



LIGHT RAIL PERMITTING ADVISORY COMMITTEE MEETING

Date: October 13, 2014

To: Light Rail Permitting Advisory Committee

From: Matthews Jackson (425-452-2729, mjackson@bellevuewa.gov)
Carol Helland (425-452-2724, chelland@bellevuewa.gov)
Liaisons to the Advisory Committee
Development Services Department

Subject: October 15th, 2014 Advisory Committee Meeting

Enclosed you will find an agenda packet for your twentieth Advisory Committee meeting next Wednesday, October 15th. We will begin at 3:00 p.m. in Room 1E-113 at Bellevue City Hall. The meeting will be chaired by Doug Mathews and Marcelle Van Houten.

This packet includes:

1. Agenda
2. September 17th Meeting Minutes
3. Sound Transit Analysis of Tree preservation and Context Sensitive Design
4. Final Bel Red Segment Design and Mitigation Permit Advisory Document

We will have hard copies of all electronic packet materials for you on October 15th. Materials will also be posted on the City's project web site at <http://www.bellevuewa.gov/light-rail-permitting-cac.htm>.

Please let us know if you have any questions prior to our meeting. We look forward to seeing you next week.



LIGHT RAIL PERMITTING ADVISORY COMMITTEE MEETING

Wednesday, October 15, 2014

3:00 p.m. – 5:00 pm • Room 1E-113

Bellevue City Hall • 450 110th Ave NE

AGENDA

- | | |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3:00 p.m. | 1. Call to Order, Approval of Agenda, Approval of September 17th Meeting Minutes <i>Committee Co-Chairs Mathews and Van Houten</i> |
| 3:10 p.m. | 2. Public Comment <i>Limit to 3 minutes per person</i> |
| 3:20 p.m. | 3. South Bellevue Segment Art Update <i>Barbara Luecke Sound Transit</i> |
| 4:20 p.m. | 4. Tree Preservation and Context Sensitive Design <i>Justin Jacson Sound Transit</i> |
| 4:50 p.m. | 5. Public Comment <i>Limit to 3 minutes per person</i> |
| 5:00 p.m. | 6. Adjourn |

Project web site located at: <http://www.bellevuewa.gov/light-rail-permitting-cac.htm> . For additional information, please contact the Light Rail Permitting Liaisons: Matthews Jackson (425-452-2729, mjackson@bellevuewa.gov) or Carol Helland (425-452-2724, chelland@bellevuewa.gov). Meeting room is wheelchair accessible. American Sign Language (ASL) interpretation available upon request. Please call at least 48 hours in advance. Assistance for the hearing impaired: dial 711 (TR).

CITY OF BELLEVUE
LIGHT RAIL PERMITTING
ADVISORY COMMITTEE
MEETING MINUTES

September 17, 2014
3:00 p.m.

Bellevue City Hall
Room 1E-113

MEMBERS PRESENT: Marcelle Van Houten, Doug Mathews, Ming-Fang Chang, Susan Rakow Anderson, Erin Derrington, Siona van Dijk, Joel Glass, Wendy Jones, Don Miles

MEMBERS ABSENT: None

OTHERS PRESENT: Matthews Jackson, Department of Development Services; Kate March, Department of Transportation; Paul Cornish, Marti Louthier, John Walser, Justin Lacson, Sound Transit

RECORDING SECRETARY: Gerry Lindsay

1. CALL TO ORDER, APPROVAL OF AGENDA, APPROVAL OF MINUTES

Co-Chair Mathews called the meeting to order at 3:04 p.m.

The agenda was approved by consensus.

A motion to approve the minutes of the September 3, 2014, meeting was made by Mr. Glass. The motion was seconded by Ms. Jones and it carried unanimously.

2. PUBLIC COMMENT

Mr. Miles took a moment to say he recently had a conversation with a group of people who are still arguing the merits of having light rail run in a tunnel through the city. He distributed to the Committee members copies of the materials that had been given to him. He said the group is partially right. Every system that has an elevated or at-grade section has problems; the former is not much to look at, and the latter has other problems associated with it.

3. MIGRATORY BIRD MITIGATION

Marti Louthier with the environmental compliance division of Sound Transit said she is a wetland biologist by training and a planner by title. She explained that the Migratory Bird Treaty Act has been on the books since 1918 and spells out a number of specific obligations the federal government has between different countries, including Canada, Mexico and Japan. The Act came about primarily because of the feather trade which had triggered a severe decline in the population of certain bird species. The law is enforced

by the US Fish and Wildlife Service. Under the law it is illegal for anyone to take the eggs, feathers or nest of any migratory bird. "Take" is defined as any means or manner, any attempt at hunting, pursuing, wounding, killing, possessing any migratory bird, nest, or egg. The law does not distinguish between intentional and unintentional take.

Ms. Louthier said the Environmental Impact Statement done for the East Link project states that the project will comply with the Migratory Bird Act. The question is how to do that. The main obligation in the project has to do with clearing habitat. The Act covers nearly every kind of bird, with the exception of pigeons, house sparrows and European starlings. Most common birds, including robins and crows, are covered, and they nest in many different and diverse places. Any action that will harm the covered species can be taken as noncompliance with the Act.

Interpretation of the law varies by jurisdiction in terms of the regional justice system. Some regions, including Region 9, have concluded that the Act does not address the unintentional taking of birds, while other regions have concluded that it does. Compliance can be fuzzy given that potential land use actions, such as clearing vegetation, could be interpreted as a take. The East Link alignment will require a great deal of clearing, and the habitats that will be affected will be along trails, in open grassy areas, ornamental landscapes, forested areas, shrubby areas, and areas with blueberries.

Ms. Louthier said birds nest between March 15 and September 15. The early nesters include hawks and owls, and many of the smaller birds nest in July through August. Contractors prefer to remove vegetation during the summer months when things are dry, but of course that presents a conflict. Sound Transit is contracting with the wildlife service division of the USDA who has staff tutored in complying with different wildlife issues. The division is known for being very efficient and task oriented. They will survey the alignment prior to any clearing activities. Where they find nesting birds they will remove the nests and have sites completely cleared by the time the contractors begin their work. There is the unfortunate opportunity for nests to be missed, and sometimes birds lay eggs in unexpected places. The division has a permit from the US Fish and Wildlife Service allowing them to deal with eggs that are discovered.

Glass windows will be limited at the South Bellevue Station, thus limiting the conflict with birds. The designers have been directed to exclude as many horizontal surfaces as possible to avoid creating opportunities for birds to nest on buildings and become a problem. There will always be something birds will choose to nest on and where necessary some contingency actions may need to be implemented. A management plan aimed at dealing with bird issues as they come up is in the works but is not yet fully developed.

Ms. Jones noted from the materials that birds cleared out for construction might be inclined to return to their original habitat once construction has been completed. She asked how likely that is to happen given the total length of the construction period. Ms. Louthier said the habitat the birds are currently occupying will be surveyed and removed ahead of construction. The majority of the South Bellevue Station area is already

developed so only a small fragment around the perimeter will be affected. The alignment through Mercer Slough and other areas will trigger the loss of habitat and the birds likely will go somewhere else. Some species are adaptable to and okay with loud noises during construction and will occupy the habitat immediately adjacent to an active site. Birds like herons are very adaptive and are often found nesting adjacent to railroad tracks and in urban environments. The bigger concern for wildlife is humans and given that the work will be far enough away from the Slough and the main habitat for herons and some more sensitive species, so it is unlikely they will be permanently affected by the project.

Answering a question asked by Ms. Jones, Ms. Louthier said there is no current plan to conduct an inventory so far in advance of construction beginning to identify what birds will be affected and what birds will not be affected. Where habitat is to be removed it will be mitigated for in the Swayolocken and West Tributary sites, and by revegetating all along the alignment.

Mr. Jackson added that the city has maps indicating the location of known bald eagle nests. None are known to exist in the Slough area, though eagles do fly through the area from the known nests on Mercer Island and possibly to and from nests in Enatai. As for herons, the largest rookeries are located to the south of I-90.

Co-Chair Van Houten asked if active nests are removed prior to construction along with vegetation and habitat. Ms. Louthier said the idea is to remove all nests before the birds lay their eggs. That tends to dissuade the birds from using the habitat and avoiding the need to disturb active nests.

4. LANDSCAPING AT SOUTH BELLEVUE STATION

John Walser with Sound Transit reminded the Committee members that the Land Use Code requires a 15-foot buffer along the street frontage. There is, however, one place where the kiss-and-ride parking encroaches into the required buffer. The Land Use Code allows that where the full buffer width cannot be achieved along the full street frontage, the loss can be made up in another area of the street frontage. He pointed out on a map where accommodation could be made.

With regard to designing the station to integrate with the context of the Slough, Mr. Walser said there have been discussions with the landscape architects. He noted that they originally had the concept of using a concrete stamping treatment in the major pedestrian pathway areas to suggest or replicate a boardwalk-type of patterning. Photos of boardwalks that exist in the Slough were shown to the group. The landscape architects are incorporating into the 90 percent documents a stamping treatment for the major pedestrian plaza. Where there are edges between the plaza pavement and the rain gardens, a concrete curb will be cast with a profile that suggests the wood curbs on a boardwalk. The approach will enhance the theme of the slough with the hardscape surfaces.

Mr. Walser also pointed out that where the tracks enter the trench near the Winters House

there is not enough room within the multipurpose path zone to continue with a planter strip along the curb line. Accordingly there will be a stretch of the path that will not have a three-foot planter strip. The trench running in front of the Winters House is deep enough to permit the cantilevering of the sidewalk over the trench, creating sufficient room to add back in the planter strip between the curb and the multipurpose path.

There is an additional pinch point along 112th Avenue SE. The roadway does not run straight and true and at one point swerves in sufficiently to make including a planter strip impossible. There is room for additional landscaping behind the multipurpose path and the track right-of-way.

Ms. Jones asked if it would be possible to include some fencing between the street and the sidewalk given how heavily traveled the roadway is. Mr. Walser said his experience with transportation planners has been that vertical features, such as trees, signs and utility poles, should be kept a minimum of three feet behind the curb. Fencing would fall into that category as well.

Mr. Jackson added that there is a federal standard about not having obstacles within a certain distance of travel lanes. He said it would be a real challenge to include fencing along that section of roadway and be able to meet the standard.

Mr. Miles asked how well someone using a walker would be able to navigate a concrete path stamped to suggest a boardwalk. Mr. Walser said the scoring or stamping will have no more relief to it than the typical sidewalk.

Answering a question asked by Mr. Glass, Mr. Walser noted that with the inclusion of the northbound bus stop near Bellevue Way, there will be a stairway to bring people into the station and an accessible ramp.

Mr. Glass noted that there have been comments made about the green way and the sizing of landscaping and asked when the Committee will be given more of a definitive response. Mr. Walser said a change order has been issued to the design team and the current schedule calls for the renderings of the station area and the landscaping to be ready toward the end of October. The artists have been selected and they are busy working through their concepts in light of the comments of the Committee. The artists are slated to come to the October 15 Committee meeting to share their concepts.

Mr. Walser informed the Committee that the 90 percent designs will be submitted to the city for review in less than two weeks. A note in the cover report will call attention to the fact that certain areas covered by the 90 percent designs will subsequently be modified or otherwise updated through change orders. Mr. Jackson clarified that the submittal for city review will involve an internal staff review; it is not in support of the permit. Updated drawings will be submitted as a revision to the permit. The same approach applied to the 30 and 60 percent designs.

Ms. Jones asked how far back the guideway at the south end is from the current street.

Mr. Walser said he did not have that information in hand but would return with an answer.

5. SOUTH BELLEVUE GARAGE BUILDING HEIGHT COMPLIANCE

Mr. Jackson said the Land Use Code amendment for light rail recognizes that a long linear system is unique in Bellevue and that some elements would require modifications to the established zoning requirements, including building height. The amendment allows for elements of the light rail system to exceed the underlying maximum building height where Sound Transit can demonstrate that two criteria have been met: 1) the requested increase in the minimum necessary for the effective functioning of the system or facility; and 2) that the visual and aesthetic impacts associated with the facility have been mitigated to the greatest extent feasible.

Justin Lacson with Sound Transit explained that in designing the South Bellevue parking garage the design team had to take into consideration how to meet the current and projected future parking demand, keeping the parking garage within the existing impervious surface area footprint, and avoid intrusions into critical areas associated with the Mercer Slough wetland complex. As designed, the garage itself has two levels that are partially underground to reduce the overall height of the structure. The building height is 75 feet above sea level. The average elevation at Bellevue Way is approximately 54 feet, and the tallest point of the garage is the south lobby which comes in at 86 feet above sea level. The difference between the elevation at Bellevue Way and the highest point on the structure is approximately 32 feet.

Mr. Jackson noted the underlying R-1 zoning has a maximum height limit of 30 feet for a flat roof and 35 feet for a pitched roof measured from the average elevation of the structure. As designed, the structure exceeds the code limit for height.

Mr. Walser noted that the height issue has been under discussion since early in the pre-design phase. There has been a clear voice through it all calling for keeping the guideway as low as possible. The height clearance needed to enable buses to pass safely under the guideway is 17 feet. The criteria for tracks entering and leaving a station are such that 75 feet or so on either side is needed before a vertical curve can begin. The combination of track criteria and bus clearance is what has established the height of the platform at about 32 feet. Signage must be a minimum of nine feet above the floor, and the station canopies top out at roughly 13 feet at the peak. With regard to the parking garage, effort is being put into preserving the poplar trees along the back side of the park and ride. That fact, along with high water table issues, prevents extensive excavation. The floor of the parking garage will be approximately two feet below the grade of the existing asphalt park and ride lot. Only three of the five levels of the parking garage will be visible from the street, and from the Slough the height of the structure will not be readily apparent.

Co-Chair Van Houten asked what the clearance height will be on each floor of the parking garage. Mr. Walser said it will be 11 feet floor to floor, so subtracting for the

beams the clearance is seven and a half feet. The van accessible parking stalls will be located outside the garage to avoid having to need a clearance of more than ten feet, which would increase the overall height of the garage.

Mr. Glass suggested the design meets the requirement that the requested increase is the minimum necessary for the effective functioning of the system or facility. He said he was less confident that the visual and aesthetic impacts associated with the design have been mitigated to the greatest extent feasible. Things like a green wall or a green roof would go a long way toward that end. Mr. Walser said more details about those elements will be available toward the end of October.

