

**CITY COUNCIL STUDY SESSION ITEM**

**SUBJECT:**

Present pre-design work and options relating to the cross-section of NE 15<sup>th</sup>/16<sup>th</sup> Street, and outline the tradeoffs raised by those options. Staff will seek Council comments on work done and conclusions drawn to date and direction on moving forward with the pre-design process, including community involvement.

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**POLICY ISSUES:**

In February 2009, Council adopted Comprehensive Plan Amendments for the Bel-Red Corridor Subarea. The Subarea Plan includes the NE 15<sup>th</sup>/16<sup>th</sup> Street project (as one of several transportation improvements to support redevelopment of the area). The Plan also contains a number of policies, several of which are relevant to the NE 15<sup>th</sup>/16<sup>th</sup> Street pre-design effort. The specific project description of the NE 15<sup>th</sup>/16<sup>th</sup> Street project contained in the Bel-Red Subarea Plan, and policies that help frame the design of the project, are outlined in Attachment A.

The policy direction from the Subarea Plan is to develop a multi-modal corridor that accomplishes several transportation (general purpose traffic, light rail transit, and non-motorized) objectives, as well as enhance the urban design and character of the area through green enhancements and an effective relationship with adjoining land uses. A major challenge of the design of the project has been to incorporate these functions while responding to Council feedback and concerns about the overall width of the corridor.

**DIRECTION NEEDED FROM COUNCIL:**

       Action  
  X   Discussion  
  X   Information

Staff is looking to receive Council feedback on the options prepared and staff conclusions made to date on the corridor pre-design, and direction on soliciting community feedback in November. Staff is responding to Council's request at the August meeting to present cross-section options, tradeoffs, and potential costs that are associated with the cross-sectional options. Staff also plans to present preliminary conclusions on the number of lanes that the project should include, following up on information presented to Council in August. Staff plans to return to Council in January 2011 to address any refinements to the options presented based on additional work and community feedback, respond to Council questions, and provide updates to the potential costs, leading to Council decisions on the project description in the Bel-Red Subarea Plan and project design.

## **BACKGROUND/ANALYSIS:**

On January 20, 2009, Council adopted Resolution No. 7874, endorsing the Mobility and Infrastructure Initiative (?) Finance Plan. One of the capital projects included in the Mobility and Infrastructure Initiative is the segment of NE 15<sup>th</sup>/16<sup>th</sup> Street between 116<sup>th</sup> Avenue NE and 124<sup>th</sup> Avenue NE. Based on Council direction on the package of mobility improvements, on March 1, 2010, Council adopted Ordinance No. 5942 which amended the 2009-2015 Capital Investment Program (CIP) to create a new CIP project for the segment of NE 15<sup>th</sup>/16<sup>th</sup> between 116<sup>th</sup> and 124<sup>th</sup>, and approved execution of a consulting contract with HDR to advance engineering pre-design work on the corridor.

Since adoption of the Comprehensive Plan for the Bel-Red Subarea in February 2009, there have been a number of changes influencing the overall cross-section and options along the NE 15<sup>th</sup>/16<sup>th</sup> Street multi-modal corridor. Many of these changes have to do with Sound Transit's work on conceptual design for Segment D of the East Link project. On October 12, 2009, Sound Transit presented to Council an update on their preliminary engineering design progress, including a new D2A "north hybrid" alignment, station options, and roadway crossing alternatives, which would be located adjacent to the proposed NE 15<sup>th</sup> Street corridor. On April 22, 2010, Sound Transit revised their East Link preliminary preferred alternative, which included provisions for execution of a term sheet with the City, and entering into a public/private partnership related to the proposed 120<sup>th</sup> Avenue NE station and retained cut alignment through Wright Runstad's (WR/SRI) The Spring District. Changes in the light rail alignment also would affect the horizontal alignment of a portion of the NE 15<sup>th</sup>/16<sup>th</sup> corridor roadway between 124<sup>th</sup> Avenue NE and 130<sup>th</sup> Avenue NE.

