the range of \$15-\$20 million. That would be a major cost burden for any TOD, but especially one consisting mainly of affordable housing. TOD in this scenario would require a significant subsidy beyond the public funds typically required to generate below-market housing. There is no obvious source for this subsidy.

If TOD succeeded in this scenario, it would be on a longer timeline. In the interim, the streetscape on 173<sup>rd</sup> Ave. NE would not be activated, and after TOD completion, the building character would be impacted by the need to include 300 additional parking stalls.

In the scenario of a single, larger parking structure, Sound Transit will still need land for construction staging, laydown, and construction offices. The land south of the station where surface parking would have been would serve this purpose well. And, it would still be suitable for TOD at the end of the light rail construction project. In this scenario, a developer – market-rate or affordable housing – would not be replacing 300 parking stalls, and so would be more likely to complete TOD in the near term. This would activate the 173<sup>rd</sup> Ave. NE streetscape sooner, and with 300 fewer parking stalls, result in a better urban design that advances the vision for Marymoor Village.

The affordable housing outcome depends on how Sound Transit acquires property rights. All acquisitions involve negotiations with property owners, and so Sound Transit will not know if it will be acquiring temporary or permanent rights – or a combination – until late 2019. If Sound Transit purchases property then it must surplus it according to the ST3 authorizing legislation. If it leases property then the underlying owner would lead redevelopment and be bound by affordability regulations in the Redmond Zoning Code. If Sound Transit purchases property, the agency anticipates that it would put together a strategy for redeveloping surplus property in 2020, a process that engages the City Council, community, City staff, and the affordable housing community.

#### **IV. PREVIOUS DISCUSSIONS HELD**

Selected past Council discussion and action dates are provided in the table below.

<b>Date</b>	<b>Action/Discussion</b>
6/6/17	Council letter to Sound Transit Board concerning proposed refinements to Downtown Redmond Link Extension
7/5/17	Council staff report on Downtown Redmond Link Extension preliminary engineering kick-off
10/10/17	Council study session on station layout
3/13/18	Planning and Public Works Committee briefing on proposed noise ordinance amendment related to development near light rail
4/10/18	Council study session on light rail design and construction activities in 2018
6/12/18	Planning and Public Works Committee briefing on light rail project status
8/14/18	Planning and Public Works Committee briefing on street closures during construction and Marymoor Village station layout

#### **V. IMPACT**

##### **A. Service/Delivery:**

Street closures during construction will affect traffic circulation for the duration of the closures, including City services that would ordinarily use closed street segments. These impacts can be managed through proactive planning, coordination of projects, and communication. The impacts cannot be eliminated.

##### **B. Fiscal Note:**

There are no fiscal impacts to the City related to street closures or Marymoor Village parking garage design options.

#### **VI. ALTERNATIVES TO STAFF RECOMMENDATION**

Staff is seeking Council direction, but not formal action at this time.

#### **VII. TIME CONSTRAINTS**

Sound Transit will publish the design-build request for proposals for the Downtown Redmond Link Extension this fall.




## **VIII. LIST OF ATTACHMENTS**

Attachment A. Street Closures During Construction Map

Attachment B. Overlake Construction Projects Map and Timeline

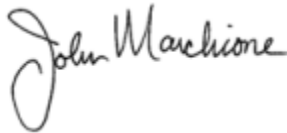
Attachment C. Marymoor Village Parking Layout Alternatives

Attachment D. Conceptual Marymoor Village Parking Garage Drawings



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**Martin Pastucha, Director of Public Works**



Approved for Agenda \_\_\_\_\_  
**John Marchione, Mayor**