Mr. Walser said all of the sections for the garage indicate a continuous flat deck all the way across. There are, however, two ramps on the back side of the garage that will occupy up to 70 percent of the length of the garage. When looking across the top roof of the garage, in many cases one will only be looking at half the width of the garage because the ramp will drop the other half of the garage down below at top level. He said he would prepare some visuals showing that along with realistic street-level viewpoints.

Co-Chair Van Houten noted the Committee had not heard much about mitigating the visual and aesthetic impacts associated with the elevated guideway coming into SE 8th Street and at Bellevue Way. Mr. Walser said the artists Katy Stone and Vicki Scuri are looking at that issue currently. They have not released their ideas yet, but both artists have visited the Slough on multiple occasions to garner ideas. Ms. Scuri is also exploring what possibilities exist with the manufacturer of the stock sound panels on the guideway.

Mr. Jackson encouraged the Committee members to go to the Enatai neighborhood to see what can actually be seen. He said his site visit was very enlightening.

Ms. Jones said she was encouraged to see the progress made toward making the design fit contextually with the Slough. However, most who live along or above Bellevue Way will experience some noise impacts and that is very concerning. They also would rather not have views of the Slough impacted by the alignment. Mr. Walser said the notion of painting the underside of the guideway is still being considered, though he allowed that there is an overall reluctance to do so. The hope is that some of the other treatments being explored will prove to be enough.

Ms. Anderson asked if the Committee will be formally commenting on the responses from Sound Transit. Mr. Jackson cautioned against getting ahead of the game, noting that it would be difficult to comment on an unknown. Currently not even Sound Transit staff knows what they will see when the updated designs are released in late October. As things are ripe to be discussed, staff will bring them before the Committee. The list of upcoming topics includes noise, tree preservation and mitigation, landscape development, the updated drawings, individual station elements, and the ancillary structures. The Committee will be given the most information possible prior to an open house event, and that may precipitate the need for an additional meeting in October .

East Link Outreach Lead Kate March said Sound Transit intends to schedule an open house in November to share the latest designs. A firm date and location has not yet been set. She suggested that scheduling an additional Committee meeting would be beneficial ahead of the open house so the Committee can review the particulars before going out to the public.

There was consensus to schedule an additional meeting in October.

Answering a question asked by Ms. Jones, Ms. March said Sound Transit mails notices to all parties who have elected to be on their mailing list and to all properties within a half mile radius of the station that is the focus of an open house. The city also spreads the word about open house events through all of its channels, including the website, *It's Your City*, and the *Bellevue Reporter*. Ms. Jones stressed the need to inform the Enatai neighborhood as a whole, not just properties within a half mile radius. Ms. March said she would work with Sound Transit to make sure that happens.

Answering a question asked by Mr. Miles, Mr. Jackson said it will be the responsibility of Sound Transit to either coordinate with the police department or to provide their own security at the stations. He said the cameras that will be installed at the stations will be regularly monitored. Mr. Walser added that Sound Transit has its own security division and contracts with the King County sheriff's office to provide a Sound Transit police force. Agreements are also established with local police agencies to share and coordinate both first response and backup. A year or more before revenue service starts, Sound Transit's security department sits down with the local jurisdiction to assess crime patterns, issues and hotspots, and to coordinate walk-throughs with the local police departments. The same is done with local fire departments. Calls made from emergency phones at the stations all go to the control center which also has the monitor feeds; it is their call as to which police authority should be alerted.

Ms. Jones commented that for reasons unknown the Enatai neighborhood has experienced a 50 percent rise in property crimes since 2010. There have been neighborhood meetings held with representatives of the police department to talk about the issue. In explaining their staffing process and the length of time it can take to hire even one new officer, get them trained and up to speed, the neighborhood learned it can take two years or more. She encouraged Sound Transit to begin a heads-up dialog with the city right away rather than waiting to learn that additional officers may be needed. Mr. Walser said Sound Transit does not typically provide on-site security at all of its stations. Decisions are made based on an assessment of local conditions. When the downtown transit tunnel first opened, Sound Transit had pairs of uniformed police officers at each station for the first couple of months to establish control, and then as everyone got the message that the facilities are secure, the two officers were assigned to roam back and forth between two stations. Assessments will take place for each East Link station in Bellevue.

Ms. March added that the station area planning process is paralleling the Committee's work on permitting. Station area planning is a city process to plan for what will happen

around each of the stations. Police presence and monitoring for crime will be an important part of that process. It will not be all on the shoulders of Sound Transit to make sure a police force is present. Station area planning for South Bellevue has been under way for a while, and the process for the East Main station will kick off on September 23.

Ms. Jones shared that the public comments made at the previous Committee meeting about saving Mercer Slough, avoiding noise, and running light rail through a deep-bore tunnel, were all well taken. She said the presenters were all people she has worked with. In a perfect world all of those concerns would be perfectly addressed. She agreed, however, that the charge of the Committee does not include addressing alignment issues.

6. PUBLIC COMMENT

7. ADJOURN

Co-Chair Mathews adjourned the meeting at 4:33 p.m.

**East Link | South Bellevue to Overlake Transit Center
Contract No. RTA/AE 0143-11**

**Contract E320
Analysis of Tree Preservation and Context
Sensitive Design – City of Bellevue**

September 23, 2013



Received

SEP 30 2014

Permit Processing

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MEMORANDUM

Sound Transit East Link | South Bellevue to OTC

ANALYSIS OF TREE PRESERVATION AND CONTEXT SENSITIVE DESIGN – CITY OF BELLEVUE

Date: September 23, 2014

To: Matthews Jackson, City of Bellevue

From: Justin Lacson, Sound Transit

Re: Tree Preservation and Context Sensitive Analysis – City of Bellevue Jurisdiction

1.0 Executive Summary

The East Link Regional Light Rail Transit (RLRT) Project (the Project) is a public transportation facility and the City of Bellevue developed a new overlay district, Chapter 20.25M of the City's Land Use Code (LUC), to acknowledge and govern this type of project. The inclusion of Chapter 20.25M into the City's land use code recognizes light rail as an acceptable use within the City. As a result, the Project is required to meet context-sensitive requirements under the discretion of the City of Bellevue, retain trees to the maximum extent feasible and plant trees and understory vegetation to meet new landscape development requirements established by the LUC.

The Project alignment, which was selected by Sound Transit (ST) and agreed to by the City of Bellevue, is adjacent to a number of residential neighborhoods and includes parcels of land with existing trees. The proposed RLRT corridor is limited, and in order to safely construct, operate and maintain RLRT facilities, removal of existing trees and other vegetation within the Project's footprint is unavoidable. To mitigate tree removal, ST has incorporated a variety of context-sensitive design methods into the Project, and has made design adjustments as a result of feedback from local residents and stakeholders. These methods are discussed in this memorandum and have been used to avoid and/or minimize tree removal within the Projects limits, especially in areas that have trees that are considered valuable because of their size and/or species. Areas that have a unique character or are within critical areas/critical area buffers were also considered for creative protective measures. Further detail on ecological benefits and habitats are provided in the *Critical Areas Report*. Moving beyond preservation, proposed station areas and landscape designs that adopt the contextual vision for each sub-area will provide additional mitigation for the loss of existing vegetation.

The East Link Final Design Team has strived to design RLRT facilities that will integrate into the existing context of Bellevue's residential neighborhoods and commercial areas and also respond to future development. Key elements of ST's design approach were tree preservation, new landscape areas that match the urban or ecological context, and thoughtful urban design, which included thoughtful selection of building contextual materials and the integration of engaging public art. ST respects Bellevue's 'City in a Park' theme and has proposed diverse landscape designs that will buffer neighborhoods from RLRT facilities, provide new gathering spaces for local residents and commuters, preserve and restore community touchstones and help to preserve and enhance environmentally sensitive areas. As a result of these context-sensitive approaches, the Project meets the City of Bellevue requirements for tree retention and removal.

2.0 Purpose and Overview

The East Link Final Design Team design team has developed context-sensitive landscape and urban design solutions that limit the removal of existing trees where possible and create landscapes that respond to the character of existing neighborhoods. The purpose of this memorandum is to provide more details on how and why decisions regarding tree removal, protection and replacement were made, as a way of demonstrating the Project's context-sensitive design approach. Section 3 (Background) provides a summary of the Tree Survey Assessment methodologies that served as the Project's baseline assessment of existing trees within the Project area. Section 4 (Tree Preservation/Protection and Removal) provides detailed information about how trees were reviewed by the Project's design team, as well as information on the required clearances that are necessary for safe operation and maintenance. This section also provides an overview of tree removal in the context of construction, and outlines when and why trees will be removed once the Project moves into active construction. Section 5 (Proposed Landscape Areas) describes how trees will be replaced, and includes details on the intent and character of the various proposed landscapes that are associated with the Project. Finally, Section 6 (Policies and Context-Sensitive Approaches) provides a discussion of how ST is complying with the City of Bellevue policies and key goals within in the City of Bellevue's Comprehensive Plan.

This memorandum is intended to build upon previous information submitted to the City of Bellevue related to the Project. Please reference the *Shoreline Substantial Development Permit Application* (13 135764 WG) and the *Design and Mitigation Permit (DMP) Application* (13 135564 LD) where noted in the following sections for details on proposed elements within the Project.

3.0 Background

3.1 Memorandum Scope and Project Area Definitions

The East Link Extension – South Bellevue to Overlake Transit Center (OTC) corridor includes land within the jurisdiction of the City of Bellevue (COB), the City of Redmond (COR) and the Washington State Department of Transportation (WSDOT) (Figure 1). This memorandum and appendices focus entirely on those portions of the Project that fall within the City of Bellevue jurisdiction.

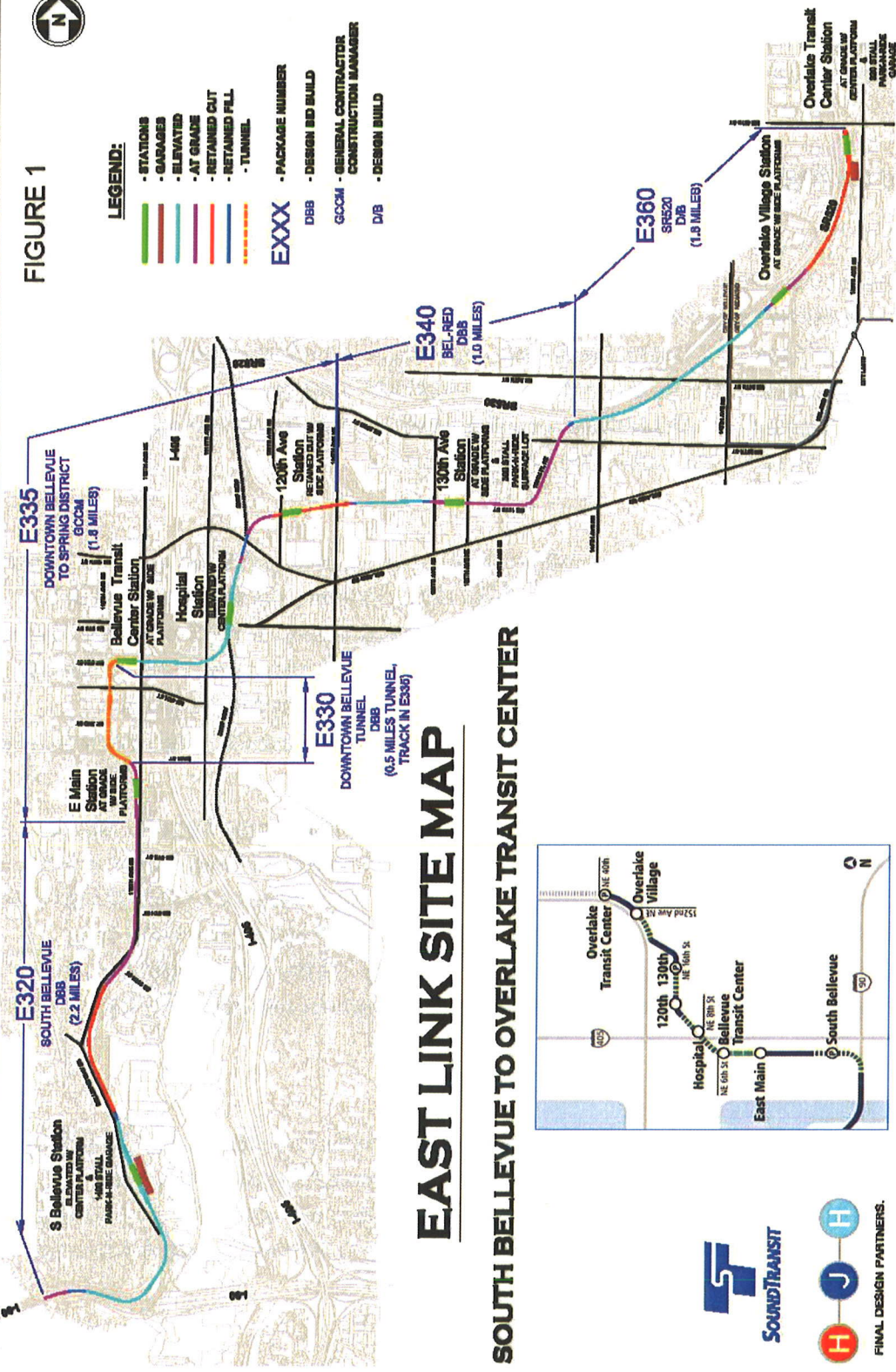
ST conducted tree survey assessments for the entire Project. For trees located within the COB jurisdiction, the tree survey assessment inventoried all trees that are 4" DBH or larger within the Project limits. The survey area was conducted within the proposed guideway and its associated elements needed for operations, construction access and staging areas, and the limits of the environmental mitigation work that is contiguous to the Project corridor. A portion of the stream mitigation work will occur off-site at Coal Creek, but tree impacts are not discussed in this memo because it is anticipated that there will be minimal or no removal of trees that are 4" DBH or larger.

ST has addressed all trees within the COB's shoreline jurisdiction in the Shoreline Substantial Development Permit submitted to COB on December 19, 2013. For information on how shoreline tree removal will be mitigated, refer to the *E320 Tree Removal and Mitigation Analysis*, which is included with this memorandum as *Appendix A*.