In addition to the changes resulting from Sound Transit's work on design of Segment D, additional design work undertaken by the City in recent months has helped inform and evolve the development of the roadway design and cross-sections. Perhaps most importantly, rather than being a uniform cross-section throughout, the cross-section of the NE 15<sup>th</sup>/16<sup>th</sup> Street project will vary considerably along the length of the corridor. These variations are driven by a couple of key factors in addition to the design of light rail. First, natural features are an important element, in that the topography of the area and the riparian corridors in the Bel-Red area that the roadway would need to cross influence the design (some areas of the roadway and non-motorized facilities will need to be on bridges). Second, the land use character of the area will help define the design; there are two major development nodes in the corridor (at 122<sup>nd</sup> and 130<sup>th</sup>) and the way the road is designed in these zones is very important in terms of both accommodating this land use and the character of these two development nodes. These factors, in addition to the evolution of design of light rail facilities in Segment D noted above, lead to defining five distinct segments or "zones" within the NE 15<sup>th</sup>/16<sup>th</sup> Street corridor between 116<sup>th</sup> Avenue NE and 136<sup>th</sup> Place. A map showing these 5 zones is shown in Attachment B.

The presentation on October 25 will discuss cross-section concepts within each of these five zones. Within each zone, in developing corridor cross-section concepts staff has identified mandatory functions within the corridor, based on the project description in the Bel-Red Subarea Plan, which have to be accommodated. These mandatory functions that must be accommodated include general purpose traffic, light rail transit, non-motorized facilities, and landscaping and green space. At the same time, staff and the consultant team have worked to respond to earlier feedback from the Council (and some Boards and Commissions during their deliberation on the Bel-Red plan) that the overall corridor was too wide, and that perhaps it was trying to accomplish too much in terms of overall functions.

To respond to this feedback over the width of the corridor, staff has developed multiple variables, to address the mandatory functions within certain zones. This work has led to the multiple cross-section concepts for each zone of the corridor that staff will present to Council on October 25. As an example, non-motorized facilities relating to bicycles can be accommodated in multiple ways, through a multi-purpose pathway, through on-street bike lanes, through a shared facility with motor vehicles such as a widened outside lane, or through a dedicated bike only pathway. These various ways to address any particular function have an effect on the width of the cross-section for the 15<sup>th</sup>/16<sup>th</sup> Street corridor. On-street parking is another important variable. On-street parking has the advantage of providing space for parked cars that support adjacent retail uses, provides drop-off areas for transit and other uses, and can add to the pedestrian experience; however, on-street parking also adds to the width of the corridor, and influences the type of bicycle facilities that are feasible.

Finally, one very important variable relating to both the transportation function and width of the corridor is the number of travel lanes. As was presented on August 2, staff and the consultant team have looked at several options, including 4 lanes (2 in each direction) throughout the entire corridor from 116<sup>th</sup> Avenue NE to 136<sup>th</sup> Place NE (consistent with the project description in the Bel-Red Plan, as noted in Attachment A) and options with 1 travel lane in each direction (2 lanes total) east of both 120<sup>th</sup> Avenue NE and 124<sup>th</sup> Avenue NE. The purpose of looking at these different options is to find the optimal solution that supports both overall mobility and urban character of the area, while also trying to reduce the width of the corridor. Additional traffic analysis undertaken since August shows that the option to reduce the number of travel lanes from 2 lanes in each direction to 1 lane in each direction east of 124<sup>th</sup> Avenue NE is feasible, and staff believes should be part of the recommended cross-section for the zones east of 124<sup>th</sup>, particularly where light rail transit joins the roadway corridor at 130<sup>th</sup> Avenue NE. Reducing the number of travel lanes at this point preserves overall transportation functionality, narrows the cross-section, and better supports the urban character at the 130<sup>th</sup> Avenue node.

Within each zone, the cross-section concepts that have been developed are less wide than earlier cross-sections that were shown to Council during deliberation on the Bel-Red plan. As will be presented on October 25, the manner in which the cross-sections in the different zones have been narrowed varies (for example, on the west end of the corridor it is largely due to light rail being in a separate alignment from the roadway; on the east end of the corridor it is largely due to the number of travel lanes being reduced).