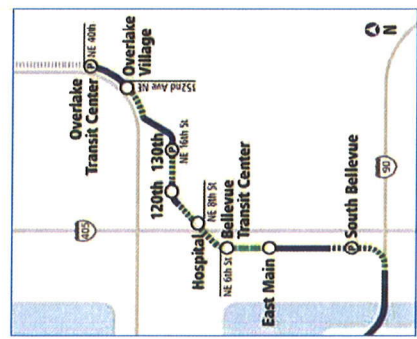
FIGURE 1

- LEGEND:**
- STATIONS
 - GARAGES
 - ELEVATED
 - AT GRADE
 - RETAINED CUT
 - RETAINED FILL
 - TUNNEL
- EXXX**
- PACKAGE NUMBER
 - DBB
 - DESIGN BID BUILD
 - GC/CM
 - GENERAL CONTRACTOR CONSTRUCTION MANAGER
 - D/B
 - DESIGN BUILD



EAST LINK SITE MAP

SOUTH BELLEVUE TO OVERLAKE TRANSIT CENTER



FINAL DESIGN PARTNERS.

3.2 Tree Assessments

ST has completed Tree Survey Assessments for the Project, which are sorted by construction package. A full description of the tree survey and assessment methodologies is provided in *Appendix D* of this memorandum.

4.0 Tree Preservation/Protection and Tree Removal

4.1 Tree Preservation

Mature existing trees and vegetation offer numerous benefits in the urban environment, their preservation is an important aspect of context-sensitive design. However, space within the Project's alignment is limited, and in order to safely and efficiently build the RLRT facility, the Project must remove hundreds of trees within the City of Bellevue. Identifying realistic opportunities for tree preservation has been a priority for the East Link Final Design Team throughout the design process. Details on the various ways in which Tree Preservation has been and will be considered during design and construction are provided below.

4.1.1 Tree Preservation during Design

Tree preservation was identified early in the design process as an important goal for particular areas identified in the *East Link Project Final Environmental Impact Statement (July 2011)*, including the Winters House and blueberry farm access, the impacted area of Surrey Downs Park, ST-acquired properties north of Surrey Downs Park along 112th Avenue SE including the new East Main park, and the NE 2nd pocket parks. Existing trees on these sites were identified for possible preservation, then reviewed and evaluated by the design team disciplines for potential risks that may impact light rail operations. Trees with significant historic value were also considered, which resulted in the preservation of a magnolia tree at Winters House.

The preservation of trees to the maximum extent feasible continues to be a primary Project goal through all stages of design. Throughout the corridor, trees that will not be negatively impacted by construction or RLRT operations will be preserved. Members of the design team referenced the City of Bellevue's BMP T101 for Tree Preservation to help determine whether trees should be preserved and this BMP is also cited in the Tree Protection specifications. Tree protection fencing will be clearly indicated on the Project plan documents, and the East Link Final Design Team is coordinating tree preservation efforts to ensure consistency for the final bid package.

4.1.2. Tree Preservation during Construction

Prior to construction, the contractor for each design package will be responsible for submitting a detailed Tree Preservation Plan to the City of Bellevue. Giving this responsibility to the contractor ensures that there is a clear awareness of the importance of tree protection, once the project moves into construction. The contractor will also have the ability to preserve additional trees along the corridor, if doing so does not impede construction activities or the overall project schedule.

4.2 Tree Removal Overview

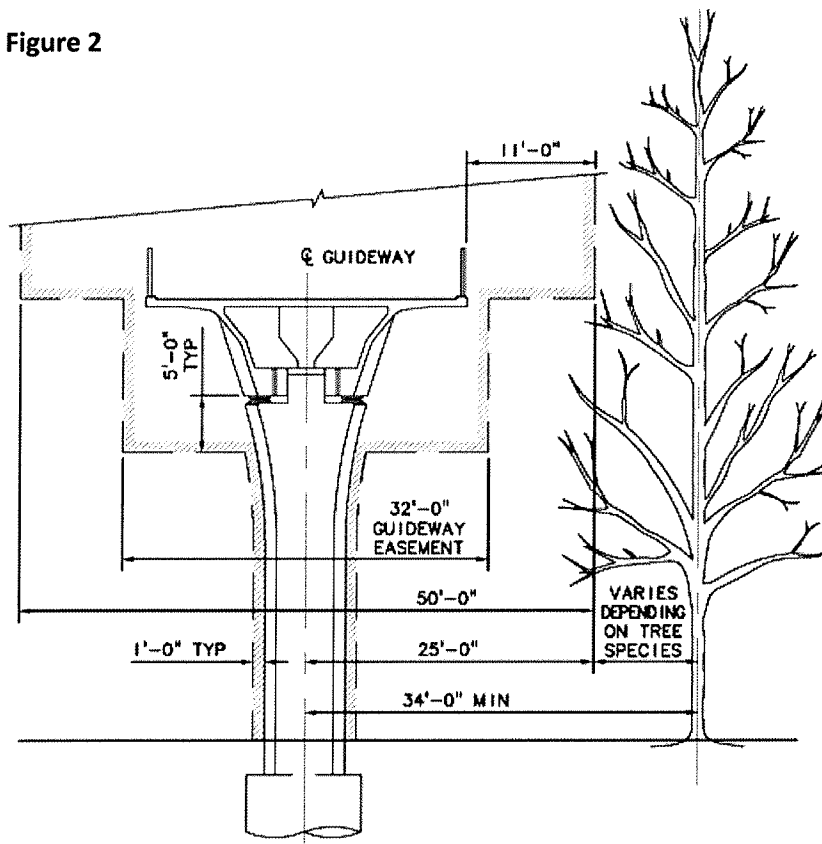
Although ST has strived to retain existing trees to the greatest extent feasible, given the location and constraints of the Project area, numerous existing trees located within the RLRT facility construction limits areas will be

removed in order to construct the Project within the alignment. Trees located within the footprint of guideway operations and the station facilities will be removed, as well as any trees located in areas needed to construct the Project (e.g. construction access, construction staging, etc.) In general, trees within public access areas deemed hazardous will be removed, as well as trees that may become hazardous as a result of construction activities. The arborist for the Project identified existing hazard trees in the field. Hazard trees located within critical areas, outside of public access areas, may be preserved, as they provide habitat and ecological value.

4.2.1 Tree Clear Zone

A Tree Clear Zone, (TCZ) measuring 34 feet from either side of the centerline of the guideway, must remain free of tree trunks, although small-medium shrubs and groundcovers will be allowable in this area. The TCZ is necessary to ensure operational and maintenance safety of the RLRT over time. (Figure 2) (For more details on proposed plantings along the RLRT, refer to the landscape plans included with the *DMP application*.) Existing trees within the TCZ will be removed, and no new trees will be planted within this area.

Figure 2



TREE CLEAR ZONE – ABOVE TOP OF RAILING

Outside of the TCZ, ST established a 30' foot buffer zone to maintain a safe operations and maintenance area for the RLRT. Trees are allowed in this area, but they must be located so that the spread of the mature canopy will not overhang or be blown onto the guideway. If the guideway geometry allows the tree canopy to be above the height of the railing, then the tree branching shall be no closer than 11 feet to the edge of the guideway. At maturity, tree branches and elevated structure dripline may be no closer than 10-feet to the Overhead Catenary System (OCS), a network of overhead wires that supply electrical power to the light rail cars. These distances have been established to ensure the safe operation of the RLRT system, as well as the supporting equipment needed for routine operations and maintenance work.

ST Operations and Maintenance staff have carefully reviewed setbacks within the buffer zone of the TCZ and existing trees in these areas. The East Link Final Design Team selected and located proposed trees and large understory vegetation within the 30' TCZ buffer zone to minimize future conflicts with Light Rail Operations. Should tree growth over time threaten ST

Operations and Maintenance practices, trees located within the TCZ buffer zone may be removed or limbed at the discretion of ST, in order to maintain a safe operation and maintenance zone for the RLRT. For more details on the TCZ, refer to the criteria within Chapter 10 (Landscape) of the *ST Link Design Criteria Manual (Volume 3)*.

4.2.2 Tree Removal at Station Facilities

Existing trees located within the footprint of proposed station buildings and parking areas will also be removed as a result of the Project. Trees may also be removed in these areas to maintain clear vehicular, bicycle and pedestrian sightlines. However, tree preservation was also a strong design consideration at many of the station areas, as ST understands the role that trees play in successful urban design. The East Link Final Design Team looked for opportunities to preserve existing trees at the station areas, particularly at the perimeter, where existing trees contributed to the softening and buffering of station facilities. See Section 5 for information on new landscape areas, including tree plantings.

4.2.3 Timing of Tree Removal due to Construction Phasing

As is covered in previous sections, the Project must remove numerous existing trees within the City of Bellevue. Contractors for each construction package will clear the trees to be removed within the first six months from notice to proceed. These cleared areas will remain treeless for the duration of construction. Due to the need to provide safe access, staging areas and adequate room for the construction of the RLRT facilities within a single corridor, the Project is limited in the ability to meet standards for preserving areas of existing vegetation that are set forth in BMP C101. The Project will protect existing vegetation to the greatest degree feasible and follow the practices outlined in BMP C101 where possible. In areas where vegetation must be cleared, the Project will employ Temporary Erosion and Sediment Control measures, such as hydroseeding, the installation of plastic covering, silt fences, and other common temporary BMPs. Landscape installation will occur near the end of construction; approximately two to four years after initial clearing. More details on proposed landscapes, including general predictions on anticipated growth are covered in Section 5.

ST will sequence construction of each contract package E320, E330/335, and E360. Each contract package will have different construction start dates. Therefore, trees will remain along the alignment within the City to some extent. Individual contract packages may have slight internal phasing options in addition to the overall staggering of construction for the Project. One challenging area is the ground improvement work to take place in E320 in South Bellevue. Three types of ground improvements are proposed for the project:

- **Stone Columns** - Stone columns are placed in a close matrix to support a heavy structure. The matrix consists of stones loaded into a column below ground. The columns support the heavy load by displacing softer soils.
- **Soil Pre-Loading** - Soil pre-loading adds heavy soils to a large surface area to “compact” soft soil and make it suitable to support heavy loads. The heavy surface soils are left in place for up to two years to compact the soft soil below.
- **Deep Soil Mixing** - Deep soil mixing uses a cementation material that is mixed to a deep level to firm up soft soils. This has to be done over a large area where the heavy structure is ultimately being placed.

Ground improvement areas will be cleared prior to the start of improvement work, and no further construction or landscape work can occur in these areas during this time. Public outreach efforts will be implemented to

educate the public on the ground improvement activities and why additional construction activities will not immediately follow this change to the existing landscape.

5.0 Proposed Landscape Areas

5.1 Overview of Proposed Landscape Areas

Given that a large number of existing trees must be removed as a result of the Project, ST has sought to balance this by proposing diverse landscape designs throughout the corridor, which will provide substantial aesthetic and ecological enhancements to the adjacent neighborhoods. The landscaping designs for the corridor and station portions of the Project are focused on low-maintenance and drought-tolerant plant species to meet City requirements for all areas within the City right-of-way. The designs respond to the surrounding context, ensuring that corridor, station, and critical area designs match existing urban characteristics and ecological functions. Each type of proposed landscape design has unique characteristics, design goals, and spatial constraints/opportunities. Despite these differences, planting design was coordinated with multi-disciplinary design teams to ensure that natural and urban areas have sensible transitions. More details on each of the landscape types are provided below, and 60% plant schedules for E320 are included as Appendix E to this memorandum. For additional information, see the *DMP permit application* for each design package. Updated design information will be provided to the COB as it becomes available.

5.1.1 Corridor Landscape Areas

The corridor landscape design provides landscape continuity and character throughout the corridor, with areas of distinction at stations and key features. The surrounding context informed the corridor design. For example, the E320 corridor near the Mercer Slough has a more native plant palette, while the E335 corridor has a simple palette to reflect the civic, urban nature of the downtown. The E340 corridor landscape responds significantly to the vision outlined in the Bel-Red Corridor Plan. Key features are highlighted, such as the Winters House, portal areas, and key intersections within the Bel-Red District, with accent planting and/or a greater level of urban design treatment.

Other context sensitive design approaches that were considered during the design process included:

- Buffer, screening and street frontage landscapes followed the COB LUC code requirements
- Vegetation and architectural screening elements, such as walls, were used in combination to soften infrastructure improvements.
- The landscape design along the corridor responds to the local context, such as near the Mercer Slough area, where the corridor landscape transitions to a native plant palette.
- View corridors along the Project's alignment have been assessed and preserved
- Open space is preserved within the E340 corridor for future gateway or development improvements.
- Back-of-sidewalk areas were inventoried to ensure restoration design matches and enhances existing conditions and adjacent context.

- Adjacent capital improvements are considered and coordinated to support community goals and vision for each area.

Proposed Plant Material : Corridor Areas

Proposed deciduous trees at installation range in size from 1.5-3" caliper (approximately 5-7' in height), while proposed conifers will be 10'-12' in height at installation. Tree heights and canopy vary significantly by species and within different contexts, making future growth predictions challenging. The following are some general assumptions about the design.

- In the first year after planting streetscape tree heights (both deciduous and conifer) will vary, but average height is expected to be 10' to 15'.
- After five years, streetscape trees should be relatively established, with approximately 2' to 5' more growth in height than at time of planting.
- After twenty years, streetscape trees are expected to be between 70% and 80% of their final mature sizes.

5.1.2 Station Landscape Areas

Whereas the corridor landscape designs were used to bring continuity to the RLRT facility, landscape designs at each of the stations will vary, in order to support the unique features of the site and its users, as well as create a link between the station area and the surrounding landscape. Below are some specific details on the station designs:

South Bellevue Station

The landscape reflects the character of the surrounding Mercer Slough Park and plantings are a mix of northwest native and introduced plants. Trees were preserved along the south, east and north side of the station garage. New trees along the west side, South Bellevue Way and at the station entrances will provide landscape buffers, and soften the transitions between facilities. In addition, planting areas in the plaza will be partly irrigated with rainwater captured from the overhead station platform and guideway. Paving patterns that guide users through the ground level of the station plaza will draw inspiration from the Mercer Slough boardwalks.

East Main Station

The landscape between the station and 112th Avenue NE meets the City of Bellevue streetscape requirements and provides an identity for the station that subtly reflects the character of the historic Surrey Downs neighborhood. The landscape to the west of the station works with the sound barrier to provide a visual buffer between the station and the adjacent residences, softening the slope between the two. Vegetated swales incorporated into the design will allow soils to absorb water, reducing the need for irrigation in these areas, and slowing flows and filtering out contaminants before the water is released into the City's storm sewer system.

Bellevue Transit Center Station

Landscape design at the station entry area follows the Downtown Subarea plan and responds to Bellevue City Hall and Plaza which is adjacent to the station and reflects a more urban context. The design also preserves some of the art and special features currently located at the site.

Hospital Station

Located across I-405, the Hospital Station adheres to the Hospital overlay area outlined in the COB LUC. Landscape design at this station draws inspiration from nearby Sturtevant Creek, and some of the historical context of this area. More details will be shared with the City of Bellevue as the design progresses.

120th Avenue Station

Design for this station is currently in-development. More details will be shared with the City of Bellevue as the design progresses.

130th Avenue Station

Vegetated swales in the 130th park & ride allow soils to absorb water, slowing flows and filtering out many contaminants. The design team also integrated future development and restoration projects into the landscape design. The site's wide planting design accommodates the anticipated development by the City of Bellevue to extend Northeast 16th Street connecting 130th and 132nd Avenues. In addition, the space where the future expansion of NE 16th Street is planned has been incorporated into the design as an interim park space.

Proposed Plant Material: Station Areas

Across all the station landscapes deciduous trees at installation range in size from 1.5"-3" (approximately 6'-8' in height) while proposed conifers will be 4'-12' in height at installation. As with the corridor landscapes, heights and canopy vary significantly by species and within different contexts, making future growth predictions challenging. The following are some general assumptions about the design.

- In the first year after planting, trees, shrubs and groundcover material will be in an initial establishment period, and reflect limited growth over their heights at installation, which range from 5'-12'.
- After five years trees and shrubs should have significant growth and plantings should be filled in with 80-100% coverage of planting beds.
- After twenty years, trees and shrubs are close to maturing, some might need maintenance pruning and some of the shrubs and groundcovers will need replacement.

5.1.3 Environmental Mitigation Landscape Areas

ST will construct and monitor environmental mitigation areas as compensation for temporary and permanent Project impacts to wetlands, streams, and their associated buffers. Sincere efforts were made through the early planning and design process to avoid and/or minimize impacts to these critical areas. These efforts resulted in a reduction in the number of trees that will be removed by the Project.

Some impacts to wetlands and streams are anticipated as a result of the Project, resulting in the need for mitigation areas. The design goal for the mitigation areas is to maintain, enhance, and/or create healthy ecosystems. The mitigation designs follow Sound Transit's commitment to a "no net loss" of wetland area and function and provide a surplus of functions to ensure the required mitigation ratios are met.

Proposed Plant Material: Mitigation Areas

The size at installation of all proposed trees within environmental mitigation areas is a 2-gallon container. Height of the plant material will vary depending on the species, but an approximate range is 1.5'-3' in height. Larger-sized plant material has proven to have a lower survival rate, and environmental mitigation landscapes are

required to meet a number of performance standards. A high survival rate is one of the performance standards established by the *Critical Areas Report*, and thus, smaller plant materials is being used within Environmental Mitigation Areas in order to promote early growth and survivability.

In addition to a one-year plant establishment period, the Project has a required monitoring/maintenance plan for all mitigation areas, which is anticipated to range from 5 to 10 years from the when the plants were installed. Details on the monitoring/maintenance plan are included in the *Critical Areas Report*.

5.1.4 Landscape Restoration Areas

These areas are specific to buildings and/or associated landscape areas that are subject to Section 4 (f) of the US Department of Transportation Act of 1966, including public parks, recreation areas, wildlife/waterfowl refuge and historic sites, as well as recreation areas subject to Section 6(f) of the Land and Water Conservation Act. These areas were identified in the East Link Project Final EIS, and include the Winters House and blueberry farm access, Surrey Downs Park, ST-acquired properties north of Surrey Downs Park along 112th Avenue SE including the proposed East Main Park, and the NE 2nd Street pocket parks. The landscape for each of these sites will use materials and plants reflective of the immediate site features and surrounding neighborhood and historic context.

The design process in these areas also identified several contextual themes that occurred along the Project's alignment. These include the Pacific Northwest native vegetation that matches the theme within the Mercer Slough Nature Park, the early twentieth century landscape designs of the historic Winters House, and the mid-century modern aesthetic typical to the architecture and landscapes in the Surrey Downs residential neighborhood.

Proposed Plant Material : Restoration Areas

Plant materials selected for these areas will respond to the unique aesthetic characteristics and function of the sites. At the Winters House, plant selection is based on plant species and form derived from historic data, pictures, and meetings with the City of Bellevue, the Eastside Heritage Center, and the State Historic Preservation Office. The adjoining parking lot landscape uses Pacific Northwest natives that is reflective of the Mercer Slough which borders the parking along the east side. The following are some general assumptions about the growth of the landscape areas over time:

- Some growth will be evident within the first year after plant installation, with exception of the newly installed plants that are required to be replaced within the one-year plant establishment phase.
- After five years, trees and other vegetation will show significant growth. Tree canopy is expected to double.
- After twenty years, trees and other vegetation are anticipated to be mature. Maintenance such as pruning of tree limbs and shrubs will be necessary to maintain Crime Prevention through Environmental Design (CPTED) requirements near public spaces, and to maintain minimum required clearances from Sound Transit operations.

5.1.5 Additional Information

For more details on the ST criteria for all proposed landscape areas, including soil preparation and planting procedures, refer to Chapter 10 of ST Link Design Criteria Manual (DCM) (Volume 3). Final technical specifications will follow the criteria set-forth in the DCM.

6.0 Policies and Context-Sensitive Approaches

6.1 Overview of Regulatory Requirements

Chapter 20.25M of the City of Bellevue's LUC recognizes RLRT facilities as an acceptable use, and governs the development of RLRT facilities within the City. As a result, the Project is required to meet context-sensitive goals under the discretion of the City of Bellevue, retain significant trees to the maximum extent feasible and plant trees and understory vegetation to meet new landscape development requirements established by the LUC.

6.1.1 Tree Removal and Replacement

Throughout the project, trees have been retained to the maximum extent feasible. ST has prepared a quantitative analysis of tree removal for each design package within the City of Bellevue (included with this memorandum as Appendices A, B & C). This analysis quantifies both the number of trees removed within each package, as well as the number of trees that will be planted along the corridor, at station areas and within mitigation sites. Where the Project removes significant trees within Critical Areas and Critical Area Buffers, the Project will replace each significant conifer removed at a 3 to 1 ratio and will replace significant deciduous trees at a 1 to 1 ratio. Outside of Critical Areas and Critical Area Buffers, the design team has taken steps to meet context-sensitive requirements established by the LUC.

Sub-section 20.25M.040.C of the City of Bellevue's LUC describes applicable landscape development requirements for the Project outside of Critical Areas and Critical Area Buffers. The purpose and intent of the landscape requirements is to provide (i) dense sight barriers between higher and lower intensity uses and (ii) visual relief and softening of transportation facilities where preservation of sight lines is important. The requirements provided in LUC 20.25M.040.C will be met through the protection/retention of significant existing trees where preservation is feasible, and by installing new landscape areas along the corridor and at the stations.

6.2 Context Sensitive Design

Context-sensitive design approaches are difficult to assess through numbers alone, and a primary goal of this memorandum is to provide a qualitative perspective on the Project's design. The City of Bellevue, through the most recent update to their Comprehensive Plan, has identified a number of goals for integrating new public transportation facilities into the context and character of the City.

6.2.1 Comprehensive Plan Discussion

Policy TR-75.12 of the City's Comprehensive Plan provides the following guidance on the development of RLRT facilities:

Partner with the regional transit provider to design transit stations and facilities incorporating neighborhood objectives and context sensitive design to better integrate facilities into the community. This includes, but is not limited to the following:

MEMORANDUM

Sound Transit East Link | South Bellevue to OTC

ANALYSIS OF TREE PRESERVATION AND CONTEXT SENSITIVE DESIGN – CITY OF BELLEVUE

Date: September 23, 2014

To: Matthews Jackson, City of Bellevue

From: Justin Lacson, Sound Transit

Re: Tree Preservation and Context Sensitive Analysis – City of Bellevue Jurisdiction

1.0 Executive Summary

The East Link Regional Light Rail Transit (RLRT) Project (the Project) is a public transportation facility and the City of Bellevue developed a new overlay district, Chapter 20.25M of the City's Land Use Code (LUC), to acknowledge and govern this type of project. The inclusion of Chapter 20.25M into the City's land use code recognizes light rail as an acceptable use within the City. As a result, the Project is required to meet context-sensitive requirements under the discretion of the City of Bellevue, retain trees to the maximum extent feasible and plant trees and understory vegetation to meet new landscape development requirements established by the LUC.

The Project alignment, which was selected by Sound Transit (ST) and agreed to by the City of Bellevue, is adjacent to a number of residential neighborhoods and includes parcels of land with existing trees. The proposed RLRT corridor is limited, and in order to safely construct, operate and maintain RLRT facilities, removal of existing trees and other vegetation within the Project's footprint is unavoidable. To mitigate tree removal, ST has incorporated a variety of context-sensitive design methods into the Project, and has made design adjustments as a result of feedback from local residents and stakeholders. These methods are discussed in this memorandum and have been used to avoid and/or minimize tree removal within the Projects limits, especially in areas that have trees that are considered valuable because of their size and/or species. Areas that have a unique character or are within critical areas/critical area buffers were also considered for creative protective measures. Further detail on ecological benefits and habitats are provided in the *Critical Areas Report*. Moving beyond preservation, proposed station areas and landscape designs that adopt the contextual vision for each sub-area will provide additional mitigation for the loss of existing vegetation.

The East Link Final Design Team has strived to design RLRT facilities that will integrate into the existing context of Bellevue's residential neighborhoods and commercial areas and also respond to future development. Key elements of ST's design approach were tree preservation, new landscape areas that match the urban or ecological context, and thoughtful urban design, which included thoughtful selection of building contextual materials and the integration of engaging public art. ST respects Bellevue's 'City in a Park' theme and has proposed diverse landscape designs that will buffer neighborhoods from RLRT facilities, provide new gathering spaces for local residents and commuters, preserve and restore community touchstones and help to preserve and enhance environmentally sensitive areas. As a result of these context-sensitive approaches, the Project meets the City of Bellevue requirements for tree retention and removal.

MEMORANDUM- APPENDIX A

Sound Transit East Link | South Bellevue to OTC

E320 TREE REMOVAL AND MITIGATION ANALYSIS WITHIN THE CITY OF BELLEVUE

Date: September 23, 2014

To: Matthews Jackson, City of Bellevue

From: Justin Lacson, Sound Transit

Re: East Link Light Rail Extension Project South Bellevue (E320) Design Package within the City of Bellevue

1.0 PURPOSE

This memorandum quantifies the number and extent of tree removal required to construct the South Bellevue (E320) portion of the East Link Light Rail Extension Project (Project) located within the City of Bellevue (COB). The number, type (e.g., deciduous, coniferous) and general location (e.g. outside critical area / buffer, within critical area / buffer) of trees which will be removed to construct the South Bellevue portion of the Project area identified in Table 3.0-1 of *Appendix A*. This memorandum also quantifies the number of proposed trees that will be planted as a result of the Project. Descriptions and detailed information on tree removal, protection and replacement are covered in the main text of the *Analysis of Tree Preservation and Context Sensitive Design* dated September 23, 2014.

A small portion at the southern extent of E320 is located within the Washington State Department of Transportation (WSDOT) right-of-way and is not included in this analysis. The remaining portion of E320 is located within the City of Bellevue's jurisdiction. Tree removal addressed below occurs entirely within the South Bellevue Design and Mitigation Permit (DMP) limits, which include the portions of the Project between the WSDOT right-of-way at approximately SE 30th Street and Bellevue Way SE to approximately 500 feet north of SE 4th Street and 112th Avenue SE (see Figure 1). Additionally, this report identifies the mitigation requirements pursuant to the Land-Use Code (LUC) for South Bellevue that are located solely within COB jurisdiction (i.e. not within WSDOT limited access right-of-way).

2.0 OVERVIEW

The E320 portion of the Project within the COB is an approximately 2.2 mile section that runs from the East Channel bridge to approximately 112th Avenue SE and SE 4th Street. This segment includes the South Bellevue Station and associated garage located at the existing S. Bellevue park-and-ride site. It will be constructed under a Design-Bid-Build contract.

REPORT SCOPE

Ninety percent design information regarding tree removal and replanting was used to develop this memorandum. Since none of the design packages are at the one-hundred-percent design level, it is anticipated that the amount and extent of tree removal and replacement may change during the City's review.

TREE DATA

The East Link Final Design Team conducted tree survey assessments for each of the Project's design packages. This tree survey identified all trees, (i.e. 4" diameter at breast height (DBH) or greater) as defined in the LUC, that are located within the construction limits and potentially impacted during implementation of the Project. This effort included any critical area mitigation projects associated with construction activities, temporary equipment access and construction staging areas. The following analysis of tree retention, removal and mitigation uses the extent of this tree survey, which is consistent with the boundaries of the Light Rail Overlay area (see COB Chapter 20.20M LUC) in E320.

The E320 package contains several trees that fall within the COB Shoreline Jurisdiction. Shoreline Jurisdiction trees removed by the project that are located *within* Critical Areas or Critical Area Buffers are mitigated based on Critical Area regulations, and are included with the Critical Area/Buffer analysis presented in this memo. Shoreline Jurisdiction trees removed by the project that are *outside* of Critical Areas and Buffers are considered part of the Light Rail Overlay area, and have been included in that portion of the following analysis. All trees within the Shoreline Jurisdiction were addressed in the *Shoreline Substantial Development Permit* (13-135764 WG) submitted December, 2013 to the City of Bellevue.

This memorandum also describes mitigation opportunities to compensate for the removal of trees. Landscaping required by the City's standard landscape development requirements (LUC 20.20.520 as well as any Sub-area landscape requirements) are counted towards the overall corridor mitigation compensation. Additional information regarding the landscaping requirements is included in the *South Bellevue (E320) Design and Mitigation Permit* application.

TREE REPLACEMENT CRITERIA

The Project is taking a standard, corridor-wide approach to mitigation for the removal of trees within critical areas and critical area buffers. For these areas (which include critical areas and critical area buffers within the City of Bellevue, the City of Redmond and WSDOT jurisdiction) the Project will apply standard replacement ratios for tree removal: a 3:1 replacement ratio for the removal of conifers (e.g., western hemlock), and a 1:1 tree replacement ratio for the removal of deciduous (e.g. big leaf maple) trees.