In considering these various functions, and the variable ways for addressing these functions and how they may add or detract from the corridor width, numerous urban design and transportation functional trade-offs have been and continue to be considered. The presentation on October 25 will further illustrate these trade-offs.

The cross-section perspectives that will be presented on October 25 have been developed for the five zones that comprise the overall corridor. The perspectives reflect bridges, other building heights as allowed by the topography, adopted land use, travel lanes, and left turn lanes. At the October 25 meeting staff will review the perspectives, provide additional profile information, and describe the potential range of costs for the options as part of the update. As noted, we will be seeking Council feedback on the work undertaken to date, and direction on moving forward with the pre-design process including seeking public input.

**ATTACHMENTS:**

- A. Bel-Red Subarea Plan NE 15<sup>th</sup>/16<sup>th</sup> Street Project Description and Policies
- B. Map of Zones Within the Overall NE 15<sup>th</sup>/16<sup>th</sup> Street Corridor

Project Description of NE 15<sup>th</sup>/16<sup>th</sup> Street in Bel-Red Subarea Plan:**107 NE 15th/16th Corridor from 116th Avenue NE to 136th Place NE**

Multi-modal corridor incorporating east-west arterial capacity (2 through-lanes in each direction, potentially with an interim improvement limited to a single through-lane in each direction); light rail guideways and stations; urban sidewalks; a bicycle trail/pathway with regional trail connections; and “green” elements, including urban open spaces, tree canopy and landscaping features, and natural drainage features where practical.

*Discussion: The new NE 15th/16th Corridor is critically important both to the functioning and character of the Bel-Red Subarea. This project provides new east west capacity for both vehicles and light rail. It provides a high quality pedestrian and bicycle facility that connects Bel-Red to Downtown, open spaces, north-south trails, and the larger Bellevue parks system. The quality and character of this centrally located corridor will also have a formative impact on the ambiance of the entire Bel-Red Subarea. Thus the design and implementation of this project should carefully incorporate the above elements in a manner that promotes the desired urban design and character of Bel-Red, with special sensitivity to width, human scale, walkability and pedestrian-friendly design.*

Policies in the Subarea Plan that are relevant to design of NE 15<sup>th</sup>/16<sup>th</sup> Street Project:

Policy S-BR-55: Extend and expand NE 15<sup>th</sup>/16<sup>th</sup> Street as a multi-modal corridor that includes vehicular, high capacity transit, and non-motorized travel modes to serve east-west trip demand across the Bel-Red area, while incorporating significant urban open spaces, and environmentally sensitive design features.

Policy S-BR-16: Encourage place-making and a dynamic public realm by integrating publicly assessable plazas, open spaces and other gathering places within development, in public and private projects.

Policy S-BR-25: Design and develop an outstanding street environment that promotes streets as key urban places sensitive to their context and providing an interesting and aesthetically rich experience. Apply a street hierarchy with design guidelines and street standards that provide an appropriate combination of elements.

Policy S-BR-29: Explore stormwater basin planning as a future step. Such planning might evaluate corridor stormwater treatment and detention across multiple properties and may provide for broader environmental benefits as compared to a site-by-site basis.

Policy S-BR-38: Provide an interconnected system of non-motorized trails for mobility within the study area, connected to the larger, regional trail system, including Marymoor Park and Bridle Trails State Park. The system will emphasize recreational use and provide transportation benefits as well:

- a. Provide non-motorized trails along the stream corridors to connect parks and other land uses, and links to the trail systems along the BNSF Corridor and NE 16th Street. Initial emphasis will focus on the West Tributary and Goff Creek stream systems;
- b. Provide a major east-west multi-purpose trail along the NE 16th Street corridor. The corridor will include a generous right-of-way width to accommodate significant green infrastructure, and to create a high-quality pedestrian and bicycle environment and auto-