Outside of critical areas, the project is required to be context sensitive and preserve existing vegetation to a maximum extent feasible. See the *Analysis of Tree Preservation and Context Sensitive Design* dated September 23, 2014 for a full discussion of applicable regulations. Information on proposed landscape areas also is provided in that document, as well as the Bel-Red DMP permit application.

3.0 Analysis

Table 3.0-1 *E320 Tree Removal and Mitigation Summary* provides a quantitative summary of tree removal, mitigation and the proposed tree plantings along the E320 corridor. This data reflects the field assessments performed by ST, based on anticipated effects of construction. The analysis for E320 portion of the Project is divided into three areas, as shown in Table 3.0-1. ST derived the estimate of trees required for mitigation by applying the critical area mitigation ratios to the number of trees that will be removed in those areas. The number of replacement trees is based on ninety-percent plans, plant schedules and cost estimate data included in the construction documents. Proposed trees include species commonly considered trees, as well as a small

number of large shrub species that exhibit a growth habit and size similar to that of a small tree. (See note 4 under Table 3.0-2) At the ninety-percent design benchmark, the number of trees planted by the Project surpasses the number of trees required to mitigate tree removal associated with the Project.

Table 3.0-1 – E320 Tree Removal and Mitigation Summary

| E320 Design Package Tree Removal | Light Rail Overlay Areas | Critical Areas | | Critical Area Buffer | |
|---------------------------------------------------------------------|----------------------------------|----------------|-------------------|----------------------|---------------------|
| | | Coniferous | Deciduous | Coniferous | Deciduous |
| Total Trees | 2,196 | | | | |
| Trees by District | 968 | 25 | 311 | 162 | 730 |
| Total Trees Removed | 1,279 | | | | |
| Trees Removed by District¹ | 682 ² (+14 hazard) | 13 | 60 (+1 hazard) | 129 (+2 hazard) | 395 (+27 hazard) |
| Estimate of Total Trees Necessary for Mitigation³ | 881 | | | | |

1. Tree counts, rather than DBH, are reported in this column, for purposes of consistency between critical areas, critical area buffers and non-critical areas. On non-critical areas within the city of Bellevue, mitigation is based on DBH. Notes on the DBH are provided below, based on the data on trees removed within Light Rail Overlay Areas.
2. Of the 10,073" of existing tree DBH located within Light Rail Overlay Areas, (includes trees to remain as well as trees that will be removed) 6,863" DBH will be removed by the Project.
3. This number was determined by applying the tree replacement ratios to the number of trees removed within each of the relevant areas.

Table 3.0-2 – E320 Tree Replanting Summary – Proposed Corridor/Station and Mitigation Plantings

| E320 Design Package Tree Replacement | Corridor and Station Plantings | Mitigation/Restoration Area Plantings ³ | |
|----------------------------------------------|-----------------------------------|----------------------------------------------------|-----------|
| | | Coniferous | Deciduous |
| Proposed Trees to be Planted | 595 | 722 | 8,262 |
| Total Trees to be Planted⁵ | 9,579 | | |

4. Includes all tree species and the following large shrub species that typically have a tree growth habit: *Crataegus douglasii* (158) *Corylus cornuta* (70) and *Salix lasiandra* (7,552)
5. This is a summary of all trees to be planted within proposed landscape areas.

MEMORANDUM – APPENDIX D**Sound Transit East Link | South Bellevue to OTC****TREE ASSESSMENT METHODOLOGY****3.2.1 Tree Assessment Methodology**

The process for completing the assessments within the Project study areas involved the following steps: A) tree location survey; B) tree species identification and health classification (describing the condition of the tree as fair or hazard, etc.); and C) data processing/ quality control. These steps are described in more detail below:

A. Tree Location Survey

Licensed surveyors completed field surveys in 2013 and 2014 to electronically locate trees 4" DBH and above using a handheld GPS device. This information was loaded into the Project design files. The selected contractor will be responsible to conduct a follow-up tree assessment and survey, to be completed prior to the initiation of construction.

B. Tree Identification and Classification

An International Society of Arboriculture (ISA) Certified Arborist (#214410) led the Tree Survey Assessment. The tree survey assessment criterion provides data collection requirements regarding health, species, and locations for trees surveyed.

The Arborist recorded the following data for trees:

- Diameter-at-Breast-Height (DBH) (Multi-stem trees had each stem recorded if size and stem location were met. The largest stem was used to determine the overall DBH of multistem trees.)
- Species
- Category—coniferous or deciduous
- Category—"significant", per city code(s)
- Health Classification—excellent/good, fair, poor, or "hazard" (In the case of "hazard" trees, the Arborist provided a description of the conditions that made the tree hazardous.)

Note: When Right-of-Entry (ROE) authorizations were not received, the tree location survey could not be completed on the specified parcel. Therefore, the arborist collected tree identification and classification using GPS offsets, range finders, and binoculars to assess trees and record data from existing public right-of-ways.

C. Data Processing/Quality Control

The arborist transferred the tree survey assessment data recorded in the field from the GPS device to a tabular format using Excel spreadsheets to create unique tree identification (ID) numbers and to confirm the status assessment of each tree.

SOUTH BELLEVUE STATION PLANTING SCHEDULE

| SYM. | QTY. | BOTANICAL | COMMON NAME | SIZE/REMARKS |
|-------------------------------------|---------|-----------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| EVERGREEN TREES | | | | |
| + | 7 | ABIES GRANDIS | GRAND FIR * | 8-10' HT. BABCONT. |
| • | 6 | INCENSE CEDAR * | INCENSE CEDAR * | 8-10' HT. BABCONT. |
| • | 21 | PINUS CONTORTA VAR. CONTORTA | SHORE PINE * | 8-10' HT. BABCONT. |
| • | 12 | THUJA PLICATA | WESTERN RED CEDAR * | 8-10' HT. BABCONT. |
| • | 33 | TSUGA HETEROPHYLLA | WESTERN HEMLOCK * | 6-8' HT. BABCONT. |
| • | 18 | TSUGA MERTENSIANA | MOUNTAIN HEMLOCK * | 6-8' HT. BABCONT. |
| DECIDUOUS | | | | |
| • | 46 | ACER CIRCINATUM | VINE MAPLE * | 7-8' HT. BAB, MULTISTEM, WELL BRANCHED & WELL ROOTED |
| • | 11 | AMELANCHIER GRANDIFLORA | PRINCESS DIANA SERVICEBERRY | 2' CAL. MIN 16-17' HT. BAB, FULL, WELL BRANCHED & WELL ROOTED; STRAIGHT CENTRAL LEADER & SINGLE TRUNK; SYMMETRICAL BRANCHING; 5 MIN BRANCH HT |
| • | 12 | CARPINUS BETULUS 'FASTIGIATA' | PYRAMIDAL EUROPEAN HORSEBEECH * | 3' CAL. MIN 12-14' HT. BAB, FULL, WELL BRANCHED & WELL ROOTED; STRAIGHT CENTRAL LEADERS & SINGLE TRUNK; SYMMETRICAL BRANCHING; 6 MIN BRANCH HT |
| • | 9 | CORNUS KOUSA X NUTTALLII 'VENUS' | VENUS DOGWOOD | 2' CAL. MIN 10-12' HT. BAB, FULL, WELL BRANCHED & WELL ROOTED; STRAIGHT CENTRAL LEADERS & SINGLE TRUNK; SYMMETRICAL BRANCHING; 5 MIN BRANCH HT |
| • | 48 | GINKGO BILOBA 'FASTIGIATA' | MAIDENHAIR TREE * | 2' CAL. MIN 12-14' HT. BAB, FULL, WELL BRANCHED & WELL ROOTED; STRAIGHT CENTRAL LEADERS & SINGLE TRUNK; SYMMETRICAL BRANCHING; 4 MIN BRANCH HT |
| • | 11 | GINKGO BILOBA 'JADE BUTTERFLY' | JADE BUTTERFLY GINKGO * | 6-7' HT. BAB, MULTISTEM, FULL, WELL BRANCHED & WELL ROOTED |
| LARGE SHRUBS | | | | |
| • | 9 | HOLDOUS DISCOLOR | OCEAN SPRAY * | 5 GAL. MIN 36" HT. 4 CANES; FULL & WELL ROOTED |
| • | 12 | MAHONIA AQUIFOLIUM | TALL OREGON GRAPE * | 5 GAL. MIN 30" HT. FULL & WELL ROOTED |
| • | 5 | PHILADELPHUS LEWISII | MOCK ORANGE * | 5 GAL. MIN 36" HT. 4 CANES; FULL & WELL ROOTED |
| • | 17 | PINUS MUGO 'WUGO' | MUGO PINE * | 5 GAL. MIN 24" HT. FULL & WELL ROOTED |
| • | 43 | RHOODENDRON OCCIDENTALE | WESTERN AZALEA * | 5 GAL. MIN 18" HT. 5 CANES; FULL & WELL ROOTED |
| • | 18 | RIBES SANGUINEUM | RED FLOWERING CURRENT * | 5 GAL. MIN 30" HT. 4 CANES; FULL & WELL ROOTED |
| • | 362 | SPIREA BETULIFOLIA TOR | BIRCH LEAF SPIREA * | 5 GAL. MIN 18" HT. 5 CANES; FULL & WELL ROOTED |
| • | 224 | SYMPHORICARPOS ALBUS | SNOWBERRY * | 2 GAL. MIN 18" HT. 3 CANES; FULL & WELL ROOTED |
| • | 418 | VACCINIUM OVATUM | EVERGREEN HUCKLEBERRY * | 5 GAL. MIN 18" HT. FULL & WELL ROOTED |
| • | 84 | VACCINIUM 'SUNSHINE BLUE' | SUNSHINE BLUEBERRY | 5 GAL. MIN 24" HT. 4 CANES; FULL & WELL ROOTED |
| • | 17 | VIBURNUM OPULUS VAR. AMERICANUM | AMERICAN CRANBERRY BUSH | 5 GAL. MIN 36" HT. 5 CANES; FULL & WELL ROOTED |
| SMALL SHRUBS AND GROUNDCOVER | | | | |
| • | 420 SF | ARCTOSTAPHYLOS UVA-URSI | KINKINNICK * | 1 GAL. FULL & WELL ROOTED; TRIANGULAR SPACING @ 18" OC |
| • | 1652 SF | ASARUM CAUDATUM | WESTERN WILD GINGER * | 1 GAL. FULL & WELL ROOTED; TRIANGULAR SPACING @ 15" OC |
| • | 2247 SF | CAREX TESTACEA | ORANGE NEWZEALAND SEDGE * | 1 GAL. FULL & WELL ROOTED; TRIANGULAR SPACING @ 18" OC |
| • | 2121 SF | CAREX OBTRUPA | SLOUGH SEDGE * | 1 GAL. FULL & WELL ROOTED; TRIANGULAR SPACING @ 24" OC |
| • | 9454 SF | GALTHERIA SHALLOON | SALAL * | 1 GAL. MIN 8" SPREAD; FULL & WELL ROOTED; TRIANGULAR SPACING @ 24" OC |
| • | 972 SF | JUNCUS EFFUSUS VAR. PACIFICUS | SOFT RUSH * | 1 GAL. FULL & WELL ROOTED; TRIANGULAR SPACING @ 24" OC |
| • | 2148 SF | KALIMOPSIS LEACHIANA LEPNIEC FORM | NORTH LIMPQUIA KALIMOPSIS * | 2 GAL. MIN 12" SPREAD; FULL & WELL ROOTED; TRIANGULAR SPACING @ 24" OC |
| • | 6808 SF | MAHONIA REPENS | CREeping MAHONIA * | 1 GAL. TRIANGULAR SPACING @ 18" OC |
| • | 718 SF | PACHYSANDRA TERMINALIS | JAPANESE SPURGE * | 4" POTS; TRIANGULAR SPACING @ 12" OC |
| • | 121 | PAXISTIMA MYRSINIS | OREGON FALSEBOX * | 2 GAL. MIN 18" HT. 12" SPREAD; FULL & WELL ROOTED |
| • | 141 | POLYSTICHUM MUNITUM | SWORD FERN * | 1 GAL. FULL & WELL ROOTED |
| • | 233 | POTENTILLA FRUTICOSA 'GOLD STAR' | GOLD STAR CINQUEFOIL * | 5 GAL. MIN 18" HT. 5 CANES; FULL & WELL ROOTED |
| • | 767 SF | RUBUS CALCINOIDES | BRAMBLE * | 1 GAL. FULL & WELL ROOTED; TRIANGULAR SPACING @ 24" OC |

60% SUBMITTAL

| | |
|--------------|--------------|
| DESIGNED BY: | LOTTSEN |
| DESIGNED BY: | P. GOUR |
| DESIGNED BY: | A. WEST |
| APPROVED BY: | J. SCHETTLER |
| DATE | 10/24/2013 |
| DATE | 10/24/2013 |
| DATE | 10/24/2013 |

NAKANO ASSOCIATES
LANDSCAPE ARCHITECTS
1111 202 212 8332
PACIFIC PALISADES, WA 98144

SUBMITTED BY:

DATE

REVIEWED BY:

DATE



SOUNDTRANSIT

DATE

REVIEWED BY:

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EAST LINK EXTENSION

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REVIEWED BY:

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EAST LINK EXTENSION

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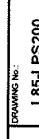


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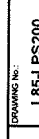


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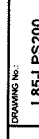


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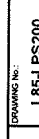


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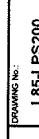


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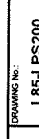


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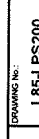


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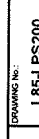


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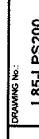


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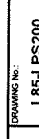


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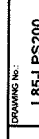


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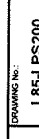


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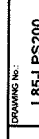


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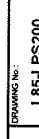


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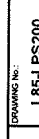


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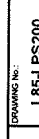


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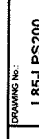


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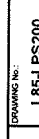


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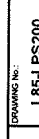


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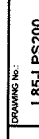


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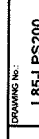


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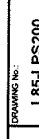


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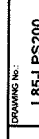


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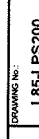


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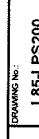


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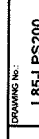


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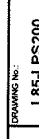


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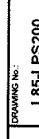


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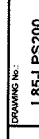


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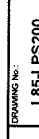


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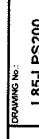


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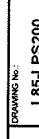


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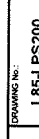


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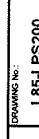


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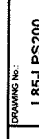


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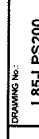


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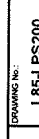


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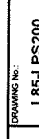


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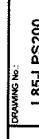


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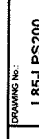


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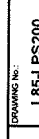


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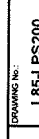


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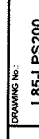


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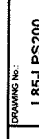


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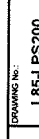


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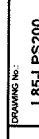


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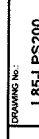


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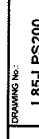


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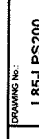


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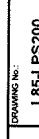


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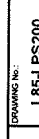


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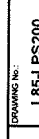


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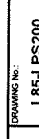


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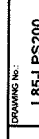


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EAST LINK EXTENSION

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60% SUBMITTAL

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**EAST LINK EXTENSION
CONTRACT E320**

LANDSCAPE
PLANTING SCHEDULE, NOTES & LEGEND
PARK MITIGATION BY SOUTH BELLEVUE STATE



SOUND TRANSIT



HJH
FINAL DESIGN PARTNERS

NAKANO ASSOCIATES
LANDSCAPE ARCHITECTS
453 Hiawatha Place S.
Seattle, WA 98144
Tel: 206.282.8392
www.nakanolandscape.com



STATE OF
WASHINGTON
LICENSED
LANDSCAPE ARCHITECT

| | |
|--------------|------------|
| DESIGNED BY: | 1. OTTESEN |
| DRAWN BY: | P. GILMOUR |
| CHECKED BY: | A. MESTY |

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CHECKED BY: / DATE:

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* INDICATES DROUGHT TOLERANT AND/OR PACIFIC NORTHWEST NATIVE SPECIES

NOTES:

1. ANY DISCREPANCIES WITH THE DIMS AND/OR SPECS AND SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF LA PRIOR TO PROCEEDING WITH CONSTRUCTION.
2. PLANT MATERIAL LOCATIONS SHALL BE COORDINATED WITH SPRINKLER IRRIGATION HEAD LOCATIONS TO AVOID ANY CONFLICTS.
3. ALL PLANTING AREAS EXCEPT AREAS SEEDED WITH MEADOW MIX OR EROSIONS CONTROL HYDROSEED MIX SHALL RECEIVE A MINIMUM ARBORIST DEPTH OF MULCH EXCEPT
4. ALL DISTURBED LANDSCAPE AREAS NOT INDICATED FOR PAVING OR PLANTING SHALL RECEIVE A DEPTH OF MULCH.

USERS PUBLIC DOCUMENTS CALDWELL, CALDWELL, TTPS, SHARPPOINT, SOUND TRAVISIT, ORGA43, SITE SCAD, ELI, DE, RE, E, 220, DRA, MNO, S, E, 320, L, 5, L, P, 3300, DMO

FORESTED BUFFER TOTALS

| COMMON NAME | BOTANICAL NAME | QTY | SIZE | SPACING | NOTES |
|-------------------|------------------------|-----|-------|----------|-------|
| BEAKED HAZELNUT | CORYLUS CORNUTA | XX | 1 GAL | 5' O.C. | NOTES |
| INDIAN PLUM | OEMLERIA CERASIFORMIS | XX | 1 GAL | 5' O.C. | NOTES |
| KINKINNICK | ARCTOSTAPHYLOS OVA-URS | XX | 1 GAL | 5' O.C. | NOTES |
| SALAL | GAULTHERIA SHALLO | XX | 1 GAL | 5' O.C. | NOTES |
| SNOWBERRY | SYMPHORICARPOS ALBUS | XX | 1 GAL | 5' O.C. | NOTES |
| SWORD FERN | POLYSTICHUM MUNITUM | XX | 1 GAL | 5' O.C. | NOTES |
| TALL OREGON GRAPE | MAHONIA AQUIFOLIUM | XX | 1 GAL | 5' O.C. | NOTES |
| VINE MAPLE | ACER CIRCINATUM | XX | 1 GAL | 5' O.C. | NOTES |
| WOODS ROSE | ROSA WOODSII | XX | 1 GAL | 5' O.C. | NOTES |
| BIG LEAF MAPLE | ACER MACROPHYLLUM | XX | 1 GAL | 10' O.C. | NOTES |
| BLACK HAWTHORNE | CRATAEGUS DOUGLASII | XX | 1 GAL | 10' O.C. | NOTES |
| DOUGLAS FIR | PSEUDOTSUGA MENZIESII | XX | 1 GAL | 10' O.C. | NOTES |
| WESTERN HEMLOCK | TSUGA HETEROPHYLLA | XX | 1 GAL | 10' O.C. | NOTES |
| WESTERN RED CEDAR | THUJA PLICATA | XX | 1 GAL | 10' O.C. | NOTES |
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SCRUB SHRUB BUFFER TOTALS

| COMMON NAME | BOTANICAL NAME | QTY | SIZE | SPACING | NOTES |
|-------------------|------------------------|-----|-------|----------|-------|
| BEAKED HAZELNUT | CORYLUS CORNUTA | XX | 1 GAL | 5' O.C. | NOTES |
| INDIAN PLUM | OEMLERIA CERASIFORMIS | XX | 1 GAL | 5' O.C. | NOTES |
| KINKINNICK | ARCTOSTAPHYLOS OVA-URS | XX | 1 GAL | 5' O.C. | NOTES |
| LOW OREGON GRAPE | MAHONIA NEROSA | XX | 1 GAL | 5' O.C. | NOTES |
| NOCTKA ROSE | ROSA NUTKANA | XX | 1 GAL | 5' O.C. | NOTES |
| SALAL | GAULTHERIA SHALLO | XX | 1 GAL | 5' O.C. | NOTES |
| SNOWBERRY | SYMPHORICARPOS ALBUS | XX | 1 GAL | 5' O.C. | NOTES |
| SWORD FERN | POLYSTICHUM MUNITUM | XX | 1 GAL | 5' O.C. | NOTES |
| VINE MAPLE | ACER CIRCINATUM | XX | 1 GAL | 5' O.C. | NOTES |
| BLACK HAWTHORNE | CRATAEGUS DOUGLASII | XX | 1 GAL | 10' O.C. | NOTES |
| DOUGLAS FIR | PSEUDOTSUGA MENZIESII | XX | 1 GAL | 10' O.C. | NOTES |
| WESTERN RED CEDAR | THUJA PLICATA | XX | 1 GAL | 10' O.C. | NOTES |
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INFILL PLANTING TOTALS

| COMMON NAME | BOTANICAL NAME | QTY | SIZE | SPACING | NOTES |
|-------------------|-----------------------|-----|-------|---------|-------|
| INDIAN PLUM | OEMLERIA CERASIFORMIS | XX | 1 GAL | 5' O.C. | NOTES |
| SALAL | GAULTHERIA SHALLO | XX | 1 GAL | 5' O.C. | NOTES |
| SWORD FERN | POLYSTICHUM MUNITUM | XX | 1 GAL | 5' O.C. | NOTES |
| TALL OREGON GRAPE | MAHONIA AQUIFOLIUM | XX | 1 GAL | 5' O.C. | NOTES |
| WOODS ROSE | ROSA WOODSII | XX | 1 GAL | 5' O.C. | NOTES |
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FORESTED WETLAND TOTALS

| COMMON NAME | BOTANICAL NAME | QTY | SIZE | SPACING | NOTES |
|---------------------|----------------------|-----|-------|----------|-------|
| HIGH BUSH CRANBERRY | VIBURNUM EDULE | XX | 1 GAL | 5' O.C. | NOTES |
| LADY FERN | ADiantum PULCHERRIMA | XX | 1 GAL | 5' O.C. | NOTES |
| PACIFIC NINEBARK | PAUSANIAS CAPITATUS | XX | 1 GAL | 5' O.C. | NOTES |
| RED OSIER DOGWOOD | CORNAUS SENDER | XX | 1 GAL | 5' O.C. | NOTES |
| TWINBERRY | LONGERA INVOLUCRATA | XX | 1 GAL | 5' O.C. | NOTES |
| OREGON ASH | FRAXINUS LATIFOLIA | XX | 1 GAL | 10' O.C. | NOTES |
| PACIFIC WILLOW | SAUX LASIANDBA | XX | 1 GAL | 10' O.C. | NOTES |
| SITKA SPRUCE | PICEA SITCHENSIS | XX | 1 GAL | 10' O.C. | NOTES |
| WESTERN RED CEDAR | THUJA PLICATA | XX | 1 GAL | 10' O.C. | NOTES |
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SCRUB-SHRUB WETLAND TOTALS

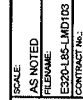
| COMMON NAME | BOTANICAL NAME | QTY | SIZE | SPACING | NOTES |
|-------------------|----------------------|-----|-------|----------|-------|
| LADY FERN | ADiantum PULCHERRIMA | XX | 1 GAL | 5' O.C. | NOTES |
| PACIFIC NINEBARK | PAUSANIAS CAPITATUS | XX | 1 GAL | 5' O.C. | NOTES |
| RED OSIER DOGWOOD | CORNAUS SENDER | XX | 1 GAL | 5' O.C. | NOTES |
| SALMONBERRY | RUBUS SPECTABILIS | XX | 1 GAL | 5' O.C. | NOTES |
| SANDBAR WILLOW | SAUX EXIGUA | XX | 1 GAL | 5' O.C. | NOTES |
| TWINBERRY | LONGERA INVOLUCRATA | XX | 1 GAL | 5' O.C. | NOTES |
| OREGON ASH | FRAXINUS LATIFOLIA | XX | 1 GAL | 10' O.C. | NOTES |
| PACIFIC WILLOW | SAUX LASIANDBA | XX | 1 GAL | 10' O.C. | NOTES |
| WESTERN RED CEDAR | THUJA PLICATA | XX | 1 GAL | 10' O.C. | NOTES |
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EMERGENT WETLAND TOTALS

| COMMON NAME | BOTANICAL NAME | QTY | SIZE | SPACING | NOTES |
|-----------------------|----------------------|-----|------|---------|-------|
| BEAKED SEDGE | CAREX ROSTRATA | XX | XX | XX | NOTES |
| COMMON SPIKERUSH | ELEOCHARIS PALUSTRIS | XX | XX | XX | NOTES |
| DAGGERLEAF RUSH | JUNCUS INSECUOLUS | XX | XX | XX | NOTES |
| HARDSTEM BULRUSH | SCIRPUS ACUTUS | XX | XX | XX | NOTES |
| SLENDER RUSH | JUNCUS TENUIS | XX | XX | XX | NOTES |
| SLOUGH SEDGE | CAREX TENUIPS | XX | XX | XX | NOTES |
| SMALL-FRUITED BULRUSH | SCIRPUS MICROCARPUS | XX | XX | XX | NOTES |
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60% SUBMITTAL

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|--------------|------------|
| DESIGNED BY: | J. LONG |
| DRAWN BY: | J. LOGAN |
| CHECKED BY: | S. ELWOOD |
| DATE: | 12/06/2013 |