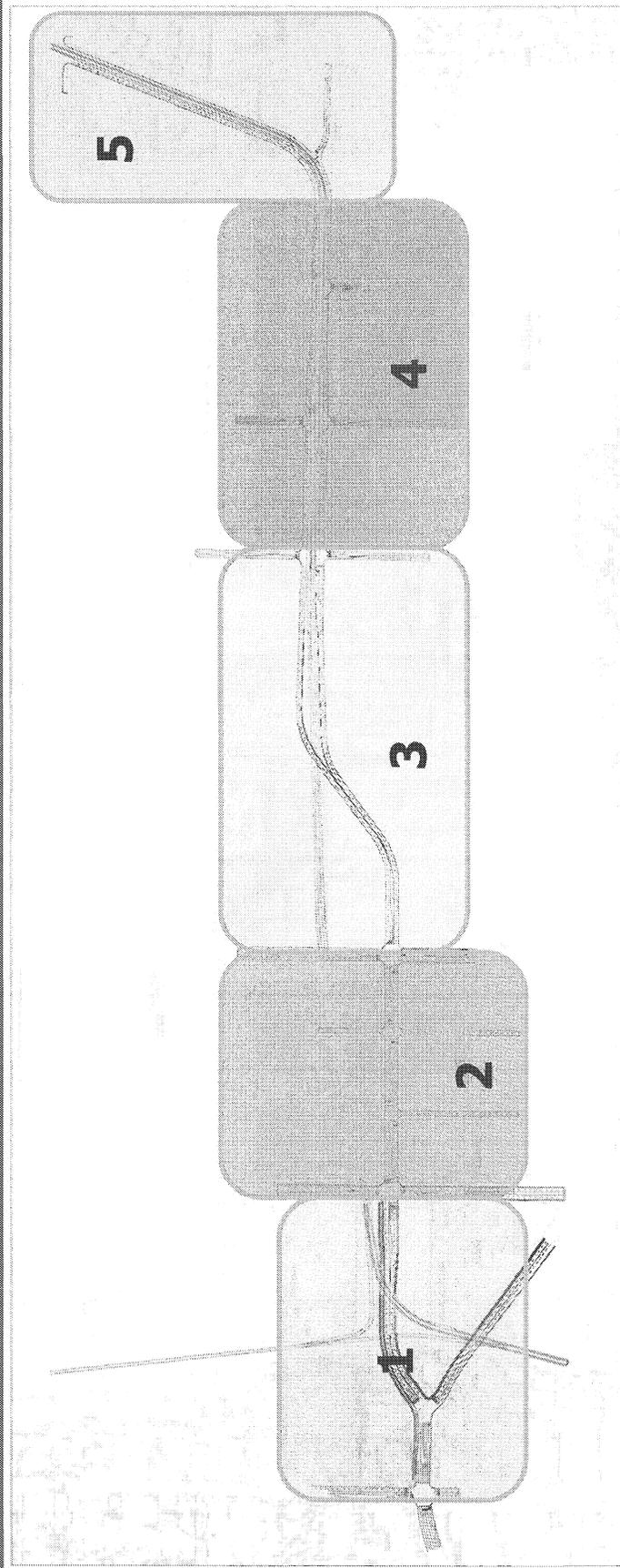
free access between neighborhoods. It will connect to other local and regional trail systems and to light-rail stations, and provide opportunities to incorporate gateway features; and,

- c. Support the development of a regional north-south multi-use trail along the BNSF Corridor that could coexist with potential long-term future rail use, linking to the NE 16th Street regional trail and other local trail access points.

Policy S-BR-39: Promote the development of “green streets” throughout the corridor, with an abundance of street trees and areas of landscaping to improve and reduce the amount of stormwater runoff, be aesthetically pleasing, and provide an attractive pedestrian experience.

Policy S-BR-64: Develop a multi-use trail system throughout the Subarea that provides both local and regional connections, including major non-motorized facilities along the extended NE 16th Street, along the West Tributary of Kelsey Creek and other stream corridors, and incorporating the planned regional trail along the BNSF railroad corridor.

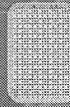
# Project Zones



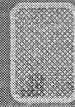
#1 – 116<sup>th</sup> to 120<sup>th</sup>

#2 – 120<sup>th</sup> to 124<sup>th</sup>

#3 – 124<sup>th</sup> to 130<sup>th</sup>



#4 – 130<sup>th</sup> to 136<sup>th</sup>



#5 – 136<sup>th</sup>/ 16<sup>th</sup>