EAST LINK EXTENSION
CONTRACT E320
SOUTH BELLEVUE
LANDSCAPE
SITE RESTORATION DETAILS

DRAWING NO.: L85-LMD103
LOCATION ID: E12
SHEET NO.: 808
REV: 0

PLANT SCHEDULE & NOTES

| SYM | QTY | BOTANICAL NAME | COMMON NAME | SIZE / REMARKS | SYM | QTY | BOTANICAL NAME | COMMON NAME | SIZE / REMARKS |
|-----|----------|-----------------------------------------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | 46 | ACER CIRCINATUM | VINE MAPLE | 8-10' HT; B&B: FULL, WELL BRANCHED & WELL ROOTED; MIN 3 TRUNKS | | 37,284 SF | MIX: NATIVE FOREST BUFFER VACCINIUM OVATUM POLYSTICHUM MUNITUM GALTHERIA SHALLOON MAHONIA REPENS SPIRAEA BETULIFOLIA 'TOR' SYMPHORICARPOS ALBUS | EVERGREEN HUCKLEBERRY WESTERN SWORD FERN SALAL PACIFIC WAX MYRTLE COMMON WHITE SNOWBERRY | 36" OC TRIANGULAR SPACING; INTERMIX PLANTS WITH CONSISTENT DISTRIBUTION; OFFSET 12" FROM PAVING, GUARDRAIL, FENCE, OR WALL 5 GAL CONT; 42" HT; FULL & WELL ROOTED; MIN 3 GREEN FRONDS 1 GAL CONT; FULL & WELL ROOTED |
| | 38 | ACER RUBRUM 'FRANKSRED' | RED SUNSET MAPLE | 2 1/2" CAL; B&B: FULL, WELL BRANCHED & WELL ROOTED; STRAIGHT CENTRAL LEADER & SINGLE TRUNK; SYMMETRICAL BRANCHING HABIT; MIN 7 BRANCHING HEIGHT | | 15% | | | |
| | 2 | BETULA PAPERIFERA | PAPER BIRCH | 2 1/2" CAL; B&B: FULL, WELL BRANCHED & WELL ROOTED; STRAIGHT CENTRAL LEADER & SINGLE TRUNK; MIN 5 BRANCHING HEIGHT | | 15% | | | |
| | 4 | CARPINUS BETULUS 'FASTIGIATA' | PYRAMIDAL EUROPEAN HORNBANE | 2 1/2" CAL; B&B: FULL, WELL BRANCHED & WELL ROOTED; STRAIGHT CENTRAL LEADER & SINGLE TRUNK; MIN 7 BRANCHING HEIGHT | | 20,338 SF | MIX: NATIVE BUFFER CORNUS SERICEA 'KELSEY' GALTHERIA SHALLOON MAHONIA REPENS SYMPHORICARPOS ALBUS | KELSEY DOGWOOD SALAL WESTERN SWORD FERN PACIFIC WAX MYRTLE COMMON WHITE SNOWBERRY | 36" OC TRIANGULAR SPACING; INTERMIX PLANTS WITH CONSISTENT DISTRIBUTION; OFFSET 12" FROM PAVING, GUARDRAIL, FENCE, OR WALL 1 GAL CONT; FULL & WELL ROOTED |
| | 29 | CORNUS KOUSA X NUTTALLII 'VENUS' | VENUS DOGWOOD | 2 1/2" CAL; B&B: FULL, WELL BRANCHED & WELL ROOTED; STRAIGHT CENTRAL LEADER & SINGLE TRUNK; MIN 5 BRANCHING HEIGHT | | 20% | | | |
| | 108 | PSEUDOTSUGA MENZIESII | DOUGLAS FIR | 10-12' HT; B&B: FULL, WELL BRANCHED & WELL ROOTED; STRAIGHT CENTRAL LEADER & SINGLE TRUNK; NOT SHEARED | | 2,465 SF | MIX: LOW SHRUB ARCTOSTAPHYLOS UVA-URSI MAHONIA REPENS SEDUM DIVERGENS | KINKY KNOCK CREEPING MAHONIA SPREADING STONECROP | 24" OC TRIANGULAR SPACING; INTERMIX PLANTS WITH CONSISTENT DISTRIBUTION; OFFSET 12" FROM PAVING OR GUARDRAIL 1 GAL CONT; FULL & WELL ROOTED |
| | 64 | THUJA PLICATA | WESTERN RED CEDAR | 10-12' HT; B&B: FULL, WELL BRANCHED & WELL ROOTED; SYMMETRICAL BRANCHING HABIT; NOT SHEARED | | 2,017 SF | MIX: TPSS PLANTING 1 GALTHERIA SHALLOON SYMPHORICARPOS ALBUS | SALAL COMMON WHITE SNOWBERRY | 36" OC TRIANGULAR SPACING; INTERMIX PLANTS WITH CONSISTENT DISTRIBUTION; OFFSET 18" FROM PAVING OR GUARDRAIL 1 GAL CONT; FULL & WELL ROOTED |
| | 188 | TILIA CORDATA 'GREENSPIRE' | GREENSPIRE LITTLELEAF LINDEN | 2 1/2" CAL; B&B: FULL, WELL BRANCHED & WELL ROOTED; STRAIGHT CENTRAL LEADER & SINGLE TRUNK; SYMMETRICAL BRANCHING HABIT; MIN 7 BRANCHING HEIGHT | | 1,178 SF | MIX: TPSS PLANTING 2 GALTHERIA SHALLOON MAHONIA AQUIFOLIUM MYRTICA CALIFORNICA SYMPHORICARPOS ALBUS | SALAL OREGON GRAPE PACIFIC WAX MYRTLE COMMON WHITE SNOWBERRY | 36" OC TRIANGULAR SPACING; INTERMIX PLANTS WITH CONSISTENT DISTRIBUTION; OFFSET 18" FROM PAVING, GUARDRAIL, FENCE, OR WALL 1 GAL CONT; FULL & WELL ROOTED |
| | 3 | AMELANCHIER ALNIFOLIA | SERVICEBERRY | 1 GAL CONT; FULL & WELL ROOTED | | 101,194 SF | MIX: WSDOT HIGH SHRUB ARBUTUS UNEDO 'COMPACTA' MOLDOUSIS DISCOLOR SYMPHORICARPOS ALBUS | COMPACT STRAWBERRY BUSH OCEAN SPRAY COMMON WHITE SNOWBERRY | 48" OC TRIANGULAR SPACING; INTERMIX PLANTS WITH CONSISTENT DISTRIBUTION; OFFSET 12" FROM PAVING OR SEEDED SWALE 1 GAL CONT; FULL & WELL ROOTED |
| | 231 | POLYSTICHUM MUNITUM | WESTERN SWORD FERN | 1 GAL CONT; FULL & WELL ROOTED; MIN 3 GREEN FRONDS | | 9,238 SF | MIX: WSDOT LOW SHRUB GALTHERIA SHALLOON MAHONIA REPENS SYMPHORICARPOS ALBUS | SALAL CREEPING MAHONIA COMMON WHITE SNOWBERRY | 48" OC TRIANGULAR SPACING; INTERMIX PLANTS WITH CONSISTENT DISTRIBUTION; OFFSET 12" FROM PAVING OR SEEDED SWALE 1 GAL CONT; FULL & WELL ROOTED |
| | 320 | PRUNUS LAUROCEASUS 'OTTO LUYKEN' | LUYKENS LAUREL | 1 GAL CONT; FULL & WELL ROOTED; 18" OFFSET FROM PAVING EDGE | | 20,225 SF | MIX: WSDOT TREE ACER CIRCINATUM AMELANCHIER ALNIFOLIA PSEUDOTSUGA MENZIESII THUJA PLICATA | VINE MAPLE SERVICEBERRY DOUGLAS FIR WESTERN RED CEDAR | 10" OC TRIANGULAR SPACING; INTERMIX PLANTS WITH CONSISTENT DISTRIBUTION; PROPOSED 10-12' HT TREES 1 GAL CONT; FULL & WELL ROOTED |
| | 229 | SPIRAEA BETULIFOLIA 'TOR' | BIRCHLEAF SPIREA | 1 GAL CONT; FULL & WELL ROOTED; 12" OFFSET FROM PAVING EDGE | | 9,131 SF | PRIVATE PROPERTY RESTORATION SEED MIX | | TO BE DETERMINED; RESTORE PLANTING & IRRIGATION TO MATCH PRE-CONSTRUCTION CONDITIONS SEE SPECIFICATIONS |
| | 3,117 SF | CORNUS SERICEA 'KELSEY' | KELSEY DOGWOOD | 1 GAL CONT; FULL & WELL ROOTED; TRIANGULAR SPACING @ 24" OC, WITH 12" OFFSET FROM PAVING EDGE | | 709 SF | WSDOT SWALE SEED MIX | | SEE WSDOT SPECIFICATION 9-14.2 |
| | 1,333 SF | FRAGARIA CHILOENSIS | BEACH STRAWBERRY | 1 GAL CONT; FULL & WELL ROOTED; TRIANGULAR SPACING @ 24" OC, WITH 12" OFFSET FROM PAVING EDGE | | 4,742 SF | MULCH ONLY | | SEE SPECIFICATIONS |
| | 3,028 SF | HAKONECHLOA MACRA 'AUREOLA' | GOLDEN JAPANESE FOREST GRASS | 1 GAL CONT; FULL & WELL ROOTED; TRIANGULAR SPACING @ 24" OC, WITH 12" OFFSET FROM PAVING EDGE | | 6,144 SF | QUARRY SPALLS | | 12" DEPTH |
| | 370 SF | HEMEROCALLIS 'STELLA DE ORO' | DAY LILY | 1 GAL CONT; FULL & WELL ROOTED; TRIANGULAR SPACING @ 24" OC, WITH 12" OFFSET FROM PAVING EDGE | | | | | |
| | 597 SF | LIRIOPE SPICATA | CREEPING LILY TURF | 1 GAL CONT; FULL & WELL ROOTED; TRIANGULAR SPACING @ 18" OC, WITH 9" OFFSET FROM PAVING EDGE | | | | | |
| | 1,294 SF | MAHONIA AQUIFOLIUM 'COMPACTA' | COMPACT OREGON GRAPE | 1 GAL CONT; FULL & WELL ROOTED; TRIANGULAR SPACING @ 36" OC, WITH 18" OFFSET FROM PAVING EDGE, OR WALL | | | | | |
| | 292 SF | MAHONIA REPENS | CREEPING MAHONIA | 1 GAL CONT; FULL & WELL ROOTED; TRIANGULAR SPACING @ 24" OC, WITH 12" OFFSET FROM PAVING EDGE | | | | | |
| | 722 SF | PEANSETIUM ALOPECUROIDES 'LITTLE BUNNY' | LITTLE BUNNY FOUNTAIN GRASS | 1 GAL CONT; FULL & WELL ROOTED; TRIANGULAR SPACING @ 24" OC, WITH 12" OFFSET FROM PAVING EDGE | | | | | |
| | 3,044 SF | ROSA RUGOSA 'PINK PAVEMENT' | PINK PAVEMENT ROSE | 1 GAL CONT; FULL & WELL ROOTED; TRIANGULAR SPACING @ 36" OC, WITH 18" OFFSET FROM PAVING EDGE | | | | | |
| | 4,464 SF | RUBUS CALYCNODES | BRAMBLE 'EMERALD CARPET' | 1 GAL CONT; FULL & WELL ROOTED; TRIANGULAR SPACING @ 24" OC, WITH 12" OFFSET FROM PAVING EDGE | | | | | |
| | | | | | | | | | NOTES: |

NOTES:

1. ALL WSDOT PLANT MIXES SHALL HAVE OFFSETS PER DETAIL 4 SHEET STD-LPD102.
2. ALL PRIVATE PROPERTY RESTORATION AREAS SHALL RECEIVE TYPE 2 SOIL PREPARATION. SEE DETAIL 2 DWG STD-LPD101.
3. ALL CORRIDOR PLANTING AREAS SHALL RECEIVE TYPE 1 SOIL PREPARATION. SEE DETAIL 1 DWG STD-LPD101.

60% SUBMITTAL

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









CORRECTED BY: / DATE:
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11/07/13 3:30 PM | CALDWELL
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PLANT SCHEDULE & NOTES

SYM QTY BOTANICAL NAME COMMON NAME SIZE / REMARKS

| | | | | | |
|-------------------------------------------------------------------------------------|--------------------------------------|-----------------------------------------|---------------------------------|---|-----------|
|  | PLANTING ENLARGEMENT 1 (SELECTION A) | | 1 GAL CONT; FULL & WELL ROOTED; | 1 | LS-LPD100 |
| | 4.816 SF | FRAGARIA CHILOENSIS | BEACH STRAWBERRY | 1 | LS-LPD100 |
|  | PLANTING ENLARGEMENT 1 (SELECTION B) | | 1 GAL CONT; FULL & WELL ROOTED; | 1 | LS-LPD100 |
| | 3.875 SF | CORNUS SERICEA 'KELSEY' | KELSEY DOGWOOD | 1 | LS-LPD100 |
|  | PLANTING ENLARGEMENT 2 | | 1 GAL CONT; FULL & WELL ROOTED; | 2 | LS-LPD100 |
| | 4.841 SF | EMEDIUM X VERSICOLOR 'SULPHUREUM' | SULPHUREUM BARRENWORT | 2 | LS-LPD100 |
|  | PLANTING ENLARGEMENT 3 | | 1 GAL CONT; FULL & WELL ROOTED; | 3 | LS-LPD100 |
| | 3.517 SF | HAKONECHLOA MACRA 'AUREOLA' | GOLDEN JAPANESE FOREST GRASS | 3 | LS-LPD100 |
|  | PLANTING ENLARGEMENT 4 (SELECTION A) | | 1 GAL CONT; FULL & WELL ROOTED; | 4 | LS-LPD100 |
| | 2.237 SF | PENNISETUM ALOPECUROIDES 'LITTLE BUNNY' | LITTLE BUNNY FOUNTAIN GRASS | 4 | LS-LPD100 |
|  | PLANTING ENLARGEMENT 4 (SELECTION B) | | 1 GAL CONT; FULL & WELL ROOTED; | 4 | LS-LPD100 |
| | 2.107 SF | RUBUS CALYCINOIDES 'EMERALD CARPET' | BRAMBLE | 4 | LS-LPD100 |
|  | PLANTING ENLARGEMENT 5 | | 1 GAL CONT; FULL & WELL ROOTED; | 5 | LS-LPD100 |
| | 2.752 SF | MAHONIA REPENS | CREeping MAHONIA | 5 | LS-LPD100 |
|  | PLANTING ENLARGEMENT 5 | | 1 GAL CONT; FULL & WELL ROOTED; | 5 | LS-LPD100 |
| | 2.107 SF | FRAGARIA CHILOENSIS | PINK PAVEMENT ROSE | 5 | LS-LPD100 |
|  | PLANTING ENLARGEMENT 5 | | 1 GAL CONT; FULL & WELL ROOTED; | 5 | LS-LPD100 |
| | 2.107 SF | HAKONECHLOA MACRA 'AUREOLA' | GOLDEN JAPANESE FOREST GRASS | 5 | LS-LPD100 |
|  | PLANTING ENLARGEMENT 5 | | 1 GAL CONT; FULL & WELL ROOTED; | 5 | LS-LPD100 |
| | 2.107 SF | SPIRAEA BETULIFOLIA 'TOR' | BIRCHLEAF SPIREA | 5 | LS-LPD100 |

- ANY DISCREPANCIES WITH THE DWGS AND/OR SPECS AND SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF LA PRIOR TO PROCEEDING WITH CONSTRUCTION.
- WHERE QUANTITIES ARE NOT SHOWN IN THE PLANT SCHEDULE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE QUANTITIES REQUIRED TO MEET THE SPECIFIED PLANT SPACING. PERCENTAGES LISTED INDICATE PERCENTAGE OF TOTAL PLANTING AREA TO RECEIVE PLANT MATERIALS.
- PLANT MATERIAL LOCATIONS SHALL BE COORDINATED WITH SPRINKLER IRRIGATION HEAD LOCATIONS TO PREVENT DAMAGE TO HEADS.
- INSTALL GROUNDCOVERS IN A TRIANGULAR PATTERN AT SPACING SHOWN IN THE PLANT SCHEDULE. WHERE GROUNDCOVER ABUTS CURBING, WALLS, OR WALKS, MIN PLANTING DISTANCE SHALL BE NINE (9) INCHES FROM SAME. UNLESS OTHERWISE NOTED, INSTALL GROUNDCOVERS CONTINUOUS IN BETWEEN SHRUB PLANTINGS.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH SUB-CONTRACTORS AS REQUIRED TO ACCOMPLISH PLANTING OPERATIONS.
- TREE LOCATIONS SHOWN ON PLANTING PLANS (SHEETS LPP103 TO 1388) ARE APPROXIMATE; IF FIELD ADJUSTMENTS ARE NECESSARY, THE FOLLOWING MIN SETBACKS FOR CENTERLINE OF TREE TRUNKS TO EDGE OF DRIVEWAY, FACE OF CURB OR INTERSECTION AND TO CENTER OF ALL OTHERS SHOWN SHALL APPLY:
A. STREET LIGHTS 25'
B. DRIVEWAYS 10'
C. INTERSECTIONS 30'
D. UNDERGROUND SEWER & WATER LINES 5'
E. UNDERGROUND GAS LINES 1'
F. UNDERGROUND HIGH PRESSURE GAS LINES 3'
G. UTILITY POWER POLES 5'
H. UNDERGROUND FIBER CABLE 2'
I. FACE OF CURB 5'
J. GUARDRAIL BARRIERS 5'

1. ANY DISCREPANCIES WITH THE DWGS AND/OR SPECS AND SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF LA PRIOR TO PROCEEDING WITH CONSTRUCTION.

2. WHERE QUANTITIES ARE NOT SHOWN IN THE PLANT SCHEDULE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE QUANTITIES REQUIRED TO MEET THE SPECIFIED PLANT SPACING. PERCENTAGES LISTED INDICATE PERCENTAGE OF TOTAL PLANTING AREA TO RECEIVE PLANT MATERIALS.

3. PLANT MATERIAL LOCATIONS SHALL BE COORDINATED WITH SPRINKLER IRRIGATION HEAD LOCATIONS TO PREVENT DAMAGE TO HEADS.

4. INSTALL GROUNDCOVERS IN A TRIANGULAR PATTERN AT SPACING SHOWN IN THE PLANT SCHEDULE. WHERE GROUNDCOVER ABUTS CURBING, WALLS, OR WALKS, MIN PLANTING DISTANCE SHALL BE NINE (9) INCHES FROM SAME. UNLESS OTHERWISE NOTED, INSTALL GROUNDCOVERS CONTINUOUS IN BETWEEN SHRUB PLANTINGS.

5. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH SUB-CONTRACTORS AS REQUIRED TO ACCOMPLISH PLANTING OPERATIONS.

6. TREE LOCATIONS SHOWN ON PLANTING PLANS (SHEETS LPP103 TO 1388) ARE APPROXIMATE; IF FIELD ADJUSTMENTS ARE NECESSARY, THE FOLLOWING MIN SETBACKS FOR CENTERLINE OF TREE TRUNKS TO EDGE OF DRIVEWAY, FACE OF CURB OR INTERSECTION AND TO CENTER OF ALL OTHERS SHOWN SHALL APPLY:

A. STREET LIGHTS 25'

B. DRIVEWAYS 10'

C. INTERSECTIONS 30'

D. UNDERGROUND SEWER & WATER LINES 5'

E. UNDERGROUND GAS LINES 1'

F. UNDERGROUND HIGH PRESSURE GAS LINES 3'

G. UTILITY POWER POLES 5'

H. UNDERGROUND FIBER CABLE 2'

I. FACE OF CURB 5'

J. GUARDRAIL BARRIERS 5'

60% SUBMITTAL

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APPROVED BY: J. SCHETTLER

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FINAL DESIGN PARTNERS.
REVIEWED BY: DATE: 12/06/2013

SOUNDTRANSIT
DATE: 12/06/2013

SCALE: NTS
FILENAME: E300-LPS100B
CONTRACT NO.: RTA001-XXXX-XX
DATE: 12/06/2013

EAST LINK EXTENSION
CONTRACT E320
SOUTH BELLEVUE
LANDSCAPE
PLANTING SCHEDULE, NOTES & LEGEND
CORRIDOR

DRAWING NO.: L85-LPS100B
LOCATION ID: E12
SHEET NO.: 859
REV: 0



LIGHT RAIL PERMITTING CITIZEN ADVISORY COMMITTEE

ADVISORY DOCUMENT – RECOMMENDATION TO DIRECTOR BEL RED SEGMENT DESIGN AND MITIGATION PERMIT OCTOBER 5, 2014

Introduction

The Light Rail Permitting Citizen Advisory Committee (CAC) was appointed by the Bellevue City Council consistent with the terms of the Light Rail Overlay regulations contained in the city's Land Use Code (LUC). Land Use Code section 20.25M.035.A describes the CAC purpose to:

1. **Dedicate the time necessary to represent community, neighborhood and citywide interests in the permit review process;** and
2. Ensure that issues of importance are surfaced early in the permit review process while there is still time to address design issues while minimizing cost implications*; and
3. **Consider the communities and land uses through which the RLRT System or Facility passes, and set “the context” for the regional transit authority to respond to as facility design progresses;** and
4. **Help guide RLRT System and Facility design to ensure that neighborhood objectives are considered and design is context sensitive by engaging in on-going dialogue with the regional transit authority and the City, and by monitoring follow-through*;** and
5. Provide a venue for receipt of public comment on the proposed RLRT Facilities and their consistency with the policy and regulatory guidance of paragraph 20.25M.035.E below and Sections 20.25M.040 and 20.25M.050 of this Part; and
6. **Build the public's sense of ownership in the project*;** and
7. **Ensure CAC participation is streamlined and effectively integrated into the permit review process to avoid delays in project delivery.**

* Identifies the focus of this Advisory Document

Design and Mitigation Permit Review

This phase of review is intended to provide feedback regarding effectiveness of design and landscape development in incorporating prior guidance at context and schematic design stages. This phase is intended to provide further input and guidance, based on the input and guidance provided in the context setting phase, on compliance (or lack of compliance) with the policy and regulatory guidance of LUC 20.25M and LUC 20.25M.040 and 20.25M.050, and whether

information is sufficient to evaluate such compliance. The CAC is charged with providing the Director of the Development Services Department with a final advisory document.

CAC Work Product

The work of the CAC at each review stage will culminate in a CAC advisory document that describes the phase of review and CAC feedback. The work product required following the Pre-Development Phase of CAC review is intended to provide Sound Transit with early guidance and advice that is integrated into future Design and Mitigation Permit submittals. This final Design and Mitigation Permit advisory document is intended to provide the Director of the Development Services Department with a recommendation to demonstrate Sound Transit compliance with Design and Mitigation Permit Decision Criteria pursuant to LUC 20.25M.030.C.3.

On April 8, 2014, Sound Transit was provided with the Bel Red Segment Pre-Development Advisory Document. That document outlined Sound Transit compliance with context setting characteristics and early Design and Mitigation Permit requirements. The pre-development advisory document also included several recommendations on additional items to be addressed during formal permit review.

The following represents the CAC advisory recommendation to the Development Services Department Director regarding compliance related to LUC 20.25M.030.C.3, LUC 20.25M.040, and 20.25M.050.

20.25M.030.C.3 Design and Mitigation Permit Decision Criteria

A proposal for a RLRT system or facility may be approved or approved with conditions; provided, that such proposal satisfies the following criteria:

- a. The applicant has demonstrated compliance with the CAC Review requirements of LUC 20.25M.035; and
 - Sound Transit has demonstrated compliance with CAC review requirements by attending and presenting materials regarding the East Link Light Rail System and Facilities at CAC meetings held the 1st and 3rd Wednesday of each month. In addition to the regularly scheduled meetings Sound Transit and City staff provided tours of the existing Central Link Light Rail System and Facilities and proposed East Link route in the City of Bellevue including the Bel Red Segment.
- b. The proposal is consistent with the Comprehensive Plan including without limitation the Light Rail Best Practices referenced in Comprehensive Plan Policy TR-75.2 and the policies set forth in LUC 20.25M.010.B.7; and
 - The East Link Project has demonstrated consistency with the numerous Comprehensive Plan Policies that are applicable to light rail (LU-9, LU-22, LU-24, ED-3, TR-75.1, TR-75.2,

TR-75.5, TR-75.7, TR-75.8, TR-75.9, TR-75.12, TR-75.15, TR-75.17, TR-75.18, TR-75.20, TR-75.22, TR-75.23, TR-75.27, TR-75.28, TR-75.32, TR-75.33, TR-75.34, TR-75.35, TR-118 and UT-39). This proposal is also consistent the Light Rail Best Practices which focus on community and neighborhoods, community involvement, connecting people to light rail, land use, street design and operations, system elements (elevated, at-grade, and tunnel), property values, station security, and construction impacts and mitigation. A detailed description of project compliance with be included in the issued Design and Mitigation Permit.

c. The proposal complies with the applicable requirements of this Light Rail Overlay District; and

- Compliance with all elements of the Light Rail Overlay District will be demonstrated in the issued Design and Mitigation Permit.

d. The proposal addresses all applicable design guidelines and development standards of this Light Rail Overlay District in a manner which fulfills their purpose and intent; and

- As discussed below, the proposal addresses all applicable elements of 20.25M.040 and 20.25M.050.

e. The proposal is compatible with and responds to the existing or intended character, appearance, quality of development and physical characteristics of the subject property and immediate vicinity; and

- The Bel Red Segment of East Link must comply with all applicable Bel Red District requirements pursuant to LUC 20.25D. Bel Red zoning and development standards were created in anticipation of future light rail extension and future development potential. Additional analysis of future land use around the proposed 130th Station will happen with the City of Bellevue's Station Area Planning process.

f. The proposal will be served by adequate public facilities including streets, fire protection, and utilities; and

- A majority of existing public facilities are available to serve East Link in Bel Red, however, the city has initiated numerous capital facilities projects to serve light rail and future additional residential and commercial density in the corridor. These improvements include, but are not limited to 120th Ave NE, 124th Avenue NE, and the future Spring Boulevard which will serve the 130th Station.

g. The proposal complies with the applicable requirements of the Bellevue City Code, including without limitation those referenced in LUC 20.25M.010.B.8; and

- Development, construction and operation of the RLRT system and facilities will comply with applicable Bellevue City Codes, including the noise control code and environmental

procedures code. Technical analysis of Sound Transit submitted Noise Studies will be completed prior to issuance of the Design and Mitigation Permit.

h. The proposal is consistent with any development agreement or Conditional Use Permit approved pursuant to subsection B of this section; and

- The proposal is consistent with the Memorandum of Understanding signed by the City of Bellevue and the Sound Transit Board.

i. The proposal provides mitigation sufficient to eliminate or minimize long-term impacts to properties located near the RLRT facility or system, and sufficient to comply with all mitigation requirements of the Bellevue City Code and other applicable state or federal laws.

- Sound Transit will be required to avoid, minimize, and mitigate anticipated long-term impacts to properties located near the light rail system and facilities.

j. When the proposed RLRT facility will be located, in whole or in part, in a critical area regulated by Part 20.25H LUC, a separate Critical Areas Land Use Permit shall not be required, but such facility shall satisfy the following additional criteria:

i. The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer; and

ii. The proposal incorporates the performance standards of Part 20.25H LUC to the maximum extent applicable; and

iii. The proposal includes a mitigation or restoration plan consistent with the requirements of LUC 20.25H.210; except that a proposal to modify or remove vegetation pursuant to an approved Vegetation Management Plan under LUC 20.25H.055.C.3.i shall not require a mitigation or restoration plan.

- Mitigation and restoration requirements per LUC 20.25H due to impacts to critical areas and their buffers will be incorporated into the Design and Mitigation Permit approval. Impacts to critical areas are limited in the Bel Red Segment, however, the Bel Red Segment will include a mitigation site that is intended to mitigate for impacts to wetlands and streams along the entire East Link alignment.

CAC Recommendation to the Director of Development Services

At the request of the CAC, CAC Pre-Development Phase advice that has been addressed in the Design and Mitigation Permit submittal and revision is included for the Director's reference.

20.25M.040 RLRT system and facilities development standards

1. Landscape Development

- The CAC recommends more native vegetation incorporated in the overall landscape plans. This should particularly include more evergreen trees.
- The CAC recommends more mature landscaping with the initial planting.
- The CAC recommends that all reasonable efforts should be made to ensure that in the interim condition prior to the completion of the future Spring Boulevard, the area around the 130th Station should not look unfinished or incomplete. Maximizing planting in available areas around the entry structures is one way to achieve this goal.
- The CAC recommends that a featured or signature tree(s) be included in the final landscape design for the Bel Red Segment. The future plaza in the vicinity of the Pacific Northwest Ballet at 136th Place NE is a suggested location.

2. Light and Glare

- The CAC recommends that measures should be taken to ensure that no lighting is directed skyward and any accent lighting results in a reflective glow. **(No lighting that is directed skyward is included in the Design and Mitigation Permit submittal. Sound Transit has included penetrations in the station entry concrete panels that will provide accent back lighting).**

20.25M.050 Design guidelines

1. Context and Design Considerations - The CAC was tasked with evaluating the existing context setting characteristics included in the Land Use Code in order to verify that the design of the station and alignment is consistent with the vision for Bel Red. The following characteristics are intended to implement the vision for Bel Red:
 - A thriving economy anchored by major employers, businesses unique to the subarea, and services important to the local community;
 - Vibrant, diverse, and walkable neighborhoods that support housing, population, and income diversity;
 - A comprehensive and connected parks and open space system;
 - Environmental improvements resulting from redevelopment;
 - A multimodal transportation system;
 - An unique cultural environment;

- Scale of development that does not compete with Downtown, and provides a graceful transition to residential areas farther to the east; and
- Sustainable development using state of the art techniques to enhance the natural and built environment and create a livable community.

2. Additional General Design Guidelines

- The CAC recommends sculptured precast concrete panels for the proposed 130th Station instead of the original Cor-ten design. **(The Design and Mitigation Permit plans include sculptured precast concrete panels instead of the Cor-ten steel at the entries).**
- The CAC recommends that organic shapes be incorporated into concrete panel design. **(The Design and Mitigation Permit submittal indicates the sculptured precast concrete panels at the entries include organic shapes).**
- The CAC recommends more color options for the 130th Station than the standard Sound Transit colors that were presented in the renderings and at the CAC meetings.
- The CAC recommends backlighting of the translucent panels and or the uses of colored lights on the exterior wall to create interesting shadows and forms. **(The Design and Mitigation Permit submittal indicates backlighting of the translucent glass at the entry areas as well as new accent lighting).**
- The CAC recommends that the base of the south face of the 130th Station retaining wall be simple and include architectural patterns above.
- The CAC recommends that the alignment and station design reflect the concept of an arts district as expressed in the Bel Red Subarea in Policy S-BR-45. **(The Sound Transit design team and selected artist have collaborated on the platform railings and the custom precast entry panels to reflect the concept of an active arts district. Although staff has seen the proposed platform railing concept, final design has not been submitted for City review as part of the Design and Mitigation Permit).**

Design and Mitigation Permit Approval

The recommendations contained in this Advisory Document represent the conclusion of the CAC review of the Bel Red Segment Design and Mitigation Permit. The recommendations included in this document shall be incorporated into the Director's administrative decision. Departures by the Director from specific recommendations included within the CAC's Design and Mitigation

Permit Advisory Document shall be limited to those instances where the Director determines that the departure is necessary to ensure that the RLRT facility or system is consistent with: (i) applicable policy and regulatory guidance contained in the Light Rail Overlay; (ii) authority granted to the CAC pursuant to this section; (iii) SEPA conditions or other regulatory requirements applicable to the RLRT system or facility; or (iv) state or federal law. Departures from the CAC Design and Mitigation Permit Advisory Document shall be addressed in the decision by the Director, and rationale for the departures shall be provided.